

Prepared in cooperation with the State of Illinois and with other agencies

# **Water Resources Data Illinois Water Year 2004 (Includes historical data)**



## **Water-Data Report IL-04**

by S.R. Cutshaw, P.C. Mills, J.L. Hogan, and D.J. Fazio

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

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## PREFACE

This Water–Data Report of Illinois is one of a series of annual reports that documents hydrologic, biologic, and meteorologic data gathered from the U.S. Geological Survey's data–collection networks in each State, Puerto Rico, and the Trust Territories. These records of surface–water, ground–water, meteorological and biological data provide the hydrologic information needed by Federal, State, and local agencies, and the private sector for developing and managing our Nation's land and water resources.

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, the following individuals contributed appreciably to the collection, processing, and tabulation of the data:

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## TABLE OF CONTENTS

	Page
Preface	<a href="#"><u>3</u></a>
Report Documentation Page	<a href="#"><u>4</u></a>
Discontinued Stations	<a href="#"><u>6</u></a>
How to Use this Report	<a href="#"><u>17</u></a>
Purpose, Scope, and History	<a href="#"><u>19</u></a>
Cooperation	<a href="#"><u>20</u></a>
Summary of Hydrologic Conditions	<a href="#"><u>21</u></a>
Figure 1	<a href="#"><u>22</u></a>
Special Networks and Programs	<a href="#"><u>23</u></a>
Explanation of the Records	<a href="#"><u>25</u></a>
Figure 2	<a href="#"><u>37</u></a>
Figure 3	<a href="#"><u>38</u></a>
Figure 4	<a href="#"><u>39</u></a>
Figure 5	<a href="#"><u>40</u></a>
Figure 6	<a href="#"><u>41</u></a>
Figure 7	<a href="#"><u>42</u></a>
Figure 8	<a href="#"><u>43</u></a>
Figure 9	<a href="#"><u>44</u></a>
Figure 10	<a href="#"><u>45</u></a>
Quality Control of Water—Quality Samples	<a href="#"><u>46</u></a>
Access to USGS Water Data	<a href="#"><u>47</u></a>
Definition of Terms	<a href="#"><u>48</u></a>
References Cited	<a href="#"><u>49</u></a>
Remark Codes	<a href="#"><u>51</u></a>
Definition of Units	<a href="#"><u>52</u></a>
Conversion Factors	<a href="#"><u>53</u></a>
Calendar for Current Water Year	<a href="#"><u>54</u></a>
Surface—Water Data	<a href="#"><u>55</u></a>
Ground—Water Data	<a href="#"><u>690</u></a>
Meteorological Data	<a href="#"><u>718</u></a>
Biological Data	<a href="#"><u>782</u></a>
Index	<a href="#"><u>838</u></a>

## DISCONTINUED STATIONS

### Discontinued Surface–Water–Discharge or Stage–Only Stations

The following continuous–record surface–water discharge or stage–only stations (gaging stations) operated by the USGS Illinois Water Science Center (Science Center) 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. Those stations with an asterisk (\*) after the station number currently are 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 Science Center at the address given in the section titled "Access to USGS Water Data."

[mi<sup>2</sup>, square miles; d, discharge; e, elevation (stage only); v, volume; —, not determined]

Station name	Station number	Drainage area (mi <sup>2</sup> )	Period of record (water year)
Bluegrass Creek at Potomac, Ill. (d)	03336500	35.0	1950–71
Salt Fork near St. Joseph, Ill. (d)	03336900	134	1959–91
Saline Branch at Urbana, Ill. (d)	03337500	68.0	1936–58
Salt Fork near Homer, Ill. (d)	03338000	340	1945–58
Vermilion River near Catlin, Ill. (d)	03338500	958	1940–58
Embarras River near Oakland, Ill. (d)	03343500	518	1910–15
Embarras River at State Highway 133 near Oakland, Ill. (d)	03343550	542	1979–82
Embarras River near Diona, Ill. (d)	03344000	919	1939–40, 1944–47, 1971–82
Range Creek near Casey, Ill. (d)	03344500	7.61	1951–82
Embarras River near Newton, Ill. (d)	03345000	1,392	1939–45
Embarras River at Lawrenceville, Ill. (d)	03346500	2,333	1930–34
Little Wabash River at Louisville, Ill. (d)	03378900	745	1965–82
Little Wabash River near Clay City, Ill. (e)	03379000	801	1909–13
Little Wabash River at Blood, Ill. (e)	03379600	1,387	1973–82
Little Wabash River near Golden Gate, Ill. (e)	03380000	1,792	1908–13, 1973–80
Skillet Fork near Iuka, Ill. (d)	03380350	208	1966–82
Horse Creek near Keenes, Ill. (d)	03380475	97.2	1959–90
Skillet Fork near Mill Shoals, Ill. (e)	03381000	874	1909–13, 1975–78
Brushy Creek near Harco, Ill. (d)	03382170	13.3	1968–82
Middle Fork Saline River near Harrisburg, Ill. (d)	03382200	225	1924–32
North Fork Saline River near Ridgway, Ill. (d)	03382350	423	1965–69
Saline River near Junction, Ill. (d)	03382500	1,051	1940–71
Eagle Creek near Equality, Ill. (d)	03382510	8.51	1966–82
Hayes Creek at Glendale, Ill. (d)	03385000*	19.1	1949–75
Lake Glendale Inlet near Dixon Springs, Ill. (d)	03385500	1.05	1954–63
Lake Glendale Outlet near Dixon Springs, Ill. (d)	03386000	1.98	1955–63
Sugar Creek near Dixon Springs, Ill. (d)	03386500	9.93	1950–71
Lake Michigan at Chicago Lock @ Chicago, Ill. (e)	04087440	—	1997–2003
Wolf Lake at Chicago, Ill. (e)	04092500	—	1940–82
Galena River at Galena, Ill. (d)	05416000	196	1935–38
Galena River at Galena, Ill. (e)	05416000	196	1939
Mississippi River at Lock and Dam 12 at Bellevue, Ia. (d)	05416100	82,400	1995–97
Plum River near Savanna, Ill. (d)	05419500	162	1935–41
Plum River at Savanna, Ill. (d)	05420100	273	1995–97
Plum River below Carroll Creek near Savanna, Ill. (d)	05420000	230	1941–77

Cedar Creek near Winslow, Ill. (d)	05435000	1.31	1951–71
Pecatonica River at Shirland, Ill. (d)	05437000	2,550	1940–58
Coon Creek at Riley, Ill. (d)	05438250	85.1	1961–82
Killbuck Creek near Monroe Center, Ill. (d)	05440500	117	1940–71
Leaf River at Leaf River, Ill. (d)	05441000	103	1940–58
Rock River at Oregon, Ill. (d)	05441500	8,205	1940–49
Kyte River near Flagg Center, Ill. (d)	05442000	116	1940–51
Rock Creek near Coleta, Ill. (d)	05445000	82.8	1940–42
Rock Creek near Morrison, Ill. (d)	05445500	158	1943–58
Rock Creek at Morrison, Ill. (d)	05446000	164	1940–42, 1978–86
Green River at Amboy, Ill. (d)	05447000	201	1940–58
Henderson Creek near Little York, Ill. (d)	05467500	151	1941–58
North Henderson Creek near Seaton, Ill. (d)	05468000	67.1	1941–51
Cedar Creek at Little York, Ill. (d)	05468500*	132	1941–71
South Henderson Creek at Biggsville, Ill. (d)	05469500	82.9	1940–71
Hadley Creek near Barry, Ill. (d)	05502020*	40.9	1956–66
Hadley Creek at Kinderhook, Ill. (d)	05502040	72.7	1940–86
Hadley Creek near Shinn, Ill. (d)	05502080	73.6	1941–46
The Sny at Atlas, Ill. (d)	05512000	451	1940–42
Bay Creek at Nebo, Ill. (d)	05513000	148	1940–86
Terry Creek near Custer Park, Ill. (d)	05526500	12.1	1949–75
Singleton Ditch at Schneider, Ind. (d)	05519000	123	1948–2001
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
North Shore Channel at Wilmette, Ill. (d)	05536101	—	2000–03
North Branch Chicago River at Albany Avenue at Chicago, Ill. (d)	05536105	113	1990–98
Chicago River at Chicago Lock at Chicago, Ill. (e)	05536121	—	1997–2003
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
Calumet River below O'Brien Lock and Dam at Chicago, Ill. (d)	05536358	—	1997–2003
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
Fox River at Wilmot, Wis. (d)	05546500	868	1940–93, 1997–99
Grass Lake Outlet at Lotus Woods, Ill. (d)	05547350	919	1997–99
Nippersink Creek above Wonder Lake, Ill. (d)	05548105	84.5	1994–97, 1999–2001
Nippersink Creek below Wonder Lake, Ill. (d)	05548110	97.3	1994–97
Fox River at Johnsburg, Ill. (d)	05548500	1,205	1997–99
Boone Creek near McHenry, Ill. (d)	05549000	15.5	1948–82
Flint Creek near Fox River Grove, Ill. (d)	05549850	37.0	1990–96
Fox River at South Elgin, Ill. (d)	05551000	1,556	1990–98
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 Wyandot, 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, 1997–98
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
Long Lake at Stallings, Ill. (d)	05589000	5.00	1939–49
Canteen Creek at Caseyville, Ill. (d)	05589500	22.6	1940–82
Kaskaskia Ditch at Bondville, Ill. (d)	05590000	12.4	1949–90
Kaskaskia River near Pesotum, Ill. (d)	05590400	109	1965–79
Kaskaskia River at Ficklin, Ill. (d)	05590500	126	1954–64
Kaskaskia River near Arcola, Ill. (d)	05591000	375	1908–13
Asa Creek at Sullivan, Ill. (d)	05591500	8.05	1950–82
Lake Shelbyville near Shelbyville, Ill. (e,v)	05591950	1,054	1971–94
Wolf Creek near Beecher City, Ill. (d)	05592300	47.9	1959–82

Hickory Creek near Bluff City, Ill. (e)	05592600	77.8	1980–88
Carlyle Lake near Carlyle, Ill. (e,v)	05592990	2,717	1967–94
Martin Branch near Centralia, Ill. (d)	05593500	7.08	1932–43, 1949–55
Crooked Creek near Hoffman, Ill. (d)	05593520	254	1975–98
Crooked Creek near Posey, Ill. (d)	05593525	344	1968–74
Blue Grass Creek near Raymond, Ill. (d)	05593600	17.3	1960–82
Sugar Creek at Albers, Ill. (d)	05594090	124	1973–82
Mud Creek near Marissa, Ill. (d)	05594330	72.4	1971–82
Silver Creek near Lebanon, Ill. (d)	05594500	324	1908–15
Kaskaskia River at New Athens, Ill. (d)	05595000	5,181	1910–21, 1935–71
Marys River near Sparta, Ill. (d)	05595500	17.8	1949–71
Sevenmile Creek near Mt. Vernon, Ill. (d)	05595800	21.1	1961–82
Casey Fork at Route 37 near Mt. Vernon, Ill. (e)	05595830	87.7	1980–85
Rend Lake near Benton, Ill. (e,v)	05595950	488	1971–94
Big Muddy River near Benton, Ill. (d)	05596000	502	1946–70
Tilley Creek near West Frankfort, Ill. (d)	05596500	3.87	1939–46, 1949–55
Crab Orchard Lake near Carterville, Ill. (e)	05598000		1953–79
Beaucoup Creek near Pinckneyville, Ill. (d)	05598500	231	1909–15
Beaucoup Creek near Matthews, Ill. (d)	05599000	292	1946–82
Big Creek near Wetaug, Ill. (d)	05600000*	32.2	1941–71

#### Discontinued Surface–Water–Quality Stations with Daily Records

The following stations are discontinued continuous–record surface–water–quality stations operated by the USGS Illinois Water Science Center. 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. Discontinued project stations with short periods of record have not been included. Information regarding these stations may be obtained from the Science Center at the address given in the section titled "Access to USGS Water Data."

[mi<sup>2</sup>, square miles; —, not determined; S.C., specific conductance; Temp., temperature; Sed., sediment]

Station name	Station number	Drainage area (mi <sup>2</sup> )	Type of record	Period of record
Middle Fork Vermilion River above Oakwood, Ill.	03336645	432	S.C., Temp.	1979
Salt Fork near St. Joseph, Ill.	03336900	134	Temp.	1959–62
Embarras River at State Highway 133 near Oakland, Ill.	03343550	542	Sed.	1979–82
Embarras River near Diona, Ill.	03344000	919	S.C., Temp.	1971–76
Little Wabash River at Louisville, Ill.	03378900	745	S.C., Temp. Sed.	1971–79 1977–81
Skillet Fork near Iuka, Ill.	03380350	208	S.C., Temp.	1973–76
Skillet Fork at Wayne City, Ill.	03380500	464	S.C., Temp.	1979
Little Wabash River at Main Street at Carmi, Ill.	03381495	3,088	S.C., Temp.	1980–81
Little Wabash River at Carmi, Ill.	03381500	3,102	S.C., Temp.	1978–79
Ohio River at Old Shawneetown, Ill.	03381700	—	Temp.	1975–77
South Fork Saline River near Carrier Mills, Ill.	03382100	147	S.C., Temp., Sed.	1980–81
Brushy Creek near Harco, Ill.	03382170	13.3	S.C., Sed. Temp.	1980–81 1980
Lusk Creek near Eddyville, Ill.	03384450	42.9	S.C., Temp., Sed.	1980–81
Calumet River at Chicago, Ill.	04092490	—	Temp.	1974–77
Lake Michigan at Calumet Park at Chicago, Ill.	04092550	—	Temp.	1974–77
Mississippi River Lock and Dam 12 at Bellevue, Ia.	05416100	82,400	Sed.	1995–97
Apple River near Hanover, Ill.	05419000	247	Sed.	1995–97

Plum River near Savanna, Ill.	05420100	273	Sed.	1995–97
Mississippi River at Dam 13 near Fulton, Ill.	05420400	85,600	Temp.	1969–77
Mississippi River at Dam 14 near Hampton, Ill.	05422400	88,400	Temp.	1973–77
South Branch Kishwaukee River at De Kalb, Ill.	05439000	77.7	Sed.	1980–81
Kishwaukee River near Perryville, Ill.	05440000	1,099	Sed.	1979–81
Rock River at Oregon, Ill.	05441500	8,205	Temp.	1975–77
Rock River near Joslin, Ill.	05446500	9,549	S.C., Temp.	1976–81
			Sed.	1980–82
Green River near Geneseo, Ill.	05447500	1,003	Sed.	1978–81
Edwards River near New Boston, Ill.	05466500	445	Sed.	1979–81
Henderson Creek near Oquawka, Ill.	05469000	432	Sed.	1978–81
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.	1975–77
			Sed.	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.	1973–77
			Sed.	1979–82, 1993–96
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
Fox River at Wilmot, Wis.	05546500	868	Sed.	1997–99
Grass Lake Outlet at Lotus Woods, Ill.	05547350	919	Sed.	1997–99
Nippersink Creek above Wonder Lake, Ill.	05548105	84.5	Sed.	1994–97, 1999–2001
Nippersink Creek below Wonder Lake, Ill.	05548110	97.3	Sed.	1994–97
Nippersink Creek near Spring Grove, Ill.	05548280	192	Sed.	1997–99
Fox River at Johnsburg, Ill.	05548500	1,205	Sed.	1997–99
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
Illinois River at Pekin, Ill.	05563800	14,585	Sed.	1995–97
Mackinaw River below Congerville, Ill.	05567510	776	Sed.	1983–86
Mackinaw River near Green Valley, Ill.	05568000	1,073	Sed.	1995–97
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.	1972–83
			Sed.	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.	1972–83
			Sed.	1972–87
Slug Run near Bryant, Ill.	05570380	7.12	S.C., Temp.	1975–80
			Sed.	1976–80
Sangamon River near Oakford, Ill.	05583000	5,093	Temp.	1976–77

			S.C., Temp. Sed.	1979–81 1981,83 1995–97
La Moine River at Ripley, Ill.	05585000	1,293	S.C., Temp. Sed.	1979 1981 1995–97
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
Mississippi River at Alton, Ill.	05587500	171,500	S.C.	1977
			Temp.	1968–77
Kaskaskia River at Cooks Mills, Ill.	05591200	473	Sed.	1979–97
Kaskaskia River near Venedy Station, Ill.	05594100	4,393	S.C., Temp. Sed.	1975–81 1980–97
White Walnut Creek near Pinckneyville, Ill.	05598480	16.5	S.C., Temp.	1980–81
Big Muddy River at Murphysboro, Ill.	05599500	2,169	S.C., Temp. Sed.	1975–81 1980–97
Mississippi River at Kellogg, Ill.	07020125	706,300	Temp.	1974–77

Discontinued Surface–Water–Quality Stations with Records Not Less Than Quarterly

The following are discontinued continuous–record stations operated by the USGS Illinois Water Science Center for which records of surface–water quality (collection frequency not less than quarterly) were published. Discontinued project stations with short periods of record have not been included. Information regarding these stations may be obtained from the Science Center at the address given in the section titled "Access to USGS Water Data."

[mi<sup>2</sup>, square miles; a, approximately; —, not determined; c, chemical; b, biological; m, microbiological; s, sediment]

Station name	Station number	Drainage area (mi <sup>2</sup> )	Type of record	Period of record (water years)
Middle Fork Vermilion River above Oakwood, Ill.	03336645	432	c,m	1978–91
Salt Fork near St. Joseph, Ill.	03336900	134	c,m	1978–91
Saline Branch near Mayview, Ill.	03337700	82.1	c,m	1978–90
Salt Fork near Oakwood, Ill.	03338097	489	c,m	1978–90
North Fork Vermilion River near Bismarck, Ill.	03338780	262	c,m	1978–91
Vermilion River near Danville, Ill.	03339000	1,290	c,m	1978–91
Little Vermilion River near Georgetown, Ill.	03339147	191	c,m	1979–90
Brouillets Creek near St. Bernice, Ind.	03341414	260	c,m	1978–90
Wabash River at Hutsonville, Ill.	03341920	12,986	c,m	1978–91
Sugar Creek near Elbridge, Ill.	03341540	61.0	c,m	1978–90
Sugar Creek at Palestine, Ill.	03342050	35.8	c,m	1979–87
Embarras River at Camargo, Ill.	03343395	180	c,m	1978–91
Embarras River near Diona, Ill.	03344000	919	c,m	1971–76, 1978–91
Embarras River at Ste. Marie, Ill.	03345500	1,516	c,m,s	1978–93
North Fork Embarras River near Oblong, Ill.	03346000	318	c,m	1978–91
Embarras River near Billett, Ill.	03346550	2,403	c,m	1978–87
Bonpas Creek at Browns, Ill.	03378000	228	c,m	1978–91
Little Wabash River near Effingham, Ill.	03378635	240	c,m	1979–91
Little Wabash River at Louisville, Ill.	03378900	745	c,m	1971–91
Little Wabash River below Clay City, Ill.	03379500	1,131	c,m	1979–91
Little Wabash River at Blood, Ill.	03379600	1,387	c,m	1978–90
Elm River near Toms Prairie, Ill.	03379950	265	c,m	1979–87

Skillet Fork near Iuka, Ill.	03380350	208	c,m	1974–76, 1979–87
Skillet Fork at Wayne City, Ill.	03380500	464	c,m	1978–91
Skillet Fork near Carmi, Ill.	03381400	1,058	c,m	1978–87
Little Wabash River at Main Street at Carmi, Ill.	03381495	3,088	c,m,s	1978–94
Little Wabash River at Carmi, Ill.	03381500	3,102	c,b,m	1978–79
South Fork Saline River near Crab Orchard, Ill.	03382055	83.2	c,m	1983–87
Sugar Creek near Stonefort, Ill.	03382090	35.4	c,m	1978–88
South Fork Saline River near Carrier Mills, Ill.	03382100	147	c,m	1977–91
Brushy Creek near Harco, Ill.	03382170	13.3	c	1980–81
Bankston Fork near Dorris Heights, Ill.	03382185	77.7	c,m	1979–87
Middle Fork Saline River near Pankeyville, Ill.	03382205	233	c,m	1978–87
North Fork Saline River near Texas City, Ill.	03382325	249	c,m	1978–87
Saline River near Gibsonia, Ill.	03382530	1,062	c,m	1979–87
Lusk Creek near Eddyville, Ill.	03384450	42.9	c,m	1978–91
Cache River at Forman, Ill.	03612000	244	c,m	1978–91
Galena River at Galena, Ill.	05416000	196	c,m	1979–87
Apple River near Elizabeth, Ill.	05418950	207	c,m	1978–91
Plum River at Savanna, Ill.	05420100	273	c,m	1978–90
Mississippi River at Clinton, Iowa	05420500	85,600	c,m	1974–91, 1993
Pecatonica River at Freeport, Ill.	05435500	1,326	c,m	1978–91
Yellow Creek near Freeport, Ill.	05435680	192	c,m	1979–87
Pecatonica River at Harrison, Ill.	05435800	1,788	c,m	1978–90
Rock River at Rockton, Ill.	05437500	6,363	c,m	1978–91
Kishwaukee River at Garden Prairie Road at Garden Prairie, Ill.	05438201	222	c,m	1978–90
Coon Creek at Riley, Ill.	05438250	85.1	c,m	1979–91
Kishwaukee River above South Branch near Perryville, Ill.	05438600	655	c,m	1978–91
South Branch Kishwaukee River near Fairdale, Ill.	05439500	387	c,m	1978–91
Kishwaukee River near Perryville, Ill.	05440000	1,099	c,m	1978–91
Killbuck Creek near New Milford, Ill.	05440520	136	c,m	1979–90
Rock River at Byron, Ill.	05440700	7,990	c,m	1978–88
Kyte River at Daysville, Ill.	05442020	179	c,m	1979–90
Rock River at Grand Detour, Ill.	05442200	8,502	c,m	1978–88
Rock River at Como, Ill.	05443500	8,753	c,m	1978–91
Elkhorn Creek near Penrose, Ill.	05444000	146	c,m	1979–91
Rock Creek near Erie, Ill.	05446100	237	c,m	1979–87
Rock River near Joslin, Ill.	05446500	9,549	c,m,s	1975–94
Green River near Deer Grove, Ill.	05447100	322	c,m	1978–90
Green River near Geneseo, Ill.	05447500	1,003	c,m	1978–91
Edwards River near New Boston, Ill.	05466500	445	c,m	1978–91
Henderson Creek near Oquawka, Ill.	05469000	432	c,m	1978–91
Bear Creek near Marceline, Ill.	05495500	349	c,m	1978–91
Bay Creek at Nebo, Ill.	05513000	148	c,m	1978–90
Iroquois River at Iroquois, Ill.	05525000	686	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,s	1978–91, 1999–2001
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
Addison Creek at Bellwood, Ill.	05532000	17.9	c,m	1979–91
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 Romeoville, Ill.	05536995	739	c,m,s	1987–92, 1999–2001
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 above Wonder Lake, Ill.	05548105	84.5	c,s	1994–97, 1999–2001
Nippersink Creek below Wonder Lake, Ill.	05548110	97.3	c	1994–97
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
Illinois River at Lacon, Ill.	05558995	13,666	c,m	1978–88, 1990–91
Illinois River at Water Company at Peoria, Ill.	05559900	—	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
Panther Creek near El Paso, Ill.	05567000	93.9	c,b	1997–98
Mackinaw River below Congerville, Ill.	05567510	776	c,m	1978–91
Mackinaw River near Green Valley, Ill.	05568000	1,073	c,b	1997–98
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
Indian Creek near Wyoming, Ill.	05568800	62.7	c,b	1997–98
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	—	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 Monticello Ill.	05572000	550	c,b	1997–98
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
Sangamon River near Oakford, Ill.	05583000	5,093	c,b	1997–98
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 Colmar, Ill.	05584500	655	c,b	1997–98
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
Wood River at East Alton, Ill.	05587700	121	c,m	1978–87
Cahokia Creek at Edwardsville, Ill.	05587900	212	c,m	1978–91
Cahokia Canal near Collinsville, Ill.	05589490	—	c,m	1978–87
Canteen Creek near Collinsville, Ill.	05589510	—	c,m	1978–87
Harding Ditch at East St. Louis, Ill.	05589785	—	c,m	1978–87
Kaskaskia River near Pesotum, Ill.	05590400	109	c,m	1978–79
Kaskaskia River near Tuscola, Ill.	05590420	113	c,m	1979–87
Kaskaskia River at Cooks Mills, Ill.	05591200	473	c,m	1977–91
Kaskaskia River at Allenville, Ill.	05591300	506	c,m	1980–87
Jonathan Creek near Sullivan, Ill.	05591400	54.7	c,m	1980–87
Asa Creek at Sullivan, Ill.	05591500	8.05	c,m	1978–90
West Okaw River near Lovington, Ill.	05591700	112	c,m	1980–91
Kaskaskia River at Shelbyville, Ill.	05592000	1,054	c,m	1978–91
Kaskaskia River near Cowden, Ill.	05592100	1,330	c,m	1978–91
Beck Creek at Herrick, Ill.	05592195	97.0	c,m	1979–88
Kaskaskia River at Vandalia, Ill.	05592500	1,940	c,m	1978–91
Hickory Creek near Bluff City, Ill.	05592600	77.8	c,m	1978–88
Hurricane Creek near Mulberry Grove, Ill.	05592800	152	c,m	1978–91
East Fork Kaskaskia River near Sandoval, Ill.	05592900	113	c,m	1978–91
North Fork Kaskaskia River near Patoka, Ill.	05592930	39.1	c,m	1978–87

Kaskaskia River below Carlyle, Ill.	05593010	2,734	c,m	1978–91
Crooked Creek near Odin, Ill.	05593505	89.2	c,m	1978–88
Crooked Creek near Hoffman, Ill.	05593520	254	c,m	1979–91
Shoal Creek near Walshville, Ill.	05593785	281	c,m	1982–90
Shoal Creek near Panama, Ill.	05593800	286	c,m	1978–82
Shoal Creek near Breese, Ill.	05594000	735	c,m	1979–91
Sugar Creek at Albers, Ill.	05594090	124	c,m	1978–90
Kaskaskia River near Venedy Station, Ill.	05594100	4,393	c,m	1975–91
Silver Creek near Troy, Ill.	05594450	154	c,m	1978–91
Silver Creek near Freeburg, Ill.	05594800	464	c,m	1978–91
Richland Creek near Hecker, Ill.	05595200	129	c,m	1978–91
Plum Creek near Baldwin, Ill.	05595280	60.9	c,m	1979–87
Kaskaskia River at Roots, Ill.	05595400	5,790	c,m	1978–87
Marys River at Welge, Ill.	05595540	113	c,m	1978–90
Big Muddy River near Mt. Vernon, Ill.	05595700	71.9	c,m	1978–90
Rayse Creek near Waltonville, Ill.	05595730	88.0	c,m	1978–91
Casey Fork at Route 37 near Mt. Vernon, Ill.	05595830	87.7	c,m	1978–91
Rend Lake near Benton, Ill.	05595950	488	c,m	1979–87
Middle Fork Big Muddy River near Benton, Ill.	05596400	152	c,m	1978–87
Big Muddy River at Plumfield, Ill.	05597000	794	c,m	1978–91
Pond Creek at West Frankfort, Ill.	05597040	33.1	c,m	1978–88
Little Muddy River near Elkhville, Ill.	05597280	213	c,m	1978–88
Crab Orchard Creek near Marion, Ill.	05597500	31.7	c,m	1978–91
Crab Orchard Creek below Crab Orchard Lake near Carterville, Ill.	05598050	201	c,m	1978–90
Crab Orchard Creek near Carbondale, Ill.	05598245	272	c,m	1978–88
White Walnut Creek near Pinckneyville, Ill.	05598480	16.5	c	1980–81
Beaucoup Creek near Vergennes, Ill.	05599200	478	c,m	1978–88
Big Muddy River at Murphysboro, Ill.	05599500	2,169	c,m	1975–92
Kinkaid Creek near Murphysboro, Ill.	05599540	60.2	c,m	1980–87
Cedar Creek near Pomona, Ill.	05599565	34.5	c,m	1980–87
Cache River at Sandusky, Ill.	05600150	234	c,m	1978–87

#### Discontinued Ground–Water–Level Stations

The following ground–water–level stations operated by the USGS Illinois Water Science Center have been discontinued. Water levels were collected and published for the period of record, expressed in water years shown for each station. Discontinued project stations with less than 5 years of record have not been included. Information regarding these stations may be obtained from the Science Center at the address given in the section titled "Access to USGS Water Data".

<u>Station Name</u>	<u>Station number</u>	<u>Period of record</u>
De Kalb County, IL, Local number, 38N5E–14.4d1	414608088375201	1993–97
Du Page County, IL, Local number, 37N11E–9.2f1	414236087583301	1948–90
Du Page County, IL, Local number, 37N11E–9.8c1	414217087592801	1948–97
Grundy County, IL, Local number, 34N8E–1.3e1	412720088153201	1992–97
Kane County, IL, Local number, 41N6E–9.1g2	420507088325501	1992–97
Kendall County, IL, Local number, 35N6E–5.6a1	413152088342801	1993–97
Ogle County, IL, Local number, 24N10E–13.6e2	420453089172601	1990;1992–97



## HOW TO USE THIS REPORT

Beginning with water year 1998, the U.S. Geological Survey's Annual Water–Data Report for Illinois has been published in electronic version on the Web at <http://il.water.usgs.gov/data/> and on compact disc (CD). The need to publish an electronic version of the report was evident from the growing number of requests for hydrologic data.

This electronic report contains current (water year 2004) and historical hydrologic, biologic, and meteorologic data for Illinois. Data include records of discharge, stage, water quality and biology of streams; stage of lakes and reservoirs; levels and quality of ground water; and records of precipitation, air temperature, dew point, solar radiation, and wind speed. Data were collected and compiled as a part of the National Water Information System (NWIS) maintained by the U.S. Geological Survey, in cooperation with Federal, State, and local agencies.

All data published in previous years' CDs are copied into the current year's CD. *Therefore, the most recent CD supersedes previous CDs.*

The electronic report offers more information and features than traditional printed Water–Data Reports. The following is a list of the general features available on the electronic report:

1. data provided as traditional annual data tables,
2. data provided as text files,
3. data grouped by data type,
4. annual data tables for water years 1998 to current,
5. daily values for the period of record,
6. gage values for water years 1994 to current,
7. station descriptions that contain a list of all data available for a station,
8. station descriptions provided separately from data tables,
9. ability to sort station lists by station number or name,
10. a dynamic map with zooming capabilities,
11. peak flows,
12. access to real–time data, and
13. ability to generate a printed Water–Data Report

The electronic report provides data in two formats: Hypertext Markup Language (HTML) files and as text files. An HTML file is a formatted file that can be read by a Web browser. Traditional annual–data tables are HTML files that look much like those in printed Water–Data Reports. A text file consists of tabular data that can be transferred into common software packages for data processing and analysis. Each line of a text file for surface–water discharge, for example, consists of a date, tab, and data value. The date contains four digits for the year, two digits for the month, and two digits for the day. For example, the date March 15, 2000, appears as "20000315." An explanation header for the data is provided at the top of all text files. To save text–file data from most browsers to a computer disk, select <Save As> from the "File" menu. The browser then will query where to save the file.

Data are arranged on the electronic report by data type, station number or name, and year. When the electronic report is accessed, the general data types listed in the first selection window (Brief Table of Contents) include "Surface Water", "Ground Water", "Meteorological", and "Biological". If interested in surface–water data, for example, "Surface–Water Data" would be selected. The two data types in "Surface–Water Data" include "Water Discharge and Stage" or "Water Quality". "Water Discharge and Stage" provides the additional data types "Water Discharge", "Water Stage", "Partial Record", and "Peak Flow". Below "Water Discharge", for example, are the following choices: "Annual Tables", "Daily Values", "Gage Values", and "Real–Time".

Data contained in "Annual Tables" include the traditional annual–data tables for water years 1998 to current.

"Daily Values" of discharge contain the period of record of mean–daily discharges for each site that has approved data available from the USGS Illinois Water Science Center's computer system. These daily values are provided as text files.

"Gage Values" include those recorded, transmitted, and/or computed from a gaging station and typically are 5–, 15–, or 30–minute data. These data are provided as compressed files by an Internet connection, and generally available for water years 1994 to current. To view a gage–value file, save the compressed file to your computer then uncompress it with extraction software such as WinZip or Gzip.

"Real–time" is a link that has been provided on the "Surface–Water Data", "Ground–Water Data", "Meteorological Data", and "Available Data" pages that accesses the National Water Information System (NWIS) real–time data Web site, if an Internet connection is available from your computer. Accessing the NWIS real–time Web site from the "Surface–Water Data", "Ground–Water Data", and "Meteorological Data" pages will display a summary page of the current gage values at the applicable telemetered sites. Accessing the NWIS real–time Web site from an "Available Data" page displays hydrographs of current gage values for all the data types collected at the particular site. Many other forms of data retrievals and options for displaying the data also may be available on this page.

"Peak flow" contains text files of annual maximum peak discharge and their associated stage values for the period of record. Also, secondary instantaneous peak discharges and their associated stage values above a selected base discharge are available if the flow above the gage is not appreciably regulated. The base discharge generally is selected such that, on average, three secondary peak–flow discharges, including the annual maximum peak discharge, will exceed the base discharge each water year. Also, if the maximum peak stage occurred at a different time than the annual maximum peak discharge, it also is listed. The specific criteria for (1) deciding which gaging stations should have secondary peaks (2) selecting the base discharge, and (3) selecting secondary peaks greater than the base discharge are given in Novak (1985).

The section "Station Descriptions" in the first selection window (Brief Table of Contents) provides information about each station, such as station location, period of record, extremes for period of record, and other remarks pertinent to the station. This section provides station descriptions separate from annual data tables.

Selecting "Annual Tables," "Daily Values," or "Gage Values" under a general data type will provide a list of stations with available data. The list of stations includes the period of record in years. Stations can be sorted by station number or name. Below the title of the station list, the sort order can be changed by selecting "(Station list by name)" or "(Station list by number)." Select a station name or number to obtain a list of the available data for that station. On the "Available-Data" page are two groups of data choices for the selected station. The first group (top of page) contains a list of the data choices for the currently selected data type. The second group (below the first group) lists the additional data that are available for the station.

A map is available that shows stations that have data. There are two areas where map links can be found. There is a link in the upper right corner of the first selection window (Brief Table of Contents). If a general data type such as "Surface-Water Data" is selected, map links, where applicable, also can be found beside each data type (for example, "Water Discharge"). When a map link is selected, the initial stations shown on the map are those with available data for the data type selected and the current year. The map offers seven main options as follows:

1. display stations by data type,
2. display features such as streams,
3. find stations by station number or map feature,
4. display stations by year(s) of available data,
5. increase or decrease text or symbol sizes,
6. zooming and panning capabilities, and
7. link to the "Available Data" page.

Stations can be displayed on the map according to data type. A data type(s) is chosen by selecting the small check box beside the desired data type(s) listed below the "Explanation." Map features, such as State boundaries, streams and county boundaries are chosen the same way. If none of the check boxes are selected, nothing will appear in the map window.

Stations can be found on the map by using the "Find" function. To use the "Find" function, enter numbers (for example, the station number or part of the number) and/or text (for example, the station name or part of the name) into the "Find" box and select the "Go" box. The "Find" function will locate any stations and any loaded features that contain the exact numbers and/or text entered into the "Find" box. Features are loaded once they are selected with the small check box. The red bullseye will show the location of the first station or feature found. If more than one station and/or feature is found, stations are located first followed by map features. In addition, the "next" or "prev" boxes can be used to locate the next site (station or feature) or previous site, respectively. The "clear" box is used to reset the "Find" function so different sites can be located.

If you are interested in stations with data for a certain year or period of time, you can use the "Show Stations by Year(s)" function. Enter a year or years in the box provided to locate stations with data for the desired year(s). The current year (default) in the box can be changed by (1) selecting the box, (2) using the "Backspace" key to erase the year, (3) typing the new year or period desired, and (4) pressing the "Enter" key. This function will not limit stations located by the "Find" function discussed in the previous paragraph. The "Find" function will locate any stations published in the report whether or not it is being shown on the map. All stations (current and discontinued) for the data type(s) selected can be shown on the map by selecting the "All years" button.

Text and symbols on the map can be increased or decreased in size. The "+" and "-" symbols in the "Size" function are used to increase or decrease the size of the text or symbols, respectively. The "Size" function can change the size of text on the map whether or not it is visible. Text of station numbers and map features will appear on the map after zooming for more detail.

The map offers zoom and pan capabilities. By using the "Zoom" bar, you can increase or decrease the detail of the map. The "Fit to Window" button located under the "Zoom" bar is used to set the map to the original size. The map can be repositioned by panning. Panning is done by holding down any mouse button and moving the mouse in the direction you want the map to move. When panning, a black bullseye will appear on the map designating the center of the map window. The bullseye is the location on the map that will appear in more detail when pulling down the zoom bar. Therefore, the black bullseye is useful for positioning a desired site within the bullseye prior to zooming.

When a station or feature is pointed to by the cursor, the name of the station or feature appears below the map. Selecting a station on the map will display the "Available Data" page for that station.

At the bottom of most selection windows is a navigation bar that includes "Table of Contents," "Introduction," "Station Descriptions," "Surface-Water Data," "Ground-Water Data," "Meteorological Data," and "Biological Data." This navigation bar allows quick transfer to other sections and data types.

A print-on-demand feature prints a paper copy very similar to the traditional printed Water-Data Report for the current water year. This printable format of the report contains the same introductory sections as the electronic report and presents traditional annual tables of surface-water, ground-water, meteorological, and biological data collected during the current water year. To print this document, the user will find the link to the "Printable Water-Data Report" page under the title of the first selection window ("Brief Table of Contents" page).

The traditional printable version of the Water-Data Report is stored in the electronic report as an Adobe® PDF® document. This PDF® document contains the introductory sections of the report, all data tables, and maps showing the data-collection sites for the current water year. The user must have Adobe® Acrobat® Reader® installed on the computer. This software may be freely obtained from the following Internet URL (<http://www.adobe.com/products/acrobat/readstep2.html>). Once Adobe® Acrobat® Reader® is available on the computer, select the link called "Printable Report" found on the "Printable Water-Data Report" page that will open the PDF® document. Allow time for the document to open and select Print from the File menu. **NOTE: The complete printed document may exceed 1,000 one-sided pages.**

## PURPOSE, SCOPE, AND HISTORY

The Water Resources Discipline of the U.S. Geological Survey (USGS), in cooperation with Federal, State, 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 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."

This annual Water–Data Report for Illinois contains current water year (Oct. 1, 2003, to Sept. 30, 2004) and historical data of discharge, stage, water quality and biology of streams; stage of lakes and reservoirs; levels and quality of ground water; and records of precipitation, air temperature, dew point, solar radiation, and wind speed. The current year's (2004) data provided in this report include (1) discharge for 178 surface–water gaging stations and for 10 crest–stage partial–record stations; (2) stage for 27 surface–water gaging stations; (3) stage for 8 reservoirs; (4) water–quality records for 36 surface–water stations; (5) sediment–discharge records for 16 surface–water stations; (6) water–level records for 15 ground–water wells; (7) precipitation records for 49 rain gages; (8) records of air temperature, dew point, solar radiation and wind speed for 1 meteorological station; and (9) biological records for 6 sample sites. Also included are miscellaneous data collected at various sites not in the systematic data–collection network.

Data were collected and compiled as a part of the National Water Information System (NWIS) maintained by the U.S. Geological Survey in cooperation with Federal, State, and local agencies.

This series of Water–Data 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 include data on quantities of surface water, quality of surface water and ground water, and ground–water levels. Because of the increase in hydrologic data collected in Illinois, a two–volume format was published for water years 1978 to 1997. Greater requests for hydrologic data in electronic format and the addition of meteorological and biological data to the report have shown a need to provide data in an electronic report. Beginning in 1998, hydrologic data were published on the Web and on compact disc.

Prior to introduction of this series and for 10 water years (1961–70) 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 1961–70 water years, the data were published in two 5–year reports. Data on chemical quality, temperature, and suspended sediment for the 1941–70 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1935–74 water years were published under the title "Ground–Water Levels in the United States." The above mentioned Water–Supply Papers may be found in the libraries of major cities of the United States and may be purchased from U.S. Geological Survey, Information Services, Denver Federal Center, Box 25286, Denver, CO 80225–0286.

Publications similar to this report are published annually by the USGS for all States. These 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 (when applicable). For example, Volume 1 of Illinois' 1997 report is identified as "U.S. Geological Survey Water–Data Report IL–97–1." For archiving and general distribution, the reports for 1961 to current 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 USGS Illinois Water Science Center at the address given in the section titled "Access to USGS Water Data" or by telephone at (217) 344–0037.

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 USGS Illinois Water Science Center's home page is <http://il.water.usgs.gov/>.

## COOPERATION

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

Illinois Department of Natural Resources, Joel Brunsvold, Director.

Office of Water Resources, Gary Clark, Director.

Illinois State Water Survey, Derek Winstanley, Chief.

Illinois Environmental Protection Agency, Renee Cipriano, Director.

Bloomington and Normal Sanitary District, J.M. Callahan, Executive Director.

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

Metropolitan Water Reclamation District of Greater Chicago, Richard Lanyon, Director of Research and Development.

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 Engineering, Stormwater & Environmental Concerns Division, A.J. Charlton, Director.

Kane County Department of Environmental Management, Tim Harbaugh, Director.

Lake County, Peter Kolb, Public Works Department.

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

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

Winnebago County, J.A. Vanderwerff, Sr, County Engineer, County Highway Department.

Winnebago County Sheriff Office, D.F. Lolli, Chief of Sheriff's Emergency Response Team.

Campton Township, Board of Trustees.

City of Champaign, Eleanor Blackmon, City Engineer.

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

City of Decatur, S.P. Swanson, Director of Engineering & Infrastructure.

City of Joliet, Dale Bottino, Emergency Management Agency Coordinator.

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

City of Peru, J.E. Prazen, Consultant.

City of Springfield, Ted Meckes, Superintendent of Water Purification.

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

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

University of Illinois, Jack Dempsey, Vice Chancellor for Administrative Affairs.

West Skokie Drainage District, Jim Cunningham, Chairman.

The following Federal agencies assisted in the data-collection program by providing funds or services:

Corps of Engineers, Chicago, IL District, Susanne Davis, Chief, Hydraulic and Environmental Engineering Branch.

Corps of Engineers, Louisville, KY District, Bill Byron, Chief, Water Management Section.

Corps of Engineers, Rock Island, IL District, Jim Stiman, Chief, Water Control Section.

Corps of Engineers, St. Louis, MO District, Don Coleman, Chief, Water Control Management Section.

Forest Service, Logan Lee, Supervisor, Midewin National Tallgrass Prairie.

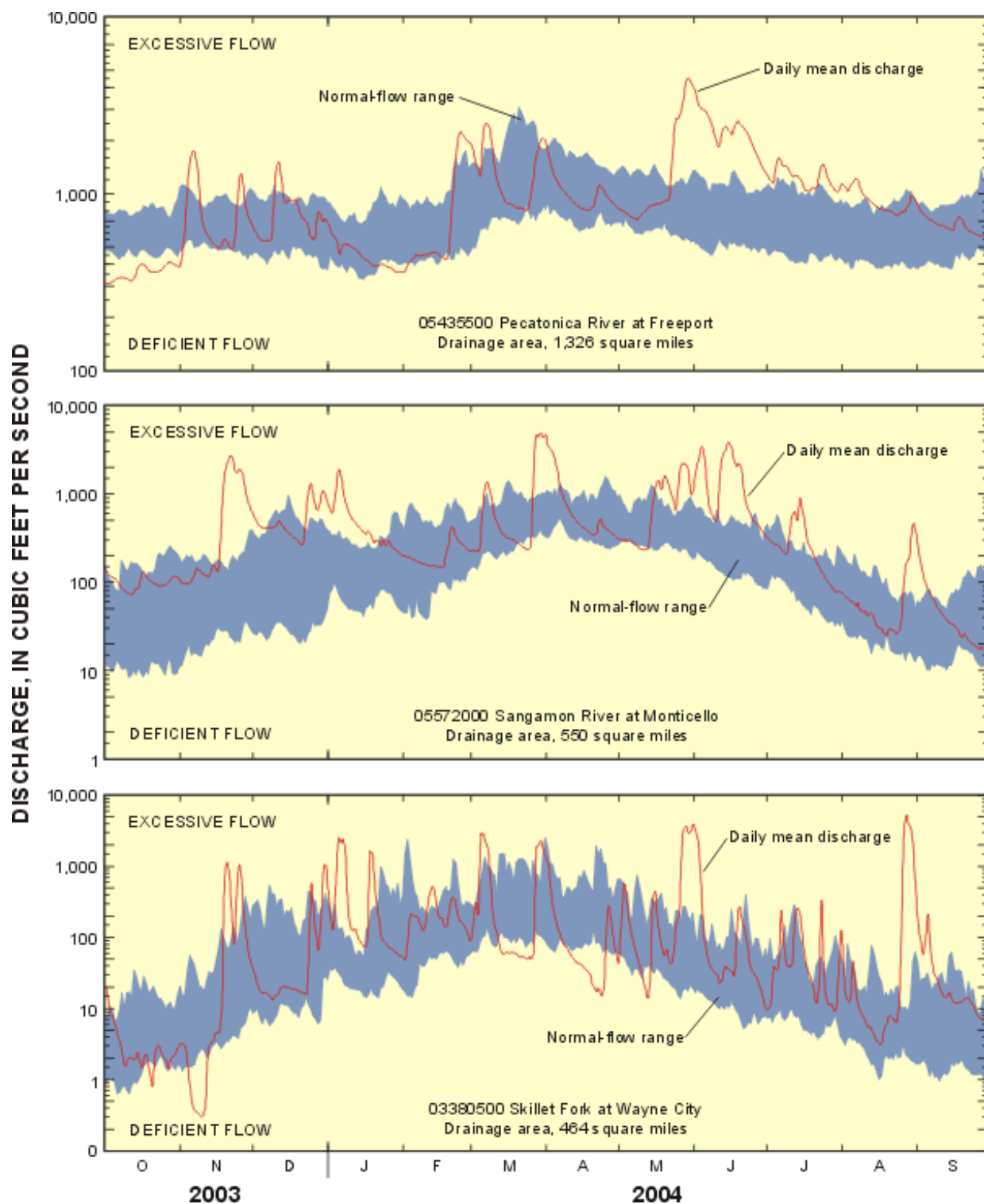


## SUMMARY OF HYDROLOGIC CONDITIONS

During the 2004 water year, runoff was above normal in the northern and central parts of the State of Illinois, and below normal in the southern part of the State. Annual runoff at the northern index station—Pecatonica River at Freeport (05435500)—was 1,038 ft<sup>3</sup>/s or 110 percent of the 30-year (1961–90) average runoff of 947 ft<sup>3</sup>/s. At the central index station—Sangamon River at Monticello (05572000)—, runoff was 600 ft<sup>3</sup>/s or 140 percent of the 30-year average of 430 ft<sup>3</sup>/s. Annual precipitation in southern Illinois was nearly 8 inches below normal (from data map—Midwestern Regional Climate Center's Web site), which contributed to below-normal annual runoff in southern Illinois. At the southern index station—Skillet Fork at Wayne City (03380500)—, runoff was 317 ft<sup>3</sup>/s or 78 percent of the 30-year average of 406 ft<sup>3</sup>/s. A comparison of the 2004 daily discharges for the three index stations and the mean-daily discharges for the 30-year period (1961–90) is shown in [figure 1](#).

Runoff at the northern-index station at Freeport was generally above normal during May — July. Northern Illinois experienced heavy rainfall and flooding near the end of May. As a result, the upper reaches of the Des Plaines River had record flooding during May 23–24. Above normal flows also occurred during parts of November, December, February, March, and August. Below-normal flows occurred in October. The central-index station at Monticello had events of above normal flows during parts of November – January and March – August. Other months had near normal flows. The southern-index station at Wayne City experienced near-normal flows most of the water year. The largest runoff events occurred in May and August. Due to below-normal rainfall in southern Illinois during October and parts of November, the gaging station at Wayne City recorded below-normal runoff during parts of those months. Below-normal runoff also occurred at Wayne City during the months of March and April.

All index gaging stations had above-normal runoff during May and June because of heavy rains throughout the State. Below- to near-normal flows were observed at all stations during the months of October and September.



**Figure 1.** Daily mean discharge for water year 2004 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.

## SPECIAL NETWORKS AND PROGRAMS

National Stream–Quality Accounting Network (NASQAN) is a network of sites used to monitor the water quality of large rivers within the Nation's largest river basins. From 1995 through 1999, a network of approximately 40 stations was operated in the Mississippi, Columbia, Colorado, and Rio Grande River Basins. For the period 2000 through 2004, sampling was reduced to a few index stations on the Colorado and Columbia Rivers so that a network of five stations could be implemented on the Yukon River. Samples are collected with sufficient frequency so 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 (NAWQA) Program; (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. Additional information about the NASQAN Program may be accessed from <http://water.usgs.gov/nasqan/>.

The NASQAN sampling sites for which data are published in this report are Wabash River at New Harmony, IN (03378500), Ohio River at Lock and Dam 53 near Grand Chain, IL (03612500), Mississippi River at Clinton, IA (05420500), and Mississippi River at Thebes, IL (07022000).

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) is a network of monitoring sites that provides continuous measurement and assessment of the chemical constituents in precipitation throughout the United States. As the lead Federal agency, the USGS works together with over 100 organizations to provide a long-term, spatial and temporal record of atmospheric deposition generated from this network of 250 precipitation–chemistry monitoring sites. The USGS supports 74 of these 250 sites. This long-term, nationally consistent monitoring program, coupled with ecosystem research, provides critical information toward a national scorecard to evaluate the effectiveness of ongoing and future regulations intended to reduce atmospheric emissions and subsequent impacts to the Nation's land and water resources. Reports and other information on the NADP/NTN Program, as well as data from the individual sites, may be accessed at <http://bqs.usgs.gov/acidrain/>.

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 provided in this report but can be obtained through <http://nadp.sws.uiuc.edu/>.

The USGS National Water–Quality Assessment (NAWQA) Program 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; to provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and to provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 42 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 is 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 water-resources managers to use in making decisions 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 Federal, State, and local 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 meet 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 may be accessed from <http://water.usgs.gov/nawqa/>.

In Illinois, a pilot 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. Selected data from the upper Illinois River Basin NAWQA pilot study's fixed stations were published in the 1987–92 annual reports.

The upper Illinois River Basin study was re-established in 1997 to (1) define the present surface- and ground-water quality, (2) if possible, identify trends in surface- and ground-water quality, (3) evaluate the effects of different land uses on stream and ground-water quality, and (4) identify areas where water quality is affected adversely by natural and/or human processes. Major water–quality issues being studied include sediment, dredging and associated contaminants; nutrients and eutrophication; dissolved oxygen; trace inorganic and organic compounds; effects of increasing urbanization; effects of ground-water mining on ground-water quality; degradation of aquatic habitat; and invasion of non-native species. Surface-water, ground-water and biological sampling activities began in 1999. The intensive data-collection phase of the upper Illinois River Basin study unit was completed during water year 2001. Selected data from the upper Illinois River Basin NAWQA study have been published in this report since 1998. Sampling continues to assess water–quality trends. Three surface-water stations were sampled on a regular basis through water year 2004 and a subset of 10 water-table wells are sampled in alternate years.

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. During water years 1997 and 1998, 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). A series of habitat surveys were completed and biological samples were collected. The ground-water samples were analyzed for major ions, nutrients, selected pesticides and selected trace metals. Guidelines for collecting and processing ground-water samples are found in Koterba, Wilde, and Lapham (1995). The intensive data-collection phase of the lower Illinois River Basin study unit was completed during water year 1998. Selected data from the lower Illinois River Basin NAWQA study have been published in annual reports beginning in 1997. Sampling continues to assess water-quality trends. Three surface-water stations were sampled on a regular basis through water year 2004 and a subset of five deep glacial aquifer wells are sampled in alternate years.

**The USGS National Streamflow Information Program (NSIP)** is a long-term program with goals to provide framework streamflow data across the Nation. Included in the program are creation of a permanent Federally funded streamflow network, research on the nature of streamflow, regional assessments of streamflow data and data bases, and upgrades in the streamflow information delivery systems. Additional information about NSIP may be accessed from <http://water.usgs.gov/nsip/>.

## EXPLANATION OF THE RECORDS

The surface–water, ground–water, meteorological and biological data in this report for water year 2004 began October 1, 2003, and ended September 30, 2004 (see "Calendar for Current Water Year" at end of introductory text). Historical data also are provided in this report. Historical data consists of approved records stored on the USGS Illinois Water Science Center's computer system. Where available, daily discharge, peak flows, stage, sediment, ground–water levels and precipitation data are provided for the period of record. Also provided in this report are gage values of discharge and stage generally for water years 1994 to current and gage values of precipitation, where available. Gage values include those recorded, transmitted and/or computed from a gaging station and typically are 5–, 15–, or 30–minute data. These data are provided as compressed files via an Internet connection. The following sections of this introductory text are presented to provide users with a more detailed explanation of how the data in this report were collected, analyzed, computed, and presented.

### Station Identification Numbers

Each data station in this report, whether stream site, well, or rain gage, 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 other data sites differ, but both are based on geographic location. The "downstream order" system is used for surface–water stations; the "latitude–longitude" system is used for wells and miscellaneous data sites.

#### Downstream Order System

Since October 1, 1950, surface–water records in USGS reports have been listed in order of downstream direction along the main–stream. All stations on a tributary entering upstream from a main–stream station are listed before that station. A station on a tributary that enters between two main–stream stations is listed between them. Beginning in water year 1998, stations listed in this report can be sorted in downstream direction or alphabetically by station name.

In assigning station numbers in downstream order, 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. An eight–digit number for a station, such as 05527500, which appears on station lists in this report 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. In areas of high station density, more than eight digits may be used for a station number.

#### 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 ([figure 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.

### Discharge and Stage

Records of discharge and stage may be complete or partial. Complete records of discharge are obtained based on discrete measurements and a stage–recording device. Complete records of stage are obtained from stage–recording devices. Data from these devices may be used to compute either instantaneous or mean–daily values for any instant or period of time within the period of record. Stations with complete records also are referred to as continuous–record stations. Locations of surface–water gaging stations for which water year 2004 discharge are given in this report are shown in [figure 3](#). Gaging stations for which stage data for water year 2004 are given in this report are shown in [figure 4](#). Data can be accessed by selecting a location on a figure.

As streamflow information needs far exceeds the number of gaging stations feasible to operate at one time, the USGS collects limited streamflow data at sites other than continuous–record gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic and hydraulic 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. Partial–record sites may include records, such as crest stage and miscellaneous measurements. Crest–stage records contain maximum stage and discharge by water year and for the period of record. Miscellaneous measurements typically contain discharge measurements or measurements from special studies, such as low–flow seepage studies. Crest–stage gage sites for water year 2004 are shown in [figure 4](#), whereas miscellaneous–measurement sites are shown in [figure 3](#).

## Collection and Computation

The data obtained at a continuous–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 discharges. The data obtained at a continuous–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 were obtained with electronic data loggers or satellite telemeters. Measurements of discharge are made with current meters and acoustical flowmeters 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 U.S. Geological Survey Techniques of Water–Resources Investigations (TWRI's), book 3, chapters A1 through A20 and book 8, chapters A2 and B2, which may be accessed at <http://water.usgs.gov/pubs/twri/>. 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).

In computing discharge records, results of individual measurements are plotted with the corresponding stages, and stage–discharge relation curves are then developed. From these curves, rating tables are prepared that indicate the approximate discharge for any stage within the range of the measurements. 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) and gage values of discharge are computed by applying the 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, 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 obscure the stage–discharge relations such 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. Gage values of discharge computed from recorded gage heights are not available for days when daily mean discharge was estimated because of ice formation.

At some surface–water gaging stations, the stage–discharge relation is affected by backwater from reservoirs, tributary streams, or other sources. This backwater effect 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.

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 records of lake or reservoir content, it is necessary to have curves, or tables available from surveys, 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 lake or reservoir 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 discharge or content. This situation results 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, gage values of gage height and gage values of discharge are not available, and daily discharges are estimated from the recorded range in stage, previous or subsequent record, field notes, 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 subsequent record, inflow–outflow studies, and other information. Information explaining how estimated daily–discharge values are identified in station records is included in the section titled "[Identifying Estimated Daily Discharge](#)."

## Presentation of Annual Daily–Value Tables

Daily–value streamflow tables in this report are presented in a format different from the format in data reports prior to the 1991 water year. The major changes since 1991 are that statistical characteristics of discharge appear in tabular summaries following the traditional annual data 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.

Daily-value tables for each continuous-record surface-water discharge station (gaging station) after 1991 consist of four parts: the station description; the data table of daily mean values of discharge for a 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.

Beginning with water year 1998 and the presentation of data in an electronic report, mean-daily discharge and stage data are published in annual daily-value tables. In addition, daily-value data are provided in text files when approved and available from the USGS Illinois Water Science Center's computer system.

#### Station description

The description provides, under various headings, information such as station location; period of record; extremes for period of record; record accuracy; and other remarks pertinent to the station. An annual daily-value table includes a station description (listed first) followed by a daily-value table. Station descriptions also are provided separate from annual data tables in the electronic report.

The following surface-water gaging information, as appropriate, is provided in station descriptions:

**LOCATION.**—Reports the latitude and longitude (generally in degrees, minutes, and seconds) with the associated national horizontal datum in parentheses. Information on locations is obtained from the most accurate maps available. The latitude and longitude of a station is determined from maps and/or global positioning systems. The location of the data 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 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.**—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 be considered reasonably equivalent to flow at the present station. Starting water year 2000, the period of record contains a list of the various data types published with their corresponding period(s) of record.

**REVISED RECORDS.**—Because of new information, published records occasionally are found to be incorrect, and revisions are given 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 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 equipment in current use, the datum of the current gage referred to the associated national vertical datum (see [Definition of Terms](#)), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

**REMARKS.**—Used to present long-term special methods of computation and conditions that affect natural flow at the station. 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.

**REMARKS FOR CURRENT YEAR.**—Established water year 2000 and used to present information relative to the accuracy of the data being presented, to special methods of computation, and to conditions that affect natural flow at the station during the current water year.

**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 highest stage that occurred. The highest stage may have been obtained from a recorder, a crest-stage gage, a high-water mark, 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 maximums.

**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 "Extremes for Period of Record", except the peak discharge listing may include secondary peaks. Prior to water year 1998 and 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. Secondary peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial control by man. Beginning water year 1998, "Extremes for current year" and peaks greater than the base discharge were eliminated for discharge stations. These extremes, however, are provided in the summary statistics table with the exception of the peaks greater than the base discharge which are provided in the "Peak Flow" data section. The "Extremes for current year", however, are provided for stage-only and precipitation stations.

**REVISIONS.**—Records are revised if errors in published records are discovered. Appropriate updates are made in the USGS distributed data system, NWIS, and subsequently to its Web-based national data system, NWISWeb (<http://water.usgs.gov/nwis/nwis>). Users are encouraged to obtain all required data from NWIS or NWISWeb to ensure that they have the most recent data updates. Updates to NWISWeb are made on an annual basis.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because no current or, possibly, future station description would be 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 USGS Illinois Water Science Center (address given in the section titled "Access to USGS Water Data") to determine if the published records were revised after the station was discontinued. However, if the data for a discontinued station were obtained by computer retrieval, the data would be current. Any published revision of data always is accompanied by revision of the corresponding data in computer storage.

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

Headings for AVERAGE DISCHARGE have been deleted for most stations and the information contained in this paragraph is now presented in the tabular summaries following the discharge table. No changes have been made to the data presentations of lake contents.

#### 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. Usually, discharge for the month 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 stage-only stations, the daily tables contain mean gage height for those days that have record for the whole day. Those days without a complete day of record are noted with dashes (—). The monthly summary of the table contains "MEAN", which gives the average daily stage in feet for each month, and "MAX" and "MIN", which give the maximum and minimum daily stages for each month. If a complete year of mean-daily stages is available, then the "MEAN", "MAX", and "MIN" for the calendar year and/or water year are provided at the bottom of the table.

#### 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 annual monthly summary for continuous-record discharge stations. 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 description. The period of record will consist of the station record for the specified water years including complete months of record for partial water years, if any, and may or may not coincide with the entire 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 station description.

#### Summary statistics

A table titled "SUMMARY STATISTICS" follows the statistics of monthly mean data tabulation for continuous-record discharge stations. 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 station record for the specified water years, including complete months of record for partial water years, if any, and may or may not coincide with the entire 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 station description. 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 based on 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 are noted in footnotes. Because the designated period may not be the same as the station period of record published in the description, 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 situation 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, as appropriate, are provided with each continuous-record discharge station:

**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.)

**MAXIMUM PEAK FLOW.**—The maximum instantaneous peak discharge occurring for the water year or designated period. Occasionally, the maximum flow for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak flow is given in the table and the maximum flow may be reported in a footnote.

**MAXIMUM PEAK STAGE.**—The maximum instantaneous peak stage occurring for the water year or designated period. Occasionally, the maximum stage for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak stage is given in the table and the maximum stage may be reported in a footnote. If the dates of occurrence of the maximum peak stage and maximum peak flow are different, 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 tables 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.

#### Identifying Estimated Daily Discharge

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

#### Partial-Record Sites

Data for partial-record discharge sites are presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage sites, and the second is a table of miscellaneous discharge measurements. Miscellaneous measurements generally are made in times of drought or flood to give better areal coverage to those events. Tables for partial-record sites include data for water years 1998 to current.

#### Peak-Flow Record

Annual maximum peak discharges and their associated stage values for the period of record is provided in this report under "Peak flow", which is available on the "Surface-Water Data" page and the "Available Data" page of each gaging station. Also, secondary instantaneous peak discharges and their associated stage values above a selected base discharge are available if the flow above the gage is not appreciably regulated. The base discharge generally is selected such that, on average, three secondary peak-flow discharges, including the annual maximum peak discharge, will exceed the base discharge each water year. Also, if the maximum peak stage occurred at a different time than the annual maximum peak discharge, it also is listed. The specific criteria for (1) deciding which gaging stations should have secondary peaks, (2) selecting the base discharge, and (3) selecting secondary peaks greater than the base discharge are given in Novak (1985).

The peak-flow data are presented in text files. Columns of data in each file include: water year, date and time of peak, peak discharge, peak-flow qualification codes, gage height associated with the peak flow, gage-height qualification codes, year peak flow was last exceeded ("highest since"), maximum gage height (if different from associated gage height of annual peak flow), date and time of maximum gage height, gage-height qualification codes associated with the maximum gage height, and number of secondary peaks. More information about qualification codes are provided as a link ("Peak-Flow Codes") on the "Peak-Flow" station-list page of the report.

### Accuracy of Discharge 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 FOR CURRENT YEAR." "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.

Values of daily mean discharges in this report typically 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 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 because of 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 Available Records

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, 100 West Randolph St., Suite 5–500A, James R. Thompson Center, Chicago, IL 60601 (telephone number 312–793–3123).

Records of discharge, not published by the USGS, are collected at various sites in Illinois by the U.S. Army Corps of Engineers. The National Water Information System (NWIS) of the USGS contains 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 used in the preparation of the records in this publication, such as discharge–measurement notes, instantaneous gage–height and discharge records, temperature measurements, and rating tables are available from the USGS Illinois Water Science Center (Science Center) whose address is given on the section titled "Access to USGS Water Data" Information on the availability of the unpublished information also may be obtained from the Science Center.

### Surface–Water Quality

Records of surface–water quality typically include physical, chemical, biological, microbiological, and sediment data. These records ordinarily are obtained at or near surface–water gaging stations because interpretation of records of surface–water quality often require corresponding discharge data. Records of surface–water quality in this report may involve a variety of types of data and measurement frequencies. Annual data tables of surface–water quality are given in this report for water years 1998 to current. In addition, daily values of sediment data (period of record) are provided in text files for continuous–record sediment sites.

### Classification

Water–quality data for surface–water sites are grouped into one of three classifications. A continuous–record station is a site where data are collected on a regularly scheduled basis. Sample frequencies 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 usually is less than quarterly. A miscellaneous sampling site is a location other than a continuous– or partial–record station, where less frequent samples are collected to allow for better areal or temporal coverage to define water–quality conditions in a river basin.

A careful distinction needs to be made between *continuous records* as used in this report and *continuous recordings* that refer to a continuous graph or a series of discrete values recorded at short intervals. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which 2004 records on surface–water quality appear in this report are shown in [figure 5](#).

### On–site Measurements and Sample Collection

To ensure that water–quality data represent the ambient quality of the water, certain measurements, such as water temperature, specific conductance, pH, and dissolved oxygen, must be made on–site when the samples are taken. To assure sample integrity, 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 given in *Techniques of Water–Resources Investigations (TWRI)*, book 1, chap. D2; book 3, chap. C2; book 5, chap. A1,A3, and A4; book 9, chap. A1–A9; Shelton (1994); Horowitz and others (1994); and other USGS publications. Most of the methods used for collecting and analyzing water samples are described in the TWRI, which may be accessed from <http://water.usgs.gov/pubs/twri/>. 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 Water Science Center. For quality–control procedures, refer to the section "[Quality Control of Water–Quality Samples](#)".

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

Water–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 and were analyzed on the basis of current sampling techniques and methods of analysis used by the USGS National Water–Quality Laboratory in Denver, Colorado and the USGS Organic Geochemistry Research Laboratory in Lawrence, Kansas.

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

#### Water Temperatures

Water temperatures are measured at most water–quality stations. In addition, water temperatures are taken at the time of discharge measurements for 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 effluent 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 discharge measurements are available from the USGS Illinois Water Science Center.

#### Sediment

At continuous–record sediment stations, suspended –sediment concentrations are determined from samples collected with depth–integrating, isokinetic samplers at single–vertical locations, and/or with automatic water samplers collecting samples from a fixed point. Periodic cross sections are obtained at various verticals with depth–integrating, isokinetic samplers to compare to and adjust the single–vertical samples and/or the fixed point samples to compute the mean concentration of the cross section. Annual data tables show daily water discharge, suspended–sediment concentration and suspended–sediment discharge. Daily values of sediment concentration and sediment discharge also are provided in text files for the period of record.

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 loads 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 which can be accessed at <http://water.usgs.gov/pubs/twri/>. These methods are consistent with ASTM standards and generally follow IOS standards. For quality–control procedures, refer to the section "[Quality Control of Water–Quality Samples](#)". Locations of sediment stations for which water year 2004 data appear in this report are shown in [figure 6](#).

At partial–record stations, suspended–sediment samples were collected periodically by depth integrated sampling at several 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 predicting 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 Analyses

Sediment samples for the National Water–Quality Assessment Program study units in the USGS Illinois Water Science Center are analyzed at the USGS sediment laboratory in Rolla, Missouri. Sediment samples for other projects are analyzed at the USGS sediment laboratory in Louisville, Kentucky. Methods used in analyzing sediment samples and in computing sediment records are given in TWRI book 5, chapter C1 (<http://water.usgs.gov/pubs/twri/>). Samples for indicator bacteria (microbiological) are analyzed locally. Water–chemistry samples are analyzed at the USGS National Water–Quality Laboratory in Denver, Colorado, the USGS Geochemistry Research Laboratory in Lawrence, Kansas, or the Illinois Environmental Protection Agency Laboratory in Champaign, Illinois. 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 found in data tables of this report identify the agency or office having the principal responsibility for collecting and (or) analyzing water samples.

<u>Agency</u>	<u>Agency Code</u>
USGS	1028
Illinois Environmental Protection Agency	17002
USGS, National Water–Quality Laboratory	80020
USGS, Illinois Water Science Center	81700
USGS Geochemistry Research Laboratory in Lawrence, Kansas	82013

The USGS National Water–Quality Laboratory collects quality–control data (refer to: "[Quality Control of Water–Quality Samples](#)") on a continual basis to evaluate selected analytical methods to determine long–term method detection levels (LT–MDL's) and laboratory reporting levels (LRL's). These values are re–evaluated each year based on the most recent quality–control data and, consequently, may change from year to year.

Analytes detected at concentrations between the LT–MDL and LRL and that pass identification criteria are estimated. Estimated concentrations will be noted with a remark code of "E" (refer to "Remarks Codes" section). These data should be used with the understanding that their uncertainty is greater than that of data reported without the "E" remark code.

Dissolved trace–element concentrations traditionally 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 greater than the micrograms per liter (ug/L) level should be viewed with caution. Such data actually may 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 (Horowitz and others, 1994).

#### Presentation of Annual Data Tables

For continuous–record stations, information pertinent to the history of station operation is provided in station descriptions preceding the annual data tables. These station descriptions give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Station descriptions also are given separate from the annual data tables.

The following surface–water quality information, as appropriate, is provided in station descriptions:

LOCATION.—See [Station Description](#) under "Discharge and Stage;" same comments apply.

DRAINAGE AREA.—See [Station Description](#) under "Discharge and Stage;" same comments apply.

PERIOD OF RECORD.—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. Starting in water year 2000, the period of record contains a list of the various data types published with their corresponding period(s) of record.

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

REMARKS.—Remarks provide long–term information pertinent to the collection, analysis, or computation of the records.

REMARKS FOR CURRENT YEAR.—Established in water year 2000 and contains information pertinent to the collection, analysis, or computation of the current year's records.

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

EXTREMES FOR PERIOD OF RECORD or CURRENT YEAR.—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 in the U.S. Geological Survey's distributed data system, NWIS, and, subsequently, to its Web-based national data system, NWISWeb (<http://water.usgs.gov/nwis/nwis>). Users are encouraged to obtain all required data from NWIS or NWISWeb to ensure the most recent updates. Updates to NWISWeb currently are made on an annual basis.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables in the surface-water quality section titled "Miscellaneous". Each site is published with its own station number and name in the regular downstream-order sequence. Station descriptions are not provided with the data tables, instead, they are shown in the section titled "Station Descriptions."

### Ground-Water Levels

Annual data tables of ground-water levels for water years 1998 to current are published in this report. In addition, the period of record for ground-water level sites with greater than 5 years of record are published in text files. Furthermore, the period of record for sites established after 1998 are also included in text files regardless of the number of data years available. Locations of wells for which water-level data for water year 2004 given in this report are shown in [figure 7](#).

### 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 consistently are accurate and reliable.

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 station description. The height of the measuring point (MP) above or below land-surface datum is given in each station description. The method and frequency of measurement also 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 500–1,000 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 better. Accordingly, most measurements are reported to a hundredth of a foot, but some are given to a tenth (or larger) of a foot.

### Presentation of Annual Data Tables

Annual data tables of ground-water levels are presented by station number or county. The primary identification number for a given well is the 15-digit station number consisting of latitude, longitude, and sequence number as described in the "[Latitude-Longitude System](#)" earlier in this report. The secondary identification number is the local well number, an alphanumeric identifier, derived from the township-range location of the well.

Annual data tables consist of two parts: the station description and the data table of water levels observed during the water year. The station description of a well precedes the data table. Station descriptions also are provided separate from the data tables.

Water levels are reported in feet below land-surface datum. For sites without recording equipment, all taped measurements of water level are listed. For wells equipped with recorders, abbreviated tables are published through water year 2002; (generally, only water-level lows are listed for every fifth day and at the end of the month (eom)); beginning in water year 2003, daily water-level lows are listed, as are end of the month statistics. Prior to water year 2003, the highest and lowest water levels of the water year and their dates of occurrence are shown below the abbreviated tables. Beginning in water year 2003, the highest and lowest water levels of the water year and their dates of occurrence are shown below the tables of sites with hand-taped measurements and above the tables of sites with recording equipment. 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.

The following ground-water-level information, as appropriate, is provided in station descriptions:

**LOCATION.**—Reports the latitude and longitude (generally in degrees, minutes, and seconds) with the associated national horizontal datum in parentheses; a landline location designation; the hydrologic-unit number; a local well name, if applicable; the distance and direction from a geographic point of reference; and the owner's name.

**AQUIFER.**—Designates the name and geologic age of the aquifer(s) open to the well.

**WELL CHARACTERISTICS.**—Describes the observation 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.**—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.**—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 feet above land–surface datum). The elevation of the land–surface datum is described in feet above (or below) associated national vertical datum; it is reported with a precision depending on the method of determination.

**REMARKS.**—Describes long–term factors that may affect water levels in a well or measurements of water levels. It should identify wells that also are water–quality monitoring wells.

**PERIOD OF RECORD.**—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. Starting in water year 2000, the period of record contains a list of the various data types published with their corresponding period(s) of record.

**EXTREMES FOR PERIOD OF RECORD or CURRENT YEAR.**—Contains the highest and lowest water levels of the period of published record or current year, with respect to land–surface datum, and the dates of their occurrence.

### Ground–Water Quality

Records of ground–water quality in this report differ from other types of records in that, for most sampling sites, records consist of generally one set of measurements for each water year. The quality of ground water ordinarily changes slowly in relation to surface water; therefore, samples for water–quality analyses are taken from wells on an infrequent (annually or longer) basis. In special cases, where ground–water quality may change more rapidly, or if a particular problem is of concern (such as monitoring for trends in nitrate concentration), more frequent measurements are made as needed to quantify these changes.

Annual data tables of ground–water quality for water years 1998 to current are published in this report. Locations of wells for which water–quality data for water year 2004 are given in this report are shown in [figure 8](#).

### Collection and Computation

Most methods for collecting and analyzing water samples are described in the TWRI's referred to in the "On–site Measurements and Sample Collection", and the "Laboratory Analyses" sections in this report. In addition, TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground–water samples for selected unstable constituents. Procedures for on–site measurements and for collecting, treating, and shipping samples are given in TWRI's Book 1, Chapter D2; Book 5, Chapters A1, A3 and A4; and Book 9, Chapters A1 through A6. The TWRI publications may be accessed from <http://water.usgs.gov/pubs/twri/>. The values in this report represent water–quality conditions at the time of sampling, as much as possible, and that are consistent with available sampling techniques and methods of analysis. These methods are consistent with ASTM standards and generally follow ISO standards. Trained personnel collected all samples. The wells sampled were pumped long enough to ensure 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, composing the casings.

### Presentation of Annual Data Tables

The records of ground–water quality are presented by station number or by county. The station number for wells sampled is the 15–digit station number derived from the latitude–longitude locations as described in the "[Latitude–Longitude System](#)" presented earlier in this report.

The station description of a well precedes the data table. Each heading in the station description provides the same information as presented in the "[Ground–Water–Levels](#)" section. Station descriptions also are provided separate from data tables in the section titled "[Station Descriptions](#)." The "[Remark Codes](#)" listed near the end of this introductory text also may be applicable to ground–water–quality records.

### Meteorology

Meteorological records in this report consist of precipitation, air temperature, dew point, solar radiation, and wind speed. Non–precipitation records (air temperature, dew point, solar radiation, and wind speed) are discussed in the "[Other Meteorological Records](#)" section. Locations of meteorological sites for which data for water year 2004 are given in this report are shown in [figure 9](#).

### Precipitation

Annual daily–value tables of 24–hour precipitation totals in and near DuPage County for water years 1986 to current are published in this report where approved and available in the USGS Illinois Water Science Center's computer system. Starting in water year 2000, other selected precipitation sites also are published. Daily values are given in text files. Depending on the type of instrumentation used to collect precipitation data, gage values of instantaneous (0.01–inch increments) or 5–minute totals of 0.01–inch increments are provided in text files where available.

### Collection and Computation

Rainfall values are obtained by using tipping-bucket rain gages with electronic data loggers. Collection, computation, and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to errors for days with freezing and/or thawing of precipitation.

For DuPage County rain-gage sites, 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 from field observations and by comparing recorded data with snowfall, snow depth, and temperature and precipitation data from the National Oceanic and Atmospheric Administration precipitation gages. For the period of record between water years 1997 and 2000, daily values for periods of missing record were estimated using amounts recorded at nearby rain gages and the reciprocal-distance-squared equation (U.S. Department of Commerce, 1972, p. 3-11). For water year 2001 to present, daily values for periods of missing record were estimated from the closest rain gage.

#### Presentation of Annual Data Tables

Precipitation records collected at surface-water gaging stations are identified by the same station number and name as the gaging station. Where a surface-water gaging station is not available, the precipitation record is published with its own name and 15-digit latitude-longitude identification number.

Information pertinent to the history of a precipitation station is provided in station descriptions that precede the data table. These station descriptions give details regarding location, period of record, record accuracy, general remarks, and maximum daily values. Station descriptions also are provided separate from data tables.

The following precipitation-station information, as appropriate, is provided in station descriptions:

**LOCATION.**—Reports the latitude and longitude (generally in degrees, minutes, and seconds) with the associated National horizontal datum in parentheses. Information on locations is obtained from the most accurate maps available. The latitude and longitude of a station is determined from maps and/or global-positioning systems. A consideration used in the determination of site locations was the proximity of existing structures and minimal obstructions.

**PERIOD OF RECORD.**—See [Station Description](#) section under " Discharge and Stage;" same comments apply.

**GAGE.**—Description of the gage equipment in current use.

**REMARKS.**—Provides long-term information pertinent to the collection, analysis, or computation of meteorological records.

**EXTREMES FOR PERIOD OF RECORD.**—Maximum daily precipitation value for the period of record.

**EXTREMES FOR CURRENT YEAR.**—Maximum daily precipitation value for the current year.

#### Other Meteorological Records

Other meteorological records in this report consist of air temperature, dew point, solar radiation, and wind-speed measurements for one station at the Argonne National Laboratory (ANL). The measurements were made by ANL staff.

#### Collection and Computation

In more recent years, the ANL used standard automated meteorological instruments. Older data were recovered from paper records and digitized. All data underwent a checking procedure at ANL and then were posted on the Web (<http://www.atmos.anl.gov/ANLMET/>). The USGS obtained these data, performed additional checks, filled in missing periods using data from adjacent National Weather Service and Illinois Climate Network stations, and by comparison with these data from adjacent stations, adjusted historical data to make it statistically homogeneous with current measurements.

#### Presentation of Annual Data Tables

Data are presented as series of hourly values in text files. Associated with each value is a three-digit, data-remarks code that explains the origin and transformations applied to the value. An explanation of the remark codes are provided as a link in the "" section of this report.

#### Biology

Since water year 1989, stream biology and physical habitat data have been obtained by the National Water-Quality Assessment (NAWQA) Program study units in the USGS Illinois Water Science Center. The NAWQA Program collects in-stream algae, benthic macroinvertebrate, fish and habitat data. Annual data tables of algae for water years 1989 to current are published in this report. Annual-data tables and text files of benthic macroinvertebrate, fish, and habitat data for water years 1996 to current are also published in this report. Locations of biological samples given in this report are shown in [figure 10](#).

### Collection and Processing

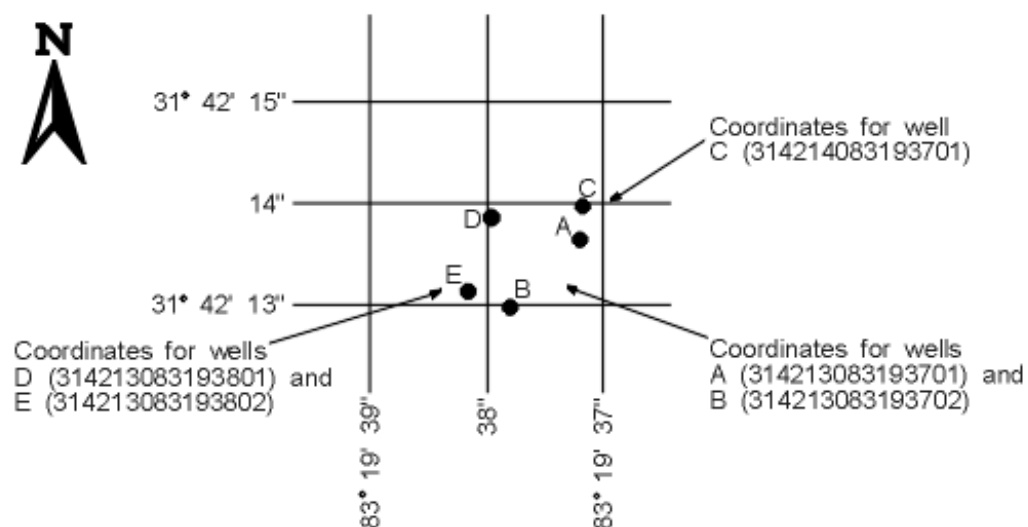
Biological community samples and habitat data were collected since 1996 according to protocols established by the NAWQA Program (Cuffney and others, 1993; Meador and others, 1993; Porter and others, 1993; Fitzpatrick and others, 1998, Moulton and others, 2002). Macroinvertebrate and algae sampling often include both quantitative and qualitative samples. All data were collected within defined reaches, or lengths of stream, which are at or near surface–water quality stations. When multiple samples were collected, they were collected from separate reaches near a station. Letter designations were given to these reaches with "A" being the most upstream reach.

The method of sample processing depended on the type of organism sampled. Fish primarily were identified in the field with selected specimens collected for identification, verification, or vouchering at the Illinois Natural History Survey, Champaign. Macroinvertebrate and algal samples were sent to the USGS National Water–Quality Laboratory for processing, enumeration and taxonomic identification. Habitat characteristics were measured both in the field and calculated in the office.

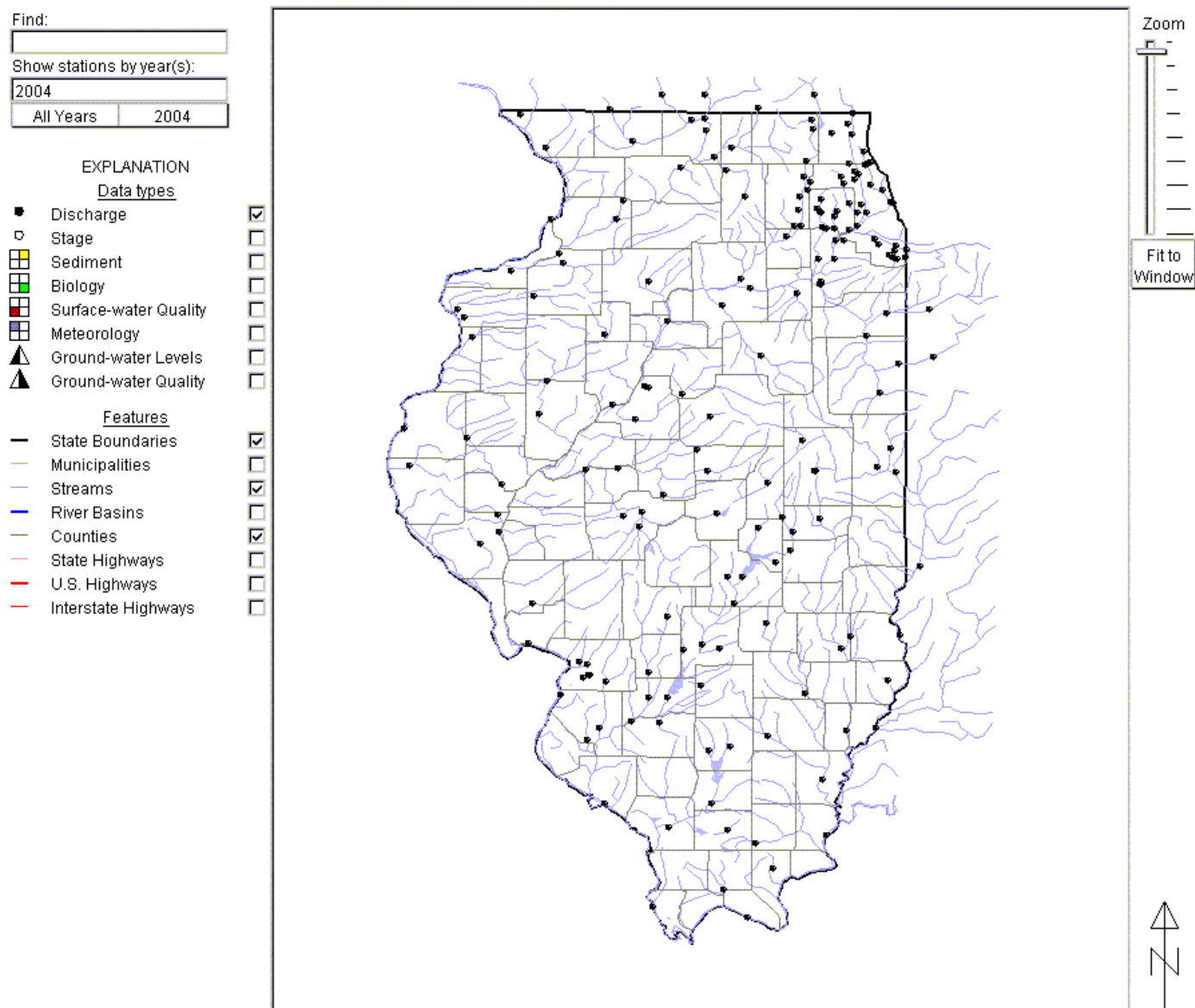
### Presentation of Annual Data Tables

Annual tables of algae include periphyton, pigment (chlorophyll), and biomass. Annual–data tables for biological community data (benthic macroinvertebrate and fish) are arranged by taxonomic group. Habitat data are collected hierarchically (in streams reaches and along cross sections within a reach), and are presented in multiple files. Information pertinent to the history of a biological station is provided in the station description that precedes the annual–data table. These station descriptions give details regarding location, period of record, drainage area and general remarks. Station descriptions also are provided separate from data tables.

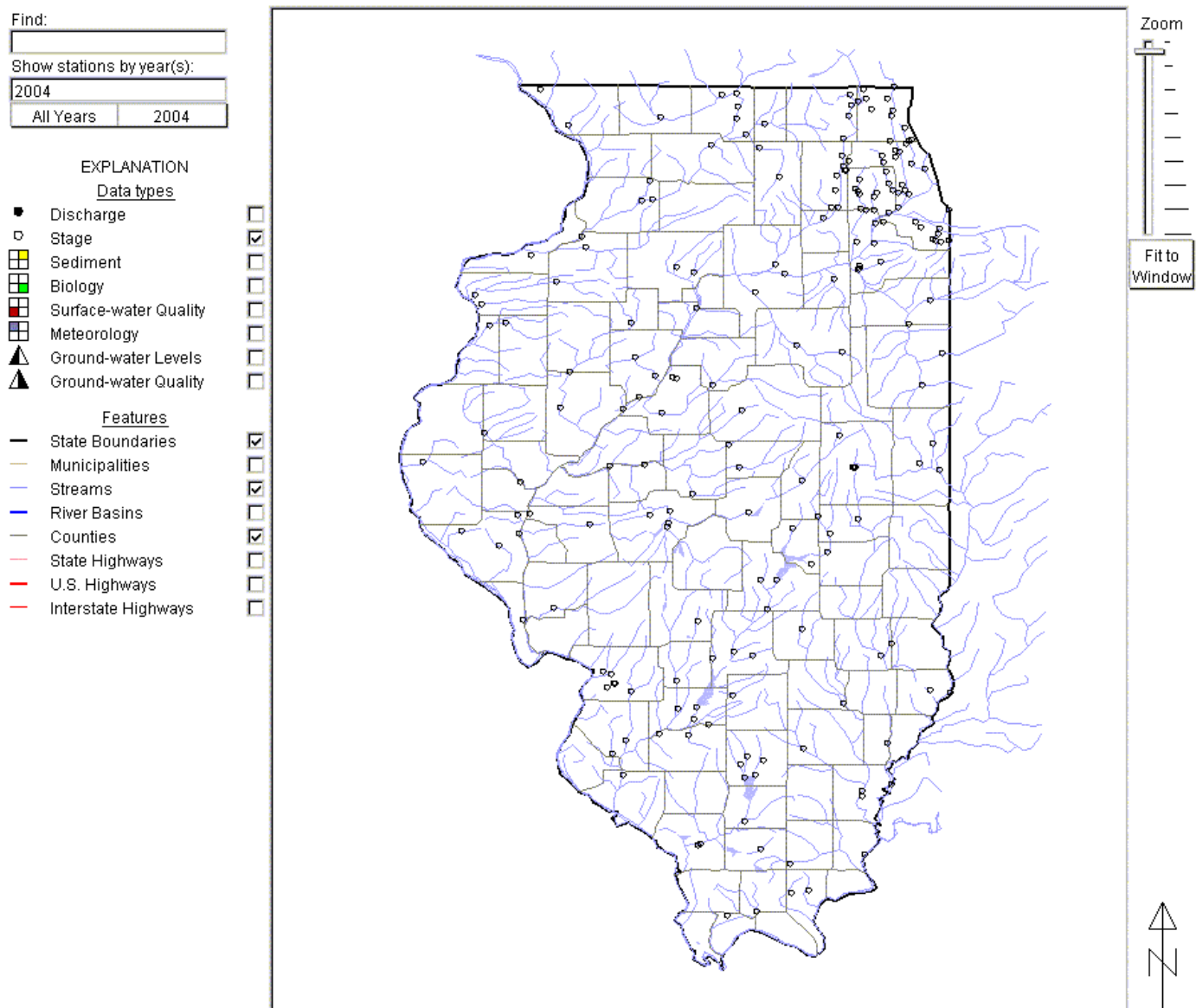




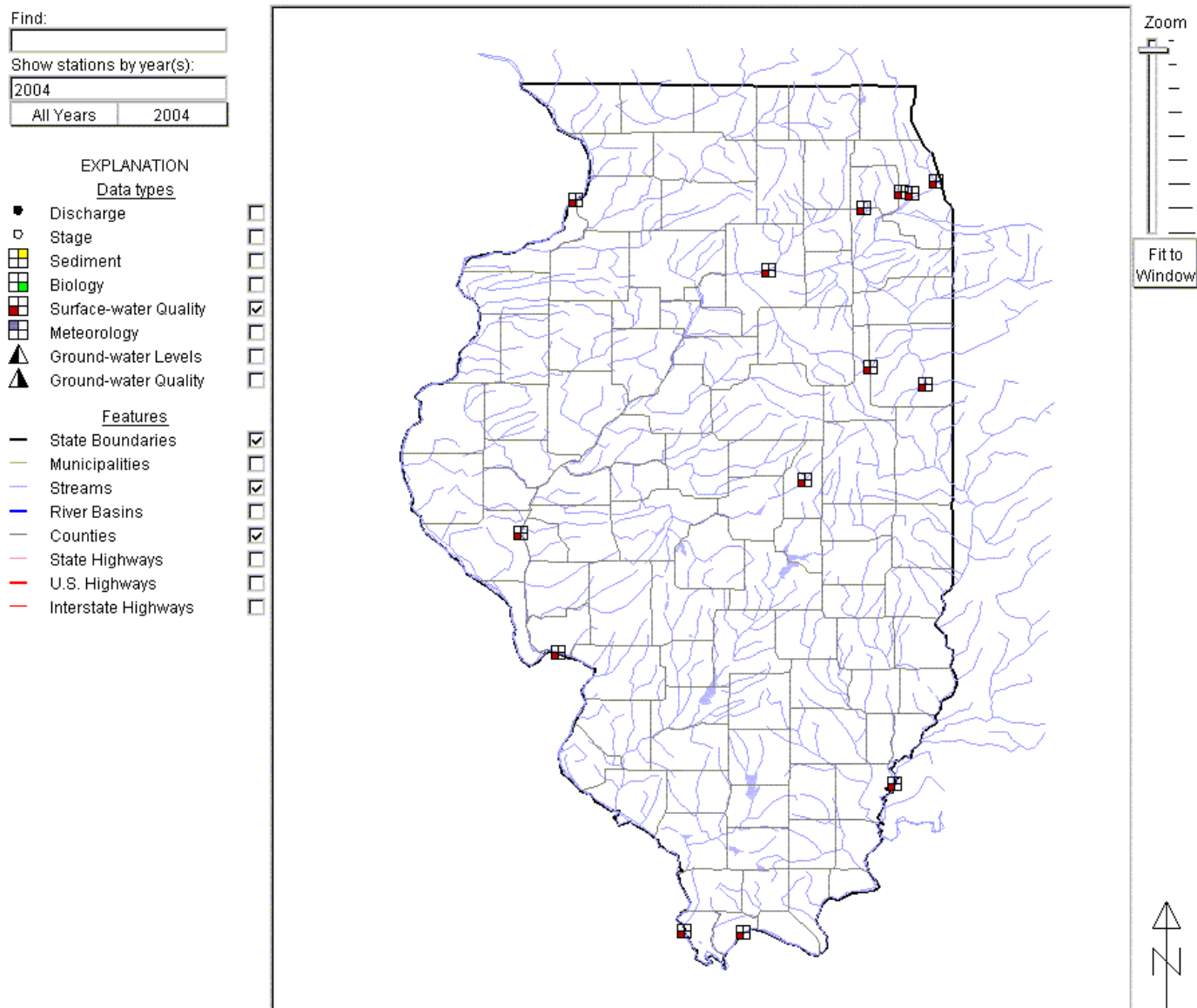
**Figure 2.** System for numbering wells and miscellaneous sites (latitude and longitude).



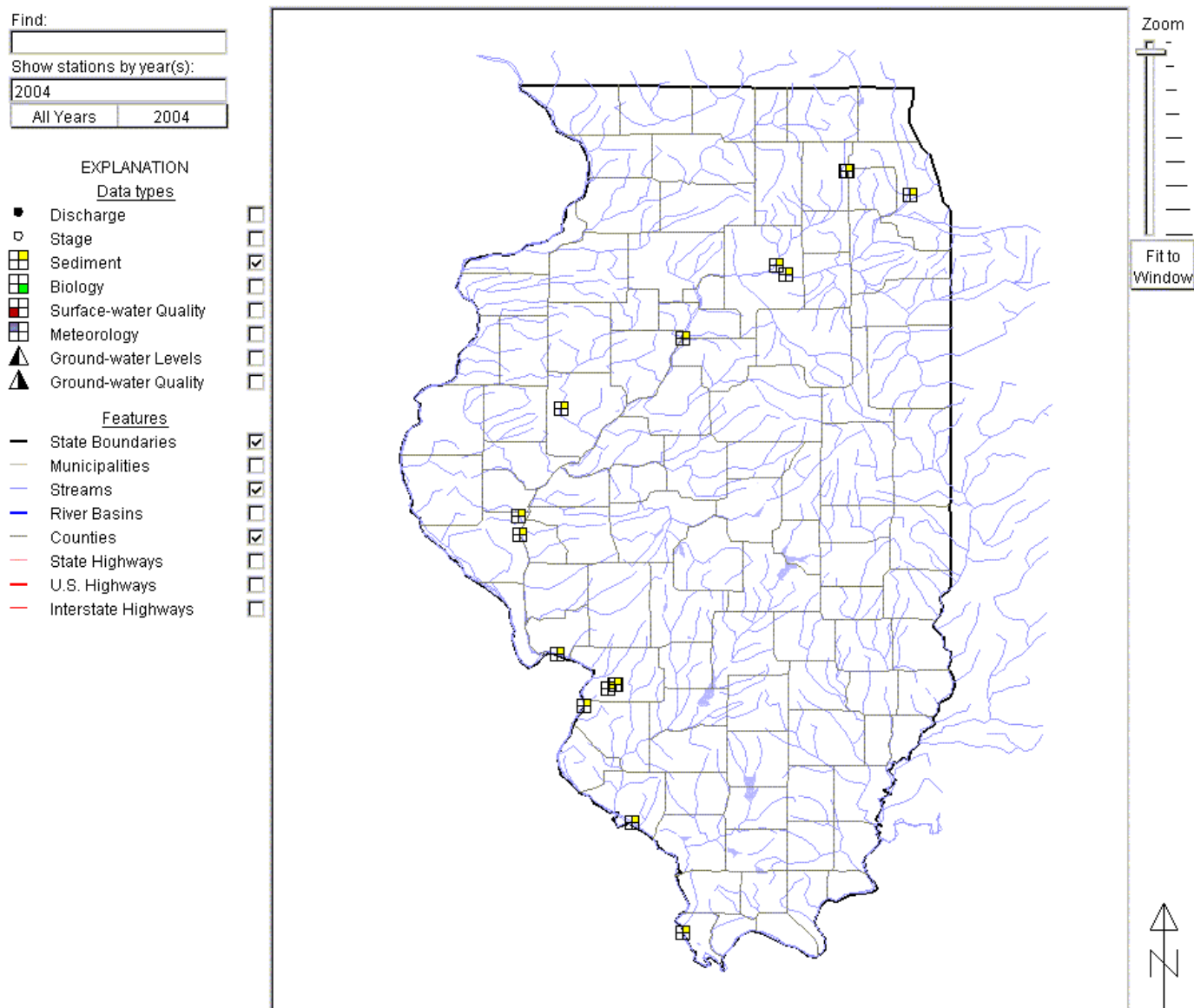
**Figure 3.** Location of surface–water–gaging stations with discharge records for current water year.



**Figure 4.** Location of surface–water–gaging stations with stage records for current water year.



**Figure 5.** Location of surface–water–quality sites for current water year.



**Figure 6.** Location of sediment sites for current water year.

Find:

Show stations by year(s):

2004

All Years    2004

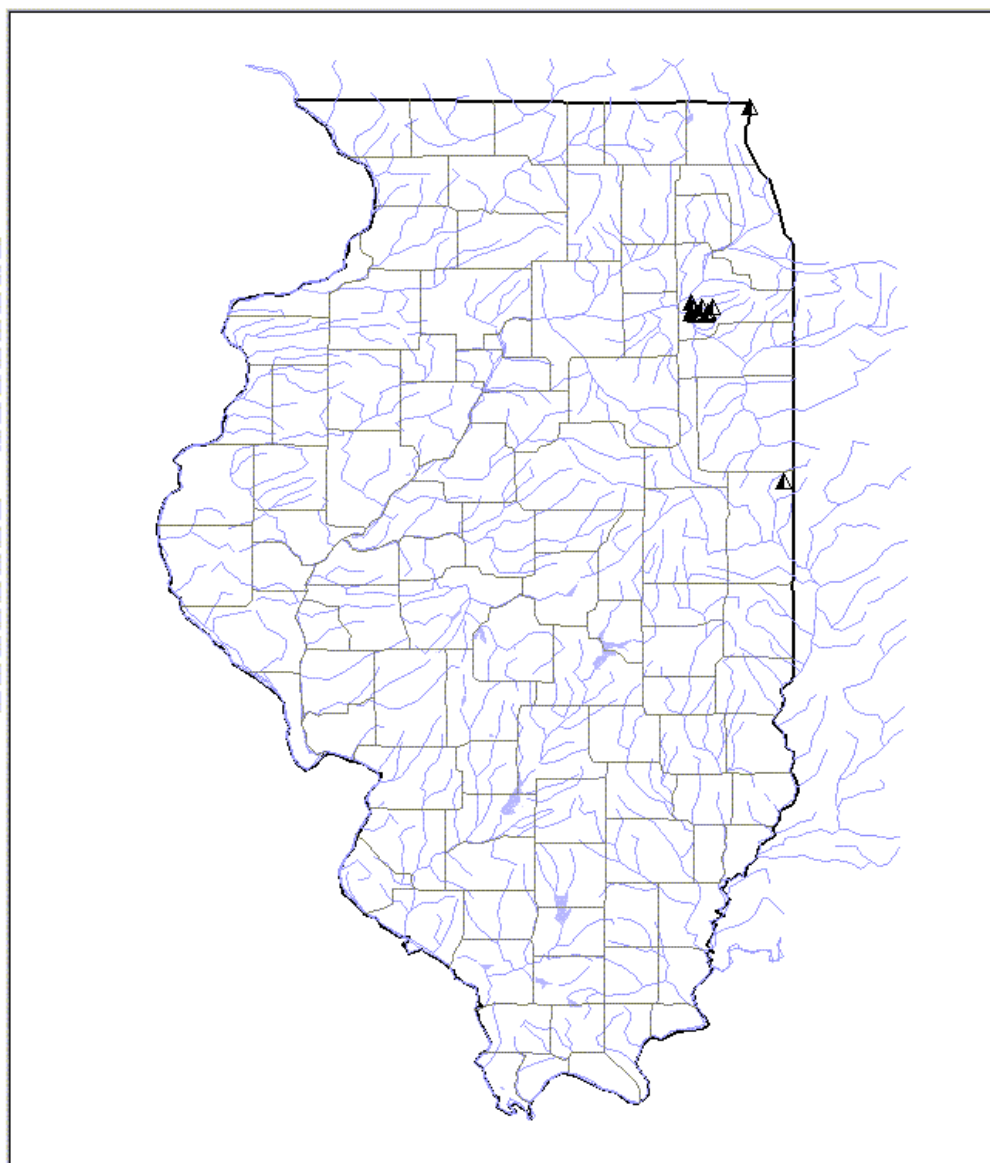
## EXPLANATION

## Data types

- ☐ Discharge
- ☐ Stage
- ☐ Sediment
- ☐ Biology
- ☐ Surface-water Quality
- ☐ Meteorology
- ☒ Ground-water Levels
- ☐ Ground-water Quality

## Features

- ☒ State Boundaries
- ☐ Municipalities
- ☐ Streams
- ☐ River Basins
- ☐ Counties
- ☐ State Highways
- ☐ U.S. Highways
- ☐ Interstate Highways

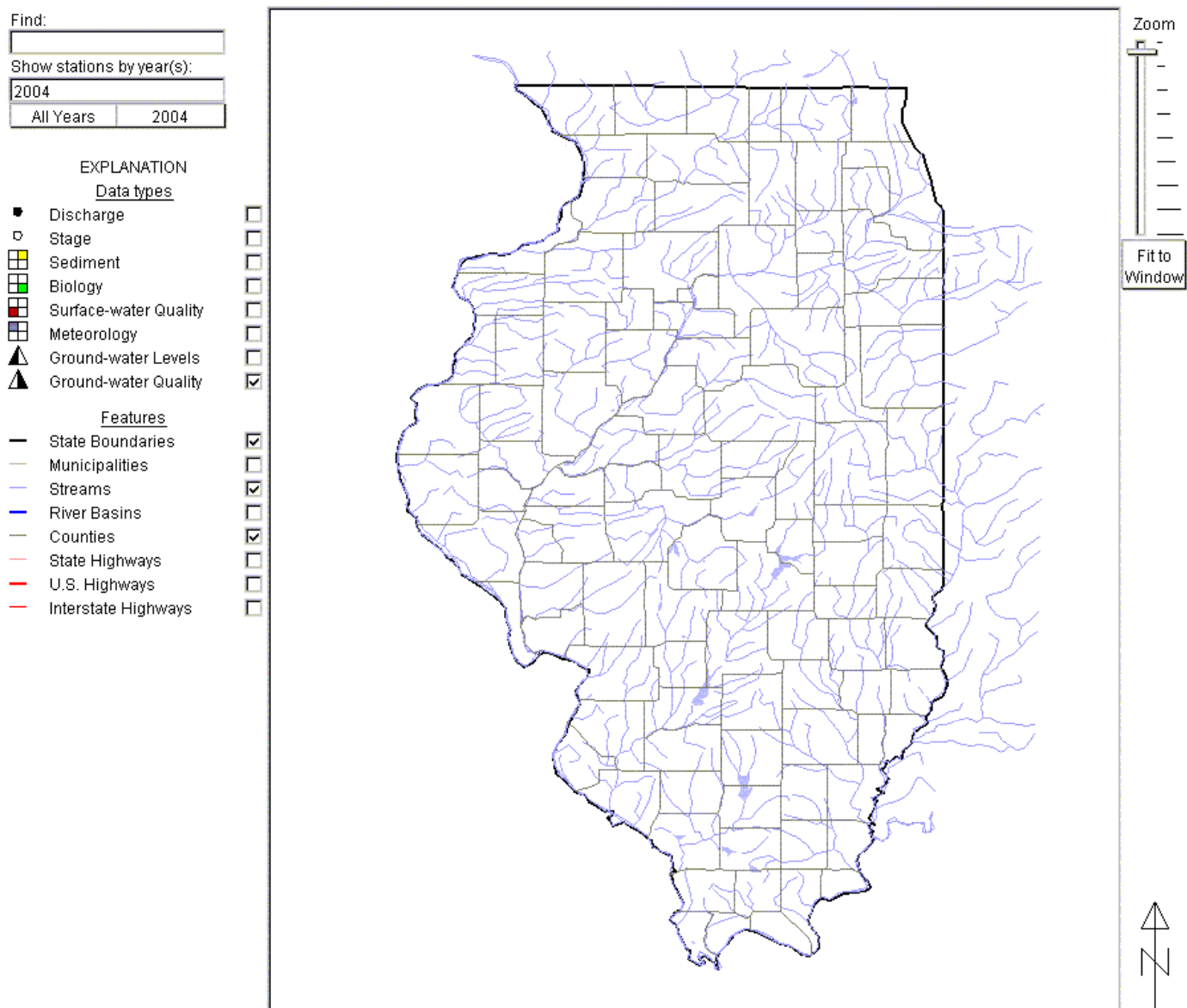


Zoom

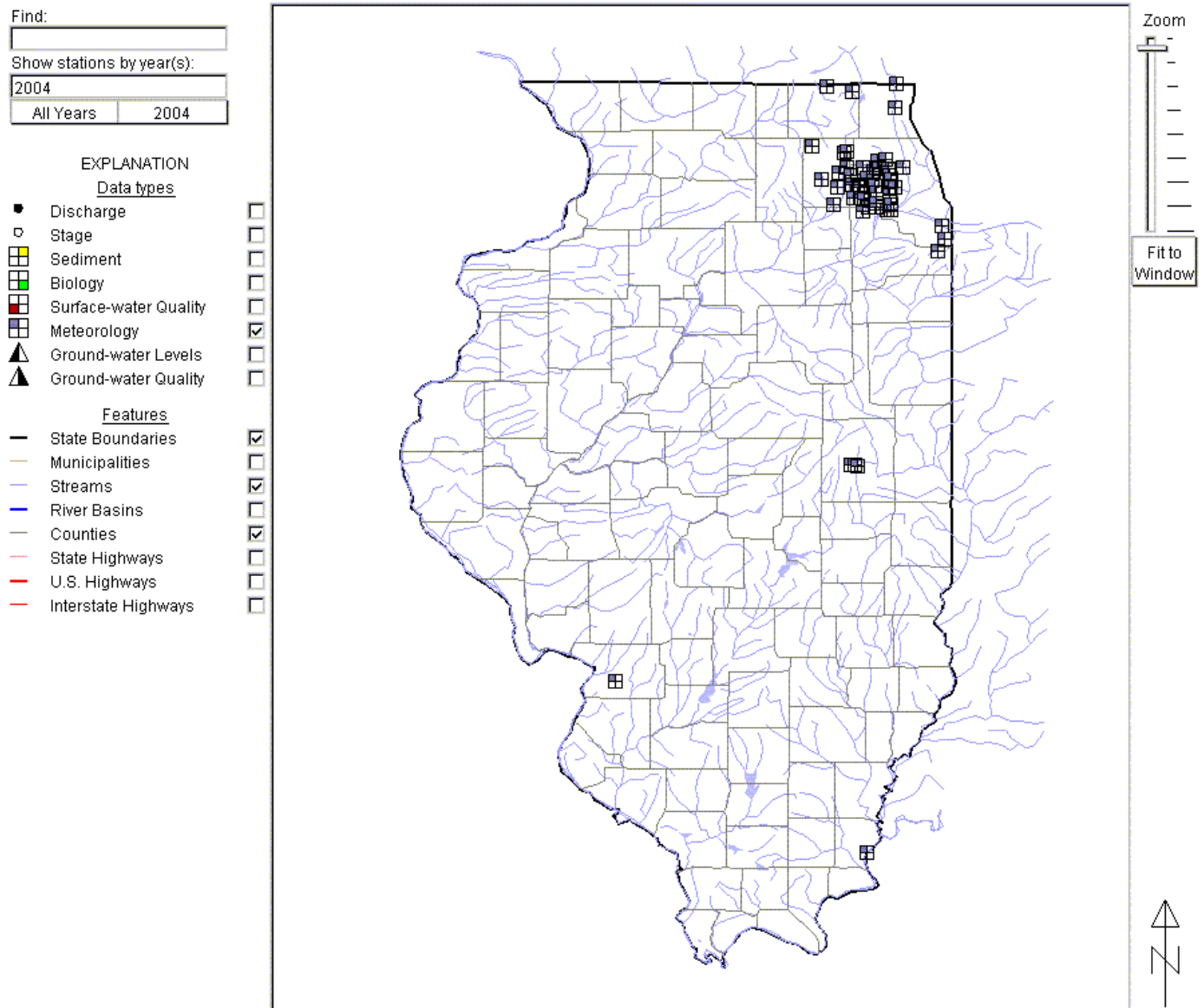
Fit to Window



**Figure 7.** Location of ground–water–level sites for current water year.

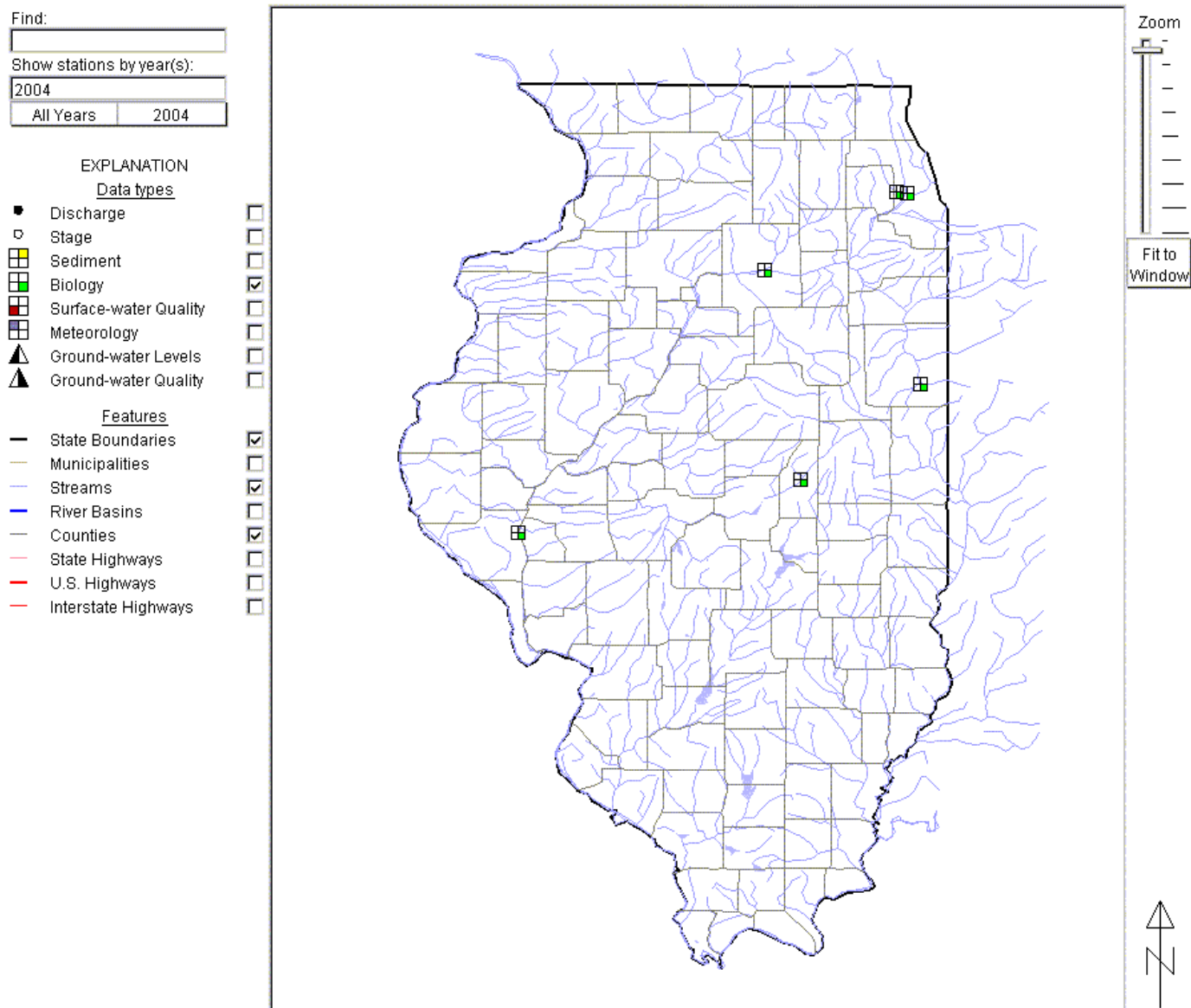


**Figure 8.** Location of ground–water–quality sites for current water year.



**Figure 9.** Location of meteorological sites for current water year.





**Figure 10.** Location of biological sites for current water year.

## QUALITY–CONTROL OF WATER–QUALITY SAMPLES

Data generated from quality–control (QC) samples are a requisite for evaluating the quality of the sampling (environmental samples) and processing techniques, as well as data from the actual samples themselves. Without QC data, environmental–sample data can not be adequately interpreted because the errors associated with the sample data are unknown. Some of the various types of QC samples collected by the USGS Illinois Water Science Center are described in the following section. Procedures have been established for the storage of water–quality–control data within the USGS. These procedures allow for storage of all derived QC data and are identified so that they can be related to corresponding environmental samples. These data are not presented in this report but are available from the Science Center.

**BLANK SAMPLES**—Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated during the data–collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analytes of interest. Any measured–value signal in a blank sample for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. Many types of blank samples are possible, each designed to segregate a different part of the data–collection process. The types of blank samples collected by the USGS Illinois Water Science Center are:

**Source solution blank** – a blank solution that is transferred to a sample bottle in an area of the office laboratory in a clean and protected atmosphere with respect to target analytes.

**Ambient blank** – a blank solution that is put in the same type of bottle used for an environmental sample, kept with the set of sample bottles before sample collection, and opened at the site and exposed to the ambient conditions.

**Field blank** – a blank solution that is subjected to all aspects of sample collection, field–processing preservation, transportation, and laboratory handling as an environmental sample.

**Trip blank** – a blank solution that is put in the same type of bottle used for an environmental sample and kept with the set of sample bottles before and after sample collection.

**Equipment blank** – a blank solution that is processed through some or all equipment used for collecting and processing an environmental sample (similar to a field blank but normally done in the more controlled conditions of the office than the field).

**Sampler blank** – a blank solution that is poured or pumped through the same field sampler used for collecting an environmental sample.

**Filter blank** – a blank solution that is filtered in the same manner and through the same filter apparatus used for an environmental sample.

**Splitter blank** – a blank solution that is mixed and separated using a field splitter in the same manner and through the same apparatus used for an environmental sample.

**Preservation blank** – a blank solution that is treated with the sampler preservatives used for an environmental sample.

**REFERENCE SAMPLES**—Reference material is a solution or material prepared by a laboratory. The reference material composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to ensure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental–sample properties.

**REPLICATE SAMPLES**—Replicate samples are a set of environmental samples collected in a manner such that the samples are thought to be essentially identical in composition. Replicate is the general case for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. Many types of replicate samples are possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected in the USGS Illinois Water Science Center are:

**Concurrent sample** – a type of replicate sample in which the samples are collected simultaneously with two or more samplers or by using one sampler and alternating collection of samples into two or more compositing containers.

**Sequential sample** – a type of replicate sample in which the samples are collected one after the other, typically over a short time.

**Split sample** – a type of replicate sample in which a sample is split into subsamples; each subsample is contemporaneous in time and space.

**SPIKE SAMPLES**—Spike samples are samples to which known quantities of a solution with one or more well–established analyte concentrations have been added. These samples are analyzed to determine the extent of matrix interference or degradation on the analyte concentration during sample processing and analysis.

## ACCESS TO USGS WATER DATA

The USGS provides near real-time stage and discharge data for many gaging stations equipped with telemetry, as well as historical surface-water, water-quality, and ground-water data for most current or discontinued stations through the Web. These data may be accessed at <http://water.usgs.gov>.

Hydrologic data for Illinois can also be accessed by the Web at <http://il.water.usgs.gov>. Information about the availability of specific types of data or products, and user charges, can be obtained locally from the USGS Illinois Water Science Center at 1201 West University Avenue, Suite 100, Urbana, IL., 61801-2347 or by calling 217-344-0037.

## DEFINITION OF TERMS

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, may be accessed at [http://water.usgs.gov/ADR\\_Defs\\_2004.pdf](http://water.usgs.gov/ADR_Defs_2004.pdf). Terms such as algae, water level, and precipitation are used in their common everyday meanings, definitions of which are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. Definitions specific to the USGS Illinois Water Science Center are listed below. See also table for converting English units to International System (SI) units. Other glossaries that also define water-related terms are accessible at <http://water.usgs.gov/glossaries.html>.

**Chlorophyll**—The green pigment found in photosynthetic organisms that harnesses the energy in sunlight to synthesize carbohydrates from carbon dioxide and water.

**Dew point**—(Or dew-point temperature.) The temperature to which a given air parcel must be cooled at constant pressure and constant water vapor content in order for saturation to occur.

**Langley per hour**—(Lg/hr) is the amount of energy measured in calories arriving at an area of 1 square centimeter in 1 hour. One Langely per hour is equivalent to 0.08598 watt per square meter.

**Nephelometric turbidity unit**—(NTU) is the measurement for reporting turbidity that is based on use of a standard suspension of formazin. Turbidity measured in NTU uses nephelometric methods that depend on passing specific light of a specific wavelength through the sample.

**Periphyton**—Algae attached to an aquatic substrate; also known as benthic algae.

**Recoverable from bed (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 (that is, less than 95 percent) 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.

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## REMARK CODES

The following remark codes may appear with data in this report:

PRINT OUTPUT	REMARK
E	Value is estimated.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
S	Water quality—Most probable value. Precipitation—Snowfall-affected precipitation.
M	Presence of material verified but not quantified.
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).
V	Analyte was detected in both the environmental sample and the associated blanks.
&	Biological organism estimated as dominant.
*	Biological organism present in qualitative sample.
P	Biological organism in pupal life stage.
LV	Biological organism in larval life stage.
A	Biology—Biological organism in adult life stage. Water quality—Average value.
N	Presumptive evidence of presence of material.
U	Material specifically analyzed for, but not detected.

## DEFINITION OF UNITS

This report contains measurements expressed in various abbreviated units. The following table lists the definition of abbreviated units used in this report:

ac-ft	acre-feet
°C	degrees Celsius
°F	degrees Fahrenheit
cfs	cubic feet per second
cfs/m	cubic feet per second per square mile
ft	feet
ft/s	feet per second
ft <sup>3</sup> /s	cubic feet per second
g	grams
Lg/hr	Langleys per hour
m <sup>2</sup>	square meters
mg/L	milligrams per liter
mi <sup>2</sup>	square miles
mm	millimeters
mph	miles per hour
ng/L	nanograms per liter
pCi/L	picocuries per liter
ug/g	micrograms per gram
ug/kg	micrograms per kilogram
ug/L	micrograms per liter
uS/cm	microsiemens per centimeter



## CONVERSION FACTORS

<b>Multiply</b>	<b>By</b>	<b>To obtain</b>
<b><i>Length</i></b>		
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
<b><i>Area</i></b>		
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
<b><i>Volume</i></b>		
gallon (gal)	$3.785 \times 10^0$	liter
	$3.785 \times 10^{-3}$	cubic meter
	$3.785 \times 10^0$	cubic decimeter
million gallons (Mgal)	$3.785 \times 10^3$	cubic meter
	$3.785 \times 10^{-3}$	cubic hectometer
cubic foot (ft <sup>3</sup> )	$2.832 \times 10^{-2}$	cubic meter
	$2.832 \times 10^1$	cubic decimeter
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)	$1.223 \times 10^3$	cubic meter
	$1.223 \times 10^{-3}$	cubic hectometer
	$1.223 \times 10^{-6}$	cubic kilometer
<b><i>Flow Rate</i></b>		
cubic foot per second (ft <sup>3</sup> /s)	$2.832 \times 10^1$	liter per second
	$2.832 \times 10^{-2}$	cubic meter per second
	$2.832 \times 10^1$	cubic decimeter per second
gallon per minute (gal/min)	$6.309 \times 10^{-2}$	liter per second
	$6.309 \times 10^{-5}$	cubic meter per second
	$6.309 \times 10^{-2}$	cubic decimeter per second
million gallons per day (Mgal/d)	$4.381 \times 10^{-2}$	cubic meter per second
	$4.381 \times 10^1$	cubic decimeter per second
<b><i>Velocity</i></b>		
feet per second (ft/s)	$1.097 \times 10^0$	kilometers per hour
	$3.048 \times 10^{-1}$	meters per second
miles per hour (mph)	$1.609 \times 10^0$	kilometers per hour
	$0.4469 \times 10^0$	meters per second
<b><i>Mass</i></b>		
ton, short (2,000 lb)	$9.072 \times 10^{-1}$	megagram (Mg) or metric ton
<b><i>Radiation</i></b>		
Langley's per hour (Lg/hr)	$11.63 \times 10^0$	watts per square meter

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows: **°F = (1.8 x °C) + 32**

CALENDAR FOR CURRENT WATER YEAR

2003

OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
			1	2	3	4							1		1	2	3	4	5	6
5	6	7	8	9	10	11	2	3	4	5	6	7	8	7	8	9	10	11	12	13
12	13	14	15	16	17	18	9	10	11	12	13	14	15	14	15	16	17	18	19	20
19	20	21	22	23	24	25	16	17	18	19	20	21	22	21	22	23	24	25	26	27
26	27	28	29	30	31		23	24	25	26	27	28	29	28	29	30	31			
							30													

2004

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	1	2	3	4	5	6	7		1	2	3	4	5	6
4	5	6	7	8	9	10	8	9	10	11	12	13	14	7	8	9	10	11	12	13
11	12	13	14	15	16	17	15	16	17	18	19	20	21	14	15	16	17	18	19	20
18	19	20	21	22	23	24	22	23	24	25	26	27	28	21	22	23	24	25	26	27
25	26	27	28	29	30	31	29							28	29	30	31			
APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3							1			1	2	3	4	5
4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12
11	12	13	14	15	16	17	9	10	11	12	13	14	15	13	14	15	16	17	18	19
18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26
25	26	27	28	29	30		23	24	25	26	27	28	29	27	28	29	30			
							30	31												
JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	1	2	3	4	5	6	7			1	2	3	4	
4	5	6	7	8	9	10	8	9	10	11	12	13	14	5	6	7	8	9	10	11
11	12	13	14	15	16	17	15	16	17	18	19	20	21	12	13	14	15	16	17	18
18	19	20	21	22	23	24	22	23	24	25	26	27	28	19	20	21	22	23	24	25
25	26	27	28	29	30	31	29	30	31					26	27	28	29	30		

### Surface–Water Data

WABASH RIVER BASIN  
**03336645 Middle Fork Vermilion River Above Oakwood, IL**

**LOCATION.**— Lat 40°08'14", long 87°44'45" (NAD of 1927), in NE1/4SW1/4 sec.5, T.19 N., R.12 W., Vermilion County, Hydrologic Unit 05120109, on right bank 150 ft upstream from Kickapoo State Park Road bridge, 1.0 mi upstream from Interstate Highway 74 bridge, 2.0 mi northeast of Oakwood, and at mile 31.7.

**DRAINAGE AREA.**— 432 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1978 to current year.

STAGE: Water years 1994 to current year. Gage-height records for January 1972 to Nov. 8, 1978, available in files of Illinois Office of Water Resources.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–91.

SPECIFIC CONDUCTANCE: Water year 1979.

WATER TEMPERATURE: Water year 1979.

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 544.42 ft above NGVD of 1929 (levels by Illinois Office of Water Resources).

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 15,500 ft<sup>3</sup>/s, Apr. 13, 1994, gage height, 20.46 ft; minimum daily, 4.5 ft<sup>3</sup>/s, Nov. 20, 1980.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	331	92	463	695	e120	219	1850	197	1500	214	154	219
2	256	88	381	585	e117	302	1230	198	1840	205	151	153
3	217	86	349	537	e114	253	881	200	716	206	142	123
4	208	86	339	1990	e111	387	670	198	451	327	138	101
5	183	94	342	3080	e110	1950	502	203	315	313	157	82
6	159	130	378	1350	e107	1790	407	195	264	255	125	73
7	143	174	414	665	e105	1070	363	182	232	352	86	66
8	132	137	409	546	e103	717	328	170	211	262	72	58
9	123	113	405	447	e101	545	292	164	201	288	65	53
10	116	100	444	383	e100	438	257	161	197	2410	69	48
11	110	100	575	341	e99	357	239	163	2280	2910	67	46
12	104	106	519	333	e98	321	222	162	5540	2370	63	42
13	99	201	425	310	e97	281	208	170	5680	965	56	40
14	111	166	388	287	e94	263	199	191	2640	1370	52	41
15	194	128	366	e270	e93	252	186	589	1190	1330	48	49
16	229	118	342	e280	e92	239	174	708	1630	707	45	55
17	184	110	323	e250	e91	232	173	446	3440	505	43	46
18	151	1080	296	e270	e90	230	175	334	2790	529	41	40
19	136	3350	273	e210	e130	218	176	382	1690	489	39	55
20	125	2930	236	e220	e270	204	190	410	765	359	39	52
21	116	2100	207	205	665	192	213	326	572	286	40	43
22	111	1040	233	175	361	172	320	274	485	248	40	37
23	106	855	932	138	254	164	287	271	413	224	39	33
24	100	2170	1590	180	249	179	247	360	357	199	37	35
25	98	1940	913	138	237	190	237	334	332	177	50	33
26	98	1100	610	e160	207	1650	236	983	317	163	270	27
27	110	847	487	e150	186	4780	219	819	281	155	466	26
28	138	729	446	e140	171	4200	201	463	252	146	387	27
29	128	617	1970	e135	164	3440	191	309	236	140	650	29
30	114	534	1830	e130	---	2500	185	249	223	137	677	29

**03336645 Middle Fork Vermilion River Above Oakwood, IL--Continued**

<b>31</b>	101	---	946	e125	---	1820	---	684	---	148	347	---
TOTAL	4531	21321	17831	14725	4736	29555	11058	10495	37040	18389	4655	1761
MEAN	146	711	575	475	163	953	369	339	1235	593	150	58.7
MAX	331	3350	1970	3080	665	4780	1850	983	5680	2910	677	219
MIN	98	86	207	125	90	164	173	161	197	137	37	26
CFSM	0.34	1.65	1.33	1.10	0.38	2.21	0.85	0.78	2.86	1.37	0.35	0.14
IN.	0.39	1.84	1.54	1.27	0.41	2.55	0.95	0.90	3.19	1.58	0.40	0.15

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 – 2004, BY WATER YEAR (WY)**

MEAN	150	307	360	330	560	740	662	665	474	311	199	121
MAX	1088	2278	1097	1679	2580	2088	2384	1656	1446	1320	1060	1116
(WY)	1994	1986	1991	1993	1982	1979	1994	1995	1998	1993	1981	1993
MIN	9.73	9.54	15.6	15.5	67.6	73.4	86.4	92.1	27.0	12.8	11.1	7.85
(WY)	2001	1981	2000	2000	2000	2000	2000	1988	1988	1988	2000	2000

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1979 – 2004**

ANNUAL TOTAL	158635		176097			
ANNUAL MEAN	435		481		406	
HIGHEST ANNUAL MEAN					901	
LOWEST ANNUAL MEAN					74.3	
HIGHEST DAILY MEAN	6290	Sep 1	5680	Jun 13	14400	Apr 13 1994
LOWEST DAILY MEAN	34	Aug 28	26	Sep 27	4.5	Nov 20 1980
ANNUAL SEVEN-DAY MINIMUM	43	Aug 22	29	Sep 24	5.1	Nov 16 1980
MAXIMUM PEAK FLOW			6070	Jun 12	15500	Apr 13 1994
MAXIMUM PEAK STAGE			10.36	Jun 12	20.46	Apr 13 1994
INSTANTANEOUS LOW FLOW			26	Sep 26		
ANNUAL RUNOFF (CFSM)	1.01		1.11		0.939	
ANNUAL RUNOFF (INCHES)	13.66		15.16		12.76	
10 PERCENT EXCEEDS	957		1200		958	
50 PERCENT EXCEEDS	183		219		152	
90 PERCENT EXCEEDS	70		62		16	

WABASH RIVER BASIN  
03337000 Boneyard Creek at Urbana, IL

**LOCATION.**— Lat 40°06'40", long 88°13'35" (NAD of 1927), in NW1/4NE1/4 sec.18, T.19 N., R.9 E., Champaign County, Hydrologic Unit 05120109, on right bank 300 ft. upstream from Mathews Ave., on University of Illinois campus in Urbana, and at mile 1.6.

**DRAINAGE AREA.**— 4.46 mi<sup>2</sup>, of which 0.88 mi<sup>2</sup> is noncontributing.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: July 1948 to current year.

STAGE: Water years 1994 to current year.

PRECIPITATION: September 2003 to current year.

**REVISED RECORDS.**— WDR IL-75-1: Drainage area. WDR IL-83-1: 1982(M). WDR IL-98: 1979-96 (selected events).

**GAGE.**— Water-stage recorder, phone telemeter, acoustic-velocity meter, rain gage, and Parshall flume. Datum of gage is 694.00 ft. above NGVD. Prior to Oct. 1, 1974, at datum 14.25 ft higher. From Oct. 1, 1974 to Sept. 30, 2001, at datum 14.10 ft. higher. From Apr. 19, 2002 to June 26, 2002, at site 95 ft. downstream at same datum. From June 27, 2002 to July 24, 2003 at site 250 ft. upstream at same datum.

**REMARKS.**— Since Aug. 1, 1960, storm runoff from 0.88 mi<sup>2</sup> at headwaters has been diverted to Saline Branch through the Northwest Diversion Conduit. Prior to the 1970's, effluent from sewage-treatment plant about 0.5 mi upstream from gage. Since July 1999, a retention basin 1.0 mi upstream temporarily detains water during periods of heavy runoff. Water enters the retention basin by gravity flow during periods of heavy runoff, and is pumped out during the recession, with a maximum rate of 20 ft<sup>3</sup>/s not to exceed a maximum in-stream rate of 60 ft<sup>3</sup>/s. Since Oct. 1999, some temporary storage occurs in underground conduits 0.6 mi upstream during runoff events. Channel construction near this gage (03337000) began Aug. 30, 2001. Streamflow diversion pumpage for channel construction began Sept. 1, 2001 causing frequent fluctuations in stage. Channel construction and pumpage for channel construction ended May 6, 2003. PRECIPITATION: Collection, computation, and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 946 ft<sup>3</sup>/s, from rating based on two indirect measurements, Aug. 12, 1993, gage height, 24.03 ft, present datum, from flood marks; minimum daily, 0.03 ft<sup>3</sup>/s, Feb. 12, 1981.

**PRECIPITATION:** Maximum daily total, 2.54 in, March 26, 2004.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	3.2	3.2	e4.5	3.2	4.4	10	7.8	3.1	2.9	3.1	1.9
2	2.9	2.9	3.3	e4.2	5.1	3.2	7.7	3.9	5.0	5.9	3.1	2.0
3	6.4	2.7	3.4	e11	4.1	3.2	6.6	3.5	3.0	15	3.2	2.0
4	3.0	2.6	3.9	e37	3.3	36	5.8	3.5	2.8	3.0	5.7	2.2
5	2.9	9.6	7.0	e9.0	3.6	12	5.4	3.4	2.7	2.8	2.8	2.3
6	2.9	3.3	3.4	e6.0	3.8	6.4	5.2	3.3	2.8	32	2.8	2.7
7	2.9	2.8	3.2	e5.0	3.2	5.4	5.4	3.2	2.8	5.3	3.0	2.6
8	2.8	2.7	3.2	e4.7	3.1	5.1	4.6	3.2	2.8	3.2	3.1	2.5
9	2.8	2.7	3.2	e4.3	3.7	4.7	4.2	3.2	3.2	18	16	2.5
10	2.7	3.3	7.3	e4.0	3.3	5.0	4.1	3.1	35	41	9.1	2.5
11	2.7	4.5	3.2	e3.9	4.3	4.8	4.0	4.1	32	4.9	2.4	2.6
12	2.6	2.9	3.1	e3.8	3.1	4.1	3.9	8.3	4.1	3.9	2.4	2.7
13	2.6	2.6	3.2	e3.7	3.2	3.8	3.8	17	3.5	20	2.4	2.7
14	14	2.6	3.4	e3.7	3.8	4.9	3.7	19	3.4	4.6	2.4	50
15	2.9	3.2	3.4	3.7	3.1	3.9	3.6	4.3	18	3.6	2.5	4.5
16	2.8	3.0	3.2	3.7	3.0	7.4	3.5	3.6	9.6	3.6	2.5	1.9
17	2.7	6.4	3.1	10	3.4	4.7	3.4	3.7	4.0	26	2.7	1.8
18	e2.7	69	4.3	4.1	4.6	3.9	3.3	28	3.3	3.9	2.8	1.8
19	e2.6	e5.0	3.3	3.7	5.4	3.7	3.3	6.4	3.0	3.8	2.8	1.8
20	e2.5	e3.7	2.9	3.6	5.7	3.7	22	4.1	2.9	e3.6	5.5	1.9

WABASH RIVER BASIN

59

**03337000 Boneyard Creek at Urbana, IL--Continued**

<b>21</b>	2.5	e3.4	3.5	3.6	3.7	3.4	4.1	3.8	3.0	e3.6	2.3	1.9
<b>22</b>	2.5	e3.2	14	3.5	3.5	3.5	12	3.5	2.9	e3.4	2.3	1.9
<b>23</b>	2.6	e24	23	3.5	3.7	3.1	4.2	3.5	2.9	e3.2	2.4	2.0
<b>24</b>	2.5	e6.0	e4.6	3.4	3.5	3.3	5.6	3.3	2.9	e3.0	2.6	2.1
<b>25</b>	6.1	e4.6	e4.0	3.5	3.5	18	5.9	14	9.2	e2.8	32	2.1
<b>26</b>	2.8	5.0	e3.8	3.4	3.3	113	4.0	3.4	2.8	e2.9	5.7	2.2
<b>27</b>	2.6	4.1	e3.6	3.3	3.4	18	4.2	3.2	2.7	e2.9	2.5	2.2
<b>28</b>	2.8	3.6	e16	3.2	3.3	25	3.4	3.1	2.8	e2.9	12	2.3
<b>29</b>	2.6	3.7	e18	3.2	3.3	11	3.3	3.0	2.8	e3.0	9.1	2.4
<b>30</b>	2.6	3.4	e5.0	3.2	---	29	5.0	6.4	2.8	7.2	2.0	2.5
<b>31</b>	2.5	---	e4.7	3.2	---	14	---	3.5	---	3.2	1.9	---
<b>TOTAL</b>	102.5	199.7	174.4	170.6	107.2	371.6	165.2	187.3	181.8	245.1	155.1	116.5
<b>MEAN</b>	3.31	6.66	5.63	5.50	3.70	12.0	5.51	6.04	6.06	7.91	5.00	3.88
<b>MAX</b>	14	69	23	37	5.7	113	22	28	35	41	32	50
<b>MIN</b>	2.5	2.6	2.9	3.2	3.0	3.1	3.3	3.0	2.7	2.8	1.9	1.8

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 – 2004, BY WATER YEAR (WY)**

<b>MEAN</b>	3.30	3.51	3.59	3.58	4.09	5.07	6.04	6.00	5.18	5.47	4.59	3.70
<b>MAX</b>	10.8	11.7	11.5	18.6	13.9	12.0	18.3	15.2	15.6	14.6	12.1	9.97
<b>(WY)</b>	1956	1986	1967	1950	1982	2004	1964	1990	1983	1992	1993	1972
<b>MIN</b>	1.25	1.08	0.95	0.60	1.11	0.94	1.43	1.85	1.15	1.47	1.11	0.84
<b>(WY)</b>	1965	1972	1990	1981	1995	1981	1971	1972	1988	1994	1986	1983

**SUMMARY STATISTICS**

**FOR 2003 CALENDAR YEAR**

**FOR 2004 WATER YEAR**

**WATER YEARS 1949 – 2004**

<b>ANNUAL TOTAL</b>	2049.5		2177.0			
<b>ANNUAL MEAN</b>	5.62		5.95		4.51	
<b>HIGHEST ANNUAL MEAN</b>					6.96	
<b>LOWEST ANNUAL MEAN</b>					3.00	
<b>HIGHEST DAILY MEAN</b>	144	Jul 9	113	Mar 26	241	Jun 19 1983
<b>LOWEST DAILY MEAN</b>	2.2	A B	1.8	Sep 17–19	0.03	Feb 12 1981
<b>ANNUAL SEVEN–DAY MINIMUM</b>	2.2	Jan 9	1.9	Sep 16	0.05	Feb 6 1981
<b>MAXIMUM PEAK FLOW</b>			537	Sep 14	946	C Aug 12 1993
<b>MAXIMUM PEAK STAGE</b>			16.45	Sep 14	24.03	D Aug 12 1993
<b>INSTANTANEOUS LOW FLOW</b>			1.8	B		
<b>10 PERCENT EXCEEDS</b>	7.5		11		9.0	
<b>50 PERCENT EXCEEDS</b>	3.2		3.4		2.2	
<b>90 PERCENT EXCEEDS</b>	2.4		2.5		1.0	

A – Estimated.

B – Several days.

C – From rating based on two indirect measurements.

D – Present datum, From floodmark.

WABASH RIVER BASIN  
**03337100 Boneyard Creek at Lincoln Ave. at Urbana, IL**

**LOCATION.**— Lat 40°06'41", long 88°13'10" (NAD of 1983), in NE1/4NE1/4 sec.18, T.19 N., R.9 E., Champaign County, Hydrologic Unit 05120109, on left bank 17 ft. upstream from Lincoln Ave. at Urbana, and at mile 1.3.

**DRAINAGE AREA.**— 4.78 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE

DISCHARGE: December 2001 to current year.

STAGE: December 2001 to current year.

**GAGE.**— Water—stage recorder, acoustic—velocity meter, phone telemeter and crest—stage gage. Datum of gage is 694.00 ft. above NGVD of 1929.

**REMARKS.**— Since Aug. 1, 1960, storm runoff from 0.88 mi<sup>2</sup> at headwaters has been diverted to Saline Branch through the Northwest Diversion Conduit. Prior to the 1970's, effluent from sewage—treatment plant about 1 mi upstream from gage. Since July 1999, a retention basin 1.3 mi upstream temporarily detains water during periods of heavy runoff. Water enters the retention basin by gravity flow during periods of heavy runoff, and is pumped out during the recession, with a maximum rate of 20 ft<sup>3</sup>/s not to exceed a maximum in—stream rate of 60 ft<sup>3</sup>/s. Since Oct. 1999, some temporary storage occurs in underground conduits 0.9 mi upstream during runoff events. Channel construction near the Boneyard Creek at Urbana gage (03337000) began Aug. 30, 2001. Streamflow diversion pumpage for channel construction began Sept. 1, 2001 causing frequent fluctuations in stage. Channel construction and pumpage for channel construction ended May 6, 2003.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE: Maximum discharge 797 ft<sup>3</sup>/s, July 9, 2003, gage height, 17.00 ft; minimum, 0.01 ft<sup>3</sup>/s, Nov. 12, 2002, due to water diversion for channel construction.

**REMARKS FOR CURRENT YEAR.**—Records poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	e4.5	3.3	4.7	4.0	5.2	7.9	9.4	e4.4	4.4	3.5	e2.5
2	4.3	e4.2	3.3	4.5	5.2	4.4	6.6	5.1	7.6	8.0	3.4	e2.7
3	7.8	e4.2	3.6	14	4.7	4.3	6.2	4.6	e5.0	20	3.5	e2.8
4	5.1	5.1	4.3	41	4.2	44	5.7	4.5	e4.5	5.0	6.7	e3.0
5	4.9	12	6.3	7.5	4.3	12	5.4	4.4	e4.2	3.9	3.4	3.3
6	4.8	e5.0	4.0	5.7	4.6	6.2	5.3	4.5	e4.0	32	3.3	3.5
7	4.8	e4.2	3.6	5.1	e4.1	5.6	5.4	4.4	e4.3	7.8	3.3	3.5
8	4.4	e3.8	3.4	4.8	e4.0	5.4	4.9	4.7	e4.3	5.1	3.0	3.2
9	4.2	e3.6	3.3	4.4	4.8	5.1	4.6	e4.5	e5.0	23	17	3.3
10	4.1	e4.0	6.7	4.3	4.5	5.3	4.6	e4.4	50	36	9.4	3.5
11	4.2	4.8	3.4	4.1	5.2	4.9	4.6	6.2	41	6.2	3.4	3.6
12	4.3	4.0	3.4	3.9	e4.0	4.5	4.7	12	6.5	5.0	3.3	3.5
13	4.2	4.4	3.3	3.9	e4.3	4.1	4.7	22	5.6	19	3.3	3.5
14	16	4.5	3.4	3.9	4.9	4.9	4.6	23	5.1	5.8	3.2	47
15	5.0	4.8	3.3	4.0	e4.2	4.1	4.6	5.7	21	4.6	3.2	5.8
16	4.6	4.4	3.5	4.0	e4.0	6.7	4.4	e4.7	12	4.3	3.1	e2.5
17	4.3	6.9	3.3	9.7	4.6	4.7	4.3	5.8	6.1	26	3.3	e2.0
18	4.3	76	4.0	4.3	5.3	4.2	4.2	33	4.9	4.9	3.3	e2.0
19	e4.2	5.1	3.5	4.2	5.6	4.0	4.2	7.8	4.7	4.4	3.2	e2.0
20	e4.2	4.0	3.3	4.1	5.8	4.1	28	6.2	4.3	4.2	6.5	e2.0
21	e4.1	3.8	3.6	4.1	4.6	4.0	4.7	5.2	4.0	4.2	3.4	e2.1
22	e4.0	3.5	15	4.0	4.5	4.3	14	e4.9	4.1	4.0	3.3	e2.1
23	e4.3	24	24	4.0	4.7	4.4	5.2	e4.7	4.4	3.7	3.3	e2.3
24	5.1	6.2	4.8	3.9	4.7	4.5	6.5	e4.5	4.6	3.4	3.4	2.4
25	7.7	4.8	4.2	3.9	4.6	17	6.8	18	11	3.3	33	2.3
26	5.4	4.9	3.9	3.8	4.4	134	4.8	5.4	4.1	3.4	7.5	2.3
27	e4.7	4.1	3.7	3.8	4.4	19	5.0	4.9	4.3	3.4	4.5	2.3
28	e5.0	3.6	16	3.8	4.3	27	4.5	e4.6	4.5	3.4	12	2.2



WABASH RIVER BASIN

61

**03337100 Boneyard Creek at Lincoln Ave. at Urbana, IL--Continued**

<b>29</b>	e4.6	3.7	18	3.8	4.3	11	4.4	e4.3	4.4	3.3	10	2.5
<b>30</b>	e4.3	3.4	5.4	3.9	---	31	6.0	7.6	4.2	7.7	3.3	2.5
<b>31</b>	e4.0	---	5.0	4.0	---	14	---	5.2	---	3.6	e2.7	---
TOTAL	156.6	231.5	179.8	185.1	132.8	413.9	186.8	246.2	254.1	273.0	178.7	128.2
MEAN	5.05	7.72	5.80	5.97	4.58	13.4	6.23	7.94	8.47	8.81	5.76	4.27
MAX	16	76	24	41	5.8	134	28	33	50	36	33	47
MIN	3.7	3.4	3.3	3.8	4.0	4.0	4.2	4.3	4.0	3.3	2.7	2.0
CFSM	1.06	1.61	1.21	1.25	0.96	2.79	1.30	1.66	1.77	1.84	1.21	0.89
IN.	1.22	1.80	1.40	1.44	1.03	3.22	1.45	1.92	1.98	2.12	1.39	1.00

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 – 2004, BY WATER YEAR (WY)**

MEAN	5.10	5.38	4.95	4.42	5.25	8.21	6.48	8.46	7.23	8.87	7.92	5.30
MAX	5.15	7.72	5.80	5.97	7.06	13.4	8.14	11.2	8.47	13.5	10.9	7.61
(WY)	2003	2004	2004	2004	2002	2004	2002	2002	2004	2003	2002	2003
MIN	5.05	3.05	4.09	2.56	4.15	5.36	5.06	6.29	6.06	4.34	5.76	4.03
(WY)	2004	2003	2003	2003	2003	2003	2003	2003	2002	2002	2004	2002

**SUMMARY STATISTICS**

**FOR 2003 CALENDAR YEAR**

**FOR 2004 WATER YEAR**

**WATER YEARS 2002 – 2004**

ANNUAL TOTAL	2356.4			2566.7					
ANNUAL MEAN	6.46			7.01					
HIGHEST ANNUAL MEAN							7.01		2004
LOWEST ANNUAL MEAN							5.94		2003
HIGHEST DAILY MEAN	174	Jul 9		134	Mar 26		174	Jul 9	2003
LOWEST DAILY MEAN	2.2		A	2.0		B	1.6	C	D
ANNUAL SEVEN-DAY MINIMUM	2.3	Jan 9		2.1	Sep 17		1.9	Jan 9	2002
MAXIMUM PEAK FLOW				560	E	Jul 9	797	Jul 9	2003
MAXIMUM PEAK STAGE				14.40	F	Sep 14	17.00	Jul 9	2003
INSTANTANEOUS LOW FLOW				1.8	G	Sep 25	0.01	C	Nov 12 2002
ANNUAL RUNOFF (CFSM)	1.35			1.47					
ANNUAL RUNOFF (INCHES)	18.34			19.98					
10 PERCENT EXCEEDS	8.5			12					
50 PERCENT EXCEEDS	3.6			4.4					
90 PERCENT EXCEEDS	2.6			3.3					

A – Jan. 10, 11, Feb. 9, 12.

B – Estimated, Sept. 17–20.

C – Result of water diversion for channel construction.

D – Nov. 13, 14, 2002.

E – Gage height, 14.19 ft.

F – Discharge 538 ft<sup>3</sup>/s.

G – Sept. 25, 26, 28. May have been less during period of indefinite stage/discharge relation Sept. 16–23.

WABASH RIVER BASIN  
**03337250 Boneyard Creek at Race Street at Urbana, IL**

**LOCATION.**— Lat 40°06'53", long 88°12'33" (NAD of 1927), in SW1/4SE1/4 sec.8, T.19 N., R.9 E., Champaign County, Hydrologic Unit 05120109, on left bank at upstream side of Race Street bridge in Urbana, and at mile 0.7.

**DRAINAGE AREA.**— 6.86 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE

STAGE: July 2000 to current year.

**GAGE.**— Water—stage recorder, phone telemeter and crest—stage gage. Datum of gage is 694.00 ft above NGVD of 1929.

**REMARKS.**—Since Aug. 1, 1960, storm runoff from 0.88 mi<sup>2</sup> at headwaters has been diverted to Saline Branch through the Northwest Diversion Conduit. Prior to the 1970's, effluent from sewage—treatment plant about 2 mi upstream from gage. Since July 1999, a retention basin 1.9 mi upstream temporarily detains water during periods of heavy runoff. Water enters the retention basin by gravity flow during periods of heavy runoff, and is pumped out during the recession, with a maximum rate of 20 ft<sup>3</sup>/s not to exceed a maximum in stream rate of 60 ft<sup>3</sup>/s. Since Oct. 1999, some temporary storage occurs in underground conduits 1.5 mi upstream during runoff events. Channel construction near the Boneyard Creek at Urbana gage (03337000) began Aug. 30, 2001. Streamflow diversion pumping for channel construction began Sept. 1, 2001 causing frequent fluctuations in stage. Channel construction and pumpage for channel construction ended May 6, 2003.

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height, 11.68 ft, July 9, 2003.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 11.68 ft, July 9; minimum gage height, 2.33 ft, Dec. 22.

Gage height, feet, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.48	2.53	2.56	2.50	2.68	2.65	2.66	2.76	2.60	2.52	2.51	4.20
2	2.49	2.52	2.56	2.52	2.63	2.59	2.68	2.68	2.65	2.51	2.71	2.75
3	2.48	2.57	2.56	2.53	2.74	2.61	2.68	2.72	2.79	2.51	2.50	2.62
4	2.85	2.52	2.56	2.50	2.55	2.63	2.81	3.15	2.62	2.51	2.47	2.56
5	2.53	2.72	2.57	2.60	2.53	2.77	2.64	2.90	2.59	2.54	2.48	2.52
6	2.52	2.54	2.57	2.51	2.55	2.63	2.71	2.74	2.76	2.77	2.45	2.50
7	2.51	2.51	2.58	2.51	2.55	2.65	2.88	2.71	2.63	2.49	2.46	2.49
8	2.50	2.52	2.58	2.50	2.57	2.66	2.65	2.69	2.61	2.90	2.46	2.48
9	2.51	2.58	2.59	2.47	2.59	2.64	2.64	2.68	2.61	5.08	2.46	2.48
10	2.49	2.58	2.58	2.47	2.60	2.63	2.64	3.11	2.74	3.70	2.52	2.47
11	2.49	2.59	2.57	2.47	2.56	2.61	2.63	2.75	3.46	3.22	2.49	2.47
12	2.53	2.59	2.55	2.48	2.54	2.63	2.64	2.68	2.88	2.64	2.48	2.47
13	2.52	2.58	2.56	2.48	2.56	3.25	2.64	2.65	2.72	2.57	2.48	2.47
14	2.55	2.56	2.55	2.48	2.85	2.74	2.64	2.79	2.58	2.53	2.53	2.59
15	2.53	2.57	2.55	2.47	2.79	2.63	2.65	2.66	2.55	2.50	2.48	2.47
16	2.54	2.53	2.55	2.48	2.64	2.63	2.66	2.62	2.59	2.48	2.48	2.46
17	2.55	2.58	2.59	2.48	2.64	2.62	2.74	2.70	2.54	2.47	2.49	2.44
18	2.86	2.54	3.06	2.48	2.65	2.58	2.64	2.73	2.53	3.26	2.49	2.42
19	2.67	2.56	2.61	2.48	2.73	2.64	2.63	2.73	2.70	2.57	2.49	2.44
20	2.53	2.56	2.45	2.48	2.75	2.60	2.83	2.82	2.56	2.55	2.51	2.42
21	2.51	2.63	2.42	2.48	2.66	2.63	2.62	2.71	2.53	3.07	2.53	2.43
22	2.51	2.50	2.44	2.52	2.83	2.62	2.61	2.71	2.51	2.59	2.54	2.65
23	2.51	2.51	2.46	2.56	2.62	2.62	2.61	2.69	2.55	2.49	2.54	2.42
24	2.52	2.50	2.45	2.57	2.63	2.62	2.80	2.72	2.53	2.47	2.55	2.45
25	2.84	2.52	---	2.57	2.62	2.69	2.88	2.68	2.51	2.46	2.56	2.43
26	2.52	2.50	2.53	2.58	2.61	2.63	2.63	2.66	2.58	2.45	2.56	3.11
27	2.51	2.50	2.54	2.57	2.60	2.67	2.61	2.64	2.51	2.44	2.57	2.56
28	2.54	2.50	2.55	2.58	2.62	2.78	2.62	2.66	2.54	2.60	2.56	2.47
29	2.85	2.53	2.59	2.61	---	2.64	2.62	2.64	2.56	2.48	3.51	2.45
30	2.61	2.55	2.77	2.59	---	2.63	2.65	2.75	2.56	2.50	2.62	2.45

**03337250 Boneyard Creek at Race Street at Urbana, IL--Continued**

<b>31</b>	2.56	---	2.54	2.69	---	2.64	---	2.64	---	2.51	3.51	---
MEAN	2.57	2.55	---	2.52	2.64	2.66	2.68	2.73	2.64	2.72	2.58	2.57
MAX	2.86	2.72	---	2.69	2.85	3.25	2.88	3.15	3.46	5.08	3.51	4.20
MIN	2.48	2.50	---	2.47	2.53	2.58	2.61	2.62	2.51	2.44	2.45	2.42

WABASH RIVER BASIN  
**03337250 Boneyard Creek at Race Street at Urbana, IL**

**LOCATION.**— Lat 40°06'53", long 88°12'33" (NAD of 1927), in SW1/4SE1/4 sec.8, T.19 N., R.9 E., Champaign County, Hydrologic Unit 05120109, on left bank at upstream side of Race Street bridge in Urbana, and at mile 0.7.

**DRAINAGE AREA.**— 6.86 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE**

STAGE: July 2000 to current year.

**GAGE.**— Water—stage recorder, phone telemeter and crest—stage gage. Datum of gage is 694.00 ft above NGVD of 1929.

**REMARKS.**—Since Aug. 1, 1960, storm runoff from 0.88 mi<sup>2</sup> at headwaters has been diverted to Saline Branch through the Northwest Diversion Conduit. Prior to the 1970's, effluent from sewage—treatment plant about 2 mi upstream from gage. Since July 1999, a retention basin 1.9 mi upstream temporarily detains water during periods of heavy runoff. Water enters the retention basin by gravity flow during periods of heavy runoff, and is pumped out during the recession, with a maximum rate of 20 ft<sup>3</sup>/s not to exceed a maximum in—stream rate of 60 ft<sup>3</sup>/s. Since Oct. 1999, some temporary storage occurs in underground conduits 1.5 mi upstream during runoff events. Channel construction near the Boneyard Creek at Urbana gage (03337000) began Aug. 30, 2001. Streamflow diversion pumping for channel construction began Sept. 1, 2001 causing frequent fluctuations in stage. Channel construction and pumpage for channel construction ended May 6, 2003.

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height, 11.68 ft, July 9, 2003; minimum, 2.04 ft, Aug. 20, 2001.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 9.68 ft, Sept. 14; minimum, 2.35 ft, Mar. 24.

Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.44	2.47	2.45	2.49	2.38	2.50	2.73	2.64	2.43	2.48	2.42	2.41
2	2.43	2.45	2.46	2.47	2.48	2.42	2.65	2.43	2.54	2.65	2.42	2.41
3	2.57	2.44	2.47	2.71	2.44	2.42	2.61	2.40	2.43	3.00	2.43	2.40
4	2.42	2.44	2.50	3.54	2.38	3.22	2.56	2.40	2.43	2.48	2.62	2.41
5	2.41	2.67	2.64	2.74	2.40	2.84	2.54	2.39	2.43	2.46	2.41	2.41
6	2.41	2.44	2.46	2.61	2.42	2.60	2.53	2.38	2.44	3.03	2.42	2.43
7	2.41	2.40	2.45	2.55	2.39	2.55	2.53	2.38	2.45	2.58	2.41	2.43
8	2.41	2.41	2.44	2.52	2.38	2.54	2.50	2.39	2.46	2.46	2.41	2.41
9	2.41	2.42	2.44	2.48	2.42	2.51	2.48	2.38	2.49	2.71	2.72	2.41
10	2.42	2.45	2.64	2.46	2.40	2.51	2.47	2.39	3.34	3.34	2.69	2.41
11	2.42	2.53	2.44	2.45	2.45	2.48	2.47	2.47	3.31	2.56	2.40	2.42
12	2.43	2.45	2.43	2.43	2.38	2.45	2.46	2.60	2.54	2.51	2.39	2.42
13	2.42	2.44	2.43	2.42	2.39	2.44	2.46	2.79	2.50	2.88	2.38	2.42
14	2.84	2.44	2.44	2.42	2.42	2.51	2.46	3.00	2.49	2.53	2.38	3.25
15	2.43	2.49	2.44	2.42	2.38	2.43	2.46	2.46	2.88	2.46	2.39	2.60
16	2.43	2.46	2.43	2.41	2.37	2.67	2.45	2.42	2.85	2.45	2.39	2.42
17	2.42	2.59	2.43	2.73	2.40	2.49	2.45	2.43	2.54	3.01	2.40	2.41
18	2.42	4.03	2.50	2.43	2.46	2.43	2.45	3.04	2.49	2.48	2.41	2.40
19	2.42	2.62	2.45	2.40	2.51	2.41	2.46	2.57	2.48	2.47	2.41	2.40
20	2.42	2.53	2.43	2.40	2.54	2.42	2.92	2.45	2.47	2.47	2.66	2.39
21	2.43	2.50	2.46	2.40	2.43	2.41	2.45	2.44	2.47	2.46	2.41	2.40
22	2.42	2.47	2.76	2.39	2.42	2.41	2.72	2.43	2.48	2.46	2.41	2.39
23	2.43	3.02	3.11	2.40	2.43	2.39	2.45	2.43	2.48	2.44	2.41	2.40
24	2.42	2.59	2.59	2.38	2.41	2.43	2.51	2.42	2.49	2.43	2.43	2.40
25	2.63	2.52	2.54	2.40	2.41	2.95	2.54	2.81	2.79	2.43	3.18	2.40
26	2.45	2.54	2.51	2.39	2.40	4.64	2.43	2.43	2.47	2.44	2.68	2.40
27	2.43	2.49	2.49	2.39	2.40	3.07	2.45	2.42	2.47	2.43	2.53	2.41
28	2.45	2.47	2.93	2.39	2.40	3.09	2.42	2.41	2.48	2.43	2.68	2.40
29	2.42	2.47	3.04	2.39	2.40	2.86	2.42	2.41	2.48	2.43	2.80	2.41
30	2.42	2.45	2.63	2.38	—	3.29	2.51	2.62	2.48	2.73	2.45	2.40

**03337250 Boneyard Creek at Race Street at Urbana, IL--Continued**

<b>31</b>	2.42	---	2.55	2.38	---	2.92	---	2.46	---	2.43	2.42	---
MEAN	2.45	2.56	2.55	2.50	2.42	2.69	2.52	2.51	2.57	2.58	2.50	2.44
MAX	2.84	4.03	3.11	3.54	2.54	4.64	2.92	3.04	3.34	3.34	3.18	3.25
MIN	2.41	2.40	2.43	2.38	2.37	2.39	2.42	2.38	2.43	2.43	2.38	2.39
CAL YR 2003	MEAN 2.61		MAX 5.08		MIN 2.40							
WTR YR 2004	MEAN 2.52		MAX 4.64		MIN 2.37							

WABASH RIVER BASIN  
**03338780 North Fork Vermilion River near Bismarck, IL**

**LOCATION.**— Lat 40°15'55", long 87°38'34" (NAD of 1927), in SE1/4NE1/4 sec.24, T.21 N., R.12 W., Vermilion County, Hydrologic Unit 05120109, on left bank at downstream side of County Road 2750 N, 1.8 mi west of Bismarck, 1.9 mi downstream from Painter Creek, 6.6 mi downstream from Middle Branch of North Fork Vermilion River, and at mile 17.7.

**DRAINAGE AREA.**— 262 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE**

DISCHARGE: June 1970 to September 1973, low–flow partial–record station. October 1988 to current year.

STAGE: Water years 1994 to current year.

**SURFACE–WATER QUALITY**

CHEMICAL: Water years 1978–91.

**REVISED RECORDS.**— WDR IL–98: 1997 (P).

**GAGE.**— Water–stage recorder, phone telemeter, and crest–stage gage. Elevation of gage is 594 ft. above NGVD of 1929, from topographic map.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum discharge, 20,100 ft<sup>3</sup>/s, Mar. 11, 1990, gage height, 21.97 ft, on basis of contracted–opening measurement of peak flow, maximum gage height, 22.45 ft, Apr. 12, 1994, discharge, 20,100 ft<sup>3</sup>/s; minimum, 2.3 ft<sup>3</sup>/s, Sept. 9, 10, 16–19, 1991.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	535	86	343	682	e95	193	1260	128	1950	199	58	272
2	400	86	286	542	e93	368	833	159	1350	183	53	190
3	332	89	265	456	e90	239	597	154	659	187	50	148
4	295	89	254	1920	e86	417	432	131	399	328	69	149
5	238	107	257	3200	e90	2110	329	122	300	291	76	122
6	207	127	284	1660	e92	1550	287	110	253	258	57	102
7	189	109	300	880	e85	882	266	102	216	580	48	91
8	173	95	315	622	e82	561	242	94	189	362	44	79
9	161	86	308	460	e78	397	207	93	170	1020	41	71
10	152	85	356	352	e85	292	186	88	170	3840	47	65
11	145	96	519	314	91	261	175	93	5980	2550	41	59
12	138	164	375	304	100	222	163	164	8770	1030	37	55
13	130	250	291	266	86	192	158	157	9190	642	35	52
14	176	166	268	249	84	185	149	175	6790	449	34	55
15	347	140	234	240	90	170	137	355	3720	303	32	94
16	279	128	223	208	79	164	133	246	3140	242	30	64
17	216	113	195	210	81	160	129	193	5240	216	29	54
18	186	948	182	220	87	153	123	304	5190	200	28	49
19	175	3090	167	168	162	140	e120	1600	2540	173	30	45
20	156	2340	149	178	392	136	e130	920	1230	151	29	42
21	152	1310	142	169	312	129	e140	522	904	135	32	41
22	141	869	147	148	174	117	e160	370	724	125	28	39
23	132	826	801	146	153	116	e150	800	546	114	26	38
24	122	2130	1160	173	158	119	e140	548	434	99	25	37
25	118	1560	671	e150	141	122	e130	593	419	90	164	36
26	115	971	423	e140	126	1790	e130	566	394	85	726	34
27	111	796	328	e125	116	3080	112	347	304	80	573	34
28	116	659	302	e115	108	1730	104	265	270	73	1900	33
29	111	513	1600	e110	106	1370	100	209	240	67	1910	33
30	97	430	1720	e105	—	1070	96	213	216	66	1430	32

**03338780 North Fork Vermilion River near Bismarck, IL--Continued**

<b>31</b>	<b>93</b>	<b>---</b>	<b>963</b>	<b>e100</b>	<b>---</b>	<b>1320</b>	<b>---</b>	<b>2330</b>	<b>---</b>	<b>65</b>	<b>522</b>	<b>---</b>
TOTAL	5938	18458	13828	14612	3522	19755	7318	12151	61897	14203	8204	2215
MEAN	192	615	446	471	121	637	244	392	2063	458	265	73.8
MAX	535	3090	1720	3200	392	3080	1260	2330	9190	3840	1910	272
MIN	93	85	142	100	78	116	96	88	170	65	25	32
CFSM	0.73	2.35	1.70	1.80	0.46	2.43	0.93	1.50	7.87	1.75	1.01	0.28
IN.	0.84	2.62	1.96	2.07	0.50	2.80	1.04	1.73	8.79	2.02	1.16	0.31

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 – 2004, BY WATER YEAR (WY)**

MEAN	177	228	231	318	353	496	470	523	531	286	156	119
MAX	1127	1162	1160	1387	917	1063	1728	1033	2063	1281	1118	902
(WY)	2002	1993	1991	1993	2001	1990	1994	1998	2004	1993	2002	2003
MIN	6.73	9.68	13.8	13.4	45.8	59.2	47.6	96.9	140	16.3	6.74	3.68
(WY)	1998	1998	2000	2000	2000	2000	2000	1992	1991	1991	1991	1991

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1989 – 2004**

ANNUAL TOTAL	128961		182101			
ANNUAL MEAN	353		498		324	
HIGHEST ANNUAL MEAN					698	
LOWEST ANNUAL MEAN					80.6	
HIGHEST DAILY MEAN	4700	Sep 2	9190	Jun 13	14500	Apr 12 1994
LOWEST DAILY MEAN	27	Aug 27,28	25	Aug 24	2.5	A
ANNUAL SEVEN-DAY MINIMUM	30	Aug 22	28	Aug 18	2.7	Sep 15 1991
MAXIMUM PEAK FLOW			10500	Jun 12	20100	B
MAXIMUM PEAK STAGE			17.58	Jun 12	22.45	Apr 12 1994
INSTANTANEOUS LOW FLOW			24	Aug 24	2.3	C
ANNUAL RUNOFF (CFSM)	1.35		1.90		1.24	
ANNUAL RUNOFF (INCHES)	18.31		25.86		16.78	
10 PERCENT EXCEEDS	862		1240		746	
50 PERCENT EXCEEDS	145		170		120	
90 PERCENT EXCEEDS	51		55		14	

A – Sept. 10, 16–19, 1991.

B – Mar. 11, 1990 and Apr. 12, 1994. Mar. 11, 1990 on basis of contracted–opening measurement of peak flow.

C – Sept. 9, 10, 16–19, 1991.

WABASH RIVER BASIN  
**03339000 Vermilion River near Danville, IL**

**LOCATION.**— Lat 40°06'03", long 87°35'50" (NAD of 1927), in NW1/4NW1/4 sec.22, T.19 N., R.11 W., Vermilion County, Hydrologic Unit 05120109, on right bank at Danville sewage–treatment plant, 1.7 mi upstream from Stony Creek, 2.2 mi southeast of Danville, and at mile 19.5.

**DRAINAGE AREA.**— 1,290 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE**

DISCHARGE: October 1914 to September 1921, June 1928 to current year. Monthly discharge only for some periods, published in WSP 1305.

STAGE: Water years 1994 to current year.

**SURFACE–WATER QUALITY**

CHEMICAL: Water years 1978–91.

**REVISED RECORDS.**— WSP 853: 1936(M). WSP 973: 1939. WSP 1305: 1915–16, 1920, 1929. WSP 1335: 1934(m). WSP 1909: 1960. WDR IL–75–1: Drainage area. WDR IL–84–1: 1983. WDR IL–92–1: 1991.

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest–stage gage. Datum of gage is 503.74 ft above NGVD of 1929 from Aug. 30, 1982 to present. However, datum incorrectly published as 503.33 ft above NGVD of 1929 from Aug. 30, 1982 to Sept. 30, 2001. Prior to Jan. 9, 1935, nonrecording gage at same site and datum 503.33 ft. above NGVD of 1929 (levels by U.S. Army Corps of Engineers). However, datum incorrectly published as 503.99 ft above NGVD of 1929 from 1928 to 1943. Jan. 9, 1935 to Aug. 30, 1982, at site 0.3 mi downstream and datum 503.33 ft above NGVD of 1929.

**REMARKS.**— Flow regulated at times by storage at Lake Vermilion on North Fork Vermilion River, 4.5 mi upstream from station, usable capacity, 7,440 acre–ft, and by Danville sewage–treatment plant.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum discharge, 48,700 ft<sup>3</sup>/s, March 13, 1939, gage height, 28.59 ft; maximum gage height, 31.56 ft, Apr. 13, 1994, discharge 47,900 ft<sup>3</sup>/s, minimum daily, 2.0 ft<sup>3</sup>/s, Oct. 9–14, 1920 and Aug. 10, 1930.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor. Effluent from sewage–treatment plant at gage averaged 13.5 ft<sup>3</sup>/s during the year. The maximum monthly average was 17.7 ft<sup>3</sup>/s in March, and the minimum was 11.0 ft<sup>3</sup>/s in October.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1590	374	1490	2950	e490	723	6120	819	3840	770	366	918
2	1250	309	1190	2310	e480	1170	4450	825	3730	724	319	e499
3	1090	366	1060	2100	e460	989	3230	783	1880	768	295	463
4	1000	304	1060	7290	e440	1370	2510	722	1290	1350	381	375
5	838	437	1100	11600	e430	6150	2010	714	1050	1450	377	340
6	698	403	1120	e7230	e420	6330	e1690	659	884	1020	394	240
7	621	452	1130	4120	e410	3910	1560	624	729	1550	297	274
8	592	448	1180	2760	e400	2610	1390	498	709	1450	230	187
9	567	331	1150	2110	e380	1930	1240	513	646	1100	211	180
10	542	365	1230	1730	e370	1480	1060	529	703	8100	217	180
11	524	331	1520	1530	e360	1320	1020	731	10300	8730	288	194
12	521	403	1420	1500	e350	1110	956	887	18500	5660	263	181
13	464	576	1100	1310	e340	955	904	860	17700	2820	206	167
14	587	542	1050	1230	e330	944	840	832	14500	3130	191	125
15	801	433	930	1210	e320	849	750	1960	7140	2850	181	118
16	892	404	969	1060	e310	853	735	2060	6530	1990	e170	e310
17	706	359	855	1060	e305	835	747	1460	9090	1360	163	231
18	614	1950	799	1150	e300	798	648	1210	9840	1340	159	179
19	596	9480	754	1050	518	733	647	2330	6130	1290	157	154
20	503	9150	660	871	1270	709	768	2610	3300	965	168	112
21	504	6560	635	905	1830	650	820	e1700	2460	820	172	95
22	491	3710	660	827	1270	549	937	1370	2120	730	177	88
23	468	3100	2560	731	785	589	992	1470	1740	643	177	96



WABASH RIVER BASIN  
**03339000 Vermilion River near Danville, IL---Continued**

69

<b>24</b>	429	7050	5630	759	746	590	935	1460	1510	531	153	121
<b>25</b>	434	6670	3460	851	771	658	885	1370	1360	487	166	82
<b>26</b>	422	4220	2160	673	661	6140	879	2410	1280	485	706	104
<b>27</b>	386	3100	1600	e620	595	14900	782	2040	1120	408	1540	78
<b>28</b>	494	2520	1440	e600	585	11800	635	1390	1010	385	1640	82
<b>29</b>	422	1990	5550	e520	533	9850	674	1060	864	367	2170	103
<b>30</b>	431	1770	7210	e510	----	7200	639	943	806	363	2740	87
<b>31</b>	374	----	4550	e500	----	6240	----	2540	----	354	1460	----
TOTAL	19851	68107	57222	63667	16459	94934	41453	39379	132761	53990	16134	6363
MEAN	640	2270	1846	2054	568	3062	1382	1270	4425	1742	520	212
MAX	1590	9480	7210	11600	1830	14900	6120	2610	18500	8730	2740	918
MIN	374	304	635	500	300	549	635	498	646	354	153	78
CFSM	0.50	1.76	1.43	1.59	0.44	2.37	1.07	0.98	3.43	1.35	0.40	0.16
IN.	0.57	1.96	1.65	1.84	0.47	2.74	1.20	1.14	3.83	1.56	0.47	0.18

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 – 2004, BY WATER YEAR (WY)**

MEAN	352	590	867	1123	1427	1713	1840	1684	1260	790	426	283
MAX	3346	5743	3593	6930	4818	5383	6846	7615	5290	4008	3049	2891
(WY)	1978	1986	1991	1950	1982	1979	1994	1943	1998	1993	1979	2003
MIN	12.8	22.8	27.3	27.8	39.6	59.6	190	83.7	43.3	26.6	17.9	14.4
(WY)	1921	1921	1915	1977	1931	1931	1915	1934	1934	1934	1930	1920

**SUMMARY STATISTICS**

**FOR 2003 CALENDAR YEAR**

**FOR 2004 WATER YEAR**

**WATER YEARS 1915 – 2004**

ANNUAL TOTAL	476051		610320			
ANNUAL MEAN	1304		1668		1027	
HIGHEST ANNUAL MEAN					2694	
LOWEST ANNUAL MEAN					139	
HIGHEST DAILY MEAN	16100	Sep 2	18500	Jun 12	45100	Apr 13 1994
LOWEST DAILY MEAN	88	Aug 28	78	Sep 27	2.0	A
ANNUAL SEVEN–DAY MINIMUM	105	Aug 22	93	Sep 22	2.1	Oct 8 1920
MAXIMUM PEAK FLOW			20000	Jun 12	48700	B Mar 13 1939
MAXIMUM PEAK STAGE			21.36	Jun 12	31.56	C Apr 13 1994
INSTANTANEOUS LOW FLOW			68	Sep 27		
ANNUAL RUNOFF (CFSM)	1.01		1.29		0.796	
ANNUAL RUNOFF (INCHES)	13.73		17.60		10.82	
10 PERCENT EXCEEDS	3160		3970		2480	
50 PERCENT EXCEEDS	577		820		402	
90 PERCENT EXCEEDS	198		226		52	

A – Oct. 9–14, 1920 and Aug. 10, 1930.

B – Gage height, 28.59 ft.

C – Discharge, 47,900 ft<sup>3</sup>/s.

WABASH RIVER BASIN  
**03341500 Wabash River at Terre Haute, IN**

**LOCATION.**— Lat 39°28'33", long 87°25'08" (NAD of 1927), in NE1/4NW1/4 sec.21, T.12 N., R.9 W., Vigo County, Hydrologic Unit 05120111, (TERRE HAUTE, IN. quadrangle), on left bank at Indiana America Water Company, Inc., 1st and Elm Streets in Terre Haute, 3.0 mi upstream from Sugar Creek, and 3.6 mi downstream from Lost Creek and at mile 215.

**DRAINAGE AREA.**— 12,263 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE**

DISCHARGE: February 1905 to July 1906, October 1927 to current year.

STAGE: August 1902 to December 1903. Gage–height records collected at site 100 ft downstream June 1891 to June 1897 and since December 1904 are contained in reports of National Weather Service.

**REVISED RECORDS.**— WSP 205: 1905. WSP 1335: 1944. WDR IN–73–1: Drainage area. WDR IN–84–1: 1983. WDR IN–86 1: 1913 (Gage height).

**GAGE.**— Water–stage recorder. Datum of gage is 445.78 ft above NGVD of 1929. Prior to Oct. 17, 1984, water–stage recorder at Wabash Avenue bridge 3,400 ft downstream at datum 2.88 ft lower. See WSP 1725 for history of changes prior to Oct. 27, 1928.

**REMARKS.**— Flow partially regulated by upstream reservoirs.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum discharge, 189,000 ft<sup>3</sup>/s, May 20, 1943, gage height 30.50 ft; minimum daily discharge, 701 ft<sup>3</sup>/s, August 3, 1934.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Flood of March 27, 1913, reached a stage of about 31.2 present site and datum, discharge, 245,000 ft<sup>3</sup>/s.

**REMARKS FOR CURRENT YEAR.**—Records good.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31800	6650	17000	32500	6210	10300	30500	5970	16900	13000	4260	20200
2	30100	6660	18000	31700	6900	12500	30400	6750	22800	12100	4140	18500
3	24800	6570	17200	29500	7750	14700	28300	7830	24700	11500	4090	16000
4	20400	6360	15100	29500	7770	18200	23900	7970	23900	11300	4040	13700
5	17100	6230	13200	43300	7420	25500	18900	7750	19800	11600	4460	12900
6	14400	6460	12200	53700	7110	29900	15200	7550	15300	11500	4850	12900
7	12600	6330	11600	52300	7320	31500	13200	7540	12800	10800	5030	11800
8	12000	6250	11200	49500	7140	32200	11900	7360	11200	10900	5720	10000
9	11400	6130	11100	46800	6830	32200	10900	6880	9880	10200	5430	8070
10	11200	5910	11700	42700	6750	30500	9990	6440	8830	10500	4800	7220
11	10700	5710	12800	37800	6670	25100	9230	6540	8910	17600	4240	6880
12	10200	5660	16000	32800	6720	19100	8470	7070	22200	18900	3900	6380
13	9200	5700	20300	27900	6560	15400	7960	6980	31800	15800	3750	5870
14	9130	6220	20900	24000	6390	13200	7660	6820	41900	12900	3620	5170
15	9310	6790	18400	21500	6360	11800	7300	6720	55900	11200	3490	4680
16	9600	7900	15100	19200	6310	11000	7030	7530	64300	9810	3250	4370
17	10200	7790	12900	17200	6070	10500	6790	8360	68000	8420	3190	4250
18	11400	7390	11500	16800	5910	9870	6590	7780	68200	7470	3070	4120
19	11900	13700	10500	15700	5930	9440	6320	10600	62100	8340	2920	3960
20	10800	24100	9660	13800	6630	8960	6240	13700	56600	7920	3570	3790
21	9510	26300	9050	12200	8850	8570	6520	13300	50800	6740	5970	3690
22	8930	25600	8850	11300	11300	8270	6670	11500	45400	6070	7670	3500
23	8460	22700	13800	10400	15000	8100	6870	10500	39700	5670	8210	3380
24	8080	23900	25200	9770	16800	7750	7100	12400	32800	5770	8880	3230
25	7820	28000	27500	9550	16300	7600	7320	13200	26100	6180	8150	3030
26	7350	28200	28000	8840	14900	7930	7100	13600	21500	6700	7130	3040
27	6930	26400	27800	8550	13200	18900	7040	14700	18800	6280	6970	2990

WABASH RIVER BASIN

71

**03341500 Wabash River at Terre Haute, IN---Continued**

<b>28</b>	6940	23500	27600	8300	11600	28200	7020	13200	16400	5520	8090	2880
<b>29</b>	6930	19900	27900	7940	10300	29900	6420	10900	14700	4960	9360	2880
<b>30</b>	6920	17300	30400	7360	----	30500	6100	10000	13800	4670	13600	2800
<b>31</b>	6870	----	31900	6420	----	30300	----	14000	----	4420	19100	----
TOTAL	372980	396310	544360	738830	253000	557890	334940	291440	926020	294740	184950	212180
MEAN	12030	13210	17560	23830	8724	18000	11160	9401	30870	9508	5966	7073
MAX	31800	28200	31900	53700	16800	32200	30500	14700	68200	18900	19100	20200
MIN	6870	5660	8850	6420	5910	7600	6100	5970	8830	4420	2920	2800
CFSM	0.98	1.08	1.43	1.94	0.71	1.47	0.91	0.77	2.52	0.78	0.49	0.58
IN.	1.13	1.20	1.65	2.24	0.77	1.69	1.02	0.88	2.81	0.89	0.56	0.64

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 – 2004, BY WATER YEAR (WY)**

MEAN	4936	6827	10280	13680	15510	18620	18890	15720	12290	8574	5117	4263
MAX	24900	40220	44490	77540	47990	51250	41940	64810	44130	39600	21330	21440
(WY)	2002	1993	1928	1950	1950	1982	1938	1943	1958	2003	1958	1989
MIN	1103	1405	1145	1216	1998	2645	5250	2405	1492	1292	1002	966
(WY)	1957	1954	1964	1977	1963	1941	1931	1934	1934	1936	1941	1941

**SUMMARY STATISTICS**

**FOR 2003 CALENDAR YEAR**

**FOR 2004 WATER YEAR**

**WATER YEARS 1928 – 2004**

ANNUAL TOTAL	5407900	5107640	
ANNUAL MEAN	14820	13960	11200
HIGHEST ANNUAL MEAN			22800
LOWEST ANNUAL MEAN			2864
HIGHEST DAILY MEAN	93600 Jul 13	68200 Jun 18	186000 May 20 1943
LOWEST DAILY MEAN	2640 Jan 19	2800 Sep 30	701 Aug 3 1934
ANNUAL SEVEN-DAY MINIMUM	2740 Jan 28	2980 Sep 24	732 Sep 24 1941
MAXIMUM PEAK FLOW		70500 Jun 18	189000 May 20 1943
MAXIMUM PEAK STAGE		22.98 Jun 18	30.50 May 20 1943
ANNUAL RUNOFF (CFSM)	1.21	1.14	0.913
ANNUAL RUNOFF (INCHES)	16.40	15.49	12.41
10 PERCENT EXCEEDS	31000	29600	27600
50 PERCENT EXCEEDS	10200	10000	6520
90 PERCENT EXCEEDS	4340	5010	2020

WABASH RIVER BASIN  
**03342000 Wabash River at Riverton, IN**

**LOCATION.**— Lat 39°01'13", long 87°34'07" (NAD of 1927), in NE1/4SW1/4 sec.30, T.7 N., R.10 W., Sullivan County, Hydrologic Unit 05120111, (MEROM, IN-IL. quadrangle), on left bank at downstream side of Illinois Central Railroad bridge at Riverton, 0.5 mi downstream from Turtle Creek, 2 mi south of Merom, and at mile 162.0.

**DRAINAGE AREA.**— 13,161 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1938 to current year. Prior to April 1939, monthly discharge only published in WSP 1305.

STAGE: June 1911 to December 1914 available in the U.S. Army Corps of Engineers office, Louisville, Ky.

**REVISED RECORDS.**— WSP 1335: 1939, 1950. WDR IN-73-1: Drainage area.

**GAGE.**— Water-stage recorder. Datum of gage is 414.65 ft above NGVD of 1929. Prior to July 17, 1951, nonrecording gage at same site and datum.

**REMARKS.**— Flow partially regulated by upstream reservoirs.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 201,000 ft<sup>3</sup>/s, May 21, 1943, gage height 29.36 ft; minimum daily discharge, 858 ft<sup>3</sup>/s, September 27, 1941.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Flood of March 28, 1913, reached a stage of 26.4 ft, from graph based on once daily readings by Illinois Central Railroad Co., discharge, 250,000 ft<sup>3</sup>/s.

**REMARKS FOR CURRENT YEAR.**—Records fair except for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29300	7670	19600	33300	7570	12100	32800	6770	19500	17000	5330	20000
2	30900	7510	19000	34900	7420	13900	33200	6770	20800	15400	5090	20900
3	31500	7510	19300	36400	8090	14900	33300	7550	24100	14100	4940	19400
4	28600	7380	18300	39400	8750	17300	32400	8350	25400	14200	4870	16900
5	24100	7190	16400	45100	8740	23800	29000	8440	24900	13400	4820	14700
6	19700	7120	14600	47300	8450	27700	24000	8200	21400	13600	5200	14000
7	16300	7250	13500	49400	8270	29100	19000	8030	16900	13100	5500	e13300
8	14300	7100	12800	52700	8290	30700	15900	8010	14000	12200	5750	e12000
9	13400	6980	12400	55200	8060	32100	14000	7800	12200	12200	6280	10500
10	12700	6860	12300	55500	7850	33100	12500	7340	10700	11600	5990	8730
11	12300	6650	13100	54100	7900	33400	11400	6970	9680	13800	5390	7890
12	11800	6490	14400	51600	8050	30800	10500	7140	12000	20200	4860	7450
13	11100	6410	17700	48000	7940	25200	9650	7570	23500	20600	4520	6950
14	10600	6450	20800	43300	7630	19600	9050	7490	27900	18500	4360	6420
15	11700	6930	21100	37500	7560	15900	8650	7350	31300	14900	4230	5750
16	10900	7490	19000	30900	7480	13900	8260	7290	36400	12600	4080	5360
17	11000	8410	16100	26100	7340	12800	7950	8120	44900	11400	3850	5050
18	11500	8460	14000	24500	7090	12000	7690	8640	54900	9680	3780	4810
19	12500	11900	12600	22500	7050	11200	7450	8360	66000	8800	3730	4630
20	12600	18800	11500	19300	7370	10600	7250	11900	76400	9330	3690	4450
21	11600	24300	10600	16600	8330	10100	7180	14100	79900	8660	4620	4280
22	10400	25800	10000	14600	10300	9570	7370	13400	78300	7830	6750	4170
23	9810	25700	11900	13300	13000	9220	7540	11800	73000	7990	8180	3990
24	9310	26300	21500	12100	16700	8970	7670	11200	65700	6940	8860	3860
25	8980	27300	25800	11500	18200	8640	7910	13400	57300	6820	9440	3700
26	8690	28100	27100	10900	17600	8870	8090	13900	48400	7240	9080	3530
27	8170	28600	27800	10200	16100	14900	7910	15800	38500	7480	8510	3500
28	7830	28100	28200	9820	14300	23600	e7600	19600	28900	6980	7970	3430

WABASH RIVER BASIN

73

**03342000 Wabash River at Riverton, IN---Continued**

<b>29</b>	7760	25900	29000	9430	12600	27400	7520	15700	23300	6280	8890	3330
<b>30</b>	7730	22500	31100	9020	---	29200	7000	12500	19400	5830	10600	3300
<b>31</b>	7700	---	32200	8350	---	31600	---	17200	---	5750	15600	---
TOTAL	434780	423160	573700	932820	284030	602170	409740	316690	1085580	354410	194760	246280
MEAN	14030	14110	18510	30090	9794	19420	13660	10220	36190	11430	6283	8209
MAX	31500	28600	32200	55500	18200	33400	33300	19600	79900	20600	15600	20900
MIN	7700	6410	10000	8350	7050	8640	7000	6770	9680	5750	3690	3300
CFSM	1.07	1.07	1.41	2.29	0.74	1.48	1.04	0.78	2.75	0.87	0.48	0.62
IN.	1.23	1.20	1.62	2.64	0.80	1.70	1.16	0.90	3.07	1.00	0.55	0.70

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 – 2004, BY WATER YEAR (WY)**

MEAN	5331	7451	10910	13830	17000	20680	20840	17680	14320	9775	5924	4880
MAX	26610	39340	39250	80210	54530	60520	41840	68010	45640	44660	23680	25370
(WY)	2002	1993	1986	1950	1950	1982	1957	1943	1958	2003	1958	1989
MIN	1382	1437	1213	1318	2058	2763	5623	3435	2601	1968	1215	1261
(WY)	1957	1954	1964	1977	1963	1941	2000	1941	1977	1988	1941	1940

**SUMMARY STATISTICS**

**FOR 2003 CALENDAR YEAR**

**FOR 2004 WATER YEAR**

**WATER YEARS 1940 – 2004**

ANNUAL TOTAL	5931690		5858120		12360	
ANNUAL MEAN	16250		16010		24340	
HIGHEST ANNUAL MEAN					1950	
LOWEST ANNUAL MEAN					3206	
HIGHEST DAILY MEAN	96700	Jul 17	79900	Jun 21	200000	May 21 1943
LOWEST DAILY MEAN	2790	Feb 2	3300	Sep 30	858	Sep 27 1941
ANNUAL SEVEN-DAY MINIMUM	2850	Jan 29	3520	Sep 24	870	Sep 25 1941
MAXIMUM PEAK FLOW			80100	Jun 21	201000	May 21 1943
MAXIMUM PEAK STAGE			22.30	Jun 21	29.36	May 21 1943
ANNUAL RUNOFF (CFSM)	1.23		1.22		0.939	
ANNUAL RUNOFF (INCHES)	16.77		16.56		12.76	
10 PERCENT EXCEEDS	34100		31500		30000	
50 PERCENT EXCEEDS	11100		11600		7300	
90 PERCENT EXCEEDS	4710		5810		2280	

WABASH RIVER BASIN  
**03343000 Wabash River at Vincennes, IN**

**LOCATION.**— Lat 38°42'19", long 87°31'14" (NAD of 1927), T.3 N., R.10 W., Lawrence County, IL, Hydrologic Unit 05120111, (VINCENNES, IL-IN. quadrangle), on right bank 30 ft east of Illinois State Highway 33, 300 ft upstream from Kelso Creek, 570 ft downstream from U.S. Highway 50 bridge, 5.1 mi downstream from Maria Creek, 7.5 mi upstream from Embarras River and at mile 129.6.

**DRAINAGE AREA.**— 13,706 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1929 to September 1994. Prior to December 1929, monthly discharge only published in WSP 1305.

STAGE: October 1994 to current year. Gage-height records for flood peaks in 1867 and 1883, intermittent records 1887–1904, and continuous since November 1904, collected at site 1.8 mi downstream, are contained in reports of National Weather Service.

**REVISED RECORDS.**— WSP 1173: 1943 (maximum gage height only). WSP 1335: 1930–31, 1933, 1936. WSP 1909: 1955. WDR IN-73-1: Drainage area.

**GAGE.**— Water-stage recorder. Datum of gage is 394.43 ft above NGVD of 1929. Oct. 1, 1968, to June 19, 1979, recording gage at site 570 ft upstream at same datum. Oct. 1, 1960, to September 30, 1968, nonrecording gage at site 1.8 mi downstream at same datum. Oct. 1, 1960, to Sept. 30, 1968, auxiliary water stage recorder at site 2.8 mi upstream from base gage at datum 0.80 ft lower. See WSP 1725 for history of changes prior to Oct. 1, 1960.

**REMARKS.**— Flow partially regulated by upstream reservoirs.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum gage height, 29.33 ft, May 22, 1943; minimum gage height unknown prior to 1988, since 1988, minimum gage height, 3.92 ft, Sept. 4, 1988.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Flood of Mar. 29, 1913, reached a stage of 26.3 ft, at former site 1.8 mi downstream and at present datum, from floodmarks, determined by U.S. Army Corps of Engineers, discharge, 255,000 ft<sup>3</sup>/s.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 24.10 ft, July 18; minimum gage height, 4.43 ft, Dec. 9, 10.

Gage height, feet, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003												
DAILY OBSERVATION AT 2400 HOURS												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.82	4.93	5.08	6.42	4.85	6.65	7.61	6.08	9.62	5.89	12.89	12.01
2	4.76	4.90	4.96	6.81	4.85	6.79	8.92	6.02	9.83	5.79	11.80	14.92
3	4.78	4.89	4.88	7.36	4.90	6.79	8.92	5.84	9.77	5.73	11.05	15.88
4	4.79	4.85	4.88	8.70	4.99	6.96	8.24	6.41	9.24	5.59	10.48	16.56
5	4.69	4.85	4.81	9.29	5.21	7.54	7.54	9.29	8.50	5.53	10.27	16.83
6	4.66	4.81	4.73	9.09	5.84	7.03	7.11	10.34	7.97	5.44	10.75	17.19
7	4.65	4.82	4.64	8.59	6.14	7.32	7.18	12.43	7.67	9.83	10.83	17.54
8	4.63	4.85	4.51	7.97	6.23	7.53	8.83	14.11	7.40	12.70	10.43	17.63
9	4.65	4.96	4.43	7.28	6.30	7.24	9.73	15.25	7.13	13.79	9.92	17.57
10	4.64	5.26	4.51	6.68	6.20	8.10	9.92	15.73	7.03	15.38	9.86	17.19
11	4.61	5.18	4.55	6.71	6.00	9.52	9.71	16.57	7.32	16.00	9.80	16.26
12	4.65	5.47	4.59	6.86	5.83	10.19	9.18	17.01	8.09	16.74	9.50	14.43
13	4.64	6.07	4.66	6.66	5.69	10.62	8.63	17.36	7.64	17.73	9.10	12.31
14	4.62	6.00	4.61	6.98	5.54	10.57	8.08	17.77	8.63	19.23	8.72	10.95
15	4.63	6.04	4.58	7.02	5.88	11.38	7.56	18.37	10.40	21.90	8.41	10.16
16	4.60	6.29	4.59	6.63	6.00	11.93	7.14	18.81	12.12	23.39	8.24	9.68
17	4.58	6.20	4.58	---	5.74	12.27	6.84	18.94	12.65	23.95	8.24	9.21
18	4.53	6.00	4.68	---	5.59	12.39	6.61	18.81	11.98	24.10	8.09	8.55
19	4.54	5.74	5.60	---	5.55	12.61	6.45	18.67	10.93	23.90	7.89	7.83
20	4.55	5.60	5.33	---	5.47	12.43	6.46	18.32	10.10	23.32	7.76	7.45
21	4.60	5.44	5.11	---	6.17	11.96	6.41	17.79	9.43	22.58	7.66	7.25
22	4.76	5.25	5.32	---	9.00	10.99	6.25	17.00	8.70	21.70	7.42	7.30
23	4.77	5.16	5.45	---	9.36	10.13	6.18	15.59	8.04	20.84	7.10	7.20

**03343000 Wabash River at Vincennes, IN--Continued**

<b>24</b>	4.78	5.18	6.49	---	8.85	9.76	6.11	13.80	7.61	20.04	6.82	7.00
<b>25</b>	5.07	5.19	7.00	---	8.00	9.86	7.12	12.26	7.28	19.27	6.68	6.82
<b>26</b>	4.84	5.13	6.67	---	7.27	9.98	7.12	11.27	6.90	18.56	6.64	7.68
<b>27</b>	4.80	5.06	6.19	---	6.78	9.30	6.81	10.62	6.53	17.90	6.47	10.11
<b>28</b>	4.82	5.13	5.84	---	6.53	8.69	6.66	10.21	6.27	17.36	6.29	12.42
<b>29</b>	5.43	5.17	5.60	5.13	---	8.19	6.62	9.89	6.07	16.78	6.29	13.64
<b>30</b>	5.06	5.16	5.46	4.88	---	7.66	6.30	9.68	5.92	15.75	6.12	14.16
<b>31</b>	4.98	---	6.29	4.88	---	7.31	---	9.65	---	14.41	8.25	---
MEAN	4.74	5.32	5.18	---	6.24	9.34	7.54	13.54	8.56	16.17	8.70	12.12
MAX	5.43	6.29	7.00	---	9.36	12.61	9.92	18.94	12.65	24.10	12.89	17.63
MIN	4.53	4.81	4.43	---	4.85	6.65	6.11	5.84	5.92	5.44	6.12	6.82

WABASH RIVER BASIN  
**03343000 Wabash River at Vincennes, IN**

**LOCATION.**— Lat 38°42'19", long 87°31'14" (NAD of 1927), T.3 N., R.10 W., Lawrence County, IL, Hydrologic Unit 05120111, (VINCENNES, IL-IN. quadrangle), on right bank 30 ft east of Illinois State Highway 33, 300 ft upstream from Kelso Creek, 570 ft downstream from U.S. Highway 50 bridge, 5.1 mi downstream from Maria Creek, 7.5 mi upstream from Embarras River and at mile 129.6.

**DRAINAGE AREA.**— 13,706 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

**DISCHARGE:** October 1929 to September 1994. Prior to December 1929, monthly discharge only published in WSP 1305.

**STAGE:** October 1994 to current year. Gage-height records collected at site 1.8 mi downstream are available for flood peaks in 1867 and 1883, intermittent records 1887–1904, and continuous since November 1904, in reports of National Weather Service.

**REVISED RECORDS.**— WSP 1173: 1943 (maximum gage height only). WSP 1335: 1930–31, 1933, 1936. WSP 1909: 1955. WDR IN-73-1: Drainage area.

**GAGE.**— Water-stage recorder. Datum of gage is 394.43 ft above NGVD of 1929. Oct. 1, 1968, to June 19, 1979, recording gage at site 570 ft upstream at same datum. Oct. 1, 1960, to September 30, 1968, nonrecording gage at site 1.8 mi downstream at same datum. Oct. 1, 1960, to Sept. 30, 1968, auxiliary water stage recorder at site 2.8 mi upstream from base gage at datum 0.80 ft lower. See WSP 1725 for history of changes prior to Oct. 1, 1960.

**REMARKS.**— Flow partially regulated by upstream reservoirs.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum gage height, 29.33 ft, May 22, 1943; minimum gage height unknown prior to 1988, since 1988, minimum gage height, 3.92 ft, Sept. 4, 1988.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Flood of Mar. 29, 1913, reached a stage of 26.3 ft, at former site 1.8 mi downstream and at present datum, from floodmarks, determined by U.S. Army Corps of Engineers, discharge, 255,000 ft<sup>3</sup>/s.

**EXTREMES FOR CURRENT YEAR.**—Maximum gage height, 21.92 ft, June 22; minimum gage height, unknown.

Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY OBSERVATION AT 2400 HOURS												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.46	6.98	11.95	16.27	6.99	9.21	16.11	6.73	13.17	11.19	6.23	11.63
2	14.78	6.91	11.72	16.49	7.00	9.93	16.24	6.71	13.33	10.52	5.98	12.07
3	15.02	6.90	11.66	16.75	7.36	10.37	16.31	7.05	14.20	10.05	5.89	11.56
4	14.73	6.83	11.32	18.48	7.58	11.59	16.12	7.43	14.30	10.21	5.84	10.69
5	13.43	6.72	10.66	19.36	7.61	13.89	15.51	7.44	13.73	9.90	5.79	9.97
6	11.81	6.69	9.97	19.70	7.58	14.99	13.78	7.35	12.45	9.89	5.96	9.72
7	10.54	6.76	9.56	20.06	7.44	15.42	11.87	7.13	10.82	9.55	6.11	9.56
8	9.83	6.68	9.26	20.61	7.37	15.74	10.68	7.11	9.84	9.17	6.15	9.11
9	9.44	6.63	9.10	21.09	7.23	15.78	9.87	7.02	9.10	9.16	6.44	8.38
10	9.20	6.59	9.15	21.27	7.34	15.78	9.26	6.81	8.56	8.93	6.32	7.67
11	9.01	6.55	9.48	21.11	7.44	15.76	8.80	6.63	8.10	10.22	6.04	7.27
12	8.76	6.55	9.92	20.63	7.47	15.49	8.36	6.70	8.91	12.62	5.80	7.09
13	8.51	6.40	11.09	19.82	7.29	14.12	7.99	6.90	12.75	12.71	5.63	6.89
14	8.33	6.40	12.08	18.87	7.09	12.11	7.71	6.97	13.93	11.96	5.56	6.68
15	8.79	6.61	12.19	17.81	7.07	10.72	7.52	6.96	14.72	10.53	5.48	6.37
16	8.47	6.85	11.57	16.58	6.97	9.87	7.32	6.86	15.44	9.47	5.39	6.18
17	8.47	7.27	10.50	15.22	6.89	9.40	7.17	7.22	16.42	9.10	5.27	6.04
18	8.66	7.72	9.71	14.92	6.78	9.04	7.05	7.45	17.72	8.26	5.25	5.89
19	9.03	9.72	9.18	14.14	6.83	8.68	6.91	7.30	19.05	7.78	5.29	---
20	9.09	12.16	8.73	12.64	7.18	8.45	6.82	8.85	20.48	7.99	5.24	---
21	8.65	13.43	8.34	11.38	7.58	8.17	6.80	9.54	21.61	7.70	5.60	---
22	8.17	13.79	8.14	10.48	8.37	7.95	6.88	9.33	21.90	7.30	6.55	---
23	7.91	14.03	9.37	9.78	9.44	7.81	6.94	8.81	21.74	7.46	7.19	---



**03343000 Wabash River at Vincennes, IN--Continued**

<b>24</b>	7.70	14.88	12.93	9.21	10.80	7.69	7.01	8.55	21.18	6.98	7.55	---
<b>25</b>	7.58	15.12	14.25	8.94	11.22	7.54	7.18	9.54	20.40	6.89	7.97	---
<b>26</b>	7.46	15.25	14.74	8.63	10.97	7.78	7.23	9.91	19.41	7.08	8.52	---
<b>27</b>	7.23	15.25	14.72	8.34	10.42	10.89	7.09	12.88	18.11	7.18	7.96	---
<b>28</b>	7.07	15.04	14.74	8.11	9.76	13.78	7.04	14.74	16.17	6.93	7.48	---
<b>29</b>	7.02	14.33	15.06	7.92	9.10	14.94	6.99	13.10	13.68	6.51	7.74	---
<b>30</b>	7.00	13.08	15.75	7.71	---	15.40	6.78	11.49	12.02	6.83	8.38	---
<b>31</b>	6.98	---	16.04	7.38	---	15.82	---	12.79	---	6.56	10.30	---
MEAN	9.46	9.60	11.38	14.83	8.01	11.75	9.38	8.49	15.11	8.92	6.48	---
MAX	15.02	15.25	16.04	21.27	11.22	15.82	16.31	14.74	21.90	12.71	10.30	---
MIN	6.98	6.40	8.14	7.38	6.78	7.54	6.78	6.63	8.10	6.51	5.24	---

WABASH RIVER BASIN  
**03343400 Embarras River near Camargo, IL**

**LOCATION.**— Lat 39°47'29", long 88°11'08" (NAD of 1927), in NE1/4NW1/4 sec.3, T.15 N., R.9 E., Douglas County, Hydrologic Unit 05120112, on left bank at downstream side of bridge on U.S. Highway 36, 2.0 mi southwest of Camargo, 5.7 miles east of Tuscola, and at mile 166.5.

**DRAINAGE AREA.**— 186 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: October 1960 to current year.

STAGE: Water years 1994 to current year.

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

**GAGE.**— Water-stage recorder, phone telemeter and crest-stage gage. Datum of gage is 622.30 ft above NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 8,040 ft<sup>3</sup>/s, Apr. 12, 1994, gage height, 17.33 ft; no flow for many days in most years.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	22	220	631	e87	109	1130	96	118	38	20	23
2	33	20	184	457	e83	131	792	127	99	35	15	16
3	29	20	170	391	e80	120	560	130	83	75	14	12
4	31	21	163	1050	e77	162	408	119	74	479	13	9.6
5	29	24	159	2880	e74	637	315	110	71	515	11	8.2
6	24	29	155	1830	e71	927	259	97	71	305	10	7.6
7	21	28	149	1130	e69	694	229	86	66	201	8.9	6.9
8	20	24	148	575	e67	451	204	76	61	168	8.0	6.4
9	19	21	145	387	e66	337	169	73	56	107	7.6	6.3
10	19	20	149	301	e65	268	143	70	54	232	7.8	5.8
11	20	20	169	257	e63	231	131	192	151	421	15	5.4
12	20	25	149	249	e62	201	119	345	628	296	9.7	5.2
13	20	26	133	229	e61	175	113	285	794	195	7.5	5.1
14	26	23	132	209	e60	164	106	240	421	320	6.4	5.4
15	51	19	e130	207	e60	151	95	365	225	351	5.5	14
16	46	19	125	187	e59	146	90	378	204	214	4.8	36
17	36	20	112	185	e58	150	88	288	328	138	4.5	11
18	31	69	103	257	e64	145	82	234	415	153	5.6	8.5
19	28	529	98	257	127	130	79	307	288	116	4.7	5.5
20	28	792	86	205	205	123	84	436	198	79	6.1	3.8
21	26	598	82	180	221	117	109	358	156	61	9.4	2.9
22	26	378	94	170	169	103	99	270	138	51	9.3	2.3
23	25	305	290	144	137	101	172	228	108	43	6.8	2.2
24	24	615	733	151	139	102	195	201	88	37	5.9	2.9
25	22	827	708	121	135	105	164	201	75	31	6.6	2.7
26	23	665	461	111	123	349	146	237	69	28	22	2.7
27	26	465	334	e130	113	2380	124	206	60	26	40	2.3
28	25	360	287	e115	102	1690	108	169	53	23	21	2.0
29	26	294	557	e102	100	1080	99	136	47	20	75	2.3
30	25	255	1040	e97	---	1070	89	123	42	e19	75	2.9
31	22	---	911	e90	---	1330	---	132	---	22	39	---
TOTAL	840	6533	8376	13285	2797	13879	6501	6315	5241	4799	495.1	226.9
MEAN	27.1	218	270	429	96.4	448	217	204	175	155	16.0	7.56
MAX	51	827	1040	2880	221	2380	1130	436	794	515	75	36

**03343400 Embarras River near Camargo, IL--Continued**

MIN	19	19	82	90	58	101	79	70	42	19	4.5	2.0
CFSM	0.15	1.17	1.45	2.30	0.52	2.41	1.17	1.10	0.94	0.83	0.09	0.04
IN.	0.17	1.31	1.68	2.66	0.56	2.78	1.30	1.26	1.05	0.96	0.10	0.05

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 – 2004, BY WATER YEAR (WY)**

MEAN	54.6	113	193	176	235	262	298	295	180	102	57.9	43.8
MAX	570	910	691	684	650	861	893	1263	773	487	315	422
(WY)	1994	1993	1984	1974	1985	1979	2002	1996	1974	1992	1979	1993
MIN	0.00	0.92	1.05	0.63	4.11	60.0	24.8	36.5	14.3	9.59	0.12	0.02
(WY)	1961	1961	1961	1977	1963	2003	2003	1976	1988	1988	1964	1964

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1961 – 2004**

ANNUAL TOTAL	36390.1		69288.0			
ANNUAL MEAN	99.7		189		167	
HIGHEST ANNUAL MEAN					357	
LOWEST ANNUAL MEAN					57.6	
HIGHEST DAILY MEAN	1100	May 11	2880	Jan 5	7000	May 13 2002
LOWEST DAILY MEAN	3.3	Aug 26	2.0	Sep 28	0.00	A
ANNUAL SEVEN-DAY MINIMUM	3.6	Aug 21	2.4	Sep 22	0.00	Oct 1 1960
MAXIMUM PEAK FLOW			3160	Jan 5	8040	Apr 12 1994
MAXIMUM PEAK STAGE			13.25	Jan 5	17.33	Apr 12 1994
INSTANTANEOUS LOW FLOW			1.8	Sep 28		
ANNUAL RUNOFF (CFSM)	0.536		1.02		0.899	
ANNUAL RUNOFF (INCHES)	7.28		13.86		12.21	
10 PERCENT EXCEEDS	283		440		428	
50 PERCENT EXCEEDS	31		102		60	
90 PERCENT EXCEEDS	9.2		8.4		2.9	

A – Many days in most years.

WABASH RIVER BASIN  
**03345500 Embarras River at Ste. Marie, IL**

**LOCATION.**— Lat 38°56'11", long 88°01'21" (NAD of 1927), in NW1/4NW1/4 sec.30, T.6 N., R.14 W., Jasper County, Hydrologic Unit 05120112, on right bank at upstream side of bridge on County Highway 9 at Ste. Marie, and at mile 48.2.

**DRAINAGE AREA.**— 1,516 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: August 1908 to December 1912, August 1914, October 1914 to current year.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–93.

**REVISED RECORDS.**— WSP 1083: 1934. WSP 1113: 1910–31, 1933, 1939–40, 1945(M). WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest–stage gage. Datum of gage is 445.75 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to June 29, 1940, nonrecording gage and June 29, 1940, to Jan. 24, 1967, water–stage recorder at same site at datum 1.00 ft higher.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 44,800 ft<sup>3</sup>/s, Jan. 4, 1950, from rating curve extended above 29,000 ft<sup>3</sup>/s, gage height, 25.95 ft, present datum; maximum gage height, 26.54 ft, June 30, 1957, present datum; minimum discharge, 1.0 ft<sup>3</sup>/s, observed, Oct. 5–9, 1914.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	470	126	1340	3660	e900	977	7450	556	9190	234	298	291
2	393	127	1150	3700	e830	1950	5900	970	7760	219	252	237
3	312	120	995	3900	e780	1460	4900	1060	2280	268	224	214
4	251	129	874	6710	e730	1750	4120	1130	1430	624	212	183
5	205	145	802	11100	e680	5880	3070	1040	1090	1030	200	157
6	176	155	768	13500	e650	7560	2240	895	892	1160	189	139
7	157	147	748	13200	e620	5380	1750	785	767	1050	181	126
8	142	149	713	10900	e600	3700	1490	697	683	970	173	115
9	128	141	696	9380	e580	3240	1320	627	618	808	166	104
10	119	135	707	8180	e580	2670	1190	570	563	791	161	97
11	104	132	743	4360	e660	2020	1060	533	519	761	157	88
12	91	129	785	2500	1220	1610	940	505	487	929	152	82
13	83	120	757	2030	1100	1380	850	490	460	1270	147	77
14	105	118	711	1820	850	1230	781	692	526	949	144	75
15	499	118	667	1630	885	1120	730	964	763	1120	141	75
16	697	117	645	1490	842	1040	687	894	989	968	138	71
17	688	112	630	1550	735	983	642	864	863	871	136	69
18	665	268	618	3460	679	945	607	935	1230	771	138	66
19	528	4440	597	3350	714	899	575	889	1580	622	135	66
20	412	4070	574	2330	911	853	552	792	1420	510	143	67
21	334	2640	539	1980	1130	813	583	741	1130	444	145	64
22	283	2420	506	1640	1190	803	606	850	852	430	150	67
23	241	2190	1880	1390	1130	753	593	869	700	757	161	69
24	212	4790	6160	1240	1070	714	605	859	578	583	185	63
25	193	4770	5030	e1050	1050	687	649	e1000	492	422	187	61
26	177	2850	3550	e950	977	1600	795	e1250	418	365	1150	59
27	163	2650	2990	e850	903	7830	717	e3850	362	342	3540	56
28	152	2400	2500	e760	838	6270	652	10500	321	303	1050	54
29	139	2050	3690	e700	784	4170	599	9580	287	269	1130	51
30	130	1640	6750	e650	—	5590	550	2690	258	263	499	51

WABASH RIVER BASIN  
**03345500 Embarras River at Ste. Marie, IL---Continued**

81

31	125	---	4850	e720	---	7390	---	6800	---	340	411	---
TOTAL	8374	39398	53965	120680	24618	83267	47203	54877	39508	20443	12095	2994
MEAN	270	1313	1741	3893	849	2686	1573	1770	1317	659	390	99.8
MAX	697	4790	6750	13500	1220	7830	7450	10500	9190	1270	3540	291
MIN	83	112	506	650	580	687	550	490	258	219	135	51
CFSM	0.18	0.87	1.15	2.57	0.56	1.77	1.04	1.17	0.87	0.43	0.26	0.07
IN.	0.21	0.97	1.32	2.96	0.60	2.04	1.16	1.35	0.97	0.50	0.30	0.07

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 – 2004, BY WATER YEAR (WY)**

MEAN	448	742	1249	1657	1915	2170	2171	1958	1299	747	423	377
MAX	3892	6308	7495	11520	7790	7556	7676	10550	5752	3844	4437	3810
(WY)	1927	1993	1968	1950	1982	1979	1922	1943	1957	1958	1915	1926
MIN	14.6	4.37	4.84	13.4	21.6	23.4	120	78.3	65.9	18.8	11.6	7.68
(WY)	1965	1915	1915	1977	1954	1954	1931	1954	1954	1954	1954	1954

**SUMMARY STATISTICS**

**FOR 2003 CALENDAR YEAR**

**FOR 2004 WATER YEAR**

**WATER YEARS 1910 – 2004**

ANNUAL TOTAL	265726		507422			
ANNUAL MEAN	728		1386		1260	
HIGHEST ANNUAL MEAN					2696	
LOWEST ANNUAL MEAN					35.9	
HIGHEST DAILY MEAN	8420	May 12	13500	Jan 6	38200	May 30 1927
LOWEST DAILY MEAN	33	Aug 30	51	Sep 29,30	1.0 A	
ANNUAL SEVEN-DAY MINIMUM	35	Aug 24	56	Sep 24	1.6	Oct 3 1914
MAXIMUM PEAK FLOW			14600	Jan 6	44800 B	Jan 4 1950
MAXIMUM PEAK STAGE			20.86	Jan 6	26.54 C	Jun 30 1957
INSTANTANEOUS LOW FLOW			49	Sep 29	1.0 D	A
ANNUAL RUNOFF (CFSM)	0.480		0.915		0.831	
ANNUAL RUNOFF (INCHES)	6.52		12.45		11.29	
10 PERCENT EXCEEDS	2060		3700		3350	
50 PERCENT EXCEEDS	251		716		468	
90 PERCENT EXCEEDS	55		126		45	

A – Oct. 5–9, 1914.

B – From rating curve extended above 29,000 ft<sup>3</sup>/s, gage height, 25.95 ft, present datum.

C – Present datum.

D – Observed.

WABASH RIVER BASIN  
**03346000 North Fork Embarras River near Oblong, IL**

**LOCATION.**— Lat 39°00'36", long 87°56'44" (NAD of 1927), in NW1/4NW1/4 sec.35, T.7 N., R.14 W., Crawford County, Hydrologic Unit 05120112, on left bank at downstream side of bridge on State Highway 33, 0.8 mi upstream from railroad bridge, 2 mi west of Oblong, and at mile 10.5.

**DRAINAGE AREA.**— 318 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE

DISCHARGE: October 1940 to current year.

STAGE: Water years 1994 to current year.

SURFACE—WATER QUALITY

CHEMICAL: Water years 1978–91.

**GAGE.**— Water–stage recorder, phone telemeter and crest–stage gage. Datum of gage is 456.19 ft above NGVD of 1929. Prior to Dec. 11, 1940, nonrecording gage and Dec. 11, 1940, to Sept. 30, 1964, water–stage recorder at same site at datum 2.00 ft higher. Oct. 8, 1971 to May 15, 1979, water–stage recorder at site 0.8 mi downstream at present datum.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE: Maximum discharge, 27,100 ft<sup>3</sup>/s, Jan. 4, 1950, from rating curve extended above 16,000 ft<sup>3</sup>/s, gage height, 24.38 ft, present datum; no flow for many days in 1953–54, 1964, 1988.

**REMARKS FOR CURRENT YEAR.**— Records good except those for Jan. 5–17 and those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	21	125	337	e64	391	466	57	3730	16	147	31
2	40	22	112	401	e65	1070	278	83	947	15	56	23
3	33	22	99	549	e70	366	208	119	211	19	32	19
4	29	23	94	2250	e75	494	170	91	144	284	25	15
5	26	23	94	8090	e82	1980	144	71	112	220	20	13
6	23	24	96	6860	e90	2420	127	63	93	262	17	12
7	22	23	103	1870	e82	621	118	56	78	326	15	10
8	20	24	99	312	e75	282	121	48	67	78	13	8.4
9	19	24	94	221	e68	211	134	42	59	85	12	7.8
10	18	22	99	189	e100	176	101	38	51	548	11	7.4
11	16	23	145	168	e170	152	90	35	46	148	10	7.0
12	17	21	164	161	e320	137	83	32	44	113	9.6	6.5
13	15	20	122	150	e250	121	75	30	67	120	9.1	6.3
14	24	20	99	139	e170	114	71	30	103	413	8.6	5.7
15	519	23	90	131	e150	113	68	32	88	327	8.2	5.6
16	226	22	87	123	e130	109	64	34	164	90	7.9	5.8
17	127	20	84	170	e120	111	61	30	180	252	7.5	28
18	90	127	83	1130	e110	113	60	28	723	235	7.2	17
19	67	1390	81	825	e150	104	55	32	263	63	7.3	7.3
20	53	1060	78	283	259	97	60	47	123	33	8.3	5.6
21	44	306	68	216	323	94	80	35	66	24	15	5.1
22	37	196	73	170	237	104	91	28	49	95	18	4.8
23	33	176	853	e130	172	90	74	24	62	1240	15	4.2
24	30	1470	2410	e115	185	87	71	22	40	413	42	4.0
25	28	1750	1510	e105	218	87	106	76	31	123	91	3.8
26	26	424	325	e95	174	478	154	133	27	214	800	3.7
27	25	262	225	e90	137	2520	100	1150	24	114	1200	3.6
28	23	206	189	e82	123	1490	74	3840	22	63	252	3.5
29	23	168	929	e76	110	442	62	2430	20	41	406	3.3
30	22	143	2400	e71	---	634	55	306	18	57	105	3.1
31	22	---	1200	e66	---	1190	---	2410	---	382	54	---
TOTAL	1750	8055	12230	25575	4279	16398	3421	11452	7652	6413	3429.7	280.5

**03346000 North Fork Embarras River near Oblong, IL--Continued**

MEAN	56.5	268	395	825	148	529	114	369	255	207	111	9.35
MAX	519	1750	2410	8090	323	2520	466	3840	3730	1240	1200	31
MIN	15	20	68	66	64	87	55	22	18	15	7.2	3.1
CFSM	0.18	0.84	1.24	2.59	0.46	1.66	0.36	1.16	0.80	0.65	0.35	0.03
IN.	0.20	0.94	1.43	2.99	0.50	1.92	0.40	1.34	0.90	0.75	0.40	0.03

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 – 2004, BY WATER YEAR (WY)**

MEAN	65.7	190	295	382	438	491	462	399	240	142	85.5	80.3
MAX	1006	1757	1755	2798	1777	1469	1521	2825	1346	1010	471	900
(WY)	2001	1986	1968	1950	1982	1973	1984	1943	1945	1958	1985	1989
MIN	0.01	0.13	0.56	0.92	4.82	2.37	10.4	19.0	4.07	0.46	0.26	0.10
(WY)	1954	1954	1954	1977	1954	1954	1954	1941	1954	1954	1954	1954

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1941 – 2004**

ANNUAL TOTAL	61831.9		100935.2			
ANNUAL MEAN	169		276		272	
HIGHEST ANNUAL MEAN					644	
LOWEST ANNUAL MEAN					3.88	
HIGHEST DAILY MEAN	4300	May 12	8090	Jan 5	20300	Jan 4 1950
LOWEST DAILY MEAN	2.1	A	3.1	Sep 30	0.00	B
ANNUAL SEVEN-DAY MINIMUM	2.2	Jan 24	3.6	Sep 24	0.00	Sep 13 1953
MAXIMUM PEAK FLOW			10400	Jan 5	27100	C Jan 4 1950
MAXIMUM PEAK STAGE			19.82	Jan 5	24.38	D Jan 4 1950
INSTANTANEOUS LOW FLOW			3.0	Sep 30		
ANNUAL RUNOFF (CFSM)	0.533		0.867		0.854	
ANNUAL RUNOFF (INCHES)	7.23		11.81		11.61	
10 PERCENT EXCEEDS	383		528		595	
50 PERCENT EXCEEDS	33		87		46	
90 PERCENT EXCEEDS	5.3		13		2.7	

A – Jan. 26, 27, estimated due to backwater from ice.

B – Many days in 1953–54, 1964, 1988.

C – From rating curve extended above 16,000 ft<sup>3</sup>/s.

D – Present datum.

WABASH RIVER BASIN  
**03346500 Embarras River at Lawrenceville, IL**

**LOCATION.**— Lat 38°43'25", long 87°39'52" (NAD of 1983), in NE1/4SW1/4 sec. 5,T. 3 N., R. 11 W., Lawrence County, Hydrologic Unit 05120112, on left bank at downstream side of U.S. Business Route 50 bridge in Lawrenceville, 6.7 miles upstream from mouth of Wabash River.

**DRAINAGE AREA.**— 2,333 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: March 1930 to November 1933, October 2001 to current year.

STAGE: October 2001 to current year.

**GAGE.**— Water-stage recorder, phone telemeter, crest-stage gage, and acoustical-velocity meter. Datum of gage is 382.24 ft above NGVD of 1988. March 1930 to November 1933 at datum 399.20 ft above NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 46,300 ft<sup>3</sup>/s, May 15, 2002, gage height, 41.57 ft; maximum gage height, 41.61 ft, May 16, 2002, discharge, 39,300 ft<sup>3</sup>/s; minimum daily discharge, 30 ft<sup>3</sup>/s, Nov. 28, 29, 1930.

**REMARKS FOR CURRENT YEAR.**— Records good except those for periods of Oct. 1–6, Jan. 12–18, and June 14 to July 4, which are fair, and those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	564	265	2200	7710	e920	1460	7970	769	11400	243	880	723
2	514	263	1700	6680	e980	3110	8280	880	9950	157	614	752
3	483	263	1480	6530	e1100	3640	8140	1160	9340	137	416	871
4	439	256	1300	8380	e1000	3540	7180	1240	7700	404	340	585
5	415	247	1140	11200	e940	6140	5870	1250	3800	2400	298	388
6	371	259	1010	e14600	e880	7840	4320	1140	2410	1720	272	308
7	e340	266	931	15200	e830	8280	2820	989	1610	1670	253	272
8	316	265	892	16500	e800	8380	2040	876	1210	1470	236	242
9	278	261	849	18000	e800	6950	1700	788	1030	1120	222	219
10	265	259	852	16900	e850	5430	1540	719	902	923	215	199
11	257	263	934	15400	e1300	4620	1380	666	805	1350	205	185
12	244	477	959	11100	2300	4000	1230	627	738	1610	195	173
13	230	430	1000	6030	2420	3360	1110	608	e650	1690	187	164
14	234	300	1050	2940	1940	2420	1010	618	573	2470	180	149
15	272	282	1140	2180	1640	1770	938	834	601	1940	172	142
16	763	296	1070	1810	1590	1530	881	1000	839	1590	164	137
17	926	289	904	1730	1470	1420	834	944	1030	1540	153	131
18	787	410	794	5010	1310	1340	791	934	2420	1660	145	125
19	735	3610	758	7180	1330	1280	747	966	3160	1230	141	135
20	613	6580	718	5720	1680	1220	725	930	2090	820	152	134
21	514	5980	683	3600	2130	1150	732	868	1520	637	204	124
22	440	3940	645	2840	2100	1100	763	826	1300	551	178	118
23	392	3320	927	2320	1930	1080	788	889	1120	890	155	112
24	357	5750	4500	2000	1830	1030	764	898	1030	1920	169	114
25	339	7760	6780	1780	1810	990	819	873	849	1190	246	113
26	334	7550	6850	e1500	1760	1070	905	1210	784	663	1280	107
27	325	5670	5340	e1350	1580	5330	1020	4340	721	607	5370	101
28	301	4590	4120	e1200	1400	7540	920	9470	631	536	5170	98
29	287	3870	4260	e1100	1280	8310	834	11600	518	446	2010	93
30	273	3050	7020	e1000	----	8120	770	12300	396	417	1760	90
31	263	----	7890	e950	----	7710	----	12400	----	905	909	----
TOTAL	12871	67021	70696	200440	41900	121160	67821	73612	71127	34906	22891	7104
MEAN	415	2234	2281	6466	1445	3908	2261	2375	2371	1126	738	237
MAX	926	7760	7890	18000	2420	8380	8280	12400	11400	2470	5370	871



**03346500 Embarras River at Lawrenceville, IL--Continued**

MIN	230	247	645	950	800	990	725	608	396	137	141	90
CFSM	0.18	0.96	0.98	2.77	0.62	1.68	0.97	1.02	1.02	0.48	0.32	0.10
IN.	0.21	1.07	1.13	3.20	0.67	1.93	1.08	1.17	1.13	0.56	0.37	0.11

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 – 2004, BY WATER YEAR (WY)**

MEAN	883	1275	2411	3476	1980	3065	2324	5204	1152	548	321	661
MAX	3659	2705	5701	7934	4025	6031	6079	19430	2371	1266	738	1744
(WY)	2002	1932	2002	1932	2002	1933	1933	2002	2004	2003	2004	1931
MIN	45.0	37.5	56.6	40.0	128	704	303	339	182	113	49.5	80.9
(WY)	1931	1931	1931	1931	1931	1931	1931	1931	1930	1930	1930	2002

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1930 – 2004**

ANNUAL TOTAL	495120		791549			
ANNUAL MEAN	1356		2163		2070	
HIGHEST ANNUAL MEAN					4072	
LOWEST ANNUAL MEAN					330	
HIGHEST DAILY MEAN	10500	A May 12	18000	Jan 9	39900	May 16 2002
LOWEST DAILY MEAN	66	B Jan 27	90	Sep 30	30	C
ANNUAL SEVEN-DAY MINIMUM	72	Jan 24	102	Sep 24	34	Nov 2 1930
MAXIMUM PEAK FLOW			18100	Jan 9	46300	D May 15 2002
MAXIMUM PEAK STAGE			35.21	Jan 9	41.61	E May 16 2002
ANNUAL RUNOFF (CFSM)	0.581		0.927		0.887	
ANNUAL RUNOFF (INCHES)	7.89		12.62		12.06	
10 PERCENT EXCEEDS	4160		6800		6800	
50 PERCENT EXCEEDS	585		939		614	
90 PERCENT EXCEEDS	141		205		70	

A – Estimated.

B – Estimated, but may have been less during period of estimated discharges in January.

C – Nov. 28, 29, 1930.

D – Gage height, 41.57 ft.

E – Discharge, 39,300 ft<sup>3</sup>/s.

WABASH RIVER BASIN  
**03377500 Wabash River at Mount Carmel, IL**

**LOCATION.**— Lat 38°24'07", long 87°45'10" (NAD of 1927), in SE1/4NW1/4 sec.28, T.1 S., R.12 W., Wabash County, Illinois, Hydrologic Unit 05120113, (MOUNT CARMEL, IL-IN quadrangle), on right bank on downstream side of Southern Railway bridge at Mount Carmel, 0.2 mi downstream from Patoka River, 0.2 mi upstream of State Road 64 bridge, and at mile 94.4.

**DRAINAGE AREA.**— 28,635 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1927 to current year.

STAGE: January 1908 to September 1913. Gage-height records November 1874 to December 1878 in files of Louisville office of the U.S. Army Corps of Engineers, and since June 1884, in reports of the National Weather Service.

**REVISED RECORDS.**— WDR IN-73-1: Drainage area.

**GAGE.**— Water-stage recorder. Datum of gage is 369.46 ft above NGVD of 1929. Oct. 1, 1949, to Feb. 8, 1977, at datum 2.00 ft higher. See WSP 1725 for history of changes prior to Sept. 30, 1949.

**REMARKS.**— Flow partially regulated by upstream reservoirs.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 305,000 ft<sup>3</sup>/s, May 25, 1943, maximum gage height, 31.75 ft, January 7, 1991; minimum daily discharge, 1,650 ft<sup>3</sup>/s, September 27, 1941.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** (1874-78, 1884 to 1985) Maximum discharge, 428,000 ft<sup>3</sup>/s, Mar. 30, 1913, gage height, 33.0 ft, present site and datum.

**REMARKS FOR CURRENT YEAR.**—Records fair except for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39000	15500	57600	59100	22500	27700	51900	18000	70100	33100	13900	21400
2	40700	15300	53700	59200	21500	27900	54500	18400	71400	29300	12500	24500
3	42400	14700	51700	61000	21800	30500	56200	19200	71200	26500	11500	25800
4	42800	14300	51500	64700	23600	35800	57300	23000	71600	24300	10700	24600
5	40900	14000	50400	75100	25400	43900	57800	26900	71700	24600	10300	21500
6	e36600	13800	47000	86900	27600	52100	55500	28700	70500	24800	10300	19000
7	e30500	13800	41100	96600	30200	57400	47600	29400	68100	24100	10400	17600
8	e25300	13900	35400	107000	31000	59500	38800	29700	58600	24000	10600	16800
9	e22000	13600	32100	119000	31300	60400	33100	29600	42700	22600	10800	15700
10	e20200	13300	30600	133000	31400	60200	29400	28100	34700	21300	11000	14000
11	e19000	13200	30100	149000	33000	58200	26800	25100	29700	20600	10700	12200
12	e18100	13300	30600	157000	34800	54500	24500	21500	26700	25500	9940	11100
13	e17100	13700	32100	157000	35300	50300	22500	18500	29800	35900	9190	10600
14	e16400	14200	35000	147000	33800	43900	20600	17100	39500	38700	8610	10000
15	e15700	15100	37700	131000	31900	36200	19100	16300	43900	38300	8180	9630
16	e16100	16400	38500	114000	30300	30800	18300	16700	48800	33400	7890	8970
17	e16800	17800	36400	91700	28500	27400	18200	17300	54200	32500	7650	8250
18	e18000	19200	33400	71300	26200	25400	18600	18200	60200	27200	7370	7910
19	e19200	22100	31200	62700	24300	24100	18700	19000	66200	23500	7160	7540
20	e20600	31500	30000	58100	23700	23400	18000	19400	71200	22100	7160	7320
21	e21700	42000	29400	51700	24500	22900	17000	20500	77200	20800	7100	7030
22	e21100	47200	28100	45700	26000	21800	16000	22800	85900	19100	7550	6790
23	e19300	48400	26600	41000	29300	20900	15800	24100	90800	17600	9100	6610
24	17900	51200	29800	37000	33300	20100	15900	24700	92300	17900	10700	6420
25	16800	56200	40500	33500	37500	19500	16400	25100	87100	17600	11900	6230
26	16000	58800	47900	31000	38900	19000	17300	26600	76200	17200	18100	6030
27	15300	59800	51800	29100	36800	21500	18600	34500	66700	16200	20400	5800

## WABASH RIVER BASIN

87

**03377500 Wabash River at Mount Carmel, IL--Continued**

<b>28</b>	14700	59300	53900	27100	33200	31600	19300	49400	58600	15700	20200	5700
<b>29</b>	14400	59800	55900	25800	30100	41300	19100	63000	49800	14600	18800	5620
<b>30</b>	14900	60000	58700	24900	----	47600	18600	66300	40000	13400	18000	5480
<b>31</b>	15400	----	60000	23900	----	50000	----	68500	----	14000	18400	----
TOTAL	704900	861400	1268700	2371100	857700	1145800	861400	865600	1825400	736400	356100	356130
MEAN	22740	28710	40930	76490	29580	36960	28710	27920	60850	23750	11490	11870
MAX	42800	60000	60000	157000	38900	60400	57800	68500	92300	38700	20400	25800
MIN	14400	13200	26600	23900	21500	19000	15800	16300	26700	13400	7100	5480
CFSM	0.79	1.00	1.43	2.67	1.03	1.29	1.00	0.98	2.12	0.83	0.40	0.41
IN.	0.92	1.12	1.65	3.08	1.11	1.49	1.12	1.12	2.37	0.96	0.46	0.46

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 – 2004, BY WATER YEAR (WY)**

MEAN	9916	15730	25900	37430	40800	49650	49650	42870	29320	19860	12170	9359
MAX	42230	87950	92340	199300	147100	108700	106400	148200	80120	73580	75530	50670
(WY)	2002	1994	1986	1950	1950	1985	1938	2002	1998	1958	1979	1989
MIN	2465	2632	2266	2861	3758	4815	11900	5805	5035	3366	2372	2572
(WY)	1941	1931	1964	1977	1931	1941	1941	1934	1988	1936	1936	1940

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1928 – 2004**

ANNUAL TOTAL	12603210		12210630			
ANNUAL MEAN	34530		33360		28490	
HIGHEST ANNUAL MEAN					56740	
LOWEST ANNUAL MEAN					6144	
HIGHEST DAILY MEAN	116000	Jul 20	157000	Jan 12	302000	May 25 1943
LOWEST DAILY MEAN	9590	Aug 30	5480	Sep 30	1650	Sep 27 1941
ANNUAL SEVEN-DAY MINIMUM	10300	Aug 25	5900	Sep 24	1700	Dec 19 1963
MAXIMUM PEAK FLOW			159000	Jan 12	305000	May 25 1943
MAXIMUM PEAK STAGE			28.06	Jan 12	31.75	Jan 7 1991
ANNUAL RUNOFF (CFSM)	1.21		1.17		0.995	
ANNUAL RUNOFF (INCHES)	16.37		15.86		13.52	
10 PERCENT EXCEEDS	60400		60600		67900	
50 PERCENT EXCEEDS	29400		25600		16900	
90 PERCENT EXCEEDS	13200		10700		4430	

WABASH RIVER BASIN  
**03378000 Bonpas Creek at Browns, IL**

**LOCATION.**— Lat 38°23'11", long 87°58'32" (NAD of 1927), in NW1/4SE1/4 sec.33, T.1 S., R.14 W., Edwards County, Hydrologic Unit 05120113, on right bank at downstream side of bridge on State Highway 15, 0.5 mi north of Browns, 0.7 mi upstream from railroad bridge, and at mile 14.6.

**DRAINAGE AREA.**— 228 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE**

DISCHARGE: October 1940 to current year.

STAGE: Water years 1994 to current year.

**SURFACE—WATER QUALITY**

CHEMICAL: Water years 1978–91.

MISCELLANEOUS: Water years 1998 and 2002.

**GAGE.**— Water–stage recorder, phone telemeter, and crest–stage gage. Datum of gage is 372.92 ft above NGVD of 1929. Prior to Dec. 11, 1968, water–stage recorder and concrete dam at site 0.4 mi downstream at datum 2.0 ft higher. Dec. 11, 1968, to Aug. 13, 1969, nonrecording gage at site 0.5 mi downstream at datum 1.0 ft lower. Prior to Oct. 1, 1982, auxiliary nonrecording gage near mouth on Wabash River at Grayville read twice daily.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Maximum discharge, 7,500 ft<sup>3</sup>/s, May 9, 1961, gage height, 24.04 ft, site and datum then in use; no flow at times in most years.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for periods of backwater from the Wabash River, Jan. 10–17, 22, June 5–7, 20–21, and June 26–28, and those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	e0.00	24	110	e14	141	271	136	2360	7.1	307	253
2	0.93	e0.00	14	140	e16	382	126	238	1880	34	46	52
3	0.62	e0.01	9.3	208	e40	181	83	254	1260	13	20	100
4	0.34	e0.01	7.2	603	118	1350	61	141	431	75	12	53
5	0.21	0.03	6.9	1310	101	1350	47	70	e67	106	8.5	38
6	0.22	0.04	11	1480	286	1300	39	43	e39	126	6.1	24
7	0.17	0.03	33	1590	332	1120	36	30	e25	134	4.4	17
8	0.15	0.01	19	1290	174	520	33	23	20	28	2.8	13
9	0.12	0.00	12	652	104	124	27	19	16	11	2.1	10
10	0.09	0.00	9.9	e318	232	74	24	16	15	6.4	1.7	8.6
11	0.07	0.01	14	e386	572	59	22	13	14	40	1.7	7.5
12	0.06	0.28	32	e553	563	49	21	11	109	777	1.8	7.1
13	0.05	0.35	20	e657	359	41	20	26	532	147	2.1	6.9
14	0.06	12	11	e640	164	37	18	27	197	37	2.1	7.1
15	0.05	11	8.2	e528	180	36	16	52	51	18	1.9	6.9
16	0.04	4.1	8.7	e391	123	37	15	36	307	11	1.9	6.6
17	0.09	1.3	9.4	e293	86	37	14	44	204	1510	2.4	6.9
18	0.06	2.5	13	913	75	36	12	93	541	1080	3.1	6.8
19	0.04	160	11	916	110	31	11	37	380	271	3.4	6.0
20	0.04	310	10	647	317	71	22	109	e91	36	3.8	5.1
21	0.02	96	9.4	161	398	254	24	25	e34	18	5.0	4.7
22	0.01	25	9.1	e75	200	89	20	16	480	11	5.7	e4.5
23	0.01	14	9.0	e50	104	50	18	12	631	339	5.3	e4.2
24	0.01	314	233	e44	89	42	17	9.7	195	197	48	e4.0
25	0.01	439	132	e40	79	37	56	82	139	37	89	e3.8
26	0.07	223	38	e34	60	38	68	910	e70	35	3980	e3.7
27	0.02	67	22	e28	48	492	34	1850	e17	22	3940	e3.6
28	0.00	148	17	e25	39	576	20	2690	e6.3	14	3130	e3.4
29	e0.00	98	93	e21	36	961	15	3090	5.9	8.7	2510	e3.2
30	e0.00	47	496	e18	—	900	13	3030	4.9	90	1860	e3.0

WABASH RIVER BASIN  
**03378000 Bonpas Creek at Browns, IL--Continued**

89

31	e0.00	---	390	e16	---	713	---	2880	---	650	1110	---
TOTAL	5.66	1972.67	1732.1	14137	5019	11128	1203	16012.7	10122.1	5889.2	17117.8	673.6
MEAN	0.18	65.8	55.9	456	173	359	40.1	517	337	190	552	22.5
MAX	2.1	439	496	1590	572	1350	271	3090	2360	1510	3980	253
MIN	0.00	0.00	6.9	16	14	31	11	9.7	4.9	6.4	1.7	3.0
CFSM	0.00	0.29	0.25	2.00	0.76	1.57	0.18	2.27	1.48	0.83	2.42	0.10
IN.	0.00	0.32	0.28	2.31	0.82	1.82	0.20	2.61	1.65	0.96	2.79	0.11

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 – 2004, BY WATER YEAR (WY)**

MEAN	44.7	167	263	325	373	468	418	356	182	107	80.7	32.4
MAX	394	1540	1787	2245	1379	1897	1375	1928	945	1366	575	304
(WY)	2002	1994	1983	1950	1950	1945	1972	1961	1945	1958	2000	1945
MIN	0.00	0.00	0.00	0.03	0.02	0.00	8.02	5.33	1.05	0.00	0.00	0.00
(WY)	1941	1941	1941	1977	1941	1941	1946	1941	1988	1944	1953	1953

**SUMMARY STATISTICS**

**FOR 2003 CALENDAR YEAR**

**FOR 2004 WATER YEAR**

**WATER YEARS 1941 – 2004**

ANNUAL TOTAL	76577.09		85012.83			
ANNUAL MEAN	210		232		234	
HIGHEST ANNUAL MEAN					505	
LOWEST ANNUAL MEAN					9.71	
HIGHEST DAILY MEAN	2400	Feb 23	3980	Aug 26	7410	May 9 1961
LOWEST DAILY MEAN	0.00	Several days	0.00	Several days	0.00	A
ANNUAL SEVEN-DAY MINIMUM	0.00	Oct 28	0.00	Oct 28	0.00	Oct 1 1940
MAXIMUM PEAK FLOW			4990	Aug 26	7500	May 9 1961
MAXIMUM PEAK STAGE			21.04	Aug 26	24.04 B	May 9 1961
ANNUAL RUNOFF (CFSM)	0.920		1.02		1.03	
ANNUAL RUNOFF (INCHES)	12.49		13.87		13.95	
10 PERCENT EXCEEDS	803		634		804	
50 PERCENT EXCEEDS	16		34		20	
90 PERCENT EXCEEDS	0.19		0.20		0.03	

A – At times in most years.

B – Site and datum then in use.

WABASH RIVER BASIN  
**03378500 Wabash River at New Harmony, IN**

(National Stream–Quality Accounting Network Station)

**LOCATION.**— Lat 38°07'53", long 87°56'32" (NAD of 1927), in SE1/4SE1/4 sec.35, T.4 S., R.14 W., Posey County, Hydrologic Unit 05120113, (NEW HARMONY, IN quadrangle), at bridge on State Highway 66 at New Harmony, at Indiana–Illinois state line, 2.3 mi downstream from Black River, and at mile 53.1.

**DRAINAGE AREA.**— 29,234 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE

DISCHARGE: October 1938 to September 1947.

STAGE: August 1988 to current year.

SURFACE–WATER QUALITY

CHEMICAL: October 1974 to 1986, water year 1998 to current year. Data collected water years 1997 and 1998 were published in the Kentucky Water Resources Data reports, and are stored in the Indiana NWIS/QW data base.

SEDIMENT: Partial record station—October 1974 to 1985.

SPECIFIC CONDUCTANCE: October 1974 to September 1980.

WATER TEMPERATURE: October 1974 to September 1980.

**GAGE.**— Water–stage recorder. Datum of gage is 353.20 ft above NGVD of 1929. (Furnished by National Weather Service). Prior to October 1992, erroneously published as 353.30 ft above NGVD of 1929.

**REMARKS.**— For sediment analysis, water discharge obtained from station Wabash River at Mount Carmel, IL. (03377500).

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Maximum gage height, 23.84 ft. May 26, 1943. Beginning August 1988, minimum gage height, 0.46 ft. Oct. 12, 1988.

SPECIFIC CONDUCTANCE: Maximum daily recorded, 805 microsiemens, Feb. 15, 1977; minimum daily recorded, 200 microsiemens, Mar. 3, 1979.

WATER TEMPERATURES: Maximum daily recorded, 32.0°C, June 28, 1978, July 14–18, 1980; minimum daily recorded, freezing point on many days during the winter period.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Flood of March 1913 reached a stage of 27.7 ft. Flood of Jan. 31, 1937, reached a stage of 24.4 ft.

**EXTREMES FOR CURRENT YEAR.**—Maximum gage height, 17.72 ft, July 21; minimum gage height, 1.22 ft, Oct. 21, 22.

**Gage height, feet, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
 DAILY OBSERVATION AT 2400 HOURS**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.81	2.89	2.19	6.91	2.75	—	8.45	6.57	—	3.53	9.71	3.87
2	2.05	2.79	2.13	8.29	2.67	—	8.49	6.07	—	3.45	8.71	6.01
3	2.17	2.73	2.04	8.96	2.67	—	8.79	5.68	6.57	3.37	7.85	8.65
4	2.21	2.62	1.95	9.51	2.64	—	8.57	5.35	6.58	3.21	7.21	10.36
5	2.09	2.46	1.91	10.13	2.77	9.32	7.62	7.33	6.31	3.06	6.61	11.49
6	1.89	2.25	1.86	10.45	2.89	9.68	6.91	9.99	5.91	2.97	6.19	12.15
7	1.72	2.13	1.81	10.43	3.25	9.55	6.44	11.53	5.59	2.83	6.13	12.75
8	1.61	2.07	1.73	10.10	3.55	9.58	6.27	12.82	5.21	4.27	6.19	13.42
9	1.55	2.05	1.65	9.39	3.74	9.55	6.68	14.06	4.83	6.81	6.03	14.07
10	1.53	2.39	1.59	8.19	3.81	9.35	7.03	14.89	4.49	8.71	5.79	14.63
11	1.49	2.95	1.60	7.01	3.69	9.43	7.07	15.34	4.69	10.86	5.59	15.04
12	1.47	3.19	1.62	6.29	3.45	10.01	6.82	15.77	7.01	12.10	5.39	15.05
13	1.41	3.87	1.71	5.92	3.25	10.68	6.36	16.18	7.79	12.85	5.17	13.71
14	1.40	4.63	2.08	5.60	3.17	11.07	5.84	16.53	8.04	13.39	4.93	10.20
15	1.36	4.66	2.39	5.45	3.51	11.15	5.33	16.73	8.55	14.23	4.73	7.61
16	1.33	4.47	2.64	5.21	4.33	11.17	4.93	16.81	9.28	15.20	4.57	6.51
17	1.29	4.31	2.98	4.75	4.67	11.13	4.61	16.84	10.04	16.11	4.37	5.91
18	1.27	4.02	3.18	4.35	4.95	11.19	4.43	16.89	10.30	16.81	4.19	5.45
19	1.27	3.61	4.37	4.08	5.04	11.62	4.25	16.88	10.19	17.37	4.00	4.95
20	1.24	3.28	5.79	3.71	5.17	12.09	4.23	16.89	9.83	17.60	3.83	4.47
21	1.23	3.03	6.43	3.44	5.52	11.96	4.68	16.67	9.48	17.62	3.69	4.17

## WABASH RIVER BASIN

91

**03378500 Wabash River at New Harmony, IN--Continued**

<b>22</b>	1.23	2.85	6.57	3.25	8.33	11.27	5.03	16.16	9.03	17.17	3.59	4.01
<b>23</b>	1.30	2.67	6.55	2.77	11.26	10.23	5.05	15.01	8.02	16.31	3.43	3.99
<b>24</b>	1.33	2.55	6.37	2.67	12.14	9.41	4.94	13.47	6.67	15.45	3.23	3.90
<b>25</b>	1.51	2.45	6.49	2.71	---	9.07	5.15	12.09	5.65	14.73	3.05	3.79
<b>26</b>	1.77	2.37	6.63	2.84	---	9.09	6.95	10.63	5.03	14.01	2.91	3.81
<b>27</b>	1.73	2.31	6.27	2.87	---	9.04	7.27	9.38	4.55	13.21	2.85	4.20
<b>28</b>	1.81	2.23	5.67	2.87	---	8.59	7.31	8.49	4.17	12.47	2.73	5.59
<b>29</b>	2.11	2.22	5.16	3.07	---	8.53	7.33	7.79	3.88	11.72	2.63	7.21
<b>30</b>	2.87	2.21	4.81	3.09	---	8.59	7.15	7.22	3.64	11.15	2.63	8.31
<b>31</b>	2.90	---	5.07	2.84	---	8.55	---	6.76	---	10.61	2.64	---
MEAN	1.68	2.94	3.65	5.71	---	---	6.33	12.35	---	11.07	4.86	8.18
MAX	2.90	4.66	6.63	10.45	---	---	8.79	16.89	---	17.62	9.71	15.05
MIN	1.23	2.05	1.59	2.67	---	---	4.23	5.35	---	2.83	2.63	3.79

WABASH RIVER BASIN  
**03378500 Wabash River at New Harmony, IN**

(National Stream–Quality Accounting Network Station)

**LOCATION.**— Lat 38°07'53", long 87°56'32" (NAD of 1927), in SE1/4SE1/4 sec.35, T.4 S., R.14 W., Posey County, Hydrologic Unit 05120113, (NEW HARMONY, IN quadrangle), at bridge on State Highway 66 at New Harmony, at Indiana–Illinois state line, 2.3 mi downstream from Black River, and at mile 53.1.

**DRAINAGE AREA.**— 29,234 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE

DISCHARGE: October 1938 to September 1947.

STAGE: August 1988 to current year.

SURFACE–WATER QUALITY

CHEMICAL: October 1974 to 1986, water year 1998 to current year. Data collected water years 1997 and 1998 were published in the Kentucky Water Resources Data reports, and are stored in the Indiana NWIS/QW data base.

SEDIMENT: Partial record station—October 1974 to 1985.

SPECIFIC CONDUCTANCE: October 1974 to September 1980.

WATER TEMPERATURE: October 1974 to September 1980.

**GAGE.**— Water–stage recorder. Datum of gage is 353.20 ft above NGVD of 1929. (Furnished by National Weather Service). Prior to October 1992, erroneously published as 353.30 ft above NGVD of 1929.

**REMARKS.**— For sediment analysis, water discharge obtained from station Wabash River at Mount Carmel, IL. (03377500).

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Maximum gage height, 23.84 ft. May 26, 1943. Beginning August 1988, minimum gage height, 0.46 ft. Oct. 12, 1988.

SPECIFIC CONDUCTANCE: Maximum daily recorded, 805 microsiemens, Feb. 15, 1977; minimum daily recorded, 200 microsiemens, Mar. 3, 1979.

WATER TEMPERATURES: Maximum daily recorded, 32.0°C, June 28, 1978, July 14–18, 1980; minimum daily recorded, freezing point on many days during the winter period.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Flood of March 1913 reached a stage of 27.7 ft. Flood of Jan. 31, 1937, reached a stage of 24.4 ft.

**EXTREMES FOR CURRENT YEAR.**—Maximum gage height, 19.56 ft, Jan. 14; minimum gage height, 1.45 ft, Sept. 30.

**Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY OBSERVATION AT 2400 HOURS**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.80	3.80	12.46	12.74	8.98	6.72	11.52	4.94	14.82	7.88	3.62	5.18
2	9.19	3.76	11.85	12.86	8.98	6.74	11.92	4.74	15.00	7.00	3.28	5.83
3	9.51	3.63	11.47	13.08	8.98	7.31	12.16	4.90	14.98	6.35	3.02	6.06
4	9.47	3.55	11.39	13.82	8.98	8.66	12.38	5.64	15.02	5.82	2.84	5.73
5	9.01	3.49	11.16	14.89	6.24	10.04	12.42	6.34	14.92	5.90	2.75	5.14
6	8.06	3.43	10.58	15.76	6.73	11.51	11.94	6.67	14.60	5.94	2.75	4.60
7	6.87	3.42	9.46	16.39	7.24	12.44	10.67	6.80	13.90	5.76	2.75	4.28
8	5.93	3.45	8.34	17.08	7.24	12.84	9.00	6.86	12.36	5.71	2.79	4.13
9	5.33	3.40	7.60	17.59	7.24	12.96	7.80	6.77	10.20	5.41	2.84	3.90
10	4.99	3.33	7.22	17.93	7.24	12.88	7.00	6.46	8.36	5.24	2.88	3.54
11	4.73	3.31	7.07	18.58	7.24	12.57	6.42	—	7.12	4.98	2.82	3.16
12	4.54	3.27	7.14	19.29	7.24	11.99	5.92	5.16	6.47	6.08	2.64	2.91
13	4.33	3.37	7.44	19.48	7.24	11.30	5.48	4.59	7.02	8.02	2.49	2.80
14	4.19	3.49	7.99	19.38	7.24	10.12	5.06	4.24	8.82	8.59	2.34	2.66
15	4.03	3.67	8.56	18.83	7.24	8.62	4.75	4.07	9.66	8.43	2.24	2.58
16	4.18	3.93	8.72	18.20	7.24	7.46	4.55	4.16	10.60	7.56	2.17	2.43
17	4.36	4.26	8.38	17.24	7.12	6.68	4.50	4.26	11.56	8.40	2.10	2.26
18	4.67	4.63	7.78	15.66	6.44	6.22	4.58	4.46	12.61	7.10	2.02	2.17
19	4.93	5.13	7.32	15.64	5.92	5.90	4.58	4.62	13.52	5.94	1.94	2.08
20	5.31	7.03	7.04	15.64	5.86	5.84	4.47	4.67	14.26	5.42	1.96	2.02
21	5.45	9.09	6.90	12.18	6.04	5.67	4.24	5.03	14.86	5.08	1.94	1.92



**03378500 Wabash River at New Harmony, IN--Continued**

<b>22</b>	5.11	10.13	6.64	11.05	6.28	5.42	4.04	5.48	15.57	4.84	2.04	1.86
<b>23</b>	4.69	10.54	6.32	11.05	6.91	5.16	3.98	5.78	16.07	4.50	2.46	1.79
<b>24</b>	4.35	11.11	6.91	8.99	7.74	4.99	4.00	5.90	16.26	4.46	2.84	1.74
<b>25</b>	4.11	12.01	9.00	8.98	8.58	4.84	4.10	6.27	16.08	4.36	3.18	1.68
<b>26</b>	3.92	12.49	10.46	8.98	8.86	4.76	4.28	7.26	15.32	4.25	7.36	1.63
<b>27</b>	3.78	12.72	11.30	8.98	8.54	5.28	4.56	9.12	14.21	4.02	6.57	1.56
<b>28</b>	3.63	12.70	11.74	8.98	7.86	7.39	4.70	11.74	12.97	3.91	6.00	1.50
<b>29</b>	3.56	12.83	12.14	8.98	7.24	9.44	4.64	13.50	11.43	3.68	5.34	1.48
<b>30</b>	3.64	12.83	12.66	8.98	---	10.70	4.53	14.23	9.42	3.62	4.92	1.45
<b>31</b>	3.77	---	12.90	8.98	---	11.18	---	14.51	---	3.74	4.79	---
MEAN	5.43	6.46	9.22	14.07	7.40	8.50	6.67	---	12.60	5.74	3.22	3.00
MAX	9.51	12.83	12.90	19.48	8.98	12.96	12.42	---	16.26	8.59	7.36	6.06
MIN	3.56	3.27	6.32	8.98	5.86	4.76	3.98	---	6.47	3.62	1.94	1.45

WABASH RIVER BASIN  
**03378500 Wabash River at New Harmony, IN**

(National Stream–Quality Accounting Network Station)

**LOCATION.**— Lat 38°07'53", long 87°56'32" (NAD of 1927), in SE1/4SE1/4 sec.35, T.4 S., R.14 W., Posey County, Hydrologic Unit 05120113, (NEW HARMONY, IN quadrangle), at bridge on State Highway 66 at New Harmony, at Indiana–Illinois state line, 2.3 mi downstream from Black River, and at mile 53.1.

**DRAINAGE AREA.**— 29,234 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE**

DISCHARGE: October 1938 to September 1947.

STAGE: August 1988 to current year.

**SURFACE–WATER QUALITY**

CHEMICAL: October 1974 to 1986, water year 1998 to current year. Data collected water years 1997 and 1998 were published in the Kentucky Water Resources Data reports, and are stored in the Indiana NWIS/QW data base.

SEDIMENT: Partial record station—October 1974 to 1985.

SPECIFIC CONDUCTANCE: October 1974 to September 1980.

WATER TEMPERATURE: October 1974 to September 1980.

**GAGE.**— Water–stage recorder. Datum of gage is 353.20 ft above NGVD of 1929. (Furnished by National Weather Service). Prior to October 1992, erroneously published as 353.30 ft above NGVD of 1929.

**REMARKS.**— For sediment analysis, water discharge obtained from station Wabash River at Mount Carmel, IL. (03377500).

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum gage height, 23.84 ft. May 26, 1943. Beginning August 1988, minimum gage height, 0.46 ft. Oct. 12, 1988.

**SPECIFIC CONDUCTANCE:** Maximum daily recorded, 805 microsiemens, Feb. 15, 1977; minimum daily recorded, 200 microsiemens, Mar. 3, 1979.

**WATER TEMPERATURES:** Maximum daily recorded, 32.0°C, June 28, 1978, July 14–18, 1980; minimum daily recorded, freezing point on many days during the winter period.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Flood of March 1913 reached a stage of 27.7 ft. Flood of Jan. 31, 1937, reached a stage of 24.4 ft.

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[Records not available at time of publication]

WABASH RIVER BASIN  
**03378635 Little Wabash River near Effingham, IL**

95

**LOCATION.**— Lat 39°06'14", long 88°35'39" (NAD of 1927), in NW1/4NW1/4 sec.36, T.8 N., R.5 E., Effingham County, Hydrologic Unit 05120114, on right bank at downstream side of bridge on U.S. Highway 40, 1,000 ft upstream from railroad bridge, 2.3 mi south west of Effingham, and at mile 202.8.

**DRAINAGE AREA.**— 240 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: October 1966 to current year.

STAGE: Water years 1994 to current year.

SURFACE-WATER QUALITY

CHEMICAL: Water years 1979–91.

**GAGE.**— Water-stage recorder, phone telemeter, and crest-stage gage. Datum of gage is 501.10 ft above NGVD of 1929. Prior to Apr. 21, 1988, at site 0.3 mi downstream at same datum.

**REMARKS.**— Pumpage diverted at station for municipal supply of Effingham not included in surface-water discharge records.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 31,500 ft<sup>3</sup>/s, May 12, 2002, gage height 24.27 ft; no flow for many days in most years.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	e6.0	42	315	e40	294	678	110	977	19	14	21
2	3.7	e5.2	39	281	e39	276	428	140	409	19	11	14
3	3.7	e4.7	34	380	e47	140	284	94	205	24	11	12
4	4.2	e4.4	39	3910	e42	1100	202	67	123	41	11	9.7
5	3.9	e5.4	38	6570	e38	3190	144	55	84	20	11	8.6
6	3.7	e5.6	39	1740	e36	1260	115	52	65	22	11	9.6
7	3.6	e5.4	37	565	e34	612	101	43	50	23	13	8.4
8	3.5	e5.2	32	324	e32	355	109	42	40	28	13	6.1
9	7.2	e5.1	32	218	e31	232	94	40	37	26	e11	6.5
10	16	e5.0	39	151	e42	162	76	38	35	248	e9.8	8.1
11	8.9	e6.8	43	108	123	119	71	35	36	281	e9.0	5.9
12	4.5	e8.0	38	96	330	94	75	36	32	105	e8.3	4.6
13	3.0	e6.9	32	84	122	78	75	42	29	48	e7.5	3.9
14	90	e6.0	36	74	108	77	62	57	27	31	e7.0	3.6
15	86	e5.4	34	71	149	72	46	60	26	40	e6.6	3.4
16	27	e5.2	33	58	92	76	42	59	55	28	e6.2	8.7
17	21	e4.9	31	233	72	74	41	46	75	20	e6.0	5.1
18	14	869	31	1150	85	63	39	46	87	16	5.8	3.2
19	12	574	31	499	184	57	37	43	64	14	6.0	2.5
20	11	116	29	248	320	62	43	44	36	12	20	2.1
21	e10	71	29	171	299	68	47	40	31	9.6	7.3	1.9
22	e9.0	50	28	121	160	55	44	37	39	12	6.2	1.8
23	e8.0	148	1370	81	125	46	51	36	36	428	6.1	1.5
24	e6.8	897	966	94	229	45	51	34	25	45	6.9	1.4
25	e6.0	427	466	51	179	47	58	42	21	24	14	1.1
26	e5.4	213	253	80	124	987	48	139	21	15	821	0.79
27	e4.8	136	164	84	94	1890	40	1440	20	13	299	0.82
28	e4.4	97	130	58	78	789	38	2370	19	11	48	0.82
29	e4.2	70	1540	e50	71	819	35	788	18	10	440	0.58
30	e4.0	52	1090	e45	---	1880	45	1410	18	37	132	0.74
31	e4.5	---	532	e42	---	1320	---	5870	---	15	38	---

## WABASH RIVER BASIN

**03378635 Little Wabash River near Effingham, IL--Continued**

TOTAL	398.0	3815.2	7277	17952	3325	16339	3219	13355	2740	1684.6	2016.7	158.45
MEAN	12.8	127	235	579	115	527	107	431	91.3	54.3	65.1	5.28
MAX	90	897	1540	6570	330	3190	678	5870	977	428	821	21
MIN	3.0	4.4	28	42	31	45	35	34	18	9.6	5.8	0.58
CFSM	0.05	0.53	0.98	2.41	0.48	2.20	0.45	1.80	0.38	0.23	0.27	0.02
IN.	0.06	0.59	1.13	2.78	0.52	2.53	0.50	2.07	0.42	0.26	0.31	0.02

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 – 2004, BY WATER YEAR (WY)**

MEAN	66.0	151	238	251	326	379	364	316	195	94.9	51.9	72.9
MAX	672	1141	1055	964	1080	1200	1225	1969	756	794	252	1001
(WY)	2001	1994	1968	1993	1982	1978	1996	2002	2000	2000	1974	1993
MIN	0.10	0.65	0.00	0.03	14.5	19.1	15.8	14.4	1.77	1.34	0.25	0.24
(WY)	1995	1977	1977	1981	1978	1972	2003	1988	1987	1972	1989	1988

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1967 – 2004**

ANNUAL TOTAL	26319.36		72279.95			
ANNUAL MEAN	72.1		197		208	
HIGHEST ANNUAL MEAN					450	
LOWEST ANNUAL MEAN					41.5	
HIGHEST DAILY MEAN	1860	May 11	6570	Jan 5	15600	May 13 2002
LOWEST DAILY MEAN	0.00	A	0.58	Sep 29	0.00	B
ANNUAL SEVEN-DAY MINIMUM	1.6	Jul 3	0.89	Sep 24	0.00	Oct 8 1966
MAXIMUM PEAK FLOW			8840	May 31	31500	May 12 2002
MAXIMUM PEAK STAGE			18.87	May 31	24.27	May 12 2002
INSTANTANEOUS LOW FLOW			0.20	Sep 30		
ANNUAL RUNOFF (CFSM)	0.300		0.823		0.867	
ANNUAL RUNOFF (INCHES)	4.08		11.20		11.78	
10 PERCENT EXCEEDS	114		427		444	
50 PERCENT EXCEEDS	13		40		37	
90 PERCENT EXCEEDS	3.9		5.1		0.20	

A – Jan. 13–15, July 6–8.

B – Many days in most years.

WABASH RIVER BASIN  
**03379500 Little Wabash River below Clay City, IL**

97

**LOCATION.**— Lat 38°38'05", long 88°17'50" (NAD of 1927), in SE1/4 sec.3, T.2 N., R.8 E., Clay County, Hydrologic Unit 05120114, on right bank 300 ft downstream from bridge on County Highway 23, 0.3 mi downstream from Big Muddy Creek, 5 mi southeast of Clay City, and at mile 128.5.

**DRAINAGE AREA.**— 1,131 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: August 1914 to current year. Prior to October 1958, published as "at Wilcox." Monthly discharge only for some periods, published in WSP 1305.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1979–91.

**REVISED RECORDS.**— WSP 973: 1937–40. WSP 1335: 1915–33, 1934(M), 1935, 1940, 1941(M), 1946(M). WSP 1625: 1958. WDR IL–75–1: Drainage area.

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 392.29 ft above NGVD of 1929. Prior to Jan. 2, 1947, nonrecording gage at highway bridge 300 ft upstream at same datum.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 47,000 ft<sup>3</sup>/s, Jan. 5, 1950, gage height, 26.67 ft; no flow Sept. 3–19, 1954.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	155	20	311	3980	e180	388	6930	136	11500	47	81	433
2	88	18	253	2690	e185	814	5260	286	9170	43	196	261
3	59	19	208	1630	e205	1080	3230	640	7230	44	182	172
4	45	18	181	3790	e240	1950	1420	521	6020	103	113	150
5	35	18	171	8550	e280	4020	670	379	5300	802	71	113
6	31	29	169	12200	e330	5090	476	273	3190	1890	52	78
7	33	32	166	15000	e310	4860	393	204	1190	1770	41	60
8	34	28	158	13200	e275	4660	340	163	409	994	34	50
9	35	24	148	9470	e250	4670	308	137	294	407	28	42
10	35	24	153	6890	e265	3030	282	115	244	209	26	39
11	39	28	185	3430	e650	1110	260	99	209	138	24	38
12	99	58	173	1470	1430	522	238	87	223	374	22	32
13	152	49	171	656	1760	408	222	80	190	437	21	27
14	103	30	163	484	1460	348	207	85	157	294	21	25
15	137	27	146	407	1050	311	194	501	139	e200	20	23
16	404	24	133	354	e780	294	183	432	121	e140	20	22
17	454	24	127	496	e660	282	169	283	330	101	19	21
18	258	113	127	3370	538	262	154	197	930	82	18	19
19	166	2990	126	4590	576	250	141	149	520	82	18	17
20	145	4650	114	3990	898	243	129	163	474	69	20	16
21	112	4600	106	2400	1270	278	120	177	496	57	43	15
22	72	4410	99	915	1240	270	114	161	273	51	46	15
23	49	2700	352	506	865	258	125	117	164	77	42	15
24	37	3150	2610	425	628	224	139	120	115	87	59	14
25	31	4690	3500	341	547	201	166	138	97	70	61	13
26	26	4280	3300	e300	522	356	283	1590	87	179	1160	12
27	23	2700	1700	e280	479	3670	320	4700	76	148	3180	10
28	21	1100	627	e255	384	5940	240	8700	66	99	3530	10
29	20	556	1310	e230	316	6750	171	12500	57	76	3460	9.7
30	19	397	3990	e210	---	8780	133	11000	51	64	1750	8.9

## WABASH RIVER BASIN

**03379500 Little Wabash River below Clay City, IL--Continued**

<b>31</b>	<b>20</b>	<b>---</b>	<b>4380</b>	<b>e190</b>	<b>---</b>	<b>8750</b>	<b>---</b>	<b>11400</b>	<b>---</b>	<b>109</b>	<b>666</b>	<b>---</b>
TOTAL	2937	36806	25357	102699	18573	70069	23017	55533	49322	9243	15024	1760.6
MEAN	94.7	1227	818	3313	640	2260	767	1791	1644	298	485	58.7
MAX	454	4690	4380	15000	1760	8780	6930	12500	11500	1890	3530	433
MIN	19	18	99	190	180	201	114	80	51	43	18	8.9
CFSM	0.08	1.08	0.72	2.93	0.57	2.00	0.68	1.58	1.45	0.26	0.43	0.05
IN.	0.10	1.21	0.83	3.38	0.61	2.30	0.76	1.83	1.62	0.30	0.49	0.06

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 – 2004, BY WATER YEAR (WY)**

MEAN	218	578	1013	1370	1519	1731	1624	1469	825	474	317	213
MAX	2146	5462	7882	9030	6833	5425	6267	10150	4271	4567	5794	2569
(WY)	1950	1986	1968	1950	1982	1978	1922	1943	1945	2000	1915	1993
MIN	0.30	1.07	1.73	6.90	12.6	4.92	56.9	45.1	14.4	9.75	4.17	0.79
(WY)	1954	1954	1954	1977	1963	1954	1954	1925	1988	1930	1964	1953

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1914 – 2004**

ANNUAL TOTAL	278633.7		410340.6			
ANNUAL MEAN	763		1121		943	
HIGHEST ANNUAL MEAN					2040	
LOWEST ANNUAL MEAN					29.3	
HIGHEST DAILY MEAN	8440	May 11	15000	Jan 7	43200	May 10 1961
LOWEST DAILY MEAN	9.5	A Jan 27,28	8.9	Sep 30	0.00	B
ANNUAL SEVEN-DAY MINIMUM	10	Jan 24	11	Sep 24	0.00	Sep 3 1954
MAXIMUM PEAK FLOW			16300	Jan 7	47000	Jan 5 1950
MAXIMUM PEAK STAGE			21.94	Jan 7	26.67	Jan 5 1950
INSTANTANEOUS LOW FLOW			8.5	Sep 30		
ANNUAL RUNOFF (CFSM)	0.675		0.991		0.834	
ANNUAL RUNOFF (INCHES)	9.16		13.50		11.33	
10 PERCENT EXCEEDS	2920		3980		3000	
50 PERCENT EXCEEDS	152		198		149	
90 PERCENT EXCEEDS	20		24		10	

A – Estimated, but may have been less during period of estimated discharges in January.

B – Sept. 3–19, 1954.

**LOCATION.**— Lat 38°21'25", long 88°35'00" (NAD of 1927), in SW1/4 sec.7, T.2 S., R.6 E., Wayne County, Hydrologic Unit 05120115, on right bank 0.1 mi downstream from Shoe Creek, 0.5 mi downstream from bridge on State Highway 15, 0.9 mi upstream from railroad bridge, 1 mi north of Wayne City, and at mile 42.4.

**DRAINAGE AREA.**— 464 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE**

DISCHARGE: August 1908 to December 1912, June 1914 to September 1921, June 1928 to current year.

STAGE: Water years 1994 to current year.

**SURFACE–WATER QUALITY**

CHEMICAL: Water years 1978–91.

SPECIFIC CONDUCTANCE: Water year 1979.

WATER TEMPERATURE: Water year 1979.

**REVISED RECORDS.**— WSP 1143: 1947–48. WSP 1205: 1918–21, 1929–31, 1937–39. WSP 1335: 1908–13, 1916(M), 1930–34, 1935(M). WSP 1725: Drainage area.

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter, and concrete dam since Nov. 17, 1954. Datum of gage is 383.15 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Sept. 30, 1921, nonrecording gage at site 0.9 mi downstream at datum about 3.0 ft lower. June 11, 1928, to Oct. 4, 1939, nonrecording gage at site 0.5 mi upstream at datum 2.8 ft lower.

**REMARKS.**— Wayne City municipal water plant diverts about 0.46 ft<sup>3</sup>/s at gage since November 1954; diversion not included in records.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum discharge, 59,400 ft<sup>3</sup>/s, May 17, 1990, gage height, 25.75 ft; maximum gage height, 26.68 ft, May 8, 1961; no flow at times in several years.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, those for discharges less than 5.0 ft<sup>3</sup>/s, and those for period of June 7–18, June 23 to July 26, July 9–11, and July 17–22, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	3.3	37	393	e52	159	1170	183	3340	e10	32	168
2	12	3.0	28	174	e50	332	479	588	2400	12	17	92
3	8.5	2.7	21	143	e100	227	254	527	792	39	13	59
4	7.1	1.5	17	735	219	2980	177	245	156	36	13	96
5	5.4	0.71	17	2610	210	3080	129	141	83	37	46	218
6	3.8	e0.40	17	2290	203	2310	102	96	53	231	21	66
7	2.8	e0.35	15	2460	197	1850	87	67	40	146	12	39
8	2.1	e0.32	15	2020	158	597	79	50	36	60	9.1	28
9	1.6	e0.30	14	324	128	211	72	37	32	40	7.8	24
10	1.9	e0.30	15	163	155	134	60	28	28	40	6.7	20
11	2.0	e0.40	16	126	302	97	53	19	23	44	5.6	16
12	1.9	2.5	19	133	455	75	48	14	25	208	5.5	15
13	1.9	3.1	21	109	538	59	45	25	39	266	4.7	15
14	2.4	3.5	20	90	390	60	43	379	37	233	3.9	17
15	1.8	4.5	20	83	265	63	41	461	35	111	3.6	13
16	1.4	4.5	20	76	197	60	37	209	33	57	3.2	12
17	2.2	4.7	19	97	194	62	35	125	30	37	3.2	12
18	2.0	11	19	1710	151	61	31	74	168	30	5.2	12
19	1.2	702	19	e1600	148	59	22	58	286	24	6.2	13
20	0.78	1180	17	e850	248	55	20	70	186	18	7.9	13
21	1.6	841	17	e380	374	56	18	48	144	e12	7.5	14
22	2.9	211	16	187	364	54	19	44	93	e20	7.0	14
23	3.0	86	17	e100	257	50	16	70	47	343	6.4	12
24	2.3	514	174	e90	190	53	18	185	37	32	12	11
25	2.0	1110	606	e83	164	51	144	197	33	14	153	9.0

WABASH RIVER BASIN  
**03380500 Skillet Fork at Wayne City, IL---Continued**

<b>26</b>	1.8	668	240	e76	149	60	290	1900	29	11	4100	7.7
<b>27</b>	1.4	188	109	e72	130	1940	164	3640	24	12	5590	7.3
<b>28</b>	2.0	95	69	e66	109	2100	94	3880	19	9.6	4300	6.8
<b>29</b>	2.1	63	198	e62	94	2410	61	3150	13	9.6	3620	6.3
<b>30</b>	2.4	46	1060	e58	---	1780	45	3200	e10	35	2110	6.0
<b>31</b>	2.9	---	1110	e55	---	1410	---	4170	---	130	498	---
TOTAL	109.18	5751.08	4002	17415	6191	22495	3853	23880	8271	2307.2	20630.5	1042.1
MEAN	3.52	192	129	562	213	726	128	770	276	74.4	666	34.7
MAX	22	1180	1110	2610	538	3080	1170	4170	3340	343	5590	218
MIN	0.78	0.30	14	55	50	50	16	14	10	9.6	3.2	6.0
CFSM	0.01	0.41	0.28	1.21	0.46	1.56	0.28	1.66	0.59	0.16	1.43	0.07
IN.	0.01	0.46	0.32	1.40	0.50	1.80	0.31	1.91	0.66	0.18	1.65	0.08

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 – 2004, BY WATER YEAR (WY)**

MEAN	96.5	257	416	639	648	787	774	649	306	157	119	73.7
MAX	1462	2969	3314	4052	2408	2361	2495	4113	1554	1162	2257	1227
(WY)	1920	1986	1983	1949	1982	1945	1957	1961	2000	1993	1915	1993
MIN	0.02	0.13	0.29	0.69	2.51	1.96	11.6	8.96	1.48	1.05	0.06	0.05
(WY)	1909	1954	1954	1981	1934	1954	1954	1936	1988	1930	1991	1940

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1909 – 2004**

ANNUAL TOTAL	133040.48	115947.06	
ANNUAL MEAN	364	317	410
HIGHEST ANNUAL MEAN			928
LOWEST ANNUAL MEAN			32.1
HIGHEST DAILY MEAN	5430 May 9,10	5590 Aug 27	45000 May 9 1961
LOWEST DAILY MEAN	0.00 A	0.30 B Nov 9,10	0.00 C
ANNUAL SEVEN-DAY MINIMUM	0.00 Aug 25	0.40 Nov 5	0.00 Oct 24 1908
MAXIMUM PEAK FLOW		5660 Aug 27	59400 D May 17 1990
MAXIMUM PEAK STAGE		14.02 Aug 27	26.68 May 8 1961
ANNUAL RUNOFF (CFSM)	0.786	0.683	0.883
ANNUAL RUNOFF (INCHES)	10.67	9.30	12.00
10 PERCENT EXCEEDS	1020	752	1110
50 PERCENT EXCEEDS	19	50	36
90 PERCENT EXCEEDS	1.7	3.1	1.4

A – Several days.

B – Estimated, but may have been less during period of estimated discharge, Nov. 6–11.

C – At times in several years.

D – Gage height, 25.75 ft.



**LOCATION.**— Lat 38°03'40", long 88°09'35" (NAD of 1927), in NW1/4SE1/4 sec.25, T.5 S., R.9 E., White County, Hydrologic Unit 05120114, on right bank at downstream side of Possum Bridge, 2.3 mi south of Main Street Bridge in Carmi, 7.8 mi downstream from Skillet Fork, and at mile 30.5.

**DRAINAGE AREA.**— 3,102 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE**

DISCHARGE: October 1939 to current year.

STAGE: October 1908 to December 1912. Water years 1994 to current year.

**SURFACE—WATER QUALITY**

CHEMICAL: Water years 1978–79.

SPECIFIC CONDUCTANCE: Water years 1978–79.

WATER TEMPERATURE: Water years 1978–79.

BIOLOGICAL: Algae, water years 1978–79.

**REVISED RECORDS.**— WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter. Datum of gage is 339.91 ft above NGVD of 1929. Prior to December 1912, nonrecording gage at site 3.1 mi upstream at datum 0.4 ft higher. Oct. 1 to Nov. 9, 1939, nonrecording gage at present site and datum. Since Nov. 14, 1939, auxiliary water–stage recorder 3.1 mi upstream.

**REMARKS.**— At extremely high stages, there is diversion 6 mi above the gage through McHenry Slough to the Wabash River.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Maximum discharge, 46,900 ft<sup>3</sup>/s, May 12, 1961, gage height 36.66 ft; maximum gage height, 36.70 ft, May 13, 1961, discharge unknown; no flow, Sept. 15–17, 1952, result of temporary dam upstream; minimum unregulated discharge, 0.6 ft<sup>3</sup>/s, Sept. 9, 1953, July 31, 1954.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	849	58	4200	4010	e500	1080	6360	2170	10600	219	4600	11700
2	731	53	3890	4170	e550	1360	6170	3360	11200	192	2120	11200
3	483	50	2890	4160	e750	1820	5960	2790	11700	172	866	10500
4	304	48	1520	4370	e930	5530	5980	2320	11900	201	530	9550
5	210	48	774	6070	e1100	7350	e6100	1760	11900	503	609	8270
6	154	48	490	e6700	1540	7880	6280	1470	11600	1640	478	6420
7	116	47	441	6890	1890	7980	6240	1180	11300	3870	336	4100
8	92	46	417	7100	1750	7840	6040	895	10900	3350	233	1830
9	83	45	357	7300	1580	7310	5540	663	10500	2620	175	677
10	81	44	347	7040	1570	6490	4660	504	10000	2120	140	320
11	62	51	324	7040	2130	5870	3140	402	9460	1730	109	233
12	59	86	300	7500	2610	5560	1600	334	8590	1410	93	196
13	55	97	307	7960	2950	5370	868	300	7700	1480	82	172
14	70	92	352	8370	3190	5200	589	340	6590	1740	73	156
15	65	99	359	8550	3270	4840	e460	1620	5360	1740	67	148
16	95	127	368	8430	3170	4040	e360	1340	4030	1270	62	138
17	160	175	358	8180	2780	2560	e315	1070	2420	845	60	124
18	197	190	339	8470	2280	1410	e270	1180	1440	779	58	111
19	403	300	313	8560	1950	913	e240	938	1030	828	56	101
20	472	1100	293	8250	1960	756	e210	762	1320	521	57	94
21	359	2990	289	7580	2380	895	e195	583	1320	308	60	89
22	254	3490	284	6640	2690	858	e210	432	1130	539	57	80
23	199	3260	294	5860	2780	798	e280	373	973	1970	58	e71
24	166	3500	267	5410	2620	736	e355	396	748	1160	417	e68
25	147	3960	586	5110	2250	672	454	1280	474	1100	2270	e66

## WABASH RIVER BASIN

**03381500 Little Wabash River at Carmi, IL--Continued**

<b>26</b>	133	4410	2240	4330	1840	616	590	5400	303	1070	7850	e62
<b>27</b>	115	4360	2760	3310	1520	1100	761	8200	289	614	11200	e60
<b>28</b>	101	4220	2930	1870	1300	4140	635	8890	270	350	11400	e57
<b>29</b>	87	4210	3120	1050	1140	5770	619	9190	251	279	12200	e57
<b>30</b>	72	4230	3400	e700	---	6530	580	9270	242	1240	12300	55
<b>31</b>	65	---	3840	e600	---	6570	---	9990	---	5630	12100	---
TOTAL	6439	41434	38649	181580	56970	119844	72061	79402	165540	41490	80716	66705
MEAN	208	1381	1247	5857	1964	3866	2402	2561	5518	1338	2604	2224
MAX	849	4410	4200	8560	3270	7980	6360	9990	11900	5630	12300	11700
MIN	55	44	267	600	500	616	195	300	242	172	56	55
CFSM	0.07	0.45	0.40	1.89	0.63	1.25	0.77	0.83	1.78	0.43	0.84	0.72
IN.	0.08	0.50	0.46	2.18	0.68	1.44	0.86	0.95	1.99	0.50	0.97	0.80

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 – 2004, BY WATER YEAR (WY)**

MEAN	583	1470	2699	3707	4538	5419	5260	4470	2506	1405	802	437
MAX	5429	12840	12960	23300	17270	17680	15400	19330	10120	8237	6024	2766
(WY)	1950	1994	1983	1950	1999	1979	1945	1961	1957	2000	1979	1993
MIN	5.25	8.23	16.4	30.6	62.7	25.3	176	167	44.5	40.8	22.7	3.07
(WY)	1965	1954	1954	1977	1963	1954	1954	1988	1988	1940	1953	1953

<b>SUMMARY STATISTICS</b>	<b>FOR 2003 CALENDAR YEAR</b>		<b>FOR 2004 WATER YEAR</b>		<b>WATER YEARS 1940 – 2004</b>	
ANNUAL TOTAL	900901		950830			
ANNUAL MEAN	2468		2598		2765	
HIGHEST ANNUAL MEAN					6094	1950
LOWEST ANNUAL MEAN					151	1954
HIGHEST DAILY MEAN	14200	May 15	12300	Aug 30	46000	May 13 1961
LOWEST DAILY MEAN	29	Aug 28	44	Nov 10	0.00	A
ANNUAL SEVEN-DAY MINIMUM	37	Aug 23	47	Nov 4	1.5	Sep 18 1953
MAXIMUM PEAK FLOW			12500	B Aug 29	46900	C May 12 1961
MAXIMUM PEAK STAGE			27.98	D Aug 28	36.70	E May 13 1961
ANNUAL RUNOFF (CFSM)	0.796		0.837		0.891	
ANNUAL RUNOFF (INCHES)	10.80		11.40		12.11	
10 PERCENT EXCEEDS	8570		7900		8790	
50 PERCENT EXCEEDS	516		1040		584	
90 PERCENT EXCEEDS	65		78		39	

A – Sept. 15–17, 1952, result of temporary dam upstream, minimum unregulated discharge, 0.6 ft<sup>3</sup>/s, Sept. 9, 1953, July 31, 1954.

B – Gage height, 26.68 ft.

C – Gage height, 36.66 ft.

D – Discharge, 11,900 ft<sup>3</sup>/s.

E – Discharge unknown.

**LOCATION.**—Lat 37°41'31", long 88°08'00" (NAD of 1983), in SE1/4NW1/4 sec.32, T.9 S., R. 10 E., Union County, Kentucky, Hydrologic Unit 05140203, on main bridge pier on downstream side of State Highway 13, 9.5 miles upstream from Saline River, and at mile 858.2.

**DRAINAGE AREA.**—141,000 mi<sup>2</sup>, approximately.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: January 2002 to current year.

STAGE: January 2002 to current year.

SURFACE-WATER QUALITY

TEMPERATURE: October 1975 to October 3, 1977.

**GAGE.**—Water-stage recorder, phone telemeter, and acoustic-velocity meter. Datum of gage is 309.10 ft above NAVD of 1988.

**REMARKS.**—Some regulation by locks and dams upstream from station at Uniontown, KY and downstream at Smithland, KY.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 640,000 ft<sup>3</sup>/s, based on stage-area and velocity ratings, May 22, 2002, gage height, 43.87 ft; maximum gage height, 44.01 ft, discharge, 621,000 ft<sup>3</sup>/s, May 23, 2002; minimum daily discharge, 10,800 ft<sup>3</sup>/s, Aug. 17, 2002 and Sept. 10, 2002.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Flood of Jan. 30, 1937, reached a stage of 65.64 ft, from information by National Weather Service.

**REMARKS FOR CURRENT YEAR.**—Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	181000	149000	411000	331000	146000	160000	235000	264000	481000	145000	162000	122000
2	192000	145000	402000	325000	128000	143000	262000	281000	497000	105000	179000	103000
3	191000	138000	396000	330000	138000	143000	275000	298000	512000	103000	159000	102000
4	177000	125000	386000	354000	184000	175000	289000	307000	526000	93600	142000	88600
5	156000	107000	371000	391000	218000	227000	313000	299000	537000	78000	145000	79500
6	145000	97300	340000	e440000	261000	261000	337000	266000	537000	91900	143000	61000
7	129000	98100	305000	e480000	304000	297000	356000	240000	503000	98100	142000	65800
8	120000	138000	267000	510000	362000	334000	354000	225000	458000	89600	132000	67200
9	117000	160000	245000	528000	387000	376000	333000	203000	407000	99400	108000	70700
10	112000	170000	233000	559000	412000	409000	293000	174000	358000	87100	93700	113000
11	85600	171000	228000	585000	434000	430000	241000	157000	286000	87900	62300	173000
12	82900	149000	226000	606000	456000	445000	202000	143000	211000	86900	50500	233000
13	80700	160000	228000	614000	468000	448000	185000	128000	192000	107000	66900	282000
14	68300	202000	245000	607000	473000	440000	198000	122000	211000	101000	69700	311000
15	73200	248000	274000	571000	459000	408000	242000	140000	241000	104000	54500	321000
16	80600	297000	298000	515000	418000	364000	292000	158000	264000	123000	44300	303000
17	123000	336000	311000	461000	366000	302000	339000	158000	281000	125000	46500	232000
18	142000	352000	312000	423000	293000	233000	375000	155000	289000	115000	47300	157000
19	137000	331000	315000	e370000	213000	195000	402000	146000	296000	130000	43500	165000
20	138000	297000	319000	333000	174000	182000	422000	155000	302000	106000	39000	228000
21	139000	280000	321000	308000	154000	190000	429000	182000	300000	87700	45300	300000
22	131000	299000	314000	297000	153000	200000	414000	208000	294000	88700	78200	347000
23	120000	344000	294000	285000	156000	202000	378000	230000	288000	97300	105000	e390000
24	103000	389000	263000	258000	171000	217000	338000	243000	272000	101000	135000	e410000
25	97100	422000	251000	226000	187000	233000	316000	254000	242000	103000	150000	e420000
26	104000	445000	260000	197000	195000	241000	309000	287000	215000	85100	154000	411000
27	97800	457000	279000	182000	197000	243000	302000	337000	205000	79500	135000	378000
28	92100	450000	299000	167000	192000	231000	289000	382000	199000	73300	100000	304000
29	107000	434000	314000	161000	179000	216000	265000	413000	186000	104000	102000	194000

## OHIO RIVER BASIN

**03381700 Ohio River at Old Shawneetown, IL-KY--Continued**

<b>30</b>	113000	422000	324000	164000	----	209000	250000	441000	171000	138000	99100	132000
<b>31</b>	133000	----	331000	161000	----	216000	----	464000	----	151000	101000	----
TOTAL	3768300	7812400	9362000	11739000	7878000	8370000	9235000	7460000	9761000	3185100	3134800	6563800
MEAN	121600	260400	302000	378700	271700	270000	307800	240600	325400	102700	101100	218800
MAX	192000	457000	411000	614000	473000	448000	429000	464000	537000	151000	179000	420000
MIN	68300	97300	226000	161000	128000	143000	185000	122000	171000	73300	39000	61000
CFSM	0.86	1.85	2.14	2.69	1.93	1.91	2.18	1.71	2.31	0.73	0.72	1.55
IN.	0.99	2.06	2.47	3.10	2.08	2.21	2.44	1.97	2.58	0.84	0.83	1.73

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 – 2004, BY WATER YEAR (WY)**

MEAN	98220	211800	251300	281300	246800	305000	313400	359100	252800	115000	90220	152000
MAX	121600	260400	302000	378700	271700	353700	383300	500500	325400	184800	139300	218800
(WY)	2004	2004	2004	2004	2004	2003	2002	2002	2004	2003	2003	2004
MIN	74880	163300	200600	183900	204800	270000	249100	240600	157000	57300	30240	38160
(WY)	2003	2003	2003	2003	2002	2004	2003	2004	2002	2002	2002	2002

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 2002 – 2004**

ANNUAL TOTAL	87168800		88269400			
ANNUAL MEAN	238800		241200			
HIGHEST ANNUAL MEAN						
LOWEST ANNUAL MEAN						
HIGHEST DAILY MEAN	550000	Mar 2	614000	Jan 13	615000	May 22 2002
LOWEST DAILY MEAN	49900	Jan 29	39000	Aug 20	10800	A
ANNUAL SEVEN-DAY MINIMUM	58800	Jan 25	45800	Aug 15	14400	Sep 9 2002
MAXIMUM PEAK FLOW			636000 B	Jan 13	640000 C	May 22 2002
MAXIMUM PEAK STAGE			42.97 D	Jan 13	44.01 E	May 23 2002
INSTANTANEOUS LOW FLOW			32200	Aug 20, 21	1640	Aug 17 2002
ANNUAL RUNOFF (CFSM)	1.69		1.71			
ANNUAL RUNOFF (INCHES)	23.00		23.29			
10 PERCENT EXCEEDS	401000		425000			
50 PERCENT EXCEEDS	213000		226000			
90 PERCENT EXCEEDS	93100		93200			

A – Aug. 17, 2002 and Sept. 10, 2002.

B – Gage height, 42.89 ft.

C – Gage height, 43.87 ft.

D – Discharge, 624,000 ft<sup>3</sup>/s.E – Discharge, 621,000 ft<sup>3</sup>/s.

**LOCATION.**— Lat 37°38'16", long 88°40'40" (NAD of 1927), in SW1/4NE1/4 sec.20, T.10 S., R.5 E., Saline County, Hydrologic Unit 05140204, on right bank at downstream side of bridge on U.S. Highway 45, 150 ft downstream from railroad bridge, 4.5 mi southwest of Carrier Mills, and at mile 42.4.

**DRAINAGE AREA.**— 147 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE**

DISCHARGE: October 1965 to current year.

STAGE: Water years 1994 to current year.

**SURFACE—WATER QUALITY**

CHEMICAL: Water years 1977–91. Additional chemical data for water years 1963–77 are published in Water–Resources Investigations 78–24 and 79–25 as site ATH 05.

SEDIMENT: Water years 1977 to 1981.

SPECIFIC CONDUCTANCE: Water years 1980–81.

WATER TEMPERATURE: Water years 1980–81.

**REVISED RECORDS.**— WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder and phone telemeter. Datum of gage is 375.63 ft above NGVD of 1929. Prior to Oct. 31, 1967, nonrecording gage at same site and datum.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Maximum discharge, 5,160 ft<sup>3</sup>/s, Jan. 31, 1982, gage height, 16.32 ft; minimum daily discharge, 0.60 ft<sup>3</sup>/s, July 29, 30, Sept. 3, 1966.

**SUSPENDED—SEDIMENT CONCENTRATION:** Maximum daily mean, 1,570 mg/L May 28, 1981; minimum daily mean, 0 mg/L Aug. 20–22, 1980.

**SUSPENDED—SEDIMENT LOADS:** Maximum daily, 8,010 tons May 28, 1981; minimum daily, 0 ton Aug. 20–22, Sept. 20, Oct. 10, 1980, May 3, 4, 1981.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	14	58	102	e50	128	162	37	153	4.2	8.6	4.3
2	12	12	44	302	e56	252	130	49	84	4.8	7.5	4.0
3	11	9.2	38	296	406	132	103	75	55	4.5	6.0	3.8
4	9.2	8.3	42	311	205	1340	85	102	39	4.6	5.1	4.0
5	8.1	9.2	39	848	158	1200	67	73	29	7.0	26	3.7
6	7.7	11	37	303	444	867	59	49	22	8.8	17	3.8
7	7.5	8.7	34	173	354	372	56	40	17	351	8.0	3.9
8	7.3	11	29	137	207	213	52	31	16	88	5.4	3.9
9	7.4	18	26	117	172	158	44	23	16	32	4.6	4.0
10	7.5	16	28	94	176	118	36	23	15	22	4.3	4.0
11	11	14	39	80	177	103	33	21	14	16	4.2	4.0
12	12	17	32	86	154	78	32	20	15	9.5	4.7	4.0
13	10	18	25	66	126	65	28	25	246	7.6	4.3	4.0
14	9.3	21	24	55	110	60	24	381	90	6.6	3.7	4.2
15	7.2	23	24	54	100	63	22	818	42	5.4	3.4	4.1
16	5.3	32	24	47	81	59	21	415	29	4.7	3.1	4.2
17	6.1	31	24	49	70	63	20	201	27	5.0	3.4	3.9
18	6.2	55	26	384	62	66	19	141	27	9.5	3.6	3.9
19	5.7	434	25	254	64	70	17	103	22	5.9	3.5	3.6
20	5.1	137	24	128	80	65	22	80	13	4.5	3.6	3.4
21	5.1	56	22	100	79	114	18	63	9.8	4.1	3.5	3.4
22	5.0	37	20	91	49	73	18	48	8.0	4.4	3.6	3.2
23	4.8	32	83	71	40	56	61	38	7.3	24	4.4	3.0
24	4.5	534	132	73	38	54	109	32	7.5	14	5.0	3.2
25	5.7	154	67	72	37	59	199	29	6.3	9.9	86	3.0

## SALINE RIVER BASIN

## 03382100 South Fork Saline River near Carrier Mills, IL---Continued

26	7.3	73	44	147	34	51	146	196	5.5	7.5	25	2.9
27	5.9	56	36	174	32	102	77	260	5.1	6.7	12	2.5
28	5.7	347	32	125	30	112	53	116	4.6	5.3	7.2	2.0
29	6.5	184	504	e92	30	742	50	78	4.6	5.8	5.8	1.8
30	9.9	81	577	e74	---	454	39	59	4.6	8.1	5.2	2.6
31	13	---	147	e62	---	224	---	369	---	9.6	4.6	---
TOTAL	238.1	2453.4	2306	4967	3621	7513	1802	3995	1034.3	701.0	292.3	106.3
MEAN	7.68	81.8	74.4	160	125	242	60.1	129	34.5	22.6	9.43	3.54
MAX	13	534	577	848	444	1340	199	818	246	351	86	4.3
MIN	4.5	8.3	20	47	30	51	17	20	4.6	4.1	3.1	1.8
CFSM	0.05	0.56	0.51	1.09	0.85	1.65	0.41	0.88	0.23	0.15	0.06	0.02
IN.	0.06	0.62	0.58	1.26	0.92	1.90	0.46	1.01	0.26	0.18	0.07	0.03

e Estimated

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 – 2004, BY WATER YEAR (WY)

MEAN	28.2	114	212	214	279	319	318	268	119	36.6	35.8	20.8
MAX	354	643	1193	608	864	837	922	1115	633	163	485	110
(WY)	2002	1986	1983	1999	1989	1979	1983	1983	1997	1976	1985	1992
MIN	2.57	4.05	8.22	10.7	42.3	28.6	22.3	15.4	6.10	1.88	5.34	1.67
(WY)	1967	1972	1977	1981	1996	1981	1981	1988	1972	1966	1994	1966

## SUMMARY STATISTICS

## FOR 2003 CALENDAR YEAR

## FOR 2004 WATER YEAR

## WATER YEARS 1966 – 2004

ANNUAL TOTAL	55880.3		29029.4			
ANNUAL MEAN	153		79.3		163	
HIGHEST ANNUAL MEAN					336	
LOWEST ANNUAL MEAN					51.0	
HIGHEST DAILY MEAN	2370	Jan 1	1340	Mar 4	4880	Dec 26 1982
LOWEST DAILY MEAN	4.5	Oct 24	1.8	Sep 29	0.60	A
ANNUAL SEVEN-DAY MINIMUM	5.1	Oct 19	2.6	Sep 24	0.77	Sep 1 1966
MAXIMUM PEAK FLOW			1730	Mar 4	5160	Jan 31 1982
MAXIMUM PEAK STAGE			11.23	Mar 4	16.32	Jan 31 1982
INSTANTANEOUS LOW FLOW			1.7	Sep 28, 29		
ANNUAL RUNOFF (CFSM)	1.04		0.540		1.11	
ANNUAL RUNOFF (INCHES)	14.14		7.35		15.06	
10 PERCENT EXCEEDS	350		188		400	
50 PERCENT EXCEEDS	44		29		32	
90 PERCENT EXCEEDS	7.5		4.1		5.9	

A – July 29, 30, Sept. 3, 1966.

**LOCATION.**— Lat 37°28'20", long 88°32'50" (NAD of 1927), in NW1/4SE1/4 sec.16, T.12 S., R.6 E., Pope County, Hydrologic Unit 05140203, on left bank at upstream side of bridge on County Highway 5, 2.8 mi southeast of Eddyville and at mile 17.7.

**DRAINAGE AREA.**— 42.9 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1967 to current year.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1979–91. Additional chemical data for water years 1961, 1964, 1969–77 are published in Water–Resources Investigations 78–24 and 79–25 as site AK 02.

SEDIMENT: January 1980 to September 1981.

SPECIFIC CONDUCTANCE: Water years 1980–81.

WATER TEMPERATURE: Water years 1980–81.

**REVISED RECORDS.**— WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, phone telemeter, and crest–stage gage. Datum of gage is 360.42 ft above NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 16,100 ft<sup>3</sup>/s, Aug. 24, 1985, from rating curve extended above 23.5 ft, based on contracted–opening measurement, gage height, 27.78 ft; no flow for several days in most years.

**SUSPENDED–SEDIMENT CONCENTRATIONS:** Maximum daily mean, 299 mg/L May 18, 1981; minimum daily mean, 0 mg/L on many days each year.

**SUSPENDED–SEDIMENT LOADS:** Maximum daily, 2,340 tons May 18, 1981; minimum daily, 0 ton on many days each year.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.55	0.73	25	55	e15	27	34	22	23	0.95	0.86	1.2
2	0.47	0.64	19	378	e71	42	29	28	12	0.87	0.79	1.0
3	0.50	0.65	16	237	e200	103	25	163	7.8	0.92	0.73	1.0
4	0.49	0.55	16	432	104	808	21	94	6.0	1.1	0.75	0.99
5	0.45	0.57	17	457	146	335	18	43	4.8	1.2	0.87	0.90
6	0.41	0.87	18	168	357	230	16	28	4.6	2.0	0.87	0.82
7	0.39	0.92	16	75	200	130	15	20	4.0	3.4	0.76	0.72
8	0.37	0.90	14	49	89	76	14	15	3.5	4.4	0.70	0.62
9	0.35	0.79	14	37	66	58	13	12	3.2	2.9	0.66	0.52
10	0.32	0.76	15	29	67	45	12	11	2.7	2.1	0.61	0.46
11	0.31	0.78	17	25	70	38	11	11	2.5	1.6	0.56	0.41
12	0.27	1.1	16	22	55	33	10	8.3	2.7	1.4	0.52	0.33
13	0.28	1.3	14	20	42	29	9.7	7.2	3.5	1.4	0.49	0.29
14	0.36	2.1	14	18	35	27	10	6.6	3.2	1.3	0.41	0.26
15	0.28	4.1	13	17	30	24	11	6.7	2.8	1.1	0.34	0.22
16	0.24	5.7	14	15	24	28	10	6.2	3.7	1.1	0.29	0.21
17	0.42	7.9	14	16	21	30	10	6.3	3.3	1.1	0.24	0.19
18	0.40	127	14	340	20	36	10	6.0	2.9	0.97	0.21	0.14
19	0.40	338	14	155	19	37	9.6	5.7	2.4	0.83	0.18	0.09
20	0.44	59	14	61	19	189	10	4.9	2.1	0.73	0.21	0.09
21	0.45	27	13	40	17	227	10	4.2	1.7	0.69	0.21	0.05
22	0.50	18	14	32	16	96	62	3.6	2.1	1.5	0.19	0.02
23	0.39	26	40	25	14	61	425	3.1	1.9	2.1	0.18	0.00
24	0.33	338	51	22	14	47	178	2.7	1.6	1.3	0.26	0.03
25	0.36	68	35	26	14	39	193	2.5	1.4	1.0	1.8	0.04
26	0.56	32	27	58	13	34	90	3.3	1.3	0.98	4.5	0.00
27	0.57	43	24	119	12	32	41	14	1.2	0.92	2.8	0.00
28	0.64	365	22	51	12	30	26	9.9	1.1	0.79	2.9	0.00

LUSK CREEK BASIN  
**03384450 Lusk Creek near Eddyville, IL---Continued**

<b>29</b>	0.66	105	234	e35	11	37	19	6.9	1.0	0.77	2.3	0.00
<b>30</b>	0.63	42	232	e20	---	49	17	6.4	1.0	0.89	1.8	0.00
<b>31</b>	0.68	---	94	e17	---	40	---	55	---	0.92	1.5	---
TOTAL	13.47	1618.36	1100	3051	1773	3017	1359.3	616.5	115.00	43.23	29.49	10.60
MEAN	0.43	53.9	35.5	98.4	61.1	97.3	45.3	19.9	3.83	1.39	0.95	0.35
MAX	0.68	365	234	457	357	808	425	163	23	4.4	4.5	1.2
MIN	0.24	0.55	13	15	11	24	9.6	2.5	1.0	0.69	0.18	0.00
CFSM	0.01	1.26	0.83	2.29	1.43	2.27	1.06	0.46	0.09	0.03	0.02	0.01
IN.	0.01	1.40	0.95	2.65	1.54	2.62	1.18	0.53	0.10	0.04	0.03	0.01

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 – 2004, BY WATER YEAR (WY)**

MEAN	7.16	48.2	86.7	84.5	101	128	118	89.3	33.8	14.7	10.1	5.46
MAX	59.5	216	377	265	287	306	408	324	153	89.9	174	75.0
(WY)	2002	1986	1983	1969	1989	1979	1983	2003	1970	1989	1985	1985
MIN	0.00	0.01	0.14	0.77	5.31	28.2	20.6	4.05	0.22	0.14	0.01	0.00
(WY)	1988	2000	1977	1981	1996	1981	1986	1988	1988	1978	2002	1999

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1968 – 2004**

ANNUAL TOTAL	30016.14		12746.95			
ANNUAL MEAN	82.2		34.8		60.5	
HIGHEST ANNUAL MEAN					120	
LOWEST ANNUAL MEAN					20.1	
HIGHEST DAILY MEAN	1600	A May 11	808	Mar 4	4670	Aug 24 1985
LOWEST DAILY MEAN	0.24	Oct 16	0.00	Several days	0.00	B
ANNUAL SEVEN-DAY MINIMUM	0.29	Oct 10	0.01	Sep 23	0.00	Aug 25 1968
MAXIMUM PEAK FLOW			1520	Mar 4	16100	C Aug 24 1985
MAXIMUM PEAK STAGE			8.17	Mar 4	27.78	Aug 24 1985
ANNUAL RUNOFF (CFSM)	1.92		0.812		1.41	
ANNUAL RUNOFF (INCHES)	26.03		11.05		19.15	
10 PERCENT EXCEEDS	221		80		121	
50 PERCENT EXCEEDS	21		7.9		9.6	
90 PERCENT EXCEEDS	0.45		0.35		0.10	

A – Estimated.

B – Several days in most years.

C – From rating curve extended above 23.5 ft, based on contracted-opening measurement.



**LOCATION.**— Lat 37°08'51", long 88°44'27" (NAD of 1927), Massac County IL., Hydrologic Unit 05140206, near center of span on downstream side of pier of Paducah Illinois Railroad bridge at Metropolis, 9.5 mi downstream from Tennessee River, 37 mi upstream from mouth, and at mile 944.1.

**DRAINAGE AREA.**— 203,000 mi<sup>2</sup>, approximately.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: January 1928 to current year. Prior to April 1928 monthly discharge only, published in WSP 1305.

STAGE: Gage-height records collected 9.6 mi upstream at Paducah since 1890 are contained in reports of National Weather Service.

PARTIAL RECORD: Occasional discharge measurements 1881 to 1924 in reports of Mississippi River Commission.

**GAGE.**— Water-stage recorder with telemetry. Datum of gage is 276.27 ft above NGVD of 1929. Prior to Dec. 22, 1936, water-stage recorders (temporary installations) at Paducah, Ky., Metropolis and Joppa, Il., and Dam 52. Auxiliary water-stage recorder near Grand Chain, 0.5 mi upstream from Dam 53, and 18 mi downstream from base gage. Prior to May 29, 1936, auxiliary nonrecording gage at Dam 53.

**REMARKS.**— Flow regulated by many dams and reservoirs. Maximum daily discharges include overflow through Bay Creek and Cache River Valleys.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 1,850,000 ft<sup>3</sup>/s, February 1, 1937, maximum gage height, 66.60 ft, February 2, 1937; minimum daily discharge, 15,000 ft<sup>3</sup>/s, July 20, 1930.

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[Records not available at time of publication]

CACHE RIVER BASIN  
03612000 Cache River at Forman, IL

**LOCATION.**— Lat 37°20'11", long 88°55'26" (NAD of 1927), in NE1/4NW1/4 sec.6, T.14 S., R.3 E., Johnson County, Hydrologic Unit 05140206, at downstream side of bridge on County Highway 3, 1.2 mi southwest of Forman, and at mile 8.1.

**DRAINAGE AREA.**— 244 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1922 to July 1924, September 1924 to current year.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–91.

**REVISED RECORDS.**— WSP 623: 1923–24. WSP 823: 1934–35. WSP 1205: 1923–24, 1927–30. WSP 1335: 1923(M), 1925, 1926–27(M), 1928, 1929–30(M), 1931, 1933, 1934–36(M), 1937–39. WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, phone telemeter, and crest–stage gage. Datum of gage is 308.47 ft. above NGVD of 1929. Dec. 30, 1971 to Sept. 30, 1997, recording gage at same site at datum 10.0 ft. higher. Oct. 1, 1958, to Dec. 30, 1971, nonrecording gage at same site and datum 10.0 ft. higher. See WSP 1705 or 1725 for history of changes prior to Sept. 30, 1958.

**REMARKS.**— Flow of lower part of Cache River Basin was diverted from Ohio River to Mississippi River beginning Oct. 31, 1950, through diversion channel of Mounds–Mound City flood–protection project. Flow of upper part of Cache River Basin, including flow past this station, continued to discharge to Ohio River, passing through Post Creek cutoff directly to Ohio River instead of through the original channel of Cache River.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 9,630 ft<sup>3</sup>/s, March 12, 1935, gage height, 42.29 ft, site then in use, from graph based on gage readings; no flow at times in some years.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for periods of backwater from the Ohio River, Nov. 25 to Dec. 6, Jan. 6–21, Feb. 18–19, Mar. 9–18, Apr. 22–26, May 29 to June 12, and June 17–25, and those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	5.7	e277	697	e120	321	432	79	e507	25	14	9.4
2	8.5	5.4	e159	1240	e130	658	278	185	e215	23	37	7.7
3	7.3	4.5	e111	1180	e650	583	189	277	e89	23	23	6.4
4	6.4	4.4	e96	1180	866	2260	141	205	e52	22	15	6.0
5	5.7	5.0	e99	1720	710	2040	108	135	e39	23	12	5.5
6	5.9	5.5	e106	e1020	1340	1440	89	105	e28	39	9.6	4.9
7	5.4	6.2	e101	e640	1160	1340	79	77	e29	244	9.3	3.9
8	5.0	6.6	93	e340	e734	e1230	73	56	e24	282	9.0	3.3
9	4.3	6.0	83	e225	e444	e958	67	47	e15	108	6.8	2.8
10	4.0	5.4	97	e172	e323	e626	63	51	e14	54	5.8	2.2
11	3.8	6.4	112	e127	e328	e383	57	71	e20	38	4.3	1.9
12	3.5	13	93	e100	e303	e236	54	51	e29	29	4.3	1.9
13	2.7	11	82	e81	e239	e159	49	97	529	25	3.7	2.0
14	3.2	7.1	71	e65	e181	e113	45	941	688	21	3.7	1.8
15	3.8	16	64	e57	e134	e84	42	1420	756	17	3.3	1.6
16	3.7	53	60	e50	e109	e87	39	1080	902	15	2.8	1.5
17	3.8	56	59	e54	e85	e81	35	1000	e729	13	2.4	3.1
18	3.2	441	56	e830	e80	e91	32	725	e777	11	2.3	4.2
19	7.1	1340	56	e810	e85	99	30	430	e978	9.8	2.2	3.4
20	7.3	911	51	e525	90	154	29	254	e689	8.6	2.2	2.5
21	6.0	599	45	e272	89	322	25	171	e388	7.1	2.1	1.7
22	5.7	262	41	184	84	256	e42	110	e207	7.8	2.2	1.6
23	4.4	144	186	134	78	175	e310	77	e136	9.5	2.4	1.9
24	3.4	1230	384	107	71	127	e339	59	e91	35	2.8	2.1
25	3.5	e915	283	211	64	106	e607	50	e64	34	21	2.1

CACHE RIVER BASIN

111

**03612000 Cache River at Forman, IL---Continued**

<b>26</b>	4.4	e617	160	688	59	94	e556	424	52	22	74	1.9
<b>27</b>	5.7	e314	103	829	54	88	352	767	42	16	55	1.2
<b>28</b>	4.7	e814	83	559	50	196	182	664	35	12	29	1.1
<b>29</b>	4.8	e842	964	313	46	529	111	e314	32	9.7	21	1.2
<b>30</b>	4.8	e547	1450	e165	---	800	75	e141	27	10	15	1.1
<b>31</b>	4.4	---	1010	e130	---	690	---	e1080	---	13	11	---
TOTAL	155.8	9193.2	6635	14705	8706	16326	4530	11143	8183	1206.5	408.2	91.9
MEAN	5.03	306	214	474	300	527	151	359	273	38.9	13.2	3.06
MAX	9.4	1340	1450	1720	1340	2260	607	1420	978	282	74	9.4
MIN	2.7	4.4	41	50	46	81	25	47	14	7.1	2.1	1.1
CFSM	0.02	1.26	0.88	1.94	1.23	2.16	0.62	1.47	1.12	0.16	0.05	0.01
IN.	0.02	1.40	1.01	2.24	1.33	2.49	0.69	1.70	1.25	0.18	0.06	0.01

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 2004, BY WATER YEAR (WY)**

MEAN	54.6	191	335	493	492	594	561	432	218	86.0	71.0	57.0
MAX	487	1097	2192	3039	1813	2268	2244	1847	1759	1257	826	542
(WY)	1928	1958	1983	1950	1950	1945	1927	1983	1928	1958	1985	1950
MIN	0.02	0.66	0.58	1.38	7.05	12.4	40.7	10.4	1.37	1.71	0.00	0.43
(WY)	1964	1954	1964	1977	1934	1941	1981	1930	1936	1931	1930	1953

**SUMMARY STATISTICS**

**FOR 2003 CALENDAR YEAR**

**FOR 2004 WATER YEAR**

**WATER YEARS 1923 - 2004**

ANNUAL TOTAL	137424.0		81283.6			
ANNUAL MEAN	377		222		297	
HIGHEST ANNUAL MEAN					779	
LOWEST ANNUAL MEAN					37.5	
HIGHEST DAILY MEAN	2900	Jan 1	2260	Mar 4	8780	Jan 26 1929
LOWEST DAILY MEAN	2.0	Aug 25	1.1	Sep 28,30	0.00	A
ANNUAL SEVEN-DAY MINIMUM	2.6	Aug 23	1.5	Sep 24	0.00	Jul 29 1930
MAXIMUM PEAK FLOW			2630	Mar 4	9630	Mar 12 1935
MAXIMUM PEAK STAGE			21.71	Mar 4	42.29 B	Mar 12 1935
INSTANTANEOUS LOW FLOW			0.78	Sep 27		
ANNUAL RUNOFF (CFSM)	1.54		0.910		1.22	
ANNUAL RUNOFF (INCHES)	20.95		12.39		16.52	
10 PERCENT EXCEEDS	1220		759		850	
50 PERCENT EXCEEDS	97		64		53	
90 PERCENT EXCEEDS	4.8		3.5		1.8	

A - At times in some years.

B - Site then in use, from graph based on gage readings.

**03612500 Ohio R. at Lock53 nr Grand Chain, KY**

(National Stream–Quality Accounting Network Station)

**LOCATION.**— Lat 37°12'11", long 89°02'30" (NAD of 1927), Pulaski County, Hydrologic Unit 05140206, at auxiliary gaging station, 0.5 mi upstream from Gar Creek, 3.0 mi southwest of Grand Chain, IL, 18.1 mi downstream from gaging station at Metropolis, and at mile 962.2.

**DRAINAGE AREA.**— 203,100 mi<sup>2</sup>, approximately.

**PERIOD OF RECORD.**—**SURFACE–WATER QUALITY**

CHEMICAL: Water years 1955 to current year.

SPECIFIC CONDUCTANCE: October 1954 to September 1970, January 1973 to September 1990.

WATER TEMPERATURE: October 1954 to September 1970, January 1973 to September 1990.

**REMARKS.**— Records of daily discharge are available for station at Metropolis, IL, (station 03611500). Flow regulated by many dams and reservoirs.

**EXTREMES FOR PERIOD OF RECORD.**—

SPECIFIC CONDUCTANCE: Maximum daily recorded, 693 microsiemens, Nov. 25, 1968; minimum daily recorded, 170 microsiemens, Feb. 9, 1957.

WATER TEMPERATURE: Maximum daily recorded, 31.0°C, July 15, 1964, July 17–21, 25, 1977; minimum daily recorded, 0.0°C, on several days during most winter months.

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**[Records not available at time of publication]**

ST. LAWRENCE RIVER BASIN  
04087440 Lake Michigan at Chicago Lock at Chicago, IL

113

**LOCATION.**— Lat 41°53'18", long 87°36'27" (NAD of 1927), in NE1/4 SE1/4 sec.10, T.39 N., R.14 E., Cook County, Hydrologic Unit 04060200, on the lakeside of the downstream left guidewall, approximately 75 ft west of the riverside gates of the Chicago Lock.

**DRAINAGE AREA.**— Indeterminate.

**PERIOD OF RECORD.**—

STAGE: August 1997 to current year.

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 579.48 ft above NGVD of 1929 (Chicago City Datum).

**REMARKS.**— Gage provides stage data to determine Illinois' diversion of Lake Michigan water.

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height, 3.84 ft, May 31, 1998; minimum, -3.79 ft., Feb 11, 2002, exaggerated due to wave action.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 0.40 ft, Oct. 2; minimum, -3.72 ft, Dec. 18, instantaneous annual extremes are exaggerated due to wave action.

Gage height, feet, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-0.77	-1.18	-1.81	-1.44	-1.88	-2.07	-1.86	-1.32	-1.22	-1.04	-1.00	-1.56
2	-0.40	-1.13	-1.12	-1.19	-1.79	-1.89	-1.55	-1.31	-1.22	-1.11	-0.96	-1.30
3	-0.39	-1.11	-1.39	-1.28	-1.66	-2.31	-1.36	-1.37	-1.03	-1.18	-0.92	-1.36
4	-0.77	-1.06	-1.31	-1.70	-1.73	-1.98	-1.12	-1.54	-1.04	-1.13	-0.85	-1.31
5	-0.77	-1.14	-1.40	-1.46	-2.06	-1.86	-1.35	-1.33	-1.21	-1.20	-0.97	-1.43
6	-1.03	-1.02	-1.85	-1.50	-1.83	-2.11	-1.69	-1.20	-1.16	-1.09	-0.98	-1.52
7	-0.86	-1.63	-1.87	-2.01	-1.94	-2.28	-1.73	-1.27	-1.09	-1.04	-0.90	-1.38
8	-0.98	-1.78	-1.58	-1.93	-2.31	-1.84	-1.44	-1.23	-1.11	-1.10	-0.78	-1.21
9	-0.65	-1.61	-1.90	-1.69	-2.16	-2.22	-1.72	-1.38	-1.17	-0.96	-0.87	-1.23
10	-0.62	-0.98	-1.86	-1.87	-2.03	-2.19	-1.75	-1.19	-1.25	-0.95	-0.98	-1.36
11	-0.54	-1.04	-1.53	-2.05	-2.15	-2.42	-1.69	-1.93	-0.90	-0.92	-0.75	-1.51
12	-0.71	-1.17	-1.79	-2.36	-2.21	-2.01	-1.67	-1.41	-0.86	-1.21	-0.74	-1.63
13	-0.89	-1.31	-1.39	-2.02	-2.09	-1.92	-1.70	-1.44	-0.93	-1.02	-0.82	-1.44
14	-1.12	-1.02	-1.58	-1.90	-1.82	-2.25	-2.09	-1.22	-1.04	-1.00	-0.87	-1.42
15	-0.70	-0.97	-1.35	-1.86	-1.41	-2.11	-2.28	-1.09	-0.94	-1.10	-0.99	-1.48
16	-0.76	-0.83	-1.60	-1.76	-1.37	-2.15	-1.27	-1.11	-0.89	-1.15	-0.97	-1.58
17	-0.80	-0.97	-1.96	-1.68	-1.67	-1.98	-1.14	-0.98	-0.95	-1.02	-0.88	-1.53
18	-1.19	-1.57	-2.05	-2.07	-2.20	-1.72	-1.21	-1.03	-0.99	-0.85	-1.06	-1.45
19	-0.82	-1.26	-1.46	-2.22	-2.10	-1.66	-1.59	-1.07	-0.90	-1.09	-1.16	-1.45
20	-0.90	-1.19	-1.82	-2.06	-2.25	-1.79	-1.80	-1.14	-1.01	-1.10	-1.29	-1.73
21	-0.99	-0.85	-2.01	-1.83	-1.98	-2.01	-1.59	-1.21	-1.10	-0.85	-1.30	-1.55
22	-0.49	-1.09	-2.19	-1.70	-1.30	-2.01	-1.66	-1.05	-1.13	-0.78	-1.19	-1.40
23	-0.65	-1.49	-1.99	-1.85	-1.78	-2.05	-1.63	-1.13	-1.10	-0.81	-1.17	-1.70
24	-1.09	-1.41	-1.62	-2.04	-1.88	-2.03	-1.50	-1.14	-1.13	-1.00	-1.38	-1.93
25	-1.04	-1.23	-1.43	-2.05	-1.94	-2.04	-1.29	-1.11	-1.24	-1.25	-1.28	-1.77
26	-0.80	-1.06	-1.83	-1.86	-2.02	-1.99	-1.51	-1.10	-1.22	-1.52	-1.25	-1.93
27	-0.93	-1.14	-1.80	-2.18	-2.01	-2.01	-1.70	-1.17	-1.35	-1.09	-1.09	-1.63
28	-0.80	-1.61	-1.79	-1.93	-1.98	-2.06	-1.60	-1.13	-1.04	-0.99	-1.35	-1.58
29	-0.96	-1.96	-1.55	-1.75	---	-1.86	-1.49	-1.17	-1.08	-1.07	-1.11	-1.70
30	-0.81	-1.37	-1.42	-2.22	---	-1.99	-1.32	-1.25	-1.10	-1.11	-1.34	-1.70
31	-0.93	---	-1.49	-1.98	---	-2.01	---	-0.95	---	-1.01	-1.39	---
MEAN	-0.81	-1.24	-1.67	-1.85	-1.91	-2.03	-1.58	-1.22	-1.08	-1.06	-1.05	-1.53
MAX	-0.39	-0.83	-1.12	-1.19	-1.30	-1.66	-1.12	-0.95	-0.86	-0.78	-0.74	-1.21
MIN	-1.19	-1.96	-2.19	-2.36	-2.31	-2.42	-2.28	-1.93	-1.35	-1.52	-1.39	-1.93

**04087440 Lake Michigan at Chicago Lock at Chicago, IL--Continued**

CAL YR 2002	MEAN -0.82	MAX 0.21	MIN -2.35
WTR YR 2003	MEAN -1.42	MAX -0.39	MIN -2.42

**LOCATION.**— Lat 42°28'44", long 90°29'10" (NAD of 1927), in SE1/4SE1/4 sec.28, T.29 N., R.1 W., Jo Daviess County, Hydrologic Unit 07060005, on left bank at downstream side of bridge on High Ridge Road, 2.4 mi east of Menominee, 4.5 mi northwest of Galena, and at mile 7.0.

**DRAINAGE AREA.**— 39.6 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: October 1967 to current year.

STAGE: Water years 1994 to current year.

**REVISED RECORDS.**— WDR IL-74-1: Drainage area.

**GAGE.**— Water-stage recorder, phone telemeter, and crest-stage gage. Datum of gage is 640.75 ft above NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge 17,000 ft<sup>3</sup>/s, May 17, 1999, gage height, 14.37 ft, on basis of contracted-opening and flow-over-road measurement of peak flow; no flow for part of Dec. 25, 1988, result of freezeup.

**REMARKS FOR CURRENT YEAR.**— Records good except those above 300 ft<sup>3</sup>/s, those for Feb. 23 to May 18 which are fair, and those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	10	15	e12	13	24	21	24	47	24	22	20
2	11	22	15	e12	13	24	21	23	39	24	23	20
3	11	56	15	e12	13	20	19	21	33	27	23	19
4	11	113	15	e12	12	23	18	21	31	27	26	19
5	11	26	16	e12	13	178	18	21	30	24	22	19
6	10	20	15	12	14	31	18	21	30	29	21	19
7	10	18	15	e11	13	24	19	22	28	28	22	19
8	10	16	15	e11	13	23	19	28	27	24	21	18
9	10	15	16	e11	13	21	19	21	26	25	21	18
10	11	15	31	e11	13	19	18	25	35	24	21	18
11	11	16	22	e11	13	19	19	21	42	33	21	18
12	11	15	19	e11	12	17	18	17	98	33	21	18
13	11	15	e18	e11	12	17	17	18	33	25	20	18
14	14	15	e17	e12	12	19	18	14	31	23	20	18
15	12	15	e16	e12	12	17	18	14	28	22	20	23
16	11	15	e16	e11	12	17	18	16	69	22	20	22
17	11	14	e15	e10	12	18	19	17	86	22	21	19
18	11	16	e15	e10	12	18	17	18	35	21	21	18
19	11	15	e14	e10	13	16	20	15	31	21	21	18
20	11	14	e14	e9.8	77	16	22	15	29	21	20	18
21	11	14	e14	e9.5	82	16	26	17	32	23	20	18
22	10	14	e13	9.4	72	15	23	97	30	23	20	18
23	11	55	e13	13	314	16	23	811	28	21	20	18
24	11	25	e13	13	88	24	23	66	29	20	21	18
25	13	20	e12	12	35	21	23	50	28	20	21	18
26	11	19	e12	12	32	41	22	38	26	20	21	18
27	11	18	e12	13	26	31	20	34	26	20	23	18
28	11	17	e12	12	23	29	21	29	27	19	23	18
29	11	16	e12	12	23	25	20	35	25	21	23	18
30	11	16	e12	11	---	23	22	134	25	27	21	18
31	11	---	e12	12	---	21	---	80	---	23	20	---
TOTAL	342	675	471	352.7	1012	823	599	1783	1084	736	660	559
MEAN	11.0	22.5	15.2	11.4	34.9	26.5	20.0	57.5	36.1	23.7	21.3	18.6

## SINSINAWA RIVER BASIN

**05414820 Sinsinawa River near Menominee, IL--Continued**

MAX	14	113	31	13	314	178	26	811	98	33	26	23
MIN	10	10	12	9.4	12	15	17	14	25	19	20	18
CFSM	0.28	0.57	0.38	0.29	0.88	0.67	0.50	1.45	0.91	0.60	0.54	0.47
IN.	0.32	0.63	0.44	0.33	0.95	0.77	0.56	1.67	1.02	0.69	0.62	0.53

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 – 2004, BY WATER YEAR (WY)**

MEAN	21.5	20.1	20.9	22.6	35.8	39.1	25.7	30.4	35.7	27.0	24.4	25.1
MAX	99.7	49.3	76.0	88.3	116	151	101	139	102	136	100	122
(WY)	1987	1994	1973	1974	1997	1975	1973	1999	1993	1993	1972	1986
MIN	8.03	8.05	5.92	7.10	8.55	7.83	7.41	8.81	8.18	9.05	9.30	8.88
(WY)	1991	1990	1990	1991	1990	1968	1990	1977	1977	1989	1971	1990

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1968 – 2004**

ANNUAL TOTAL	6170		9096.7			
ANNUAL MEAN	16.9		24.9		27.3	
HIGHEST ANNUAL MEAN					57.5	
LOWEST ANNUAL MEAN					12.3	
HIGHEST DAILY MEAN	113	Nov 4	811	May 23	2170	May 17 1999
LOWEST DAILY MEAN	10	A	9.4	Jan 22	4.8	Jan 25 1991
ANNUAL SEVEN-DAY MINIMUM	10	Oct 3	10	B Jan 16	5.0	Feb 22 1968
MAXIMUM PEAK FLOW			3640	May 23	17000	C May 17 1999
MAXIMUM PEAK STAGE			10.34	May 23	14.37	May 17 1999
INSTANTANEOUS LOW FLOW			6.1	D Jan 19	0.00	E Dec 25 1988
ANNUAL RUNOFF (CFSM)	0.427		0.628		0.689	
ANNUAL RUNOFF (INCHES)	5.80		8.55		9.36	
10 PERCENT EXCEEDS	22		31		39	
50 PERCENT EXCEEDS	15		19		18	
90 PERCENT EXCEEDS	11		11		9.8	

A – Several days.

B – Estimated due to backwater from ice.

C – On basis of contracted–opening and flow–over–road measurement of peak flow.

D – But may have been less during period of estimated record, Dec. 13 – Jan. 21.

E – Result of freezeup.



**LOCATION.**— Lat 42°15'10", long 90°17'09" (NAD of 1927), in NE1/4NW1/4 sec.16, T.26 N., R.2 E., Jo Daviess County, Hydrologic Unit 07060005, on right bank, 0.3 mi southwest of Hanover, and at mile 13.9.

**DRAINAGE AREA.**— 247 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1934 to current year. Monthly discharge only for some periods, published in WSP 1308.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

SEDIMENT: October 1994 to September 1997.

MISCELLANEOUS: Sediment concentration and particle size, water year 1997.

**REVISED RECORDS.**— WSP 1005: 1939, 1941(M). WSP 1308: 1935–38(M), 1943–45(M). WDR IL–75–1: Drainage area.

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 591.00 ft above NGVD of 1929. Prior to Oct. 1, 1945, nonrecording gage at site 3.5 mi downstream at datum 9.48 ft lower.

**REMARKS.**— Occasional regulation during low flow by dam at Hanover. 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.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 13,700 ft<sup>3</sup>/s, June 4, 2002, gage height 27.91 ft; no flow for part of each day, May 23, 24, 1967, result of temporary closure of gate at dam at Hanover.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily, 3,790 mg/L, May 28, 1996; minimum daily, 5 mg/L, Aug. 5, 1997.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 28,900 tons, May 28, 1996; minimum daily, 0.8 tons, Aug. 5, 1997

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	44	74	112	e54	214	344	165	917	213	117	72
2	35	68	72	116	e56	248	300	157	601	208	110	71
3	37	132	70	116	e59	205	270	148	453	209	110	67
4	39	427	69	108	e56	196	246	144	365	245	e100	64
5	39	228	76	91	e54	1640	231	139	321	214	e100	62
6	38	134	72	90	e53	726	224	133	301	206	99	62
7	38	99	67	88	e54	380	215	139	282	218	96	61
8	38	81	67	91	e56	283	207	128	260	205	93	63
9	38	69	77	91	e56	247	195	139	243	187	91	59
10	38	64	403	90	e54	223	182	147	254	179	89	59
11	38	64	485	91	e53	212	176	154	427	176	85	57
12	39	61	250	e90	e53	185	171	143	443	200	83	56
13	39	52	217	92	e54	183	167	139	399	184	80	56
14	54	47	e200	86	e56	194	162	158	373	171	77	56
15	50	49	e170	85	e55	179	150	168	370	162	74	67
16	47	49	e150	85	e52	168	146	152	468	161	74	87
17	52	48	e140	85	e56	170	147	145	2970	164	80	76
18	42	51	e135	84	e53	174	139	162	980	158	82	61
19	40	53	e130	e84	56	173	137	151	713	150	80	56
20	40	51	126	74	177	172	159	142	592	150	76	55
21	41	48	e125	74	310	161	401	143	610	162	71	53
22	41	46	e128	e68	316	154	284	1240	633	192	67	51
23	43	94	e118	62	899	152	231	3920	478	159	70	52
24	47	191	e110	e60	927	279	212	1500	406	143	74	51
25	54	133	103	58	276	356	215	897	364	136	78	49
26	51	111	121	56	221	847	206	657	291	132	78	48
27	48	108	121	e54	214	700	188	500	257	121	87	49

APPLE RIVER BASIN  
**05419000 Apple River near Hanover, IL---Continued**

<b>28</b>	47	94	130	e53	190	585	179	389	245	117	88	48
<b>29</b>	47	84	139	e54	189	661	172	326	232	113	96	47
<b>30</b>	45	79	129	e53	----	483	163	524	221	136	86	47
<b>31</b>	45	----	122	e53	----	405	----	1190	----	135	77	----
TOTAL	1326	2859	4396	2494	4759	10955	6219	14239	15469	5306	2668	1762
MEAN	42.8	95.3	142	80.5	164	353	207	459	516	171	86.1	58.7
MAX	54	427	485	116	927	1640	401	3920	2970	245	117	87
MIN	35	44	67	53	52	152	137	128	221	113	67	47
CFSM	0.17	0.39	0.57	0.33	0.66	1.43	0.84	1.86	2.09	0.69	0.35	0.24
IN.	0.20	0.43	0.66	0.38	0.72	1.65	0.94	2.14	2.33	0.80	0.40	0.27

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 – 2004, BY WATER YEAR (WY)**

MEAN	113	127	112	143	242	334	258	241	242	141	105	124
MAX	807	672	565	779	837	945	1104	1172	1077	974	610	968
(WY)	1987	1962	1983	1960	1971	1959	1973	1973	1993	1993	2002	1965
MIN	19.7	24.4	21.4	15.2	19.4	34.2	40.2	30.9	29.9	23.1	18.6	21.0
(WY)	1941	1941	1990	1940	1940	1954	1940	1940	1989	1989	1941	1940

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1935 – 2004**

ANNUAL TOTAL	37445		72452		181	
ANNUAL MEAN	103		198		39.3	
HIGHEST ANNUAL MEAN					480	
LOWEST ANNUAL MEAN					1940	
HIGHEST DAILY MEAN	817	May 9	3920	May 23	9470	Jun 4 2002
LOWEST DAILY MEAN	29	Sep 11	35	Oct 2	3.5	May 24 1967
ANNUAL SEVEN-DAY MINIMUM	30	Sep 5	37	Oct 1	10	Dec 28 1939
MAXIMUM PEAK FLOW			5150	May 23	13700	Jun 4 2002
MAXIMUM PEAK STAGE			17.11	May 23	27.91	Jun 4 2002
INSTANTANEOUS LOW FLOW			33	Oct 2,3	0.00	A
ANNUAL RUNOFF (CFSM)	0.415		0.801		0.734	
ANNUAL RUNOFF (INCHES)	5.64		10.91		9.98	
10 PERCENT EXCEEDS	194		400		333	
50 PERCENT EXCEEDS	73		122		89	
90 PERCENT EXCEEDS	39		49		32	

A – Parts of each day, May 23, 24, 1997, result of temporary closure of gate at dam in Hanover.

UPPER MISSISSIPPI RIVER BASIN  
**05420500 Mississippi River at Clinton, IA**

119

(National Stream–Quality Accounting Network Station)

**LOCATION.**— Lat 41°46'50", long 90°15'07" (NAD of 1927), in NW1/4 sec.34, T.81 N., R.6 E., Clinton County, Hydrologic Unit 07080101, on right bank at end of Eighth Avenue in Camanche, 5.0 mi upstream from Wapsipinicon River, 6.4 mi downstream from Clinton, 10.6 mi downstream from Lock and Dam 13, and at mile 511.8 upstream from Ohio River.

**DRAINAGE AREA.**— 85,600 mi<sup>2</sup>, approximately, at Fulton–Lyons Bridge at Clinton.

**PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE**

DISCHARGE: June to August 1873 (fragmentary), October 1873 to current year. October 1932 to September 1939, published as "at Le Claire." June 1873 to December 1932, published in the Iowa State Planning Board report "Stream–flow records of Iowa, 1873–1932."

**SURFACE–WATER QUALITY**

CHEMICAL: October 1974 to September 1987, October 1994 to current year.

SEDIMENT: October 1994 to September 30, 1997 (discontinued).

SPECIFIC CONDUCTANCE: July 1975 to September 1976; sporadic measurements February 1977 to September 1981; October 1994 to September 30, 1997 (discontinued).

WATER TEMPERATURE: July 1975 to April 1989; January 1995 to September 30, 1997 (discontinued).

MISCELLANEOUS: Periodic observations.

**REVISED RECORDS.**— WDR IA–75–1: 1974.

**GAGE.**— Water–stage recorder and U.S. Army Corps of Engineers satellite telemeter. Datum of gage is 562.68 ft above NGVD of 1929. June 6, 1969 to Sept. 16, 1988, water–stage recorder at site 400 ft. upstream at same datum. Auxiliary water–stage recorder at Lock and Dam 13 since Oct. 1, 1958. See WSP 1728 for history of changes prior to Oct. 1, 1955.

**REMARKS.**— Minor flow regulation caused by navigation dams.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum daily discharge, 307,000 ft<sup>3</sup>/s, discharge affected by regulation or diversion, April 28, 1965, gage height, 24.65 ft; minimum daily discharge, 6,500 ft<sup>3</sup>/s, December 25, 1933.

**SUSPENDED–SEDIMENT CONCENTRATIONS:** Maximum daily mean, 294 mg/L; Apr. 7, 1997; minimum daily mean, 1 mg/L several days in December 1995 – January 1996.

**SUSPENDED–SEDIMENT LOADS:** Maximum daily, 108,000 tons, Apr. 7, 1997; minimum daily, 96 tons, Jan. 9, 1996.

**SPECIFIC CONDUCTANCE:** Maximum daily 560 microsiemens Nov. 24 to Dec. 3, 1979; minimum daily 220 microsiemens Apr. 19, 20, 1976, Nov. 8–18, 1980.

**WATER TEMPERATURE:** Maximum daily 31.5°C July 21–23, 1983; minimum daily 0.0°C on many days during winter periods.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum stage known since at least 1828, that of Apr. 28, 1965.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17900	17600	22100	22500	e15000	e35000	83800	68000	123000	90400	34100	28300
2	22000	22900	18500	20600	e15200	43100	89500	66700	130000	78400	33200	28100
3	20100	26500	16200	19100	e15700	55300	94100	63600	130000	62700	37400	28400
4	14700	33400	16600	15200	e18200	60000	101000	60200	126000	58000	37500	27900
5	14900	43600	19200	15500	e19000	70600	104000	51300	121000	52700	41900	25900
6	17200	39400	21200	e15000	e19400	83600	107000	48000	120000	48400	49000	24100
7	18000	31700	20900	e15400	e19000	85700	113000	43800	121000	56100	44500	27800
8	18100	26300	20900	e15700	e18900	74600	115000	43800	125000	62100	39200	28200
9	18800	24900	22600	e15800	e18900	68700	111000	42600	129000	64100	38400	27200
10	19500	23900	28200	e16300	e18900	59700	101000	43000	136000	62700	37100	27900
11	20200	24000	28600	e17700	e19000	53300	93400	48100	137000	63400	37100	31500
12	20000	24800	23600	e18800	e19300	47300	81300	47900	139000	64400	35600	32000
13	19800	20900	18400	e17100	e19300	39600	71600	50800	142000	68500	34300	32100
14	19400	21000	16800	e16100	e19300	41300	65100	55500	146000	67800	34400	32000
15	24600	20200	16100	e15700	e19200	44200	59000	55000	148000	65100	34300	30200

UPPER MISSISSIPPI RIVER BASIN  
**05420500 Mississippi River at Clinton, IA--Continued**

16	23600	20100	17000	e16600	e19100	46100	56100	54300	150000	62000	33400	32800
17	21800	22600	15400	e17800	e19300	48100	54000	54000	153000	60100	31900	47500
18	18600	24900	14000	e17100	e19300	48100	49900	57500	164000	60000	33200	53300
19	18100	27800	16600	e16100	e19400	47200	45700	65100	169000	60100	33900	59100
20	19000	e31000	19400	e15400	e19400	46800	44200	65100	171000	58800	35600	61500
21	19000	e32000	21600	e16700	e20600	47400	48300	64400	171000	57200	34500	60900
22	18200	e30000	21800	e15800	e22600	46700	55200	66900	169000	58100	31600	63400
23	18700	e28500	21600	e15300	e25600	45500	56400	95900	165000	57900	28300	61400
24	19400	e27500	21900	e15300	e28900	48200	54800	129000	158000	57700	26200	56500
25	20500	26700	21900	e14900	e33100	51200	56900	143000	150000	51900	28400	54200
26	22400	25500	21600	e14700	e33400	55200	63700	143000	141000	43300	31100	54400
27	26500	25800	22100	e15600	e29000	61100	66400	132000	129000	42200	31800	53900
28	23100	26900	22500	e15200	e29000	62100	65400	114000	114000	40000	32500	53400
29	17600	26300	23900	e15200	e29800	64900	64200	99500	101000	33000	36400	54800
30	16300	24300	24500	e15000	---	74200	66400	99400	98000	32200	35400	53600
31	16600	---	24500	e15100	---	77200	---	111000	---	34100	29700	---
TOTAL	604600	801000	640200	508300	622800	1732000	2237400	2282400	4176000	1773400	1081900	1252300
MEAN	19500	26700	20650	16400	21480	55870	74580	73630	139200	57210	34900	41740
MAX	26500	43600	28600	22500	33400	85700	115000	143000	171000	90400	49000	63400
MIN	14700	17600	14000	14700	15000	35000	44200	42600	98000	32200	26200	24100
AC-FT	1199000	1589000	1270000	1008000	1235000	3435000	4438000	4527000	8283000	3518000	2146000	2484000
CFSM	0.23	0.31	0.24	0.19	0.25	0.65	0.87	0.86	1.63	0.67	0.41	0.49
IN.	0.26	0.35	0.28	0.22	0.27	0.75	0.97	0.99	1.81	0.77	0.47	0.54

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1874 – 2004, BY WATER YEAR (WY)**

MEAN	40720	39200	27970	25790	28190	50510	89790	82630	69850	56280	37860	38040
MAX	203600	146800	73590	54100	65680	127500	175900	212400	182100	198900	113400	92380
(WY)	1882	1882	1882	1973	1966	1973	1997	1888	1892	1993	1993	1938
MIN	13490	13760	11120	11390	14000	17600	26040	23190	15420	14690	12460	13870
(WY)	1934	1934	1934	1890	1893	1934	1931	1977	1988	1988	1936	1933

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1874 – 2004	
ANNUAL TOTAL	15604900		17712300			
ANNUAL MEAN	42750		48390		48940	
HIGHEST ANNUAL MEAN					94690	1882
LOWEST ANNUAL MEAN					18870	1934
HIGHEST DAILY MEAN	157000	May 22	171000	Jun 20	307000	Apr 28 1965
LOWEST DAILY MEAN	13900	Sep 30	14000	Dec 18	6500	Dec 25 1933
ANNUAL SEVEN-DAY MINIMUM	16000	Sep 5	15100	Jan 25	7430	Dec 24 1933
MAXIMUM PEAK FLOW			175000	Jun 21		
MAXIMUM PEAK STAGE			18.17	Jun 21	24.65	Apr 28 1965
ANNUAL RUNOFF (AC-FT)	30950000		35130000		35460000	
ANNUAL RUNOFF (CFSM)	0.499		0.565		0.572	
ANNUAL RUNOFF (INCHES)	6.78		7.70		7.77	
10 PERCENT EXCEEDS	90000		111000		95200	
50 PERCENT EXCEEDS	27400		34200		37600	
90 PERCENT EXCEEDS	18500		16800		19000	

UPPER MISSISSIPPI RIVER BASIN  
**05420500 Mississippi River at Clinton, IA**

121

(National Stream–Quality Accounting Network Station)

**LOCATION.**— Lat 41°46'50", long 90°15'07" (NAD of 1927), in NW1/4 sec.34, T.81 N., R.6 E., Clinton County, Hydrologic Unit 07080101, on right bank at end of Eighth Avenue in Camanche, 5.0 mi upstream from Wapsipinicon River, 6.4 mi downstream from Clinton, 10.6 mi downstream from Lock and Dam 13, and at mile 511.8 upstream from Ohio River.

**DRAINAGE AREA.**— 85,600 mi<sup>2</sup>, approximately, at Fulton–Lyons Bridge at Clinton.

**PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE**

DISCHARGE: June to August 1873 (fragmentary), October 1873 to current year. October 1932 to September 1939, published as "at Le Claire." June 1873 to December 1932, published in the Iowa State Planning Board report "Stream–flow records of Iowa, 1873–1932."

**SURFACE–WATER QUALITY**

CHEMICAL: October 1974 to September 1987, October 1994 to current year.

SEDIMENT: October 1994 to September 30, 1997 (discontinued).

SPECIFIC CONDUCTANCE: July 1975 to September 1976; sporadic measurements February 1977 to September 1981; October 1994 to September 30, 1997 (discontinued).

WATER TEMPERATURE: July 1975 to April 1989; January 1995 to September 30, 1997 (discontinued).

MISCELLANEOUS: Periodic observations.

**REVISED RECORDS.**— WDR IA–75–1: 1974.

**GAGE.**— Water–stage recorder and U.S. Army Corps of Engineers satellite telemeter. Datum of gage is 562.68 ft above NGVD of 1929. June 6, 1969 to Sept. 16, 1988, water–stage recorder at site 400 ft. upstream at same datum. Auxiliary water–stage recorder at Lock and Dam 13 since Oct. 1, 1958. See WSP 1728 for history of changes prior to Oct. 1, 1955.

**REMARKS.**— Minor flow regulation caused by navigation dams.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum daily discharge, 307,000 ft<sup>3</sup>/s, discharge affected by regulation or diversion, April 28, 1965, gage height, 24.65 ft; minimum daily discharge, 6,500 ft<sup>3</sup>/s, December 25, 1933.

**SUSPENDED–SEDIMENT CONCENTRATIONS:** Maximum daily mean, 294 mg/L; Apr. 7, 1997; minimum daily mean, 1 mg/L several days in December 1995 – January 1996.

**SUSPENDED–SEDIMENT LOADS:** Maximum daily, 108,000 tons, Apr. 7, 1997; minimum daily, 96 tons, Jan. 9, 1996.

**SPECIFIC CONDUCTANCE:** Maximum daily 560 microsiemens Nov. 24 to Dec. 3, 1979; minimum daily 220 microsiemens Apr. 19, 20, 1976, Nov. 8–18, 1980.

**WATER TEMPERATURE:** Maximum daily 31.5°C July 21–23, 1983; minimum daily 0.0°C on many days during winter periods.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum stage known since at least 1828, that of Apr. 28, 1965.

**SURFACE–WATER QUALITY, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

Date	Time	Instan- taneous dis- charge, cfs (00061)	Turbid- ity, wat unf lab, Hach 2100AN NTU (99872)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conduc- tance, wat unf lab, uS/cm 25 degC (90095)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO <sub>3</sub> (00900)	
OCT														
20...	1030	19,700	15	744	11.4	112	8.9	8.6	376	390	20.0	14.6	190	
NOV														
19...	1005	30,300	23	738	16.2	128	8.8	7.8	386	390	—	5.5	180	
FEB														
26...	1110	33,600	23	756	12.8	88	7.7	7.5	390	389	3.5	.0	170	
MAR														
23...	1000	44,600	17	748	14.3	113	8.0	8.1	346	388	10.5	4.7	170	
APR														
22...	0950	56,900	20	751	9.6	93	9.0	8.1	310	306	7.0	13.9	150	
MAY														
11...	1030	48,100	20	747	8.4	90	8.8	8.2	278	277	—	17.5	130	
26...	1100	143,000	340	746	5.6	60	7.6	7.9	257	263	—	17.4	120	

UPPER MISSISSIPPI RIVER BASIN  
05420500 Mississippi River at Clinton, IA--Continued

JUN													
08...	1030	124,000	50	749	7.0	81	7.6	7.5	300	312	28.0	22.3	140
22...	1015	167,000	32	743	—	—	7.6	7.8	293	310	—	21.1	140
JUL													
07...	1100	53,300	15	745	7.1	86	7.9	8.2	404	433	12.5	23.4	200
21...	0930	57,000	11	752	6.1	78	8.0	8.0	422	450	—	27.0	210
AUG													
17...	0920	31,400	12	748	8.6	99	8.6	8.5	389	426	—	21.4	210
SEP													
02...	1020	27,600	15	748	7.7	93	8.7	—	—	412	28.0	23.5	—

SURFACE-WATER QUALITY, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004--Continued

Date	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium adsorp- tion ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alka- linity, wat flt fxd end lab, mg/L as CaCO <sub>3</sub> (29801)	Alka- linity, wat flt inc tit field, mg/L as CaCO <sub>3</sub> (39086)	Bicar- bonate, wat flt incrm. titr., field, mg/L (00453)	Carbon- ate, wat flt incrm. titr., field, mg/L (00452)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)
OCT													
20...	41.9	19.8	2.72	.4	12.7	163	158	169	12	18.6	<.2	1.91	20.9
NOV													
19...	41.3	18.6	2.31	.4	11.7	162	158	166	13	19.1	<.2	3.17	21.3
FEB													
26...	39.9	16.5	4.69	.4	13.0	146	140	171	.0	23.0	<.2	8.23	20.5
MAR													
23...	41.8	16.8	4.46	.5	14.3	146	129	157	.0	20.9	<.2	10.2	20.9
APR													
22...	36.5	14.3	2.94	.4	10.4	122	115	129	5	14.5	<.2	.48	19.2
MAY													
11...	29.3	12.9	2.56	.3	8.69	109	105	117	6	13.0	<.2	.15	17.3
26...	32.1	10.7	4.11	.2	4.98	96	92	112	.0	9.26	<.2	5.69	10.4
JUN													
08...	33.5	12.8	2.64	.3	9.34	113	110	134	.0	14.2	<.2	5.20	15.6
22...	36.4	12.5	2.94	.3	7.10	106	100	122	.0	11.3	<.2	11.0	21.1
JUL													
07...	48.4	19.2	2.72	.3	8.35	149	148	180	.0	16.7	.2	10.1	34.7
21...	51.0	20.1	2.67	.3	8.83	158	155	189	.0	16.2	.2	9.27	37.1
AUG													
17...	46.6	21.8	2.28	.3	9.58	166	159	175	9	16.8	.2	7.60	29.6
SEP													
02...	—	—	—	—	—	—	158	172	10	—	—	—	—

SURFACE-WATER QUALITY, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004--Continued

Date	Residue water, fltrd, tons/ acre-ft (70303)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L (00666)	Phos- phorus, water, unfltrd mg/L (00665)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Alum- inum, water, fltrd, ug/L (01106)
OCT													
20...	.31	224	.41	.91	<.04	<.06	<.008	.014	.029	.118	2.6	5.9	2
NOV													
19...	.31	228	.43	1.4	<.04	.65	.008	<.006	.013	.143	4.6	5.1	—
FEB													
26...	.34	252	1.5	1.9	.51	1.74	.021	.177	.21	.31	2.4	9.0	—
MAR													
23...	.33	243	.75	1.2	.24	2.05	.019	.057	.078	.163	1.6	6.5	3
APR													
22...	.25	184	.43	1.3	<.04	.54	.012	<.006	.016	.14	2.2	6.8	—

**05420500 Mississippi River at Clinton, IA--Continued**

MAY													
11...	.22	162	.49	1.1	E.02	.21	E.007	.010	.028	.136	2.6	7.9	—
26...	.23	168	.69	2.5	<.04	3.12	.075	.085	.095	.78	14.5	9.1	3
JUN													
08...	.26	191	.48	1.2	E.04	1.56	.024	.054	.069	.22	3.1	9.7	—
22...	.23	169	.62	.99	.05	2.66	.065	.074	.094	.194	1.3	9.4	—
JUL													
07...	.36	264	.72	.94	.17	3.39	.045	.063	.082	.129	1.8	8.3	—
21...	.36	263	.70	.80	.09	2.82	.035	.081	.103	.144	.9	6.8	2
AUG													
17...	.34	249	.53	.96	E.04	1.58	.022	.071	.094	.154	1.8	5.7	E2
SEP													
02...	—	—	.50	.85	.04	.83	.016	.071	.086	.147	1.8	5.7	—

**SURFACE-WATER QUALITY, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004--Continued**

Date	Anti- mony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryll- ium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chrom- ium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)	Mangan- ese, water, fltrd, ug/L (01056)
OCT													
20...	<.20	1.5	28	<.06	28	E.02	<.8	.362	8.2	E4	1.31	4.0	1.4
NOV													
19...	—	.9	—	—	27	—	—	—	—	20	—	3.2	—
FEB													
26...	—	.8	—	—	23	—	—	—	—	39	—	2.3	—
MAR													
23...	E.12	.6	39	<.06	32	<.04	<.8	.285	2.4	50	.08	2.7	8.4
APR													
22...	—	.8	—	—	22	—	—	—	—	25	—	2.6	—
MAY													
11...	—	.9	—	—	20	—	—	—	—	26	—	2.5	—
26...	<.20	1.4	48	<.06	18	<.04	<.8	.170	1.1	14	<.08	1.1	1.3
JUN													
08...	—	.9	—	—	23	—	—	—	—	29	—	2.6	—
22...	—	1.0	—	—	25	—	—	—	—	61	—	3.7	—
JUL													
07...	—	1.4	—	—	28	—	—	—	—	11	—	5.7	—
21...	E.16	1.5	53	<.06	28	<.04	<.8	.315	4.3	E5	.27	6.1	11.1
AUG													
17...	E.17	2.0	47	<.06	30	<.04	<.8	.317	1.6	E5	<.08	5.9	3.6
SEP													
02...	—	—	—	—	—	—	—	—	—	—	—	—	—

**SURFACE-WATER QUALITY, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004--Continued**

Date	Molyb- denum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selen- ium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Stront- ium, water, fltrd, ug/L (01080)	Vanad- ium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	2,6-Di- ethyl- aniline water fltrd 0.7u GF (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto- chlor, water, fltrd, ug/L (49260)	Ala- chlor, water, fltrd, ug/L (46342)	alpha- HCH, water, fltrd, ug/L (34253)	alpha- HCH-d6, surrog, wat flt 0.7u GF percent recovry (91065)
OCT													
20...	1.4	9.84	.4	<.2	80.4	2.2	38.0	<.006	<.006	<.006	<.004	<.005	95.6
NOV													
19...	—	—	E.4	—	77.9	2.0	—	<.006	E.008	E.005	<.005	<.005	82.6
FEB													
26...	—	—	.5	—	76.3	2.1	—	<.006	E.024	.013	<.005	<.005	102
MAR													
23...	.8	1.73	E.4	<.2	73.0	1.2	2.5	<.006	E.021	.015	<.005	<.005	95.4
APR													
22...	—	—	E.3	—	63.6	1.7	—	<.006	E.020	.027	<.005	<.005	106

UPPER MISSISSIPPI RIVER BASIN  
**05420500 Mississippi River at Clinton, IA--Continued**

MAY													
11...	---	---	E.3	---	59.8	1.8	---	<.006	E.021	.131	<.005	<.005	89.3
26...	.7	1.23	E.4	<.2	56.0	2.2	1.3	<.006	E.178	2.80	.048	<.005	98.6
JUN													
08...	---	---	E.2	---	63.5	2.1	---	<.006	E.040	.196	.015	<.005	96.3
22...	---	---	.4	---	69.5	1.8	---	<.006	E.059	.171	.012	<.005	93.3
JUL													
07...	---	---	.7	---	106	2.3	---	<.006	E.053	.073	.006	<.005	96.9
21...	1.5	1.99	.9	<.2	111	2.8	2.1	<.006	E.050	.024	<.005	<.005	96.8
AUG													
17...	1.6	1.91	.7	<.2	105	3.3	E.4	<.006	E.042	.011	<.005	<.005	91.3
SEP													
02...	---	---	---	---	---	---	---	<.006	E.047	.008	<.005	<.005	99.3

**SURFACE-WATER QUALITY, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004--Continued**

Date	Atra- zine, water, fltrd, ug/L (39632)	Azin- phos- methyl, water, fltrd 0.7u GF ug/L (82686)	Ben- flur- alin, water, fltrd 0.7u GF ug/L (82673)	Butyl- ate, water, fltrd, ug/L (04028)	Car- baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo- furan, water, fltrd 0.7u GF ug/L (82674)	Chlor- pyrifos water, fltrd, ug/L (38933)	cis- Per- methrin water fltrd 0.7u GF ug/L (82687)	Cyana- zine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazi- non, water, fltrd, ug/L (39572)	Diazi- non-d10 surrog. wat flt 0.7u GF percent recovry (91063)	Diel- drin, water, fltrd, ug/L (39381)
OCT													
20...	E.006	<.050	<.010	<.002	E.006	<.020	<.005	<.006	<.018	<.003	E.003	107	<.005
NOV													
19...	.032	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	115	<.009
FEB													
26...	.053	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	113	<.009
MAR													
23...	.044	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	107	<.009
APR													
22...	.061	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	109	<.009
MAY													
11...	.187	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	111	<.009
26...	4.81	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	101	<.009
JUN													
08...	.485	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	114	<.009
22...	1.04	<.050	<.010	<.004	<.041	E.037	<.005	<.006	<.018	<.003	E.004	111	<.009
JUL													
07...	.826	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	110	<.009
21...	.440	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	108	<.009
AUG													
17...	.252	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	104	<.009
SEP													
02...	.171	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	124	<.009

**SURFACE-WATER QUALITY, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004--Continued**

Date	Disul- foton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal- flur- alin, water, fltrd 0.7u GF ug/L (82663)	Etho- prop, water, fltrd 0.7u GF ug/L (82672)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala- thion, water, fltrd, ug/L (39532)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)
OCT													
20...	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.006	<.013	<.006	<.002	<.007
NOV													
19...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	E.011	<.006	<.003	<.007
FEB													
26...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.025	<.006	<.003	<.007
MAR													
23...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.096	<.006	<.003	<.007



UPPER MISSISSIPPI RIVER BASIN  
05420500 Mississippi River at Clinton, IA--Continued

125

APR													
22...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.053	<.006	<.003	<.007
MAY													
11...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.057	<.006	<.003	<.007
26...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	1.21	.012	<.003	<.007
JUN													
08...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.220	E.005	<.003	<.007
22...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.305	<.006	<.003	<.007
JUL													
07...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.167	<.006	<.003	<.007
21...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.060	<.006	<.003	<.007
AUG													
17...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.027	<.006	<.003	<.007
SEP													
02...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.020	<.006	<.003	<.007

SURFACE-WATER QUALITY, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004--Continued

Date	p,p'- DDE, water, fltrd, ug/L (34653)	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prome- ton, water, fltrd, ug/L (04037)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)
OCT													
20...	<.003	<.010	<.004	<.022	<.011	E.01	<.004	<.010	<.011	<.02	.152	.03	<.034
NOV													
19...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.007	<.02	<.034
FEB													
26...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.009	<.02	<.034
MAR													
23...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.018	<.02	<.034
APR													
22...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	.009	<.02	<.034
MAY													
11...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	.006	<.02	<.034
26...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	.048	<.02	<.034
JUN													
08...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.016	<.02	<.034
22...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.021	<.02	<.034
JUL													
07...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.013	<.02	<.034
21...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.013	<.02	<.034
AUG													
17...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.016	<.02	<.034
SEP													
02...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.10	<.005	<.02	<.034

SURFACE-WATER QUALITY, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004--Continued

Date	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sedi- ment, sieve diametr percent <.063mm (70331)	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment dis- charge, tons/d (80155)
OCT								
20...	<.02	<.005	<.002	<.009	.91	98	18	957
NOV								
19...	<.02	<.010	<.002	<.009	--	98	26	2,130
FEB								
26...	<.02	<.010	<.002	<.009	--	--	26	2,360
MAR								

## UPPER MISSISSIPPI RIVER BASIN

**05420500 Mississippi River at Clinton, IA--Continued**

23...	<.02	<.010	<.002	<.009	.60	86	36	4,340
APR								
22...	<.02	<.010	<.002	<.009	---	46	3	461
MAY								
11...	<.02	<.010	<.002	<.009	---	---	32	4,160
26...	<.02	<.010	<.002	<.009	.52	100	529	204,000
JUN								
08...	<.02	<.010	<.002	<.009	---	98	122	40,800
22...	<.02	<.010	<.002	<.009	---	97	75	33,800
JUL								
07...	<.02	<.010	<.002	<.009	---	98	28	4,030
21...	<.02	<.010	<.002	<.009	2.18	99	19	2,920
AUG								
17...	<.02	<.010	<.002	<.009	1.84	92	63	5,340
SEP								
02...	<.02	<.010	<.002	<.009	---	92	27	2,010

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**LOCATION.**— Lat 42°36'33", long 89°04'14" (NAD of 1927), in NE 1/4 sec.28, T.2 N., R.12 E., Rock County, Hydrologic Unit 07090001, on right bank in Afton, 0.3 mi downstream from highway bridge and 1.1 mi upstream from Bass Creek.

**DRAINAGE AREA.**— 3,340 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: January 1914 to current year. Monthly discharge for January 1914 published in WSP 1308.

**REVISED RECORDS.**— WSP 1238: 1916(M), 1919(M), 1933, 1937–38, 1943. WDR WI–79–1: Drainage area.

**GAGE.**— Water–stage recorder and satellite telemeter. Datum of gage is 742.36 ft above NGVD of 1929. Prior to Aug. 23, 1932, a nonrecording gage 20 ft upstream, and Aug. 23, 1932, to Sept. 30, 1933, water–stage recorder, at same site at datum 1 ft higher.

**REMARKS.**— Diurnal fluctuation caused by powerplants above station.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 13,000 ft<sup>3</sup>/s, March 23 and 24, 1929, gage height, 11.81 ft, present datum; maximum gage height, 13.05 ft, February 5, 1916, present datum, backwater from ice; minimum daily discharge, 42 ft<sup>3</sup>/s, August 25 and 26, 1934.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are fair, and periods of discharge below 800 ft<sup>3</sup>/s, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	517	1100	2140	2260	e840	1910	4460	2860	9860	7910	2930	1750
2	599	1290	2100	2150	e840	2320	4420	2740	9820	7660	2830	1730
3	527	1540	2250	1860	e700	2400	4360	2650	9880	7530	2760	1690
4	467	2050	2260	1810	e650	2540	4330	2450	9910	7710	2950	1580
5	528	2230	2240	1670	e800	3140	4190	2360	9860	7680	2960	1520
6	505	2120	2270	1470	e790	3330	4060	2270	9790	7200	2870	1440
7	595	2090	2160	e1400	e780	3360	4080	2260	9630	7060	2800	1440
8	549	2410	2030	e1400	e750	3640	3980	1980	9380	6760	2660	1440
9	545	2320	2040	e1300	e650	4010	3890	1940	9310	6590	2600	1010
10	593	2150	2450	e1300	e660	4160	3800	2020	9300	6440	2510	1070
11	597	2090	2430	e1300	e960	4190	3710	2310	9410	6190	2620	1080
12	556	2040	2170	e1300	e1100	4240	3630	2570	9460	5960	2580	1020
13	597	1930	2170	e1300	e1000	4320	3510	2620	9340	5780	2520	1130
14	758	2260	2210	e1300	e900	4230	3400	2800	9400	5580	2200	1330
15	794	2140	2270	e1300	e900	4270	3290	2930	9470	5430	1650	1220
16	844	2110	2630	e1300	e900	4380	3140	2980	9470	5280	1680	1200
17	934	2000	2610	e1300	e900	4340	3200	3010	9730	5260	1620	1300
18	934	2130	2590	e1300	e880	4270	3050	3270	9700	5100	1750	1250
19	896	2310	2540	e1200	e890	4100	2660	3480	9550	4860	1670	1220
20	949	2100	2470	e1100	e910	4210	2910	3510	9420	4670	1570	1160
21	761	2330	2430	e1100	e980	4190	3030	3760	9350	4560	1370	914
22	899	2290	2260	e1100	e1100	4090	3010	5310	9360	4390	1350	868
23	837	2130	1960	e1100	1280	3960	3070	6340	9140	4410	1320	856
24	930	1870	1980	e1100	1490	3950	3080	7010	9060	4170	1140	758
25	972	1940	1950	e1100	1420	3930	3100	7080	8970	4000	1160	775
26	825	2050	1970	e1000	1610	4120	2970	7480	8810	3820	1330	1010
27	789	2310	1960	e900	1610	4300	2950	7930	8660	3600	1430	1000
28	1310	2270	1980	e790	1700	4240	2850	8320	8590	3430	1620	1050
29	1270	2200	2040	e800	1720	4210	2650	8550	8320	3280	1610	1040
30	1290	2180	2280	e830	----	4350	2790	8910	8090	3170	1540	957
31	1150	----	2290	e830	----	4500	----	9500	----	3080	1770	----

## ROCK RIVER BASIN

**05430500 Rock River at Afton, WI--Continued**

TOTAL	24317	61980	69130	39970	29710	119200	103570	133200	280040	168560	63370	35808
MEAN	784	2066	2230	1289	1024	3845	3452	4297	9335	5437	2044	1194
MAX	1310	2410	2630	2260	1720	4500	4460	9500	9910	7910	2960	1750
MIN	467	1100	1950	790	650	1910	2650	1940	8090	3080	1140	758
CFSM	0.23	0.62	0.67	0.39	0.31	1.15	1.03	1.29	2.79	1.63	0.61	0.36
IN.	0.27	0.69	0.77	0.45	0.33	1.33	1.15	1.48	3.12	1.88	0.71	0.40

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 – 2004, BY WATER YEAR (WY)**

MEAN	1393	1585	1481	1311	1554	3321	4069	2624	1930	1478	1145	1194
MAX	8219	5884	4395	3558	5647	8958	10010	7911	9335	5443	5376	5088
(WY)	1987	1986	1986	1960	1938	1918	1979	1973	2004	1993	1924	1938
MIN	254	397	383	275	327	610	1002	389	314	247	183	212
(WY)	1940	1964	1940	1959	1959	1940	1931	1958	1934	1934	1934	1939

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1914 – 2004**

ANNUAL TOTAL	466271		1128855			
ANNUAL MEAN	1277		3084		1927	
HIGHEST ANNUAL MEAN					3925	
LOWEST ANNUAL MEAN					557	
HIGHEST DAILY MEAN	3630	May 15	9910	Jun 4	13000	Mar 23 1929
LOWEST DAILY MEAN	335	Aug 27	467	Oct 4	42	Aug 25 1934
ANNUAL SEVEN-DAY MINIMUM	391	Sep 1	531	Oct 3	115	Aug 24 1934
MAXIMUM PEAK FLOW			9930	Jun 1	13000 A	Mar 23 1929
MAXIMUM PEAK STAGE			10.96	Jun 1	13.05 B	Feb 5 1916
ANNUAL RUNOFF (CFSM)	0.382		0.923		0.577	
ANNUAL RUNOFF (INCHES)	5.19		12.57		7.84	
10 PERCENT EXCEEDS	2410		7770		4070	
50 PERCENT EXCEEDS	960		2260		1360	
90 PERCENT EXCEEDS	528		852		486	

A – Gage height, 11.81 ft, present datum.

B – Present datum, backwater from ice.

**LOCATION.**— Lat 42°30'34", long 89°47'58" (NAD of 1927), in NE 1/4 SE 1/4 sec.32, T.1 N., R.6 E., Green County, Hydrologic Unit 07090003, on right bank about 400 ft downstream from highway bridge in Martintown, 0.3 mi upstream from Wisconsin-Illinois State line and 8.8 mi downstream from Skinner Creek.

**DRAINAGE AREA.**— 1,034 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: October 1939 to current year.

**REVISED RECORDS.**— WSP 1308: 1949–50(M). WDR WI–71–1: Drainage area.

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 757.83 ft above NGVD of 1929. Prior to Jan. 6, 1940, nonrecording gage at same site and datum. Auxiliary wire-weight gage 1.2 mi downstream, at same datum.

**REMARKS.**— Diurnal fluctuation at low flow caused by powerplant in Argyle, 28.2 mi upstream.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 15,100 ft<sup>3</sup>/s, July 1, 1969, gage height, 21.46 ft; no flow, December 14, 1939, result of regulation.

**REMARKS FOR CURRENT YEAR.**— Records good except those for periods of discharge above 2,000 ft<sup>3</sup>/s, which are fair, and estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	267	322	571	549	e370	1100	1250	632	2930	1130	868	682
2	265	346	547	519	e380	1070	1140	619	3010	1090	836	654
3	272	499	521	520	e400	1040	1060	609	3030	1090	813	642
4	274	1030	506	526	e400	923	1000	596	2880	1300	882	626
5	281	1470	509	464	e400	1410	949	584	2610	1330	1030	610
6	283	1660	516	e430	e400	1880	905	576	2230	1300	1030	604
7	286	1320	518	e470	e390	1870	875	572	1900	1320	885	599
8	284	855	508	e450	e390	1450	844	602	1690	1340	809	586
9	281	658	509	e440	e390	1120	820	649	1550	1240	789	580
10	278	571	743	e430	e390	966	790	659	1460	1170	781	585
11	274	536	1090	e420	e390	883	762	689	1540	1180	764	577
12	280	522	1010	e420	e390	816	737	719	2020	1200	747	568
13	288	505	744	e420	e390	762	715	714	2080	1190	736	560
14	316	484	955	e420	e390	735	700	707	2000	1130	718	551
15	332	469	1030	e420	e380	741	690	760	1870	1050	700	550
16	338	460	873	e410	e380	739	677	761	1760	998	687	606
17	326	455	722	e400	e380	702	677	680	2040	998	680	660
18	302	471	729	e400	e380	691	711	675	2190	1090	684	654
19	299	491	689	e400	e380	699	732	718	2200	1110	685	591
20	299	476	600	e400	e410	696	703	783	2040	1010	691	560
21	300	455	707	e390	e600	682	849	719	1800	1000	674	550
22	300	438	755	e380	e1000	662	917	1420	1700	1150	653	540
23	300	466	641	e370	e1600	639	888	2340	1600	1170	639	534
24	298	851	571	e370	e1800	665	794	2830	1500	1070	647	529
25	316	1250	546	e370	e1900	767	743	4140	1430	974	659	527
26	341	1030	735	e370	e1900	981	733	5380	1390	921	701	530
27	347	798	851	e370	e1800	1370	729	5320	1320	888	736	527
28	331	694	632	e380	e1600	1640	703	4570	1260	865	786	514
29	324	640	589	e380	1410	1630	668	3680	1220	837	819	514
30	326	602	651	e370	----	1540	647	3070	1180	862	766	523
31	325	----	604	e370	----	1410	----	2920	----	887	725	----

## ROCK RIVER BASIN

**05434500 Pecatonica River at Martintown, WI--Continued**

TOTAL	9333	20824	21172	13028	21390	32279	24408	49693	57430	33890	23620	17333
MEAN	301	694	683	420	738	1041	814	1603	1914	1093	762	578
MAX	347	1660	1090	549	1900	1880	1250	5380	3030	1340	1030	682
MIN	265	322	506	370	370	639	647	572	1180	837	639	514
CFSM	0.29	0.67	0.66	0.41	0.71	1.01	0.79	1.55	1.85	1.06	0.74	0.56
IN.	0.34	0.75	0.76	0.47	0.77	1.16	0.88	1.79	2.07	1.22	0.85	0.62

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 – 2004, BY WATER YEAR (WY)**

MEAN	538	590	520	579	802	1349	966	833	879	795	587	575
MAX	1226	2429	1492	2049	2512	3155	2943	3200	2804	5190	1752	1920
(WY)	1987	1962	1983	1960	1953	1950	1960	1973	2000	1993	1993	1965
MIN	187	211	162	147	182	259	328	234	233	181	167	166
(WY)	1957	1965	1959	1959	1959	1957	1957	1958	1965	1965	1958	1958

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1940 – 2004**

ANNUAL TOTAL	173784		324400			
ANNUAL MEAN	476		886		751	
HIGHEST ANNUAL MEAN					1720	
LOWEST ANNUAL MEAN					292	
HIGHEST DAILY MEAN	1660	Nov 6	5380	May 26	14600	Jul 1 1969
LOWEST DAILY MEAN	251	Sep 11	265	Oct 2	132	Nov 7 1949
ANNUAL SEVEN-DAY MINIMUM	255	Sep 6	275	Oct 1	140	Jan 18 1959
MAXIMUM PEAK FLOW			5530	May 26	15100	Jul 1 1969
MAXIMUM PEAK STAGE			16.41	May 26	21.46	Jul 1 1969
INSTANTANEOUS LOW FLOW					0.00	Dec 14 1939
ANNUAL RUNOFF (CFSM)	0.460		0.857		0.726	
ANNUAL RUNOFF (INCHES)	6.25		11.67		9.86	
10 PERCENT EXCEEDS	786		1630		1330	
50 PERCENT EXCEEDS	430		691		540	
90 PERCENT EXCEEDS	280		370		261	

**LOCATION.**— Lat 42°18'10", long 89°37'10" (NAD of 1927), in SE1/4 sec.30, T.27 N., R.8 E., Stephenson County, Hydrologic Unit 07090003, on right bank on property of Commonwealth Edison Company in Freeport, 0.3 mi upstream from Stephenson Street Bridge, 5 mi upstream from Yellow Creek, and at mile 61.9.

**DRAINAGE AREA.**— 1,326 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: September 1914 to current year.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–91.

**REVISED RECORDS.**— WSP 1175: 1944, 1948. WSP 1508: 1915(M), 1917(M), 1921(M), 1924(M), 1928(M), 1930(M), 1935–37. WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, and U.S. Army Corps of Engineers satellite telemeter and rain gage. Datum of gage is 743.18 ft above NGVD of 1929. Prior to Jan. 15, 1935, nonrecording gage at site 0.9 mi downstream at datum 4.2 ft lower. July 13, 1943, to Aug. 25, 1982, auxiliary nonrecording gage read once daily 0.9 mi down stream.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 18,400 ft<sup>3</sup>/s, Mar. 16, 1929, gage height, 19.76 ft, site and datum then in use; minimum, 82 ft<sup>3</sup>/s, Dec. 11, 1957, result of freezeup.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	321	388	665	688	e360	1820	1780	818	3710	1260	1120	848
2	309	437	621	630	e360	1540	1550	801	3330	1190	1070	800
3	310	579	586	590	e390	1390	1360	780	3130	1170	1050	765
4	318	948	558	573	e410	1280	1250	763	3060	1450	1120	744
5	322	1480	544	539	e430	1940	1170	751	2990	1600	1170	723
6	329	1700	544	455	450	2500	1110	735	2840	1540	1240	709
7	334	1760	545	497	447	2540	1060	730	2620	1460	1190	703
8	336	1490	547	e520	445	2360	1020	719	2370	1450	1070	688
9	335	1070	555	e520	448	1880	989	748	2090	1410	995	671
10	331	798	944	e510	451	1420	956	778	1880	1330	961	663
11	327	664	1460	e500	452	1190	925	803	1930	1270	937	663
12	321	608	1530	e490	456	1060	895	828	2300	1280	914	653
13	333	574	1210	e480	465	983	869	854	2440	1270	889	642
14	360	545	917	e470	464	931	850	862	2390	1230	868	631
15	388	523	e900	e450	463	897	832	870	2300	1150	844	628
16	398	503	e940	e430	454	883	820	889	2190	1070	827	676
17	398	490	e930	e420	442	875	815	874	2480	1050	822	710
18	388	506	e920	e410	430	855	814	894	2610	1040	813	738
19	368	541	932	e400	426	840	834	913	2560	1090	810	718
20	363	549	848	e390	457	839	855	921	2480	1080	802	667
21	363	525	760	e390	712	836	985	939	2390	1100	796	631
22	363	493	730	e390	1120	819	1130	1520	2280	1320	775	614
23	363	492	e700	e400	1720	799	1100	2450	2120	1470	754	605
24	367	591	e640	e400	2170	836	1050	2670	1960	1430	764	596
25	378	1010	e580	e390	2260	981	990	2710	1820	1310	793	588
26	391	1300	560	e380	2180	1230	946	2950	1680	1200	796	583
27	406	1150	558	e380	2100	1610	914	3550	1570	1130	856	584
28	414	928	782	e370	2020	1820	890	4450	1480	1080	894	579
29	402	793	777	e360	1950	2040	863	4630	1390	1050	977	566
30	392	717	700	e360	—	2070	832	4370	1320	1050	968	566

ROCK RIVER BASIN  
**05435500 Pecatonica River at Freeport, IL---Continued**

<b>31</b>	391	---	722	e360	---	1960	---	4100	---	1160	905	---
TOTAL	11119	24152	24205	14142	24932	43024	30454	50670	69710	38690	28790	19952
MEAN	359	805	781	456	860	1388	1015	1635	2324	1248	929	665
MAX	414	1760	1530	688	2260	2540	1780	4630	3710	1600	1240	848
MIN	309	388	544	360	360	799	814	719	1320	1040	754	566
CFSM	0.27	0.61	0.59	0.34	0.65	1.05	0.77	1.23	1.75	0.94	0.70	0.50
IN.	0.31	0.68	0.68	0.40	0.70	1.21	0.85	1.42	1.96	1.09	0.81	0.56

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 – 2004, BY WATER YEAR (WY)**

MEAN	696	749	686	748	1114	1736	1215	1019	1053	910	718	752
MAX	2654	2773	1807	2817	3992	4915	3539	3931	3742	6423	2279	3011
(WY)	1928	1962	1983	1973	1938	1929	1993	1973	2000	1993	1993	1938
MIN	228	258	201	163	282	356	396	232	266	211	233	218
(WY)	1965	1965	1959	1959	1964	1957	1957	1934	1934	1936	1934	1958

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1914 – 2004**

ANNUAL TOTAL	213568		379840			
ANNUAL MEAN	585		1038		948	
HIGHEST ANNUAL MEAN					2452	
LOWEST ANNUAL MEAN					373	
HIGHEST DAILY MEAN	1930	May 15	4630	May 29	17000	Mar 28 1916
LOWEST DAILY MEAN	290	Sep 11	309	Oct 2	118	Aug 4 1936
ANNUAL SEVEN-DAY MINIMUM	295	Jan 18	320	Oct 1	150	Dec 18 1964
MAXIMUM PEAK FLOW			4690	May 29	18400	Mar 16 1929
MAXIMUM PEAK STAGE			14.08	May 29	19.76 A	Mar 16 1929
INSTANTANEOUS LOW FLOW			307	Oct 2,3	82 B	Dec 11 1957
ANNUAL RUNOFF (CFSM)	0.441		0.783		0.715	
ANNUAL RUNOFF (INCHES)	5.99		10.66		9.72	
10 PERCENT EXCEEDS	1020		2090		1770	
50 PERCENT EXCEEDS	524		835		670	
90 PERCENT EXCEEDS	318		390		317	

A – Site and datum then in use.

B – Result of freezeup.



**LOCATION.**— Lat 42°36'42", long 89°23'53" (NAD of 1927), in SW 1/4 sec.26, T.2 N., R.9 E., Green County, Hydrologic Unit 07090004, on left bank at downstream side of highway bridge, 1.2 mi southwest of Brodhead, and 1.9 mi upstream from Sylvester Creek.

**DRAINAGE AREA.**— 523 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: January 1914 to current year. Monthly discharge for January and February 1914 published in WSP 1308.

**REVISED RECORDS.**— WSP 1238: 1914–16, 1918, 1922, 1927, 1933. WSP 1508: 1916–17(M), 1919(M), 1920, 1921(M), 1927–28(M), 1930(M), 1931, 1936(M), 1943(M). WDR WI-73-1: Drainage area.

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 768.14 ft above NGVD of 1929. Prior to Oct. 17, 1938, nonrecording gage 20 ft upstream at same datum.

**REMARKS.**— Some regulation from dam and non-operational powerplant upstream.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 14,800 ft<sup>3</sup>/s. September 13, 1915, from rating curve extended above 7,500 ft<sup>3</sup>/s, gage height, 11.40 feet, from floodmarks; minimum discharge, 35 ft<sup>3</sup>/s, September 19, 1959.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	164	198	332	314	e200	453	551	323	1540	449	454	331
2	162	233	320	310	e200	501	492	319	1630	421	409	319
3	169	347	309	311	e210	536	453	312	1360	434	392	320
4	173	670	306	306	e220	496	422	305	1040	661	503	317
5	176	879	310	e260	e220	747	402	296	817	810	546	304
6	183	985	309	e300	e220	945	387	293	699	853	520	300
7	199	1000	305	e280	e220	1060	375	290	640	802	443	303
8	175	760	304	e260	e220	976	368	298	603	675	378	298
9	173	482	308	e250	e220	656	359	299	567	592	381	291
10	170	395	442	e240	e220	499	352	321	560	599	374	286
11	169	361	646	e230	e220	455	336	392	627	596	365	286
12	171	355	646	e230	e220	420	332	417	769	536	355	281
13	192	338	610	e230	e220	392	329	393	861	492	349	275
14	198	325	515	e230	e220	389	324	376	901	460	341	269
15	203	314	497	e230	e220	378	319	393	893	434	336	278
16	203	310	466	e230	e210	369	313	399	743	457	329	296
17	191	302	406	e230	e210	363	324	364	756	540	329	303
18	187	318	380	e220	e220	363	355	368	784	573	332	293
19	186	357	365	e220	e230	361	353	410	765	514	331	279
20	186	373	334	e210	e240	364	342	417	670	453	328	270
21	185	344	339	e210	e270	355	464	393	597	432	322	264
22	184	323	378	e210	e350	349	515	1090	612	469	315	260
23	183	339	341	e210	e500	340	491	1890	603	493	309	257
24	186	407	330	e210	e600	351	414	3230	560	450	309	255
25	205	512	292	e210	e680	368	394	4080	539	419	314	251
26	225	527	306	e210	e750	447	386	2860	532	401	326	250
27	218	452	339	e210	e650	598	374	1950	506	387	334	248
28	209	392	339	e210	e550	755	354	1390	480	372	359	246
29	203	359	337	e200	464	839	337	1060	496	358	384	244
30	203	344	336	e200	---	737	325	969	467	396	373	245
31	202	---	327	e200	---	639	---	1250	---	477	352	---

## ROCK RIVER BASIN

**05436500 Sugar Creek near Brodhead, WI--Continued**

TOTAL	5833	13301	11774	7371	9174	16501	11542	27147	22617	16005	11492	8419
MEAN	188	443	380	238	316	532	385	876	754	516	371	281
MAX	225	1000	646	314	750	1060	551	4080	1630	853	546	331
MIN	162	198	292	200	200	340	313	290	467	358	309	244
CFSM	0.36	0.85	0.73	0.45	0.60	1.02	0.74	1.67	1.44	0.99	0.71	0.54
IN.	0.41	0.95	0.84	0.52	0.65	1.17	0.82	1.93	1.61	1.14	0.82	0.60

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 – 2004, BY WATER YEAR (WY)**

MEAN	286	309	273	293	428	651	462	381	380	305	261	297
MAX	788	836	597	1168	1690	1698	1159	1368	1320	1248	694	1579
(WY)	1928	1962	1929	1916	1938	1929	1993	1973	2000	1993	1924	1938
MIN	126	127	120	89.4	127	181	198	140	113	117	105	106
(WY)	1965	1965	1956	1956	1959	1934	1938	1934	1934	1958	1934	1958

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1914 – 2004**

ANNUAL TOTAL	97065		161176			
ANNUAL MEAN	266		440		360	
HIGHEST ANNUAL MEAN					694	
LOWEST ANNUAL MEAN					172	
HIGHEST DAILY MEAN	1000	Nov 7	4080	May 25	10800	Mar 14 1929
LOWEST DAILY MEAN	112	Sep 8	162	Oct 2	51	Jun 13 1934
ANNUAL SEVEN-DAY MINIMUM	121	Sep 6	175	Oct 1	71	Jun 28 1934
MAXIMUM PEAK FLOW			4360	May 25	14800	A Sep 13 1915
MAXIMUM PEAK STAGE			8.30	May 25	11.40	B Sep 13 1915
INSTANTANEOUS LOW FLOW					35	Sep 19 1959
ANNUAL RUNOFF (CFSM)	0.508		0.842		0.689	
ANNUAL RUNOFF (INCHES)	6.90		11.46		9.36	
10 PERCENT EXCEEDS	406		744		587	
50 PERCENT EXCEEDS	232		350		264	
90 PERCENT EXCEEDS	163		210		151	

A – From rating curve extended above 7,500 ft<sup>3</sup>/s.

B – From floodmarks.

**LOCATION.**— Lat 42°26'17", long 89°10'29", (NAD of 1927) in SE1/4SW1/4 sec.12, T.28 N., R.11 E., Winnebago County, Hydrologic Unit 7090003, on left bank on upstream side of bridge, next to the Rivers Edge Campsite, 1.5 mi downstream from Sugar Creek, 7 mi upstream from confluence with Rock River, and at mile 7.1.

**DRAINAGE AREA.**— 2,556 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: Oct. 1939 to Sept. 1958 (published as "at Shirland"), July 2002 to current year.

STAGE: July 2002 to current year.

PARTIAL RECORD: Annual maximum, water years 1959 to 1971 (published as "at Shirland").

**GAGE.**— Water-stage recorder, acoustic-velocity meter, phone telemeter and crest-stage gage. Datum of gage is 711.79 ft above NGVD of 1929. October 1939 to September 1971, nonrecording gage at site 1.5 miles upstream "at Shirland" (05437000) at same datum. Records considered equivalent.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 16,600 ft<sup>3</sup>/s, April 4, 1959, gage-height, 17.45 ft at site then in use; minimum daily discharge, 335 ft<sup>3</sup>/s, Sept. 7, 14, 15, 1958.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	592	683	1360	1560	e800	2980	3660	1840	6200	2630	1990	1440
2	554	730	1240	1550	e820	2970	3400	1790	6670	2530	1910	1350
3	533	909	1170	1530	e860	2790	3070	1710	6810	2450	1820	1310
4	530	1270	1140	1500	e920	2610	2820	1680	6840	2770	1870	1270
5	561	1630	1200	1470	e980	3000	2580	1610	6460	3100	2050	1250
6	584	2000	1150	795	e1020	3710	2390	1570	6210	3210	2100	1230
7	616	2220	1120	814	e1040	4050	2250	1530	5750	3260	2090	1230
8	678	2230	1130	e980	e1010	4050	2160	1530	5260	3240	2030	1230
9	669	2140	1200	e1130	e1000	3960	2070	1510	4830	3120	1870	1220
10	678	1740	1680	e1150	e1000	3540	2010	1520	4590	2990	1820	1190
11	671	1320	2500	e1120	e1000	3030	1940	1600	4470	2810	1780	1170
12	635	1410	2900	e1090	e1020	2600	1870	1730	4890	2690	1730	1170
13	613	1360	2680	e1030	e1010	2320	1830	1850	4840	2600	1710	1150
14	629	1210	2250	e1000	e1000	2170	1780	1930	4730	2480	1690	1150
15	653	1160	2030	e960	e990	2050	1750	1970	4590	2410	1630	1130
16	656	1160	1920	e920	e970	1990	1720	1950	4580	2300	1620	1150
17	660	1150	1860	e900	e940	1950	1690	1940	4640	2310	1610	1160
18	649	1260	e1880	e870	e940	1910	1700	1980	4510	2290	1590	1240
19	667	1300	1980	e850	e930	1920	1710	2020	4450	2260	1540	1250
20	666	1320	e1800	e840	e1100	1950	1730	2080	4370	2200	1530	1210
21	672	1340	1640	e840	1410	1940	1920	2140	4370	2170	1480	1100
22	673	1280	e1600	e850	1720	1910	2190	2670	4320	2250	1490	1060
23	682	1270	e1550	e880	2490	1920	2400	3640	4240	2360	1410	1030
24	702	1240	e1400	e870	3220	1950	2430	4350	4130	2380	1380	971
25	738	1300	1230	e850	3500	2130	2360	5230	3940	2310	1350	1010
26	746	1610	1280	e830	3680	2520	2250	6030	3700	2180	1380	990
27	764	1940	1420	e810	3740	3040	2160	6590	3440	2090	1410	943
28	785	1880	1630	e800	3800	3380	2080	6280	3220	2010	1460	914
29	721	1670	1670	e790	3450	3420	2000	5890	2990	1940	1510	945
30	677	1470	1670	e780	---	3600	1890	5930	2810	1920	1540	963
31	697	---	1610	e790	---	3770	---	5950	---	1940	1520	---
TOTAL	20351	43202	50890	31149	46360	85130	65810	90040	142850	77200	51910	34426
MEAN	656	1440	1642	1005	1599	2746	2194	2905	4762	2490	1675	1148

**05437050 Pecatonica River nr Shirland, IL--Continued**

MAX	785	2230	2900	1560	3800	4050	3660	6590	6840	3260	2100	1440
MIN	530	683	1120	780	800	1910	1690	1510	2810	1920	1350	914

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 – 2004, BY WATER YEAR (WY)**

MEAN	1018	1081	983	1262	1652	3295	1837	1628	1862	1485	1210	1027
MAX	2598	3142	1797	4956	4463	7679	4550	3254	4762	3901	2955	2003
(WY)	1952	1952	1943	1946	1953	1948	1952	1948	2004	1951	1942	1942
MIN	476	545	559	479	650	789	940	604	723	639	442	394
(WY)	1957	1950	1957	1940	1940	1954	1956	1958	1958	1941	1958	1958

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1940 – 2004**

ANNUAL TOTAL	423311		739318			
ANNUAL MEAN	1160		2020		1523	
HIGHEST ANNUAL MEAN					2825	
LOWEST ANNUAL MEAN					749	
HIGHEST DAILY MEAN	3920	May 16	6840	Jun 4	15200	Jan 8 1946
LOWEST DAILY MEAN	530	Oct 4	530	Oct 4	335	A
ANNUAL SEVEN-DAY MINIMUM	565	Sep 30	567	Oct 1	366	Sep 10 1958
MAXIMUM PEAK FLOW			7420	B Jun 4	16600	Apr 4 1959
MAXIMUM PEAK STAGE			12.79	C Jun 3	17.45	D Apr 4 1959
INSTANTANEOUS LOW FLOW			455	Oct 3		
ANNUAL RUNOFF (CFSM)	0.454		0.790		0.596	
ANNUAL RUNOFF (INCHES)	6.16		10.76		8.10	
10 PERCENT EXCEEDS	1890		3840		2920	
50 PERCENT EXCEEDS	1100		1690		1010	
90 PERCENT EXCEEDS	653		794		580	

A – Sept. 7, 14, 15, 1958.

B – Gage height, 12.75 ft.

C – Discharge, 6,760 ft<sup>3</sup>/s.

D – Site then in use.

**LOCATION.**— Lat 42°26'55", long 89°04'11" (NAD of 1927), in SW1/4NE1/4 sec.24, T.46 N., R.1 E., Winnebago County, Hydrologic Unit 07090005, on right bank 750 ft downstream from State Highway 75 in Rockton, 1.0 mi downstream from Pecatonica River, and at mile 156.1.

**DRAINAGE AREA.**— 6,363 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: June 1903 to July 1906, October 1906 to November 1907, January 1908 to March 1909, July 1914 to September 1919, October 1939 to current year. Published as "below mouth of Pecatonica River at Rockton" 1903–9; as "at Rockford" 1914–19. Monthly discharge only for some periods for 1903–1950, published in WSP 1308.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–91.

**REVISED RECORDS.**— WSP 325: 1903–9. WSP 895: 1904(M). WSP 1508: 1915, 1916–17(M). WDR IL–75–1: Drainage area. WDR IL–97–1: 1996 (Dec. 10–23).

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter and raingage, and crest–stage gage. Datum of gage is 707.94 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1906, nonrecording gage at site 800 ft upstream at datum about 1 ft higher. Oct. 1, 1906, to Mar. 31, 1909, nonrecording gage at site 800 ft upstream at datum about 2 ft higher. July 30, 1914, to Apr. 30, 1919, nonrecording gage at site at Rockford about 21 mi downstream, at different datum. Oct. 1, 1939, to Aug. 10, 1973, at site 800 ft upstream at same datum.

**REMARKS.**— Low flow regulated by power–plant upstream from station.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 32,500 ft<sup>3</sup>/s, Mar. 30, 1916, gage height, 13.06 ft, site and datum then in use; minimum daily, 501 ft<sup>3</sup>/s, Sept. 14, 1958.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Flood in February 1937 reached a stage of 14.6 ft (backwater from ice), from floodmark.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1050	1820	3750	3830	e1900	5530	9140	4850	18000	11900	5630	3930
2	1370	2170	3600	3820	e1900	5670	8830	4730	18200	11500	5660	3820
3	1180	2810	3620	3400	e1900	5270	8420	4560	18500	11200	5460	3740
4	1140	3790	3710	3250	e1900	5170	7920	4330	18600	11700	5870	3510
5	1150	4450	3630	3030	1980	6500	7450	4140	18300	12300	5850	3390
6	1150	4680	3650	1870	2620	7950	7040	4060	17900	11900	5830	3330
7	1200	4860	3580	3000	2490	8020	6830	3990	17300	11700	5760	3170
8	1260	5190	3520	2850	2430	8410	6590	3710	16600	11400	5520	3280
9	1200	5280	3380	2720	2390	8790	6350	3580	16000	11000	5320	2740
10	1220	4730	4340	e2700	2360	8780	6130	3700	15600	10700	5020	2670
11	1200	4130	5280	e2700	2340	8310	5910	4030	15600	10300	5060	2710
12	1200	3780	5260	e2600	2180	7480	5760	4530	16700	9930	4940	2530
13	1030	3350	e4500	e2600	2120	7130	5590	4740	16800	9620	4930	2690
14	1450	3800	e4100	e2500	2040	6880	5400	5130	16300	9250	4620	2860
15	1540	3630	e4200	e2400	1980	6570	5240	5360	16100	8920	3790	2740
16	1550	3510	e4200	e2300	2010	6590	5070	5340	15800	8630	3760	2730
17	1620	3440	e4000	e2200	2020	6570	5090	5350	16000	8620	3700	2830
18	1720	3430	e3900	e2200	1960	6420	4980	5640	16300	8520	3830	2840
19	1660	3790	e3800	e2100	1950	6140	4610	5890	15900	8220	3700	2730
20	1660	3540	e3900	e2100	2000	6260	4800	5980	15600	8000	3680	2700
21	1590	3810	4190	e2000	2080	6160	5380	6260	15500	7900	3270	2450
22	1570	3810	4190	2090	2280	6040	5520	8990	15600	7790	3340	2250

## ROCK RIVER BASIN

**05437500 Rock River at Rockton, IL---Continued**

<b>23</b>	1590	3690	3820	e2100	3030	5850	5790	11900	15200	7820	3220	2220
<b>24</b>	1600	3330	3690	e2100	3970	5980	5780	13100	14900	7580	3030	2100
<b>25</b>	1660	3280	3330	e2100	4170	6140	5740	13500	14700	7380	2890	1980
<b>26</b>	1690	3700	3320	e2100	4440	7050	5440	14400	14200	7000	3260	2250
<b>27</b>	1460	4340	3450	e2000	4570	8100	5280	15700	13700	6680	3420	2260
<b>28</b>	2020	4390	3660	e2000	4830	8430	5060	16200	13300	6340	3720	2250
<b>29</b>	2070	4120	3670	e1900	5290	8810	4800	16200	12800	6040	3810	2260
<b>30</b>	2090	3890	3960	e1900	---	9010	4780	16400	12300	5840	3790	2190
<b>31</b>	2060	---	3950	e1900	---	9240	---	17200	---	5730	4040	---
TOTAL	45950	114540	121150	76360	77130	219250	180720	243490	478300	281410	135720	83150
MEAN	1482	3818	3908	2463	2660	7073	6024	7855	15940	9078	4378	2772
MAX	2090	5280	5280	3830	5290	9240	9140	17200	18600	12300	5870	3930
MIN	1030	1820	3320	1870	1900	5170	4610	3580	12300	5730	2890	1980
CFSM	0.23	0.60	0.61	0.39	0.42	1.11	0.95	1.23	2.51	1.43	0.69	0.44
IN.	0.27	0.67	0.71	0.45	0.45	1.28	1.06	1.42	2.80	1.65	0.79	0.49

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 – 2004, BY WATER YEAR (WY)**

MEAN	3113	3529	3296	3199	3859	7192	7279	5426	4731	3770	2909	2878
MAX	13340	11320	9049	9432	8365	13920	18530	17770	16960	17000	9039	7753
(WY)	1987	1986	1983	1960	1997	1974	1993	1973	2000	1993	1993	1972
MIN	857	1100	1004	800	1000	1692	2476	1103	1248	1056	793	780
(WY)	1965	1940	1959	1940	1940	1954	1958	1958	1977	1965	1958	1958

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1940 – 2004**

ANNUAL TOTAL	1043806		2057170			
ANNUAL MEAN	2860		5621		4265	
HIGHEST ANNUAL MEAN					9484	
LOWEST ANNUAL MEAN					1568	
HIGHEST DAILY MEAN	7930	May 16	18600	Jun 4	29700	Mar 25 1975
LOWEST DAILY MEAN	741	Sep 8	1030	Oct 13	501	Sep 14 1958
ANNUAL SEVEN-DAY MINIMUM	850	Sep 6	1180	Oct 1	622	Oct 2 1958
MAXIMUM PEAK FLOW			18600	Jun 3	30000	Mar 25 1975
MAXIMUM PEAK STAGE			11.11	Jun 4	15.54	Mar 25 1975
INSTANTANEOUS LOW FLOW			708	Oct 13		
ANNUAL RUNOFF (CFSM)	0.449		0.883		0.670	
ANNUAL RUNOFF (INCHES)	6.10		12.03		9.11	
10 PERCENT EXCEEDS	4640		12900		8400	
50 PERCENT EXCEEDS	2600		4120		3240	
90 PERCENT EXCEEDS	1200		1940		1310	

ROCK RIVER BASIN  
**05437610 Rock River at Latham Park, Il**

139

**LOCATION.**— Lat 42°22'07", long 89°03'30", (NAD 1983) in SW1/4SW1/4 sec.18, T.45 N., R.2 E., Winnebago County, Hydrologic Unit 07090005, at bridge on Latham Park Road, 1.1 mi upstream from Willow Creek, 3.1 mi downstream from McDonald Creek, 9 mi upstream of Rockford dam, and at mile 146.1.

**DRAINAGE AREA.**— 6,476 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE

STAGE: July 2002 to current year.

PARTIAL RECORD: Miscellaneous discharge measurements, Water years 1927 and 2003.

**GAGE.**— Water—stage recorder and phone telemeter. Datum of gage is 700.00 ft above NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height, 6.28 ft, May 16, 2003, minimum, 3.02 ft, Aug. 22, Sept. 8, 2003.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 6.28 ft, May 16, minimum, 3.02 ft, Aug. 22, Sept. 8.

Gage height, feet, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.08	4.33	4.21	3.96	3.86	3.63	4.30	4.04	5.03	3.76	3.55	3.11
2	4.81	4.33	4.12	3.89	3.90	3.50	4.23	4.24	4.90	3.74	3.48	3.13
3	4.68	4.35	4.41	3.83	3.95	3.57	4.19	4.63	4.76	3.74	3.44	3.19
4	4.99	4.26	4.23	3.82	3.96	3.51	4.17	4.83	4.62	3.64	3.51	3.13
5	5.18	4.30	4.26	3.87	3.91	3.77	4.20	4.99	4.75	3.76	3.52	3.14
6	5.16	4.27	4.19	3.94	3.86	3.55	4.18	5.13	4.47	3.72	3.43	3.15
7	5.03	4.16	4.35	3.92	3.95	3.52	4.12	5.10	4.38	3.81	3.46	3.13
8	5.05	3.99	4.43	3.92	3.89	3.50	4.20	5.15	4.39	3.91	3.52	3.05
9	5.07	4.09	4.22	3.99	3.82	3.62	4.17	5.41	4.26	4.27	3.52	3.10
10	4.87	4.23	4.25	4.08	3.89	3.61	4.10	5.66	4.42	4.34	3.50	3.14
11	4.74	4.23	4.35	3.92	3.86	3.56	4.14	5.91	4.27	4.39	3.46	3.14
12	4.47	4.21	4.29	3.60	3.79	3.53	4.08	5.70	4.06	4.13	3.43	3.17
13	4.38	4.19	4.28	3.96	3.83	3.51	4.12	5.77	4.18	4.06	3.44	3.22
14	4.36	4.14	4.10	4.09	3.89	3.62	4.16	5.85	4.10	4.04	3.48	3.49
15	4.32	4.15	4.00	3.78	3.90	3.79	4.06	6.07	4.22	4.41	3.49	3.67
16	4.30	4.20	3.94	3.84	3.84	4.04	3.73	6.19	4.24	4.46	3.46	3.53
17	4.30	4.15	3.98	3.97	3.81	4.31	3.73	6.14	4.26	4.12	3.42	3.45
18	4.32	4.17	4.08	3.95	3.96	4.37	3.77	5.95	4.35	3.99	3.41	3.64
19	4.32	4.17	4.21	3.87	4.05	4.28	3.52	5.86	4.37	4.04	3.42	3.58
20	4.27	4.10	4.25	3.78	3.98	4.39	3.73	5.78	4.34	3.95	3.43	3.40
21	4.25	4.11	4.23	3.78	3.97	4.21	3.86	5.77	4.12	3.77	3.35	3.32
22	4.23	4.12	4.24	3.86	3.68	4.26	3.90	5.74	4.02	3.96	3.14	3.42
23	4.24	4.07	4.13	3.78	3.68	4.23	3.96	5.65	4.04	3.94	3.39	3.44
24	4.30	4.11	3.93	3.75	3.70	4.22	4.04	5.56	3.91	3.86	3.28	3.26
25	4.41	4.06	3.84	3.80	3.77	4.19	4.15	5.41	3.66	3.83	3.13	3.29
26	4.25	4.04	3.95	3.81	3.80	4.38	4.06	5.26	4.04	3.74	3.28	3.37
27	4.18	3.96	3.97	3.77	3.85	4.25	4.19	5.19	3.67	3.60	3.17	3.28
28	4.24	4.03	3.96	3.77	3.74	4.27	4.02	5.13	3.71	3.58	3.10	3.25
29	4.28	4.07	4.04	3.77	---	4.33	3.89	5.05	3.78	3.56	3.14	3.34
30	4.44	4.01	4.10	3.81	---	4.33	3.80	5.04	3.77	3.54	3.19	3.31
31	4.37	---	4.05	3.84	---	4.36	---	5.18	---	3.54	3.12	---
MEAN	4.51	4.15	4.15	3.86	3.86	3.94	4.03	5.40	4.24	3.91	3.38	3.29
MAX	5.18	4.35	4.43	4.09	4.05	4.39	4.30	6.19	5.03	4.46	3.55	3.67
MIN	4.08	3.96	3.84	3.60	3.68	3.50	3.52	4.04	3.66	3.54	3.10	3.05

WTR YR 2003    MEAN 4.06    MAX 6.19    MIN 3.05

**DRAINAGE AREA.**— 6,476 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

STAGE: July 2002 to current year.

PARTIAL RECORD: Miscellaneous discharge measurements, water years 1927 and 2003 to current year.

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 700.00 ft above NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.—**

STAGE: Maximum gage height, 10.61 ft, June 4, 2004, minimum, 3.02 ft, Aug. 22, Sept. 8, 2003.

**EXTREMES FOR CURRENT YEAR.**—Maximum gage height, 10.61 ft, June 4, minimum, 3.09 ft, Oct. 5.

Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.21	3.67	4.66	4.62	3.73	5.50	6.73	5.17	10.34	7.93	5.34	4.68
2	3.34	3.85	4.57	4.62	3.73	5.45	6.60	5.13	10.44	7.76	5.36	4.61
3	3.34	4.05	4.54	4.42	3.76	5.29	6.44	5.06	10.53	7.62	5.25	4.56
4	3.28	4.50	4.60	4.24	3.70	5.23	6.29	5.02	10.59	7.82	5.40	4.46
5	3.25	4.74	4.56	4.23	3.60	5.77	6.16	4.92	10.55	8.12	5.35	4.39
6	3.27	4.82	4.58	3.84	3.84	6.22	6.03	4.89	10.40	8.04	5.40	4.37
7	3.31	4.90	4.57	3.61	4.14	6.32	5.93	4.82	10.17	7.94	5.37	4.24
8	3.32	5.01	4.53	4.13	4.01	6.42	5.85	4.77	9.89	7.81	5.30	4.31
9	3.33	5.10	4.44	4.27	4.04	6.52	5.79	4.68	9.62	7.62	5.25	4.08
10	3.29	4.94	4.89	4.32	4.05	6.57	5.71	4.72	9.45	7.50	5.11	3.99
11	3.33	4.76	5.21	4.35	4.04	6.44	5.64	4.86	9.43	7.32	5.17	4.00
12	3.31	4.67	5.25	4.37	4.01	6.17	5.58	5.04	10.14	7.15	5.12	3.96
13	3.23	4.45	5.07	4.25	3.91	6.07	5.52	5.04	10.03	7.03	5.05	4.02
14	3.38	4.62	5.04	4.11	3.92	6.03	5.48	5.17	9.78	6.88	5.02	4.08
15	3.50	4.53	4.99	4.06	3.82	5.87	5.44	5.31	9.66	6.75	4.67	4.10
16	3.49	4.51	5.13	4.08	3.82	5.89	5.37	5.32	9.58	6.63	4.65	4.02
17	3.53	4.49	5.12	4.01	3.91	5.89	5.30	5.32	9.62	6.59	4.64	4.09
18	3.61	4.47	4.96	3.91	3.94	5.85	5.33	5.42	9.77	6.59	4.65	4.11
19	3.58	4.60	4.91	4.01	3.86	5.78	5.18	5.52	9.62	6.48	4.62	4.08
20	3.60	4.59	5.07	3.82	3.75	5.80	5.14	5.56	9.49	6.36	4.62	4.05
21	3.52	4.56	5.69	3.96	3.73	5.75	5.41	5.59	9.45	6.31	4.39	3.97
22	3.47	4.62	5.08	3.71	3.76	5.74	5.40	6.46	9.49	6.27	4.43	3.81
23	3.50	4.66	4.64	3.68	4.13	5.65	5.57	7.78	9.36	6.22	4.32	3.80
24	3.51	4.55	4.52	3.80	4.60	5.74	5.55	8.30	9.21	6.17	4.29	3.76
25	3.55	4.38	4.36	3.81	4.78	5.78	5.58	8.51	9.09	6.08	4.16	3.65
26	3.57	4.56	4.32	3.87	4.86	6.02	5.46	8.77	8.89	5.92	4.36	3.73
27	3.49	4.82	4.40	3.89	4.97	6.31	5.38	9.31	8.68	5.80	4.47	3.83
28	3.66	4.83	4.52	3.72	5.09	6.46	5.36	9.60	8.50	5.67	4.57	3.78
29	3.82	4.79	4.53	3.64	5.26	6.60	5.28	9.61	8.32	5.54	4.64	3.82
30	3.80	4.72	4.68	3.50	---	6.64	5.13	9.68	8.13	5.44	4.64	3.81
31	3.80	---	4.70	3.53	---	6.73	---	10.00	---	5.38	4.70	---
MEAN	3.46	4.59	4.78	4.01	4.10	6.02	5.65	6.30	9.61	6.80	4.85	4.07
MAX	3.82	5.10	5.69	4.62	5.26	6.73	6.73	10.00	10.59	8.12	5.40	4.68
MIN	3.21	3.67	4.32	3.50	3.60	5.23	5.13	4.68	8.13	5.38	4.16	3.65

CAL YR 2003      MEAN 4.06      MAX 6.19      MIN 3.05



**05437610 Rock River at Latham Park, Il--Continued**

WTR YR 2004	MEAN 5.35	MAX 10.59	MIN 3.21
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**EXTREMES FOR CURRENT YEAR.**—Maximum gage height, 3.23 ft, May 11, minimum, 1.78 ft, Aug. 22, 31.

WTR YR 2003      MEAN 2.49      MAX 3.10      MIN 1.88

ROCK RIVER BASIN  
**05437641 Rock River at Auburn St at Rockford, IL**

143

**LOCATION.**— Lat 42°17'19", long 89°03'55", (NAD 1927) in SW1/4SW1/4 sec.13, T.44 N., R.1 E., Winnebago County, Hydrologic Unit 07090005, at bridge on Auburn St., 700 ft. downstream from Spring Creek, 2.25 mi upstream of Rockford dam, and at mile 139.0.

**DRAINAGE AREA.**— 6,528 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE

STAGE: August 2002 to current year.

**GAGE.**— Water—stage recorder and phone telemeter. Datum of gage is 700.00 ft above NGVD of 1929.

**REMARKS.**—Stages regulated by power plant 17 mi. upstream of gage.

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height, 4.84 ft, June 12, 2004; minimum, 1.65 ft, January 7, 2004.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 4.84 ft, June 12; minimum, 1.65 ft, January 7.

Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.03	2.39	2.92	2.76	1.98	3.15	3.27	2.97	4.51	3.60	3.08	2.96
2	2.10	2.52	2.87	2.77	1.97	2.96	3.21	2.95	4.52	3.54	3.10	2.92
3	2.11	2.66	2.85	2.66	1.98	2.93	3.18	2.95	4.55	3.48	3.04	2.88
4	2.08	2.94	2.89	2.55	1.94	2.92	3.14	2.95	4.75	3.67	3.08	2.82
5	2.06	3.04	2.88	2.54	1.91	3.10	3.13	2.94	4.75	3.86	3.05	2.77
6	2.07	3.03	2.88	1.99	2.00	3.16	3.10	2.97	4.63	3.82	3.10	2.75
7	2.10	3.02	2.86	1.83	2.18	3.16	3.08	2.95	4.50	3.77	3.08	2.67
8	2.11	3.04	2.84	2.23	2.12	3.19	3.07	2.94	4.35	3.72	3.07	2.73
9	2.13	3.02	2.81	2.34	2.16	3.16	3.08	2.90	4.19	3.63	3.06	2.59
10	2.10	2.94	3.05	2.38	2.17	3.16	3.06	2.95	4.12	3.60	3.02	2.53
11	2.11	2.94	3.10	2.41	2.16	3.11	3.05	3.03	4.11	3.55	3.10	2.54
12	2.11	2.94	3.07	2.43	2.14	3.08	3.04	3.06	4.54	3.50	3.07	2.52
13	2.04	2.83	2.89	2.38	2.07	3.06	3.04	2.99	4.29	3.47	3.02	2.55
14	2.17	2.91	2.86	2.38	2.07	3.08	3.06	3.01	4.19	3.43	3.04	2.59
15	2.25	2.87	2.84	2.29	2.00	3.05	3.07	3.06	4.13	3.40	2.92	2.60
16	2.25	2.86	2.99	2.35	1.99	3.07	3.08	3.05	4.11	3.38	2.93	2.57
17	2.27	2.83	3.01	2.37	2.04	3.08	3.03	3.03	4.14	3.35	2.94	2.62
18	2.32	2.84	2.93	2.29	2.03	3.06	3.02	3.02	4.26	3.36	2.93	2.63
19	2.30	2.91	2.90	2.09	2.04	3.05	2.99	3.05	4.18	3.36	2.93	2.61
20	2.30	2.91	2.78	2.07	2.09	3.11	2.97	3.09	4.11	3.31	2.92	2.58
21	2.26	2.89	2.96	2.16	2.14	3.08	3.00	3.10	4.12	3.27	2.77	2.54
22	2.21	2.93	2.98	2.02	2.22	3.06	2.98	3.21	4.17	3.25	2.77	2.43
23	2.24	2.93	2.79	2.00	2.47	3.03	3.08	3.62	4.14	3.20	2.71	2.41
24	2.25	2.87	2.71	2.07	2.77	3.12	3.03	3.78	4.04	3.21	2.70	2.39
25	2.29	2.75	2.60	2.09	2.88	3.13	3.04	3.88	3.98	3.23	2.60	2.32
26	2.30	2.88	2.57	2.12	2.90	3.15	3.02	3.91	3.87	3.14	2.73	2.37
27	2.24	3.01	2.60	2.14	2.94	3.19	3.01	4.16	3.74	3.15	2.84	2.44
28	2.33	2.96	2.69	2.02	2.97	3.20	2.99	4.27	3.69	3.12	2.93	2.42
29	2.48	2.94	2.70	1.97	3.07	3.25	3.03	4.19	3.70	3.10	2.96	2.44
30	2.46	2.95	2.79	1.91	---	3.20	2.96	4.21	3.72	3.08	2.94	2.43
31	2.47	---	2.81	1.90	---	3.26	---	4.30	---	3.08	2.98	---
MEAN	2.21	2.88	2.85	2.24	2.26	3.11	3.06	3.31	4.20	3.41	2.95	2.59
MAX	2.48	3.04	3.10	2.77	3.07	3.26	3.27	4.30	4.75	3.86	3.10	2.96
MIN	2.03	2.39	2.57	1.83	1.91	2.92	2.96	2.90	3.69	3.08	2.60	2.32

**05437641    Rock River at Auburn St at Rockford, Il—Continued**

CAL YR 2003	MEAN 2.50	MAX 3.10	MIN 1.88
WTR YR 2004	MEAN 2.92	MAX 4.75	MIN 1.83

**LOCATION.**— Lat 42°31'18", long 88°39'39" (NAD of 1927), in NE 1/4 NE 1/4 sec.25, T.1 N., R.15 E., Walworth County, Hydrologic Unit 07090006, on right bank 0.9 mi upstream from County Trunk Highway B bridge, 3.2 mi southwest of Walworth.

**DRAINAGE AREA.**— 9.58 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE

DISCHARGE: September 1992 to current year.

**GAGE.**— Water–stage recorder, phone telemeter and crest–stage gage. Elevation of gage is 935 ft above NGVD of 1929, from topographic map.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Maximum discharge, 571 ft<sup>3</sup>/s, June 13, 1999, gage height, 9.69 ft; maximum gage height, 10.05 ft, June 30, 1993, discharge, 322 ft<sup>3</sup>/s; minimum discharge, 0.58 ft<sup>3</sup>/s, March 9–12, 1996.

**REMARKS FOR CURRENT YEAR.**— Records fair.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.99	1.1	1.00	0.96	0.80	1.5	2.2	1.6	6.2	2.7	1.2	1.0
2	0.99	1.7	1.0	0.95	0.80	1.5	1.9	1.6	3.9	2.7	1.2	0.99
3	1.1	2.5	1.0	0.92	0.81	1.3	1.9	1.6	3.4	3.1	1.3	0.99
4	1.0	3.4	1.0	0.92	0.80	3.0	1.7	1.6	3.1	3.0	1.6	0.96
5	1.1	2.9	1.0	0.89	0.83	17	1.6	1.5	3.2	2.7	1.6	0.97
6	1.1	1.9	0.99	0.89	0.83	3.7	1.6	1.4	3.5	2.7	1.6	0.99
7	1.1	1.6	0.99	0.89	0.80	2.8	1.7	1.3	3.6	2.4	1.7	0.97
8	1.1	1.4	0.99	0.89	0.80	2.3	1.6	1.4	4.1	2.0	1.8	0.99
9	1.1	1.4	1.1	0.89	0.81	2.1	1.6	1.4	5.9	2.1	1.8	1.1
10	1.2	1.3	5.4	0.89	0.80	1.8	1.6	1.4	6.9	2.0	1.4	1.1
11	1.3	1.2	3.1	0.89	0.80	1.6	1.5	1.4	7.7	2.0	1.4	1.1
12	1.4	1.3	2.2	0.89	0.80	1.4	1.5	1.7	48	2.0	1.4	1.0
13	1.4	1.2	1.8	0.89	0.80	1.4	1.5	4.2	5.3	1.9	1.2	1.0
14	1.4	1.2	1.5	0.89	0.80	1.4	1.5	10	3.7	1.9	1.2	0.99
15	1.4	1.2	1.4	0.88	0.80	1.2	1.5	6.3	3.3	1.9	1.1	1.0
16	1.4	1.2	1.3	0.90	0.81	1.2	1.6	3.6	3.2	1.8	1.1	1.1
17	1.4	1.2	1.2	0.98	0.83	1.2	1.6	3.1	3.3	1.8	1.1	1.1
18	1.4	1.6	1.2	0.90	0.87	1.2	1.6	6.3	3.2	1.8	1.3	1.0
19	1.4	1.6	1.1	0.90	0.89	1.2	1.6	4.1	3.0	1.8	1.1	0.93
20	1.4	1.4	1.1	0.89	2.5	1.2	1.8	6.7	2.9	1.8	1.1	0.91
21	1.4	1.3	1.1	0.89	3.0	1.2	1.9	16	4.3	1.9	1.1	0.86
22	1.4	1.2	1.1	0.86	3.7	1.1	1.7	102	3.6	1.8	1.1	0.86
23	1.3	1.2	0.99	0.85	15	1.2	1.7	31	3.1	1.7	1.1	0.88
24	1.4	1.1	0.97	0.81	3.9	2.0	1.7	8.6	3.0	1.7	1.1	0.95
25	1.3	1.1	0.91	0.82	1.7	1.9	1.8	5.2	3.2	1.6	1.4	0.95
26	1.2	1.1	0.89	0.82	1.6	6.3	1.7	4.2	3.2	1.4	1.3	0.95
27	1.2	1.1	0.91	0.83	1.4	3.6	1.7	3.7	2.5	1.4	1.2	0.95
28	1.2	1.1	1.1	0.86	1.3	3.4	1.7	3.3	2.4	1.4	1.3	0.98
29	1.1	1.1	1.00	0.89	1.4	6.0	1.6	3.2	2.8	1.4	1.3	1.00
30	1.2	1.00	0.99	0.87	---	3.5	1.6	7.2	2.7	1.3	1.2	1.1
31	1.1	---	0.96	0.81	---	2.6	---	15	---	1.3	1.1	---
TOTAL	38.48	43.60	41.29	27.41	50.98	82.8	50.2	261.6	158.2	61.0	40.4	29.67
MEAN	1.24	1.45	1.33	0.88	1.76	2.67	1.67	8.44	5.27	1.97	1.30	0.99
MAX	1.4	3.4	5.4	0.98	15	17	2.2	102	48	3.1	1.8	1.1
MIN	0.99	1.0	0.89	0.81	0.80	1.1	1.5	1.3	2.4	1.3	1.1	0.86
CFSM	0.13	0.15	0.14	0.09	0.18	0.28	0.17	0.88	0.55	0.21	0.14	0.10
IN.	0.15	0.17	0.16	0.11	0.20	0.32	0.19	1.02	0.61	0.24	0.16	0.12

**05438283 Piscasaw Creek near Walworth, WI--Continued**

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 – 2004, BY WATER YEAR (WY)												
MEAN	2.14	2.00	1.93	2.21	4.33	3.85	3.70	3.72	8.17	2.90	2.00	2.03
MAX	3.68	3.29	4.54	5.85	13.1	12.0	12.4	8.44	17.2	6.22	4.27	4.48
(WY)	1994	1993	1993	1993	1997	1993	1993	2004	1999	1993	1993	1993
MIN	1.24	1.08	0.99	0.88	1.23	0.69	1.00	1.95	1.38	1.07	1.02	0.89
(WY)	1996	1997	1998	2004	1995	1996	1996	1995	1995	1995	1995	2003
<b>SUMMARY STATISTICS</b>												
				<b>FOR 2003 CALENDAR YEAR</b>			<b>FOR 2004 WATER YEAR</b>			<b>WATER YEARS 1992 – 2004</b>		
ANNUAL TOTAL				552.02			885.63					
ANNUAL MEAN				1.51			2.42			3.23		
HIGHEST ANNUAL MEAN										6.41		
LOWEST ANNUAL MEAN										1.32		
HIGHEST DAILY MEAN				27 Jul 15			102 May 22			251 Feb 21 1997		
LOWEST DAILY MEAN				0.78 Sep 9			0.80 A Feb 1			0.58 Mar 10 1996		
ANNUAL SEVEN-DAY MINIMUM				0.79 Sep 4			0.80 Feb 7			0.62 Mar 9 1996		
MAXIMUM PEAK FLOW							345 May 22			571 B Jun 13 1999		
MAXIMUM PEAK STAGE							8.51 May 22			10.05 C Jun 30 1993		
INSTANTANEOUS LOW FLOW							0.58 Mar 20			0.58 D Mar 9 1996		
ANNUAL RUNOFF (CFSM)				0.158			0.253			0.337		
ANNUAL RUNOFF (INCHES)				2.14			3.44			4.58		
10 PERCENT EXCEEDS				1.8			3.6			4.6		
50 PERCENT EXCEEDS				1.3			1.4			2.0		
90 PERCENT EXCEEDS				0.97			0.89			1.0		

A – Also occurred Feb. 2, 4, 7, 8, 10–15.

B – Gage height, 9.69 ft.

C – Discharge, 322 ft<sup>3</sup>/s.

D – Also occurred Mar. 10–12, 1996 and Mar. 20, 2004.

**LOCATION.**— Lat 42°15'22", long 88°51'47" (NAD of 1927), in SE1/4SE1/4 sec.27, T.44 N., R.3 E., Boone County, Hydrologic Unit 07090006, on left bank at Belvidere sewage-treatment plant, 1.3 mi downstream from bridge on State Street in Belvidere, 3.0 mi downstream from Piscasaw Creek, and at mile 21.9.

**DRAINAGE AREA.**— 538 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: October 1939 to current year.

STAGE: Water years 1994 to current year.

**REVISED RECORDS.**— WSP 1175: 1946. WSP 1508: 1940, 1942–43, 1947(M). WSP 1728: 1940(M). WDR IL–75–1: Drainage area. WDR IL–00: 1999.

**GAGE.**— Water-stage recorder, phone telemeter and crest-stage gage. Datum of gage is 738.34 ft above NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Sept. 29, 1939, to Sept. 30, 1942, nonrecording gage at site 1.3 mi upstream at datum 3.99 ft higher, and Oct. 1, 1942, to Sept. 30, 1973, nonrecording gage at present site and datum.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 11,900 ft<sup>3</sup>/s, Feb. 20, 1994; gage height 14.19 ft; minimum discharge, 14 ft<sup>3</sup>/s, Sept. 19, 1988, observed.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Flood of Jan. 24, 1938, reached a stage of 16.9 ft, backwater from ice, from information by sewage-treatment plant employees.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	75	134	196	101	339	1120	304	2580	404	155	184
2	52	125	128	194	106	427	911	298	2690	371	152	165
3	57	252	125	195	106	458	758	281	2350	370	175	151
4	61	338	124	194	108	457	642	271	1910	467	247	139
5	61	315	134	174	109	1100	558	258	1490	454	274	135
6	61	306	132	110	111	1520	504	249	1160	406	221	131
7	59	231	129	e100	112	1450	470	239	939	371	190	125
8	57	183	129	e100	112	1270	444	235	787	348	175	120
9	56	158	150	e98	115	935	413	235	667	332	165	116
10	55	147	529	e96	112	696	385	233	795	422	154	113
11	56	141	939	e98	109	560	363	233	1070	456	149	109
12	57	135	837	e100	114	460	343	246	2800	394	146	104
13	59	125	636	e100	111	402	330	310	3060	342	141	102
14	78	116	541	e100	104	385	315	559	2880	311	133	99
15	78	115	423	e100	108	370	300	1060	2320	289	129	108
16	82	113	367	e98	103	346	288	1250	1790	273	127	117
17	74	115	329	e96	108	336	284	1220	1330	265	125	115
18	72	168	293	e92	108	334	277	1540	1080	251	122	107
19	71	317	265	e92	112	329	270	1990	894	238	119	100
20	71	343	187	e94	134	331	276	2010	754	237	113	97
21	69	269	235	e96	158	318	360	1890	807	237	108	93
22	67	220	255	e98	198	299	448	2480	1090	299	103	89
23	68	201	219	107	324	284	405	3070	1140	301	107	88
24	70	188	201	112	483	380	371	3880	961	251	109	87
25	75	172	171	109	452	642	381	3360	794	229	126	86
26	79	163	187	111	375	1010	420	2660	672	213	142	85
27	78	154	198	112	338	1280	389	2210	587	199	164	88
28	77	148	202	107	312	1380	352	1810	543	188	294	85
29	77	142	224	106	300	1550	324	1400	482	175	315	84

## ROCK RIVER BASIN

**05438500 Kishwaukee River at Belvidere, IL--Continued**

<b>30</b>	75	138	225	106	---	1510	302	1440	443	169	260	84
<b>31</b>	76	---	212	104	---	1380	---	2120	---	163	212	---
TOTAL	2080	5613	8860	3595	5143	22538	13003	39341	40865	9425	5152	3306
MEAN	67.1	187	286	116	177	727	433	1269	1362	304	166	110
MAX	82	343	939	196	483	1550	1120	3880	3060	467	315	184
MIN	52	75	124	92	101	284	270	233	443	163	103	84
CFSM	0.12	0.35	0.53	0.22	0.33	1.35	0.81	2.36	2.53	0.57	0.31	0.20
IN.	0.14	0.39	0.61	0.25	0.36	1.56	0.90	2.72	2.83	0.65	0.36	0.23

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 – 2004, BY WATER YEAR (WY)**

MEAN	240	284	298	290	410	671	626	506	470	287	217	240
MAX	1242	1328	1613	1053	1221	2337	2461	1610	1835	1815	1287	2215
(WY)	1973	1986	1983	1974	2001	1979	1993	1974	1999	1993	1987	1972
MIN	40.3	50.1	42.8	30.5	49.6	120	141	108	101	56.6	39.2	44.0
(WY)	1957	1957	1964	1940	1940	1956	1963	1949	1977	1941	1964	1964

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1940 – 2004**

ANNUAL TOTAL	68868		158921			
ANNUAL MEAN	189		434		378	
HIGHEST ANNUAL MEAN					992	
LOWEST ANNUAL MEAN					112	
HIGHEST DAILY MEAN	939	Dec 11	3880	May 24	8860	Jun 14 1999
LOWEST DAILY MEAN	39	Sep 11	52	Oct 1,2	15	A
ANNUAL SEVEN-DAY MINIMUM	43	Sep 6	57	Oct 7	23	Jan 2 1940
MAXIMUM PEAK FLOW			3960	May 24	11900	Feb 20 1994
MAXIMUM PEAK STAGE			8.59	May 24	14.19	Feb 20 1994
INSTANTANEOUS LOW FLOW			50	Oct 1,2,3	14 B	Sep 19 1988
ANNUAL RUNOFF (CFSM)	0.351		0.807		0.702	
ANNUAL RUNOFF (INCHES)	4.76		10.99		9.54	
10 PERCENT EXCEEDS	369		1150		807	
50 PERCENT EXCEEDS	138		220		214	
90 PERCENT EXCEEDS	56		86		69	

A – Dec. 30, 1939; Jan. 7, 1940.

B – Observed.



ROCK RIVER BASIN  
05439000 South Branch Kishwaukee River at Dekalb, IL

149

**LOCATION.**— Lat 41°55'52", long 88°45'34" (NAD of 1927), in SW1/4NE1/4 sec.22, T.40 N., R.4 E., De Kalb County, Hydrologic Unit 07090006, on left bank 100 ft downstream from bridge on State Highway 38 in De Kalb, and at mile 48.5.

**DRAINAGE AREA.**— 77.7 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: July 1925 to October 1933, October 1979 to current year.

STAGE: Water years 1995 to current year.

SURFACE-WATER QUALITY

SEDIMENT: October 1979 to September 1981.

**REVISED RECORDS.**— WDR IL-80-1: Drainage area.

**GAGE.**— Water-stage recorder, phone telemeter, and crest stage gage. Datum of gage is 831.88 ft above NGVD of 1929. Mar. 23, 1980, to Sept. 30, 1983, at datum 3.0 ft higher. Oct. 1, 1979, to Mar. 22, 1980, nonrecording gage at same site at datum 3.0 ft higher. Prior to Sept. 30, 1933, nonrecording gage at same site at datum 3.40 ft higher.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 3,500 ft<sup>3</sup>/s, July 2, 1983, gage height, 15.80 ft; present datum; no flow, at times in several years.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,650 mg/L June 13, 1981; minimum daily mean, 10 mg/L Mar. 9, 1980.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 3,070 tons June 13, 1981; minimum daily, 0.04 ton Oct. 15, 1979.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.09	0.81	0.96	4.2	e1.1	67	150	51	921	34	1.8	0.86
2	0.03	6.2	1.7	e3.9	e1.1	80	130	44	538	31	1.5	0.66
3	0.10	24	1.4	e3.6	e1.1	58	113	39	338	43	5.6	0.69
4	0.08	18	1.2	e2.9	e1.1	69	96	42	260	46	17	0.52
5	0.07	19	2.8	e2.4	e1.1	316	83	38	217	36	5.4	1.5
6	0.06	3.9	2.3	e2.1	e1.1	265	77	35	185	30	3.2	1.1
7	0.01	2.4	1.5	1.8	e1.1	184	69	32	160	27	2.3	0.73
8	0.00	2.0	1.3	2.1	e1.1	138	65	31	141	25	1.9	0.49
9	0.00	1.7	7.3	2.5	e1.1	110	48	31	126	29	1.8	0.79
10	0.00	1.5	159	3.1	e1.1	87	44	51	123	29	1.4	0.28
11	0.05	1.3	156	4.1	e1.2	74	41	152	118	23	2.9	0.24
12	0.21	1.1	94	4.7	e1.2	58	36	116	298	21	3.0	0.31
13	0.10	1.4	60	5.2	e1.2	47	35	161	253	19	2.0	0.24
14	8.5	1.9	37	4.9	e1.2	50	33	369	183	17	0.93	0.17
15	2.3	2.0	27	4.3	e1.2	38	29	428	152	15	0.60	0.74
16	1.2	1.9	22	3.1	e1.2	37	28	279	132	13	0.72	1.3
17	0.78	2.6	14	e2.7	e1.3	37	26	214	118	12	1.8	0.73
18	0.58	38	15	e2.1	e1.5	36	25	202	103	12	1.3	0.46
19	0.57	7.7	11	e1.7	1.7	35	25	174	89	9.8	2.3	0.37
20	0.50	4.4	18	e1.5	22	39	41	267	81	9.0	0.86	0.33
21	0.42	2.8	7.5	e1.2	26	33	93	698	93	22	0.66	0.27
22	0.35	2.4	8.6	e1.1	36	29	78	811	83	11	0.62	0.17
23	0.46	2.4	8.2	e1.1	93	30	63	710	68	7.7	0.56	0.11
24	0.64	2.2	6.4	e1.1	104	82	61	420	63	5.7	1.4	0.06
25	1.6	1.7	5.6	e1.1	63	126	93	307	56	4.8	2.3	0.00
26	1.4	1.5	4.7	e1.2	57	143	86	250	50	3.7	1.5	0.00
27	0.97	1.3	4.9	e1.2	49	159	73	214	46	3.3	4.5	0.07
28	0.89	1.3	9.6	e1.2	45	149	68	183	43	2.8	2.8	0.15
29	0.82	1.1	7.7	e1.2	38	195	58	158	39	2.4	3.2	0.11
30	0.79	1.2	6.0	e1.2	---	176	55	510	36	2.2	1.6	0.06

**05439000 South Branch Kishwaukee River at Dekalb, IL--Continued**

<b>31</b>	0.76	---	5.8	e1.2	---	170	---	1130	---	2.1	1.1	---
TOTAL	24.33	159.71	708.46	75.7	555.7	3117	1922	8147	5113	548.5	78.55	13.51
MEAN	0.78	5.32	22.9	2.44	19.2	101	64.1	263	170	17.7	2.53	0.45
MAX	8.5	38	159	5.2	104	316	150	1130	921	46	17	1.5
MIN	0.00	0.81	0.96	1.1	1.1	29	25	31	36	2.1	0.56	0.00
CFSM	0.01	0.07	0.29	0.03	0.25	1.29	0.82	3.38	2.19	0.23	0.03	0.01
IN.	0.01	0.08	0.34	0.04	0.27	1.49	0.92	3.90	2.45	0.26	0.04	0.01

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 – 2004, BY WATER YEAR (WY)**

MEAN	23.0	54.0	54.2	40.2	76.1	98.3	104	102	94.1	54.9	33.4	27.1
MAX	119	246	261	154	245	292	309	263	257	322	383	337
(WY)	1927	1986	1983	1993	2001	1993	1993	2004	1993	1983	1987	1980
MIN	0.22	1.43	0.93	0.07	0.01	5.84	6.53	11.4	9.97	1.52	0.51	0.23
(WY)	1934	1998	1998	2003	2003	2003	2003	1931	1930	1988	1931	2003

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1926 – 2004**

ANNUAL TOTAL	7980.11		20463.46			
ANNUAL MEAN	21.9		55.9		63.3	
HIGHEST ANNUAL MEAN					151	
LOWEST ANNUAL MEAN					13.4	
HIGHEST DAILY MEAN	714	May 11	1130	May 31	2520	Jul 3 1983
LOWEST DAILY MEAN	0.00	A	0.00	B	0.00	C
ANNUAL SEVEN-DAY MINIMUM	0.00	Sep 5	0.03	Oct 5	0.00	Sep 5 2003
MAXIMUM PEAK FLOW			1270	May 31	3500	Jul 2 1983
MAXIMUM PEAK STAGE			10.62	May 31	15.80	D
ANNUAL RUNOFF (CFSM)	0.281		0.720		0.815	
ANNUAL RUNOFF (INCHES)	3.82		9.80		11.08	
10 PERCENT EXCEEDS	59		158		157	
50 PERCENT EXCEEDS	1.9		5.8		26	
90 PERCENT EXCEEDS	0.01		0.51		1.4	

A – Many days.

B – Oct. 8, 9, 10, Sept. 25, 26.

C – At times in several years.

D – Present datum.

**05439500 South Branch Kishwaukee River near Fairdale, IL**

**LOCATION.**— Lat 42°06'38", long 88°54'02" (NAD of 1927), in SE1/4SE1/4 sec.17, T.42 N., R.3 E., De Kalb County, Hydrologic Unit 07090006, on right bank at downstream side of bridge on Irene Road, 1.2 mi downstream from Owens Creek, 1.8 mi northeast of Fairdale, and at mile 11.0.

**DRAINAGE AREA.**— 387 mi<sup>2</sup>.

**PERIOD OF RECORD.**—**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1939 to current year. Monthly discharge only for some periods, published in WSP 1308.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–81.

MISCELLANEOUS: Water years 1998 and 2002.

**REVISED RECORDS.**— WSP 1508: 1940, 1942(M). WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, phone telemeter, and crest–stage gage. Datum of gage is 733.90 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to May 1, 1940, nonrecording gage at same site and datum. Prior to Nov. 7, 1986, water–stage recorder on left bank at upstream side of bridge at same site and datum.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 25,400 ft<sup>3</sup>/s, July 18, 1996, gage height 13.37 ft; minimum discharge, 2.1 ft<sup>3</sup>/s, Jan. 20, 1940.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** A stage of 11.9 ft occurred in March 1937, from information by a local resident.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004****DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	16	37	88	e52	222	680	232	3780	243	66	45
2	17	21	36	e86	e50	299	560	214	3570	227	61	41
3	17	58	36	e80	e50	295	469	197	2900	221	63	38
4	16	111	37	e80	e50	264	398	188	1900	260	184	37
5	14	84	40	e80	e50	896	345	186	1250	247	166	35
6	14	114	41	e80	e52	1310	316	177	945	220	e120	35
7	15	65	46	e80	e52	1000	295	168	761	205	e68	34
8	17	42	41	e80	e52	667	273	161	627	188	e50	32
9	17	30	43	80	e52	510	248	157	537	183	e38	31
10	18	25	270	e78	e52	416	221	152	546	292	e35	31
11	17	26	801	e76	e54	358	205	189	771	237	43	30
12	17	24	573	e74	e54	308	193	303	3450	200	42	30
13	14	21	400	e70	e54	268	183	327	2540	179	43	27
14	18	20	280	e68	e56	258	176	1130	1900	161	41	28
15	53	20	226	66	e56	251	168	1930	1360	e150	39	30
16	42	20	193	e62	e58	232	160	1760	951	e120	36	38
17	23	19	169	e58	e60	227	162	1170	758	e110	37	51
18	18	44	159	e52	e62	225	150	1560	620	e100	40	39
19	17	204	151	e50	e70	223	145	1220	522	e100	35	35
20	16	172	128	e48	e80	225	149	893	457	114	56	32
21	22	117	129	e48	e90	217	262	1080	580	118	37	30
22	19	87	131	e48	e110	199	317	2810	697	159	34	31
23	15	70	106	e48	e200	193	270	4390	520	140	33	30
24	15	59	102	e48	e370	315	239	3740	433	117	34	30
25	17	57	81	e50	e330	626	274	3000	382	102	43	30
26	18	49	97	e52	e300	907	328	2180	343	92	58	28
27	24	48	97	e54	e270	934	297	1490	318	86	56	28

## ROCK RIVER BASIN

**05439500 South Branch Kishwaukee River near Fairdale, IL--Continued**

<b>28</b>	20	42	96	e54	e230	779	270	1060	295	80	96	30
<b>29</b>	20	39	106	e54	e220	1050	249	808	275	76	89	31
<b>30</b>	19	40	104	e54	----	1000	234	1500	259	71	68	30
<b>31</b>	18	----	95	e54	----	807	----	3390	----	69	56	----
TOTAL	603	1744	4851	2000	3236	15481	8236	37762	34247	4867	1867	997
MEAN	19.5	58.1	156	64.5	112	499	275	1218	1142	157	60.2	33.2
MAX	53	204	801	88	370	1310	680	4390	3780	292	184	51
MIN	14	16	36	48	50	193	145	152	259	69	33	27
CFSM	0.05	0.15	0.40	0.17	0.29	1.29	0.71	3.15	2.95	0.41	0.16	0.09
IN.	0.06	0.17	0.47	0.19	0.31	1.49	0.79	3.63	3.29	0.47	0.18	0.10

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 – 2004, BY WATER YEAR (WY)**

MEAN	155	187	199	222	327	517	490	428	401	226	161	139
MAX	1318	1052	1234	946	1244	2392	1782	1316	1734	1863	1202	1181
(WY)	1955	1986	1983	1974	2001	1979	1993	1996	1993	1996	1987	1980
MIN	11.3	12.6	11.3	6.19	15.5	50.2	55.9	47.8	57.4	20.5	17.9	12.3
(WY)	1954	1954	1964	1940	1940	2003	2003	1949	1988	1940	1971	1953

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1940 – 2004**

ANNUAL TOTAL	35739		115891			
ANNUAL MEAN	97.9		317		287	
HIGHEST ANNUAL MEAN					752	
LOWEST ANNUAL MEAN					65.7	
HIGHEST DAILY MEAN	1690	May 13	4390	May 23	14600	Jul 18 1996
LOWEST DAILY MEAN	12	Sep 21	14	Oct 5,6,13	3.0	Jan 20 1940
ANNUAL SEVEN-DAY MINIMUM	15	Sep 6	16	Oct 1	4.1	Jan 19 1940
MAXIMUM PEAK FLOW			5110	Jun 12	25400	Jul 18 1996
MAXIMUM PEAK STAGE			9.13	Jun 12	13.37	Jul 18 1996
INSTANTANEOUS LOW FLOW			13	Oct 4–7,13	2.1	Jan 20 1940
ANNUAL RUNOFF (CFSM)	0.253		0.818		0.742	
ANNUAL RUNOFF (INCHES)	3.44		11.14		10.09	
10 PERCENT EXCEEDS	185		807		666	
50 PERCENT EXCEEDS	41		96		130	
90 PERCENT EXCEEDS	18		24		20	

**LOCATION.**— Lat 42°11'40", long 88°59'55" (NAD of 1927), in NE1/4NE1/4 sec.21, T.43 N., R.2 E., Winnebago County, Hydrologic Unit 07090006, on left bank at upstream side of bridge on Blackhawk Road, 1.4 mi downstream from South Branch Kishwaukee River, 2 mi southwest of Perryville, 7.1 mi upstream from Killbuck Creek, and at mile 9.6.

**DRAINAGE AREA.**— 1,099 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE**

DISCHARGE: October 1939 to current year.

STAGE: Water years 1994 to current year.

**SURFACE—WATER QUALITY**

CHEMICAL: Water years 1978–91.

SEDIMENT: April 1979 to September 1981.

**REVISED RECORDS.**— WSP 1175: 1941(P), 1942. WSP 1508: 1941, 1949. WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, phone telemeter, and U.S. Army Corps of Engineers satellite telemeter and rain gage. Datum of gage is 692.13 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Apr. 30, 1949, nonrecording gage at same site and datum.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Maximum discharge, 24,200 ft<sup>3</sup>/s, July 18, 1996, gage height 23.54 ft; minimum discharge, 46 ft<sup>3</sup>/s, Oct. 6, 7, 10, 1956.

**SUSPENDED—SEDIMENT CONCENTRATION:** Maximum daily mean, 1,860 mg/L June 7, 1980; minimum daily mean, 13 mg/L Sept. 17, 1981.

**SUSPENDED—SEDIMENT LOADS:** Maximum daily, 24,000 tons Apr. 1, 1979; minimum daily, 11 tons Sept. 17, 1981.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Flood in January 1938 reached a stage of 23.85 ft, from information by the U.S. Army Corps of Engineers.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	133	235	339	e190	604	1960	622	6230	774	296	323
2	102	199	226	334	e190	741	1640	604	6510	720	283	289
3	108	375	221	329	e200	841	1390	567	5700	708	312	268
4	116	501	219	326	e200	784	1200	544	4060	823	557	255
5	113	480	230	306	e200	1900	1040	530	2810	869	585	252
6	112	500	232	253	e200	2910	949	510	2210	764	458	239
7	110	411	233	e210	e200	2580	891	490	1820	704	381	231
8	106	331	229	e200	e210	2120	831	470	1570	670	342	220
9	104	288	236	e190	e210	1650	764	468	1370	636	315	210
10	103	259	859	e190	e210	1320	695	458	1450	809	289	209
11	102	246	1750	e200	e200	1100	652	462	1870	841	277	205
12	106	230	1570	e200	e210	934	614	612	5580	725	275	194
13	105	215	1220	e200	e200	818	587	728	7330	647	273	191
14	138	205	952	e200	e190	760	567	1430	5110	593	263	185
15	140	201	768	e200	e200	725	549	2780	3920	553	255	184
16	180	201	645	e190	e190	672	526	2940	2810	521	254	205
17	144	199	575	e180	e200	649	520	2540	2210	501	251	207
18	127	285	502	e180	e200	643	511	2990	1830	472	244	200
19	125	451	471	e180	207	629	489	3260	1580	448	237	185
20	121	587	394	e180	227	622	503	2880	1380	436	232	184
21	115	474	469	e190	286	612	649	2710	1460	434	224	182
22	119	394	465	e190	386	578	882	4640	1880	529	211	176
23	113	356	400	e200	746	551	810	6660	1740	566	213	172
24	113	323	350	e200	1030	718	708	8250	1520	464	212	165
25	122	302	322	e200	938	1350	729	7310	1320	426	217	162

ROCK RIVER BASIN  
**05440000 Kishwaukee River near Perryville, IL--Continued**

<b>26</b>	123	285	329	e200	793	1960	849	5410	1170	399	261	160
<b>27</b>	130	271	363	e210	695	2390	817	3830	1050	377	348	159
<b>28</b>	135	258	350	e200	632	2280	732	2920	963	358	650	159
<b>29</b>	133	247	370	e200	593	2550	682	2330	894	340	542	159
<b>30</b>	135	244	379	e190	---	2600	632	2380	828	324	456	159
<b>31</b>	131	---	362	e190	---	2310	---	4840	---	308	375	---
TOTAL	3735	9451	15926	6757	10133	40901	24368	77165	80175	17739	10088	6089
MEAN	120	315	514	218	349	1319	812	2489	2672	572	325	203
MAX	180	587	1750	339	1030	2910	1960	8250	7330	869	650	323
MIN	102	133	219	180	190	551	489	458	828	308	211	159
CFSM	0.11	0.29	0.47	0.20	0.32	1.20	0.74	2.26	2.43	0.52	0.30	0.18
IN.	0.13	0.32	0.54	0.23	0.34	1.38	0.82	2.61	2.71	0.60	0.34	0.21

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 – 2004, BY WATER YEAR (WY)**

MEAN	468	568	596	620	882	1392	1271	1067	1003	603	451	445
MAX	2309	2881	3230	2265	2963	5395	4267	3355	3827	3263	2853	3577
(WY)	1973	1986	1983	1969	1997	1979	1993	1996	1993	1993	1987	1972
MIN	75.5	95.8	83.5	68.8	98.8	230	280	212	214	135	97.4	78.9
(WY)	1957	1957	1964	1959	1940	1956	1963	1949	1959	1941	1964	1946

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1940 – 2004**

ANNUAL TOTAL	125246		302527			
ANNUAL MEAN	343		827		779	
HIGHEST ANNUAL MEAN					1955	
LOWEST ANNUAL MEAN					227	
HIGHEST DAILY MEAN	2320	May 13	8250	May 24	16700	Jul 19 1996
LOWEST DAILY MEAN	68	Sep 11	102	Oct 2,11	49	Oct 10 1956
ANNUAL SEVEN-DAY MINIMUM	73	Sep 6	105	Oct 7	52	Sep 11 1964
MAXIMUM PEAK FLOW			8420	May 24	24200	Jul 18 1996
MAXIMUM PEAK STAGE			13.71	May 24	23.54	Jul 18 1996
INSTANTANEOUS LOW FLOW			97	Oct 11	46	A
ANNUAL RUNOFF (CFSM)	0.312		0.752		0.709	
ANNUAL RUNOFF (INCHES)	4.24		10.24		9.64	
10 PERCENT EXCEEDS	638		2150		1700	
50 PERCENT EXCEEDS	235		390		430	
90 PERCENT EXCEEDS	105		161		130	

A – Oct. 6, 7, 10, 1956.

**LOCATION.**— Lat 42°07'23", long 89°15'21" (NAD of 1927), in NW1/4SW1/4 sec.32, T.25 N., R.11 E., Ogle County, Hydrologic Unit 7090005, at bridge on State Highway 72, 0.3 mi south of Byron, 1.2 mi upstream from Mill Creek, 1.3 mi downstream from Stillman Creek, and at mile 120.3.

**DRAINAGE AREA.**— 7,990 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: May 2000 to current year.

STAGE: Water years 2000 to current year.

SURFACE-WATER QUALITY

CHEMICAL: 1978–1988. Additional data for water years 1964, 1971–1977 are published in Water–Resources Investigations 78–23 and 79–24 as site P 14.

**GAGE.**— Water–stage recorder, phone telemeter, and raingage. Datum of gage is 666.13 ft above NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 35,400 ft<sup>3</sup>/s, June 14, 2000, gage–height, 16.12 ft; minimum discharge, 1,190 ft<sup>3</sup>/s, Sept. 9, 2003.

**REMARKS FOR CURRENT YEAR.**— Records good except those for December 26 to January 2 and estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1400	1970	4380	4280	e2100	e5800	11000	6080	24700	12700	5900	4090
2	1370	2120	4200	4410	e2200	e6200	10600	6030	25500	12200	5860	3940
3	1600	2710	4050	4420	e2300	e6200	10000	5810	24800	11800	5750	3780
4	1480	3350	4130	4040	e2400	6490	9550	5710	23700	12200	6650	3630
5	1420	4240	4000	3970	e2600	8240	9090	5420	22200	12700	6230	3460
6	1420	4640	3560	e3700	e2800	10200	8700	5250	20800	12800	6240	3370
7	1470	4910	3740	e3500	e2900	10600	8290	5010	19700	12400	6080	3200
8	1500	5060	3820	e3300	e2900	10400	8080	5000	18600	12000	5870	3180
9	1510	5430	3790	e3100	e2800	10300	7790	4740	17500	11600	5680	3100
10	1460	5300	5180	e3100	e2700	10200	7550	4710	17100	11500	5380	2750
11	1510	4760	6070	e3100	e2700	9860	7280	4840	17200	11200	5250	2710
12	1500	4490	5030	e3100	e2600	9100	7080	5350	21600	10700	5200	2740
13	1450	4120	4420	e3000	e2500	8600	6920	5980	25700	10300	5020	2670
14	1460	3980	4730	e2900	e2500	8460	6770	6640	23600	9890	4950	2740
15	1710	4080	4800	e2800	e2400	7960	6600	7870	21400	9500	4440	2940
16	1690	4040	4800	e2700	e2400	7880	6440	8540	19500	9230	3910	2780
17	1710	3950	4470	e2600	e2300	7840	6210	8450	18300	9010	3960	2760
18	1800	4090	4340	e2500	e2300	7780	6290	9090	18100	8870	3870	2840
19	1770	4150	4090	e2400	e2300	7650	6120	9630	17600	8680	3910	2810
20	1810	4560	4020	e2300	e2400	7530	5760	9410	16900	8440	3800	2720
21	1760	4230	5260	e2300	e2500	7430	6600	9170	17000	8340	3600	2700
22	1660	4330	4820	e2200	e2600	7370	6800	12500	17500	8360	3440	2460
23	1650	4450	4220	e2200	e2900	7230	7000	17400	17100	8320	3370	2370
24	1650	4400	3500	e2200	e4000	7490	7040	20600	16500	8120	3330	2340
25	1720	3880	3560	e2200	e4500	8020	7190	21300	15900	7760	3120	2210
26	1730	4020	3630	e2200	e5000	9080	7040	19900	15400	7480	3190	2150
27	1740	4330	4070	e2200	e5200	10100	6780	19000	14800	7120	3740	2370
28	1710	4850	4030	e2200	e5400	10600	6740	18800	14200	6810	4270	2320
29	2060	4760	4030	e2100	e5600	11000	6450	18200	13800	6480	4280	2340
30	2030	4550	4270	e2100	—	11200	6090	18200	13200	6230	4130	2360
31	2090	—	4390	e2100	—	11200	—	21700	—	6050	4000	—
TOTAL	50840	125750	133400	89220	87800	268010	223850	326330	569900	298790	144420	85830
MEAN	1640	4192	4303	2878	3028	8645	7462	10530	19000	9638	4659	2861

## ROCK RIVER BASIN

**05440700 Rock River at Byron, IL--Continued**

MAX	2090	5430	6070	4420	5600	11200	11000	21700	25700	12800	6650	4090
MIN	1370	1970	3500	2100	2100	5800	5760	4710	13200	6050	3120	2150
CFSM	0.21	0.52	0.54	0.36	0.38	1.08	0.93	1.32	2.38	1.21	0.58	0.36
IN.	0.24	0.59	0.62	0.42	0.41	1.25	1.04	1.52	2.65	1.39	0.67	0.40

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 – 2004, BY WATER YEAR (WY)**

MEAN	4287	4705	4200	3411	5503	7509	7469	8434	12810	5845	3830	3802
MAX	6794	6495	5963	4706	10480	9905	9777	10530	21220	9638	4685	5868
(WY)	2002	2002	2002	2002	2001	2001	2001	2004	2000	2004	2000	2000
MIN	1640	3340	3174	2601	2818	3096	3520	6819	3353	2808	1784	1484
(WY)	2004	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 2000 – 2004**

ANNUAL TOTAL	1169960		2404140			
ANNUAL MEAN	3205		6569			
HIGHEST ANNUAL MEAN					6569	2004
LOWEST ANNUAL MEAN					3256	2003
HIGHEST DAILY MEAN	9110	May 15	25700	Jun 13	34700	Jun 14 2000
LOWEST DAILY MEAN	1210	Sep 9	1370	Oct 2	1210	Sep 9 2003
ANNUAL SEVEN-DAY MINIMUM	1280	Sep 5	1450	Oct 1	1280	Sep 5 2003
MAXIMUM PEAK FLOW			26100	Jun 13	35400	Jun 14 2000
MAXIMUM PEAK STAGE			13.19	Jun 13	16.12	Jun 14 2000
INSTANTANEOUS LOW FLOW			1290	Oct 5	1190	Sep 9 2003
ANNUAL RUNOFF (CFSM)	0.401		0.822			
ANNUAL RUNOFF (INCHES)	5.45		11.19			
10 PERCENT EXCEEDS	5040		14400		10000	
50 PERCENT EXCEEDS	2900		4750		4470	
90 PERCENT EXCEEDS	1500		2110		2400	



ROCK RIVER BASIN  
**05443000 Rock River above Sinnissippi Dam at Rock Falls, IL**

157

**LOCATION.**— Lat 41°47'14", long 89°40'35" (NAD of 1927), in SW1/4SE1/4 sec.22, T.21 N., R.7 E., Whiteside County, Hydrologic Unit 07093005, on concrete wall at mouth of Hennepin Feeder Canal, 300 ft upstream of the Upper Rock Falls Dam, and at mile 73.6.

**DRAINAGE AREA.**— 8,740 mi<sup>2</sup>.(revised WRD IL-75-1).

**PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE

STAGE: October 2003 to current year.

**GAGE.**— Water—stage recorder and phone telemeter. Datum of Gage is 630.00 ft above NGVD 1929, based on elevation provided by Illinois Department of Natural Resources.

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height, 6.88 ft, Dec. 22, 2003; minimum 5.45 ft, Jan. 8, 2004.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 6.88 ft, Dec. 22; minimum, 5.45 ft, Jan. 8.

Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	6.25	6.57	6.47	5.99	6.19	6.09	6.19	6.22	6.15	6.22	6.30
2	---	6.26	6.44	6.40	6.05	6.18	6.12	6.16	6.15	6.14	6.21	6.17
3	---	6.36	6.40	6.44	6.00	6.16	6.12	6.14	6.17	6.11	6.26	6.21
4	---	6.36	6.40	6.38	5.94	6.13	6.09	6.14	6.20	6.16	6.38	6.31
5	---	6.44	6.48	6.26	5.99	6.13	6.12	6.18	6.09	6.19	6.38	6.29
6	---	6.52	6.40	6.11	5.95	6.12	6.18	6.11	6.03	6.20	6.25	6.27
7	---	6.54	6.47	6.02	5.96	6.12	6.15	6.09	6.04	6.17	6.34	6.24
8	---	6.52	6.52	5.89	6.02	6.16	6.14	6.09	6.01	6.18	6.29	6.25
9	---	6.47	6.58	6.09	6.02	6.11	6.09	6.14	6.02	6.17	6.29	6.26
10	---	6.45	6.54	6.07	6.00	6.08	6.11	6.13	6.02	6.15	6.32	6.23
11	---	6.47	6.23	6.08	6.00	6.14	6.09	6.08	6.00	6.20	6.22	6.16
12	---	6.43	6.21	6.15	6.00	6.08	6.13	6.13	6.39	6.15	6.15	6.13
13	---	6.43	6.30	6.15	5.99	6.13	6.10	6.18	6.46	6.21	6.14	6.13
14	---	6.34	6.38	6.13	5.97	6.16	6.09	6.15	6.37	6.32	6.13	6.14
15	---	6.40	6.23	6.10	5.96	6.13	6.15	6.15	6.14	6.26	6.25	6.16
16	---	6.35	6.33	6.10	5.96	6.13	6.13	6.10	6.10	6.25	6.26	6.16
17	---	6.29	6.24	6.13	5.93	6.15	6.14	6.12	6.11	6.24	6.31	6.14
18	---	6.53	6.17	6.08	5.98	6.17	6.12	6.11	6.10	6.20	6.17	6.13
19	---	6.54	6.07	6.00	5.98	6.16	6.14	6.07	6.14	6.20	6.12	6.33
20	---	6.58	6.27	6.01	6.00	6.14	6.09	6.08	6.09	6.22	6.23	6.22
21	---	6.55	6.57	6.02	6.01	6.08	6.15	6.15	6.14	6.21	6.34	6.14
22	---	6.42	6.73	6.01	6.04	6.07	6.07	6.19	6.21	6.23	6.21	6.16
23	---	6.55	6.57	6.00	6.11	6.12	6.12	6.20	6.16	6.19	6.18	6.09
24	---	6.40	6.37	5.98	6.27	6.19	6.15	6.22	6.09	6.14	6.24	6.34
25	---	6.34	6.23	6.00	6.39	6.21	6.14	6.21	6.10	6.11	6.26	6.28
26	---	6.37	6.35	6.00	6.44	6.18	6.14	6.14	6.09	6.16	6.29	6.22
27	---	6.52	6.40	6.00	6.35	6.19	6.09	6.10	6.11	6.22	6.36	6.23
28	---	6.57	6.41	5.98	6.23	6.19	6.09	6.10	6.15	6.18	6.37	6.25
29	6.19	6.47	6.41	5.97	6.24	6.12	6.10	6.09	6.08	6.21	6.24	6.15
30	6.23	6.55	6.40	5.91	---	6.13	6.11	6.15	6.11	6.19	6.27	6.16
31	6.25	---	6.44	5.90	---	6.10	---	6.22	---	6.25	6.32	---
MEAN	---	6.44	6.39	6.09	6.06	6.14	6.12	6.14	6.14	6.19	6.26	6.21
MAX	---	6.58	6.73	6.47	6.44	6.21	6.18	6.22	6.46	6.32	6.38	6.34
MIN	---	6.25	6.07	5.89	5.93	6.07	6.07	6.07	6.00	6.11	6.12	6.09

ROCK RIVER BASIN  
05443500 Rock River at Como, IL

**LOCATION.**— Lat 41°46'58", long 89°44'59" (NAD of 1927), in NE1/4NE1/4 sec.25, T.21 N., R.6 E., Whiteside County, Hydrologic Unit 07090005, on left bank, 1 mi upstream from Como, 3 mi downstream from Rock Falls, 3.5 mi upstream from Elkhorn Creek, and at mile 69.2.

**DRAINAGE AREA.**— 8,753 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: March to December 1905, October 1914 to September 1971, October 1977 to September 1986. Water years 1987–90, seven-month period (March to September). October 1990 to current year. Published as "at Sterling" 1905–6 and as "at Lyndon" 1914–34. Records published for both sites December 1933 to September 1934. Monthly discharge only for some periods, published in WSP 1308.

STAGE: Water years 1994 to current year.

PARTIAL RECORD: Annual maximum, water years 1972–77.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–91.

**REVISED RECORDS.**— WSP 1308: 1915(M), 1917–18(M), 1922(M), 1924(M), 1926(M), 1928(M), 1931–32(M), 1934(M). WDR IL–79–1: Drainage area. WDR IL–97–1: 1996 (Dec. 12–23).

**GAGE.**— Water-stage recorder, U.S. Army Corps of Engineers satellite telemeter and rain gage, and crest-stage gage. Datum of gage is 606.83 ft above NGVD of 1929. Jan. 6, 1905, to Feb. 17, 1906, nonrecording gage at Sterling, 3 mi upstream, at different datum. Nov. 24, 1914, to Sept. 30, 1934, nonrecording gage at Lyndon, 16.5 mi downstream at datum 22.46 ft lower.

**REMARKS.**— Some diurnal fluctuation caused by powerplants upstream from station.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 59,700 ft<sup>3</sup>/s, Apr. 21, 1973, gage height, 15.66 ft, from rating curve extended above 41,200 ft<sup>3</sup>/s; maximum gage height, 17.51 ft, Feb. 7, 1938, ice jam; minimum discharge, 390 ft<sup>3</sup>/s, July 27, 2003, as a result of regulation.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1770	2820	4290	4590	e2200	5960	12000	5690	25800	13900	5760	4120
2	1640	2770	4290	4410	e2200	6630	11400	5790	26700	13400	5610	4080
3	1500	3460	3940	4320	e2200	6900	10800	5620	26000	12800	5590	3550
4	1790	3820	3750	4350	e2300	6660	10000	5120	25000	12700	6120	3660
5	1810	4890	3960	3950	e2600	7500	9220	5360	23900	13100	6520	3550
6	1690	5050	4040	3190	e2900	9930	8720	4930	22300	13700	5970	3350
7	1620	5320	3730	2080	e3000	11100	8380	5000	21200	13400	5600	3350
8	1690	5010	3860	1770	e3100	11000	8000	4560	20400	12700	5750	2910
9	1650	5510	3940	2810	e3000	10800	7810	4620	19100	12800	5520	3240
10	1640	5440	5230	3580	e2900	10500	7350	4460	18700	12900	5210	2910
11	1900	5180	7040	3270	e2800	9900	7280	4490	18600	12400	5040	2660
12	1750	4160	7410	3600	e2700	9570	6800	4810	19000	11700	5030	2610
13	1790	4320	6840	3580	e2600	8420	6750	5980	23200	10700	5030	2520
14	1850	3800	6340	3260	e2500	8120	6450	6320	25200	10500	4560	2510
15	1890	3970	6600	3410	e2500	7930	6220	7590	23100	9890	4590	2640
16	2150	4120	5460	3040	e2500	7670	6060	8810	21100	9420	3710	2860
17	2190	3710	6580	3360	e2500	7460	6000	8670	19700	9200	4000	2710
18	2110	3890	5620	3490	e2500	7330	5720	9750	19000	8940	3870	2300
19	2290	3900	5540	2930	e2500	7290	5740	10300	18700	8730	3800	3020
20	2430	4190	4880	2680	e2600	7010	5710	10200	18200	8580	3380	2670
21	2290	4690	4190	e2600	e2700	7190	5890	9730	18000	8220	3750	2620
22	2310	4130	5110	e2500	3040	7010	6520	11600	18600	8440	3390	2560
23	2280	4160	5460	e2400	3560	6810	6710	17500	18400	8360	3280	1990
24	2090	3980	5070	e2400	4840	7220	6930	20700	18000	8150	3240	1860

ROCK RIVER BASIN  
05443500 Rock River at Como, IL--Continued

159

25	2210	4070	4190	e2400	5460	7710	6770	21700	17400	7830	3080	2200
26	2260	3470	3880	e2500	5790	8590	6810	21600	16900	7350	2880	2040
27	2330	3710	4100	e2500	6020	10100	6750	20600	16200	7240	3330	2020
28	2260	4230	4190	e2400	5950	11100	6290	20100	15800	6580	4210	2620
29	2210	4600	4300	e2300	5830	11600	6040	19700	15200	6500	4480	2260
30	2630	4210	4380	e2200	----	12300	5760	19800	14800	5970	4050	1880
31	2680	----	4400	e2200	----	12400	----	22000	----	5910	3940	----
TOTAL	62700	126580	152610	94070	95290	269710	220880	333100	604200	312010	140290	83270
MEAN	2023	4219	4923	3035	3286	8700	7363	10750	20140	10060	4525	2776
MAX	2680	5510	7410	4590	6020	12400	12000	22000	26700	13900	6520	4120
MIN	1500	2770	3730	1770	2200	5960	5710	4460	14800	5910	2880	1860
CFSM	0.23	0.48	0.56	0.35	0.38	0.99	0.84	1.23	2.30	1.15	0.52	0.32
IN.	0.27	0.54	0.65	0.40	0.40	1.15	0.94	1.42	2.57	1.33	0.60	0.35

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 – 2004, BY WATER YEAR (WY)

MEAN	3841	4604	4282	4408	5919	9520	9123	6986	6589	5156	3849	3817
MAX	9633	15900	14120	13200	18020	19970	25070	16660	24500	22030	10820	15630
(WY)	1955	1986	1983	1946	1938	1948	1993	1960	2000	1993	1993	1938
MIN	1210	1408	1411	1047	1353	2432	3305	1652	1848	885	1147	999
(WY)	1964	1950	1964	1940	1940	1968	1958	1958	1936	1936	1936	1958

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1935 – 2004

ANNUAL TOTAL	1306930	2494710	
ANNUAL MEAN	3581	6816	5709
HIGHEST ANNUAL MEAN			12990
LOWEST ANNUAL MEAN			2187
HIGHEST DAILY MEAN	10700 May 16	26700 Jun 2	45200 A
LOWEST DAILY MEAN	1070 Sep 10	1500 Oct 3	524 Aug 9 1936
ANNUAL SEVEN-DAY MINIMUM	1180 Sep 6	1680 Oct 2	673 Aug 3 1936
MAXIMUM PEAK FLOW		26800 Jun 1	59700 B Apr 21 1973
MAXIMUM PEAK STAGE		9.82 Jun 1	17.51 C Feb 7 1938
INSTANTANEOUS LOW FLOW		647 D Jan 8	390 E Jul 27 2003
ANNUAL RUNOFF (CFSM)	0.409	0.779	0.652
ANNUAL RUNOFF (INCHES)	5.55	10.60	8.86
10 PERCENT EXCEEDS	6070	15900	11100
50 PERCENT EXCEEDS	3180	5000	4320
90 PERCENT EXCEEDS	1710	2260	1700

A – June 15, 2000 and June 5, 2002.

B – Gage height, 15.66 ft, from rating curve extended above 41,200 ft<sup>3</sup>/s.

C – Ice jam.

D – Result of freeze up.

E – Result of regulation.

ROCK RIVER BASIN  
**05444000 Elkhorn Creek near Penrose, IL**

**LOCATION.**— Lat 41°54'10", long 89°41'46" (NAD of 1927), in SW1/4SE1/4 sec.9, T.22 N., R.7 E., Whiteside County, Hydrologic Unit 07090005, on left bank 50 ft upstream from bridge on County Road 2200 N, 2 mi northwest of Penrose, 2.2 mi downstream from Buffalo Creek, 5 mi upstream from Sugar Creek, and at mile 17.5.

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

**PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE**

DISCHARGE: October 1939 to current year.

STAGE: Water years 1994 to current year.

**SURFACE–WATER QUALITY**

CHEMICAL: Water years 1979–91.

**REVISED RECORDS.**— WSP 925: 1940. WSP 955: 1941. WSP 1175: 1941(P), 1948(P). WSP 1308: 1950(M). WDR IL–72–1: Drainage area.

**GAGE.**— Water–stage recorder and phone telemeter. Datum of gage is 657.85 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Apr. 6, 1940, nonrecording gage at same site and datum.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum discharge, 7,330 ft<sup>3</sup>/s, June 4, 2002, gage height, 17.42 ft; maximum gage height, 17.75 ft, Jan. 5, 1946; minimum discharge, 1.9 ft<sup>3</sup>/s, Jan. 3, 1976, result of freezeup.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Flood of June 1938 reached a stage of 19.6 ft, from U.S. Army Corps of Engineers high–water mark.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	25	25	31	e36	52	121	63	511	96	63	54
2	24	32	25	32	e37	55	112	60	236	92	61	52
3	25	48	25	33	e37	50	105	57	190	91	62	51
4	25	48	26	30	e37	49	97	56	166	112	77	49
5	26	41	28	30	e36	195	93	55	153	114	73	48
6	25	36	28	e28	e34	137	89	54	144	122	63	47
7	25	30	27	e27	e29	99	86	53	135	98	61	46
8	25	28	27	e28	27	83	82	52	127	91	59	46
9	24	28	29	e28	26	75	77	52	120	101	57	45
10	25	28	95	e28	e25	70	74	52	119	160	57	45
11	25	31	131	e28	e25	66	72	52	149	110	56	45
12	26	31	82	e28	e25	57	70	52	185	99	55	43
13	26	28	e60	e28	e25	61	68	56	164	110	54	42
14	31	27	e50	e28	e25	58	67	59	142	114	53	42
15	30	29	e42	e28	e25	55	66	59	147	91	51	43
16	28	31	e36	30	e25	54	65	55	126	86	51	43
17	26	28	e33	29	25	56	63	55	120	87	53	43
18	26	33	e33	33	27	54	61	122	114	82	54	42
19	26	32	e33	e32	26	55	60	116	108	78	54	41
20	26	31	e33	e33	81	54	61	103	104	86	51	40
21	25	29	e32	31	139	52	81	93	212	86	49	40
22	25	28	e31	e30	108	51	75	215	328	93	48	40
23	25	30	e30	e30	403	51	68	336	160	81	47	40
24	26	29	e28	31	177	85	67	256	138	75	54	39
25	28	29	e28	e30	77	127	72	179	128	72	59	39
26	27	28	e30	e29	62	167	68	154	120	70	55	39
27	26	28	33	e30	55	195	64	139	112	69	60	39
28	26	27	34	e32	49	157	62	127	109	68	78	39
29	26	26	34	e33	48	152	61	116	104	67	78	38

ROCK RIVER BASIN  
05444000 Elkhorn Creek near Penrose, IL--Continued

161

<b>30</b>	26	26	32	e34	---	141	60	287	99	66	66	39
<b>31</b>	26	---	31	e35	---	130	---	533	---	65	58	---
TOTAL	804	925	1211	937	1751	2743	2267	3718	4770	2832	1817	1299
MEAN	25.9	30.8	39.1	30.2	60.4	88.5	75.6	120	159	91.4	58.6	43.3
MAX	31	48	131	35	403	195	121	533	511	160	78	54
MIN	24	25	25	27	25	49	60	52	99	65	47	38
CFSM	0.18	0.21	0.27	0.21	0.41	0.61	0.52	0.82	1.09	0.63	0.40	0.30
IN.	0.20	0.24	0.31	0.24	0.45	0.70	0.58	0.95	1.22	0.72	0.46	0.33

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 – 2004, BY WATER YEAR (WY)**

MEAN	66.4	71.7	73.7	95.7	150	176	126	128	145	93.7	74.6	66.5
MAX	280	314	267	580	556	588	618	607	560	401	422	225
(WY)	1982	1986	1973	1969	1951	1993	1973	1974	1993	1951	1972	1972
MIN	15.6	17.6	15.4	14.6	22.3	33.6	34.7	25.7	25.8	19.2	23.0	14.7
(WY)	1958	1950	1959	1959	1964	1956	1957	1940	1957	1940	1963	1957

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1940 – 2004	
ANNUAL TOTAL	15128		25074			
ANNUAL MEAN	41.4		68.5		105	
HIGHEST ANNUAL MEAN					275	1973
LOWEST ANNUAL MEAN					30.7	1940
HIGHEST DAILY MEAN	406	May 20	533	May 31	5430	Apr 21 1973
LOWEST DAILY MEAN	23	A	24	Oct 1,2,9	10	Dec 10 1958
ANNUAL SEVEN–DAY MINIMUM	23	Sep 5	25	Oct 1	10	Dec 9 1958
MAXIMUM PEAK FLOW			1070	May 31	7330 B	Jun 4 2002
MAXIMUM PEAK STAGE			6.56	May 31	17.75 C	Jan 5 1946
INSTANTANEOUS LOW FLOW			23	Oct 9,Dec 2,3	1.9 D	Jan 3 1976
ANNUAL RUNOFF (CFSM)	0.284		0.469		0.721	
ANNUAL RUNOFF (INCHES)	3.85		6.39		9.79	
10 PERCENT EXCEEDS	60		130		176	
50 PERCENT EXCEEDS	37		52		64	
90 PERCENT EXCEEDS	25		26		26	

A – Several days.

B – Gage height, 17.42 ft.

C – Discharge, 5,980 ft<sup>3</sup>/s.

D – Result of freezeup.

ROCK RIVER BASIN  
05446500 Rock River near Joslin, IL

**LOCATION.**— Lat 41°33'21", long 90°11'08" (NAD of 1927), in NE1/4NE1/4 sec.18, T.18 N., R.3 E., Rock Island County, Hydrologic Unit 07090005, near center of span on downstream side of bridge on State Highway 92, 1.8 mi east of Joslin, 14.5 mi downstream from Rock Creek, and at mile 26.9.

**DRAINAGE AREA.**— 9,549 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1939 to current year.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1975–94.

SEDIMENT: May 1980 to September 1982.

SPECIFIC CONDUCTANCE: Water years 1976–81.

WATER TEMPERATURE: Water years 1976–81.

**REVISED RECORDS.**— WDR IL–79–1: Drainage area.

**GAGE.**— Water-stage recorder, U.S. Army Corps of Engineers satellite telemeter and crest-stage gage. Datum of gage is 564.06 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Apr. 6, 1940, nonrecording gage at same site and datum.

**REMARKS.**— Some diurnal fluctuation caused by powerplants upstream from station.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 47,700 ft<sup>3</sup>/s, June 7, 2002, gage height, 19.24 ft., minimum daily discharge, 834 ft<sup>3</sup>/s, Jan. 3, 1940.

**SUSPENDED-SEDIMENT CONCENTRATION:** Maximum daily mean, 1,210 mg/L June 14, 1981; minimum daily mean, 17 mg/L Feb. 9, 1981.

**SUSPENDED-SEDIMENT LOADS:** Maximum daily, 48,000 tons Apr. 5, 1982; minimum daily, 131 tons Feb. 9, 1981.

**REMARKS FOR CURRENT YEAR.**— Records good except those for May 26 to July 2, which are fair, and estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1950	2770	4980	5410	e2400	7060	13200	6400	24200	15300	7010	5020
2	2010	2860	5070	5420	e2500	7020	12800	6550	26900	14700	6850	5320
3	1930	3050	4910	5150	e2650	7480	12300	6480	28400	14200	6710	5200
4	1870	3670	4680	5300	e2820	7520	11700	6290	28500	13800	6990	4610
5	2050	3960	4650	5080	e3050	7830	11000	5870	27800	14000	7490	4720
6	2030	5010	4820	5190	e3290	9680	10300	6060	26800	14400	7520	4560
7	1970	5110	4760	e4700	e3480	11400	9850	5630	24900	14500	6700	4380
8	1930	5730	4620	e3300	e3550	11800	9340	5500	23200	14200	6930	4340
9	1940	5640	4650	e2800	e3600	11500	9050	5210	22100	13800	6800	4010
10	1900	5980	5290	e3800	e3400	11300	8740	5180	21000	14100	6550	4180
11	1950	5950	7400	e4400	e3200	10800	8300	5080	20700	14100	6300	3820
12	2050	5490	8080	e4000	e3100	10500	8030	5070	20000	13400	5910	3620
13	2000	4870	8040	e4500	e3000	9840	7670	5850	20900	12800	5980	3580
14	2070	5000	7680	e4400	e2900	9070	7600	6930	23600	12000	6060	3430
15	2100	4440	7370	e4200	e2850	8930	7310	7420	25800	11800	5390	3520
16	2160	4650	7000	e4000	e2800	8620	7070	8850	25400	11200	5450	3680
17	2330	4780	6620	e3700	e2800	8400	6940	9490	23600	10800	4600	3780
18	2320	4400	7060	e4000	e2850	8290	6800	9980	21800	10500	4920	3650
19	2290	4650	6600	e4100	e2900	8170	6510	11500	20800	10400	4770	3370
20	2380	4580	6070	e3700	e2950	8020	6720	11700	20300	10200	4660	3850
21	2460	4910	5430	e3300	e3000	7950	6590	11300	19700	9900	4320	3570
22	2390	5290	5570	e3000	e3200	7950	7120	11300	19700	9790	4570	3540
23	2420	4650	6330	e2600	e3900	7780	7400	14700	20200	9990	4130	3450
24	2350	4990	6020	e2400	e4600	7880	7450	18800	19800	9770	4100	3150
25	2250	4790	5660	e2500	e5400	8590	7740	21100	19100	9510	4090	3140

ROCK RIVER BASIN  
05446500 Rock River near Joslin, IL---Continued

163

26	2360	4690	5200	e2700	e6400	9570	7660	22200	18400	9080	3810	3090
27	2430	4310	4990	e2800	e7000	10900	7650	22700	17800	8620	3770	2950
28	2480	4560	5090	e2700	e7200	12000	7420	22000	17200	8380	4750	3030
29	2390	5350	5080	e2450	e7100	12600	7030	21300	16800	7810	5660	3370
30	2450	5240	5190	e2400	---	12900	6850	21300	16000	7670	5680	3130
31	2710	---	5220	e2370	---	13300	---	22500	---	7120	5230	---
TOTAL	67920	141370	180130	116370	107890	294650	254140	350240	661400	357840	173700	115060
MEAN	2191	4712	5811	3754	3720	9505	8471	11300	22050	11540	5603	3835
MAX	2710	5980	8080	5420	7200	13300	13200	22700	28500	15300	7520	5320
MIN	1870	2770	4620	2370	2400	7020	6510	5070	16000	7120	3770	2950
CFSM	0.23	0.49	0.61	0.39	0.39	1.00	0.89	1.18	2.31	1.21	0.59	0.40
IN.	0.26	0.55	0.70	0.45	0.42	1.15	0.99	1.36	2.58	1.39	0.68	0.45

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)

MEAN	4549	5176	5012	5183	6365	10690	10700	8616	7832	5921	4409	4196
MAX	17110	16700	14780	15820	14520	22500	26950	26030	26810	24000	12420	13470
(WY)	1987	1986	1983	1973	2001	1948	1993	1973	2000	1993	1993	1972
MIN	1381	1626	1519	1172	1554	2803	3877	2032	2052	1902	1349	1084
(WY)	1957	1950	1959	1940	1940	1954	1940	1958	1977	1965	1958	1958

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1940 - 2004

ANNUAL TOTAL	1444070	2820710	
ANNUAL MEAN	3956	7707	6551
HIGHEST ANNUAL MEAN			14560
LOWEST ANNUAL MEAN			2587
HIGHEST DAILY MEAN	10700 May 16	28500 Jun 4	46100 Jun 7 2002
LOWEST DAILY MEAN	1560 Sep 11	1870 Oct 4	834 Jan 3 1940
ANNUAL SEVEN-DAY MINIMUM	1650 Sep 6	1960 Oct 4	977 Jan 1 1940
MAXIMUM PEAK FLOW		28600 Jun 3	47700 Jun 7 2002
MAXIMUM PEAK STAGE		15.04 Jun 3	19.24 Jun 7 2002
INSTANTANEOUS LOW FLOW		1790 Oct 4	
ANNUAL RUNOFF (CFSM)	0.414	0.807	0.686
ANNUAL RUNOFF (INCHES)	5.63	10.99	9.32
10 PERCENT EXCEEDS	6480	16900	12900
50 PERCENT EXCEEDS	3630	5650	4990
90 PERCENT EXCEEDS	1980	2500	2010

ROCK RIVER BASIN  
05447500 Green River near Geneseo, IL

**LOCATION.**— Lat 41°29'20", long 90°09'27" (NAD of 1927), in NE1/4SW1/4 sec.4, T.17 N., R.3 E., Henry County, Hydrologic Unit 07090007, on right bank at upstream side of bridge on State Highway 82, 1.4 mi upstream from Geneseo Creek, 2.4 mi north of Geneseo, and at mile 14.9.

**DRAINAGE AREA.**— 1,003 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: March 1936 to current year.

STAGE: Water years 1994 to current year.

SURFACE-WATER QUALITY

SEDIMENT: March 1978 to September 1981.

CHEMICAL: Water years 1978–91.

**REVISED RECORDS.**— WSP 875: 1938. WSP 1508: 1937, 1939–41(M), 1946(P), 1947–49. WDR IL–74–1: Drainage area.

**GAGE.**— Water-stage recorder, U.S. Army Corps of Engineers satellite telemeter and crest-stage gage. Datum of gage is 577.66 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1939, nonrecording gage at present site at datum 27.00 ft. lower. Oct. 1, 1939 to Apr. 3, 1940, nonrecording gage at present site at datum 3.0 ft. higher. Apr. 3, 1940 to Sept. 30, 1997, recording gage at present site at datum 3.0 ft. higher.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 12,100 ft<sup>3</sup>/s, June 22, 1974, gage height, 19.75 ft, present datum; maximum gage height, 21.59 ft, present datum, Jan. 23, 1969, ice jam; minimum daily discharge, 22 ft<sup>3</sup>/s, Jan. 18, 1977.

SUSPENDED-SEDIMENT CONCENTRATION: Maximum daily mean, 8,620 mg/L Apr. 14, 1981; minimum daily mean, 17 mg/L Jan. 15, 16, 1979.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 132,000 tons Apr. 14, 1981; minimum daily, 7.3 tons Jan. 15, 16, 1979.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	80	135	366	e150	418	1090	499	5340	499	207	205
2	70	85	126	361	e160	424	1010	500	3910	475	200	180
3	71	152	127	356	e170	407	923	493	2930	461	202	164
4	71	211	131	e350	e180	403	854	473	2240	478	261	155
5	71	262	138	e347	e200	968	790	459	1810	452	304	140
6	71	243	141	e343	e210	1320	744	434	1550	565	233	131
7	70	185	139	e340	e220	1090	709	521	1370	553	207	126
8	69	159	134	e337	e210	927	672	602	1220	489	195	123
9	70	145	141	e333	e200	811	637	517	1100	445	184	121
10	71	138	1730	e330	e195	714	600	484	1080	462	175	117
11	71	134	2870	e327	e185	661	574	823	1670	452	172	117
12	70	133	1590	e323	e175	582	555	828	1610	426	170	111
13	71	118	1090	e320	e165	594	535	1020	1380	396	167	103
14	87	111	915	e317	e160	565	524	1290	1400	368	159	103
15	103	111	806	e313	e155	542	501	1670	1480	359	149	107
16	93	114	730	e300	e150	536	479	1720	1200	335	140	143
17	87	117	645	e340	e145	528	462	1340	1060	320	138	149
18	81	184	600	e300	e140	535	437	1500	962	308	159	114
19	78	246	559	e270	e220	541	426	1700	875	299	175	100
20	77	211	442	e240	e400	534	429	1460	812	288	169	96
21	74	188	471	e210	935	520	520	1350	785	293	151	95
22	73	173	520	e180	779	490	574	1290	788	294	138	91
23	73	169	491	e170	898	471	555	2130	746	305	129	90
24	74	161	424	e165	e700	485	522	2040	699	292	131	91
25	79	155	363	e160	e600	557	539	1710	663	282	144	90
26	80	154	374	e170	e520	892	555	1500	624	269	166	87
27	81	147	420	e180	e460	1300	539	1280	596	259	168	88



ROCK RIVER BASIN

165

**05447500 Green River near Geneseo, IL--Continued**

<b>28</b>	83	141	414	e170	e410	1200	506	1130	579	247	247	86
<b>29</b>	80	132	400	e160	410	1180	486	997	553	232	362	84
<b>30</b>	81	138	394	e155	----	1230	484	2150	525	219	303	84
<b>31</b>	82	----	381	e153	----	1140	----	5310	----	214	243	----
TOTAL	2382	4697	17841	8386	9502	22565	18231	39220	41557	11336	5948	3491
MEAN	76.8	157	576	271	328	728	608	1265	1385	366	192	116
MAX	103	262	2870	366	935	1320	1090	5310	5340	565	362	205
MIN	69	80	126	153	140	403	426	434	525	214	129	84
CFSM	0.08	0.16	0.57	0.27	0.33	0.73	0.61	1.26	1.38	0.36	0.19	0.12
IN.	0.09	0.17	0.66	0.31	0.35	0.84	0.68	1.45	1.54	0.42	0.22	0.13

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 – 2004, BY WATER YEAR (WY)**

MEAN	379	448	459	525	749	1020	1058	1004	924	560	379	331
MAX	2135	1790	1905	1976	2318	3244	3562	3500	3568	2946	1845	1777
(WY)	1999	1978	1983	1946	2001	1979	1973	1974	1974	1990	1987	1970
MIN	48.8	60.4	57.1	26.5	68.8	174	157	140	127	62.9	61.0	46.5
(WY)	1954	1954	1959	1977	1940	2003	2003	1989	1977	1940	1988	1940

**SUMMARY STATISTICS**

**FOR 2003 CALENDAR YEAR**

**FOR 2004 WATER YEAR**

**WATER YEARS 1936 – 2004**

ANNUAL TOTAL	112383		185156			
ANNUAL MEAN	308		506		654	
HIGHEST ANNUAL MEAN					1579	
LOWEST ANNUAL MEAN					159	
HIGHEST DAILY MEAN	3670	May 1	5340	Jun 1	10100	Mar 19 1979
LOWEST DAILY MEAN	59	Aug 28	69	Oct 8	22	Jan 18 1977
ANNUAL SEVEN-DAY MINIMUM	63	Aug 25	70	Oct 6	24	Jan 17 1977
MAXIMUM PEAK FLOW			5840	May 31	12100	A Jun 22 1974
MAXIMUM PEAK STAGE			13.77	May 31	21.59	B Jan 23 1969
INSTANTANEOUS LOW FLOW			68	C		
ANNUAL RUNOFF (CFSM)	0.307		0.504		0.652	
ANNUAL RUNOFF (INCHES)	4.17		6.87		8.86	
10 PERCENT EXCEEDS	643		1200		1460	
50 PERCENT EXCEEDS	147		325		384	
90 PERCENT EXCEEDS	72		89		97	

A – Gage height, 19.75 ft., present datum.

B – Present datum, due to backwater from ice, estimated discharge, 8000 ft<sup>3</sup>/s.

C – Oct. 2, 7, 8.

ROCK RIVER BASIN  
05448000 Mill Creek at Milan, IL

**LOCATION.**— Lat 41°26'32", long 90°33'21" (NAD of 1927), in NW1/4NE1/4 sec.25, T.17 N., R.2 W., Rock Island County, Hydrologic Unit 07090005, on right bank 100 ft. upstream from Knoxville Road Bridge, 1 mi southeast of Milan, and at mile 1.2.

**DRAINAGE AREA.**— 62.4 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: March 1989 to current year, October 1939 to September 1940 (fragmentary), July 1941 to September 1986. Seven-month period (March to September), water years 1987–89.

STAGE: Water years 1999 to current year.

**REVISED RECORDS.**— WSP 1308: 1940(M), 1943(M). WDR IL-72-1: Drainage area.

**GAGE.**— Water-stage recorder, phone telemeter, and crest-stage gage. Datum of gage is 565.23 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1987, at datum 1.00 ft higher. Prior to Apr. 5, 1940, nonrecording gage at site 300 ft upstream. Oct. 1939 to Nov. 15, 1984, recording gage at site 400 ft. upstream.

**REMARKS.**— Occasional pumpage of about 3–6 ft<sup>3</sup>/s from quarry into creek upstream from gage.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 9,300 ft<sup>3</sup>/s, Apr. 22, 1973, gage height, 12.65 ft, present datum; no flow at times in several years.

**REMARKS FOR CURRENT YEAR.**— Records good except those for May 31 to June 16, which are fair, and estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.89	3.4	6.7	9.2	e9.4	30	71	27	327	35	10	22
2	0.54	6.2	7.6	11	e9.3	26	61	34	247	29	9.5	18
3	0.55	32	5.0	12	e10	22	56	63	224	37	11	19
4	0.61	16	4.9	7.4	e11	33	49	41	179	34	43	19
5	0.64	8.1	5.7	9.5	e12	229	45	35	155	29	18	16
6	2.1	6.4	6.2	14	e13	101	43	32	133	55	11	10
7	2.6	5.6	6.3	5.0	e14	70	40	368	119	36	9.6	9.3
8	2.8	4.9	7.0	7.5	e13	53	39	181	107	31	8.9	8.7
9	2.8	4.7	10	e10	e12	46	36	117	99	32	8.5	8.4
10	2.2	5.1	208	e9.6	e12	39	34	93	240	35	10	8.2
11	1.00	5.0	67	e9.2	e11	35	30	77	415	33	11	7.7
12	1.6	5.0	34	e8.8	e11	29	29	63	183	27	9.4	7.3
13	2.0	5.2	e30	e8.4	e10	29	28	73	141	23	7.1	6.8
14	3.8	5.0	e26	e8.2	e10	32	27	76	184	20	6.7	6.6
15	5.5	5.1	23	e8.0	e9.7	28	28	68	131	18	6.5	18
16	5.2	5.4	20	e7.9	e9.3	32	27	59	105	30	6.2	74
17	4.3	7.3	15	e7.8	e9.0	31	26	55	94	53	8.5	24
18	3.1	13	e15	e10	e11	43	23	252	85	25	21	13
19	2.6	13	e14	e8.8	e13	40	22	177	76	21	101	9.2
20	2.6	10	14	7.5	e30	39	27	120	69	19	22	7.9
21	3.0	7.6	17	e7.4	e90	33	55	171	71	18	15	7.4
22	3.0	6.1	17	e7.3	e70	31	33	336	68	28	10	6.7
23	3.1	6.6	16	e7.2	e80	31	28	196	54	38	9.3	6.5
24	3.0	7.4	e12	e7.1	e60	34	28	128	50	21	15	6.1
25	3.4	6.8	9.1	e7.0	e45	33	36	158	47	19	30	6.0
26	3.7	6.1	10	e11	e36	170	29	113	43	16	55	6.1
27	3.8	6.1	11	e11	e32	131	26	96	40	18	26	8.9
28	4.5	5.9	15	e10	e31	105	28	82	42	19	119	8.9
29	5.6	5.5	13	e10	30	105	27	70	36	17	95	6.6
30	5.4	5.6	10	e9.8	---	87	28	2600	37	14	41	5.4

ROCK RIVER BASIN  
05448000 Mill Creek at Milan, IL--Continued

167

31	4.4	---	10	e9.6	---	82	---	559	---	11	29	---
TOTAL	90.33	230.1	665.5	277.2	713.7	1829	1059	6520	3801	841	783.2	381.7
MEAN	2.91	7.67	21.5	8.94	24.6	59.0	35.3	210	127	27.1	25.3	12.7
MAX	5.6	32	208	14	90	229	71	2600	415	55	119	74
MIN	0.54	3.4	4.9	5.0	9.0	22	22	27	36	11	6.2	5.4
CFSM	0.05	0.12	0.34	0.14	0.39	0.95	0.57	3.37	2.03	0.43	0.40	0.20
IN.	0.05	0.14	0.40	0.17	0.43	1.09	0.63	3.89	2.27	0.50	0.47	0.23

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 – 2004, BY WATER YEAR (WY)**

MEAN	22.1	23.5	26.1	37.0	62.5	75.8	78.0	78.2	70.7	41.0	24.6	18.5
MAX	209	175	162	223	261	299	335	432	616	388	259	208
(WY)	1955	1962	1983	1960	2001	1960	1965	1996	1993	1986	1993	1970
MIN	0.11	0.51	0.44	0.00	2.78	3.95	3.17	3.44	1.86	1.50	0.89	0.18
(WY)	1957	1957	1977	1940	1964	1956	1956	1956	1956	1988	1957	1956

**SUMMARY STATISTICS**

**FOR 2003 CALENDAR YEAR**

**FOR 2004 WATER YEAR**

**WATER YEARS 1940 – 2004**

ANNUAL TOTAL	8635.07		17191.73			
ANNUAL MEAN	23.7		47.0		47.8	
HIGHEST ANNUAL MEAN					173	
LOWEST ANNUAL MEAN					8.67	
HIGHEST DAILY MEAN	572	May 5	2600	May 30	5000	Jul 8 1986
LOWEST DAILY MEAN	0.37	Sep 11	0.54	Oct 2	0.00	A
ANNUAL SEVEN-DAY MINIMUM	0.68	Sep 6	1.1	Oct 1	0.00	A
MAXIMUM PEAK FLOW			6650	May 30	9300	Apr 22 1973
MAXIMUM PEAK STAGE			10.23	May 30	12.65 B	Apr 22 1973
INSTANTANEOUS LOW FLOW			0.38	Oct 2		
ANNUAL RUNOFF (CFSM)	0.379		0.753		0.766	
ANNUAL RUNOFF (INCHES)	5.15		10.25		10.41	
10 PERCENT EXCEEDS	44		102		96	
50 PERCENT EXCEEDS	7.9		18		18	
90 PERCENT EXCEEDS	2.0		5.1		1.8	

A – At times in several years.

B – Present datum.

EDWARDS RIVER BASIN  
**05466000 Edwards River near Orion, IL**

**LOCATION.**— Lat 41°16'19", long 90°22'39" (NAD of 1927), in NE1/4SE1/4 sec.21, T.15 N., R.1 E., Henry County, Hydrologic Unit 07080104, on left bank at downstream side of bridge on U.S. Highway 150, 1.5 mi north of Opheim, 5.5 mi south of Orion, and at mile 51.5.

**DRAINAGE AREA.**— 155 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1940 to current year. Monthly discharge only for some periods, published in WSP 1308.

STAGE: Water years 1994 to current year.

**REVISED RECORDS.**— WSP 1175: 1947(P). WSP 1508: 1942. WDR IL-75-1: Drainage area.

**GAGE.**— Water-stage recorder, phone telemeter and crest-stage gage. Datum of gage is 653.96 ft above NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Apr. 4, 1941, and Apr. 8 to Nov. 11, 1981, nonrecording gage at same site and datum.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 8,910 ft<sup>3</sup>/s, Feb. 19, 1951, gage height, 13.41 ft, from floodmarks; maximum gage height, 15.52 ft, June 23, 1974, discharge, 5,760 ft<sup>3</sup>/s; minimum discharge, 0.3 ft<sup>3</sup>/s, Oct. 6, 1956.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Flood of August 1924 reached a stage of 20.2 ft, from floodmarks.

**REMARKS FOR CURRENT YEAR.**— Records good except those for June 1–4, which are fair, and estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	5.1	13	66	e47	73	165	81	561	68	22	12
2	5.9	6.9	11	66	e48	68	148	86	395	65	21	11
3	5.9	22	10	64	e50	59	135	132	324	66	20	10
4	5.6	22	10	71	e54	69	120	131	271	69	32	10
5	5.7	64	12	67	e60	381	112	117	244	65	27	9.8
6	5.5	24	13	e54	e69	236	110	107	223	81	21	9.8
7	5.3	13	11	e45	e70	177	104	467	202	63	20	11
8	5.3	9.8	11	e76	e69	139	98	307	183	58	19	8.9
9	5.5	8.7	18	e69	e65	122	89	228	168	62	17	8.8
10	5.6	7.3	1660	e67	e62	108	84	191	185	60	16	8.7
11	5.1	7.4	580	e64	e58	106	82	177	299	55	16	8.8
12	5.0	6.8	269	e62	e55	93	79	189	207	56	16	8.9
13	5.0	6.6	198	e60	e53	89	78	214	180	51	15	8.9
14	7.1	6.3	162	e58	e51	91	76	214	182	47	14	8.7
15	7.4	6.3	138	e57	e49	80	72	257	171	44	13	12
16	5.8	6.3	133	e56	e47	85	71	219	148	43	13	30
17	5.0	7.3	113	e55	e44	86	68	197	139	42	13	19
18	4.5	64	105	e68	e44	93	66	546	126	42	15	11
19	4.4	48	96	e65	e90	87	65	370	116	40	26	9.2
20	4.4	28	90	e61	e130	85	65	302	113	37	19	8.3
21	4.6	21	99	e58	e220	77	94	1260	112	35	15	7.8
22	4.7	18	88	e57	e160	75	73	793	106	39	13	7.3
23	4.8	17	84	e54	e190	76	67	614	95	36	11	7.2
24	4.9	23	79	e52	e140	82	67	373	90	33	12	7.2
25	5.3	19	77	e51	89	83	78	638	86	33	15	7.2
26	5.3	14	76	e50	78	213	69	394	81	31	18	7.3
27	5.6	13	71	e56	71	226	65	318	79	30	19	6.9
28	5.6	13	73	e54	66	192	66	263	78	28	22	6.6
29	5.1	19	74	e51	67	221	62	232	73	26	21	6.4
30	5.1	13	72	e49	---	191	71	1800	70	25	16	6.7

**05466000 Edwards River near Orion, IL---Continued**

<b>31</b>	5.0	---	69	e48	---	179	---	1540	---	24	13	---
TOTAL	165.7	539.8	4515	1831	2296	3942	2599	12757	5307	1454	550	295.4
MEAN	5.35	18.0	146	59.1	79.2	127	86.6	412	177	46.9	17.7	9.85
MAX	7.4	64	1660	76	220	381	165	1800	561	81	32	30
MIN	4.4	5.1	10	45	44	59	62	81	70	24	11	6.4
CFSM	0.03	0.12	0.94	0.38	0.51	0.82	0.56	2.65	1.14	0.30	0.11	0.06
IN.	0.04	0.13	1.08	0.44	0.55	0.95	0.62	3.06	1.27	0.35	0.13	0.07

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 – 2004, BY WATER YEAR (WY)**

MEAN	51.8	63.3	70.4	86.1	153	175	199	186	171	105	53.1	45.9
MAX	466	486	436	427	871	554	634	558	693	689	466	375
(WY)	1942	1978	1983	1974	1951	1979	1983	1973	1974	1969	1993	1989
MIN	0.93	1.87	0.84	0.50	2.44	13.8	11.3	11.3	9.95	6.91	3.48	2.13
(WY)	1957	1977	1977	1977	1989	1956	1956	1989	1977	1977	1988	1956

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1941 – 2004**

ANNUAL TOTAL	22131.6		36251.9			
ANNUAL MEAN	60.6		99.0		113	
HIGHEST ANNUAL MEAN					334	
LOWEST ANNUAL MEAN					22.0	
HIGHEST DAILY MEAN	2570	May 1	1800	May 30	7630	Feb 19 1951
LOWEST DAILY MEAN	3.6	A Jan 26	4.4	Oct 19,20	0.40	Oct 6 1956
ANNUAL SEVEN-DAY MINIMUM	3.8	Jan 22	4.6	Oct 18	0.40	Jan 20 1977
MAXIMUM PEAK FLOW			3390	May 30	8910	B Feb 19 1951
MAXIMUM PEAK STAGE			12.64	May 30	15.52	C Jun 23 1974
INSTANTANEOUS LOW FLOW			4.1	Oct 19,20	0.30	Oct 6 1956
ANNUAL RUNOFF (CFSM)	0.391		0.639		0.728	
ANNUAL RUNOFF (INCHES)	5.31		8.70		9.90	
10 PERCENT EXCEEDS	114		213		235	
50 PERCENT EXCEEDS	13		60		48	
90 PERCENT EXCEEDS	5.0		6.7		6.0	

A – Estimated due to backwater from ice.

B – Gage height, 13.41 ft., from flood mark.

C – Discharge, 5,760 ft<sup>3</sup>/s.

EDWARDS RIVER BASIN  
**05466500 Edwards River near New Boston, IL**

**LOCATION.**— Lat 41°11'13", long 90°58'02" (NAD of 1927), at quarter corner between secs.21 and 28, T.14 N., R.5 W., Mercer County, Hydrologic Unit 07080104, on left bank at downstream side of bridge on State Highway 17, 1.5 mi northeast of New Boston, and at mile 4.6.

**DRAINAGE AREA.**— 445 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1934 to current year. Monthly discharge only for some periods, published in WSP 1308.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–91. Additional chemical data for water years 1959, 1971–77 are published in Water–Resources Investigations 78–23 and 79–24 as site LF 01.

SEDIMENT: January 1979 to September 1981.

**REVISED RECORDS.**— WSP 1508: 1935–36(M), 1938–40(M), 1941, 1943. WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter and crest–stage gage. Datum of gage is 529.92 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Mar. 1, 1941, nonrecording gage at same site and datum.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 18,000 ft<sup>3</sup>/s, Apr. 22, 1973, gage height, 23.33 ft; minimum, 1.2 ft<sup>3</sup>/s, Oct. 19, 20, 1988.

SUSPENDED–SEDIMENT CONCENTRATIONS: Maximum daily mean, 11,600 mg/L May 29, 1980; minimum daily mean, 9 mg/L Feb. 15, 1981.

SUSPENDED–SEDIMENT LOADS: Maximum daily, 75,400 tons Apr. 14, 1981; minimum daily, 1.4 tons Oct. 12, 13, 1979.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	20	32	171	e81	228	547	233	3520	210	70	70
2	17	21	37	169	e80	229	494	241	3790	201	68	61
3	17	37	33	170	e81	211	448	260	2440	213	66	55
4	17	64	32	168	e84	199	413	341	1290	207	101	51
5	16	70	35	157	e93	564	379	328	1010	205	95	49
6	16	74	35	118	e105	968	357	308	862	275	83	46
7	16	78	37	e100	e116	619	342	296	759	254	66	43
8	16	51	38	e130	e118	473	325	1040	657	205	59	40
9	16	39	40	e125	e116	398	306	731	577	182	56	40
10	20	35	279	e120	e108	355	282	534	575	185	53	38
11	18	32	1640	e116	e103	326	268	461	1140	196	51	36
12	18	31	1460	e112	e99	291	259	426	1110	174	49	35
13	17	30	655	e108	e95	272	251	464	736	166	48	34
14	22	29	460	e104	e90	274	245	573	639	151	47	34
15	21	28	387	e100	e86	267	241	532	605	137	45	37
16	21	28	342	e98	e82	260	233	556	550	128	43	119
17	24	28	327	e97	e77	267	227	489	490	128	45	119
18	24	31	282	e107	e74	309	219	472	451	126	68	73
19	22	57	270	e120	e71	329	210	942	414	115	191	55
20	20	115	270	e112	e170	310	211	799	384	109	101	46
21	19	75	215	e105	e250	284	268	902	371	103	74	e42
22	19	59	271	e100	e460	263	299	1690	362	116	57	37
23	18	53	239	e94	e340	250	249	1530	334	126	49	36
24	18	48	229	e90	e400	256	229	1320	303	123	73	35
25	19	46	198	e87	e350	275	243	1000	288	102	67	33
26	19	42	188	e86	e300	490	259	1190	270	94	104	32
27	19	44	217	e90	e240	830	236	899	256	89	93	32
28	19	40	204	e97	e210	725	225	747	246	83	130	30

## EDWARDS RIVER BASIN

171

**05466500 Edwards River near New Boston, IL--Continued**

<b>29</b>	19	38	199	e92	231	702	218	641	237	79	179	29
<b>30</b>	20	34	186	e88	---	673	220	2250	222	75	133	29
<b>31</b>	20	---	180	e84	---	594	---	4920	---	72	89	---
TOTAL	585	1377	9017	3515	4710	12491	8703	27115	24888	4629	2453	1416
MEAN	18.9	45.9	291	113	162	403	290	875	830	149	79.1	47.2
MAX	24	115	1640	171	460	968	547	4920	3790	275	191	119
MIN	16	20	32	84	71	199	210	233	222	72	43	29
CFSM	0.04	0.10	0.65	0.25	0.36	0.91	0.65	1.97	1.86	0.34	0.18	0.11
IN.	0.05	0.12	0.75	0.29	0.39	1.04	0.73	2.27	2.08	0.39	0.21	0.12

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 – 2004, BY WATER YEAR (WY)**

MEAN	139	166	175	238	365	492	543	508	452	298	160	123
MAX	1216	1192	1469	1133	1512	1791	2307	1762	1829	2258	1508	1006
(WY)	1999	1978	1983	1969	2001	1993	1973	1996	1974	1982	1993	1970
MIN	5.47	11.2	8.86	6.39	11.9	66.0	33.4	33.0	35.8	11.7	10.3	7.29
(WY)	1989	1938	1964	1977	1989	1956	1956	1989	1977	1936	1988	1988

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1935 – 2004**

ANNUAL TOTAL	75716		100899			
ANNUAL MEAN	207		276		304	
HIGHEST ANNUAL MEAN					965	
LOWEST ANNUAL MEAN					76.6	
HIGHEST DAILY MEAN	4280	May 3	4920	May 31	14000	Apr 22 1973
LOWEST DAILY MEAN	16	Oct 5–9	16	Oct 5–9	1.3	Oct 19 1988
ANNUAL SEVEN-DAY MINIMUM	16	Oct 3	16	Oct 3	2.4	Oct 18 1988
MAXIMUM PEAK FLOW			6200	May 31	18000	Apr 22 1973
MAXIMUM PEAK STAGE			22.61	May 31	23.33	Apr 22 1973
INSTANTANEOUS LOW FLOW			16	A	1.2	B
ANNUAL RUNOFF (CFSM)	0.466		0.620		0.684	
ANNUAL RUNOFF (INCHES)	6.33		8.43		9.29	
10 PERCENT EXCEEDS	309		609		700	
50 PERCENT EXCEEDS	48		126		130	
90 PERCENT EXCEEDS	20		29		21	

A – Oct. 3–10, and 13.

B – Oct. 19–20, 1998.

POPE CREEK BASIN  
**05467000 Pope Creek near Keithsburg, IL**

**LOCATION.**— Lat 41°07'44", long 90°55'09" (NAD of 1927), in SE1/4SE1/4 sec.11, T.13 N., R.5 W., Mercer County, Hydrologic Unit 07080104, on right bank at downstream side of bridge on County Road 900 E, 1.8 mi northeast of Keithsburg, and at mile 3.0.

**DRAINAGE AREA.**— 174 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1934 to September 1986. Monthly discharge only for some periods, published in WSP 1308. Seven-month period (March to September), water years 1987–90. October 1990 to September 1996. October 1997 to current year.

STAGE: Water years 1994–1996; 1998 to current year.

**REVISED RECORDS.**— WSP 1508: 1935–37(M), 1938, 1939–43(M). WDR IL–81–1: Drainage area.

**GAGE.**— Water-stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest-stage gage. Datum of gage is 524.07 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Aug. 1, 1975, nonrecording gage and crest-stage gage at site 1,000 ft upstream at same datum. Aug. 1, 1975 to Aug. 24, 1981, water-stage recorder at site 500 ft downstream at same datum.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 8,900 ft<sup>3</sup>/s, Apr. 22, 1973, gage height, 27.88 ft, from graph based on gage readings at site 1,000 ft upstream at same datum; maximum gage height, 29.25 ft, Feb. 9, 2001, estimated discharge, 3,250 ft<sup>3</sup>/s, ice jam; minimum daily discharge, 0.53 ft<sup>3</sup>/s, Aug. 6, 1989.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	5.7	14	66	e35	90	182	88	752	68	19	17
2	4.8	7.1	13	65	e36	85	163	86	475	69	18	14
3	4.9	38	12	66	e37	74	148	107	398	83	18	13
4	4.8	51	12	63	e39	73	136	163	332	73	36	11
5	4.9	35	13	56	e43	290	125	148	292	67	31	10
6	5.1	42	14	57	e50	330	119	128	263	98	21	9.4
7	4.8	43	14	e62	e46	233	113	120	242	77	18	8.5
8	4.6	25	14	e70	e42	182	107	160	215	63	15	7.7
9	4.6	17	17	e64	e37	152	98	159	193	57	13	7.4
10	6.5	14	e348	e60	e35	132	90	138	206	76	12	7.2
11	5.5	13	e772	e58	e33	118	85	185	370	65	11	6.9
12	4.3	12	e437	e56	e31	105	82	156	269	65	10	6.6
13	4.6	9.0	255	e54	e30	97	79	150	214	59	9.6	6.4
14	7.2	8.8	202	e52	e29	101	77	164	202	51	9.1	6.4
15	11	8.6	171	e50	e28	95	75	170	196	45	8.7	11
16	6.9	9.2	154	e48	e28	95	72	170	168	41	8.0	151
17	5.3	9.2	145	e50	e27	100	68	156	153	49	7.6	58
18	5.6	14	124	e54	e27	124	65	177	142	44	13	27
19	5.5	43	115	e58	e27	127	62	270	131	37	34	20
20	5.5	61	148	e56	e70	114	64	230	122	34	20	15
21	5.2	41	142	e52	e200	102	113	299	120	32	16	12
22	5.0	32	122	e49	e170	93	105	316	118	47	13	10
23	5.0	27	95	e47	e150	91	83	510	108	47	12	9.5
24	5.1	24	94	e45	e170	95	76	364	98	37	12	8.7
25	5.6	21	96	e44	e140	96	91	348	93	33	23	8.2
26	5.5	20	83	e43	e110	156	90	385	88	30	37	7.8
27	6.2	18	86	e46	e92	254	79	312	83	27	29	7.4
28	6.2	16	80	e50	e88	207	75	264	81	25	39	7.5
29	5.3	14	80	e43	e82	232	72	229	77	23	57	7.3
30	6.4	15	74	e39	---	217	79	1020	71	21	34	6.8



POPE CREEK BASIN  
**05467000 Pope Creek near Keithsburg, IL--Continued**

173

31	5.8	---	70	e37	---	197	---	1320	---	20	22	---
TOTAL	172.6	693.6	4016	1660	1932	4457	2873	8492	6272	1563	626.0	498.7
MEAN	5.57	23.1	130	53.5	66.6	144	95.8	274	209	50.4	20.2	16.6
MAX	11	61	772	70	200	330	182	1320	752	98	57	151
MIN	4.3	5.7	12	37	27	73	62	86	71	20	7.6	6.4
CFSM	0.03	0.13	0.74	0.31	0.38	0.83	0.55	1.57	1.20	0.29	0.12	0.10
IN.	0.04	0.15	0.86	0.35	0.41	0.95	0.61	1.82	1.34	0.33	0.13	0.11

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 – 2004, BY WATER YEAR (WY)**

MEAN	55.2	65.7	72.9	89.9	161	178	199	202	188	122	64.5	53.1
MAX	698	520	576	461	843	640	822	717	1020	1303	693	471
(WY)	1999	1999	1983	1974	2001	1993	1973	1996	1990	1982	1993	1980
MIN	2.40	2.96	2.63	2.74	5.29	19.1	11.4	7.68	10.9	1.24	2.75	1.82
(WY)	1964	1957	1965	1977	1964	1956	1956	1989	1936	1989	1989	1988

**SUMMARY STATISTICS**

**FOR 2003 CALENDAR YEAR**

**FOR 2004 WATER YEAR**

**WATER YEARS 1935 – 2004**

ANNUAL TOTAL	35189.7		33255.9		122	
ANNUAL MEAN	96.4		90.9		399	
HIGHEST ANNUAL MEAN					1993	
LOWEST ANNUAL MEAN					25.8	
HIGHEST DAILY MEAN	4870	May 1	1320	May 31	7030	Oct 18 1998
LOWEST DAILY MEAN	4.3	Oct 12	4.3	Oct 12	0.53	Aug 6 1989
ANNUAL SEVEN-DAY MINIMUM	4.8	Oct 3	4.8	Oct 3	0.78	Aug 1 1989
MAXIMUM PEAK FLOW			2180	May 30	8900 A	Apr 22 1973
MAXIMUM PEAK STAGE			26.87	May 30	29.25 B	Feb 9 2001
INSTANTANEOUS LOW FLOW			4.0	Oct 12,13		
ANNUAL RUNOFF (CFSM)	0.554		0.522		0.702	
ANNUAL RUNOFF (INCHES)	7.52		7.11		9.54	
10 PERCENT EXCEEDS	157		203		267	
50 PERCENT EXCEEDS	20		56		48	
90 PERCENT EXCEEDS	5.9		7.2		7.0	

A – Gage height, 27.88 ft., from graph based on gage readings at site 1,000 ft. upstream at same datum.

B – Ice jam, estimated discharge, 3,250 ft<sup>3</sup>/s.

HENDERSON CREEK BASIN  
05469000 Henderson Creek near Oquawka, IL

**LOCATION.**— Lat 41°00'05", long 90°51'15" (NAD of 1927), in NE1/4SW1/4 sec.28, T.12 N., R.4 W., Henderson County, Hydrologic Unit 07080104, on left bank at downstream side of bridge on State Highway 94, 1 mi south of Bald Bluff, 6.5 mi northeast of Oquawka, and at mile 20.8.

**DRAINAGE AREA.**— 432 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

**DISCHARGE:** October 1934 to September 1996. October 1997 to current year. Prior to October 1938, published as Henderson River. Monthly discharge only for some periods, published in WSP 1308.

**STAGE:** Water years 1994–1996; 1998 to current year.

**SURFACE-WATER QUALITY**

**CHEMICAL:** Water years 1978 to 1991. Additional chemical data for water years 1972–77 are published in Water-Resources Investigations 78–23 and 79–24 as site LD 02.

**SEDIMENT:** April 1978 to September 1981.

**REVISED RECORDS.**— WSP 1208: 1939, 1942–43, 1948. WSP 1308: 1935–38(M), 1941(M). WDR IL–75–1: Drainage area.

**GAGE.**— Water-stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest-stage gage. Datum of gage is 541.21 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Mar. 4, 1941, nonrecording gage at same site and datum.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 34,600 ft<sup>3</sup>/s, July 8, 1982, gage height, 31.05 ft; maximum gage height, 32.65 ft, July 25, 1993, discharge 30,800 ft<sup>3</sup>/s; minimum daily observed, 1.7 ft<sup>3</sup>/s, Sept. 22, 23, 1940.

**SUSPENDED-SEDIMENT CONCENTRATIONS:** Maximum daily mean, 7,070 mg/L May 27, 1981; minimum daily mean, 6 mg/L Feb. 10, 11, 1981.

**SUSPENDED-SEDIMENT LOADS:** Maximum daily, 33,900 tons Apr. 14, 1981; minimum daily, 0.87 tons Feb. 2–4, 1980.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	15	57	261	e130	215	465	285	980	146	73	70
2	15	26	52	263	e130	213	429	288	714	140	68	66
3	13	233	49	260	e130	184	396	277	610	186	66	61
4	11	189	50	245	e140	190	376	320	534	169	86	58
5	11	303	56	222	e150	666	362	303	479	159	104	54
6	11	189	59	e200	e170	714	351	282	441	145	75	49
7	11	97	65	e225	e180	520	342	262	411	156	61	46
8	11	66	56	e260	e190	432	315	251	373	139	55	44
9	16	55	73	e250	e180	390	301	245	342	123	57	42
10	18	51	2210	e240	e175	348	285	236	352	301	58	40
11	33	48	3700	e230	e170	326	276	235	610	317	54	37
12	17	45	1540	e220	e165	293	260	232	520	830	50	54
13	15	42	842	e210	e160	280	255	228	406	371	e48	53
14	28	40	693	e205	e155	280	250	241	e400	252	e46	51
15	60	39	612	e200	e150	272	242	256	e420	193	e44	115
16	46	35	577	e195	e140	271	237	237	353	160	e42	701
17	27	34	511	e190	e130	284	228	224	322	196	e48	324
18	21	161	474	e190	e120	339	217	258	299	171	52	185
19	18	406	432	e220	e130	332	210	297	279	132	175	138
20	16	188	370	e250	e200	309	208	282	262	119	134	118
21	15	126	394	e210	e600	281	319	272	268	110	84	103
22	14	101	386	e190	e450	259	323	277	280	167	66	95
23	14	91	363	e170	e475	260	252	392	245	299	53	88
24	14	106	332	e160	e500	271	240	354	221	181	60	87
25	15	95	287	e150	339	267	279	383	205	126	63	84
26	17	78	310	e140	244	328	275	521	194	110	116	75
27	28	73	292	e150	222	502	247	424	184	101	e100	68

HENDERSON CREEK BASIN

175

**05469000 Henderson Creek near Oquawka, IL--Continued**

<b>28</b>	18	67	314	e160	213	454	244	371	180	93	e130	66
<b>29</b>	16	59	314	e150	204	521	240	327	168	86	e160	63
<b>30</b>	17	59	291	e145	----	520	245	499	155	80	e120	52
<b>31</b>	17	----	274	e140	----	491	----	1410	----	78	e90	----
TOTAL	603	3117	16035	6301	6342	11012	8669	10469	11207	5836	2438	3087
MEAN	19.5	104	517	203	219	355	289	338	374	188	78.6	103
MAX	60	406	3700	263	600	714	465	1410	980	830	175	701
MIN	11	15	49	140	120	184	208	224	155	78	42	37
CFSM	0.05	0.24	1.20	0.47	0.51	0.82	0.67	0.78	0.86	0.44	0.18	0.24
IN.	0.05	0.27	1.38	0.54	0.55	0.95	0.75	0.90	0.97	0.50	0.21	0.27

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 – 2004, BY WATER YEAR (WY)**

MEAN	148	174	183	241	369	453	493	491	466	309	142	130
MAX	1560	1189	1176	1265	1473	1752	1742	1829	1960	2967	1675	1222
(WY)	1942	1978	1983	1969	2001	1979	1973	1996	1974	1982	1993	1970
MIN	7.10	9.89	8.38	4.45	13.5	47.4	33.4	26.9	31.3	6.58	9.61	5.65
(WY)	1938	1938	1964	1940	1989	1956	1956	1989	1940	1936	1936	1940

**SUMMARY STATISTICS**

**FOR 2003 CALENDAR YEAR**

**FOR 2004 WATER YEAR**

**WATER YEARS 1935 – 2004**

ANNUAL TOTAL	73964		85116			
ANNUAL MEAN	203		233		299	
HIGHEST ANNUAL MEAN					1002	
LOWEST ANNUAL MEAN					50.9	
HIGHEST DAILY MEAN	3750	May 10	3700	Dec 11	25800	Jul 25 1993
LOWEST DAILY MEAN	11	Oct 4–8	11	Oct 4–8	1.7 A	B
ANNUAL SEVEN-DAY MINIMUM	12	Oct 2	12	Oct 2	2.1	Sep 17 1940
MAXIMUM PEAK FLOW			4070	Dec 11	34600 C	Jul 8 1982
MAXIMUM PEAK STAGE			24.28	Dec 11	32.65 D	Jul 25 1993
INSTANTANEOUS LOW FLOW			9.8	Oct 9		
ANNUAL RUNOFF (CFSM)	0.469		0.538		0.693	
ANNUAL RUNOFF (INCHES)	6.37		7.33		9.42	
10 PERCENT EXCEEDS	422		432		668	
50 PERCENT EXCEEDS	59		190		127	
90 PERCENT EXCEEDS	17		40		19	

A – Observed.

B – Sept. 22, 23, 1940.

C – Gage height, 31.05 ft.

D – Discharge, 30,800 ft<sup>3</sup>/s.

UPPER MISSISSIPPI RIVER BASIN  
**05474500 Mississippi River at Keokuk, IA**

**LOCATION.**— Lat 40°23'37", long 91°22'27" (NAD of 1927), in SE1/4 SW1/4 sec.30, T.65 N., R.4 W., Lee County, Hydrologic Unit 07080104, near right bank in tailwater of dam and powerplant of Union Electric Co. at Keokuk, 0.2 mi upstream from bridge on U.S. Highway 136, 2.7 mi upstream from Des Moines River, and at mile 364.2 upstream from Ohio River.

**DRAINAGE AREA.**— 119,000 mi<sup>2</sup>, approximately.

**PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE**

DISCHARGE: January 1878 to current year.

**GAGE.**— Water—stage recorder. Datum of gage is 477.41 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Jan. 1, 1878 to May 1913, nonrecording gage at Galland (formerly Nashville), 8 mi upstream; zero of gage was set to low—water mark of 1864, or 496.52 ft above NGVD of 1929.

**REMARKS.**— Discharge computed from records of operation of turbines in powerplant and spillway gates in dam. Minor flow regulation caused by powerplant since 1913 and navigation dams. Records for May 1913 to September 1937 adjusted for change in contents in Keokuk Reservoir, those after September 1937 unadjusted.

**COOPERATION.**—Records provided by Ameren—Union Electric Co.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Maximum discharge, 446,000 ft<sup>3</sup>/s, July 10, 1993, gage height, 27.58 ft; from floodmark; minimum daily discharge, 5,000 ft<sup>3</sup>/s, December 27, 1933.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Flood of June 6, 1851, reached a stage of 21.0 ft, present site and datum, estimated as 13.5 ft at Galland, discharge, 360,000 ft<sup>3</sup>/s.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17100	20900	33800	42600	22900	55500	118800	86700	252300	146700	46600	49600
2	22800	23900	33400	40100	22900	61800	119300	88100	261300	134500	48200	44900
3	21900	33800	31400	35000	24900	68400	125700	86300	262000	125800	44600	41600
4	20100	40100	29700	35000	25500	79200	123900	81600	257500	110800	49800	37500
5	15800	43600	29700	34300	25000	104400	124700	79100	246100	92700	51300	35700
6	17600	50800	29000	21100	27500	114100	130900	69400	236300	89300	54200	32400
7	24500	54800	30300	16800	27100	128100	130200	67900	226000	90100	58900	32500
8	23300	52000	32800	18200	27800	137600	131600	63700	215800	87500	61300	34000
9	22000	41500	35500	20500	27600	130900	134600	60900	204300	91000	54700	36500
10	21100	39400	65000	22200	27500	107500	134800	55200	200300	97900	48400	35500
11	20900	38700	61300	23900	27800	103500	129200	53700	191100	102900	46700	35000
12	21700	38100	59400	30500	28500	98600	123600	56100	192800	108700	46300	36200
13	21900	32300	44200	36100	28700	84600	112400	65200	192400	109300	44800	37100
14	23600	30300	37700	33900	28600	75400	95100	71400	191100	110400	44400	36300
15	23100	26500	36500	30100	28300	68800	84600	70800	193900	110600	43600	41000
16	29900	32200	33300	29400	28400	74600	79300	72100	196000	106100	43300	39900
17	32800	33500	31000	32500	27400	71500	78500	68500	201400	100600	40400	41400
18	22500	37200	29800	32000	26000	75000	69400	74700	201000	93600	41300	56600
19	16700	38100	30300	25000	28600	74900	70200	88000	201100	92400	42300	56500
20	18400	35400	33800	24000	30600	82600	65700	97100	207000	89800	45600	54400
21	20300	37600	33400	26800	34100	79400	66000	98100	214600	84100	46200	61000
22	22400	38300	34700	24300	40500	74700	71100	98000	217300	84900	40400	73400
23	23200	37200	37900	23400	44500	70900	76200	99600	217900	83700	35500	74700
24	24000	34300	38100	23700	53400	68100	75600	122300	221500	81500	37400	80300
25	24300	33000	37900	24300	65300	73100	73000	153900	218200	78300	37700	79100
26	25600	40100	36700	25700	62200	82200	78200	177100	211900	69600	38900	75800
27	25300	39300	36500	22700	63000	97900	87200	190400	204600	57800	48200	72400
28	22600	37900	36700	21200	57800	109000	82900	202300	192700	55500	53300	68800

## UPPER MISSISSIPPI RIVER BASIN

177

**05474500 Mississippi River at Keokuk, IA--Continued**

<b>29</b>	21300	37000	36900	22000	52400	103900	82400	206700	177200	51300	54100	64800
<b>30</b>	20400	33700	38400	23000	----	108100	88800	212100	161900	45700	58100	60900
<b>31</b>	20800	----	42700	22800	----	112700	----	230000	----	41200	56200	----
TOTAL	687900	1111500	1157800	843100	1014800	2777000	2963900	3247000	6367500	2824300	1462700	1525800
MEAN	22190	37050	37350	27200	34990	89580	98800	104700	212200	91110	47180	50860
MAX	32800	54800	65000	42600	65300	138000	135000	230000	262000	147000	61300	80300
MIN	15800	20900	29000	16800	22900	55500	65700	53700	162000	41200	35500	32400
AC-FT	1364000	2205000	2296000	1672000	2013000	5508000	5879000	6440000	12630000	5602000	2901000	3026000
CFSM	0.19	0.31	0.31	0.23	0.29	0.75	0.83	0.88	1.78	0.77	0.40	0.43
IN.	0.22	0.35	0.36	0.26	0.32	0.87	0.93	1.02	1.99	0.88	0.46	0.48

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1879 – 2004, BY WATER YEAR (WY)**

MEAN	50900	51100	38710	36030	42740	80390	119600	109600	95450	75210	49780	47390
MAX	221100	211300	125600	101600	95620	185400	250100	260700	227300	385800	223000	163300
(WY)	1882	1882	1983	1973	1984	1973	1993	1888	1892	1993	1993	1993
MIN	16060	16020	13450	14650	15790	21780	32930	27600	17400	16280	13030	15530
(WY)	1934	1934	1934	1940	1899	1934	1895	1934	1934	1988	1936	1976

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1879 – 2004**

ANNUAL TOTAL	19713400	25983300	
ANNUAL MEAN	54010	70990	66460
HIGHEST ANNUAL MEAN			162500 1993
LOWEST ANNUAL MEAN			21540 1934
HIGHEST DAILY MEAN	181000 May 25	262000 Jun 3	434000 Jul 10 1993
LOWEST DAILY MEAN	13500 Sep 10	15800 Oct 5	5000 Dec 27 1933
ANNUAL SEVEN-DAY MINIMUM	15500 Sep 6	20000 Oct 1	8270 Dec 25 1933
MAXIMUM PEAK FLOW			446000 Jul 10 1993
MAXIMUM PEAK STAGE			27.58 A Jul 10 1993
ANNUAL RUNOFF (AC-FT)	39100000	51540000	48150000
ANNUAL RUNOFF (CFSM)	0.454	0.597	0.558
ANNUAL RUNOFF (INCHES)	6.16	8.12	7.59
10 PERCENT EXCEEDS	116000	156000	134000
50 PERCENT EXCEEDS	36900	51300	51000
90 PERCENT EXCEEDS	21800	23400	23000

A – From floodmark.

BEAR CREEK BASIN  
**05495500 Bear Creek near Marcelline, IL**

**LOCATION.**— Lat 40°08'34", long 91°20'14" (NAD of 1927), on line between secs.20 and 21, T.2 N., R.8 W., Adams County, Hydrologic Unit 07110001, on right downstream side of bridge on County Road 900 E, 0.9 mi downstream from Grindstone Creek, 2.2 mi northeast of Marcelline, 3.8 mi upstream from State Highway 96, and at mile 12.3.

**DRAINAGE AREA.**— 349 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: March 1944 to current year.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–91.

**REVISED RECORDS.**— WSP 1308: 1944–45(M), 1948(M). WDR IL–75–1: Drainage area. WDR IL–94–1: 1991.

**GAGE.**— Water–stage recorder, phone telemeter, and crest–stage gage. Datum of gage is 504.52 ft above NGVD of 1929. Prior to June 24, 1949, nonrecording gage at same site and datum.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 35,500 ft<sup>3</sup>/s, May 8, 1996, gage height, 28.36 ft; maximum gage height, 28.38 ft, Mar. 4, 1985; no flow for many days in 1953–56, 1962–64, 1976–77, 1988, and part of each day Aug. 17–19, 1989.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for Nov. 18–19, Dec. 10–13, Mar. 5–6, May 25–26, 30–31, June 15–17, Aug. 25–29, Sept. 15, 17, and estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	22	47	136	e35	85	168	67	567	30	11	68
2	11	57	42	127	e37	86	140	71	226	29	11	50
3	8.8	402	39	123	e40	74	116	61	139	71	12	39
4	7.6	522	39	114	e43	215	98	50	100	94	15	32
5	6.6	1560	41	100	e42	2330	87	47	79	60	16	27
6	6.3	1000	43	e90	e39	1120	80	45	67	38	13	23
7	5.9	229	42	e70	e37	338	77	41	59	31	12	21
8	5.6	120	40	e58	e36	202	73	36	52	1270	11	18
9	5.4	84	42	e68	e34	150	65	32	50	489	10	16
10	6.7	70	6860	e72	e32	121	60	28	853	121	9.5	15
11	7.5	64	6510	e68	e32	102	55	28	1150	377	8.8	15
12	6.0	60	1230	e70	e31	87	52	51	354	515	10	14
13	6.4	50	343	e67	e30	76	49	102	137	135	8.5	13
14	269	41	256	e62	e30	86	47	68	89	70	7.3	13
15	308	38	211	e58	e30	88	46	82	1200	47	6.9	755
16	81	39	1180	e61	e29	86	45	57	1850	37	6.7	2510
17	44	126	740	e70	e29	104	44	42	794	30	6.5	1790
18	32	1950	304	e62	e40	114	44	35	165	25	6.5	223
19	25	2560	223	e57	e200	95	41	69	106	22	6.1	79
20	20	668	153	e52	e720	81	45	52	78	20	6.7	49
21	17	230	152	e47	405	69	168	39	94	18	7.4	35
22	15	146	200	e44	167	61	136	32	170	18	6.4	28
23	14	121	787	e42	156	57	75	80	95	17	5.5	23
24	13	123	519	e39	134	58	59	182	58	15	5.4	20
25	36	94	210	e38	110	59	70	4600	200	15	853	17
26	82	78	173	e36	88	283	76	3790	116	14	2390	16
27	63	70	146	e35	82	585	59	812	57	13	5060	14
28	43	62	283	e34	77	353	49	217	44	12	4180	14
29	34	54	510	e34	77	667	43	130	37	11	1460	12
30	29	50	239	e33	—	327	44	1150	32	11	244	11

## BEAR CREEK BASIN

179

**05495500 Bear Creek near Marcelline, IL--Continued**

<b>31</b>	<b>25</b>	<b>---</b>	<b>164</b>	<b>e34</b>	<b>---</b>	<b>203</b>	<b>---</b>	<b>2870</b>	<b>---</b>	<b>12</b>	<b>109</b>	<b>---</b>
TOTAL	1247.8	10690	21768	2001	2842	8362	2211	14966	9018	3667	14515.2	5960
MEAN	40.3	356	702	64.5	98.0	270	73.7	483	301	118	468	199
MAX	308	2560	6860	136	720	2330	168	4600	1850	1270	5060	2510
MIN	5.4	22	39	33	29	57	41	28	32	11	5.4	11
CFSM	0.12	1.02	2.01	0.18	0.28	0.77	0.21	1.38	0.86	0.34	1.34	0.57
IN.	0.13	1.14	2.32	0.21	0.30	0.89	0.24	1.60	0.96	0.39	1.55	0.64

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 – 2004, BY WATER YEAR (WY)**

MEAN	110	151	146	149	265	371	412	416	286	269	97.8	153
MAX	1658	2172	1485	956	1237	1370	2163	2679	2251	1967	541	1954
(WY)	1987	1986	1983	1946	1985	1985	1944	1995	1990	1993	1993	1970
MIN	0.00	0.00	0.07	0.31	0.68	3.83	9.02	3.26	0.72	0.24	0.17	0.00
(WY)	1957	1957	1957	1977	1989	1956	1977	1989	1956	1988	1988	1953

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1944 – 2004**

ANNUAL TOTAL	68519.87		97248.0			
ANNUAL MEAN	188		266		233	
HIGHEST ANNUAL MEAN					711	
LOWEST ANNUAL MEAN					12.5	
HIGHEST DAILY MEAN	6860	Dec 10	6860	Dec 10	21300	May 12 2002
LOWEST DAILY MEAN	0.97	Aug 24	5.4	Oct 9, Aug. 24	0.00	A
ANNUAL SEVEN-DAY MINIMUM	1.2	Aug 20	6.2	Oct 6	0.00	A
MAXIMUM PEAK FLOW			9630	Dec 10	35500	B May 8 1996
MAXIMUM PEAK STAGE			15.66	Dec 10	28.38	Mar 4 1985
INSTANTANEOUS LOW FLOW			4.6	Oct 9		
ANNUAL RUNOFF (CFSM)	0.538		0.761		0.668	
ANNUAL RUNOFF (INCHES)	7.30		10.37		9.08	
10 PERCENT EXCEEDS	367		536		424	
50 PERCENT EXCEEDS	37		59		24	
90 PERCENT EXCEEDS	3.7		12		1.2	

A – Many days in 1953–56, 1962–64, 1976–77, 1988, and part of each day Aug. 17–19, 1989.

B – Gage height, 28.36 ft.

BAY CREEK BASIN  
05512500 Bay Creek at Pittsfield, IL

**LOCATION.**— Lat 39°37'31", long 90°47'38" (NAD of 1927), in NE1/4SW1/4 sec.18, T.5 S., R.3 W., Pike County, Hydrologic Unit 07110004, on right bank at downstream side of bridge on abandoned county road, 50 ft downstream from Panther Creek, 0.1 mi downstream from U.S. Highway 54, 1.4 mi northeast of Pittsfield, and at mile 33.6.

**DRAINAGE AREA.**— 39.4 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1939 to current year.

STAGE: Water years 1994 to current year.

**REVISED RECORDS.**— WSP 1175: 1940(P), 1941, 1949. WSP 1508: 1942. WDR IL-75-1: Drainage area.

**GAGE.**— Water-stage recorder, phone telemeter, and crest-stage gage. Datum of gage is 638.48 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Dec. 7, 1939, nonrecording gage at same site and datum.

**REMARKS.**— Effluent from sewage-treatment plant upstream at Pittsfield.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 13,700 ft<sup>3</sup>/s, Sept. 14, 1993, gage height, 14.92 ft, from rating curve extended above 4,400 ft<sup>3</sup>/s; no flow during many periods.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Flood of Sept. 8, 1926, reached a stage of 18.4 ft, from floodmark, discharge not determined.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor. Effluent from sewage-treatment plant upstream at Pittsfield averaged about 1.25 ft<sup>3</sup>/s.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	5.3	11	17	e8.4	16	29	14	5.7	2.8	1.1	3.3
2	4.6	5.6	11	17	e9.4	14	26	13	5.1	4.8	1.1	2.4
3	4.5	5.7	11	17	13	13	22	10	4.7	14	1.1	2.2
4	4.5	6.6	12	134	11	176	19	10	4.5	5.6	1.8	1.8
5	4.1	69	12	31	e10	394	17	9.9	4.4	3.8	1.4	1.7
6	2.9	11	12	20	e9.8	42	17	8.5	4.2	6.0	1.1	1.6
7	2.6	8.2	11	18	e9.4	33	16	7.5	3.9	4.0	1.0	1.3
8	2.3	7.1	11	19	9.1	30	14	7.3	3.8	3.2	e0.92	1.2
9	18	6.7	56	18	11	29	12	6.6	4.0	5.7	e0.86	1.2
10	8.2	6.7	737	16	11	27	12	6.7	4.4	34	e0.82	1.1
11	5.2	7.0	47	17	12	23	11	10	4.3	6.1	e0.78	1.1
12	5.1	6.5	28	17	14	19	10	16	3.9	4.3	e0.76	1.0
13	7.7	5.8	24	17	10	18	10	17	4.1	3.4	e0.74	1.1
14	122	5.7	23	16	e9.6	22	9.3	35	3.7	3.1	e0.72	2.1
15	12	6.1	24	15	e9.4	18	8.9	24	3.7	2.8	e0.70	8.8
16	8.1	5.9	29	15	e10	19	8.8	15	3.2	2.7	e0.68	2.5
17	6.6	6.9	21	29	11	20	8.3	12	3.0	2.5	e0.66	1.6
18	5.8	190	20	26	35	18	7.6	16	2.9	2.0	e0.64	1.0
19	5.7	40	19	17	90	15	7.0	14	2.9	1.8	e0.62	0.95
20	5.8	17	17	e15	55	15	14	11	2.8	1.7	1.9	0.91
21	5.3	13	18	e14	25	12	18	9.6	3.2	1.7	1.1	e0.88
22	5.3	12	20	e12	21	12	10	8.3	3.1	1.5	1.0	e0.86
23	5.0	49	65	e12	22	13	9.0	10	2.9	1.4	1.6	e0.84
24	4.9	25	24	14	21	16	77	12	2.4	1.3	3.2	e0.84
25	33	19	20	10	18	22	58	37	2.9	1.3	407	e0.83
26	9.5	17	19	e9.0	17	52	29	11	3.1	1.2	26	e0.82
27	7.3	16	19	e8.6	16	33	22	10	2.7	1.1	177	e0.82
28	6.7	16	19	e8.4	15	43	17	8.7	2.9	1.1	68	e0.81



BAY CREEK BASIN  
05512500 Bay Creek at Pittsfield, IL--Continued

181

29	5.9	14	19	e8.2	16	40	12	7.4	2.8	1.0	15	e0.81
30	5.3	13	18	e8.2	---	31	13	7.2	2.7	1.8	8.3	e0.80
31	5.1	---	17	e8.4	---	30	---	6.6	---	1.3	5.5	---
TOTAL	333.8	616.8	1394	603.8	529.1	1265	543.9	391.3	107.9	129.0	733.10	47.17
MEAN	10.8	20.6	45.0	19.5	18.2	40.8	18.1	12.6	3.60	4.16	23.6	1.57
MAX	122	190	737	134	90	394	77	37	5.7	34	407	8.8
MIN	2.3	5.3	11	8.2	8.4	12	7.0	6.6	2.4	1.0	0.62	0.80
CFSM	0.27	0.52	1.14	0.49	0.46	1.04	0.46	0.32	0.09	0.11	0.60	0.04
IN.	0.32	0.58	1.32	0.57	0.50	1.19	0.51	0.37	0.10	0.12	0.69	0.04

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 – 2004, BY WATER YEAR (WY)

MEAN	12.2	16.5	17.4	18.2	31.4	39.9	50.1	52.2	33.6	26.0	13.6	19.7
MAX	140	201	142	114	126	132	207	283	243	417	103	359
(WY)	1942	1986	1983	1974	1942	1973	1973	1970	1945	1981	1961	1993
MIN	0.20	0.19	0.08	0.06	0.27	0.45	3.61	1.23	0.94	0.10	0.07	0.06
(WY)	1951	1951	1951	1940	1954	1956	1963	1954	1977	1940	1941	1940

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1940 – 2004

ANNUAL TOTAL	12112.86		6694.87			
ANNUAL MEAN	33.2		18.3		27.5	
HIGHEST ANNUAL MEAN					94.8	
LOWEST ANNUAL MEAN					2.76	
HIGHEST DAILY MEAN	1270	Sep 1	737	Dec 10	5660	Jul 26 1981
LOWEST DAILY MEAN	0.90	A Jan 27	0.62	B Aug 19	0.00	C
ANNUAL SEVEN-DAY MINIMUM	0.98	Jan 22	0.68	Aug 13	0.00	C
MAXIMUM PEAK FLOW			2440	Aug 25	13700	D Sep 14 1993
MAXIMUM PEAK STAGE			9.57	Aug 25	14.92	Sep 14 1993
ANNUAL RUNOFF (CFSM)	0.842		0.464		0.698	
ANNUAL RUNOFF (INCHES)	11.44		6.32		9.49	
10 PERCENT EXCEEDS	50		29		39	
50 PERCENT EXCEEDS	9.6		9.4		3.8	
90 PERCENT EXCEEDS	1.9		1.1		0.30	

A – Estimated due to backwater from ice.

B – Estimated.

C – Several occurrences in most years.

D – From rating curve extending above 4,400 ft<sup>3</sup>/s.

ILLINOIS RIVER BASIN  
**05518000 Kankakee River at Shelby, IN**

**LOCATION.**— Lat 41°10'58", long 87°20'25" (NAD of 1927), in SW1/4NE1/4 sec.33, T.32 N., R.8 W., Lake County, Hydrologic Unit 07120001, (SHELBY, IN quadrangle), on right bank at upstream side of Highway 55 bridge, 1.0 mi south of Shelby, 7.8 mi upstream from Beaver Lake Ditch, and at mile 68.0.

**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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1922 to current year. Monthly discharge only for some periods published in WSP 1308.

**SURFACE-WATER QUALITY**

SEDIMENT: Water years 1993–96.

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

**GAGE.**— Water-stage recorder. Datum of gage is 628.13 ft above NGVD of 1929. Prior to Dec. 19, 1934, nonrecording gage, Dec. 19, 1934, to Oct. 4, 1965, water-stage recorder on left bank 50 ft downstream, Oct. 5, 1965, to Sept. 21, 1966, nonrecording gage on right bank 200 ft downstream, and Sept. 21, 1966 to July 21, 1998, water-stage recorder on right bank 25 ft upstream from Monon railroad bridge and approximately 400 ft downstream, all at same datum.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 7,650 ft<sup>3</sup>/s, March 26, 1982, maximum gage height 12.98 ft, March 24, 1982; minimum daily discharge, 260 ft<sup>3</sup>/s, January 13, 1954.

**REMARKS FOR CURRENT YEAR.**—Records fair except for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	731	931	2480	2410	e1370	1880	2030	1130	2240	1060	863	3520
2	719	861	2280	2520	e1390	1990	1960	1130	2490	1010	816	3330
3	713	902	2110	2520	e1450	2140	1860	1140	2600	937	763	3010
4	731	904	1950	2410	e1500	2310	1740	1140	2650	937	824	2730
5	726	946	1890	2300	e1500	2690	1680	1120	2650	969	946	2500
6	709	1040	1860	2160	e1470	3070	1620	1090	2500	964	999	2470
7	679	1190	1830	1990	e1440	3120	1580	1090	2150	999	929	2490
8	694	1250	1840	1900	e1390	3180	1530	1080	1820	1010	847	2420
9	658	1230	1830	1940	e1350	3210	1510	1060	1590	1140	793	2150
10	641	1200	1880	1920	e1310	3170	1470	1060	1450	1110	742	1900
11	638	1190	2030	1830	e1290	3010	1450	1130	1570	995	749	1690
12	613	1170	2120	1760	e1270	2770	1400	1370	2270	958	701	1520
13	603	1190	2200	1720	e1260	2560	1380	1410	3050	895	707	1390
14	653	1150	2200	1680	e1240	2390	1370	1370	3150	839	699	1290
15	788	1120	2100	1660	e1220	2260	1340	1480	3320	782	688	1220
16	864	1090	2020	1600	e1210	2140	1310	1660	3400	750	691	1230
17	941	1060	1940	1570	e1200	2050	1270	1790	3460	850	683	1190
18	966	1100	1870	1550	e1190	1980	1270	1730	3500	829	822	1170
19	956	1370	1830	1500	e1190	1910	1240	1580	3540	746	1260	1160
20	888	1800	1780	1490	e1270	1860	1200	1500	3470	758	1660	1110
21	846	2130	1730	1510	1390	1820	1230	1420	3250	788	1660	1100
22	832	2300	1710	1490	1490	1770	1240	1370	2900	1330	1580	1070
23	819	2450	1730	e1460	1690	1710	1220	1360	2510	1790	1450	1020
24	785	2660	1780	e1290	1790	1670	1210	1490	2170	1800	1320	993
25	790	2830	1930	e1420	1860	1650	1210	1540	1890	1830	1270	956
26	848	2890	2110	e1430	1910	1710	1190	1570	1690	1720	1900	952
27	908	2920	2200	e1460	1920	1850	1160	1550	1520	1390	2570	938
28	941	2950	2150	e1430	1920	1960	1160	1430	1410	1160	2740	905
29	994	2910	2080	e1390	1890	2040	1150	1290	1270	1040	3180	871
30	985	2720	2110	e1360	—	2040	1120	1240	1160	950	3470	880

**05518000 Kankakee River at Shelby, IN---Continued**

<b>31</b>	968	---	2260	e1350	---	2070	---	1690	---	903	3550	---
TOTAL	24627	49454	61830	54020	42370	69980	42100	42010	72640	33239	41872	49175
MEAN	794	1648	1995	1743	1461	2257	1403	1355	2421	1072	1351	1639
MAX	994	2950	2480	2520	1920	3210	2030	1790	3540	1830	3550	3520
MIN	603	861	1710	1290	1190	1650	1120	1060	1160	746	683	871
CFSM	0.45	0.93	1.12	0.98	0.82	1.27	0.79	0.76	1.36	0.60	0.76	0.92
IN.	0.51	1.03	1.29	1.13	0.89	1.46	0.88	0.88	1.52	0.70	0.88	1.03

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 – 2004, BY WATER YEAR (WY)**

MEAN	1073	1336	1616	1803	1969	2533	2734	2303	1832	1294	974	876
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	500	540	460	462	848	1226	789	569	441	402	356
(WY)	1954	2000	1964	1940	1963	1934	1925	1934	1934	1988	1988	1941

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1924 – 2004**

ANNUAL TOTAL	495086		583317			
ANNUAL MEAN	1356		1594		1693	
HIGHEST ANNUAL MEAN					2767	
LOWEST ANNUAL MEAN					775	
HIGHEST DAILY MEAN	4390	Jul 22	3550	Aug 31	7650	Mar 26 1982
LOWEST DAILY MEAN	404	Aug 27	603	Oct 13	260	Jan 13 1954
ANNUAL SEVEN-DAY MINIMUM	445	Aug 23	643	Oct 8	298	Aug 2 1988
MAXIMUM PEAK FLOW			3570	Jun 19	7650	Mar 26 1982
MAXIMUM PEAK STAGE			9.53	Jun 19	12.98	Mar 24 1982
ANNUAL RUNOFF (CFSM)	0.762		0.896		0.952	
ANNUAL RUNOFF (INCHES)	10.35		12.20		12.93	
10 PERCENT EXCEEDS	2460		2580		3340	
50 PERCENT EXCEEDS	1050		1450		1350	
90 PERCENT EXCEEDS	693		828		630	

ILLINOIS RIVER BASIN  
**05520500 Kankakee River at Momence, IL**

**LOCATION.**— Lat 41°09'36", long 87°40'07" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: February to December 1905, February to July 1906, December 1914 to current year.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1975–1991 and 1999 to current. Additional chemical data for water years 1959–72 are published in Water–Resources Investigations 78–23 and 79–24 as site F 02.

SEDIMENT: October 1978–September 1981, January 1993–December 1995.

MISCELLANEOUS: Contaminants in streambed sediments, August 1998; Contaminants in fish tissue, August 1998.

**BIOLOGICAL**

ALGAE: Pigment and biomass, Water years 1989 and 1990.

BENTHIC MACROINVERTEBRATES: Water year 1999.

FISH: Water year 1999.

HABITAT: Water year 1999.

**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, U.S. Army Corps of Engineers satellite telemeter. Datum of gage is 609.18 ft above NGVD of 1929. 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.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 16,000 ft<sup>3</sup>/s, Mar. 6, 1979, gage height, 10.51 ft, ice jam; minimum, 243 ft<sup>3</sup>/s, Aug. 7, 1988.

SUSPENDED–SEDIMENT CONCENTRATIONS: Maximum daily, 2,620 mg/L, June 9, 1981; minimum daily, 4 mg/L, Feb. 22, Apr. 30, May 3, 4, 1993.

SUSPENDED–SEDIMENT LOADS: Maximum daily, 30,600 tons, May 30, 1981; minimum daily, 23 tons, Nov. 23, 1980.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	859	1120	3500	2780	e920	2610	3120	1570	3140	1460	939	4630
2	847	1070	3230	2910	e890	2790	3000	1600	3140	1310	888	4550
3	833	1050	2940	3000	e870	2870	2870	1540	3180	1230	851	4440
4	846	1080	2690	3040	e840	3000	2720	1510	3230	1230	986	4330
5	846	1150	2550	2990	e820	4440	2550	1490	3260	1210	1070	4040
6	843	1210	2470	2790	e840	4860	2420	1440	3260	1190	1110	3730
7	809	1270	2450	2820	e890	4470	2330	1480	3170	1150	1090	3500
8	805	1360	2440	2080	e940	4340	2250	1520	2910	1130	993	3380
9	800	1390	2440	2090	e970	4240	2170	1470	2500	1170	923	3290
10	776	1390	2650	2420	e900	4190	2120	1440	2210	1330	875	3100
11	770	1360	3080	2370	e900	4130	2060	1480	2310	1250	833	2830
12	762	1350	2940	2440	e980	4000	2010	1540	5610	1130	803	2520
13	732	1330	2900	2200	e1060	3820	1930	1720	6760	1070	778	2220
14	774	1320	2880	2020	e970	3590	1900	1780	5680	1000	769	2010
15	841	1280	2850	1940	e910	3360	1860	1980	5430	933	754	1830
16	938	1250	2740	1890	e880	3160	1830	2060	4970	875	751	1740
17	998	1230	2610	1840	e880	3000	1800	2160	4690	958	745	1700
18	1050	1460	2460	1800	e880	2870	1760	2250	4520	983	837	1640
19	1070	2420	2330	1850	e1000	2740	1730	2260	4420	917	1240	1570
20	1060	2340	2210	1840	e1130	2620	1740	2170	4370	851	1770	1520
21	1030	2430	2110	1710	e1300	2530	1770	2030	4320	855	2060	1480

## ILLINOIS RIVER BASIN

185

**05520500 Kankakee River at Momence, IL--Continued**

<b>22</b>	979	2580	2090	1550	e1900	2450	1750	1920	4240	965	2110	1440
<b>23</b>	958	2780	2070	1340	2300	2360	1690	1840	3990	1500	2020	1380
<b>24</b>	936	3380	2070	1190	2450	2310	1640	1810	3610	1790	1870	1350
<b>25</b>	957	3580	2090	e1130	2510	2290	1670	2000	3190	1890	2020	1280
<b>26</b>	1000	3600	2230	e1100	2560	2650	1690	2060	2760	1950	3450	1240
<b>27</b>	1040	3610	2390	e1060	2600	3160	1630	2050	2400	1850	3860	1230
<b>28</b>	1080	3620	2540	e1020	2590	3000	1570	1980	2110	1510	4080	1170
<b>29</b>	1090	3620	2590	e1000	2590	3180	1550	1810	1890	1240	4630	1120
<b>30</b>	1130	3620	2640	e970	----	3180	1510	1800	1650	1110	4790	1080
<b>31</b>	1130	----	2690	e950	----	3150	----	2880	----	998	4690	----
TOTAL	28589	60250	79870	60130	39270	101360	60640	56640	108920	38035	54585	71340
MEAN	922	2008	2576	1940	1354	3270	2021	1827	3631	1227	1761	2378
MAX	1130	3620	3500	3040	2600	4860	3120	2880	6760	1950	4790	4630
MIN	732	1050	2070	950	820	2290	1510	1440	1650	851	745	1080
CFSM	0.40	0.88	1.12	0.85	0.59	1.43	0.88	0.80	1.58	0.53	0.77	1.04
IN.	0.46	0.98	1.30	0.98	0.64	1.64	0.98	0.92	1.77	0.62	0.89	1.16

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1905 – 2004, BY WATER YEAR (WY)**

MEAN	1200	1557	1983	2198	2488	3262	3461	2908	2228	1519	1095	992
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 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1905 – 2004**

ANNUAL TOTAL	677214		759629			
ANNUAL MEAN	1855		2075		2082	
HIGHEST ANNUAL MEAN					3743	
LOWEST ANNUAL MEAN					857	
HIGHEST DAILY MEAN	7010	Jul 23	6760	Jun 13	14800	Mar 7 1979
LOWEST DAILY MEAN	567	Aug 28	732	Oct 13	248	Aug 7 1988
ANNUAL SEVEN-DAY MINIMUM	622	Aug 24	774	Oct 8	271	Aug 3 1988
MAXIMUM PEAK FLOW			7250	A Jun 12	16000	B Mar 6 1979
MAXIMUM PEAK STAGE			5.67	C Jan 27	10.51	C Mar 6 1979
INSTANTANEOUS LOW FLOW			729	Oct 13,14	243	Aug 7 1988
ANNUAL RUNOFF (CFSM)	0.809		0.905		0.907	
ANNUAL RUNOFF (INCHES)	10.98		12.32		12.33	
10 PERCENT EXCEEDS	3730		3610		4340	
50 PERCENT EXCEEDS	1300		1850		1590	
90 PERCENT EXCEEDS	837		889		661	

A – Gage height, 4.65 ft.

B – Estimated due to backwater from ice.

C – Ice jam.

ILLINOIS RIVER BASIN  
**05524500 Iroquois River near Foresman, IN**

**LOCATION.**— Lat 40°52'14", long 87°18'24" (NAD of 1927), in NE1/4SE1/4 sec.15, T.28 N., R.8 W., Newton County, Hydrologic Unit 07120002, (GOODLAND, IN quadrangle), on right bank at downstream side of bridge on State Highway 55, 0.2 mi north of intersection of State Highways 16 and 55, 0.5 mi downstream from Mosquito Creek, 0.6 mi west of Foresman, 3 mi east of Brook, and at mile 72.7.

**DRAINAGE AREA.**— 449 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE

DISCHARGE: December 1948 to current year.

**REVISED RECORDS.**— WSP 1338: 1953. WSP 1438: 1955. WSP 1508: 1956. WSP 2115: Drainage area.

**GAGE.**— Water–stage recorder and acoustic velocity meter. Datum of gage is 624.00 ft above NGVD of 1929. Prior to Sept. 7, 1955, nonrecording gage 2.5 mi upstream at datum 3.54 ft higher.

**REMARKS.**— Stage may be affected by backwater.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Maximum discharge, 5,930 ft<sup>3</sup>/s, June 14, 1958, maximum gage height 24.42 ft; minimum daily discharge, 6.3 ft<sup>3</sup>/s, September 10, 1964.

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[Records not available at time of publication]

**LOCATION.**— Lat 40°49'22", long 87°34'53" (NAD of 1927), in NE1/4SE1/4 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.**—

**SURFACE–WATER DISCHARGE AND STAGE**

DISCHARGE: October 1944 to current year.

STAGE: Water years 1994 to current year.

**SURFACE–WATER QUALITY**

CHEMICAL: Water years 1978–91. Additional chemical data for water years 1972–77 are published in Water–Resources Investigations 78–23 and 79–24 as site FL 04.

SEDIMENT: October 1978 to September 1980, January 1993 to December 1995.

**GAGE.**— Water–stage recorder, phone telemeter, and crest–stage gage. Datum of gage is 614.34 ft above NGVD of 1929. Prior to Aug. 5, 1945, nonrecording gage at same site and datum.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum discharge, 10,400 ft<sup>3</sup>/s, June 13, 1958, gage height, 26.31 ft; minimum, 5.2 ft<sup>3</sup>/s, Sept. 13, 1964.

**SUSPENDED–SEDIMENT CONCENTRATIONS:** Maximum daily, 2,280 mg/L, June 2, 1980; minimum daily, 3 mg/L, Dec. 23, 24, 27–31, 1978.

**SUSPENDED–SEDIMENT LOADS:** Maximum daily, 12,200 tons, June 3, 1980; minimum daily, 0.45 ton, Dec. 28, 1978.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	271	389	1050	2020	e240	342	1610	232	1770	251	69	3020
2	219	358	851	1940	e230	470	1540	240	1970	227	66	2630
3	202	340	703	1780	e220	647	1420	249	2100	209	63	2240
4	196	335	625	1580	e200	704	1250	255	2100	228	111	1950
5	192	392	599	1550	e190	1190	1030	255	1970	245	263	1810
6	180	628	612	1500	e210	1670	829	244	1760	227	337	1730
7	171	735	646	1400	e230	1780	692	239	1480	203	263	1610
8	169	679	722	1210	e240	1750	612	279	1110	186	178	1430
9	164	573	843	1010	e200	1610	548	357	751	170	130	1220
10	162	486	991	824	e200	1390	490	360	528	172	107	963
11	158	443	1190	695	e200	1130	447	357	997	198	97	686
12	153	425	1290	636	e230	882	415	446	4070	211	96	488
13	152	404	1280	595	e250	688	393	486	6510	189	101	387
14	165	371	1190	574	e230	578	379	505	6220	162	98	336
15	270	341	1030	573	e210	525	356	744	5540	142	89	305
16	412	323	866	544	e205	498	338	733	4770	128	83	288
17	418	310	730	511	e210	480	327	642	4220	125	79	277
18	365	394	638	492	e215	466	315	559	3660	188	76	267
19	321	1110	569	e470	e220	450	303	601	2960	244	77	251
20	292	1500	510	e450	372	434	294	621	2330	199	150	231
21	278	1630	462	e420	538	422	306	584	1770	154	389	217
22	273	1660	436	e380	580	398	308	519	1240	132	517	208
23	263	1600	633	e340	529	373	296	463	836	117	528	198
24	241	1710	1200	e390	469	363	274	423	603	111	464	189
25	264	1810	1400	e320	404	380	272	403	488	102	401	183
26	452	1790	1410	e290	359	627	277	380	425	93	1280	178
27	637	1730	1320	e320	336	1220	276	351	377	86	1600	172
28	649	1610	1170	e270	324	1430	262	322	337	82	1580	168
29	580	1450	1360	e250	320	1550	245	288	305	77	2730	164
30	500	1260	1840	e260	---	1570	232	318	276	73	3490	160

ILLINOIS RIVER BASIN  
**05525000 Iroquois River at Iroquois, IL--Continued**

31	437	---	1990	e260	---	1580	---	1160	---	71	3350	---
TOTAL	9206	26786	30156	23854	8361	27597	16336	13615	63473	5002	18862	23956
MEAN	297	893	973	769	288	890	545	439	2116	161	608	799
MAX	649	1810	1990	2020	580	1780	1610	1160	6510	251	3490	3020
MIN	152	310	436	250	190	342	232	232	276	71	63	160
CFSM	0.43	1.30	1.42	1.12	0.42	1.30	0.79	0.64	3.08	0.24	0.89	1.16
IN.	0.50	1.45	1.64	1.29	0.45	1.50	0.89	0.74	3.44	0.27	1.02	1.30

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 – 2004, BY WATER YEAR (WY)**

MEAN	265	345	532	616	804	1059	1069	849	757	486	152	192
MAX	2556	1878	1794	3030	2213	3462	3116	1956	3496	4336	608	2020
(WY)	1994	1986	1968	1950	1950	1982	1950	2002	1958	2003	2004	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 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1945 – 2004**

ANNUAL TOTAL	280942		267204			
ANNUAL MEAN	770		730		592	
HIGHEST ANNUAL MEAN					1323	
LOWEST ANNUAL MEAN					121	
HIGHEST DAILY MEAN	9830	Jul 12	6510	Jun 13	10200	Jun 14 1958
LOWEST DAILY MEAN	42	A Jan 27	63	Aug 3	5.5	Sep 13 1964
ANNUAL SEVEN-DAY MINIMUM	45	Jan 23	72	Jul 28	6.6	Sep 8 1964
MAXIMUM PEAK FLOW			6740	Jun 13	10400	Jun 13 1958
MAXIMUM PEAK STAGE			22.74	Jun 13	26.31	Jun 13 1958
INSTANTANEOUS LOW FLOW			60	Aug 3	5.2	Sep 13 1964
ANNUAL RUNOFF (CFSM)	1.12		1.06		0.863	
ANNUAL RUNOFF (INCHES)	15.23		14.49		11.73	
10 PERCENT EXCEEDS	1640		1680		1610	
50 PERCENT EXCEEDS	290		404		269	
90 PERCENT EXCEEDS	106		163		34	

A – Estimated due to backwater from ice.



**LOCATION.**— Lat 40°37'48", long 87°43'26" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: July 1948 to current year.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–91, and 1999 to current year.

MISCELLANEOUS: Contaminants in streambed sediments, August 1999; contaminants in fish tissue, August 1999.

**BIOLOGICAL**

ALGAE: Water years 2002–03.

BENTHIC MACROINVERTEBRATES: Water years 1999 and 2002.

FISH: Water years 1999 and 2002–04.

HABITAT: Water years 1999 and 2002–04.

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

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 622.00 ft above NGVD of 1929. Prior to July 23, 1970, nonrecording gage at same site and datum.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 22,900 ft<sup>3</sup>/s, Feb. 21, 1951, gage height, 20.90 ft, from rating curve extended above 8,200 ft<sup>3</sup>/s; maximum gage height, 28.16 ft, Apr. 12, 1994, discharge, 19,400 ft<sup>3</sup>/s; minimum discharge, 2.0 ft<sup>3</sup>/s, Sept. 1, 2, 7, 1972, Oct. 8, 1994.

**REMARKS FOR CURRENT YEAR.**— Records good except those for Jan. 28 to Mar. 5, which are fair, and estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	68	373	935	e115	166	2600	110	5500	190	56	2180
2	86	61	307	695	e110	307	1630	110	3380	173	53	903
3	76	59	280	590	e105	273	1050	105	1720	166	49	511
4	77	59	267	776	e100	261	733	101	920	223	69	536
5	72	72	271	2300	e103	1560	546	100	590	286	98	374
6	63	148	295	e1300	e107	2510	452	97	444	198	92	290
7	58	171	345	e850	e110	1610	406	94	355	180	70	237
8	54	138	420	e680	e100	925	361	92	296	178	56	195
9	50	111	457	508	e90	599	305	90	254	143	48	167
10	50	98	501	406	e100	432	260	88	235	671	43	145
11	49	96	747	360	115	358	237	93	1780	1980	39	128
12	47	186	623	347	122	295	212	99	7590	1900	37	117
13	46	449	457	308	112	246	200	108	9860	1220	36	107
14	50	314	386	280	109	222	188	229	6070	642	35	99
15	118	216	335	269	116	204	172	1110	3340	370	32	97
16	163	175	302	237	103	189	162	968	1900	236	30	104
17	136	147	265	228	106	183	156	590	3670	224	29	99
18	110	336	239	229	109	180	148	468	4420	401	61	91
19	97	2590	220	193	163	167	141	948	3080	351	70	86
20	87	3080	186	e185	762	158	142	813	1960	209	66	80
21	78	1830	189	e180	1090	153	159	589	1080	154	74	76
22	75	1080	196	e170	545	139	156	495	668	128	63	73
23	70	731	653	e180	305	134	147	1330	505	114	51	69
24	67	1290	1690	e160	269	136	136	996	417	97	138	66
25	65	1760	1260	e130	234	143	135	842	362	85	1530	64

ILLINOIS RIVER BASIN  
**05525500 Sugar Creek at Milford, IL---Continued**

<b>26</b>	67	1240	737	e140	194	443	134	1200	325	78	4390	62
<b>27</b>	75	860	512	e150	170	2740	125	1020	286	73	5450	60
<b>28</b>	96	669	436	e130	153	2750	119	689	259	67	3730	59
<b>29</b>	96	540	1250	136	147	1910	114	439	230	62	5010	58
<b>30</b>	86	450	2410	133	---	1830	111	619	208	60	6170	55
<b>31</b>	75	---	1560	129	---	2620	---	4190	---	59	4260	---
TOTAL	2440	19024	18169	13314	5964	23843	11437	18822	61704	10918	31935	7188
MEAN	78.7	634	586	429	206	769	381	607	2057	352	1030	240
MAX	163	3080	2410	2300	1090	2750	2600	4190	9860	1980	6170	2180
MIN	46	59	186	129	90	134	111	88	208	59	29	55
CFSM	0.18	1.42	1.31	0.96	0.46	1.72	0.85	1.36	4.61	0.79	2.31	0.54
IN.	0.20	1.59	1.52	1.11	0.50	1.99	0.95	1.57	5.15	0.91	2.66	0.60

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 – 2004, BY WATER YEAR (WY)**

MEAN	140	225	359	392	538	646	688	577	522	330	124	113
MAX	1813	1964	1361	2240	1918	1915	1908	1824	2057	1599	1030	1250
(WY)	2002	1986	1991	1950	1951	1979	1994	1998	2004	1993	2004	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 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1948 – 2004**

ANNUAL TOTAL	158074	224758	
ANNUAL MEAN	433	614	
HIGHEST ANNUAL MEAN			387
LOWEST ANNUAL MEAN			855
HIGHEST DAILY MEAN	6130 Jul 11	9860 Jun 13	15200 Apr 13 1994
LOWEST DAILY MEAN	18 Aug 28	29 Aug 17	2.5 Sep 1 1972
ANNUAL SEVEN-DAY MINIMUM	22 Aug 23	34 Aug 11	2.9 Sep 11 1988
MAXIMUM PEAK FLOW		10400 Jun 12	22900 A Feb 21 1951
MAXIMUM PEAK STAGE		24.28 Jun 12	28.16 B Apr 12 1994
INSTANTANEOUS LOW FLOW		26 Aug 17	2.0 C
ANNUAL RUNOFF (CFSM)	0.971	1.38	0.868
ANNUAL RUNOFF (INCHES)	13.18	18.75	11.79
10 PERCENT EXCEEDS	1130	1700	1000
50 PERCENT EXCEEDS	167	189	130
90 PERCENT EXCEEDS	50	64	11

A – Gage height, 20.90 ft., from rating curve extended above 8,200 ft<sup>3</sup>/s.B – Discharge, 19,400 ft<sup>3</sup>/s.

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

**LOCATION.**— Lat 40°37'48", long 87°43'26" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: July 1948 to current year.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–91, and 1999 to current year.

MISCELLANEOUS: Contaminants in streambed sediments, August 1999; contaminants in fish tissue, August 1999.

**BIOLOGICAL**

ALGAE: Water years 2002–03.

BENTHIC MACROINVERTEBRATES: Water years 1999 and 2002.

FISH: Water years 1999 and 2002–04.

HABITAT: Water years 1999 and 2002–04.

**REVISED RECORDS.**— WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder and phone telemeter. Datum of gage is 622.00 ft above NGVD of 1929. Prior to July 23, 1970, nonrecording gage at same site and datum.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 22,900 ft<sup>3</sup>/s, Feb. 21, 1951, gage height, 20.90 ft, from rating curve extended above 8,200 ft<sup>3</sup>/s; maximum gage height, 28.16 ft, Apr. 12, 1994, discharge, 19,400 ft<sup>3</sup>/s; minimum discharge, 2.0 ft<sup>3</sup>/s, Sept. 1, 2, 7, 1972, Oct. 8, 1994.

**REMARKS FOR CURRENT YEAR.**—Sampled as part of the Upper Illinois River Basin (UIRB) National Water Quality Assessment Project (NAWQA).

**SURFACE-WATER QUALITY**

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Gage height, feet (00065)	Instan- taneous dis- charge, cfs (00061)	Dis- solved oxygen, percent of sat- uration (00300)	Dis- solved oxygen, mg/L (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Alka- linity, wat flt inc tit field, mg/L as CaCO <sub>3</sub> (39086)	Bicar- bonate, wat flt incrm. titr., field, mg/L (00453)
OCT 2003													
01...	1010	81700	80020	4.23	133	17.1	156	7.9	624	9.0	11.2	238	E289
DEC													
19...	0910	81700	80020	5.43	225	14.8	106	8.1	704	-4.5	1.6	253	E307
FEB 2004													
03...	1105	81700	80020	4.50	129	21.0	144	8.0	737	-7.0	.0	258	314
APR													
20...	0930	81700	80020	4.60	163	8.3	86	8.2	648	14.0	16.7	236	285
MAY													
19...	1025	81700	80020	9.22	E770	11.4	116	7.9	526	21.0	16.2	148	E179
JUN													
18...	1000	81700	80020	19.17	5780	5.5	65	7.1	186	28.5	23.4	92	112
JUL													
15...	0930	81700	80020	6.72	384	6.9	80	7.5	590	25.0	22.4	232	281
AUG													
06...	1000	81700	80020	4.18	100	7.4	83	7.9	630	20.0	19.9	231	279

ILLINOIS RIVER BASIN  
05525500 Sugar Creek at Milford, IL--Continued

Date	Carbon- ate, wat flt incrm. titr., field, mg/L (00452)	Chlor- ide, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, unfltrd mg/L (00665)	Total nitro- gen, wat unf by anal ysis, mg/L (62855)	2,6-Di- ethyl- aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto- chlor, water, fltrd, ug/L (49260)	Ala- chlor, water, fltrd, ug/L (46342)
OCT 2003													
01...	E1	22.8	41.5	<.04	4.06	.009	.046	.094	7.12	<.006	E.052	.015	<.004
DEC													
19...	<1	26.4	51.7	<.04	8.82	.011	.016	.029	9.95	<.006	E.010	<.006	<.005
FEB 2004													
03...	<1	26.1	63.4	<.04	8.34	.011	.013	.022	8.49	<.006	E.016	<.006	<.005
APR													
20...	1	149	47.9	<.04	8.68	.041	.008	.103	9.27	<.006	E.034	.044	<.005
MAY													
19...	<1	25.8	10.9	<.04	15.0	.057	.077	.50	16.4	<.006	E.496	2.88	<.005
JUN													
18...	<1	6.65	12.4	<.04	5.12	.064	.174	.31	6.06	<.006	E.238	.423	<.005
JUL													
15...	1	18.2	38.3	E.03	7.07	.033	.097	.178	8.03	<.006	E.069	.104	<.005
AUG													
06...	1	24.4	60.7	<.04	3.07	.017	.041	.101	3.36	<.006	E.037	.045	<.005
Date	alpha- HCH, water, fltrd, ug/L (34253)	Atra- zine, water, fltrd, ug/L (39632)	Azin- phos- methyl, water, fltrd 0.7u GF ug/L (82686)	Ben- flur- alin, water, fltrd 0.7u GF ug/L (82673)	Butyl- ate, water, fltrd, ug/L (04028)	Car- baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo- furan, water, fltrd 0.7u GF ug/L (82674)	Chlor- pyrifos water, fltrd, ug/L (38933)	cis- Per- methrin water fltrd 0.7u GF ug/L (82687)	Cyana- zine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazi- non, water, fltrd, ug/L (39572)	Diel- drin, water, fltrd, ug/L (39381)
OCT 2003													
01...	<.005	.212	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.005
DEC													
19...	<.005	.094	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009
FEB 2004													
03...	<.005	.061	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009
APR													
20...	<.005	.507	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009
MAY													
19...	<.005	10.9	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009
JUN													
18...	<.005	1.11	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009
JUL													
15...	<.005	.736	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009
AUG													
06...	<.005	.320	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009

**05525500 Sugar Creek at Milford, IL---Continued**

Date	Disul- foton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal- flur- alin, water, fltrd 0.7u GF ug/L (82663)	Etho- prop, water, fltrd 0.7u GF ug/L (82672)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala- thion, water, fltrd, ug/L (39532)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)
OCT 2003													
01...	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.006	.030	<.006	<.002	<.007
DEC													
19...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.014	<.006	<.003	<.007
FEB 2004													
03...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	E.012	<.006	<.003	<.007
APR													
20...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.240	<.006	<.003	<.007
MAY													
19...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	3.36	.069	<.003	<.007
JUN													
18...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.623	<.006	<.003	<.007
JUL													
15...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.112	<.006	<.003	<.007
AUG													
06...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.499	<.006	<.003	<.007

Date	p,p'- DDE, water, fltrd, ug/L (34653)	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prome- ton, water, fltrd, ug/L (04037)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)
OCT 2003													
01...	<.003	<.010	<.004	<.022	<.011	E.01	<.004	<.010	<.011	<.02	<.005	<.02	<.034
DEC													
19...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034
FEB 2004													
03...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034
APR													
20...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.033	<.02	<.034
MAY													
19...	<.003	<.010	<.004	.029	<.011	.01	<.004	<.025	<.011	<.02	.085	<.02	<.034
JUN													
18...	<.004	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.048	<.02	<.034
JUL													
15...	<.003	<.010	<.004	<.022	<.011	.02	<.004	<.025	<.011	<.02	.007	<.02	<.034
AUG													
06...	<.003	<.010	<.004	<.022	<.011	.05	<.004	<.025	<.011	<.69	E.005	<.02	<.034

Date	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	Sus- pended sedi- ment concen- tration mg/L (80154)
OCT 2003					
01...	<.02	<.005	<.002	<.009	87

ILLINOIS RIVER BASIN  
**05525500 Sugar Creek at Milford, IL--Continued**

DEC						
	19...	<.02	<.010	<.002	<.009	71
FEB 2004						
	03...	<.02	<.010	<.002	<.009	52
APR						
	20...	<.02	<.010	<.002	<.009	234
MAY						
	19...	<.02	<.010	<.002	<.009	488
JUN						
	18...	<.02	<.010	<.002	<.009	142
JUL						
	15...	<.02	<.010	<.002	<.009	133
AUG						
	06...	<.02	<.010	<.002	<.009	119

Remark codes used in this table:

< — Less than

E — Estimated value

**LOCATION.**— Lat 41°00'32", long 87°49'24" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: April 1923 to current year.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–1991 and 1999 to 2001. Additional chemical data for water years 1959–77 are published in Water–Resources Investigations 78–23 and 79–24 as site FL 02.

SEDIMENT: October 1978 to September 1981, January 1993 to December 1995.

MISCELLANEOUS: Water years 1998 and 2002; Contaminants in streambed sediments, August 1998; contaminants in fish tissue, August 1998.

**BIOLOGICAL**

BENTHIC MACROINVERTEBRATES: Water year 1999.

FISH: Water year 1999.

HABITAT: Water year 1999.

**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, phone telemetry, and crest–stage gage. Datum of gage is 595.99 ft above NGVD of 1929. 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.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 27,000 ft<sup>3</sup>/s, May 13, 1933, Mar. 7, 1979; maximum gage height 21.68 ft, Mar. 7, 1979, present datum, ice jam; minimum discharge, 9 ft<sup>3</sup>/s, Oct. 6–8, 1956.

SUSPENDED–SEDIMENT CONCENTRATIONS: Maximum daily, 1,400 mg/L, Apr. 14, 1979; minimum daily, 4 mg/L, Mar. 3, 1994.

SUSPENDED–SEDIMENT LOADS: Maximum daily, 57,000 tons, June 5, 1980; minimum daily, 3.2 tons, Nov. 16, 1979.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Flood in spring of 1913 reached a stage of 21.6 ft, present datum, discharge about 34,000 ft<sup>3</sup>/s.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for June 15 to Sept. 27, and those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	727	752	2790	5090	e540	e800	6650	651	8020	931	224	8740
2	560	672	2370	4320	e510	974	6370	698	8390	830	214	7690
3	461	608	2010	3750	e480	1180	5330	682	8190	778	202	5670
4	389	575	1770	3360	e450	1420	4080	662	7250	775	295	3940
5	350	643	1660	3470	e435	2800	3220	630	5600	793	514	3230
6	331	897	1710	4360	e420	5230	2640	618	4090	850	641	2840
7	313	1120	1850	4470	e445	5960	2230	614	3310	795	673	2570
8	288	1270	2090	3740	e470	5380	1970	760	2780	699	600	2340
9	265	1220	2410	2980	e520	4220	1730	776	2260	638	474	2120
10	251	1080	2810	2450	e450	3390	1520	763	1790	650	364	1860
11	241	947	3350	1990	e450	2820	1340	861	3050	1230	291	1550
12	222	860	3540	1760	e500	2370	1200	1020	10800	2960	243	1220
13	207	802	3320	1650	e580	1980	1120	1060	15200	3540	216	955
14	220	929	2960	1560	e540	1680	1070	1310	17400	2980	197	777
15	274	956	2640	1470	e480	1480	994	2540	18100	1960	190	668
16	365	849	2350	1410	e500	1370	919	3480	16100	1270	183	609
17	553	756	2080	1340	e480	1300	866	3170	13400	914	171	594
18	677	1150	1910	1280	e490	1260	849	2500	11500	754	162	585
19	629	3700	1730	1240	e500	1210	771	2060	10800	799	181	540

ILLINOIS RIVER BASIN  
**05526000 Iroquois River near Chebanse, IL--Continued**

<b>20</b>	560	5890	1500	e1150	e600	1160	754	2170	10000	894	234	501
<b>21</b>	475	6640	1290	e1100	e900	1110	843	2230	8430	761	278	464
<b>22</b>	429	6470	1240	e1000	e1200	1050	898	1960	5900	596	440	429
<b>23</b>	400	5330	1310	e975	e1300	1000	881	1720	3630	469	653	408
<b>24</b>	383	5170	2270	e840	e1200	960	840	1990	2490	400	730	383
<b>25</b>	407	5770	3920	e900	e1000	958	838	2300	1940	347	940	361
<b>26</b>	558	5930	3980	e700	e950	1310	836	2740	1640	314	3370	346
<b>27</b>	744	5420	3300	e640	e850	3210	806	2870	1440	293	6010	325
<b>28</b>	928	4510	2810	e700	e780	5270	783	2630	1280	265	7030	300
<b>29</b>	992	3770	2640	e600	e740	6310	698	2040	1150	239	7340	305
<b>30</b>	967	3240	3840	e560	---	6360	650	1890	1040	232	8130	293
<b>31</b>	858	---	5080	e580	---	6290	---	5470	---	226	8820	---
TOTAL	15024	77926	78530	61435	18760	81812	53696	54865	206970	29182	50010	52613
MEAN	485	2598	2533	1982	647	2639	1790	1770	6899	941	1613	1754
MAX	992	6640	5080	5090	1300	6360	6650	5470	18100	3540	8820	8740
MIN	207	575	1240	560	420	800	650	614	1040	226	162	293
CFSM	0.23	1.24	1.21	0.95	0.31	1.26	0.86	0.85	3.30	0.45	0.77	0.84
IN.	0.27	1.39	1.40	1.09	0.33	1.46	0.96	0.98	3.68	0.52	0.89	0.94

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 – 2004, BY WATER YEAR (WY)**

MEAN	733	965	1518	1861	2524	3103	3182	2710	2085	1325	485	571
MAX	8019	5850	8203	9079	7425	11210	8396	10910	7934	8361	2497	7372
(WY)	1994	1986	1928	1950	1982	1982	1950	1943	1958	2003	1977	1993
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 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1923 – 2004**

ANNUAL TOTAL	715979		780823			
ANNUAL MEAN	1962		2133		1754	
HIGHEST ANNUAL MEAN					4477	
LOWEST ANNUAL MEAN					365	
HIGHEST DAILY MEAN	16800	Jul 13	18100	Jun 15	27000	Mar 7 1979
LOWEST DAILY MEAN	190	A	162	Aug 18	10	Oct 6 1956
ANNUAL SEVEN-DAY MINIMUM	199	Sep 19	186	Aug 13	14	Aug 2 1934
MAXIMUM PEAK FLOW			18400	Jun 15	27000	B
MAXIMUM PEAK STAGE			15.35	Jun 15	21.68	C
INSTANTANEOUS LOW FLOW			157	Aug 18	9.0	D
ANNUAL RUNOFF (CFSM)	0.938		1.02		0.839	
ANNUAL RUNOFF (INCHES)	12.74		13.89		11.40	
10 PERCENT EXCEEDS	5130		5440		4780	
50 PERCENT EXCEEDS	849		1060		740	
90 PERCENT EXCEEDS	266		347		81	

A – Jan 27 and 28, estimated due to backwater from ice; and Sept. 23.

B – May 13, 1933; March 7, 1979.

C – Present datum, ice jam.

D – Oct. 6–8, 1956.



ILLINOIS RIVER BASIN  
05527390 Prairie Creek near Webster Siding, IL.

197

**LOCATION.**—Lat 41°21'17", long 88°10'20" (NAD of 1927), in NW 1/4 SW 1/4 sec. 11, T.33N, R.09 E, Will County, Hydrologic Unit 07120001, Midewin National Tallgrass Prairie, on right upstream side of bridge, 1.05 mi. from Interstate 55, and at mile 1.3.

**DRAINAGE AREA.**—48.60 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE WATER DISCHARGE AND STAGE

STAGE: October 2003 to September 2004.

PARTIAL RECORD: Discharge measurements, water year 2004.

**GAGE.**—Water stage recorder and crest stage gage. Datum of gage is 530.91 ft. above NAVD of 1988.

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum recorded gage height, 7.57 ft., June 13, 2004; minimum recorded, 1.31 ft., Aug. 16, 17, 2004.

Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.37	1.41	---	---	---	1.96	2.90	2.05	3.62	1.64	1.36	2.21
2	1.36	1.49	---	---	---	2.07	2.62	2.12	2.97	1.62	1.34	2.02
3	1.37	1.59	---	---	---	2.01	2.44	2.01	2.63	1.66	1.34	1.87
4	1.38	1.60	---	---	---	2.04	2.29	1.94	2.39	2.15	1.51	1.78
5	1.36	2.30	---	---	---	4.20	2.19	1.90	2.25	2.10	1.58	1.72
6	1.36	2.40	---	---	---	3.74	2.14	1.84	2.14	1.89	1.60	1.69
7	1.35	2.09	---	---	---	3.01	2.09	1.83	2.04	1.80	1.51	1.65
8	1.35	1.92	---	---	---	2.67	2.04	1.85	1.97	1.75	1.44	1.61
9	1.35	1.82	---	---	---	2.47	2.00	1.90	1.90	1.77	1.39	1.58
10	1.35	1.77	---	---	---	2.31	1.93	1.84	1.92	1.89	1.37	1.56
11	1.36	1.75	---	---	---	2.23	1.89	1.79	2.19	1.79	1.36	1.54
12	1.36	1.72	---	---	---	2.11	1.86	1.81	5.79	1.73	1.36	1.53
13	1.36	1.66	---	---	---	2.03	1.85	2.23	5.38	1.68	1.35	1.51
14	1.43	1.61	---	---	---	2.04	1.83	4.36	3.42	1.65	1.35	1.50
15	1.45	1.59	---	---	---	2.00	1.80	4.27	3.20	1.61	1.33	1.50
16	1.43	1.60	---	---	---	1.97	1.78	3.20	2.79	1.58	1.32	1.56
17	1.43	1.59	---	---	---	1.97	1.78	2.80	2.56	1.59	1.32	1.52
18	1.41	3.03	---	---	---	1.96	1.76	2.63	2.36	1.55	1.34	1.50
19	1.40	---	---	---	---	1.94	1.76	2.49	2.19	1.52	1.43	1.51
20	1.40	---	---	---	---	1.96	1.78	2.36	2.08	1.51	1.43	1.49
21	1.38	---	---	---	---	1.92	1.96	2.24	2.05	1.48	1.44	1.48
22	1.38	---	---	---	---	1.87	1.90	2.23	2.03	1.46	1.42	1.46
23	1.38	---	---	---	---	1.86	1.81	3.47	1.91	1.48	1.41	1.46
24	1.39	---	---	---	---	1.90	1.78	3.16	1.86	1.71	1.43	1.46
25	1.45	---	---	---	2.32	1.96	2.25	3.09	1.80	1.54	1.49	1.45
26	1.44	---	---	---	2.15	2.28	2.32	2.95	1.76	1.48	2.10	1.44
27	1.42	---	---	---	2.06	2.68	2.11	2.59	1.73	1.43	2.27	1.44
28	1.44	---	---	---	1.98	2.52	1.99	2.35	1.71	1.41	4.68	1.45
29	1.43	---	---	---	1.91	3.69	1.92	2.19	1.68	1.39	3.76	1.44
30	1.42	---	---	---	---	3.25	1.95	2.94	1.65	1.40	2.94	1.43
31	1.41	---	---	---	---	3.43	---	5.39	---	1.39	2.50	---
MEAN	1.39	---	---	---	---	2.39	2.02	2.57	2.47	1.63	1.72	1.58
MAX	1.45	---	---	---	---	4.20	2.90	5.39	5.79	2.15	4.68	2.21
MIN	1.35	---	---	---	---	1.86	1.76	1.79	1.65	1.39	1.32	1.43

ILLINOIS RIVER BASIN  
**05527500 Kankakee River near Wilmington, IL**

**LOCATION.**— Lat 41°20'48", long 88°11'11" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: February 1935 to current year. Monthly discharge only for some periods, published in WSP 1308. November 1914 to September 1933 at site 8.5 mi upstream, published as Kankakee River at Custer Park. Records may not be equivalent.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1977–91. Additional chemical data for water years 1959–77 are published in Water Resources Investigations 78–23 and 79–24 as site F 01.

SEDIMENT: October 1978 to September 1982, January 1993 to December 1995.

WATER TEMPERATURE: Water years 1973–77.

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

**GAGE.**— Water-stage recorder and U.S. Army Corps of Engineers satellite telemeter. Datum of gage is 510.86 ft above NGVD of 1929. However, datum incorrectly published as 511.10 ft above NGVD of 1929 from Feb. 16, 1935 to Sept. 30, 1953.

**REMARKS.**— Slight diurnal fluctuation at low flow caused by powerplants upstream from station.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 75,900 ft<sup>3</sup>/s, July 13, 1957, gage height, 11.40 ft; maximum gage height, 13.88 ft, Jan. 30, 1968, ice jam; minimum discharge, 204 ft<sup>3</sup>/s, Aug. 1, 1936.

SUSPENDED–SEDIMENT CONCENTRATIONS: Maximum daily, 2,180 mg/L, Apr. 14, 1981; minimum daily, 5 mg/L, Feb. 5, 1993, Sept. 24–30, 1995, Oct. 12, 1995.

SUSPENDED–SEDIMENT LOADS: Maximum daily, 172,000 tons, Apr. 14, 1981; minimum daily, 12 tons, Sept. 20, 29–30, 1995.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Floods in 1883, 1887 reached a stage of 16.7 ft, discharge not determined.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
 DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1870	2060	6950	7860	e1380	3680	10700	3130	13300	2890	1410	13000
2	1630	2080	6420	7560	e1310	3810	10200	3190	12500	2620	1280	12100
3	1490	1940	5780	7040	e1270	4130	9280	2980	11900	2500	1140	10300
4	1330	1840	5320	6800	e1210	4480	7930	2680	11200	2580	1980	8130
5	1320	2220	5020	6520	e1170	7770	6730	2700	9780	2590	1960	6810
6	1300	2560	5060	6760	e1120	11500	5960	2580	8210	2480	2000	5940
7	1240	2740	5160	7030	e1200	11400	5400	e2630	7260	2450	1900	5410
8	1210	2860	5320	6480	e1280	10700	4930	e2700	6270	2350	1940	4920
9	1150	3020	5520	5600	e1390	9420	4630	e2650	5650	2290	1750	4750
10	1140	3050	6230	4960	e1280	8300	4340	e2600	4940	2430	1490	4350
11	1100	2890	7740	4990	e1200	7520	4060	e2800	4890	2530	1250	3880
12	1070	2620	7460	4700	e1350	6870	3760	3270	e15100	3530	1190	3360
13	1040	2460	7020	4580	e1500	6330	3610	3730	e27000	4720	1050	2810
14	1110	2560	6700	4270	e1400	5800	3470	4840	23400	4510	1040	2470
15	1180	2520	6330	4050	e1280	5470	3390	6070	23500	3680	1010	2210
16	1350	2460	5940	3810	e1280	5240	3240	6610	21700	2700	982	2080
17	1560	2360	5480	3690	e1280	4950	3150	6530	18400	1930	975	1930
18	1790	4010	5110	3510	e1280	4710	3050	5960	15900	1990	1010	1900
19	1930	10900	4830	3670	e1500	4540	2890	5350	14700	2000	1930	1830
20	1920	11300	4610	3720	e1950	4360	2910	4980	13900	2080	2160	1750
21	1720	10500	4380	3190	e2600	4340	3220	4960	12800	1790	2380	1670

## ILLINOIS RIVER BASIN

199

**05527500 Kankakee River near Wilmington, IL--Continued**

<b>22</b>	1780	10300	3960	e2900	e3400	4100	3520	4760	10800	1730	2600	1600
<b>23</b>	1670	9590	3920	e2700	e3800	3880	3270	4670	8070	1840	2780	1560
<b>24</b>	1630	10100	4110	e2400	e4000	3800	3140	4510	6180	2380	2880	1480
<b>25</b>	1610	10500	5540	e2100	e4100	3830	3410	4830	5120	2280	2640	1430
<b>26</b>	1630	10300	6450	e1900	e4200	4380	3520	5340	4490	2310	6240	e1410
<b>27</b>	1850	9920	6150	e1700	4050	6780	3390	5520	3970	2330	9630	e1390
<b>28</b>	2130	9080	5760	e1600	3820	8680	3170	5360	3490	2230	12200	e1380
<b>29</b>	2260	8150	5540	e1540	3670	11300	2730	4860	3320	1900	13400	e1370
<b>30</b>	2310	7420	5880	e1480	----	11400	2760	4950	3090	1660	13300	e1360
<b>31</b>	2280	----	7240	e1410	----	10900	----	11300	----	1560	13100	----
TOTAL	48600	164310	176930	130520	60270	204370	135760	139040	330830	76860	110597	114580
MEAN	1568	5477	5707	4210	2078	6593	4525	4485	11030	2479	3568	3819
MAX	2310	11300	7740	7860	4200	11500	10700	11300	27000	4720	13400	13000
MIN	1040	1840	3920	1410	1120	3680	2730	2580	3090	1560	975	1360
CFSM	0.30	1.06	1.11	0.82	0.40	1.28	0.88	0.87	2.14	0.48	0.69	0.74
IN.	0.35	1.19	1.28	0.94	0.44	1.48	0.98	1.00	2.39	0.56	0.80	0.83

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 – 2004, BY WATER YEAR (WY)**

MEAN	2305	3254	4280	4798	5951	7824	7994	7070	5642	3617	1985	1858
MAX	15570	15530	18150	17270	13870	22730	18360	21480	14320	12720	5793	14370
(WY)	1994	1986	1983	1993	1968	1982	1950	1943	1993	2003	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 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1934 – 2004**

ANNUAL TOTAL	1509677	1692667	
ANNUAL MEAN	4136	4625	4710
HIGHEST ANNUAL MEAN			10380
LOWEST ANNUAL MEAN			1407
HIGHEST DAILY MEAN	21100 Jul 12	27000 A Jun 13	55100 Nov 28 1990
LOWEST DAILY MEAN	833 Aug 28	975 Aug 17	270 Jan 1 1940
ANNUAL SEVEN-DAY MINIMUM	880 Feb 28	1040 Aug 12	340 Aug 2 1988
MAXIMUM PEAK FLOW		29100 Jun 13	75900 B Jul 13 1957
MAXIMUM PEAK STAGE		6.43 Jun 13	13.88 C Jan 30 1968
INSTANTANEOUS LOW FLOW		948 Aug 17,18	204 Aug 1 1936
ANNUAL RUNOFF (CFSM)	0.803	0.898	0.915
ANNUAL RUNOFF (INCHES)	10.90	12.23	12.43
10 PERCENT EXCEEDS	9710	10200	10800
50 PERCENT EXCEEDS	2560	3520	3020
90 PERCENT EXCEEDS	1070	1350	876

A – Estimated.

B – Gage height, 11.40 ft.

C – Ice jam.

ILLINOIS RIVER BASIN  
**05527800 Des Plaines River at Russell, IL**

**LOCATION.**— Lat 42°29'21", long 87°55'35" (NAD of 1927), in SE1/4 sec.3, T.46 N., R.11 E., Lake County, Hydrologic Unit 07120004, on 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.**—

**SURFACE—WATER DISCHARGE AND STAGE**

DISCHARGE: July 1967 to current year.

STAGE: Water years 1994 to current year.

PARTIAL RECORD: Occasional low-flow measurements, water years 1961–63, and annual maximum gage heights, water years 1962–66.

**SURFACE—WATER QUALITY**

CHEMICAL: Water years 1978–1991 and 1999 to 2001. Additional chemical data for water years 1959–60, 1964–69, 1971–77 are published in Water-Resources Investigations 78–22 and 79–23 as site G 08.

MISCELLANEOUS: Water years 1999–2000; contaminants in streambed sediment, Water years 1998 and 2000; contaminants in fish tissue, Water year 1998.

PRECIPITATION: October 1999 to current year.

**BIOLOGICAL**

ALGAE: Pigment and biomass, Water year 2000.

BENTHIC MACROINVERTEBRATES: Water years 1999–2001.

FISH: Water years 1999–2001.

HABITAT: Water years 1999–2001.

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

**GAGE.**— Water–stage recorder, phone telemeter, raingage, and crest–stage gage. Datum of gage is 662.00 ft above NGVD of 1929. Oct. 17, 1961 to June 29, 1967, crest–stage gage at left downstream side of bridge at datum 4.29 ft higher.

**REMARKS.**— Collection, computation, and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Maximum discharge, 3,500 ft<sup>3</sup>/s, May 23, 2004, gage height, 11.09 ft, no flow, at times in most years.

**PRECIPITATION:** Maximum daily total, 3.55 in., June 12, 2000.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.13	1.7	22	e44	e7.8	195	328	60	679	130	11	9.6
2	0.13	6.4	18	e43	e7.8	224	311	55	622	86	9.0	6.5
3	0.15	54	16	e41	e8.0	241	289	49	508	65	9.0	4.8
4	0.16	87	14	e38	e8.4	253	261	45	418	136	21	3.6
5	0.15	112	15	e37	e8.6	353	234	39	357	223	32	3.1
6	0.15	117	16	e36	e8.8	483	206	35	313	290	31	2.6
7	0.15	100	16	e34	e8.6	573	174	31	270	357	20	1.9
8	0.13	72	16	e32	e8.4	630	139	29	233	387	14	1.6
9	0.11	50	16	e30	e8.2	661	106	36	196	360	12	1.4
10	0.09	36	89	e29	e7.8	640	84	64	191	316	9.3	1.1
11	0.08	28	191	e29	e7.6	568	72	107	274	265	8.0	1.1
12	0.07	23	218	e28	e7.6	463	64	154	334	216	7.2	1.1
13	0.18	20	224	e27	e7.8	387	58	213	369	151	6.5	0.96
14	0.59	19	214	e25	e8.2	338	54	274	354	92	5.8	0.77
15	0.56	21	201	e23	e8.8	290	51	340	322	66	5.0	0.77
16	0.82	22	190	e21	e12	245	48	386	283	55	4.2	1.7
17	1.4	25	174	e19	e15	205	53	412	248	48	6.1	3.5
18	1.8	39	150	e17	e20	167	58	492	229	41	9.7	3.0
19	1.3	68	120	e16	e25	138	57	543	233	36	8.0	2.5
20	1.0	83	108	e16	30	120	51	540	246	31	7.6	2.2

ILLINOIS RIVER BASIN  
**05527800 Des Plaines River at Russell, IL--Continued**

201

21	0.84	85	90	e15	36	105	80	635	273	34	6.0	1.7
22	0.70	75	71	e14	45	92	100	2020	315	44	4.6	1.2
23	0.63	65	62	e13	65	82	102	3190	326	46	4.0	0.63
24	0.65	62	61	e12	102	91	93	3260	332	39	4.0	0.32
25	0.77	55	62	e11	128	135	96	2540	328	30	4.3	0.18
26	0.73	48	56	e11	148	183	99	1850	311	24	4.6	0.10
27	0.72	43	44	e10	165	220	95	1310	283	20	6.1	0.08
28	0.94	37	43	e9.6	176	239	88	946	250	17	17	0.03
29	1.3	32	e43	e9.0	179	306	77	712	217	15	23	0.01
30	1.5	28	e44	e8.6	---	335	66	575	179	13	18	0.03
31	1.8	---	e45	e8.2	---	336	---	604	---	12	15	---
TOTAL	19.73	1514.1	2649	706.4	1268.4	9298	3594	21546	9493	3645	343.0	58.08
MEAN	0.64	50.5	85.5	22.8	43.7	300	120	695	316	118	11.1	1.94
MAX	1.8	117	224	44	179	661	328	3260	679	387	32	9.6
MIN	0.07	1.7	14	8.2	7.6	82	48	29	179	12	4.0	0.01
CFSM	0.01	0.41	0.69	0.19	0.36	2.44	0.97	5.65	2.57	0.96	0.09	0.02
IN.	0.01	0.46	0.80	0.21	0.38	2.81	1.09	6.52	2.87	1.10	0.10	0.02

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 – 2004, BY WATER YEAR (WY)**

MEAN	41.6	67.8	85.4	66.1	105	208	219	142	109	54.3	38.4	50.8
MAX	364	390	382	279	327	673	718	695	642	363	417	410
(WY)	1987	1986	1983	1993	1974	1979	1993	2004	2000	1978	1978	1972
MIN	0.06	1.60	3.06	1.46	1.19	14.9	33.4	6.15	1.90	0.78	0.23	0.06
(WY)	1995	2000	1977	1977	2003	1968	1977	1977	1988	1988	1999	1994

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1967 – 2004	
ANNUAL TOTAL	13753.49		54134.71			
ANNUAL MEAN	37.7		148		99.0	
HIGHEST ANNUAL MEAN					206	
LOWEST ANNUAL MEAN					9.24	
HIGHEST DAILY MEAN	238	May 11	3260	May 24	3260	May 24 2004
LOWEST DAILY MEAN	0.00	A	0.01	Sep 29	0.00	B
ANNUAL SEVEN-DAY MINIMUM	0.00	Sep 18	0.11	Sep 24	0.00	Jul 27 1988
MAXIMUM PEAK FLOW			3500	May 23	3500	May 23 2004
MAXIMUM PEAK STAGE			11.09	May 23	11.09	May 23 2004
INSTANTANEOUS LOW FLOW			0.00	Sep 28,29		
ANNUAL RUNOFF (CFSM)	0.306		1.20		0.805	
ANNUAL RUNOFF (INCHES)	4.16		16.37		10.94	
10 PERCENT EXCEEDS	93		339		271	
50 PERCENT EXCEEDS	16		43		34	
90 PERCENT EXCEEDS	0.21		1.1		2.7	

A – Several days.

B – At times in most years.

ILLINOIS RIVER BASIN  
**05527950 Mill Creek at Old Mill Creek, IL**

**LOCATION.**— Lat 42°24'55", long 87°58'09" (NAD of 1927), 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.**—

SURFACE–WATER DISCHARGE AND STAGE

DISCHARGE: October 1989 to current year.

STAGE: Water years 1994 to current year.

PARTIAL RECORD: Annual maximum, water years 1962 to 1976.

SURFACE–WATER QUALITY

MISCELLANEOUS: Contaminants in streambed sediments, water year 2000.

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

**GAGE.**— Water–stage recorder, phone telemeter, and crest–stage gage. Datum of gage is 668.00 ft above NGVD of 1929. Prior to Oct. 1, 1989, at datum 8.85 ft higher.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Maximum discharge, 1,160 ft<sup>3</sup>/s, April 23, 1999, gage height 12.21 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.**—

SURFACE–WATER DISCHARGE AND STAGE: A gage height of 13.73 ft, present datum, discharge unknown, occurred between October 1976 and September 1989, from mark on crest–stage gage.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.28	1.5	16	28	e4.9	77	156	43	342	58	5.4	5.4
2	0.26	8.5	15	28	e5.1	119	135	37	288	49	5.2	3.8
3	0.28	41	14	28	e5.2	98	120	30	248	46	5.4	2.6
4	0.30	43	14	27	e5.2	91	106	25	220	163	10	1.6
5	0.29	58	18	25	e5.2	400	94	21	179	138	12	1.3
6	0.24	44	20	23	e5.2	297	84	18	147	121	9.1	1.3
7	0.21	37	18	23	e5.1	227	76	16	125	106	7.3	1.1
8	0.21	32	17	20	e5.0	189	68	14	112	98	6.3	1.0
9	0.21	27	18	e17	e4.9	172	60	17	108	87	5.7	0.91
10	0.22	23	117	e16	e5.0	160	53	20	255	75	5.2	0.88
11	0.29	20	136	e15	e5.2	141	47	32	347	65	4.8	0.81
12	0.34	20	96	e14	e5.1	124	42	54	333	58	4.4	0.85
13	0.30	17	79	e14	e5.0	112	38	119	270	49	4.3	0.88
14	1.5	16	71	e13	e4.9	105	35	202	228	41	4.1	0.90
15	5.2	15	66	e13	e4.8	94	32	218	200	35	4.1	1.1
16	3.7	14	64	e12	e4.7	84	27	151	172	30	4.1	4.1
17	2.6	13	62	e12	e4.8	78	32	129	152	27	4.1	5.2
18	2.4	29	56	e11	e4.9	72	42	383	135	24	4.2	3.7
19	2.1	43	51	e10	e5.2	69	38	267	115	20	4.3	2.7
20	1.7	34	44	e9.2	6.4	66	33	243	97	15	4.4	1.9
21	1.2	28	43	e8.4	11	62	67	262	121	12	4.6	1.6
22	1.7	24	43	e7.2	13	56	57	712	152	12	4.6	1.6
23	2.1	24	40	e6.6	20	52	47	677	134	12	4.6	1.6
24	2.0	30	37	e6.0	40	65	41	556	140	10	4.6	1.6
25	2.3	25	34	e5.6	39	90	57	492	137	9.8	4.8	1.5
26	3.3	23	30	e5.3	38	187	58	444	115	8.9	4.9	1.3
27	3.8	22	29	e5.2	41	162	52	401	98	8.1	6.5	1.2

## ILLINOIS RIVER BASIN

203

**05527950 Mill Creek at Old Mill Creek, IL--Continued**

<b>28</b>	4.3	21	32	e5.2	45	166	53	347	85	7.4	15	1.1
<b>29</b>	3.4	19	34	e5.1	50	302	55	301	74	6.8	17	0.96
<b>30</b>	2.4	17	33	e5.0	----	216	46	320	66	6.3	12	0.79
<b>31</b>	2.0	----	30	e5.0	----	180	----	383	----	6.0	8.0	----
TOTAL	51.13	769.0	1377	422.8	398.8	4313	1851	6934	5195	1404.3	201.0	55.28
MEAN	1.65	25.6	44.4	13.6	13.8	139	61.7	224	173	45.3	6.48	1.84
MAX	5.2	58	136	28	50	400	156	712	347	163	17	5.4
MIN	0.21	1.5	14	5.0	4.7	52	27	14	66	6.0	4.1	0.79
CFSM	0.03	0.42	0.73	0.22	0.23	2.28	1.01	3.67	2.84	0.74	0.11	0.03
IN.	0.03	0.47	0.84	0.26	0.24	2.63	1.13	4.23	3.17	0.86	0.12	0.03

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 – 2004, BY WATER YEAR (WY)**

MEAN	16.2	37.9	36.6	41.2	69.8	89.7	107	94.8	79.3	29.9	10.0	7.98
MAX	115	127	106	126	181	157	297	245	266	168	44.0	26.5
(WY)	2002	1993	1992	1993	2001	1993	1993	1996	2000	1993	1990	2000
MIN	1.38	2.66	5.81	3.50	2.37	10.1	22.8	11.9	3.45	1.00	0.55	0.43
(WY)	1995	2000	2003	2003	2003	2003	2003	1994	1992	1991	1991	2003

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1990 – 2004**

ANNUAL TOTAL	7174.59		22972.31			
ANNUAL MEAN	19.7		62.8		51.5	
HIGHEST ANNUAL MEAN					102	
LOWEST ANNUAL MEAN					15.7	
HIGHEST DAILY MEAN	136	Dec 11	712	May 22	777	Apr 23 1999
LOWEST DAILY MEAN	0.21	Oct 7,8,9	0.21	Oct 7,8,9	0.03	Sep 11 1991
ANNUAL SEVEN-DAY MINIMUM	0.24	Oct 5	0.24	Oct 5	0.05	Sep 5 1991
MAXIMUM PEAK FLOW			831	May 22	1160	A Apr 23 1999
MAXIMUM PEAK STAGE			11.54	May 22	12.88	B Mar 6 1976
INSTANTANEOUS LOW FLOW			0.21	Oct 7,8,9,10	0.03	C
ANNUAL RUNOFF (CFSM)	0.322		1.03		0.845	
ANNUAL RUNOFF (INCHES)	4.38		14.02		11.48	
10 PERCENT EXCEEDS	49		172		132	
50 PERCENT EXCEEDS	14		23		24	
90 PERCENT EXCEEDS	0.49		1.6		2.1	

A – Gage height, 12.21 ft.

B – Present datum.

C – Sept. 7, 8, 10, 11, 1991.

ILLINOIS RIVER BASIN  
**05528000 Des Plaines River near Gurnee, IL**

**LOCATION.**— Lat 42°20'39", long 87°56'18" (NAD of 1927), in SE1/4SW1/4 sec.27, T.45 N., R.11 E., Lake County, Hydrologic Unit 07120004, on left bank at upstream side of 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1945 to September 1958, October 1968 to current year.

STAGE: Water years 1994 to current year.

PARTIAL RECORD: Annual maximum, water years 1960–68.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1977–91.

PRECIPITATION: October 1999 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, phone telemeter, and rain gage. Datum of gage is 650.30 ft above NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Prior to May 26, 1946, nonrecording gage. May 27, 1946, to Sept. 30, 1958, water–stage recorder. Dec. 17, 1959, to September 1968, crest–stage gage. October 1968 to September 1998, water stage recorder at site 800 ft upstream at same datum.

**REMARKS.**— Effluent from sewage–treatment plants, 0.5 mi upstream. Collection, computation, and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 3,890 ft<sup>3</sup>/s, May 25, 2004, gage height, 11.76 ft; maximum gage height, 11.95 ft, Sept. 27, 1986; no flow Sept. 26 to Oct. 19, 1956, and part of each day Aug. 27–30, Sept. 1, 2, 1970.

**PRECIPITATION:** Maximum daily total, 2.76 in., Oct. 13, 2001.

**REMARKS FOR CURRENT YEAR.**— Records fair. Effluent from sewage–treatment plants averaged 52.2 ft<sup>3</sup>/s. The maximum monthly effluent was 77.7 ft<sup>3</sup>/s in May, and the minimum was 39.6 ft<sup>3</sup>/s in January.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	38	100	149	62	335	782	206	1380	424	54	69
2	37	101	93	143	63	392	723	188	1280	340	54	61
3	42	226	89	140	63	437	669	171	1180	286	52	56
4	40	240	86	138	64	464	613	154	1050	402	98	53
5	39	337	105	127	64	780	559	140	943	437	80	49
6	39	269	101	105	63	930	508	128	830	488	79	48
7	36	238	98	126	64	999	457	125	729	527	75	48
8	36	205	94	118	64	965	401	119	635	572	66	40
9	35	165	98	108	65	938	341	130	565	613	61	51
10	34	131	343	104	63	921	281	146	702	645	54	43
11	36	115	429	104	63	904	234	192	886	608	51	44
12	37	103	450	104	62	871	206	250	1100	546	49	44
13	39	98	426	104	62	811	186	417	1140	461	47	44
14	67	89	400	104	62	749	173	594	1040	355	44	44
15	49	84	385	94	61	675	161	742	947	231	44	47
16	40	81	367	98	60	601	151	778	863	162	45	57
17	40	78	346	96	59	532	175	781	786	137	50	57
18	39	189	321	91	59	470	174	1140	698	120	48	53
19	40	191	291	86	62	409	174	1170	614	110	55	53
20	39	190	229	82	78	349	179	1130	546	98	48	50
21	38	183	202	75	93	305	274	1100	553	91	47	49
22	37	174	196	71	97	271	281	1730	621	92	47	40
23	36	165	185	67	127	245	277	2730	643	92	46	48
24	35	171	167	66	174	266	260	3600	680	90	49	48



**05528000 Des Plaines River near Gurnee, IL--Continued**

<b>25</b>	46	152	146	67	208	304	289	3810	712	83	52	46
<b>26</b>	39	137	136	67	223	480	276	3430	707	76	48	56
<b>27</b>	39	128	137	66	240	564	262	2870	670	66	54	47
<b>28</b>	38	118	151	66	261	619	245	2320	622	65	95	46
<b>29</b>	37	112	155	65	287	842	230	1860	563	60	97	43
<b>30</b>	38	106	154	63	----	866	218	1570	495	58	87	43
<b>31</b>	38	----	154	61	----	843	----	1500	----	57	76	----
TOTAL	1222	4614	6634	2955	2973	19137	9759	35221	24180	8392	1852	1477
MEAN	39.4	154	214	95.3	103	617	325	1136	806	271	59.7	49.2
MAX	67	337	450	149	287	999	782	3810	1380	645	98	69
MIN	34	38	86	61	59	245	151	119	495	57	44	40

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 – 2004, BY WATER YEAR (WY)**

MEAN	131	178	225	158	247	430	481	331	250	151	122	127
MAX	1011	785	865	514	626	1510	1395	1136	1123	599	648	756
(WY)	1987	1986	1983	1993	2001	1979	1993	2004	2000	1993	1978	1986
MIN	16.6	16.5	12.7	10.6	11.9	59.8	79.9	31.3	23.1	23.9	15.0	18.3
(WY)	1977	1977	1977	1977	1977	2003	1977	1977	1977	1977	1977	1977

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1977 – 2004**

ANNUAL TOTAL	38790	118416	
ANNUAL MEAN	106	324	236
HIGHEST ANNUAL MEAN			428
LOWEST ANNUAL MEAN			26.8
HIGHEST DAILY MEAN	499 May 10,11	3810 May 25	3810 May 25 2004
LOWEST DAILY MEAN	22 Feb 16	34 Oct 10	7.5 Feb 6 1977
ANNUAL SEVEN-DAY MINIMUM	23 Feb 11	36 Oct 6	7.9 Jan 31 1977
MAXIMUM PEAK FLOW		3890 May 25	3890 A May 25 2004
MAXIMUM PEAK STAGE		11.76 May 25	11.95 B Sep 27 1986
INSTANTANEOUS LOW FLOW		27 Oct 11	
10 PERCENT EXCEEDS	213	817	575
50 PERCENT EXCEEDS	76	134	122
90 PERCENT EXCEEDS	25	44	41

A – Gage height, 11.76 ft.

B – Discharge, 3,530 ft<sup>3</sup>/s.

ILLINOIS RIVER BASIN  
**05528035    Drainage Ditch at Libertyville, IL**

**LOCATION.**— Lat 42°18'21", long 87°56'35" (NAD of 1927), in SW1/4NW1/4 sec.10, T.44 N., R.11 E., Lake County, Hydrologic Unit 07120004, on left bank at upstream side of bridge on State Highway 137 (Buckley Road) and at mile 0.46.

**DRAINAGE AREA.**— 2.78 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

STAGE: Aug. 1999 to current year.

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 656.77 ft above NGVD of 1929.

**REMARKS.**— Gage is used for flood warnings.

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum recorded gage height, 54.33 ft, October 13, 2001; minimum recorded, 48.43 ft, Sept. 8–12, 1999.

**EXTREMES FOR CURRENT YEAR.**— Maximum recorded gage height, 52.37 ft, May 5; minimum recorded, 48.58 ft, Sept. 11, 12.

Gage height, feet WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49.59	49.52	49.54	---	---	---	49.65	51.02	49.93	49.48	49.49	49.45
2	49.65	49.52	49.54	---	---	---	49.62	50.34	49.77	49.47	49.44	49.38
3	49.63	49.52	49.54	---	---	---	49.64	50.00	49.70	49.46	49.59	49.25
4	49.76	49.52	49.54	---	---	---	50.52	49.96	49.65	49.47	49.73	49.10
5	49.73	49.52	49.55	---	---	---	50.49	51.16	49.60	49.54	49.58	48.91
6	49.62	49.52	49.54	---	---	---	50.04	50.22	49.58	49.82	49.55	48.73
7	49.59	49.52	49.54	---	---	---	49.97	50.01	49.58	50.13	49.53	48.63
8	49.56	49.52	49.55	---	---	---	50.00	49.93	49.69	50.10	49.52	48.61
9	49.54	49.52	49.55	---	---	---	50.12	50.77	49.66	49.94	49.50	48.60
10	49.53	49.52	49.55	---	---	---	50.14	50.70	49.58	49.78	49.49	48.59
11	49.52	49.52	49.55	---	---	---	49.94	50.63	49.57	49.65	49.49	48.59
12	49.52	49.52	49.55	---	---	---	49.82	50.36	49.55	---	49.49	48.97
13	49.52	49.52	49.55	---	---	---	49.75	50.02	49.55	---	49.48	49.45
14	49.51	49.52	49.55	---	---	---	49.71	49.92	49.54	---	49.47	49.53
15	49.51	49.52	49.55	---	---	---	49.67	49.93	49.52	---	49.45	49.43
16	49.51	49.52	49.55	---	---	49.64	49.77	49.84	49.51	---	49.40	49.31
17	49.51	49.53	49.55	---	---	49.68	49.70	49.75	---	49.73	49.33	49.18
18	49.52	49.54	49.55	---	---	49.64	49.63	49.70	---	49.79	49.26	49.04
19	49.51	49.53	49.61	---	---	49.65	49.61	49.66	49.81	49.60	49.16	48.87
20	49.51	49.53	49.60	---	---	---	49.63	49.73	49.60	49.55	49.05	48.72
21	49.51	49.56	---	---	---	---	49.61	49.65	49.55	50.08	48.89	48.63
22	49.51	49.54	---	---	---	---	49.59	49.60	49.53	49.78	48.74	49.44
23	49.51	49.54	---	---	---	---	49.57	49.58	49.51	49.63	48.65	49.32
24	49.53	49.54	---	---	---	---	49.57	49.56	49.49	49.57	48.62	49.20
25	49.55	49.54	---	---	---	49.83	49.57	49.56	49.49	49.53	48.65	49.06
26	49.52	49.53	---	---	---	49.74	49.55	49.55	49.49	49.51	49.33	49.21
27	49.52	49.54	---	---	---	49.68	49.54	49.54	49.48	49.50	49.27	49.47
28	49.52	49.53	---	---	---	49.75	49.54	50.04	49.50	49.50	49.11	49.39
29	49.52	49.53	---	---	---	49.80	49.54	50.33	49.48	49.49	48.95	49.32
30	49.52	49.54	---	---	---	49.70	49.71	50.00	49.48	49.47	48.74	49.22
31	49.52	---	---	---	---	49.67	---	50.33	---	49.45	48.87	---
MEAN	49.55	49.53	---	---	---	---	49.77	50.04	---	---	49.25	49.09
MAX	49.76	49.56	---	---	---	---	50.52	51.16	---	---	49.73	49.53
MIN	49.51	49.52	---	---	---	---	49.54	49.54	---	---	48.62	48.59

**LOCATION.**— Lat 42°18'21", long 87°56'35" (NAD of 1927), in SW1/4NW1/4 sec.10, T.44 N., R.11 E., Lake County, Hydrologic Unit 07120004, on left bank at upstream side of bridge on State Highway 137 (Buckley Road) and at mile 0.46.

**DRAINAGE AREA.**— 2.78 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

STAGE: Aug. 1999 to current year.

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 656.77 ft above NGVD of 1929.

**REMARKS.**— Gage is used for flood warnings.

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum recorded gage height, 55.40 ft, May 25, 2004; minimum recorded, 48.33 ft, Sept. 26–30, 2004.

**EXTREMES FOR CURRENT YEAR.**— Maximum recorded gage height, 55.40 ft, May 25; minimum recorded, 48.33 ft, September 26–30.

Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49.12	49.43	49.61	49.68	---	50.36	50.68	49.59	51.85	49.52	49.43	49.24
2	49.01	49.79	49.59	49.67	---	50.27	50.47	49.58	51.61	49.50	49.40	49.13
3	49.28	50.25	49.58	49.70	---	50.08	50.26	49.56	51.44	49.66	49.43	49.00
4	49.46	50.26	49.58	49.66	---	50.18	50.04	49.56	51.22	50.21	49.54	48.86
5	49.38	50.61	49.88	49.66	---	52.12	49.82	49.55	50.95	49.80	49.46	48.72
6	49.31	49.98	49.87	---	---	51.29	49.70	49.54	50.62	49.69	49.41	48.63
7	49.24	49.78	49.79	---	---	51.27	49.66	49.54	50.25	49.62	49.36	48.57
8	49.15	49.67	49.75	---	---	51.18	49.63	49.53	49.84	49.59	49.32	48.44
9	49.06	49.62	49.85	---	---	51.06	49.60	49.55	49.61	49.73	49.25	48.43
10	48.96	49.60	51.47	---	---	50.99	49.59	49.59	51.27	50.64	49.19	48.43
11	48.93	49.58	---	---	---	50.92	49.57	49.60	51.47	49.95	49.13	48.43
12	49.50	49.58	---	---	---	50.89	49.57	49.74	51.34	49.74	49.08	48.43
13	49.41	49.56	---	---	---	50.76	49.56	50.50	51.37	49.64	49.03	48.42
14	49.62	49.55	---	---	---	50.51	49.56	51.01	51.18	49.58	48.95	48.42
15	49.49	49.54	---	---	---	50.27	49.55	50.67	50.93	49.55	48.86	48.87
16	49.47	49.54	---	---	---	49.97	49.54	50.48	50.66	49.53	48.78	49.48
17	49.42	49.55	49.80	---	---	49.82	49.66	50.44	50.39	49.52	49.23	49.34
18	49.35	50.61	49.80	---	---	49.82	49.63	52.90	50.05	49.50	49.34	49.21
19	49.28	50.35	49.80	---	---	49.83	49.57	51.64	49.71	49.49	49.23	49.06
20	49.22	49.96	49.80	---	---	49.83	49.64	51.43	49.59	49.48	49.11	48.88
21	49.14	49.81	49.80	---	---	49.75	49.99	51.44	50.25	49.48	48.96	48.71
22	49.06	49.73	49.78	---	---	49.71	49.82	53.04	50.23	49.48	48.77	48.58
23	48.98	49.79	49.73	---	---	49.69	49.70	53.36	49.91	49.47	48.64	48.48
24	49.06	49.97	49.70	---	---	50.01	49.69	54.46	49.93	49.47	49.32	48.41
25	49.52	49.83	49.70	---	---	50.02	49.94	55.33	50.00	49.47	49.45	48.39
26	49.44	49.76	49.69	---	---	50.95	49.81	55.18	49.97	49.47	49.35	48.34
27	49.38	49.72	49.68	---	---	50.37	49.70	54.50	49.86	49.47	49.49	48.33
28	49.44	49.68	49.80	---	---	50.72	49.64	53.61	49.65	49.47	49.68	48.33
29	49.46	49.66	49.84	---	---	51.47	49.59	52.71	49.55	49.46	49.50	48.33
30	49.47	49.64	49.76	---	---	51.03	49.59	52.31	49.53	49.46	49.41	48.34
31	49.41	---	49.71	---	---	50.88	---	52.27	---	49.45	49.33	---
MEAN	49.29	49.81	---	---	---	50.52	49.76	51.36	50.47	49.62	49.24	48.67
MAX	49.62	50.61	---	---	---	52.12	50.68	55.33	51.85	50.64	49.68	49.48
MIN	48.93	49.43	---	---	---	49.69	49.54	49.53	49.53	49.45	48.64	48.33

ILLINOIS RIVER BASIN  
05528500 Buffalo Creek near Wheeling, IL

**LOCATION.**— Lat 42°09'06", long 87°57'26" (NAD of 1927), 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.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: August 1952 to current year.

STAGE: Water years 1994 to current year.

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

**GAGE.**— Water-stage recorder, phone telemeter, and crest-stage gage. Datum of gage is 658.60 ft above NGVD of 1929 (Cook County Highway Department bench mark).

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 887 ft<sup>3</sup>/s, July 22, 1982, gage height, 7.94 ft; no flow at times in several years.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.95	4.5	8.2	9.3	e4.7	36	49	13	173	4.1	1.0	5.6
2	0.90	41	8.1	8.6	e3.9	40	40	11	137	3.5	0.92	4.2
3	5.0	125	7.1	8.0	e3.8	34	33	9.1	70	48	15	3.0
4	2.1	105	6.3	8.0	e4.6	43	28	8.6	41	95	55	2.4
5	2.4	113	13	8.9	e4.0	190	25	7.2	29	38	24	2.1
6	1.9	74	12	12	e3.7	184	23	7.5	21	23	13	1.6
7	1.4	42	11	10	e4.2	153	20	7.4	16	16	7.2	1.2
8	0.78	27	9.6	e9.0	e4.8	86	18	6.4	13	13	4.8	0.99
9	0.47	19	18	e7.0	e4.5	54	16	6.5	11	16	3.5	0.68
10	0.59	13	109	e6.2	e3.7	42	15	11	43	58	2.4	0.53
11	0.72	10	114	e5.5	e3.8	35	13	7.4	62	37	1.9	1.1
12	1.2	8.9	69	e5.1	e3.7	28	11	11	79	23	1.8	1.5
13	1.0	6.2	40	e5.2	e3.6	26	10	19	62	14	1.8	0.74
14	20	5.0	30	e5.4	e3.8	28	9.8	55	43	9.9	1.6	1.2
15	13	4.8	23	e5.0	e3.7	26	9.4	63	31	7.8	1.2	0.56
16	6.0	4.6	19	e5.1	e3.6	26	9.0	37	22	5.9	0.99	1.3
17	4.2	4.5	16	5.7	e3.6	25	12	28	16	4.9	1.2	0.72
18	2.9	78	13	6.3	e3.7	26	11	111	13	4.4	0.76	0.91
19	2.2	89	11	6.8	6.7	27	8.5	112	11	3.5	0.68	0.74
20	1.9	53	10	6.2	22	26	13	111	8.8	3.2	0.42	0.48
21	1.1	36	8.8	5.9	28	23	18	165	31	4.0	0.37	0.37
22	1.0	29	7.6	e5.2	27	22	14	187	44	4.7	0.37	0.42
23	1.1	27	8.0	e4.7	39	19	14	190	29	3.6	0.70	0.39
24	1.3	33	7.6	e4.5	50	37	17	161	20	2.5	1.2	0.48
25	4.0	28	7.2	e4.4	45	43	29	92	14	2.1	0.82	0.62
26	2.2	22	6.6	e4.6	39	79	22	53	11	1.9	1.2	0.63
27	2.2	16	6.0	e5.2	34	78	16	41	8.4	1.6	2.7	0.46
28	2.0	13	10	e5.8	31	97	13	31	7.3	1.5	47	0.43
29	1.5	11	12	e5.6	29	148	10	25	6.2	1.2	29	0.44
30	1.3	9.4	13	e5.8	---	118	12	145	5.3	1.1	14	0.43
31	1.4	---	11	e5.4	---	67	---	191	---	0.99	8.1	---
TOTAL	88.71	1051.9	645.1	200.4	422.1	1866	538.7	1923.1	1078.0	453.39	244.63	36.22
MEAN	2.86	35.1	20.8	6.46	14.6	60.2	18.0	62.0	35.9	14.6	7.89	1.21

**05528500 Buffalo Creek near Wheeling, IL---Continued**

MAX	20	125	114	12	50	190	49	191	173	95	55	5.6
MIN	0.47	4.5	6.0	4.4	3.6	19	8.5	6.4	5.3	0.99	0.37	0.37
CFSM	0.15	1.79	1.06	0.33	0.74	3.07	0.92	3.17	1.83	0.75	0.40	0.06
IN.	0.17	2.00	1.22	0.38	0.80	3.54	1.02	3.65	2.05	0.86	0.46	0.07

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 – 2004, BY WATER YEAR (WY)**

MEAN	9.70	14.9	15.9	13.9	20.9	33.0	35.9	25.4	18.8	11.3	11.1	10.6
MAX	84.3	89.6	92.8	53.1	69.9	147	97.1	116	103	46.1	64.5	65.4
(WY)	2002	1986	1983	1974	1997	1979	1983	1996	1970	1978	1987	1972
MIN	0.00	0.00	0.03	0.04	0.12	4.80	4.26	3.33	0.74	0.06	0.00	0.00
(WY)	1953	1954	1954	1954	1963	1956	1963	1977	1963	1953	1955	1953

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1952 – 2004**

ANNUAL TOTAL	5136.33		8548.25			
ANNUAL MEAN	14.1		23.4		18.4	
HIGHEST ANNUAL MEAN					32.9	
LOWEST ANNUAL MEAN					2.00	
HIGHEST DAILY MEAN	131	May 11	191	May 31	525	Dec 3 1982
LOWEST DAILY MEAN	0.15	Jul 3	0.37	A	0.00	B
ANNUAL SEVEN-DAY MINIMUM	0.59	Jun 27	0.48	Sep 21	0.00	Aug 22 1952
MAXIMUM PEAK FLOW			495	May 20	887	Jul 22 1982
MAXIMUM PEAK STAGE			6.38	May 20	7.94	Jul 22 1982
INSTANTANEOUS LOW FLOW			0.23	Sep 15,21,23		
ANNUAL RUNOFF (CFSM)	0.718		1.19		0.941	
ANNUAL RUNOFF (INCHES)	9.75		16.22		12.78	
10 PERCENT EXCEEDS	36		62		44	
50 PERCENT EXCEEDS	5.0		9.4		7.8	
90 PERCENT EXCEEDS	0.80		1.0		0.50	

A – Aug. 21, 22 and Sept. 21.

B – At times in several years.

ILLINOIS RIVER BASIN  
**05529000 Des Plaines River near Des Plaines, IL**

**LOCATION.**— Lat 42°04'55", long 87°53'25" (NAD of 1927), 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.**—

**SURFACE–WATER DISCHARGE AND STAGE**

DISCHARGE: October 1940 to current year.

STAGE: Water years 1994 to current year.

**SURFACE–WATER QUALITY**

CHEMICAL: Water years 1978–91.

**REVISED RECORDS.**— WSP 975: 1942. WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, phone telemeter, and masonry dam. Datum of gage is 626.31 ft above NGVD of 1929. Prior to Apr. 8, 1941, nonrecording gage at same site and datum.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum discharge, 4,900 ft<sup>3</sup>/s, Oct. 1, 1986, gage height, 10.88 ft; no flow many days in 1944, 1946 and Aug. 7, 8, 1962.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Flood of July 4, 1938, reached a stage of 9.0 ft, from floodmark, discharge, 5,000 ft<sup>3</sup>/s.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	80	183	246	e82	631	1040	346	2790	562	68	112
2	57	239	187	236	e82	604	879	319	2250	500	67	95
3	88	739	169	233	e83	604	800	293	1830	497	84	83
4	93	701	158	226	e83	636	742	268	1470	791	340	72
5	75	878	220	234	e84	1350	693	244	1160	666	213	67
6	69	708	244	186	e86	1640	647	210	884	620	142	63
7	69	526	222	152	e90	1520	602	184	756	614	120	63
8	64	422	206	217	e94	1290	554	173	674	615	102	59
9	63	346	215	179	e97	1050	502	169	602	634	87	51
10	61	274	700	164	e98	921	445	196	669	786	79	55
11	62	219	911	158	96	855	386	239	1240	775	70	50
12	59	182	817	162	93	804	336	273	1430	698	67	52
13	67	146	717	165	92	769	301	445	1330	624	64	56
14	233	131	656	163	90	741	281	636	1290	530	59	57
15	235	121	608	156	88	704	260	766	1150	424	55	58
16	128	114	580	146	87	665	241	750	946	298	57	75
17	84	111	547	152	88	624	259	718	839	215	66	78
18	73	474	508	155	86	579	278	1140	779	173	87	73
19	69	665	473	135	96	535	268	1660	725	155	70	70
20	70	505	422	e120	175	490	278	1660	669	133	70	72
21	69	405	358	e100	269	436	365	1880	683	124	60	66
22	71	354	327	e92	290	395	420	2300	778	130	56	49
23	69	347	319	e86	360	364	409	2680	745	190	56	43
24	67	399	293	e84	466	400	394	2830	716	140	70	50
25	94	349	261	e88	482	462	463	3180	714	121	73	53
26	93	300	226	e88	486	618	451	3610	714	108	70	55
27	86	265	216	e87	483	791	413	3740	705	100	75	68
28	81	229	e250	e86	480	851	380	3470	685	86	287	65
29	77	203	276	e84	493	1530	365	2920	652	82	237	64

**05529000 Des Plaines River near Des Plaines, IL---Continued**

<b>30</b>	77	187	268	e82	---	1590	351	2610	618	75	168	62
<b>31</b>	79	---	261	e80	---	1320	---	3080	---	71	136	---
TOTAL	2644	10619	11798	4542	5679	25769	13803	42989	30493	11537	3255	1936
MEAN	85.3	354	381	147	196	831	460	1387	1016	372	105	64.5
MAX	235	878	911	246	493	1640	1040	3740	2790	791	340	112
MIN	57	80	158	80	82	364	241	169	602	71	55	43
CFSM	0.24	0.98	1.06	0.41	0.54	2.31	1.28	3.85	2.82	1.03	0.29	0.18
IN.	0.27	1.10	1.22	0.47	0.59	2.66	1.43	4.44	3.15	1.19	0.34	0.20

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 – 2004, BY WATER YEAR (WY)**

MEAN	157	215	230	233	318	621	629	436	311	179	133	135
MAX	1453	1187	1368	1046	1070	2216	1990	1557	1299	908	726	1191
(WY)	1987	1986	1983	1960	1974	1979	1993	1996	2000	1993	1972	1972
MIN	0.96	3.02	2.73	2.92	5.01	40.7	57.7	41.5	15.3	6.35	0.81	0.30
(WY)	1945	1954	1945	1945	1963	1945	1945	1946	1963	1946	1944	1944

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1941 – 2004**

ANNUAL TOTAL	84792		165064			
ANNUAL MEAN	232		451		299	
HIGHEST ANNUAL MEAN					656	
LOWEST ANNUAL MEAN					31.4	
HIGHEST DAILY MEAN	1560	May 11	3740	May 27	4870	Oct 1 1986
LOWEST DAILY MEAN	46	A Feb 24	43	Sep 23	0.00	B
ANNUAL SEVEN-DAY MINIMUM	47	Feb 21	54	Sep 9	0.00	Aug 10 1944
MAXIMUM PEAK FLOW			3760	May 27	4900	Oct 1 1986
MAXIMUM PEAK STAGE			8.51	May 27	10.88	Oct 1 1986
INSTANTANEOUS LOW FLOW			38	Sep 23		
ANNUAL RUNOFF (CFSM)	0.645		1.25		0.832	
ANNUAL RUNOFF (INCHES)	8.76		17.06		11.30	
10 PERCENT EXCEEDS	506		892		776	
50 PERCENT EXCEEDS	155		240		139	
90 PERCENT EXCEEDS	54		67		12	

A – Estimated.

B – Many days in 1944, 1946 and Aug. 7, 8, 1962.

ILLINOIS RIVER BASIN  
05529500 Mc Donald Creek near Mount Prospect, IL

**LOCATION.**— Lat 42°05'43", long 87°54'46" (NAD of 1927), 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.**—

SURFACE—WATER DISCHARGE AND STAGE

DISCHARGE: August 1952 to current year.

STAGE: Water years 1994 to current year.

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

**GAGE.**— Water-stage recorder, phone telemeter, and crest-stage gage. Datum of gage is 639.12 ft above NGVD of 1929 (Cook County Highway Department bench mark). Prior to May 9, 1978, at site 55 ft downstream of present location at same datum. May 1978 to Mar. 1994, at present location. Mar. 7 to Sept. 30, 1994, at temporary site 50 ft upstream of present location at same datum. Oct. 1994, moved back to present location.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE: Maximum discharge, 806 ft<sup>3</sup>/s, Aug. 14, 1987, gage height, 8.08 ft; no flow at times in several years.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.74	1.3	1.7	1.4	e0.41	10	11	3.4	58	2.9	0.78	1.2
2	0.65	13	1.3	1.9	e0.39	11	8.2	2.5	29	2.7	0.79	0.75
3	2.1	58	1.2	2.9	e0.42	7.6	6.3	2.0	14	23	4.9	0.46
4	1.8	44	1.3	e1.4	e0.47	16	4.8	2.1	8.1	65	24	0.29
5	1.0	57	4.7	e1.8	e0.43	83	4.4	1.7	6.5	25	8.7	0.26
6	0.95	22	3.0	e1.2	e0.46	43	4.0	1.7	5.5	14	5.7	0.20
7	0.99	11	2.5	e0.75	e0.52	31	3.5	1.4	4.7	9.2	3.9	0.13
8	0.92	5.6	2.4	e0.64	e0.57	20	3.2	1.5	4.6	6.8	2.8	0.09
9	0.73	4.1	6.8	e0.60	e0.55	12	2.7	1.6	4.5	8.9	2.3	0.10
10	0.63	3.5	46	e0.60	e0.58	8.7	2.4	3.7	20	38	1.4	0.11
11	0.75	3.0	32	e0.68	e0.60	6.3	2.0	4.3	45	12	1.1	0.11
12	1.2	2.4	20	e0.76	e0.54	4.8	1.8	4.9	40	7.5	0.84	0.10
13	1.1	2.0	12	e0.74	e0.52	4.3	1.7	15	19	6.3	0.82	0.08
14	12	2.0	8.4	e0.60	e0.54	5.2	1.8	35	11	4.5	0.69	0.10
15	5.8	1.7	6.0	e0.50	e0.52	4.0	1.8	20	7.3	3.4	0.65	0.33
16	2.6	1.5	4.8	e0.47	e0.50	3.9	1.8	9.4	6.9	2.8	0.64	0.15
17	1.9	1.7	3.9	e0.52	e0.52	4.1	2.4	6.3	6.2	2.2	1.5	0.05
18	1.7	46	3.2	e0.49	e0.54	4.5	1.9	40	5.0	2.0	0.90	0.10
19	1.3	29	2.6	e0.49	e0.58	4.5	1.4	15	3.6	1.9	0.74	0.12
20	1.3	18	2.7	e0.50	e2.0	4.4	3.3	8.1	2.9	1.7	0.63	0.15
21	0.92	11	2.2	e0.46	e5.0	3.1	5.2	16	8.8	2.2	0.57	0.15
22	0.89	7.0	2.1	e0.46	e5.3	2.7	3.4	76	6.4	2.7	0.56	0.14
23	0.78	11	1.8	e0.44	12	2.5	2.8	41	4.5	1.9	0.53	0.19
24	0.73	10	1.9	e0.44	12	9.0	3.7	19	3.7	1.3	1.5	0.20
25	1.7	7.0	1.6	e0.43	9.0	8.1	9.5	12	3.2	1.3	0.96	0.13
26	1.0	6.0	1.8	e0.45	7.1	22	5.7	8.0	3.0	1.2	1.0	0.17
27	0.76	4.7	1.3	e0.46	5.7	15	3.7	5.9	2.9	1.2	2.6	0.22
28	0.76	3.4	2.4	e0.46	5.0	36	3.2	3.9	3.1	1.1	21	0.21
29	0.62	2.7	2.1	e0.48	4.8	60	2.7	2.8	4.0	1.0	8.9	0.24
30	0.74	2.4	1.9	e0.45	---	29	2.6	68	3.3	0.86	4.6	0.34
31	1.1	---	1.6	e0.48	---	17	---	128	---	0.81	2.3	---



**05529500 Mc Donald Creek near Mount Prospect, IL--Continued**

TOTAL	50.16	392.0	187.2	23.95	77.56	492.7	112.9	560.2	344.7	255.37	108.30	6.87
MEAN	1.62	13.1	6.04	0.77	2.67	15.9	3.76	18.1	11.5	8.24	3.49	0.23
MAX	12	58	46	2.9	12	83	11	128	58	65	24	1.2
MIN	0.62	1.3	1.2	0.43	0.39	2.5	1.4	1.4	2.9	0.81	0.53	0.05
CFSM	0.20	1.65	0.76	0.10	0.34	2.00	0.47	2.28	1.45	1.04	0.44	0.03
IN.	0.24	1.84	0.88	0.11	0.36	2.31	0.53	2.63	1.62	1.20	0.51	0.03

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 – 2004, BY WATER YEAR (WY)**

MEAN	4.04	5.23	4.85	4.36	6.21	9.85	11.8	8.20	7.25	4.72	5.25	4.16
MAX	31.2	28.5	27.2	20.7	26.5	36.2	35.0	31.3	33.5	26.2	39.7	23.9
(WY)	2002	1986	1983	1999	1997	1979	1999	1996	1970	1957	1987	1972
MIN	0.00	0.00	0.00	0.00	0.00	1.58	2.05	1.46	0.50	0.02	0.00	0.00
(WY)	1953	1954	1954	1954	1954	1956	1989	1988	1963	1953	1953	1953

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1952 – 2004**

ANNUAL TOTAL	2118.54		2611.91			
ANNUAL MEAN	5.80		7.14		6.32	
HIGHEST ANNUAL MEAN					11.7	
LOWEST ANNUAL MEAN					1.17	
HIGHEST DAILY MEAN	106	May 1	128	May 31	476	Aug 14 1987
LOWEST DAILY MEAN	0.02	A,B	0.05	Sep 17	0.00	C
ANNUAL SEVEN-DAY MINIMUM	0.02	A	0.10	Sep 8	0.00	Sep 12 1952
MAXIMUM PEAK FLOW			171	May 31	806	Aug 14 1987
MAXIMUM PEAK STAGE			4.80	May 31	8.08	Aug 14 1987
INSTANTANEOUS LOW FLOW			0.02	Sep 13,16,17		
ANNUAL RUNOFF (CFSM)	0.732		0.900		0.798	
ANNUAL RUNOFF (INCHES)	9.94		12.25		10.84	
10 PERCENT EXCEEDS	15		19		14	
50 PERCENT EXCEEDS	1.9		2.4		2.2	
90 PERCENT EXCEEDS	0.14		0.46		0.09	

A – Estimated due to backwater from ice.

B – Several days.

C – At times in several years.

ILLINOIS RIVER BASIN  
**05530000 Weller Creek at Des Plaines, IL**

**LOCATION.**— Lat 42°02'58", long 87°55'05" (NAD of 1927), 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.**—

SURFACE–WATER DISCHARGE AND STAGE

DISCHARGE: October 1950 to current year.

STAGE: Water years 1994 to current year.

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

**GAGE.**— Water–stage recorder, phone telemeter, and crest–stage gage. Datum of gage is 634.02 ft above NGVD of 1929 (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, 1970, at present site at datum 1.00 ft higher.

**REMARKS.**— Prior to Nov. 15, 1958, effluent from Arlington Heights sewage–treatment plant entered Weller Creek above station.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Maximum discharge, 1,590 ft<sup>3</sup>/s, June 10, 1967, gage height, 15.09 ft, present datum; no flow at times in most years.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for discharges greater than 100 ft<sup>3</sup>/s, and those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.61	0.97	0.79	e0.72	e0.51	5.7	5.3	4.8	20	2.4	1.3	1.0
2	0.55	44	0.74	e0.73	e0.52	4.5	4.7	3.5	9.7	2.2	1.4	0.89
3	8.3	105	0.78	e0.75	e0.58	2.4	4.1	3.2	6.3	156	37	0.72
4	4.2	81	0.90	e0.76	e0.72	35	3.8	2.9	5.7	137	72	0.68
5	1.5	63	7.3	e0.78	e0.63	146	3.6	2.9	4.2	12	5.5	0.65
6	1.00	7.8	2.4	e0.80	e0.62	15	3.6	2.7	3.8	5.6	3.7	0.62
7	0.87	5.7	1.3	e0.74	e0.72	6.2	3.3	3.0	3.0	4.5	3.2	0.65
8	0.70	1.7	1.2	e0.66	e0.80	4.7	3.2	3.0	2.8	4.0	2.8	0.53
9	0.41	2.0	16	e0.64	e0.76	3.9	3.2	2.9	3.0	14	1.9	0.92
10	0.54	1.1	72	e0.64	e0.60	3.5	3.1	25	125	57	2.1	0.47
11	0.77	1.00	9.8	e0.65	e0.64	3.3	3.1	7.9	74	5.2	1.7	0.48
12	1.1	0.78	4.6	e0.68	e0.62	3.8	2.9	13	105	4.0	1.5	0.55
13	0.63	0.68	3.1	e0.70	e0.60	2.8	2.8	60	10	3.5	1.6	0.55
14	59	0.81	2.2	e0.69	e0.63	4.0	2.8	100	8.9	2.8	1.3	0.76
15	10	0.65	1.9	e0.64	e0.60	3.0	2.8	17	5.5	2.8	1.2	2.3
16	3.0	0.80	1.7	e0.61	e0.58	3.1	2.8	5.6	4.2	2.6	1.2	2.7
17	1.9	0.98	1.7	e0.62	e0.56	3.5	4.5	4.3	3.7	2.4	3.4	0.48
18	0.93	88	1.8	e0.69	e0.58	3.9	3.1	61	3.4	2.6	3.7	0.40
19	0.83	11	1.8	e0.68	7.6	3.4	2.7	7.6	3.2	2.6	5.0	0.41
20	0.76	4.2	1.6	e0.60	39	3.2	12	25	3.1	2.5	2.7	0.49
21	0.77	2.6	1.3	e0.58	38	2.9	9.7	84	38	26	2.3	0.95
22	0.43	1.8	1.1	e0.55	36	2.8	4.5	176	6.8	13	2.2	0.43
23	0.39	15	1.2	e0.53	15	2.9	3.7	36	4.0	3.9	2.2	0.65
24	0.42	7.8	1.5	e0.52	4.9	21	11	10	4.1	3.2	8.5	0.92
25	3.3	2.4	1.1	e0.51	3.2	4.9	13	10	3.9	3.2	4.4	1.1
26	0.37	1.8	e0.80	e0.53	2.5	23	4.3	5.6	3.2	2.9	e3.5	1.3
27	0.45	1.5	0.96	e0.54	2.0	5.1	3.7	4.6	3.3	2.5	2.4	1.2
28	0.48	1.3	2.8	e0.53	1.8	94	4.0	3.8	2.9	2.4	115	1.2
29	0.62	1.1	1.3	e0.53	1.9	61	3.1	3.6	2.7	2.4	7.5	1.7
30	0.62	0.97	1.00	e0.52	—	9.7	4.8	186	2.5	2.4	2.3	1.4

ILLINOIS RIVER BASIN  
**05530000 Weller Creek at Des Plaines, IL--Continued**

215

<b>31</b>	0.56	---	e0.80	e0.52	---	6.2	---	131	---	1.5	e1.4	---
TOTAL	106.01	457.44	147.47	19.64	163.17	494.4	139.2	1005.9	475.9	489.1	305.9	27.10
MEAN	3.42	15.2	4.76	0.63	5.63	15.9	4.64	32.4	15.9	15.8	9.87	0.90
MAX	59	105	72	0.80	39	146	13	186	125	156	115	2.7
MIN	0.37	0.65	0.74	0.51	0.51	2.4	2.7	2.7	2.5	1.5	1.2	0.40
CFSM	0.26	1.16	0.36	0.05	0.43	1.21	0.35	2.46	1.20	1.20	0.75	0.07
IN.	0.30	1.29	0.42	0.06	0.46	1.39	0.39	2.83	1.34	1.38	0.86	0.08

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 – 2004, BY WATER YEAR (WY)**

MEAN	7.28	7.97	6.62	6.53	8.96	14.7	18.8	13.3	12.2	9.06	11.1	8.49
MAX	39.0	46.4	34.3	43.2	38.2	107	54.1	64.0	54.1	38.4	69.9	55.7
(WY)	2002	1986	1983	1974	1997	1979	1975	1974	1972	1957	1987	1972
MIN	0.13	0.31	0.08	0.08	0.19	0.72	2.24	1.44	0.90	2.41	0.32	0.60
(WY)	1963	1963	1964	1959	1972	1968	1989	1982	1982	1998	1973	1966

**SUMMARY STATISTICS**

**FOR 2003 CALENDAR YEAR**

**FOR 2004 WATER YEAR**

**WATER YEARS 1951 – 2004**

ANNUAL TOTAL	3787.50		3831.23			
ANNUAL MEAN	10.4		10.5		10.4	
HIGHEST ANNUAL MEAN					23.4	
LOWEST ANNUAL MEAN					3.07	
HIGHEST DAILY MEAN	282	May 1	186	May 30	1120	Aug 14 1987
LOWEST DAILY MEAN	0.00	Feb 9	0.37	Oct 26	0.00	A
ANNUAL SEVEN-DAY MINIMUM	0.01	B Feb 7	0.52	B Jan 27	0.00	Nov 4 1958
MAXIMUM PEAK FLOW			768	Jul 3	1590	Jun 10 1967
MAXIMUM PEAK STAGE			6.98	Jul 3	15.09	C Jun 10 1967
INSTANTANEOUS LOW FLOW			0.00	D Jan 7		
ANNUAL RUNOFF (CFSM)	0.786		0.793		0.788	
ANNUAL RUNOFF (INCHES)	10.67		10.80		10.71	
10 PERCENT EXCEEDS	29		22		21	
50 PERCENT EXCEEDS	1.3		2.7		2.2	
90 PERCENT EXCEEDS	0.22		0.58		0.26	

A – At times in most years.

B – Estimated due to backwater from ice.

C – Present datum.

D – Result of freezeup.

ILLINOIS RIVER BASIN  
**05530990 Salt Creek at Rolling Meadows, IL**

**LOCATION.**— Lat 42°03'37", long 88°01'00" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1973 to current year. August 1950 to September 1971, and October 1972 to September 1973 at site 0.9 mi downstream, published as Salt Creek near Arlington Heights. Records may not be equivalent.

STAGE: Water years 1994 to current year.

PARTIAL RECORD: Annual maximum, water year 1972.

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

**GAGE.**— Water-stage recorder, phone telemeter, and crest-stage gage. Datum of gage is 686.40 ft above NGVD of 1929 (Cook County Highway Department bench mark).

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 1,650 ft<sup>3</sup>/s, Aug. 14, 1987, gage height, 14.03 ft; no flow, Jan. 12–Feb. 8, 1977, as a result of freezeup, Aug. 20, 25, 1986, and Sept. 8, 9, 11, 1999.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	12	40	13	e2.5	59	54	25	97	4.6	1.5	6.3
2	1.2	81	38	e9.6	e2.6	60	43	17	51	4.7	1.3	4.9
3	12	252	38	e10	e2.7	46	37	13	39	63	23	3.0
4	5.2	190	38	e11	e3.0	80	31	11	35	74	104	3.3
5	1.7	237	68	e9.0	e3.2	489	27	9.6	15	31	23	4.0
6	1.2	86	56	e7.8	e3.3	205	24	8.2	10	23	9.1	2.7
7	1.1	58	51	e6.0	e3.4	89	22	7.4	7.5	12	4.2	1.8
8	1.0	44	49	e5.0	e3.6	67	21	6.7	5.2	7.7	2.4	1.0
9	0.98	38	78	e4.4	e3.5	67	24	6.8	3.7	13	1.5	0.86
10	0.95	36	314	e4.3	e3.6	64	19	20	83	71	1.1	0.63
11	1.2	36	133	e4.3	e4.0	47	16	22	104	26	0.78	0.67
12	3.0	32	67	e4.4	e4.4	37	14	30	240	14	0.64	0.50
13	2.2	31	50	e4.5	e4.3	28	13	68	109	9.1	0.62	0.66
14	63	29	41	e4.4	e4.2	38	12	126	70	7.2	0.47	0.58
15	26	30	35	e4.1	e4.1	30	11	72	49	4.2	0.44	1.1
16	12	30	32	e4.2	4.0	31	10	40	41	3.2	0.53	4.3
17	6.7	32	27	e4.6	3.9	32	15	29	31	2.5	3.5	0.97
18	4.8	272	23	e4.4	4.2	34	11	163	24	2.0	1.4	0.56
19	4.7	142	19	e4.0	7.2	33	10	74	18	1.8	1.3	0.48
20	4.6	78	15	e3.7	48	33	23	43	12	1.8	0.68	0.40
21	5.0	59	13	e3.3	60	26	37	62	78	11	0.44	0.39
22	6.2	50	13	e2.8	47	21	22	282	66	21	0.40	1.4
23	5.8	73	13	e2.6	66	24	21	135	37	13	0.41	1.5
24	6.6	85	12	e2.6	72	69	23	52	28	6.0	2.0	0.39
25	21	60	9.7	e2.7	57	63	55	34	21	4.1	3.1	0.28
26	13	54	8.6	e2.8	51	137	34	19	15	3.0	2.1	0.39
27	11	50	8.2	e2.8	45	87	21	10	11	2.4	12	0.35
28	9.3	47	26	e2.8	41	188	16	6.1	16	2.8	164	0.25
29	9.1	44	23	e2.7	40	268	14	3.6	8.1	1.6	42	0.21
30	10	43	19	e2.6	---	100	23	366	5.6	1.9	19	0.24
31	12	---	15	e2.5	---	69	---	326	---	2.0	9.0	---

**05530990 Salt Creek at Rolling Meadows, IL--Continued**

TOTAL	263.83	2311	1372.5	152.9	598.7	2621	703	2087.4	1330.1	444.6	435.91	44.11
MEAN	8.51	77.0	44.3	4.93	20.6	84.5	23.4	67.3	44.3	14.3	14.1	1.47
MAX	63	272	314	13	72	489	55	366	240	74	164	6.3
MIN	0.95	12	8.2	2.5	2.5	21	10	3.6	3.7	1.6	0.40	0.21
CFSM	0.28	2.53	1.45	0.16	0.68	2.77	0.77	2.21	1.45	0.47	0.46	0.05
IN.	0.32	2.82	1.67	0.19	0.73	3.20	0.86	2.55	1.62	0.54	0.53	0.05

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 – 2004, BY WATER YEAR (WY)**

MEAN	19.0	29.5	27.9	23.7	33.7	49.6	57.0	45.2	28.9	18.4	27.1	19.5
MAX	111	120	107	85.7	113	202	136	148	87.6	83.6	136	77.0
(WY)	2002	1986	1983	1999	1997	1979	1983	1996	1996	1993	1987	2001
MIN	2.42	2.32	0.62	0.13	0.92	10.5	9.73	7.33	3.15	3.00	2.56	1.47
(WY)	1980	1977	1977	1977	2003	2000	1989	1977	1988	1979	1986	2004

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1974 – 2004**

ANNUAL TOTAL	10524.16	12365.05	
ANNUAL MEAN	28.8	33.8	31.6
HIGHEST ANNUAL MEAN			52.1 1993
LOWEST ANNUAL MEAN			9.25 1977
HIGHEST DAILY MEAN	550 May 1	489 Mar 5	1180 Aug 14 1987
LOWEST DAILY MEAN	0.72 A Feb 17	0.21 Sep 29	0.00 B
ANNUAL SEVEN-DAY MINIMUM	0.74 A Feb 16	0.30 Sep 24	0.00 Jan 12 1977
MAXIMUM PEAK FLOW		854 May 30	1650 Aug 14 1987
MAXIMUM PEAK STAGE		7.85 May 30	14.03 Aug 14 1987
INSTANTANEOUS LOW FLOW		0.17 Sep 29,30	
ANNUAL RUNOFF (CFSM)	0.945	1.11	1.04
ANNUAL RUNOFF (INCHES)	12.84	15.08	14.07
10 PERCENT EXCEEDS	69	74	72
50 PERCENT EXCEEDS	9.3	13	13
90 PERCENT EXCEEDS	0.93	1.2	1.6

A – Estimated due to backwater from ice.

B – Jan. 12 – Feb. 8, 1977, result of freezeup; Aug. 20, 25, 1986 and Sept. 8, 9, 11, 1999.

ILLINOIS RIVER BASIN  
**05531044 Salt Creek near Elk Grove Village, IL**

**LOCATION.**— Lat 42°01'01", long 88°00'01" (NAD of 1927), 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.**—

STAGE: June 1992 to current year.

PARTIAL RECORD: Miscellaneous discharge measurements, Water year 2003.

**GAGE.**— Water—stage recorder, phone telemeter, and concrete dam. Datum of gage is 674.75 ft above NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height, 14.78 ft, Feb. 21, 1997; minimum recorded, 10.72 ft, Aug. 3, 1998.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

STAGE: 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, 13.18 ft, May 1; minimum, 10.86 ft, July 4.

Gage height, feet, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.11	11.02	11.05	11.06	11.06	11.03	11.22	12.81	11.31	10.92	11.24	11.00
2	11.21	11.01	11.05	11.05	11.09	11.03	11.19	12.78	11.23	10.90	11.63	11.01
3	11.24	11.00	11.06	11.05	11.11	11.03	11.18	12.11	11.19	10.89	11.64	11.00
4	11.32	11.00	11.05	11.05	11.12	11.04	11.57	11.76	11.15	10.88	12.02	10.98
5	11.47	11.00	11.05	11.05	11.10	11.07	12.13	12.61	11.12	11.03	11.70	10.96
6	11.36	11.03	11.03	11.06	11.08	11.07	11.84	12.34	11.10	11.14	11.55	10.95
7	11.26	11.02	11.02	11.06	11.06	11.06	11.66	11.87	11.10	11.36	11.93	10.95
8	11.15	11.02	11.02	11.06	11.04	11.06	11.59	11.70	11.22	11.38	11.68	10.94
9	11.10	11.02	11.02	11.06	11.02	11.06	11.51	12.32	11.32	11.38	11.45	10.93
10	11.08	11.03	11.01	11.06	11.01	11.07	11.53	12.33	11.24	11.36	11.29	10.93
11	11.08	11.02	11.01	11.04	11.01	11.05	11.48	12.37	11.19	11.25	11.20	10.92
12	11.09	11.01	11.01	11.04	11.01	11.07	11.41	12.25	11.15	11.15	11.15	10.91
13	11.07	11.00	11.02	11.03	11.00	11.18	11.33	11.87	11.12	11.09	11.11	10.92
14	11.04	11.01	11.02	11.03	10.99	11.23	11.27	11.78	11.09	11.05	11.14	11.07
15	11.04	11.04	11.01	11.02	10.99	11.26	11.22	12.10	11.07	11.58	11.16	11.14
16	11.03	11.03	11.01	11.01	10.99	11.27	11.19	11.85	11.04	11.70	11.13	11.08
17	11.02	11.04	11.02	11.00	10.99	11.27	11.15	11.61	11.02	11.42	11.09	11.04
18	11.04	11.04	11.17	11.00	10.99	11.26	11.13	11.46	11.09	11.26	11.07	11.02
19	11.04	11.09	11.37	11.00	10.99	11.24	11.12	11.36	11.35	11.14	11.05	11.00
20	11.02	11.09	11.31	11.00	11.00	11.29	11.13	11.33	11.31	11.10	11.03	10.96
21	11.01	11.12	11.23	10.99	11.01	11.31	11.14	11.36	11.22	11.74	11.02	10.95
22	11.01	11.13	11.16	10.99	11.02	11.26	11.11	11.36	11.12	11.56	11.00	10.99
23	11.00	11.10	11.12	10.99	11.02	11.22	11.09	11.31	11.06	11.32	10.98	10.99
24	11.00	11.09	11.09	10.99	11.03	11.18	11.09	11.25	11.04	11.22	10.96	10.97
25	11.07	11.07	11.09	10.98	11.03	11.23	11.10	11.19	11.03	11.18	10.96	10.96
26	11.10	11.06	11.08	10.99	11.03	11.23	11.09	11.17	11.02	11.12	10.97	10.99
27	11.08	11.06	11.07	10.99	11.03	11.20	11.07	11.16	10.98	11.09	10.99	11.14
28	11.06	11.06	11.06	10.99	11.03	11.24	11.06	11.18	10.96	11.07	10.96	11.12
29	11.04	11.06	11.06	11.00	---	11.36	11.05	11.28	10.95	11.07	10.96	11.08
30	11.03	11.06	11.06	11.00	---	11.31	11.28	11.26	10.93	11.05	10.95	11.04
31	11.03	---	11.07	11.02	---	11.25	---	11.37	---	11.04	10.93	---
MEAN	11.10	11.04	11.08	11.02	11.03	11.18	11.30	11.76	11.12	11.21	11.22	11.00
MAX	11.47	11.13	11.37	11.06	11.12	11.36	12.13	12.81	11.35	11.74	12.02	11.14
MIN	11.00	11.00	11.01	10.98	10.99	11.03	11.05	11.16	10.93	10.88	10.93	10.91

**05531044 Salt Creek near Elk Grove Village, IL--Continued**

WTR YR 2003	MEAN 11.17	MAX 12.81	MIN 10.88
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ILLINOIS RIVER BASIN  
**05531044 Salt Creek near Elk Grove Village, IL**

**LOCATION.**— Lat 42°01'01", long 88°00'01" (NAD of 1927), 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.**—

STAGE: June 1992 to current year.

PARTIAL RECORD: Miscellaneous discharge measurements, Water year 2003.

**GAGE.**— Water—stage recorder, phone telemeter, and concrete dam. Datum of gage is 674.75 ft above NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height, 14.78 ft, Feb. 21, 1997; minimum recorded, 10.72 ft, Aug. 3, 1998.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

STAGE: 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, 13.34 ft, May 31; minimum, 10.83 ft, September 29, 30.

Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.03	10.97	11.08	11.14	11.04	11.38	11.56	11.24	12.51	11.02	10.96	11.23
2	11.00	11.15	11.04	11.13	11.04	11.51	11.45	11.23	11.94	11.01	10.95	11.16
3	11.04	11.93	11.02	11.17	11.06	11.46	11.38	11.20	11.65	11.15	10.96	11.11
4	11.12	11.92	11.02	11.17	11.06	11.44	11.30	11.16	11.51	11.68	11.64	11.09
5	11.09	12.30	11.13	11.18	11.05	12.60	11.26	11.14	11.38	11.48	11.59	11.07
6	11.06	11.91	11.18	11.14	11.06	12.59	11.24	11.12	11.28	11.32	11.36	11.07
7	11.04	11.56	11.15	11.12	11.06	12.05	11.21	11.11	11.23	11.23	11.23	11.05
8	11.02	11.35	11.11	11.10	11.06	11.70	11.20	11.08	11.20	11.15	11.15	11.01
9	11.00	11.23	11.12	11.09	11.06	11.55	11.17	11.08	11.17	11.11	11.11	10.99
10	10.99	11.16	11.94	11.09	11.06	11.49	11.17	11.13	11.54	11.40	11.07	10.97
11	10.99	11.13	12.26	11.08	11.06	11.44	11.15	11.29	12.10	11.37	11.05	10.96
12	10.99	11.12	11.91	11.09	11.06	11.34	11.14	11.27	12.59	11.26	11.03	10.96
13	10.98	11.07	11.65	11.10	11.06	11.26	11.12	11.51	12.35	11.18	11.01	10.95
14	11.28	11.02	11.49	11.10	11.05	11.30	11.12	11.90	11.87	11.12	11.00	10.93
15	11.44	11.01	11.39	11.09	11.05	11.28	11.11	12.01	11.62	11.07	10.98	10.93
16	11.28	11.00	11.33	11.08	11.04	11.25	11.10	11.67	11.44	11.04	10.98	10.99
17	11.17	11.00	11.29	11.09	11.04	11.25	11.11	11.46	11.34	11.01	10.99	10.96
18	11.10	11.68	11.25	11.10	11.04	11.28	11.09	11.83	11.26	10.99	11.01	10.96
19	11.06	12.09	11.21	11.09	11.05	11.29	11.11	11.84	11.19	10.98	11.06	10.95
20	11.03	11.72	11.17	11.07	11.16	11.31	11.12	11.64	11.13	10.97	11.04	10.94
21	11.02	11.47	11.16	11.06	11.46	11.25	11.29	11.90	11.23	10.98	11.03	10.93
22	10.99	11.32	11.15	11.05	11.48	11.21	11.26	12.69	11.51	11.12	11.02	10.93
23	10.98	11.29	11.13	11.04	11.49	11.20	11.21	12.56	11.38	11.11	11.01	10.94
24	10.96	11.49	11.11	11.04	11.57	11.38	11.20	12.03	11.27	11.07	11.01	10.93
25	11.01	11.38	11.10	11.03	11.53	11.56	11.41	11.74	11.21	11.04	11.06	10.92
26	11.02	11.29	11.11	11.03	11.46	11.79	11.39	11.56	11.15	11.01	11.07	10.89
27	11.00	11.22	11.09	11.05	11.41	11.82	11.30	11.43	11.09	11.00	11.12	10.88
28	11.00	11.18	11.14	11.05	11.36	11.77	11.22	11.34	11.07	10.99	11.82	10.88
29	10.99	11.12	11.19	11.04	11.33	12.52	11.21	11.28	11.07	10.97	11.82	10.86
30	10.98	11.10	11.18	11.03	---	12.17	11.20	11.90	11.04	10.97	11.52	10.84
31	10.98	---	11.16	11.04	---	11.78	---	13.20	---	10.97	11.34	---
MEAN	11.05	11.37	11.27	11.09	11.18	11.59	11.23	11.60	11.48	11.12	11.16	10.98
MAX	11.44	12.30	12.26	11.18	11.57	12.60	11.56	13.20	12.59	11.68	11.82	11.23
MIN	10.96	10.97	11.02	11.03	11.04	11.20	11.09	11.08	11.04	10.97	10.95	10.84



**05531044 Salt Creek near Elk Grove Village, IL--Continued**

CAL YR 2003	MEAN 11.21	MAX 12.81	MIN 10.88
WTR YR 2004	MEAN 11.26	MAX 13.20	MIN 10.84

ILLINOIS RIVER BASIN  
**05531175 Salt Creek at Wood Dale, IL**

**LOCATION.**— Lat 41°57'51", long 87°59'02" (NAD of 1927), in SW1/4SE1/4 sec.9, T.40 N., R.11 E., Du Page County, Hydrologic Unit 07120004, on downstream side of bridge on Irving Park Road and at mile 27.6.

**DRAINAGE AREA.**— 74.7 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE

STAGE: October 1999 to current year.

PARTIAL RECORD: Discharge measurements, water year 2000.

**GAGE.**— Water—stage recorder, phone telemeter, and crest—stage gage. Datum of gage is 663.00 ft above NGVD of 1929.

**REMARKS.**—Some regulation by sewage—treatment plants in upstream watershed.

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height, 14.15 ft, Oct. 14, 2001; minimum, 5.88, July 1, 2001.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 12.25 ft, May 1; minimum, 6.19 ft, June 30.

<p style="text-align: center;">Gage height, feet  WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  DAILY MEAN VALUES</p>												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.65	6.40	6.45	6.46	6.44	6.37	6.80	11.29	6.98	6.32	7.23	6.58
2	6.99	6.41	6.48	6.47	6.52	6.39	6.77	11.90	6.84	6.31	8.34	6.52
3	6.95	6.38	6.49	6.44	6.62	6.41	6.74	10.46	6.80	6.32	8.53	6.45
4	7.30	6.42	6.43	6.41	6.60	6.41	8.06	8.95	6.71	6.32	9.81	6.43
5	7.58	6.43	6.44	6.43	6.53	6.44	9.69	10.95	6.64	6.76	8.78	6.42
6	7.19	6.42	6.43	6.48	6.47	6.49	8.82	10.96	6.61	6.95	8.04	6.36
7	6.95	6.40	6.41	6.46	6.42	6.42	8.10	9.52	6.57	7.34	9.24	6.36
8	6.71	6.42	6.43	6.44	6.39	6.48	7.90	8.67	7.11	7.33	8.59	6.36
9	6.65	6.40	6.40	6.47	6.38	6.46	7.70	10.67	7.36	7.40	7.64	6.36
10	6.52	6.43	6.41	6.43	6.40	6.46	7.80	10.99	7.04	7.35	7.15	6.38
11	6.52	6.43	6.37	6.39	6.34	6.43	7.56	10.69	6.86	7.00	6.93	6.38
12	6.50	6.40	6.40	6.39	6.37	6.58	7.32	10.49	6.72	6.71	6.76	6.37
13	6.48	6.35	6.37	6.38	6.33	6.85	7.11	9.30	6.63	6.59	6.66	6.34
14	6.45	6.45	6.39	6.34	6.33	6.89	6.99	8.75	6.54	6.47	6.78	6.95
15	6.45	6.44	6.41	6.37	6.33	6.90	6.87	9.63	6.47	8.20	6.79	6.89
16	6.42	6.43	6.42	6.33	6.34	6.92	6.80	9.07	6.45	8.44	6.71	6.63
17	6.40	6.45	6.39	6.33	6.34	6.98	6.71	8.26	6.42	7.62	6.58	6.50
18	6.49	6.46	7.02	6.34	6.37	6.94	6.63	7.75	6.74	7.31	6.51	6.42
19	6.45	6.53	7.47	6.36	6.34	6.87	6.64	7.54	7.48	6.84	6.51	6.37
20	6.43	6.62	7.19	6.36	6.36	7.08	6.63	7.59	7.08	6.68	6.43	6.33
21	6.43	6.60	6.91	6.35	6.37	7.08	6.65	7.52	6.80	7.86	6.46	6.33
22	6.36	6.65	6.72	6.35	6.37	6.93	6.60	7.20	6.63	7.80	6.41	6.40
23	6.32	6.52	6.62	6.31	6.38	6.84	6.54	7.08	6.54	7.18	6.36	6.38
24	6.38	6.51	6.56	6.33	6.42	6.74	6.53	6.88	6.48	6.84	6.34	6.36
25	6.66	6.52	6.53	6.31	6.37	6.94	6.49	6.74	6.40	6.67	6.34	6.33
26	6.63	6.47	6.48	6.34	6.37	6.90	6.51	6.64	6.48	6.54	6.44	6.47
27	6.56	6.51	6.49	6.36	6.39	6.78	6.48	6.63	6.39	6.44	6.42	6.75
28	6.55	6.48	6.46	6.34	6.42	6.99	6.48	6.70	6.35	6.49	6.40	6.61
29	6.48	6.48	6.45	6.33	---	7.35	6.44	6.94	6.35	6.46	6.39	6.51
30	6.39	6.49	6.51	6.34	---	7.12	7.40	6.86	6.34	6.40	6.33	6.44
31	6.37	---	6.50	6.42	---	6.96	---	7.08	---	6.39	6.34	---
MEAN	6.62	6.46	6.55	6.38	6.40	6.75	7.13	8.70	6.69	6.95	7.10	6.47
MAX	7.58	6.65	7.47	6.48	6.62	7.35	9.69	11.90	7.48	8.44	9.81	6.95
MIN	6.32	6.35	6.37	6.31	6.33	6.37	6.44	6.63	6.34	6.31	6.33	6.33

**05531175 Salt Creek at Wood Dale, IL--Continued**

CAL YR 2002	MEAN 7.10	MAX 13.22	MIN 6.26
WTR YR 2003	MEAN 6.86	MAX 11.90	MIN 6.31

ILLINOIS RIVER BASIN  
**05531175 Salt Creek at Wood Dale, IL**

**LOCATION.**— Lat 41°57'51", long 87°59'02" (NAD of 1927), in SW1/4SE1/4 sec.9, T.40 N., R.11 E., Du Page County, Hydrologic Unit 07120004, on downstream side of bridge on Irving Park Road and at mile 27.6.

**DRAINAGE AREA.**— 74.7 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE

STAGE: October 1999 to current year.

PARTIAL RECORD: Discharge measurements, water year 2000.

**GAGE.**— Water—stage recorder, phone telemeter, and crest—stage gage. Datum of gage is 663.00 ft above NGVD of 1929.

**REMARKS.**—Some regulation by sewage—treatment plants in upstream watershed.

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height, 14.15 ft, Oct. 14, 2001; minimum, 5.88, July 1, 2001.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 12.30 ft, May 31; minimum, 5.99 ft, September 29.

Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.36	6.33	6.73	6.64	6.36	7.25	8.04	6.80	11.68	6.47	6.31	6.90
2	6.33	6.84	6.60	6.61	6.44	7.63	7.61	6.73	9.80	6.43	6.33	6.69
3	6.47	9.02	6.61	6.67	6.41	7.45	7.38	6.68	8.79	6.85	6.37	6.56
4	6.57	9.14	6.60	6.68	6.47	7.50	7.16	6.62	8.19	8.19	8.12	6.47
5	6.49	10.32	7.07	6.77	6.42	10.57	7.01	6.60	7.79	7.54	7.83	6.50
6	6.44	9.42	7.09	6.67	6.47	11.46	6.97	6.54	7.43	7.11	7.24	6.45
7	6.40	8.02	6.92	6.63	6.48	10.19	7.07	6.53	7.03	6.90	6.94	6.43
8	6.35	7.35	6.81	6.55	6.46	8.65	6.88	6.48	6.94	6.71	6.76	6.51
9	6.31	7.04	6.90	6.51	6.47	7.97	6.76	6.47	6.84	6.78	6.55	6.46
10	6.32	6.87	9.45	6.53	6.42	7.64	6.72	6.73	7.67	7.45	6.49	6.37
11	6.29	6.79	10.39	6.52	6.44	7.57	6.70	7.23	9.40	7.26	6.41	6.32
12	6.32	6.77	9.16	6.59	6.44	7.62	6.66	7.04	10.35	7.04	6.38	6.33
13	6.32	6.66	8.11	6.61	6.42	7.04	6.63	7.82	10.70	6.84	6.37	6.29
14	7.35	6.49	7.61	6.59	6.42	7.07	6.68	9.28	9.29	6.68	6.35	6.30
15	7.62	6.49	7.33	6.56	6.40	7.00	6.72	9.56	8.30	6.60	6.35	6.44
16	7.05	6.50	7.16	6.54	6.39	6.92	6.64	8.31	7.72	6.49	6.35	6.42
17	6.72	6.51	7.04	6.56	6.41	6.91	6.60	7.51	7.31	6.39	6.36	6.39
18	6.55	8.72	6.94	6.61	6.42	7.07	6.55	8.55	7.07	6.40	6.38	6.32
19	6.50	10.02	6.86	6.57	6.43	7.44	6.57	8.64	6.87	6.38	6.67	6.34
20	6.45	8.78	6.77	6.52	6.89	7.43	6.68	8.01	6.71	6.37	6.50	6.34
21	6.41	7.80	6.73	6.51	7.61	7.17	7.19	8.91	7.15	6.44	6.42	6.35
22	6.37	7.32	6.70	6.44	7.68	6.90	6.98	10.84	7.82	6.64	6.35	6.31
23	6.34	7.34	6.64	6.43	7.71	6.83	6.80	11.39	7.37	6.63	6.36	6.32
24	6.33	8.13	6.67	6.41	7.97	7.38	6.78	9.84	7.10	6.50	6.56	6.32
25	6.48	7.64	6.59	6.42	7.83	7.87	7.41	8.59	6.89	6.41	6.51	6.29
26	6.46	7.29	6.55	6.44	7.61	8.57	7.27	8.29	6.78	6.42	6.62	6.29
27	6.42	7.11	6.53	6.43	7.41	8.68	7.06	7.85	6.63	6.35	6.79	6.33
28	6.43	6.93	6.72	6.44	7.21	8.44	6.78	7.56	6.63	6.35	8.94	6.29
29	6.40	6.83	6.84	6.43	7.10	10.55	6.71	7.34	6.55	6.36	8.76	6.23
30	6.39	6.77	6.78	6.36	---	10.10	6.70	8.69	6.53	6.35	7.70	6.34
31	6.41	---	6.71	6.42	---	8.84	---	11.96	---	6.31	7.18	---
MEAN	6.50	7.57	7.15	6.54	6.80	8.06	6.92	8.04	7.84	6.70	6.81	6.40
MAX	7.62	10.32	10.39	6.77	7.97	11.46	8.04	11.96	11.68	8.19	8.94	6.90
MIN	6.29	6.33	6.53	6.36	6.36	6.83	6.55	6.47	6.53	6.31	6.31	6.23

**05531175 Salt Creek at Wood Dale, IL--Continued**

CAL YR 2003	MEAN 6.99	MAX 11.90	MIN 6.29
WTR YR 2004	MEAN 7.11	MAX 11.96	MIN 6.23

ILLINOIS RIVER BASIN  
05531300 Salt Creek at Elmhurst, IL

**LOCATION.**— Lat 41°53'10", long 87°57'33" (NAD of 1927), 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.**—

SURFACE—WATER DISCHARGE AND STAGE

DISCHARGE: June 1989 to current year.

STAGE: Water years 1994 to current year.

PARTIAL RECORD: Annual maximum, water years 1961–80.

PRECIPITATION: October 1989 to March 1996 and December 1996 to current year.

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

**GAGE.**— Water-stage recorder, phone telemeter, rain gage, and crest-stage gage. Datum of gage is 652.65 ft above NGVD of 1929. Water years 1997 and 1998, datum incorrectly published as 655.00 ft above NGVD of 1929. Prior to October 1, 1996, at site 990 ft upstream at datum 2.35 ft higher. Prior to June 1, 1989, crest-stage gage at datum 7.84 ft higher.

**REMARKS.**— Occasional regulation by sewage treatment plants upstream from station. Since May 28, 1996, some flow temporarily diverted for flood control to Elmhurst Quarry Flood Control Reservoir about 1.0 miles upstream from gage. Collection, computation and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE: Maximum discharge, 2,230 ft<sup>3</sup>/s, Aug. 27, 1972, gage height, 12.76 ft, datum 660.49 ft above NGVD of 1929, maximum gage height, 13.56 ft, Aug. 6, 1989; minimum discharge, 18 ft<sup>3</sup>/s, July 1, 1989.

PRECIPITATION: Maximum daily total, 3.67 in., September 11, 2000, but may have been greater during periods of missing record.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	43	72	71	46	139	249	83	1020	75	42	96
2	40	99	63	68	47	166	183	79	658	73	42	76
3	50	409	60	70	48	155	149	73	373	116	65	60
4	60	476	62	73	51	183	129	65	264	261	243	52
5	54	570	122	82	46	654	111	62	203	179	218	53
6	47	488	117	74	53	828	101	58	163	128	137	55
7	43	241	97	71	52	659	109	57	119	103	99	48
8	41	143	85	62	50	344	95	53	102	82	80	51
9	38	106	99	57	52	225	80	53	94	120	64	52
10	40	87	441	56	50	181	75	63	215	157	55	44
11	37	78	604	56	48	163	74	117	457	151	49	39
12	39	72	445	61	49	174	69	106	587	119	46	42
13	39	67	253	62	47	122	74	174	685	92	45	38
14	171	53	181	61	50	122	88	431	504	78	43	39
15	191	48	148	59	46	115	92	496	291	67	42	59
16	125	50	129	56	47	104	89	308	200	58	42	74
17	82	53	115	62	48	104	83	172	151	52	50	65
18	62	364	105	64	47	116	79	280	119	49	47	53
19	55	527	97	59	52	154	81	318	96	48	73	41
20	49	371	85	57	103	180	90	238	81	49	56	40
21	49	204	80	55	172	144	132	377	142	47	47	42
22	44	138	78	50	184	109	112	643	207	84	44	40
23	40	157	75	47	187	95	89	837	156	67	44	39
24	42	241	75	47	217	150	86	639	127	57	122	39
25	72	185	67	47	197	209	159	338	109	52	75	38
26	52	137	64	49	176	334	140	269	107	49	72	37

**05531300 Salt Creek at Elmhurst, IL---Continued**

<b>27</b>	49	113	62	49	155	343	118	207	91	47	96	39
<b>28</b>	49	94	81	49	129	327	87	169	90	44	395	39
<b>29</b>	47	84	91	47	119	632	75	140	85	44	378	36
<b>30</b>	46	77	85	e47	---	631	75	392	79	46	207	38
<b>31</b>	46	---	78	e48	---	397	---	902	---	42	131	---
TOTAL	1841	5775	4216	1816	2568	8259	3173	8199	7575	2636	3149	1464
MEAN	59.4	192	136	58.6	88.6	266	106	264	252	85.0	102	48.8
MAX	191	570	604	82	217	828	249	902	1020	261	395	96
MIN	37	43	60	47	46	95	69	53	79	42	42	36
CFSM	0.65	2.10	1.49	0.64	0.97	2.91	1.16	2.89	2.76	0.93	1.11	0.53
IN.	0.75	2.35	1.71	0.74	1.04	3.36	1.29	3.33	3.08	1.07	1.28	0.60

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 – 2004, BY WATER YEAR (WY)**

MEAN	116	138	102	121	154	174	210	210	160	96.7	140	98.7
MAX	419	251	186	282	350	266	430	431	360	229	338	266
(WY)	2002	1991	1992	1993	1997	2004	1993	1996	1996	1993	1990	2001
MIN	56.8	47.9	46.1	44.2	47.0	70.2	99.4	58.4	53.1	38.1	50.7	48.8
(WY)	1993	2000	1990	2003	2003	2000	1994	1992	1992	1991	1991	1994

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1989 – 2004**

ANNUAL TOTAL	44956	50671		
ANNUAL MEAN	123	138		143
HIGHEST ANNUAL MEAN				196
LOWEST ANNUAL MEAN				106
HIGHEST DAILY MEAN	1120	May 2	1020	Jun 1
LOWEST DAILY MEAN	36	Aug 31, Sep 21	36	Sep 29
ANNUAL SEVEN-DAY MINIMUM	38	Sep 7	38	Sep 24
MAXIMUM PEAK FLOW			1070	Jun 1
MAXIMUM PEAK STAGE			10.20	Jun 1
INSTANTANEOUS LOW FLOW			28	Sep 29, 30 A
ANNUAL RUNOFF (CFSM)	1.35		1.51	
ANNUAL RUNOFF (INCHES)	18.28		20.61	
10 PERCENT EXCEEDS	284		335	
50 PERCENT EXCEEDS	67		80	
90 PERCENT EXCEEDS	41		44	

A – Part of each day.

ILLINOIS RIVER BASIN  
**05531410 Salt Creek at 22nd. St. at Oakbrook, IL**

**LOCATION.**— Lat 41°50'50", long 87°56'13" (NAD of 1927), 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.**—

STAGE: June 1994 to current year.

PRECIPITATION: October 1995 to current year.

**GAGE.**— Water—stage recorder and an unheated, tipping—bucket rain gage. Datum of gage is 600.00 ft above NGVD of 1929.

**REMARKS.**— Collection, computation and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height, 55.03 ft, Feb. 21, 1997; minimum, 46.76 ft, Sept. 27, 28, 1995.

PRECIPITATION: Maximum daily total, 3.38 in., September 11, 2000, but may have been greater during periods of missing record.

**EXTREMES FOR CURRENT YEAR.**— Maximum recorded gage height, 53.11 ft, May 1; minimum recorded, 47.77 ft, Oct. 23, 31.

<p style="text-align: center;">Gage height, feet  <b>WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003</b>  <b>DAILY MEAN VALUES</b></p>												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48.02	47.89	47.99	47.95	47.94	47.92	48.25	52.69	49.06	47.90	49.32	48.41
2	48.45	47.88	47.98	47.94	47.96	47.93	48.18	----	48.93	47.86	49.83	48.12
3	48.30	47.89	48.00	47.94	48.04	47.96	48.18	----	49.02	47.88	49.64	48.00
4	48.89	47.88	47.98	47.91	48.07	47.97	49.82	----	48.90	47.91	50.31	47.93
5	48.84	47.93	47.98	47.93	47.98	47.98	50.58	----	48.85	48.34	49.85	47.93
6	48.54	47.93	47.98	47.96	47.94	48.05	50.06	51.69	----	----	----	47.91
7	48.33	47.92	47.95	47.94	47.92	48.03	49.42	50.72	----	----	----	47.89
8	48.14	47.91	47.97	47.93	47.90	48.08	49.18	49.77	----	----	49.61	47.88
9	48.04	47.90	47.96	47.93	47.88	48.04	49.01	51.71	----	----	48.93	47.87
10	47.98	47.94	47.95	47.94	47.89	47.98	49.02	52.09	----	48.74	48.52	47.88
11	47.96	47.95	47.93	47.91	47.88	47.98	48.87	51.72	e48.28	48.44	48.37	47.88
12	47.93	47.93	47.94	47.91	47.88	48.20	48.65	51.24	48.21	48.19	----	47.87
13	47.94	47.95	47.93	47.91	47.87	48.31	48.50	50.53	48.13	48.05	----	47.88
14	47.92	48.12	47.93	47.87	47.86	48.32	48.49	49.88	48.06	48.01	----	48.41
15	47.91	48.22	47.93	----	47.86	48.29	48.55	50.23	48.01	49.40	e48.48	48.35
16	47.89	48.04	47.94	----	47.85	48.33	48.47	50.17	47.98	49.48	48.33	48.10
17	47.87	47.97	47.96	----	47.87	48.36	48.33	49.61	47.96	49.13	48.08	47.99
18	47.94	47.97	49.03	----	47.89	48.30	48.10	49.25	48.18	48.95	48.00	47.94
19	47.90	48.09	49.10	----	47.87	48.29	48.06	49.05	48.70	48.38	47.97	47.90
20	47.90	48.03	48.70	----	47.87	48.49	48.10	49.14	48.47	48.28	47.96	47.88
21	47.90	48.13	48.42	----	47.88	48.50	48.07	49.07	48.23	49.10	47.94	47.86
22	47.85	48.19	48.23	----	47.89	48.36	48.05	48.97	48.10	49.05	47.91	48.05
23	47.83	48.06	48.12	----	47.90	48.25	48.00	48.84	48.03	48.59	47.90	47.95
24	47.86	48.02	48.05	----	47.93	48.17	47.97	48.74	47.99	48.32	47.88	47.91
25	48.12	48.02	48.01	----	47.91	48.28	47.97	48.66	47.95	48.16	47.87	47.90
26	48.07	48.01	47.98	----	47.91	48.31	47.93	48.60	47.96	48.07	47.91	48.15
27	48.01	48.01	47.98	----	47.93	48.19	47.95	48.61	47.93	47.98	47.94	48.26
28	47.97	48.02	47.96	----	47.92	48.50	47.93	48.88	47.92	47.99	47.91	48.11
29	47.94	48.00	47.94	----	----	48.69	47.91	48.98	47.90	47.97	47.91	48.02
30	47.90	47.99	47.98	----	----	48.53	49.14	49.05	47.86	47.93	47.87	47.96
31	47.85	----	47.98	----	----	48.37	----	49.22	----	47.92	47.87	----
MEAN	48.06	47.99	48.09	----	47.91	48.22	48.56	----	----	----	----	48.01
MAX	48.89	48.22	49.10	----	48.07	48.69	50.58	----	----	----	----	48.41
MIN	47.83	47.88	47.93	----	47.85	47.92	47.91	----	----	----	----	47.86



**LOCATION.**— Lat 41°50'50", long 87°56'13" (NAD of 1927), in SE1/4SW1/4 sec.24, T.39 N., R.11 E., Du Page County, Hydrologic Unit 07120004, on right bank at upstream side of bridge on 22nd Street in Oak Brook and at mile 14.9.

**DRAINAGE AREA.**— 103 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

STAGE: June 1994 to current year.

PRECIPITATION: October 1995 to current year.

**GAGE.**— Water—stage recorder and an unheated tipping—bucket rain gage. Datum of gage is 600.00 ft above NGVD of 1929.

**REMARKS.**— Collection, computation and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height, 55.03 ft, Feb. 21, 1997; minimum, 46.76 ft, Sept. 27, 28, 1995.

PRECIPITATION: Maximum daily total, 3.38 in., September 11, 2000, but may have been greater during periods of missing record.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 52.60 ft, Nov. 5; minimum, 46.98 ft, Feb. 5, 11.

Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47.92	47.93	48.17	47.36	47.15	48.58	49.32	48.16	52.45	48.21	47.91	48.29
2	47.91	48.35	48.11	47.32	47.15	48.74	48.92	48.13	51.24	48.17	47.90	48.15
3	47.99	50.23	48.08	47.33	47.13	48.66	48.68	48.07	49.93	48.53	48.05	48.02
4	48.05	50.48	48.11	47.37	47.11	48.92	48.54	48.02	49.36	49.46	49.47	47.96
5	48.00	51.18	48.71	47.49	47.04	51.60	48.39	47.98	49.01	48.98	49.17	47.93
6	47.96	50.58	48.58	47.41	47.12	51.80	48.32	47.95	48.77	48.67	48.69	47.96
7	47.94	49.37	48.41	47.34	47.12	51.25	48.35	47.97	48.48	48.47	48.38	47.92
8	47.91	48.73	48.30	47.27	47.09	49.85	48.28	47.93	48.33	48.30	48.24	47.93
9	47.88	48.45	48.37	47.22	47.10	49.16	48.17	47.92	48.29	48.62	48.12	47.95
10	47.89	48.30	50.45	47.21	47.09	48.91	48.12	47.95	49.22	48.88	48.04	47.88
11	47.87	48.22	50.97	47.22	47.06	48.78	48.10	48.35	50.55	48.83	48.00	47.85
12	47.89	48.17	50.34	47.28	47.28	48.83	48.05	48.33	51.10	48.64	47.96	47.86
13	47.89	48.14	49.35	47.30	47.87	48.53	48.08	48.70	51.23	48.37	47.95	47.83
14	48.87	48.04	48.91	47.29	47.89	48.53	48.18	50.22	50.64	48.25	47.94	47.85
15	48.91	47.98	48.68	47.25	47.85	48.44	48.22	50.41	49.58	48.15	47.92	47.96
16	48.52	48.00	48.54	47.23	47.87	48.36	48.19	49.59	49.05	48.08	47.92	48.16
17	48.23	48.02	48.44	47.30	47.88	48.35	48.14	48.81	48.73	48.01	48.06	48.04
18	48.07	50.32	48.12	47.31	47.88	48.44	48.11	49.32	48.50	47.98	48.00	47.97
19	48.00	50.73	47.62	47.24	47.93	48.68	48.09	49.54	48.33	47.97	48.24	47.85
20	47.96	50.06	47.52	47.21	48.41	48.90	48.23	49.15	48.22	47.97	48.06	47.85
21	47.96	49.13	47.45	47.18	48.83	48.66	48.48	49.75	48.70	47.97	47.98	47.87
22	47.94	48.68	47.43	47.14	48.88	48.41	48.34	50.84	49.12	48.26	47.96	47.85
23	47.91	48.86	47.41	47.08	48.91	48.28	48.18	51.63	48.79	48.15	47.90	47.84
24	47.92	49.40	47.40	47.07	49.05	48.76	48.14	51.08	48.60	48.05	48.72	47.83
25	48.29	49.02	47.32	47.07	48.93	49.11	48.82	49.76	48.43	47.99	48.35	47.84
26	48.01	48.68	47.28	47.09	48.80	50.04	48.59	49.33	48.41	47.96	48.34	47.85
27	47.98	48.50	47.26	47.10	48.66	49.87	48.42	49.00	48.31	47.94	48.48	47.85
28	47.97	48.35	47.49	47.08	48.48	49.81	48.21	48.75	48.30	47.92	50.49	47.85
29	47.96	48.27	47.57	47.13	48.41	51.12	48.10	48.57	48.28	47.93	49.92	47.84
30	47.95	48.21	47.51	47.17	—	51.06	48.09	49.97	48.23	47.98	49.06	47.85
31	47.94	—	47.43	47.16	—	50.10	—	51.95	—	47.91	48.56	—
MEAN	48.05	48.95	48.24	47.23	47.86	49.31	48.33	49.13	49.21	48.28	48.38	47.92
MAX	48.91	51.18	50.97	47.49	49.05	51.80	49.32	51.95	52.45	49.46	50.49	48.29
MIN	47.87	47.93	47.26	47.07	47.04	48.28	48.05	47.92	48.22	47.91	47.90	47.83

**05531410 Salt Creek at 22nd. St. at Oakbrook, IL--Continued**

WTR YR 2004	MEAN 48.41	MAX 52.45	MIN 47.04
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**LOCATION.**— Lat 41°49'33", long 87°54'02" (NAD of 1927), in NE1/4SE1/4 sec.31, T.39 N., R.12 E., Cook County, Hydrologic Unit 07120004, on left pier 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.**—

**SURFACE—WATER DISCHARGE AND STAGE**

DISCHARGE: October 1945 to current year.

STAGE: Water years 1994 to current year.

**SURFACE—WATER QUALITY**

CHEMICAL: Water years 1978–91 and 1999 to current year.

MISCELLANEOUS: Contaminants in streambed sediments, August 1998; contaminants in fish tissue, August 1998.

**BIOLOGICAL**

ALGAE: Water years 1989, 1990, and 2002–03.

BENTHIC MACROINVERTEBRATES: Water years 1999 and 2002.

FISH: Water years 1999–2000 and 2002–04.

HABITAT: Water years 1999 and 2002–04.

**REVISED RECORDS.**— WSP 1915: Drainage area. WRD IL–87–2: Drainage area. WRD IL–97–2: July 21 – Sept. 26, 1996.

**GAGE.**— Water–stage recorder, phone telemeter, and crest–stage gage. Datum of gage is 624.93 ft above NGVD of 1929. Prior to July 26, 1946, nonrecording gage at same site and datum.

**REMARKS.**— Occasional regulation by sewage treatment plants upstream from station. Since May 28, 1996, some flow temporarily diverted for flood control to Elmhurst Quarry Flood Control Reservoir 12.3 miles upstream from gage.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Maximum discharge, 3,540 ft<sup>3</sup>/s, Aug. 17, 1987, gage height, 10.54 ft; minimum, no flow, May 27, 1998, due to bridge construction.

**REMARKS FOR CURRENT YEAR.**— Records good except those for Sept. 13–30 which are fair and estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	68	97	86	e56	164	315	111	1040	68	59	160
2	37	130	89	83	e56	200	230	106	819	64	61	131
3	59	529	83	83	e57	189	187	96	461	102	69	104
4	122	547	86	90	e60	209	161	87	311	338	355	89
5	112	855	190	101	e64	845	136	82	235	225	299	79
6	104	640	173	98	e64	853	124	78	189	160	206	83
7	97	352	142	e84	65	784	126	82	139	133	154	73
8	89	204	122	e78	62	453	120	75	111	97	128	74
9	83	149	120	76	62	278	103	72	105	145	109	79
10	78	123	540	73	61	218	98	72	233	215	94	64
11	72	113	679	74	57	193	96	129	639	186	87	56
12	67	99	556	80	48	197	91	131	757	176	81	56
13	56	94	322	83	55	158	91	179	745	118	80	50
14	229	78	223	81	59	149	107	498	641	96	77	52
15	251	69	181	70	55	138	116	568	369	81	74	64
16	169	72	153	71	56	125	114	392	242	76	73	122
17	115	74	136	78	57	123	110	223	178	68	103	92
18	85	518	136	63	57	136	106	289	133	66	93	79
19	69	662	115	43	65	172	103	353	103	69	133	48
20	61	509	102	69	136	212	123	270	83	71	106	46
21	55	287	96	e66	218	176	164	378	149	72	91	46
22	50	194	93	40	230	133	143	616	252	99	85	45
23	47	206	92	e56	232	115	115	801	184	87	80	41
24	45	343	88	e55	260	179	101	741	143	68	251	e40

ILLINOIS RIVER BASIN  
**05531500 Salt Creek at Western Springs, IL--Continued**

<b>25</b>	136	259	83	e55	238	250	223	420	114	61	220	e40
<b>26</b>	90	190	77	e57	213	456	182	303	108	58	192	e40
<b>27</b>	81	155	76	e58	187	437	152	241	88	57	216	e40
<b>28</b>	78	130	97	46	155	390	120	195	81	52	769	e43
<b>29</b>	75	114	109	e54	143	746	101	163	78	55	570	e43
<b>30</b>	72	104	103	e56	---	731	101	403	71	67	326	e43
<b>31</b>	69	---	94	e56	---	510	---	902	---	59	214	---
TOTAL	2793	7867	5253	2163	3128	9919	4059	9056	8801	3289	5455	2022
MEAN	90.1	262	169	69.8	108	320	135	292	293	106	176	67.4
MAX	251	855	679	101	260	853	315	902	1040	338	769	160
MIN	37	68	76	40	48	115	91	72	71	52	59	40
CFSM	0.78	2.28	1.47	0.61	0.94	2.78	1.18	2.54	2.55	0.92	1.53	0.59
IN.	0.90	2.54	1.70	0.70	1.01	3.21	1.31	2.93	2.85	1.06	1.76	0.65

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 – 2004, BY WATER YEAR (WY)**

MEAN	92.4	110	109	112	135	210	233	174	141	96.2	112	91.4
MAX	515	457	500	368	444	809	565	480	388	288	795	414
(WY)	2002	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 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1946 – 2004**

ANNUAL TOTAL	58811	63805	
ANNUAL MEAN	161	174	135
HIGHEST ANNUAL MEAN			250
LOWEST ANNUAL MEAN			36.6
HIGHEST DAILY MEAN	1160 May 2	1040 Jun 1	3220 Aug 17 1987
LOWEST DAILY MEAN	34 Feb 7	37 Oct 2	1.0 Aug 27 1950
ANNUAL SEVEN-DAY MINIMUM	51 Sep 19	41 Sep 23	2.1 Oct 15 1948
MAXIMUM PEAK FLOW		1110 Aug 28	3540 Aug 17 1987
MAXIMUM PEAK STAGE		7.14 Aug 28	10.54 Aug 17 1987
INSTANTANEOUS LOW FLOW		9.9 Feb 12	0.00 A May 27 1998
ANNUAL RUNOFF (CFSM)	1.40	1.52	1.17
ANNUAL RUNOFF (INCHES)	19.02	20.64	15.91
10 PERCENT EXCEEDS	360	395	305
50 PERCENT EXCEEDS	95	104	77
90 PERCENT EXCEEDS	54	56	16

A – Due to bridge construction.

**LOCATION.**— Lat 41°49'33", long 87°54'02" (NAD of 1927), in NE1/4SE1/4 sec.31, T.39 N., R.12 E., Cook County, Hydrologic Unit 07120004, on left pier 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1945 to current year.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–91 and 1999 to current year.

MISCELLANEOUS: Contaminants in streambed sediments, August 1998; contaminants in fish tissue, August 1998.

**BIOLOGICAL**

ALGAE: Water years 1989, 1990, and 2002–03.

BENTHIC MACROINVERTEBRATES: Water years 1999 and 2002.

FISH: Water years 1999–2000 and 2002–04.

HABITAT: Water years 1999 and 2002–04.

**REVISED RECORDS.**— WSP 1915: Drainage area. WRD IL–87–2: Drainage area. WRD IL–97–2: July 21 – Sept. 26, 1996.

**GAGE.**— Water–stage recorder, phone telemeter, and crest–stage gage. Datum of gage is 624.93 ft above NGVD of 1929. Prior to July 26, 1946, nonrecording gage at same site and datum.

**REMARKS.**— Occasional regulation by sewage treatment plants upstream from station. Since May 28, 1996, some flow temporarily diverted for flood control to Elmhurst Quarry Flood Control Reservoir 12.3 miles upstream from gage.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 3,540 ft<sup>3</sup>/s, Aug. 17, 1987, gage height, 10.54 ft; minimum, no flow, May 27, 1998, due to bridge construction.

**REMARKS FOR CURRENT YEAR.**—Sampled as part of the Upper Illinois River Basin (UIRB) National Water Quality Assessment Program (NAWQA).

**SURFACE-WATER QUALITY**

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Gage height, feet (00065)	Instan- taneous dis- charge, cfs (00061)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Alka- linity, wat flt inc tit field, mg/L as CaCO <sub>3</sub> (39086)	Bicar- bonate, wat flt incrm. titr., field, mg/L (00453)
OCT 2003													
20...	1250	81700	80020	1.93	84	9.8	98	7.3	965	28.5	15.3	115	139
NOV													
13...	1130	81700	80020	1.95	60	10.7	92	8.0	952	3.5	8.6	130	158
DEC													
11...	1210	81700	80020	5.55	684	13.6	108	7.8	864	–3.0	5.5	140	E171
JAN 2004													
20...	1140	81700	80020	1.86	50	24.0	165	8.0	1850	–10.0	.0	172	E209
FEB													
04...	1155	81700	80020	2.14	87	18.6	128	8.1	2890	–6.0	.0	158	E192
APR													
12...	1300	81700	80020	1.92	86	16.1	148	8.8	1470	6.0	11.4	175	208
MAY													
18...	1245	81700	80020	3.38	299	7.9	86	7.8	1390	13.5	19.0	144	E174



**05531500**

JUN	18...	<.005	.258	<.050	<.010	<.004	E.017	<.020	<.005	<.006	<.018	<.003	<.005	<.009
JUL	17...	<.005	.155	<.050	<.010	<.004	E.163	<.020	<.005	<.006	<.018	<.003	.019	<.009
AUG	13...	<.005	.069	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.010	<.009
	18...	<.005	.045	<.050	<.010	<.004	E.035	<.020	<.005	<.006	<.018	<.003	.125	<.009

Date	Disul- foton, water, fltrd	EPTC, water, fltrd	Ethal- flur- alin, water, fltrd	Etho- prop, water, fltrd	Fonofos water, fltrd, water, fltrd, ug/L (04095)	Lindane water, fltrd, water, fltrd, ug/L (39341)	Linuron water fltrd ug/L (82666)	Mala- thion, water, fltrd, water, fltrd, ug/L (39532)	Methyl para- thion, water, fltrd ug/L (82667)	Metola- chlor, water, fltrd, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd ug/L (82671)	Naprop- amide, water, fltrd ug/L (82684)
	0.7u GF ug/L (82677)	0.7u GF ug/L (82668)	0.7u GF ug/L (82663)	0.7u GF ug/L (82672)									
OCT 2003	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.006	E.007	<.006	<.002	<.007
NOV 13...	---	---	---	---	---	---	---	---	---	---	---	---	---
DEC 11...	---	---	---	---	---	---	---	---	---	---	---	---	---
JAN 2004	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	E.006	<.006	<.003	<.007
FEB 04...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	<.013	<.006	<.003	<.007
APR 12...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	E.009	<.006	<.003	<.007
MAY 18...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.076	<.006	<.003	<.007
JUN 17...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.023	<.006	<.003	<.007
JUL 13...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	E.010	<.006	<.003	<.007
AUG 18...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	E.010	<.006	<.003	<.007

[illegible]

ILLINOIS RIVER BASIN  
**05531500 Salt Creek at Western Springs, IL--Continued**

17...	<.003	<.010	<.004	<.022	<.011	.03	<.004	<.025	<.011	<.02	.006	<.02	<.034
JUL													
13...	<.003	<.010	<.004	<.022	<.011	.03	<.004	<.025	<.011	<.02	<.010	<.02	<.034
AUG													
18...	<.003	<.010	<.004	<.022	<.011	.02	<.004	<.025	<.011	<.02	<.010	<.02	<.034
<hr/>													
	Date	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	Sus- pended sedi- ment concen- tration mg/L (80154)							
OCT 2003	20...	<.02	<.005	<.002	<.009	152							
NOV	13...	---	---	---	---	87							
DEC	11...	---	---	---	---	141							
JAN 2004	20...	<.02	<.010	<.002	<.009	123							
FEB	04...	<.02	<.010	<.002	<.009	288							
APR	12...	<.02	<.010	<.002	<.009	118							
MAY	18...	<.02	<.010	<.002	<.009	164							
JUN	17...	<.02	<.010	<.002	<.009	134							
JUL	13...	<.02	<.010	<.002	<.009	108							
AUG	18...	<.02	<.010	<.002	<.009	96							

Remark codes used in this table:

< --- Less than

E --- Estimated value



**LOCATION.**— Lat 41°52'54", long 87°52'09" (NAD of 1927), 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.**—

**SURFACE—WATER DISCHARGE AND STAGE**

DISCHARGE: August 1950 to June 1951, October 1951 to current year.

STAGE: Water years 1994 to current year.

**SURFACE—WATER QUALITY**

CHEMICAL: Water years 1979–91, July 2000.

MISCELLANEOUS: Water year 2000; contaminants in streambed sediments, water year 2000.

**BIOLOGICAL**

ALGAE: Pigment and biomass, Water year 2000.

BENTHIC MACROINVERTEBRATES: Water year 2000.

HABITAT: Water year 2000.

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

**GAGE.**— Water–stage recorder and phone telemeter. Datum of gage is 617.65 ft above NGVD of 1929 (Cook County Highway Department bench mark). Prior to Oct. 26, 1951, at datum 2.00 ft higher.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Maximum discharge, 1,120 ft<sup>3</sup>/s, Aug. 14, 1987, gage height, 12.84 ft; no flow Sept. 14, 1962.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	5.0	14	6.7	e5.6	30	25	12	61	3.9	3.9	16
2	13	34	12	18	e6.0	21	18	4.6	52	3.6	3.6	15
3	13	107	5.0	7.7	e6.0	10	9.9	4.2	47	33	24	6.9
4	8.2	120	9.7	5.3	5.9	56	9.0	5.7	46	61	81	5.5
5	5.0	96	55	8.4	15	124	8.8	5.8	25	23	22	3.8
6	4.5	58	21	6.4	21	27	8.6	4.3	12	15	17	3.7
7	5.3	51	17	4.2	6.5	15	7.7	6.1	11	11	8.2	3.5
8	6.0	29	7.3	e6.2	6.7	12	7.7	6.9	9.0	14	6.0	11
9	4.7	17	23	e6.0	4.8	24	5.9	5.1	8.7	64	5.5	9.7
10	5.0	7.9	103	e5.8	4.8	71	5.6	8.7	98	37	6.3	3.9
11	4.5	8.1	47	4.6	5.4	47	6.0	8.1	83	25	14	3.0
12	5.0	6.9	24	9.7	4.7	20	5.3	26	85	27	5.9	2.8
13	4.1	5.4	19	8.2	4.7	16	6.9	30	42	7.6	4.9	2.7
14	85	4.2	19	7.2	17	23	8.7	91	46	8.6	4.8	2.8
15	19	3.6	20	8.8	4.9	31	5.1	19	22	6.0	4.3	8.7
16	13	3.9	19	6.0	4.1	45	5.3	10	13	5.6	4.0	22
17	12	19	21	e7.0	4.8	33	7.7	8.4	10	4.8	9.4	5.3
18	4.9	137	12	e6.8	5.6	24	4.9	60	9.3	5.2	8.3	3.4
19	3.9	57	8.2	e6.6	8.4	7.7	4.6	14	8.4	4.2	27	3.0
20	3.3	36	8.4	e5.8	57	42	25	42	7.4	4.1	6.3	2.8
21	4.8	40	9.6	e5.5	37	8.5	26	62	57	4.6	4.8	7.4
22	4.7	28	7.5	5.3	15	4.9	6.4	96	36	45	4.9	7.7
23	5.0	47	7.9	e5.4	23	9.3	8.2	58	14	19	4.4	3.2
24	5.5	45	7.4	e5.3	22	43	12	35	15	7.1	92	2.9
25	41	22	7.6	5.2	15	25	48	28	8.0	4.0	59	2.8
26	6.6	15	5.9	5.5	12	90	12	18	5.6	4.4	32	2.7
27	5.1	7.7	6.7	e5.6	11	32	5.1	19	4.7	4.8	53	2.7
28	5.3	6.6	17	5.6	9.6	55	9.0	15	5.6	4.9	167	5.6

ILLINOIS RIVER BASIN  
**05532000 Addison Creek at Bellwood, IL--Continued**

<b>29</b>	5.2	5.7	7.6	5.6	8.8	69	4.7	7.1	4.3	3.8	48	12
<b>30</b>	5.3	5.3	7.3	e6.0	---	36	4.5	113	4.5	5.6	22	4.2
<b>31</b>	5.3	---	8.3	e5.6	---	30	---	88	---	3.9	18	---
TOTAL	318.3	1028.3	557.4	206.0	352.3	1081.4	321.6	911.0	850.5	470.7	771.5	186.7
MEAN	10.3	34.3	18.0	6.65	12.1	34.9	10.7	29.4	28.4	15.2	24.9	6.22
MAX	85	137	103	18	57	124	48	113	98	64	167	22
MIN	3.3	3.6	5.0	4.2	4.1	4.9	4.5	4.2	4.3	3.6	3.6	2.7
CFSM	0.57	1.91	1.00	0.37	0.68	1.95	0.60	1.64	1.58	0.85	1.39	0.35
IN.	0.66	2.14	1.16	0.43	0.73	2.25	0.67	1.89	1.77	0.98	1.60	0.39

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 – 2004, BY WATER YEAR (WY)**

MEAN	13.4	14.9	13.8	12.8	15.8	23.0	26.7	21.0	17.5	14.1	17.0	14.1
MAX	59.9	44.5	53.5	39.2	51.5	72.6	59.0	57.9	41.5	46.6	103	61.4
(WY)	2002	1986	1983	1993	1997	1979	1983	1990	1993	1957	1987	1961
MIN	0.22	0.46	1.63	0.98	1.38	6.69	7.87	4.25	1.64	0.68	0.42	0.31
(WY)	1953	1954	1954	1954	1963	1956	1971	1952	1956	1955	1953	1952

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1950 – 2004**

ANNUAL TOTAL	6683.3		7055.7			
ANNUAL MEAN	18.3		19.3		17.1	
HIGHEST ANNUAL MEAN					27.6	
LOWEST ANNUAL MEAN					3.98	
HIGHEST DAILY MEAN	177	May 1	167	Aug 28	768	Aug 14 1987
LOWEST DAILY MEAN	2.4	Jul 27, Aug 18	2.7	Sep 13, 26, 27	0.00	Sep 14 1962
ANNUAL SEVEN-DAY MINIMUM	3.5	Jul 25	3.9	Sep 22	0.10	Oct 6 1952
MAXIMUM PEAK FLOW			516	Aug 28	1120	Aug 14 1987
MAXIMUM PEAK STAGE			7.69	Aug 28	12.84	Aug 14 1987
INSTANTANEOUS LOW FLOW			2.6 A			
ANNUAL RUNOFF (CFSM)	1.02		1.08		0.954	
ANNUAL RUNOFF (INCHES)	13.89		14.66		12.96	
10 PERCENT EXCEEDS	50		51		38	
50 PERCENT EXCEEDS	7.5		8.4		8.5	
90 PERCENT EXCEEDS	4.2		4.3		2.7	

A – Several days.

**LOCATION.**— Lat 41°50'45", long 87°51'08" (NAD of 1927), in SW1/4NE1/4 sec.27, T.39 N., R.12 E., Cook County, Hydrologic Unit 07120004, on 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.**—

SURFACE—WATER DISCHARGE AND STAGE

STAGE: October 1989 to current year.

PARTIAL RECORD: Low-flow measurements, July 1961 to September 1962.

**GAGE.**— Water-stage recorder, phone telemeter, and crest-stage gage. Datum of gage is 608.04 ft above NGVD of 1929 (levels by Illinois Department of Transportation).

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height, 10.63 ft, Feb. 21, 1997; minimum, 0.33 ft, July 5, 2002.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 7.33 ft, May 11; minimum, 0.76 ft, July 2.

Gage height, feet WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.16	0.91	1.02	1.02	1.87	0.90	1.37	6.20	1.55	0.83	2.06	1.80
2	1.73	0.90	0.98	0.98	1.66	0.87	1.26	6.64	1.39	0.81	3.63	1.50
3	1.54	0.93	1.01	1.00	1.70	0.93	1.28	5.60	1.52	0.84	2.94	1.20
4	2.27	0.91	1.00	0.97	1.74	0.99	3.04	3.80	1.36	0.88	3.37	1.01
5	2.14	0.98	0.97	0.98	1.63	0.95	3.83	5.21	1.21	1.52	3.09	0.95
6	1.76	1.03	1.01	1.06	1.44	0.99	3.28	5.09	1.18	1.55	2.48	0.91
7	1.50	0.95	0.94	1.02	1.31	1.01	2.66	4.35	1.16	1.91	2.73	0.86
8	1.27	1.00	0.95	1.00	1.44	1.05	2.38	2.98	1.57	1.85	2.73	0.89
9	1.16	0.95	1.01	0.99	1.35	1.12	2.11	5.54	1.99	1.94	2.11	0.91
10	1.16	0.98	0.94	0.99	1.34	1.16	2.07	5.77	1.62	1.94	1.67	0.85
11	1.04	0.96	0.92	1.15	1.30	1.08	1.96	6.11	1.39	1.61	1.57	0.83
12	1.01	0.97	0.92	1.38	1.24	1.22	1.76	4.83	1.27	1.29	1.37	0.83
13	1.02	0.95	0.92	1.40	1.28	1.50	1.57	3.99	1.24	1.10	1.22	0.88
14	0.96	1.12	0.96	1.18	1.29	1.47	1.47	2.99	1.12	1.04	1.58	1.66
15	0.96	1.34	0.94	1.19	1.31	1.41	1.61	2.95	1.04	2.66	1.59	1.61
16	0.95	1.12	0.92	1.22	1.29	1.40	1.50	2.98	0.99	2.58	1.47	1.26
17	0.95	0.98	0.96	1.16	1.29	1.42	1.44	2.45	0.99	2.24	1.16	1.06
18	1.04	0.96	2.56	1.17	1.30	1.40	1.15	2.00	1.14	2.35	1.09	0.98
19	0.98	1.17	2.77	1.19	1.27	1.31	1.10	1.77	1.78	1.55	1.04	0.89
20	0.94	1.04	1.98	1.23	1.26	1.62	1.21	1.91	1.55	1.34	1.01	0.88
21	0.94	1.16	1.63	1.24	1.10	1.67	1.13	1.71	1.31	2.27	0.94	0.83
22	0.95	1.26	1.34	1.26	0.93	1.51	1.13	1.62	1.15	2.09	0.93	1.23
23	0.89	1.11	1.21	1.28	0.89	1.40	1.09	1.44	1.06	1.72	0.90	1.08
24	0.92	1.02	1.15	1.35	0.96	1.27	1.05	1.35	1.00	1.41	0.92	0.92
25	1.24	1.02	1.11	1.39	1.32	1.36	1.06	1.24	1.01	1.18	0.85	0.91
26	1.20	1.03	1.05	1.37	1.06	1.38	1.02	1.15	0.94	1.07	0.90	1.21
27	1.12	1.03	1.04	1.38	0.98	1.29	1.05	1.13	0.95	0.96	0.96	1.63
28	1.06	1.03	1.03	1.42	0.91	1.63	1.05	1.39	0.88	0.99	0.93	1.22
29	1.06	0.99	1.01	1.48	---	1.85	1.08	1.71	0.86	0.96	1.02	1.08
30	0.99	1.04	1.03	1.46	---	1.64	2.46	1.56	0.82	0.89	0.85	0.98
31	0.93	---	1.08	1.62	---	1.47	---	2.00	---	0.87	0.83	---
MEAN	1.19	1.03	1.17	1.21	1.30	1.30	1.67	3.21	1.23	1.49	1.61	1.09
MAX	2.27	1.34	2.77	1.62	1.87	1.85	3.83	6.64	1.99	2.66	3.63	1.80
MIN	0.89	0.90	0.92	0.97	0.89	0.87	1.02	1.13	0.82	0.81	0.83	0.83

**05532300 Salt Creek at Brookfield, IL--Continued**

CAL YR 2002	MEAN 1.65	MAX 7.13	MIN 0.72
WTR YR 2003	MEAN 1.46	MAX 6.64	MIN 0.81

**LOCATION.**— Lat 41°50'45", long 87°51'08" (NAD of 1927), in SW1/4NE1/4 sec.27, T.39 N., R.12 E., Cook County, Hydrologic Unit 07120004, on 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.**—

SURFACE—WATER DISCHARGE AND STAGE

STAGE: October 1989 to current year.

PARTIAL RECORD: Low-flow measurements, July 1961 to September 1962.

**GAGE.**— Water-stage recorder, phone telemeter, and crest-stage gage. Datum of gage is 608.04 ft above NGVD of 1929 (levels by Illinois Department of Transportation).

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height, 10.63 ft, Feb. 21, 1997; minimum, 0.33 ft, July 5, 2002.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 6.70 ft, June 1; minimum, 0.69 ft, February 13.

Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.91	0.94	1.29	1.15	1.45	1.76	2.84	1.33	6.60	1.18	0.85	1.51
2	0.92	1.54	1.25	1.18	1.39	1.96	2.20	1.27	5.96	1.14	0.83	1.36
3	1.00	3.66	1.15	1.14	1.50	1.86	1.85	1.21	4.43	1.35	0.98	1.18
4	1.12	3.78	1.18	1.16	1.46	2.12	1.69	1.16	3.41	2.73	2.70	1.08
5	1.02	5.25	2.06	1.26	1.50	5.37	1.54	1.14	2.65	2.13	2.24	1.01
6	0.96	4.10	1.82	1.64	1.58	5.12	1.47	1.08	2.06	1.73	1.78	1.01
7	0.94	2.79	1.62	1.98	1.57	4.93	1.45	1.12	1.63	1.59	1.44	0.97
8	0.90	1.97	1.45	1.55	1.55	3.62	1.45	1.08	1.41	1.39	1.25	1.02
9	0.86	1.62	1.48	1.37	1.53	2.67	1.31	1.03	1.35	1.80	1.14	1.05
10	0.83	1.41	3.55	1.21	1.51	2.37	1.24	1.05	2.41	2.12	1.03	0.94
11	0.84	1.32	3.97	1.09	1.45	2.09	1.21	1.39	4.20	1.80	1.04	0.89
12	0.83	1.24	3.54	1.14	1.30	1.93	1.17	1.57	4.73	1.86	0.94	0.87
13	0.84	1.21	2.56	1.16	1.11	1.75	1.16	1.80	4.39	1.42	0.91	0.85
14	2.30	1.11	2.06	1.13	1.20	1.72	1.30	3.40	4.14	1.26	0.89	0.85
15	2.23	1.03	1.83	1.10	1.06	1.66	1.33	3.50	3.05	1.15	0.85	0.94
16	1.79	1.04	1.68	1.08	1.08	1.66	1.32	2.80	2.26	1.08	0.85	1.39
17	1.43	1.12	1.58	1.13	0.99	1.60	1.34	1.97	1.83	0.99	1.17	1.12
18	1.19	4.09	1.52	1.18	0.97	1.63	1.26	2.48	1.58	0.94	1.06	1.06
19	1.05	4.59	1.38	1.82	1.04	1.75	1.23	2.80	1.40	0.91	1.36	0.88
20	1.01	3.83	1.29	1.86	1.60	2.07	1.47	2.75	1.28	0.91	1.08	0.85
21	0.99	2.65	1.24	1.71	2.10	1.80	1.78	3.58	1.77	0.95	0.97	0.90
22	0.96	1.96	1.22	1.58	2.08	1.55	1.55	4.65	2.29	1.32	0.92	0.91
23	0.94	2.09	1.21	1.75	2.12	1.42	1.38	5.37	1.90	1.36	0.88	0.85
24	0.92	3.05	1.17	1.66	2.24	1.89	1.29	5.42	1.67	1.09	2.11	0.84
25	1.68	2.36	1.15	1.51	2.11	2.19	2.16	4.61	1.50	0.98	2.12	0.84
26	1.12	1.91	1.09	1.49	1.97	3.34	1.81	4.43	1.43	0.96	1.88	0.82
27	1.02	1.66	1.09	1.50	1.82	3.13	1.60	4.60	1.33	0.95	2.06	0.81
28	0.99	1.50	1.29	1.41	1.67	3.01	1.42	4.65	1.28	0.88	4.70	0.86
29	0.98	1.38	1.31	1.34	1.58	4.67	1.25	4.42	1.27	0.88	3.37	0.91
30	0.96	1.30	1.27	1.31	---	4.70	1.24	4.98	1.22	0.97	2.40	0.82
31	0.94	---	1.22	1.32	---	3.93	---	6.23	---	0.88	1.80	---
MEAN	1.11	2.25	1.66	1.38	1.54	2.62	1.51	2.87	2.55	1.31	1.54	0.98
MAX	2.30	5.25	3.97	1.98	2.24	5.37	2.84	6.23	6.60	2.73	4.70	1.51
MIN	0.83	0.94	1.09	1.08	0.97	1.42	1.16	1.03	1.22	0.88	0.83	0.81

**05532300 Salt Creek at Brookfield, IL--Continued**

CAL YR 2003	MEAN 1.60	MAX 6.64	MIN 0.81
WTR YR 2004	MEAN 1.78	MAX 6.60	MIN 0.81

**LOCATION.**— Lat 41°49'20", long 87°49'15" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1943 to current year. Monthly discharge only for some periods, published in WSP 1308.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1987–92 and 1999 to 2004.

SEDIMENT: April 1979 to September 1982, January 2003 to current year.

MISCELLANEOUS: Contaminants in streambed sediments, August 1998; contaminants in fish tissue, August 1998; sediment concentration and particle size, water years 1998–2003.

**BIOLOGICAL**

ALGAE: Water years 1989, 1990, and 2002–03.

BENTHIC MACROINVERTEBRATES: Water years 1999 and 2002.

FISH: Water years 1999–2000 and 2002–04.

HABITAT: Water years 1999 and 2002–04.

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

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter, automatic water sampler, and rain gage, and concrete dam. Datum of gage is 594.68 ft above NGVD of 1929. Prior to Nov. 27, 1946, nonrecording gage at bridge 400 ft upstream at same datum.

**REMARKS.**— Occasional regulation by gates at Hoffman Dam.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 9,770 ft<sup>3</sup>/s, Aug. 15, 1987, gage height, 9.90 ft; no flow Aug. 22–24, 1962, and part of Sept. 5, 1968, Aug. 31, 1974, Oct. 7, 1974.

SUSPENDED–SEDIMENT CONCENTRATIONS: Maximum daily mean, 297 mg/L Apr. 12, 1979; minimum daily mean, 3 mg/L Jan. 24, Feb. 1, 3, 4, 1982

SUSPENDED–SEDIMENT LOADS: Maximum daily, 3,240 tons Apr. 12, 1979; minimum daily, 1.5 tons Feb. 3, 4, 1982.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Flood of Mar. 18, 1919, reached a discharge of 7,450 ft<sup>3</sup>/s, gage height, 9.43 ft., present datum, from information furnished by Metropolitan Water Reclamation District of Greater Chicago.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	157	162	372	400	e200	795	1890	555	4730	778	219	377
2	151	362	350	386	e210	1000	1570	514	4270	684	209	305
3	173	1500	325	387	e220	968	1380	471	3260	649	239	257
4	282	1780	318	383	e220	1020	1200	439	2510	1590	1270	225
5	195	2430	647	407	e220	2550	1080	410	2020	1490	956	200
6	171	1960	600	352	e230	2900	988	376	1660	1060	565	191
7	165	1370	472	296	e230	2840	914	368	1390	918	397	192
8	159	841	417	366	e230	2360	854	351	1180	885	328	194
9	145	636	406	369	e230	1890	758	327	1040	973	289	195
10	139	516	1400	321	e220	1660	673	338	1140	1370	257	172
11	141	451	1970	305	e220	1520	597	541	e2100	1340	251	167
12	138	392	1820	332	e220	1400	527	518	e2380	1230	228	157
13	134	355	1360	346	e220	1300	486	819	e2250	1000	219	158
14	664	310	1070	324	e220	1260	477	1590	e2200	843	212	159
15	742	282	930	312	e220	1200	467	1840	1840	684	200	172
16	424	272	844	297	e220	1130	442	1570	1620	535	187	314
17	277	283	784	e290	231	1070	470	1280	1400	423	261	223

ILLINOIS RIVER BASIN  
**05532500 Des Plaines River at Riverside, IL--Continued**

<b>18</b>	206	1340	724	e270	238	1030	463	1520	1230	357	257	200
<b>19</b>	179	1910	667	e250	250	996	453	1830	1080	324	402	172
<b>20</b>	174	1470	598	e240	410	1000	503	1940	975	320	264	163
<b>21</b>	176	978	535	e230	719	846	788	2410	992	307	221	168
<b>22</b>	168	713	480	e220	677	708	688	3000	1400	477	200	168
<b>23</b>	167	677	466	e210	705	626	637	3500	1200	448	188	157
<b>24</b>	161	1150	448	e210	830	793	604	3640	1080	375	513	145
<b>25</b>	343	845	421	e210	856	1000	995	3410	1010	309	826	149
<b>26</b>	224	654	380	e210	831	1400	832	3390	974	283	438	142
<b>27</b>	184	548	358	e210	791	1570	713	3630	939	282	548	145
<b>28</b>	173	479	407	e210	742	1620	618	3790	922	255	1820	159
<b>29</b>	170	422	461	e200	710	2360	559	3630	881	242	1350	156
<b>30</b>	163	390	450	e200	----	2580	538	3680	824	254	792	146
<b>31</b>	164	----	423	e200	----	2340	----	4530	----	236	500	----
TOTAL	6909	25478	20903	8943	11520	45732	23164	56207	50497	20921	14606	5728
MEAN	223	849	674	288	397	1475	772	1813	1683	675	471	191
MAX	742	2430	1970	407	856	2900	1890	4530	4730	1590	1820	377
MIN	134	162	318	200	200	626	442	327	824	236	187	142
CFSM	0.35	1.35	1.07	0.46	0.63	2.34	1.23	2.88	2.67	1.07	0.75	0.30
IN.	0.41	1.50	1.23	0.53	0.68	2.70	1.37	3.32	2.98	1.24	0.86	0.34

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 – 2004, BY WATER YEAR (WY)**

MEAN	337	415	435	436	552	999	1091	791	601	392	369	329
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 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1944 – 2004**

ANNUAL TOTAL	194251		290608			
ANNUAL MEAN	532		794		562	
HIGHEST ANNUAL MEAN					1092	
LOWEST ANNUAL MEAN					111	
HIGHEST DAILY MEAN	3720	May 2	4730	Jun 1	9180	Aug 15 1987
LOWEST DAILY MEAN	134	Sep 11, Oct 13	134	Oct 13	0.00	Aug 23 1962
ANNUAL SEVEN-DAY MINIMUM	144	Sep 6	146	Oct 7	1.5	Oct 19 1953
MAXIMUM PEAK FLOW			4780	Jun 1	9770	Aug 15 1987
MAXIMUM PEAK STAGE			7.08	Jun 1	9.90	Aug 15 1987
INSTANTANEOUS LOW FLOW			127	Oct 13, 14	A	
ANNUAL RUNOFF (CFSM)	0.845		1.26		0.892	
ANNUAL RUNOFF (INCHES)	11.47		17.16		12.12	
10 PERCENT EXCEEDS	1160		1830		1380	
50 PERCENT EXCEEDS	343		470		308	
90 PERCENT EXCEEDS	168		173		39	

A – No flow Aug. 22–24, 1962, and part of Sept. 5, 1968, Aug. 31, 1974, Oct. 7, 1974.



**LOCATION.**— Lat 41°49'20", long 87°49'15" (NAD of 1927), 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.

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**EXTREMES FOR CURRENT YEAR.**—

SUSPENDED–SEDIMENT CONCENTRATIONS: Maximum daily, 174 mg/L, Feb. 20; minimum daily, 15 mg/L, Nov. 13–14 and Sept. 26–30.

SUSPENDED–SEDIMENT LOADS: Maximum daily, 1,850 tons, May 31; minimum daily, 5.0 tons, Sept. 30.

**SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

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	157	20	7.0	162	20	8.5	372	18	18
2	151	20	8.1	362	81	89	350	17	16
3	173	20	9.4	1500	149	604	325	16	14
4	282	20	16	1780	97	473	318	22	19
5	195	21	11	2430	118	776	647	47	81
6	171	21	9.8	1960	69	366	600	35	58
7	165	22	9.6	1370	51	183	472	29	36
8	159	22	9.5	841	37	88	417	28	31
9	145	23	8.9	636	25	43	406	86	95
10	139	24	8.8	516	20	29	1400	123	467
11	141	24	9.2	451	18	22	1970	117	623
12	138	26	9.6	392	17	18	1820	108	529

ILLINOIS RIVER BASIN  
**05532500 Des Plaines River at Riverside, IL--Continued**

13	134	29	10	355	15	15	1360	96	354
14	664	56	110	310	15	12	1070	85	247
15	742	58	117	282	17	13	930	77	193
16	424	43	49	272	20	14	844	70	159
17	277	31	23	283	25	19	784	65	137
18	206	27	15	1340	89	351	724	61	120
19	179	25	12	1910	76	395	667	59	107
20	174	23	11	1470	53	209	598	59	95
21	176	23	11	978	43	114	535	58	83
22	168	23	10	713	33	64	480	71	91
23	167	23	10	677	41	81	466	101	127
24	161	24	10	1150	62	192	448	121	147
25	343	28	26	845	52	120	421	107	121
26	224	25	15	654	44	78	380	90	92
27	184	23	11	548	35	53	358	81	78
28	173	21	9.7	479	27	35	407	84	92
29	170	19	8.6	422	20	23	461	88	110
30	163	17	7.6	390	19	20	450	78	95
31	164	18	7.7	---	---	---	423	68	78
TOTAL	6909	---	590.5	25478	---	4507.5	20903	---	4513

	JANUARY			FEBRUARY			MARCH		
1	400	63	68	e200	33	18	795	20	43
2	386	61	64	e210	33	19	1000	27	74
3	387	59	61	e220	34	20	968	34	89
4	383	62	64	e220	34	20	1020	65	189
5	407	78	86	e220	34	20	2550	140	971
6	352	55	54	e230	72	50	2900	80	624
7	296	42	34	e230	73	52	2840	53	410
8	366	42	41	e230	59	42	2360	44	279
9	369	41	41	e230	47	32	1890	40	203
10	321	41	36	e220	44	30	1660	38	170
11	305	40	33	e220	43	28	1520	40	166
12	332	40	36	e220	41	27	1400	37	138
13	346	40	37	e220	41	25	1300	34	119
14	324	39	34	e220	41	27	1260	31	106
15	312	39	33	e220	41	26	1200	28	92
16	297	39	31	e220	41	25	1130	27	83
17	e290	38	32	231	40	25	1070	27	79
18	e270	38	34	238	44	29	1030	27	76
19	e250	37	26	250	99	68	996	28	74
20	e240	37	29	410	174	190	1000	28	75
21	e230	37	28	719	141	273	846	28	64
22	e220	36	24	677	107	197	708	28	53
23	e210	36	21	705	74	139	626	28	47
24	e210	36	23	830	40	89	793	43	97
25	e210	35	23	856	22	52	1000	48	130
26	e210	35	22	831	21	47	1400	76	288
27	e210	35	20	791	20	42	1570	55	235
28	e210	34	19	742	18	36	1620	67	300
29	e200	34	18	710	17	32	2360	144	930
30	e200	33	18	---	---	---	2580	158	1100
31	e200	33	18	---	---	---	2340	139	883

ILLINOIS RIVER BASIN  
05532500 Des Plaines River at Riverside, IL--Continued

247

TOTAL	8943	---	1108	11520	---	1680	45732	---	8187
APRIL			MAY			JUNE			
1	1890	121	620	555	36	53	4730	97	1240
2	1570	103	437	514	35	48	4270	42	486
3	1380	85	317	471	34	43	3260	32	281
4	1200	74	241	439	32	39	2510	34	228
5	1080	70	203	410	31	35	2020	33	182
6	988	65	174	376	30	31	1660	33	147
7	914	60	149	368	29	29	1390	32	121
8	854	56	129	351	28	27	1180	32	102
9	758	51	104	327	28	24	1040	32	91
10	673	46	84	338	31	29	1140	67	241
11	597	42	68	541	36	53	e2100	115	653
12	527	41	58	518	44	62	e2380	115	732
13	486	41	53	819	60	132	e2250	101	618
14	477	40	52	1590	97	428	e2200	87	524
15	467	40	51	1840	111	553	1840	75	394
16	442	40	48	1570	95	404	1620	67	295
17	470	40	51	1280	79	276	1400	59	225
18	463	40	50	1520	86	355	1230	53	177
19	453	40	49	1830	102	503	1080	48	141
20	503	40	55	1940	94	494	975	43	114
21	788	54	114	2410	130	853	992	45	123
22	688	45	83	3000	158	1280	1400	55	207
23	637	40	69	3500	147	1380	1200	47	154
24	604	40	66	3640	119	1170	1080	44	129
25	995	61	165	3410	81	749	1010	43	117
26	832	54	122	3390	68	620	974	41	109
27	713	43	83	3630	69	679	939	40	101
28	618	39	65	3790	79	804	922	38	95
29	559	38	57	3630	75	732	881	37	87
30	538	37	53	3680	115	1160	824	35	78
31	---	---	---	4530	151	1850	---	---	---
TOTAL	23164	---	3870	56207	---	14895	50497	---	8192
JULY			AUGUST			SEPTEMBER			
1	778	34	71	219	37	22	377	64	66
2	684	32	59	209	36	20	305	59	49
3	649	32	56	239	38	26	257	54	38
4	1590	64	279	1270	72	246	225	50	30
5	1490	60	243	956	66	171	200	47	25
6	1060	47	135	565	60	92	191	44	22
7	918	43	107	397	54	58	192	41	21
8	885	43	102	328	53	47	194	38	20
9	973	52	140	289	52	41	195	33	18
10	1370	67	248	257	51	35	172	23	11
11	1340	55	198	251	46	31	167	17	7.6
12	1230	50	165	228	41	25	157	17	7.1
13	1000	47	127	219	36	21	158	17	7.1
14	843	43	99	212	31	18	159	17	7.1
15	684	40	74	200	28	15	172	17	7.6
16	535	37	53	187	29	15	314	16	14

ILLINOIS RIVER BASIN  
**05532500 Des Plaines River at Riverside, IL--Continued**

17	423	33	38	261	31	22	223	16	9.8
18	357	30	29	257	33	23	200	16	8.7
19	324	27	23	402	35	38	172	16	7.5
20	320	23	20	264	37	26	163	16	7.1
21	307	28	23	221	39	23	168	16	7.2
22	477	56	72	200	40	22	168	16	7.2
23	448	43	53	188	42	22	157	16	6.6
24	375	37	38	513	71	127	145	16	6.1
25	309	34	29	826	106	231	149	16	6.2
26	283	32	25	438	78	93	142	15	6.0
27	282	33	25	548	76	112	145	15	6.0
28	255	35	24	1820	145	722	159	15	6.5
29	242	36	23	1350	112	416	156	15	6.4
30	254	37	25	792	76	165	146	15	5.0
31	236	38	24	500	69	94	---	---	---
TOTAL	20921	---	2627	14606	---	3019	5728	---	446.8
YEAR	290608		53635.8						

**LOCATION.**— Lat 41°49'20", long 87°49'15" (NAD of 1927), 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.

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**REMARKS FOR CURRENT YEAR.**—Sampled as part of the Upper Illinois River Basin (UIRB) National Water Quality Assessment Program (NAWQA).

**SURFACE-WATER QUALITY**

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Gage height, feet (00065)	Instan- taneous dis- charge, cfs (00061)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Alka- linity, wat flt inc tit field, mg/L as CaCO <sub>3</sub> (39086)	Bicar- bonate, wat flt incrm. titr., field, mg/L (00453)
OCT 2003													
20...	1040	81700	80020	3.02	178	10.0	95	7.3	964	28.5	13.1	136	E165
NOV													
13...	1030	81700	80020	3.28	322	11.0	93	7.8	1030	3.5	7.8	157	190
DEC													
11...	1050	81700	80020	4.96	1970	12.8	105	7.8	784	–3.5	6.6	121	E147

JAN 2004	20...	1035	81700	80020	3.15	242	24.5	170	7.8	2420	-12.0	.1	195	E237
FEB	04...	1050	81700	80020	---	---	18.8	130	8.1	2960	-9.0	.0	180	E219
APR	12...	1055	81700	80020	3.51	532	12.3	108	8.3	1260	4.5	9.7	205	248
MAY	18...	1045	81700	80020	4.51	1490	8.6	91	7.9	1010	11.0	18.3	165	199
JUN	17...	1100	81700	80020	4.48	1460	7.4	85	7.7	839	27.0	22.5	193	233
JUL	13...	1035	81700	80020	4.01	1010	7.1	85	7.7	741	26.5	24.1	176	212
AUG	18...	1035	81700	80020	3.10	242	8.2	94	7.8	973	23.0	21.4	128	E156

Date	Carbon- ate, wat flt incrm. titr., field, mg/L (00452)	Chlor- ide, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, unfltrd mg/L (00665)	Total nitro- gen, wat unf by anal ysis, mg/L (62855)	2,6-Di- ethyl- aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto- chlor, water, fltrd, ug/L (49260)	Ala- chlor, water, fltrd, ug/L (46342)
OCT 2003													
20...	<1	160	72.6	<.04	6.51	.054	1.19	1.40	7.68	<.006	E.012	<.006	<.004
NOV													
13...	<1	159	83.7	E.04	5.15	.031	.690	.83	6.33	---	---	---	---
DEC													
11...	<1	120	61.0	.13	2.67	.053	.368	.59	3.61	<.006	<.006	<.006	<.005
JAN 2004													
20...	<1	548	106	.18	7.93	.064	1.15	1.31	9.45	---	---	---	---
FEB													
04...	<1	---	---	.36	9.51	.155	1.50	1.51	10.0	<.006	E.012	<.006	<.005
APR													
12...	<1	211	86.9	<.04	4.87	.025	.461	.71	5.91	<.006	E.011	<.006	<.005
MAY													
18...	<1	173	54.7	.06	3.10	.048	.243	.47	4.19	<.006	E.060	.319	.010
JUN													
17...	1	112	47.3	E.03	2.75	.038	.294	.031	3.59	<.006	E.085	.403	<.005
JUL													
13...	1	99.1	43.1	<.04	2.08	.019	.351	.47	2.77	<.006	E.061	.010	<.005
AUG													
18...	1	151	78.3	E.02	6.01	.045	1.12	1.22	7.23	<.006	E.018	<.006	<.005

[illegible]

## ILLINOIS RIVER BASIN

251

## 05532500 Des Plaines River at Riverside, IL--Continued

11...	<.005	.014	<.050	<.010	<.004	E.022	<.020	<.007	<.006	<.018	<.003	.013	<.009
JAN 2004													
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	<.005	.033	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	.015	<.009
APR													
12...	<.005	.032	<.050	<.010	<.004	E.016	<.020	<.005	<.006	<.018	<.003	<.005	<.009
MAY													
18...	<.005	.590	<.050	<.010	<.004	E.013	<.020	<.005	<.006	<.018	<.003	<.005	<.009
JUN													
17...	<.005	1.56	<.050	<.010	<.004	.551	<.020	<.005	<.006	<.018	<.003	.012	<.009
JUL													
13...	<.005	.783	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	.008	<.009
AUG													
18...	<.005	.051	<.050	<.010	<.004	E.111	<.020	<.005	<.006	<.018	<.003	<.005	<.009

Date	Disul- foton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal- flur- alin, water, fltrd 0.7u GF ug/L (82663)	Etho- prop, water, fltrd 0.7u GF ug/L (82672)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala- thion, water, fltrd, ug/L (39532)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)
OCT 2003													
20...	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.006	.014	<.006	<.002	<.007
NOV													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
11...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.110	<.006	<.003	<.007
JAN 2004													
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
04...	<.02	<.010	<.009	<.005	<.005	<.004	<.035	<.027	<.015	<.013	<.006	<.003	<.007
APR													
12...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.015	<.010	<.003	<.007
MAY													
18...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.343	<.006	<.003	<.007
JUN													
17...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.571	<.006	<.003	<.007
JUL													
13...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.274	<.006	<.003	<.007
AUG													
18...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	E.012	<.006	<.003	<.007

Date	p,p'- DDE, water, fltrd, ug/L (34653)	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prome- ton, water, fltrd, ug/L (04037)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)
OCT 2003													
20...	<.003	<.010	<.004	<.022	<.011	.02	<.004	<.010	<.011	<.02	<.007	.03	<.075
NOV													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
11...	<.003	<.010	<.004	<.022	<.011	.02	<.004	<.025	<.011	<.02	<.007	<.02	<.034

ILLINOIS RIVER BASIN  
**05532500 Des Plaines River at Riverside, IL--Continued**

JAN 2004	20...	--	--	--	--	--	--	--	--	--	--	--	--	
FEB	04...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034
APR	12...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.008	E.01	<.034
MAY	18...	<.003	<.010	<.004	<.022	<.011	.03	<.004	<.025	<.011	<.02	<.005	E.07	<.034
JUN	17...	<.003	<.010	<.004	<.022	<.011	.02	<.004	<.025	<.011	<.02	.065	<.02	<.034
JUL	13...	<.003	<.010	<.004	<.022	<.011	.02	<.004	<.025	<.011	<.02	.028	<.02	<.034
AUG	18...	<.003	<.010	<.004	<.022	<.011	.03	<.004	<.025	<.011	<.02	<.010	.02	<.034

		Date	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	Sus- pended sedi- ment concen- tration mg/L (80154)
OCT 2003	20...		<.02	<.005	<.002	<.009	85
NOV	13...		---	---	---	---	79
DEC	11...		<.02	<.010	<.002	E.004	122
JAN 2004	20...		---	---	---	---	210
FEB	04...		<.02	<.010	<.002	<.009	180
APR	12...		<.02	<.010	<.002	<.009	112
MAY	18...		<.02	<.010	<.002	<.009	154
JUN	17...		<.02	<.010	<.002	<.009	112
JUL	13...		<.02	<.010	<.002	<.009	120
AUG	18...		<.02	<.010	<.002	<.009	141

Remark codes used in this table:

< --- Less than

E --- Estimated value



**LOCATION.**— Lat 41°44'20", long 87°53'47" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: July 1951 to current year.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

MISCELLANEOUS: Water year 2000; contaminants in streambed sediments, water year 2000.

**BIOLOGICAL**

ALGAE: Pigment and biomass, Water year 2000.

BENTHIC MACROINVERTEBRATES: Water year 2000.

FISH: Water year 2001.

HABITAT: Water year 2000.

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

**GAGE.**— Water-stage recorder, phone telemeter, and crest-stage gage. Datum of gage is 606.36 ft above NGVD of 1929. 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.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 2,680 ft<sup>3</sup>/s, Sept. 14, 1961, gage height, 13.71 ft, present datum; minimum daily, 0.1 ft<sup>3</sup>/s, Dec. 9, 1957.

**REMARKS FOR CURRENT YEAR.**— Records good except those greater than 100 ft<sup>3</sup>/s, which are fair. Effluent from sewage-treatment plant 2 mi. upstream averaged 18.0 ft<sup>3</sup>/s during the year. The maximum monthly average was 25 ft<sup>3</sup>/s in March, and the minimum was 13.4 ft<sup>3</sup>/s in September.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	11	16	14	12	35	32	22	82	15	13	22
2	12	36	15	14	13	33	28	19	60	15	13	18
3	17	141	16	16	13	26	25	19	39	31	17	16
4	14	130	19	14	13	69	22	18	27	32	63	16
5	12	252	63	18	13	296	22	17	24	20	20	14
6	11	61	37	15	14	92	18	17	21	38	17	14
7	12	34	27	14	14	51	19	18	20	31	15	14
8	12	26	23	14	13	38	19	17	19	21	14	13
9	12	21	36	13	14	32	18	17	18	25	13	13
10	11	19	154	13	13	28	18	18	78	51	12	8.3
11	12	20	71	13	13	26	17	16	144	23	14	13
12	12	19	39	16	14	22	17	25	201	21	11	12
13	11	17	31	16	14	20	17	47	63	18	13	14
14	55	17	26	15	13	27	18	112	47	17	12	10
15	22	17	24	15	13	20	17	45	33	15	12	14
16	16	18	23	14	13	21	17	28	26	15	13	20
17	15	17	20	15	13	22	20	24	23	14	14	14
18	13	225	20	15	14	26	16	33	20	13	15	12
19	12	172	19	13	16	25	16	23	20	14	15	12
20	13	43	17	13	51	29	33	20	18	14	13	13
21	13	28	16	12	41	23	37	25	35	19	12	13
22	13	22	17	12	32	22	22	59	27	21	12	13
23	13	60	17	12	39	19	20	49	20	16	12	13
24	14	79	16	12	35	35	19	27	21	14	40	12
25	36	37	15	12	31	28	51	29	19	13	34	12

ILLINOIS RIVER BASIN  
**05533000 Flag Creek near Willow Springs, IL--Continued**

<b>26</b>	16	30	14	12	27	62	26	22	16	13	35	11
<b>27</b>	15	e26	14	12	25	42	21	20	15	13	47	12
<b>28</b>	15	e20	20	12	23	88	21	18	17	13	338	13
<b>29</b>	14	e18	18	13	22	131	18	16	15	13	89	13
<b>30</b>	14	e16	16	13	---	57	23	175	15	15	41	13
<b>31</b>	12	---	15	12	---	39	---	190	---	13	27	---
TOTAL	482	1632	874	424	581	1484	667	1185	1183	606	1016	407.3
MEAN	15.5	54.4	28.2	13.7	20.0	47.9	22.2	38.2	39.4	19.5	32.8	13.6
MAX	55	252	154	18	51	296	51	190	201	51	338	22
MIN	11	11	14	12	12	19	16	16	15	13	11	8.3

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 – 2004, BY WATER YEAR (WY)**

MEAN	16.0	19.9	19.3	18.3	22.3	32.0	35.4	27.9	21.8	18.3	18.0	17.1
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 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1951 – 2004
ANNUAL TOTAL	10088.8	10541.3	
ANNUAL MEAN	27.6	28.8	22.2
HIGHEST ANNUAL MEAN			39.6
LOWEST ANNUAL MEAN			7.79
HIGHEST DAILY MEAN	283 May 9	338 Aug 28	1040 Jul 18 1996
LOWEST DAILY MEAN	9.8 Jan 21	8.3 Sep 10	0.10 Dec 9 1957
ANNUAL SEVEN-DAY MINIMUM	12 Oct 5	12 Oct 5	1.0 Feb 3 1959
MAXIMUM PEAK FLOW		790 Aug 28	2680 Sep 14 1961
MAXIMUM PEAK STAGE		7.82 Aug 28	13.71 A Sep 14 1961
INSTANTANEOUS LOW FLOW		1.7 Sep 10	
10 PERCENT EXCEEDS	47	50	41
50 PERCENT EXCEEDS	17	18	14
90 PERCENT EXCEEDS	12	12	4.5

A – Present datum.

**LOCATION.**— Lat 41°42'28", long 87°57'47" (NAD of 1927), 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.**—

**SURFACE–WATER DISCHARGE AND STAGE**

DISCHARGE: December 1985 to current year.

STAGE: Water years 1994 to current year.

PARTIAL RECORD: Annual maximum, water years 1961–79.

PRECIPITATION: April 1986 to current year.

**SURFACE–WATER QUALITY**

MISCELLANEOUS: Water year 2000; contaminants in streambed sediments, water year 2000.

**BIOLOGICAL**

ALGAE: Pigment and biomass, Water year 2000.

BENTHIC MACROINVERTEBRATES: Water year 2000.

FISH: Water year 2001.

HABITAT: Water year 2000.

**REVISED RECORDS.**— WDR IL–77–1: 1961–76(M).

**GAGE.**— Water–stage recorder, phone telemeter, unheated tipping–bucket rain gage, and crest–stage gage. Datum of gage is 630.00 ft above NGVD of 1929. Oct. 11, 1961, to Sept. 30, 1976, crest–stage gage on bridge 50 ft downstream at datum 11.22 ft higher.

**REMARKS.**— For precipitation records, 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.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum discharge, 3,070 ft<sup>3</sup>/s, July 18, 1996, gage height, 17.53 ft; no flow at times in most years.

**PRECIPITATION:** Maximum daily total, 6.17 in., July 17, 1996.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.44	0.89	3.6	e2.0	e0.94	15	9.9	4.5	43	0.78	0.95	8.0
2	0.11	22	3.3	e1.9	e0.94	15	7.1	3.1	27	0.45	1.1	4.7
3	1.6	67	3.1	e1.8	e0.94	8.4	5.4	2.4	16	14	4.2	3.3
4	2.2	72	4.1	e2.0	e0.95	45	4.2	1.9	7.1	8.8	34	3.1
5	1.1	127	29	e2.0	e0.98	225	3.9	1.7	4.5	2.8	7.2	2.5
6	0.48	33	15	e1.8	e1.0	63	4.6	1.5	3.5	21	3.7	2.3
7	0.19	16	8.3	e1.6	e1.0	38	3.8	2.0	2.9	13	2.6	1.8
8	0.00	8.2	6.3	e1.5	e0.96	23	3.4	1.4	2.2	4.6	2.2	1.8
9	0.28	5.2	17	e1.4	e0.90	13	3.1	1.1	1.9	13	1.8	1.4
10	0.24	4.3	84	e1.4	e0.90	11	2.8	1.1	43	17	1.6	1.0
11	0.16	3.9	35	e1.5	e0.86	7.7	2.5	1.4	92	5.0	1.5	0.89
12	0.10	3.4	17	e1.6	e0.90	5.4	2.4	4.4	111	3.3	0.72	0.69
13	0.00	2.7	12	e1.5	e0.96	4.4	2.2	34	33	3.0	0.30	0.71
14	20	2.4	8.4	e1.5	e0.96	11	2.0	72	32	2.1	0.25	0.65
15	5.8	2.4	6.9	e1.4	e0.92	6.0	1.9	29	15	1.8	0.14	1.2
16	2.9	2.7	6.1	e1.5	e0.90	5.5	1.8	11	8.5	1.4	0.09	4.2
17	2.1	2.7	4.9	e1.6	e0.92	6.8	2.6	6.2	6.3	1.1	0.22	1.7
18	1.4	124	4.4	e1.6	e1.0	12	1.7	16	4.8	0.60	1.4	1.0
19	1.1	56	3.8	e1.5	e1.3	11	1.4	6.2	3.9	0.70	2.2	0.66
20	0.91	26	3.7	e1.4	30	8.4	13	4.2	3.0	0.34	0.81	0.52
21	0.50	19	3.2	e1.3	25	5.9	17	8.1	11	16	0.23	0.84
22	0.16	7.9	3.3	e1.2	16	5.6	4.3	23	7.1	9.4	0.17	1.6
23	0.12	32	3.5	e1.1	20	4.8	2.9	30	3.7	4.9	0.08	1.6

ILLINOIS RIVER BASIN  
**05533400 Sawmill Creek near Lemont, IL--Continued**

<b>24</b>	0.14	40	3.2	e1.1	19	23	2.6	14	3.0	2.9	18	1.7
<b>25</b>	12	15	3.0	e1.0	11	15	21	11	2.6	2.0	15	1.7
<b>26</b>	3.0	9.0	2.7	e1.0	8.5	39	5.5	5.6	2.1	1.5	17	1.7
<b>27</b>	2.0	6.8	2.7	e1.0	6.9	24	3.5	3.9	1.8	1.2	33	1.9
<b>28</b>	1.6	5.5	6.1	e1.0	6.0	81	2.8	2.9	1.9	0.75	259	0.27
<b>29</b>	1.3	4.6	e4.0	e0.98	6.1	82	2.1	2.6	1.6	0.41	54	0.00
<b>30</b>	1.0	4.1	e2.5	e0.96	---	38	4.9	104	0.97	1.9	24	0.00
<b>31</b>	0.97	---	e2.2	e0.94	---	17	---	91	---	1.6	14	---
TOTAL	63.90	725.69	312.3	44.08	166.73	869.9	146.3	501.2	496.37	157.33	501.46	53.43
MEAN	2.06	24.2	10.1	1.42	5.75	28.1	4.88	16.2	16.5	5.08	16.2	1.78
MAX	20	127	84	2.0	30	225	21	104	111	21	259	8.0
MIN	0.00	0.89	2.2	0.94	0.86	4.4	1.4	1.1	0.97	0.34	0.08	0.00
CFSM	0.16	1.86	0.77	0.11	0.44	2.16	0.38	1.24	1.27	0.39	1.24	0.14
IN.	0.18	2.08	0.89	0.13	0.48	2.49	0.42	1.43	1.42	0.45	1.43	0.15

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 – 2004, BY WATER YEAR (WY)**

MEAN	6.65	11.8	8.44	10.1	13.2	14.7	16.8	16.9	12.0	10.0	9.12	6.57
MAX	24.7	37.4	28.7	30.6	54.5	28.1	53.4	49.3	57.6	58.6	28.2	20.6
(WY)	2002	1991	1988	1993	1997	2004	1999	1990	1993	1996	1998	1989
MIN	1.11	0.68	0.22	0.17	0.16	3.54	4.88	1.25	1.02	0.14	0.50	0.10
(WY)	1993	2003	2003	2003	2003	2000	2004	1992	1992	1991	1991	1995

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1986 – 2004**

ANNUAL TOTAL	2995.95		4038.69			
ANNUAL MEAN	8.21		11.0		11.2	
HIGHEST ANNUAL MEAN					17.9	
LOWEST ANNUAL MEAN					5.39	
HIGHEST DAILY MEAN	146	May 9	259	Aug 28	1220	Jul 18 1996
LOWEST DAILY MEAN	0.00	A	0.00	B	0.00	C
ANNUAL SEVEN-DAY MINIMUM	0.01	Sep 7	0.14	Oct 7	0.00	Jul 24 1991
MAXIMUM PEAK FLOW			615	Aug 28	3070	Jul 18 1996
MAXIMUM PEAK STAGE			12.74	Aug 28	17.53	Jul 18 1996
ANNUAL RUNOFF (CFSM)	0.631		0.849		0.860	
ANNUAL RUNOFF (INCHES)	8.57		11.56		11.69	
10 PERCENT EXCEEDS	20		28		24	
50 PERCENT EXCEEDS	2.4		3.0		3.5	
90 PERCENT EXCEEDS	0.14		0.74		0.28	

A – Many days.

B – Oct. 8, 13, Sept. 29, 30.

C – At times in most years.

**LOCATION.**— Lat 42°09'10", long 87°49'07" (NAD of 1927), 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.**—

SURFACE–WATER DISCHARGE AND STAGE

DISCHARGE: August 1952 to current year.

STAGE: Water years 1994 to current year.

SURFACE–WATER QUALITY

CHEMICAL: Water years 1978–91.

**REVISED RECORDS.**— WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, phone telemeter, and crest–stage gage. Datum of gage is 638.88 ft above NGVD of 1929 (Cook County Highway Department bench mark).

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Maximum discharge, 933 ft<sup>3</sup>/s, Aug. 14, 1987, gage height, 11.52 ft; maximum gage height, 11.55 ft, Oct. 13, 2001; no flow at times in most years.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	3.8	6.2	6.6	e1.3	47	43	13	169	2.3	0.92	3.7
2	1.4	38	5.1	7.2	e1.2	53	32	11	79	2.0	0.88	2.9
3	6.3	108	4.4	6.6	e1.4	33	25	9.4	44	13	6.6	2.3
4	5.1	71	3.8	6.2	e1.5	41	20	8.7	28	58	22	2.0
5	2.1	119	13	4.6	e1.4	311	16	8.2	17	28	5.1	1.5
6	1.3	52	11	e3.3	e1.6	180	14	7.5	11	18	2.6	1.2
7	1.1	34	8.9	e2.6	e1.7	113	13	7.3	8.3	12	1.9	0.83
8	0.75	23	8.2	e2.1	e1.6	59	13	6.8	5.7	8.7	1.7	0.42
9	0.65	16	13	e1.9	e1.5	42	14	6.4	4.9	8.1	1.5	0.19
10	0.58	12	121	e1.8	e1.5	32	11	9.3	47	62	1.3	0.17
11	0.48	10	87	e2.0	e1.5	27	9.8	14	125	42	1.1	0.12
12	0.48	7.0	50	e2.1	e1.4	20	9.0	15	99	23	0.96	0.08
13	0.51	4.7	34	e2.0	e1.3	19	8.7	28	69	14	0.88	0.05
14	24	4.0	24	e1.7	e1.4	19	7.8	64	49	11	0.90	0.03
15	15	2.9	18	e1.8	e1.3	17	7.3	67	30	5.2	0.92	0.13
16	8.1	2.3	15	e1.8	e1.3	16	7.4	44	18	3.6	0.90	0.48
17	5.8	2.4	13	e1.6	e1.4	17	18	32	14	2.6	3.2	0.30
18	3.8	80	11	e1.3	e1.6	17	13	151	9.5	2.0	3.9	0.11
19	3.6	58	9.4	e1.0	2.7	18	10	116	6.7	1.7	1.8	0.08
20	4.5	36	8.0	e0.93	12	19	13	109	4.7	2.1	1.8	0.07
21	2.4	27	8.1	e0.88	23	17	23	124	33	7.4	1.1	0.05
22	1.4	20	7.2	e0.86	23	15	16	274	53	9.3	0.97	0.06
23	0.52	23	8.8	e0.84	39	15	15	191	31	14	0.88	0.10
24	1.1	28	6.2	e0.85	54	28	15	129	21	4.1	3.3	0.02
25	2.9	19	5.1	e0.94	46	32	26	78	15	2.5	1.9	0.01
26	2.5	15	4.6	e1.1	42	96	20	49	10	1.8	2.4	0.07
27	1.3	12	4.6	e1.2	37	84	17	35	6.8	1.6	3.6	0.02
28	0.92	10	7.8	e1.4	34	99	14	26	4.9	1.3	32	0.00
29	0.85	8.6	9.5	e1.6	30	237	12	21	3.6	1.3	16	0.00
30	0.87	8.4	8.6	e1.4	---	113	11	159	2.8	1.3	8.7	0.00
31	1.4	---	7.7	e1.5	---	61	---	306	---	1.0	5.3	---

## ILLINOIS RIVER BASIN

**05534500 North Branch Chicago River at Deerfield, IL--Continued**

TOTAL	103.51	855.1	542.2	71.70	368.6	1897	474.0	2119.6	1019.9	364.9	137.01	16.99
MEAN	3.34	28.5	17.5	2.31	12.7	61.2	15.8	68.4	34.0	11.8	4.42	0.57
MAX	24	119	121	7.2	54	311	43	306	169	62	32	3.7
MIN	0.48	2.3	3.8	0.84	1.2	15	7.3	6.4	2.8	1.0	0.88	0.00
CFSM	0.17	1.45	0.89	0.12	0.65	3.11	0.80	3.47	1.73	0.60	0.22	0.03
IN.	0.20	1.61	1.02	0.14	0.70	3.58	0.90	4.00	1.93	0.69	0.26	0.03

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 – 2004, BY WATER YEAR (WY)**

MEAN	8.61	13.2	14.3	12.2	19.4	34.3	36.7	22.5	16.6	10.2	8.69	8.98
MAX	101	76.3	95.9	62.8	64.2	153	109	108	64.3	59.7	59.9	70.5
(WY)	2002	1986	1983	1974	1997	1979	1999	1996	1996	1982	1990	1972
MIN	0.09	0.16	0.05	0.00	0.08	3.89	6.40	2.16	0.79	0.44	0.22	0.02
(WY)	1961	1963	1963	1963	1963	1968	1986	1992	1963	1965	1966	1966

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1953 – 2004**

ANNUAL TOTAL	5666.79		7970.51			
ANNUAL MEAN	15.5		21.8		17.1	
HIGHEST ANNUAL MEAN					32.2	
LOWEST ANNUAL MEAN					2.32	
HIGHEST DAILY MEAN	261	May 11	311	Mar 5	641	Oct 14 2001
LOWEST DAILY MEAN	0.33	Sep 8,9	0.00	Sep 28–30	0.00	A
ANNUAL SEVEN-DAY MINIMUM	0.36	Sep 5	0.02	Sep 24	0.00	Oct 5 1953
MAXIMUM PEAK FLOW			386	Mar 5	933	Aug 14 1987
MAXIMUM PEAK STAGE			9.45	Mar 5, May 30	11.52	Aug 14 1987
ANNUAL RUNOFF (CFSM)	0.788		1.11		0.868	
ANNUAL RUNOFF (INCHES)	10.70		15.05		11.79	
10 PERCENT EXCEEDS	41		55		42	
50 PERCENT EXCEEDS	5.1		7.8		4.9	
90 PERCENT EXCEEDS	0.40		0.88		0.40	

A – At times in most years.

ILLINOIS RIVER BASIN  
05535000 Skokie River at Lake Forest, IL

259

**LOCATION.**— Lat 42°13'57", long 87°50'41" (NAD of 1927), in NW1/4SW1/4 sec.4, T.43 N., R.12 E., Lake County, Hydrologic Unit 07120003, on right bank at upstream side of bridge on Westleigh Road at Lake Forest and at mile 13.1.

**DRAINAGE AREA.**— 13.0 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

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

STAGE: Water years 1994 to current year.

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

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 648.75 ft above NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 580 ft<sup>3</sup>/s, Oct. 13, 2001, gage height, 7.78 ft; maximum gage height, 8.35 ft, July 22, 1982; no flow many days in 1959.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.95	1.6	3.5	4.2	e0.92	32	23	6.4	64	10	0.61	1.1
2	0.53	34	3.4	3.8	e1.0	27	18	4.6	33	8.6	0.59	0.53
3	3.3	57	3.1	e2.4	e1.1	19	15	4.1	22	24	0.97	0.37
4	2.1	49	2.6	e1.6	e1.1	32	13	3.3	18	41	13	0.29
5	1.1	62	11	e1.8	e1.1	165	11	2.6	16	18	4.6	0.27
6	1.1	32	7.5	e2.0	e1.1	81	9.8	2.2	15	14	2.4	0.22
7	0.76	19	5.0	e1.6	e1.1	43	7.7	2.2	14	13	1.3	0.23
8	0.65	14	4.2	e1.4	e1.2	31	7.3	1.9	13	11	0.92	0.12
9	0.59	12	12	e1.3	e1.2	24	6.9	2.0	13	17	0.85	0.11
10	0.62	11	81	e1.2	e1.1	20	6.3	9.0	79	59	0.95	0.12
11	0.60	10	46	e1.3	e1.3	18	5.7	8.8	92	21	0.56	0.16
12	0.68	10	27	e1.6	e1.1	15	5.5	7.3	59	11	0.72	0.11
13	0.62	9.3	18	e1.5	e1.1	13	5.1	27	34	7.4	0.52	0.12
14	21	9.2	15	e1.5	e1.2	15	4.7	53	23	5.0	0.50	0.19
15	9.9	9.0	13	e1.4	e1.1	12	4.5	36	18	3.5	0.50	0.26
16	7.0	8.3	13	e1.3	e1.2	11	4.1	22	15	2.5	0.64	1.6
17	3.6	7.7	12	e1.5	e2.8	11	13	17	15	2.4	2.3	0.64
18	2.4	66	10	e1.4	e5.0	13	5.3	134	13	1.8	1.2	0.29
19	1.5	36	9.7	e1.3	15	12	5.3	65	12	1.6	0.91	0.38
20	1.5	23	10	e1.2	41	15	8.9	33	11	1.4	0.65	0.15
21	1.7	16	7.5	e1.1	47	9.5	14	e80	46	1.8	0.66	0.13
22	1.5	12	4.5	e1.1	37	8.6	7.7	e170	32	4.0	0.71	0.29
23	1.5	17	5.4	e1.1	41	8.1	6.2	91	20	1.6	0.55	0.22
24	1.8	19	5.7	e1.0	30	29	8.3	50	19	1.1	1.6	0.22
25	7.0	12	3.3	e0.96	25	19	18	31	15	1.2	2.3	0.31
26	3.1	11	3.1	e1.0	22	83	9.0	22	13	1.1	0.83	0.20
27	4.2	10	2.6	e1.0	20	44	7.1	18	12	0.88	3.0	0.34
28	1.5	8.6	7.7	e0.99	18	82	6.2	15	12	0.78	21	0.30
29	1.9	6.7	8.3	e0.98	20	114	5.4	17	11	0.80	7.5	0.87
30	1.8	4.1	6.7	e0.95	---	54	5.8	144	11	0.73	4.3	0.53
31	1.6	---	5.6	e0.92	---	30	---	145	---	0.70	1.7	---
TOTAL	88.10	596.5	367.4	46.40	341.72	1090.2	267.8	1224.4	770	287.89	78.84	10.67
MEAN	2.84	19.9	11.9	1.50	11.8	35.2	8.93	39.5	25.7	9.29	2.54	0.36
MAX	21	66	81	4.2	47	165	23	170	92	59	21	1.6

ILLINOIS RIVER BASIN  
**05535000 Skokie River at Lake Forest, IL--Continued**

MIN	0.53	1.6	2.6	0.92	0.92	8.1	4.1	1.9	11	0.70	0.50	0.11
CFSM	0.22	1.53	0.91	0.12	0.91	2.71	0.69	3.04	1.97	0.71	0.20	0.03
IN.	0.25	1.71	1.05	0.13	0.98	3.12	0.77	3.50	2.20	0.82	0.23	0.03

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 – 2004, BY WATER YEAR (WY)**

MEAN	7.86	10.4	10.6	9.40	13.5	22.5	24.2	16.4	12.7	8.43	7.16	8.19
MAX	53.7	44.5	53.7	42.4	35.5	82.3	56.9	54.3	41.6	33.3	41.7	61.7
(WY)	2002	1986	1983	1974	1997	1979	1983	1996	1996	1993	1972	1986
MIN	0.83	0.73	1.20	0.29	0.66	4.01	5.95	2.26	0.91	1.29	1.26	0.36
(WY)	1957	2000	1959	1959	2003	1956	1986	1988	1988	1991	1955	2004

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1952 – 2004**

ANNUAL TOTAL	4074.43	5169.92	
ANNUAL MEAN	11.2	14.1	12.6
HIGHEST ANNUAL MEAN			22.2
LOWEST ANNUAL MEAN			3.54
HIGHEST DAILY MEAN	150 May 11	170 A May 22	444 Sep 27 1986
LOWEST DAILY MEAN	0.26 Sep 8	0.11 Sep 9,12	0.00 B
ANNUAL SEVEN-DAY MINIMUM	0.31 Sep 5	0.13 Sep 8	0.00 Jan 3 1959
MAXIMUM PEAK FLOW		267 May 30	580 C Oct 13 2001
MAXIMUM PEAK STAGE		5.32 May 30	8.35 D Jul 22 1982
INSTANTANEOUS LOW FLOW		0.05 Sep 8,10–13	
ANNUAL RUNOFF (CFSM)	0.859	1.09	0.969
ANNUAL RUNOFF (INCHES)	11.66	14.79	13.17
10 PERCENT EXCEEDS	29	35	28
50 PERCENT EXCEEDS	3.1	5.7	5.2
90 PERCENT EXCEEDS	0.51	0.62	1.3

A – Estimated.

B – Many days in 1959.

C – Gage height, 7.78 ft.

D – Discharge, 435 ft<sup>3</sup>/s.



**LOCATION.**— Lat 42°09'34", long 87°47'52" (NAD of 1927), 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.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: September 1967 to current year.

STAGE: Water years 1994 to current year.

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

**GAGE.**— Water-stage recorder, phone telemeter, and crest-stage gage. Datum of gage is 622.83 ft above NGVD of 1929 (city of Highland Park bench mark).

**REMARKS.**—Occasional diversion due to pumping upstream of gage.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 1,230 ft<sup>3</sup>/s, Oct. 14, 2001, gage height, 9.95 ft; no flow at times in 1988, 1989, 1991, 2000, 2002, and 2003.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Flood of July 1938 reached a stage of 10.6 ft, discharge not determined, from information furnished by Highland Park City Engineer.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	2.8	4.9	4.7	e1.9	48	26	7.9	159	11	0.79	3.3
2	1.7	68	4.6	e4.2	e1.8	43	20	4.4	67	11	0.51	2.8
3	8.6	153	4.1	e3.0	e1.9	25	16	3.4	34	37	7.8	1.5
4	6.6	103	3.9	e2.7	e1.8	46	14	2.9	16	90	45	1.5
5	2.8	145	17	e3.3	e1.8	361	12	2.3	12	33	13	1.1
6	2.0	54	11	e2.3	e2.0	161	10	2.2	10	24	7.4	1.5
7	1.9	29	8.5	e2.2	e2.2	69	8.7	2.0	9.3	20	3.8	0.87
8	1.1	20	6.6	e2.1	e2.3	37	8.3	2.2	8.5	19	2.6	0.84
9	0.85	17	17	e2.0	e2.1	25	7.2	1.5	8.8	23	1.7	0.71
10	0.97	15	162	e2.1	e2.0	20	6.5	6.6	108	120	1.6	0.73
11	1.0	14	74	e2.3	e2.1	17	5.9	12	183	48	1.6	0.26
12	1.8	13	42	e2.6	e1.8	14	5.6	13	98	24	1.4	0.17
13	1.4	12	25	e2.7	e1.7	12	5.0	30	52	13	1.2	0.43
14	47	11	21	e2.6	e1.8	15	4.3	72	40	8.9	1.1	0.42
15	17	10	17	e2.2	e1.7	11	3.9	46	21	6.3	1.1	0.83
16	9.0	9.7	16	e2.1	e3.0	10	3.6	27	16	4.6	1.1	4.2
17	5.4	9.4	14	e2.5	6.5	11	19	19	16	5.9	12	2.5
18	3.4	132	12	e2.3	14	11	6.3	192	12	4.8	5.7	1.1
19	1.7	67	11	e2.1	23	11	4.3	93	11	2.9	2.0	0.85
20	1.4	36	16	e2.0	32	12	9.8	78	10	2.7	0.71	0.68
21	1.5	24	12	e1.9	43	8.5	19	133	78	17	0.94	0.47
22	1.5	19	6.5	e1.9	32	7.3	7.7	332	61	24	0.89	0.18
23	1.3	30	6.0	e1.9	47	7.0	6.0	183	28	9.8	0.98	0.17
24	1.5	35	6.4	e1.9	48	30	7.5	80	26	3.5	5.4	0.32
25	8.4	20	5.8	e1.9	36	21	23	50	19	2.6	5.0	0.21
26	3.7	16	3.9	e1.9	30	100	10	39	13	2.0	2.6	0.23
27	3.8	14	3.1	e1.9	25	56	6.9	25	12	1.7	4.8	0.23
28	2.8	12	8.6	e1.8	22	80	6.2	20	12	1.3	50	0.23
29	1.8	10	9.8	e1.8	24	210	4.8	22	11	0.94	19	0.22

ILLINOIS RIVER BASIN  
**05535070 Skokie River near Highland Park, IL--Continued**

<b>30</b>	2.0	7.0	8.3	e1.8	---	75	5.4	198	11	0.87	9.5	0.22
<b>31</b>	2.1	---	6.2	e1.8	---	38	---	426	---	1.1	6.0	---
TOTAL	149.02	1107.9	564.2	72.5	414.4	1591.8	292.9	2125.4	1162.6	573.91	217.22	28.77
MEAN	4.81	36.9	18.2	2.34	14.3	51.3	9.76	68.6	38.8	18.5	7.01	0.96
MAX	47	153	162	4.7	48	361	26	426	183	120	50	4.2
MIN	0.85	2.8	3.1	1.8	1.7	7.0	3.6	1.5	8.5	0.87	0.51	0.17
CFSM	0.23	1.75	0.86	0.11	0.68	2.43	0.46	3.25	1.84	0.88	0.33	0.05
IN.	0.26	1.95	0.99	0.13	0.73	2.81	0.52	3.75	2.05	1.01	0.38	0.05

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 – 2004, BY WATER YEAR (WY)**

MEAN	14.9	18.3	18.4	15.9	24.2	35.4	38.4	28.1	22.7	16.8	16.8	16.2
MAX	129	69.9	79.3	60.3	71.0	119	118	90.5	64.4	55.0	69.7	98.0
(WY)	2002	1986	1983	1999	1997	1979	1999	1996	1969	1969	1987	1986
MIN	2.01	1.24	2.53	1.61	0.85	8.24	7.63	3.48	1.92	1.31	3.40	0.96
(WY)	1989	2000	1977	2003	2003	2000	1989	1992	1988	1991	1991	2004

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1967 – 2004**

ANNUAL TOTAL	6915.24	8300.62	
ANNUAL MEAN	18.9	22.7	22.2
HIGHEST ANNUAL MEAN			33.2 1993
LOWEST ANNUAL MEAN			7.83 1977
HIGHEST DAILY MEAN	312 May 11	426 May 31	990 Oct 14 2001
LOWEST DAILY MEAN	0.01 Sep 10	0.17 Sep 12,23	0.00 A
ANNUAL SEVEN-DAY MINIMUM	0.16 Sep 6	0.22 Sep 22	0.00 Jun 14 1988
MAXIMUM PEAK FLOW		536 May 31	1230 Oct 14 2001
MAXIMUM PEAK STAGE		8.02 May 31	9.95 Oct 14 2001
INSTANTANEOUS LOW FLOW		0.11 Sep 13,23	
ANNUAL RUNOFF (CFSM)	0.898	1.07	1.05
ANNUAL RUNOFF (INCHES)	12.19	14.63	14.27
10 PERCENT EXCEEDS	45	53	48
50 PERCENT EXCEEDS	5.7	7.6	9.2
90 PERCENT EXCEEDS	0.68	1.1	2.0

A – At times in 1988, 1989, 1991, 2000, 2002 and 2003.

ILLINOIS RIVER BASIN  
**05535500 West Fk Of N Br Chicago River at Northbrook, IL**

263

**LOCATION.**— Lat 42°08'18", long 87°50'04" (NAD of 1927), 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.**—

SURFACE—WATER DISCHARGE AND STAGE

DISCHARGE: August 1952 to current year.

STAGE: Water years 1994 to current year.

**GAGE.**— Water—stage recorder, and phone telemeter. Datum of gage is 637.98 ft above NGVD of 1929 (Cook County Highway Department bench mark).

**REMARKS.**— Effluent from sewage—treatment plant 1.7 mi upstream.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE: Maximum discharge, 1,190 ft<sup>3</sup>/s, Aug. 14, 1987, gage height, 10.10 ft; no flow at times in several years.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor. Effluent from sewage—treatment plant averaged about 4.8 ft<sup>3</sup>/s.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	6.1	9.0	e6.1	e4.2	33	20	11	58	5.4	5.0	4.4
2	3.2	63	8.7	e6.2	4.3	36	18	8.3	27	5.5	5.3	4.1
3	13	130	7.9	e6.2	5.7	21	16	8.2	18	40	22	3.8
4	6.3	87	7.8	e6.3	5.4	46	15	8.6	20	53	71	3.7
5	4.2	86	21	e6.4	4.8	167	14	7.8	14	15	12	3.9
6	3.9	26	12	e6.0	5.8	62	12	7.5	13	11	7.2	4.3
7	3.7	18	10	e5.6	6.2	31	8.5	6.7	37	8.9	5.0	4.5
8	3.8	13	9.6	e5.4	6.0	30	7.9	6.5	52	8.2	4.6	4.2
9	3.7	11	23	5.5	5.5	20	7.5	7.0	37	12	4.7	3.8
10	4.2	11	103	5.5	5.2	16	6.9	8.3	69	46	4.0	3.9
11	4.6	9.9	42	5.6	5.7	14	6.5	11	71	13	3.9	3.5
12	6.7	9.7	20	e5.6	5.0	12	6.3	9.4	31	11	8.0	3.5
13	5.9	11	14	e5.6	4.7	9.5	6.4	18	16	11	3.4	4.4
14	44	8.7	12	e5.5	4.7	13	6.1	55	26	6.5	3.3	3.7
15	13	8.2	10	e5.4	4.8	15	6.1	37	14	6.1	3.2	5.6
16	9.0	7.9	9.8	e5.2	4.7	16	5.8	17	9.2	5.4	3.3	6.0
17	6.2	11	9.3	e5.6	4.9	23	13	12	9.6	5.2	6.2	e4.4
18	5.9	107	8.7	e5.6	5.4	18	7.8	96	7.1	4.9	5.1	e4.2
19	5.1	42	7.7	5.6	8.2	21	6.7	40	6.1	5.1	4.3	e4.2
20	6.0	24	6.7	4.8	26	16	15	79	5.7	6.2	3.8	e4.3
21	5.8	16	6.6	4.7	24	15	20	144	43	17	3.4	4.4
22	5.0	13	6.8	4.7	22	14	10	151	23	13	3.5	4.0
23	4.7	29	6.8	4.5	31	14	8.0	64	12	17	3.5	4.3
24	5.5	25	6.4	4.2	32	32	10	34	11	8.3	8.8	4.3
25	10	16	5.6	4.4	25	22	24	32	8.0	6.3	5.8	4.2
26	5.2	12	5.7	4.5	22	65	13	22	6.4	6.3	4.6	4.4
27	5.6	11	5.5	4.6	19	37	9.6	12	5.6	5.8	7.8	4.2
28	5.2	9.7	10	e4.3	17	70	8.7	8.7	5.7	4.9	42	4.5
29	4.1	9.2	e8.0	e4.2	17	93	8.1	8.7	5.4	4.4	11	4.7
30	5.2	8.4	e7.5	e4.2	---	47	8.8	130	5.3	5.1	6.4	4.5
31	4.7	---	e6.4	e4.2	---	31	---	108	---	4.8	5.1	---
TOTAL	216.7	839.8	427.5	162.2	336.2	1059.5	325.7	1168.7	666.1	372.3	287.2	127.9
MEAN	6.99	28.0	13.8	5.23	11.6	34.2	10.9	37.7	22.2	12.0	9.26	4.26

## ILLINOIS RIVER BASIN

**05535500 West Fk Of N Br Chicago River at Northbrook, IL--Continued**

MAX	44	130	103	6.4	32	167	24	151	71	53	71	6.0
MIN	3.2	6.1	5.5	4.2	4.2	9.5	5.8	6.5	5.3	4.4	3.2	3.5
CFSM	0.61	2.43	1.20	0.45	1.01	2.97	0.94	3.28	1.93	1.04	0.81	0.37
IN.	0.70	2.72	1.38	0.52	1.09	3.43	1.05	3.78	2.15	1.20	0.93	0.41

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 – 2004, BY WATER YEAR (WY)**

MEAN	9.24	11.3	11.8	9.75	14.2	22.9	24.9	17.4	14.6	11.3	11.0	10.3
MAX	59.4	40.4	51.2	40.0	43.2	86.6	57.3	67.3	41.6	59.2	57.5	50.0
(WY)	2002	1986	1983	1974	1997	1979	1983	1996	1978	1982	1987	1986
MIN	0.24	0.34	0.54	0.38	1.04	3.01	6.58	4.61	1.51	0.50	0.47	0.24
(WY)	1954	1957	1954	1954	1963	1956	1953	1953	1956	1956	1955	1952

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1952 – 2004**

ANNUAL TOTAL	5161.0		5989.8			
ANNUAL MEAN	14.1		16.4		14.1	
HIGHEST ANNUAL MEAN					22.5	
LOWEST ANNUAL MEAN					2.96	
HIGHEST DAILY MEAN	144	May 1	167	Mar 5	753	Aug 14 1987
LOWEST DAILY MEAN	2.1	A	3.2	B	0.00	C
ANNUAL SEVEN-DAY MINIMUM	2.4	Aug 19	3.9	Sep 8	0.00	Oct 27 1956
MAXIMUM PEAK FLOW			560	May 20	1190	Aug 14 1987
MAXIMUM PEAK STAGE			7.28	May 20	10.10	Aug 14 1987
INSTANTANEOUS LOW FLOW			1.4	Oct 3		
ANNUAL RUNOFF (CFSM)	1.23		1.42		1.22	
ANNUAL RUNOFF (INCHES)	16.69		19.38		16.61	
10 PERCENT EXCEEDS	30		37		30	
50 PERCENT EXCEEDS	6.6		7.9		6.2	
90 PERCENT EXCEEDS	3.0		4.2		2.0	

A – Aug. 25, estimated, Sept. 25.

B – Oct. 2, Aug. 15.

C – At times in several years.

**LOCATION.**— Lat 42°00'44", long 87°47'44" (NAD of 1927), 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.**—

**SURFACE–WATER DISCHARGE AND STAGE**

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

STAGE: Water years 1994 to current year.

**SURFACE–WATER QUALITY**

CHEMICAL: Water years 1978 to 1991. Additional chemical data for water years 1972–77 are published in Water–Resources Investigations 78–22 and 79–23 as site HCC 07.

SEDIMENT: October 1984 to September 1986.

**BIOLOGICAL**

ALGAE: Pigment and biomass, Water years 1989 and 1990.

**REVISED RECORDS.**— WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder and phone telemeter. Datum of gage is 601.99 ft above NGVD of 1929.

**REMARKS.**— Diurnal fluctuation at low flow caused by sewage–treatment plants.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Maximum discharge, 2,590 ft<sup>3</sup>/s, Aug. 14, 1987, gage height, 11.35 ft; minimum daily discharge, .10 ft<sup>3</sup>/s, Sept. 30, 1953.

SUSPENDED–SEDIMENT CONCENTRATIONS: Maximum daily mean, 285 mg/L July 15, 1985; minimum daily mean, 2 mg/L Jan. 23 to Feb. 21, 1985, and Jan. 30–31, 1986.

SUSPENDED–SEDIMENT LOADS: Maximum daily, 566 tons July 8, 1986; minimum daily, 0.14 ton Jan. 29, Jan. 31 to Feb. 4, Feb. 6–11, 15–19, 1985.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	26	55	45	46	201	199	47	672	36	22	46
2	25	102	50	43	47	275	160	45	489	30	21	40
3	44	500	38	49	56	199	128	40	253	116	57	40
4	63	400	33	45	56	203	104	34	187	234	390	36
5	36	471	88	51	53	751	87	30	164	125	141	31
6	28	293	67	52	57	703	77	41	132	77	60	26
7	27	154	51	67	58	462	64	34	116	60	51	27
8	25	111	44	41	49	355	52	30	136	50	43	25
9	24	82	51	38	41	288	46	30	142	60	38	24
10	23	72	338	35	37	216	40	46	374	475	35	24
11	23	67	443	34	31	174	31	55	569	211	31	24
12	21	59	250	38	31	150	28	65	509	125	28	25
13	22	49	167	41	29	132	28	151	336	100	30	22
14	180	43	137	40	29	138	25	264	243	83	26	25
15	164	42	112	37	26	122	21	300	194	66	23	26
16	66	40	97	35	31	120	23	163	143	60	23	34
17	49	39	84	e34	26	118	52	114	113	53	33	28
18	39	279	74	e33	24	124	50	361	92	46	43	23
19	33	340	64	e35	35	115	38	375	82	44	50	21
20	31	158	52	e34	86	116	50	327	70	41	25	20
21	31	111	49	33	161	89	104	662	151	52	19	23
22	28	78	49	33	137	78	71	967	214	85	22	21
23	25	95	49	31	158	77	51	986	144	67	20	20

## ILLINOIS RIVER BASIN

**05536000 North Branch Chicago River at Niles, IL--Continued**

<b>24</b>	24	172	48	34	207	151	55	659	103	64	170	20
<b>25</b>	54	143	43	34	219	174	122	488	86	47	117	18
<b>26</b>	39	118	38	36	198	299	85	317	64	45	49	16
<b>27</b>	29	104	37	40	176	340	65	207	56	32	65	18
<b>28</b>	31	91	47	41	153	293	52	160	50	28	365	19
<b>29</b>	29	79	52	42	146	507	46	130	44	26	152	20
<b>30</b>	27	67	49	43	---	409	44	363	40	28	84	20
<b>31</b>	26	---	49	45	---	287	---	767	---	27	59	---
TOTAL	1292	4385	2805	1239	2403	7666	1998	8258	5968	2593	2292	762
MEAN	41.7	146	90.5	40.0	82.9	247	66.6	266	199	83.6	73.9	25.4
MAX	180	500	443	67	219	751	199	986	672	475	390	46
MIN	21	26	33	31	24	77	21	30	40	26	19	16
CFSM	0.42	1.46	0.90	0.40	0.83	2.47	0.67	2.66	1.99	0.84	0.74	0.25
IN.	0.48	1.63	1.04	0.46	0.89	2.85	0.74	3.07	2.22	0.96	0.85	0.28

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 – 2004, BY WATER YEAR (WY)**

MEAN	68.5	80.2	81.7	76.3	107	169	188	136	108	80.6	79.6	69.6
MAX	472	349	381	239	358	582	496	445	339	290	401	315
(WY)	2002	1986	1983	1974	1997	1979	1999	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 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1951 – 2004**

ANNUAL TOTAL	35757		41661		103	
ANNUAL MEAN	98.0		114		171	
HIGHEST ANNUAL MEAN					1993	
LOWEST ANNUAL MEAN					28.0	
HIGHEST DAILY MEAN	1040	May 1	986	May 23	2030	Aug 15 1987
LOWEST DAILY MEAN	18	Aug 24	16	Sep 26	0.10	Sep 30 1953
ANNUAL SEVEN-DAY MINIMUM	20	Aug 19	19	Sep 23	1.3	Oct 9 1952
MAXIMUM PEAK FLOW			1130	May 23	2590	Aug 14 1987
MAXIMUM PEAK STAGE			7.79	May 23	11.35	Aug 14 1987
INSTANTANEOUS LOW FLOW			13	Sep 26		
ANNUAL RUNOFF (CFSM)	0.980		1.14		1.03	
ANNUAL RUNOFF (INCHES)	13.30		15.50		14.06	
10 PERCENT EXCEEDS	237		293		249	
50 PERCENT EXCEEDS	45		52		48	
90 PERCENT EXCEEDS	23		25		13	

**05536105 Nb Chicago River at Albany Avenue at Chicago, IL**

**LOCATION.**— Lat 41°58'27", long 87°42'22" (NAD of 1927), 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.**—**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1989 to September 1998; June 2000 to current year.

STAGE: October 1994 to September 1998, June 2000 to current year.

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 580.67 ft above NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 2,360 ft<sup>3</sup>/s, Feb. 21, 1997, gage height 6.81 ft; minimum discharge, 3.6 ft<sup>3</sup>/s, Aug. 5, 1993.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	23	63	43	e50	162	245	79	737	69	37	48
2	27	69	56	40	e55	266	198	79	585	63	34	39
3	36	438	46	43	e58	203	163	68	342	152	38	40
4	61	504	40	45	e60	173	132	66	241	292	455	37
5	39	615	94	46	e58	744	113	55	212	199	220	33
6	30	448	84	37	e60	799	102	62	177	117	80	30
7	28	213	56	68	e62	557	89	57	154	98	62	30
8	27	147	49	72	e54	399	78	47	171	83	56	30
9	25	101	50	52	e48	285	73	44	178	92	50	27
10	25	85	314	46	e41	212	69	50	409	429	46	26
11	26	78	509	e42	e34	168	61	71	653	318	42	27
12	23	75	317	39	e29	141	57	60	615	152	41	29
13	25	62	193	e37	e28	122	57	156	430	114	43	26
14	169	51	147	39	e27	121	58	261	319	97	40	26
15	193	50	111	38	e29	111	52	347	253	77	37	27
16	70	50	89	e37	e33	102	56	198	191	72	35	35
17	49	48	73	36	e31	99	78	130	155	66	47	33
18	43	337	64	e36	65	104	87	327	128	58	50	29
19	38	472	56	e36	88	97	74	445	116	54	79	26
20	34	237	49	e37	136	95	74	333	101	52	46	25
21	34	155	50	e36	237	75	138	575	168	49	37	27
22	33	103	44	e34	135	64	112	894	270	99	38	26
23	32	116	43	e34	140	62	87	988	202	76	36	24
24	31	231	42	e35	196	100	85	729	144	76	157	24
25	53	189	39	e38	214	144	158	559	123	60	200	22
26	43	153	36	e41	191	225	128	380	100	56	70	19
27	31	128	35	e45	169	325	103	240	85	48	80	20
28	28	114	43	e46	147	272	90	187	81	41	561	21
29	26	95	48	e47	137	530	83	153	75	42	227	21
30	25	77	46	e48	---	533	79	368	70	42	87	20
31	23	---	46	e49	---	361	---	741	---	40	60	---
TOTAL	1355	5464	2932	1322	2612	7651	2979	8749	7485	3283	3091	847
MEAN	43.7	182	94.6	42.6	90.1	247	99.3	282	250	106	99.7	28.2
MAX	193	615	509	72	237	799	245	988	737	429	561	48
MIN	23	23	35	34	27	62	52	44	70	40	34	19
CFSM	0.39	1.61	0.84	0.38	0.80	2.18	0.88	2.50	2.21	0.94	0.88	0.25

**05536105 Nb Chicago River at Albany Avenue at Chicago, IL--Continued**

IN.	0.45	1.80	0.97	0.44	0.86	2.52	0.98	2.88	2.46	1.08	1.02	0.28
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e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 – 2004, BY WATER YEAR (WY)**

MEAN	108	125	86.6	102	147	184	189	217	156	102	123	85.1
MAX	488	266	175	280	394	288	514	446	332	189	342	247
(WY)	2002	1991	1992	1993	1997	1993	1993	1996	1996	1993	1990	2001
MIN	38.7	38.3	31.3	28.7	31.7	62.7	84.1	45.0	46.0	33.0	44.6	24.1
(WY)	1995	2003	1990	2003	2003	2003	1994	1992	1992	2002	2003	1994

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1990 – 2004**

ANNUAL TOTAL	38081	47770	
ANNUAL MEAN	104	131	135
HIGHEST ANNUAL MEAN			201 1993
LOWEST ANNUAL MEAN			90.0 2003
HIGHEST DAILY MEAN	994 May 1	988 May 23	1990 Feb 22 1997
LOWEST DAILY MEAN	17 Sep 12	19 Sep 26	11 Oct 11 1992
ANNUAL SEVEN-DAY MINIMUM	19 Sep 6	21 Sep 24	14 Sep 16 1994
MAXIMUM PEAK FLOW		1030 May 23	2360 Feb 21 1997
MAXIMUM PEAK STAGE		5.12 May 23	6.81 Feb 21 1997
INSTANTANEOUS LOW FLOW		17 Sep 26	3.6 A
ANNUAL RUNOFF (CFSM)	0.923	1.16	1.19
ANNUAL RUNOFF (INCHES)	12.54	15.73	16.20
10 PERCENT EXCEEDS	278	326	319
50 PERCENT EXCEEDS	48	68	69
90 PERCENT EXCEEDS	24	29	28

A – Aug. 5, 6, 1993.



**LOCATION.**— Lat 41°53'30", long 87°38'30" (NAD of 1927), in NW1/4SW1/4 sec.12, T.40 N., R.13 E., Cook County, Hydrologic Unit 07120003, on right upstream side of Grand Avenue bridge in Chicago, 0.6 mi upstream from the confluence with the main stem of the Chicago River and at mile 36.0.

**DRAINAGE AREA.**— 180 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: July 2, 2002 to current year.

SURFACE-WATER QUALITY

PHYSICAL AND CHEMICAL: Water years 2002 to current year.

WATER TEMPERATURE: September 2002 to current year.

**GAGE.**— Water-stage recorder, acoustic velocity meter and water-temperature sensor. Datum of gage is 579.48 ft above NGVD of 1929 (Chicago City datum).

**REMARKS.**— This station provides data for a water-quality model.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum daily discharge, 4,430 ft<sup>3</sup>/s, Aug. 22, 2002, minimum daily discharge, -20 ft<sup>3</sup>/s, Jan. 31, 2004, due to regulation.

WATER TEMPERATURE: Maximum recorded, 25.6°C, Aug. 27, 2003; minimum recorded, 0.5°C, Jan. 31, 2004.

**REMARKS FOR CURRENT YEAR.**— Records poor.

**EXTREMES FOR CURRENT YEAR.**— Maximum daily discharge, 4,430 ft<sup>3</sup>/s, Aug. 22, minimum daily discharge, 166 ft<sup>3</sup>/s, Sept. 15.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	482	e561
2	---	---	---	---	---	---	---	---	---	e465	555	801
3	---	---	---	---	---	---	---	---	---	519	460	904
4	---	---	---	---	---	---	---	---	---	502	537	706
5	---	---	---	---	---	---	---	---	---	551	563	538
6	---	---	---	---	---	---	---	---	---	471	570	531
7	---	---	---	---	---	---	---	---	---	512	525	531
8	---	---	---	---	---	---	---	---	---	500	507	558
9	---	---	---	---	---	---	---	---	---	1250	509	529
10	---	---	---	---	---	---	---	---	---	625	468	419
11	---	---	---	---	---	---	---	---	---	510	442	401
12	---	---	---	---	---	---	---	---	---	535	479	263
13	---	---	---	---	---	---	---	---	---	479	619	194
14	---	---	---	---	---	---	---	---	---	485	990	210
15	---	---	---	---	---	---	---	---	---	543	713	166
16	---	---	---	---	---	---	---	---	---	496	593	179
17	---	---	---	---	---	---	---	---	---	540	438	e218
18	---	---	---	---	---	---	---	---	---	536	450	386
19	---	---	---	---	---	---	---	---	---	552	535	499
20	---	---	---	---	---	---	---	---	---	450	e524	565
21	---	---	---	---	---	---	---	---	---	454	492	545
22	---	---	---	---	---	---	---	---	---	520	4430	687
23	---	---	---	---	---	---	---	---	---	501	2530	497
24	---	---	---	---	---	---	---	---	---	502	1440	434
25	---	---	---	---	---	---	---	---	---	514	923	423
26	---	---	---	---	---	---	---	---	---	506	879	447
27	---	---	---	---	---	---	---	---	---	514	850	374
28	---	---	---	---	---	---	---	---	---	507	848	409
29	---	---	---	---	---	---	---	---	---	510	750	517

ILLINOIS RIVER BASIN  
05536118 N.B. Chicago River at Grand Ave at Chicago, Il--Continued

30	---	---	---	---	---	---	---	---	---	509	648	479
31	---	---	---	---	---	---	---	---	---	473	e660	---
TOTAL	---	---	---	---	---	---	---	---	---	---	25409	13971
MEAN	---	---	---	---	---	---	---	---	---	---	820	466
MAX	---	---	---	---	---	---	---	---	---	---	4430	904
MIN	---	---	---	---	---	---	---	---	---	---	438	166
CFSM	---	---	---	---	---	---	---	---	---	---	4.57	2.60
IN.	---	---	---	---	---	---	---	---	---	---	5.27	2.90

e Estimated

**LOCATION.**— Lat 41°53'30", long 87°38'30" (NAD of 1927), in NW1/4SW1/4 sec.12, T.40 N., R.13 E., Cook County, Hydrologic Unit 07120003, on right upstream side of Grand Avenue bridge in Chicago, 0.6 mi upstream from the confluence with the main stem of the Chicago River and at mile 36.0.

**DRAINAGE AREA.**— 180 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: July 2, 2002 to current year.

SURFACE-WATER QUALITY

PHYSICAL AND CHEMICAL: Water years 2002 to current year.

WATER TEMPERATURE: September 2002 to current year.

**GAGE.**— Water-stage recorder, acoustic velocity meter and water-temperature sensor. Datum of gage is 579.48 ft above NGVD of 1929 (Chicago City datum).

**REMARKS.**— This station provides data for a water-quality model.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum daily discharge, 4,430 ft<sup>3</sup>/s, Aug. 22, 2002, minimum daily discharge, -20 ft<sup>3</sup>/s, Jan. 31, 2004, due to regulation.

WATER TEMPERATURE: Maximum recorded, 25.6°C, Aug. 27, 2003; minimum recorded, 0.5°C, Jan. 31, 2004.

**REMARKS FOR CURRENT YEAR.**— Records poor.

**EXTREMES FOR CURRENT YEAR.**— Maximum daily recorded discharge, 2,590 ft<sup>3</sup>/s, May 1, minimum daily recorded discharge, 133 ft<sup>3</sup>/s, Mar. 8.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	441	e316	297	347	324	348	402	2590	640	---	---	680
2	566	e334	374	321	393	307	368	1820	543	---	---	565
3	421	323	359	369	242	280	452	1150	471	---	---	570
4	877	318	312	364	352	353	1350	1190	418	---	---	401
5	648	377	326	355	345	308	1290	1990	439	---	---	561
6	513	313	164	308	368	253	856	1420	488	---	---	318
7	450	301	278	324	359	302	687	1040	405	---	---	279
8	371	293	335	347	330	133	730	855	e653	---	---	480
9	428	320	314	405	238	285	698	2370	---	---	---	454
10	464	342	394	299	196	360	718	1710	---	---	---	376
11	506	364	372	382	303	311	624	1900	---	---	---	444
12	372	362	328	283	280	322	507	1350	---	---	---	453
13	407	449	376	314	324	381	503	1250	---	---	---	342
14	298	335	365	308	303	351	502	1140	---	---	---	583
15	350	426	349	353	247	375	433	984	---	---	---	543
16	424	416	320	420	297	404	451	820	---	---	---	436
17	348	391	361	335	288	477	393	669	---	---	---	446
18	413	342	1000	294	279	388	375	638	---	---	---	452
19	333	477	790	321	332	419	459	756	---	---	---	518
20	307	403	534	259	268	515	493	593	---	---	---	488
21	338	418	388	316	323	546	412	652	---	---	---	558
22	329	415	375	289	294	490	451	479	---	---	---	528
23	357	337	360	345	307	402	393	494	---	---	---	598
24	361	358	348	290	277	401	374	579	---	---	---	464
25	473	385	308	250	306	464	373	388	---	---	---	442
26	315	370	303	254	340	410	336	567	---	---	---	481
27	302	322	373	258	256	397	346	445	---	---	e464	452
28	299	281	314	284	334	567	359	724	---	---	527	384
29	297	368	311	315	---	545	344	638	---	---	434	396

## ILLINOIS RIVER BASIN

**05536118 N.B. Chicago River at Grand Ave at Chicago, Il--Continued**

<b>30</b>	338	364	427	303	---	430	901	626	---	---	566	309
<b>31</b>	320	---	398	346	---	423	---	555	---	---	545	---
TOTAL	12666	10820	11853	9958	8505	11947	16580	32382	---	---	---	14001
MEAN	409	361	382	321	304	385	553	1045	---	---	---	467
MAX	877	477	1000	420	393	567	1350	2590	---	---	---	680
MIN	297	281	164	250	196	133	336	388	---	---	---	279
CFSM	2.28	2.01	2.13	1.79	1.69	2.15	3.08	5.82	---	---	---	2.60
IN.	2.63	2.24	2.46	2.06	1.76	2.48	3.44	6.71	---	---	---	2.90

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 – 2003, BY WATER YEAR (WY)**

MEAN	409	361	382	321	304	385	553	1045	---	---	820	466
MAX	409	361	382	321	304	385	553	1045	---	---	820	467
(WY)	2003	2003	2003	2003	2003	2003	2003	2003	---	---	2002	2003
MIN	409	361	382	321	304	385	553	1045	---	---	820	466
(WY)	2003	2003	2003	2003	2003	2003	2003	2003	---	---	2002	2002

**LOCATION.**— Lat 41°53'30", long 87°38'30" (NAD of 1927), in NW1/4SW1/4 sec.12, T.40 N., R.13 E., Cook County, Hydrologic Unit 07120003, on right upstream side of Grand Avenue bridge in Chicago, 0.6 mi upstream from the confluence with the main stem of the Chicago River and at mile 36.0.

**DRAINAGE AREA.**— 180 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: July 2, 2002 to current year.

SURFACE-WATER QUALITY

PHYSICAL AND CHEMICAL: Water years 2002 to current year.

WATER TEMPERATURE: September 2002 to current year.

**GAGE.**— Water-stage recorder, acoustic velocity meter and water-temperature sensor. Datum of gage is 579.48 ft above NGVD of 1929 (Chicago City datum).

**REMARKS.**— This station provides data for a water-quality model.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum daily discharge, 4,430 ft<sup>3</sup>/s, Aug. 22, 2002, minimum daily discharge, -20 ft<sup>3</sup>/s, Jan. 31, 2004, due to regulation.

WATER TEMPERATURE: Maximum recorded, 25.6°C, Aug. 27, 2003; minimum recorded, 0.5°C, Jan. 31, 2004.

**REMARKS FOR CURRENT YEAR.**— Records poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	344	323	418	344	172	645	617	376	1250	602	542	634
2	315	632	364	336	189	692	603	397	915	556	618	595
3	470	1210	321	339	394	574	484	402	816	918	648	600
4	352	1550	427	281	324	804	459	325	633	892	1260	575
5	394	1670	548	371	136	2000	473	373	725	724	885	591
6	326	893	377	421	235	1220	528	366	580	612	666	543
7	327	651	400	35	200	1050	404	369	638	642	656	545
8	363	398	402	67	187	697	487	387	623	666	668	597
9	361	447	478	319	299	613	410	347	630	709	581	602
10	357	474	973	290	333	665	395	445	1250	903	633	648
11	392	398	985	324	276	536	379	467	1840	871	596	577
12	331	497	658	359	344	442	426	527	1430	699	605	528
13	339	345	429	406	343	432	346	714	790	624	640	593
14	842	436	518	337	291	610	446	847	909	609	625	551
15	594	323	421	376	258	457	376	741	751	673	589	573
16	460	368	492	328	335	434	405	565	694	594	601	423
17	332	476	401	339	324	494	524	559	526	620	580	366
18	315	1520	431	331	358	519	378	788	680	647	565	317
19	326	922	364	259	376	442	429	840	536	631	609	285
20	407	700	344	108	641	599	519	858	605	598	480	360
21	305	517	395	322	570	418	518	1270	753	497	606	382
22	348	437	337	331	456	435	390	1780	712	656	503	325
23	297	633	326	302	485	379	478	1820	565	572	614	425
24	444	764	306	251	563	671	373	1310	574	624	848	363
25	413	596	302	397	548	610	552	1040	562	553	806	290
26	358	418	329	236	528	820	463	816	630	642	470	345
27	338	448	296	272	486	751	375	677	610	567	783	343
28	392	494	373	246	495	775	381	572	504	641	2760	295
29	295	457	372	261	429	1100	396	502	595	614	777	347
30	311	398	324	136	---	1090	376	1470	608	460	753	322

## ILLINOIS RIVER BASIN

**05536118 N.B. Chicago River at Grand Ave at Chicago, Il--Continued**

<b>31</b>	289	---	319	-20	---	710	---	1610	---	582	691	---
TOTAL	11737	19395	13430	8704	10575	21684	13390	23560	22934	20198	22658	13940
MEAN	379	646	433	281	365	699	446	760	764	652	731	465
MAX	842	1670	985	421	641	2000	617	1820	1840	918	2760	648
MIN	289	323	296	-20	136	379	346	325	504	460	470	285
CFSM	2.11	3.60	2.41	1.56	2.03	3.90	2.49	4.24	4.26	3.63	4.07	2.59
IN.	2.43	4.02	2.78	1.80	2.19	4.50	2.78	4.88	4.75	4.19	4.70	2.89

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)**

MEAN	394	504	408	301	335	542	500	902	764	652	775	466
MAX	409	646	433	321	365	699	553	1045	764	652	820	467
(WY)	2003	2004	2004	2003	2004	2004	2003	2003	2004	2004	2002	2003
MIN	379	361	382	281	304	385	446	760	764	652	731	465
(WY)	2004	2003	2003	2004	2003	2003	2004	2004	2004	2004	2004	2004

**SUMMARY STATISTICS****FOR 2004 WATER YEAR****WATER YEARS 2002 - 2004**

ANNUAL TOTAL	202205		
ANNUAL MEAN	552		
HIGHEST DAILY MEAN	2760 Aug 28	4430 Aug 22 2002	
LOWEST DAILY MEAN	-20 Jan 31	-20 Jan 31 2004	
ANNUAL SEVEN-DAY MINIMUM	179 Jan 27	179 Jan 27 2004	
MAXIMUM PEAK FLOW	7550 Aug 28	14100 Aug 22 2002	

**LOCATION.**— Lat 41°53'30", long 87°38'30" (NAD of 1927), in NW1/4SW1/4 sec.12, T.40 N., R.13 E., Cook County, Hydrologic Unit 07120003, on right upstream side of Grand Avenue bridge in Chicago, 0.6 mi upstream from the confluence with the main stem of the Chicago River and at mile 36.0.

**DRAINAGE AREA.**— 180 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: July 2, 2002 to current year.

SURFACE-WATER QUALITY

PHYSICAL AND CHEMICAL: Water years 2002 to current year.

WATER TEMPERATURE: September 2002 to current year.

**GAGE.**— Water-stage recorder, acoustic velocity meter and water-temperature sensor. Datum of gage is 579.48 ft above NGVD of 1929 (Chicago City datum).

**REMARKS.**— This station provides data for a water-quality model.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum daily discharge, 4,430 ft<sup>3</sup>/s, Aug. 22, 2002, minimum daily discharge, -20 ft<sup>3</sup>/s, Jan. 31, 2004, due to regulation.

WATER TEMPERATURE: Maximum recorded, 25.6°C, Aug. 27, 2003; minimum recorded, 0.5°C, Jan. 31, 2004.

**SURFACE-WATER QUALITY**

Date	Time	Depth (in ft)	Sample location, (ft from L bank)	Temper- ature water, deg C (00010)	Specific conduct- ance, uS/cm (00095)	Sample location (ft from L bank)	Temper- ature water deg C (00010)	Specific conduct- ance, uS/cm (00095)	Sample location (ft from L bank)	Temper- ature water deg C (00010)	Specific conduct- ance, uS/cm (00095)
SEP 2002											
11...	1410	0	40	24.1	619	80	24.0	621	120	24.0	621
		2	40	24.1	619	80	24.0	621	120	24.0	621
		4	40	24.1	619	80	24.0	620	120	24.0	621
		6	40	24.1	619	80	24.0	621	120	24.0	621
		8	40	24.0	619	80	24.0	621	120	24.0	622
		10	40	24.0	620	80	24.0	621	120	24.0	621
		12	40	24.0	620	80	24.0	621	120	24.0	622
		14		—	—	80	24.0	621	120	24.0	622
		16		—	—	80	24.0	620	120	24.0	621
		18		—	—		—	—	120	24.0	621
		20		—	—		—	—	—	23.9	621

ILLINOIS RIVER BASIN  
**05536118 N.B. Chicago River at Grand Ave at Chicago, IL**

**LOCATION.**— Lat 41°53'30", long 87°38'30" (NAD of 1927), in NW1/4SW1/4 sec.12, T.40 N., R.13 E., Cook County, Hydrologic Unit 07120003, on right upstream side of Grand Avenue bridge in Chicago, 0.6 mi upstream from the confluence with the main stem of the Chicago River and at mile 36.0.

**DRAINAGE AREA.**— 180 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: July 2, 2002 to current year.

SURFACE-WATER QUALITY

PHYSICAL AND CHEMICAL: Water years 2002 to current year.

WATER TEMPERATURE: September 2002 to current year.

**GAGE.**— Water-stage recorder, acoustic velocity meter and water-temperature sensor. Datum of gage is 579.48 ft above NGVD of 1929 (Chicago City datum).

**REMARKS.**— This station provides data for a water-quality model.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum daily discharge, 4,430 ft<sup>3</sup>/s, Aug. 22, 2002, minimum daily discharge, -20 ft<sup>3</sup>/s, Jan. 31, 2004, due to regulation.

WATER TEMPERATURE: Maximum recorded, 25.6°C, Aug. 27, 2003; minimum recorded, 0.5°C, Jan. 31, 2004.

**SURFACE-WATER QUALITY DATA**

Date	Time	Depth (in ft)	Sample location, (ft from L bank)	Temper- ature water, deg C (00010)	Specific conduct- ance, uS/cm (00095)	Sample location (ft from L bank)	Temper- ature water deg C (00010)	Specific conduct- ance, uS/cm (00095)	Sample location (ft from L bank)	Temper- ature water deg C (00010)	Specific conduct- ance, uS/cm (00095)
NOV 2002											
06...	1010	0	40	12.9	707	80	12.9	707	120	12.9	707
		2	40	12.9	707	80	12.9	707	120	12.9	707
		4	40	12.9	707	80	12.9	707	120	12.9	707
		6	40	12.9	707	80	12.9	707	120	12.9	706
		8	40	12.9	707	80	12.9	707	120	12.9	706
		10	40	12.9	707	80	12.9	707	120	12.9	707
		12	40	12.9	707	80	12.9	707	120	12.9	708
		14	40	12.8	705	80	12.9	708	120	12.9	707
		16	40	12.8	705	80	12.9	707	120	12.9	708
		18		—	—		12.9	708	120	12.9	707
		20		—	—		—	—	—	—	—
MAY 2003											
06...	1250	0	40	13.3	873	80	13.4	874	120	13.4	871
		2	40	13.4	872	80	13.4	873	120	13.5	870
		4	40	13.4	872	80	13.3	873	120	13.4	871
		6	40	13.4	871	80	13.3	873	120	13.3	871
		8	40	13.3	871	80	13.2	872	120	13.3	871
		10	40	13.3	871	80	13.2	872	120	13.3	870



**05536118 N.B. Chicago River at Grand Ave at Chicago, Il--Continued**

12	40	13.3	870	80	13.2	872	120	13.3	870
14	40	13.3	870	80	13.3	872	120	13.3	870
16	40	13.3	869	80	13.2	871	120	13.3	870
18		--	--	80	13.2	871	120	13.2	870
20		--	--	80	13.2	871	120	13.2	870

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ILLINOIS RIVER BASIN  
**05536118 N.B. Chicago River at Grand Ave at Chicago, IL**

**LOCATION.**— Lat 41°53'30", long 87°38'30" (NAD of 1927), in NW1/4SW1/4 sec.12, T.40 N., R.13 E., Cook County, Hydrologic Unit 07120003, on right upstream side of Grand Avenue bridge in Chicago, 0.6 mi upstream from the confluence with the main stem of the Chicago River and at mile 36.0.

**DRAINAGE AREA.**— 180 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: July 2, 2002 to current year.

**SURFACE-WATER QUALITY**

PHYSICAL AND CHEMICAL: Water years 2002 to current year.

WATER TEMPERATURE: September 2002 to current year.

**GAGE.**— Water-stage recorder, acoustic velocity meter and water-temperature sensor. Datum of gage is 579.48 ft above NGVD of 1929 (Chicago City datum).

**REMARKS.**— This station provides data for a water-quality model.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum daily discharge, 4,430 ft<sup>3</sup>/s, Aug. 22, 2002, minimum daily discharge, -20 ft<sup>3</sup>/s, Jan. 31, 2004, due to regulation.

**WATER TEMPERATURE:** Maximum recorded, 25.6°C, Aug. 27, 2003; minimum recorded, 0.5°C, Jan. 31, 2004.

**SURFACE-WATER QUALITY**

Date	Time	Depth (in ft)	Sample location, (ft from L bank)	Temper- ature water deg C (00010)	Specific conduct- ance, uS/cm (00095)	Sample location (ft from L bank)	Temper- ature water deg C (00010)	Specific conduct- ance, uS/cm (00095)	Sample location (ft from L bank)	Temper- ature water deg C (00010)	Specific conduct- ance, uS/cm (00095)
MAR 2004 02...	1645	0	40	10.1	1426	80	10.1	1427	120	10.1	1427
		2	40	10.1	1424	80	10.1	1425	120	10.1	1426
		4	40	10.1	1423	80	10.1	1425	120	10.1	1426
		6	40	10.2	1423	80	10.1	1424	120	10.1	1425
		8	40	10.1	1424	80	10.1	1425	120	10.1	1425
		10	40	10.1	1423	80	10.1	1424	120	10.1	1424
		12	40	10.2	1423	80	10.1	1425	120	10.1	1426
		14	40	10.1	1423	80	10.1	1425	120	10.1	1425
		16	40	10.2	1424	80	10.1	1425	120	10.0	1425
		18	40	10.1	1423	80	10.1	1425	120	10.0	1425
		20	40	10.1	1421	80	10.0	1427	120	10.0	1425

Date	Time	Depth (in ft)	Sample location, (ft from L bank)	Temper- ature water, deg C (00010)	Specific conduct- ance, uS/cm (00095)	Sample location (ft from L bank)	Temper- ature water deg C (00010)	Specific conduct- ance, uS/cm (00095)	Sample location (ft from L bank)	Temper- ature water deg C (00010)	Specific conduct- ance, uS/cm (00095)
APR 14...	1300	0	40	12.3	1029	80	12.0	1031	120	12.1	1042
		2	40	12.4	1029	80	12.0	1030	120	11.9	1039
		4	40	12.2	1031	80	11.7	1028	120	11.7	1037
		6	40	11.7	1030	80	11.4	1030	120	11.6	1034
		8	40	11.3	1030	80	11.3	1029	120	11.3	1034
		10	40	11.2	1029	80	11.2	1029	120	11.2	1034
		12	40	11.2	1029	80	11.1	1030	120	11.1	1034
		14	40	11.1	1030	80	11.1	1030	120	11.1	1034

**05536118 N.B. Chicago River at Grand Ave at Chicago, Il--Continued**

16	40	11.2	1029	80	11.1	1030	120	11.1	1034
18		--	--		11.1	1031	120	11.1	1039
20		--	--		--	--	--	11.1	1035

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[illegible]

[illegible][illegible][illegible]

**Water Temperature, Sensor #4, degrees Celsius**  
**WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002**  
**DAILY MEAN VALUES**

**Water Temperature, Sensor #5, degrees Celsius**  
**WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002**  
**DAILY MEAN VALUES**

[illegible]

[illegible][illegible]

MIN

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**LOCATION.**— Lat 41°53'30", long 87°38'30" (NAD of 1927), in NW1/4SW1/4 sec.12, T.40 N., R.13 E., Cook County, Hydrologic Unit 07120003, on right upstream side of Grand Avenue bridge in Chicago, 0.6 mi upstream from the confluence with the main stem of the Chicago River and at mile 36.0.

**DRAINAGE AREA.**— 180 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

## SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: July 2, 2002 to current year.

## SURFACE-WATER QUALITY

PHYSICAL AND CHEMICAL: Water years 2002 to current year.

WATER TEMPERATURE: September 2002 to current year.

**GAGE.**— Water-stage recorder, acoustic velocity meter and water-temperature sensor. Datum of gage is 579.48 ft above NGVD of 1929 (Chicago City datum).

**REMARKS.**— This station provides data for a water-quality model.

**EXTREMES FOR PERIOD OF RECORD.—**

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum daily discharge, 4,430 ft<sup>3</sup>/s, Aug. 22, 2002, minimum daily discharge, -20 ft<sup>3</sup>/s, Jan. 31, 2004, due to regulation.

**WATER TEMPERATURE:** Maximum recorded, 25.6°C, Aug. 27, 2003; minimum recorded, 0.5°C, Jan. 31, 2004.

**EXTREMES FOR CURRENT YEAR.**— Maximum recorded water temperature, 25.1°C, Sept. 10; minimum recorded, 22.6°C, Sept. 4.

**REMARKS FOR CURRENT YEAR.**— Water-temperature data are from six temperature sensors on right bank with sensor #1 being the lowest in the water column and sensor #6 being the highest.

[illegible]

[illegible]

[illegible][illegible][illegible]

**Water Temperature, Sensor #6, degrees Celsius**  
**WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002**  
**DAILY MAXIMUM VALUES**

[illegible]

**05536118 N.B. Chicago River at Grand Ave at Chicago, Il--Continued****MIN**

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[illegible]

[illegible][illegible][illegible]

**Water Temperature, Sensor #4, degrees Celsius**  
**WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002**  
**DAILY MINIMUM VALUES**

**Water Temperature, Sensor #5, degrees Celsius**  
**WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002**  
**DAILY MINIMUM VALUES**

[illegible]



[illegible][illegible]

MIN

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**LOCATION.**— Lat 41°53'30", long 87°38'30" (NAD of 1927), in NW1/4SW1/4 sec.12, T.40 N., R.13 E., Cook County, Hydrologic Unit 07120003, on right upstream side of Grand Avenue bridge in Chicago, 0.6 mi upstream from the confluence with the main stem of the Chicago River and at mile 36.0.

**DRAINAGE AREA.**— 180 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: July 2, 2002 to current year.

**SURFACE-WATER QUALITY**

PHYSICAL AND CHEMICAL: Water years 2002 to current year.

WATER TEMPERATURE: September 2002 to current year.

**GAGE.**— Water-stage recorder, acoustic velocity meter and water-temperature sensor. Datum of gage is 579.48 ft above NGVD of 1929 (Chicago City datum).

**REMARKS.**— This station provides data for a water-quality model.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum daily discharge, 4,430 ft<sup>3</sup>/s, Aug. 22, 2002, minimum daily discharge, -20 ft<sup>3</sup>/s, Jan. 31, 2004, due to regulation.

**WATER TEMPERATURE:** Maximum recorded, 25.6°C, Aug. 27, 2003; minimum recorded, 0.5°C, Jan. 31, 2004.

**EXTREMES FOR CURRENT YEAR.**— Maximum recorded water temperature, 25.6°C, Aug. 27; minimum recorded, 3.1°C, Jan. 19 and Mar. 9.

**REMARKS FOR CURRENT YEAR.**— Water-temperature data are from six temperature sensors on right bank with sensor #1 being the lowest in the water column and sensor #6 being the highest.

Water Temperature, Sensor #1, degrees Celsius  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	8.3	9.4	7.0	7.3	10.9	12.1	16.0	---	---	22.1
2	---	---	8.1	8.6	7.8	7.4	11.8	11.3	16.0	---	---	22.0
3	---	12.7	7.9	6.5	7.9	6.8	12.1	12.1	15.7	---	---	21.9
4	---	12.6	8.6	7.7	7.4	6.5	11.1	12.5	15.9	---	---	22.1
5	---	12.8	7.9	8.0	6.6	5.8	7.7	13.0	16.5	---	---	22.1
6	---	12.9	6.7	7.3	6.1	5.9	7.3	13.6	17.0	---	---	22.3
7	---	13.0	7.0	7.6	5.5	6.1	7.5	14.4	17.8	---	---	22.3
8	---	13.3	7.7	8.2	5.1	6.0	7.8	14.3	---	---	---	22.7
9	---	13.3	7.9	8.4	4.8	5.4	7.8	14.2	---	---	---	23.4
10	---	14.4	8.1	8.1	4.9	5.8	9.6	14.9	---	---	---	23.5
11	---	14.4	8.7	6.4	4.9	5.6	10.6	15.3	---	---	---	23.6
12	---	14.4	9.2	5.7	4.6	6.9	11.0	14.1	---	---	---	23.5
13	---	14.0	7.9	5.7	4.5	7.7	11.7	14.5	---	---	---	23.4
14	---	13.8	8.9	4.2	5.1	8.4	12.4	14.7	---	---	---	23.0
15	---	11.8	9.5	5.1	5.5	8.6	13.7	14.0	---	---	---	22.7
16	---	12.6	9.3	5.5	5.4	9.6	14.5	13.8	---	---	---	21.8
17	---	12.1	8.3	5.7	5.5	10.9	13.9	15.1	---	---	---	21.5
18	---	10.8	9.0	4.6	5.8	10.8	12.5	15.7	---	---	---	21.1
19	---	10.9	10.5	4.0	6.5	10.2	12.2	15.9	---	---	---	20.3
20	---	12.3	9.2	4.6	7.2	9.9	13.2	16.3	---	---	---	19.9
21	---	12.8	8.0	4.8	7.4	10.1	14.0	16.4	---	---	---	19.2
22	---	10.9	7.6	4.6	7.9	10.0	13.8	16.0	---	---	---	18.5
23	---	11.8	7.1	3.9	7.1	10.2	13.3	16.0	---	---	---	18.7
24	---	10.9	7.1	3.6	6.4	10.9	13.5	16.5	---	---	---	18.8
25	---	9.5	7.1	3.9	5.3	11.9	13.4	16.9	---	---	---	17.7
26	---	10.3	7.2	4.4	5.5	12.2	13.2	17.1	---	---	---	17.3
27	---	10.3	6.0	4.5	6.0	12.0	14.0	17.6	---	---	---	17.4
28	---	8.6	6.6	4.6	6.7	11.5	14.8	17.5	---	---	24.8	18.0
29	---	9.3	7.7	4.9	---	11.0	15.3	16.8	---	---	24.6	17.0
30	---	9.1	7.5	5.9	---	10.5	15.3	16.5	---	---	23.9	16.5
31	---	---	9.2	6.6	---	10.3	---	16.0	---	---	23.1	---

## ILLINOIS RIVER BASIN

## 05536118 N.B. Chicago River at Grand Ave at Chicago, Il--Continued

MEAN	---	---	8.1	5.9	6.1	8.8	12.0	15.0	---	---	---	20.8
MAX	---	---	10.5	9.4	7.9	12.2	15.3	17.6	---	---	---	23.6
MIN	---	---	6.0	3.6	4.5	5.4	7.3	11.3	---	---	---	16.5

Water Temperature, Sensor #2, degrees Celsius  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	8.3	9.4	7.0	7.3	10.8	12.1	15.9	---	---	22.2
2	---	---	8.1	8.6	7.8	7.4	11.8	11.3	16.0	---	---	22.0
3	---	12.7	7.9	6.5	7.9	6.8	12.1	12.1	15.7	---	---	21.9
4	---	12.6	8.6	7.7	7.4	6.5	11.1	12.6	15.9	---	---	22.1
5	---	12.8	7.9	8.0	6.6	5.8	7.7	13.0	16.5	---	---	22.1
6	---	12.9	6.9	7.2	6.1	5.9	7.3	13.6	17.0	---	---	22.3
7	---	13.0	7.1	7.6	5.5	6.1	7.5	14.4	17.8	---	---	22.3
8	---	13.3	7.8	8.2	5.1	6.1	7.8	14.3	---	---	---	22.7
9	---	13.3	7.9	8.4	4.8	5.7	7.8	14.2	---	---	---	23.5
10	---	14.4	8.1	8.1	4.9	5.8	9.5	14.9	---	---	---	23.5
11	---	14.5	8.7	6.4	4.9	5.6	10.6	15.3	---	---	---	23.6
12	---	14.4	9.2	5.7	4.6	6.8	11.0	14.1	---	---	---	23.5
13	---	14.0	7.9	5.7	4.5	7.7	11.6	14.5	---	---	---	23.4
14	---	13.8	8.9	4.2	5.1	8.4	12.4	14.7	---	---	---	23.0
15	---	11.8	9.5	5.1	5.5	8.5	13.7	14.0	---	---	---	22.7
16	---	12.6	9.3	5.5	5.4	9.5	14.5	13.8	---	---	---	21.9
17	---	12.1	8.3	5.7	5.5	10.7	13.9	15.1	---	---	---	21.5
18	---	10.8	9.0	4.6	5.8	10.8	12.5	15.7	---	---	---	21.1
19	---	10.9	10.5	4.0	6.5	10.2	12.2	15.9	---	---	---	20.3
20	---	12.3	9.2	4.6	7.2	9.8	13.2	16.3	---	---	---	19.9
21	---	12.8	8.0	4.8	7.4	10.1	14.0	16.4	---	---	---	19.2
22	---	10.9	7.6	4.7	7.9	10.0	13.8	16.0	---	---	---	18.5
23	---	11.8	7.1	3.9	7.1	10.1	13.3	16.0	---	---	---	18.7
24	---	10.9	7.1	3.6	6.3	10.9	13.5	16.5	---	---	---	18.9
25	---	9.4	7.1	3.9	5.3	11.8	13.3	16.8	---	---	---	17.8
26	---	10.3	7.2	4.4	5.5	12.1	13.2	17.1	---	---	---	17.4
27	---	10.3	6.1	4.5	6.0	11.9	14.0	17.5	---	---	---	17.5
28	---	8.6	6.8	4.6	6.7	11.5	14.8	17.5	---	---	24.8	18.0
29	---	9.3	7.7	4.9	---	11.0	15.3	16.8	---	---	24.7	17.0
30	---	9.1	7.5	5.9	---	10.5	15.3	16.6	---	---	24.0	16.5
31	---	---	9.2	6.6	---	10.2	---	16.1	---	---	23.1	---
MEAN	---	---	8.1	5.9	6.1	8.8	12.0	15.0	---	---	---	20.8
MAX	---	---	10.5	9.4	7.9	12.1	15.3	17.5	---	---	---	23.6
MIN	---	---	6.1	3.6	4.5	5.6	7.3	11.3	---	---	---	16.5

Water Temperature, Sensor #3, degrees Celsius  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	8.3	9.4	7.0	7.3	10.7	12.0	15.9	---	---	22.1
2	---	---	8.1	8.5	7.8	7.4	11.7	11.3	15.9	---	---	21.9
3	---	12.6	7.9	6.5	7.9	6.8	12.1	12.0	15.7	---	---	21.8
4	---	12.6	8.6	7.7	7.3	6.5	11.1	12.5	15.8	---	---	22.0
5	---	12.7	7.9	8.0	6.6	5.8	7.7	12.9	16.4	---	---	22.0
6	---	12.8	7.3	7.2	6.1	5.9	7.2	13.5	16.9	---	---	22.2
7	---	12.9	7.3	7.5	5.5	6.1	7.4	14.3	17.7	---	---	22.2
8	---	13.2	7.7	8.1	5.1	6.3	7.7	14.2	---	---	---	22.6
9	---	13.3	7.8	8.4	4.7	6.3	7.7	14.1	---	---	---	23.4
10	---	14.3	8.1	8.1	4.9	5.8	9.4	14.8	---	---	---	23.4
11	---	14.4	8.7	6.4	4.9	5.6	10.5	15.2	---	---	---	23.5
12	---	14.4	9.2	5.7	4.6	6.8	10.9	14.0	---	---	---	23.4
13	---	14.0	7.9	5.6	4.5	7.7	11.5	14.5	---	---	---	23.3
14	---	13.7	8.9	4.2	5.1	8.3	12.2	14.7	---	---	---	23.0
15	---	11.7	9.4	5.1	5.5	8.4	13.6	13.9	---	---	---	22.6
16	---	12.6	9.3	5.5	5.4	9.4	14.4	13.7	---	---	---	21.8
17	---	12.0	8.3	5.7	5.4	10.5	13.9	15.0	---	---	---	21.4
18	---	10.7	9.0	4.6	5.8	10.8	12.5	15.6	---	---	---	21.1
19	---	10.9	10.5	4.0	6.5	10.1	12.1	15.8	---	---	---	20.3

**05536118 N.B. Chicago River at Grand Ave at Chicago, IL--Continued**

20	---	12.3	9.2	4.6	7.1	9.7	13.1	16.2	---	---	---	19.8
21	---	12.7	8.0	4.8	7.3	10.1	14.0	16.3	---	---	---	19.1
22	---	10.9	7.5	4.6	7.9	9.9	13.7	15.9	---	---	---	18.5
23	---	11.7	7.1	3.9	7.1	9.9	13.2	15.9	---	---	---	18.6
24	---	10.8	7.1	3.6	6.3	10.7	13.4	16.4	---	---	---	18.8
25	---	9.4	7.1	3.9	5.3	11.8	13.3	16.7	---	---	---	17.7
26	---	10.3	7.2	4.4	5.5	12.1	13.2	17.0	---	---	---	17.3
27	---	10.3	6.1	4.5	6.0	11.8	13.8	17.4	---	---	---	17.4
28	---	8.6	6.9	4.6	6.6	11.5	14.7	17.4	---	---	24.7	17.9
29	---	9.3	7.7	4.9	---	11.0	15.3	16.7	---	---	24.6	16.9
30	---	9.1	7.5	5.9	---	10.4	15.2	16.5	---	---	23.9	16.5
31	---	---	9.1	6.6	---	10.1	---	16.0	---	---	23.1	---
MEAN	---	---	8.1	5.9	6.1	8.7	11.9	14.9	---	---	---	20.8
MAX	---	---	10.5	9.4	7.9	12.1	15.3	17.4	---	---	---	23.5
MIN	---	---	6.1	3.6	4.5	5.6	7.2	11.3	---	---	---	16.5

**Water Temperature, Sensor #4, degrees Celsius**  
**WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	8.3	9.4	7.0	7.3	10.7	12.1	15.9	---	---	22.2
2	---	---	8.1	8.6	7.8	7.4	11.7	11.3	16.0	---	---	22.0
3	---	12.7	7.9	6.5	7.9	6.8	12.1	12.0	15.7	---	---	21.9
4	---	12.6	8.6	7.7	7.4	6.5	11.1	12.5	15.8	---	---	22.1
5	---	12.8	7.9	8.0	6.7	5.9	7.7	13.0	16.4	---	---	22.1
6	---	12.9	7.7	7.3	6.1	5.9	7.3	13.6	17.0	---	---	22.3
7	---	13.0	7.4	7.6	5.5	6.2	7.5	14.4	17.8	---	---	22.3
8	---	13.3	7.8	8.2	5.1	6.5	7.8	14.3	---	---	---	22.7
9	---	13.3	7.9	8.4	4.8	6.5	7.8	14.2	---	---	---	23.5
10	---	14.3	8.1	8.2	4.9	5.8	9.4	14.9	---	---	---	23.5
11	---	14.5	8.7	6.4	4.9	5.6	10.5	15.3	---	---	---	23.6
12	---	14.4	9.2	5.7	4.6	6.8	10.9	14.1	---	---	---	23.5
13	---	14.0	7.9	5.7	4.6	7.7	11.5	14.5	---	---	---	23.4
14	---	13.8	8.9	4.2	5.1	8.3	12.3	14.7	---	---	---	23.1
15	---	11.8	9.5	5.1	5.6	8.4	13.6	14.0	---	---	---	22.7
16	---	12.6	9.4	5.6	5.5	9.4	14.5	13.8	---	---	---	21.8
17	---	12.1	8.3	5.7	5.5	10.4	13.9	15.0	---	---	---	21.5
18	---	10.8	9.0	4.6	5.8	10.8	12.5	15.7	---	---	---	21.1
19	---	10.9	10.5	4.0	6.5	10.2	12.1	15.9	---	---	---	20.4
20	---	12.3	9.2	4.6	7.1	9.7	13.1	16.2	---	---	---	19.9
21	---	12.8	8.0	4.8	7.3	10.1	14.0	16.4	---	---	---	19.2
22	---	10.9	7.6	4.7	8.0	10.0	13.7	15.9	---	---	---	18.5
23	---	11.8	7.1	3.9	7.1	9.9	13.2	15.9	---	---	---	18.7
24	---	10.9	7.1	3.6	6.4	10.6	13.5	16.5	---	---	---	18.9
25	---	9.5	7.1	3.9	5.3	11.8	13.3	16.8	---	---	---	17.8
26	---	10.3	7.2	4.4	5.5	12.1	13.2	17.1	---	---	---	17.4
27	---	10.3	6.1	4.5	6.0	11.8	13.8	17.5	---	---	---	17.5
28	---	8.6	7.1	4.6	6.7	11.5	14.7	17.5	---	---	24.8	18.0
29	---	9.3	7.7	4.9	---	11.0	15.3	16.8	---	---	24.7	17.0
30	---	9.1	7.5	5.9	---	10.4	15.3	16.5	---	---	24.0	16.5
31	---	---	9.2	6.7	---	10.1	---	16.1	---	---	23.2	---
MEAN	---	---	8.1	5.9	6.1	8.8	11.9	15.0	---	---	---	20.8
MAX	---	---	10.5	9.4	8.0	12.1	15.3	17.5	---	---	---	23.6
MIN	---	---	6.1	3.6	4.6	5.6	7.3	11.3	---	---	---	16.5

**Water Temperature, Sensor #5, degrees Celsius**  
**WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	8.3	9.4	7.1	7.3	10.7	12.0	15.9	---	---	22.2
2	---	---	8.1	8.6	7.8	7.4	11.6	11.3	15.9	---	---	22.0
3	---	12.7	7.9	6.5	7.9	6.8	12.1	12.0	15.7	---	---	21.8
4	---	12.6	8.6	7.7	7.4	6.5	11.1	12.5	15.8	---	---	22.1
5	---	12.8	8.0	8.0	6.6	5.8	7.7	13.0	16.4	---	---	22.1
6	---	12.9	8.1	7.2	6.1	5.9	7.3	13.5	17.0	---	---	22.3

## ILLINOIS RIVER BASIN

## 05536118 N.B. Chicago River at Grand Ave at Chicago, IL--Continued

7	---	13.0	7.5	7.6	5.5	6.2	7.5	14.4	17.7	---	---	22.2
8	---	13.3	7.8	8.2	5.1	6.6	7.8	14.2	---	---	---	22.7
9	---	13.3	7.9	8.4	4.8	6.5	7.7	14.2	---	---	---	23.4
10	---	14.3	8.1	8.1	4.9	5.8	9.4	14.8	---	---	---	23.5
11	---	14.4	8.7	6.4	4.9	5.6	10.5	15.3	---	---	---	23.5
12	---	14.4	9.2	5.7	4.6	6.7	10.9	14.1	---	---	---	23.5
13	---	14.0	7.9	5.7	---	7.7	11.3	14.5	---	---	---	23.3
14	---	13.8	8.9	4.2	---	8.2	12.2	14.7	---	---	---	23.0
15	---	11.7	9.4	5.1	---	8.3	13.6	14.0	---	---	---	22.7
16	---	12.6	9.3	5.5	---	9.3	14.5	13.8	---	---	---	21.8
17	---	12.1	8.3	5.7	---	10.3	13.9	15.0	---	---	---	21.4
18	---	10.8	9.0	4.6	---	10.8	12.5	15.7	---	---	---	21.1
19	---	10.9	10.5	4.0	---	10.1	12.0	15.9	---	---	---	20.3
20	---	12.3	9.2	4.6	---	9.7	13.1	16.2	---	---	---	19.9
21	---	12.7	8.0	4.8	---	10.1	14.0	16.4	---	---	---	19.2
22	---	10.9	7.6	4.7	---	10	13.6	15.9	---	---	---	18.5
23	---	11.8	7.1	3.9	---	9.8	13.2	15.9	---	---	---	18.7
24	---	10.9	7.1	3.6	---	10.5	13.5	16.4	---	---	---	18.9
25	---	9.4	7.1	3.9	---	11.8	13.3	16.8	---	---	---	17.7
26	---	10.3	7.2	4.4	---	12.1	13.2	17.0	---	---	---	17.4
27	---	10.3	6.1	4.5	---	11.8	13.8	17.5	---	---	---	17.5
28	---	8.6	7.2	4.6	6.6	11.5	14.7	17.4	---	---	24.7	18.0
29	---	9.3	7.7	4.9	---	11.0	15.3	16.8	---	---	24.7	17.0
30	---	9.1	7.5	5.9	---	10.3	15.2	16.5	---	---	23.9	16.5
31	---	---	9.2	6.7	---	10.0	---	16.0	---	---	23.1	---
MEAN	---	---	8.1	5.9	---	8.7	11.9	15.0	---	---	---	20.8
MAX	---	---	10.5	9.4	---	12.1	15.3	17.5	---	---	---	23.5
MIN	---	---	6.1	3.6	---	5.6	7.3	11.3	---	---	---	16.5

Water Temperature, Sensor #6, degrees Celsius  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	8.4	9.5	7.2	7.3	10.8	12.2	16.0	---	---	22.1
2	---	---	8.2	8.6	7.9	7.5	11.8	11.5	16.0	---	---	22.0
3	---	12.7	8.0	6.6	8.0	6.9	12.2	12.2	15.8	---	---	21.8
4	---	12.6	8.7	7.8	7.4	6.6	11.2	12.7	15.8	---	---	22.1
5	---	12.8	8.2	8.1	6.7	5.9	7.9	13.1	16.4	---	---	22.1
6	---	12.9	8.3	7.3	6.1	6.0	7.4	13.7	17.0	---	---	22.2
7	---	13.0	7.6	7.6	5.6	6.3	7.6	14.5	17.8	---	---	22.2
8	---	13.3	7.8	8.2	5.2	6.7	7.9	14.3	---	---	---	22.7
9	---	13.3	7.9	8.5	4.8	6.6	7.9	14.3	---	---	---	23.4
10	---	14.3	8.1	8.2	5.0	5.9	9.5	14.9	---	---	---	23.5
11	---	14.5	8.8	6.5	5.0	5.7	10.6	15.3	---	---	---	23.5
12	---	14.4	9.3	5.8	4.7	6.8	11.1	14.1	---	---	---	23.5
13	---	14.0	7.9	5.7	4.6	7.8	11.4	14.6	---	---	---	23.3
14	---	13.8	8.9	4.3	5.2	8.3	12.3	14.8	---	---	---	23.0
15	---	11.8	9.5	5.2	5.6	8.4	13.7	14.1	---	---	---	22.7
16	---	12.6	9.4	5.6	5.5	9.4	14.7	13.9	---	---	---	21.8
17	---	12.1	8.4	5.8	5.6	10.3	14.2	15.1	---	---	---	21.4
18	---	10.8	9.1	4.7	5.9	10.9	12.8	15.9	---	---	---	21.1
19	---	11.0	10.6	4.1	6.6	10.3	12.2	16.1	---	---	---	20.3
20	---	12.3	9.3	4.7	7.2	9.8	13.3	16.3	---	---	---	19.9
21	---	12.8	8.1	4.9	7.4	10.3	14.2	16.5	---	---	---	19.2
22	---	11.0	7.6	4.7	8.0	10.1	13.8	16.0	---	---	---	18.5
23	---	11.8	7.2	4.0	7.2	9.9	13.4	16.0	---	---	---	18.7
24	---	10.9	7.2	3.7	6.4	10.6	13.6	16.6	---	---	---	18.9
25	---	9.5	7.2	4.0	5.4	11.9	13.5	16.9	---	---	---	17.7
26	---	10.3	7.3	4.5	5.6	12.2	13.4	17.2	---	---	---	17.4
27	---	10.3	6.2	4.6	6.2	11.9	13.9	17.5	---	---	---	17.5
28	---	8.7	7.3	4.7	6.7	11.7	14.8	17.5	---	---	24.7	18.0
29	---	9.4	7.8	5.0	---	11.2	15.4	16.8	---	---	24.6	17.0
30	---	9.2	7.5	6.0	---	10.4	15.4	16.6	---	---	23.9	16.6
31	---	---	9.2	6.8	---	10.1	---	16.1	---	---	23.1	---
MEAN	---	---	8.2	6.0	6.2	8.8	12.1	15.1	---	---	---	20.8

**05536118 N.B. Chicago River at Grand Ave at Chicago, Il--Continued**

<b>MAX</b>	---	---	10.6	9.5	8.0	12.2	15.4	17.5	---	---	---	23.5
<b>MIN</b>	---	---	6.2	3.7	4.6	5.7	7.4	11.5	---	---	---	16.6

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ILLINOIS RIVER BASIN  
**05536118 N.B. Chicago River at Grand Ave at Chicago, IL**

**LOCATION.**— Lat 41°53'30", long 87°38'30" (NAD of 1927), in NW1/4SW1/4 sec.12, T.40 N., R.13 E., Cook County, Hydrologic Unit 07120003, on right upstream side of Grand Avenue bridge in Chicago, 0.6 mi upstream from the confluence with the main stem of the Chicago River and at mile 36.0.

**DRAINAGE AREA.**— 180 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: July 2, 2002 to current year.

SURFACE-WATER QUALITY

PHYSICAL AND CHEMICAL: Water years 2002 to current year.

WATER TEMPERATURE: September 2002 to current year.

**GAGE.**— Water-stage recorder, acoustic velocity meter and water-temperature sensor. Datum of gage is 579.48 ft above NGVD of 1929 (Chicago City datum).

**REMARKS.**— This station provides data for a water-quality model.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum daily discharge, 4,430 ft<sup>3</sup>/s, Aug. 22, 2002, minimum daily discharge, -20 ft<sup>3</sup>/s, Jan. 31, 2004, due to regulation.

WATER TEMPERATURE: Maximum recorded, 25.6°C, Aug. 27, 2003; minimum recorded, 0.5°C, Jan. 31, 2004.

**EXTREMES FOR CURRENT YEAR.**— Maximum recorded water temperature, 25.6°C, Aug. 27; minimum recorded, 3.1°C, Jan. 19 and Mar. 9.

**REMARKS FOR CURRENT YEAR.**— Water-temperature data are from six temperature sensors on right bank with sensor #1 being the lowest in the water column and sensor #6 being the highest.

**Water Temperature, Sensor #1, degrees Celsius**  
**WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003**  
**DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	8.6	9.6	7.4	7.6	11.9	14.6	16.3	---	---	22.7
2	---	---	8.3	9.0	8.2	7.6	12.4	11.7	16.4	---	---	22.6
3	---	12.8	8.4	7.8	8.2	7.1	12.3	12.6	16.1	---	---	22.3
4	---	12.8	8.9	7.9	7.7	6.8	12.1	12.7	16.7	---	---	22.4
5	---	12.9	8.6	8.2	7.1	6.0	8.8	13.8	17.0	---	---	22.4
6	---	13.0	7.9	8.3	6.2	6.3	7.6	14.2	17.4	---	---	22.8
7	---	13.2	7.8	7.9	5.7	6.4	7.6	14.6	18.4	---	---	22.7
8	---	13.6	7.8	8.5	5.3	6.5	8.2	14.9	---	---	---	23.3
9	---	13.7	8.0	9.4	5.0	6.7	8.4	14.9	---	---	---	23.8
10	---	14.7	8.3	8.5	5.1	6.2	11.0	16.9	---	---	---	23.8
11	---	14.6	9.1	7.6	5.1	6.0	11.2	16.0	---	---	---	24.0
12	---	14.5	9.3	5.8	4.8	7.5	11.3	14.4	---	---	---	23.8
13	---	14.4	9.1	6.0	4.7	8.2	12.4	15.1	---	---	---	23.7
14	---	14.0	9.3	4.9	5.4	9.2	13.7	15.0	---	---	---	23.2
15	---	13.0	9.6	5.4	5.6	9.6	14.4	14.4	---	---	---	23.0
16	---	13.1	9.5	5.7	5.6	10.4	14.8	14.2	---	---	---	22.4
17	---	13.1	9.2	5.9	5.6	12.4	14.3	15.9	---	---	---	22.2
18	---	10.9	11.3	5.6	6.1	11.1	13.2	16.2	---	---	---	21.8
19	---	11.8	11.5	4.7	7.0	10.5	13.0	16.1	---	---	---	21.0
20	---	13.0	9.8	4.9	7.7	11.0	13.9	16.9	---	---	---	21.0
21	---	13.3	8.6	4.9	7.8	10.3	14.2	16.9	---	---	---	19.9
22	---	11.6	7.7	4.8	8.2	10.2	14.6	16.7	---	---	---	19.0
23	---	12.1	7.4	4.3	7.5	11.5	14.0	16.5	---	---	---	19.7
24	---	11.5	7.2	3.8	6.7	12.1	14.0	16.9	---	---	---	19.7
25	---	10.3	7.2	4.4	5.6	12.3	13.7	17.3	---	---	---	18.2
26	---	10.4	7.6	4.6	5.9	12.7	13.6	17.5	---	---	---	18.3
27	---	10.6	7.2	4.6	6.6	12.7	15.0	18.1	---	---	---	18.2
28	---	9.8	7.1	4.7	6.9	11.7	15.4	17.8	---	---	25.3	18.1
29	---	9.5	8.0	5.4	---	11.3	15.7	17.3	---	---	24.8	17.7
30	---	9.5	8.7	6.4	---	11.1	16.0	16.8	---	---	24.3	16.7
31	---	---	9.6	6.9	---	11.2	---	16.4	---	---	23.6	---



**05536118 N.B. Chicago River at Grand Ave at Chicago, Il--Continued**

MEAN	---	---	8.6	6.3	6.4	9.4	12.6	15.6	---	---	---	21.3
MAX	---	---	11.5	9.6	8.2	12.7	16.0	18.1	---	---	---	24.0
MIN	---	---	7.1	3.8	4.7	6.0	7.6	11.7	---	---	---	16.7

**Water Temperature, Sensor #2, degrees Celsius**  
**WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003**  
**DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	8.6	9.6	7.4	7.6	11.8	14.6	16.3	---	---	22.8
2	---	---	8.3	9.0	8.3	7.6	12.4	11.7	16.3	---	---	22.6
3	---	12.8	8.4	7.8	8.2	7.1	12.3	12.6	16.2	---	---	22.3
4	---	12.8	8.9	7.9	7.7	6.8	12.1	12.7	16.6	---	---	22.5
5	---	12.9	8.6	8.2	7.1	6.0	8.8	13.8	17.0	---	---	22.3
6	---	13.0	7.9	8.3	6.2	6.3	7.6	14.2	17.3	---	---	22.6
7	---	13.2	7.8	7.9	5.7	6.5	7.6	14.6	18.4	---	---	22.7
8	---	13.6	7.9	8.5	5.3	6.6	8.2	14.8	---	---	---	23.3
9	---	13.7	8.0	9.3	5.0	6.8	8.4	14.9	---	---	---	23.8
10	---	14.7	8.3	8.5	5.1	6.2	10.8	15.8	---	---	---	23.8
11	---	14.7	9.1	7.6	5.1	6.0	11.2	16.1	---	---	---	24.0
12	---	14.6	9.3	5.8	4.8	7.4	11.3	14.4	---	---	---	23.8
13	---	14.4	9.1	6.0	4.7	8.2	12.3	15.1	---	---	---	23.7
14	---	14.0	9.3	4.9	5.4	9.1	13.2	15.1	---	---	---	23.2
15	---	13.0	9.7	5.4	5.6	9.5	14.4	14.5	---	---	---	22.9
16	---	13.1	9.5	5.7	5.6	10.3	14.8	14.3	---	---	---	22.4
17	---	13.1	9.2	5.9	5.6	12.0	14.3	15.8	---	---	---	22.0
18	---	10.9	11.3	5.6	6.1	11.1	13.2	16.2	---	---	---	21.7
19	---	11.8	11.5	4.7	7.0	10.5	12.8	16.1	---	---	---	21.1
20	---	13.0	9.8	4.9	7.6	10.6	13.9	16.9	---	---	---	21.1
21	---	13.3	8.6	4.9	7.8	10.4	14.2	16.9	---	---	---	20.0
22	---	11.6	7.7	4.8	8.2	10.2	14.5	16.5	---	---	---	19.1
23	---	12.1	7.5	4.3	7.5	11.4	13.9	16.4	---	---	---	19.7
24	---	11.5	7.2	3.8	6.7	12.0	13.9	16.9	---	---	---	19.8
25	---	10.3	7.2	4.4	5.6	12.3	13.7	17.2	---	---	---	18.1
26	---	10.4	7.6	4.6	5.9	12.7	13.6	17.5	---	---	---	18.4
27	---	10.6	7.3	4.6	6.6	12.4	14.8	18.0	---	---	---	18.2
28	---	9.8	7.3	4.7	6.9	11.7	15.5	17.8	---	---	25.2	18.2
29	---	9.5	8.0	5.4	---	11.3	15.7	17.4	---	---	24.9	17.8
30	---	9.5	8.7	6.4	---	11.0	15.9	16.8	---	---	24.3	16.7
31	---	---	9.6	7.0	---	11.1	---	16.4	---	---	23.6	---
MEAN	---	---	8.6	6.3	6.4	9.3	12.6	15.5	---	---	---	21.4
MAX	---	---	11.5	9.6	8.3	12.7	15.9	18.0	---	---	---	24.0
MIN	---	---	7.2	3.8	4.7	6.0	7.6	11.7	---	---	---	16.7

**Water Temperature, Sensor #3, degrees Celsius**  
**WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003**  
**DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	8.6	9.6	7.4	7.5	11.6	14.6	16.2	---	---	22.7
2	---	---	8.3	9.0	8.3	7.5	12.3	11.6	16.2	---	---	22.3
3	---	12.8	8.3	7.8	8.2	7.1	12.2	12.6	16.1	---	---	22.1
4	---	12.8	8.8	7.8	7.7	6.7	12.0	12.6	16.4	---	---	22.3
5	---	12.9	8.6	8.2	7.0	6.0	8.8	13.7	16.9	---	---	22.2
6	---	12.9	8.1	8.3	6.2	6.2	7.6	14.2	17.2	---	---	22.5
7	---	13.1	7.8	7.9	5.7	6.5	7.6	14.5	18.3	---	---	22.6
8	---	13.5	7.8	8.4	5.3	6.6	8.2	14.6	---	---	---	23.2
9	---	13.6	8.0	9.0	5.0	6.8	8.4	14.9	---	---	---	23.7
10	---	14.6	8.2	8.5	5.1	6.2	10.6	15.7	---	---	---	23.7
11	---	14.6	9.1	7.5	5.0	6.0	11.1	16.0	---	---	---	23.9
12	---	14.5	9.3	5.8	4.8	7.3	11.3	14.4	---	---	---	23.6
13	---	14.3	9.0	6.0	4.7	8.2	12.2	15.0	---	---	---	23.6
14	---	14.0	9.3	4.9	5.4	8.9	12.8	15.0	---	---	---	23.1
15	---	12.9	9.6	5.4	5.6	9.1	14.3	14.4	---	---	---	22.8
16	---	13.1	9.5	5.7	5.6	10.0	14.7	14.2	---	---	---	22.4
17	---	13.1	9.1	5.9	5.6	11.5	14.2	15.7	---	---	---	21.8
18	---	10.9	11.2	5.6	6.1	11.0	13.1	16.1	---	---	---	21.6
19	---	11.7	11.4	4.7	6.9	10.4	12.7	16.0	---	---	---	21.0

## ILLINOIS RIVER BASIN

## 05536118 N.B. Chicago River at Grand Ave at Chicago, IL--Continued

20	---	12.9	9.8	4.8	7.6	10.4	13.8	16.8	---	---	---	21.0
21	---	13.2	8.6	4.9	7.8	10.3	14.1	16.8	---	---	---	19.9
22	---	11.5	7.7	4.8	8.1	10.2	14.4	16.4	---	---	---	19.0
23	---	12.0	7.4	4.3	7.5	11.1	13.5	16.3	---	---	---	19.7
24	---	11.5	7.2	3.8	6.6	11.6	13.8	16.8	---	---	---	19.7
25	---	10.2	7.2	4.4	5.6	12.2	13.6	17.1	---	---	---	18.0
26	---	10.3	7.5	4.6	5.8	12.5	13.5	17.4	---	---	---	18.3
27	---	10.6	7.3	4.6	6.5	12.0	14.7	17.9	---	---	---	18.2
28	---	9.7	7.3	4.7	6.9	11.6	15.4	17.7	---	---	25.0	18.1
29	---	9.5	8.0	5.4	---	11.2	15.6	17.3	---	---	24.8	17.7
30	---	9.4	8.7	6.3	---	10.8	15.6	16.6	---	---	24.2	16.6
31	---	---	9.6	7.0	---	10.8	---	16.3	---	---	23.6	---
MEAN	---	---	8.6	6.3	6.4	9.2	12.5	15.5	---	---	---	21.2
MAX	---	---	11.4	9.6	8.3	12.5	15.6	17.9	---	---	---	23.9
MIN	---	---	7.2	3.8	4.7	6.0	7.6	11.6	---	---	---	16.6

Water Temperature, Sensor #4, degrees Celsius  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	8.6	9.6	7.4	7.6	11.6	14.6	16.3	---	---	22.8
2	---	---	8.3	9.0	8.4	7.6	12.3	11.7	16.3	---	---	22.4
3	---	12.8	8.4	7.8	8.3	7.1	12.3	12.6	16.2	---	---	22.2
4	---	12.9	8.9	7.9	7.8	6.8	12.1	12.7	16.5	---	---	22.4
5	---	12.9	8.6	8.2	7.1	6.0	8.8	13.8	16.9	---	---	22.4
6	---	13.0	8.4	8.3	6.2	6.3	7.6	14.2	17.3	---	---	22.5
7	---	13.2	7.8	7.9	5.8	6.6	7.6	14.6	18.3	---	---	22.6
8	---	13.5	7.9	8.5	5.3	6.8	8.2	14.7	---	---	---	23.3
9	---	13.7	8.0	8.9	5.0	6.8	8.5	14.9	---	---	---	23.8
10	---	14.6	8.3	8.5	5.1	6.2	10.5	15.7	---	---	---	23.8
11	---	14.7	9.1	7.6	5.1	6.0	11.2	16.1	---	---	---	23.9
12	---	14.6	9.3	5.8	4.8	7.3	11.3	14.5	---	---	---	23.8
13	---	14.4	9.1	6.0	4.7	8.2	12.1	15.1	---	---	---	23.6
14	---	14.1	9.3	4.9	5.5	8.8	12.8	15.1	---	---	---	23.2
15	---	13.0	9.7	5.4	5.6	9.0	14.4	14.5	---	---	---	22.9
16	---	13.2	9.5	5.7	5.6	10.0	14.8	14.3	---	---	---	22.5
17	---	13.1	9.2	5.9	5.6	11.3	14.3	15.8	---	---	---	21.8
18	---	10.9	11.2	5.7	6.1	11.1	13.2	16.2	---	---	---	21.7
19	---	11.8	11.5	4.8	7.0	10.5	12.7	16.1	---	---	---	21.1
20	---	13.0	9.8	4.9	7.5	10.4	13.9	16.8	---	---	---	21.1
21	---	13.3	8.6	5.0	7.8	10.3	14.2	16.9	---	---	---	20.0
22	---	11.6	7.7	4.8	8.2	10.2	14.3	16.4	---	---	---	19.1
23	---	12.1	7.5	4.4	7.6	11.0	13.5	16.4	---	---	---	19.8
24	---	11.6	7.2	3.8	6.7	11.5	13.9	16.9	---	---	---	19.8
25	---	10.3	7.2	4.4	5.7	12.3	13.6	17.2	---	---	---	18.1
26	---	10.4	7.6	4.6	5.8	12.4	13.6	17.5	---	---	---	18.4
27	---	10.6	7.5	4.7	6.5	12.0	14.6	17.8	---	---	---	18.2
28	---	9.7	7.4	4.7	6.9	11.7	15.4	17.8	---	---	25.1	18.2
29	---	9.5	8.0	5.4	---	11.3	15.7	17.4	---	---	24.9	17.8
30	---	9.5	8.7	6.4	---	10.8	15.5	16.7	---	---	24.3	16.7
31	---	---	9.6	7.1	---	10.7	---	16.4	---	---	23.7	---
MEAN	---	---	8.6	6.3	6.4	9.2	12.5	15.5	---	---	---	21.3
MAX	---	---	11.5	9.6	8.4	12.4	15.7	17.8	---	---	---	23.9
MIN	---	---	7.2	3.8	4.7	6.0	7.6	11.7	---	---	---	16.7

Water Temperature, Sensor #5, degrees Celsius  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	8.6	9.6	7.4	7.6	11.5	14.6	16.2	---	---	22.7
2	---	---	8.3	9.0	8.4	7.6	12.3	11.7	16.2	---	---	22.3
3	---	12.8	8.4	7.8	8.4	7.1	12.3	12.6	16.2	---	---	22.1
4	---	12.8	8.9	7.9	7.8	6.7	12.1	12.7	16.4	---	---	22.3
5	---	12.9	8.9	8.2	7.1	6.0	8.8	13.8	16.9	---	---	22.3
6	---	13.0	8.6	8.3	6.2	6.3	7.6	14.2	17.3	---	---	22.5

**05536118 N.B. Chicago River at Grand Ave at Chicago, IL--Continued**

7	---	13.2	7.7	7.9	5.7	6.8	7.6	14.5	18.3	---	---	22.6
8	---	13.5	7.9	8.4	5.3	6.8	8.2	14.6	---	---	---	23.3
9	---	13.7	8.0	9.0	5.0	6.8	8.4	14.9	---	---	---	23.7
10	---	14.6	8.3	8.5	5.1	6.2	10.5	15.7	---	---	---	23.8
11	---	14.6	9.1	7.6	5.1	6.0	11.1	16.0	---	---	---	23.9
12	---	14.5	9.3	5.8	4.8	7.3	11.3	14.4	---	---	---	23.7
13	---	14.3	9.0	6.0	---	8.2	12.0	15.1	---	---	---	23.5
14	---	14.0	9.3	4.9	---	8.8	12.8	15.0	---	---	---	23.2
15	---	13.0	9.6	5.4	---	9.0	14.3	14.4	---	---	---	22.9
16	---	13.1	9.5	5.7	---	9.9	14.8	14.2	---	---	---	22.4
17	---	13.1	9.1	5.9	---	11.3	14.3	15.7	---	---	---	21.7
18	---	10.9	11.2	5.7	---	11.1	13.2	16.2	---	---	---	21.6
19	---	11.7	11.5	4.8	---	10.5	12.5	16.1	---	---	---	21.1
20	---	13.0	9.8	4.8	---	10.3	13.9	16.7	---	---	---	21.1
21	---	13.3	8.6	5.0	---	10.3	14.1	16.8	---	---	---	20.0
22	---	11.6	7.7	4.8	---	10.2	14.2	16.3	---	---	---	19.1
23	---	12.1	7.5	4.4	---	10.8	13.5	16.3	---	---	---	19.8
24	---	11.6	7.2	3.8	---	11.4	13.8	16.9	---	---	---	19.8
25	---	10.3	7.2	4.4	---	12.2	13.6	17.2	---	---	---	18.0
26	---	10.4	7.5	4.6	---	12.4	13.6	17.5	---	---	---	18.4
27	---	10.6	7.7	4.7	---	12.0	14.6	17.8	---	---	---	18.2
28	---	9.7	7.7	4.7	6.9	11.7	15.4	17.8	---	---	25.0	18.2
29	---	9.5	8.0	5.4	---	11.3	15.6	17.3	---	---	24.9	17.8
30	---	9.5	8.7	6.3	---	10.7	15.5	16.7	---	---	24.3	16.7
31	---	---	9.6	7.2	---	10.6	---	16.4	---	---	23.6	---
MEAN	---	---	8.7	6.3	---	9.2	12.4	15.5	---	---	---	21.3
MAX	---	---	11.5	9.6	---	12.4	15.6	17.8	---	---	---	23.9
MIN	---	---	7.2	3.8	---	6.0	7.6	11.7	---	---	---	16.7

Water Temperature, Sensor #6, degrees Celsius  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	8.7	9.7	7.5	7.6	11.7	14.8	16.4	---	---	22.7
2	---	---	8.4	9.1	8.5	7.7	12.5	12.0	16.4	---	---	22.3
3	---	12.9	8.4	7.9	8.5	7.2	12.4	12.8	16.2	---	---	22.1
4	---	12.9	8.9	7.9	7.8	6.8	12.3	12.9	16.4	---	---	22.3
5	---	12.9	9.1	8.3	7.2	6.1	9.1	14.1	16.9	---	---	22.3
6	---	13.0	8.8	8.4	6.3	6.6	7.8	14.4	17.3	---	---	22.5
7	---	13.2	7.8	8.0	5.8	7.0	7.8	14.7	18.3	---	---	22.6
8	---	13.5	7.9	8.5	5.4	7.1	8.3	14.7	---	---	---	23.3
9	---	13.7	8.1	9.0	5.1	6.9	8.6	15.0	---	---	---	23.7
10	---	14.7	8.3	8.6	5.2	6.3	10.6	15.8	---	---	---	23.8
11	---	14.7	9.2	7.6	5.2	6.0	11.4	16.1	---	---	---	23.8
12	---	14.6	9.4	5.9	4.8	7.4	11.6	14.5	---	---	---	23.7
13	---	14.3	9.1	6.1	4.7	8.3	12.2	15.2	---	---	---	23.4
14	---	14.1	9.3	5.0	5.5	8.8	12.9	15.1	---	---	---	23.2
15	---	13.0	9.7	5.5	5.7	9.0	14.4	14.5	---	---	---	22.9
16	---	13.2	9.6	5.8	5.7	10.0	15.1	14.4	---	---	---	22.4
17	---	13.2	9.2	6.0	5.7	11.3	14.9	15.9	---	---	---	21.6
18	---	11.0	11.3	5.8	6.2	11.2	13.5	16.6	---	---	---	21.6
19	---	11.8	11.5	4.8	7.0	10.6	12.6	16.4	---	---	---	21.1
20	---	13.0	9.9	5.0	7.5	10.5	14.1	16.8	---	---	---	21.1
21	---	13.3	8.6	5.0	7.9	10.5	14.4	17.0	---	---	---	20.0
22	---	11.6	7.8	4.9	8.2	10.3	14.2	16.4	---	---	---	19.1
23	---	12.1	7.5	4.5	7.6	10.6	13.8	16.4	---	---	---	19.7
24	---	11.6	7.3	3.9	6.8	11.5	14.0	17.2	---	---	---	19.8
25	---	10.3	7.3	4.4	5.8	12.3	13.9	17.4	---	---	---	18.0
26	---	10.4	7.6	4.7	5.9	12.5	13.8	17.6	---	---	---	18.4
27	---	10.6	7.8	4.7	6.7	12.2	14.6	17.9	---	---	---	18.2
28	---	9.8	7.8	4.8	7.0	12.1	15.4	17.9	---	---	25.0	18.2
29	---	9.6	8.1	5.5	---	11.5	15.8	17.4	---	---	24.9	17.8
30	---	9.5	8.8	6.4	---	10.9	15.7	16.8	---	---	24.3	16.7
31	---	---	9.7	7.3	---	10.4	---	16.5	---	---	23.6	---
MEAN	---	---	8.7	6.4	6.5	9.3	12.6	15.7	---	---	---	21.3

05536118 N.B. Chicago River at Grand Ave at Chicago, Il--Continued

MAX	---	---	11.5	9.7	8.5	12.5	15.8	17.9	---	---	---	23.8
MIN	---	---	7.3	3.9	4.7	6.0	7.8	12.0	---	---	---	16.7

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**LOCATION.**— Lat 41°53'30", long 87°38'30" (NAD of 1927), in NW1/4SW1/4 sec.12, T.40 N., R.13 E., Cook County, Hydrologic Unit 07120003, on right upstream side of Grand Avenue bridge in Chicago, 0.6 mi upstream from the confluence with the main stem of the Chicago River and at mile 36.0.

**DRAINAGE AREA.**— 180 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: July 2, 2002 to current year.

SURFACE-WATER QUALITY

PHYSICAL AND CHEMICAL: Water years 2002 to current year.

WATER TEMPERATURE: September 2002 to current year.

**GAGE.**— Water-stage recorder, acoustic velocity meter and water-temperature sensor. Datum of gage is 579.48 ft above NGVD of 1929 (Chicago City datum).

**REMARKS.**— This station provides data for a water-quality model.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum daily discharge, 4,430 ft<sup>3</sup>/s, Aug. 22, 2002, minimum daily discharge, -20 ft<sup>3</sup>/s, Jan. 31, 2004, due to regulation.

WATER TEMPERATURE: Maximum recorded, 25.6°C, Aug. 27, 2003; minimum recorded, 0.5°C, Jan. 31, 2004.

**EXTREMES FOR CURRENT YEAR.**— Maximum recorded water temperature, 25.6°C, Aug. 27; minimum recorded, 3.1°C, Jan. 19 and Mar. 9.

**REMARKS FOR CURRENT YEAR.**— Water-temperature data are from six temperature sensors on right bank with sensor #1 being the lowest in the water column and sensor #6 being the highest.

Water Temperature, Sensor #1, degrees Celsius  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	8.0	9.0	6.3	6.8	10.2	11.3	15.6	---	---	21.6
2	---	---	7.9	7.8	7.4	7.1	11.1	10.8	15.7	---	---	21.6
3	---	12.5	7.7	5.9	7.6	6.6	11.9	11.5	15.3	---	---	21.5
4	---	12.3	8.3	7.4	7.0	6.0	8.8	12.4	15.3	---	---	21.9
5	---	12.6	7.2	7.8	6.1	5.6	7.1	12.1	16.1	---	---	21.9
6	---	12.7	5.3	6.5	5.7	5.6	7.1	12.9	16.6	---	---	22.1
7	---	12.7	5.6	6.9	5.2	5.6	7.3	14.2	17.3	---	---	22.0
8	---	13.1	7.6	7.8	4.8	5.2	7.4	14.1	---	---	---	22.2
9	---	13.0	7.6	8.2	4.5	3.1	7.2	13.5	---	---	---	23.2
10	---	13.7	7.8	7.5	4.7	5.5	8.4	14.4	---	---	---	23.3
11	---	14.4	8.2	5.3	4.7	5.3	10.1	14.4	---	---	---	23.3
12	---	14.1	9.0	5.5	4.3	6.0	10.6	13.7	---	---	---	23.3
13	---	13.8	7.2	4.8	4.3	7.3	11.2	14.0	---	---	---	23.2
14	---	13.0	8.3	3.7	4.6	8.0	11.9	14.4	---	---	---	22.8
15	---	11.1	9.2	4.7	5.4	8.0	12.8	13.6	---	---	---	22.4
16	---	11.7	9.1	5.2	5.2	8.7	14.2	13.5	---	---	---	21.4
17	---	10.9	7.4	5.5	5.3	9.8	13.2	14.2	---	---	---	21.0
18	---	10.6	7.6	3.3	5.5	10.4	11.9	15.2	---	---	---	20.3
19	---	10.6	9.8	3.1	6.1	9.7	11.7	15.7	---	---	---	19.8
20	---	11.7	8.5	4.4	6.8	9.6	12.4	15.9	---	---	---	19.3
21	---	11.0	7.6	4.6	7.0	9.9	13.8	16.0	---	---	---	18.3
22	---	10.2	7.4	4.3	7.5	9.7	13.3	15.7	---	---	---	18.0
23	---	11.5	6.9	3.5	6.6	9.6	12.9	15.5	---	---	---	17.9
24	---	9.9	7.0	3.4	5.6	10.0	13.2	16.2	---	---	---	18.0
25	---	8.7	7.0	3.6	5.1	11.3	13.1	16.5	---	---	---	17.1
26	---	10.2	6.4	4.1	5.1	11.9	12.8	16.6	---	---	---	16.9
27	---	9.8	5.1	4.3	5.6	11.6	13.4	17.2	---	---	---	16.9
28	---	8.1	6.0	4.5	6.0	11.3	14.1	17.3	---	---	24.6	17.7
29	---	8.9	6.7	4.6	---	10.7	15.0	16.5	---	---	24.2	16.4
30	---	8.6	6.8	5.4	---	10.2	14.4	16.4	---	---	23.6	16.4
31	---	---	8.7	6.3	---	9.8	---	15.8	---	---	22.7	---

## ILLINOIS RIVER BASIN

## 05536118 N.B. Chicago River at Grand Ave at Chicago, IL--Continued

MEAN	---	---	7.5	5.4	5.7	8.3	11.4	14.6	---	---	---	20.4
MAX	---	---	9.8	9.0	7.6	11.9	15.0	17.3	---	---	---	23.3
MIN	---	---	5.1	3.1	4.3	3.1	7.1	10.8	---	---	---	16.4

Water Temperature, Sensor #2, degrees Celsius  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	8.0	9.0	6.3	6.8	10.2	11.3	15.6	---	---	21.6
2	---	---	7.9	7.8	7.4	7.1	11.1	10.8	15.7	---	---	21.7
3	---	12.5	7.7	5.9	7.6	6.6	11.9	11.5	15.3	---	---	21.6
4	---	12.3	8.3	7.4	7.0	6.0	8.8	12.4	15.4	---	---	22.0
5	---	12.6	7.3	7.8	6.2	5.6	7.1	12.1	16.1	---	---	21.9
6	---	12.7	5.3	6.5	5.7	5.6	7.0	12.9	16.6	---	---	22.1
7	---	12.7	5.7	6.9	5.2	5.7	7.3	14.2	17.3	---	---	22.0
8	---	13.1	7.6	7.8	4.8	5.2	7.4	14.1	---	---	---	22.2
9	---	13.0	7.7	8.2	4.5	3.1	7.2	13.5	---	---	---	23.2
10	---	13.7	7.8	7.5	4.7	5.5	8.4	14.4	---	---	---	23.4
11	---	14.4	8.2	5.3	4.7	5.3	10.1	14.4	---	---	---	23.3
12	---	14.1	9.0	5.5	4.3	6.0	10.6	13.7	---	---	---	23.4
13	---	13.8	7.2	4.8	4.3	7.3	11.1	14.0	---	---	---	23.2
14	---	13.0	8.3	3.7	4.6	8.0	11.9	14.5	---	---	---	22.9
15	---	11.1	9.2	4.7	5.4	8.0	12.8	13.6	---	---	---	22.4
16	---	11.7	9.1	5.2	5.2	8.7	14.2	13.5	---	---	---	21.5
17	---	10.9	7.4	5.5	5.3	9.8	13.2	14.2	---	---	---	21.1
18	---	10.6	7.6	3.3	5.5	10.5	11.9	15.2	---	---	---	20.3
19	---	10.6	9.8	3.1	6.1	9.7	11.7	15.7	---	---	---	19.8
20	---	11.8	8.6	4.4	6.8	9.6	12.4	15.9	---	---	---	19.4
21	---	10.9	7.6	4.6	7.0	9.9	13.8	16.1	---	---	---	18.3
22	---	10.2	7.4	4.3	7.5	9.7	13.3	15.6	---	---	---	18.1
23	---	11.5	6.9	3.6	6.6	9.6	12.9	15.5	---	---	---	17.9
24	---	9.9	7.0	3.4	5.6	10.0	13.2	16.1	---	---	---	18.0
25	---	8.7	7.0	3.6	5.1	11.3	13.1	16.5	---	---	---	17.1
26	---	10.2	6.3	4.2	5.1	11.9	12.8	16.6	---	---	---	16.9
27	---	9.8	5.1	4.3	5.6	11.6	13.4	17.2	---	---	---	16.9
28	---	8.0	6.2	4.5	6.0	11.3	14.1	17.3	---	---	24.6	17.7
29	---	8.9	7.0	4.6	---	10.7	15.1	16.6	---	---	24.3	16.4
30	---	8.6	6.8	5.4	---	10.2	14.6	16.4	---	---	23.6	16.4
31	---	---	8.7	6.3	---	9.8	---	15.8	---	---	22.7	---
MEAN	---	---	7.5	5.5	5.7	8.3	11.4	14.6	---	---	---	20.4
MAX	---	---	9.8	9.0	7.6	11.9	15.1	17.3	---	---	---	23.4
MIN	---	---	5.1	3.1	4.3	3.1	7.0	10.8	---	---	---	16.4

Water Temperature, Sensor #3, degrees Celsius  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	8.0	9.0	6.3	6.8	10.2	11.2	15.5	---	---	21.6
2	---	---	7.9	7.8	7.3	7.0	11.1	10.8	15.6	---	---	21.6
3	---	12.5	7.7	5.8	7.6	6.6	11.9	11.4	15.3	---	---	21.5
4	---	12.3	8.3	7.4	7.0	6.0	8.8	12.3	15.3	---	---	21.9
5	---	12.6	7.3	7.8	6.2	5.6	7.1	12.1	16.0	---	---	21.8
6	---	12.7	6.2	6.4	5.7	5.6	7.0	12.9	16.5	---	---	22.0
7	---	12.7	5.8	6.9	5.2	5.6	7.3	14.2	17.2	---	---	21.9
8	---	13.0	7.6	7.8	4.8	5.5	7.4	14.0	---	---	---	22.2
9	---	13.0	7.6	8.2	4.5	5.3	7.1	13.4	---	---	---	23.2
10	---	13.6	7.8	7.5	4.7	5.5	8.4	14.4	---	---	---	23.3
11	---	14.3	8.2	5.3	4.7	5.3	10.0	14.4	---	---	---	23.2
12	---	14.0	9.0	5.5	4.3	6.0	10.5	13.6	---	---	---	23.3
13	---	13.7	7.2	4.8	4.4	7.2	11.0	13.9	---	---	---	23.1
14	---	12.9	8.3	3.7	4.6	8.0	11.8	14.4	---	---	---	22.8
15	---	11.1	9.2	4.7	5.4	8.0	12.7	13.6	---	---	---	22.4
16	---	11.6	9.0	5.2	5.2	8.7	14.2	13.4	---	---	---	21.4
17	---	10.9	7.4	5.5	5.3	9.8	13.1	14.2	---	---	---	21.0
18	---	10.6	7.6	3.3	5.5	10.4	11.9	15.2	---	---	---	20.2
19	---	10.6	9.8	3.1	6.1	9.6	11.7	15.6	---	---	---	19.7

**05536118 N.B. Chicago River at Grand Ave at Chicago, IL--Continued**

20	---	11.7	8.5	4.4	6.8	9.5	12.3	15.8	---	---	---	19.3
21	---	10.9	7.6	4.5	7.0	9.8	13.7	16.0	---	---	---	18.2
22	---	10.2	7.3	4.3	7.5	9.6	13.3	15.5	---	---	---	18.0
23	---	11.5	6.9	3.6	6.6	9.6	12.8	15.4	---	---	---	17.9
24	---	9.9	7.0	3.4	5.6	9.9	13.1	16.0	---	---	---	18.0
25	---	8.7	7.0	3.6	5.1	11.3	13.1	16.4	---	---	---	17.0
26	---	10.1	6.3	4.2	5.1	11.9	12.8	16.5	---	---	---	16.9
27	---	9.7	5.1	4.3	5.6	11.4	13.3	17.1	---	---	---	16.8
28	---	8.0	6.5	4.5	6.0	11.2	14.0	17.2	---	---	24.5	17.7
29	---	8.9	7.0	4.6	---	10.7	15.0	16.4	---	---	24.2	16.4
30	---	8.6	6.8	5.4	---	10.1	14.6	16.3	---	---	23.5	16.3
31	---	---	8.7	6.3	---	9.8	---	15.8	---	---	22.6	---
MEAN	---	---	7.6	5.4	5.7	8.3	11.4	14.5	---	---	---	20.4
MAX	---	---	9.8	9.0	7.6	11.9	15.0	17.2	---	---	---	23.3
MIN	---	---	5.1	3.1	4.3	5.3	7.0	10.8	---	---	---	16.3

**Water Temperature, Sensor #4, degrees Celsius**  
**WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003**  
**DAILY MINIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	8.0	9.0	6.5	6.9	10.2	11.3	15.6	---	---	21.7
2	---	---	7.9	7.8	7.4	7.1	11.1	10.9	15.6	---	---	21.7
3	---	12.5	7.8	5.8	7.6	6.7	12.0	11.5	15.3	---	---	21.5
4	---	12.4	8.3	7.4	7.0	6.0	8.8	12.4	15.3	---	---	22.0
5	---	12.6	7.4	7.8	6.2	5.6	7.1	12.1	16.1	---	---	21.9
6	---	12.7	6.6	6.5	5.7	5.6	7.1	12.9	16.6	---	---	22.1
7	---	12.7	6.8	6.9	5.2	5.7	7.4	14.2	17.3	---	---	22.0
8	---	13.1	7.6	7.8	4.8	6.0	7.4	14.1	---	---	---	22.3
9	---	13.0	7.7	8.2	4.5	6.2	7.1	13.5	---	---	---	23.3
10	---	13.7	7.8	7.5	4.8	5.5	8.4	14.4	---	---	---	23.4
11	---	14.4	8.2	5.3	4.7	5.3	10.1	14.5	---	---	---	23.3
12	---	14.1	9.0	5.6	4.4	6.0	10.6	13.6	---	---	---	23.4
13	---	13.8	7.2	4.9	4.4	7.3	11.0	14.0	---	---	---	23.2
14	---	13.0	8.3	3.7	4.6	8.0	11.9	14.5	---	---	---	22.9
15	---	11.1	9.2	4.7	5.4	8.0	12.8	13.6	---	---	---	22.4
16	---	11.7	9.1	5.2	5.2	8.8	14.2	13.5	---	---	---	21.5
17	---	10.9	7.4	5.5	5.3	9.8	13.2	14.2	---	---	---	21.1
18	---	10.6	7.6	3.4	5.5	10.5	12.0	15.2	---	---	---	20.3
19	---	10.6	9.8	3.1	6.1	9.7	11.7	15.7	---	---	---	19.8
20	---	11.8	8.6	4.4	6.8	9.6	12.4	15.9	---	---	---	19.4
21	---	10.9	7.6	4.6	7.0	9.9	13.8	16.1	---	---	---	18.3
22	---	10.3	7.4	4.3	7.5	9.7	13.3	15.6	---	---	---	18.1
23	---	11.6	7.0	3.6	6.7	9.6	12.9	15.5	---	---	---	18.0
24	---	9.9	7.0	3.4	5.6	10.0	13.2	16.1	---	---	---	18.1
25	---	8.7	7.0	3.6	5.2	11.3	13.1	16.5	---	---	---	17.1
26	---	10.2	6.3	4.2	5.1	11.9	12.8	16.6	---	---	---	16.9
27	---	9.7	5.1	4.3	5.7	11.5	13.4	17.2	---	---	---	16.9
28	---	8.0	6.7	4.5	6.0	11.3	14.1	17.3	---	---	24.6	17.8
29	---	9.0	7.1	4.6	---	10.8	15.1	16.5	---	---	24.3	16.4
30	---	8.6	6.8	5.4	---	10.2	14.6	16.4	---	---	23.7	16.4
31	---	---	8.7	6.3	---	9.8	---	15.8	---	---	22.7	---
MEAN	---	---	7.6	5.5	5.7	8.4	11.4	14.6	---	---	---	20.4
MAX	---	---	9.8	9.0	7.6	11.9	15.1	17.3	---	---	---	23.4
MIN	---	---	5.1	3.1	4.4	5.3	7.1	10.9	---	---	---	16.4

**Water Temperature, Sensor #5, degrees Celsius**  
**WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003**  
**DAILY MINIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	8.0	9.0	6.6	6.8	10.2	11.3	15.5	---	---	21.7
2	---	---	7.9	7.8	7.3	7.1	11.1	10.8	15.6	---	---	21.7
3	---	12.5	7.8	5.8	7.6	6.6	11.9	11.5	15.3	---	---	21.5
4	---	12.3	8.3	7.4	7.0	6.0	8.8	12.3	15.3	---	---	22.0
5	---	12.6	7.5	7.8	6.2	5.6	7.1	12.1	16.1	---	---	21.9
6	---	12.7	6.8	6.5	5.7	5.6	7.0	12.9	16.6	---	---	22.1

## ILLINOIS RIVER BASIN

## 05536118 N.B. Chicago River at Grand Ave at Chicago, IL--Continued

7	---	12.7	7.0	6.9	5.2	5.7	7.2	14.2	17.3	---	---	22.0
8	---	13.1	7.6	7.8	4.8	6.1	7.4	14.1	---	---	---	22.2
9	---	13.0	7.7	8.2	4.5	6.2	7.1	13.4	---	---	---	23.2
10	---	13.6	7.8	7.5	4.7	5.5	8.4	14.4	---	---	---	23.4
11	---	14.4	8.2	5.3	4.7	5.3	10.0	14.4	---	---	---	23.3
12	---	14.1	9.0	5.5	4.3	6.0	10.6	13.6	---	---	---	23.4
13	---	13.8	7.1	4.9	---	7.2	10.8	13.9	---	---	---	23.2
14	---	12.9	8.3	3.7	---	8.0	11.9	14.4	---	---	---	22.9
15	---	11.1	9.2	4.7	---	8.0	12.8	13.6	---	---	---	22.4
16	---	11.7	9.1	5.2	---	8.7	14.2	13.5	---	---	---	21.5
17	---	10.9	7.4	5.5	---	9.8	13.2	14.2	---	---	---	21.1
18	---	10.6	7.6	3.3	---	10.5	12.0	15.2	---	---	---	20.3
19	---	10.6	9.8	3.1	---	9.7	11.7	15.7	---	---	---	19.8
20	---	11.7	8.6	4.4	---	9.5	12.3	15.9	---	---	---	19.3
21	---	10.9	7.6	4.6	---	9.8	13.8	16.0	---	---	---	18.2
22	---	10.2	7.4	4.3	---	9.7	13.3	15.5	---	---	---	18.1
23	---	11.5	6.9	3.6	---	9.6	12.9	15.5	---	---	---	18.0
24	---	9.9	7.0	3.4	---	10.0	13.1	16.1	---	---	---	18.0
25	---	8.7	7.0	3.6	---	11.3	13.1	16.4	---	---	---	17.1
26	---	10.2	6.2	4.2	---	11.9	12.8	16.5	---	---	---	16.9
27	---	9.7	5.1	4.4	---	11.4	13.4	17.2	---	---	---	16.9
28	---	8.0	6.8	4.5	6.0	11.3	14.1	17.3	---	---	24.5	17.8
29	---	9.0	7.1	4.6	---	10.7	15.0	16.5	---	---	24.3	16.4
30	---	8.6	6.8	5.4	---	10.1	14.6	16.4	---	---	23.6	16.4
31	---	---	8.7	6.3	---	9.8	---	15.8	---	---	22.7	---
MEAN	---	---	7.7	5.5	---	8.4	11.4	14.5	---	---	---	20.4
MAX	---	---	9.8	9.0	---	11.9	15.0	17.3	---	---	---	23.4
MIN	---	---	5.1	3.1	---	5.3	7.0	10.8	---	---	---	16.4

Water Temperature, Sensor #6, degrees Celsius  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	8.1	9.1	6.7	6.9	10.3	11.4	15.6	---	---	21.7
2	---	---	8.0	7.9	7.3	7.2	11.2	11.0	15.7	---	---	21.7
3	---	12.6	7.8	6.0	7.7	6.7	12.0	11.6	15.4	---	---	21.5
4	---	12.4	8.4	7.5	7.1	6.1	9.0	12.5	15.4	---	---	22.0
5	---	12.4	7.6	7.9	6.2	5.7	7.2	12.3	16.1	---	---	21.9
6	---	12.8	7.3	6.6	5.8	5.7	7.2	13.0	16.6	---	---	22.1
7	---	12.8	7.1	7.0	5.3	5.8	7.3	14.3	17.3	---	---	22.0
8	---	13.1	7.6	7.8	4.9	6.2	7.6	14.1	---	---	---	22.2
9	---	13.1	7.7	8.3	4.6	6.3	7.2	13.5	---	---	---	23.2
10	---	13.7	7.9	7.6	4.8	5.6	8.5	14.5	---	---	---	23.3
11	---	14.4	8.3	5.4	4.8	5.4	10.2	14.5	---	---	---	23.3
12	---	14.2	9.1	5.6	4.4	6.0	10.7	13.7	---	---	---	23.3
13	---	13.8	7.2	5.0	4.5	7.3	10.9	14.0	---	---	---	23.2
14	---	13.0	8.4	3.8	4.7	8.1	12.0	14.5	---	---	---	22.9
15	---	11.2	9.3	4.8	5.5	8.1	12.9	13.7	---	---	---	22.4
16	---	11.7	9.1	5.3	5.3	8.8	14.3	13.6	---	---	---	21.5
17	---	10.9	7.5	5.6	5.4	9.8	13.4	14.3	---	---	---	21.0
18	---	10.7	7.6	3.5	5.6	10.6	12.1	15.4	---	---	---	20.3
19	---	10.7	9.9	3.2	6.2	9.8	11.8	15.8	---	---	---	19.8
20	---	11.8	8.6	4.5	6.9	9.5	12.5	16.0	---	---	---	19.3
21	---	11.0	7.7	4.7	7.0	10.0	13.9	16.1	---	---	---	18.2
22	---	10.3	7.4	4.4	7.6	9.8	13.5	15.7	---	---	---	18.1
23	---	11.6	7.0	3.7	6.8	9.7	13.0	15.6	---	---	---	18.0
24	---	10.0	7.1	3.5	5.7	10.1	13.3	16.2	---	---	---	18.0
25	---	8.8	7.1	3.7	5.2	11.3	13.2	16.6	---	---	---	17.1
26	---	10.2	6.3	4.3	5.2	12.0	13.0	16.6	---	---	---	17.0
27	---	9.8	5.2	4.5	5.8	11.5	13.6	17.2	---	---	---	16.9
28	---	8.1	6.9	4.6	6.2	11.5	14.2	17.3	---	---	24.5	17.7
29	---	9.0	7.1	4.7	---	10.9	15.1	16.6	---	---	24.3	16.4
30	---	8.6	6.9	5.5	---	10.2	14.8	16.4	---	---	23.6	16.4
31	---	---	8.8	6.4	---	9.9	---	15.9	---	---	22.7	---
MEAN	---	---	7.7	5.6	5.8	8.5	11.5	14.6	---	---	---	20.4



**05536118 N.B. Chicago River at Grand Ave at Chicago, Il--Continued**

<b>MAX</b>	---	---	9.9	9.1	7.7	12.0	15.1	17.3	---	---	---	23.3
<b>MIN</b>	---	---	5.2	3.2	4.4	5.4	7.2	11.0	---	---	---	16.4

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ILLINOIS RIVER BASIN  
**05536118 N.B. Chicago River at Grand Ave at Chicago, IL**

**LOCATION.**— Lat 41°53'30", long 87°38'30" (NAD of 1927), in NW1/4SW1/4 sec.12, T.40 N., R.13 E., Cook County, Hydrologic Unit 07120003, on right upstream side of Grand Avenue bridge in Chicago, 0.6 mi upstream from the confluence with the main stem of the Chicago River and at mile 36.0.

**DRAINAGE AREA.**— 180 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: July 2, 2002 to current year.

SURFACE-WATER QUALITY

PHYSICAL AND CHEMICAL: Water years 2002 to current year.

WATER TEMPERATURE: September 2002 to current year.

**GAGE.**— Water-stage recorder, acoustic velocity meter and water-temperature sensor. Datum of gage is 579.48 ft above NGVD of 1929 (Chicago City datum).

**REMARKS.**— This station provides data for a water-quality model.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum daily discharge, 4,430 ft<sup>3</sup>/s, Aug. 22, 2002, minimum daily discharge, -20 ft<sup>3</sup>/s, Jan. 31, 2004, due to regulation.

WATER TEMPERATURE: Maximum recorded, 25.6°C, Aug. 27, 2003; minimum recorded, 0.5°C, Jan. 31, 2004.

**EXTREMES FOR CURRENT YEAR.**— Maximum water temperature, 24.6°C, July 22; minimum, 0.5°C, Jan. 31.

**REMARKS FOR CURRENT YEAR.**— Water-temperature data are from six temperature sensors on right bank with sensor #1 being the lowest in the water column and sensor #6 being the highest.

**Water Temperature, Sensor #1, degrees Celsius**  
**WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.6	15.3	9.4	8.4	3.1	9.3	10.8	15.1	17.0	21.5	22.9	21.3
2	16.2	15.9	9.4	9.1	5.1	9.8	10.8	14.3	17.3	21.9	23.6	21.7
3	15.7	15.6	9.7	9.9	6.3	9.6	11.1	14.1	17.5	22.0	23.9	22.3
4	16.0	14.5	9.7	9.7	6.5	9.1	10.9	14.6	17.9	21.9	23.1	22.5
5	16.8	15.5	10.5	8.2	6.1	9.0	11.1	15.2	18.2	22.3	21.9	22.5
6	16.2	13.8	11.4	6.7	4.6	7.8	11.6	16.1	18.8	21.8	21.6	22.4
7	16.5	12.6	9.4	4.9	4.4	7.5	12.4	16.1	19.5	21.6	21.7	22.0
8	17.7	11.7	9.5	3.0	6.1	7.1	12.8	15.9	20.8	21.5	21.9	21.4
9	18.5	11.1	10.5	5.2	5.5	7.3	13.1	16.5	21.7	21.3	22.3	20.9
10	19.2	11.3	12.2	6.6	5.2	7.7	12.8	17.7	20.8	21.4	22.1	20.9
11	19.5	12.3	9.8	6.9	5.8	7.8	12.3	18.5	18.7	21.5	21.1	21.0
12	19.4	13.0	7.4	7.2	6.1	7.2	11.7	19.1	19.1	22.2	20.1	21.6
13	19.0	12.7	6.7	7.9	6.0	7.3	11.0	19.4	19.6	22.8	19.8	22.1
14	18.3	11.9	6.8	7.8	6.2	7.9	11.6	18.8	20.3	22.8	20.3	22.4
15	16.9	11.6	7.5	7.0	6.2	8.4	12.5	17.0	20.6	22.9	20.9	22.6
16	15.2	12.0	7.9	6.8	6.2	8.1	14.0	16.4	20.7	22.5	21.2	22.8
17	14.9	12.8	7.7	6.5	6.5	7.8	15.5	16.9	20.9	22.4	21.5	22.5
18	15.5	14.7	7.9	6.8	6.9	8.0	16.2	17.5	20.9	22.6	22.1	22.2
19	15.8	14.0	7.6	6.1	7.7	8.5	16.7	17.1	20.1	22.6	22.1	21.9
20	16.4	12.8	7.3	4.5	8.3	9.4	16.3	17.5	19.8	23.0	22.0	21.7
21	17.3	12.8	7.1	4.6	8.3	9.4	15.2	18.3	19.5	23.6	21.6	21.6
22	17.2	12.9	7.8	5.2	6.6	9.0	14.7	17.9	19.3	23.8	21.5	21.9
23	16.6	13.5	8.6	4.7	7.0	8.9	14.4	17.2	19.8	23.4	21.9	22.1
24	16.5	13.2	8.7	4.3	8.0	9.9	14.2	17.2	19.9	22.3	22.4	22.0
25	16.5	10.7	8.3	4.9	7.6	11.2	14.2	17.0	19.7	21.7	22.1	21.8
26	16.4	9.6	8.1	5.1	7.3	11.7	14.3	17.0	19.9	21.7	22.1	21.1
27	15.8	10.4	8.3	5.0	7.4	12.6	13.9	17.3	20.0	21.9	23.1	21.0
28	14.1	10.7	8.7	5.0	7.8	12.6	14.2	17.4	20.4	22.1	22.0	20.8
29	14.0	10.1	9.3	4.3	8.5	12.9	15.2	17.2	20.8	22.4	21.1	20.1
30	14.4	9.6	9.6	2.6	---	12.6	15.7	16.9	21.3	22.5	20.7	19.7
31	15.3	---	8.7	1.7	---	11.5	---	17.4	---	22.5	20.8	---
MEAN	16.6	12.6	8.8	6.0	6.5	9.3	13.4	16.9	19.7	22.3	21.8	21.7

**05536118 N.B. Chicago River at Grand Ave at Chicago, Il--Continued**

<b>MAX</b>	19.5	15.9	12.2	9.9	8.5	12.9	16.7	19.4	21.7	23.8	23.9	22.8
<b>MIN</b>	14.0	9.6	6.7	1.7	3.1	7.1	10.8	14.1	17.0	21.3	19.8	19.7

WTR YR 2004

MEAN 14.6

MAX 23.9

MIN 1.7

**Water Temperature, Sensor #2, degrees Celsius**  
**WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

<b>DAY</b>	<b>OCT</b>	<b>NOV</b>	<b>DEC</b>	<b>JAN</b>	<b>FEB</b>	<b>MAR</b>	<b>APR</b>	<b>MAY</b>	<b>JUN</b>	<b>JUL</b>	<b>AUG</b>	<b>SEP</b>
1	16.6	15.3	9.4	8.4	3.4	9.3	10.8	15.1	17.0	21.5	22.9	21.3
2	16.2	15.9	9.4	9.1	5.2	9.9	10.8	14.3	17.3	21.9	23.6	21.7
3	15.7	15.7	9.7	9.9	6.3	9.6	11.1	14.1	17.5	22.0	23.9	22.3
4	16.1	14.5	9.7	9.7	6.5	9.1	10.9	14.6	17.8	21.9	23.1	22.5
5	16.8	15.6	10.5	8.2	6.1	9.0	11.1	15.2	18.2	22.3	21.9	22.5
6	16.2	13.8	11.4	6.7	4.8	7.8	11.6	16.1	18.8	21.7	21.6	22.4
7	16.5	12.6	9.4	4.9	4.8	7.5	12.4	16.1	19.5	21.6	21.7	22.0
8	17.7	11.7	9.5	3.2	6.2	7.1	12.8	15.9	20.8	21.5	21.9	21.4
9	18.5	11.1	10.5	5.4	5.5	7.3	13.1	16.5	21.7	21.4	22.3	20.9
10	19.2	11.3	12.2	6.6	5.4	7.7	12.8	17.6	20.8	21.4	22.1	20.9
11	19.5	12.3	9.8	6.9	5.8	7.8	12.3	18.5	18.7	21.5	21.1	21.0
12	19.4	13.1	7.4	7.2	6.1	7.2	11.6	19.0	19.1	22.2	20.1	21.6
13	19.0	12.7	6.7	7.8	6.0	7.3	11.0	19.4	19.6	22.8	19.8	22.2
14	18.4	11.9	6.8	7.8	6.2	7.9	11.5	18.8	20.3	22.8	20.4	22.4
15	17.0	11.6	7.5	6.9	6.2	8.4	12.5	17.1	20.6	22.9	20.9	22.6
16	15.2	12.0	7.9	6.8	6.2	8.1	13.9	16.4	20.7	22.5	21.2	22.9
17	15.0	12.9	7.7	6.5	6.5	7.8	15.5	16.9	20.9	22.4	21.5	22.5
18	15.5	14.7	7.9	6.8	6.9	8.0	16.2	17.5	20.9	22.6	22.1	22.2
19	15.8	14.0	7.6	6.1	7.7	8.5	16.7	17.1	20.1	22.7	22.1	21.9
20	16.4	12.8	7.3	4.6	8.3	9.4	16.3	17.5	19.8	23.0	22.0	21.7
21	17.4	12.8	7.1	4.9	8.3	9.4	15.2	18.4	19.5	23.6	21.6	21.7
22	17.2	12.9	7.8	5.2	6.6	9.0	14.7	17.9	19.3	23.8	21.5	21.9
23	16.6	13.6	8.6	4.7	7.1	8.9	14.4	17.3	19.8	23.4	21.9	22.1
24	16.5	13.2	8.7	4.3	8.0	9.9	14.2	17.2	19.9	22.3	22.4	22.1
25	16.5	10.7	8.3	4.9	7.6	11.2	14.3	17.0	19.7	21.8	22.1	21.8
26	16.4	9.6	8.1	5.1	7.2	11.7	14.3	17.0	19.9	21.8	22.1	21.1
27	15.8	10.4	8.3	5.0	7.4	12.6	13.9	17.3	20.0	21.9	23.1	21.1
28	14.1	10.8	8.7	5.0	7.8	12.6	14.2	17.4	20.4	22.2	22.0	20.8
29	14.0	10.1	9.3	4.5	8.4	12.9	15.2	17.2	20.8	22.4	21.1	20.1
30	14.5	9.6	9.6	2.8	---	12.6	15.7	16.9	21.3	22.5	20.7	19.7
31	15.3	---	8.7	2.1	---	11.5	---	17.4	---	22.5	20.8	---
<b>MEAN</b>	16.6	12.6	8.8	6.1	6.5	9.3	13.4	16.9	19.7	22.3	21.8	21.7
<b>MAX</b>	19.5	15.9	12.2	9.9	8.4	12.9	16.7	19.4	21.7	23.8	23.9	22.9
<b>MIN</b>	14.0	9.6	6.7	2.1	3.4	7.1	10.8	14.1	17.0	21.4	19.8	19.7

WTR YR 2004

MEAN 14.7

MAX 23.9

MIN 2.1

**Water Temperature, Sensor #3, degrees Celsius**  
**WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

<b>DAY</b>	<b>OCT</b>	<b>NOV</b>	<b>DEC</b>	<b>JAN</b>	<b>FEB</b>	<b>MAR</b>	<b>APR</b>	<b>MAY</b>	<b>JUN</b>	<b>JUL</b>	<b>AUG</b>	<b>SEP</b>
1	16.6	15.3	9.3	8.4	3.5	9.2	10.8	15.1	---	---	---	---
2	16.1	15.8	9.4	9.0	5.1	9.8	10.7	14.2	---	---	---	---
3	15.6	15.6	9.6	9.9	6.2	9.5	11.0	14.0	---	---	---	---
4	16.0	14.5	9.7	9.6	6.5	9.1	10.8	14.5	---	---	---	---
5	16.7	15.5	10.5	8.1	6.2	8.9	11.0	15.1	---	---	---	---
6	16.1	13.7	11.3	6.7	5.0	7.8	11.5	15.9	---	---	---	---
7	16.5	12.5	9.3	5.2	5.4	7.4	12.3	16.1	---	---	---	---
8	17.6	11.6	9.4	3.8	6.2	7.1	12.7	15.8	---	---	---	---
9	18.5	11.0	10.5	5.5	5.6	7.2	13.0	16.4	---	---	---	---
10	19.2	11.2	12.2	6.6	5.5	7.6	12.8	17.5	---	---	---	---
11	19.5	12.3	9.7	6.8	5.8	7.8	12.2	18.4	---	---	---	---
12	19.3	13.0	7.3	7.1	6.0	7.2	11.6	18.9	---	---	---	---
13	18.9	12.6	6.6	7.8	6.0	7.2	10.9	19.3	---	---	---	---
14	18.3	11.9	6.8	7.8	6.1	7.8	11.3	18.7	---	---	---	---
15	16.9	11.6	7.5	6.9	6.1	8.3	12.4	17.0	---	---	---	---
16	15.2	12.0	7.8	6.8	6.1	8.1	13.8	16.3	---	---	---	---

## ILLINOIS RIVER BASIN

## 05536118 N.B. Chicago River at Grand Ave at Chicago, Il--Continued

17	14.9	12.8	7.7	6.5	6.4	7.7	15.4	16.9	---	---	---	---
18	15.4	14.7	7.8	6.7	6.9	7.9	16.1	---	---	---	---	---
19	15.7	13.9	7.6	6.0	7.6	8.4	16.7	---	---	---	---	---
20	16.3	12.7	7.2	4.6	8.3	9.3	16.3	---	---	---	---	---
21	17.3	12.7	7.0	5.0	8.3	9.4	15.2	---	---	---	---	---
22	17.2	12.8	7.7	5.1	6.5	8.9	14.6	---	---	---	---	---
23	16.5	13.5	8.6	4.6	7.1	8.8	14.3	---	---	---	---	---
24	16.4	13.2	8.6	4.2	7.9	9.9	14.2	---	---	---	---	---
25	16.5	10.7	8.3	4.9	7.5	11.1	14.2	---	---	---	---	---
26	16.4	9.5	8.0	5.1	7.2	11.7	14.3	---	---	---	---	---
27	15.7	10.3	8.2	5.0	7.3	12.5	13.8	---	---	---	---	---
28	14.1	10.7	8.7	5.0	7.8	12.4	14.1	---	---	---	---	---
29	13.9	10.1	9.3	4.6	8.3	12.9	15.1	---	---	---	---	---
30	14.4	9.6	9.6	3.5	---	12.6	15.7	---	---	---	---	---
31	15.2	---	8.7	2.5	---	11.5	---	---	---	---	---	---
MEAN	16.5	12.6	8.7	6.1	6.5	9.2	13.3	---	---	---	---	---
MAX	19.5	15.8	12.2	9.9	8.3	12.9	16.7	---	---	---	---	---
MIN	13.9	9.5	6.6	2.5	3.5	7.1	10.7	---	---	---	---	---

Water Temperature, Sensor #4, degrees Celsius  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

## DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.7	15.4	9.4	8.4	3.8	9.3	10.9	15.2	17.0	21.4	22.9	21.4
2	16.2	15.9	9.4	9.1	5.2	9.9	10.8	14.3	17.4	21.9	23.5	21.7
3	15.7	15.7	9.7	9.9	6.3	9.6	11.1	14.1	17.5	22.0	23.9	22.3
4	16.1	14.5	9.7	9.7	6.5	9.1	10.9	14.5	17.8	21.9	23.1	22.6
5	16.8	15.6	10.6	8.2	6.3	9.0	11.1	15.2	18.2	22.4	21.9	22.5
6	16.2	13.8	11.4	6.7	5.2	7.9	11.6	16.0	18.8	21.7	21.6	22.4
7	16.5	12.6	9.4	5.7	5.8	7.5	12.3	16.2	19.4	21.7	21.7	22.1
8	17.7	11.7	9.5	4.5	6.3	7.2	12.8	15.8	20.6	21.4	21.9	21.4
9	18.5	11.1	10.6	5.8	5.8	7.3	13.0	16.4	21.6	21.4	22.3	20.9
10	19.2	11.3	12.2	6.7	5.7	7.7	12.9	17.5	20.9	21.3	22.2	20.9
11	19.6	12.3	9.8	6.9	5.9	7.8	12.2	18.5	18.7	21.5	21.2	21.0
12	19.4	13.1	7.4	7.2	6.1	7.3	11.7	18.9	19.1	22.1	20.2	21.6
13	19.0	12.7	6.7	7.9	6.1	7.3	11.0	19.4	19.6	22.8	19.9	22.2
14	18.4	12.0	6.8	7.9	6.2	7.9	11.3	18.8	20.4	22.8	20.4	22.4
15	17.0	11.6	7.5	7.0	6.2	8.4	12.4	17.1	20.6	22.9	20.9	22.6
16	15.3	12.0	7.9	6.9	6.2	8.2	13.8	16.3	20.7	22.5	21.3	22.9
17	15.0	12.9	7.8	6.5	6.5	7.8	15.4	16.9	20.8	22.4	21.5	22.5
18	15.5	14.7	7.9	6.8	7.0	8.0	16.2	17.6	20.9	22.6	22.1	22.3
19	15.8	14.0	7.7	6.1	7.7	8.4	16.7	17.1	20.1	22.7	22.1	21.9
20	16.4	12.8	7.3	4.8	8.4	9.4	16.3	17.4	19.8	22.9	22.0	21.7
21	17.4	12.8	7.1	5.2	8.3	9.5	15.2	18.4	19.6	23.5	21.6	21.7
22	17.3	12.9	7.8	5.2	6.6	9.0	14.7	17.9	19.3	23.8	21.6	21.9
23	16.6	13.6	8.6	4.7	7.2	8.9	14.3	17.3	19.8	23.4	21.9	22.2
24	16.5	13.3	8.7	4.3	8.0	10.0	14.2	17.3	19.9	22.3	22.4	22.1
25	16.6	10.7	8.4	4.9	7.6	11.2	14.3	17.0	19.7	21.8	22.2	21.8
26	16.5	9.6	8.1	5.2	7.3	11.7	14.3	17.0	19.9	21.8	22.1	21.1
27	15.8	10.4	8.3	5.1	7.4	12.6	13.8	17.3	20.0	21.8	23.1	21.1
28	14.1	10.8	8.7	5.1	7.8	12.5	14.1	17.4	20.4	22.1	22.1	20.9
29	14.0	10.2	9.3	4.7	8.4	12.9	15.2	17.2	20.8	22.4	21.2	20.1
30	14.5	9.6	9.7	3.7	---	12.6	15.7	17.0	21.2	22.5	20.7	19.7
31	15.3	---	8.8	2.8	---	11.5	---	17.4	---	22.5	20.8	---
MEAN	16.6	12.7	8.8	6.2	6.6	9.3	13.3	16.9	19.7	22.3	21.8	21.7
MAX	19.6	15.9	12.2	9.9	8.4	12.9	16.7	19.4	21.6	23.8	23.9	22.9
MIN	14.0	9.6	6.7	2.8	3.8	7.2	10.8	14.1	17.0	21.3	19.9	19.7

WTR YR 2004

MEAN 14.7

MAX 23.9

MIN 2.8

**05536118 N.B. Chicago River at Grand Ave at Chicago, IL--Continued**

**Water Temperature, Sensor #5, degrees Celsius**  
**WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.6	15.3	9.4	8.4	3.9	9.3	10.8	15.1	17.0	21.4	22.9	21.3
2	16.2	15.9	9.4	9.1	5.2	9.8	10.7	14.3	17.3	21.8	23.5	21.7
3	15.7	15.7	9.7	9.9	6.3	9.6	11.1	14.0	17.4	22.0	23.9	22.3
4	16.1	14.5	9.7	9.7	6.5	9.1	10.8	14.5	17.7	21.9	23.1	22.5
5	16.8	15.6	10.5	8.2	6.6	9.0	11.0	15.1	18.1	22.3	21.9	22.5
6	16.2	13.8	11.4	6.7	5.5	7.8	11.6	15.9	18.7	21.7	21.6	22.4
7	16.5	12.6	9.4	5.9	5.9	7.5	12.3	16.1	19.3	21.6	21.7	22.0
8	17.7	11.7	9.5	4.9	6.4	7.1	12.8	15.8	20.5	21.4	21.9	21.4
9	18.5	11.1	10.5	5.8	5.9	7.3	13.0	16.3	21.6	21.3	22.3	20.8
10	19.2	11.3	12.2	6.6	5.7	7.7	12.8	17.5	20.8	21.3	22.1	20.9
11	19.5	12.3	9.8	6.9	5.9	7.8	12.2	18.4	18.7	21.4	21.1	21.0
12	19.4	13.1	7.4	7.2	6.1	7.2	11.6	18.8	19.1	22.1	20.1	21.6
13	19.0	12.7	6.7	7.8	6.0	7.2	11.0	19.3	19.5	22.7	19.8	22.1
14	18.4	11.9	6.8	7.8	6.2	7.9	11.2	18.8	20.3	22.8	20.3	22.3
15	17.0	11.6	7.5	6.9	6.2	8.4	12.4	17.0	20.6	22.8	20.9	22.6
16	15.2	12.0	7.9	6.8	6.2	8.1	13.8	16.3	20.6	22.5	21.2	22.8
17	15.0	12.8	7.7	6.5	6.5	7.8	15.3	16.8	20.8	22.4	21.5	22.5
18	15.5	14.7	7.9	6.8	6.9	8.0	16.1	17.5	20.9	22.6	22.0	22.2
19	15.8	14.0	7.6	6.1	7.6	8.4	16.7	17.0	20.1	22.6	22.0	21.9
20	16.3	12.8	7.3	5.5	8.3	9.4	16.3	17.4	19.8	22.8	22.0	21.7
21	17.4	12.8	7.1	5.3	8.3	9.4	15.2	18.4	19.5	23.5	21.6	21.6
22	17.2	12.9	7.8	5.2	6.5	8.9	14.7	17.9	19.2	23.7	21.5	21.9
23	16.6	13.5	8.6	4.7	7.2	8.8	14.3	17.3	19.7	23.4	21.9	22.1
24	16.5	13.2	8.7	4.3	8.0	9.9	14.2	17.2	19.9	22.3	22.4	22.1
25	16.5	10.7	8.3	4.9	7.6	11.2	14.2	17.0	19.7	21.7	22.1	21.8
26	16.4	9.6	8.1	5.2	7.2	11.7	14.3	17.0	19.8	21.7	22.1	21.1
27	15.8	10.4	8.3	5.1	7.4	12.5	13.8	17.3	20.0	21.7	23.0	21.0
28	14.1	10.8	8.7	5.0	7.8	12.4	14.1	17.3	20.3	22.1	22.0	20.9
29	14.0	10.1	9.3	4.7	8.4	12.9	15.1	17.2	20.8	22.3	21.1	20.1
30	14.4	9.6	9.6	3.7	----	12.6	15.7	16.9	21.1	22.5	20.7	19.7
31	15.3	----	8.8	3.0	----	11.5	----	17.4	----	22.5	20.7	----
MEAN	16.6	12.6	8.8	6.3	6.6	9.2	13.3	16.9	19.6	22.2	21.8	21.7
MAX	19.5	15.9	12.2	9.9	8.4	12.9	16.7	19.3	21.6	23.7	23.9	22.8
MIN	14.0	9.6	6.7	3.0	3.9	7.1	10.7	14.0	17.0	21.3	19.8	19.7

WTR YR 2004

MEAN 14.7

MAX 23.9

MIN 3.0

**Water Temperature, Sensor #6, degrees Celsius**  
**WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.7	15.4	9.4	8.5	4.0	9.2	10.9	15.1	16.9	20.9	22.4	21.0
2	16.2	15.9	9.5	9.1	5.3	9.8	10.8	14.3	17.2	21.3	22.9	21.4
3	15.7	15.7	9.7	10	6.3	9.6	11.1	14.1	17.3	21.6	23.3	21.9
4	16.1	14.6	9.8	9.7	6.6	9.2	10.9	14.4	17.5	21.5	22.9	22.1
5	16.8	15.6	10.6	8.2	7.0	9.0	11.1	15.1	17.9	21.9	21.9	22.1
6	16.2	13.8	11.4	6.8	5.8	8.0	11.6	15.8	18.5	21.4	21.5	22.1
7	16.5	12.6	9.4	6.1	6.1	7.7	12.2	16.1	19.0	21.4	21.5	21.8
8	17.7	11.7	9.5	5.2	6.7	7.3	12.7	15.7	19.9	21.1	21.6	21.4
9	18.5	11.2	10.6	6.0	6.1	7.4	12.9	16.2	21.1	21.1	22.0	20.9
10	19.2	11.3	12.3	6.7	5.8	7.8	12.9	17.3	20.7	21.0	21.9	20.8
11	19.5	12.4	9.8	6.9	6.0	7.9	12.3	18.2	18.7	21.1	21.2	20.8
12	19.4	13.1	7.5	7.3	6.2	7.4	11.7	18.7	18.9	21.5	20.3	21.2
13	19.0	12.7	6.7	7.9	6.1	7.3	11.1	19.2	19.3	22.1	19.9	21.8
14	18.4	12.0	6.9	7.9	6.3	7.9	11.3	18.7	20.0	22.3	20.2	22.0
15	17.0	11.7	7.6	7.0	6.2	8.4	12.3	17.1	20.3	22.3	20.6	22.2
16	15.3	12.1	7.9	6.9	6.3	8.2	13.6	16.3	20.4	22.1	21.0	22.5
17	15.0	12.9	7.8	6.6	6.6	7.9	15.0	16.7	20.5	22.1	21.2	22.3
18	15.5	14.7	8.0	6.8	7.0	8.1	15.8	17.4	20.6	22.2	21.6	22.0
19	15.8	14.0	7.7	6.2	7.7	8.4	16.5	17.0	20.0	22.2	21.7	21.8
20	16.4	12.8	7.3	5.8	8.3	9.4	16.2	17.2	19.6	22.3	21.7	21.5
21	17.4	12.8	7.2	5.4	8.4	9.5	15.2	18.2	19.5	22.9	21.4	21.5

## ILLINOIS RIVER BASIN

**05536118 N.B. Chicago River at Grand Ave at Chicago, IL--Continued**

<b>22</b>	17.3	12.9	7.8	5.3	6.8	9.1	14.7	17.9	19.1	23.2	21.3	21.7
<b>23</b>	16.6	13.6	8.7	4.8	7.3	8.9	14.2	17.2	19.5	23.0	21.5	21.9
<b>24</b>	16.5	13.3	8.7	4.4	8.1	9.9	14.2	17.2	19.6	22.2	22.0	21.9
<b>25</b>	16.5	10.8	8.4	5.0	7.7	11.1	14.2	16.9	19.5	21.6	21.9	21.7
<b>26</b>	16.5	9.6	8.1	5.2	7.3	11.6	14.3	16.9	19.6	21.6	21.8	21.1
<b>27</b>	15.8	10.4	8.3	5.2	7.5	12.4	13.9	17.2	19.7	21.5	22.5	21.0
<b>28</b>	14.2	10.8	8.7	5.1	7.9	12.3	14.0	17.2	20.0	21.7	22.0	20.8
<b>29</b>	14.0	10.2	9.4	4.9	8.4	12.8	14.9	17.2	20.4	22.0	21.2	20.2
<b>30</b>	14.5	9.7	9.7	3.9	---	12.6	15.6	16.9	20.7	22.1	20.7	19.8
<b>31</b>	15.3	---	8.8	3.3	---	11.6	---	17.3	---	22.1	20.6	---
<b>MEAN</b>	16.6	12.7	8.8	6.4	6.8	9.3	13.3	16.8	19.4	21.8	21.6	21.5
<b>MAX</b>	19.5	15.9	12.3	10.0	8.4	12.8	16.5	19.2	21.1	23.2	23.3	22.5
<b>MIN</b>	14.0	9.6	6.7	3.3	4.0	7.3	10.8	14.1	16.9	20.9	19.9	19.8

WTR YR 2004

MEAN 14.6

MAX 23.3

MIN 3.3

**LOCATION.**— Lat 41°53'30", long 87°38'30" (NAD of 1927), in NW1/4SW1/4 sec.12, T.40 N., R.13 E., Cook County, Hydrologic Unit 07120003, on right upstream side of Grand Avenue bridge in Chicago, 0.6 mi upstream from the confluence with the main stem of the Chicago River and at mile 36.0.

**DRAINAGE AREA.**— 180 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: July 2, 2002 to current year.

SURFACE-WATER QUALITY

PHYSICAL AND CHEMICAL: Water years 2002 to current year.

WATER TEMPERATURE: September 2002 to current year.

**GAGE.**— Water-stage recorder, acoustic velocity meter and water-temperature sensor. Datum of gage is 579.48 ft above NGVD of 1929 (Chicago City datum).

**REMARKS.**— This station provides data for a water-quality model.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum daily discharge, 4,430 ft<sup>3</sup>/s, Aug. 22, 2002, minimum daily discharge, -20 ft<sup>3</sup>/s, Jan. 31, 2004, due to regulation.

WATER TEMPERATURE: Maximum recorded, 25.6°C, Aug. 27, 2003; minimum recorded, 0.5°C, Jan. 31, 2004.

**EXTREMES FOR CURRENT YEAR.**— Maximum water temperature, 24.6°C, July 22; minimum, 0.5°C, Jan. 31.

**REMARKS FOR CURRENT YEAR.**— Water-temperature data are from six temperature sensors on right bank with sensor #1 being the lowest in the water column and sensor #6 being the highest.

Water Temperature, Sensor #1, degrees Celsius												
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MAXIMUM VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.8	15.5	9.8	8.6	4.7	9.7	11.1	15.6	17.5	22.0	23.3	21.7
2	16.6	16.4	9.8	9.6	5.8	10.1	11.2	14.7	17.6	22.5	24.1	22.1
3	16.3	17.1	9.9	10.1	6.6	9.9	11.3	14.4	18.2	22.6	24.4	22.6
4	16.4	15.6	9.8	10.1	6.7	9.3	11.3	15.1	18.6	22.6	24.0	22.7
5	17.3	16.0	11.3	8.5	6.6	9.9	11.5	15.7	18.7	22.6	22.5	22.8
6	16.9	14.8	11.6	7.8	5.7	8.1	12.1	17.1	19.1	22.8	22.2	22.6
7	17.1	13.1	10.7	6.2	6.3	7.6	13.2	16.4	20.1	21.8	21.9	22.3
8	18.4	12.4	10.1	4.5	6.5	7.3	13.1	16.6	21.7	22.3	22.3	21.8
9	18.9	11.3	11.2	6.6	5.9	7.6	13.8	17.4	22.4	21.6	22.6	21.3
10	19.5	11.8	13.1	6.8	6.0	8.1	13.1	18.3	21.5	22.0	22.4	21.4
11	19.9	12.9	12.0	7.1	6.3	8.0	12.8	19.3	19.2	21.9	21.7	21.3
12	19.6	13.4	8.1	7.5	6.2	7.8	12.1	20.0	19.6	23.3	20.6	22.1
13	19.3	13.2	7.0	8.2	6.2	7.7	11.2	20.3	20.0	23.6	20.2	22.6
14	18.9	12.3	7.0	8.1	6.4	8.1	13.0	19.1	20.6	23.0	20.8	22.9
15	17.8	11.8	7.8	7.2	6.3	8.5	13.1	17.7	20.9	23.7	21.4	23.2
16	16.7	12.5	8.1	7.0	6.5	8.6	15.3	16.7	21.3	22.8	21.4	23.3
17	15.2	13.6	7.8	7.0	6.9	7.9	16.6	17.6	21.6	22.6	21.9	22.8
18	15.9	15.5	8.1	7.0	7.3	8.1	17.0	17.8	21.1	22.9	22.5	22.5
19	16.1	14.8	7.8	6.3	8.0	9.2	17.0	17.8	20.8	23.1	22.5	22.3
20	17.0	13.4	7.4	5.5	8.6	9.8	16.7	19.2	20.2	23.6	22.3	22.3
21	17.5	12.9	7.4	5.7	8.5	9.7	15.7	19.0	19.9	24.5	21.8	22.1
22	17.4	13.0	8.4	5.6	7.7	9.6	14.9	19.0	19.9	24.6	21.8	22.3
23	17.0	14.0	8.7	4.8	7.8	9.5	15.3	17.6	20.6	23.7	22.3	22.7
24	16.6	13.9	8.8	4.6	8.2	10.7	14.5	17.4	20.1	23.2	22.6	22.3
25	16.6	12.4	8.6	5.3	8.1	11.5	14.7	17.3	20.1	22.1	22.3	22.1
26	16.6	9.8	8.3	5.4	7.6	12.4	14.6	17.2	20.1	21.9	22.6	21.4
27	16.1	10.8	8.5	5.3	7.8	12.8	14.4	17.9	20.3	22.6	23.6	21.3
28	15.0	10.9	9.1	5.3	8.2	13.6	14.8	17.9	21.1	22.8	23.5	21.2
29	14.2	10.4	9.6	5.1	9.2	13.2	15.8	17.5	21.4	22.8	21.6	20.4
30	14.9	9.7	9.9	4.4	---	13.1	15.9	17.5	22.1	22.6	21.3	20.1
31	15.5	---	9.3	2.7	---	12.0	---	17.6	---	22.8	21.3	---
MEAN	17.0	13.2	9.2	6.6	7.0	9.7	13.9	17.5	20.2	22.8	22.2	22.1

## ILLINOIS RIVER BASIN

## 05536118 N.B. Chicago River at Grand Ave at Chicago, Il--Continued

MAX	19.9	17.1	13.1	10.1	9.2	13.6	17.0	20.3	22.4	24.6	24.4	23.3
MIN	14.2	9.7	7.0	2.7	4.7	7.3	11.1	14.4	17.5	21.6	20.2	20.1

WTR YR 2004

MEAN 15.1

MAX 24.6

MIN 2.7

Water Temperature, Sensor #2, degrees Celsius  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

## DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.8	15.5	9.8	8.6	4.7	9.7	11.1	15.6	17.5	21.9	23.3	21.7
2	16.6	16.5	9.8	9.6	5.8	10.1	11.2	14.7	17.6	22.5	24.0	22.1
3	15.9	17.1	9.9	10.2	6.6	10.0	11.4	14.4	18.1	22.2	24.4	22.6
4	16.4	15.6	9.8	10.2	6.6	9.3	11.3	15.1	18.6	22.6	24.0	22.7
5	17.3	16.0	11.3	8.5	6.6	9.6	11.5	15.7	18.7	22.6	22.5	22.6
6	16.9	14.8	11.6	7.8	5.7	8.1	12.1	16.9	19.2	22.2	22.2	22.6
7	17.1	13.1	10.7	6.3	6.3	7.6	13.1	16.4	20.1	21.8	21.9	22.3
8	18.2	12.4	10.1	4.6	6.5	7.3	13.0	16.6	21.7	22.3	22.4	21.9
9	18.9	11.3	11.2	6.6	5.9	7.6	13.7	17.3	22.4	21.6	22.6	21.3
10	19.6	11.9	13.1	6.8	6.0	8.1	13.1	18.2	21.5	22.0	22.5	21.7
11	19.9	12.9	12.0	7.1	6.3	8.0	12.8	19.3	19.2	21.8	21.8	21.3
12	19.6	13.4	8.1	7.5	6.2	7.7	12.1	19.9	19.6	23.3	20.6	22.0
13	19.3	13.3	7.0	8.2	6.2	7.6	11.2	20.3	20.0	23.5	20.2	22.5
14	18.9	12.3	7.0	8.1	6.4	8.1	12.7	19.1	20.6	23.0	20.8	22.8
15	17.8	11.8	7.8	7.2	6.3	8.5	13.1	17.7	20.8	23.6	21.4	23.2
16	16.4	12.6	8.1	7.0	6.5	8.6	14.9	16.7	21.2	22.8	21.4	23.3
17	15.2	13.6	7.8	7.0	6.8	7.9	16.6	17.6	21.4	22.7	21.9	22.8
18	15.9	15.5	8.0	7.0	7.3	8.2	17.0	17.8	21.1	23.0	22.5	22.6
19	16.2	14.8	7.8	6.3	8.0	9.2	17.1	17.8	20.8	23.1	22.5	22.2
20	17.1	13.4	7.4	5.5	8.6	9.8	16.7	19.0	20.1	23.6	22.3	22.3
21	17.6	12.9	7.4	5.7	8.5	9.7	15.7	19.0	19.9	23.9	21.9	22.0
22	17.4	13.0	8.4	5.6	7.7	9.6	14.9	19.0	19.9	24.4	21.8	22.3
23	17.0	13.9	8.7	4.8	7.8	9.4	15.2	17.6	20.6	23.8	22.3	22.6
24	16.6	13.9	8.8	4.6	8.2	10.8	14.5	17.4	20.0	23.2	22.7	22.3
25	16.6	12.4	8.6	5.3	8.1	11.5	14.7	17.3	20.1	22.0	22.3	22.1
26	16.6	9.8	8.3	5.4	7.6	12.5	14.6	17.2	20.1	22.0	22.6	21.4
27	16.1	10.8	8.5	5.3	7.8	12.7	14.4	17.8	20.3	22.6	23.6	21.2
28	15.0	10.9	9.1	5.2	8.1	13.4	14.8	17.8	20.9	22.8	23.5	21.2
29	14.2	10.4	9.6	5.1	9.0	13.2	15.8	17.5	21.4	22.8	21.6	20.5
30	14.9	9.8	9.9	4.4	---	13.1	15.9	17.3	22.0	22.6	21.1	20.0
31	15.5	---	9.4	2.8	---	12.0	---	17.6	---	22.7	21.2	---
MEAN	17.0	13.2	9.2	6.6	7.0	9.6	13.9	17.5	20.2	22.7	22.3	22.1
MAX	19.9	17.1	13.1	10.2	9.0	13.4	17.1	20.3	22.4	24.4	24.4	23.3
MIN	14.2	9.8	7.0	2.8	4.7	7.3	11.1	14.4	17.5	21.6	20.2	20.0

WTR YR 2004

MEAN 15.1

MAX 24.4

MIN 2.8

Water Temperature, Sensor #3, degrees Celsius  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

## DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.7	15.5	9.7	8.6	4.6	9.7	11.0	15.5	---	---	---	---
2	16.5	16.4	9.7	9.6	5.8	10.1	11.1	14.5	---	---	---	---
3	16.0	17.0	9.8	10.1	6.6	9.9	11.3	14.3	---	---	---	---
4	16.4	15.5	9.8	10.1	6.6	9.3	11.3	15.1	---	---	---	---
5	17.2	15.9	11.2	8.4	6.6	9.4	11.3	15.6	---	---	---	---
6	16.8	14.8	11.5	7.8	5.7	8.0	11.9	16.6	---	---	---	---
7	17.1	13.1	10.6	6.3	6.2	7.6	12.8	16.4	---	---	---	---
8	18.1	12.3	10.1	5.0	6.5	7.3	13.0	16.4	---	---	---	---
9	18.8	11.2	11.1	6.5	5.9	7.6	13.5	17.2	---	---	---	---
10	19.4	11.8	13.0	6.8	5.9	8.0	13.1	18.2	---	---	---	---
11	19.8	12.9	11.9	7.0	6.3	7.9	12.7	19.2	---	---	---	---
12	19.6	13.3	8.1	7.5	6.2	7.7	12.0	19.5	---	---	---	---
13	19.2	13.2	6.9	8.1	6.2	7.5	11.2	20.7	---	---	---	---
14	18.9	12.2	6.9	8.1	6.4	8.1	12.4	19.1	---	---	---	---
15	17.7	11.8	7.8	7.1	6.2	8.5	13.0	17.7	---	---	---	---
16	16.3	12.5	8.1	7.0	6.4	8.5	14.7	16.6	---	---	---	---



**05536118 N.B. Chicago River at Grand Ave at Chicago, Il--Continued**

17	15.1	13.6	7.8	6.9	6.6	7.8	16.3	17.6	---	---	---	---
18	15.8	15.5	8.0	6.9	7.2	8.1	16.8	---	---	---	---	---
19	16.1	14.7	7.7	6.3	7.9	9.0	17.0	---	---	---	---	---
20	17.0	13.3	7.3	5.4	8.6	9.7	16.7	---	---	---	---	---
21	17.5	12.9	7.3	5.6	8.5	9.6	15.6	---	---	---	---	---
22	17.3	12.9	8.3	5.5	7.7	9.5	14.9	---	---	---	---	---
23	17.0	13.8	8.6	4.8	7.8	9.3	15.0	---	---	---	---	---
24	16.6	13.8	8.7	4.5	8.2	10.7	14.4	---	---	---	---	---
25	16.6	12.4	8.5	5.2	8.0	11.4	14.6	---	---	---	---	---
26	16.5	9.7	8.2	5.3	7.5	12.4	14.5	---	---	---	---	---
27	16.1	10.7	8.4	5.2	7.7	12.6	14.3	---	---	---	---	---
28	14.9	10.9	9.0	5.2	8.0	13.2	14.7	---	---	---	---	---
29	14.1	10.3	9.5	5.0	8.8	13.1	15.7	---	---	---	---	---
30	14.9	9.7	9.8	4.5	---	13.0	15.8	---	---	---	---	---
31	15.5	---	9.4	3.1	---	12.0	---	---	---	---	---	---
MEAN	17.0	13.1	9.1	6.6	6.9	9.6	13.8	---	---	---	---	---
MAX	19.8	17.0	13.0	10.1	8.8	13.2	17.0	---	---	---	---	---
MIN	14.1	9.7	6.9	3.1	4.6	7.3	11.0	---	---	---	---	---

**Water Temperature, Sensor #4, degrees Celsius**  
**WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.8	15.5	9.8	8.6	4.7	9.8	11.1	15.6	17.6	21.8	23.3	21.8
2	16.7	16.5	9.8	9.6	5.8	10.2	11.2	14.6	17.6	22.5	24.0	22.2
3	16.0	17.1	9.9	10.2	6.7	10.0	11.4	14.4	18.0	22.3	24.3	22.7
4	16.5	15.6	9.9	10.2	6.7	9.4	11.4	15.1	18.6	22.6	24.0	22.7
5	17.3	16.0	11.3	8.6	6.8	9.5	11.4	15.6	18.7	22.7	22.6	22.7
6	16.9	14.8	11.6	7.9	5.9	8.1	12.0	16.6	19.2	22.2	22.1	22.6
7	17.1	13.2	10.7	6.5	6.3	7.6	12.9	16.4	20.0	21.8	21.9	22.3
8	18.2	12.4	10.2	5.3	6.7	7.4	13.1	16.3	21.6	22.2	22.4	21.9
9	18.9	11.3	11.2	6.6	6.2	7.6	13.4	17.2	22.3	21.6	22.6	21.2
10	19.5	11.9	13.1	6.9	6.0	8.1	13.1	18.3	21.5	21.9	22.5	21.3
11	19.7	13.0	12.0	7.1	6.4	8.0	12.7	19.2	19.2	21.9	21.8	21.3
12	19.6	13.4	8.2	7.5	6.3	7.8	12.1	19.6	19.7	23.2	20.7	22.0
13	19.2	13.3	7.0	8.2	6.2	7.6	11.3	20.9	20.0	23.4	20.1	22.4
14	18.9	12.3	7.0	8.2	6.4	8.2	12.3	19.2	20.6	23.0	20.8	22.6
15	17.8	11.8	7.9	7.2	6.3	8.6	13.1	17.7	20.7	23.5	21.4	22.9
16	16.3	12.6	8.2	7.0	6.5	8.6	14.7	16.7	21.0	22.9	21.4	23.2
17	15.1	13.7	7.9	7.0	6.7	7.9	16.3	17.6	21.3	22.7	21.9	22.7
18	15.9	15.5	8.1	7.0	7.3	8.2	16.8	17.8	21.2	22.9	22.5	22.6
19	16.2	14.8	7.8	6.4	8.0	8.9	17.1	17.6	20.8	23.1	22.4	22.1
20	17.1	13.4	7.4	5.6	8.6	9.8	16.7	18.8	20.1	23.4	22.4	22.0
21	17.6	12.9	7.4	5.7	8.6	9.7	15.7	19.1	19.9	23.8	21.9	21.9
22	17.4	13.0	8.4	5.6	7.7	9.6	15.0	19.1	19.9	24.2	21.8	22.2
23	17.1	13.9	8.7	4.8	7.8	9.3	15.0	17.7	20.3	23.8	22.3	22.7
24	16.6	13.9	8.8	4.6	8.2	10.8	14.4	17.5	20.0	23.2	22.7	22.3
25	16.7	12.5	8.6	5.3	8.1	11.5	14.6	17.4	20.1	22.0	22.4	22.1
26	16.6	9.8	8.3	5.4	7.6	12.5	14.6	17.2	20.2	22.0	22.5	21.4
27	16.2	10.8	8.5	5.3	7.8	12.7	14.4	17.7	20.4	22.4	23.6	21.2
28	15.0	10.9	9.1	5.3	8.1	13.0	14.8	17.8	20.8	22.8	23.5	21.2
29	14.2	10.4	9.6	5.1	8.9	13.2	15.8	17.6	21.3	22.7	21.7	20.5
30	14.9	9.8	9.9	4.5	---	13.1	15.9	17.4	22.0	22.6	20.9	20.0
31	15.6	---	9.5	3.4	---	12.1	---	17.6	---	22.8	21.2	---
MEAN	17.0	13.2	9.2	6.7	7.0	9.6	13.8	17.5	20.2	22.7	22.2	22.0
MAX	19.7	17.1	13.1	10.2	8.9	13.2	17.1	20.9	22.3	24.2	24.3	23.2
MIN	14.2	9.8	7.0	3.4	4.7	7.4	11.1	14.4	17.6	21.6	20.1	20.0

WTR YR 2004

MEAN 15.1

MAX 24.3

MIN 3.4

**05536118 N.B. Chicago River at Grand Ave at Chicago, IL--Continued**

**Water Temperature, Sensor #5, degrees Celsius**  
**WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.8	15.5	9.8	8.6	4.6	9.7	11.1	15.6	17.6	21.8	23.3	21.7
2	16.9	16.4	9.8	9.6	5.8	10.1	11.2	14.6	17.6	22.4	23.9	22.1
3	15.9	17.1	9.9	10.1	6.6	10.0	11.3	14.3	17.9	22.2	24.3	22.6
4	16.4	15.6	9.8	10.2	6.6	9.3	11.3	15.1	18.4	22.6	24.0	22.7
5	17.3	16.0	11.3	8.5	7.1	9.5	11.4	15.6	18.6	22.6	22.5	22.6
6	16.9	14.8	11.6	7.9	6.1	8.1	11.9	16.5	19.1	22.1	22.0	22.6
7	17.1	13.1	10.7	6.7	6.3	7.6	12.9	16.4	19.9	21.8	21.9	22.3
8	18.2	12.4	10.1	5.7	7.0	7.4	13.0	16.1	21.6	22.1	22.4	21.9
9	18.9	11.3	11.2	6.6	6.6	7.6	13.4	17.2	22.1	21.5	22.5	21.1
10	19.5	11.8	13.1	6.8	6.0	8.1	13.1	18.3	21.5	21.8	22.5	21.2
11	19.7	12.9	12.0	7.1	6.3	8.0	12.7	18.9	19.2	21.8	21.8	21.3
12	19.6	13.4	8.1	7.5	6.3	7.8	12.1	19.4	19.6	23.1	20.6	22.0
13	19.2	13.3	7.0	8.1	6.2	7.6	11.2	20.7	20.0	23.3	20.1	22.3
14	18.9	12.3	7.0	8.1	6.4	8.1	12.1	19.1	20.6	23.0	20.8	22.5
15	17.8	11.8	7.8	7.2	6.3	8.5	13.1	17.7	20.6	23.4	21.4	22.8
16	16.2	12.6	8.1	7.0	6.5	8.6	14.7	16.7	20.9	22.8	21.4	23.2
17	15.1	13.6	7.8	7.0	6.7	7.9	16.2	17.6	21.2	22.7	21.9	22.7
18	15.9	15.5	8.0	7.0	7.3	8.1	16.7	17.8	21.1	22.9	22.5	22.5
19	16.2	14.8	7.8	6.4	7.9	8.8	17.1	17.4	20.8	23.1	22.4	22.1
20	17.1	13.4	7.4	6.5	8.6	9.8	16.7	19.4	20.0	23.3	22.3	21.9
21	17.6	12.9	7.4	5.7	8.5	9.7	15.7	19.0	19.9	23.8	21.9	21.9
22	17.4	13.0	8.4	5.6	7.6	9.6	14.9	19.0	19.9	24.0	21.8	22.2
23	17.0	13.9	8.7	4.8	7.8	9.3	14.9	17.6	20.2	23.7	22.3	22.5
24	16.6	13.9	8.8	4.6	8.2	10.7	14.4	17.5	20.0	23.2	22.7	22.3
25	16.7	12.4	8.6	5.3	8.1	11.5	14.6	17.3	20.0	22.0	22.3	22.1
26	16.6	9.8	8.3	5.4	7.6	12.5	14.6	17.2	20.1	21.9	22.5	21.4
27	16.2	10.8	8.4	5.5	7.8	12.6	14.4	17.7	20.3	22.3	23.6	21.2
28	15.0	10.9	9.1	5.2	8.0	12.8	14.8	17.8	20.7	22.7	23.5	21.2
29	14.2	10.4	9.6	5.2	8.9	13.2	15.8	17.6	21.2	22.7	21.7	20.5
30	14.9	9.8	9.9	4.5	---	13.1	15.9	17.3	21.7	22.6	20.9	19.9
31	15.5	---	9.5	3.6	---	12.1	---	17.6	---	22.7	21.2	---
MEAN	17.0	13.2	9.2	6.7	7.0	9.6	13.8	17.4	20.1	22.6	22.2	22.0
MAX	19.7	17.1	13.1	10.2	8.9	13.2	17.1	20.7	22.1	24.0	24.3	23.2
MIN	14.2	9.8	7.0	3.6	4.6	7.4	11.1	14.3	17.6	21.5	20.1	19.9

WTR YR 2004

MEAN 15.1

MAX 24.3

MIN 3.6

**Water Temperature, Sensor #6, degrees Celsius**  
**WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.8	15.6	9.8	8.7	4.7	9.7	11.2	15.5	17.4	21.2	22.8	21.4
2	16.9	16.5	9.8	9.7	5.8	10.1	11.2	14.7	17.5	21.7	23.1	21.7
3	15.9	17.1	9.9	10.2	6.7	10.0	11.4	14.3	17.6	21.7	23.6	22.2
4	16.5	15.6	9.9	10.2	6.7	9.4	11.4	15.0	18.0	22.0	23.6	22.3
5	17.3	16.0	11.3	8.6	7.4	9.5	11.3	15.5	18.4	22.0	22.4	22.3
6	16.9	14.9	11.6	7.9	6.6	8.3	11.9	16.2	18.8	21.6	21.7	22.2
7	17.1	13.2	10.7	6.8	6.4	7.8	12.6	16.3	19.6	21.4	21.6	22.0
8	18.2	12.4	10.2	5.9	7.3	7.6	13.0	16.0	20.8	21.4	22.0	21.7
9	18.9	11.3	11.2	6.7	6.8	7.7	13.1	16.9	21.4	21.2	22.1	21.1
10	19.5	11.9	13.1	6.9	6.0	8.1	13.1	18.1	21.2	21.4	22.1	20.9
11	19.7	13.0	12.0	7.2	6.4	8.1	12.6	18.7	19.4	21.5	21.7	21.0
12	19.6	13.4	8.2	7.6	6.3	7.9	12.2	19.2	19.4	22.0	20.8	21.6
13	19.2	13.3	7.0	8.2	6.3	7.6	11.4	19.6	19.7	22.5	20.0	22.0
14	18.9	12.3	7.1	8.2	6.5	8.2	11.8	19.1	20.2	22.5	20.5	22.2
15	17.8	11.9	7.9	7.3	6.4	8.6	13.0	17.8	20.3	22.6	21.0	22.4
16	15.9	12.6	8.2	7.1	6.6	8.6	14.5	16.6	20.5	22.4	21.1	22.6
17	15.1	13.7	7.9	7.0	6.8	8.0	15.7	17.4	20.7	22.2	21.5	22.5
18	15.9	15.6	8.1	7.0	7.4	8.2	16.2	17.5	20.8	22.4	21.8	22.1
19	16.2	14.8	7.8	6.4	7.9	8.8	16.8	17.1	20.6	22.4	21.8	21.9
20	17.1	13.4	7.4	6.7	8.6	9.8	16.5	18.1	19.8	22.6	21.8	21.7
21	17.6	13.0	7.4	5.8	8.5	9.7	15.7	18.9	19.7	23.2	21.7	21.6

**05536118 N.B. Chicago River at Grand Ave at Chicago, IL--Continued**

<b>22</b>	17.4	13.0	8.4	5.6	7.8	9.6	14.9	18.8	19.4	23.3	21.5	21.9
<b>23</b>	17.0	13.9	8.8	4.9	7.8	9.3	14.4	17.6	19.8	23.2	21.9	22.0
<b>24</b>	16.6	13.9	8.8	4.7	8.3	10.6	14.4	17.4	19.8	22.9	22.2	22.0
<b>25</b>	16.7	12.5	8.6	5.3	8.2	11.4	14.4	17.3	19.7	21.8	22.1	21.8
<b>26</b>	16.6	9.9	8.3	5.5	7.6	12.3	14.5	17.1	19.8	21.7	22.0	21.4
<b>27</b>	16.2	10.8	8.5	5.6	7.8	12.5	14.4	17.5	19.9	21.6	22.9	21.1
<b>28</b>	15.0	11.0	9.1	5.3	8.0	12.6	14.6	17.6	20.2	22.1	23.0	21.0
<b>29</b>	14.2	10.5	9.6	5.4	8.8	13.0	15.5	17.4	20.7	22.2	21.6	20.6
<b>30</b>	14.9	9.8	9.9	4.6	---	13.0	15.8	17.2	21.0	22.2	20.9	20.0
<b>31</b>	15.6	---	9.5	3.9	---	12.2	---	17.5	---	22.3	20.9	---
<b>MEAN</b>	17.0	13.2	9.2	6.8	7.1	9.6	13.7	17.2	19.7	22.1	21.9	21.7
<b>MAX</b>	19.7	17.1	13.1	10.2	8.8	13.0	16.8	19.6	21.4	23.3	23.6	22.6
<b>MIN</b>	14.2	9.8	7.0	3.9	4.7	7.6	11.2	14.3	17.4	21.2	20.0	20.0

WTR YR 2004

MEAN 15.0

MAX 23.6

MIN 3.9

ILLINOIS RIVER BASIN  
**05536118 N.B. Chicago River at Grand Ave at Chicago, IL**

**LOCATION.**— Lat 41°53'30", long 87°38'30" (NAD of 1927), in NW1/4SW1/4 sec.12, T.40 N., R.13 E., Cook County, Hydrologic Unit 07120003, on right upstream side of Grand Avenue bridge in Chicago, 0.6 mi upstream from the confluence with the main stem of the Chicago River and at mile 36.0.

**DRAINAGE AREA.**— 180 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: July 2, 2002 to current year.

SURFACE-WATER QUALITY

PHYSICAL AND CHEMICAL: Water years 2002 to current year.

WATER TEMPERATURE: September 2002 to current year.

**GAGE.**— Water-stage recorder, acoustic velocity meter and water-temperature sensor. Datum of gage is 579.48 ft above NGVD of 1929 (Chicago City datum).

**REMARKS.**— This station provides data for a water-quality model.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum daily discharge, 4,430 ft<sup>3</sup>/s, Aug. 22, 2002, minimum daily discharge, -20 ft<sup>3</sup>/s, Jan. 31, 2004, due to regulation.

WATER TEMPERATURE: Maximum recorded, 25.6°C, Aug. 27, 2003; minimum recorded, 0.5°C, Jan. 31, 2004.

**EXTREMES FOR CURRENT YEAR.**— Maximum water temperature, 24.6°C, July 22; minimum, 0.5°C, Jan. 31.

**REMARKS FOR CURRENT YEAR.**— Water-temperature data are from six temperature sensors on right bank with sensor #1 being the lowest in the water column and sensor #6 being the highest.

**Water Temperature, Sensor #1, degrees Celsius**  
**WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MINIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.4	15.0	9.1	8.3	0.7	8.8	10.6	14.6	16.3	21.1	22.4	21.0
2	15.8	15.1	9.1	8.6	3.5	9.6	10.3	13.9	17.1	21.4	23.2	21.4
3	15.5	14.3	9.5	9.6	5.8	9.3	10.8	13.8	17.1	21.6	23.6	22.0
4	15.7	14.0	9.6	8.5	6.4	8.9	10.5	14.1	17.3	21.4	22.5	22.3
5	16.4	14.8	9.7	7.8	4.1	8.1	10.8	14.8	17.7	21.8	21.6	22.3
6	15.8	13.1	10.7	6.1	2.2	7.6	11.3	15.4	18.4	21.4	21.2	22.2
7	15.8	12.3	8.7	4.0	1.2	7.3	11.9	15.8	18.9	21.5	21.4	21.8
8	17.0	11.2	8.8	2.1	4.6	6.9	12.5	15.6	19.9	20.8	21.5	21.1
9	18.0	10.9	10.1	2.2	4.2	7.0	12.9	15.8	21.2	21.2	22.0	20.6
10	18.9	10.7	11.2	6.4	2.8	7.4	12.3	17.0	19.1	20.8	21.7	20.6
11	19.4	11.7	8.1	6.6	4.2	7.7	12.0	18.1	18.2	20.9	20.6	20.7
12	19.1	12.8	7.0	6.9	5.9	7.0	11.2	18.5	18.4	21.5	19.8	21.2
13	18.8	12.2	6.5	7.5	5.8	7.0	10.8	19.1	19.2	22.4	19.6	21.9
14	17.7	11.8	6.7	7.2	6.0	7.5	10.9	17.7	20.0	22.6	19.9	22.1
15	15.9	11.5	7.0	6.8	6.0	8.1	11.8	16.4	20.4	22.4	20.4	22.3
16	14.9	11.6	7.7	6.7	6.0	7.7	13.0	16.0	20.5	22.3	21.0	22.6
17	14.8	12.5	7.6	6.1	6.3	7.7	14.6	16.4	20.5	22.1	21.2	22.2
18	15.0	13.5	7.7	6.3	6.5	7.8	15.8	17.1	20.6	22.2	21.7	21.9
19	15.4	13.4	7.3	5.4	7.2	8.1	16.4	16.8	19.8	22.3	21.8	21.7
20	15.8	12.5	7.1	3.7	7.8	8.7	15.7	16.9	19.4	22.5	21.8	21.5
21	17.0	12.7	6.9	1.4	7.7	9.2	14.9	18.1	19.2	23.1	21.3	21.4
22	17.0	12.8	7.4	4.7	6.2	8.3	14.3	17.5	18.8	23.6	21.3	21.6
23	16.4	12.9	8.4	4.5	5.4	8.3	14.0	16.8	19.4	23.1	21.5	21.9
24	16.3	12.4	8.5	3.0	7.8	9.2	14.0	17.0	19.7	21.8	22.2	21.8
25	16.2	9.4	8.0	4.3	7.4	10.7	13.9	16.7	19.5	21.4	21.9	21.3
26	16.1	9.4	7.9	4.7	7.0	11.2	14.0	16.8	19.6	21.6	21.8	20.9
27	15.0	9.8	8.2	4.4	7.2	12.4	13.4	17.0	19.6	21.5	22.5	20.9
28	13.8	10.4	8.4	4.8	7.7	12.2	13.4	17.0	20.1	21.6	21.5	20.4
29	13.8	9.6	9.0	1.1	8.0	12.6	14.6	17.0	20.4	22.1	20.9	19.8
30	14.1	9.4	9.3	0.8	---	12.0	15.5	16.6	20.9	22.4	20.5	19.4
31	14.9	---	8.4	0.5	---	11.0	---	17.0	---	22.3	20.4	---
MEAN	16.2	12.1	8.4	5.2	5.6	8.9	12.9	16.5	19.2	21.9	21.4	21.4

**05536118 N.B. Chicago River at Grand Ave at Chicago, Il--Continued**

<b>MAX</b>	19.4	15.1	11.2	9.6	8.0	12.6	16.4	19.1	21.2	23.6	23.6	22.6
<b>MIN</b>	13.8	9.4	6.5	0.5	0.7	6.9	10.3	13.8	16.3	20.8	19.6	19.4

WTR YR 2004

MEAN 14.2

MAX 23.6

MIN 0.5

**Water Temperature, Sensor #2, degrees Celsius**  
**WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MINIMUM VALUES**

<b>DAY</b>	<b>OCT</b>	<b>NOV</b>	<b>DEC</b>	<b>JAN</b>	<b>FEB</b>	<b>MAR</b>	<b>APR</b>	<b>MAY</b>	<b>JUN</b>	<b>JUL</b>	<b>AUG</b>	<b>SEP</b>
1	16.4	15.0	9.1	8.3	1.6	8.8	10.6	14.6	16.3	21.2	22.5	21.0
2	15.8	15.1	9.2	8.6	3.9	9.6	10.3	14.0	17.1	21.4	23.2	21.4
3	15.5	14.3	9.5	9.6	5.8	9.3	10.8	13.8	17.1	21.6	23.6	22.0
4	15.7	14.0	9.6	8.5	6.3	9.0	10.5	14.1	17.3	21.5	22.5	22.3
5	16.4	14.8	9.8	7.8	4.2	8.1	10.8	14.8	17.7	21.8	21.6	22.3
6	15.8	13.1	10.7	6.1	3.5	7.6	11.3	15.4	18.4	21.4	21.2	22.3
7	15.8	12.4	8.8	4.1	1.4	7.3	11.9	15.8	18.9	21.5	21.5	21.8
8	17.1	11.2	8.8	2.2	4.6	6.9	12.6	15.6	19.9	20.8	21.5	21.1
9	18.1	10.9	10.1	2.4	4.4	7.0	12.9	15.8	21.2	21.2	22.0	20.6
10	18.9	10.7	11.2	6.4	3.3	7.4	12.3	17.0	19.1	20.9	21.8	20.6
11	19.4	11.7	8.1	6.7	4.2	7.7	12.1	18.1	18.2	20.9	20.6	20.7
12	19.2	12.8	7.0	6.9	5.9	6.9	11.2	18.5	18.4	21.5	19.8	21.3
13	18.9	12.2	6.5	7.5	5.8	7.0	10.8	19.1	19.2	22.4	19.6	22.0
14	17.8	11.8	6.7	7.2	6.0	7.6	10.9	17.7	20.0	22.5	19.9	22.2
15	15.9	11.5	7.0	6.8	6.0	8.1	11.8	16.5	20.5	22.4	20.4	22.4
16	14.9	11.6	7.7	6.7	5.9	7.7	13.0	16.0	20.5	22.3	21.0	22.6
17	14.8	12.5	7.6	6.1	6.3	7.7	14.7	16.4	20.5	22.1	21.3	22.2
18	15.1	13.6	7.7	6.3	6.5	7.8	15.8	17.1	20.6	22.2	21.7	22.0
19	15.4	13.4	7.3	5.5	7.2	8.1	16.4	16.8	19.8	22.3	21.8	21.7
20	15.8	12.5	7.1	3.9	7.8	8.8	15.7	17.0	19.4	22.5	21.8	21.5
21	17.0	12.7	6.9	1.7	7.7	9.2	14.9	18.1	19.2	23.2	21.4	21.4
22	17.0	12.8	7.4	4.7	6.2	8.3	14.3	17.5	18.8	23.6	21.3	21.6
23	16.4	12.9	8.4	4.5	6.1	8.3	14.0	16.8	19.4	23.1	21.5	21.9
24	16.4	12.4	8.5	3.0	7.8	9.2	14.0	17.0	19.8	21.8	22.2	21.9
25	16.3	9.4	8.0	4.3	7.4	10.7	13.9	16.7	19.4	21.4	21.9	21.4
26	16.1	9.4	7.9	4.8	7.0	11.2	14.0	16.8	19.6	21.6	21.8	20.9
27	15.0	9.8	8.1	4.5	7.1	12.4	13.4	17.0	19.6	21.5	22.5	20.9
28	13.8	10.4	8.4	4.8	7.6	12.2	13.5	17.0	20.1	21.6	21.5	20.4
29	13.8	9.6	9.1	1.7	8.0	12.6	14.6	17.0	20.4	22.1	20.9	19.9
30	14.1	9.4	9.3	0.9	---	12.0	15.5	16.6	20.9	22.4	20.6	19.4
31	14.9	---	8.4	0.7	---	11.0	---	17.0	---	22.3	20.4	---
<b>MEAN</b>	16.2	12.1	8.4	5.3	5.7	8.9	12.9	16.5	19.2	21.9	21.5	21.5
<b>MAX</b>	19.4	15.1	11.2	9.6	8.0	12.6	16.4	19.1	21.2	23.6	23.6	22.6
<b>MIN</b>	13.8	9.4	6.5	0.7	1.4	6.9	10.3	13.8	16.3	20.8	19.6	19.4

WTR YR 2004

MEAN 14.2

MAX 23.6

MIN 0.7

**Water Temperature, Sensor #3, degrees Celsius**  
**WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MINIMUM VALUES**

<b>DAY</b>	<b>OCT</b>	<b>NOV</b>	<b>DEC</b>	<b>JAN</b>	<b>FEB</b>	<b>MAR</b>	<b>APR</b>	<b>MAY</b>	<b>JUN</b>	<b>JUL</b>	<b>AUG</b>	<b>SEP</b>
1	16.4	15.0	9.0	8.3	2.3	8.7	10.6	14.5	---	---	---	---
2	15.7	15.0	9.1	8.5	4.1	9.6	10.3	13.9	---	---	---	---
3	15.5	14.2	9.4	9.6	5.8	9.3	10.7	13.8	---	---	---	---
4	15.6	13.9	9.6	8.4	6.3	9.0	10.4	14.0	---	---	---	---
5	16.3	14.8	9.7	7.8	4.6	8.0	10.8	14.7	---	---	---	---
6	15.7	13.1	10.6	6.1	3.6	7.5	11.2	15.4	---	---	---	---
7	15.8	12.3	8.7	4.1	2.6	7.3	11.8	15.7	---	---	---	---
8	17.0	11.2	8.8	2.2	4.6	6.8	12.5	15.5	---	---	---	---
9	18.0	10.8	10.0	3.0	4.8	7.0	12.8	15.8	---	---	---	---
10	18.8	10.6	11.1	6.4	3.8	7.3	12.2	16.9	---	---	---	---
11	19.3	11.7	8.1	6.6	4.2	7.7	12.0	18.1	---	---	---	---
12	19.1	12.8	6.9	6.8	5.8	6.9	11.2	18.5	---	---	---	---
13	18.8	12.2	6.4	7.4	5.8	6.9	10.8	19.1	---	---	---	---
14	17.7	11.7	6.7	7.1	5.9	7.5	10.8	17.6	---	---	---	---
15	15.8	11.4	6.9	6.7	6.0	8.1	11.8	16.4	---	---	---	---
16	14.9	11.6	7.6	6.6	5.9	7.7	13.0	15.9	---	---	---	---

## ILLINOIS RIVER BASIN

## 05536118 N.B. Chicago River at Grand Ave at Chicago, Il--Continued

17	14.8	12.5	7.6	6.0	6.3	7.6	14.6	16.3	---	---	---	---
18	15.0	13.6	7.7	6.3	6.5	7.8	15.8	---	---	---	---	---
19	15.4	13.3	7.3	5.4	7.2	8.0	16.3	---	---	---	---	---
20	15.7	12.5	7.0	4.1	7.8	8.7	15.6	---	---	---	---	---
21	17.0	12.6	6.8	3.2	7.7	9.1	14.9	---	---	---	---	---
22	17.0	12.7	7.3	4.7	6.2	8.3	14.3	---	---	---	---	---
23	16.4	12.8	8.3	4.5	6.5	8.3	14.0	---	---	---	---	---
24	16.3	12.4	8.4	3.0	7.8	9.2	13.9	---	---	---	---	---
25	16.2	9.3	8.0	4.3	7.3	10.7	13.8	---	---	---	---	---
26	16.1	9.3	7.9	4.7	6.9	11.1	14.0	---	---	---	---	---
27	14.9	9.7	8.1	4.5	7.1	12.3	13.3	---	---	---	---	---
28	13.7	10.3	8.4	4.8	7.6	12.1	13.4	---	---	---	---	---
29	13.7	9.6	9.0	3.8	7.9	12.6	14.6	---	---	---	---	---
30	14.0	9.3	9.3	1.5	---	12.0	15.5	---	---	---	---	---
31	14.8	---	8.4	1.4	---	11.0	---	---	---	---	---	---
MEAN	16.2	12.1	8.3	5.4	5.8	8.8	12.9	---	---	---	---	---
MAX	19.3	15.0	11.1	9.6	7.9	12.6	16.3	---	---	---	---	---
MIN	13.7	9.3	6.4	1.4	2.3	6.8	10.3	---	---	---	---	---

Water Temperature, Sensor #4, degrees Celsius  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.5	15.0	9.1	8.3	2.6	8.7	10.6	14.6	16.3	21.1	22.5	21.1
2	15.8	15.1	9.2	8.6	4.2	9.6	10.3	14.0	17.1	21.4	23.2	21.4
3	15.6	14.3	9.5	9.6	5.8	9.3	10.8	13.8	17.1	21.7	23.6	22.0
4	15.8	14.0	9.6	8.5	6.4	9.0	10.4	14.1	17.3	21.5	22.5	22.3
5	16.4	14.8	9.8	7.8	4.8	8.1	10.9	14.8	17.7	21.8	21.6	22.2
6	15.8	13.2	10.7	6.2	4.2	7.6	11.3	15.5	18.4	21.5	21.3	22.3
7	15.8	12.4	8.8	4.8	3.1	7.4	11.9	15.8	18.9	21.5	21.5	21.9
8	17.1	11.2	8.9	3.4	5.2	6.9	12.6	15.6	20.0	20.8	21.5	21.1
9	18.1	10.9	10.1	3.4	5.3	7.0	12.9	15.9	21.3	21.2	22.0	20.6
10	18.9	10.7	11.2	6.4	4.2	7.4	12.3	16.8	19.1	20.9	21.8	20.7
11	19.4	11.8	8.2	6.7	4.5	7.8	12.1	18.1	18.2	20.9	20.7	20.7
12	19.2	12.8	7.0	6.9	5.9	7.0	11.2	18.5	18.4	21.6	19.9	21.3
13	18.9	12.3	6.5	7.5	5.9	7.0	10.9	19.1	19.1	22.4	19.7	22.0
14	17.8	11.8	6.7	7.2	6.0	7.6	10.9	17.7	20.0	22.6	20.0	22.2
15	15.9	11.5	7.0	6.8	6.1	8.1	11.9	16.5	20.5	22.5	20.5	22.4
16	14.9	11.6	7.7	6.7	6.0	7.8	13.0	16.0	20.6	22.3	21.0	22.7
17	14.9	12.5	7.7	6.1	6.4	7.8	14.6	16.4	20.5	22.1	21.3	22.3
18	15.1	13.6	7.7	6.4	6.6	7.8	15.8	17.2	20.6	22.3	21.8	22.0
19	15.4	13.4	7.3	5.5	7.3	8.1	16.4	16.8	19.8	22.4	21.8	21.8
20	15.8	12.6	7.1	4.3	7.9	8.8	15.7	17.0	19.4	22.5	21.9	21.5
21	17.0	12.7	6.9	3.9	7.7	9.2	15.0	18.1	19.3	23.2	21.4	21.5
22	17.0	12.8	7.4	4.8	6.2	8.4	14.3	17.5	18.8	23.5	21.3	21.7
23	16.4	12.9	8.4	4.5	6.6	8.4	14.0	16.8	19.4	23.1	21.6	21.9
24	16.4	12.5	8.6	3.1	7.8	9.3	14.0	17.0	19.8	21.8	22.2	21.9
25	16.2	9.4	8.0	4.4	7.4	10.7	14.0	16.7	19.4	21.5	22.0	21.4
26	16.2	9.4	7.9	4.8	7.0	11.2	14.0	16.8	19.6	21.6	21.8	21.0
27	15.0	9.8	8.2	4.7	7.2	12.4	13.4	17.0	19.6	21.5	22.5	20.9
28	13.8	10.4	8.4	4.9	7.6	12.2	13.5	17.0	20.1	21.7	21.6	20.5
29	13.8	9.7	9.0	4.0	8.0	12.6	14.7	17.0	20.4	22.1	20.9	19.9
30	14.1	9.4	9.4	2.5	---	12.1	15.5	16.6	20.9	22.4	20.6	19.5
31	14.9	---	8.4	1.5	---	11.1	---	17.0	---	22.3	20.4	---
MEAN	16.3	12.2	8.4	5.6	6.0	8.9	13.0	16.5	19.3	21.9	21.5	21.5
MAX	19.4	15.1	11.2	9.6	8.0	12.6	16.4	19.1	21.3	23.5	23.6	22.7
MIN	13.8	9.4	6.5	1.5	2.6	6.9	10.3	13.8	16.3	20.8	19.7	19.5

WTR YR 2004

MEAN 14.3

MAX 23.6

MIN 1.5

**05536118 N.B. Chicago River at Grand Ave at Chicago, IL--Continued**

**Water Temperature, Sensor #5, degrees Celsius**  
**WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MINIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.4	15.0	9.1	8.3	2.7	8.7	10.6	14.6	16.3	21.1	22.5	21.0
2	15.8	15.1	9.2	8.6	4.5	9.6	10.3	14.0	17.1	21.4	23.2	21.3
3	15.6	14.3	9.5	9.6	5.8	9.3	10.8	13.8	17.1	21.6	23.6	22.0
4	15.7	14.0	9.6	8.5	6.3	8.9	10.4	14.1	17.3	21.5	22.5	22.3
5	16.4	14.8	9.6	7.8	4.8	8.1	10.8	14.8	17.6	21.8	21.6	22.2
6	15.8	13.1	10.7	6.1	4.4	7.6	11.3	15.4	18.4	21.4	21.2	22.3
7	15.8	12.3	8.8	5.0	3.8	7.3	11.9	15.8	18.9	21.5	21.5	21.8
8	17.1	11.2	8.8	3.3	5.8	6.9	12.6	15.5	19.9	20.8	21.5	21.1
9	18.1	10.9	10.1	3.3	5.6	7.0	12.9	15.8	21.2	21.1	22.0	20.6
10	18.9	10.7	11.2	6.4	4.7	7.4	12.3	16.7	19.1	20.8	21.8	20.6
11	19.4	11.7	8.1	6.7	4.5	7.7	12.1	18.1	18.2	20.8	20.6	20.7
12	19.2	12.8	7.0	6.9	5.9	7.0	11.2	18.4	18.4	21.5	19.9	21.3
13	18.9	12.2	6.5	7.5	5.8	7.0	10.8	19.1	19.1	22.4	19.6	22.0
14	17.8	11.8	6.7	7.2	6.0	7.6	10.9	17.7	20.0	22.5	20.0	22.1
15	15.9	11.5	7.0	6.8	6.0	8.1	11.8	16.5	20.5	22.4	20.4	22.4
16	14.9	11.6	7.7	6.7	6.0	7.7	13.0	15.9	20.5	22.3	21.0	22.7
17	14.8	12.5	7.6	6.1	6.3	7.7	14.6	16.3	20.5	22.1	21.2	22.3
18	15.1	13.6	7.7	6.3	6.5	7.8	15.8	17.2	20.6	22.2	21.7	22.0
19	15.4	13.4	7.3	5.5	7.2	8.1	16.4	16.8	19.8	22.3	21.8	21.8
20	15.8	12.5	7.1	4.4	7.8	8.7	15.7	16.9	19.4	22.4	21.8	21.5
21	17.0	12.7	6.9	4.5	7.6	9.2	14.9	18.1	19.2	23.2	21.4	21.5
22	17.0	12.8	7.4	4.8	6.2	8.3	14.3	17.5	18.8	23.4	21.2	21.7
23	16.4	12.9	8.4	4.5	6.6	8.3	14.0	16.8	19.4	23.1	21.5	21.9
24	16.4	12.4	8.5	3.0	7.8	9.2	14.0	17.0	19.8	21.8	22.2	21.9
25	16.1	9.4	8.0	4.3	7.3	10.7	13.8	16.6	19.4	21.4	21.9	21.4
26	16.1	9.4	7.9	4.8	6.9	11.2	14.0	16.8	19.6	21.6	21.8	21.0
27	15.0	9.8	8.1	4.6	7.1	12.4	13.3	17.0	19.6	21.5	22.5	20.9
28	13.8	10.4	8.4	4.8	7.6	12.2	13.5	16.9	20.1	21.6	21.5	20.5
29	13.8	9.6	8.9	4.2	8.0	12.6	14.6	17.0	20.4	22.1	20.9	19.9
30	14.1	9.4	9.3	2.6	----	12.0	15.5	16.6	20.8	22.4	20.5	19.5
31	14.8	----	8.4	2.1	----	11.0	----	17.0	----	22.3	20.4	----
MEAN	16.2	12.1	8.4	5.7	6.1	8.9	12.9	16.5	19.2	21.9	21.5	21.5
MAX	19.4	15.1	11.2	9.6	8.0	12.6	16.4	19.1	21.2	23.4	23.6	22.7
MIN	13.8	9.4	6.5	2.1	2.7	6.9	10.3	13.8	16.3	20.8	19.6	19.5

WTR YR 2004

MEAN 14.3

MAX 23.6

MIN 2.1

**Water Temperature, Sensor #6, degrees Celsius**  
**WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MINIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.5	15.0	9.1	8.4	3.2	8.6	10.8	14.6	16.4	20.8	22.1	20.9
2	15.8	15.1	9.2	8.6	4.7	9.6	10.5	14.1	17.1	21.0	22.7	21.2
3	15.6	14.3	9.5	9.7	5.8	9.4	10.9	13.9	17.1	21.4	23.1	21.7
4	15.8	14.0	9.6	8.6	6.4	8.9	10.6	14.1	17.3	21.2	22.4	22.0
5	16.4	14.9	9.7	7.9	6.2	8.3	10.9	14.7	17.6	21.6	21.6	22.0
6	15.8	13.2	10.7	6.2	5.3	7.8	11.3	15.4	18.2	21.2	21.2	22.0
7	15.8	12.4	8.8	5.7	5.0	7.6	11.9	15.8	18.7	21.3	21.4	21.7
8	17.1	11.3	8.9	4.5	6.3	7.1	12.5	15.5	19.6	20.8	21.4	21.1
9	18.1	10.9	10.2	4.2	5.7	7.1	12.9	15.8	20.7	20.9	21.8	20.7
10	18.9	10.8	11.2	6.5	5.1	7.5	12.4	16.6	19.4	20.7	21.7	20.6
11	19.4	11.8	8.2	6.7	5.0	7.8	12.1	17.9	18.4	20.8	20.8	20.6
12	19.2	12.9	7.0	7.0	6.0	7.0	11.3	18.4	18.5	21.2	20.0	21.0
13	18.9	12.3	6.6	7.5	6.0	7.1	11.0	19.0	19.0	21.9	19.8	21.6
14	17.8	11.8	6.8	7.3	6.1	7.6	11.0	17.8	19.7	22.2	20.0	21.9
15	15.9	11.5	7.0	6.8	6.1	8.2	11.8	16.6	20.2	22.1	20.3	22.1
16	14.9	11.7	7.7	6.8	6.0	7.8	12.9	16.1	20.3	22.0	20.8	22.4
17	14.9	12.6	7.7	6.1	6.4	7.7	14.4	16.4	20.3	21.9	21.0	22.1
18	15.1	13.6	7.8	6.4	6.7	7.8	15.5	17.1	20.4	22.0	21.4	21.9
19	15.4	13.4	7.4	5.7	7.3	8.2	16.2	16.8	19.8	22.0	21.6	21.6
20	15.8	12.6	7.2	4.9	7.9	8.7	15.6	16.9	19.4	22.1	21.6	21.4
21	17.0	12.7	7.0	4.6	7.8	9.3	14.9	18.0	19.2	22.6	21.3	21.4

## ILLINOIS RIVER BASIN

**05536118 N.B. Chicago River at Grand Ave at Chicago, IL--Continued**

<b>22</b>	17.0	12.8	7.4	4.8	6.3	8.6	14.4	17.5	18.8	23.0	21.2	21.5
<b>23</b>	16.5	12.9	8.4	4.6	6.6	8.5	14.1	16.8	19.3	22.8	21.3	21.7
<b>24</b>	16.4	12.5	8.6	3.0	7.8	9.3	14.0	17.0	19.6	21.8	21.8	21.8
<b>25</b>	15.8	9.5	8.1	4.4	7.5	10.6	14.0	16.7	19.3	21.4	21.7	21.4
<b>26</b>	16.2	9.4	8.0	4.9	7.0	11.2	14.0	16.8	19.4	21.4	21.6	21.0
<b>27</b>	15.0	9.8	8.2	4.6	7.2	12.2	13.5	16.9	19.5	21.4	22.0	20.9
<b>28</b>	13.8	10.5	8.4	4.9	7.7	12.1	13.5	17.0	19.9	21.5	21.6	20.5
<b>29</b>	13.8	9.7	8.9	4.2	8.0	12.5	14.6	17.0	20.1	21.8	20.9	20.0
<b>30</b>	14.1	9.4	9.4	3.0	----	12.2	15.4	16.6	20.5	22.1	20.6	19.6
<b>31</b>	14.9	----	8.5	2.5	----	11.2	----	17.0	----	22.0	20.4	----
<b>MEAN</b>	16.2	12.2	8.4	5.8	6.3	9.0	13.0	16.5	19.1	21.6	21.3	21.3
<b>MAX</b>	19.4	15.1	11.2	9.7	8.0	12.5	16.2	19.0	20.7	23.0	23.1	22.4
<b>MIN</b>	13.8	9.4	6.6	2.5	3.2	7.0	10.5	13.9	16.4	20.7	19.8	19.6

WTR YR 2004

MEAN 14.3

MAX 23.1

MIN 2.5



ILLINOIS RIVER BASIN  
**05536121 Chicago River at Chicago Lock at Chicago, IL**

325

**LOCATION.**— Lat 41°53'18", long 87°36'27" (NAD of 1927), in NE1/4SE1/4 sec.10, T.39 N., R.14 E., Cook County, Hydrologic Unit 07120003, 0.2 mi east of Lake Shore Drive in Chicago, on left downstream side of lock guidewall, 100 ft downstream of the river—side lock gates at the Chicago River Lock and Dam.

**DRAINAGE AREA.**— Indeterminate.

**PERIOD OF RECORD.**—

STAGE: August 1997 to current year.

**GAGE.**— Water—stage recorder and phone telemeter. Datum of gage is 579.48 ft above NGVD of 1929 (Chicago City datum).

**REMARKS.**— Gage provides stage data to determine Illinois' diversion of Lake Michigan water.

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height, 4.14 ft, Aug. 16, 1997; minimum, -3.27 ft., Jan. 18, 2002.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, -0.17 ft, May 9; minimum, -3.21 ft, Apr. 30.

Gage height, feet, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-1.92	-1.83	-1.91	-1.91	-1.94	-1.89	-2.06	-1.77	-1.81	-1.90	-2.51	-2.21
2	-1.94	-1.82	-1.94	-1.93	-1.99	-1.83	-1.98	-2.08	-1.98	-1.88	-2.01	-2.12
3	-1.94	-1.85	-1.88	-1.85	-1.83	-1.85	-1.98	-1.87	-2.08	-1.86	-1.95	-1.94
4	-1.79	-1.92	-1.98	-1.87	-1.68	-1.84	-1.65	-2.10	-1.78	-2.03	-2.02	-1.99
5	-1.77	-1.84	-1.86	-1.86	-1.93	-1.88	-1.31	-1.88	-1.96	-1.83	-1.99	-1.90
6	-1.81	-1.90	-1.88	-1.94	-1.89	-1.88	-1.89	-1.59	-2.04	-1.93	-2.09	-2.03
7	-1.82	-1.88	-1.88	-1.82	-1.85	-1.88	-1.65	-1.80	-1.89	-2.31	-2.04	-1.90
8	-1.80	-1.83	-1.88	-1.79	-1.96	-2.24	-1.78	-1.97	-2.05	-2.26	-1.95	-1.83
9	-1.90	-1.87	-1.87	-1.86	-1.95	-2.20	-1.87	-1.93	-2.08	-1.95	-1.93	-1.93
10	-1.91	-1.75	-1.90	-1.91	-1.85	-2.58	-2.06	-2.92	-1.93	-1.92	-2.03	-1.89
11	-1.82	-1.86	-1.86	-1.79	-1.86	-2.46	-2.07	-2.18	-1.81	-1.77	-2.02	-1.96
12	-1.87	-1.81	-1.88	-1.91	-1.96	-2.38	-1.88	-2.16	-1.96	-1.82	-1.97	-2.03
13	-1.84	-1.85	-1.86	-1.94	-2.06	-2.07	-1.91	-1.80	-1.90	-1.85	-1.89	-2.01
14	-1.96	-1.84	-1.95	-1.92	-2.04	-2.20	-2.21	-1.89	-1.80	-1.85	-2.03	-2.14
15	-1.89	-1.93	-1.91	-1.92	-1.98	-2.34	-2.15	-1.76	-1.90	-1.57	-2.02	-1.97
16	-1.85	-1.87	-1.93	-1.97	-2.02	-2.33	-2.11	-1.85	-1.83	-1.67	-1.94	-1.98
17	-1.88	-1.86	-1.92	-2.00	-1.99	-2.15	-2.09	-1.76	-1.79	-1.48	-2.01	-1.89
18	-1.82	-1.91	-2.01	-1.96	-1.87	-2.07	-1.97	-1.77	-2.20	-1.89	-2.14	-1.98
19	-1.83	-1.69	-2.02	-2.00	-1.93	-2.11	-2.05	-2.13	-2.31	-1.63	-2.08	-2.06
20	-1.86	-1.86	-1.79	-2.06	-1.83	-1.92	-2.01	-2.39	-1.67	-2.01	-1.89	-1.96
21	-1.81	-1.77	-1.85	-1.96	-1.76	-2.04	-1.82	-1.82	-1.92	-1.84	-1.99	-2.00
22	-1.92	-1.87	-1.83	-1.88	-1.99	-2.37	-2.01	-1.89	-1.85	-1.99	-2.04	-1.89
23	-1.97	-1.86	-1.96	-1.85	-1.84	-2.49	-2.00	-1.90	-1.81	-2.15	-1.82	-2.02
24	-1.99	-1.87	-1.88	-1.99	-1.86	-2.22	-2.03	-1.85	-1.94	-2.05	-1.94	-2.05
25	-1.91	-1.87	-1.89	-2.11	-1.91	-2.22	-2.01	-1.96	-1.91	-1.97	-2.09	-1.96
26	-1.83	-1.84	-1.96	-1.98	-1.87	-2.15	-1.95	-1.86	-2.22	-1.86	-2.10	-2.01
27	-1.95	-1.92	-1.85	-1.86	-1.82	-2.26	-1.99	-1.87	-1.75	-2.32	-1.87	-1.93
28	-1.93	-1.80	-1.88	-1.89	-1.90	-2.22	-2.03	-2.05	-2.08	-2.26	-1.97	-1.95
29	-1.99	-1.92	-1.90	-1.78	---	-2.00	-1.96	-2.17	-1.89	-2.09	-2.37	-2.05
30	-1.97	-1.99	-1.78	-1.85	---	-2.03	-2.34	-1.89	-1.81	-1.81	-1.76	-1.97
31	-1.90	---	-1.90	-1.84	---	-2.18	---	-1.87	---	-2.05	-2.05	---
MEAN	-1.88	-1.86	-1.90	-1.91	-1.91	-2.14	-1.96	-1.96	-1.93	-1.93	-2.02	-1.99
MAX	-1.77	-1.69	-1.78	-1.78	-1.68	-1.83	-1.31	-1.59	-1.67	-1.48	-1.76	-1.83
MIN	-1.99	-1.99	-2.02	-2.11	-2.06	-2.58	-2.34	-2.92	-2.31	-2.32	-2.51	-2.21
CAL YR 2002	MEAN -1.85		MAX 0.26		MIN -3.07							

**05536121 Chicago River at Chicago Lock at Chicago, IL--Continued**

WTR YR 2003	MEAN -1.95	MAX -1.31	MIN -2.92
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**05536123 Chicago River at Columbus Drive at Chicago, IL.**

**LOCATION.**— Lat 41°53'18", long 87°37'16" (NAD of 1927), in NE1/4SW1/4 sec.10, T.39 N., R.14 E., Cook County, Hydrologic Unit 07120003, on left downstream side of bridge within the Columbus Drive bridge structure in Chicago, 0.5 mi downstream from Chicago River Lock and Dam.

**DRAINAGE AREA.**— Indeterminate.

**PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE

DISCHARGE: October 1996 to current year.

**GAGE.**— Water—stage recorder, acoustical flowmeter and phone telemeter. Datum of gage is 579.48 ft above NGVD of 1929 (Chicago City datum).

**REMARKS.**— This gaging station provides flow data 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 stormwater runoff from a 673 mi<sup>2</sup> diverted watershed area. Estimated daily discharges determined from regression relations between this site and flow data from the Metropolitan Water Reclamation District of Greater Chicago—Chicago River Controlling Works.

**EXTREMES FOR PERIOD OF RECORD.**— Maximum daily discharge, 1,370 ft<sup>3</sup>/s, Aug. 6, 1997, minimum daily, −2,450 ft<sup>3</sup>/s, Feb. 21, 1997, due to regulation to prevent flooding.

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[Records not available at time of publication]

ILLINOIS RIVER BASIN  
**05536195 Little Calumet River at Munster, IN**

**LOCATION.**— Lat 41°34'38", long 87°31'17" (NAD of 1927), in SE1/4NW1/4 sec. 13, T. 36 N., R. 10 E., Lake County, Hydrologic Unit 07120003, on left bank 200 ft upstream from Hohman Avenue bridge at north city limits of Munster, 0.4 mi upstream from Illinois–Indiana State line, 4.6 mi upstream from mouth of Thorn Creek, and at mile 29.6.

**DRAINAGE AREA.**— 90.0 mi<sup>2</sup>. During times of floods on Deep River, flow may enter basin from eastern portion of Little Calumet River Basin; or, during times of floods on Hart Ditch, flow may leave the basin and enter eastern portion of the Little Calumet River Basin.

**PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE

DISCHARGE: June 1958 to current year.

**GAGE.**— Water–stage recorder. Datum is 580.72 ft above NGVD of 1929.

**REMARKS.**—Flow from eastern portion of Little Calumet River Basin is diverted to Lake Michigan by Burns Ditch. Periods of high flow frequently are in backwater from downstream storage.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Maximum discharge, 1510 ft<sup>3</sup>/sec, April 28, 1959, gage height, 13.67 ft; maximum gage height, 17.03 ft, November 28, 1990, due to backwater, discharge, 1200 ft<sup>3</sup>/sec, estimated; minimum daily discharge, 1.9 ft<sup>3</sup>/s, Aug. 16, 1964.

**REMARKS FOR CURRENT YEAR.**—Records poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	23	41	28	e14	79	125	73	272	24	8.7	54
2	14	86	37	28	e14	93	93	51	150	24	8.7	42
3	17	51	34	28	e14	73	76	40	104	35	9.8	40
4	18	49	33	29	e14	90	64	32	77	72	108	36
5	14	162	66	e29	e14	355	54	29	63	22	28	32
6	13	77	83	e24	e14	318	48	29	54	18	17	30
7	13	48	74	e23	e14	182	42	29	45	16	12	28
8	12	36	66	e21	e14	130	37	27	39	15	9.7	28
9	12	30	61	e21	e14	104	33	27	34	17	9.6	28
10	12	27	103	e20	e14	84	31	58	41	15	8.1	26
11	13	26	130	e21	e14	73	29	125	78	14	8.0	26
12	15	25	83	e22	e14	60	27	80	291	14	8.1	25
13	16	23	55	e23	e14	51	26	126	290	15	9.9	24
14	111	24	54	e23	e14	46	25	198	180	14	11	19
15	52	24	45	e22	e14	43	24	144	134	14	8.2	21
16	29	26	42	e22	e13	41	23	95	97	16	7.6	120
17	22	27	39	e21	e13	40	40	72	75	16	7.3	33
18	20	279	32	e20	e14	42	26	123	61	15	11	22
19	19	397	35	e19	e19	42	22	74	50	15	19	19
20	19	271	28	e18	46	42	26	62	42	13	13	17
21	19	157	30	e17	105	38	46	51	44	73	11	15
22	18	99	29	e17	99	35	35	85	44	76	9.8	14
23	19	104	31	e16	111	31	29	154	36	25	11	13
24	19	180	31	e16	117	42	25	115	31	17	55	12
25	52	128	27	e16	85	42	64	102	28	13	48	12
26	32	86	27	e16	69	87	46	75	26	13	64	12
27	27	70	26	e16	60	112	37	59	25	11	88	13
28	25	60	27	e15	54	89	29	48	25	9.8	248	12
29	24	52	30	e15	49	145	26	41	24	9.0	201	11
30	23	46	31	e14	---	142	31	135	24	12	116	12
31	22	---	31	e14	---	179	---	322	---	10	73	---

**05536195 Little Calumet River at Munster, IN--Continued**

TOTAL	735	2693	1461	634	1064	2930	1239	2681	2484	672.8	1247.5	796
MEAN	23.7	89.8	47.1	20.5	36.7	94.5	41.3	86.5	82.8	21.7	40.2	26.5
MAX	111	397	130	29	117	355	125	322	291	76	248	120
MIN	12	23	26	14	13	31	22	27	24	9.0	7.3	11
CFSM	0.26	1.00	0.52	0.23	0.41	1.05	0.46	0.96	0.92	0.24	0.45	0.29
IN.	0.30	1.11	0.60	0.26	0.44	1.21	0.51	1.11	1.03	0.28	0.52	0.33

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 – 2004, BY WATER YEAR (WY)**

MEAN	34.8	58.3	71.5	61.6	81.6	123	123	94.0	70.9	42.1	37.5	38.8
MAX	151	212	301	199	252	386	268	266	222	185	141	217
(WY)	1994	1973	1983	1993	1959	1979	1973	1959	1993	1996	1990	1965
MIN	6.47	5.29	7.12	7.32	8.49	18.2	21.3	18.1	11.2	9.56	7.28	5.54
(WY)	1969	1972	1961	1961	1963	2000	1963	1992	1965	1991	1964	1966

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1959 – 2004**

ANNUAL TOTAL	17999.1		18637.3			
ANNUAL MEAN	49.3		50.9		69.6	
HIGHEST ANNUAL MEAN					121	
LOWEST ANNUAL MEAN					23.5	
HIGHEST DAILY MEAN	529	Jul 21	397	Nov 19	1160	Apr 28 1959
LOWEST DAILY MEAN	6.7	Jun 25	7.3	Aug 17	1.9	Aug 16 1964
ANNUAL SEVEN-DAY MINIMUM	7.5	Jun 22	8.6	Aug 11	2.2	Sep 2 1964
MAXIMUM PEAK FLOW			428	Nov 18	1510	Apr 28 1959
MAXIMUM PEAK STAGE			11.07	Nov 18	17.03	Nov 28 1990
ANNUAL RUNOFF (CFSM)	0.548		0.566		0.774	
ANNUAL RUNOFF (INCHES)	7.44		7.70		10.51	
10 PERCENT EXCEEDS	131		113		173	
50 PERCENT EXCEEDS	21		29		31	
90 PERCENT EXCEEDS	10		13		9.0	

ILLINOIS RIVER BASIN  
**05536215 Thorn Creek at Glenwood, IL**

**LOCATION.**— Lat 41°31'49", long 87°37'20" (NAD of 1927), in SW1/4SE1/4 sec.9, T.35 N., R.14 E., Cook County, Hydrologic Unit 07120003, on right bank 20 ft downstream from Cook County Forest Preserve bike trail, 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: 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).

STAGE: Water years 1994 to current year.

**REVISED RECORDS.**— WSP 1437: 1955. WDR IL–75–1: Drainage area.

**GAGE.**— Water-stage recorder. Datum of gage is 610.97 ft above NGVD of 1929.

**REMARKS.**— Effluent from sewage-treatment plant 1 mi upstream consists of publicly supplied water from Lake Michigan and ground-water sources.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 2,700 ft<sup>3</sup>/s (estimated), July 18, 1996, gage height unknown; maximum recorded gage height, 11.26 ft, Aug. 17, 1968, may have been higher during period of no gage-height record, July 17–20, 1996; minimum daily, 6.0 ft<sup>3</sup>/s, July 4, Aug. 21, Sept. 5, 11, 25, 1949.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Flood of Apr. 1947, reached a stage of 12.94 ft, from floodmarks, discharge not determined.

**REMARKS FOR CURRENT YEAR.**— Records good except those for Oct. 1 to Nov. 17, which are fair, and those for estimated daily discharges, which are poor. Effluent from sewage-treatment plant upstream averaged 23.1 ft<sup>3</sup>/s during the year. The maximum monthly average was 32.8 ft<sup>3</sup>/s in March and the minimum was 16.5 ft<sup>3</sup>/s in September.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	17	28	23	21	64	e61	59	102	20	18	27
2	15	81	26	23	22	72	e44	38	61	21	19	24
3	19	39	26	23	22	44	e39	32	48	54	33	23
4	18	72	27	23	21	106	e38	29	41	119	115	23
5	16	180	65	28	21	435	e36	29	37	34	30	21
6	17	48	53	23	21	108	e35	27	33	28	23	21
7	15	34	43	21	21	68	e33	29	31	25	21	21
8	15	26	38	21	20	52	e32	28	29	24	20	20
9	14	24	40	21	20	43	e31	28	27	24	19	20
10	15	22	96	21	20	37	e31	44	57	24	19	19
11	14	22	63	22	20	35	e30	49	61	23	18	19
12	17	20	42	25	19	31	e29	54	489	23	18	20
13	16	19	34	23	20	30	e30	119	91	23	18	19
14	97	19	32	22	20	38	e30	182	90	24	18	19
15	29	19	30	21	19	31	e29	85	55	22	17	44
16	27	21	32	21	19	32	e34	52	43	21	17	107
17	20	24	28	24	19	35	e38	40	36	21	18	29
18	18	592	27	23	20	38	e30	57	33	21	20	24
19	17	276	25	21	26	35	e31	40	30	21	29	23
20	16	80	24	21	68	33	e38	35	28	21	25	22
21	15	56	24	21	59	29	e39	32	42	49	20	20
22	16	45	24	21	47	27	e29	151	33	35	18	20
23	16	105	24	21	58	e35	e28	151	28	28	18	18
24	15	113	25	21	57	e36	e44	91	26	22	60	19
25	51	62	23	21	41	e51	e58	120	25	20	113	20

## ILLINOIS RIVER BASIN

331

**05536215 Thorn Creek at Glenwood, IL---Continued**

<b>26</b>	21	45	23	21	34	e92	e32	62	24	20	77	20
<b>27</b>	18	38	23	21	31	e67	31	46	23	19	105	20
<b>28</b>	19	34	26	20	29	e114	30	37	24	19	271	19
<b>29</b>	17	31	26	20	29	e203	28	34	22	19	79	19
<b>30</b>	17	30	25	20	---	e95	45	256	21	21	42	18
<b>31</b>	18	---	24	20	---	e121	---	341	---	20	32	---
TOTAL	655	2194	1046	677	844	2237	1063	2377	1690	865	1350	738
MEAN	21.1	73.1	33.7	21.8	29.1	72.2	35.4	76.7	56.3	27.9	43.5	24.6
MAX	97	592	96	28	68	435	61	341	489	119	271	107
MIN	14	17	23	20	19	27	28	27	21	19	17	18

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 – 2004, BY WATER YEAR (WY)**

MEAN	27.3	34.5	37.8	35.8	42.2	57.8	60.4	50.5	44.8	34.6	29.5	27.8
MAX	87.1	108	172	97.7	136	188	120	153	138	147	85.2	108
(WY)	1955	1991	1983	1993	1997	1979	1999	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 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1949 – 2004**

ANNUAL TOTAL	14746		15736			
ANNUAL MEAN	40.4		43.0		40.3	
HIGHEST ANNUAL MEAN					67.9	
LOWEST ANNUAL MEAN					24.8	
HIGHEST DAILY MEAN	690	Jul 21	592	Nov 18	1500	A
LOWEST DAILY MEAN	14	Oct 9,11	14	Oct 9,11	6.0	B
ANNUAL SEVEN-DAY MINIMUM	15	Oct 5	15	Oct 5	8.5	Sep 5 1949
MAXIMUM PEAK FLOW			867	Nov 18	2700 C	Jul 18 1996
MAXIMUM PEAK STAGE			9.07	Nov 18	11.26 D	Aug 17 1968
INSTANTANEOUS LOW FLOW			10	E	0.00 F	Jun 3 1992
10 PERCENT EXCEEDS	66		79		69	
50 PERCENT EXCEEDS	24		27		24	
90 PERCENT EXCEEDS	19		19		16	

A – Aug. 17, 1968; July 18, 1996 (estimated).

B – July 4, Aug. 21, Sept. 5, 11, 25, 1949.

C – Estimated, gage height unknown.

D – May have been higher during period of no gage–height record, July 17–20, 1996.

E – Several days.

F – No effluent from sewage–treatment plant because of temporary equipment repair.

ILLINOIS RIVER BASIN  
**05536235 Deer Creek near Chicago Heights, IL**

**LOCATION.**— Lat 41°31'15", long 87°35'25" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: 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).

STAGE: Water years 1994 to current year.

**REVISED RECORDS.**— WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, phone telemeter, and crest–stage gage. Datum of gage is 615.95 ft above NGVD of 1929. See WSP 1707 or 1727 for history of changes prior to Aug. 13, 1958.

**REMARKS.**— Undetermined amount of flow diverted for irrigation upstream from the gage.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 1,380 ft<sup>3</sup>/s, July 13, 1957, gage height, 11.75 ft; maximum gage height, 11.79 ft, Nov. 28, 1990, discharge, 809 ft<sup>3</sup>/s; no flow at times in several years.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for Aug. 28 to Sept. 30 and estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.69	18	10	6.1	3.3	21	43	22	67	3.9	3.1	14
2	0.75	32	7.9	7.1	3.9	52	31	15	38	3.6	3.0	11
3	1.4	32	7.1	8.3	4.2	23	24	11	27	5.0	4.0	9.0
4	1.6	34	6.9	8.2	4.1	30	19	12	19	19	23	7.5
5	1.1	62	16	9.1	3.7	306	16	11	15	8.6	8.3	6.7
6	0.99	32	27	6.6	4.1	121	16	8.7	13	6.8	4.7	6.0
7	1.3	19	20	6.0	4.1	61	14	7.6	11	5.8	4.0	6.0
8	1.2	14	17	5.7	4.1	39	13	8.5	9.4	4.9	3.3	5.7
9	1.3	12	15	5.7	4.0	30	11	8.6	7.9	5.1	3.1	4.9
10	2.0	12	48	5.5	4.0	23	10	14	10	4.9	2.9	4.4
11	1.4	14	44	6.0	4.0	20	9.3	33	19	4.7	3.0	4.2
12	1.1	14	21	7.1	4.2	16	8.6	24	177	4.3	2.6	3.4
13	1.0	14	13	7.1	4.0	14	8.5	57	96	4.2	2.5	3.5
14	8.4	15	11	7.2	4.1	16	8.6	86	64	4.3	2.6	3.6
15	4.3	13	9.2	6.1	3.9	15	8.5	60	46	3.7	2.3	5.1
16	1.2	13	8.8	6.1	3.3	14	8.7	31	28	3.7	2.1	32
17	1.9	12	7.6	6.6	3.8	14	13	21	21	3.6	2.5	9.4
18	1.3	228	6.4	6.0	4.3	16	10	20	16	3.5	2.5	4.5
19	1.2	307	5.6	4.5	5.8	18	8.3	18	12	3.2	5.3	2.9
20	1.4	101	4.6	e4.0	17	17	9.3	16	9.8	3.6	3.7	2.1
21	1.7	50	4.6	e3.7	40	14	15	14	10	5.6	3.5	2.3
22	1.6	31	4.7	e3.5	27	12	9.8	23	12	8.2	2.8	1.9
23	1.3	31	5.2	3.2	37	12	8.3	44	8.1	8.2	2.5	2.0
24	1.5	72	5.4	4.3	33	14	7.6	38	6.5	3.8	6.7	1.9
25	3.9	36	5.0	4.1	19	19	27	40	5.6	3.3	22	2.0
26	2.5	24	4.7	e3.9	14	59	17	28	5.1	2.9	31	1.9
27	1.8	21	4.9	e3.7	11	58	12	18	4.5	3.1	32	1.6
28	2.0	17	6.0	e3.5	9.7	40	10	13	4.2	2.9	97	1.7
29	2.4	15	8.9	e3.4	9.3	114	8.8	10	4.3	3.0	54	1.4
30	2.3	13	8.3	e3.3	---	66	9.7	54	4.0	3.4	31	1.9



**05536235 Deer Creek near Chicago Heights, IL--Continued**

<b>31</b>	<b>2.8</b>	<b>---</b>	<b>7.0</b>	<b>3.1</b>	<b>---</b>	<b>66</b>	<b>---</b>	<b>147</b>	<b>---</b>	<b>3.5</b>	<b>21</b>	<b>---</b>
TOTAL	59.33	1308	370.8	168.7	293.9	1340	415.0	913.4	770.4	154.3	392.0	164.5
MEAN	1.91	43.6	12.0	5.44	10.1	43.2	13.8	29.5	25.7	4.98	12.6	5.48
MAX	8.4	307	48	9.1	40	306	43	147	177	19	97	32
MIN	0.69	12	4.6	3.1	3.3	12	7.6	7.6	4.0	2.9	2.1	1.4
CFSM	0.08	1.89	0.52	0.24	0.44	1.87	0.60	1.28	1.11	0.22	0.55	0.24
IN.	0.10	2.11	0.60	0.27	0.47	2.16	0.67	1.47	1.24	0.25	0.63	0.26

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 – 2004, BY WATER YEAR (WY)**

MEAN	7.73	14.8	18.1	18.0	26.0	37.6	34.2	24.5	20.2	9.96	7.38	6.92
MAX	55.9	78.3	83.6	74.5	119	167	78.2	79.6	109	57.0	43.1	59.9
(WY)	1955	1991	1983	1993	1997	1979	1999	2002	1993	1996	1968	1993
MIN	0.00	0.25	0.59	0.36	0.51	3.26	3.75	2.15	0.61	0.54	0.63	0.03
(WY)	1957	1957	1957	1984	1978	2000	1963	1988	1988	1988	1956	1956

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1948 – 2004**

ANNUAL TOTAL	5924.35		6350.33			
ANNUAL MEAN	16.2		17.4		18.8	
HIGHEST ANNUAL MEAN					42.8	
LOWEST ANNUAL MEAN					5.77	
HIGHEST DAILY MEAN	448	Jul 21	307	Nov 19	860	Jul 13 1957
LOWEST DAILY MEAN	0.64	A	0.69	Oct 1	0.00	B
ANNUAL SEVEN-DAY MINIMUM	0.65	Jan 23	1.1	Oct 1	0.00	B
MAXIMUM PEAK FLOW			413	Nov 18	1380	C Jul 13 1957
MAXIMUM PEAK STAGE			10.66	Nov 18	11.79	D Nov 28 1990
INSTANTANEOUS LOW FLOW			0.00	Oct 6		
ANNUAL RUNOFF (CFSM)	0.703		0.751		0.813	
ANNUAL RUNOFF (INCHES)	9.54		10.23		11.04	
10 PERCENT EXCEEDS	34		38		42	
50 PERCENT EXCEEDS	6.0		8.3		5.1	
90 PERCENT EXCEEDS	0.98		2.3		1.0	

A – Jan. 24–27, Feb. 17, estimated due to backwater from ice.

B – At times in several years.

C – Gage height, 11.75 ft.

D – Discharge, 809 ft<sup>3</sup>/s.

ILLINOIS RIVER BASIN  
**05536255 Butterfield Creek at Flossmoor, IL**

**LOCATION.**— Lat 41°32'24", long 87°38'57" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: 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).

STAGE: Water years 1994 to current year.

**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 and phone telemeter. Datum of gage is 616.80 ft above NGVD of 1929. Prior to Sept. 9, 1948, nonrecording gage at same site and datum.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 2,220 ft<sup>3</sup>/s, July 18, 1996, gage height, 12.59 ft; no flow at times in several years.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.42	1.5	9.3	5.1	e1.6	18	34	27	101	2.1	0.85	9.1
2	0.32	52	7.6	4.6	e1.6	22	25	14	51	2.2	0.82	4.5
3	0.69	21	6.5	4.6	e1.6	16	19	6.4	34	12	3.4	2.8
4	1.7	21	6.4	4.8	e1.6	40	14	4.4	22	102	46	2.3
5	0.52	116	30	e5.1	e1.6	234	11	4.1	12	31	12	1.4
6	0.31	45	35	e5.4	e1.9	105	8.9	4.5	8.1	14	3.8	1.1
7	0.29	21	23	e4.5	e1.8	59	7.6	4.4	5.5	6.6	2.1	0.83
8	0.33	10	18	e3.8	e1.7	38	7.2	3.2	4.3	4.2	1.7	1.0
9	0.29	4.9	16	e3.3	e1.6	27	5.6	2.7	3.9	3.3	1.3	1.4
10	0.40	3.1	65	e3.0	e1.6	19	4.9	2.4	15	3.4	1.1	1.3
11	0.36	2.9	55	e2.8	e1.6	14	4.3	2.5	64	2.5	0.89	0.88
12	0.37	4.0	27	e2.7	e1.7	11	3.9	4.9	375	1.9	0.80	1.0
13	0.46	16	18	e2.8	e1.7	9.0	3.7	40	130	1.8	0.76	0.72
14	45	3.1	13	e2.7	e1.7	12	3.6	135	91	2.8	0.67	0.54
15	20	1.9	11	e2.5	e1.6	9.7	e3.4	91	56	2.0	0.57	3.8
16	7.8	1.9	15	e2.1	e1.6	8.9	e3.2	42	32	1.6	0.54	53
17	2.8	2.8	13	e2.2	e1.6	10	e3.5	22	21	1.4	0.57	9.6
18	1.8	528	11	e2.4	e1.7	13	e2.9	33	17	1.2	0.94	3.1
19	1.6	375	7.1	e2.3	e2.0	13	e2.5	19	12	1.1	4.9	1.7
20	1.9	151	9.0	e2.2	e1.0	10	e1.0	13	7.4	1.0	3.4	1.0
21	1.4	101	5.6	e2.1	e5.0	7.9	15	9.9	11	6.5	2.0	1.1
22	1.0	59	5.2	e2.0	e3.5	6.5	6.7	52	8.5	5.6	1.2	0.84
23	0.70	63	5.7	e2.3	e4.2	6.6	4.3	143	5.4	3.3	1.0	0.58
24	0.74	101	5.4	e2.1	e3.3	17	4.0	50	4.0	1.7	6.1	1.2
25	18	55	5.7	e2.0	e2.6	16	33	66	3.4	1.3	25	0.34
26	4.9	33	4.1	e1.9	22	34	16	37	2.9	1.1	31	1.5
27	1.7	24	4.0	e1.8	16	29	8.1	24	2.5	0.94	53	0.62
28	1.4	18	6.4	e1.8	12	40	5.2	15	2.7	0.80	162	0.38
29	1.7	14	8.1	e1.7	11	111	3.7	8.8	2.5	0.73	66	0.39
30	1.4	12	7.2	e1.7	---	63	8.3	131	2.1	0.90	36	0.54
31	1.5	---	6.0	e1.7	---	53	---	232	---	1.2	22	---
TOTAL	121.80	1862.1	459.3	90.0	288.8	1072.6	282.5	1244.2	1107.2	222.17	492.41	108.56

**05536255 Butterfield Creek at Flossmoor, IL--Continued**

MEAN	3.93	62.1	14.8	2.90	9.96	34.6	9.42	40.1	36.9	7.17	15.9	3.62
MAX	45	528	65	5.4	50	234	34	232	375	102	162	53
MIN	0.29	1.5	4.0	1.7	1.6	6.5	2.5	2.4	2.1	0.73	0.54	0.34
CFSM	0.17	2.64	0.63	0.12	0.42	1.47	0.40	1.71	1.57	0.30	0.68	0.15
IN.	0.19	2.95	0.73	0.14	0.46	1.70	0.45	1.97	1.75	0.35	0.78	0.17

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 – 2004, BY WATER YEAR (WY)**

MEAN	7.93	14.3	16.3	17.0	21.7	32.8	32.8	26.6	21.4	12.8	8.36	8.09
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	0.27	0.14	0.07	0.03	0.38	2.85	3.57	2.49	1.14	0.55	0.32	0.25
(WY)	1953	2000	1977	1977	1978	2000	1986	1992	1988	1988	1948	1953

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1948 – 2004**

ANNUAL TOTAL	6477.93		7351.64			
ANNUAL MEAN	17.7		20.1		18.4	
HIGHEST ANNUAL MEAN					42.3	
LOWEST ANNUAL MEAN					4.82	
HIGHEST DAILY MEAN	528	Nov 18	528	Nov 18	1500	Jul 13 1957
LOWEST DAILY MEAN	0.19	A	0.29	Oct 7,9	0.00	B
ANNUAL SEVEN-DAY MINIMUM	0.20	Jan 22	0.34	Oct 6	0.00	B
MAXIMUM PEAK FLOW			931	Nov 18	2220	Jul 18 1996
MAXIMUM PEAK STAGE			10.48	Nov 18	12.59	Jul 18 1996
INSTANTANEOUS LOW FLOW			0.23	Sep 25,26		
ANNUAL RUNOFF (CFSM)	0.755		0.855		0.781	
ANNUAL RUNOFF (INCHES)	10.25		11.64		10.62	
10 PERCENT EXCEEDS	45		51		42	
50 PERCENT EXCEEDS	2.8		4.9		4.5	
90 PERCENT EXCEEDS	0.31		0.90		0.47	

A – Jan. 25–27 and Feb. 17–18, estimated due to backwater from ice.

B – At times in several years.

ILLINOIS RIVER BASIN  
**05536265 Lansing Ditch near Lansing, IL**

**LOCATION.**— Lat 41°31'42", long 87°31'45" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: 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).

STAGE: Water years 1994 to current year.

**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 NGVD of 1929. Prior to Sept. 20, 1948, nonrecording gage at same site and datum.

**REMARKS.**— Some diurnal fluctuation caused by pumping operations upstream from station.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 461 ft<sup>3</sup>/s, May 10 or 11, 1948, gage height, 9.24 ft, from floodmark; maximum gage height, 10.18 ft, Oct. 11, 1954, discharge 302 ft<sup>3</sup>/s; no flow at times in most years.

**REMARKS FOR CURRENT YEAR.**— Records poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.21	0.20	0.61	0.61	0.31	1.9	0.58	0.53	2.0	0.56	0.22	0.28
2	0.23	3.2	0.74	0.61	0.32	4.0	e0.47	0.43	e1.0	0.57	0.20	0.35
3	0.28	1.9	0.78	0.61	0.34	0.69	e0.40	0.41	e0.70	0.63	0.21	0.45
4	0.36	1.1	0.83	0.64	0.34	6.9	e0.37	2.1	e0.55	1.1	1.2	0.50
5	0.35	12	6.2	0.67	0.35	36	e0.34	3.2	e0.45	0.50	0.35	0.54
6	0.35	5.2	11	e0.66	0.35	6.9	e0.31	e0.40	e0.37	0.29	0.19	0.57
7	3.7	1.3	8.4	e0.64	0.35	1.0	e0.29	e0.30	e0.33	0.39	0.17	0.57
8	5.2	0.35	5.8	e0.64	0.35	4.0	e0.27	e0.26	e0.30	0.41	0.21	0.57
9	0.47	0.25	4.6	e0.62	0.35	9.6	e0.25	e0.25	0.27	0.38	0.25	0.57
10	0.47	0.21	12	0.61	0.35	15	e0.23	0.30	0.40	0.43	4.5	0.58
11	0.54	0.25	16	0.61	0.33	0.34	e0.22	0.46	0.82	0.46	9.0	0.61
12	0.70	0.22	8.7	0.61	0.33	0.29	e0.24	0.28	23	0.47	0.29	0.64
13	0.82	0.22	3.6	0.61	0.32	0.27	e0.23	1.1	3.2	0.48	0.26	0.68
14	7.5	0.22	1.9	0.61	0.33	0.26	e0.22	1.3	1.5	4.1	0.24	0.61
15	6.6	0.22	1.1	0.58	0.34	0.28	0.21	e0.70	12	12	0.19	1.1
16	5.0	0.24	5.6	0.58	0.32	0.28	0.22	e0.60	24	5.2	0.16	4.1
17	4.8	0.32	22	0.57	0.31	0.29	0.28	e0.50	0.30	0.40	0.15	0.45
18	2.4	53	1.2	0.58	0.31	0.33	0.30	e0.70	0.36	0.46	0.18	0.32
19	0.88	43	0.72	e0.46	0.42	0.35	0.28	e0.50	0.37	0.47	0.40	0.35
20	0.37	36	0.71	e0.42	e1.1	0.33	0.30	e0.40	0.42	0.45	0.37	0.35
21	0.59	53	0.67	e0.37	e3.1	0.31	0.32	0.33	0.52	0.64	0.35	0.32
22	1.3	7.1	0.67	e0.35	e2.7	0.29	0.19	1.8	0.54	0.54	0.35	0.33
23	1.8	3.2	11	e0.33	e3.6	0.29	0.25	2.3	0.39	0.48	0.35	0.32
24	1.2	23	0.84	0.43	e2.0	0.34	0.35	1.1	0.39	0.34	0.87	0.41
25	3.2	31	0.61	0.38	e1.1	0.40	0.52	0.51	0.31	0.24	1.1	0.31
26	2.7	3.2	0.61	0.36	0.61	1.2	0.43	1.8	0.32	0.22	1.2	0.24
27	7.1	0.65	0.61	e0.34	0.54	1.1	0.35	5.5	0.46	0.27	0.82	0.21
28	9.9	0.54	0.61	e0.34	0.48	0.61	0.30	3.4	0.48	0.30	22	e0.20
29	3.3	0.52	0.61	e0.33	0.46	2.3	0.26	0.88	0.51	e0.25	1.5	e0.24
30	0.54	0.52	0.61	e0.32	—	8.9	0.33	13	0.50	e0.22	24	e0.21

**05536265 Lansing Ditch near Lansing, IL--Continued**

<b>31</b>	0.20	---	0.61	0.32	---	4.1	---	20	---	0.20	24	---
TOTAL	73.06	282.13	129.94	15.81	22.11	108.85	9.31	65.34	76.76	33.45	95.28	16.98
MEAN	2.36	9.40	4.19	0.51	0.76	3.51	0.31	2.11	2.56	1.08	3.07	0.57
MAX	9.9	53	22	0.67	3.6	36	0.58	20	24	12	24	4.1
MIN	0.20	0.20	0.61	0.32	0.31	0.26	0.19	0.25	0.27	0.20	0.15	0.20
CFSM	0.27	1.06	0.47	0.06	0.09	0.40	0.04	0.24	0.29	0.12	0.35	0.06
IN.	0.31	1.19	0.55	0.07	0.09	0.46	0.04	0.27	0.32	0.14	0.40	0.07

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 – 2004, BY WATER YEAR (WY)**

MEAN	4.88	6.26	6.57	7.09	8.91	13.1	13.2	10.3	9.22	6.71	4.29	4.16
MAX	41.8	25.6	28.0	24.1	23.3	44.4	40.7	31.5	33.8	33.3	16.5	23.3
(WY)	1955	1986	1983	1952	2001	1979	1950	1959	1993	2003	1990	1965
MIN	0.16	0.22	0.23	0.12	0.12	0.75	0.31	1.53	0.32	0.10	0.18	0.17
(WY)	1953	1954	1964	1963	2003	2003	2004	1958	2002	2002	2002	1999

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1948 – 2004**

ANNUAL TOTAL	2933.48		929.02					
ANNUAL MEAN	8.04		2.54				7.90	
HIGHEST ANNUAL MEAN							14.0	
LOWEST ANNUAL MEAN							1993	
HIGHEST DAILY MEAN	124	Jul 21	53	Nov 18, 21	377	May 11	1951	
LOWEST DAILY MEAN	0.00	Jan 2–6	0.15	Aug 17	0.00	A		
ANNUAL SEVEN-DAY MINIMUM	0.09	Jan 16	0.21	Aug 12	0.00	A		
MAXIMUM PEAK FLOW			100	Nov 18	461	B	C	
MAXIMUM PEAK STAGE			7.01	Nov 18	10.18	D	Oct 11 1954	
ANNUAL RUNOFF (CFSM)	0.909		0.287		0.893			
ANNUAL RUNOFF (INCHES)	12.34		3.91		12.14			
10 PERCENT EXCEEDS	22		5.9		17			
50 PERCENT EXCEEDS	0.99		0.49		3.9			
90 PERCENT EXCEEDS	0.10		0.24		0.34			

A – At times in most years.

B – Gage height, 9.24 ft. from floodmark.

C – May 10 or 11, 1948.

D – Discharge, 302 ft<sup>3</sup>/s.

ILLINOIS RIVER BASIN  
05536275 Thorn Creek at Thornton, IL

**LOCATION.**— Lat 41°34'06", long 87°36'28" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: 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).

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1979–91.

**REVISED RECORDS.**— WSP 1707: Drainage area.

**GAGE.**— Water–stage recorder, phone telemeter, and crest–stage gage. Datum of gage is 586.43 ft above NGVD of 1929. Prior to Dec. 18, 1948, nonrecording gage at same site and datum.

**REMARKS.**— Effluent from sewage–treatment plant upstream consists of publicly supplied water from Lake Michigan and ground water sources.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 4,700 ft<sup>3</sup>/s, July 13, 1957, gage height, 16.00 ft; maximum gage height, 17.06 ft, June 14, 1981, discharge, 4,140 ft<sup>3</sup>/s, minimum daily discharge, 4.4 ft<sup>3</sup>/s, Sept. 11, 1949.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Flood of Apr. 5, 1947, reached a stage of 14.34 ft (from floodmark), discharge, 4,200 ft<sup>3</sup>/s.

**REMARKS FOR CURRENT YEAR.**— Records fair. Effluent from sewage–treatment plant upstream averaged 23.1 ft<sup>3</sup>/s during the year. The maximum monthly average was 32.8 ft<sup>3</sup>/s in March, and the minimum was 16.5 ft<sup>3</sup>/s in September.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	27	67	40	30	89	249	101	647	26	24	63
2	24	139	62	40	30	258	135	69	272	26	22	40
3	27	84	60	40	31	152	85	55	147	36	26	37
4	31	72	58	40	30	129	70	49	97	269	194	35
5	27	460	112	46	29	996	65	55	77	75	67	29
6	27	271	177	43	31	810	61	56	65	50	43	29
7	25	101	111	41	34	349	57	46	55	41	36	32
8	29	64	83	45	34	184	53	42	51	36	32	31
9	34	53	76	45	31	108	49	40	48	33	25	31
10	27	47	234	36	29	84	46	46	58	32	24	30
11	24	43	300	36	29	84	43	80	156	29	31	28
12	26	43	138	39	29	65	40	74	940	28	37	23
13	25	44	78	42	29	60	41	179	761	27	27	26
14	156	41	66	43	28	64	41	581	370	33	23	29
15	92	35	60	38	29	63	40	529	270	38	22	28
16	51	34	61	36	28	63	41	212	146	46	21	230
17	38	39	61	37	29	62	67	102	110	35	22	67
18	31	743	63	40	29	66	52	148	68	26	22	44
19	29	1360	52	35	34	68	46	107	59	24	39	37
20	29	796	43	33	98	64	54	79	45	24	31	35
21	28	421	42	33	225	60	78	67	50	41	26	32
22	27	275	44	35	157	56	53	123	56	68	22	28
23	27	217	46	33	193	54	46	688	42	49	22	22
24	27	532	50	30	231	68	44	350	37	30	34	26
25	64	312	43	31	196	74	136	327	35	25	163	27

**05536275 Thorn Creek at Thornton, IL--Continued**

<b>26</b>	43	186	41	34	114	186	84	226	36	24	162	28
<b>27</b>	34	115	41	35	71	258	61	124	30	26	211	24
<b>28</b>	32	99	41	34	67	151	53	103	31	29	637	21
<b>29</b>	36	83	49	34	64	616	45	95	29	26	421	21
<b>30</b>	33	76	52	31	---	377	49	293	27	25	148	20
<b>31</b>	29	---	46	33	---	394	---	1040	---	32	83	---
TOTAL	1160	6812	2457	1158	1989	6112	1984	6086	4815	1309	2697	1153
MEAN	37.4	227	79.3	37.4	68.6	197	66.1	196	160	42.2	87.0	38.4
MAX	156	1360	300	46	231	996	249	1040	940	269	637	230
MIN	24	27	41	30	28	54	40	40	27	24	21	20

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 – 2004, BY WATER YEAR (WY)**

MEAN	60.0	87.5	95.7	96.7	121	174	175	138	115	76.4	59.8	57.3
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	26.1	37.4	34.0	29.3	24.9	21.7	14.9	11.7
(WY)	1951	1949	1951	1954	2003	1981	1986	1958	1948	1952	1948	1948

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1948 – 2004**

ANNUAL TOTAL	33497		37732			
ANNUAL MEAN	91.8		103		105	
HIGHEST ANNUAL MEAN					199	
LOWEST ANNUAL MEAN					51.5	
HIGHEST DAILY MEAN	1360	Nov 19	1360	Nov 19	3810	Nov 28 1990
LOWEST DAILY MEAN	21	A	20	Sep 30	4.4	Sep 11 1949
ANNUAL SEVEN-DAY MINIMUM	23	Jan 19	24	Sep 24	9.0	Sep 14 1948
MAXIMUM PEAK FLOW			1640	Nov 19	4700 B	Jul 13 1957
MAXIMUM PEAK STAGE			11.57	Nov 19	17.06 C	Jun 14 1981
INSTANTANEOUS LOW FLOW			17	Sep 29,30		
10 PERCENT EXCEEDS	224		232		225	
50 PERCENT EXCEEDS	36		45		46	
90 PERCENT EXCEEDS	25		27		23	

A – June 28, July 2.

B – Gage Height, 16.00 ft.

C – Discharge, 4,140 ft<sup>3</sup>/s.

ILLINOIS RIVER BASIN  
**05536290 Little Calumet River at South Holland, IL**

**LOCATION.**— Lat 41°36'25", long 87°35'52" (NAD of 1927), 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>. (Does not include part of watershed diverted to Lake Michigan.)

**PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE**

DISCHARGE: 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).

STAGE: Water years 1994 to current year.

PRECIPITATION: October 2000 to current year.

**REVISED RECORDS.**— WSP 1507: 1950, 1953. WDR IL—81–2: Drainage area.

**GAGE.**— Water–stage recorder, phone telemeter, rain gage, and crest–stage gage. Datum of gage is 575.00 ft above NGVD of 1929 (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. 14 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.**— 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.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Maximum discharge, 4,440 ft<sup>3</sup>/s, July 14, 1957, gage height, 20.11 ft, site then in use; maximum gage height, 20.50 ft, Nov. 28, 1990; minimum daily discharge, 7.9 ft<sup>3</sup>/s Oct. 6, 1950.

**PRECIPITATION:** Maximum daily total, 2.32 in., May 11, 2002 and Nov. 18, 2003.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Flood of Apr. 6, 1947, reached a stage of 19.24 ft, from floodmarks, discharge, 4,760 ft<sup>3</sup>/s.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	52	128	74	e47	152	444	215	1160	47	43	186
2	37	349	116	70	e48	306	302	162	539	44	35	121
3	42	277	98	70	e51	254	225	117	303	86	47	87
4	59	221	94	71	e52	250	179	94	208	476	405	85
5	45	680	196	85	e52	1240	151	86	155	228	227	67
6	39	457	290	79	e50	1290	137	97	124	116	109	60
7	41	256	232	75	e49	677	124	84	104	94	70	65
8	36	169	184	74	e48	393	111	72	98	78	57	62
9	51	132	164	78	e47	287	98	62	81	77	45	62
10	40	113	322	63	e46	244	88	76	126	73	37	59
11	35	105	434	57	44	224	80	166	367	54	37	56
12	34	99	286	64	44	168	70	178	1360	49	56	46
13	37	92	179	72	41	130	67	340	1240	45	48	46
14	288	89	145	72	40	133	64	815	694	48	36	53
15	272	77	126	69	41	125	59	785	515	55	34	75
16	132	72	124	58	38	118	59	397	334	74	31	498
17	90	78	124	60	38	116	106	230	252	69	33	209
18	63	1170	117	67	39	129	95	384	181	45	39	107
19	52	1550	106	55	49	136	66	258	144	41	81	74
20	49	1190	83	55	135	126	78	173	113	37	63	65
21	46	697	77	50	310	114	157	145	109	118	58	57
22	45	425	79	54	278	100	106	212	131	255	42	53
23	44	375	86	50	286	89	79	913	92	127	36	41



## ILLINOIS RIVER BASIN

341

**05536290 Little Calumet River at South Holland, IL--Continued**

<b>24</b>	44	702	86	46	324	121	71	559	73	67	98	39
<b>25</b>	141	511	82	e45	282	153	242	475	63	47	274	46
<b>26</b>	126	339	71	e45	220	232	184	367	61	41	325	49
<b>27</b>	81	238	72	e44	154	398	120	248	54	39	350	47
<b>28</b>	70	190	72	e44	131	323	90	187	55	46	898	33
<b>29</b>	69	157	86	e44	121	733	73	150	54	44	799	30
<b>30</b>	68	140	91	e43	----	595	82	458	48	44	390	31
<b>31</b>	58	----	87	e45	----	601	----	1380	----	55	247	----
TOTAL	2276	11002	4437	1878	3105	9957	3807	9885	8838	2719	5050	2509
MEAN	73.4	367	143	60.6	107	321	127	319	295	87.7	163	83.6
MAX	288	1550	434	85	324	1290	444	1380	1360	476	898	498
MIN	34	52	71	43	38	89	59	62	48	37	31	30
CFSM	0.35	1.76	0.69	0.29	0.51	1.54	0.61	1.53	1.42	0.42	0.78	0.40
IN.	0.41	1.97	0.79	0.34	0.56	1.78	0.68	1.77	1.58	0.49	0.90	0.45

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 – 2004, BY WATER YEAR (WY)**

MEAN	103	150	170	171	219	315	313	254	203	135	105	103
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	33.2	65.4	65.1	51.8	35.4	39.0	23.8	17.8
(WY)	1957	1950	1963	1963	2003	2000	1986	1958	1949	1948	1948	1949

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1948 – 2004**

ANNUAL TOTAL	65293		65463			
ANNUAL MEAN	179		179		187	
HIGHEST ANNUAL MEAN					333	
LOWEST ANNUAL MEAN					72.4	
HIGHEST DAILY MEAN	1550	Nov 19	1550	Nov 19	4240	Jul 14 1957
LOWEST DAILY MEAN	25	Jul 3	30	Sep 29	7.9	Oct 6 1950
ANNUAL SEVEN-DAY MINIMUM	28	Jan 22	39	Oct 7	14	Oct 27 1949
MAXIMUM PEAK FLOW			1820	Nov 18	4440 A	Jul 14 1957
MAXIMUM PEAK STAGE			14.00	Nov 18	20.50 B	Nov 28 1990
INSTANTANEOUS LOW FLOW			28	C		
ANNUAL RUNOFF (CFSM)	0.860		0.860		0.897	
ANNUAL RUNOFF (INCHES)	11.68		11.71		12.18	
10 PERCENT EXCEEDS	455		397		422	
50 PERCENT EXCEEDS	82		87		84	
90 PERCENT EXCEEDS	31		43		36	

A – Gage height, 20.11 ft, site then in use.

B – Discharge, 4.150 ft<sup>3</sup>/s.

C – Aug. 16, 17, and Sept. 28–30.

ILLINOIS RIVER BASIN  
**05536340 Midlothian Creek at Oak Forest, IL**

**LOCATION.**— Lat 41°36'51", long 87°43'46" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: 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).

STAGE: Water years 1994 to current year.

**REVISED RECORDS.**— WSP 1337: 1951-53: WSP 1911: Drainage area.

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 620.41 ft above NGVD of 1929 (Cook County Highway Department bench mark).

**REMARKS.**— 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 recessions. Flow bypassed gage from Nov. 21, 1962, to Mar. 2, 1963, due to diversion 1.0 mi upstream.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 627 ft<sup>3</sup>/s, Apr. 22, 1973, gage height, 7.67 ft; maximum gage height, 9.00 ft, July 13, 1957, discharge, 550 ft<sup>3</sup>/s; no flow at times in most years.

**REMARKS FOR CURRENT YEAR.**— Records good except those for Aug. 10 to Sept. 30 and for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	1.6	4.4	2.9	e0.84	8.5	23	22	105	3.0	1.7	7.5
2	6.7	43	4.4	2.8	e0.98	11	18	13	51	3.0	1.4	4.4
3	5.0	36	9.5	2.8	e1.1	8.4	8.3	7.9	24	5.1	3.4	2.8
4	5.3	20	8.7	2.9	e1.4	14	5.8	5.9	12	36	39	2.2
5	1.6	36	22	e3.3	e1.3	65	5.2	4.3	12	10	14	e1.9
6	1.3	22	18	e3.4	e1.3	58	3.7	3.0	6.0	6.5	4.9	e1.6
7	1.3	14	9.9	e2.7	e1.6	33	3.2	3.6	5.2	18	3.2	e1.4
8	1.2	9.3	9.7	e2.2	e1.7	24	3.1	4.4	5.5	8.8	2.2	e1.6
9	1.2	3.1	8.8	e2.0	e1.6	19	2.8	3.8	4.6	8.3	1.8	2.2
10	1.1	1.5	30	e1.7	e1.5	19	2.5	10	11	9.7	1.8	2.7
11	0.93	1.6	20	e1.6	e1.5	18	2.3	6.4	52	4.4	1.5	2.8
12	0.53	1.2	11	e1.7	e1.4	9.8	2.1	9.0	115	3.7	e1.3	e2.0
13	0.95	1.1	6.9	e2.0	e1.4	6.5	2.1	48	108	3.3	e1.1	e1.5
14	21	1.2	5.3	e1.7	e1.3	8.4	2.2	91	94	3.0	e1.0	e0.90
15	16	1.4	4.8	e1.4	e1.3	5.4	2.4	58	53	3.0	e0.90	e3.5
16	9.4	1.4	6.6	e1.2	e1.4	4.6	2.6	22	38	2.7	e0.90	34
17	4.2	2.3	5.0	e1.2	e1.5	5.0	3.4	11	19	2.4	1.3	9.8
18	2.0	69	4.1	e1.6	e1.7	7.6	3.7	29	14	1.9	2.6	e4.5
19	1.2	87	3.4	e1.5	e2.0	7.9	3.0	22	13	1.7	4.9	e3.5
20	1.0	59	3.4	e1.4	e3.0	5.1	7.9	16	5.0	1.6	3.0	e2.0
21	1.0	41	2.2	e1.4	e2.0	3.7	22	11	4.7	5.6	2.6	e1.4
22	0.77	24	2.5	e1.3	e1.4	3.1	10	33	6.3	13	e1.7	e1.1
23	0.61	23	3.2	e1.6	19	3.6	4.9	85	4.7	8.9	e1.6	e0.90
24	0.52	37	2.7	e1.4	16	12	3.9	47	4.5	3.0	e3.0	e1.9
25	14	25	2.7	e1.3	11	14	31	32	4.1	1.9	7.5	e0.70
26	7.1	20	2.2	e1.4	8.4	14	17	20	3.8	1.7	13	e2.3
27	3.4	15	2.1	e1.4	7.1	11	11	16	3.6	1.9	18	e1.2
28	2.8	8.4	6.8	e1.5	6.0	13	7.2	8.8	3.3	1.7	49	e0.60
29	2.5	5.1	8.4	e1.6	5.8	38	5.6	4.9	3.4	1.7	32	e0.80
30	1.9	4.0	6.3	e1.3	---	26	11	75	3.3	2.5	11	e0.90

ILLINOIS RIVER BASIN  
**05536340 Midlothian Creek at Oak Forest, IL--Continued**

343

<b>31</b>	1.8	---	4.1	e1.0	---	23	---	142	---	2.7	5.7	---
TOTAL	129.31	614.2	239.1	57.2	137.12	499.6	230.9	865.0	789.0	180.7	237.00	104.60
MEAN	4.17	20.5	7.71	1.85	4.73	16.1	7.70	27.9	26.3	5.83	7.65	3.49
MAX	21	87	30	3.4	20	65	31	142	115	36	49	34
MIN	0.52	1.1	2.1	1.0	0.84	3.1	2.1	3.0	3.3	1.6	0.90	0.60
CFSM	0.33	1.62	0.61	0.15	0.38	1.28	0.61	2.21	2.09	0.46	0.61	0.28
IN.	0.38	1.81	0.71	0.17	0.40	1.48	0.68	2.55	2.33	0.53	0.70	0.31

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 – 2004, BY WATER YEAR (WY)**

MEAN	6.94	9.96	10.7	10.2	13.7	21.6	21.0	16.2	13.3	9.09	6.26	7.23
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	0.04	0.17	0.00	0.00	0.00	3.13	1.41	1.84	0.88	0.29	0.25	0.11
(WY)	1964	1965	1963	1963	1963	1964	1963	1968	1965	1964	1966	1963

**SUMMARY STATISTICS**

**FOR 2003 CALENDAR YEAR**

**FOR 2004 WATER YEAR**

**WATER YEARS 1951 – 2004**

ANNUAL TOTAL	3550.45		4083.73				
ANNUAL MEAN	9.73		11.2		12.2		
HIGHEST ANNUAL MEAN					21.0		1993
LOWEST ANNUAL MEAN					2.68		1963
HIGHEST DAILY MEAN	119	Jul 28	142	May 31	448		Oct 11 1954
LOWEST DAILY MEAN	0.52	Oct 24	0.52	Oct 24	0.00		A
ANNUAL SEVEN-DAY MINIMUM	0.72	Jan 23	1.0	Oct 18	0.00		A
MAXIMUM PEAK FLOW			315	May 30	627	B	Apr 22 1973
MAXIMUM PEAK STAGE			5.00	May 30	9.00	C	Jul 13 1957
INSTANTANEOUS LOW FLOW			0.42	Oct 12			
ANNUAL RUNOFF (CFSM)	0.772		0.886		0.966		
ANNUAL RUNOFF (INCHES)	10.48		12.06		13.12		
10 PERCENT EXCEEDS	24		29		31		
50 PERCENT EXCEEDS	4.2		4.1		3.6		
90 PERCENT EXCEEDS	0.95		1.3		0.58		

A – At times in most years.

B – Gage Height, 7.67 ft.

C – Discharge, 550 ft<sup>3</sup>/s.

ILLINOIS RIVER BASIN  
05536500 Tinley Creek near Palos Park, IL

**LOCATION.**— Lat 41°38'48", long 87°45'59" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: July 1951 to current year. Prior to October 1952, records published with those for streams in the St. Lawrence River basin (WSP 1237).

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

MISCELLANEOUS: Water year 2000; contaminants in streambed sediments, water year 2000.

**BIOLOGICAL**

ALGAE: Water year 2000.

BENTHIC MACROINVERTEBRATES: Water year 2000.

FISH: Water year 2001.

HABITAT: Water year 2000.

**REVISED RECORDS.**— WDR IL-75-1: Drainage area. WDR IL-81-2: 1955(M), 1957(M), 1970(M), 1978(M).

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 607.40 ft above NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 2,010 ft<sup>3</sup>/s, July 18, 1996, from rating curve extended above 800 ft<sup>3</sup>/s on basis of indirect measurement of flow through culvert, gage height, 10.25 ft; maximum gage height, 10.30 ft, discharge, 1,930 ft<sup>3</sup>/s, Oct. 10, 1954; no flow at times in most years.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	2.2	4.0	3.2	e1.2	12	11	22	89	1.2	1.4	3.8
2	1.1	132	3.4	3.1	e1.2	11	7.7	11	31	1.1	1.1	2.9
3	0.96	134	3.1	3.1	e1.3	7.8	6.0	6.3	21	1.1	1.3	2.4
4	3.0	30	3.2	3.1	e1.3	39	4.9	4.5	12	39	69	2.2
5	2.0	172	36	e3.5	e1.3	321	4.1	3.5	6.9	12	18	2.0
6	1.4	34	25	e3.9	e1.3	90	3.7	2.8	5.0	7.4	6.7	1.9
7	1.1	11	13	e3.3	e1.3	29	3.5	2.8	3.7	7.9	3.7	1.9
8	0.88	6.9	8.2	e2.8	e1.2	17	3.3	3.2	3.1	3.9	2.6	1.6
9	0.80	4.9	7.0	e2.4	e1.2	13	3.0	2.6	2.6	4.2	1.9	1.5
10	0.90	4.4	79	e2.2	e1.2	10	2.7	8.5	35	11	1.6	1.3
11	1.0	3.8	33	e2.0	e1.2	7.7	2.6	4.9	125	5.0	1.5	0.96
12	1.1	4.2	14	e1.7	e1.2	5.1	2.4	8.0	386	2.9	1.5	0.94
13	1.2	4.3	9.0	e2.0	e1.2	4.0	2.2	132	76	2.2	1.2	0.81
14	20	3.7	6.2	e2.0	e1.2	6.0	2.0	230	48	1.9	1.1	0.70
15	17	3.4	5.4	e1.8	e1.2	6.5	1.8	74	24	1.7	1.0	0.82
16	6.2	3.5	6.4	e1.6	e1.2	5.5	1.8	24	13	1.5	0.78	55
17	3.9	5.2	5.6	e1.4	e1.2	5.2	2.0	14	7.6	1.4	0.68	12
18	2.7	343	4.5	e1.7	e1.2	6.7	2.2	89	5.1	1.2	0.63	3.9
19	2.2	187	3.8	e1.8	e1.4	9.5	1.7	30	3.8	1.0	1.7	2.2
20	2.2	42	3.3	e1.7	e6.0	7.5	3.5	16	3.0	1.0	1.8	1.5
21	2.0	18	3.0	e1.6	e30	5.6	15	13	4.9	4.9	1.5	1.4
22	1.7	12	2.9	e1.5	e26	3.9	7.1	18	8.7	32	1.1	1.2
23	1.7	54	3.1	e1.7	e29	3.6	4.0	66	4.0	21	0.75	1.1
24	1.7	128	3.0	e1.6	e28	8.7	3.1	21	2.8	7.0	0.84	0.95
25	12	27	2.8	e1.5	e20	17	27	24	2.4	3.3	7.6	0.85
26	7.2	14	2.5	e1.4	14	16	12	16	2.0	2.3	17	0.73

## ILLINOIS RIVER BASIN

345

**05536500 Tinley Creek near Palos Park, IL---Continued**

<b>27</b>	3.6	9.8	2.5	e1.3	11	13	5.9	9.1	1.6	2.0	26	0.60
<b>28</b>	2.8	7.2	6.2	e1.3	7.8	31	4.1	6.1	1.4	1.6	148	0.61
<b>29</b>	2.5	5.6	8.4	e1.2	7.7	116	3.2	4.6	1.7	1.3	44	0.66
<b>30</b>	2.3	4.7	5.6	e1.2	---	27	7.1	183	1.3	1.4	13	0.65
<b>31</b>	2.5	---	4.1	e1.2	---	18	---	238	---	2.0	5.9	---
TOTAL	111.04	1411.8	317.2	63.8	203.0	873.3	160.6	1287.9	931.6	187.4	384.88	109.08
MEAN	3.58	47.1	10.2	2.06	7.00	28.2	5.35	41.5	31.1	6.05	12.4	3.64
MAX	20	343	79	3.9	30	321	27	238	386	39	148	55
MIN	0.80	2.2	2.5	1.2	1.2	3.6	1.7	2.6	1.3	1.0	0.63	0.60
CFSM	0.32	4.20	0.91	0.18	0.62	2.52	0.48	3.71	2.77	0.54	1.11	0.32
IN.	0.37	4.69	1.05	0.21	0.67	2.90	0.53	4.28	3.09	0.62	1.28	0.36

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 – 2004, BY WATER YEAR (WY)**

MEAN	6.51	9.80	9.71	10.5	13.4	20.9	21.4	15.8	11.9	6.86	5.29	5.41
MAX	87.0	47.1	57.7	43.1	69.8	90.2	50.7	43.7	56.9	58.5	28.3	38.2
(WY)	1955	2004	1983	1999	1997	1979	1970	2002	2000	1996	1987	1993
MIN	0.00	0.17	0.15	0.06	0.19	2.24	1.52	1.79	0.67	0.15	0.00	0.00
(WY)	1953	1954	1964	1977	1963	1981	1963	1963	1965	1956	1964	1953

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1951 – 2004**

ANNUAL TOTAL	4785.97	6041.60	
ANNUAL MEAN	13.1	16.5	11.4
HIGHEST ANNUAL MEAN			22.7
LOWEST ANNUAL MEAN			2.27
HIGHEST DAILY MEAN	343 Nov 18	386 Jun 12	891 Oct 10 1954
LOWEST DAILY MEAN	0.30 A	0.60 Sep 27	0.00 B
ANNUAL SEVEN-DAY MINIMUM	0.31 Jan 22	0.72 Sep 24	0.00 B
MAXIMUM PEAK FLOW		690 May 30	2010 C,D Jul 18 1996
MAXIMUM PEAK STAGE		7.91 May 30	10.30 E Oct 10 1954
INSTANTANEOUS LOW FLOW		0.57 F	
ANNUAL RUNOFF (CFSM)	1.17	1.47	1.02
ANNUAL RUNOFF (INCHES)	15.90	20.07	13.86
10 PERCENT EXCEEDS	27	31	25
50 PERCENT EXCEEDS	3.7	3.5	2.7
90 PERCENT EXCEEDS	0.72	1.2	0.20

A – Jan. 24–27, 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.

E – Discharge, 1,930 ft<sup>3</sup>/s.

F – Several days.

ILLINOIS RIVER BASIN  
**05536995 Chicago Sanitary Ship Canal at Romeoville, IL**

**LOCATION.**— Lat 41°38'27", long 88°03'35" (NAD of 1927), 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 (135th Street) 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.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: October 1984 to current year.

STAGE: Water years 1994 to current year.

SURFACE-WATER QUALITY

CHEMICAL: Water years 1987–92 and 1999 to 2001.

WATER TEMPERATURE: Water years 1974–77.

**REVISED RECORDS.**— WDR IL–86–2: 1985. WDR IL–89–2: 1986. WDR IL–92–2: 1986–89.

**GAGE.**— Acoustical flowmeter and phone telemeter. Datum of gage is 551.89 ft above NGVD of 1929 (U.S. Army Corps of Engineers bench mark).

**REMARKS.**— 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.

**EXTREMES FOR PERIOD RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 19,466 ft<sup>3</sup>/s, Feb. 21, 1997, gage-height, 23.95 ft; maximum gage-height, 26.43 ft, Feb. 4, 1996, discharge, 2,876 ft<sup>3</sup>/s; no flow or periods of reverse flow at times in most years.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are fair.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1732	1531	2153	1799	1930	2241	3029	2005	6562	2836	3010	3157
2	1430	4284	1442	1393	1539	2182	2685	2119	3334	2673	2885	2863
3	2057	4760	1408	1377	1955	2485	2277	1722	4208	5933	3860	2806
4	1435	5154	2090	1415	1481	4505	1918	1575	2864	4927	5677	2723
5	1559	5878	2805	1895	1172	8992	1876	1889	4305	4566	4968	2624
6	1547	3883	2776	2486	2123	5352	2328	1894	3366	4061	3400	2396
7	1666	3338	2753	1569	1381	5018	1539	1795	3269	3707	4233	1900
8	1586	1943	2133	1295	2154	3023	1685	1909	3017	3852	3775	2306
9	1628	2963	3346	1287	1741	3089	1730	1748	2996	5048	2791	2121
10	1559	2091	4159	1330	1156	3256	1667	2139	5605	4106	3492	2522
11	2478	1368	3672	1793	1444	2117	1446	1477	7632	4370	2816	2339
12	1576	2136	2940	1481	1439	2097	1771	3080	8877	2741	3157	1969
13	1766	1440	2494	1791	1950	2313	1453	4652	4866	4090	3228	2461
14	4212	1958	2332	1236	1332	2578	1665	6990	6078	2798	3166	2184
15	2299	1339	1922	1672	1150	1859	1447	4371	4511	3485	3013	3733
16	2415	1365	2105	1616	1651	1637	1842	3519	4994	3612	3146	2823
17	1950	3187	1669	1545	1378	1855	2370	3894	2845	3042	3491	2804
18	2057	10200	2005	1905	1900	2411	1773	3068	4358	3544	2372	2208
19	2064	5818	1443	1574	1322	1953	e1700	3378	3209	3206	2693	2350
20	2196	5016	1690	1354	2937	2069	e3294	4115	3687	3249	3051	2039
21	1691	3484	2134	1762	2496	1712	2013	e4576	3750	4103	3200	1889
22	1616	3140	1349	1273	2700	1873	1869	e6457	3511	4377	2439	1840
23	1660	4153	1303	1709	2531	1870	2688	e6626	3513	3353	2858	2297
24	2500	4030	1513	1710	2474	2482	2382	e4541	3239	3840	4106	1903
25	2107	3894	1724	1924	2104	2710	2470	3601	2462	3049	3579	1703

**05536995 Chicago Sanitary Ship Canal at Romeoville, IL--Continued**

<b>26</b>	2371	2009	1653	1499	2574	2897	2199	3551	3163	3247	2380	1837
<b>27</b>	1883	2751	1492	1758	1802	3038	1743	3062	3175	3608	4301	1932
<b>28</b>	1707	2192	1774	1476	2223	3589	2225	2875	2592	3328	10721	1983
<b>29</b>	1362	2671	1873	1470	1940	3975	1751	3054	2785	3128	4695	3314
<b>30</b>	1547	1958	1442	1343	----	4468	2225	7486	3038	3020	4106	2426
<b>31</b>	1813	----	1566	1580	----	3048	----	8485	----	2729	3423	----
TOTAL	59469	99934	65160	49317	53979	92694	61060	111653	121811	113628	114032	71452
MEAN	1918	3331	2102	1591	1861	2990	2035	3602	4060	3665	3678	2382
MAX	4212	10200	4159	2486	2937	8992	3294	8485	8877	5933	10721	3733
MIN	1362	1339	1303	1236	1150	1637	1446	1477	2462	2673	2372	1703

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 – 2004, BY WATER YEAR (WY)**

MEAN	3107	2909	2550	2641	2834	3089	3372	3544	3845	3986	4212	3816
MAX	5244	5243	3991	4347	4975	4789	5194	5493	6405	5426	6830	5182
(WY)	1987	1986	1988	1993	1997	1985	1992	1990	1993	1986	1987	1986
MIN	1918	1471	1604	1275	1298	1734	2035	2370	2455	2699	2917	2382
(WY)	2004	2003	2003	2003	2003	2000	2004	1994	2003	2002	2000	2004

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1985 – 2004**

ANNUAL TOTAL	925543		1014189				
ANNUAL MEAN	2536		2771		3327		
HIGHEST ANNUAL MEAN					4113		
LOWEST ANNUAL MEAN					2342		
HIGHEST DAILY MEAN	10200	Nov 18	10721	Aug 28	17870	May 10 1990	
LOWEST DAILY MEAN	1009	Feb 9	1150	Feb 15	915	A	Nov 20 2001
ANNUAL SEVEN-DAY MINIMUM	1160	Feb 8	1450	Feb 10	1160	Feb 8 2003	
MAXIMUM PEAK FLOW			14643	B Aug 28	19466	C	Feb 21 1997
MAXIMUM PEAK STAGE			26.16	D Mar 29	26.43	E	Feb 4 1996
INSTANTANEOUS LOW FLOW			38	Jan 8	F		
10 PERCENT EXCEEDS	4240		4370		5020		
50 PERCENT EXCEEDS	2200		2390		2960		
90 PERCENT EXCEEDS	1260		1470		1880		

A – Estimated by regression.

B – Gage height, 21.38 ft.

C – Gage height, 23.95 ft.

D – Discharge, 3,515 ft<sup>3</sup>/s.E – Discharge, 2,876 ft<sup>3</sup>/s.

F – No flow or periods of reverse flow at times in most years.

ILLINOIS RIVER BASIN  
05537500 Long Run near Lemont, IL

**LOCATION.**— Lat 41°38'33", long 87°59'57" (NAD of 1927), 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.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: July 1951 to current year.

STAGE: Water years 1994 to current year.

**REVISED RECORDS.**— WSP 1338: 1952(M). WDR IL-75-1: Drainage area.

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 637.20 ft above NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 5,310 ft<sup>3</sup>/s, July 18, 1996, from rating curve extended above 2,800 ft<sup>3</sup>/s, gage height, 11.10 ft; no flow at times in most years.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	2.4	12	9.0	e5.2	18	31	23	142	3.9	2.6	27
2	2.6	62	10	9.0	e5.0	20	25	17	72	3.5	6.9	17
3	3.9	95	9.7	8.8	e5.2	15	21	12	54	4.4	12	14
4	4.9	57	9.7	9.6	e5.0	33	19	9.0	34	6.7	64	12
5	3.3	118	36	11	e4.8	329	14	7.7	24	4.5	24	9.2
6	2.5	55	42	10	e5.1	155	12	6.8	18	13	11	7.5
7	2.0	31	26	7.9	e5.6	76	11	7.6	14	23	6.9	6.0
8	1.9	20	19	e7.6	e5.6	50	10	6.8	11	8.1	5.1	4.9
9	1.8	14	23	e7.0	e5.4	37	9.0	6.1	8.9	6.6	4.2	4.7
10	1.7	12	142	e6.2	e5.2	29	8.3	9.6	17	11	3.6	3.9
11	1.8	11	80	e5.5	e5.1	24	7.8	6.5	100	6.2	3.5	3.2
12	3.2	11	39	e5.2	e5.0	16	7.3	7.1	459	4.8	3.1	3.0
13	3.8	8.9	25	e5.2	e4.9	14	6.8	53	193	4.1	3.0	2.9
14	15	7.5	20	e5.1	e4.9	19	6.1	302	96	4.4	2.8	2.9
15	11	7.0	17	e4.9	e4.8	17	5.7	230	64	3.5	2.6	3.6
16	7.0	7.2	16	e4.3	e4.7	16	5.4	85	43	3.1	2.3	27
17	5.3	7.8	14	e3.9	e4.7	13	5.8	49	31	2.9	2.8	11
18	3.4	198	12	e4.7	e4.7	15	5.4	100	21	2.7	3.2	6.1
19	3.2	221	11	e4.3	e5.0	18	4.8	72	15	2.6	4.0	4.1
20	3.1	84	12	e4.1	e6.0	17	13	45	12	2.7	3.2	3.4
21	3.3	50	9.1	e3.9	e45	15	48	55	13	5.4	2.8	3.0
22	3.0	36	9.0	e3.8	e26	12	20	41	13	16	2.6	2.7
23	2.6	56	9.5	e3.8	e30	11	13	71	8.7	14	2.6	2.7
24	2.5	139	9.2	e3.8	41	18	10	41	7.2	5.6	3.4	2.9
25	12	56	10	e3.9	26	27	35	38	6.8	3.9	19	3.3
26	8.2	37	8.7	e4.2	19	34	20	29	5.8	3.1	37	3.2
27	5.1	27	7.4	e4.7	15	33	13	22	5.1	2.8	67	3.0
28	3.7	20	12	e5.2	14	56	9.9	17	5.3	2.8	549	4.0
29	3.1	16	15	e6.0	13	144	7.7	13	4.9	2.9	151	4.0
30	2.7	14	12	e5.8	---	65	15	93	4.1	3.0	62	3.5
31	2.7	---	10	e5.6	---	45	---	236	---	3.2	38	---
TOTAL	132.9	1480.8	687.3	184.0	330.9	1391	420.0	1711.2	1502.8	184.4	1105.2	205.7
MEAN	4.29	49.4	22.2	5.94	11.4	44.9	14.0	55.2	50.1	5.95	35.7	6.86
MAX	15	221	142	11	45	329	48	302	459	23	549	27



**05537500 Long Run near Lemont, IL--Continued**

MIN	1.7	2.4	7.4	3.8	4.7	11	4.8	6.1	4.1	2.6	2.3	2.7
CFSM	0.21	2.36	1.06	0.28	0.55	2.15	0.67	2.64	2.40	0.28	1.71	0.33
IN.	0.24	2.64	1.22	0.33	0.59	2.48	0.75	3.05	2.67	0.33	1.97	0.37

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 – 2004, BY WATER YEAR (WY)**

MEAN	10.0	14.4	16.4	16.3	21.6	34.2	36.1	24.7	19.0	12.0	6.30	7.74
MAX	163	71.9	92.2	75.5	104	131	86.9	74.5	89.6	126	35.7	74.9
(WY)	1955	1986	1983	1993	1997	1979	1975	1966	1993	1996	2004	1961
MIN	0.00	0.01	0.02	0.02	0.03	2.19	1.69	2.83	0.73	0.05	0.00	0.00
(WY)	1965	1972	1964	1977	1964	1964	1963	1958	1988	1961	1964	1963

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1951 – 2004**

ANNUAL TOTAL	6622.17		9336.2			
ANNUAL MEAN	18.1		25.5		18.1	
HIGHEST ANNUAL MEAN					39.9	
LOWEST ANNUAL MEAN					3.37	
HIGHEST DAILY MEAN	504	Jul 27	549	Aug 28	2190	Jul 18 1996
LOWEST DAILY MEAN	0.71	Jul 4	1.7	Oct 10	0.00	A
ANNUAL SEVEN-DAY MINIMUM	0.99	Jun 28	2.1	Oct 6	0.00	A
MAXIMUM PEAK FLOW			1090	Aug 28	5310 B	Jul 18 1996
MAXIMUM PEAK STAGE			7.46	Aug 28	11.10	Jul 18 1996
INSTANTANEOUS LOW FLOW			1.6	Oct 9–11		
ANNUAL RUNOFF (CFSM)	0.868		1.22		0.868	
ANNUAL RUNOFF (INCHES)	11.79		16.62		11.80	
10 PERCENT EXCEEDS	42		56		42	
50 PERCENT EXCEEDS	7.0		9.1		5.4	
90 PERCENT EXCEEDS	1.3		3.0		0.17	

A – At times in most years.

B – From rating curve extended above 2,800 ft<sup>3</sup>/s.

ILLINOIS RIVER BASIN  
**05539000 Hickory Creek at Joliet, IL**

**LOCATION.**— Lat 41°30'54", long 88°04'24" (NAD of 1927), in NE1/4SW1/4 sec.15, T.35 N., R.10 E., Will County, Hydrologic Unit 07120004, on left bank at downstream side of Richards Street bridge in Joliet, 0.6 mi downstream from Spring Creek, and at mile 1.6.

**DRAINAGE AREA.**— 107.48 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: October 1944 to current year.

STAGE: Water years 1994 to current year.

SURFACE-WATER QUALITY

CHEMICAL: Water years 1979–91.

**REVISED RECORDS.**— WDR IL–91–2: 1981(M).

**GAGE.**— Water–stage recorder, phone telemeter, and crest–stage gage. Datum of gage is 506.00 ft above NGVD of 1929. Prior to Oct. 9, 1946, nonrecording gage at site 0.3 mi upstream at datum 21.00 ft higher. Oct. 9, 1946, to Sept. 30, 1974, at site 0.3 miles upstream at datum 21.00 ft higher. Oct. 1, 1974 to Sept. 30, 2003, at site 0.3 miles upstream at datum 20.00 ft higher.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 17,300 ft<sup>3</sup>/s, June 13, 1981, gage height, 14.90 ft, from rating curve extended above 6,300 ft<sup>3</sup>/s, site and datum then in use; maximum gage height, 16.82 ft, June 12, 2004, present site and datum (discharge 4,630 ft<sup>3</sup>/s); minimum, 0.5 ft<sup>3</sup>/s, Aug. 9, 16, 19, 1964.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	19	81	e49	e23	67	196	133	812	28	24	113
2	18	252	70	e47	e23	90	146	112	466	26	23	76
3	17	225	65	e45	e24	74	117	73	345	32	32	54
4	17	164	66	e47	e25	99	99	57	211	200	160	45
5	18	510	114	e49	e24	1370	83	50	156	120	127	38
6	17	277	205	e45	e23	718	75	44	115	69	56	34
7	17	147	143	e40	e23	392	67	46	89	47	35	31
8	20	105	117	e35	e22	235	62	47	73	35	28	29
9	16	80	113	e31	e22	172	56	48	65	42	25	26
10	15	70	443	e32	e22	136	52	51	107	72	23	25
11	14	63	378	e33	e23	107	48	47	659	45	21	25
12	14	60	199	e33	e23	81	44	48	3470	34	21	23
13	13	58	132	e32	e23	69	43	425	1350	30	21	22
14	45	51	112	e31	e22	73	39	1140	790	28	20	22
15	78	48	97	e31	e22	70	38	847	489	28	19	25
16	45	47	92	e30	e21	64	37	439	307	26	19	124
17	33	50	86	e29	e21	62	38	265	214	24	19	80
18	26	1040	73	e28	e22	67	38	283	173	24	22	37
19	23	1720	68	e27	e25	77	35	210	145	22	30	28
20	19	769	59	e27	e50	71	43	157	115	22	30	24
21	17	409	56	e26	e200	62	103	128	94	22	28	22
22	17	257	46	e25	172	55	67	164	96	22	23	20
23	16	309	44	e25	187	52	50	895	70	33	21	19
24	17	762	43	e25	180	74	45	423	54	32	40	19
25	38	375	40	e25	128	112	156	364	49	27	47	18
26	44	237	38	e25	96	130	128	246	42	24	147	18
27	27	188	36	e24	73	149	81	161	37	23	298	18
28	23	159	46	e23	61	187	60	118	35	22	1250	17
29	20	130	61	e23	57	698	50	91	33	23	598	17
30	20	98	e65	e22	—	379	64	659	30	26	273	17

ILLINOIS RIVER BASIN  
05539000 Hickory Creek at Joliet, IL---Continued

351

31	21	---	e52	e22	---	280	---	1490	---	25	155	---
TOTAL	746	8679	3240	986	1637	6272	2160	9261	10691	1233	3635	1066
MEAN	24.1	289	105	31.8	56.4	202	72.0	299	356	39.8	117	35.5
MAX	78	1720	443	49	200	1370	196	1490	3470	200	1250	124
MIN	13	19	36	22	21	52	35	44	30	22	19	17
CFSM	0.22	2.69	0.97	0.30	0.53	1.88	0.67	2.78	3.32	0.37	1.09	0.33
IN.	0.26	3.00	1.12	0.34	0.57	2.17	0.75	3.21	3.70	0.43	1.26	0.37

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 – 2004, BY WATER YEAR (WY)**

MEAN	39.6	65.4	78.0	81.3	109	167	172	135	108	59.7	36.9	39.7
MAX	458	359	552	306	416	726	566	488	581	432	144	372
(WY)	1955	1991	1983	1974	1997	1979	1947	1974	1981	1957	1998	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 2003 CALENDAR YEAR**

**FOR 2004 WATER YEAR**

**WATER YEARS 1945 – 2004**

ANNUAL TOTAL	35016		49606			
ANNUAL MEAN	95.9		136		90.8	
HIGHEST ANNUAL MEAN					168	
LOWEST ANNUAL MEAN					20.8	
HIGHEST DAILY MEAN	1720	Nov 19	3470	Jun 12	8400 B	Jun 13 1981
LOWEST DAILY MEAN	11	A	13	Oct 13	0.80 B	Aug 16 1964
ANNUAL SEVEN-DAY MINIMUM	13	Feb 11	16	Oct 7	1.0 B	Aug 12 1964
MAXIMUM PEAK FLOW			4630	Jun 12	17300 C	Jun 13 1981
MAXIMUM PEAK STAGE			16.82	Jun 12	16.82 D	Jun 12 2004
INSTANTANEOUS LOW FLOW			11	Oct 12	0.50	E
ANNUAL RUNOFF (CFSM)	0.893		1.26		0.845	
ANNUAL RUNOFF (INCHES)	12.12		17.17		11.48	
10 PERCENT EXCEEDS	212		288		199	
50 PERCENT EXCEEDS	36		48		30	
90 PERCENT EXCEEDS	15		21		7.8	

A – June 25 and July 2–4.

B – Site then in use.

C – From rating curve extended above 6,300 ft<sup>3</sup>/s, gage height, 14.90 ft, site and datum then in use.

D – Discharge, 4,630 ft<sup>3</sup>/s.

E – Aug. 9, 16, 19, 1964; site then in use.

ILLINOIS RIVER BASIN  
**05539900 West Branch Du Page River near West Chicago, IL**

**LOCATION.**— Lat 41°54'39", long 88°10'44" (NAD of 1927), 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.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: July 1961 to current year.

STAGE: Water years 1994 to current year.

SURFACE-WATER QUALITY

CHEMICAL: Water years 1979–91.

BIOLOGICAL

ALGAE: Pigment and biomass, Water year 1990.

**REVISED RECORDS.**— WDR IL–75–1: Drainage area. WDR IL–77–1: 1966–67(M).

**GAGE.**— Water–stage recorder and phone telemeter. Datum of gage is 717.76 ft above NGVD of 1929.

**REMARKS.**— Diurnal fluctuation at low flow caused by sewage–treatment plant upstream from station.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 984 ft<sup>3</sup>/s, Dec. 3, 1982, gage height, 10.44 ft; maximum gage height, 10.91 ft, Oct. 14, 2001; minimum discharge, .20 ft<sup>3</sup>/s, July 1, 5, 8–12, 1963.

**REMARKS FOR CURRENT YEAR.**— Records good.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	14	24	30	19	57	77	33	278	21	15	21
2	13	39	21	29	18	72	62	27	129	20	15	20
3	15	111	20	29	18	54	55	26	96	23	17	19
4	19	75	20	29	18	61	51	26	80	27	107	18
5	15	168	47	30	17	370	45	22	64	23	38	17
6	14	63	36	25	17	191	41	21	52	21	24	16
7	15	36	30	25	19	106	35	22	46	20	20	18
8	12	28	27	25	20	88	34	20	41	20	18	15
9	13	24	31	25	20	66	33	20	43	31	18	17
10	13	22	287	24	19	56	33	28	104	45	17	15
11	13	21	173	25	20	46	31	48	149	26	16	15
12	15	19	99	26	19	39	30	30	370	24	17	15
13	15	16	78	25	19	35	29	85	192	21	16	15
14	64	15	62	24	19	44	28	183	110	19	16	13
15	37	16	56	24	20	38	29	119	85	18	16	15
16	21	16	49	23	20	34	28	74	67	17	17	20
17	17	17	46	25	19	38	28	56	59	17	19	16
18	15	185	39	27	19	44	28	98	51	17	17	14
19	15	128	38	24	20	46	29	63	43	17	35	15
20	15	68	35	24	65	44	37	55	38	16	20	15
21	13	46	33	22	83	37	54	134	64	17	17	14
22	13	39	33	21	64	35	34	395	67	22	16	14
23	13	48	34	21	87	34	30	219	39	18	15	14
24	13	84	33	22	84	76	29	119	36	16	19	14
25	18	49	31	22	64	74	70	101	35	16	27	14
26	16	38	27	22	55	124	39	84	33	15	21	14
27	18	33	27	21	48	89	32	70	29	15	30	14
28	15	28	43	19	43	121	29	57	28	15	125	14
29	15	27	40	19	42	329	26	46	27	15	59	14

**05539900 West Branch Du Page River near West Chicago, IL--Continued**

<b>30</b>	15	25	34	18	---	126	29	207	23	14	33	14
<b>31</b>	14	---	31	18	---	94	---	499	---	15	27	---
TOTAL	532	1498	1584	743	995	2668	1135	2987	2478	621	867	469
MEAN	17.2	49.9	51.1	24.0	34.3	86.1	37.8	96.4	82.6	20.0	28.0	15.6
MAX	64	185	287	30	87	370	77	499	370	45	125	21
MIN	12	14	20	18	17	34	26	20	23	14	15	13
CFSM	0.60	1.75	1.79	0.84	1.20	3.02	1.33	3.38	2.90	0.70	0.98	0.55
IN.	0.69	1.96	2.07	0.97	1.30	3.48	1.48	3.90	3.23	0.81	1.13	0.61

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 – 2004, BY WATER YEAR (WY)**

MEAN	27.5	33.5	34.0	30.2	39.7	53.4	61.2	49.0	40.1	26.4	30.2	29.5
MAX	171	111	134	81.5	118	191	135	113	103	63.8	135	124
(WY)	2002	1986	1983	1999	1997	1979	1983	1996	1996	1993	1987	2001
MIN	1.54	1.62	0.97	0.87	0.75	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 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1961 – 2004**

ANNUAL TOTAL	12380.5	16577	
ANNUAL MEAN	33.9	45.3	37.8
HIGHEST ANNUAL MEAN			66.8
LOWEST ANNUAL MEAN			6.41
HIGHEST DAILY MEAN	464 May 1	499 May 31	824 Oct 14 2001
LOWEST DAILY MEAN	9.1 Sep 12	12 Oct 8	0.20 Jul 5 1963
ANNUAL SEVEN-DAY MINIMUM	9.6 Sep 6	14 Oct 5	0.26 Jul 5 1963
MAXIMUM PEAK FLOW		538 May 31	984 A Dec 3 1982
MAXIMUM PEAK STAGE		8.26 May 31	10.91 Oct 14 2001
INSTANTANEOUS LOW FLOW		9.7 Oct 1	0.20 B
ANNUAL RUNOFF (CFSM)	1.19	1.59	1.33
ANNUAL RUNOFF (INCHES)	16.16	21.64	18.04
10 PERCENT EXCEEDS	63	88	77
50 PERCENT EXCEEDS	19	27	24
90 PERCENT EXCEEDS	12	15	8.2

A – Gage height, 10.44 ft.

B – July 1, 5, 8–12, 1963.

ILLINOIS RIVER BASIN  
05540060 Kress Creek at West Chicago, IL

**LOCATION.**— Lat 41°51'23", long 88°12'15" (NAD of 1927), 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.**—

SURFACE—WATER DISCHARGE AND STAGE

DISCHARGE: November 1985 to current year.

STAGE: Water years 1994 to current year.

PARTIAL RECORD: Annual maximum, water years 1961–80.

PRECIPITATION: April 1986 to current year.

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

**GAGE.**— Water-stage recorder, phone telemeter, rain gage, and crest-stage gage. Datum of gage is 700.00 ft above NGVD of 1929. Prior to November 8, 1985 at datum 5.44 ft higher.

**REMARKS.**— Collection, computation and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE: Maximum discharge, 1,980 ft<sup>3</sup>/s, July 18, 1996, gage height, 9.24 ft; minimum discharge, .02 ft<sup>3</sup>/s, Sept. 1, 2, 9, 1988.

PRECIPITATION: Maximum daily total, 6.88 in., July 17, 1996, but may have been greater during periods of missing record.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.42	0.53	4.7	3.3	e1.6	14	39	6.8	72	3.4	0.76	2.2
2	0.39	5.9	3.6	3.1	e1.6	17	32	7.1	57	2.5	0.77	1.1
3	0.63	38	3.9	2.9	1.6	14	27	4.6	49	7.6	4.9	0.85
4	0.69	32	4.5	3.3	1.6	20	22	4.2	36	7.9	24	1.1
5	1.0	62	9.4	3.4	e1.5	120	19	3.2	25	5.2	13	0.59
6	0.67	28	8.8	3.0	e1.6	76	18	3.7	20	4.3	5.9	0.49
7	0.46	17	6.6	2.6	e1.6	55	16	2.9	16	3.3	2.7	0.44
8	0.38	12	4.9	2.4	1.6	40	14	4.2	12	3.2	1.2	0.31
9	0.47	9.6	12	e2.3	1.5	31	12	2.8	9.4	12	1.2	0.31
10	0.36	7.6	110	2.3	1.5	25	11	3.7	18	15	0.92	0.31
11	0.35	5.6	83	2.4	1.4	21	10	4.8	36	8.1	0.90	0.43
12	0.35	4.7	45	2.6	1.5	17	9.4	6.1	134	5.1	0.71	0.32
13	0.35	4.7	33	e2.5	1.6	14	8.5	17	72	3.7	0.66	0.31
14	12	4.0	24	e2.4	1.6	16	6.0	59	58	2.5	0.66	0.31
15	5.9	2.8	19	e2.3	1.5	11	6.4	47	47	2.3	0.69	0.44
16	3.1	3.5	16	e2.4	1.5	9.8	5.1	31	36	2.7	0.82	0.76
17	2.6	3.2	13	e2.6	1.5	9.5	6.2	22	29	2.2	1.2	1.5
18	1.8	65	10	e2.6	1.6	11	4.8	29	20	2.3	1.4	0.38
19	1.2	48	8.1	e2.3	1.9	11	5.2	21	16	1.9	1.9	0.33
20	0.94	26	6.5	e2.2	13	18	10	20	13	1.3	2.8	0.72
21	0.78	20	4.9	e2.1	16	11	20	26	21	1.1	1.1	0.52
22	0.77	17	3.9	e2.0	12	8.3	21	59	18	4.4	0.66	1.2
23	0.93	21	e4.0	e1.9	18	8.2	14	51	14	4.3	0.66	0.55
24	0.92	26	e3.8	e1.8	17	20	10	35	13	3.5	4.4	0.33
25	2.1	17	e3.5	e1.7	13	21	19	33	10	3.0	2.4	0.31
26	1.6	15	e3.3	e1.6	17	55	13	28	8.1	2.4	2.8	0.31
27	1.3	12	e3.3	e1.7	10	42	9.3	22	6.7	1.6	4.8	0.31
28	0.79	9.7	e5.0	e1.7	8.8	62	8.8	17	5.6	0.96	41	0.31

## ILLINOIS RIVER BASIN

355

**05540060 Kress Creek at West Chicago, IL--Continued**

<b>29</b>	0.70	6.3	e4.7	e1.5	6.9	108	5.6	11	4.7	0.83	18	0.37
<b>30</b>	0.75	4.8	e4.0	e1.6	---	66	6.5	75	4.2	0.80	8.9	0.33
<b>31</b>	0.61	---	3.8	e1.6	---	49	---	111	---	0.76	5.0	---
TOTAL	45.31	528.93	470.2	72.1	161.5	1000.8	408.8	768.1	880.7	120.15	156.81	17.74
MEAN	1.46	17.6	15.2	2.33	5.57	32.3	13.6	24.8	29.4	3.88	5.06	0.59
MAX	12	65	110	3.4	18	120	39	111	134	15	41	2.2
MIN	0.35	0.53	3.3	1.5	1.4	8.2	4.8	2.8	4.2	0.76	0.66	0.31
CFSM	0.08	0.97	0.84	0.13	0.31	1.78	0.75	1.37	1.62	0.21	0.28	0.03
IN.	0.09	1.09	0.97	0.15	0.33	2.06	0.84	1.58	1.81	0.25	0.32	0.04

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 – 2004, BY WATER YEAR (WY)**

MEAN	10.7	14.4	12.2	12.7	18.7	21.2	24.0	23.3	19.3	12.1	11.0	7.65
MAX	55.7	36.0	40.5	36.9	57.6	44.4	62.9	48.2	48.3	80.8	82.1	29.1
(WY)	2002	1996	1988	1993	1997	1990	1993	2003	1996	1996	1987	1987
MIN	1.46	0.90	0.91	0.57	0.56	2.68	6.09	3.99	2.01	3.12	1.51	0.59
(WY)	2004	2000	2003	2003	2003	2003	1989	1989	1992	1991	1986	2004

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1986 – 2004**

ANNUAL TOTAL	3466.78			4631.14			15.8		
ANNUAL MEAN	9.50			12.7			24.0		
HIGHEST ANNUAL MEAN							1993		
LOWEST ANNUAL MEAN							2003		
HIGHEST DAILY MEAN	169	May 1		134	Jun 12		1210	Jul 18	1996
LOWEST DAILY MEAN	0.35	A		0.31	A		0.04	Sep 9	1988
ANNUAL SEVEN-DAY MINIMUM	0.39	Oct 7		0.32	Sep 24		0.09	Sep 3	1999
MAXIMUM PEAK FLOW				160	Jun 12		1980	Jul 18	1996
MAXIMUM PEAK STAGE				5.67	Jun 12		9.24	Jul 18	1996
INSTANTANEOUS LOW FLOW				0.27	Sep 10,28		0.02	B	
ANNUAL RUNOFF (CFSM)	0.525			0.699			0.874		
ANNUAL RUNOFF (INCHES)	7.13			9.52			11.87		
10 PERCENT EXCEEDS	21			34			37		
50 PERCENT EXCEEDS	2.8			4.7			7.4		
90 PERCENT EXCEEDS	0.50			0.66			1.0		

A – Several days.

B – Sept. 1, 2, 9, 1988.

**05540091 Spring Brook at Forest Preserve near Warrenville, IL**

**LOCATION.**— Lat 41°50'07", long 88°10'58" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1991 to current year.

STAGE: December 1993 to February 1994, April 1994 to current year.

**GAGE.**— Water-stage recorder and crest-stage gage. Datum of gage is 690.15 ft above NGVD of 1929.

**REMARKS.**— Effluent from sewage-treatment plant 3 mi upstream.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 393 ft<sup>3</sup>/s, July 18, 1996, gage height, 12.60 ft; no flow, Nov. 25, 1999.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004****DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e6.2	e5.2	e10	7.3	6.9	17	28	13	43	9.0	6.4	8.3
2	e6.0	e11	e9.8	7.3	7.1	19	26	11	40	9.0	6.2	7.8
3	e7.4	29	e9.4	8.4	7.6	16	25	9.8	31	10	6.9	6.9
4	e7.0	17	e11	8.5	7.8	19	24	9.2	27	13	28	6.6
5	e6.8	40	e19	8.9	7.7	90	21	8.0	25	8.8	15	6.9
6	e6.2	e14	e14	8.2	7.9	35	19	8.9	23	8.5	9.0	6.8
7	e6.2	e11	e13	7.7	8.0	32	17	9.5	19	12	7.3	7.0
8	e6.0	e9.0	e12	7.4	7.8	26	15	8.6	17	10	6.9	6.4
9	e5.8	e8.0	e13	7.6	8.4	24	14	8.2	16	16	6.3	6.4
10	e5.2	e7.0	84	7.4	7.4	22	14	8.5	24	22	5.9	6.6
11	e5.2	e6.6	e40	7.8	7.1	20	13	10	47	13	6.3	5.8
12	e5.2	e6.2	e26	8.7	6.9	18	13	9.5	101	11	7.2	6.8
13	e8.0	e5.9	e20	8.8	7.0	15	12	19	47	9.8	6.9	6.7
14	e20	e5.4	e17	8.8	7.1	18	12	48	35	9.1	6.5	6.1
15	e13	e5.5	e15	8.7	7.0	17	12	25	27	7.8	6.7	7.5
16	e9.0	e5.6	e13	8.6	7.9	15	12	19	22	8.1	6.4	11
17	e7.4	e5.8	e12	9.0	8.0	15	9.4	18	21	6.5	7.3	7.2
18	e6.6	54	e11	9.3	8.7	16	9.6	18	19	7.8	11	5.6
19	e6.0	e30	e11	8.6	10	17	12	14	16	7.2	11	6.5
20	e6.0	e20	e10	8.7	18	20	14	14	14	7.8	9.0	6.2
21	e6.0	e17	e9.8	8.6	22	17	22	21	20	7.6	7.0	6.5
22	e5.4	e22	e9.6	8.4	17	15	15	36	24	7.8	7.1	6.2
23	e5.2	e32	e9.4	8.5	22	14	12	25	16	6.7	7.0	7.6
24	e7.0	e25	e9.2	8.3	24	22	12	20	15	6.9	9.9	6.2
25	e11	e18	e8.8	8.2	21	23	24	20	15	6.1	15	6.1
26	e7.0	e15	e8.8	8.6	18	51	16	16	12	9.0	11	7.7
27	e6.0	e13	e8.8	8.9	16	34	13	13	10	6.0	15	6.9
28	e5.8	e12	e12	8.8	15	58	11	12	9.8	6.4	34	7.0
29	e5.8	e11	7.5	7.8	15	86	11	11	9.5	6.4	16	5.1
30	e5.4	e10	6.8	6.7	---	44	12	75	9.9	6.3	11	5.7
31	e5.6	---	e9.6	6.7	---	34	---	92	---	7.9	9.0	---
TOTAL	219.4	471.2	470.5	255.2	334.3	869	470.0	630.2	755.2	283.5	318.2	204.1
MEAN	7.08	15.7	15.2	8.23	11.5	28.0	15.7	20.3	25.2	9.15	10.3	6.80
MAX	20	54	84	9.3	24	90	28	92	101	22	34	11



**05540091 Spring Brook at Forest Preserve near Warrenville, IL--Continued**

MIN	5.2	5.2	6.8	6.7	6.9	14	9.4	8.0	9.5	6.0	5.9	5.1
CFSM	1.04	2.30	2.22	1.21	1.69	4.10	2.29	2.98	3.69	1.34	1.50	1.00
IN.	1.19	2.57	2.56	1.39	1.82	4.73	2.56	3.43	4.11	1.54	1.73	1.11

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 – 2004, BY WATER YEAR (WY)**

MEAN	13.3	13.9	12.1	14.6	15.9	18.5	22.0	19.1	18.1	12.0	11.6	10.6
MAX	38.2	20.9	17.9	29.5	35.4	28.5	34.4	30.0	30.2	29.6	17.4	19.3
(WY)	2002	1995	1993	1993	1997	1998	1993	2003	1993	1996	1997	2001
MIN	7.08	6.49	7.72	8.06	7.37	10.1	8.35	6.98	7.41	8.44	7.33	6.09
(WY)	2004	1994	1994	2003	1996	2000	1994	1994	1992	1995	1999	2003

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1992 – 2004**

ANNUAL TOTAL	4463.3	5280.8	
ANNUAL MEAN	12.2	14.4	15.1
HIGHEST ANNUAL MEAN			18.8
LOWEST ANNUAL MEAN			11.3
HIGHEST DAILY MEAN	125 May 1	101 Jun 12	309 Jul 18 1996
LOWEST DAILY MEAN	4.3 A Sep 20	5.1 Sep 29	3.8 Nov 25 1999
ANNUAL SEVEN-DAY MINIMUM	4.8 A Sep 18	5.7 A Oct 6	4.6 Nov 5 1993
MAXIMUM PEAK FLOW		180 Mar 28	393 Jul 18 1996
MAXIMUM PEAK STAGE		10.47 Mar 28	12.60 Jul 18 1996
INSTANTANEOUS LOW FLOW		0.19 Jul 27	0.00 Nov 25 1999
ANNUAL RUNOFF (CFSM)	1.79	2.11	2.21
ANNUAL RUNOFF (INCHES)	24.31	28.76	30.06
10 PERCENT EXCEEDS	20	25	27
50 PERCENT EXCEEDS	8.7	9.8	11
90 PERCENT EXCEEDS	5.5	6.2	6.5

A – Estimated.

ILLINOIS RIVER BASIN  
**05540095 West Branch Du Page River near Warrenville, IL**

**LOCATION.**— Lat 41°49'21", long 88°10'24" (NAD of 1927), 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.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: October 1968 to current year.

STAGE: Water years 1994 to current year.

SURFACE-WATER QUALITY

CHEMICAL: Water years 1977–91.

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

**GAGE.**— Water-stage recorder, phone telemeter, crest-stage gage and masonry dam. Datum of gage is 688.59 ft above NGVD of 1929 (Illinois Department of Transportation bench mark).

**REMARKS.**— Flow slightly regulated by sewage-treatment plants upstream.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 3,470 ft<sup>3</sup>/s, July 18, 1996, gage height, 6.41 ft; minimum daily discharge, 7.8 ft<sup>3</sup>/s, Sept. 14, 1971, Oct. 26, 1972.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Flood of Oct. 11, 1954, reached a stage of 5.54 ft, from floodmark, discharge not determined.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	35	56	58	e30	126	257	73	1010	68	35	59
2	31	65	53	54	e31	173	195	65	521	64	35	47
3	32	272	50	52	e31	142	164	60	325	74	39	43
4	37	211	50	54	e30	144	140	57	231	88	197	40
5	33	496	97	59	e29	844	126	53	174	69	120	37
6	32	258	104	45	e30	903	115	53	142	58	74	35
7	31	117	82	48	e32	444	103	53	120	58	54	37
8	29	75	71	46	e34	299	95	51	105	55	45	36
9	29	60	73	45	e35	221	88	49	92	77	42	36
10	28	53	631	43	e32	175	85	51	173	132	42	36
11	28	47	740	44	e34	140	79	83	401	85	40	32
12	28	43	338	47	e33	118	69	75	803	72	41	33
13	32	39	212	46	e33	102	67	157	771	62	40	34
14	97	36	156	44	e33	119	63	407	364	54	37	33
15	107	36	125	43	e34	110	63	477	260	47	36	34
16	65	37	108	43	e34	98	60	234	189	47	38	43
17	49	37	95	45	e33	98	57	156	160	43	44	39
18	39	369	82	48	e33	110	54	208	135	44	47	34
19	34	537	73	45	51	123	57	163	109	42	58	34
20	33	245	65	44	110	141	68	127	95	40	53	35
21	34	136	61	38	201	122	139	241	130	42	43	35
22	33	90	59	36	160	107	104	546	226	52	40	36
23	32	95	61	36	193	100	82	676	155	56	40	35
24	32	232	60	38	212	168	73	336	129	45	50	34
25	44	137	68	35	161	226	150	247	118	41	66	33
26	39	97	64	36	143	409	111	191	104	43	60	34
27	37	76	60	35	117	353	85	150	89	39	79	34

**05540095 West Branch Du Page River near Warrenville, IL---Continued**

<b>28</b>	37	67	82	32	107	373	75	125	82	39	286	34
<b>29</b>	34	60	94	32	101	1030	68	101	78	38	214	33
<b>30</b>	34	55	76	e32	----	654	67	431	74	37	115	34
<b>31</b>	34	----	66	e32	----	356	----	1140	----	38	81	----
TOTAL	1216	4113	4012	1335	2137	8528	2959	6836	7365	1749	2191	1099
MEAN	39.2	137	129	43.1	73.7	275	98.6	221	246	56.4	70.7	36.6
MAX	107	537	740	59	212	1030	257	1140	1010	132	286	59
MIN	28	35	50	32	29	98	54	49	74	37	35	32
CFSM	0.43	1.52	1.43	0.48	0.82	3.04	1.09	2.44	2.72	0.62	0.78	0.41
IN.	0.50	1.69	1.65	0.55	0.88	3.51	1.22	2.81	3.03	0.72	0.90	0.45

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 – 2004, BY WATER YEAR (WY)**

MEAN	70.5	92.9	95.2	83.9	113	157	179	148	118	76.5	88.7	75.5
MAX	366	276	354	250	374	588	396	351	300	283	512	261
(WY)	2002	1986	1983	1999	1997	1979	1983	2003	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 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1969 – 2004**

ANNUAL TOTAL	34236	43540	
ANNUAL MEAN	93.8	119	108
HIGHEST ANNUAL MEAN			162 1993
LOWEST ANNUAL MEAN			35.1 1977
HIGHEST DAILY MEAN	1240 May 2	1140 May 31	2880 Aug 15 1987
LOWEST DAILY MEAN	26 A	28 Oct 10–12	7.8 B
ANNUAL SEVEN-DAY MINIMUM	28 Feb 11	29 Oct 6	10 Oct 20 1971
MAXIMUM PEAK FLOW		1240 May 31	3470 Jul 18 1996
MAXIMUM PEAK STAGE		3.69 May 31	6.41 Jul 18 1996
INSTANTANEOUS LOW FLOW		14 C Jan 30	
ANNUAL RUNOFF (CFSM)	1.04	1.32	1.19
ANNUAL RUNOFF (INCHES)	14.09	17.92	16.23
10 PERCENT EXCEEDS	158	246	226
50 PERCENT EXCEEDS	49	61	61
90 PERCENT EXCEEDS	30	33	27

A – Jan. 22, estimated; Feb. 12.

B – Sept. 14, 1971, Oct. 26, 1972.

C – Result of freezeup.

ILLINOIS RIVER BASIN  
**05540130 West Branch Du Page River near Naperville, IL**

**LOCATION.**— Lat 41°43'13", long 88°07'55" (NAD of 1927), 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.**—

SURFACE–WATER DISCHARGE AND STAGE

DISCHARGE: October 1988 to current year.

STAGE: Water years 1994 to current year.

PRECIPITATION: May 1989 to current year.

**GAGE.**— Water–stage recorder, phone telemeter, unheated tipping–bucket rain gage, and crest–stage gage. Datum of gage is 630.00 ft above NGVD of 1929. Water years 1989 to 1995 datum incorrectly published as 625.28 ft above NGVD of 1929.

**REMARKS.**— For precipitation records, 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.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Maximum discharge, 6,620 ft<sup>3</sup>/s, July 18, 1996, gage height, 14.31 ft; minimum discharge, 4.0 ft<sup>3</sup>/s, August 29, 2002.

PRECIPITATION: Maximum daily total, 5.34 in., August 4, 1998.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	34	78	77	e50	125	264	95	1210	69	45	87
2	35	75	74	73	e50	166	207	87	650	63	42	68
3	44	348	70	73	e52	148	179	80	366	86	59	61
4	48	324	74	75	e53	175	155	75	243	97	214	56
5	45	649	113	79	e50	869	141	72	196	77	155	53
6	40	341	133	58	e56	970	131	69	165	119	98	49
7	38	178	108	e60	e54	499	120	74	140	90	72	47
8	37	125	98	e59	e54	303	112	70	126	71	59	47
9	33	99	104	e56	e54	228	99	67	112	100	54	42
10	35	87	687	e58	e52	193	94	65	223	174	49	45
11	35	79	810	e62	e50	170	92	90	448	120	47	41
12	33	72	388	63	e52	148	87	97	1220	110	46	40
13	35	64	223	61	e50	135	83	150	954	85	46	42
14	122	55	176	60	e51	150	82	436	456	73	42	41
15	144	54	150	e58	e48	144	78	528	302	63	40	41
16	90	54	132	57	e49	134	74	258	217	61	40	55
17	74	57	119	e56	e50	135	71	178	184	56	57	52
18	56	514	108	e54	e50	144	67	199	160	55	77	42
19	45	620	99	53	e70	152	68	183	134	53	67	38
20	41	302	95	e52	e120	170	88	141	117	53	70	39
21	38	187	94	e50	e180	151	161	208	143	67	54	41
22	35	141	80	e49	164	138	126	481	211	59	48	40
23	35	149	80	e49	174	128	106	712	149	73	46	41
24	36	234	77	e49	194	173	98	366	127	58	90	40
25	84	176	83	e50	166	237	168	242	118	51	97	38
26	59	138	81	e51	149	398	137	197	102	51	132	37
27	45	116	77	e52	130	375	107	160	91	49	141	40
28	45	100	96	e51	116	429	95	137	85	48	535	40
29	39	88	112	e51	112	1070	86	117	80	48	283	38
30	38	82	97	e50	---	776	88	475	74	51	156	38
31	37	---	85	e49	---	383	---	1240	---	48	112	---

**05540130 West Branch Du Page River near Naperville, IL--Continued**

TOTAL	1561	5542	4801	1795	2500	9416	3464	7349	8803	2278	3073	1379
MEAN	50.4	185	155	57.9	86.2	304	115	237	293	73.5	99.1	46.0
MAX	144	649	810	79	194	1070	264	1240	1220	174	535	87
MIN	33	34	70	49	48	125	67	65	74	48	40	37
CFSM	0.41	1.50	1.26	0.47	0.70	2.47	0.94	1.93	2.39	0.60	0.81	0.37
IN.	0.47	1.68	1.45	0.54	0.76	2.85	1.05	2.22	2.66	0.69	0.93	0.42

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 – 2004, BY WATER YEAR (WY)**

MEAN	115	143	109	133	172	186	233	237	181	118	117	103
MAX	534	290	187	315	518	316	449	449	368	456	202	332
(WY)	2002	1996	1991	1999	1997	1990	1993	1990	1996	1996	2002	2001
MIN	30.5	38.3	33.5	40.0	43.9	73.0	69.5	62.6	32.7	39.5	35.7	40.9
(WY)	1990	2000	1990	2003	2003	2000	1989	1989	1992	1991	1991	1991

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1989 – 2004**

ANNUAL TOTAL	42697		51961			
ANNUAL MEAN	117		142		154	
HIGHEST ANNUAL MEAN					202	
LOWEST ANNUAL MEAN					98.6	
HIGHEST DAILY MEAN	1440	May 2	1240	May 31	4960	Jul 18 1996
LOWEST DAILY MEAN	24	Jul 3	33	Oct 9,12	16	A
ANNUAL SEVEN-DAY MINIMUM	26	Jun 28	35	Oct 7	19	Jun 3 1994
MAXIMUM PEAK FLOW			1580	Jun 12	6620	Jul 18 1996
MAXIMUM PEAK STAGE			8.78	Jun 12	14.31	Jul 18 1996
INSTANTANEOUS LOW FLOW			29	Oct 10,11	4.0	Aug 29 2002
ANNUAL RUNOFF (CFSM)	0.951		1.15		1.25	
ANNUAL RUNOFF (INCHES)	12.91		15.72		16.98	
10 PERCENT EXCEEDS	216		289		314	
50 PERCENT EXCEEDS	63		82		89	
90 PERCENT EXCEEDS	34		41		39	

A – Oct. 13, 1989, Sept. 28, 2002.

ILLINOIS RIVER BASIN  
**05540160 East Branch Du Page River near Downers Grove, IL**

**LOCATION.**— Lat 41°49'54", long 88°02'51" (NAD of 1927), 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.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: October 1989 to current year.

STAGE: Water years 1994 to current year.

PARTIAL RECORD: Annual maximum, water years 1961–76.

**GAGE.**— Water-stage recorder, phone telemeter, and crest-stage gage. Datum of gage is 660.00 ft above NGVD of 1929. Prior to July 19, 1989, at datum 12.21 ft higher.

**REMARKS.**— Diurnal fluctuation at low flow caused by sewage-treatment plants upstream from station.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 1,720 ft<sup>3</sup>/s, Aug. 26, 1972, gage height, 16.94 ft; minimum discharge, 3.6 ft<sup>3</sup>/s, Dec. 19, 1989.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	22	33	29	23	46	75	34	e230	e27	e33	32
2	19	41	30	28	23	50	58	31	e150	e28	e32	28
3	23	149	29	28	25	43	50	30	e110	e35	e35	26
4	22	132	34	28	23	64	43	28	e75	e54	e90	25
5	20	242	61	30	23	308	41	27	e60	e35	e60	25
6	19	107	48	27	22	214	39	27	e50	e48	e40	25
7	19	60	41	27	23	120	38	28	e42	e59	e30	23
8	18	45	37	26	23	83	37	28	e36	e34	e25	22
9	19	37	44	26	24	66	34	26	e33	e45	e24	22
10	18	33	222	25	23	53	32	26	e100	e74	e23	22
11	18	32	179	26	22	47	31	27	202	e49	e22	21
12	18	30	103	27	23	41	31	29	329	e50	e22	21
13	18	26	64	26	22	38	30	40	218	e38	21	21
14	71	25	52	26	24	48	29	133	e130	e31	21	20
15	50	26	45	24	23	41	28	128	e150	e28	21	23
16	38	26	42	25	22	39	28	68	e70	e24	22	28
17	32	26	37	28	23	39	28	48	e56	e21	27	23
18	29	217	35	27	22	42	27	59	e46	e22	27	22
19	26	175	33	25	24	44	27	52	e40	e22	31	21
20	25	94	32	25	55	52	32	47	e35	e22	27	19
21	24	64	31	24	64	46	46	70	e50	e28	27	22
22	23	52	32	23	54	42	39	119	e68	e30	23	21
23	22	68	31	23	63	37	33	118	e52	e29	22	20
24	22	98	30	23	65	63	34	76	e44	e28	62	20
25	41	66	28	23	55	65	66	63	e38	e26	53	20
26	29	52	27	23	47	162	48	51	e35	e25	59	19
27	26	46	27	24	42	114	36	42	e29	e23	50	19
28	25	41	37	23	40	136	33	35	e31	e21	163	19
29	24	37	35	23	38	279	29	32	e29	e21	76	19
30	23	35	32	22	---	175	32	85	e27	e23	48	19
31	23	---	30	22	---	104	---	e250	---	e34	38	---
TOTAL	803	2104	1541	786	960	2701	1134	1857	2565	1034	1254	667
MEAN	25.9	70.1	49.7	25.4	33.1	87.1	37.8	59.9	85.5	33.4	40.5	22.2

**05540160 East Branch Du Page River near Downers Grove, IL--Continued**

MAX	71	242	222	30	65	308	75	250	329	74	163	32
MIN	18	22	27	22	22	37	27	26	27	21	21	19
CFSM	0.97	2.64	1.87	0.95	1.24	3.28	1.42	2.25	3.21	1.25	1.52	0.84
IN.	1.12	2.94	2.16	1.10	1.34	3.78	1.59	2.60	3.59	1.45	1.75	0.93

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 – 2004, BY WATER YEAR (WY)**

MEAN	41.0	47.8	37.6	44.2	52.7	57.5	69.7	70.9	58.1	38.8	41.2	34.6
MAX	142	92.8	56.2	100	138	87.8	139	123	97.2	96.5	63.4	83.3
(WY)	2002	1991	1991	1993	1997	1993	1993	2003	1993	1996	1998	2001
MIN	18.5	20.5	16.3	19.2	22.5	29.9	33.3	22.2	21.5	19.9	18.4	19.7
(WY)	1990	2000	1990	2003	2003	1996	1990	1992	1992	1991	1991	1995

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1990 – 2004**

ANNUAL TOTAL	16751		17406			
ANNUAL MEAN	45.9		47.6		49.5	
HIGHEST ANNUAL MEAN					64.1	
LOWEST ANNUAL MEAN					38.5	
HIGHEST DAILY MEAN	472	May 1	329	Jun 12	961	Oct 14 2001
LOWEST DAILY MEAN	18	A	18	B	11	C
ANNUAL SEVEN-DAY MINIMUM	18	Jan 14	18	Oct 7	12	Aug 14 1992
MAXIMUM PEAK FLOW			372	Nov 4	1040	Oct 14 2001
MAXIMUM PEAK STAGE			13.14	Nov 4	16.28	Oct 14 2001
INSTANTANEOUS LOW FLOW			12	Oct 13	3.6	Dec 19 1989
ANNUAL RUNOFF (CFSM)	1.73		1.79		1.86	
ANNUAL RUNOFF (INCHES)	23.43		24.34		25.27	
10 PERCENT EXCEEDS	81		86		91	
50 PERCENT EXCEEDS	29		32		32	
90 PERCENT EXCEEDS	20		22		19	

A – Many days.

B – Oct. 8, 10–13.

C – Aug. 19, Oct. 7, 1992.

ILLINOIS RIVER BASIN  
**05540195 St. Joseph Creek at Route 34 at Lisle, IL**

**LOCATION.**— Lat 41°48'07", long 88°04'08" (NAD of 1927), 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 and at mile 0.8.

**DRAINAGE AREA.**— 11.1 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE

DISCHARGE: October 1988 to current year.

STAGE: Water years 1994 to current year.

PRECIPITATION: July 1989 to September 1998.

**GAGE.**— Water—stage recorder, phone telemeter, and crest—stage gage. Datum of gage is 660.00 ft above NGVD of 1929.

**REMARKS.**—For precipitation records, 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 error.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE: Maximum discharge, 1,280 ft<sup>3</sup>/s, July 18, 1996, gage height, 12.89 ft; no flow at times in most years.

PRECIPITATION: Maximum recorded, 3.95 in., July 17, 1996 but may have been greater during periods of missing record.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.37	1.4	2.2	1.9	e0.92	10	6.3	3.3	23	0.42	0.00	5.7
2	0.33	12	2.0	2.3	e0.91	7.0	4.4	1.5	30	0.37	0.00	3.6
3	4.0	e110	1.9	2.5	e0.91	5.5	3.8	1.3	11	15	9.2	1.9
4	0.89	272	5.4	2.1	e0.92	36	3.5	1.2	6.4	4.9	21	1.6
5	0.48	e120	19	e1.7	e0.94	147	2.8	1.0	4.3	2.7	3.9	1.3
6	0.39	16	9.7	e1.6	e0.97	31	1.9	1.0	3.1	18	2.0	1.4
7	0.69	9.9	6.8	e1.5	e0.94	15	1.9	1.9	2.0	7.2	0.94	1.2
8	0.47	8.1	5.3	e1.4	e0.92	10	1.6	0.95	1.7	3.2	0.49	0.77
9	0.44	6.7	15	e1.3	e0.86	7.5	1.6	0.93	1.3	11	0.46	0.45
10	0.39	5.3	71	e1.4	e0.84	5.6	1.4	1.2	47	9.4	0.34	0.53
11	0.16	4.8	20	e1.4	e0.82	4.8	1.3	1.3	40	7.7	0.11	0.33
12	0.14	4.8	9.7	e1.5	e0.90	3.9	1.2	2.3	139	4.3	0.12	0.51
13	0.39	4.3	6.8	e1.4	e0.92	2.6	1.1	7.5	20	1.9	0.16	0.55
14	27	4.3	5.8	e1.4	e0.90	e7.0	1.0	35	15	1.2	0.16	6.0
15	7.1	4.8	5.0	e1.4	e0.88	4.0	0.92	9.9	8.4	0.62	0.17	16
16	4.9	5.7	4.8	e1.4	e0.86	4.0	0.86	4.1	6.4	0.55	0.19	15
17	2.1	5.8	3.6	e1.4	e0.90	5.1	1.7	2.4	4.5	0.30	4.0	5.5
18	1.4	121	3.0	e1.5	e0.97	7.1	1.0	10	2.6	0.35	1.6	0.16
19	1.7	37	2.5	e1.4	e1.2	5.0	1.0	2.6	2.1	0.14	1.9	0.15
20	1.8	13	2.2	e1.3	e1.8	11	7.8	2.0	e1.6	0.04	0.28	0.13
21	e1.2	8.5	2.1	e1.2	e1.5	4.8	3.7	5.2	16	1.4	0.11	0.17
22	1.4	6.5	1.9	e1.2	e1.0	4.1	2.1	22	3.5	1.5	0.03	0.26
23	1.5	27	2.2	e1.1	e1.2	3.4	1.6	9.1	2.5	0.69	0.01	0.67
24	1.5	20	1.7	e1.0	e1.1	13	6.4	4.5	3.5	0.01	39	0.25
25	17	9.7	1.7	e1.0	7.2	6.5	15	6.7	1.9	0.01	12	0.40
26	3.8	7.3	1.5	e0.98	5.7	29	3.7	2.3	1.5	0.06	19	0.36
27	3.1	5.2	1.4	e0.97	4.9	11	2.2	1.5	1.2	0.05	19	0.45
28	4.7	3.8	5.6	e0.96	3.9	47	1.8	1.2	2.0	0.00	203	0.41
29	4.0	3.0	2.6	e0.94	3.5	47	1.6	1.1	0.81	0.10	39	0.57
30	2.3	2.6	2.1	e0.92	---	14	3.2	90	0.81	1.5	13	0.52
31	1.9	---	2.0	e0.92	---	8.8	---	69	---	0.28	8.8	---



**05540195 St. Joseph Creek at Route 34 at Lisle, IL--Continued**

TOTAL	97.54	860.5	226.5	42.99	108.68	517.7	88.38	303.98	403.12	94.89	399.97	66.84
MEAN	3.15	28.7	7.31	1.39	3.75	16.7	2.95	9.81	13.4	3.06	12.9	2.23
MAX	27	272	71	2.5	18	147	15	90	139	18	203	16
MIN	0.14	1.4	1.4	0.92	0.82	2.6	0.86	0.93	0.81	0.00	0.00	0.13
CFSM	0.28	2.58	0.66	0.12	0.34	1.50	0.27	0.88	1.21	0.28	1.16	0.20
IN.	0.33	2.88	0.76	0.14	0.36	1.73	0.30	1.02	1.35	0.32	1.34	0.22

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 – 2004, BY WATER YEAR (WY)**

MEAN	6.66	10.0	4.95	7.07	9.67	10.7	12.7	13.5	9.62	6.99	6.89	5.39
MAX	29.4	28.7	15.1	22.8	43.2	25.1	30.6	37.7	27.6	28.9	15.5	12.2
(WY)	2002	2004	1993	1999	1997	1990	1999	1990	1993	1996	1997	1992
MIN	1.16	0.84	0.66	0.26	0.19	2.41	2.95	0.67	0.50	0.67	0.97	0.05
(WY)	2000	2000	1990	2003	2003	2000	2004	1994	1992	1991	1991	1995

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1989 – 2004**

ANNUAL TOTAL	2893.73		3211.09			
ANNUAL MEAN	7.93		8.77		8.67	
HIGHEST ANNUAL MEAN					12.4	
LOWEST ANNUAL MEAN					4.79	
HIGHEST DAILY MEAN	272	Nov 4	272	Nov 4	638	Feb 21 1997
LOWEST DAILY MEAN	0.00	Jun 23,29	0.00	Jul 28,Aug 1,2	0.00	A
ANNUAL SEVEN-DAY MINIMUM	0.11	Jun 23	0.13	Jul 23	0.00	Aug 19 1992
MAXIMUM PEAK FLOW			533	Aug 28	1280	Jul 18 1996
MAXIMUM PEAK STAGE			9.09	Aug 28	12.89	Jul 18 1996
ANNUAL RUNOFF (CFSM)	0.714		0.790		0.781	
ANNUAL RUNOFF (INCHES)	9.70		10.76		10.61	
10 PERCENT EXCEEDS	16		16		18	
50 PERCENT EXCEEDS	1.8		2.1		2.7	
90 PERCENT EXCEEDS	0.18		0.37		0.22	

A – At times in most years.

ILLINOIS RIVER BASIN  
**05540250 East Branch Du Page River at Bolingbrook, IL**

**LOCATION.**— Lat 41°43'05", long 88°04'14" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1988 to current year.

STAGE: Water years 1994 to current year.

PARTIAL RECORD: Annual maximum gage height, water years 1962–70 (published as "at Barbers Corners").

PRECIPITATION: May 1989 to September 1995.

**GAGE.**— Water-stage recorder, phone telemeter, and crest-stage gage. Datum of gage is 625.28 ft above NGVD of 1929. Prior to Oct. 1, 1988, at datum 17.07 ft higher.

**REMARKS.**— Diurnal fluctuation at low flow caused by sewage treatment plants upstream from station. For precipitation records, 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.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 3,980 ft<sup>3</sup>/s, July 18, 1996, gage height, 23.75 ft; minimum discharge, 2.4 ft<sup>3</sup>/s, Aug. 5, 1993.

**PRECIPITATION:** Maximum recorded, 3.80 in., May 9, 1990 but may have been greater during periods of missing record.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	33	e66	62	46	101	184	79	507	60	49	89
2	37	80	e62	60	46	119	147	71	317	60	48	71
3	44	372	e50	62	49	95	125	65	239	73	54	61
4	47	287	63	61	47	118	109	60	166	124	202	56
5	e41	656	165	67	47	611	97	57	129	79	117	52
6	39	351	137	61	47	484	92	55	106	112	82	53
7	38	e250	93	58	46	278	87	58	92	133	65	53
8	37	e160	81	58	49	191	82	58	81	79	56	47
9	38	77	88	55	49	154	78	55	76	92	54	45
10	37	63	447	54	46	125	74	53	158	166	53	44
11	37	59	426	54	45	110	72	55	391	108	49	44
12	38	54	260	59	47	96	69	52	691	113	50	43
13	38	49	164	58	46	87	68	77	433	79	49	44
14	147	46	128	57	47	114	66	201	251	66	48	41
15	125	42	111	55	47	99	64	236	197	61	47	45
16	75	49	101	53	45	94	62	146	151	54	48	73
17	59	47	89	57	47	95	63	101	123	49	54	55
18	49	432	85	62	46	106	60	122	104	49	68	48
19	46	511	79	54	48	113	60	101	88	50	67	45
20	46	270	73	53	128	127	70	85	78	49	57	46
21	42	e200	70	50	159	112	110	105	108	65	52	46
22	39	e160	70	48	129	100	85	215	158	68	49	42
23	38	e125	70	48	153	89	72	191	110	66	51	27
24	35	e240	67	49	161	132	70	150	96	61	125	30
25	96	e150	63	48	133	147	164	134	92	56	181	29
26	e46	e120	60	49	114	262	112	110	75	54	171	30
27	e39	e100	60	48	98	258	84	89	68	52	186	30
28	e38	e84	79	47	89	240	72	75	69	46	812	28
29	e36	e76	78	47	83	515	66	65	65	47	477	28

## ILLINOIS RIVER BASIN

367

**05540250 East Branch Du Page River at Bolingbrook, IL--Continued**

<b>30</b>	e35	e72	71	46	---	371	73	259	62	52	191	26
<b>31</b>	37	---	68	45	---	242	---	597	---	52	122	---
TOTAL	1540	5215	3524	1685	2137	5785	2637	3777	5281	2275	3734	1371
MEAN	49.7	174	114	54.4	73.7	187	87.9	122	176	73.4	120	45.7
MAX	147	656	447	67	161	611	184	597	691	166	812	89
MIN	35	33	50	45	45	87	60	52	62	46	47	26
CFSM	0.66	2.29	1.50	0.72	0.97	2.46	1.16	1.61	2.32	0.97	1.59	0.60
IN.	0.76	2.56	1.73	0.83	1.05	2.84	1.29	1.85	2.59	1.12	1.83	0.67

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 – 2004, BY WATER YEAR (WY)**

MEAN	86.3	109	83.5	99.3	114	131	154	150	126	92.2	89.4	74.5
MAX	284	179	135	263	306	208	358	286	239	299	155	134
(WY)	2002	1991	1995	1993	1997	1993	1993	1990	1993	1996	1998	2001
MIN	38.4	40.9	23.5	44.5	42.2	52.5	50.5	43.5	43.6	41.7	38.0	41.1
(WY)	1990	2000	1990	2003	1989	2000	1989	1992	1992	1991	1991	1991

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1989 – 2004**

ANNUAL TOTAL	33661		38961			
ANNUAL MEAN	92.2		106		109	
HIGHEST ANNUAL MEAN					152	
LOWEST ANNUAL MEAN					76.9	
HIGHEST DAILY MEAN	656	Nov 5	812	Aug 28	2700	Jul 18 1996
LOWEST DAILY MEAN	30	Jun 29	26	Sep 30	12	Aug 5 1993
ANNUAL SEVEN-DAY MINIMUM	35	Jun 27	29	Sep 24	18	Aug 16 1992
MAXIMUM PEAK FLOW			989	Aug 28	3980	Jul 18 1996
MAXIMUM PEAK STAGE			20.32	Aug 28	23.75	Jul 18 1996
INSTANTANEOUS LOW FLOW			19	Sep 25	2.4	Aug 5 1993
ANNUAL RUNOFF (CFSM)	1.22		1.40		1.44	
ANNUAL RUNOFF (INCHES)	16.52		19.12		19.54	
10 PERCENT EXCEEDS	188		200		211	
50 PERCENT EXCEEDS	53		68		71	
90 PERCENT EXCEEDS	38		44		38	

ILLINOIS RIVER BASIN  
**05540275 Spring Brook at 87th Street near Naperville, IL**

**LOCATION.**— Lat 41°43'33", long 88°09'49" (NAD of 1927), 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>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: October 1987 to current year.

STAGE: Water years 1994 to current year.

SURFACE-WATER QUALITY

CHEMICAL: October 1987 to current year.

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 647.00 ft above NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 1,750 ft<sup>3</sup>/s, July 18, 1996, gage height, 10.77 ft; minimum daily, no flow, Oct. 11, 1988, Aug. 25, 2003 and Sept. 24, 26–28, 2004.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	0.38	7.3	e3.4	e1.6	9.8	29	3.9	51	3.2	2.5	11
2	0.99	1.9	6.6	e3.2	e1.6	11	21	3.3	32	3.0	2.3	6.8
3	1.4	27	6.3	e3.1	e1.6	9.6	16	4.3	20	3.5	2.3	5.3
4	1.6	28	6.1	e3.3	e1.6	13	12	2.9	14	5.2	14	4.2
5	0.92	100	9.5	e3.2	e1.6	72	10	2.7	11	5.0	11	3.2
6	0.54	55	9.4	e3.0	e1.7	44	8.5	2.2	6.9	7.9	8.5	2.6
7	0.38	26	7.9	e2.7	e1.7	32	5.8	2.5	5.8	16	7.1	2.2
8	0.70	17	7.3	e2.5	e1.6	25	4.7	2.3	4.7	10	6.0	1.9
9	0.59	13	7.8	e2.3	e1.5	21	3.8	2.2	3.8	9.4	5.3	1.4
10	0.43	11	65	e2.4	e1.5	21	3.3	2.2	7.9	11	4.2	1.1
11	0.34	9.6	43	e2.5	e1.4	17	3.0	2.3	38	9.5	3.5	1.0
12	0.33	8.0	29	e2.6	e1.6	13	2.8	2.0	137	10	2.9	0.66
13	0.47	7.3	22	e2.6	e1.6	11	2.6	3.0	102	6.6	2.5	0.35
14	2.3	7.6	18	e2.4	e1.6	12	6.7	11	50	5.6	2.2	0.78
15	2.6	5.8	17	e2.4	e1.5	10	3.1	11	27	4.4	1.8	0.26
16	2.1	5.1	16	e2.5	e1.5	9.5	2.3	8.0	19	3.4	1.8	0.97
17	1.9	4.5	14	e2.6	e1.6	8.5	2.0	7.3	16	3.2	1.8	0.98
18	1.8	54	12	e2.6	e1.7	8.8	1.8	8.7	14	2.7	2.0	0.72
19	1.6	50	9.9	e2.5	e3.0	9.2	1.8	6.5	12	5.0	2.9	0.45
20	1.4	32	9.5	e2.3	21	8.9	2.4	5.2	8.0	3.2	2.5	0.23
21	1.1	22	7.4	e2.2	21	8.5	4.9	5.2	7.8	5.1	2.1	0.07
22	0.64	16	6.9	e2.0	14	8.4	3.8	15	8.5	7.8	1.8	0.07
23	0.61	18	6.4	e1.9	17	8.3	3.1	12	6.9	5.5	1.7	0.04
24	0.70	25	5.9	e1.8	16	10	3.0	13	6.0	4.0	3.7	0.00
25	2.1	17	5.8	e1.8	12	11	6.7	14	5.3	3.4	8.8	0.05
26	1.5	14	5.2	e1.7	11	24	5.7	10	4.4	2.9	11	0.00
27	1.6	13	4.8	e1.7	9.8	25	4.8	8.9	3.8	3.0	18	0.00
28	1.8	11	e10	e1.7	9.1	39	3.8	4.3	3.6	2.5	70	0.00
29	1.2	9.5	e8.0	e1.7	8.5	113	3.5	3.1	3.5	2.6	64	0.09
30	0.88	8.4	e4.5	e1.6	---	56	3.5	23	3.3	2.9	29	0.38
31	0.63	---	e3.5	e1.6	---	42	---	47	---	2.9	15	---
TOTAL	36.45	617.08	392.0	73.8	170.9	711.5	185.4	249.0	633.2	170.4	312.2	46.80
MEAN	1.18	20.6	12.6	2.38	5.89	23.0	6.18	8.03	21.1	5.50	10.1	1.56
MAX	2.6	100	65	3.4	21	113	29	47	137	16	70	11

**05540275 Spring Brook at 87th Street near Naperville, IL--Continued**

MIN	0.33	0.38	3.5	1.6	1.4	8.3	1.8	2.0	3.3	2.5	1.7	0.00
CFSM	0.12	2.08	1.28	0.24	0.60	2.32	0.62	0.81	2.13	0.56	1.02	0.16
IN.	0.14	2.32	1.47	0.28	0.64	2.67	0.70	0.94	2.38	0.64	1.17	0.18

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 – 2004, BY WATER YEAR (WY)**

MEAN	6.56	10.1	7.96	9.87	11.8	13.1	16.2	15.2	12.5	10.7	7.10	5.21
MAX	42.9	20.6	22.6	30.7	44.3	26.1	34.0	46.3	31.3	78.1	27.6	18.2
(WY)	2002	2004	1988	1993	1997	1990	1993	1990	1993	1996	1998	2001
MIN	0.70	0.58	0.69	0.57	0.57	2.36	3.47	1.57	0.78	0.39	0.22	0.36
(WY)	1993	2000	1990	2003	2003	2000	2003	1989	1988	1988	1991	1988

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1988 – 2004**

ANNUAL TOTAL	2687.53		3598.73			
ANNUAL MEAN	7.36		9.83		10.5	
HIGHEST ANNUAL MEAN					15.7	
LOWEST ANNUAL MEAN					4.82	
HIGHEST DAILY MEAN	100	Nov 5	137	Jun 12	1370	Jul 18 1996
LOWEST DAILY MEAN	0.00	Aug 25	0.00	A	0.00	B
ANNUAL SEVEN-DAY MINIMUM	0.08	Aug 23	0.02	Sep 22	0.02	Sep 22 2004
MAXIMUM PEAK FLOW			164	Jun 12	1750	Jul 18 1996
MAXIMUM PEAK STAGE			5.94	Jun 12	10.77	Jul 18 1996
ANNUAL RUNOFF (CFSM)	0.744		0.993		1.06	
ANNUAL RUNOFF (INCHES)	10.10		13.52		14.43	
10 PERCENT EXCEEDS	20		22		26	
50 PERCENT EXCEEDS	2.5		4.4		4.9	
90 PERCENT EXCEEDS	0.53		1.1		0.70	

A – Sept. 24, 26–28.

B – Oct. 11, 1988, Aug. 25, 2003 and Sept. 24, 26–28, 2004.

ILLINOIS RIVER BASIN  
**05540275 Spring Brook at 87th Street near Naperville, IL**

**LOCATION.**— Lat 41°43'33", long 88°09'49" (NAD of 1927), 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>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1987 to current year.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: October 1987 to current year.

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 647.00 ft above NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 1,750 ft<sup>3</sup>/s, July 18, 1996, gage height, 10.77 ft; minimum daily, no flow, Oct. 11, 1988, Aug. 25, 2003 and Sept. 24, 26–28, 2004.

**SURFACE-WATER QUALITY**

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Gage height, feet (00065)	Baro- metric pres- sure, mm Hg (00025)	Temper- ature, water, deg C (00010)	Temper- ature, air, deg C (00020)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Residue total at 105 deg. C, sus- pended, mg/L (00530)	Ammonia water, fltrd, mg/L as N (00608)
OCT 2003													
27...	1120	81700	80020	2.52	738	7.0	5.0	886	11.6	96	8.1	<10	<.04
NOV													
18...	1300	81700	80020	4.60	729	10.9	14.5	503	9.7	88	8.2	144	.07
DEC													
18...	1130	81700	80020	3.00	742	.2	-1.5	—	—	—	—	52	E.04
JAN 2004													
20...	1445	81700	80020	2.55	750	.2	-8.0	1070	E28.1	E194	8.2	<10	<.04
FEB													
10...	0945	81700	80020	2.62	740	.0	-4.0	1320	15.9	109	7.8	37	.06
MAR													
22...	1310	81700	80020	2.70	753	6.7	3.5	1410	12.0	98	8.2	<10	<.04
APR													
29...	1105	81700	80020	2.66	754	15.8	24.8	1290	12.0	120	7.9	38	E.03
MAY													
25...	1605	81700	80020	3.17	739	19.5	21.0	1100	7.8	85	7.8	24	<.04
JUN													
15...	1110	81700	80020	3.49	746	23.0	25.0	766	7.7	89	7.8	32	.04
JUL													
20...	0820	81700	80020	2.40	743	21.0	24.0	653	6.3	71	7.2	12	E.04
AUG													
17...	0940	81700	80020	2.34	745	18.6	23.5	879	2.7	40	7.6	<10	.05
SEP													
14...	0930	81700	80020	2.34	760	20.6	26.0	852	6.4	72	7.7	<10	E.03

**05540275 Spring Brook at 87th Street near Naperville, IL--Continued**

Date	Nitrite water, fltrd, mg/L as N (00613)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd, mg/L as N (00625)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Phos- phorus, water, unfltrd mg/L (00665)	Phos- phorus, water, fltrd, mg/L (00666)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Total coli- form, M-Endo, immed, col/ 100 mL (31501)	Fecal coli- form, M-FC 0.7u MF col/ 100 mL (31625)	Fecal strep- tococci KF MF, col/ 100 mL (31673)
OCT 2003										
27...	.012	.38	.52	.18	.05	E.02	<.02	150	80	150
NOV										
18...	.017	1.0	1.5	.58	.34	.15	.11	5300	2500	5500
DEC										
18...	.015	.46	1.0	1.20	.11	E.02	<.02	440	40	48
JAN 2004										
20...	.009	.40	.41	.66	E.03	<.04	<.02	28	3	6
FEB										
10...	.008	.35	.59	.59	.05	<.04	<.02	15	9	7
MAR										
22...	.009	.30	.51	.70	E.04	<.04	<.02	28	<1	2
APR										
29...	.009	.39	1.2	.12	.14	.07	<.02	170	47	32
MAY										
25...	<.008	.50	1.2	<.06	.11	<.04	<.04	420	430	130
JUN										
15...	.024	.55	.91	.64	.10	<.04	<.02	1630	200	270
JUL										
20...	E.004	.64	.72	.09	.07	.05	E.02	2700	650	1570
AUG										
17...	E.004	.39	.40	.22	.04	.05	E.02	500	100	92
SEP										
14...	E.004	.36	.38	.14	.04	E.03	E.02	510	110	240

Remark codes used in this table:

&lt; -- Less than

E -- Estimated value

ILLINOIS RIVER BASIN  
**05540500 Du Page River at Shorewood, IL**

**LOCATION.**— Lat 41°31'20", long 88°11'33" (NAD of 1927), in SE1/4SW1/4 sec.10, T.35 N., R.9 E., Will County, Hydrologic Unit 07120004, 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1940 to current year. Published as "at Troy" 1940–65.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–91.

WATER TEMPERATURE: Water years 1964–76.

MISCELLANEOUS: Water years 1998 and 2002.

**REVISED RECORDS.**— WSP 1035: 1944. WSP 1055: 1942(M). WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, phone telemeter, U.S. Army Corps of Engineers satellite telemeter, and masonry dam. Datum of gage is 564.62 ft above NGVD of 1929 (Illinois Department of Transportation bench mark). Prior to Apr. 11, 1941, nonrecording gage at same site and datum.

**REMARKS.**— Streamflow contains effluent from sewage–treatment plants upstream.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 17,300 ft<sup>3</sup>/s, July 18, 1996, from rating curve extended above 14,000 ft<sup>3</sup>/s, gage height, 14.03 ft, from floodmark; minimum 0.2 ft<sup>3</sup>/s, Nov. 17, 1955, result of freezeup.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor. Effluent from sewage–treatment plant upstream averaged about 35 ft<sup>3</sup>/s during the year.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	152	138	295	242	e180	320	904	295	2330	214	178	512
2	151	235	276	234	e200	414	705	285	1730	208	172	381
3	141	740	265	227	e220	404	575	259	1150	206	167	307
4	151	927	252	227	e210	375	496	239	797	311	440	268
5	154	1790	343	242	e200	1510	437	224	606	276	583	241
6	142	1560	497	172	e195	1980	400	212	496	327	365	218
7	138	867	401	e185	e190	1430	369	216	425	612	278	209
8	130	557	342	e195	e185	901	335	212	372	397	227	203
9	125	429	327	e200	e180	695	317	208	329	314	194	197
10	126	367	1080	e195	e175	563	297	230	369	493	187	186
11	123	330	1800	188	e172	486	284	220	1480	435	176	186
12	119	299	1230	192	162	419	273	245	3300	367	168	183
13	119	253	781	205	165	372	258	289	2840	317	166	175
14	173	233	591	197	173	370	252	608	1740	275	165	171
15	373	220	491	187	163	389	246	1080	1170	241	158	166
16	282	217	436	189	163	353	234	766	830	222	153	215
17	207	220	385	188	166	341	222	516	642	207	151	214
18	172	946	351	201	156	351	216	507	532	186	187	186
19	151	1870	327	165	163	384	213	543	446	185	221	164
20	142	1300	291	e180	246	384	233	433	384	198	205	154
21	142	773	272	e180	559	389	359	407	358	201	193	147
22	127	571	261	e170	490	344	365	667	535	317	173	149
23	123	486	259	e165	477	321	304	993	460	267	161	147
24	127	822	252	e165	554	355	269	847	371	242	200	140
25	185	725	243	e170	497	541	403	606	341	213	434	133
26	228	536	241	e175	424	629	442	525	308	195	518	131



**05540500 Du Page River at Shorewood, IL---Continued**

<b>27</b>	175	446	240	e180	381	951	340	431	276	189	774	129
<b>28</b>	166	370	247	e175	340	758	284	373	260	179	2290	132
<b>29</b>	150	332	300	e175	317	1960	268	322	252	173	e2400	130
<b>30</b>	140	310	277	e170	---	1870	272	633	232	176	e1400	129
<b>31</b>	140	---	254	e175	---	1300	---	2120	---	182	801	---
TOTAL	4974	18869	13607	5911	7703	21859	10572	15511	25361	8325	13885	5903
MEAN	160	629	439	191	266	705	352	500	845	269	448	197
MAX	373	1870	1800	242	559	1980	904	2120	3300	612	2400	512
MIN	119	138	240	165	156	320	213	208	232	173	151	129
CFSM	0.50	1.94	1.35	0.59	0.82	2.18	1.09	1.54	2.61	0.83	1.38	0.61
IN.	0.57	2.17	1.56	0.68	0.88	2.51	1.21	1.78	2.91	0.96	1.59	0.68

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 – 2004, BY WATER YEAR (WY)**

MEAN	200	229	245	250	325	472	515	429	333	237	201	184
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 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1941 – 2004**

ANNUAL TOTAL	127248		152480			
ANNUAL MEAN	349		417		301	
HIGHEST ANNUAL MEAN					564	
LOWEST ANNUAL MEAN					94.2	
HIGHEST DAILY MEAN	2020	May 10	3300	Jun 12	11400	Oct 11 1954
LOWEST DAILY MEAN	113	A Jan 11	119	Oct 12	14	Dec 24 1963
ANNUAL SEVEN-DAY MINIMUM	126	Oct 7	126	Oct 7	15	Dec 27 1963
MAXIMUM PEAK FLOW			3840	Jun 12	17300	B Jul 18 1996
MAXIMUM PEAK STAGE			6.17	Jun 12	14.03	C Jul 18 1996
INSTANTANEOUS LOW FLOW			107	D	0.20	A Nov 17 1955
ANNUAL RUNOFF (CFSM)	1.08		1.29		0.930	
ANNUAL RUNOFF (INCHES)	14.61		17.51		12.64	
10 PERCENT EXCEEDS	776		807		642	
50 PERCENT EXCEEDS	224		268		175	
90 PERCENT EXCEEDS	142		155		48	

A – Result of freezeup.

B – From rating curve extended above 14,000 ft<sup>3</sup>/s.

C – From floodmark.

D – Oct. 11–13 and 23.

ILLINOIS RIVER BASIN  
**05541130 Grant Creek near Webster Siding, IL**

**LOCATION.**— Lat 41°22'10", long 88°10'24" (NAD of 1927), in NE1/4NE1/4SE1/4 sec.03, T.33 N., R.09 E., Will County, Hydrologic Unit 07120004, Midewin National Tallgrass Prairie, on left downstream side of highway bridge, 0.5 mi west of Interstate Highway 55, and at mile 4.4.

**DRAINAGE AREA.**— 7.82 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE

STAGE: October 2003 to September 2004.

PARTIAL RECORD: Miscellaneous discharge measurements, water year 2004.

**GAGE.**— Water—stage recorder and crest—stage gage. Datum of gage is 522.34 ft above NGVD of 1988.

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum recorded gage height, 6.46 ft, June 12, 2004; minimum recorded 1.31 ft, Aug. 3, 2004.

Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.39	1.48	1.80	1.62	---	1.84	2.65	2.32	2.40	1.49	1.36	1.90
2	1.39	1.51	1.76	1.63	---	1.84	2.39	2.15	2.16	1.47	1.35	1.84
3	1.39	1.56	1.74	1.63	---	1.76	2.21	2.00	2.04	1.51	1.35	1.79
4	1.41	1.57	1.74	1.61	---	1.90	2.06	1.92	1.88	2.15	1.60	1.75
5	1.39	2.13	1.89	---	---	3.66	2.03	1.88	1.78	1.85	1.58	1.72
6	1.39	2.00	2.06	---	---	2.73	2.00	1.86	1.73	1.74	1.50	1.72
7	1.38	1.85	1.94	---	---	2.40	1.92	1.87	1.71	1.72	1.46	1.71
8	1.38	1.76	1.88	---	---	2.19	1.87	1.83	1.66	1.64	1.44	1.68
9	1.43	1.70	1.84	---	---	2.08	1.82	1.81	1.62	1.66	1.42	1.67
10	1.46	1.67	2.58	---	---	1.99	1.80	1.79	1.64	1.80	1.40	1.65
11	1.50	1.65	2.40	1.57	---	1.93	1.76	1.78	1.71	1.70	1.40	1.62
12	1.52	1.62	2.11	1.58	---	1.88	1.73	1.76	4.12	1.65	1.39	1.61
13	1.53	1.59	---	1.59	---	1.81	1.70	1.98	2.59	1.61	1.39	1.61
14	1.60	1.59	1.88	1.58	---	1.84	1.70	2.92	2.34	1.58	1.38	1.59
15	1.59	1.60	1.84	---	---	1.80	1.69	2.67	2.24	1.55	1.36	1.59
16	1.56	1.60	1.84	---	---	1.79	1.71	2.31	2.04	1.53	1.36	1.76
17	1.59	1.61	1.78	---	---	1.78	1.71	2.12	1.94	1.52	1.35	1.69
18	1.56	2.75	1.74	---	---	1.79	1.69	2.08	1.86	1.50	1.37	1.66
19	1.56	2.90	1.70	---	---	1.78	1.69	1.99	1.80	1.48	1.41	1.63
20	1.58	2.36	1.69	---	2.17	1.76	1.77	1.91	1.76	1.46	1.46	1.61
21	1.59	2.15	1.67	---	2.15	1.70	1.93	1.84	1.75	1.45	1.47	1.58
22	1.59	2.04	1.67	---	2.00	1.69	1.79	1.94	1.75	1.44	1.43	1.58
23	1.53	2.16	1.68	---	2.10	1.68	1.75	2.51	1.68	1.42	1.41	1.57
24	1.49	3.00	1.65	---	2.06	1.74	1.74	2.25	1.64	1.40	1.47	1.56
25	1.57	2.28	1.65	---	1.89	1.79	2.18	2.43	1.67	1.39	1.72	1.55
26	1.60	2.09	1.61	---	1.82	1.98	2.02	2.27	1.60	1.38	2.15	1.54
27	1.55	2.00	1.60	---	1.76	2.07	1.91	2.10	1.56	1.38	2.21	1.53
28	1.53	1.91	1.67	---	1.72	2.19	1.84	1.98	1.55	1.39	3.27	1.50
29	1.52	1.87	1.73	---	1.73	3.19	1.80	1.89	1.53	1.38	2.57	1.51
30	1.50	1.87	1.68	---	---	2.85	1.98	2.77	1.51	1.38	2.15	1.49
31	1.49	---	1.64	---	---	3.20	---	3.28	---	1.38	2.01	---
MEAN	1.50	1.93	---	---	---	2.08	1.89	2.14	1.91	1.55	1.62	1.64
MAX	1.60	3.00	---	---	---	3.66	2.65	3.28	4.12	2.15	3.27	1.90
MIN	1.38	1.48	---	---	---	1.68	1.69	1.76	1.51	1.38	1.35	1.49

**LOCATION.**— Lat 41°17'10", long 88°21'35" (NAD of 1927), in SW1/4SW1/4 sec.31, T.33 N., R.8 E., Grundy County, Hydrologic 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.

**DRAINAGE AREA.**— 455 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1939 to October 1995. October 1998 to current year.

STAGE: Water years 1994–1996;1999 to current year.

PARTIAL RECORD: Annual maximum, water years 1997–98.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–91.

**REVISED RECORDS.**— WSP 1035: 1943(P). WSP 1115: 1946. WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest–stage gage. Datum of gage is 527.41 ft. above NGVD of 1929. Prior to Apr. 30, 1940, and October 1996 to September 1998, nonrecording gage at same site and datum.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 22,400 ft<sup>3</sup>/s, Dec. 4, 1982, gage height, 19.51 ft; maximum gage height, 19.70 ft, July 15, 1958, discharge, 17,600 ft<sup>3</sup>/s, from rating extended above 12,000 ft<sup>3</sup>/s; no flow at times in many years.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Flood of Aug. 8, 1924 reached a stage of about 21 ft, discharge not determined.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	5.3	255	111	e42	137	1070	687	4810	78	5.8	497
2	2.8	6.2	197	113	e44	156	836	854	1790	71	5.9	318
3	2.6	8.7	177	124	e46	140	682	626	1250	66	5.6	208
4	2.5	12	177	119	e44	144	556	502	879	74	146	135
5	2.4	68	193	110	e42	1990	452	425	659	78	354	95
6	2.2	73	243	100	e40	2540	407	357	524	77	188	74
7	2.0	54	266	122	e38	1440	386	356	428	61	87	58
8	1.8	46	299	90	e37	990	352	553	351	50	48	46
9	1.7	37	323	98	e34	761	301	541	295	45	31	38
10	1.8	32	639	88	e33	599	261	428	285	49	21	32
11	1.6	31	1080	82	e32	514	243	367	614	51	15	27
12	1.2	29	700	94	e31	410	226	422	1680	54	13	24
13	1.1	24	492	95	e30	340	216	451	1400	51	10	21
14	2.3	21	417	99	e29	314	214	698	897	42	9.3	18
15	2.9	22	352	117	e28	292	195	1400	646	33	7.2	16
16	8.0	21	317	101	e27	269	182	1050	506	30	6.2	20
17	6.3	20	271	93	e26	268	180	747	429	31	6.9	25
18	5.2	233	242	129	e32	259	174	595	361	32	23	19
19	4.1	2040	218	136	e40	243	170	490	302	48	176	15
20	3.7	1440	202	100	e60	240	179	431	260	43	154	12
21	3.2	892	246	83	e125	232	310	386	245	32	112	11
22	3.3	634	178	99	e325	199	376	363	248	25	74	9.7
23	3.5	536	162	81	e250	192	287	376	225	19	52	8.9
24	3.4	1110	146	68	264	213	253	353	191	15	39	8.1
25	5.7	1020	137	e62	216	229	693	418	166	11	46	7.3
26	14	690	167	e58	175	276	1010	615	135	9.4	396	6.6
27	12	533	116	e52	155	710	676	496	113	8.2	705	6.4
28	12	435	122	e46	122	734	498	404	109	7.2	1900	6.1

ILLINOIS RIVER BASIN  
**05542000 Mazon River near Coal City, IL--Continued**

<b>29</b>	8.9	358	131	e43	116	1690	389	325	99	6.3	1770	5.5
<b>30</b>	6.5	313	127	e40	---	1490	327	758	88	6.0	1280	5.1
<b>31</b>	6.0	---	120	e40	---	1150	---	6590	---	6.0	799	---
TOTAL	137.8	10744.2	8712	2793	2483	19161	12101	23064	19985	1209.1	8485.9	1772.7
MEAN	4.45	358	281	90.1	85.6	618	403	744	666	39.0	274	59.1
MAX	14	2040	1080	136	325	2540	1070	6590	4810	78	1900	497
MIN	1.1	5.3	116	40	26	137	170	325	88	6.0	5.6	5.1
CFSM	0.01	0.79	0.62	0.20	0.19	1.36	0.89	1.64	1.46	0.09	0.60	0.13
IN.	0.01	0.88	0.71	0.23	0.20	1.57	0.99	1.89	1.63	0.10	0.69	0.14

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 – 2004, BY WATER YEAR (WY)**

MEAN	144	231	295	294	441	642	674	534	466	226	91.7	154
MAX	1148	2264	2398	1399	2027	3378	2316	2765	1776	1551	1406	2494
(WY)	1942	1986	1983	1950	2001	1979	1950	1943	1980	1958	1972	1989
MIN	0.00	0.15	0.10	0.10	0.56	2.14	17.1	46.7	13.9	0.40	0.58	0.00
(WY)	1940	1957	1940	1940	1940	1940	2003	1956	1988	1988	1947	1946

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1940 – 2004**

ANNUAL TOTAL	68644.68			110648.7					
ANNUAL MEAN	188			302			348		
HIGHEST ANNUAL MEAN							819		
LOWEST ANNUAL MEAN							20.6		
HIGHEST DAILY MEAN	6920	Jul 19		6590	May 31		19400	Dec 4 1982	
LOWEST DAILY MEAN	0.68	A		1.1	Oct 13		0.00	B	
ANNUAL SEVEN-DAY MINIMUM	0.72	Jan 23		1.6	Oct 7		0.00	B	
MAXIMUM PEAK FLOW				8520	May 31		22400	C	Dec 4 1982
MAXIMUM PEAK STAGE				11.35	May 31		19.70	D	Jul 15 1958
INSTANTANEOUS LOW FLOW					0.96	Oct 13			
ANNUAL RUNOFF (CFSM)	0.413			0.664			0.766		
ANNUAL RUNOFF (INCHES)	5.61			9.05			10.40		
10 PERCENT EXCEEDS	458			706			862		
50 PERCENT EXCEEDS	21			124			92		
90 PERCENT EXCEEDS	1.9			6.3			1.6		

A – Jan. 25–27, estimated due to backwater from ice.

B – At times in many years.

C – Gage height, 19.51 ft.

D – Discharge, 17,600 ft<sup>3</sup>/s, from rating extended above 12,000 ft<sup>3</sup>/s.

**LOCATION.**— Lat 41°19'37", long 88°43'03" (NAD of 1927), 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.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1919 to current year. Prior to October 1939, published as "at Morris."

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1975–96.

SEDIMENT: February 2003 to current year.

SPECIFIC CONDUCTANCE: Water years 1975–81.

WATER TEMPERATURE: Water years 1975–81.

MISCELLANEOUS: Water Year 1998; Contaminants in streambed sediments, October 1996; contaminants in fish tissue, October 1996; sediment concentration and particle size, water years 1993–97, 2003.

**BIOLOGICAL**

ALGAE: Water year 1989.

**REVISED RECORDS.**— WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, phone telemeter, automatic water sampler, and U.S. Army Corps of Engineers satellite telemeter. Datum of gage is 452.91 ft above NGVD of 1929. October 1919 to January 1935, nonrecording gage at site at Morris, 16.6 mi upstream, at datum 25.59 ft higher. January 1935 to September 1939, water–stage recorder 300 ft downstream from Morris site at that datum. October 1939 to September 2002, water–stage recorder at current site at datum 10 ft. higher.

**REMARKS.**— 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. Suspended sediment samples were collected twice weekly with additional samples during high–runoff periods by an automatic water sampler.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 95,000 ft<sup>3</sup>/s, Feb. 22, 1997, gage height, 26.85 ft, present datum; minimum daily discharge, 461 ft<sup>3</sup>/s, Nov. 21, 2002.

**SUSPENDED–SEDIMENT CONCENTRATIONS:** Maximum daily, 307 mg/L, June 13, 2004; minimum daily, 6 mg/L, Jan. 28 – Feb. 6, 2004.

**SUSPENDED–SEDIMENT LOADS:** Maximum daily, 42,100 tons, June 13, 2004; minimum daily, 37 tons, Feb. 4, 2004.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** A stage of 26.2 ft at Morris occurred in 1831, discharge not determined, and a stage of 35.4 ft (ice jam) occurred at present site and datum on Jan. 21, 1916, estimated discharge, 40,000 ft<sup>3</sup>/s.

**REMARKS FOR CURRENT YEAR.**— Records good except those for Feb. 4 to March 2, which are fair, and those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4040	4070	10600	10900	e4600	7380	21000	7400	39000	7710	4170	19600
2	2640	6650	10500	10700	e4000	8360	19600	8160	30900	6040	5750	18900
3	4510	9310	8830	10200	e4400	8960	16800	6690	26900	7950	3400	15400
4	2460	9320	8340	9420	2460	10500	14500	6490	22100	11000	9620	13600
5	3050	13300	10200	10000	4770	22400	11700	7280	20300	8850	9570	11800
6	2820	13300	10300	9900	4920	28500	12200	6360	17400	8600	8230	10600
7	2990	11300	10300	10100	4340	27500	9570	5880	14200	9380	7300	8750
8	2870	8110	9700	9750	4880	23000	8740	5890	13200	8110	6390	9240
9	3110	7190	10200	8350	5380	18500	9250	7840	11400	8590	5290	8400
10	1810	8340	14200	7310	3940	17300	7420	6000	12400	8680	6010	8310
11	3620	4990	17900	7220	3920	14000	7530	6390	16700	9240	4870	7460
12	3200	5320	17400	7850	4350	12700	7450	7270	33900	8440	4690	6890
13	2740	5970	15100	7430	4700	12500	6840	9130	50600	10100	4370	6690

ILLINOIS RIVER BASIN  
**05543500 Illinois River at Marseilles, IL---Continued**

14	5150	5830	12800	6130	4400	10800	6400	17500	45400	9460	4930	5420
15	5470	4850	12200	7180	4160	11500	5350	18400	39400	8960	4780	5990
16	5940	4610	10500	6630	4010	9230	6990	16900	35500	7560	4920	7890
17	4760	5160	9780	5820	3420	9130	6130	15400	29600	6220	4720	5770
18	4280	13800	9790	6480	4560	9840	6070	14200	25600	6970	3010	5560
19	4510	25900	8970	4820	4990	8810	5240	13000	22300	5320	5290	4750
20	4630	26500	7430	5100	5630	8920	6590	12700	20900	6790	6530	4770
21	2870	20800	8810	5710	8300	8240	7580	12200	19300	6620	6130	4650
22	4080	17400	6580	4710	9050	8080	7400	14700	18200	6580	5580	3530
23	3390	16600	7360	5080	10400	7500	7910	16400	15900	6600	6640	4740
24	3430	19300	6490	4230	10000	8530	7460	15500	13200	6950	8220	3790
25	4870	20100	8240	5450	9270	9090	7490	15000	11000	6400	8280	3320
26	4220	17100	9800	4250	8960	9280	9710	14600	9800	6140	10600	4070
27	3970	15800	9250	e3800	8440	12600	7980	14200	9630	6040	16100	4140
28	4860	14200	8820	e4500	7320	16300	7840	13700	8540	6780	31100	3420
29	3550	12900	8810	e3700	7930	22400	6340	12800	8070	5090	32400	4650
30	4880	12300	8900	e4600	---	26500	6680	15800	7950	5180	27900	3110
31	4220	---	10300	e2300	---	22600	---	33400	---	5240	22600	---
TOTAL	118940	360320	318400	209620	167500	430950	271760	377180	649290	231590	289390	225210
MEAN	3837	12010	10270	6762	5776	13900	9059	12170	21640	7471	9335	7507
MAX	5940	26500	17900	10900	10400	28500	21000	33400	50600	11000	32400	19600
MIN	1810	4070	6490	2300	2460	7380	5240	5880	7950	5090	3010	3110

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 – 2004, BY WATER YEAR (WY)**

MEAN	7500	8466	9603	9862	11670	14960	16040	13830	11880	9323	7804	7628
MAX	21050	24180	30100	28430	25970	41290	33180	35180	25940	21020	19220	22770
(WY)	1927	1986	1983	1993	1997	1979	1922	1943	1993	1957	1924	1993
MIN	3155	2278	3551	2899	2906	4748	6516	5649	4346	4687	4242	3345
(WY)	2003	2000	2003	2003	2003	2003	1986	1988	1988	1988	1939	1999

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1920 – 2004
ANNUAL TOTAL	3063890	3650150	
ANNUAL MEAN	8394	9973	10700
HIGHEST ANNUAL MEAN			17850
LOWEST ANNUAL MEAN			5583
HIGHEST DAILY MEAN	36800 Jul 19	50600 Jun 13	89600 Feb 22 1997
LOWEST DAILY MEAN	1740 Feb 21	1810 Oct 10	461 A Nov 21 2002
ANNUAL SEVEN-DAY MINIMUM	2370 Jan 17	2730 Oct 4	1990 B Jan 9 1999
MAXIMUM PEAK FLOW		52200 Jun 13	95000 Feb 22 1997
MAXIMUM PEAK STAGE		20.37 Jun 13	26.85 C Feb 22 1997
INSTANTANEOUS LOW FLOW		761 Oct 4	
10 PERCENT EXCEEDS	18000	18600	19300
50 PERCENT EXCEEDS	5720	8080	8870
90 PERCENT EXCEEDS	2770	4120	4450

A – Due to temporary dam closure.

B – Estimated due to backwater from ice.

C – Present datum.

**LOCATION.**— Lat 41°19'37", long 88°43'03" (NAD of 1927), 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.

**PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE**

DISCHARGE: October 1919 to current year. Prior to October 1939, published as "at Morris."

STAGE: Water years 1994 to current year.

**SURFACE–WATER QUALITY**

CHEMICAL: Water years 1975–96.

SEDIMENT: February 2003 to current year.

SPECIFIC CONDUCTANCE: Water years 1975–81.

WATER TEMPERATURE: Water years 1975–81.

MISCELLANEOUS: Water Year 1998; Contaminants in streambed sediments, October 1996; contaminants in fish tissue, October 1996; sediment concentration and particle size, water years 1993–97, 2003.

**BIOLOGICAL**

ALGAE: Water year 1989.

**REVISED RECORDS.**— WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, phone telemeter, automatic water sampler, and U.S. Army Corps of Engineers satellite telemeter. Datum of gage is 452.91 ft above NGVD of 1929. October 1919 to January 1935, nonrecording gage at site at Morris, 16.6 mi upstream, at datum 25.59 ft higher. January 1935 to September 1939, water–stage recorder 300 ft downstream from Morris site at that datum. October 1939 to September 2002, water–stage recorder at current site at datum 10 ft. higher.

**REMARKS.**— 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. Suspended sediment samples were collected twice weekly with additional samples during high–runoff periods by an automatic water sampler.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum discharge, 95,000 ft<sup>3</sup>/s, Feb. 22, 1997, gage height, 26.85 ft, present datum; minimum daily discharge, 461 ft<sup>3</sup>/s, Nov. 21, 2002.

**SUSPENDED–SEDIMENT CONCENTRATIONS:** Maximum daily, 307 mg/L, June 13, 2004; minimum daily, 6 mg/L, Jan. 28 – Feb. 6, 2004.

**SUSPENDED–SEDIMENT LOADS:** Maximum daily, 42,100 tons, June 13, 2004; minimum daily, 37 tons, Feb. 4, 2004.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** A stage of 26.2 ft at Morris occurred in 1831, discharge not determined, and a stage of 35.4 ft (ice jam) occurred at present site and datum on Jan. 21, 1916, estimated discharge, 40,000 ft<sup>3</sup>/s.

**EXTREMES FOR CURRENT YEAR.**—

**SUSPENDED–SEDIMENT CONCENTRATIONS:** Maximum daily, 214 mg/L, May 12; minimum daily, 16 mg/L, Feb. 1 and Apr. 20.

**SUSPENDED–SEDIMENT LOADS:** Maximum daily, 18,200 tons, May 12; minimum daily, 48 tons, Sept. 30.

**SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003**

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	2320	---	---	2300	---	---	2190	---	---
2	4920	---	---	2610	---	---	2940	---	---
3	3540	---	---	2110	---	---	3230	---	---
4	5460	---	---	2590	---	---	2690	---	---
5	5230	---	---	2930	---	---	2140	---	---
6	5370	---	---	2160	---	---	2840	---	---
7	4820	---	---	2800	---	---	2740	---	---
8	3030	---	---	1930	---	---	3100	---	---
9	3980	---	---	3130	---	---	2980	---	---

ILLINOIS RIVER BASIN  
05543500 Illinois River at Marseilles, IL---Continued

10	2970	---	---	2270	---	---	1970	---	---
11	3430	---	---	2830	---	---	3530	---	---
12	3290	---	---	2230	---	---	2280	---	---
13	3460	---	---	3820	---	---	3000	---	---
14	2400	---	---	2220	---	---	2710	---	---
15	2460	---	---	3690	---	---	2310	---	---
16	3040	---	---	2700	---	---	3380	---	---
17	2730	---	---	3120	---	---	2170	---	---
18	3240	---	---	3180	---	---	6600	---	---
19	2520	---	---	2030	---	---	7120	---	---
20	3080	---	---	2480	---	---	6180	---	---
21	1510	---	---	461	---	---	4990	---	---
22	2980	---	---	2840	---	---	4190	---	---
23	2700	---	---	2830	---	---	4970	---	---
24	1820	---	---	3230	---	---	3800	---	---
25	2920	---	---	3120	---	---	4220	---	---
26	2410	---	---	2910	---	---	3140	---	---
27	2940	---	---	2840	---	---	3010	---	---
28	2250	---	---	2750	---	---	4070	---	---
29	2860	---	---	2890	---	---	3600	---	---
30	2040	---	---	2360	---	---	3080	---	---
31	2100	---	---	---	---	---	4900	---	---
TOTAL	97820	---	---	79361	---	---	110070	---	---

JANUARY				FEBRUARY			MARCH		
1	2760	---	---	3470	16	60	3600	24	225
2	3290	---	---	3070	24	185	1860	24	106
3	4400	---	---	2130	24	132	3300	24	186
4	4250	---	---	3730	24	262	2760	24	170
5	3810	---	---	3310	24	206	3260	24	218
6	3590	---	---	3580	24	233	3150	24	188
7	3430	---	---	2790	24	173	2760	24	155
8	3230	---	---	3930	24	251	4830	24	281
9	4020	---	---	2650	24	175	3230	24	183
10	2560	---	---	3820	24	241	4390	24	273
11	3410	---	---	2130	24	112	3590	24	205
12	2660	---	---	3470	24	208	4450	24	308
13	2920	---	---	2310	24	134	4860	24	307
14	2770	---	---	3500	24	217	6610	24	406
15	3070	---	---	1980	24	129	5540	24	339
16	2730	---	---	3260	24	197	5200	24	329
17	2490	---	---	2320	24	139	5410	24	323
18	2420	---	---	1910	24	114	5090	25	334
19	2200	---	---	3440	24	229	5480	31	450
20	2640	---	---	2760	24	164	6040	37	564
21	2800	---	---	1740	24	110	6360	43	688
22	1980	---	---	3640	24	219	6950	46	851
23	2080	---	---	1880	24	113	5310	41	608
24	3230	---	---	3570	24	205	5350	36	512
25	2730	---	---	2250	24	132	5720	30	455
26	2250	---	---	3040	24	188	5410	26	380
27	2670	---	---	2870	24	174	4970	25	336
28	2220	---	---	2820	24	172	6120	24	374
29	2650	---	---	---	---	---	5150	23	308



ILLINOIS RIVER BASIN  
05543500 Illinois River at Marseilles, IL---Continued

381

30	2810	---	---	---	---	---	5410	21	307
31	1810	---	---	---	---	---	5020	20	267
TOTAL	89880	---	---	81370	---	4874	147180	---	10636

APRIL				MAY			JUNE		
1	4200	19	199	14300	75	2880	10200	74	1960
2	4420	21	238	14300	89	3470	9190	64	1580
3	4460	24	294	14700	79	3070	9300	56	1370
4	8300	38	939	14200	72	2680	7420	52	1110
5	11800	62	1920	18100	61	2930	8540	49	1120
6	12500	70	2310	19000	64	3370	7950	46	986
7	11400	58	1760	18100	84	4070	6230	43	695
8	12000	47	1520	15400	76	3130	8050	40	792
9	11600	40	1220	23700	103	6650	6480	37	628
10	11000	36	1040	31300	138	11500	7000	35	634
11	10500	32	895	32400	173	15000	6350	35	583
12	8570	29	667	31800	214	18200	6780	35	618
13	8000	28	594	26600	147	10400	5790	35	545
14	8240	26	554	24100	92	5940	7160	38	708
15	6160	24	385	20900	79	4380	10300	50	1370
16	6340	22	359	20200	76	4110	10400	56	1540
17	5280	21	277	18800	73	3650	10000	53	1410
18	5550	19	280	15300	69	2730	10400	49	1320
19	6350	18	302	13900	67	2480	8880	45	1070
20	4260	16	169	13800	66	2420	6970	44	780
21	4760	17	213	11700	63	1900	7240	43	820
22	5360	19	270	10200	60	1600	5720	43	626
23	4430	21	256	9270	58	1430	6090	42	622
24	5420	22	323	8960	55	1260	5240	42	550
25	4970	24	306	8010	52	1090	4760	42	546
26	4570	25	297	7330	49	945	4090	42	574
27	4300	26	291	6370	47	777	4310	42	480
28	3890	28	278	7930	48	1030	4810	42	549
29	4250	30	308	7830	56	1170	4000	42	398
30	8070	42	940	9240	75	1870	5150	42	564
31	---	---	---	9550	83	2090	---	---	---
TOTAL	210950	---	19404	497290	---	128222	214800	---	26548

JULY				AUGUST			SEPTEMBER		
1	3960	42	451	12300	33	1050	7250	25	468
2	3910	42	411	12600	30	980	6050	28	451
3	5180	45	573	14000	28	1050	7120	32	627
4	4060	49	471	14100	28	1060	7610	39	813
5	5720	53	769	13200	27	965	7360	36	700
6	8020	58	1180	11500	27	807	6620	28	471
7	12000	65	2090	11200	26	781	5120	27	353
8	15900	91	3910	10600	25	700	5670	32	465
9	19200	113	5880	9480	25	620	4310	36	407
10	25200	132	9010	8410	24	542	3840	35	336
11	29400	145	11600	7800	24	479	4220	32	327
12	29200	142	11200	8280	23	504	4630	30	377
13	28000	119	8970	6650	23	385	3580	28	245

ILLINOIS RIVER BASIN  
**05543500 Illinois River at Marseilles, IL--Continued**

14	26000	97	6750	7040	22	402	5820	27	404
15	29300	126	10100	5910	22	343	4390	27	307
16	32600	128	11200	5640	21	306	4860	26	335
17	29300	89	6980	6450	21	349	3760	26	231
18	34000	120	11000	5800	20	304	4370	25	273
19	36800	137	13600	4230	21	231	4270	25	235
20	32900	99	8700	5440	22	304	2730	25	173
21	29100	73	5780	4440	22	245	4820	24	280
22	32100	95	8100	4910	22	292	3420	24	221
23	29200	57	4450	4700	22	262	4440	24	258
24	24900	49	3320	4860	23	273	3750	23	223
25	20700	46	2530	4140	23	246	2480	23	142
26	16600	44	1890	3330	24	212	5030	22	281
27	16800	45	2040	5260	24	348	4700	22	275
28	22800	52	3210	3430	25	216	5950	22	310
29	18600	44	2230	4300	24	254	3850	21	220
30	14800	39	1540	4390	22	237	4090	21	48
31	13300	36	1260	4710	22	275	---	---	---
TOTAL	649550	---	161195	229100	---	15022	146110	---	10256

**LOCATION.**— Lat 41°19'37", long 88°43'03" (NAD of 1927), 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.

**PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE**

DISCHARGE: October 1919 to current year. Prior to October 1939, published as "at Morris."

STAGE: Water years 1994 to current year.

**SURFACE–WATER QUALITY**

CHEMICAL: Water years 1975–96.

SEDIMENT: February 2003 to current year.

SPECIFIC CONDUCTANCE: Water years 1975–81.

WATER TEMPERATURE: Water years 1975–81.

MISCELLANEOUS: Water Year 1998; Contaminants in streambed sediments, October 1996; contaminants in fish tissue, October 1996; sediment concentration and particle size, water years 1993–97, 2003.

**BIOLOGICAL**

ALGAE: Water year 1989.

**REVISED RECORDS.**— WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, phone telemeter, automatic water sampler, and U.S. Army Corps of Engineers satellite telemeter. Datum of gage is 452.91 ft above NGVD of 1929. October 1919 to January 1935, nonrecording gage at site at Morris, 16.6 mi upstream, at datum 25.59 ft higher. January 1935 to September 1939, water–stage recorder 300 ft downstream from Morris site at that datum. October 1939 to September 2002, water–stage recorder at current site at datum 10 ft. higher.

**REMARKS.**— 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. Suspended sediment samples were collected twice weekly with additional samples during high–runoff periods by an automatic water sampler.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum discharge, 95,000 ft<sup>3</sup>/s, Feb. 22, 1997, gage height, 26.85 ft, present datum; minimum daily discharge, 461 ft<sup>3</sup>/s, Nov. 21, 2002.

**SUSPENDED–SEDIMENT CONCENTRATIONS:** Maximum daily, 307 mg/L, June 13, 2004; minimum daily, 6 mg/L, Jan. 28 – Feb. 6, 2004.

**SUSPENDED–SEDIMENT LOADS:** Maximum daily, 42,100 tons, June 13, 2004; minimum daily, 37 tons, Feb. 4, 2004.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** A stage of 26.2 ft at Morris occurred in 1831, discharge not determined, and a stage of 35.4 ft (ice jam) occurred at present site and datum on Jan. 21, 1916, estimated discharge, 40,000 ft<sup>3</sup>/s.

**EXTREMES FOR CURRENT YEAR.**—

**SUSPENDED–SEDIMENT CONCENTRATIONS:** Maximum daily, 307 mg/L, June 13; minimum daily, 6 mg/L, Jan. 28 – Feb. 6.

**SUSPENDED–SEDIMENT LOADS:** Maximum daily, 42,100 tons, June 13; minimum daily, 37 tons, Feb. 4.

**SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

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	4040	16	162	4070	29	305	10600	60	1730
2	2640	17	112	6650	32	579	10500	42	1140
3	4510	18	200	9310	29	708	8830	52	1200
4	2460	18	111	9320	32	798	8340	61	1330
5	3050	19	143	13300	34	1210	10200	66	1800
6	2820	19	135	13300	35	1250	10300	61	1660
7	2990	20	143	11300	37	1110	10300	54	1480
8	2870	20	144	8110	37	796	9700	48	1250
9	3110	21	161	7190	36	687	10200	45	1210

ILLINOIS RIVER BASIN  
05543500 Illinois River at Marseilles, IL---Continued

10	1810	22	90	8340	36	806	14200	50	1900
11	3620	22	195	4990	37	477	17900	82	4010
12	3200	23	182	5320	39	536	17400	87	4080
13	2740	24	163	5970	41	657	15100	55	2220
14	5150	32	445	5830	37	558	12800	48	1650
15	5470	30	427	4850	29	361	12200	52	1680
16	5940	29	445	4610	22	265	10500	59	1670
17	4760	29	353	5160	18	258	9780	75	1910
18	4280	29	311	13800	44	1680	9790	83	2130
19	4510	28	321	25900	109	7840	8970	60	1440
20	4630	28	331	26500	156	11200	7430	45	874
21	2870	28	199	20800	104	5870	8810	40	922
22	4080	26	269	17400	79	3650	6580	35	609
23	3390	25	206	16600	79	3530	7360	31	592
24	3430	23	199	19300	79	4030	6490	28	468
25	4870	23	282	20100	65	3520	8240	31	691
26	4220	25	266	17100	67	3040	9800	35	902
27	3970	27	272	15800	50	2130	9250	39	960
28	4860	29	357	14200	42	1590	8820	44	1020
29	3550	30	268	12900	43	1460	8810	48	1120
30	4880	31	401	12300	69	2230	8900	48	1130
31	4220	31	339	---	---	---	10300	45	1240
TOTAL	118940	---	7632	360320	---	63131	318400	---	46018

	JANUARY			FEBRUARY			MARCH		
1	10900	42	1220	e4600	6	80	7380	16	318
2	10700	39	1110	e4000	6	71	8360	21	448
3	10200	36	979	e4400	6	100	8960	28	668
4	9420	32	799	2460	6	37	10500	39	1150
5	10000	28	745	4770	6	73	22400	104	6220
6	9900	24	625	4920	6	83	28500	115	8820
7	10100	20	537	4340	7	76	27500	83	6150
8	9750	16	405	4880	7	92	23000	67	4160
9	8350	13	278	5380	7	104	18500	57	2840
10	7310	12	230	3940	8	80	17300	50	2320
11	7220	11	213	3920	8	81	14000	43	1620
12	7850	10	216	4350	8	93	12700	37	1260
13	7430	9	187	4700	9	106	12500	34	1130
14	6130	9	142	4400	9	104	10800	32	907
15	7180	9	164	4160	9	101	11500	29	897
16	6630	9	154	4010	10	101	9230	28	674
17	5820	9	134	3420	10	90	9130	26	630
18	6480	9	152	4560	10	125	9840	24	634
19	4820	9	112	4990	11	142	8810	22	519
20	5100	9	115	5630	12	180	8920	20	468
21	5710	8	115	8300	16	355	8240	18	384
22	4710	8	95	9050	20	480	8080	16	343
23	5080	7	99	10400	20	550	7500	14	289
24	4230	7	80	10000	16	416	8530	14	312
25	5450	7	100	9270	12	298	9090	17	402
26	4250	7	78	8960	14	331	9280	20	479
27	e3800	7	68	8440	14	309	12600	23	784
28	e4500	6	77	7320	13	244	16300	56	2460
29	e3700	6	62	7930	14	298	22400	56	3410

ILLINOIS RIVER BASIN  
05543500 Illinois River at Marseilles, IL---Continued

385

30	e4600	6	74	----	----	----	26500	84	5950
31	e2300	6	38	----	----	----	22600	83	5010
TOTAL	209620	----	9403	167500	----	5200	430950	----	61656

	APRIL			MAY			JUNE		
1	21000	63	3510	7400	29	563	39000	148	15600
2	19600	55	2890	8160	33	699	30900	145	12100
3	16800	47	2120	6690	28	497	26900	115	8330
4	14500	40	1550	6490	23	393	22100	115	6760
5	11700	30	928	7280	19	369	20300	99	5310
6	12200	26	848	6360	19	311	17400	81	3780
7	9570	23	580	5880	19	290	14200	67	2530
8	8740	20	467	5890	20	299	13200	55	1940
9	9250	20	477	7840	22	448	11400	52	1560
10	7420	19	375	6000	25	386	12400	49	1590
11	7530	19	380	6390	27	452	16700	51	2260
12	7450	20	388	7270	29	548	33900	132	13900
13	6840	20	373	9130	32	765	50600	307	42100
14	6400	20	341	17500	66	3040	45400	158	19500
15	5350	18	259	18400	87	4220	39400	117	12300
16	6990	16	291	16900	60	2700	35500	103	9840
17	6130	14	227	15400	43	1740	29600	85	6690
18	6070	15	240	14200	36	1360	25600	75	5110
19	5240	16	221	13000	31	1080	22300	74	4410
20	6590	18	312	12700	28	965	20900	76	4210
21	7580	20	393	12200	29	940	19300	79	4060
22	7400	23	450	14700	34	1340	18200	68	3330
23	7910	25	510	16400	35	1520	15900	58	2470
24	7460	23	457	15500	34	1420	13200	60	2100
25	7490	22	440	15000	41	1670	11000	58	1700
26	9710	21	530	14600	36	1380	9800	57	1450
27	7980	19	401	14200	35	1320	9630	56	1410
28	7840	18	374	13700	35	1280	8540	54	1220
29	6340	18	311	12800	36	1240	8070	51	1070
30	6680	24	410	15800	56	2560	7950	44	913
31	---	---	---	33400	142	12900	---	---	---
TOTAL	271760	---	21053	377180	---	48695	649290	---	199543

	JULY			AUGUST			SEPTEMBER		
1	7710	37	739	4170	27	276	19600	69	3590
2	6040	32	496	5750	27	404	18900	65	3290
3	7950	34	706	3400	27	226	15400	55	2280
4	11000	36	1040	9620	27	701	13600	50	1780
5	8850	38	882	9570	27	682	11800	46	1430
6	8600	40	893	8230	27	576	10600	43	1180
7	9380	41	1030	7300	27	505	8750	40	912
8	8110	42	888	6390	26	423	9240	37	890
9	8590	41	926	5290	25	338	8400	35	768
10	8680	41	925	6010	23	368	8310	37	802
11	9240	40	950	4870	22	282	7460	40	774
12	8440	37	818	4690	21	254	6890	41	726
13	10100	35	925	4370	25	274	6690	37	637

ILLINOIS RIVER BASIN  
**05543500 Illinois River at Marseilles, IL---Continued**

14	9460	34	845	4930	27	341	5420	32	446
15	8960	38	903	4780	24	291	5990	28	429
16	7560	42	833	4920	22	271	7890	27	563
17	6220	46	744	4720	23	281	5770	27	395
18	6970	47	856	3010	25	177	5560	26	368
19	5320	48	667	5290	26	348	4750	25	301
20	6790	48	853	6530	27	464	4770	25	297
21	6620	45	771	6130	28	440	4650	24	292
22	6580	42	721	5580	29	415	3530	25	229
23	6600	40	647	6640	27	478	4740	26	318
24	6950	37	665	8220	26	563	3790	27	261
25	6400	35	577	8280	27	619	3320	27	231
26	6140	33	532	10600	38	1060	4070	28	286
27	6040	31	494	16100	51	2170	4140	28	294
28	6780	29	506	31100	208	18200	3420	27	239
29	5090	27	355	32400	164	14400	4650	26	316
30	5180	27	363	27900	103	7760	3110	25	196
31	5240	27	370	22600	80	4880	---	---	---
TOTAL	231590	---	22920	289390	---	58467	225210	---	24520
YEAR	3650150		568238						

**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.**—

**SURFACE—WATER DISCHARGE AND STAGE**

DISCHARGE: 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, phone telemeter, and U.S. Corps of Engineers satellite telemeter. Datum of gage is 735.72 ft above NGVD of 1929 (Racine County Surveyor bench mark). Prior to Sept. 2, 1965, nonrecording gage at bridge 400 ft above dam in Wilmot 11 mi downstream at datum 0.50 ft lower, and recording gage Sept. 2, 1965 to Sept. 30, 1993, recording gage 100 ft downstream from bridge at the lower datum. Removal of dam due to damage was completed by Sept. 15, 1992.

**REMARKS.**—Occasional regulation from several dams upstream from gage.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Maximum discharge, 7,520 ft<sup>3</sup>/s, March 31, 1960, gage height, 9.25 ft, from graph based on gage readings, site and datum then in use; maximum gage height, 14.10 ft, February 21, 1994, ice affected; no flow, October 26, 1945 and August 10, 1990.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are fair.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	167	282	412	e180	e470	1250	715	3020	958	268	342
2	115	268	236	378	e180	e560	1100	582	2900	858	263	270
3	106	438	257	313	e180	e680	978	446	2700	650	256	246
4	105	701	254	e300	e180	e740	906	318	2460	779	401	231
5	100	785	260	e290	e180	1260	811	356	2150	945	525	232
6	99	741	259	e260	e180	1760	654	339	1820	835	435	225
7	100	612	256	e240	e180	1750	536	410	1650	726	491	227
8	118	563	250	e240	e170	1630	639	367	1450	774	490	238
9	115	486	260	e240	e170	1490	667	560	1420	771	431	230
10	112	422	595	e230	e170	1340	582	1050	1370	825	267	205
11	91	320	1250	e220	e170	1190	503	1020	1430	751	298	175
12	104	357	890	e220	e170	1050	502	993	1490	691	297	197
13	109	317	752	e220	e160	899	511	1260	1480	718	269	205
14	144	309	691	e220	e160	804	471	2050	1390	636	274	184
15	152	230	644	e220	e160	726	369	2740	1400	633	271	179
16	110	283	710	e210	e160	710	330	2750	1390	541	248	188
17	147	255	665	e210	e160	676	348	2460	1840	430	270	197
18	125	371	510	e210	e160	558	406	2370	2790	432	276	177
19	120	546	453	e210	e170	570	394	2450	2780	416	273	177
20	119	498	446	e210	e180	641	478	2430	2470	398	268	176
21	104	417	505	e210	e190	621	476	2450	2240	422	258	175
22	132	448	418	e210	e200	607	690	3100	2310	447	250	169
23	119	382	399	e200	e220	558	801	4100	2210	429	232	170
24	105	335	423	e200	e240	515	652	4470	2140	391	241	165
25	158	358	403	e200	e280	578	800	4350	2140	353	272	158
26	157	344	e390	e200	e330	770	786	3990	1810	338	305	148
27	161	352	359	e200	e360	1130	768	3660	1560	346	258	149
28	195	296	337	e200	e400	1070	683	3350	1410	346	275	150
29	146	352	410	e190	e430	1340	430	3060	1300	276	367	161
30	188	232	384	e190	---	1520	545	2920	1160	292	345	147

ILLINOIS RIVER BASIN  
**05545750 Fox River near New Munster, WI--Continued**

<b>31</b>	181	---	391	e190	---	1420	---	3010	---	271	377	---
TOTAL	3936	12185	14339	7243	6070	29633	19066	64126	57680	17678	9751	5893
MEAN	127	406	463	234	209	956	636	2069	1923	570	315	196
MAX	195	785	1250	412	430	1760	1250	4470	3020	958	525	342
MIN	91	167	236	190	160	470	330	318	1160	271	232	147
CFSM	0.16	0.50	0.57	0.29	0.26	1.18	0.78	2.55	2.37	0.70	0.39	0.24
IN.	0.18	0.56	0.66	0.33	0.28	1.36	0.87	2.94	2.65	0.81	0.45	0.27

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 – 2004, BY WATER YEAR (WY)**

MEAN	387	476	450	420	537	1092	1059	737	587	393	331	341
MAX	1931	1536	1755	1818	1386	2434	3591	2078	1923	1382	902	1763
(WY)	1987	1986	1983	1960	2001	1979	1993	1973	2004	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 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1940 – 2004**

ANNUAL TOTAL	112331		247600			
ANNUAL MEAN	308		677		567	
HIGHEST ANNUAL MEAN					1240	
LOWEST ANNUAL MEAN					174	
HIGHEST DAILY MEAN	1360	May 10	4470	May 24	7100	Apr 1 1960
LOWEST DAILY MEAN	83	Sep 8	91	Oct 11	35	Sep 9 1958
ANNUAL SEVEN-DAY MINIMUM	92	Sep 2	103	Oct 1	41	Sep 7 1958
MAXIMUM PEAK FLOW			4510	May 24	7520	A Mar 31 1960
MAXIMUM PEAK STAGE			13.73	May 24	14.10	B Feb 21 1994
INSTANTANEOUS LOW FLOW			82	Oct 11	0.00	C Oct 26 1945
ANNUAL RUNOFF (CFSM)	0.379		0.834		0.699	
ANNUAL RUNOFF (INCHES)	5.15		11.36		9.50	
10 PERCENT EXCEEDS	562		1680		1270	
50 PERCENT EXCEEDS	239		374		370	
90 PERCENT EXCEEDS	109		160		128	

A – Gage height, 9.25 ft, from graph based on gage readings, site and datum then in use.

B – Ice affected.

C – Also occurred Aug. 10, 1990.



**LOCATION.**— Lat 42°28'19", long 88°08'49" (NAD of 1927), 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 southwest of natural outlet, and 3 mi west of Antioch.

**PERIOD OF RECORD.**—

STAGE: October 1939 to current year.

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 733.00 ft above NGVD of 1929 (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).

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: 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, 5.05 ft, May 11; minimum, 2.42 ft, Feb. 21, but may have been less during period of missing record, Nov. 26 to Mar. 30, no water getting to intakes.

Gage height, feet WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.46	4.32	---	---	---	---	4.10	4.29	4.44	4.17	4.20	3.98
2	4.52	4.32	---	---	---	---	4.01	4.30	4.46	4.15	4.19	4.00
3	4.49	4.34	---	---	---	---	3.96	4.40	4.46	4.18	4.18	4.03
4	4.56	4.31	---	---	---	---	3.92	4.46	4.46	4.16	4.18	3.99
5	4.49	4.31	---	---	---	---	3.98	4.61	4.46	4.19	4.19	4.01
6	4.54	4.32	---	---	---	---	3.93	4.61	4.46	4.23	4.19	4.03
7	4.42	4.38	---	---	---	---	3.86	4.52	4.45	4.30	4.19	4.02
8	4.46	4.42	---	---	---	---	3.94	4.45	4.49	4.36	4.15	4.02
9	4.40	4.41	---	---	---	---	4.00	4.52	4.48	4.42	4.13	4.01
10	4.38	4.36	---	---	---	---	4.03	4.53	4.54	4.51	4.14	4.01
11	4.39	4.33	---	---	---	---	4.04	4.85	4.45	4.52	4.08	4.02
12	4.39	4.35	e2.58	---	---	---	4.04	4.60	4.45	4.52	4.05	4.06
13	4.36	4.37	---	---	---	---	4.11	4.59	4.46	4.50	4.06	4.09
14	4.38	4.34	---	---	---	---	4.22	4.55	4.44	4.47	4.06	4.12
15	4.33	4.27	---	---	---	---	4.31	4.48	4.39	4.51	4.08	4.14
16	4.30	4.25	---	---	---	---	4.05	4.45	4.35	4.51	4.08	4.14
17	4.33	4.25	---	---	---	---	3.99	4.37	4.33	4.52	4.06	4.14
18	4.36	4.26	---	---	---	---	4.01	4.31	4.35	4.45	4.06	4.11
19	4.31	4.21	---	---	---	---	4.07	4.29	4.27	4.44	4.07	4.08
20	4.31	3.93	---	---	---	---	4.23	4.30	4.25	4.38	4.09	4.07
21	4.32	3.59	---	---	e2.42	---	4.15	4.30	4.25	4.36	4.10	4.06
22	4.29	3.37	---	---	---	---	4.10	4.27	4.25	4.31	4.02	4.09
23	4.26	3.30	---	---	---	---	4.13	4.28	4.26	4.28	4.02	4.10
24	4.28	3.10	---	---	---	---	4.10	4.27	4.26	4.28	4.09	4.10
25	4.31	3.08	---	---	---	---	4.01	4.26	4.26	4.32	4.03	4.06
26	4.30	---	---	---	---	---	4.04	4.21	4.25	4.37	4.06	4.10
27	4.26	---	---	---	---	---	4.17	4.21	4.25	4.25	4.01	4.12
28	4.24	---	---	---	---	---	4.17	4.21	4.19	4.19	4.06	4.07
29	4.23	---	---	---	---	---	4.16	4.26	4.21	4.17	4.02	4.09
30	4.25	---	---	---	---	---	4.19	4.36	4.19	4.17	3.99	4.09
31	4.29	---	---	---	---	4.09	---	4.36	---	4.16	4.00	---
MEAN	4.36	---	---	---	---	---	4.07	4.40	4.36	4.33	4.09	4.07
MAX	4.56	---	---	---	---	---	4.31	4.85	4.54	4.52	4.20	4.14
MIN	4.23	---	---	---	---	---	3.86	4.21	4.19	4.15	3.99	3.98

ILLINOIS RIVER BASIN  
**05547000 Channel Lake near Antioch, IL**

**LOCATION.**— Lat 42°28'19", long 88°08'49" (NAD of 1927), 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 southwest of natural outlet, and 3 mi west of Antioch.

**PERIOD OF RECORD.**—

STAGE: October 1939 to current year.

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 733.00 ft above NGVD of 1929 (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).

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: 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, 6.73 ft, May 27; minimum, 2.63 ft, Jan. 26, but may have been less during period of missing record, Dec. 19 to Mar. 6, no water getting to intakes.

Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.05	4.19	2.92	---	---	---	4.60	4.39	6.41	4.41	4.15	4.33
2	4.06	4.30	2.92	---	---	---	4.56	4.36	6.30	4.36	4.11	4.33
3	4.16	4.40	2.91	---	---	---	4.44	4.35	6.17	4.36	4.08	4.31
4	4.08	4.49	2.91	---	---	---	4.37	4.40	6.00	4.41	4.13	4.29
5	4.06	4.47	2.91	---	---	---	4.31	4.29	5.80	4.41	4.16	4.28
6	4.06	4.40	2.90	---	---	---	4.25	4.27	5.57	4.44	4.25	4.30
7	4.08	4.31	2.90	---	---	4.40	4.16	4.14	5.39	4.41	4.30	4.20
8	4.07	4.11	2.90	---	---	4.44	4.10	4.20	5.20	4.36	4.35	4.12
9	4.06	3.98	2.89	---	---	4.43	4.11	4.26	4.99	4.34	4.40	4.13
10	4.06	3.85	2.89	---	---	4.46	4.09	4.35	4.94	4.33	4.37	4.14
11	4.10	3.77	2.98	---	---	4.42	4.04	4.40	4.95	4.33	4.33	4.14
12	4.08	3.73	3.14	---	---	4.29	3.96	4.52	4.86	4.33	4.27	4.10
13	4.09	3.55	3.10	---	---	4.23	3.94	4.58	4.89	4.32	4.24	4.11
14	4.07	3.51	3.06	---	---	4.23	3.98	4.66	4.89	4.28	4.20	4.13
15	4.14	3.39	3.04	---	---	3.96	4.02	4.88	4.83	4.28	4.19	4.19
16	4.10	3.25	3.07	---	---	3.96	3.99	5.10	4.78	4.27	4.20	4.12
17	4.11	3.19	3.03	---	---	4.02	3.95	5.30	4.76	4.16	4.19	4.08
18	4.15	3.19	2.96	---	---	4.01	4.11	5.38	4.81	4.14	4.22	4.08
19	4.10	3.24	---	---	---	4.02	4.13	5.37	4.93	4.14	4.17	4.08
20	4.17	3.36	---	---	---	3.96	4.02	5.38	5.11	4.14	4.16	4.06
21	4.09	3.18	---	---	---	3.83	4.20	5.35	5.21	4.16	4.14	4.05
22	4.08	3.17	---	---	---	3.90	4.12	5.63	5.26	4.18	4.21	4.03
23	4.08	3.35	---	---	---	3.88	4.22	6.00	5.26	4.14	4.12	4.03
24	4.10	3.36	---	---	---	3.94	4.23	6.31	5.20	4.16	4.15	4.03
25	4.13	3.24	---	---	---	3.96	4.38	6.54	5.15	4.11	4.20	3.98
26	4.13	3.05	---	e2.85	---	4.07	4.42	6.67	5.06	4.12	4.24	3.98
27	4.14	2.97	---	---	---	4.13	4.41	6.70	4.91	4.12	4.26	3.99
28	4.24	2.94	---	---	---	4.32	4.63	6.60	4.72	4.14	4.26	3.86
29	4.20	2.96	---	---	---	4.47	4.65	6.51	4.56	4.17	4.30	3.93
30	4.21	2.93	---	---	---	4.51	4.41	6.42	4.46	4.17	4.34	3.96
31	4.25	---	---	---	---	4.55	---	6.45	---	4.13	4.31	---
MEAN	4.11	3.59	---	---	---	---	4.23	5.22	5.18	4.25	4.23	4.11
MAX	4.25	4.49	---	---	---	---	4.65	6.70	6.41	4.44	4.40	4.33
MIN	4.05	2.93	---	---	---	---	3.94	4.14	4.46	4.11	4.08	3.86

e Estimated

**LOCATION.**— Lat 42°25'09", long 88°07'33" (NAD of 1927), 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.**—

STAGE:October 1939 to current year.

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 733.00 ft above NGVD of 1929 (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).

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: 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, 4.81 ft, May 11; minimum, 2.43 ft, Feb. 21, but may have been less during period of missing record, Dec. 11 to Mar. 6.

Gage height, feet, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.41	4.30	2.66	---	---	---	4.05	4.27	4.41	4.12	4.14	3.97
2	4.53	4.30	2.64	---	---	---	4.02	4.33	4.43	4.11	4.15	3.98
3	4.49	4.28	2.63	---	---	---	3.98	4.39	4.45	4.12	4.15	4.00
4	4.51	4.29	2.61	---	---	---	3.97	4.41	4.45	4.12	4.17	3.98
5	4.48	4.27	2.60	---	---	---	4.01	4.56	4.44	4.15	4.16	3.97
6	4.47	4.30	2.59	---	---	---	3.93	4.58	4.42	4.17	4.16	3.97
7	4.41	4.29	2.57	---	---	2.79	3.89	4.51	4.41	4.25	4.17	3.97
8	4.39	4.30	2.57	---	---	2.77	3.96	4.43	4.44	4.32	4.16	3.98
9	4.38	4.30	2.55	---	---	2.73	3.99	4.43	4.45	4.40	4.13	3.97
10	4.37	4.32	2.52	---	---	2.76	4.01	4.48	4.46	4.48	4.12	3.97
11	4.36	4.32	---	---	---	2.75	4.03	4.72	4.45	4.53	4.10	3.96
12	4.37	4.32	e2.46	---	---	2.73	4.05	4.63	4.44	4.51	4.07	3.98
13	4.37	4.32	---	---	---	2.77	4.07	4.56	4.44	4.48	4.04	4.03
14	4.33	4.31	---	---	---	2.79	4.11	4.51	4.42	4.43	4.04	4.08
15	4.33	4.27	---	---	---	2.81	4.16	4.45	4.38	4.49	4.05	4.10
16	4.30	4.25	---	---	---	2.81	4.07	4.42	4.33	4.49	4.06	4.09
17	4.30	4.24	---	---	---	2.92	4.01	4.35	4.29	4.49	4.03	4.07
18	4.30	4.21	---	---	---	3.26	4.01	4.25	4.30	4.47	4.03	4.05
19	4.32	4.17	---	---	---	3.51	4.02	4.22	4.30	4.42	4.03	4.08
20	4.29	3.92	---	---	---	3.65	4.12	4.30	4.21	4.35	4.02	4.03
21	4.29	3.65	---	---	e2.43	3.76	4.15	4.25	4.19	4.35	4.04	4.01
22	4.29	3.41	---	---	---	3.85	4.12	4.22	4.19	4.31	4.01	4.06
23	4.26	3.25	---	---	---	3.87	4.10	4.23	4.18	4.27	4.00	4.06
24	4.25	3.10	---	---	---	3.91	4.08	4.25	4.18	4.24	4.01	4.05
25	4.26	2.96	---	---	---	3.96	4.04	4.23	4.17	4.22	4.01	4.04
26	4.26	2.83	---	---	---	3.99	4.04	4.20	4.21	4.24	4.02	4.03
27	4.23	2.72	---	---	---	3.98	4.10	4.17	4.18	4.21	4.01	4.09
28	4.21	2.70	---	---	---	4.03	4.14	4.17	4.16	4.17	4.00	4.07
29	4.21	2.71	---	---	---	4.04	4.14	4.23	4.17	4.14	4.00	4.06
30	4.23	2.71	---	---	---	4.03	4.18	4.28	4.15	4.13	3.98	4.06
31	4.26	---	---	---	---	4.03	---	4.39	---	4.12	3.98	---
MEAN	4.34	3.84	---	---	---	---	4.05	4.37	4.32	4.30	4.07	4.03
MAX	4.53	4.32	---	---	---	---	4.18	4.72	4.46	4.53	4.17	4.10
MIN	4.21	2.70	---	---	---	---	3.89	4.17	4.15	4.11	3.98	3.96

e Estimated

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 6.46 ft, May 28; minimum, 2.51 ft, Jan. 22–24.

WTR YR 2004      MEAN 3.91      MAX 6.46      MIN 2.52

**LOCATION.**— Lat 42°21'00", long 88°05'18" (NAD of 1927), 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.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: October 1989 to current year.

STAGE: Water years 1994 to current year.

**GAGE.**— Water-stage recorder, phone telemeter, and crest-stage gage. Datum of gage is 764.94 ft above NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 312 ft<sup>3</sup>/s, July 18, 1993, from rating curve extended above 120 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow, gage height, 6.42 ft; no flow at times in 1991, 1994 and 1998.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.23	1.2	4.7	8.2	e2.2	33	55	12	76	6.9	1.2	0.74
2	0.21	3.9	4.1	7.8	e2.2	41	44	12	60	5.7	0.69	0.69
3	0.72	14	3.7	7.8	e2.2	34	36	11	48	7.6	1.1	0.62
4	0.44	20	3.1	7.0	e2.2	32	30	11	40	18	3.5	0.62
5	0.42	40	4.9	7.0	e2.2	91	26	9.4	33	14	2.1	0.57
6	0.43	22	6.0	7.7	e2.3	95	22	8.5	29	11	1.9	0.60
7	0.45	11	5.4	5.1	e2.3	84	19	7.7	25	9.2	1.5	0.63
8	0.33	7.3	5.0	5.4	e2.4	71	16	8.0	21	8.4	1.1	0.54
9	0.22	5.4	6.5	5.1	e2.4	57	14	9.8	21	8.6	0.87	0.45
10	0.22	4.4	56	5.0	e2.3	48	13	10	49	26	0.65	0.47
11	0.19	3.8	64	e4.6	e2.2	40	11	13	76	20	0.59	0.62
12	0.34	3.4	46	e4.4	e2.2	32	10	14	86	13	0.63	1.1
13	0.46	3.3	33	e4.2	e2.1	27	8.8	31	73	10	0.62	0.56
14	2.4	3.0	27	e4.0	e2.1	26	8.0	49	56	7.8	0.61	0.44
15	1.2	2.9	22	e3.8	e2.0	25	7.7	56	45	6.7	0.55	0.88
16	0.74	2.4	20	e3.7	e2.0	21	6.5	44	38	5.7	0.46	1.3
17	0.74	2.5	17	e3.5	e2.1	19	6.4	35	33	4.9	0.75	1.3
18	0.79	14	15	e3.4	e2.2	20	7.2	141	27	3.5	0.58	1.3
19	0.78	21	13	e3.4	4.8	20	8.0	150	23	4.0	0.40	0.70
20	0.53	14	13	e3.3	9.2	19	9.5	123	20	3.1	0.32	0.43
21	0.41	10	9.3	e3.2	18	16	22	94	26	2.9	0.29	0.75
22	0.43	8.4	8.9	e3.0	26	15	19	155	38	3.2	0.28	1.4
23	0.57	12	8.7	e2.9	32	15	16	183	27	5.7	0.27	1.6
24	0.78	13	7.6	e2.7	33	23	14	163	22	4.4	0.70	1.6
25	1.0	12	8.2	e2.5	31	29	20	128	19	3.4	0.57	0.89
26	0.85	7.8	6.2	e2.4	29	62	18	97	16	2.9	0.62	0.46
27	0.87	6.4	5.4	e2.3	19	65	16	75	13	2.5	0.87	0.29
28	1.1	5.5	8.0	e2.2	19	65	15	62	12	2.2	1.6	0.33
29	1.0	5.9	11	e2.2	21	88	13	54	10	1.9	1.4	0.34
30	0.94	5.0	11	e2.1	---	79	11	61	8.0	1.7	1.1	0.34
31	0.94	---	9.1	e2.1	---	66	---	76	---	1.8	0.86	---
TOTAL	20.73	285.5	462.8	132.0	281.6	1358	522.1	1903.4	1070.0	226.7	28.68	22.56
MEAN	0.67	9.52	14.9	4.26	9.71	43.8	17.4	61.4	35.7	7.31	0.93	0.75
MAX	2.4	40	64	8.2	33	95	55	183	86	26	3.5	1.6
MIN	0.19	1.2	3.1	2.1	2.0	15	6.4	7.7	8.0	1.7	0.27	0.29
CFSM	0.04	0.56	0.88	0.25	0.57	2.58	1.02	3.61	2.10	0.43	0.05	0.04

ILLINOIS RIVER BASIN  
**05547755 Squaw Creek at Round Lake, IL--Continued**

IN.	0.05	0.62	1.01	0.29	0.62	2.97	1.14	4.17	2.34	0.50	0.06	0.05
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e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 – 2004, BY WATER YEAR (WY)**

MEAN	6.27	11.7	10.5	12.4	22.2	25.7	29.6	29.1	19.4	10.0	2.49	3.06
MAX	52.5	33.6	26.6	40.2	55.4	45.8	79.4	99.6	74.4	54.0	7.60	12.9
(WY)	2002	1993	1992	1999	2001	1990	1993	1996	1996	1993	1990	1992
MIN	0.40	0.92	0.98	0.74	0.45	2.12	7.76	3.36	0.76	0.44	0.19	0.11
(WY)	1995	2003	1990	2003	2003	2003	2003	1994	1992	1991	1991	1994

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1990 – 2004**

ANNUAL TOTAL	2688.33	6314.07	
ANNUAL MEAN	7.37	17.3	15.1
HIGHEST ANNUAL MEAN			27.6 1993
LOWEST ANNUAL MEAN			5.61 2003
HIGHEST DAILY MEAN	77 May 9	183 May 23	284 May 21 1996
LOWEST DAILY MEAN	0.11 Sep 9	0.19 Oct 11	0.00 A
ANNUAL SEVEN-DAY MINIMUM	0.14 Sep 5	0.31 Oct 6	0.00 Sep 10 1994
MAXIMUM PEAK FLOW		196 May 22	312 B Jul 18 1993
MAXIMUM PEAK STAGE		4.97 May 22	6.42 Jul 18 1993
INSTANTANEOUS LOW FLOW		0.12 Oct 11	
ANNUAL RUNOFF (CFSM)	0.433	1.01	0.891
ANNUAL RUNOFF (INCHES)	5.88	13.82	12.11
10 PERCENT EXCEEDS	22	49	38
50 PERCENT EXCEEDS	2.9	6.9	6.0
90 PERCENT EXCEEDS	0.35	0.58	0.57

A – No flow at times in 1991, 1994 and 1998.

B – From rating curve extended above 120 ft<sup>3</sup>/s on basis of slope–area measurement of peak flow.

ILLINOIS RIVER BASIN  
05548000 Nippersink Lake at Fox Lake, IL

395

**LOCATION.**— Lat 42°24'11", long 88°10'57" (NAD of 1927), 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.**—

STAGE: October 1939 to current year.

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 733.00 ft above NGVD of 1929 (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).

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: 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, 4.58 ft, May 12; minimum, 2.32 ft, Feb. 21, but may have been less during period of missing record, Jan. 3 to Mar. 27.

Gage height, feet, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.33	4.24	2.61	2.73	---	---	4.01	4.28	4.39	4.11	4.09	3.96
2	4.47	4.24	2.61	2.56	---	---	4.02	4.36	4.41	4.11	4.09	3.96
3	4.49	4.24	2.60	---	---	---	3.98	4.38	4.44	4.08	4.11	3.94
4	4.45	4.25	2.59	---	---	---	3.98	4.41	4.44	4.08	4.14	3.94
5	4.42	4.25	2.58	---	---	---	3.94	4.52	4.41	4.13	4.13	3.93
6	4.40	4.25	2.57	---	---	---	3.97	4.55	4.40	4.17	4.13	3.92
7	4.38	4.25	2.56	---	---	---	3.97	4.51	4.37	4.23	4.15	3.93
8	4.36	4.22	2.55	---	---	---	3.97	4.42	4.39	4.31	4.15	3.93
9	4.35	4.22	2.52	---	---	---	3.96	4.42	4.42	4.38	4.12	3.93
10	4.35	4.26	2.50	---	---	---	3.98	4.47	4.41	4.41	4.10	3.94
11	4.35	4.27	2.50	---	---	---	4.01	4.39	4.45	4.44	4.09	3.94
12	4.34	4.28	2.49	---	---	---	4.05	4.53	4.44	4.46	4.07	3.93
13	4.33	4.28	2.50	---	---	---	4.04	4.51	4.42	4.43	4.03	3.97
14	4.31	4.27	2.50	---	---	---	4.03	4.49	4.41	4.37	4.02	4.00
15	4.30	4.27	2.51	---	---	---	4.03	4.46	4.37	4.44	4.01	4.02
16	4.30	4.27	2.52	---	---	---	4.14	4.40	4.33	4.44	4.02	4.02
17	4.27	4.26	2.52	---	---	---	4.07	4.35	4.28	4.45	4.02	4.02
18	4.26	4.22	2.57	---	---	---	4.01	4.27	4.30	4.46	4.01	4.01
19	4.26	4.16	2.67	---	---	---	3.99	4.22	4.32	4.36	4.00	4.00
20	4.26	3.95	2.74	---	---	---	4.01	4.29	4.20	4.28	3.99	3.99
21	4.26	3.66	2.82	---	e2.32	---	4.08	4.27	4.18	4.31	3.97	3.98
22	4.26	3.37	2.90	---	---	---	4.10	4.23	4.17	4.30	3.99	3.98
23	4.26	3.18	2.93	---	---	---	4.09	4.23	4.16	4.26	3.98	3.98
24	4.26	3.06	2.97	---	---	---	4.07	4.26	4.15	4.22	3.95	3.98
25	4.26	2.91	2.99	---	---	---	4.06	4.24	4.14	4.17	3.96	3.98
26	4.26	2.79	3.01	---	---	---	4.04	4.21	4.14	4.15	3.97	3.97
27	4.25	2.70	3.03	---	---	---	4.05	4.17	4.12	4.19	3.99	3.98
28	4.23	2.68	3.02	---	---	3.97	4.11	4.17	4.14	4.15	3.96	4.00
29	4.23	2.63	2.98	---	---	4.00	4.14	4.23	4.13	4.11	3.97	3.99
30	4.24	2.62	2.94	---	---	4.00	4.18	4.26	4.13	4.08	3.97	3.98
31	4.24	---	2.90	---	---	4.00	---	4.42	---	4.07	3.95	---
MEAN	4.31	3.81	2.70	---	---	---	4.04	4.35	4.30	4.26	4.04	3.97
MAX	4.49	4.28	3.03	---	---	---	4.18	4.55	4.45	4.46	4.15	4.02
MIN	4.23	2.62	2.49	---	---	---	3.94	4.17	4.12	4.07	3.95	3.92

e Estimated

ILLINOIS RIVER BASIN  
05548000 Nippersink Lake at Fox Lake, IL

**LOCATION.**— Lat 42°24'11", long 88°10'57" (NAD of 1927), 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.**—

STAGE: October 1939 to current year.

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 733.00 ft above NGVD of 1929 (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).

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: 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, 6.52 ft, May 27; minimum, 2.53 ft, Dec. 7, but may have been less during period of missing record, Jan. 21 to Feb. 28.

Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.98	4.13	2.66	2.70	---	3.36	4.57	---	6.20	4.31	4.02	4.27
2	3.98	4.18	2.63	2.72	---	3.51	4.52	---	6.17	4.30	4.01	4.26
3	3.96	4.33	2.58	2.73	---	3.62	4.46	---	6.07	4.28	4.01	4.24
4	3.99	4.38	2.56	2.76	---	3.66	4.33	---	5.89	4.28	4.03	4.22
5	3.99	4.40	2.60	2.74	---	3.85	4.22	---	5.68	4.34	4.05	4.20
6	3.99	4.36	2.57	2.70	---	4.06	4.13	---	5.43	4.31	4.07	4.17
7	3.97	4.27	2.55	2.66	---	4.20	4.10	e4.19	5.20	4.30	4.09	4.18
8	3.97	4.15	2.54	2.63	---	4.32	4.06	4.11	5.00	4.27	4.11	4.17
9	3.98	3.97	2.57	2.62	---	4.31	4.04	4.15	4.83	4.27	4.12	4.12
10	3.98	3.79	2.76	2.62	---	4.19	4.04	4.23	4.85	4.26	4.14	4.09
11	3.98	3.67	2.87	2.61	---	4.17	4.01	4.30	4.85	4.25	4.15	---
12	3.98	3.56	2.97	2.62	---	4.15	3.96	4.32	4.75	4.23	4.16	---
13	3.98	3.49	2.96	2.62	---	4.05	3.94	4.43	4.73	4.22	4.16	---
14	4.02	3.38	2.92	2.61	---	3.92	3.91	4.57	4.75	4.22	4.16	---
15	4.04	3.29	2.91	2.60	---	3.89	3.87	4.79	4.74	4.21	4.13	---
16	4.04	3.20	2.91	2.59	---	3.90	3.84	4.97	4.69	4.19	4.09	---
17	4.03	3.09	2.91	2.60	---	3.91	3.89	5.09	4.67	4.17	4.08	---
18	4.02	3.10	2.87	2.59	---	3.92	3.83	5.27	4.71	4.09	e4.08	---
19	4.03	3.12	2.78	2.56	---	3.85	3.87	5.26	4.85	4.06	---	---
20	4.02	3.13	2.71	2.55	---	3.86	3.94	5.21	4.94	4.06	---	e3.97
21	4.02	3.20	2.64	---	---	3.86	4.02	5.25	5.07	4.07	---	3.97
22	4.03	3.18	2.63	---	---	3.80	4.11	5.44	5.12	4.11	---	3.96
23	4.02	3.09	2.62	---	---	---	4.14	5.73	5.09	4.12	---	3.94
24	4.01	3.02	2.63	---	---	---	4.21	6.10	5.08	4.10	---	3.91
25	4.03	2.98	2.63	---	---	---	4.23	6.34	5.00	4.09	---	3.91
26	4.03	2.96	2.62	e2.55	---	3.95	4.30	6.46	4.91	4.07	---	3.91
27	4.04	2.92	2.61	---	---	4.05	4.33	6.49	4.78	4.06	---	3.90
28	4.04	2.85	2.62	---	---	4.13	e4.25	6.47	4.61	4.07	---	3.93
29	4.05	2.74	2.65	---	3.28	4.31	---	6.34	4.40	4.06	---	3.88
30	4.08	2.70	2.67	---	---	4.48	---	6.23	4.33	4.05	e4.26	3.87
31	4.09	---	2.67	---	---	4.57	---	6.22	---	4.05	4.26	---
MEAN	4.01	3.49	2.70	---	---	---	---	---	5.05	4.18	---	---
MAX	4.09	4.40	2.97	---	---	---	---	---	6.20	4.34	---	---
MIN	3.96	2.70	2.54	---	---	---	---	---	4.33	4.05	---	---

e Estimated



**LOCATION.**— Lat 42°26'36", long 88°14'51" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: August 1966 to current year.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1976–91.

SEDIMENT: Dec. 1997 to May 1999.

MISCELLANEOUS: Sediment concentration and particle size, water years 1998–99.

PRECIPITATION: October 1999 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, phone telemeter, unheated tipping-bucket rain gage, and crest-stage gage. Datum of gage is 746.00 ft above NGVD of 1929.

**REMARKS.**— Suspended-sediment samples were collected twice weekly with more frequent samples collected during high runoff periods. Collection, computation, and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 2,910 ft<sup>3</sup>/s, Sept. 26, 1986, gage height, 14.26 ft; minimum discharge, 6.6 ft<sup>3</sup>/s, Aug. 7, 1988.

**SUSPENDED-SEDIMENT CONCENTRATION:** Maximum daily, 244 mg/L, May 17, 1999; minimum daily, 8 mg/L, Nov. 24, 1998.

**SUSPENDED-SEDIMENT LOAD:** Maximum daily, 247 tons, May 17, 1999; minimum daily, 1.9 tons, Nov. 24, 1998.

**PRECIPITATION:** Maximum daily total, 2.82 in., June 12, 2000.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** 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.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	25	49	71	e41	132	238	82	686	117	49	62
2	18	51	48	71	e42	184	204	83	586	109	46	57
3	21	132	48	72	e42	179	183	83	425	112	46	52
4	21	169	50	69	e43	159	164	88	303	172	70	51
5	19	153	65	71	e43	406	155	75	245	171	75	50
6	19	110	68	84	e44	553	147	73	215	150	66	50
7	18	82	68	91	e44	484	127	69	196	130	58	42
8	17	59	61	68	e44	349	120	71	177	122	55	39
9	17	52	60	64	e44	246	115	86	159	112	52	38
10	17	47	199	62	e44	208	109	98	217	108	48	40
11	17	47	355	62	e44	180	104	153	338	102	45	41
12	23	45	298	62	e44	146	99	148	367	98	44	41
13	20	42	212	60	e44	138	95	143	373	93	45	42
14	27	36	155	58	e43	147	96	295	316	84	44	42
15	31	37	128	56	e42	131	96	416	240	78	43	46
16	28	34	116	58	e42	126	95	362	199	75	43	51
17	24	35	104	57	e42	126	91	268	204	70	44	45
18	25	127	94	e55	e43	124	97	312	233	69	43	45
19	23	191	85	e54	e44	125	96	385	193	70	43	43
20	23	160	78	e53	e48	127	76	355	167	68	40	40

## ILLINOIS RIVER BASIN

**05548280 Nippersink Creek near Spring Grove, IL--Continued**

<b>21</b>	26	111	80	52	58	116	127	344	180	67	38	39
<b>22</b>	21	85	71	49	64	116	133	685	263	70	40	39
<b>23</b>	21	91	70	e46	81	112	125	1170	252	66	41	37
<b>24</b>	22	81	68	e43	121	142	115	1210	223	64	41	38
<b>25</b>	28	71	68	e43	118	214	132	910	225	60	57	36
<b>26</b>	28	61	70	e43	105	284	127	610	194	57	56	36
<b>27</b>	26	54	62	e44	102	342	111	443	166	57	63	34
<b>28</b>	29	55	75	e43	100	327	117	317	148	55	89	33
<b>29</b>	28	55	86	e42	103	363	108	257	137	55	107	33
<b>30</b>	25	58	82	e41	---	342	79	334	125	52	95	34
<b>31</b>	30	---	79	e41	---	282	---	609	---	50	74	---
TOTAL	711	2356	3152	1785	1719	6910	3681	10534	7752	2763	1700	1276
MEAN	22.9	78.5	102	57.6	59.3	223	123	340	258	89.1	54.8	42.5
MAX	31	191	355	91	121	553	238	1210	686	172	107	62
MIN	17	25	48	41	41	112	76	69	125	50	38	33
CFSM	0.12	0.41	0.53	0.30	0.31	1.16	0.64	1.77	1.35	0.46	0.29	0.22
IN.	0.14	0.46	0.61	0.35	0.33	1.34	0.71	2.04	1.50	0.54	0.33	0.25

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 – 2004, BY WATER YEAR (WY)**

MEAN	102	122	139	117	162	241	249	188	185	114	85.7	109
MAX	473	372	493	316	455	554	652	542	646	522	258	579
(WY)	1987	1986	1983	1974	1971	1979	1993	1974	2000	1993	1972	1972
MIN	22.9	36.3	29.9	28.7	35.8	62.2	66.7	55.0	34.6	26.0	25.3	21.1
(WY)	2004	1972	1990	1977	1978	1968	2003	1989	1988	1988	1988	1988

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1966 – 2004**

ANNUAL TOTAL	23274	44339		
ANNUAL MEAN	63.8	121		151
HIGHEST ANNUAL MEAN				288
LOWEST ANNUAL MEAN				52.4
HIGHEST DAILY MEAN	355	Dec 11	1210	May 24
LOWEST DAILY MEAN	17	Oct 8–11	17	Oct 8–11
ANNUAL SEVEN-DAY MINIMUM	18	Oct 5	18	Oct 5
MAXIMUM PEAK FLOW			1270	May 24
MAXIMUM PEAK STAGE			9.84	May 24
INSTANTANEOUS LOW FLOW			16	Oct 8–11
ANNUAL RUNOFF (CFSM)	0.332		0.631	
ANNUAL RUNOFF (INCHES)	4.51		8.59	
10 PERCENT EXCEEDS	116		272	
50 PERCENT EXCEEDS	50		71	
90 PERCENT EXCEEDS	23		34	

**LOCATION.**— Lat 42°22'35", long 88°14'11" (NAD of 1927), 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 Stratton Lock and Dam (previously known as McHenry Dam), and at mile 103.0.

**DRAINAGE AREA.**— 1,205 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE**

DISCHARGE: December 1997 to August 1999.

STAGE: October 1939 to current year.

**SURFACE—WATER QUALITY**

SEDIMENT: December 1997 to May 1999.

MISCELLANEOUS: Sediment concentration and particle size, water years 1998–99.

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

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 733.00 ft above NGVD of 1929 (levels by Illinois Department of Transportation). Oct. 1, 1939 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). Suspended-sediment samples were collected twice weekly with more frequent samples collected during high runoff periods.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Maximum recorded discharge, 4,780 ft<sup>3</sup>/s, June 17, 1999, gage height, 5.91 ft; maximum gage height, 7.55 ft, present datum, April 6, 1960, discharge unknown; minimum recorded discharge, -1,300 ft<sup>3</sup>/s, June 25, 1998; minimum gage height, 1.43 ft, present datum, Mar. 9 1967.

**SUSPENDED—SEDIMENT CONCENTRATION:** Maximum daily, 420 mg/L, May 17, 1999; minimum daily, 2 mg/L, Jan. 20 to Feb. 3, 1998.

**SUSPENDED—SEDIMENT LOAD:** Maximum daily, 1,680 tons, May 17, 1999; minimum daily, 5.1 tons, Jan. 25 to Jan. 27, 1998.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 4.57 ft, May 31; minimum, 2.17 ft, Jan. 25, 27, but may have been less during period of missing record, Jan. 28.

**Gage height, feet, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.32	4.20	2.60	2.63	2.23	2.63	3.94	4.38	4.40	4.07	4.06	3.98
2	4.52	4.24	2.62	2.55	2.26	2.66	4.00	4.47	4.45	4.05	4.04	3.95
3	4.48	4.24	2.60	2.57	2.28	2.68	4.00	4.46	4.48	3.99	4.10	3.90
4	4.36	4.28	2.57	2.56	2.28	2.72	4.01	e4.48	4.48	4.00	4.14	3.94
5	4.40	4.27	2.56	2.57	2.30	2.78	3.89	e4.39	4.43	4.06	4.12	3.90
6	4.31	4.26	2.53	2.58	2.32	2.80	3.99	4.40	4.44	4.13	4.13	3.85
7	4.38	4.18	2.52	2.50	2.31	2.82	4.02	---	4.38	4.19	4.14	3.89
8	4.35	4.16	2.53	2.54	2.30	2.86	3.96	---	4.40	4.31	4.14	3.93
9	4.38	4.21	2.49	2.55	2.32	2.87	3.94	---	4.41	4.39	4.09	3.93
10	4.38	4.28	2.49	2.55	2.33	2.89	3.97	---	4.35	4.37	4.05	3.93
11	4.36	4.30	2.50	2.56	2.31	2.91	4.01	---	4.45	4.39	4.10	3.92
12	4.34	4.27	2.50	2.52	2.31	2.94	4.06	e4.32	4.42	4.40	4.07	3.92
13	4.31	4.25	2.52	2.51	2.31	2.98	4.02	4.32	4.39	4.37	4.02	3.96
14	4.30	4.28	2.50	2.49	2.33	2.99	3.97	4.33	4.36	4.34	4.00	4.02
15	4.32	4.31	2.53	2.46	2.40	3.04	3.92	4.33	4.33	4.39	3.99	4.01
16	4.31	4.27	2.57	2.45	2.35	3.12	4.20	4.25	4.30	4.37	3.99	3.99
17	4.27	4.23	2.58	2.42	2.35	3.23	4.13	4.20	4.25	4.39	3.99	3.99
18	4.24	4.19	2.58	2.36	2.30	3.38	4.05	4.14	4.26	4.42	3.98	4.01
19	4.27	3.98	2.66	2.33	2.35	3.53	4.01	4.16	4.29	4.28	3.96	3.97
20	4.28	3.68	2.69	2.31	2.33	3.63	3.95	4.23	4.16	4.20	3.94	3.96
21	4.28	3.44	2.77	2.29	2.41	3.65	4.08	4.24	4.12	4.28	3.91	3.95
22	4.28	3.22	2.85	2.28	2.51	3.72	4.14	4.22	4.10	4.30	3.97	3.96
23	4.30	3.03	2.92	2.26	2.50	3.77	4.13	4.23	4.11	4.25	3.95	3.94
24	4.29	2.94	3.00	2.22	2.51	3.78	4.13	4.24	4.08	4.18	3.85	3.94

## ILLINOIS RIVER BASIN

**05548500 Fox River at Johnsburg, IL--Continued**

<b>25</b>	4.30	2.80	3.02	2.20	2.53	3.85	4.15	4.21	4.08	4.08	3.94	3.97
<b>26</b>	4.24	2.71	3.04	2.20	2.57	3.87	---	4.20	4.06	4.01	3.94	3.95
<b>27</b>	4.24	2.65	3.04	e2.17	2.60	3.88	---	4.17	4.03	4.16	4.00	3.95
<b>28</b>	4.26	2.64	3.00	---	2.61	e3.85	e4.18	4.17	4.09	4.14	3.91	3.99
<b>29</b>	4.32	2.56	2.98	2.19	---	3.94	4.22	4.25	4.05	4.09	3.95	3.97
<b>30</b>	4.28	2.62	2.91	2.19	---	3.94	e4.31	4.28	4.08	4.06	3.95	3.96
<b>31</b>	4.24	---	2.83	2.21	---	3.92	---	4.46	---	4.04	3.93	---
MEAN	4.32	3.76	2.69	---	2.38	3.28	---	---	4.27	4.22	4.01	3.95
MAX	4.52	4.31	3.04	---	2.61	3.94	---	---	4.48	4.42	4.14	4.02
MIN	4.24	2.56	2.49	---	2.23	2.63	---	---	4.03	3.99	3.85	3.85

e Estimated

**LOCATION.**— Lat 42°22'35", long 88°14'11" (NAD of 1927), 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 Stratton Lock and Dam (previously known as McHenry Dam), and at mile 103.0.

**DRAINAGE AREA.**— 1,205 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE**

DISCHARGE: December 1997 to August 1999.

STAGE: October 1939 to current year.

**SURFACE–WATER QUALITY**

SEDIMENT: December 1997 to May 1999.

MISCELLANEOUS: Sediment concentration and particle size, water years 1998–99.

**REVISED RECORDS.**— WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder and phone telemeter. Datum of gage is 733.00 ft above NGVD of 1929 (levels by Illinois Department of Transportation). Oct. 1, 1939 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). Suspended–sediment samples were collected twice weekly with more frequent samples collected during high runoff periods.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum recorded discharge, 4,780 ft<sup>3</sup>/s, June 17, 1999, gage height, 5.91 ft; maximum gage height, 7.55 ft, present datum, April 6, 1960, discharge unknown; minimum recorded discharge, –1,300 ft<sup>3</sup>/s, June 25, 1998; minimum gage height, 1.43 ft, present datum, Mar. 9 1967.

**SUSPENDED–SEDIMENT CONCENTRATION:** Maximum daily, 420 mg/L, May 17, 1999; minimum daily, 2 mg/L, Jan. 20 to Feb. 3, 1998.

**SUSPENDED–SEDIMENT LOAD:** Maximum daily, 1,680 tons, May 17, 1999; minimum daily, 5.1 tons, Jan. 25 to Jan. 27, 1998.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 5.96 ft, May 28; minimum, 2.35 ft, Jan. 21.

Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.98	4.15	2.55	2.69	2.57	3.30	4.36	4.28	5.61	4.17	3.92	4.24
2	3.96	4.26	2.59	2.69	2.58	3.43	4.32	4.27	5.61	4.20	3.98	4.21
3	3.91	4.42	2.57	2.70	2.61	3.49	4.24	4.21	5.50	4.19	4.02	4.20
4	3.98	4.34	2.57	2.80	2.62	3.48	4.15	4.08	5.33	4.16	4.13	4.16
5	4.00	4.30	2.63	2.72	2.63	3.50	4.04	4.17	5.12	4.23	4.15	4.12
6	—	4.19	2.57	2.66	2.66	3.67	3.98	4.14	4.93	4.18	4.13	4.08
7	3.94	4.04	2.54	2.61	2.67	3.74	4.02	4.18	4.77	4.18	4.15	4.15
8	3.96	3.93	2.54	2.59	2.68	3.94	3.96	4.08	4.58	4.14	4.16	4.15
9	3.98	3.73	2.59	2.61	2.67	3.95	3.96	4.09	4.46	4.17	4.19	4.09
10	3.99	3.63	2.71	2.61	2.69	3.86	3.97	4.17	4.56	4.14	4.21	4.03
11	3.94	3.56	2.64	2.58	2.70	3.85	3.94	4.24	4.46	—	4.18	3.98
12	3.96	3.35	2.68	2.60	2.71	3.93	3.93	4.22	4.35	—	4.18	3.99
13	3.95	3.37	2.73	2.61	2.70	3.82	3.88	4.31	4.43	e4.18	4.14	4.00
14	4.06	3.26	2.76	2.59	2.72	3.55	3.83	4.42	4.48	—	4.10	3.97
15	4.02	3.21	2.73	2.60	2.73	3.75	3.77	4.59	4.47	—	4.05	3.92
16	4.06	3.13	2.68	2.59	2.73	3.86	3.76	4.72	4.43	—	4.03	4.04
17	4.03	3.01	2.73	2.59	2.73	3.84	3.83	4.76	4.41	—	4.05	4.05
18	3.99	3.06	2.70	2.59	2.73	3.82	3.66	4.94	4.41	—	4.02	3.99
19	4.03	3.03	2.65	2.55	2.74	3.74	3.68	4.85	4.55	—	4.05	3.96
20	3.96	3.00	2.63	2.53	2.75	3.68	3.91	4.78	4.63	—	4.05	3.96
21	4.04	3.18	2.48	2.46	2.78	3.77	3.91	4.83	4.78	—	4.02	3.94
22	4.04	3.14	2.55	2.52	2.80	3.66	4.08	5.04	4.77	—	3.93	3.92
23	4.03	2.91	2.57	2.53	2.86	3.61	4.09	5.20	4.68	—	4.06	3.90
24	4.02	2.76	2.61	2.54	2.92	3.61	4.18	5.51	4.68	—	4.04	3.88
25	4.04	2.81	2.60	2.55	3.00	3.65	4.11	5.77	4.61	4.08	4.05	3.91

ILLINOIS RIVER BASIN  
**05548500 Fox River at Johnsbury, IL--Continued**

<b>26</b>	4.04	2.88	2.59	2.56	3.07	3.80	4.18	5.89	4.52	4.04	4.04	3.90
<b>27</b>	4.05	2.84	2.57	2.57	3.12	3.90	4.25	5.91	4.40	4.02	4.09	3.91
<b>28</b>	4.00	2.75	2.52	2.58	3.16	3.95	4.07	5.89	4.24	4.01	4.25	4.00
<b>29</b>	4.07	2.58	2.60	2.58	3.23	4.13	4.14	5.76	4.10	3.98	4.22	3.90
<b>30</b>	4.08	2.57	2.60	2.58	---	4.30	4.33	5.70	4.12	3.98	4.22	3.88
<b>31</b>	4.08	---	2.56	2.57	---	4.37	---	5.66	---	3.97	4.24	---
MEAN	---	3.38	2.61	2.60	2.78	3.77	4.02	4.80	4.67	---	4.10	4.01
MAX	---	4.42	2.76	2.80	3.23	4.37	4.36	5.91	5.61	---	4.25	4.24
MIN	---	2.57	2.48	2.46	2.57	3.30	3.66	4.08	4.10	---	3.92	3.88

e Estimated

ILLINOIS RIVER BASIN  
05549500 Fox River near McHenry, IL

403

**LOCATION.**— Lat 42°18'36", long 88°15'05" (NAD of 1927), 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 at mile 97.8.

**DRAINAGE AREA.**— 1,250 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

STAGE: June 1941 to current year.

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

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 733.00 ft above NGVD of 1929 (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).

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: 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, 4.58 ft, July 15; minimum, 1.93 ft, Jan. 2, 27, 28, but may have been less during period of missing record Jan. 28 to Mar. 23.

Gage height, feet WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.28	4.18	2.48	2.16	---	---	3.93	4.29	4.35	4.09	4.06	4.01
2	4.45	4.21	2.51	2.31	---	---	4.03	4.37	4.37	4.07	4.06	3.97
3	4.37	4.20	2.49	2.47	---	---	4.03	4.33	4.41	4.00	4.11	3.91
4	4.22	4.26	2.47	2.44	---	---	4.05	4.35	4.40	4.04	4.16	3.98
5	4.29	4.25	2.45	2.48	---	---	3.89	4.28	4.36	4.10	4.13	3.93
6	4.17	4.24	2.42	2.51	---	---	3.98	4.14	4.35	4.15	4.13	3.89
7	4.29	4.11	2.40	2.35	---	---	4.04	4.12	4.32	4.18	4.16	3.93
8	4.24	4.08	2.42	2.43	---	---	3.98	4.01	4.31	4.29	4.15	3.95
9	4.32	4.14	2.38	2.46	---	---	3.92	3.94	4.36	4.36	4.12	3.96
10	4.33	4.25	2.38	2.47	---	---	3.95	4.00	4.29	4.33	4.08	3.96
11	4.32	4.29	2.43	2.45	---	---	3.99	3.49	4.43	4.37	4.10	3.94
12	4.30	4.24	2.43	2.35	---	---	4.05	4.04	4.40	4.40	4.08	3.91
13	4.28	4.21	2.47	2.35	---	---	3.97	4.04	4.38	4.37	4.04	3.97
14	4.24	4.26	2.43	2.33	---	---	3.86	4.03	4.38	4.32	4.02	4.03
15	4.29	4.31	2.49	2.29	---	---	3.80	4.04	4.36	4.37	4.00	4.02
16	4.29	4.28	2.54	2.27	---	---	4.16	3.97	4.31	4.33	4.02	3.94
17	4.21	4.23	2.52	2.25	---	---	4.10	3.96	4.26	4.33	4.04	3.96
18	4.18	4.14	2.45	2.14	---	---	4.01	3.93	4.24	4.38	4.01	4.04
19	4.26	3.68	2.59	2.10	---	---	3.95	4.03	4.26	4.26	3.98	4.00
20	4.26	3.17	2.59	2.09	---	---	3.83	4.12	4.17	4.18	3.94	4.01
21	4.24	2.96	2.69	2.09	e2.38	---	4.01	4.12	4.15	4.27	3.90	3.99
22	4.27	2.87	2.78	2.11	---	---	4.08	4.15	4.13	4.30	4.02	3.99
23	4.29	2.75	2.86	2.06	---	---	4.06	4.18	4.11	4.26	3.99	3.97
24	4.26	2.69	2.93	2.00	---	3.83	4.05	4.21	4.08	4.19	3.85	3.96
25	4.26	2.55	2.95	1.96	---	3.92	4.10	4.19	4.07	4.07	3.95	4.00
26	4.19	2.48	2.95	1.97	---	3.94	4.06	4.18	4.06	3.98	3.94	3.96
27	4.19	2.51	2.90	1.93	---	3.95	3.99	4.11	4.03	4.18	4.04	3.97
28	4.23	2.53	2.82	---	---	3.87	4.10	4.13	4.11	4.15	3.90	4.03
29	4.31	2.43	2.84	---	---	3.97	4.16	4.22	4.09	4.11	3.97	4.00
30	4.27	2.61	2.73	---	---	3.94	4.21	4.20	4.10	4.06	4.00	3.98
31	4.22	---	2.53	---	---	3.90	---	4.41	---	4.05	3.96	---
MEAN	4.27	3.64	2.59	---	---	---	4.01	4.12	4.25	4.21	4.03	3.97

05549500 Fox River near McHenry, IL--Continued

MAX	4.45	4.31	2.95	---	---	---	4.21	4.41	4.43	4.40	4.16	4.04
MIN	4.17	2.43	2.38	---	---	---	3.80	3.49	4.03	3.98	3.85	3.89

e Estimated



ILLINOIS RIVER BASIN  
05549500 Fox River near McHenry, IL

405

**LOCATION.**— Lat 42°18'36", long 88°15'05" (NAD of 1927), 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 at mile 97.8.

**DRAINAGE AREA.**— 1,250 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

STAGE: June 1941 to current year.

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

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 733.00 ft above NGVD of 1929 (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).

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: 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, 4.63 ft, May 18; minimum, 1.52 ft, Dec. 12, result of freezeup.

Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.02	4.17	2.46	2.58	2.52	3.25	4.02	4.23	4.15	4.05	3.94	4.25
2	3.99	4.28	2.51	2.58	2.54	3.35	3.99	4.23	4.15	4.13	3.99	4.23
3	3.91	4.40	2.51	2.62	2.56	3.29	3.95	4.19	4.05	4.15	4.05	4.23
4	4.02	4.23	2.54	2.78	2.58	3.15	3.86	4.03	3.89	4.12	4.17	4.20
5	4.04	4.10	2.64	2.63	2.60	2.85	3.75	4.17	3.67	4.15	4.20	4.15
6	4.02	3.93	2.53	2.45	2.62	2.76	3.82	4.14	3.77	4.06	4.17	4.08
7	3.97	3.76	2.48	2.39	2.64	2.84	3.93	4.21	3.82	4.06	4.19	4.17
8	3.98	3.65	2.48	2.37	2.64	3.06	3.91	4.11	3.68	4.07	4.19	4.18
9	4.01	3.43	2.57	2.43	2.63	3.09	3.91	4.11	3.77	4.10	4.18	4.11
10	4.02	3.45	2.51	2.48	2.65	3.15	3.91	4.11	3.89	4.09	4.20	4.05
11	3.95	3.45	2.03	2.44	2.67	3.38	3.90	4.15	3.48	4.07	4.18	4.01
12	3.98	3.23	1.63	2.49	2.68	3.51	3.92	4.10	3.59	4.08	4.19	4.02
13	3.96	3.27	1.77	2.54	2.66	3.34	3.88	4.13	4.02	4.07	4.17	4.00
14	4.09	3.13	2.30	2.50	2.69	2.99	3.80	4.18	4.01	4.11	4.14	3.95
15	4.02	3.07	2.24	2.49	2.70	3.52	3.70	4.27	4.01	4.09	4.09	3.87
16	4.08	3.00	2.18	2.51	2.69	3.81	3.72	4.34	4.00	4.07	4.04	4.06
17	4.04	2.86	2.29	2.52	2.70	3.75	3.84	4.19	3.96	4.10	4.06	4.08
18	3.99	2.95	2.26	2.54	2.69	3.71	3.57	4.25	3.97	4.01	4.02	4.02
19	4.06	2.90	2.33	2.41	2.71	3.59	3.64	4.08	4.09	3.97	4.09	3.98
20	3.96	2.80	2.35	2.40	2.73	3.58	3.89	3.96	4.19	4.01	4.08	3.97
21	4.06	3.09	2.15	2.32	2.76	3.70	3.87	4.01	4.20	4.03	4.06	3.94
22	4.06	3.05	2.35	2.45	2.80	3.55	4.06	e4.12	4.10	4.08	3.93	3.95
23	4.04	2.68	2.46	2.46	2.87	3.48	4.06	e3.92	3.91	4.12	4.07	3.91
24	4.03	2.54	2.53	2.47	2.96	3.46	4.14	e4.08	3.85	4.08	4.04	3.89
25	4.05	2.56	2.50	2.48	3.03	3.49	4.05	4.31	3.80	4.08	4.03	3.95
26	4.05	2.73	2.48	2.51	3.08	3.63	4.12	4.40	3.72	4.05	4.02	3.94
27	4.06	2.70	2.42	2.51	3.12	3.63	4.17	4.41	3.60	4.05	4.09	3.93
28	3.98	2.63	2.32	2.51	3.14	3.65	3.91	4.40	3.45	4.03	4.27	4.05
29	4.07	2.39	2.48	2.52	3.19	3.84	4.03	4.30	3.55	3.99	4.25	3.93
30	4.07	2.45	2.45	2.52	---	4.00	4.28	4.24	3.87	3.99	4.22	3.90
31	4.08	---	2.39	2.52	---	4.05	---	4.24	---	4.01	4.26	---
MEAN	4.02	3.23	2.36	2.50	2.75	3.43	3.92	4.18	3.87	4.07	4.12	4.03
MAX	4.09	4.40	2.64	2.78	3.19	4.05	4.28	4.41	4.20	4.15	4.27	4.25
MIN	3.91	2.39	1.63	2.32	2.52	2.76	3.57	3.92	3.45	3.97	3.93	3.87

e Estimated

**05549500 Fox River near McHenry, IL--Continued**

WTR YR 2004	MEAN 3.54	MAX 4.41	MIN 1.63
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ILLINOIS RIVER BASIN  
**05549501 Fox River near Mc Henry, II (Tailwater)**

407

**LOCATION.**— Lat 42°18'33", long 88°15'05" (NAD of 1927), in NW1/4 sec.12, T.44 N., R.8 E., McHenry County, Hydrologic Unit 07120006, on left bank of main channel, 30 ft downstream from Stratton Lock and Dam, 2.5 mi downstream from McHenry, and at mile 97.8.

**DRAINAGE AREA.**— 1,250 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

STAGE: October 2002 to current year.

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 730.15 ft above NGVD of 1929.

**REMARKS.**— Stage regulated by Stratton Lock and Dam.

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height, 2.85 ft, May 12, 13, 14, 2003; minimum, 0.28 ft, Sept. 4, 2003.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 2.85 ft, May 12, 13, 14; minimum, 0.28 ft, Sept. 4.

Gage height, feet, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	0.92	1.07	1.89	0.77	0.55	1.23	1.19	1.35	0.83	0.86	0.38
2	---	0.94	1.05	1.50	0.77	0.52	1.29	1.49	1.36	0.80	0.90	0.38
3	---	0.97	1.07	1.02	0.76	0.56	1.31	1.59	1.40	0.77	0.94	0.36
4	---	0.98	1.07	1.00	0.75	0.55	1.36	1.64	1.40	0.77	1.02	0.35
5	---	0.99	1.08	0.94	0.75	0.55	1.49	2.12	1.33	0.86	1.00	0.36
6	---	0.98	1.09	0.89	0.74	0.57	1.50	2.61	1.31	0.94	0.92	0.37
7	---	1.03	1.08	0.96	0.74	0.57	1.58	2.71	1.26	1.05	0.90	0.37
8	1.49	0.94	1.07	0.96	0.75	0.54	1.32	2.63	1.24	1.21	0.90	0.38
9	1.26	0.96	1.07	0.92	0.74	0.58	1.33	2.70	1.29	1.40	0.86	0.37
10	1.12	0.98	1.05	0.89	0.74	0.58	1.26	2.76	1.25	1.41	0.80	0.38
11	1.09	1.01	0.97	0.83	0.74	0.59	1.26	2.72	1.38	1.43	0.78	0.39
12	1.05	1.00	0.95	1.01	0.74	0.59	1.33	2.78	1.38	1.48	0.76	0.40
13	1.01	0.99	0.94	1.03	0.73	0.55	1.33	2.80	1.35	1.44	0.72	0.41
14	1.01	1.00	0.93	1.04	0.70	0.58	1.30	2.79	1.33	1.36	0.65	0.45
15	0.97	1.03	0.90	1.05	0.68	0.59	1.26	2.76	1.28	1.61	0.56	0.46
16	0.96	1.01	0.88	1.05	0.66	0.61	1.47	2.67	1.18	1.86	0.54	0.47
17	0.93	0.98	0.90	1.05	0.66	0.61	1.53	2.61	1.08	1.83	0.55	0.49
18	0.93	0.99	1.00	1.06	0.65	0.60	1.29	2.46	1.18	1.90	0.51	0.49
19	0.91	1.59	0.93	1.07	0.59	0.58	1.13	2.08	1.78	1.76	0.50	0.44
20	0.93	2.11	0.95	1.06	0.57	0.80	1.04	1.98	1.30	1.59	0.50	0.46
21	0.94	2.13	0.95	1.01	0.53	1.03	1.07	2.01	1.01	1.51	0.47	0.47
22	0.90	1.86	0.92	0.92	0.52	1.07	1.18	1.70	0.94	1.33	0.46	0.45
23	0.93	1.71	0.84	0.92	0.54	1.08	1.20	1.40	0.89	1.23	0.43	0.45
24	0.94	1.69	0.94	0.93	0.55	1.10	1.18	1.41	0.87	1.14	0.41	0.45
25	1.05	1.62	0.95	0.93	0.56	1.15	1.12	1.40	0.84	1.02	0.37	0.43
26	1.26	1.55	0.97	0.93	0.56	1.19	0.87	1.36	0.80	0.89	0.39	0.46
27	1.28	1.33	1.13	0.93	0.56	1.24	0.69	1.27	0.80	0.97	0.40	0.46
28	1.18	1.06	1.35	0.88	0.55	1.21	0.68	1.12	0.85	1.00	0.41	0.44
29	1.04	1.04	1.36	0.79	---	1.22	0.75	1.01	0.84	0.94	0.37	0.45
30	0.99	0.92	1.33	0.77	---	1.23	0.83	1.04	0.84	0.88	0.38	0.43
31	0.94	---	1.52	0.78	---	1.23	---	1.35	---	0.84	0.38	---
MEAN	---	1.21	1.04	1.00	0.66	0.79	1.21	2.01	1.17	1.23	0.63	0.42
MAX	---	2.13	1.52	1.89	0.77	1.24	1.58	2.80	1.78	1.90	1.02	0.49
MIN	---	0.92	0.84	0.77	0.52	0.52	0.68	1.01	0.80	0.77	0.37	0.35

ILLINOIS RIVER BASIN  
**05549501 Fox River near Mc Henry, IL (Tailwater)**

**LOCATION.**— Lat 42°18'33", long 88°15'05" (NAD of 1927), in NW1/4 sec.12, T.44 N., R.8 E., McHenry County, Hydrologic Unit 07120006, on left bank of main channel, 30 ft downstream from Stratton Lock and Dam, 2.5 mi downstream from McHenry, and at mile 97.8.

**DRAINAGE AREA.**— 1,250 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

STAGE: October 2002 to current year.

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 730.15 ft above NGVD of 1929.

**REMARKS.**— Stage regulated by Stratton Lock and Dam.

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height, 6.34 ft, May 27, 2004; minimum, 0.28 ft, Sept. 4, 2003.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 6.34 ft, May 27; minimum, 0.32 ft, Oct. 1.

Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.41	0.61	1.18	1.23	1.00	1.33	3.08	1.85	6.11	2.41	0.91	1.08
2	0.42	0.75	1.17	1.23	0.97	1.47	3.00	1.82	6.07	2.15	0.88	1.07
3	0.46	1.34	1.12	1.20	0.96	1.91	2.89	1.66	5.95	2.02	0.87	1.05
4	0.49	1.95	0.99	1.15	0.94	2.33	2.81	1.42	5.76	1.92	0.99	1.02
5	0.52	2.38	0.96	1.16	0.92	2.85	2.71	1.34	5.53	2.12	1.01	1.00
6	0.51	2.53	0.97	1.39	0.93	3.43	2.33	1.28	5.03	2.15	1.00	0.95
7	0.50	2.49	1.02	1.36	0.93	3.52	2.06	1.37	4.55	2.10	1.00	0.92
8	0.50	2.45	1.01	1.35	0.93	3.62	1.89	1.24	4.29	2.01	1.04	0.92
9	0.50	2.36	0.99	1.28	0.94	3.62	1.80	1.24	3.90	1.94	1.07	0.88
10	0.50	2.02	1.53	1.16	0.93	3.32	1.79	1.60	3.87	1.99	1.11	0.86
11	0.51	1.68	2.22	1.14	0.93	2.94	1.78	2.03	4.39	1.96	1.10	0.84
12	0.48	1.58	2.52	1.13	0.93	2.88	1.67	2.06	4.29	1.85	1.09	0.82
13	0.49	1.54	2.66	1.11	0.94	2.88	1.53	2.36	3.69	1.73	1.06	0.80
14	0.54	1.56	2.34	1.10	0.94	2.81	1.47	2.78	3.60	1.67	1.03	0.79
15	0.56	1.55	2.21	1.11	0.93	2.37	1.45	3.11	3.54	1.56	0.99	0.80
16	0.54	1.51	2.08	1.10	0.94	1.83	1.34	3.34	3.35	1.53	0.92	0.81
17	0.53	1.52	2.03	1.10	0.95	1.82	1.29	3.71	3.28	1.48	0.86	0.83
18	0.53	1.59	2.09	1.08	0.96	1.93	1.28	4.48	3.25	1.33	0.85	0.81
19	0.55	1.58	1.93	1.16	0.96	1.94	1.17	4.77	3.31	1.16	0.85	0.80
20	0.56	1.62	1.76	1.12	0.97	1.83	1.34	4.82	3.34	1.01	0.84	0.77
21	0.52	1.54	1.61	1.07	0.99	1.85	1.39	4.86	3.66	0.98	0.84	0.74
22	0.53	1.52	1.52	0.90	1.00	1.85	1.56	e5.27	3.99	1.13	0.83	0.73
23	0.52	1.60	1.35	0.87	1.02	1.85	1.62	e5.57	4.07	1.22	0.82	0.73
24	0.52	1.59	1.19	0.87	1.03	1.92	1.75	e5.92	4.15	1.19	0.85	0.67
25	0.54	1.59	1.24	0.87	1.02	1.95	1.76	6.17	4.13	1.16	0.87	0.61
26	0.51	1.52	1.25	0.88	1.09	2.21	1.80	6.29	4.06	1.07	0.88	0.61
27	0.53	1.48	1.29	0.90	1.17	2.62	1.93	6.30	3.97	0.98	0.91	0.60
28	0.53	1.43	1.30	0.90	1.21	2.72	1.73	6.07	3.85	0.95	1.07	0.58
29	0.53	1.41	1.24	0.90	1.26	2.82	1.52	5.99	3.42	0.95	1.08	0.57
30	0.59	1.25	1.26	0.93	---	2.98	1.76	6.14	2.82	0.93	1.06	0.57
31	0.57	---	1.26	0.98	---	3.12	---	6.19	---	0.91	1.07	---
MEAN	0.52	1.65	1.53	1.09	0.99	2.47	1.85	3.65	4.17	1.53	0.96	0.81
MAX	0.59	2.53	2.66	1.39	1.26	3.62	3.08	6.30	6.11	2.41	1.11	1.08
MIN	0.41	0.61	0.96	0.87	0.92	1.33	1.17	1.24	2.82	0.91	0.82	0.57

e Estimated

CAL YR 2003      MEAN 1.07      MAX 2.80      MIN 0.35

**05549501 Fox River near Mc Henry, IL (Tailwater)--Continued**

WTR YR 2004	MEAN 1.77	MAX 6.30	MIN 0.41
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ILLINOIS RIVER BASIN  
05550000 Fox River at Algonquin, IL

**LOCATION.**— Lat 42°09'59", long 88°17'25" (NAD of 1927), 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 (Algonquin Road) in Algonquin, 140 ft upstream from Algonquin Dam, and at mile 81.6.

**DRAINAGE AREA.**— 1,403 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1915 to current year. Monthly discharge only for some periods, published in WSP 1308.

STAGE: Water years 1994 to current year.

**BIOLOGICAL**

ALGAE: Pigment and biomass, Water year 1989.

**REVISED RECORDS.**— WSP 1175: 1916. WDR IL-75-1: Drainage area.

**GAGE.**— Water-stage recorder, phone telemeter, and concrete dam with adjustable gate. Datum of gage is 729.48 ft above NGVD of 1929. Prior to Oct. 20, 1933, nonrecording gage at site 20 ft downstream at same datum.

**REMARKS.**— Flow regulated by gate in Algonquin Dam, Stratton Lock and Dam (previously known as McHenry Dam), 16 mi upstream from station, and occasionally affected by wind action.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 6,720 ft<sup>3</sup>/s, May 22, 2004, gage height 3.09 ft, due to regulation; maximum gage height, 4.50 ft, April 1, 1916; from graph based on gage readings; no flow, Nov. 26, 1952, Nov. 20, 1953, Oct. 25, 1956 and Sept. 9, 14, 1958, result of windstorm.

**REMARKS FOR CURRENT YEAR.**— Records poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	136	232	601	607	441	666	2210	1000	5750	1680	e360	553
2	129	322	594	600	394	741	2120	988	5630	1420	e360	542
3	110	620	575	622	363	1010	2040	900	5370	1320	e380	539
4	166	1010	498	637	341	1440	1890	729	5000	1250	e480	510
5	190	1460	502	578	338	1850	1700	690	4560	1300	e580	471
6	183	1620	470	557	336	2510	1440	661	e3900	1360	e510	419
7	157	1570	467	581	332	2610	1130	728	e3500	1330	e450	455
8	158	1540	480	574	329	2690	1060	634	e3350	1260	e440	467
9	168	1460	504	557	327	2650	972	597	e3250	1170	e450	429
10	168	1190	785	481	330	2470	960	760	e3150	1170	e455	382
11	144	903	1330	463	332	2150	961	1120	e3300	1140	e460	355
12	146	787	1530	472	330	2080	934	1170	e3800	1100	e465	350
13	144	825	1420	473	328	1990	849	1430	e3900	985	e470	335
14	222	789	1270	471	337	1910	780	1870	3770	957	e470	307
15	199	799	1200	465	336	1740	738	2200	3380	878	e460	279
16	212	788	1160	466	329	1070	702	2310	3060	834	e450	363
17	190	762	1170	473	330	966	701	2660	2800	814	e420	386
18	158	859	1090	466	336	1070	600	3750	2610	727	e400	357
19	193	856	1060	455	343	1040	567	3980	2570	621	e390	329
20	163	826	778	451	356	1060	708	4030	2490	506	e380	319
21	189	872	742	443	369	1090	722	4020	2540	535	e370	301
22	195	829	749	360	374	1010	835	5090	3010	e550	e360	305
23	181	761	737	332	399	999	874	5430	3070	e560	e350	290
24	168	772	610	327	425	1080	938	5560	3200	e540	e350	263
25	183	797	577	327	431	1100	939	e5400	3190	e520	e360	253
26	170	812	582	327	464	1360	952	e5200	3100	e490	e380	237
27	170	784	574	332	521	1800	1060	e5050	3000	e460	e410	228
28	131	769	598	327	563	1900	851	e5000	2880	e420	587	279

ILLINOIS RIVER BASIN  
05550000 Fox River at Algonquin, IL---Continued

411

29	159	700	619	336	599	2090	720	e5000	2600	e380	604	232
30	174	625	600	363	---	2230	917	e5200	2080	e370	557	206
31	171	---	609	434	---	2310	---	6020	---	e370	563	---
TOTAL	5227	26939	24481	14357	11033	50682	31870	89177	103810	27017	13721	10741
MEAN	169	898	790	463	380	1635	1062	2877	3460	872	443	358
MAX	222	1620	1530	637	599	2690	2210	6020	5750	1680	604	553
MIN	110	232	467	327	327	666	567	597	2080	370	350	206
CFSM	0.12	0.64	0.56	0.33	0.27	1.17	0.76	2.05	2.47	0.62	0.32	0.26
IN.	0.14	0.71	0.65	0.38	0.29	1.34	0.85	2.36	2.75	0.72	0.36	0.28

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 – 2004, BY WATER YEAR (WY)

MEAN	623	820	783	715	876	1641	1700	1185	890	611	468	505
MAX	3650	2492	3105	2675	3613	4162	4961	3786	3610	2902	2964	2926
(WY)	1987	1986	1983	1960	1938	1918	1993	1973	2000	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 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1916 – 2004

ANNUAL TOTAL	193708		409055			
ANNUAL MEAN	531		1118		901	
HIGHEST ANNUAL MEAN					1936	
LOWEST ANNUAL MEAN					202	
HIGHEST DAILY MEAN	2000	May 13,14	6020	May 31	6610	Apr 2 1979
LOWEST DAILY MEAN	90	Sep 6	110	Oct 3	12	A
ANNUAL SEVEN-DAY MINIMUM	102	Sep 6	153	Oct 1	19	Oct 16 1956
MAXIMUM PEAK FLOW			6720	B May 22	6720	B May 22 2004
MAXIMUM PEAK STAGE			3.32	C May 22	4.50	D Apr 1 1916
INSTANTANEOUS LOW FLOW			62	Oct 3	0.00	E
ANNUAL RUNOFF (CFSM)	0.378		0.797		0.642	
ANNUAL RUNOFF (INCHES)	5.14		10.85		8.72	
10 PERCENT EXCEEDS	1020		2920		2030	
50 PERCENT EXCEEDS	410		614		604	
90 PERCENT EXCEEDS	144		248		192	

A – Aug. 30, 31, 1934; July 28, 1942.

B – Gage height 3.09 ft, due to regulation.

C – Discharge 4,770 ft<sup>3</sup>/s, due to regulation.

D – From graph based on gage readings.

E – Nov. 26, 1952; Nov. 20, 1953; Oct. 25, 1956 and Sept. 9, 14, 1958; result of windstorms.

FOX RIVER BASIN  
**05550001 Fox River at Algonquin, II (Tailwater)**

**LOCATION.**— Lat 42°09'58", long 88°17'26" (NAD of 1927), in SW1/4NE1/4NW1/4 sec.34, T.43 N., R.8 E., McHenry County, Hydrologic Unit 07120006, on right bank 60 ft downstream from bridge on State Highway 62 (Algonquin Road) in Algonquin, 140 ft downstream from Algonquin Dam, and at mile 81.6.

**DRAINAGE AREA.**— 1,403 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE

STAGE: October 2002 to current year.

**GAGE.**— Water—stage recorder and phone telemeter. Datum of gage is 719.48 ft above NGVD of 1929.

**REMARKS.**— Flow regulated by gate in Algonquin Dam, Stratton Lock and Dam (previously known as McHenry Dam), 16 mi upstream from station, and occasionally affected by wind action.

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE:Maximum gage height, 9.07 ft, May 12, 2003; minimum, 6.02 ft Sept. 3, 2003.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 9.07 ft, May 12; minimum, 6.02 ft, Sept. 3.

Gage height, feet, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.63	6.71	7.06	7.94	6.60	6.38	7.25	7.34	7.33	6.65	6.62	6.20
2	7.05	6.74	7.10	7.76	6.61	6.40	7.39	7.65	7.31	6.60	6.74	6.15
3	7.56	6.75	7.06	7.15	6.62	6.39	7.43	7.73	7.36	6.51	6.78	6.08
4	7.58	6.81	7.05	7.02	6.61	6.42	---	7.72	7.37	6.52	6.85	6.10
5	7.62	6.82	7.03	7.04	6.60	6.44	---	8.13	7.29	6.67	6.81	6.08
6	7.52	6.80	7.02	7.03	6.60	6.41	---	8.67	7.25	6.75	6.77	6.12
7	7.49	6.74	7.03	6.95	6.59	6.41	---	8.81	7.20	6.90	6.80	6.15
8	7.20	6.65	7.03	7.02	6.58	6.42	---	8.69	7.21	7.08	6.81	6.11
9	7.14	6.65	7.02	7.04	6.59	6.40	---	8.77	7.25	7.29	6.77	6.09
10	6.99	6.77	7.01	6.97	6.59	6.39	---	8.89	7.16	7.28	6.67	6.09
11	6.94	6.84	6.93	6.71	6.57	6.40	---	8.70	7.35	7.30	6.65	6.09
12	6.90	6.81	6.92	6.90	6.58	6.47	---	9.01	7.37	7.37	6.65	6.20
13	6.87	6.77	6.92	6.96	6.59	6.45	---	9.02	7.33	7.33	6.58	6.23
14	6.81	6.81	6.92	6.96	6.59	6.45	---	8.97	7.31	7.24	6.50	6.25
15	6.83	6.91	6.94	6.95	6.60	6.49	---	8.97	7.28	7.60	6.35	6.20
16	6.82	6.89	6.94	6.95	6.59	6.51	---	8.81	7.18	7.73	6.35	6.17
17	6.73	6.98	6.92	6.95	6.57	6.57	7.60	8.71	7.05	7.69	6.36	6.18
18	6.68	7.08	6.96	6.93	6.57	6.69	7.39	8.56	6.99	7.75	6.28	6.21
19	6.74	7.81	7.02	6.93	6.51	6.65	7.10	8.14	7.68	7.62	6.23	6.18
20	6.77	8.24	6.94	6.94	6.48	6.72	6.87	8.03	7.39	7.46	6.18	6.22
21	6.74	8.02	7.00	6.91	6.43	7.00	7.01	7.97	6.96	7.43	6.16	6.22
22	6.77	7.92	6.95	6.81	6.42	7.14	7.21	7.77	6.80	7.27	6.25	6.28
23	6.80	7.81	6.82	6.77	6.40	7.14	7.20	7.40	6.71	7.13	6.21	6.18
24	6.78	7.84	6.94	6.76	6.39	7.10	7.17	7.37	6.64	6.99	6.17	6.16
25	6.85	7.79	6.97	6.76	6.39	7.23	7.20	7.37	6.58	6.76	6.14	6.21
26	7.07	7.70	6.96	6.77	6.38	7.25	6.92	7.34	6.58	6.51	6.17	6.34
27	7.13	7.56	7.02	6.76	6.38	7.25	6.50	7.24	6.52	6.70	6.18	6.38
28	7.08	7.19	7.30	6.73	6.38	7.22	6.54	7.11	6.63	6.81	6.12	6.33
29	6.92	7.10	7.37	6.62	---	7.34	6.65	6.97	6.64	6.72	6.13	6.25
30	6.86	7.19	7.38	6.59	---	7.32	6.78	6.89	6.66	6.63	6.19	6.19
31	6.78	---	7.54	6.60	---	7.26	---	7.34	---	6.57	6.17	---
MEAN	6.99	7.16	7.03	6.94	6.53	6.73	---	8.07	7.08	7.06	6.44	6.19
MAX	7.62	8.24	7.54	7.94	6.62	7.34	---	9.02	7.68	7.75	6.85	6.38
MIN	6.63	6.65	6.82	6.59	6.38	6.38	---	6.89	6.52	6.51	6.12	6.08



FOX RIVER BASIN  
**05550001 Fox River at Algonquin, II (Tailwater)**

413

**LOCATION.**— Lat 42°09'58", long 88°17'26" (NAD of 1927), in SW1/4NE1/4NW1/4 sec.34, T.43 N., R.8 E., McHenry County, Hydrologic Unit 07120006, on right bank 60 ft downstream from bridge on State Highway 62 (Algonquin Road) in Algonquin, 140 ft downstream from Algonquin Dam, and at mile 81.6.

**DRAINAGE AREA.**— 1,403 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE

STAGE: October 2002 to current year.

**GAGE.**— Water—stage recorder and phone telemeter. Datum of gage is 719.48 ft above NGVD of 1929.

**REMARKS.**— Flow regulated by gate in Algonquin Dam, Stratton Lock and Dam (previously known as McHenry Dam), 16 mi upstream from station, and occasionally affected by wind action.

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE:Maximum gage height, 12.85 ft, May 30, 2004; minimum, 6.02 ft Sept. 3, 2003.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 12.85 ft, May 30; minimum, 6.13 ft, Sept. 30.

Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.22	6.50	7.13	7.23	6.67	7.25	9.33	7.77	12.65	8.45	6.57	6.76
2	6.20	6.73	7.13	7.21	6.63	7.38	9.24	7.76	12.58	8.03	6.58	6.74
3	6.28	7.29	7.09	7.26	6.62	7.77	9.14	7.63	12.47	7.87	6.64	6.74
4	6.34	7.85	6.94	7.29	6.60	8.22	9.02	7.36	12.29	7.74	6.88	6.72
5	6.36	8.41	6.96	7.19	6.61	8.83	8.82	7.28	12.08	7.86	6.84	6.67
6	6.33	8.58	6.91	7.15	6.59	9.54	8.48	7.23	11.79	7.96	6.74	6.59
7	6.27	8.55	6.89	7.18	6.57	9.70	8.06	7.35	11.00	7.95	6.71	6.64
8	6.30	8.53	6.91	7.17	6.57	9.81	7.90	7.19	10.49	7.89	6.70	6.65
9	6.33	8.43	6.97	7.15	6.58	9.79	7.79	7.11	10.24	7.79	6.70	6.59
10	6.35	8.09	7.64	7.01	6.58	9.51	7.76	7.38	9.84	7.91	6.76	6.53
11	6.31	7.73	8.21	6.97	6.58	9.09	7.75	7.87	10.18	7.82	6.76	6.50
12	6.35	7.54	8.43	6.98	6.58	9.00	7.70	7.94	10.44	7.74	6.78	6.50
13	6.45	7.59	8.31	6.99	6.57	8.90	7.56	8.27	9.83	7.55	6.77	6.46
14	6.89	7.53	8.14	6.98	6.57	8.81	7.44	8.96	9.61	7.52	6.76	6.42
15	6.78	7.54	8.06	6.97	6.57	8.63	7.34	9.40	9.59	7.39	6.70	6.39
16	6.63	7.52	8.01	6.98	6.57	7.92	7.26	9.53	9.43	7.33	6.62	6.55
17	6.41	7.47	8.03	6.99	6.57	7.80	7.25	9.78	9.33	7.35	6.58	6.60
18	6.33	7.70	7.95	6.99	6.58	7.91	7.03	10.99	9.29	7.21	6.54	6.52
19	6.42	7.65	7.91	6.97	6.59	7.87	6.96	11.04	9.29	7.05	6.56	6.45
20	6.35	7.59	7.53	6.96	6.63	7.88	7.24	11.07	9.32	6.89	6.55	6.40
21	6.36	7.64	7.46	6.92	6.67	7.92	7.31	11.13	9.52	6.69	6.56	6.37
22	6.38	7.56	7.48	6.76	6.68	7.83	7.48	12.18	9.96	6.78	6.46	6.44
23	6.36	7.46	7.45	6.71	6.76	7.80	7.53	12.54	10.01	6.90	6.54	6.35
24	6.49	7.47	7.24	6.69	6.81	7.90	7.64	12.59	10.13	6.86	6.57	6.35
25	6.48	7.50	7.16	6.69	6.80	7.90	7.65	12.69	10.12	6.85	6.55	6.36
26	6.38	7.52	7.17	6.68	6.87	8.24	7.66	12.73	10.05	6.79	6.53	6.33
27	6.35	7.48	7.16	6.70	6.97	8.73	7.79	12.71	9.95	6.69	6.61	6.27
28	6.28	7.45	7.22	6.69	7.04	8.85	7.52	12.68	9.84	6.64	6.88	6.36
29	6.34	7.32	7.25	6.70	7.12	9.12	7.31	12.58	9.57	6.61	6.83	6.30
30	6.35	7.19	7.21	6.66	---	9.27	7.62	12.62	8.95	6.59	6.75	6.24
31	6.35	---	7.23	6.67	---	9.41	---	12.77	---	6.62	6.77	---
MEAN	6.39	7.65	7.46	6.95	6.67	8.53	7.82	9.88	10.33	7.33	6.67	6.49
MAX	6.89	8.58	8.43	7.29	7.12	9.81	9.33	12.77	12.65	8.45	6.88	6.76
MIN	6.20	6.50	6.89	6.66	6.57	7.25	6.96	7.11	8.95	6.59	6.46	6.24

**05550001 Fox River at Algonquin, II (Tailwater)--Continued**

WTR YR 2004	MEAN 7.68	MAX 12.77	MIN 6.20
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**LOCATION.**— Lat 42°03'31", long 88°18'14" (NAD of 1927), in SE1/4SE1/4 sec.3, T.41 N., R.9 E., Kane County, Hydrologic Unit 07120006, on right bank 50 ft upstream from bridge on Big Timber Road, .5 mi west of Elgin, and at mile 1.6.

**DRAINAGE AREA.**— 38.9 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: May 1998 to current year.

STAGE: May 1998 to current year.

PARTIAL RECORD: Annual maximum, water years 1962, 1963, 1965–80. Miscellaneous discharge measurements, November 1990.

PRECIPITATION: October 1998 to current year.

**GAGE.**— Water-stage recorder, phone telemeter, rain gage, and crest-stage gage. Datum of gage is 745.00 ft above NGVD of 1929. Prior to Sept. 30, 1980, at downstream side of bridge 100 ft downstream and at datum 7.36 ft higher.

**REMARKS.**— Collection, computation and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 1,650 ft<sup>3</sup>/s, Aug. 22, 2002, gage height, 8.26 ft, from rating curve extended above 580 ft<sup>3</sup>/s; minimum discharge, 0.63 ft<sup>3</sup>/s, several days in water year 2004.

PRECIPITATION: Maximum daily total, 4.40 in., August 22, 2002.

**REMARKS FOR CURRENT YEAR.**— Records good except those for May 22 – June 29, which are fair, and those for estimated daily discharges and above 1,100 ft<sup>3</sup>/s, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.70	3.4	8.3	15	4.2	42	66	20	292	21	1.2	4.2
2	0.80	24	6.4	15	4.3	54	55	18	199	18	1.1	3.5
3	2.4	42	5.9	16	4.6	50	47	16	138	19	39	3.3
4	0.76	48	6.0	16	4.2	58	39	15	95	25	54	3.1
5	0.73	58	12	14	4.1	188	35	14	70	21	24	3.2
6	0.71	30	9.0	11	4.5	152	33	12	58	19	14	2.5
7	0.71	18	8.3	11	4.5	108	30	9.8	48	16	8.4	2.2
8	0.67	12	7.9	9.9	4.3	80	27	7.0	39	15	6.2	2.6
9	0.66	8.1	24	10	4.4	65	24	5.6	32	21	5.0	3.0
10	0.70	6.8	138	9.6	4.1	54	21	23	62	36	4.4	2.9
11	0.78	7.0	133	9.9	4.5	47	19	12	80	21	4.4	2.3
12	0.91	6.2	84	11	4.2	34	19	16	382	15	4.3	2.1
13	0.73	4.7	57	9.8	4.2	29	18	38	319	12	3.9	2.1
14	14	3.9	45	8.1	4.3	33	16	153	219	9.3	3.4	2.7
15	1.5	4.0	38	7.9	4.0	30	15	163	145	7.7	3.1	6.0
16	0.88	4.0	34	e7.6	3.7	29	15	100	96	6.7	2.9	6.3
17	0.81	5.5	28	e7.2	3.8	30	15	72	72	5.8	3.3	3.2
18	0.80	77	24	6.8	4.1	31	13	129	57	4.7	3.3	2.5
19	0.82	68	20	e6.5	5.0	31	12	104	45	4.2	3.5	1.9
20	0.84	44	17	5.7	17	34	19	72	38	3.7	2.5	1.7
21	0.87	32	19	5.9	19	28	34	89	66	7.7	2.2	1.8
22	0.89	24	18	4.7	20	25	30	379	80	7.7	2.0	1.7
23	0.95	25	17	3.5	45	23	25	444	57	4.7	2.1	1.6
24	1.4	19	15	3.9	61	62	29	332	46	3.3	2.6	1.7
25	3.3	16	13	3.6	41	87	43	234	38	2.7	3.9	2.0
26	0.92	14	13	3.7	36	137	37	165	33	2.3	4.0	2.1
27	0.87	13	13	5.2	32	115	28	116	31	2.1	5.9	2.1
28	0.92	11	23	4.9	28	118	25	83	29	1.8	28	3.0
29	0.93	9.9	21	4.7	29	150	21	66	25	1.6	13	3.0
30	0.94	9.9	19	e4.5	---	108	21	264	23	1.5	7.6	2.8

ILLINOIS RIVER BASIN  
**05550300 Tyler Creek at Elgin, IL--Continued**

<b>31</b>	0.96	---	17	e4.4	---	82	---	372	---	1.5	5.5	---
TOTAL	43.86	648.4	893.8	257.0	409.0	2114	831	3543.4	2914	338.0	268.7	83.1
MEAN	1.41	21.6	28.8	8.29	14.1	68.2	27.7	114	97.1	10.9	8.67	2.77
MAX	14	77	138	16	61	188	66	444	382	36	54	6.3
MIN	0.66	3.4	5.9	3.5	3.7	23	12	5.6	23	1.5	1.1	1.6
CFSM	0.04	0.56	0.74	0.21	0.36	1.75	0.71	2.94	2.50	0.28	0.22	0.07
IN.	0.04	0.62	0.85	0.25	0.39	2.02	0.79	3.39	2.79	0.32	0.26	0.08

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 – 2004, BY WATER YEAR (WY)**

MEAN	22.4	19.7	16.5	18.9	41.7	38.2	49.5	61.0	66.6	14.1	12.4	9.17
MAX	77.3	40.6	28.8	67.6	111	68.2	117	114	119	35.8	48.8	19.4
(WY)	2002	2001	2004	1999	2001	2004	1999	2004	2002	2000	2002	2000
MIN	1.41	5.05	3.75	2.11	1.94	10.6	13.8	35.5	9.75	6.40	3.58	1.55
(WY)	2004	2003	2003	2003	2003	2003	2003	2001	2003	2001	2003	2003

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1998 – 2004**

ANNUAL TOTAL	5492.95		12344.26			
ANNUAL MEAN	15.0		33.7		31.4	
HIGHEST ANNUAL MEAN					44.2	
LOWEST ANNUAL MEAN					11.9	
HIGHEST DAILY MEAN	188	May 11	444	May 23	803	Jun 5 2002
LOWEST DAILY MEAN	0.66	Oct 9	0.66	Oct 9	0.66	Oct 9 2003
ANNUAL SEVEN-DAY MINIMUM	0.71	Oct 4	0.71	Oct 4	0.71	Oct 4 2003
MAXIMUM PEAK FLOW	795		May 30		1650	A Aug 22 2002
MAXIMUM PEAK STAGE	7.51		May 30		8.26	Aug 22 2002
INSTANTANEOUS LOW FLOW	0.63		B		0.63	C
ANNUAL RUNOFF (CFSM)	0.387		0.867		0.806	
ANNUAL RUNOFF (INCHES)	5.25		11.80		10.95	
10 PERCENT EXCEEDS	37		82		70	
50 PERCENT EXCEEDS	4.1		14		14	
90 PERCENT EXCEEDS	0.94		1.7		2.5	

A – From rating curve extended above 580 ft<sup>3</sup>/s.

B – Several days.

C – Several days in water year 2004.

**LOCATION.**— Lat 42°01'34", long 88°15'20" (NAD of 1927), 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.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: August 1951 to current year.

STAGE: Water years 1994 to current year.

SURFACE-WATER QUALITY

CHEMICAL: Water years 1977–91.

MISCELLANEOUS: Water year 2000; contaminants in streambed sediments, water year 2000.

BIOLOGICAL

ALGAE: Pigment and biomass, Water year 2000.

BENTHIC MACROINVERTEBRATES: Water year 2000.

FISH: Water year 2001.

HABITAT: Water year 2000.

**REVISED RECORDS.**— WSP 1338: 1952–53. WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder and phone telemeter. Datum of gage is 716.00 ft above NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 1,180 ft<sup>3</sup>/s, Feb. 21, 1997, gage height, 6.78 ft; no flow, July 10, 1957, Sept. 14, 1958, July 18, 1989, Oct. 6, 1997.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	7.8	12	11	3.5	24	92	16	216	6.4	3.2	7.5
2	2.0	26	11	10	3.5	31	65	15	111	6.7	3.2	5.5
3	3.0	132	9.3	11	3.6	30	46	13	64	6.9	7.0	4.1
4	4.5	149	8.9	11	3.7	33	36	11	40	9.5	48	3.4
5	2.6	138	13	e10	3.8	249	30	9.6	31	7.3	34	2.7
6	2.3	106	15	e9.6	3.9	289	25	8.2	24	6.6	16	2.3
7	2.0	51	13	e8.8	4.0	167	24	7.7	20	6.0	9.8	2.1
8	1.8	30	12	8.3	4.1	119	24	7.0	15	5.6	7.3	1.8
9	1.8	21	14	7.7	4.1	79	20	6.2	11	5.7	5.8	1.8
10	2.0	16	123	7.1	4.0	53	18	14	37	11	4.8	1.6
11	1.8	14	169	7.0	3.8	42	16	27	109	12	4.3	1.9
12	3.1	13	108	7.1	3.6	33	14	20	305	9.0	3.9	2.0
13	4.3	11	58	7.3	3.7	28	13	39	282	7.2	3.8	1.7
14	22	9.1	38	7.2	3.5	29	12	102	132	6.5	3.9	2.2
15	18	8.3	27	6.9	3.5	27	12	138	72	9.1	3.6	3.8
16	17	8.0	22	6.3	3.4	24	11	66	44	7.5	3.1	4.7
17	9.5	7.7	19	e6.0	3.3	23	10	35	32	6.0	3.1	3.8
18	6.8	69	15	e5.8	3.2	24	9.5	83	25	5.3	3.2	3.2
19	5.2	124	13	e5.5	3.4	27	9.5	77	19	4.6	6.1	2.7
20	5.2	82	11	5.3	9.7	28	11	47	15	4.2	3.9	2.3
21	4.6	46	10	5.0	24	24	23	68	25	4.8	3.4	2.2
22	4.4	32	9.5	5.1	25	20	18	277	47	9.7	3.2	3.2
23	4.2	29	9.3	4.1	34	18	15	275	30	9.4	3.1	3.5
24	4.8	47	8.9	4.3	41	46	13	155	19	6.6	3.6	2.4
25	7.2	37	7.9	4.3	36	63	25	94	17	5.2	4.9	3.1
26	8.1	27	7.7	4.3	32	111	23	59	13	4.5	4.4	4.4
27	7.4	24	7.4	4.3	26	115	17	41	11	3.9	7.8	3.5

ILLINOIS RIVER BASIN  
**05550500 Poplar Creek at Elgin, IL--Continued**

<b>28</b>	7.9	20	13	4.3	22	107	14	31	9.8	3.5	49	3.4
<b>29</b>	7.3	16	16	4.1	21	306	12	23	8.4	3.4	40	3.0
<b>30</b>	7.0	14	14	3.8	---	208	13	107	7.2	3.2	18	3.6
<b>31</b>	8.2	---	12	3.6	---	137	---	314	---	3.5	11	---
TOTAL	188.0	1314.9	826.9	206.1	340.3	2514	671.0	2185.7	1791.4	200.8	326.4	93.4
MEAN	6.06	43.8	26.7	6.65	11.7	81.1	22.4	70.5	59.7	6.48	10.5	3.11
MAX	22	149	169	11	41	306	92	314	305	12	49	7.5
MIN	1.8	7.7	7.4	3.6	3.2	18	9.5	6.2	7.2	3.2	3.1	1.6
CFSM	0.17	1.25	0.76	0.19	0.33	2.30	0.64	2.00	1.70	0.18	0.30	0.09
IN.	0.20	1.39	0.87	0.22	0.36	2.66	0.71	2.31	1.89	0.21	0.34	0.10

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 – 2004, BY WATER YEAR (WY)**

MEAN	15.3	21.7	22.7	21.2	29.7	48.2	52.4	38.0	28.3	14.9	16.2	14.1
MAX	115	133	113	85.1	129	235	146	130	102	92.4	103	94.6
(WY)	2002	1986	1983	1993	1997	1979	1983	1974	1996	1993	1990	1972
MIN	0.50	0.25	0.60	0.91	0.69	4.76	9.51	3.50	0.97	1.27	0.87	0.25
(WY)	1957	1954	1957	1959	2003	1956	1986	1989	1963	1988	1956	1956

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1951 – 2004**

ANNUAL TOTAL	8161.60	10658.9	
ANNUAL MEAN	22.4	29.1	26.9
HIGHEST ANNUAL MEAN			52.6 1993
LOWEST ANNUAL MEAN			4.69 1963
HIGHEST DAILY MEAN	460 May 11	314 May 31	861 Feb 22 1997
LOWEST DAILY MEAN	0.58 A Feb 16	1.6 Sep 10	0.10 Sep 16 1956
ANNUAL SEVEN-DAY MINIMUM	0.60 A Feb 12	1.8 Sep 7	0.10 Sep 9 1958
MAXIMUM PEAK FLOW		367 Mar 6	1180 Feb 21 1997
MAXIMUM PEAK STAGE		3.54 Mar 6	6.78 Feb 21 1997
INSTANTANEOUS LOW FLOW		1.1 Sep 10	0.00 B
ANNUAL RUNOFF (CFSM)	0.635	0.827	0.763
ANNUAL RUNOFF (INCHES)	8.63	11.26	10.37
10 PERCENT EXCEEDS	45	78	65
50 PERCENT EXCEEDS	7.1	10	11
90 PERCENT EXCEEDS	0.74	3.2	1.3

A – Estimated due to backwater from ice.

B – July 10, 1957; Sept. 14, 1958; July 18, 1989; Oct. 6, 1997.

**LOCATION.**— Lat 41°59'46", long 88°17'42" (NAD of 1927), 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 upstream 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.**—

**SURFACE–WATER DISCHARGE AND STAGE**

DISCHARGE: October 1989 to September 1998.

STAGE: July to September 1914, October 1993 to current year.

PARTIAL RECORD: Low–flow discharge measurements, July 1961 to September 1962; miscellaneous discharge measurements, water years 1978–89.

**SURFACE–WATER QUALITY**

CHEMICAL: Water years 1978–91.

**GAGE.**— Water–stage recorder, phone telemeter, and concrete dam. Datum of gage is 687.95 ft above NGVD of 1929.

**REMARKS.**— Flow regulated by Stratton Lock and Dam (previously known as McHenry dam), 30 mi upstream, and occasionally affected by wind action.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum discharge 6,990 ft<sup>3</sup>/s, July 18, 1993, gage–height 14.45 ft.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Flood of April 2, 1960, reached a stage of 8.16 ft at site 0.1 mi downstream at present datum, from floodmarks, discharge 6,550 ft<sup>3</sup>/s.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 13.56 ft, May 11; minimum, 11.68 ft, Sept. 21, 22.

Gage height, feet, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.21	12.24	12.27	12.63	—	—	12.41	12.83	12.57	12.18	12.13	11.89
2	12.35	12.22	12.28	12.72	—	—	12.45	12.96	12.55	12.16	12.17	11.91
3	12.58	12.24	12.26	12.46	—	—	12.51	12.91	12.55	12.13	12.19	11.88
4	12.71	12.25	12.26	12.27	—	—	12.62	12.84	12.56	12.10	12.25	11.83
5	12.70	12.27	12.25	12.26	—	—	12.73	13.10	12.54	12.19	12.27	11.81
6	12.68	12.27	12.24	12.27	—	—	12.69	13.26	12.50	12.19	12.27	11.77
7	12.65	12.24	12.25	12.23	—	—	12.70	13.33	12.48	12.28	12.28	11.73
8	12.55	12.21	12.25	12.24	—	—	12.65	13.31	12.49	12.33	12.24	11.71
9	12.46	12.18	12.24	12.25	—	—	12.56	13.36	12.49	12.45	12.24	11.72
10	12.41	12.22	12.25	12.26	—	—	12.54	13.41	12.46	12.49	12.20	11.74
11	12.36	12.26	12.24	12.16	—	12.03	12.51	13.53	12.46	12.46	12.16	11.74
12	12.34	12.28	12.21	12.16	—	—	12.51	13.49	12.52	12.46	12.16	11.75
13	12.33	12.25	12.21	12.22	—	—	12.53	13.43	12.51	—	12.15	11.78
14	12.31	12.24	12.21	12.23	—	—	12.47	13.40	12.48	12.43	12.11	11.81
15	12.29	12.30	12.21	12.21	—	—	12.40	13.47	12.47	12.60	12.07	11.84
16	12.31	12.31	12.23	12.24	—	—	12.43	13.36	12.44	12.70	12.01	11.82
17	12.29	12.30	12.22	12.22	—	—	12.62	13.26	12.39	12.69	11.99	11.78
18	12.26	12.37	12.25	12.21	—	—	12.58	13.20	12.34	12.69	11.98	11.75
19	12.25	12.54	12.30	12.22	—	—	12.45	13.07	12.58	12.66	11.94	11.73
20	12.27	12.93	12.26	12.23	—	—	12.34	12.96	12.62	12.59	11.91	11.72
21	12.27	12.89	12.24	12.22	—	12.30	12.31	12.93	12.38	12.59	11.87	11.70
22	12.26	12.93	12.26	12.19	—	12.33	12.40	12.88	12.27	12.52	11.86	11.69
23	12.27	12.66	12.22	12.14	—	12.33	12.42	12.71	12.23	12.42	11.87	11.71
24	12.27	12.66	12.19	12.15	—	12.33	12.42	12.62	12.20	12.35	11.84	11.73
25	12.29	12.66	12.23	12.14	—	12.35	12.43	12.61	12.17	12.28	11.80	11.81
26	12.36	12.60	12.23	—	—	12.43	12.40	12.59	12.17	12.16	11.80	11.84
27	12.42	12.56	12.23	—	—	12.44	12.25	12.57	12.16	12.12	11.82	11.89

## ILLINOIS RIVER BASIN

**05551000 Fox River at South Elgin, IL--Continued**

<b>28</b>	12.43	12.39	12.32	----	----	12.45	12.16	12.51	12.15	12.22	11.84	11.88
<b>29</b>	12.36	12.28	12.40	----	----	12.49	12.22	12.44	12.19	12.20	11.82	11.89
<b>30</b>	12.31	12.30	12.41	----	----	12.48	12.35	12.40	12.18	12.15	11.82	11.88
<b>31</b>	12.28	----	12.43	----	----	12.45	----	12.47	----	12.13	11.84	----
MEAN	12.38	12.40	12.26	----	----	----	12.47	13.01	12.40	----	12.03	11.79
MAX	12.71	12.93	12.43	----	----	----	12.73	13.53	12.62	----	12.28	11.91
MIN	12.21	12.18	12.19	----	----	----	12.16	12.40	12.15	----	11.80	11.69
CAL YR 2002	MEAN 12.56		MAX 13.74			MIN 12.01						



**LOCATION.**— Lat 41°59'46", long 88°17'42" (NAD of 1927), 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 upstream 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.**—

**SURFACE—WATER DISCHARGE AND STAGE**

DISCHARGE: October 1989 to September 1998.

STAGE: July to September 1914, October 1993 to current year.

PARTIAL RECORD: Low-flow discharge measurements, July 1961 to September 1962; miscellaneous discharge measurements, water years 1978–89.

**SURFACE—WATER QUALITY**

CHEMICAL: Water years 1978–91.

**GAGE.**— Water-stage recorder, phone telemeter, and concrete dam. Datum of gage is 687.95 ft above NGVD of 1929.

**REMARKS.**— Flow regulated by Stratton Lock and Dam (previously known as McHenry dam), 30 mi upstream, and occasionally affected by wind action.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Maximum discharge 6,990 ft<sup>3</sup>/s, July 18, 1993, gage-height 14.45 ft.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Flood of April 2, 1960, reached a stage of 8.16 ft at site 0.1 mi downstream at present datum, from floodmarks, discharge 6,550 ft<sup>3</sup>/s.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 14.40 ft, May 31; minimum recorded, 11.91 ft, Oct. 3.

Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	—	12.04	12.41	12.46	12.17	12.48	13.42	12.84	14.38	13.14	12.23	12.33
2	—	12.17	12.40	12.44	12.17	12.56	13.38	12.87	14.32	12.96	12.20	12.33
3	11.94	12.50	12.40	12.45	12.17	12.67	13.33	12.86	14.28	12.86	12.21	12.32
4	11.97	12.69	12.36	12.48	12.17	12.87	13.30	12.80	14.22	12.86	12.40	12.32
5	12.00	13.03	12.34	12.47	12.17	13.30	13.23	12.70	14.16	12.80	12.42	12.31
6	12.00	13.05	12.32	12.38	12.17	13.55	13.15	12.66	14.09	12.86	12.37	12.28
7	11.98	13.02	12.31	12.40	12.17	13.57	12.98	12.66	13.97	12.87	12.32	12.26
8	11.97	13.00	12.30	12.42	12.16	13.56	12.87	12.67	13.78	12.86	12.29	12.27
9	11.98	12.96	12.33	12.41	12.16	13.54	12.82	12.61	13.69	12.83	12.28	12.27
10	11.98	12.88	12.70	12.37	12.16	13.49	12.79	12.61	13.62	12.90	12.29	12.23
11	11.98	12.71	13.03	12.34	12.16	13.34	12.79	12.82	13.65	12.88	12.30	12.19
12	11.97	12.60	13.08	12.33	12.16	13.27	12.78	12.92	13.84	12.84	12.31	12.16
13	11.98	12.57	13.02	12.33	12.16	13.23	12.73	13.05	13.88	12.78	12.32	12.14
14	12.13	12.56	12.96	12.33	12.16	13.19	12.69	13.30	13.70	12.72	12.31	12.12
15	—	12.55	12.90	12.32	12.16	13.18	12.65	13.53	13.58	12.69	12.30	12.11
16	12.10	12.56	12.85	12.34	12.16	12.94	12.61	13.56	13.51	12.64	12.28	12.14
17	12.06	12.54	12.84	12.34	12.16	12.77	12.58	13.57	13.44	12.63	12.24	12.16
18	12.02	12.73	12.80	12.33	12.15	12.77	12.56	13.72	13.41	12.62	12.23	12.17
19	12.01	12.77	12.79	12.31	12.15	12.78	12.47	13.80	13.39	12.55	12.22	12.14
20	12.02	12.69	12.66	12.32	12.15	12.76	12.54	13.81	13.39	12.45	12.22	12.12
21	12.00	12.66	12.59	12.31	12.16	12.78	12.69	13.82	13.42	12.37	12.21	12.11
22	12.02	12.64	12.58	12.25	12.17	12.76	12.70	14.02	13.56	12.34	12.20	12.10
23	12.02	12.59	12.58	12.21	12.19	12.74	12.75	14.11	13.58	12.38	12.17	12.11
24	12.01	12.59	12.50	12.19	12.30	12.82	12.78	14.11	13.58	12.40	12.19	12.09
25	12.05	12.60	12.43	12.19	12.36	12.89	12.87	14.09	13.58	12.38	12.21	12.07
26	12.03	12.59	12.42	12.18	12.35	13.02	12.85	14.08	13.58	12.37	12.21	12.06
27	12.02	12.59	12.42	12.18	12.37	13.19	12.86	14.07	13.58	12.33	12.21	12.06

## ILLINOIS RIVER BASIN

**05551000 Fox River at South Elgin, IL--Continued**

<b>28</b>	12.01	12.57	12.44	12.18	12.39	13.25	12.87	14.06	13.57	12.28	12.34	12.05
<b>29</b>	11.98	12.53	12.47	12.18	12.42	13.46	12.74	14.06	13.53	12.25	12.41	12.06
<b>30</b>	12.01	12.46	12.45	12.17	----	13.46	12.74	14.11	13.35	12.23	12.38	12.04
<b>31</b>	12.01	----	12.43	12.17	----	13.46	----	14.35	----	12.23	12.34	----
MEAN	----	12.65	12.58	12.32	12.21	13.09	12.85	13.43	13.72	12.62	12.28	12.17
MAX	----	13.05	13.08	12.48	12.42	13.57	13.42	14.35	14.38	13.14	12.42	12.33
MIN	----	12.04	12.30	12.17	12.15	12.48	12.47	12.61	13.35	12.23	12.17	12.04

**LOCATION.**— Lat 41°58'17", long 88°16'33" (NAD of 1983) in NE1/4NW1/4 sec.12, T.40 N., R.8 E., Kane County, Hydrologic Unit 07120007, on left bank at downstream side of footbridge on YWCA Camp Tu–Endie–Wei, 0.9 mi east of Valley View, 2.5 mi southeast of South Elgin and at mile 1.1.

**DRAINAGE AREA.**— 13.88 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE

STAGE: May 2002 to current year.

PARTIAL RECORD: Miscellaneous discharge measurements, water year 2003.

SURFACE–WATER QUALITY

SEDIMENT: June 2002 to current year.

MISCELLANEOUS: Sediment concentration and particle size, water years, 2002–03.

**GAGE.**— Water–stage recorder, and pumping sampler. Datum of gage is 700.00 ft above NAVD of 1988.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Maximum gage height, 22.48 ft, May 12 2002; minimum, 19.83 ft, Sept. 5, 2003.

SUSPENDED–SEDIMENT CONCENTRATIONS: Maximum daily, 139 mg/L, Aug. 22, 2002; minimum daily, 18 mg/L, Sept. 29, 2002.

SUSPENDED–SEDIMENT LOADS: Maximum daily, 20 tons, Aug. 22, 2002; minimum daily, 0.09 tons, Sept. 15–16, 2002.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 21.87 ft, May 1; minimum recorded, 19.83 ft, Sept. 5.

Gage height, feet, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.68	20.72	20.72	20.69	---	---	20.58	21.65	20.69	20.14	20.10	19.94
2	20.72	20.73	20.71	20.69	---	---	20.57	21.63	20.67	20.14	20.08	19.91
3	20.72	20.73	20.72	20.69	---	---	20.57	21.25	20.67	20.15	20.05	19.88
4	20.78	20.74	20.71	20.68	---	---	20.74	21.07	20.65	20.16	20.01	19.85
5	20.78	20.73	20.72	20.68	---	---	20.89	21.51	20.66	20.22	20.01	19.85
6	20.73	20.73	20.71	20.69	---	---	20.82	21.33	20.65	20.22	20.06	19.91
7	20.71	20.73	20.71	20.70	---	20.58	20.78	21.12	20.66	20.19	20.04	19.88
8	20.71	20.76	20.71	20.69	---	---	20.74	20.98	20.76	20.17	20.03	19.85
9	20.69	20.79	20.71	20.70	---	---	20.73	21.40	20.78	20.20	20.06	19.86
10	20.68	20.77	20.71	20.69	---	---	20.71	21.39	20.69	20.20	20.07	19.91
11	20.67	20.76	20.71	---	---	---	20.66	21.48	20.57	20.15	20.07	19.92
12	20.67	20.76	20.71	---	---	20.75	20.63	21.22	20.52	20.10	20.06	19.91
13	20.67	20.75	20.71	20.71	---	20.71	20.63	21.10	20.74	20.07	20.06	19.88
14	20.68	20.75	20.71	---	---	20.63	20.62	21.02	20.77	20.05	20.07	19.88
15	20.69	20.75	20.71	---	---	20.57	20.60	21.02	20.75	20.34	20.12	19.87
16	20.70	20.74	20.72	---	---	20.58	20.59	20.96	20.72	20.25	20.06	19.87
17	20.71	20.73	20.71	---	---	20.59	20.59	20.91	20.53	20.17	20.05	19.91
18	20.72	20.73	20.76	---	---	20.57	20.58	20.86	20.61	20.14	20.02	19.91
19	20.72	20.74	20.75	---	---	20.56	20.58	20.83	20.70	20.12	20.02	19.86
20	20.72	20.73	20.73	---	---	20.60	20.59	20.80	20.34	20.12	20.09	19.86
21	20.73	20.73	20.72	---	---	20.59	20.59	20.75	20.16	20.14	20.02	19.89
22	20.73	20.73	20.72	---	---	20.62	20.60	20.72	20.14	20.10	19.98	19.90
23	20.70	20.73	20.74	---	---	20.61	20.60	20.71	20.15	20.06	19.98	19.89
24	20.69	20.73	20.74	---	---	20.58	20.58	20.69	20.15	20.10	19.96	19.90
25	20.72	20.73	20.74	---	---	20.60	20.58	20.69	20.17	20.15	19.94	19.91
26	20.76	20.73	20.73	---	---	20.58	20.58	20.68	20.21	20.15	19.95	19.92
27	20.78	20.72	20.73	---	---	20.57	20.60	20.68	20.18	20.11	20.01	19.95
28	20.75	20.72	20.73	---	---	20.60	20.61	20.68	20.16	20.09	20.00	19.94
29	20.74	20.72	20.72	---	---	20.61	20.62	20.68	20.15	20.04	19.98	19.88
30	20.72	20.72	20.71	---	---	20.59	20.77	20.68	20.13	20.03	19.95	19.86
31	20.72	---	20.70	---	---	20.58	---	20.69	---	20.07	19.92	---

ILLINOIS RIVER BASIN  
05551029 Brewster Creek nr Valley View, Il--Continued

MEAN	20.72	20.74	20.72	----	----	----	20.64	21.01	20.49	20.14	20.03	19.89
MAX	20.78	20.79	20.76	----	----	----	20.89	21.65	20.78	20.34	20.12	19.95
MIN	20.67	20.72	20.70	----	----	----	20.57	20.68	20.13	20.03	19.92	19.85

**LOCATION.**— Lat 41°58'17", long 88°16'33" (NAD of 1983) in NE1/4NW1/4 sec.12, T.40 N., R.8 E., Kane County, Hydrologic Unit 07120007, on left bank at downstream side of footbridge on YWCA Camp Tu–Endie–Wei, 0.9 mi east of Valley View, 2.5 mi southeast of South Elgin and at mile 1.1.

**DRAINAGE AREA.**— 13.88 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE

STAGE: May 2002 to current year.

PARTIAL RECORD: Miscellaneous discharge measurements, water years 2003, 2004.

SURFACE–WATER QUALITY

SEDIMENT: June 2002 to current year.

MISCELLANEOUS: Sediment concentration and particle size, water years, 2002–03.

**GAGE.**— Water–stage recorder, and automatic water sampler. Datum of gage is 700.00 ft above NAVD of 1988.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Maximum gage height, 22.48 ft, May 12 2002; minimum, 19.13 ft, Sept. 26, 2004.

SUSPENDED–SEDIMENT CONCENTRATIONS: Maximum daily, 421 mg/L, Mar. 29, 2004; minimum daily, 10 mg/L, Oct. 25–26, 2003.

SUSPENDED–SEDIMENT LOADS: Maximum daily, 62 tons, Mar. 29, 2004; minimum daily, 0.06 tons, Oct. 26, 2003, and Sept. 25–26, 2004.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 21.63 ft, June 12; minimum, 19.13 ft, Sept. 26.

Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.87	19.83	20.07	----	----	20.16	20.41	19.91	21.00	19.58	19.33	19.39
2	19.81	19.97	20.04	----	----	20.19	20.28	19.88	20.74	19.59	19.33	19.37
3	19.82	20.27	20.04	----	----	20.19	20.19	19.85	20.43	19.58	19.37	19.35
4	19.85	20.31	----	----	----	20.25	20.15	19.82	20.27	19.61	19.71	19.33
5	19.85	20.52	----	----	----	20.92	20.09	19.81	20.14	19.58	19.56	19.34
6	19.86	20.30	----	----	----	20.83	20.06	19.82	20.06	19.55	19.45	19.33
7	19.83	20.15	----	----	----	20.63	20.06	19.84	20.00	19.54	19.40	19.33
8	19.89	20.10	----	----	----	20.52	20.03	19.80	19.95	19.53	19.38	19.31
9	19.94	20.03	----	----	----	20.40	20.01	19.79	19.90	19.52	19.36	19.30
10	19.91	19.98	----	----	----	20.32	19.98	19.79	20.20	19.58	19.39	19.32
11	19.89	20.00	----	----	----	20.22	19.96	19.87	20.46	19.56	19.40	19.33
12	19.88	20.01	----	----	----	20.21	19.94	19.87	21.02	19.53	19.38	19.34
13	19.84	19.98	----	----	----	20.12	20.01	20.14	20.64	19.52	19.37	19.34
14	20.00	19.96	----	----	----	20.09	20.00	20.25	20.38	19.49	19.34	19.32
15	20.05	19.96	----	----	----	20.04	19.95	20.39	20.15	19.48	19.30	19.33
16	19.99	19.96	----	----	----	20.06	19.90	20.25	20.01	19.52	19.30	19.39
17	19.97	19.95	----	----	----	20.07	19.87	20.12	19.92	19.50	19.35	19.35
18	19.95	20.44	----	----	----	20.08	19.87	20.32	19.87	19.48	19.34	19.33
19	19.93	20.56	----	----	----	20.09	19.84	20.23	19.78	19.46	19.42	19.31
20	19.91	20.46	----	----	----	20.04	19.91	20.25	19.71	19.44	19.38	19.29
21	19.92	20.41	----	----	----	20.01	20.13	20.65	19.85	19.45	19.34	19.50
22	19.93	20.35	----	----	----	19.98	20.11	21.30	19.93	19.45	19.33	19.43
23	19.90	20.32	----	----	----	19.98	19.95	21.13	19.80	19.42	19.32	19.36
24	19.91	20.40	----	----	----	20.21	19.92	20.83	19.72	19.40	19.33	19.22
25	19.92	20.30	----	----	----	20.22	20.01	20.55	19.69	19.39	19.34	19.17
26	19.88	20.26	----	----	----	20.52	19.94	20.41	19.65	19.39	19.36	19.16
27	19.84	20.21	----	----	20.13	20.48	19.94	20.29	19.63	19.40	19.41	19.18
28	19.85	20.16	----	----	20.10	20.54	19.89	20.18	19.62	19.35	19.70	19.37
29	19.83	20.12	----	----	20.08	20.93	19.84	20.10	19.59	19.34	19.60	19.29
30	19.82	20.10	----	----	----	20.78	19.88	20.79	19.57	19.36	19.53	19.21
31	19.85	----	----	----	----	20.58	----	21.24	----	19.36	19.44	----

ILLINOIS RIVER BASIN  
05551029 Brewster Creek nr Valley View, Il--Continued

MEAN	19.89	20.18	----	----	----	20.31	20.00	20.24	20.06	19.48	19.41	19.32
MAX	20.05	20.56	----	----	----	20.93	20.41	21.30	21.02	19.61	19.71	19.50
MIN	19.81	19.83	----	----	----	19.98	19.84	19.79	19.57	19.34	19.30	19.16

**LOCATION.**— Lat 41°58'17", long 88°16'33" (NAD of 1983) in NE1/4NW1/4 sec.12, T.40 N., R.8 E., Kane County, Hydrologic Unit 07120007, on left bank at downstream side of footbridge on YWCA Camp Tu-Endie-Wei, 0.9 mi east of Valley View, 2.5 mi southeast of South Elgin and at mile 1.1.

**DRAINAGE AREA.**— 13.88 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

STAGE: May 2002 to current year.

PARTIAL RECORD: Miscellaneous discharge measurements, water years 2003, 2004.

SURFACE-WATER QUALITY

SEDIMENT: June 2002 to current year.

MISCELLANEOUS: Sediment concentration and particle size, water years, 2002–03.

**GAGE.**— Water-stage recorder, and automatic water sampler. Datum of gage is 700.00 ft above NAVD of 1988.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum gage height, 22.48 ft, May 12 2002; minimum, 19.13 ft, Sept. 26, 2004.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily, 421 mg/L, Mar. 29, 2004; minimum daily, 10 mg/L, Oct. 25–26, 2003.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 62 tons, Mar. 29, 2004; minimum daily, 0.06 tons, Oct. 26, 2003, and Sept. 25–26, 2004.

**EXTREMES FOR CURRENT YEAR.**—

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily, 421 mg/L, Mar. 29; minimum daily, 10 mg/L, Oct. 25–26.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 62 tons, Mar. 29; minimum daily, 0.06 tons, Oct. 26, and Sept. 25–26.

**SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

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	1.1	41	0.13	2.0	20	0.10	3.6	42	0.41
2	0.69	43	0.08	4.2	35	0.42	3.4	45	0.41
3	0.71	43	0.08	8.7	88	2.1	3.4	47	0.43
4	0.87	43	0.10	8.9	99	2.9	3.3	44	0.39
5	0.89	43	0.10	17	91	4.1	4.4	41	0.49
6	0.91	48	0.12	8.0	44	0.98	4.2	37	0.42
7	0.63	50	0.08	4.2	19	0.23	3.8	34	0.34
8	0.97	62	0.16	3.1	27	0.24	3.6	30	0.29
9	1.2	66	0.22	2.1	22	0.13	4.6	29	0.39
10	1.0	56	0.15	1.8	25	0.12	32	244	24
11	0.96	46	0.12	2.2	28	0.16	32	137	12
12	1.0	41	0.11	2.2	29	0.17	31	86	7.3
13	0.81	40	0.09	1.8	30	0.15	22	68	4.1
14	2.6	85	0.63	1.6	30	0.13	17	52	2.3
15	3.1	73	0.62	1.5	31	0.12	13	39	1.4
16	2.3	43	0.28	1.4	32	0.12	11	36	1.1
17	2.3	47	0.32	1.3	39	0.14	8.3	33	0.74
18	1.9	37	0.19	17	79	4.0	7.2	30	0.59
19	1.9	25	0.13	23	31	2.1	6.0	31	0.50
20	1.8	16	0.08	17	34	1.6	6.2	31	0.53
21	2.4	15	0.10	15	41	1.6	5.4	32	0.47
22	2.7	15	0.11	12	45	1.4	5.2	33	0.46
23	2.3	14	0.08	10	60	1.8	5.1	33	0.46
24	2.3	12	0.07	14	74	2.8	4.7	34	0.44
25	2.6	10	0.07	9.3	59	1.5	4.5	35	0.42
26	2.3	10	0.06	8.2	61	1.3	4.2	35	0.40

ILLINOIS RIVER BASIN  
05551029 Brewster Creek nr Valley View, IL--Continued

27	1.9	15	0.08	6.8	63	1.2	4.1	36	0.40
28	2.1	29	0.17	5.6	54	0.82	6.6	37	0.65
29	1.8	18	0.09	4.6	46	0.57	6.1	37	0.62
30	1.9	16	0.08	4.1	39	0.44	e5.2	78	3.5
31	2.1	16	0.09	---	---	---	e4.9	47	0.75
TOTAL	52.04	---	4.79	218.6	---	33.44	276.0	---	66.70

	JANUARY			FEBRUARY			MARCH		
1	5.0	45	0.60	e2.0	21	0.32	9.6	42	1.1
2	5.3	44	0.63	e1.9	20	0.28	11	40	1.1
3	5.1	43	0.60	e2.0	20	0.24	11	39	1.2
4	4.3	43	0.50	e2.0	19	0.21	17	73	4.9
5	4.3	42	0.49	e2.1	20	0.20	61	241	41
6	e3.9	41	0.51	e2.1	20	0.27	51	235	33
7	e3.5	40	0.40	e2.2	21	0.27	38	67	7.2
8	e3.4	40	0.40	e2.2	22	0.26	31	33	2.8
9	e3.4	39	0.40	e2.2	23	0.25	24	28	1.8
10	e3.3	38	0.37	e2.2	23	0.23	18	25	1.2
11	e3.3	37	0.35	e2.1	24	0.25	12	27	0.88
12	e3.2	37	0.36	e2.0	25	0.25	9.8	30	0.78
13	e3.2	36	0.32	e2.0	25	0.26	8.1	32	0.71
14	e3.1	35	0.30	e1.9	26	0.27	7.0	35	0.67
15	e3.1	34	0.30	e1.9	27	0.26	5.9	38	0.60
16	e3.1	33	0.31	e1.8	28	0.28	6.3	40	0.68
17	e3.0	33	0.31	e1.7	28	0.31	6.7	39	0.70
18	e3.0	32	0.29	e1.7	31	0.33	6.8	36	0.66
19	e2.9	31	0.30	e2.2	45	0.45	7.2	34	0.65
20	e2.9	30	0.27	e3.9	87	1.9	5.8	31	0.48
21	e2.8	30	0.26	e6.8	155	5.6	4.8	30	0.39
22	e2.7	29	0.27	e7.2	158	5.0	4.0	35	0.37
23	e2.4	28	0.30	e8.2	114	3.3	4.0	39	0.42
24	e2.3	27	0.23	9.5	77	2.0	13	129	4.8
25	e2.2	27	0.25	9.4	58	1.5	11	104	3.2
26	e2.2	26	0.29	9.1	51	1.2	31	167	14
27	e2.3	25	0.28	7.9	47	1.0	28	90	6.8
28	e2.3	24	0.21	7.2	45	0.88	31	199	25
29	e2.2	24	0.30	6.8	43	0.80	55	421	62
30	e2.1	23	0.26	---	---	---	47	170	22
31	e2.0	22	0.30	---	---	---	36	103	10
TOTAL	97.8	---	10.96	114.2	---	28.37	612.0	---	251.09

	APRIL			MAY			JUNE		
1	26	80	5.5	4.1	47	0.51	86	36	8.4
2	17	100	4.6	3.6	49	0.47	75	47	9.3
3	12	120	3.9	3.2	52	0.44	52	45	6.2
4	10	140	3.9	2.8	54	0.41	41	56	6.2
5	7.8	153	3.2	2.7	55	0.41	34	68	6.2
6	7.1	143	2.7	2.8	53	0.41	29	81	6.2
7	7.0	131	2.5	2.9	51	0.40	26	93	6.5
8	6.3	120	2.0	2.6	48	0.33	22	88	5.3
9	5.7	108	1.7	2.4	46	0.30	18	44	2.2
10	5.1	98	1.4	2.6	44	0.31	36	181	20



**05551029 Brewster Creek nr Valley View, IL--Continued**

11	4.7	96	1.2	3.8	45	0.47	54	97	15
12	4.2	94	1.1	4.0	59	0.78	83	104	24
13	6.0	92	1.5	14	153	6.7	81	21	4.6
14	5.8	90	1.4	19	89	4.6	69	25	4.6
15	4.8	87	1.1	26	65	4.5	52	30	4.2
16	4.0	84	0.90	16	62	2.6	41	36	4.0
17	3.4	81	0.73	9.0	58	1.5	35	42	3.9
18	3.2	78	0.68	20	126	7.0	30	77	6.4
19	2.8	75	0.57	13	50	1.9	24	47	3.1
20	4.6	71	0.86	15	189	16	19	41	2.1
21	11	64	1.9	39	163	24	27	163	16
22	9.7	57	1.5	79	104	22	35	88	8.4
23	4.7	50	0.63	78	33	7.0	26	20	1.4
24	4.3	55	0.70	66	33	5.8	19	16	0.81
25	6.6	69	1.3	47	28	3.6	16	16	0.72
26	4.6	45	0.56	37	29	2.9	13	17	0.58
27	4.7	45	0.56	32	30	2.6	9.8	17	0.46
28	3.9	44	0.47	26	32	2.3	8.9	18	0.43
29	3.1	44	0.37	22	30	1.8	7.8	19	0.39
30	3.6	45	0.44	59	190	35	6.5	19	0.34
31	---	---	---	84	45	10	---	---	---
TOTAL	203.7	---	49.87	738.5	---	167.04	1076.0	---	177.93

	JULY			AUGUST			SEPTEMBER		
1	6.8	20	0.36	1.7	121	0.55	2.7	77	0.55
2	6.8	20	0.37	1.7	126	0.57	2.3	74	0.45
3	6.6	23	0.41	2.8	133	1.1	2.0	63	0.34
4	8.0	24	0.53	16	132	6.2	1.7	51	0.24
5	6.8	24	0.45	7.3	94	1.9	1.8	44	0.22
6	5.6	26	0.38	4.1	80	0.88	1.8	49	0.24
7	5.1	27	0.37	2.9	66	0.52	1.6	56	0.24
8	4.6	28	0.35	2.6	52	0.37	1.4	65	0.24
9	4.5	29	0.35	2.4	45	0.30	1.4	79	0.29
10	6.8	30	0.56	2.9	46	0.36	1.5	49	0.20
11	5.9	32	0.50	2.9	46	0.36	1.7	38	0.17
12	4.9	33	0.43	2.6	47	0.33	1.7	41	0.19
13	4.4	43	0.51	2.5	47	0.31	1.6	42	0.18
14	3.7	43	0.44	2.0	48	0.26	1.5	43	0.17
15	3.6	37	0.35	1.6	49	0.21	1.5	45	0.19
16	4.2	40	0.46	1.6	54	0.24	2.3	47	0.29
17	4.0	45	0.49	2.2	59	0.34	1.9	48	0.25
18	3.5	50	0.47	2.1	62	0.35	1.6	48	0.21
19	3.0	55	0.45	3.3	57	0.51	1.4	49	0.18
20	2.7	60	0.44	2.6	52	0.37	1.2	48	0.15
21	3.0	65	0.53	2.2	48	0.28	7.9	96	3.4
22	3.0	71	0.57	2.0	44	0.24	4.3	87	1.3
23	2.5	76	0.52	1.9	41	0.21	2.1	67	0.47
24	2.1	81	0.45	2.0	39	0.22	0.79	49	0.11
25	2.0	86	0.47	2.3	43	0.27	0.55	43	0.06
26	2.1	91	0.50	2.9	47	0.38	0.52	41	0.06
27	2.1	96	0.54	3.9	52	0.54	0.61	42	0.07
28	1.8	101	0.48	18	79	4.2	3.3	59	0.66
29	1.7	106	0.49	9.5	59	1.5	1.3	48	0.18
30	1.8	111	0.55	5.8	77	1.2	0.59	46	0.07

ILLINOIS RIVER BASIN  
05551029 Brewster Creek nr Valley View, Il--Continued

31	2.0	116	0.63	3.5	78	0.73	---	---	---
TOTAL	125.6	---	14.40	121.8	---	25.80	56.56	---	11.37
YEAR	3692.80		841.76						

e Estimated

**LOCATION.**— Lat 41°58'19", long 88°16'47" (NAD of 1983), in SW1/4SW1/4 sec. 12, T. 40 N., R. 8 E., Kane County, Hydrologic Unit 07120007, on private property about 500 feet upstream of state Highway 25 at Valley View, 2.5 miles southeast of South Elgin, and at mile 0.8.

**DRAINAGE AREA.**— 14.0 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE

DISCHARGE: May 2002 to current year.

STAGE: May 2002 to current year.

PARTIAL RECORD: Annual maximum, water years 1962 to 1979, at site 500 ft downstream on State Highway 25 and at datum 10.08 ft higher.

SURFACE—WATER QUALITY

SEDIMENT: June 2002 to current year.

MISCELLANEOUS: Sediment concentration and particle size, water years 2002–03

PRECIPITATION: May 2002 to current year.

**REVISED RECORDS.**— WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, phone telemeter, automatic water sampler, and rain gage. Datum of gage is 700.00 ft above NAVD of 1988.

**REMARKS.**— Occasional pumpage from quarry into creek about 0.5 mi. upstream. Collection, computation and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE: Maximum discharge, 685 ft<sup>3</sup>/s, June 10, 1967, gage height, 1.65 ft, site and datum then in use; minimum discharge, 0.40 ft<sup>3</sup>/s, Sept. 26, 2004.

PRECIPITATION: Maximum daily total, 3.32 in., August 13, 2002.

SUSPENDED—SEDIMENT CONCENTRATIONS: Maximum daily, 1450 mg/L, Mar. 29, 2004; minimum daily, 10 mg/L, June 25, 2004.

SUSPENDED—SEDIMENT LOADS: Maximum daily, 217 tons, Mar. 29, 2004; minimum daily, 0.06 tons, Sept. 16, 19–20, 2003, and Sept. 25–26, 2004.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	2.0	3.6	5.0	e2.0	9.6	26	4.1	86	6.8	1.7	2.7
2	0.69	4.2	3.4	5.3	e1.9	11	17	3.6	75	6.8	1.7	2.3
3	0.71	8.7	3.4	5.1	e2.0	11	12	3.2	52	6.6	2.8	2.0
4	0.87	8.9	3.3	4.3	e2.0	17	10	2.8	41	8.0	16	1.7
5	0.89	17	4.4	4.3	e2.1	61	7.8	2.7	34	6.8	7.3	1.8
6	0.91	8.0	4.2	e3.9	e2.1	51	7.1	2.8	29	5.6	4.1	1.8
7	0.63	4.2	3.8	e3.5	e2.2	38	7.0	2.9	26	5.1	2.9	1.6
8	0.97	3.1	3.6	e3.4	e2.2	31	6.3	2.6	22	4.6	2.6	1.4
9	1.2	2.1	4.6	e3.4	e2.2	24	5.7	2.4	18	4.5	2.4	1.4
10	1.0	1.8	32	e3.3	e2.2	18	5.1	2.6	36	6.8	2.9	1.5
11	0.96	2.2	32	e3.3	e2.1	12	4.7	3.8	54	5.9	2.9	1.7
12	1.00	2.2	31	e3.2	e2.0	9.8	4.2	4.0	83	4.9	2.6	1.7
13	0.81	1.8	22	e3.2	e2.0	8.1	6.0	14	81	4.4	2.5	1.6
14	2.6	1.6	17	e3.1	e1.9	7.0	5.8	19	69	3.7	2.0	1.5
15	3.1	1.5	13	e3.1	e1.9	5.9	4.8	26	52	3.6	1.6	1.5
16	2.3	1.4	11	e3.1	e1.8	6.3	4.0	16	41	4.2	1.6	2.3
17	2.3	1.3	8.3	e3.0	e1.7	6.7	3.4	9.0	35	4.0	2.2	1.9
18	1.9	17	7.2	e3.0	e1.7	6.8	3.2	20	30	3.5	2.1	1.6
19	1.9	23	6.0	e2.9	e2.2	7.2	2.8	13	24	3.0	3.3	1.4
20	1.8	17	6.2	e2.9	e3.9	5.8	4.6	15	19	2.7	2.6	1.2
21	2.4	15	5.4	e2.8	e6.8	4.8	11	39	27	3.0	2.2	7.9
22	2.7	12	5.2	e2.7	e7.2	4.0	9.7	79	35	3.0	2.0	4.3

ILLINOIS RIVER BASIN  
05551030 Brewster Creek at Valley View, IL--Continued

23	2.3	10	5.1	e2.4	e8.2	4.0	4.7	78	26	2.5	1.9	2.1
24	2.3	14	4.7	e2.3	9.5	13	4.3	66	19	2.1	2.0	0.79
25	2.6	9.3	4.5	e2.2	9.4	11	6.6	47	16	2.0	2.3	0.55
26	2.3	8.2	4.2	e2.2	9.1	31	4.6	37	13	2.1	2.9	0.52
27	1.9	6.8	4.1	e2.3	7.9	28	4.7	32	9.8	2.1	3.9	0.61
28	2.1	5.6	6.6	e2.3	7.2	31	3.9	26	8.9	1.8	18	3.3
29	1.8	4.6	6.1	e2.2	6.8	55	3.1	22	7.8	1.7	9.5	1.3
30	1.9	4.1	e5.2	e2.1	---	47	3.6	59	6.5	1.8	5.8	0.59
31	2.1	---	e4.9	e2.0	---	36	---	84	---	2.0	3.5	---
TOTAL	52.04	218.6	276.0	97.8	114.2	612.0	203.7	738.5	1076.0	125.6	121.8	56.56
MEAN	1.68	7.29	8.90	3.15	3.94	19.7	6.79	23.8	35.9	4.05	3.93	1.89
MAX	3.1	23	32	5.3	9.5	61	26	84	86	8.0	18	7.9
MIN	0.63	1.3	3.3	2.0	1.7	4.0	2.8	2.4	6.5	1.7	1.6	0.52
CFSM	0.12	0.52	0.64	0.23	0.28	1.41	0.48	1.70	2.56	0.29	0.28	0.13
IN.	0.14	0.58	0.73	0.26	0.30	1.63	0.54	1.96	2.86	0.33	0.32	0.15

e Estimated

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 – 2004, BY WATER YEAR (WY)

MEAN	3.24	5.87	6.07	2.70	3.23	12.0	7.64	25.7	19.1	3.87	8.38	2.41
MAX	4.80	7.29	8.90	3.15	3.94	19.7	8.49	27.6	35.9	4.56	18.6	4.16
(WY)	2003	2004	2004	2004	2004	2004	2003	2003	2004	2002	2002	2002
MIN	1.68	4.45	3.25	2.25	2.49	4.22	6.79	23.8	4.57	3.01	2.60	1.19
(WY)	2004	2003	2003	2003	2003	2003	2004	2004	2003	2003	2003	2003

## SUMMARY STATISTICS

## FOR 2003 CALENDAR YEAR

## FOR 2004 WATER YEAR

## WATER YEARS 2002 – 2004

ANNUAL TOTAL	2273.32	3692.80	
ANNUAL MEAN	6.23	10.1	
HIGHEST ANNUAL MEAN			10.1 2004
LOWEST ANNUAL MEAN			5.78 2003
HIGHEST DAILY MEAN	81 May 1	86 Jun 1	86 Jun 1 2004
LOWEST DAILY MEAN	0.63 Oct 7	0.52 Sep 26	0.52 Sep 26 2004
ANNUAL SEVEN-DAY MINIMUM	0.81 Oct 2	0.81 Oct 2	0.81 Oct 2 2003
MAXIMUM PEAK FLOW		111 Jun 12	111 Jun 12 2004
MAXIMUM PEAK STAGE		13.41 Jun 12	13.41 Jun 12 2004
INSTANTANEOUS LOW FLOW		0.40 Sep 26	0.40 Sep 26 2004
ANNUAL RUNOFF (CFSM)	0.445	0.721	
ANNUAL RUNOFF (INCHES)	6.04	9.81	
10 PERCENT EXCEEDS	13	29	19
50 PERCENT EXCEEDS	2.8	4.0	3.5
90 PERCENT EXCEEDS	1.3	1.7	1.7

**LOCATION.**— Lat 41°58'19", long 88°16'47" (NAD of 1983), in SW1/4SW1/4 sec. 12, T. 40 N., R. 8 E., Kane County, Hydrologic Unit 07120007, on private property about 500 feet upstream of state Highway 25 at Valley View, 2.5 miles southeast of South Elgin, and at mile 0.8.

**DRAINAGE AREA.**— 14.0 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: May 2002 to current year.

STAGE: May 2002 to current year.

PARTIAL RECORD: Annual maximum, water years 1962 to 1979, at site 500 ft downstream on State Highway 25 and at datum 10.08 ft higher.

**SURFACE-WATER QUALITY**

SEDIMENT: June 2002 to current year.

MISCELLANEOUS: Sediment concentration and particle size, water years 2002–03

PRECIPITATION: May 2002 to current year.

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

**GAGE.**— Water-stage recorder, phone telemeter, automatic water sampler, and rain gage. Datum of gage is 700.00 ft above NAVD of 1988.

**REMARKS.**— Occasional pumpage from quarry into creek about 0.5 mi. upstream. Collection, computation and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 685 ft<sup>3</sup>/s, June 10, 1967, gage height, 1.65 ft, site and datum then in use; minimum discharge, 0.40 ft<sup>3</sup>/s, Sept. 26, 2004, due to pumping.

**PRECIPITATION:** Maximum daily total, 3.32 in., August 13, 2002.

**SUSPENDED-SEDIMENT CONCENTRATIONS:** Maximum daily, 1450 mg/L, Mar. 29, 2004; minimum daily, 10 mg/L, June 25, 2004.

**SUSPENDED-SEDIMENT LOADS:** Maximum daily, 217 tons, Mar. 29, 2004; minimum daily, 0.06 tons, Sept. 16, 19–20, 2003, and Sept. 25–26, 2004.

**EXTREMES FOR CURRENT YEAR.**—

**SUSPENDED-SEDIMENT CONCENTRATIONS:** Maximum daily, 1450 mg/L, Mar. 29; minimum daily, 10 mg/L, June 25.

**SUSPENDED-SEDIMENT LOADS:** Maximum daily, 217 tons, Mar. 29; minimum daily, 0.06 tons, Sept. 25–26.

**SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

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	1.1	53	0.20	2.0	32	0.17	3.6	21	0.21
2	0.69	42	0.08	4.2	41	0.49	3.4	23	0.21
3	0.71	43	0.08	8.7	112	2.7	3.4	24	0.21
4	0.87	44	0.10	8.9	241	7.5	3.3	25	0.22
5	0.89	45	0.11	17	243	11	4.4	26	0.31
6	0.91	46	0.11	8.0	57	1.3	4.2	27	0.31
7	0.63	47	0.08	4.2	23	0.28	3.8	28	0.29
8	0.97	48	0.12	3.1	15	0.12	3.6	29	0.29
9	1.2	49	0.16	2.1	17	0.09	4.6	31	0.38
10	1.0	50	0.14	1.8	18	0.09	32	74	7.0
11	0.96	51	0.13	2.2	21	0.12	32	66	5.8
12	1.00	52	0.14	2.2	25	0.14	31	70	5.9
13	0.81	53	0.12	1.8	29	0.14	22	68	4.0
14	2.6	94	0.67	1.6	33	0.14	17	66	3.0
15	3.1	85	0.72	1.5	37	0.15	13	64	2.2
16	2.3	46	0.30	1.4	42	0.16	11	61	1.8
17	2.3	61	0.43	1.3	40	0.15	8.3	59	1.3

ILLINOIS RIVER BASIN  
05551030 Brewster Creek at Valley View, IL--Continued

18	1.9	33	0.17	17	165	8.7	7.2	57	1.1
19	1.9	30	0.15	23	165	10	6.0	55	0.89
20	1.8	27	0.13	17	77	3.6	6.2	53	0.89
21	2.4	28	0.18	15	41	1.7	5.4	51	0.74
22	2.7	28	0.21	12	37	1.2	5.2	48	0.68
23	2.3	28	0.17	10	51	1.6	5.1	47	0.64
24	2.3	26	0.16	14	72	2.7	4.7	46	0.59
25	2.6	22	0.16	9.3	44	1.1	4.5	45	0.55
26	2.3	23	0.14	8.2	28	0.64	4.2	45	0.50
27	1.9	35	0.18	6.8	17	0.32	4.1	44	0.49
28	2.1	41	0.24	5.6	18	0.26	6.6	44	0.77
29	1.8	14	0.07	4.6	19	0.23	6.1	43	0.71
30	1.9	19	0.10	4.1	20	0.23	e5.2	54	1.9
31	2.1	27	0.15	---	---	---	e4.9	51	0.82
TOTAL	52.04	---	5.90	218.6	---	57.02	276.0	---	44.70

	JANUARY			FEBRUARY			MARCH		
1	5.0	44	0.59	e2.0	17	0.25	9.6	103	2.7
2	5.3	43	0.61	e1.9	16	0.21	11	136	3.9
3	5.1	42	0.58	e2.0	15	0.18	11	170	5.2
4	4.3	41	0.48	e2.0	14	0.16	17	263	15
5	4.3	40	0.47	e2.1	16	0.17	61	508	85
6	e3.9	39	0.49	e2.1	18	0.24	51	358	50
7	e3.5	39	0.38	e2.2	20	0.26	38	109	12
8	e3.4	38	0.38	e2.2	22	0.26	31	36	3.0
9	e3.4	37	0.38	e2.2	24	0.27	24	26	1.7
10	e3.3	36	0.35	e2.2	26	0.26	18	22	1.0
11	e3.3	35	0.33	e2.1	28	0.30	12	23	0.75
12	e3.2	34	0.34	e2.0	31	0.31	9.8	85	2.5
13	e3.2	33	0.30	e2.0	33	0.34	8.1	64	1.4
14	e3.1	32	0.28	e1.9	35	0.36	7.0	52	1.0
15	e3.1	32	0.28	e1.9	37	0.35	5.9	43	0.68
16	e3.1	31	0.28	e1.8	39	0.39	6.3	40	0.68
17	e3.0	30	0.28	e1.7	41	0.44	6.7	38	0.69
18	e3.0	29	0.26	e1.7	41	0.45	6.8	36	0.65
19	e2.9	28	0.27	e2.2	44	0.44	7.2	33	0.64
20	e2.9	27	0.24	e3.9	107	2.5	5.8	31	0.48
21	e2.8	26	0.23	e6.8	159	5.7	4.8	30	0.39
22	e2.7	25	0.24	e7.2	80	2.5	4.0	33	0.36
23	e2.4	25	0.26	e8.2	158	4.5	4.0	37	0.40
24	e2.3	24	0.20	9.5	111	2.8	13	125	5.2
25	e2.2	23	0.22	9.4	79	2.0	11	101	3.2
26	e2.2	22	0.25	9.1	83	2.1	31	333	28
27	e2.3	21	0.23	7.9	67	1.4	28	94	7.1
28	e2.3	20	0.17	7.2	65	1.3	31	523	75
29	e2.2	19	0.25	6.8	71	1.3	55	1450	217
30	e2.1	18	0.21	---	---	---	47	323	42
31	e2.0	17	0.24	---	---	---	36	80	8.0
TOTAL	97.8	---	10.07	114.2	---	31.74	612.0	---	575.62

ILLINOIS RIVER BASIN  
05551030 Brewster Creek at Valley View, IL--Continued

435

	APRIL			MAY			JUNE		
1	26	36	2.5	4.1	55	0.61	86	188	44
2	17	25	1.2	3.6	50	0.48	75	311	61
3	12	17	0.54	3.2	51	0.44	52	99	14
4	10	20	0.54	2.8	76	0.58	41	57	6.3
5	7.8	24	0.50	2.7	102	0.75	34	47	4.2
6	7.1	28	0.53	2.8	122	0.93	29	34	2.7
7	7.0	32	0.60	2.9	119	0.95	26	27	1.9
8	6.3	36	0.61	2.6	115	0.80	22	35	2.1
9	5.7	40	0.62	2.4	120	0.79	18	45	2.2
10	5.1	43	0.59	2.6	154	1.1	36	151	19
11	4.7	45	0.57	3.8	222	2.3	54	134	22
12	4.2	48	0.54	4.0	221	2.5	83	538	122
13	6.0	52	0.85	14	218	10	81	219	48
14	5.8	57	0.89	19	261	16	69	73	14
15	4.8	64	0.83	26	156	11	52	41	5.9
16	4.0	77	0.83	16	103	4.1	41	35	3.9
17	3.4	91	0.83	9.0	97	2.3	35	30	2.8
18	3.2	101	0.88	20	205	11	30	24	2.0
19	2.8	95	0.73	13	60	2.2	24	21	1.4
20	4.6	88	1.1	15	233	21	19	21	1.1
21	11	187	7.5	39	350	56	27	301	31
22	9.7	164	4.7	79	655	139	35	71	7.1
23	4.7	100	1.3	78	264	56	26	22	1.6
24	4.3	116	1.6	66	193	35	19	15	0.79
25	6.6	269	5.0	47	91	12	16	10	0.45
26	4.6	109	1.4	37	59	5.9	13	12	0.43
27	4.7	73	0.95	32	42	3.6	9.8	16	0.41
28	3.9	54	0.57	26	30	2.1	8.9	18	0.43
29	3.1	63	0.52	22	27	1.6	7.8	18	0.38
30	3.6	60	0.59	59	561	101	6.5	18	0.32
31	---	---	---	84	104	24	---	---	---
TOTAL	203.7	---	40.41	738.5	---	526.03	1076.0	---	423.41

	JULY			AUGUST			SEPTEMBER		
1	6.8	18	0.33	1.7	109	0.49	2.7	30	0.22
2	6.8	18	0.33	1.7	129	0.58	2.3	29	0.18
3	6.6	18	0.32	2.8	170	1.7	2.0	27	0.14
4	8.0	18	0.39	16	190	9.3	1.7	25	0.12
5	6.8	19	0.35	7.3	55	1.1	1.8	24	0.12
6	5.6	20	0.30	4.1	28	0.31	1.8	30	0.14
7	5.1	21	0.29	2.9	29	0.23	1.6	35	0.15
8	4.6	22	0.27	2.6	33	0.23	1.4	40	0.15
9	4.5	22	0.27	2.4	36	0.23	1.4	41	0.15
10	6.8	23	0.42	2.9	36	0.28	1.5	41	0.17
11	5.9	22	0.35	2.9	37	0.29	1.7	47	0.21
12	4.9	21	0.27	2.6	39	0.28	1.7	48	0.22
13	4.4	21	0.25	2.5	48	0.32	1.6	43	0.19
14	3.7	30	0.30	2.0	58	0.32	1.5	42	0.17
15	3.6	41	0.40	1.6	65	0.28	1.5	43	0.18
16	4.2	50	0.57	1.6	66	0.29	2.3	59	0.37
17	4.0	53	0.57	2.2	65	0.38	1.9	48	0.25
18	3.5	55	0.52	2.1	65	0.37	1.6	43	0.19

## ILLINOIS RIVER BASIN

**05551030 Brewster Creek at Valley View, IL--Continued**

19	3.0	57	0.46	3.3	67	0.60	1.4	42	0.16
20	2.7	59	0.43	2.6	68	0.48	1.2	42	0.13
21	3.0	60	0.48	2.2	68	0.40	7.9	43	0.98
22	3.0	63	0.51	2.0	64	0.34	4.3	43	0.53
23	2.5	71	0.48	1.9	60	0.31	2.1	44	0.26
24	2.1	79	0.44	2.0	57	0.31	0.79	43	0.09
25	2.0	85	0.47	2.3	59	0.37	0.55	42	0.06
26	2.1	84	0.47	2.9	62	0.49	0.52	42	0.06
27	2.1	82	0.47	3.9	64	0.67	0.61	43	0.07
28	1.8	80	0.38	18	142	7.5	3.3	47	0.48
29	1.7	75	0.34	9.5	66	1.8	1.3	44	0.16
30	1.8	72	0.36	5.8	35	0.55	0.59	43	0.07
31	2.0	89	0.48	3.5	31	0.29	---	---	---
TOTAL	125.6	---	12.27	121.8	---	31.09	56.56	---	6.37
YEAR	3692.80		1764.63						

e Estimated



**LOCATION.**— Lat 41°55'58", long 88°20'28" (NAD of 1927), 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.**—

**SURFACE—WATER DISCHARGE AND STAGE**

DISCHARGE: December 1960 to current year.

STAGE: Water years 1994 to current year.

**SURFACE—WATER QUALITY**

MISCELLANEOUS: Water year 2000; contaminants in streambed sediments, water year 2000.

**PRECIPITATION:** August 2000 to current year.

**BIOLOGICAL**

ALGAE: Pigment and biomass, Water year 2000.

BENTHIC MACROINVERTEBRATES: Water year 2000.

HABITAT: Water year 2000.

**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, phone telemeter, crest-stage gage, and rain gage. Datum of gage is 704.84 ft above NGVD of 1929.

**REMARKS.**— Collection, computation and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Maximum discharge, 2,580, Feb. 21, 1997, from rating curve extended above 1,960 ft<sup>3</sup>/s, gage height, 8.77 ft; maximum gage height, 9.66 ft, Feb. 8, 1965, from floodmark, ice jam; minimum discharge, 0.10 ft<sup>3</sup>/s, several days in 1961 and 1965.

**PRECIPITATION:** Maximum recorded daily total, 3.27 in., August 13, 2002.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	110	e12	20	e9.7	57	73	17	374	25	9.6	12
2	1.3	125	e11	20	e9.4	74	58	15	166	24	7.0	10
3	e2.2	181	11	21	e9.7	59	48	13	111	23	8.2	9.0
4	e1.8	142	14	21	e9.4	57	40	11	78	28	47	8.6
5	e1.8	208	26	e19	e8.9	328	35	11	59	27	25	9.3
6	e1.7	98	30	e18	e8.6	236	35	10	47	25	14	9.2
7	e1.7	57	24	e16	e8.4	132	32	11	39	24	11	7.8
8	e1.7	34	21	e15	e8.2	89	28	9.9	33	23	10	6.6
9	e1.7	25	29	e14	e8.1	73	24	9.6	29	19	8.6	6.0
10	e1.8	22	303	e14	e7.8	56	23	9.6	52	30	8.6	4.7
11	e2.2	21	327	14	e7.4	52	21	38	118	24	8.7	4.5
12	e2.1	20	138	14	7.3	39	19	23	780	20	8.7	4.5
13	e13	e20	85	14	e7.4	33	18	38	586	17	8.5	3.8
14	e23	e20	57	13	7.5	39	17	94	226	18	8.2	3.6
15	e2.4	e21	46	e12	e7.8	36	17	159	145	15	7.2	5.9
16	e2.1	e23	42	11	e8.0	33	16	85	105	15	6.1	7.3
17	e2.0	53	35	e10	e8.4	33	15	58	86	15	7.1	6.0
18	e2.0	174	30	e9.9	e9.4	35	13	100	72	14	7.5	4.4
19	e2.0	176	26	e9.5	15	38	14	85	62	13	13	4.1
20	e2.0	77	e24	9.3	22	39	15	69	54	13	11	3.7
21	e2.1	e45	22	9.1	52	33	32	284	62	13	10	3.2
22	e2.2	e38	20	8.8	47	29	25	859	84	14	9.4	3.0
23	e3.8	e34	e18	7.9	96	31	19	615	54	13	9.0	3.0
24	e7.4	e30	e16	9.0	114	63	17	242	47	12	9.4	3.1
25	e4.0	e27	e15	9.0	73	99	39	151	47	11	10	3.1

ILLINOIS RIVER BASIN  
**05551200 Ferson Creek near St. Charles, IL--Continued**

<b>26</b>	e2.4	e22	e14	9.2	59	166	32	114	37	9.9	11	2.9
<b>27</b>	e2.2	e20	13	e9.5	51	150	24	87	32	9.4	14	2.9
<b>28</b>	e2.2	e17	26	e9.6	45	116	19	67	30	11	26	2.9
<b>29</b>	e2.3	e14	35	e9.6	45	246	18	51	28	9.4	21	2.8
<b>30</b>	e7.2	e13	28	e9.6	---	147	16	209	25	8.3	15	2.7
<b>31</b>	e8.6	---	23	e9.6	---	98	---	702	---	8.7	13	---
TOTAL	116.5	1867	1521	395.6	770.4	2716	802	4247.1	3668	531.7	382.8	160.6
MEAN	3.76	62.2	49.1	12.8	26.6	87.6	26.7	137	122	17.2	12.3	5.35
MAX	23	208	327	21	114	328	73	859	780	30	47	12
MIN	1.3	13	11	7.9	7.3	29	13	9.6	25	8.3	6.1	2.7
CFSM	0.07	1.20	0.95	0.25	0.51	1.69	0.52	2.65	2.36	0.33	0.24	0.10
IN.	0.08	1.34	1.09	0.28	0.55	1.95	0.58	3.06	2.64	0.38	0.28	0.12

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 – 2004, BY WATER YEAR (WY)**

MEAN	22.0	35.8	36.4	35.4	50.2	69.1	69.4	58.0	48.9	25.0	25.0	22.7
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	14.5	16.4	7.87	3.07	1.05	1.65	1.64
(WY)	1964	1972	1964	1977	1963	2003	1977	1989	1977	1961	1964	1976

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1961 – 2004**

ANNUAL TOTAL	10218.1	17178.7	
ANNUAL MEAN	28.0	46.9	41.9
HIGHEST ANNUAL MEAN			76.7
LOWEST ANNUAL MEAN			8.72
HIGHEST DAILY MEAN	608 May 11	859 May 22	1620 Feb 21 1997
LOWEST DAILY MEAN	1.3 A Oct 2	1.3 A Oct 2	0.10 B
ANNUAL SEVEN-DAY MINIMUM	1.7 Aug 22	1.7 Oct 2	0.23 Aug 26 1961
MAXIMUM PEAK FLOW		1160 Jun 12	2580 C,D Feb 21 1997
MAXIMUM PEAK STAGE		6.16 Jun 12	9.66 E Feb 8 1965
INSTANTANEOUS LOW FLOW		0.95 A Oct 2	0.10 F
ANNUAL RUNOFF (CFSM)	0.541	0.908	0.811
ANNUAL RUNOFF (INCHES)	7.35	12.36	11.02
10 PERCENT EXCEEDS	57	106	88
50 PERCENT EXCEEDS	10	18	22
90 PERCENT EXCEEDS	2.0	3.8	4.5

A – But may have been less during estimated period, Oct. 3–31.

B – Several days in 1961.

C – From rating curve extended above 1,960 ft<sup>3</sup>/s.

D – Gage height, 8.77 ft.

E – From floodmark, ice jam.

F – Several days in 1961 and 1965.

**LOCATION.**— Lat 41°50'45", long 88°20'57" (NAD of 1927), in NW1/4NW1/4SE1/4 sec.20, T.39 N., R.8 E., Kane County, Hydrologic Unit 07120007, on left bank at bridge on Deer Path road, 1 mi. west of Batavia, and at mile 2.9.

**DRAINAGE AREA.**— 27.6 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE

DISCHARGE: May 1998 to current year.

STAGE: Water years 1998 to current year.

PARTIAL RECORD: Miscellaneous discharge measurements, water year 1998.

PRECIPITATION: October 1999 to current year.

**GAGE.**— Water–stage recorder, phone telemeter, unheated tipping–bucket rain gage, and crest–stage gage. Datum of gage is 685.00 ft above NGVD of 1929.

**REMARKS.**— Effluent from sewage–treatment plant 5 mi upstream. Collection, computation, and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Maximum discharge, 1,080 ft<sup>3</sup>/s, Apr. 23, 1999, gage height, 7.52 ft; minimum discharge, 0.22 ft<sup>3</sup>/s, September 29, 2004.

PRECIPITATION: Maximum daily total, 2.84 in, August 13, 2002.

**EXTREMES FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor. Effluent from sewage–treatment plant 5 mi. upstream averaged 0.55 ft<sup>3</sup>/s during the year. The maximum average was 0.69 ft<sup>3</sup>/s in June and the minimum was 0.47 ft<sup>3</sup>/s in October.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.30	1.6	1.7	11	e2.7	21	41	12	183	8.5	2.7	2.5
2	0.31	2.3	1.3	10	e2.7	24	34	9.5	90	7.8	2.6	2.4
3	0.44	18	1.0	11	e2.7	21	29	7.9	63	8.2	3.0	1.7
4	0.43	30	0.98	9.5	e2.7	24	25	7.0	44	8.6	14	1.3
5	0.43	62	5.3	9.6	e2.7	124	22	6.0	33	8.1	12	0.83
6	0.41	42	6.8	7.4	e2.7	97	20	5.9	26	7.8	6.9	0.92
7	0.36	22	6.2	6.3	e2.7	56	18	6.2	23	7.1	3.4	0.85
8	0.35	12	4.3	e6.1	e2.7	41	16	6.0	21	6.9	2.6	0.90
9	0.35	9.4	7.2	e5.9	e2.7	32	14	5.2	17	13	1.6	0.72
10	0.38	6.3	98	5.7	e2.7	26	13	5.6	20	18	1.2	0.74
11	0.44	5.0	106	e5.6	e2.8	23	12	5.2	45	14	1.2	1.2
12	0.51	2.5	59	e5.6	e2.7	20	11	6.2	265	12	1.3	0.63
13	0.59	1.6	41	e5.6	e2.7	19	9.9	11	199	8.5	1.2	0.52
14	1.3	2.0	33	e5.5	e2.6	20	8.8	26	90	7.3	1.1	0.76
15	1.2	1.5	27	e5.0	e2.6	19	8.8	36	65	6.0	0.94	0.81
16	0.96	1.4	24	e4.7	e2.6	18	8.0	25	48	6.2	0.87	0.97
17	0.76	0.97	20	e4.4	e2.6	17	9.0	17	37	5.2	1.0	1.1
18	0.69	47	17	e4.1	e2.6	17	10	20	31	4.6	1.2	0.80
19	0.69	64	14	e3.9	e2.9	19	9.9	19	26	4.2	1.2	0.74
20	0.56	41	13	3.7	15	20	12	16	23	4.1	1.2	0.69
21	0.73	24	12	3.8	24	18	18	40	29	4.1	1.2	1.1
22	0.70	16	12	3.4	29	15	15	85	38	5.8	1.6	0.94
23	0.72	13	12	e3.4	37	14	12	79	29	8.9	0.97	0.86
24	0.72	17	11	e3.3	37	24	11	53	25	6.3	0.96	0.61
25	1.1	14	9.5	e3.2	28	34	21	41	21	5.5	1.00	0.51
26	1.1	12	8.2	e3.1	25	56	18	31	17	4.1	1.6	0.81
27	1.1	8.8	8.0	e3.0	21	56	14	25	15	3.7	2.5	0.36
28	1.3	6.1	14	e2.9	17	53	12	21	13	3.4	9.1	0.57

ILLINOIS RIVER BASIN  
**05551330 Mill Creek near Batavia, IL—Continued**

<b>29</b>	1.2	4.0	17	e2.8	16	86	10	16	12	2.8	11	0.36
<b>30</b>	1.1	2.9	15	e2.8	---	63	10	76	9.9	2.8	7.0	0.66
<b>31</b>	1.2	---	14	e2.8	---	52	---	254	---	2.9	4.1	---
TOTAL	22.43	490.37	619.48	165.1	300.1	1129	472.4	973.7	1557.9	216.4	102.24	27.86
MEAN	0.72	16.3	20.0	5.33	10.3	36.4	15.7	31.4	51.9	6.98	3.30	0.93
MAX	1.3	64	106	11	37	124	41	254	265	18	14	2.5
MIN	0.30	0.97	0.98	2.8	2.6	14	8.0	5.2	9.9	2.8	0.87	0.36
CFSM	0.03	0.59	0.72	0.19	0.37	1.32	0.57	1.14	1.88	0.25	0.12	0.03
IN.	0.03	0.66	0.83	0.22	0.40	1.52	0.64	1.31	2.10	0.29	0.14	0.04

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 – 2004, BY WATER YEAR (WY)**

MEAN	19.0	14.7	13.1	14.1	25.2	23.5	32.8	33.6	31.3	16.1	9.72	8.04
MAX	43.8	26.5	20.0	49.1	68.4	36.4	89.5	64.2	51.9	45.8	28.5	18.7
(WY)	1999	2001	2004	1999	2001	2004	1999	2003	2004	1998	2002	2001
MIN	0.72	4.49	5.68	2.79	2.41	9.31	12.5	11.9	8.33	3.40	2.16	0.40
(WY)	2004	2000	2003	2003	2003	2003	2003	2000	2003	2001	2003	2003

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1998 – 2004**

GENERAL STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1998 - 2001	
ANNUAL TOTAL	4424.97		6076.98			
ANNUAL MEAN	12.1		16.6		19.7	
HIGHEST ANNUAL MEAN					32.4 1999	
LOWEST ANNUAL MEAN					10.5 2003	
HIGHEST DAILY MEAN	227	May 1	265	Jun 12	754	Apr 23 1999
LOWEST DAILY MEAN	0.30	Oct 1	0.30	Oct 1	0.30	Oct 1 2003
ANNUAL SEVEN-DAY MINIMUM	0.34	Sep 7	0.38	Oct 1	0.34	Sep 7 2003
MAXIMUM PEAK FLOW			331	Jun 12	1080	Apr 23 1999
MAXIMUM PEAK STAGE			6.08	Jun 12	7.52	Apr 23 1999
INSTANTANEOUS LOW FLOW			0.22	Sep 29	0.22	Sep 29 2004
ANNUAL RUNOFF (CF5M)	0.439		0.601		0.714	
ANNUAL RUNOFF (INCHES)	5.96		8.18		9.70	
10 PERCENT EXCEEDS	27		40		42	
50 PERCENT EXCEEDS	2.5		7.6		9.4	
90 PERCENT EXCEEDS	0.41		0.81		2.0	

**LOCATION.**— Lat 41°44'01", long 88°20'00", (NAD 1927) in NW1/4SE1/4 sec.33, T.38 N., R.8 E., Kane County, Hydrologic Unit 07120007, on left bank at dam 0.4 mi upstream from Mill Street bridge in Montgomery, 3.2 mi upstream from Waubensee Creek, and at mile 45.9.

**DRAINAGE AREA.**— 1,732 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE

DISCHARGE: October 2002 to current year.

STAGE: October 2002 to current year.

MISCELLANEOUS MEASUREMENTS: Water year 1976.

SURFACE–WATER QUALITY

CHEMICAL: Water years 1978 to 1990. Additional chemical data for water years 1964, 1972–77 are published in Water–Resources Investigations 78–23 and 79–24 as site DT 38.

**GAGE.**— Water–stage recorder, phone telemeter, and concrete dam. Datum of gage is 603.52 ft above NGVD of 1929.

**REMARKS.**— Flow regulated by Algonquin Dam, 36 mi upstream from station; Stratton Lock and Dam (previously known as McHenry Dam), 52 mi upstream from station; and occasionally affected by wind action.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Maximum discharge, 8,800 ft<sup>3</sup>/s, May 31, 2004; gage height, 13.92 ft; minimum discharge, 123 ft<sup>3</sup>/s, Aug. 26, 2003, Sept. 8, 2003.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	187	212	728	801	500	904	2950	1280	7570	2130	514	664
2	187	363	692	781	e540	1070	2770	1290	6650	1780	470	647
3	195	1100	684	791	e500	1180	2630	1230	6180	1550	537	630
4	208	1410	664	826	e460	1600	2500	1080	5760	1570	1140	607
5	230	2340	672	828	e470	3440	2310	882	5360	1410	909	579
6	247	2030	622	576	e450	3880	2170	828	4980	1540	727	545
7	243	1890	577	693	e440	3550	1850	828	4430	1530	613	515
8	225	1800	561	793	e450	3370	1600	845	3650	1560	557	525
9	233	1720	626	765	e450	3240	1460	736	3390	1680	541	531
10	239	1580	1800	713	e450	3040	1370	722	3320	1860	556	492
11	236	1280	2340	649	e460	2660	1350	1140	3850	1740	601	441
12	222	1040	2170	612	e450	2370	1330	1380	7120	1620	613	416
13	207	906	1960	598	e450	2280	1250	1690	5710	1460	630	404
14	448	913	1830	588	e450	2250	1120	2480	4020	1320	626	384
15	467	888	1640	532	e450	2210	1040	3070	3440	1270	593	359
16	335	908	1560	618	e440	1810	972	2830	3100	1170	546	417
17	277	873	1500	583	e440	1430	921	2760	2850	1150	557	429
18	215	1640	1420	522	e440	1430	875	3970	2740	1130	528	442
19	189	1700	1420	474	e440	1480	761	4470	2670	994	534	396
20	200	1350	e1300	e580	e480	1470	855	4470	2650	866	505	365
21	197	1180	e1200	e600	e520	1460	1150	4920	2860	756	493	345
22	200	1120	1010	e540	e560	1420	1090	6980	3320	696	466	333
23	215	1070	959	e510	e640	1320	1150	7460	3340	762	420	338
24	207	1090	864	e440	e710	1560	1190	6660	3410	798	487	313
25	248	1030	770	e440	e700	1780	1460	6370	3450	759	512	286
26	237	1020	744	e440	e700	2150	1350	6230	3350	716	548	275
27	216	999	744	e430	723	2450	1330	6090	3220	658	584	267
28	214	949	794	e430	760	2710	1320	6000	3120	584	999	266
29	193	885	844	e430	797	3680	1040	5870	2990	531	1010	286
30	190	807	812	e420	---	3380	1060	6840	2610	531	814	268

FOX RIVER BASIN  
**05551540 Fox River at Montgomery, IL--Continued**

<b>31</b>	217	---	791	411	---	3130	---	8600	---	530	713	---
TOTAL	7324	36093	34298	18414	15320	69704	44224	110001	121110	36651	19343	12765
MEAN	236	1203	1106	594	528	2249	1474	3548	4037	1182	624	426
MAX	467	2340	2340	828	797	3880	2950	8600	7570	2130	1140	664
MIN	187	212	561	411	440	904	761	722	2610	530	420	266
CFSM	0.14	0.69	0.64	0.34	0.31	1.30	0.85	2.05	2.33	0.68	0.36	0.25
IN.	0.16	0.78	0.74	0.40	0.33	1.50	0.95	2.36	2.60	0.79	0.42	0.27

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 – 2004, BY WATER YEAR (WY)**

MEAN	506	1012	832	568	432	1381	1208	2932	2388	975	507	308
MAX	776	1203	1106	594	528	2249	1474	3548	4037	1182	624	426
(WY)	2003	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004	2004
MIN	236	820	558	542	332	514	943	2316	740	768	391	190
(WY)	2004	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003

**SUMMARY STATISTICS**

**FOR 2003 CALENDAR YEAR**

**FOR 2004 WATER YEAR**

**WATER YEARS 2003 – 2004**

ANNUAL TOTAL	283657		525247			
ANNUAL MEAN	777		1435			
HIGHEST ANNUAL MEAN					1435	2004
LOWEST ANNUAL MEAN					745	2003
HIGHEST DAILY MEAN	4090	May 11	8600	May 31	8600	May 31 2004
LOWEST DAILY MEAN	131	Sep 8	187	Oct 1,2	131	Sep 8 2003
ANNUAL SEVEN-DAY MINIMUM	142	Sep 7	203	Oct 18	142	Sep 7 2003
MAXIMUM PEAK FLOW			8800	May 31	8800	May 31 2004
MAXIMUM PEAK STAGE			13.92	May 31	13.92	May 31 2004
INSTANTANEOUS LOW FLOW			174	Oct 29	123	A
ANNUAL RUNOFF (CFSM)	0.449		0.829			
ANNUAL RUNOFF (INCHES)	6.09		11.28			
10 PERCENT EXCEEDS	1600		3360		2650	
50 PERCENT EXCEEDS	573		844		664	
90 PERCENT EXCEEDS	199		327		250	

A – Aug. 26, 2003; Sept. 8, 2003.

**LOCATION.**— Lat 41°44'27", long 88°23'00" (NAD of 1927), in NW1/4SE1/4 sec.25, T.38 N., R.7 E., Kane County, Hydrologic Unit 07120007, on right bank at bridge on Jericho Rd., 1.0 mi west of Montgomery, and at mile 13.0.

**DRAINAGE AREA.**— 55.0 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE

DISCHARGE: June 1998 to current year.

STAGE: Water years 1998 to current year.

PRECIPITATION: October 1999 to current year.

**GAGE.**— Water–stage recorder, phone telemeter, unheated tipping–bucket rain gage, and crest–stage gage. Datum of gage is 654.00 ft above NGVD of 1929.

**REMARKS.**— Collection, computation, and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Maximum discharge, 1,040 ft<sup>3</sup>/s, Apr. 23, 1999, gage height, 8.61 ft; minimum, 0.16 ft<sup>3</sup>/s, Sept. 6, 7, 2003.

PRECIPITATION: Maximum daily total, 2.62 in, October 13, 2001.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Maximum measured, 1,170 ft<sup>3</sup>/s, Feb. 22, 1997, gage height unknown.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	23	17	e22	e12	29	110	24	394	29	10	13
2	5.8	27	15	e20	e12	37	86	24	247	27	9.5	11
3	6.2	64	14	e20	e12	35	68	22	167	27	9.8	9.8
4	8.6	65	16	e20	e12	36	55	22	102	29	25	9.2
5	8.0	100	24	e18	e12	147	50	23	84	28	23	8.4
6	5.0	60	24	e14	e12	183	48	21	68	27	18	7.9
7	4.6	45	21	e14	e12	126	46	21	58	25	15	7.5
8	3.2	36	21	e14	e12	93	43	20	49	24	14	7.1
9	4.2	27	26	e14	e12	76	39	20	43	31	12	6.3
10	6.4	22	143	e14	e12	62	35	19	43	46	11	6.1
11	4.5	23	209	e13	e12	56	34	19	71	36	11	5.9
12	3.7	23	140	e13	e12	47	33	19	520	31	10	5.9
13	4.4	19	98	e13	e12	43	31	24	768	27	9.6	5.7
14	25	16	e68	e12	e12	43	29	44	465	25	9.6	5.3
15	31	18	e54	e12	e12	41	27	67	244	22	8.9	5.6
16	24	19	e45	e11	e12	41	27	51	173	21	8.5	7.5
17	20	19	e37	e11	e12	41	26	40	123	19	9.1	6.9
18	15	66	e31	e11	e12	40	24	37	98	17	9.8	6.2
19	9.7	91	e27	e11	e12	40	26	35	81	16	11	6.0
20	11	65	e24	e10	e15	40	36	32	68	17	9.6	6.3
21	14	48	e26	e10	e26	36	39	35	66	17	8.4	6.0
22	16	37	e24	e10	e40	33	29	107	79	18	7.8	6.2
23	17	32	e21	e10	e50	32	26	115	67	17	8.0	5.9
24	24	37	e20	e10	e66	40	25	81	57	14	8.0	5.7
25	31	33	e18	e10	37	58	34	63	52	13	9.2	5.7
26	31	31	e19	e11	30	89	36	52	46	13	12	6.1
27	28	27	e19	e11	25	120	31	44	41	11	18	5.6
28	25	24	e21	e11	25	103	35	37	38	11	26	5.7
29	23	21	e23	e12	25	169	33	32	34	10	26	4.9

## ILLINOIS RIVER BASIN

## 05551675 Blackberry Creek near Montgomery, IL--Continued

<b>30</b>	24	20	e24	e12	---	153	25	101	32	11	20	4.6
<b>31</b>	21	---	e21	e12	---	143	---	328	---	11	16	---
TOTAL	459.6	1138	1290	406	567	2232	1186	1579	4378	670	403.8	204.0
MEAN	14.8	37.9	41.6	13.1	19.6	72.0	39.5	50.9	146	21.6	13.0	6.80
MAX	31	100	209	22	66	183	110	328	768	46	26	13
MIN	3.2	16	14	10	12	29	24	19	32	10	7.8	4.6
CFSM	0.27	0.69	0.76	0.24	0.36	1.31	0.72	0.93	2.65	0.39	0.24	0.12
IN.	0.31	0.77	0.87	0.27	0.38	1.51	0.80	1.07	2.96	0.45	0.27	0.14

e Estimated

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 – 2004, BY WATER YEAR (WY)

MEAN	38.5	32.6	27.3	30.7	52.0	51.2	66.3	68.2	73.1	36.2	21.5	13.2
MAX	86.5	53.2	41.6	106	137	72.5	156	107	146	90.8	35.4	26.8
(WY)	2002	2001	2004	1999	2001	2001	1999	2002	2004	1998	2000	2001
MIN	11.6	9.69	6.87	7.99	10.2	18.8	32.6	27.6	24.7	10.6	5.80	2.21
(WY)	2003	2003	2003	2003	2003	2003	2003	2001	2003	2001	2001	2003

## SUMMARY STATISTICS

## FOR 2003 CALENDAR YEAR

## FOR 2004 WATER YEAR

## WATER YEARS 1998 – 2004

ANNUAL TOTAL	10636.32		14513.4		41.5	
ANNUAL MEAN	29.1		39.7		64.6	
HIGHEST ANNUAL MEAN					1999	
LOWEST ANNUAL MEAN					2003	
HIGHEST DAILY MEAN	305	May 10	768	Jun 13	768	Jun 13 2004
LOWEST DAILY MEAN	0.46	Sep 6	3.2	Oct 8	0.46	Sep 6 2003
ANNUAL SEVEN-DAY MINIMUM	0.96	Sep 6	4.4	Oct 7	0.96	Sep 6 2003
MAXIMUM PEAK FLOW			822	Jun 13	1040	Apr 23 1999
MAXIMUM PEAK STAGE			8.12	Jun 13	8.61	Apr 23 1999
INSTANTANEOUS LOW FLOW			2.7	Oct 8	0.16	A
ANNUAL RUNOFF (CFSM)	0.530		0.721		0.756	
ANNUAL RUNOFF (INCHES)	7.20		9.82		10.27	
10 PERCENT EXCEEDS	65		80		83	
50 PERCENT EXCEEDS	19		24		24	
90 PERCENT EXCEEDS	4.5		7.9		8.4	

A – Sept. 6, 7, 2003.



**LOCATION.**— Lat 41°40'18", long 88°26'29" (NAD of 1927), 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.**—

SURFACE–WATER DISCHARGE AND STAGE

DISCHARGE: October 1960 to current year.

STAGE: Water years 1994 to current year.

SURFACE–WATER QUALITY

CHEMICAL: Water years 1978–91.

BIOLOGICAL

ALGAE: Pigment and biomass, Water year 1990.

**REVISED RECORDS.**— WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, phone telemeter, and crest–stage gage. Datum of gage is 612.34 ft above NGVD of 1929.

**REMARKS.**— Diversion about 7 miles upstream near Jericho Rd. that crosses the watershed divide during overbank flow.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE –WATER DISCHARGE AND STAGE: Maximum discharge, 5,510 ft<sup>3</sup>/s, from rating curve extended above 3,900 ft<sup>3</sup>/s, July 18, 1996, gage height, 13.16 ft, backwater from debris jam; minimum, 0.10 ft<sup>3</sup>/s, Dec. 7, 1962, result of freeze up.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	e29	23	24	12	33	221	26	676	45	15	25
2	5.3	38	21	20	e12	38	166	24	648	43	14	27
3	6.1	51	20	20	e12	38	124	22	354	41	15	18
4	7.3	44	20	21	e12	37	94	20	194	43	30	15
5	8.2	103	24	19	e12	117	80	21	139	42	35	14
6	7.6	67	27	14	e12	209	74	19	107	41	27	13
7	7.0	42	25	e14	e12	152	70	19	86	39	23	13
8	8.2	30	23	e14	e12	104	64	17	69	36	20	12
9	7.6	19	25	e14	e12	83	55	18	56	37	18	11
10	e5.2	15	104	e14	e12	63	49	17	54	63	16	11
11	e4.8	12	217	e14	e12	53	46	16	86	52	15	10
12	e5.8	13	157	e14	e12	44	42	16	616	45	14	10
13	e5.0	11	96	e14	e12	40	41	23	1030	40	13	9.8
14	e28	8.5	66	e14	12	39	35	55	995	36	12	9.3
15	30	7.7	52	14	12	38	33	100	597	32	12	9.0
16	e24	7.9	48	e13.5	12	36	31	79	318	30	12	9.8
17	e20	7.2	38	e13	12	37	30	54	217	28	11	9.7
18	e16	50	33	13	12	36	27	48	157	25	15	9.2
19	e13	128	28	e12	13	36	e32	43	133	24	16	8.9
20	e14	102	25	e12	17	35	e39	38	110	24	14	7.8
21	e16	72	29	e12	30	33	e43	38	102	28	13	8.1
22	e17	52	24	12	42	29	e35	112	118	30	11	8.0
23	e20	43	23	e12	49	29	e30	177	104	27	11	8.6
24	e24	46	21	e12	68	33	e26	131	89	23	11	8.7
25	e31	42	18	e12.5	58	57	e38	95	79	21	13	9.1
26	e30	38	20	13	49	90	e40	74	70	20	15	7.9
27	e27	34	20	13	42	167	e36	58	61	18	24	7.8
28	e23	30	20	13	32	165	e46	46	58	17	31	8.0
29	e23	27	25	13	32	262	44	37	53	16	38	8.9

## ILLINOIS RIVER BASIN

**05551700 Blackberry Creek near Yorkville, IL—Continued**

<b>30</b>	e25	25	26	13	---	300	24	96	50	17	29	8.0
<b>31</b>	e23	---	22	12	---	279	---	440	---	17	23	---
TOTAL	486.7	1194.3	1320	445.0	648	2712	1715	1979	7426	1000	566	335.6
MEAN	15.7	39.8	42.6	14.4	22.3	87.5	57.2	63.8	248	32.3	18.3	11.2
MAX	31	128	217	24	68	300	221	440	1030	63	38	27
MIN	4.6	7.2	18	12	12	29	24	16	50	16	11	7.8
CFSM	0.22	0.57	0.61	0.20	0.32	1.25	0.81	0.91	3.53	0.46	0.26	0.16
IN.	0.26	0.63	0.70	0.24	0.34	1.44	0.91	1.05	3.94	0.53	0.30	0.18

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 – 2004, BY WATER YEAR (WY)**

MEAN	30.6	41.8	45.7	42.8	61.0	84.5	86.9	77.5	68.0	45.7	28.3	30.6
MAX	126	175	217	146	202	360	249	221	248	381	172	131
(WY)	1973	1986	1983	1993	1997	1979	1979	1974	2004	1996	1987	1987
MIN	5.42	7.44	4.16	4.25	5.46	18.1	27.2	16.7	14.3	8.43	4.21	2.95
(WY)	1964	1964	1964	1977	1963	2003	1963	1989	1977	1961	1991	2003

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1961 – 2004**

ANNUAL TOTAL	11110.5		19827.6			
ANNUAL MEAN	30.4		54.2		53.5	
HIGHEST ANNUAL MEAN					97.8	
LOWEST ANNUAL MEAN					16.7	
HIGHEST DAILY MEAN	298	May 10	1030	Jun 13	3460	Jul 19 1996
LOWEST DAILY MEAN	1.3	Sep 20	4.6	Oct 1	1.3	Sep 20 2003
ANNUAL SEVEN-DAY MINIMUM	1.7	Sep 17	6.2	Oct 7	1.7	Sep 17 2003
MAXIMUM PEAK FLOW			1130	Jun 13	5510 A	Jul 18 1996
MAXIMUM PEAK STAGE			7.85	Jun 13	13.16 B	Jul 18 1996
INSTANTANEOUS LOW FLOW			3.7	Oct 1	0.10 C	Dec 7 1962
ANNUAL RUNOFF (CFSM)	0.434		0.772		0.763	
ANNUAL RUNOFF (INCHES)	5.89		10.51		10.36	
10 PERCENT EXCEEDS	64		104		110	
50 PERCENT EXCEEDS	18		26		31	
90 PERCENT EXCEEDS	4.9		10		9.9	

A – From rating curve extended above 3,900 ft<sup>3</sup>/s.

B – Backwater from debris jam.

C – Result of freezeup.

**LOCATION.**— Lat 41°23'04", long 88°47'21" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: November 1914 to current year. Prior to April 1925, published as "at Wedron." Monthly discharge only for some periods, published in WSP 1308.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–92 and 1996.

SEDIMENT: February 2003 to current year.

MISCELLANEOUS: Sediment concentration and particle size, water years 1996–97, 2003.

**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, phone telemeter, U.S. Army Corps of Engineers satellite telemeter, automatic water sampler, and crest–stage gage. Datum of gage is 462.30 ft above NGVD of 1929. 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 NGVD of 1929. 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.**— Regulation by hydropower plant upstream from gage.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 55,400 ft<sup>3</sup>/s, July 19, 1996, gage height, 24.47 ft, from rating curve extended above 43,000 ft<sup>3</sup>/s; affected by dam failure 500 ft upstream from gage then in use. Maximum gage height, 36.47 ft, Jan. 25, 1960, ice jam; minimum daily discharge, 1.0 ft<sup>3</sup>/s, Aug. 29, 1934, when turbines were shut down; minimum daily with plant operating, 78 ft<sup>3</sup>/s, Oct. 29, 1956.

**SUSPENDED-SEDIMENT CONCENTRATIONS:** Maximum daily, 2,380 mg/L, June 1, 2004; minimum daily, 4 mg/L, Feb. 18–20, 2003.

**SUSPENDED-SEDIMENT LOADS:** Maximum daily, 90,100 tons, June 1, 2004; minimum daily, 2.6 tons, Feb. 18, 2003.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	288	342	1160	1160	e640	e1350	4990	1760	14100	3110	803	1020
2	264	414	1080	1190	e700	1620	4500	1940	10700	2640	773	968
3	273	815	1030	1170	e680	1720	4110	1900	9120	2280	748	932
4	249	1610	1030	1200	e620	1910	3790	1810	8060	2200	1180	872
5	253	2740	1060	1230	e620	4360	3520	1650	7350	2080	1600	863
6	296	3040	1090	849	e600	6520	3280	1410	6750	2380	1190	815
7	327	2600	1030	553	e600	5710	3020	1410	6190	2570	1030	775
8	308	2330	973	1250	e600	4980	2600	1410	5390	2300	934	735
9	301	2210	979	1350	e600	4620	2330	1420	4810	2180	829	741
10	248	2070	1980	1210	e600	4360	2140	1530	4620	2560	835	731
11	274	1860	4570	1030	e620	3980	2030	1590	5810	2530	838	703
12	268	1560	3960	936	e610	3460	1980	1970	10900	2240	874	627
13	302	1340	3310	862	e600	3240	1930	2400	13000	2080	873	634
14	292	1180	2900	864	e600	3140	1790	4060	8840	1850	878	598
15	598	1230	2590	778	e600	3110	1670	5860	7120	1740	849	598
16	676	1200	2350	849	e600	2980	1560	5330	5880	1600	809	610
17	464	1210	2210	872	e590	2390	1470	4710	5320	1530	850	639
18	477	1750	2050	705	e580	2200	1410	4760	4530	1460	853	645
19	401	3240	1950	668	e570	2240	1310	5870	4240	1390	906	643
20	343	2600	1770	e740	e560	2240	1260	5760	4000	1240	827	608

ILLINOIS RIVER BASIN  
05552500 Fox River at Dayton, IL---Continued

21	323	2060	1810	e880	e560	2200	1710	5800	3940	1170	749	539
22	327	1790	1770	e800	e580	2120	1800	7480	4470	1090	714	543
23	312	1670	1630	e730	e640	2050	1690	10300	4580	1030	697	503
24	345	1750	1390	e680	e750	2080	1710	9430	4450	1030	680	526
25	409	1620	1190	e620	e950	2640	2030	8290	4460	1040	859	499
26	444	1520	1290	e580	e900	3040	2280	7810	4350	985	974	461
27	410	1490	1310	e560	e1000	4190	2090	7520	4190	971	993	445
28	385	1430	1220	e520	e1100	4270	2040	7240	4080	923	1520	437
29	361	1350	1260	e520	e1250	5650	1920	6970	3930	849	1790	412
30	344	1260	1290	e560	---	5830	1640	8030	3660	817	1360	450
31	313	---	1240	e600	---	5410	---	14000	---	835	1180	---
TOTAL	10875	51281	54472	26516	19920	105610	69600	151420	188840	52700	29995	19572
MEAN	351	1709	1757	855	687	3407	2320	4885	6295	1700	968	652
MAX	676	3240	4570	1350	1250	6520	4990	14000	14100	3110	1790	1020
MIN	248	342	973	520	560	1350	1260	1410	3660	817	680	412
CFSM	0.13	0.65	0.67	0.32	0.26	1.29	0.88	1.85	2.38	0.64	0.37	0.25
IN.	0.15	0.72	0.77	0.37	0.28	1.49	0.98	2.13	2.66	0.74	0.42	0.28

e Estimated

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 – 2004, BY WATER YEAR (WY)

MEAN	1134	1481	1479	1458	2045	3248	3249	2484	2009	1271	934	968
MAX	5239	5444	7695	4941	5649	11290	9157	7575	6295	5988	4909	5141
(WY)	1955	1986	1983	1960	2001	1979	1979	1974	2004	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 2003 CALENDAR YEAR

## FOR 2004 WATER YEAR

## WATER YEARS 1915 – 2004

ANNUAL TOTAL	403124	780801	
ANNUAL MEAN	1104	2133	1812
HIGHEST ANNUAL MEAN			3940 1993
LOWEST ANNUAL MEAN			330 1934
HIGHEST DAILY MEAN	6260 May 12	14100 Jun 1	46600 Jul 19 1996
LOWEST DAILY MEAN	215 Sep 13	248 Oct 10	1.0 A Aug 29 1934
ANNUAL SEVEN-DAY MINIMUM	228 Sep 8	279 Oct 1	120 Oct 8 1956
MAXIMUM PEAK FLOW		15000 May 31	55400 B Jul 19 1996
MAXIMUM PEAK STAGE		13.64 May 31	36.47 C Jan 25 1960
INSTANTANEOUS LOW FLOW		85 D Oct 20,24,30,31	
ANNUAL RUNOFF (CFSM)	0.418	0.807	0.686
ANNUAL RUNOFF (INCHES)	5.68	10.99	9.32
10 PERCENT EXCEEDS	2130	4980	4100
50 PERCENT EXCEEDS	843	1300	1180
90 PERCENT EXCEEDS	307	492	378

A – When turbines were shut down; lowest daily mean with plant operating, 78 ft<sup>3</sup>/s, Oct. 29, 1956.B – Gage height, 24.47 ft, from rating curve extended above 43,000 ft<sup>3</sup>/s, affected by dam failure 500 ft. upstream from gage then in use.

C – Ice jam.

D – Result of regulation by hydropower plant.

**LOCATION.**— Lat 41°23'04", long 88°47'21" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: November 1914 to current year. Prior to April 1925, published as "at Wedron." Monthly discharge only for some periods, published in WSP 1308.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–92 and 1996.

SEDIMENT: February 2003 to current year.

MISCELLANEOUS: Sediment concentration and particle size, water years 1996–97, 2003.

**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, phone telemeter, U.S. Army Corps of Engineers satellite telemeter, automatic water sampler, and crest–stage gage. Datum of gage is 462.30 ft above NGVD of 1929. 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 NGVD of 1929. 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.**— Regulation by hydropower plant upstream from gage.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 55,400 ft<sup>3</sup>/s, July 19, 1996, gage height, 24.47 ft, from rating curve extended above 43,000 ft<sup>3</sup>/s; affected by dam failure 500 ft upstream from gage then in use. Maximum gage height, 36.47 ft, Jan. 25, 1960, ice jam; minimum daily discharge, 1.0 ft<sup>3</sup>/s, Aug. 29, 1934, when turbines were shut down; minimum daily with plant operating, 78 ft<sup>3</sup>/s, Oct. 29, 1956.

SUSPENDED–SEDIMENT CONCENTRATIONS: Maximum daily, 2,380 mg/L, June 1, 2004; minimum daily, 4 mg/L, Feb. 18–20, 2003.

SUSPENDED–SEDIMENT LOADS: Maximum daily, 90,100 tons, June 1, 2004; minimum daily, 2.6 tons, Feb. 18, 2003.

**EXTREMES FOR CURRENT YEAR.**—

SUSPENDED–SEDIMENT CONCENTRATIONS: Maximum daily, 473 mg/L, May 2; minimum daily, 4 mg/L, Feb. 18–20.

SUSPENDED–SEDIMENT LOADS: Maximum daily, 5,450 tons, May 2; minimum daily, 2.6 tons, Feb. 18.

**SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003**

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	565	---	---	686	---	---	658	---	---
2	567	---	---	636	---	---	640	---	---
3	678	---	---	595	---	---	720	---	---
4	1120	---	---	616	---	---	554	---	---
5	1480	---	---	654	---	---	657	---	---
6	1400	---	---	702	---	---	482	---	---
7	1280	---	---	695	---	---	547	---	---
8	1180	---	---	664	---	---	773	---	---
9	1070	---	---	638	---	---	511	---	---
10	924	---	---	612	---	---	618	---	---
11	847	---	---	607	---	---	772	---	---
12	738	---	---	654	---	---	748	---	---
13	727	---	---	684	---	---	655	---	---
14	702	---	---	675	---	---	614	---	---
15	668	---	---	664	---	---	589	---	---

ILLINOIS RIVER BASIN  
05552500 Fox River at Dayton, IL--Continued

16	646	---	---	700	---	---	602	---	---
17	642	---	---	725	---	---	566	---	---
18	654	---	---	719	---	---	610	---	---
19	624	---	---	802	---	---	742	---	---
20	592	---	---	1000	---	---	689	---	---
21	604	---	---	1810	---	---	606	---	---
22	614	---	---	1700	---	---	538	---	---
23	614	---	---	1750	---	---	483	---	---
24	624	---	---	1260	---	---	475	---	---
25	669	---	---	1260	---	---	440	---	---
26	722	---	---	1250	---	---	532	---	---
27	746	---	---	1150	---	---	546	---	---
28	882	---	---	1080	---	---	688	---	---
29	898	---	---	897	---	---	680	---	---
30	835	---	---	692	---	---	811	---	---
31	718	---	---	---	---	---	762	---	---
TOTAL	25030	---	---	26577	---	---	19308	---	---

JANUARY				FEBRUARY			MARCH		
1	818	---	---	e540	---	---	e430	6	7.5
2	1160	---	---	e540	---	---	e430	7	7.8
3	1320	---	---	e540	---	---	e440	7	8.3
4	903	---	---	e540	---	---	e440	7	8.5
5	629	---	---	e540	---	---	e450	7	9.0
6	586	---	---	e540	---	---	e450	8	9.3
7	589	---	---	e540	---	---	e440	8	9.4
8	563	---	---	e540	---	---	e440	8	9.6
9	541	---	---	e540	---	---	e450	8	10
10	562	---	---	e550	---	---	e450	9	10
11	e640	---	---	e550	---	---	e450	9	11
12	e520	---	---	e550	---	---	e450	9	11
13	e560	---	---	e550	---	---	e480	9	12
14	e610	---	---	e550	---	---	e480	9	12
15	e640	---	---	e540	---	---	e470	10	12
16	e650	---	---	e540	---	---	e500	10	14
17	e640	---	---	e520	---	---	e580	11	17
18	e630	---	---	e500	4	2.6	724	12	24
19	e620	---	---	e470	4	5.4	752	13	27
20	e630	---	---	e430	4	5.2	849	14	33
21	e630	---	---	e390	5	4.9	854	16	38
22	e640	---	---	e380	5	5.0	858	19	44
23	e640	---	---	e420	5	5.8	966	22	57
24	e610	---	---	e430	5	6.2	1000	22	59
25	e580	---	---	e430	6	6.5	971	18	47
26	e570	---	---	e430	6	6.7	1010	22	60
27	e560	---	---	e430	6	7.0	1050	19	55
28	e570	---	---	e430	6	7.3	1060	20	57
29	e580	---	---	---	---	---	1160	34	107
30	e540	---	---	---	---	---	1170	20	63
31	e520	---	---	---	---	---	1140	16	51
TOTAL	20251	---	---	13950	---	---	21394	---	900.4

ILLINOIS RIVER BASIN  
05552500 Fox River at Dayton, IL---Continued

451

	APRIL			MAY			JUNE		
1	1090	14	42	1750	272	1590	1510	76	309
2	1040	14	39	4250	473	5450	1520	72	293
3	1050	15	43	3290	320	2900	1430	68	261
4	1280	22	76	2540	132	911	1380	63	236
5	1910	51	273	3150	237	2290	1350	59	216
6	2030	59	326	4270	338	3930	1290	55	191
7	1770	40	191	3740	214	2160	1200	51	165
8	1750	25	118	3440	198	1840	1230	47	155
9	1520	23	96	4860	270	3660	1450	43	171
10	1360	22	81	5640	229	3510	1320	44	157
11	1330	21	75	5620	207	3190	1250	45	153
12	1200	20	64	6260	274	4670	1170	46	146
13	1200	19	61	4880	159	2110	1270	48	162
14	1190	18	57	4130	128	1440	1220	49	160
15	1110	16	49	3990	131	1420	1160	50	155
16	996	15	41	3850	104	1080	1110	51	153
17	996	15	40	3380	75	685	1050	52	148
18	1290	21	72	3080	81	677	1050	55	155
19	1230	21	69	2840	90	685	1180	59	189
20	1080	15	43	2690	87	636	1240	61	206
21	931	12	31	2440	78	514	1400	60	226
22	736	12	23	2200	71	423	1070	54	157
23	821	16	36	2080	72	405	825	52	117
24	880	20	47	1680	74	335	731	52	102
25	867	19	44	1470	76	301	698	52	97
26	861	18	41	1410	78	296	677	52	94
27	843	16	37	1360	80	292	685	52	95
28	684	15	28	1330	82	293	656	52	91
29	507	16	22	1310	83	295	673	52	94
30	569	21	33	1220	84	277	663	52	92
31	---	---	---	1360	80	293	---	---	---
TOTAL	34121	---	2198	95510	---	48558	33458	---	4946

	JULY			AUGUST			SEPTEMBER		
1	637	52	89	892	45	111	360	37	36
2	617	52	86	1310	75	268	430	37	43
3	599	52	83	1440	91	351	378	37	38
4	570	52	79	1460	72	283	295	37	30
5	603	52	84	1310	55	194	267	37	27
6	706	56	108	1170	52	163	237	38	24
7	909	65	158	1150	50	156	240	38	24
8	983	64	170	1100	48	144	239	38	24
9	1300	75	278	905	47	114	230	38	22
10	1550	85	357	842	45	103	225	38	22
11	1460	49	192	785	44	92	232	38	22
12	1260	32	108	722	42	82	242	38	24
13	1230	30	98	669	40	73	215	38	22
14	1140	38	117	668	39	70	216	38	22
15	1430	152	611	647	37	65	379	38	39
16	2030	168	926	631	36	61	354	39	35
17	1780	72	351	509	34	47	305	39	32
18	2800	240	1830	433	32	38	335	39	31

## ILLINOIS RIVER BASIN

**05552500 Fox River at Dayton, IL--Continued**

19	2030	221	1220	422	34	39	302	39	29
20	1720	121	567	397	36	39	266	39	26
21	1720	52	240	376	36	37	241	39	26
22	1670	48	215	315	36	29	252	40	27
23	1340	46	165	398	36	34	279	40	29
24	1150	44	135	388	36	33	259	40	28
25	998	41	112	298	37	28	253	41	28
26	885	39	94	e280	37	29	295	41	33
27	768	52	110	e310	37	28	364	46	46
28	1120	109	331	366	37	30	469	47	59
29	1110	91	273	e290	37	29	368	43	43
30	950	68	174	e300	37	29	318	41	12
31	811	51	112	308	37	31	----	----	----
TOTAL	37876	---	9473	21091	---	2830	8845	---	903

e Estimated



**LOCATION.**— Lat 41°23'04", long 88°47'21" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: November 1914 to current year. Prior to April 1925, published as "at Wedron." Monthly discharge only for some periods, published in WSP 1308.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–92 and 1996.

SEDIMENT: February 2003 to current year.

MISCELLANEOUS: Sediment concentration and particle size, water years 1996–97, 2003.

**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, phone telemeter, U.S. Army Corps of Engineers satellite telemeter, automatic water sampler, and crest–stage gage. Datum of gage is 462.30 ft above NGVD of 1929. 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 NGVD of 1929. 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.**— Regulation by hydropower plant upstream from gage.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 55,400 ft<sup>3</sup>/s, July 19, 1996, gage height, 24.47 ft, from rating curve extended above 43,000 ft<sup>3</sup>/s; affected by dam failure 500 ft upstream from gage then in use. Maximum gage height, 36.47 ft, Jan. 25, 1960, ice jam; minimum daily discharge, 1.0 ft<sup>3</sup>/s, Aug. 29, 1934, when turbines were shut down; minimum daily with plant operating, 78 ft<sup>3</sup>/s, Oct. 29, 1956.

**SUSPENDED-SEDIMENT CONCENTRATIONS:** Maximum daily, 2,380 mg/L, June 1, 2004; minimum daily, 4 mg/L, Feb. 18–20, 2003.

**SUSPENDED-SEDIMENT LOADS:** Maximum daily, 90,100 tons, June 1, 2004; minimum daily, 2.6 tons, Feb. 18, 2003.

**EXTREMES FOR CURRENT YEAR.**—

**SUSPENDED-SEDIMENT CONCENTRATIONS:** Maximum daily, 2,380 mg/L, June 1; minimum daily, 6 mg/L, Jan. 22.

**SUSPENDED-SEDIMENT LOADS:** Maximum daily, 90,100 tons, June 1; minimum daily, 16 tons, Jan. 22.

**SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

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	288	48	36	342	61	57	1160	65	204
2	264	45	32	414	66	74	1080	66	191
3	273	41	30	815	82	183	1030	66	183
4	249	38	26	1610	102	443	1030	67	184
5	253	44	30	2740	135	1010	1060	67	192
6	296	52	42	3040	154	1270	1090	68	198
7	327	42	36	2600	132	926	1030	80	219
8	308	35	29	2330	107	676	973	114	299
9	301	37	30	2210	94	560	979	94	248
10	248	40	27	2070	84	472	1980	145	872
11	274	42	31	1860	75	377	4570	192	2370
12	268	45	32	1560	67	285	3960	162	1740
13	302	47	38	1340	66	237	3310	136	1220
14	292	50	39	1180	65	207	2900	109	852
15	598	99	174	1230	64	215	2590	97	682

ILLINOIS RIVER BASIN  
05552500 Fox River at Dayton, IL---Continued

16	676	148	271	1200	64	208	2350	92	586
17	464	145	182	1210	63	207	2210	87	521
18	477	132	169	1750	81	412	2050	82	455
19	401	113	123	3240	174	1530	1950	77	407
20	343	103	95	2600	142	1010	1770	72	343
21	323	92	80	2060	110	615	1810	67	328
22	327	82	72	1790	88	427	1770	62	296
23	312	77	65	1670	71	321	1630	59	257
24	345	74	69	1750	69	326	1390	67	250
25	409	71	79	1620	67	293	1190	77	247
26	444	68	82	1520	65	266	1290	87	301
27	410	66	73	1490	63	254	1310	97	343
28	385	63	66	1430	63	244	1220	103	339
29	361	63	61	1350	64	233	1260	97	330
30	344	62	57	1260	64	218	1290	90	312
31	313	62	53	---	---	---	1240	83	278
TOTAL	10875	---	2229	51281	---	13556	54472	---	15247

	JANUARY			FEBRUARY			MARCH		
1	1160	76	239	e640	35	92	1450	16	63
2	1190	69	223	e700	35	84	1620	16	70
3	1170	63	198	e740	35	68	1720	20	93
4	1200	56	180	706	35	66	1910	43	225
5	1230	49	162	751	35	70	4360	177	2370
6	849	42	97	666	34	61	6520	218	3880
7	553	42	68	765	34	70	5710	86	1330
8	1250	118	407	731	34	67	4980	44	599
9	1350	127	467	705	34	64	4620	33	419
10	1210	98	320	714	33	64	4360	32	381
11	1030	70	197	750	33	67	3980	36	383
12	936	59	149	716	33	64	3460	24	224
13	862	52	122	731	33	64	3240	22	194
14	864	46	106	807	32	73	3140	26	216
15	778	39	81	e720	32	64	3110	21	180
16	849	33	76	e700	32	81	2980	14	110
17	872	28	67	e680	33	100	2390	11	70
18	705	23	45	683	36	67	2200	13	78
19	668	26	50	683	41	75	2240	16	96
20	e740	72	188	705	45	85	2240	18	109
21	e880	24	73	740	45	90	2200	19	111
22	e800	6	16	705	34	66	2120	19	111
23	e730	10	23	662	23	42	2050	21	115
24	e680	14	29	1900	19	100	2080	25	139
25	e620	19	38	1910	28	142	2640	29	205
26	e580	23	46	1710	29	135	3040	40	332
27	e560	27	48	1540	24	98	4190	87	991
28	e520	31	48	1370	22	79	4270	109	1260
29	e520	35	50	1340	19	71	5650	154	2360
30	e560	36	61	---	---	---	5830	120	1890
31	e600	36	61	---	---	---	5410	104	1520
TOTAL	26516	---	3935	26170	---	2269	105710	---	20124

ILLINOIS RIVER BASIN  
05552500 Fox River at Dayton, IL---Continued

455

	APRIL			MAY			JUNE		
1	4990	85	1150	1760	48	233	14100	2380	90100
2	4500	74	898	1940	77	404	10700	1620	48100
3	4110	58	647	1900	59	306	9120	558	13800
4	3790	54	550	1810	39	188	8060	447	9730
5	3520	50	480	1650	38	166	7350	279	5580
6	3280	49	430	1410	38	143	6750	189	3450
7	3020	47	383	1410	38	147	6190	200	3350
8	2600	46	324	1410	39	148	5390	118	1730
9	2330	46	287	1420	39	151	4810	93	1210
10	2140	44	257	1530	40	164	4620	93	1160
11	2030	41	227	1590	48	206	5810	140	2200
12	1980	38	206	1970	68	365	10900	454	15300
13	1930	38	198	2400	100	656	13000	1360	47500
14	1790	46	222	4060	160	1790	8840	530	13500
15	1670	55	248	5860	220	3480	7120	143	2780
16	1560	60	251	5330	173	2510	5880	136	2160
17	1470	51	204	4710	129	1640	5320	156	2170
18	1410	42	162	4760	118	1540	4530	111	1380
19	1310	35	126	5870	260	4120	4240	93	1060
20	1260	36	123	5760	251	3910	4000	79	849
21	1710	69	320	5800	156	2450	3940	84	893
22	1800	48	233	7480	292	6390	4470	166	2020
23	1690	40	182	10300	1060	29600	4580	102	1270
24	1710	35	163	9430	407	10600	4450	88	1060
25	2030	59	328	8290	171	3850	4460	87	1050
26	2280	78	479	7810	135	2850	4350	88	1030
27	2090	52	290	7520	128	2610	4190	97	1100
28	2040	41	227	7240	124	2430	4080	106	1170
29	1920	32	165	6970	146	2750	3930	111	1180
30	1640	24	106	8030	374	8740	3660	102	1010
31	---	---	---	14000	1540	59700	---	---	---
TOTAL	69600	---	9866	151420	---	154237	188840	---	278892

	JULY			AUGUST			SEPTEMBER		
1	3110	92	770	803	80	174	1020	80	221
2	2640	82	586	773	81	168	968	75	196
3	2280	76	466	748	81	165	932	70	175
4	2200	69	411	1180	81	222	872	64	152
5	2080	65	366	1600	81	350	863	59	138
6	2380	66	418	1190	82	263	815	54	119
7	2570	67	464	1030	82	227	775	52	108
8	2300	68	426	934	82	207	735	51	101
9	2180	71	416	829	82	184	741	50	100
10	2560	73	505	835	82	186	731	49	96
11	2530	75	513	838	83	187	703	48	91
12	2240	75	455	874	78	186	627	48	80
13	2080	76	423	873	70	165	634	47	81
14	1850	76	379	878	70	166	598	47	75
15	1740	76	358	849	70	161	598	47	75
16	1600	76	330	809	70	154	610	46	76
17	1530	77	317	850	70	162	639	46	79
18	1460	77	302	853	70	163	645	45	79

## ILLINOIS RIVER BASIN

**05552500 Fox River at Dayton, IL--Continued**

19	1390	77	289	906	71	173	643	45	78
20	1240	77	259	827	72	160	608	45	73
21	1170	78	245	749	73	147	539	44	65
22	1090	78	231	714	74	142	543	44	64
23	1030	78	216	697	75	141	503	44	60
24	1030	78	217	680	76	138	526	43	62
25	1040	79	221	859	77	178	499	43	58
26	985	79	209	974	79	207	461	45	56
27	971	79	207	993	90	242	445	47	56
28	923	79	197	1520	96	392	437	48	57
29	849	80	182	1790	112	541	412	56	62
30	817	80	176	1360	93	344	450	91	106
31	835	80	180	1180	86	274	----	----	----
TOTAL	52700	---	10734	29995	---	6569	19572	---	2839
YEAR	787151		520497						

**LOCATION.**— Lat 41°20'17", long 88°51'10" (NAD of 1927), in SW1/4SW1/4 sec.11, T.33 N., R.3 E., LaSalle County, Hydrologic Unit 07130001, downstream of the railroad bridge, 0.25 miles, and downstream 0.5 miles of the Route 23 bridge in Ottawa and the confluence with the Fox River.

**DRAINAGE AREA.**— 10,949 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: March 11, 1903 to December 31, 1903.

PARTIAL RECORD: Miscellaneous discharge measurements, water years 1903–1904.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1997 to 2004.

MISCELLANEOUS: Contaminants in streambed sediments, August 1998; contaminants in fish tissue, August, 1998.

**BIOLOGICAL**

ALGAE: Water years 1998–99 and 2002–03.

BENTHIC MACROINVERTEBRATES: Water years 1998–99 and 2002.

FISH: Water years 1998–99 and 2002–04.

HABITAT: Water years 1998–99.

**GAGE.**— Prior to November 1, 1903, vertical staff at west end of first pier from the north abutment of the railroad bridge at same datum. November 1, 1903 to February 21, 1904, chain gage read twice daily. Datum of gage is 579.48 ft above NGVD of 1929.

**REMARKS.**— Discharges for surface-water quality data for water years 1997 to current are computed by adding discharges of Illinois River at Marseilles (05543500) and Fox River at Dayton, IL (05552500).

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 46,900 ft<sup>3</sup>/s, Apr. 15, 1903, gage height, –119.08 ft (460.40 ft above NGVD of 1929); minimum discharge, 6,740 ft<sup>3</sup>/s, Sept. 8, 1903.

**REMARKS FOR CURRENT YEAR.**—Sampled as part of the Lower Illinois River Basin (LIRB) National Water Quality Assessment Program (NAWQA).

**SURFACE-WATER QUALITY**

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Instan- taneous dis- charge, cfs (00061)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Alka- linity, wat flt inc tit field, mg/L as CaCO <sub>3</sub> (39086)	Bicar- bonate, wat flt incrm. titr., field, mg/L (00453)	Carbon- ate, wat flt incrm. titr., field, mg/L (00452)
OCT 2003													
16...	1120	81700	80020	E9710	9.5	100	8.5	820	12.0	17.4	160	E194	<1
DEC													
03...	1030	81700	80020	E9300	13.7	107	8.4	760	3.0	5.0	189	228	1
FEB 2004													
26...	1120	81700	80020	E11600	11.9	88	7.9	1160	6.0	2.9	180	E218	<1
APR													
08...	1125	81700	80020	E11800	13.0	120	8.5	890	15.0	12.5	220	264	2
MAY													
14...	1050	81700	80020	E20300	8.9	103	8.1	967	16.0	23.0	182	E220	E1
JUN													
11...	1025	81700	80020	E23900	—	—	8.0	809	26.0	25.4	200	238	2
JUL													
07...	0950	81700	80020	E11200	7.5	92	8.4	762	20.5	25.8	176	209	3
AUG													
04...	0955	81700	80020	E16100	7.8	100	8.3	718	24.0	28.2	150	180	1

ILLINOIS RIVER BASIN  
**05553500 Illinois River at Ottawa, IL--Continued**

Date	Chlor- ide, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, unfltrd mg/L (00665)	Total nitro- gen, wat unf by anal ysis, mg/L (62855)	2,6-Di- ethyl- aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto- chlor, water, fltrd, ug/L (49260)	Ala- chlor, water, fltrd, ug/L (46342)	alpha- HCH, water, fltrd, ug/L (34253)
OCT 2003													
16...	98.5	89.5	<.04	4.24	.075	.641	.88	5.80	<.006	E.026	.037	.041	<.005
DEC													
03...	66.6	79.3	.04	6.22	.038	.181	.29	7.36	<.006	E.006	.065	<.010	<.005
FEB 2004													
26...	211	78.3	<.04	5.23	.094	.493	.61	6.58	<.006	E.023	.360	<.006	<.005
APR													
08...	101	75.4	<.04	6.63	.043	.124	.24	7.80	E.004	E.021	.032	<.005	<.005
MAY													
14...	122	85.0	E.02	6.07	.075	.493	.92	7.35	<.006	E.057	.524	.021	<.005
JUN													
11...	76.6	58.4	<.04	5.44	.044	.219	.54	6.89	<.006	E.141	.253	.016	<.005
JUL													
07...	84.8	68.3	<.04	4.14	.054	.393	.63	4.49	.012	E.060	.321	.010	<.005
AUG													
04...	78.4	71.2	<.04	3.30	.041	.474	.69	4.16	<.006	E.032	.076	<.005	<.005
Date	Atra- zine, water, fltrd, ug/L (39632)	Azin- phos- methyl, water, fltrd 0.7u GF ug/L (82686)	Ben- flur- alin, water, fltrd 0.7u GF ug/L (82673)	Butyl- ate, water, fltrd, ug/L (04028)	Car- baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo- furan, water, fltrd 0.7u GF ug/L (82674)	Chlor- pyrifos water, fltrd, ug/L (38933)	cis- Per- methrin water fltrd 0.7u GF ug/L (82687)	Cyana- zine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazi- non, water, fltrd, ug/L (39572)	Diel- drin, water, fltrd, ug/L (39381)	Disul- foton, water, fltrd 0.7u GF ug/L (82677)
OCT 2003													
16...	.259	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	.010	<.005	<.02
DEC													
03...	.174	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	.007	<.009	<.02
FEB 2004													
26...	.459	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	.015	<.009	<.02
APR													
08...	.156	<.050	<.010	<.004	E.006	<.020	<.005	<.006	<.018	<.003	.007	<.009	<.02
MAY													
14...	1.21	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	.003	.018	<.009	<.02
JUN													
11...	1.80	<.050	<.010	<.004	<.041	<.020	<.010	<.006	<.018	<.003	.007	<.009	<.02
JUL													
07...	.974	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	.011	<.009	<.02
AUG													
04...	.278	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	.007	<.009	<.02

## 05553500 Illinois River at Ottawa, IL---Continued

Date	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal- flur- alin, water, fltrd 0.7u GF ug/L (82663)	Etho- prop, water, fltrd 0.7u GF ug/L (82672)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala- thion, water, fltrd, ug/L (39532)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)	p,p'- DDE, water, fltrd, ug/L (34653)
OCT 2003													
16...	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.070	.117	<.006	<.002	<.007	<.003
DEC													
03...	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.026	<.006	<.003	<.007	<.003
FEB 2004													
26...	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.113	<.006	<.003	<.007	<.003
APR													
08...	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.057	<.006	<.003	<.007	<.003
MAY													
14...	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.215	<.006	<.003	<.007	<.003
JUN													
11...	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.437	<.006	<.003	<.007	<.003
JUL													
07...	<.004	<.009	<.005	<.003	<.010	<.035	<.027	<.015	.120	<.006	<.003	<.007	<.003
AUG													
04...	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.033	<.006	<.003	<.007	<.003

Date	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prome- ton, water, fltrd, ug/L (04037)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)
OCT 2003													
16...	<.010	<.004	<.022	<.011	E.01	<.004	<.010	<.011	<.02	.030	E.01	<.034	<.02
DEC													
03...	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.039	<.02	<.034	<.02
FEB 2004													
26...	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.053	<.02	<.034	<.02
APR													
08...	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.017	E.01	<.034	<.02
MAY													
14...	<.010	<.004	<.022	<.011	.02	<.004	<.025	<.011	<.02	.022	E.01	<.034	<.02
JUN													
11...	<.010	<.004	.031	<.011	.02	<.004	<.025	<.011	<.02	.089	<.02	<.034	<.02
JUL													
07...	<.010	<.004	<.022	<.011	.02	<.004	<.025	<.011	<.02	.028	<.02	<.034	<.02
AUG													
04...	<.010	<.004	<.022	<.011	.04	<.004	<.025	<.011	<.02	.014	E.01	<.034	<.02

Date	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	Sus- pended sedi- ment concen- tration mg/L (80154)
OCT 2003				
16...	<.005	.015	<.009	86

ILLINOIS RIVER BASIN  
**05553500 Illinois River at Ottawa, IL--Continued**

DEC					
	03...	<.010	.009	<.009	76
FEB 2004					
	26...	<.010	.004	<.009	113
APR					
	08...	<.010	.011	<.009	84
MAY					
	14...	<.010	.010	<.009	230
JUN					
	11...	<.010	<.002	<.009	190
JUL					
	07...	<.010	<.002	<.009	146
AUG					
	04...	<.010	<.002	<.009	123

Remark codes used in this table:

< -- Less than

E -- Estimated value



**LOCATION.**— Lat 40°44', Long 88°07', Ford County, Hydrologic Unit 07130002.

**PERIOD OF RECORD.**—

**SURFACE-WATER QUALITY**

CHEMICAL: May 2001 to August 2004.

**GAGE.**— Water-stage recorder and automatic water sampler.

SURFACE-WATER QUALITY											
Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Ammonia + org-N, water, flttd, mg/L as N (00623)	Ammonia + org-N, water, unflttd mg/L as N (00625)	Ammonia water, flttd, mg/L as N (00608)	Nitrite + nitrate water flttd, mg/L as N (00631)	Nitrite water, flttd, mg/L as N (00613)	Ortho- phos- phate, water, flttd, mg/L as P (00671)	Phos- phorus, water, flttd, mg/L (00666)	Phos- phorus, water, unflttd mg/L (00665)
APR 2003											
08...	2300	81700	80020	--	--	--	8.84	--	--	<.04	--
30...	1030	81700	80020	--	--	--	13.9	--	--	<.04	--
MAY											
14...	2126	81700	80020	.30	.31	<.04	19.7	.095	<.09	.010	.015
15...	1359	81700	80020	--	--	--	20.6	--	--	<.04	--
16...	0544	81700	80020	--	--	--	19.5	--	--	.20	--
16...	1827	81700	80020	--	--	--	18.6	--	--	<.04	--
17...	1738	81700	80020	--	--	--	17.8	--	--	<.04	--
JUN											
13...	1533	81700	80020	.40	.38	.07	17.8	.015	.12	.148	.165
JUL											
18...	1137	81700	80020	--	--	--	19.1	--	--	<.04	--
18...	1916	81700	80020	--	--	--	18.1	--	--	<.04	--
19...	0247	81700	80020	--	--	--	17.6	--	--	<.04	--
19...	2108	81700	80020	--	--	--	12.4	--	--	<.04	--
23...	0432	81700	80020	--	--	--	19.6	--	--	<.04	--

Remark codes used in this table:

< --- Less than

ILLINOIS RIVER BASIN  
**05553970    Agricultural Tile Drain near Lahogue, IL**

**LOCATION.**— Lat 40°44', Long 88°07', Ford County, Hydrologic Unit 07130002.

**PERIOD OF RECORD.**—

SURFACE-WATER QUALITY

CHEMICAL: May 2001 to August 2004.

**GAGE.**— Water-stage recorder and automatic water sampler.

**SURFACE-WATER QUALITY**

			Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Phos- phorus, water, fltrd, mg/L (00666)
Date	Time					
DEC 2003						
09...	1045		81700	80020	14.2	<.04
23...	1200		81700	80020	13.3	<.04
JAN 2004						
06...	1200		81700	80020	8.18	<.04
23...	1354		81700	80020	17.2	<.04
FEB						
06...	1354		81700	80020	15.2	.05
20...	1354		81700	80020	10.5	<.04
MAR						
05...	0925		81700	80020	12.8	<.04
22...	1104		81700	80020	16.3	<.04
APR						
05...	1104		81700	80020	20.5	<.04
19...	1105		81700	80020	16.9	<.04
MAY						
03...	1105		81700	80020	17.3	<.04
17...	1105		81700	80020	15.8	<.04
JUN						
21...	1040		81700	80020	22.4	<.04
JUL						
05...	1040		81700	80020	18.4	<.04
19...	1040		81700	80020	9.93	<.04
AUG						
02...	1040		81700	80020	9.74	.10
16...	1040		81700	80020	5.11	.07

Remark codes used in this table:

< — Less than

**LOCATION.**— Lat 40°44', Long 88°07', Ford County, Hydrologic Unit 07130002.

**PERIOD OF RECORD.**—

**SURFACE-WATER QUALITY**

CHEMICAL: May 2001 to June 2004.

**GAGE.**— Water-stage recorder and automatic water sampler.

SURFACE-WATER QUALITY											
Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Ammonia	Ammonia	Ammonia water, flttd, mg/L as N (00608)	Nitrite	Nitrite water, flttd, mg/L as N (00613)	Ortho-	Phos- phorus, water, flttd, mg/L (00666)	Phos- phorus, water, unflttd mg/L (00665)
				+ org-N, water, flttd, mg/L as N (00623)	+ org-N, water, unflttd mg/L as N (00625)		+ nitrate water flttd, mg/L as N (00631)		phos- phate, water, flttd, mg/L as P (00671)		
APR 2003											
08...	0225	81700	80020	.18	.20	<.04	12.2	.027	<.09	<.004	E.003
16...	0726	81700	80020	---	---	---	12.0	---	---	<.04	---
MAY											
05...	1852	81700	80020	.14	.12	<.04	13.9	.159	<.09	<.004	E.002
09...	0516	81700	80020	---	---	---	13.9	---	---	<.04	---
11...	1231	81700	80020	---	---	---	14.5	---	---	<.04	---
14...	2204	81700	80020	.32	.37	<.04	22.2	.096	<.09	E.004	.013
16...	1317	81700	80020	---	---	---	17.9	---	---	<.04	---
21...	0025	81700	80020	---	---	---	16.3	---	---	E.03	---
JUN											
13...	1329	81700	80020	---	---	---	16.6	---	---	E.03	---
15...	1829	81700	80020	---	---	---	17.1	---	---	<.04	---
25...	0527	81700	80020	---	---	---	16.7	---	---	<.04	---
JUL											
06...	0120	81700	80020	---	---	---	14.7	---	---	<.04	---
07...	1109	81700	80020	---	---	---	16.0	---	---	<.04	---
09...	1628	81700	80020	.40	.42	E.03	16.9	E.004	<.02	.021	.023
10...	0801	81700	80020	---	---	---	19.1	---	---	<.04	---
11...	0406	81700	80020	---	---	---	19.1	---	---	<.04	---
13...	1608	81700	80020	---	---	---	16.9	---	---	<.04	---

Remark codes used in this report:

< --- Less than

E --- Estimated value

ILLINOIS RIVER BASIN  
**05553975    Agricultural Tile Drain at County Road 1800E near Lahogue, IL**

**LOCATION.**— Lat 40°44', Long 88°07', Ford County, Hydrologic Unit 07130002.

**PERIOD OF RECORD.**—

SURFACE-WATER QUALITY

CHEMICAL: May 2001 to June 2004.

**GAGE.**— Water-stage recorder and automatic water sampler.

**SURFACE-WATER QUALITY**

					Nitrite + nitrate water fltrd, mg/L as N (00631)	Phos- phorus, water, fltrd, mg/L (00666)
	Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)		
DEC 2003	09...	1015	81700	80020	16.3	<.04
	23...	1200	81700	80020	17.1	<.04
JAN 2004	23...	1412	81700	80020	16.2	<.04
MAR	22...	1113	81700	80020	14.8	<.04
APR	05...	1116	81700	80020	17.6	<.04
	19...	1115	81700	80020	16.8	<.04
MAY	03...	1115	81700	80020	16.7	<.04
	17...	1115	81700	80020	17.4	<.04
JUN	07...	1200	81700	80020	21.4	<.04

Remark codes used in this table:

< — Less than

**LOCATION.**— Lat 40°52'40", long 88°38'10" (NAD of 1927), 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.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: October 1942 to current year.

STAGE: Water years 1994 to current year.

**REVISED RECORDS.**— WDR IL-75-1: Drainage area. WDR IL-83-2: 1951, 1957, 1965(M), 1968, 1970, 1980. WDR IL-98: 1997 (P).

**GAGE.**— Water-stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest-stage gage. Datum of gage is 619.45 ft above NGVD of 1929. Prior to Nov. 8, 1965, nonrecording gage at same site and datum.

**REMARKS.**— An average of 3 ft<sup>3</sup>/s, diverted 0.5 mi upstream from station for water supply of city of Pontiac, is not included in records.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 13,100 ft<sup>3</sup>/s, Dec. 4, 1982, gage height; 19.16 ft; no flow for many days in 1953, 1983-84, 1986-91.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	35	449	e250	103	129	2040	428	3510	120	41	171
2	6.2	30	377	248	106	141	1570	568	2200	110	34	117
3	7.0	30	339	251	109	139	1190	527	1430	107	27	86
4	7.4	33	327	253	109	138	938	495	1030	108	33	68
5	8.8	39	330	232	102	995	740	458	803	127	32	57
6	8.8	54	320	146	101	1970	613	399	666	120	40	47
7	8.0	72	311	176	106	1370	560	367	561	106	36	38
8	7.7	68	386	194	106	977	497	373	479	96	26	34
9	6.3	58	550	197	98	705	437	388	415	89	20	32
10	6.6	51	700	185	93	537	369	352	390	316	18	30
11	6.3	44	974	175	93	437	331	595	726	774	16	25
12	6.0	39	802	190	91	397	300	923	1790	536	16	20
13	6.7	37	608	195	88	336	284	781	1520	356	15	17
14	17	39	513	189	85	291	276	1020	1140	425	14	15
15	13	40	472	170	85	284	256	2040	873	386	12	16
16	e11	37	e430	205	82	260	239	1810	664	255	9.5	24
17	e9.5	38	e390	202	78	249	231	1260	529	198	8.1	30
18	e10	436	e360	184	79	242	217	957	492	184	8.5	45
19	e11	4070	e300	126	92	227	201	948	410	173	103	49
20	e12	3870	e290	172	171	197	229	901	338	143	112	40
21	13	2270	e295	160	408	192	387	732	314	116	78	31
22	14	1460	e310	143	422	181	587	610	311	98	66	26
23	14	1100	e310	135	310	170	457	554	276	85	51	22
24	14	1250	e370	146	273	176	383	537	234	73	38	18
25	22	1450	e390	135	238	183	519	590	208	63	50	17
26	29	1090	e350	122	188	248	743	1030	185	55	215	17
27	46	865	e310	132	153	1160	590	926	169	51	705	14
28	58	714	e300	118	134	1270	471	707	157	46	418	13
29	48	607	e295	115	123	1760	403	537	146	41	299	12
30	43	525	e285	107	---	2010	367	1100	133	41	312	11

ILLINOIS RIVER BASIN  
**05554500 Vermilion River at Pontiac, IL--Continued**

31	37	---	e270	103	---	1980	---	3840	---	43	259	---
TOTAL	515.6	20451	12713	5356	4226	19351	16425	26753	22099	5441	3112.1	1142
MEAN	16.6	682	410	173	146	624	548	863	737	176	100	38.1
MAX	58	4070	974	253	422	2010	2040	3840	3510	774	705	171
MIN	6.0	30	270	103	78	129	201	352	133	41	8.1	11
CFSM	0.03	1.18	0.71	0.30	0.25	1.08	0.95	1.49	1.27	0.30	0.17	0.07
IN.	0.03	1.31	0.82	0.34	0.27	1.24	1.06	1.72	1.42	0.35	0.20	0.07

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 – 2004, BY WATER YEAR (WY)**

MEAN	137	232	328	354	508	730	798	741	574	325	122	115
MAX	1682	2327	2773	1981	1856	3123	2801	2968	2232	2350	1186	1540
(WY)	1994	1986	1983	1993	2001	1979	1957	1943	1980	1951	1943	1989
MIN	0.00	0.93	4.58	3.03	6.71	23.2	109	71.1	27.0	0.00	0.00	0.00
(WY)	1989	2000	1954	1977	1963	2000	1977	1964	1988	1988	1988	1988

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1943 – 2004**

ANNUAL TOTAL	108752.1		137584.7			
ANNUAL MEAN	298		376		413	
HIGHEST ANNUAL MEAN					1094	
LOWEST ANNUAL MEAN					49.7	
HIGHEST DAILY MEAN	4420	Jul 19	4070	Nov 19	12300	Dec 4 1982
LOWEST DAILY MEAN	3.3	Aug 28	6.0	Oct 12	0.00	A
ANNUAL SEVEN-DAY MINIMUM	5.2	Aug 23	6.8	Oct 7	0.00	A
MAXIMUM PEAK FLOW			4590	Nov 19	13100	Dec 4 1982
MAXIMUM PEAK STAGE			10.59	Nov 19	19.16	Dec 4 1982
INSTANTANEOUS LOW FLOW			5.6	Oct 9–12		
ANNUAL RUNOFF (CFSM)	0.515		0.649		0.713	
ANNUAL RUNOFF (INCHES)	6.99		8.84		9.68	
10 PERCENT EXCEEDS	802		951		1050	
50 PERCENT EXCEEDS	100		190		132	
90 PERCENT EXCEEDS	10		16		6.7	

A – Many occurrences in 1953, 1983–84, 1986–91.

**LOCATION.**— Lat 41°12'30", long 88°55'51" (NAD of 1927), 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>. Area at site used prior to October 1971, 1,278 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE**

DISCHARGE: May 1931 to current year. Prior to October 1971, published as "at Lowell."

STAGE: Water years 1994 to current year.

**SURFACE—WATER QUALITY**

CHEMICAL: Water years 1978 to 1991.

SEDIMENT: June 1980 to September 1981.

MISCELLANEOUS: Contaminants in streambed sediments, July 1996; contaminants in fish tissue, July 1996.

**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, U.S. Army Corps of Engineers satellite telemeter and crest–stage gage. Datum of gage is 520.58 ft above NGVD of 1929. 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.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** 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 and datum (discharge 31,800 ft<sup>3</sup>/s); minimum discharge, 2.6 ft<sup>3</sup>/s, Aug. 3, 1988.

**SUSPENDED—SEDIMENT CONCENTRATIONS:** Maximum daily mean, 6,730 mg/L Aug. 15, 1981; minimum daily mean, 1 mg/L Feb. 5, 1981.

**SUSPENDED—SEDIMENT LOADS:** Maximum daily, 209,000 tons Aug. 15, 1981; minimum daily, 0.24 ton Feb. 5, 1981.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	47	596	355	e180	279	3750	1130	8610	252	56	351
2	15	57	514	337	e175	285	3110	1420	5140	235	51	246
3	15	52	443	332	e180	290	2390	1330	3450	218	53	176
4	16	49	413	345	e180	302	1870	1190	2510	219	219	135
5	15	90	419	347	e175	1100	1490	1060	1960	210	237	108
6	15	72	415	472	e170	3400	1240	930	1610	212	124	92
7	15	73	402	437	e175	2880	1100	872	1340	215	76	77
8	13	71	397	411	e180	1990	995	1040	1130	193	65	64
9	12	84	490	428	e170	1470	874	983	957	188	55	54
10	12	75	776	340	e165	1120	756	870	878	200	43	49
11	11	68	1190	312	e160	908	670	759	961	403	34	44
12	10	63	1300	298	e155	755	617	1090	1840	814	29	41
13	9.1	54	958	292	e150	670	574	1270	2350	611	29	36
14	e16	47	775	289	e145	595	548	1510	1890	534	26	32
15	24	44	671	258	e140	536	519	2590	1590	524	24	31
16	15	45	605	281	e135	511	485	3260	1240	443	21	63
17	12	45	541	318	e135	489	463	2490	999	340	18	46
18	15	100	504	369	e130	473	445	1890	840	268	22	46
19	15	1740	463	463	e130	448	421	1590	748	239	32	43
20	17	4850	391	367	e240	418	424	1710	650	223	39	54
21	18	3730	380	400	e370	384	503	1480	596	193	126	61
22	20	2290	388	350	e850	362	705	1260	585	168	107	54
23	20	1570	416	268	e940	347	796	1170	545	135	83	44
24	20	1300	404	e250	e740	346	668	1060	479	118	83	38
25	25	1810	552	e240	e650	345	858	1190	423	104	83	33
26	25	1620	507	e220	530	361	1780	1750	386	92	96	29

ILLINOIS RIVER BASIN  
**05555300 Vermilion River near Leonore, IL—Continued**

<b>27</b>	44	1210	443	e220	385	644	1530	1920	353	82	239	27
<b>28</b>	37	955	403	e210	327	1780	1190	1540	331	74	1420	26
<b>29</b>	40	785	394	e200	293	2310	969	1190	302	68	1220	25
<b>30</b>	58	676	392	e190	---	3220	852	1850	279	66	693	23
<b>31</b>	52	---	377	e185	---	3350	---	8530	---	62	463	---
TOTAL	646.1	23672	16919	9784	8355	32368	32592	51924	44972	7703	5866	2148
MEAN	20.8	789	546	316	288	1044	1086	1675	1499	248	189	71.6
MAX	58	4850	1300	472	940	3400	3750	8530	8610	814	1420	351
MIN	9.1	44	377	185	130	279	421	759	279	62	18	23
CFSM	0.02	0.63	0.44	0.25	0.23	0.83	0.87	1.34	1.20	0.20	0.15	0.06
IN.	0.02	0.70	0.50	0.29	0.25	0.96	0.97	1.54	1.34	0.23	0.17	0.06

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 – 2004, BY WATER YEAR (WY)**

MEAN	436	707	948	848	1305	1968	1803	1648	1379	703	318	372
MAX	3188	4978	6201	4259	4159	7649	5098	5152	4442	2966	2678	3997
(WY)	1987	1986	1983	1993	2001	1979	1982	1995	1980	1993	1981	1993
MIN	11.4	11.4	11.4	6.36	38.1	49.1	208	241	78.5	8.83	6.89	11.8
(WY)	1972	1972	1977	1977	2003	2000	1977	1992	1988	1988	1988	1999

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1972 – 2004**

ANNUAL TOTAL	155018.5		236949.1			
ANNUAL MEAN	425		647		1034	
HIGHEST ANNUAL MEAN					2419	
LOWEST ANNUAL MEAN					267	
HIGHEST DAILY MEAN	4850	Nov 20	8610	Jun 1	30000	Dec 4 1982
LOWEST DAILY MEAN	9.1	Oct 13	9.1	Oct 13	2.6	Aug 3 1988
ANNUAL SEVEN-DAY MINIMUM	11	Aug 25	12	Oct 7	3.0	Jul 30 1988
MAXIMUM PEAK FLOW			10800	Jun 1	31800	Dec 4 1982
MAXIMUM PEAK STAGE			16.57	Jun 1	27.13	Dec 4 1982
INSTANTANEOUS LOW FLOW			8.0	Oct 13	2.6	Aug 3 1988
ANNUAL RUNOFF (CFSM)	0.339		0.518		0.826	
ANNUAL RUNOFF (INCHES)	4.61		7.05		11.23	
10 PERCENT EXCEEDS	1170		1600		2560	
50 PERCENT EXCEEDS	166		348		383	
90 PERCENT EXCEEDS	18		29		25	



**LOCATION.**— Lat 41°21'57", long 89°29'54" (NAD of 1927), 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 Run, 1.5 mi west of Princeton, and at mile 20.5.

**DRAINAGE AREA.**— 196 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: March 1936 to current year. Prior to October 1974, published as Bureau Creek at Princeton.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–91.

**BIOLOGICAL**

BENTHIC MACROINVERTEBRATES: Water year 1997.

**REVISED RECORDS.**— WSP 1175: 1940–41, 1948. WSP 1308: 1942(M). WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder and U.S. Army Corps of Engineers satellite telemeter. Datum of gage is 555.39 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to July 18, 1940, nonrecording gage at bridge 425 ft upstream at datum 30.00 ft lower. July 18, 1940, to Sept. 18, 1944, water–stage recorder at site 500 ft upstream at present datum.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 12,500 ft<sup>3</sup>/s, from rating curve extended above 11,800 ft<sup>3</sup>/s, May 17, 1974, gage height, 16.01 ft; no flow during January 1940 and for several days in October and November 1953.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	4.8	7.4	38	e18	76	317	118	1100	76	14	11
2	4.2	12	7.1	37	e17	80	277	113	732	70	13	9.4
3	5.0	37	7.2	38	e18	75	242	109	526	67	22	8.6
4	5.5	28	7.2	40	e18	81	213	105	386	64	48	8.1
5	5.1	22	10	34	e17	260	189	104	321	68	24	8.1
6	5.5	11	8.8	39	e17	489	176	103	279	88	20	7.1
7	5.3	9.2	7.8	46	e16	302	168	106	243	99	16	6.8
8	5.4	7.7	7.7	42	e16	229	155	98	212	85	14	6.4
9	5.3	7.0	18	37	e15	191	142	96	189	75	12	6.0
10	5.3	6.6	271	35	e15	162	129	106	250	85	11	5.9
11	5.2	6.5	609	34	e14	147	124	149	716	64	9.4	5.7
12	5.4	6.4	344	37	e14	123	118	133	417	56	9.2	5.4
13	5.4	5.7	207	36	e13	126	114	260	316	50	8.6	5.3
14	13	6.0	170	33	e13	116	112	587	298	70	8.1	5.1
15	5.0	6.0	136	35	e12	111	108	913	333	68	7.6	19
16	7.3	6.4	114	32	e12	108	105	591	278	49	7.4	13
17	5.0	6.3	94	34	e12	108	103	420	228	42	7.8	7.4
18	4.6	29	88	43	e13	112	99	433	195	37	8.6	6.2
19	4.6	11	73	56	e16	115	95	375	169	34	10	5.6
20	4.9	10	65	35	e19	121	101	318	153	35	9.1	5.5
21	5.1	11	75	27	e50	120	120	281	149	64	8.7	5.4
22	5.1	16	65	32	e150	109	125	432	143	48	8.0	4.9
23	5.6	14	57	27	e130	107	120	536	126	36	7.4	4.8
24	5.1	11	44	25	e140	124	115	358	115	29	8.4	4.7
25	8.5	10	48	23	e115	159	126	320	108	26	12	4.6
26	5.1	9.5	48	23	e100	235	128	276	100	23	20	4.6
27	4.7	8.8	43	23	89	334	125	244	94	21	16	4.7
28	4.6	8.0	48	23	81	327	123	215	90	19	18	4.6
29	4.8	7.8	46	e22	77	348	121	186	86	17	14	4.7

ILLINOIS RIVER BASIN  
**05556500 Big Bureau Creek at Princeton, IL--Continued**

<b>30</b>	5.1	7.8	45	e21	---	383	117	689	81	16	11	4.7
<b>31</b>	4.9	---	41	e19	---	341	---	2200	---	15	12	---
TOTAL	169.7	342.5	2812.2	1026	1237	5719	4307	10974	8433	1596	415.3	203.3
MEAN	5.47	11.4	90.7	33.1	42.7	184	144	354	281	51.5	13.4	6.78
MAX	13	37	609	56	150	489	317	2200	1100	99	48	19
MIN	4.1	4.8	7.1	19	12	75	95	96	81	15	7.4	4.6
CFSM	0.03	0.06	0.46	0.17	0.22	0.94	0.73	1.81	1.43	0.26	0.07	0.03
IN.	0.03	0.07	0.53	0.19	0.23	1.09	0.82	2.08	1.60	0.30	0.08	0.04

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 – 2004, BY WATER YEAR (WY)**

MEAN	61.7	83.9	92.3	125	188	256	244	234	213	98.6	54.8	53.1
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	0.92	0.37	1.79	0.00	3.67	8.77	9.73	9.94	10.2	0.63	2.29	1.93
(WY)	1954	1954	1977	1940	2003	2003	2003	1989	1977	1936	1944	1943

<b>SUMMARY STATISTICS</b>	<b>FOR 2003 CALENDAR YEAR</b>		<b>FOR 2004 WATER YEAR</b>		<b>WATER YEARS 1936 – 2004</b>	
ANNUAL TOTAL	17967.8		37235.0			
ANNUAL MEAN	49.2		102		142	
HIGHEST ANNUAL MEAN					365	
LOWEST ANNUAL MEAN					14.6	
HIGHEST DAILY MEAN	2930	May 11	2200	May 31	8730	Jun 24 1994
LOWEST DAILY MEAN	2.9	A Jan 27–29	4.1	Oct 1	0.00	B
ANNUAL SEVEN–DAY MINIMUM	3.0	Jan 25	4.7	Sep 24	0.00	Jan 1 1940
MAXIMUM PEAK FLOW			2670	May 31	12500	C May 17 1974
MAXIMUM PEAK STAGE			7.39	May 31	16.01	May 17 1974
INSTANTANEOUS LOW FLOW			3.6	Oct 2		
ANNUAL RUNOFF (CFSM)	0.251		0.519		0.725	
ANNUAL RUNOFF (INCHES)	3.41		7.07		9.85	
10 PERCENT EXCEEDS	91		277		335	
50 PERCENT EXCEEDS	7.2		37		55	
90 PERCENT EXCEEDS	3.7		5.4		3.3	

A – Estimated due to backwater from ice.

B – Month of January 1940 and several days in October and November 1953.

C – From rating curve extended above 11,800 ft<sup>3</sup>/s.

**LOCATION.**— Lat 41°06'26", long 89°21'23" (NAD of 1927), 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.**—

**SURFACE–WATER DISCHARGE AND STAGE**

DISCHARGE: October 1981 to current year. Prior to October 1983, published as station number "05558900."

STAGE: Water years 1994 to current year.

**SURFACE–WATER QUALITY**

SEDIMENT: June 1983 to September 1986, May 1993 to September 1993.

MISCELLANEOUS: Contaminants in streambed sediments, October 1996; contaminants in fish tissue, October 1996.

**GAGE.**— Water–stage recorder, phone telemeter, acoustic–velocity meter, and a crest–stage gage. Datum of gage is 425.88 ft above NGVD of 1929.

**REMARKS.**— Some regulation by locks and dams upstream from station at Starved Rock and downstream at Peoria.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum recorded discharge, 117,000 ft<sup>3</sup>/s, based on a stage–area and velocity rating, Feb. 23, 1997, gage height, 27.19 ft; maximum gage height, 32.02 ft, Mar. 7, 1985; minimum daily discharge, 2,240 ft<sup>3</sup>/s, Nov. 3, 2002.

**SUSPENDED–SEDIMENT CONCENTRATIONS:** Maximum daily mean, 324 mg/L, June 11, 1993; minimum daily mean, 19 mg/L, May 2, 1993.

**SUSPENDED–SEDIMENT LOADS:** Maximum daily, 52,800 tons, June 11, 1993; minimum daily, 1,600 tons, June 2, 1993.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** 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.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5270	5090	14600	11800	e5300	7810	29300	11000	45700	11200	e5000	23400
2	4470	6120	12700	12600	e4800	10900	28500	11400	48500	8960	6630	21800
3	e5200	9220	11200	12500	e5200	10300	27100	11500	43700	7290	5150	20100
4	4880	8900	8290	12400	e3200	11400	24000	8840	38900	11400	10400	17500
5	4020	13900	8810	10700	e5400	15700	20700	9310	34700	9330	10100	14800
6	3490	15800	8690	10500	e5600	28000	19200	8550	31600	10100	9960	13800
7	3380	14800	9530	10900	e5200	32700	18000	9160	28300	10200	7540	13400
8	3550	12300	11100	10700	e5700	31100	16900	7970	26300	8700	8220	11100
9	4080	11100	11000	10400	e6200	28800	14800	8390	24100	7160	7840	8580
10	e3600	9850	14400	9060	e4800	23600	13900	8760	22000	9360	6480	8080
11	e3000	9500	18300	8800	e4500	25100	12900	9030	24100	7570	7050	8180
12	4930	8250	22000	10200	e5000	22000	12300	8770	28200	e9000	6180	7030
13	2830	7980	20600	9240	e5400	18500	11900	11700	40100	e11000	5500	6470
14	4380	5480	18900	8670	e5000	18900	9180	17200	49800	e10000	5290	7000
15	6510	7570	16300	7850	e4800	18700	7570	22300	49400	e9000	5860	5970
16	5720	6410	16400	8510	e4500	16800	8000	24200	45000	e8000	4760	9270
17	5980	5710	15700	8290	e4100	14400	6800	23600	42400	e7400	5020	7190
18	4700	10700	14200	7870	4960	14400	6430	24100	37400	e8000	5470	6850
19	5760	19600	13600	6350	5900	13100	8850	21400	34200	e6500	5990	5520
20	e5000	25100	e11500	5660	6210	14500	7290	20900	29600	e7200	7520	5340
21	5480	27400	9400	5570	8910	12900	10600	21300	28000	e9000	6290	5550
22	5140	23200	10000	6240	9940	10300	10300	20900	27700	e8500	6440	4950
23	3680	20700	9290	5830	12000	9630	10400	23500	24500	e7800	6380	5170
24	4230	20800	9000	5830	12600	9330	10200	25800	25700	e7000	6550	5390
25	5460	21000	8980	5000	12100	9560	9620	25100	19500	e6500	8360	4450

ILLINOIS RIVER BASIN  
**05558300 Illinois River at Henry, IL--Continued**

<b>26</b>	4690	21800	10200	5570	11400	12300	12500	24100	14700	e6000	9990	4310
<b>27</b>	4880	20400	9620	4150	11000	13300	12500	23600	11900	e5400	14200	5040
<b>28</b>	e5000	19300	10300	5160	10100	18000	7840	23400	11700	e5100	20000	5090
<b>29</b>	4820	15700	11000	e4400	9830	23600	11300	21300	11500	e5200	28600	3830
<b>30</b>	4000	16700	9420	e5200	----	28800	11500	22600	10400	e5500	28800	4290
<b>31</b>	5890	----	11700	e3000	----	29800	----	32800	----	e6000	26700	----
TOTAL	144020	420380	386730	248950	199650	554230	410380	542480	909600	249370	298270	269450
MEAN	4646	14010	12480	8031	6884	17880	13680	17500	30320	8044	9622	8982
MAX	6510	27400	22000	12600	12600	32700	29300	32800	49800	11400	28800	23400
MIN	2830	5090	8290	3000	3200	7810	6430	7970	10400	5100	4760	3830

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 – 2004, BY WATER YEAR (WY)**

MEAN	9144	12400	14300	12790	16950	22730	21970	19460	17810	12980	9419	8867
MAX	23990	31730	51370	36120	38680	55690	48890	36220	33600	28840	18640	26090
(WY)	1994	1986	1983	1993	2001	1982	1983	2002	1996	1993	1993	1993
MIN	4167	3197	4041	3324	3645	5904	8504	8544	7199	5669	3739	2687
(WY)	2003	2003	2003	2003	2003	2003	2003	1989	1988	1991	1991	1991

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1982 – 2004
ANNUAL TOTAL	3638620	4633510	
ANNUAL MEAN	9969	12660	14880
HIGHEST ANNUAL MEAN			24470
LOWEST ANNUAL MEAN			8323
HIGHEST DAILY MEAN	36600 May 12	49800 Jun 14	111000 Feb 23 1997
LOWEST DAILY MEAN	2300 A Jan 23	2830 Oct 13	2040 Sep 27 1991
ANNUAL SEVEN-DAY MINIMUM	2740 Jan 14	3590 Oct 5	2140 Sep 24 1991
MAXIMUM PEAK FLOW		52100 B Jun 14	117000 C Feb 23 1997
MAXIMUM PEAK STAGE		23.08 D Jun 17	32.02 Mar 7 1985
10 PERCENT EXCEEDS	21900	25100	29100
50 PERCENT EXCEEDS	7030	9620	11000
90 PERCENT EXCEEDS	3450	4990	5340

A – Estimated due to backwater from ice.

B – Gage height, 22.53 ft.

C – Based on stage–area and velocity ratings; gage height, 27.19 ft.

D – Discharge, 42500 ft<sup>3</sup>/s.

**LOCATION.**— Lat 40°55'45", long 89°27'42" (NAD of 1927), in NW1/4 sec.22, T.11 N., R.9 W., Peoria County, Hydrologic Unit 07130001, at center of Atchison, Topeka and Sante Fe Railroad bridge, 1 mi north of Chillicothe and at mile 181.9.

**DRAINAGE AREA.**— Not determined.

**PERIOD OF RECORD.**—

**SURFACE-WATER QUALITY**

SEDIMENT: May 1993 to November 1993, water years 1994 to 2000 (March to December), March 2001 to current year.

MISCELLANEOUS: Sediment concentration and particle size, water years 1996–99, 2002–03.

**REMARKS.**— Water discharge used to compute sediment record are from Illinois River at Henry (station 05558300). Suspended–sediment samples were collected by a local observer twice 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 RECORD.**—

SUSPENDED–SEDIMENT CONCENTRATIONS: Maximum daily, 554 mg/L, Aug. 29, 2004; minimum daily, 16 mg/L, Mar. 7, 1998 and Dec. 24, 2003.

SUSPENDED–SEDIMENT LOADS: Maximum daily, 93,800 tons, July 20, 1996; minimum daily, 140 tons, Oct. 30, 2002.

**EXTREMES FOR CURRENT YEAR.**—

SUSPENDED–SEDIMENT CONCENTRATIONS: Maximum daily, 554 mg/L, Aug. 29; minimum daily, 16 mg/L, Dec. 24.

SUSPENDED–SEDIMENT LOADS: Maximum daily, 50,300 tons, June 14; minimum daily, 290 tons, Oct. 11.

**SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

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	5270	44	373	5090	37	494	14600	70	2790
2	4470	48	592	6120	39	644	12700	53	1840
3	e5200	48	670	9220	53	1330	11200	29	876
4	4880	49	649	8900	71	1740	8290	28	618
5	4020	50	542	13900	93	3510	8810	33	782
6	3490	50	488	15800	98	4180	8690	34	797
7	3380	61	566	14800	73	2940	9530	34	875
8	3550	62	592	12300	57	1890	11100	34	1000
9	4080	42	465	11100	48	1440	11000	28	832
10	e3600	36	353	9850	43	1130	14400	25	1020
11	e3000	36	290	9500	38	963	18300	41	2060
12	4930	41	549	8250	41	910	22000	69	4110
13	2830	48	393	7980	46	993	20600	57	3220
14	4380	40	498	5480	52	761	18900	39	2000
15	6510	29	517	7570	57	1170	16300	42	1830
16	5720	28	451	6410	67	1160	16400	50	2200
17	5980	30	489	5710	79	1220	15700	44	1870
18	4700	33	415	10700	102	3010	14200	35	1340
19	5760	33	519	19600	152	8210	13600	33	1220
20	e5000	34	458	25100	218	14800	e11500	34	1050
21	5480	35	530	27400	211	15500	9400	33	842
22	5140	36	496	23200	160	10200	10000	26	697
23	3680	38	373	20700	105	5820	9290	17	425
24	4230	36	408	20800	81	4520	9000	16	385
25	5460	34	503	21000	66	3720	8980	17	393
26	4690	36	449	21800	52	3050	10200	18	493
27	4880	38	495	20400	46	2550	9620	19	497
28	e5000	37	489	19300	43	2260	10300	23	645
29	4820	35	457	15700	42	1780	11000	27	802

ILLINOIS RIVER BASIN  
**05559600 Illinois River at Chillicothe, IL--Continued**

30	4000	34	384	16700	56	2520	9420	26	655
31	5890	35	559	---	---	---	11700	23	740
TOTAL	144020	---	15012	420380	---	104415	386730	---	38904

JANUARY				FEBRUARY			MARCH		
1	11800	---	---	e5300	---	---	7810	35	752
2	12600	---	---	e4800	---	---	10900	77	2280
3	12500	---	---	e5200	---	---	10300	46	1290
4	12400	---	---	e3200	---	---	11400	33	1000
5	10700	---	---	e5400	---	---	15700	44	2020
6	10500	---	---	e5600	---	---	28000	142	10800
7	10900	---	---	e5200	---	---	32700	166	14600
8	10700	---	---	e5700	---	---	31100	249	20900
9	10400	---	---	e6200	---	---	28800	246	19300
10	9060	---	---	e4800	---	---	23600	154	10000
11	8800	---	---	e4500	---	---	25100	117	7960
12	10200	---	---	e5000	---	---	22000	76	4520
13	9240	---	---	e5400	---	---	18500	56	2800
14	8670	---	---	e5000	---	---	18900	41	2070
15	7850	---	---	e4800	---	---	18700	54	2730
16	8510	---	---	e4500	---	---	16800	64	2900
17	8290	---	---	e4100	---	---	14400	50	1930
18	7870	---	---	4960	---	---	14400	62	2390
19	6350	---	---	5900	---	---	13100	71	2540
20	5660	---	---	6210	---	---	14500	63	2480
21	5570	---	---	8910	---	---	12900	81	2810
22	6240	---	---	9940	---	---	10300	93	2590
23	5830	---	---	12000	---	---	9630	75	1970
24	5830	---	---	12600	---	---	9330	54	1370
25	5000	---	---	12100	---	---	9560	37	949
26	5570	---	---	11400	---	---	12300	56	1880
27	4150	---	---	11000	---	---	13300	67	2420
28	5160	---	---	10100	---	---	18000	88	4330
29	e4400	---	---	9830	---	---	23600	133	8570
30	e5200	---	---	---	---	---	28800	172	13300
31	e3000	---	---	---	---	---	29800	131	10600
TOTAL	248950	---	---	199650	---	---	554230	---	166051

APRIL				MAY			JUNE		
1	29300	110	8660	11000	52	1560	45700	279	34300
2	28500	92	7070	11400	49	1510	48500	249	32600
3	27100	87	6400	11500	50	1560	43700	206	24400
4	24000	82	5330	8840	71	1700	38900	139	14700
5	20700	66	3700	9310	93	2320	34700	66	6250
6	19200	50	2570	8550	95	2200	31600	44	3790
7	18000	47	2300	9160	92	2280	28300	53	4030
8	16900	45	2060	7970	88	1890	26300	69	4880
9	14800	42	1700	8390	66	1490	24100	82	5340
10	13900	42	1590	8760	40	957	22000	77	4590
11	12900	48	1670	9030	35	859	24100	85	5540
12	12300	55	1830	8770	37	875	28200	146	11200
13	11900	57	1840	11700	40	1250	40100	267	29800

ILLINOIS RIVER BASIN  
05559600 Illinois River at Chillicothe, IL--Continued

475

14	9180	57	1410	17200	68	3260	49800	375	50300
15	7570	56	1050	22300	100	6030	49400	132	17700
16	8000	54	1170	24200	105	6840	45000	102	12400
17	6800	53	969	23600	90	5710	42400	58	6620
18	6430	52	816	24100	105	6820	37400	87	8660
19	8850	54	1290	21400	70	4080	34200	65	6090
20	7290	58	1140	20900	70	3970	29600	46	3660
21	10600	84	2430	21300	88	5040	28000	50	3780
22	10300	117	3270	20900	106	5980	27700	52	3900
23	10400	121	3400	23500	138	8750	24500	49	3250
24	10200	110	3040	25800	108	7510	25700	44	3040
25	9620	101	2640	25100	99	6690	19500	35	1860
26	12500	122	4130	24100	95	6170	14700	46	1850
27	12500	113	3940	23600	72	4610	11900	59	1920
28	7840	65	1380	23400	65	4090	11700	60	1900
29	11300	61	1870	21300	64	3700	11500	59	1830
30	11500	57	1770	22600	198	12500	10400	61	1710
31	---	---	---	32800	280	24800	---	---	---
TOTAL	410380	---	82435	542480	---	147001	909600	---	311890

	JULY			AUGUST			SEPTEMBER		
1	11200	68	2050	e5000	31	418	23400	389	24600
2	8960	76	1850	6630	35	549	21800	326	19200
3	7290	84	1650	5150	43	584	20100	299	16300
4	11400	84	2600	10400	52	1460	17500	275	13000
5	9330	82	2060	10100	57	1550	14800	250	10000
6	10100	73	2030	9960	57	1530	13800	226	8420
7	10200	77	2110	7540	56	1130	13400	199	7250
8	8700	72	1710	8220	53	1170	11100	173	5180
9	7160	64	1250	7840	30	634	8580	147	3410
10	9360	58	1460	6480	40	701	8080	120	2640
11	7570	62	1260	7050	44	870	8180	94	2080
12	e9000	60	1480	6180	32	529	7030	68	1290
13	e11000	56	1660	5500	31	466	6470	49	860
14	e10000	55	1480	5290	36	504	7000	52	977
15	e9000	54	1310	5860	63	1000	5970	56	903
16	e8000	51	1100	4760	42	538	9270	60	1500
17	e7400	47	938	5020	48	651	7190	64	1240
18	e8000	43	920	5470	50	734	6850	68	1250
19	e6500	37	649	5990	50	817	5520	72	1070
20	e7200	46	889	7520	51	1040	5340	76	1090
21	e9000	58	1400	6290	52	881	5550	77	1160
22	e8500	67	1530	6440	53	915	4950	72	972
23	e7800	61	1280	6380	53	920	5170	67	935
24	e7000	53	1010	6550	54	957	5390	62	897
25	e6500	46	817	8360	57	1280	4450	56	677
26	e6000	42	688	9990	111	2980	4310	51	591
27	e5400	36	521	14200	196	7670	5040	45	618
28	e5100	28	385	20000	356	20100	5090	42	572
29	e5200	25	353	28600	554	42800	3830	44	455
30	e5500	24	363	28800	407	31600	4290	46	495
31	e6000	27	441	26700	412	29600	---	---	---
TOTAL	249370	---	39244	298270	---	156578	269450	---	129632

e Estimated

ILLINOIS RIVER BASIN  
05560500 Farm Creek at Farmdale, IL

**LOCATION.**— Lat 40°40'03", long 89°30'15" (NAD of 1927), in SE1/4NE1/4 sec.36, T.26 N., R.4 W., Tazewell County, Hydrologic Unit 07130001, on right bank at upstream side of bridge, 0.2 mi east of Farmdale, 0.3 mi upstream from Norfolk Western Railway bridge, 0.3 mi downstream from Toledo, Peoria Western Railroad bridge, and at mile 5.8.

**DRAINAGE AREA.**— 27.4 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1948 to October 1985. March 1986 to current (Seven month periods—March to September).

STAGE: Water years 1994 to current year (Seven month periods—March to September).

PARTIAL RECORD: Miscellaneous discharge measurements, water years 1986–99.

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

**GAGE.**— Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 530.12 ft above NGVD of 1929. Prior to Mar. 5, 2002, water-stage recorder and concrete control at site 400 ft. downstream at same datum.

**REMARKS.**— High flow regulated by Farmdale Dam, 1 mi upstream effective Aug. 16, 1951.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Prior to Mar. 5, 2002, maximum gage height, 7.58 ft, Apr. 24, 1950, discharge not determined; maximum discharge prior to Mar. 5, 2002 and after Farmdale Dam (Aug. 16, 1951) 1,050 ft<sup>3</sup>/s, June 2, 1980, gage height, 4.43 ft; maximum gage height, 6.55 ft, Feb. 20, 1982, ice jam; after Mar. 5, 2002, maximum discharge, 598 ft<sup>3</sup>/s, May 12, 2002, gage height 9.37 ft; no flow for several days in most years.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	---	---	---	---	---	26	17	104	10	2.3	3.6
2	---	---	---	---	---	---	22	17	66	8.8	2.2	3.3
3	---	---	---	---	---	---	21	16	51	12	2.1	3.0
4	---	---	---	---	---	---	19	16	38	8.6	7.6	2.9
5	---	---	---	---	---	---	17	15	33	7.2	2.6	2.6
6	---	---	---	---	---	---	17	13	29	22	2.0	2.8
7	---	---	---	---	---	---	16	11	25	16	2.0	2.9
8	---	---	---	---	---	---	15	10	22	9.4	1.9	2.7
9	---	---	---	---	---	---	13	10	20	8.4	1.9	2.7
10	---	---	---	---	---	---	12	9.6	89	38	1.7	2.7
11	---	---	---	---	---	---	12	9.6	104	28	1.7	2.6
12	---	---	---	---	---	---	11	11	46	31	1.7	2.6
13	---	---	---	---	---	---	11	15	33	16	1.8	2.7
14	---	---	---	---	---	---	11	55	26	13	1.9	2.6
15	---	---	---	---	---	---	10	44	24	9.8	1.6	3.3
16	---	---	---	---	---	---	10	30	20	8.2	1.7	8.8
17	---	---	---	---	---	---	9.6	23	18	7.3	2.1	2.6
18	---	---	---	---	---	---	9.2	108	16	6.5	5.2	---
19	---	---	---	---	---	---	8.9	123	14	5.9	6.9	---
20	---	---	---	---	---	---	12	57	13	5.3	4.7	---
21	---	---	---	---	---	---	12	40	50	4.8	2.7	---
22	---	---	---	---	---	---	9.0	34	39	8.6	2.0	---
23	---	---	---	---	---	---	8.1	31	22	5.6	2.0	---
24	---	---	---	---	---	8.6	18	24	18	4.2	6.6	---
25	---	---	---	---	---	8.6	44	45	14	3.7	16	---
26	---	---	---	---	---	29	22	29	12	3.4	15	---
27	---	---	---	---	---	21	18	25	12	3.0	22	---
28	---	---	---	---	---	37	18	22	12	2.6	46	---
29	---	---	---	---	---	58	15	19	12	2.4	15	---



**05560500 Farm Creek at Farmdale, IL--Continued**

<b>30</b>	---	---	---	---	---	37	16	165	11	3.0	6.3	---
<b>31</b>	---	---	---	---	---	31	---	343	---	2.7	4.3	---
TOTAL	---	---	---	---	---	---	462.8	1387.2	993	315.4	193.5	---
MEAN	---	---	---	---	---	---	15.4	44.7	33.1	10.2	6.24	---
MAX	--	---	---	---	---	--	44	343	104	38	46	--
MIN	--	---	---	---	---	--	8.1	9.6	11	2.4	1.6	--
CFSM	---	---	---	---	---	---	0.56	1.63	1.21	0.37	0.23	---
IN.	---	---	---	---	---	---	0.63	1.88	1.35	0.43	0.26	---

ILLINOIS RIVER BASIN  
**05561500 Fondulac Creek near East Peoria, IL**

**LOCATION.**— Lat 40°40'38", long 89°31'52" (NAD of 1927), in SW1/4SE1/4 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 Railroad bridge, 3 mi northeast of East Peoria, and at mile 0.4.

**DRAINAGE AREA.**— 5.54 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: January 1948 to October 1985. March 1986 to current (Seven month periods—March to September).

STAGE: Water years 1994 to current year (Seven month periods—March to September).

PARTIAL RECORD: Miscellaneous discharge measurements, water years 1986–99.

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

**GAGE.**— Water-stage recorder and concrete control. Datum of gage is 505.00 ft above NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Aug. 5, 1948, nonrecording gage at same site and datum.

**REMARKS.**— High flow regulated by Fondulac Dam, 0.5 mi upstream effective Sept. 7, 1949.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 560 ft<sup>3</sup>/s, Mar. 3, 1979, gage height, 4.66 ft, from rating curve extended above 170 ft<sup>3</sup>/s; no flow for many days in most years.

**REMARKS FOR CURRENT YEAR.**— Records poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	---	e1.3	5.2	0.07	0.00	---
2	---	---	---	---	---	---	---	e1.6	2.4	0.00	0.00	---
3	---	---	---	---	---	---	---	e1.1	1.6	1.8	0.00	---
4	---	---	---	---	---	---	---	1.0	1.2	0.47	0.37	---
5	---	---	---	---	---	---	---	0.75	0.96	e1.5	0.00	---
6	---	---	---	---	---	---	---	0.75	0.83	e4.4	0.00	---
7	---	---	---	---	---	---	---	0.76	0.69	1.3	0.00	---
8	---	---	---	---	---	---	---	0.75	0.59	0.57	0.00	---
9	---	---	---	---	---	---	---	0.59	0.54	e8.1	0.00	---
10	---	---	---	---	---	---	---	0.60	e20	6.8	0.00	---
11	---	---	---	---	---	---	---	0.61	e16	5.9	0.00	---
12	---	---	---	---	---	---	---	0.53	2.8	2.3	0.00	---
13	---	---	---	---	---	---	---	0.54	1.6	0.92	0.00	---
14	---	---	---	---	---	---	---	12	1.2	0.64	0.00	---
15	---	---	---	---	---	---	---	1.4	1.2	0.46	0.00	---
16	---	---	---	---	---	---	---	0.87	0.92	0.31	0.00	---
17	---	---	---	---	---	---	---	0.71	0.79	e0.06	0.00	---
18	---	---	---	---	---	---	---	e24	0.73	e0.00	0.12	---
19	---	---	---	---	---	---	---	e19	0.68	0.00	0.59	---
20	---	---	---	---	---	---	---	2.9	0.57	0.00	0.48	---
21	---	---	---	---	---	---	---	1.6	e10	0.00	0.02	---
22	---	---	---	---	---	---	---	1.5	5.8	1.9	0.00	---
23	---	---	---	---	---	---	---	1.3	1.7	0.24	0.00	---
24	---	---	---	---	---	---	---	0.91	1.1	0.00	0.24	---
25	---	---	---	---	---	---	---	5.8	0.98	0.00	6.4	---
26	---	---	---	---	---	---	---	1.4	0.80	0.00	1.9	---
27	---	---	---	---	---	---	---	1.1	0.75	0.00	---	---
28	---	---	---	---	---	---	---	0.85	0.69	0.00	---	---
29	---	---	---	---	---	---	e0.63	0.70	0.59	0.00	---	---
30	---	---	---	---	---	---	e1.7	64	0.32	0.00	---	---

**05561500 Fondulac Creek near East Peoria, IL--Continued**

<b>31</b>	---	---	---	---	---	---	---	34	---	0.00	---	---
TOTAL	---	---	---	---	---	---	---	184.92	83.23	37.74	---	---
MEAN	---	---	---	---	---	---	---	5.97	2.77	1.22	---	---
MAX	---	---	---	---	---	---	---	64	20	8.1	---	---
MIN	---	---	---	---	---	---	---	0.53	0.32	0.00	---	---
CFSM	---	---	---	---	---	---	---	1.08	0.50	0.22	---	---
IN.	---	---	---	---	---	---	---	1.24	0.56	0.25	---	---

e Estimated

ILLINOIS RIVER BASIN  
**05567500 Mackinaw River near Congerville, IL**

**LOCATION.**— Lat 40°37'25", long 89°14'30" (NAD of 1927), 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.**—

SURFACE–WATER DISCHARGE AND STAGE

DISCHARGE: October 1944 to current year.

STAGE: Water years 1994 to current year.

SURFACE–WATER QUALITY

SEDIMENT: June 1983 to September 1983.

BIOLOGICAL

BENTHIC MACROINVERTEBRATES: Water year 1997.

**REVISED RECORDS.**— WSP 1175: 1948. WSP 1308: 1945(M). WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest–stage gage. Datum of gage is 607.01 ft above NGVD of 1929. Prior to July 11, 1945, nonrecording gage at same site and datum.

**REMARKS.**— The City of Bloomington occasionally pumps water upstream from station into Lake Evergreen for municipal supply. The City of Bloomington also withdraws water from Lake Bloomington, which is on Money Creek, a tributary to the Mackinaw River. Water withdrawals are diverted via effluent to Sugar Creek basin.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Maximum discharge, 44,800 ft<sup>3</sup>/s, Dec. 4, 1982, gage height, 20.21 ft, from floodmark; minimum, 0.2 ft<sup>3</sup>/s, Oct. 21–24, Oct. 27 to Nov. 3, 1956, Oct. 6, 1957, Oct. 8–10, 1963.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	27	312	209	e85	132	2800	589	5590	178	40	34
2	17	25	262	203	e85	138	2110	595	4100	160	38	32
3	16	26	232	214	e87	135	1580	545	2250	152	35	27
4	16	27	225	211	e90	132	1260	516	1640	150	37	24
5	17	42	229	204	e85	563	1030	500	1330	156	39	22
6	17	50	228	146	e80	1350	890	456	1130	150	41	21
7	17	37	206	155	e82	1070	806	418	976	173	36	19
8	18	34	201	213	e85	790	732	386	847	136	33	18
9	18	34	213	222	e82	641	641	368	741	117	32	17
10	17	31	285	181	e80	528	556	353	725	191	31	17
11	17	31	341	166	e78	455	514	339	1120	493	27	17
12	16	30	366	170	e76	400	467	369	1800	550	27	15
13	16	27	316	172	e74	355	433	423	1470	359	27	14
14	19	27	296	164	e72	333	415	489	1070	584	26	14
15	19	28	286	168	e70	312	391	1010	875	562	25	15
16	21	28	272	166	e68	293	382	1250	762	377	24	37
17	25	28	244	155	e66	293	354	1010	676	264	25	38
18	26	74	220	147	e65	279	338	944	607	203	34	44
19	24	581	209	121	e90	259	338	1680	538	167	46	45
20	23	1930	181	131	e150	238	298	1710	473	139	41	33
21	19	1800	208	153	e250	222	376	1320	466	118	33	27
22	18	872	206	144	387	199	406	1060	527	102	30	23
23	17	687	204	133	274	194	355	937	437	89	29	21
24	17	638	326	122	202	205	330	833	367	78	28	19
25	27	808	400	e115	182	210	677	957	319	68	36	18
26	25	670	341	e110	156	256	1020	1610	288	60	67	18

## ILLINOIS RIVER BASIN

481

**05567500 Mackinaw River near Congerville, IL--Continued**

<b>27</b>	29	539	298	e105	141	728	812	1470	262	54	89	16
<b>28</b>	35	450	286	e100	135	1240	692	1140	242	52	91	16
<b>29</b>	33	388	275	e96	129	1400	604	905	219	48	68	16
<b>30</b>	29	347	249	e92	----	1670	506	1340	197	46	46	15
<b>31</b>	28	----	234	e88	----	2310	----	5280	----	43	36	----
TOTAL	654	10316	8151	4776	3506	17330	22113	30802	32044	6019	1217	692
MEAN	21.1	344	263	154	121	559	737	994	1068	194	39.3	23.1
MAX	35	1930	400	222	387	2310	2800	5280	5590	584	91	45
MIN	16	25	181	88	65	132	298	339	197	43	24	14
CFSM	0.03	0.45	0.34	0.20	0.16	0.73	0.96	1.30	1.39	0.25	0.05	0.03
IN.	0.03	0.50	0.40	0.23	0.17	0.84	1.07	1.49	1.55	0.29	0.06	0.03

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 – 2004, BY WATER YEAR (WY)**

MEAN	186	263	382	447	632	919	1043	928	778	371	174	212
MAX	2765	3340	4062	2808	2218	3157	3136	4216	3322	2687	2734	4330
(WY)	1987	1986	1983	1993	2001	1979	1973	1995	1974	1951	1981	1993
MIN	0.59	2.47	2.40	6.01	14.9	32.0	91.7	114	21.6	6.09	1.22	1.84
(WY)	1957	1964	1964	1945	1963	2000	2000	1958	1963	1988	1988	1988

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1945 – 2004**

ANNUAL TOTAL	111600		137620			
ANNUAL MEAN	306		376		527	
HIGHEST ANNUAL MEAN					1672	
LOWEST ANNUAL MEAN					78.2	
HIGHEST DAILY MEAN	7550	Jul 10	5590	Jun 1	34000	Dec 4 1982
LOWEST DAILY MEAN	15	Mar 5	14	Sep 13,14	0.20 A	
ANNUAL SEVEN-DAY MINIMUM	17	Feb 28	16	Sep 9	0.20	Oct 27 1956
MAXIMUM PEAK FLOW			5760	Jun 1	44800	Dec 4 1982
MAXIMUM PEAK STAGE			11.17	Jun 1	20.21 B	Dec 4 1982
INSTANTANEOUS LOW FLOW			13	C	0.20 D	
ANNUAL RUNOFF (CFSM)	0.399		0.490		0.687	
ANNUAL RUNOFF (INCHES)	5.41		6.67		9.33	
10 PERCENT EXCEEDS	655		986		1270	
50 PERCENT EXCEEDS	134		180		180	
90 PERCENT EXCEEDS	19		21		12	

A – Oct. 21–24, Oct. 27 to Nov. 3, 1956.

B – From floodmark.

C – Sept. 14, 15, 29.

D – Oct. 21–24, Oct. 27 to Nov. 3, 1956; Oct. 6, 1957; Oct. 8–10, 1963.

ILLINOIS RIVER BASIN  
**05568000 Mackinaw River near Green Valley, IL**

**LOCATION.**— Lat 40°27'15", long 89°36'22" (NAD of 1927), 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>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: March 1921 to September 1956; June 1988 to current year.

STAGE: Water years 1994 to current year.

PARTIAL RECORD: Annual maximum, water years 1957–88.

**SURFACE-WATER QUALITY**

CHEMICAL: October 1997 to September 1998.

SEDIMENT: October 1994 to September 1997.

MISCELLANEOUS: Contaminants of streambed sediment, July 1997; contaminants of fish tissue, July 1997; streambank sediment size, October 1997; Streambed sediment size, October 1997; sediment concentration and particle size, water years 1996–98.

**BIOLOGICAL**

BENTHIC MACROINVERTEBRATES: Water year 1996 and 1997.

FISH: Water year 1997.

HABITAT: Water year 1996.

**GAGE.**— Water-stage recorder, U.S. Army Corps of Engineers satellite telemeter and a crest-stage gage. Datum of gage is 477.10 ft above NGVD of 1929 (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 down stream at present datum.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 51,000 ft<sup>3</sup>/s, Dec. 6, 1982, gage height, 16.13 ft, site then in use; maximum recorded gage height, 28.29 ft, Sept. 16, 1993 (discharge unknown); minimum discharge observed, 17 ft<sup>3</sup>/s, Oct. 26, 27, 1940.

**SUSPENDED-SEDIMENT CONCENTRATIONS:** Maximum daily, 6,160 mg/L, May 27, 1996; minimum daily, 4 mg/L, May 11, 1997.

**SUSPENDED-SEDIMENT LOADS:** Maximum daily 99,800 tons, May 27, 1996; minimum daily, 0.83 tons, Dec. 21, 1996.

**REMARKS FOR CURRENT YEAR.**— Records good except those for May 31 to June 18, which are fair, and those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	82	470	399	e180	e325	2580	701	5520	360	138	104
2	59	79	426	426	e180	e315	2510	773	5120	339	133	94
3	60	80	388	405	e175	e290	1900	734	3670	348	128	91
4	59	88	369	373	e170	e450	1530	692	2500	329	136	87
5	58	161	371	e340	e170	e900	1270	677	2040	310	125	81
6	56	144	366	e300	e165	e1300	1090	642	1740	326	116	74
7	56	134	351	e320	e160	e1050	980	595	1520	320	113	68
8	56	126	336	e340	e170	e900	903	552	1300	319	109	66
9	57	110	333	345	e165	e780	820	526	1140	287	104	64
10	68	106	403	343	e160	e720	741	507	1190	350	98	62
11	59	107	460	332	e155	e670	679	500	1600	405	96	61
12	55	104	472	331	e150	e630	639	490	1840	742	93	61
13	53	95	467	301	e145	e580	604	534	2100	631	91	62
14	59	91	438	294	e142	e550	577	812	1650	492	89	62
15	66	89	416	281	e140	e510	556	1170	1360	662	86	70
16	56	88	414	289	e138	e470	538	1520	1180	591	83	353
17	55	90	399	308	e132	e440	518	1460	1020	453	82	177
18	57	532	393	281	e130	e430	495	1250	894	369	85	126
19	59	608	367	264	e200	e460	481	2760	821	319	93	106
20	66	1040	329	233	e300	e420	483	2410	732	287	98	108
21	69	1880	322	269	e400	e370	501	2030	684	262	101	102

## ILLINOIS RIVER BASIN

483

**05568000 Mackinaw River near Green Valley, IL--Continued**

<b>22</b>	65	1310	392	300	e520	e340	518	1650	757	246	93	94
<b>23</b>	62	884	407	312	e460	e345	525	1410	699	251	87	87
<b>24</b>	62	943	401	250	e400	e360	490	1230	607	209	88	83
<b>25</b>	78	849	483	e240	e340	e410	758	1640	545	191	107	78
<b>26</b>	96	894	549	e225	e310	475	1190	1750	498	178	156	75
<b>27</b>	77	739	512	e215	e290	575	1190	2030	465	167	130	73
<b>28</b>	82	639	507	e205	e295	1050	978	1710	437	161	171	71
<b>29</b>	81	564	468	e200	e305	1630	863	1390	412	153	152	71
<b>30</b>	89	517	443	e190	----	1760	767	1470	384	147	135	70
<b>31</b>	91	----	419	e185	----	1860	----	4910	----	144	118	----
TOTAL	2028	13173	12871	9096	6647	21365	27674	40525	44425	10348	3434	2781
MEAN	65.4	439	415	293	229	689	922	1307	1481	334	111	92.7
MAX	96	1880	549	426	520	1860	2580	4910	5520	742	171	353
MIN	53	79	322	185	130	290	481	490	384	144	82	61
CFSM	0.06	0.41	0.39	0.27	0.21	0.64	0.86	1.22	1.38	0.31	0.10	0.09
IN.	0.07	0.46	0.45	0.32	0.23	0.74	0.96	1.40	1.54	0.36	0.12	0.10

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 – 2004, BY WATER YEAR (WY)**

MEAN	284	400	443	668	961	1071	1314	1328	892	568	272	333
MAX	3525	3417	2425	3514	3066	3629	4996	5756	2704	3109	2404	6057
(WY)	1927	1927	1928	1993	1927	1993	1944	1943	1999	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 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1921 – 2004**

ANNUAL TOTAL	156252						194367					
ANNUAL MEAN	428						531			714		
HIGHEST ANNUAL MEAN										2353		1993
LOWEST ANNUAL MEAN										98.4		1940
HIGHEST DAILY MEAN	8520	Jul 11					5520	Jun 1		23500	Apr 24	1944
LOWEST DAILY MEAN	32	A Mar 6					53	Oct 13		17	B	
ANNUAL SEVEN-DAY MINIMUM	35	Mar 1					57	Oct 12		18	Oct 21	1940
MAXIMUM PEAK FLOW							5600	Jun 1		51000	C	Dec 6 1982
MAXIMUM PEAK STAGE							22.25	Jun 1		28.29	D	Sep 16 1993
INSTANTANEOUS LOW FLOW							51	Oct 13		17	E	B
ANNUAL RUNOFF (CFSM)	0.399						0.495			0.665		
ANNUAL RUNOFF (INCHES)	5.42						6.74			9.04		
10 PERCENT EXCEEDS	849						1300			1770		
50 PERCENT EXCEEDS	239						340			259		
90 PERCENT EXCEEDS	51						72			45		

A – Estimated due to backwater from ice.

B – Oct. 26–27, 1940.

C – Gage Height, 16.13 ft., site then in use.

D – Maximum recorded, discharge unknown.

E – Observed.

ILLINOIS RIVER BASIN  
**05568500 Illinois River at Kingston Mines, IL**

**LOCATION.**— Lat 40°33'11", long 89°46'38" (NAD of 1927), 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. Auxiliary gage (05568615) 8.6 miles downstream.

**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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1939 to current year.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

WATER TEMPERATURE: Water years 1975–77.

MISCELLANEOUS: Contaminants in streambed sediments, October 1996; contaminants in fish tissue, October 1996.

**REVISED RECORDS.**— WSP 1558: 1957. WDR IL-75-1: Drainage area.

**GAGE.**— Water-stage recorder, phone telemeter, crest-stage gage, and U.S. Army Corps of Engineers satellite telemeter. Auxiliary water-stage recorder, phone telemeter, and U.S. Army Corps of Engineers satellite telemeter at site 8.6 mi downstream. Datum of gage is 428.00 ft above NGVD of 1929 (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. Prior to Oct. 30, 1967 and Nov. 9, 1999 to Oct. 29, 2002, auxiliary water-stage recorder at mouth of Copperas Creek, 8.0 mi downstream.

**REMARKS.**— 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.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 88,800 ft<sup>3</sup>/s, Dec. 7, 1982, gage height, 23.86 ft; maximum gage height, 26.02 ft, May 25, 1943; minimum daily discharge, 600 ft<sup>3</sup>/s, Oct. 26, 1997, estimated, caused by dam regulation.

**REMARKS FOR CURRENT YEAR.**— Records fair.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5990	6060	24100	13500	e3700	9580	31100	16200	32900	24600	5850	28200
2	5710	6150	22600	13900	e4400	9970	31800	15900	38300	23100	6580	27400
3	4570	7270	18000	15200	e5000	11200	32200	14000	40800	21000	7630	26400
4	4270	9380	10100	17000	e4400	12300	31800	10700	40800	20200	6370	25100
5	3800	14100	9600	16500	e4000	12400	30500	9970	40400	19300	8000	23400
6	3520	18400	9350	13800	e4800	22300	29100	11400	39300	14800	8960	21800
7	3570	18900	9470	12000	e6000	29700	28700	11900	37800	8200	9070	18700
8	3720	18900	10500	11800	e5500	31400	27600	12200	36200	8690	8680	12900
9	3890	17500	12800	12000	e6200	32000	26000	9710	35000	10100	7840	7430
10	4110	15300	14200	12000	e5700	30700	24900	8710	33900	10800	7750	e6000
11	3670	12500	20800	11700	e5000	31100	23700	10800	33100	11100	6290	e5200
12	3400	11000	25400	11700	e5300	30400	22800	9990	32600	11000	6090	e5300
13	3310	8600	e29000	11700	e5700	28900	21700	10800	33500	11500	4620	e5400
14	3580	7750	e26000	10600	e5400	28000	15800	15000	37200	12400	4730	e6000
15	3750	6780	23800	10400	e5200	27600	8220	21700	41300	12700	5530	5030
16	4970	6280	23900	10100	e4900	26600	7120	27500	43100	12600	5280	7670
17	6050	6110	23900	10300	e4600	25100	6710	27600	43500	12300	4110	8250
18	5820	9210	23300	10600	e4800	24200	6880	28300	42900	11400	4460	7950
19	5850	13200	22600	e7500	e5300	e22000	7110	28500	41900	8890	5500	6690
20	5640	20600	17900	7180	e6000	20400	7970	27600	39900	6630	5930	6090
21	5910	28900	8470	7160	6970	15900	8770	27300	38000	7150	6030	5720
22	5800	29700	8610	7070	7840	12400	11500	26400	37400	8020	5610	5590
23	5160	28000	9770	6720	11700	11500	13500	26300	35500	8920	5610	5520
24	3890	27800	10800	6490	14500	7620	12000	27400	34700	9110	5800	5400
25	3730	27000	11100	5640	14700	7370	10700	e30000	33400	9020	5990	5420



**05568500 Illinois River at Kingston Mines, IL--Continued**

<b>26</b>	4070	27900	11100	5750	14700	10200	11000	e29000	31500	7790	8310	e5300
<b>27</b>	4000	27900	10500	6300	14400	13900	13900	28000	29800	6410	10900	e6100
<b>28</b>	4060	27500	9900	e5400	14000	15400	11300	28000	28600	5380	16700	e4400
<b>29</b>	4710	e25000	11800	e4900	12400	27200	10400	27400	27100	5140	25700	3270
<b>30</b>	5200	24700	11900	e5300	----	28300	14800	27600	25600	5780	27100	2930
<b>31</b>	5420	----	11500	e4500	----	29800	----	29800	----	6220	28200	----
TOTAL	141140	508390	492770	304710	213110	645440	539580	635680	1086000	350250	275220	310560
MEAN	4553	16950	15900	9829	7349	20820	17990	20510	36200	11300	8878	10350
MAX	6050	29700	29000	17000	14700	32000	32200	30000	43500	24600	28200	28200
MIN	3310	6060	8470	4500	3700	7370	6710	8710	25600	5140	4110	2930

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 – 2004, BY WATER YEAR (WY)**

MEAN	9464	11160	13270	13920	16870	23260	25100	23490	19230	13670	9763	9065
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	3676	4598	3747	3421	6450	7928	7822	5579	4474	5038	4027
(WY)	1964	2003	1944	1963	1963	2003	1940	1989	1977	1965	1944	1963

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1940 – 2004**

ANNUAL TOTAL	4145660	5502850	
ANNUAL MEAN	11360	15040	15670
HIGHEST ANNUAL MEAN			32200 1993
LOWEST ANNUAL MEAN			6820 1964
HIGHEST DAILY MEAN	34000 Jul 23	43500 Jun 17	86700 Dec 7 1982
LOWEST DAILY MEAN	2800 A Jan 23	2930 B Sep 30	600 C Oct 26 1997
ANNUAL SEVEN-DAY MINIMUM	3260 Jan 18	3670 Oct 7	2060 Oct 8 1964
MAXIMUM PEAK FLOW		43900 D Jun 17	88800 E Dec 7 1982
MAXIMUM PEAK STAGE		16.84 F Jun 18	26.02 May 25 1943
INSTANTANEOUS LOW FLOW		2320 Oct 13	
10 PERCENT EXCEEDS	27300	30100	32200
50 PERCENT EXCEEDS	7410	11100	10900
90 PERCENT EXCEEDS	3860	4950	5200

A – Estimated due to backwater from ice.

B – But may have been less during period of missing record Sept. 26–28.

C – Estimated, caused by dam regulation.

D – Gage height, 16.70 ft.

E – Gage height, 23.86 ft.

F – Discharge, 42900 ft<sup>3</sup>/s.

ILLINOIS RIVER BASIN  
05568800 Indian Creek near Wyoming, IL

**LOCATION.**— Lat 41°01'06", long 89°50'07" (NAD of 1927), 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.**—

**SURFACE—WATER DISCHARGE AND STAGE**

DISCHARGE: October 1959 to current year.

STAGE: Water years 1994 to current year.

**SURFACE—WATER QUALITY**

CHEMICAL: Water years 1978–91 and 1998.

SEDIMENT: October 1980 to September 1981.

SPECIFIC CONDUCTANCE: Water year 1981.

WATER TEMPERATURE: Water year 1981.

MISCELLANEOUS: Contaminants of streambed sediments, August 1996; contaminants of fish tissue, August 1996; streambank sediment size, October 1997; streambed sediment size, October 1997.

**BIOLOGICAL**

BENTHIC MACROINVERTEBRATES: Water years 1996–98.

FISH: Water years 1996–98.

HABITAT: Water years 1996–1998.

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

**GAGE.**— Water-stage recorder, phone telemeter, and crest-stage gage. Datum of gage is 606.78 ft above NGVD of 1929. Prior to Oct. 1, 1994, at same site at datum 10.00 ft. higher.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Maximum discharge, 6,540 ft<sup>3</sup>/s, from rating curve extended above 1,400 ft<sup>3</sup>/s, on basis of contracted-opening measurement of peak flow, June 22, 1974; gage height, 23.81 ft (present datum); no flow, Sept. 25, 26, and part of each day Oct. 7, 8, 13, 1988.

**SUSPENDED—SEDIMENT CONCENTRATIONS:** Maximum daily mean, 11,100 mg/L Apr. 14, 1981; minimum daily mean, 20 mg/L Feb. 6–17, 1981.

**SUSPENDED—SEDIMENT LOADS:** Maximum daily, 31,100 tons Apr. 14, 1981; minimum daily, 0.35 ton Feb. 14, 1981.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	2.7	5.5	24	e17	24	45	30	390	28	10	5.9
2	2.0	4.6	5.0	25	e18	23	43	29	188	27	9.9	5.4
3	2.1	16	4.7	24	e19	20	42	39	152	34	9.6	4.8
4	2.1	14	5.2	23	e20	23	39	39	129	40	17	4.5
5	2.1	20	6.8	27	e22	114	37	38	114	28	14	4.3
6	2.0	10	7.5	e18	e24	85	37	36	102	26	9.5	4.1
7	2.2	6.8	6.1	e21	e27	63	36	86	86	37	8.7	3.7
8	2.1	5.6	5.5	e24	e26	52	35	94	76	27	8.5	3.7
9	2.1	5.1	6.5	e27	e25	47	32	72	72	33	8.1	3.6
10	2.3	4.8	214	e25	e24	42	31	69	74	34	7.7	3.5
11	2.5	4.9	149	e24	e22	41	30	90	113	33	8.4	3.5
12	2.4	5.0	77	e23	e21	37	30	68	83	44	7.9	3.3
13	2.4	4.6	58	e22	e20	36	30	61	73	28	7.3	3.1
14	4.7	4.3	50	e22	e18	36	29	79	69	24	6.9	3.2
15	6.6	4.3	44	e21	e17	33	28	82	64	22	6.0	4.7
16	4.0	4.8	42	e21	e17	34	27	72	59	21	5.6	17
17	2.9	4.9	37	e20	e16	34	26	68	55	21	11	8.5
18	2.9	11	35	e23	e16	34	26	100	51	20	16	5.0
19	2.4	14	32	e25	e45	32	25	84	47	18	13	4.1
20	2.5	8.7	53	e23	110	31	26	76	46	18	12	3.6
21	2.5	7.1	54	e22	126	29	34	198	47	17	8.0	3.5

**05568800 Indian Creek near Wyoming, IL--Continued**

<b>22</b>	3.4	6.8	31	e21	73	29	27	199	45	17	6.4	3.3
<b>23</b>	3.1	7.2	30	e20	90	29	25	176	40	22	5.9	3.1
<b>24</b>	2.6	7.1	28	e19	76	30	26	109	38	17	7.3	3.2
<b>25</b>	2.9	6.5	28	e18	52	29	31	177	36	16	8.6	2.9
<b>26</b>	3.2	5.8	30	e17	43	34	28	130	34	15	9.2	3.1
<b>27</b>	3.5	5.8	26	e18	36	39	26	107	34	14	12	3.1
<b>28</b>	3.1	5.7	28	e19	22	40	27	91	33	13	14	2.8
<b>29</b>	2.7	5.9	27	e20	22	48	26	80	31	12	9.0	2.7
<b>30</b>	3.0	5.8	25	e19	----	49	28	1140	29	12	7.6	2.9
<b>31</b>	2.9	----	25	e18	----	48	----	1090	----	11	6.5	----
TOTAL	87.3	219.8	1175.8	673	1064	1245	932	4809	2410	729	291.6	130.1
MEAN	2.82	7.33	37.9	21.7	36.7	40.2	31.1	155	80.3	23.5	9.41	4.34
MAX	6.6	20	214	27	126	114	45	1140	390	44	17	17
MIN	2.0	2.7	4.7	17	16	20	25	29	29	11	5.6	2.7
CFSM	0.04	0.12	0.60	0.35	0.59	0.64	0.50	2.47	1.28	0.38	0.15	0.07
IN.	0.05	0.13	0.70	0.40	0.63	0.74	0.55	2.85	1.43	0.43	0.17	0.08

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 – 2004, BY WATER YEAR (WY)**

MEAN	18.5	28.8	35.2	43.3	56.3	79.7	81.3	87.0	70.5	43.0	22.7	24.0
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	0.64	1.37	0.96	1.35	3.22	13.2	6.88	6.82	6.20	3.51	1.33	0.50
(WY)	1964	1965	1964	1963	1964	2003	1989	1989	1977	1988	1988	1988

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1960 – 2004**

ANNUAL TOTAL	8333.1	13766.6	
ANNUAL MEAN	22.8	37.6	49.1
HIGHEST ANNUAL MEAN			131 1993
LOWEST ANNUAL MEAN			13.6 1964
HIGHEST DAILY MEAN	459 May 11	1140 May 30	3330 Feb 21 1997
LOWEST DAILY MEAN	1.7 A Jan 26	2.0 Oct 2,6	0.00 B
ANNUAL SEVEN-DAY MINIMUM	1.9 A Jan 23	2.1 Oct 1,	0.11 Oct 6 1963
MAXIMUM PEAK FLOW		2290 May 30	6540 C Jun 22 1974
MAXIMUM PEAK STAGE		21.17 May 30	23.81 D Jun 22 1974
INSTANTANEOUS LOW FLOW		1.6 Oct 2,5	
ANNUAL RUNOFF (CFSM)	0.364	0.600	0.783
ANNUAL RUNOFF (INCHES)	4.94	8.17	10.64
10 PERCENT EXCEEDS	52	76	106
50 PERCENT EXCEEDS	7.3	23	22
90 PERCENT EXCEEDS	2.5	3.2	2.9

A – Estimated due to backwater from ice.

B – Sept. 25, 26, 1998 and part of each day Oct. 7, 8, 13, 1988.

C – From rating curve extended above 1,400 ft<sup>3</sup>/s on basis of contracted–opening measurement of peak flow.

D – Present datum.

ILLINOIS RIVER BASIN  
05569500 Spoon River at London Mills, IL

**LOCATION.**— Lat 40°42'26", long 90°16'48" (NAD of 1927), 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 southwest 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.**—

**SURFACE—WATER DISCHARGE AND STAGE**

DISCHARGE: October 1942 to current year.

STAGE: Water years 1994 to current year.

**SURFACE—WATER QUALITY**

CHEMICAL: Water years 1978–91.

MISCELLANEOUS: Water years 1998 and 2002.

**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, U.S. Army Corps of Engineers satellite telemeter and crest–stage gage. Datum of gage is 508.97 ft above NGVD of 1929. Prior to July 13, 1945, nonrecording gage at same site and datum. July 14, 1945, to Apr. 26, 1984, at site 0.9 mi upstream at same datum.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Maximum discharge, 41,000 ft<sup>3</sup>/s, June 23, 1974, gage height, 28.03 ft, from graph based on gage readings; minimum, 2.6 ft<sup>3</sup>/s, Sept. 16, 1988.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Flood of Aug. 26, 1924, reached a stage of 27.08 ft, from information by local residents.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	45	152	427	e200	408	911	644	4920	358	117	85
2	34	55	142	420	e198	401	836	594	4640	343	110	71
3	30	113	136	423	e194	379	766	526	2810	352	100	61
4	28	159	133	418	e191	373	710	625	1810	398	113	55
5	27	567	140	384	e189	1210	654	698	1540	407	123	49
6	25	405	151	248	e187	1750	616	633	1380	416	125	45
7	25	307	157	357	e182	1580	602	573	1250	356	145	41
8	25	227	152	397	e180	1200	579	594	1120	334	103	39
9	27	165	154	440	e178	989	544	1020	1020	319	83	37
10	27	135	2420	411	e175	858	501	858	1060	470	75	35
11	32	122	4580	381	e173	762	466	817	1460	566	69	33
12	36	110	3140	377	e170	688	446	1160	1350	1130	65	31
13	33	95	1810	384	e169	616	429	1090	1180	728	61	29
14	43	87	1390	388	e168	604	419	1110	1010	500	60	28
15	63	84	1190	365	e166	590	410	1210	1010	389	56	41
16	75	79	1040	362	e166	569	400	1420	948	331	53	795
17	74	78	911	367	e162	570	389	1170	847	316	51	462
18	71	213	814	356	e164	580	378	1040	768	289	55	173
19	64	400	739	316	e190	566	360	1150	709	263	163	133
20	57	301	597	e280	e300	525	356	1210	652	244	151	78
21	52	298	585	e290	e1020	485	422	1010	634	228	110	59
22	48	234	659	e280	e1000	450	471	1280	652	223	107	47
23	37	205	626	e260	e960	430	420	1400	607	278	78	39
24	31	185	548	e255	e860	445	370	1670	538	238	70	36
25	44	191	459	e245	e730	468	411	1310	493	221	78	32
26	50	203	465	e235	e630	515	449	1500	460	187	126	30

## ILLINOIS RIVER BASIN

489

**05569500 Spoon River at London Mills, IL--Continued**

<b>27</b>	48	194	518	e230	e540	732	421	1450	438	167	129	29
<b>28</b>	52	184	496	e225	e450	757	381	1220	420	153	226	28
<b>29</b>	49	175	496	e220	432	928	368	1040	401	141	222	26
<b>30</b>	45	162	480	e210	----	973	384	1230	379	134	161	25
<b>31</b>	45	----	453	e208	----	969	----	4910	----	125	117	----
TOTAL	1339	5778	25733	10159	10324	22370	14869	36162	36506	10604	3302	2672
MEAN	43.2	193	830	328	356	722	496	1167	1217	342	107	89.1
MAX	75	567	4580	440	1020	1750	911	4910	4920	1130	226	795
MIN	25	45	133	208	162	373	356	526	379	125	51	25
CFSM	0.04	0.18	0.77	0.31	0.33	0.67	0.46	1.09	1.14	0.32	0.10	0.08
IN.	0.05	0.20	0.89	0.35	0.36	0.78	0.52	1.25	1.27	0.37	0.11	0.09

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 – 2004, BY WATER YEAR (WY)**

MEAN	292	382	458	644	953	1169	1282	1260	1142	710	325	337
MAX	3647	2196	3090	3262	3963	4185	3905	4793	6036	4654	2989	3715
(WY)	1987	1986	1983	1974	2001	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 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1943 – 2004**

ANNUAL TOTAL	123287		179818			
ANNUAL MEAN	338		491		744	
HIGHEST ANNUAL MEAN					2205	
LOWEST ANNUAL MEAN					150	
HIGHEST DAILY MEAN	4580	Dec 11	4920	Jun 1	35100	Jun 23 1974
LOWEST DAILY MEAN	25	A	25	B	3.0	Sep 15 1988
ANNUAL SEVEN-DAY MINIMUM	26	Oct 4	26	Oct 4	3.3	Sep 12 1988
MAXIMUM PEAK FLOW			5510	May 31	41000	Jun 23 1974
MAXIMUM PEAK STAGE			14.47	May 31	28.03 C	Jun 23 1974
INSTANTANEOUS LOW FLOW			24	D	2.6	Sep 16 1988
ANNUAL RUNOFF (CFSM)	0.315		0.458		0.694	
ANNUAL RUNOFF (INCHES)	4.28		6.24		9.43	
10 PERCENT EXCEEDS	704		1120		1700	
50 PERCENT EXCEEDS	148		356		322	
90 PERCENT EXCEEDS	38		45		45	

A – Sept. 20,21 and Oct. 6–8.

B – Oct. 6–8 and Sept. 30.

C – From graph based on gage readings.

D – Oct. 7–8 and Sept. 30.

ILLINOIS RIVER BASIN  
**05570000 Spoon River at Seville, IL**

**LOCATION.**— Lat 40°29'24", long 90°20'25" (NAD of 1927), in SE1/4NW1/4 sec.24, T.6 N., R.1 E., Fulton County, Hydrologic Unit 07130005, on left bank at downstream side of State Highway 95 bridge, 0.5 mi upstream from a railroad bridge, 0.5 mi northeast of Seville, 0.1 mi downstream from Shaw Creek, and at mile 39.2.

**DRAINAGE AREA.**— 1,636 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE**

DISCHARGE: July 1914 to current year. Monthly discharge only for some periods, published in WSP 1308.

STAGE: Water years 1994 to current year.

**SURFACE–WATER QUALITY**

CHEMICAL: Water years 1978–93.

SEDIMENT: Water years 1980–97, Feb. 2003 to current year.

MISCELLANEOUS: Sediment concentration and particle size, water years 1993, 1995–97, 2003.

**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, U.S. Army Corps of Engineers satellite telemeter, sediment sampler, and crest–stage gage. Datum of gage is 467.04 ft above NGVD of 1929. Datum of gage was incorrectly published water years 1927–1941. Prior to May 9, 1935, nonrecording gage 0.5 miles downstream at same datum. May 9, 1935 to June 30, 1976, nonrecording gage 0.47 miles downstream at same datum. July 1, 1976, to July 13, 1983, recording gage at present site and datum. July 14, 1983 to Sept. 18, 2000, recording gage 0.47 miles downstream at same datum.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum discharge, 37,300 ft<sup>3</sup>/s, Aug. 22, 1924, gage height, 30.77 ft, from graph based on gage readings; maximum gage height, 33.10 ft, July 26, 1993, discharge, 34,700 ft<sup>3</sup>/s; minimum observed discharge, 3.8 ft<sup>3</sup>/s, July 31, Aug. 27–29, 1914.

**SUSPENDED–SEDIMENT CONCENTRATIONS:** Maximum daily, 4,630 mg/L, July 21, 1996; minimum daily, 10 mg/L, Feb. 5, 6, 1996.

**SUSPENDED–SEDIMENT LOADS:** Maximum daily, 128,000 tons, May 27, 1996; minimum daily, 2.9 tons, Feb. 6, 1996.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Flood of 1883 reached a stage of about 33.0 ft, backwater from ice, discharge not determined.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	76	286	762	e410	680	1370	681	6970	555	201	222
2	65	81	278	728	e390	652	1290	1000	6360	526	194	177
3	59	134	270	722	e380	634	1200	882	5190	525	184	151
4	53	268	255	724	e370	631	1110	817	2890	575	187	133
5	48	548	259	699	e360	1270	1040	950	2230	658	191	121
6	47	957	265	645	e360	2340	977	962	1940	793	204	111
7	47	613	278	712	e350	2370	944	868	1750	868	202	104
8	47	472	280	882	e340	1870	918	794	1580	613	207	98
9	51	357	284	862	e340	1520	878	990	1450	568	168	93
10	53	288	2100	846	e340	1320	826	1230	1580	731	149	90
11	49	255	6230	809	e330	1190	765	1110	1950	919	136	86
12	49	235	5540	765	e330	1080	725	1090	2100	1050	136	83
13	54	215	3340	726	e320	992	696	1530	1810	1490	128	80
14	75	196	2220	720	e320	932	674	1290	1530	956	118	78
15	80	182	1830	693	e320	918	662	1440	1430	708	113	82
16	93	174	1630	672	e310	906	643	1590	1380	575	109	297
17	124	170	1470	658	e310	888	630	1590	1300	510	104	1400
18	116	261	1320	623	e330	888	608	1360	1170	545	105	684
19	107	660	1210	e640	e400	882	581	1310	1080	457	134	452
20	98	743	1080	e680	e700	846	563	1490	998	392	418	365
21	86	599	1030	e720	e900	786	605	1370	968	359	350	285

## ILLINOIS RIVER BASIN

491

**05570000 Spoon River at Seville, IL--Continued**

<b>22</b>	78	535	1020	e660	e1550	739	695	1280	1000	334	255	236
<b>23</b>	73	445	1070	e620	e1500	699	694	1680	957	329	202	203
<b>24</b>	65	391	977	e590	e1400	696	621	1860	864	392	158	179
<b>25</b>	82	356	886	e550	e1250	724	616	1940	775	337	202	162
<b>26</b>	84	350	841	e530	e1050	787	661	1700	718	309	254	150
<b>27</b>	84	345	845	e510	e900	983	670	1910	675	275	369	139
<b>28</b>	89	328	861	e480	e760	1160	617	1650	645	254	338	131
<b>29</b>	85	314	845	e460	e720	1350	576	1430	616	237	391	125
<b>30</b>	84	302	834	e450	----	1440	576	1420	589	225	352	117
<b>31</b>	77	----	800	e430	----	1420	----	4360	----	214	280	----
TOTAL	2262	10850	40434	20568	17340	33593	23431	43574	54495	17279	6539	6634
MEAN	73.0	362	1304	663	598	1084	781	1406	1816	557	211	221
MAX	124	957	6230	882	1550	2370	1370	4360	6970	1490	418	1400
MIN	47	76	255	430	310	631	563	681	589	214	104	78
CFSM	0.04	0.22	0.80	0.41	0.37	0.66	0.48	0.86	1.11	0.34	0.13	0.14
IN.	0.05	0.25	0.92	0.47	0.39	0.76	0.53	0.99	1.24	0.39	0.15	0.15

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 – 2004, BY WATER YEAR (WY)**

MEAN	528	601	664	1003	1446	1643	1835	1760	1631	1039	521	596
MAX	5356	4386	5745	5500	7111	6524	6752	8015	7908	7839	4767	8440
(WY)	1987	1986	1983	1916	2001	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 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1914 – 2004**

ANNUAL TOTAL	196494		276999		1103	
ANNUAL MEAN	538		757		1103	
HIGHEST ANNUAL MEAN					3578	
LOWEST ANNUAL MEAN					168	
HIGHEST DAILY MEAN	9400	Jul 10	6970	Jun 1	32800	Aug 23 1924
LOWEST DAILY MEAN	47	Oct 6–8	47	Oct 6–8	3.8	Jul 31 1914
ANNUAL SEVEN-DAY MINIMUM	49	Oct 5	49	Oct 5	4.2	Aug 23 1914
MAXIMUM PEAK FLOW			7210	Jun 1	37300 A	Aug 22 1924
MAXIMUM PEAK STAGE			17.66	Jun 1	33.10 B	Jul 26 1993
INSTANTANEOUS LOW FLOW			46	Oct 6	3.8 C	D
ANNUAL RUNOFF (CFSM)	0.329		0.463		0.674	
ANNUAL RUNOFF (INCHES)	4.47		6.30		9.16	
10 PERCENT EXCEEDS	1170		1490		2540	
50 PERCENT EXCEEDS	265		616		480	
90 PERCENT EXCEEDS	66		96		65	

A – Gage height, 30.77 ft., from graph based on gage readings.

B – Discharge, 34,700 ft<sup>3</sup>/s.

C – Observed.

D – July 31, and Aug. 27–29, 1914.

ILLINOIS RIVER BASIN  
05570000 Spoon River at Seville, IL

**LOCATION.**— Lat 40°29'24", long 90°20'25" (NAD of 1927), in SE1/4NW1/4 sec.24, T.6 N., R.1 E., Fulton County, Hydrologic Unit 07130005, on left bank at downstream side of State Highway 95 bridge, 0.5 mi upstream from a railroad bridge, 0.5 mi northeast of Seville, 0.1 mi downstream from Shaw Creek, and at mile 39.2.

**DRAINAGE AREA.**— 1,636 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE**

DISCHARGE: July 1914 to current year. Monthly discharge only for some periods, published in WSP 1308.

STAGE: Water years 1994 to current year.

**SURFACE–WATER QUALITY**

CHEMICAL: Water years 1978–93.

SEDIMENT: Water years 1980–97, Feb. 2003 to current year.

MISCELLANEOUS: Sediment concentration and particle size, water years 1993, 1995–97, 2003.

**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, U.S. Army Corps of Engineers satellite telemeter, sediment sampler, and crest–stage gage. Datum of gage is 467.04 ft above NGVD of 1929. Datum of gage was incorrectly published water years 1927–1941. Prior to May 9, 1935, nonrecording gage 0.5 miles downstream at same datum. May 9, 1935 to June 30, 1976, nonrecording gage 0.47 miles downstream at same datum. July 1, 1976, to July 13, 1983, recording gage at present site and datum. July 14, 1983 to Sept. 18, 2000, recording gage 0.47 miles downstream at same datum.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum discharge, 37,300 ft<sup>3</sup>/s, Aug. 22, 1924, gage height, 30.77 ft, from graph based on gage readings; maximum gage height, 33.10 ft, July 26, 1993, discharge, 34,700 ft<sup>3</sup>/s; minimum observed discharge, 3.8 ft<sup>3</sup>/s, July 31, Aug. 27–29, 1914.

**SUSPENDED–SEDIMENT CONCENTRATIONS:** Maximum daily, 4,630 mg/L, July 21, 1996; minimum daily, 10 mg/L, Feb. 5, 6, 1996.

**SUSPENDED–SEDIMENT LOADS:** Maximum daily, 128,000 tons, May 27, 1996; minimum daily, 2.9 tons, Feb. 6, 1996.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Flood of 1883 reached a stage of about 33.0 ft, backwater from ice, discharge not determined.

**EXTREMES FOR CURRENT YEAR.**—

**SUSPENDED–SEDIMENT CONCENTRATIONS:** Maximum daily, 2,550 mg/L, May 31; minimum daily, 13 mg/L, Sept. 27–28.

**SUSPENDED–SEDIMENT LOADS:** Maximum daily, 39,900 tons, Dec. 11; minimum daily, 3.3 tons, Oct. 1.

**SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

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	60	26	3.3	76	74	15	286	22	17
2	65	53	9.2	81	64	14	278	19	14
3	59	52	8.2	134	59	21	270	16	12
4	53	41	5.8	268	78	59	255	16	11
5	48	32	4.2	548	204	330	259	31	21
6	47	31	3.9	957	442	1140	265	31	22
7	47	30	3.8	613	207	352	278	32	24
8	47	29	3.7	472	93	120	280	35	26
9	51	28	3.9	357	65	63	284	70	56
10	53	28	3.9	288	43	33	2100	1350	9090
11	49	27	3.6	255	26	18	6230	2390	39900
12	49	29	3.9	235	25	15	5540	1050	16100
13	54	31	4.5	215	25	15	3340	339	3210
14	75	33	6.7	196	28	15	2220	215	1290
15	80	33	7.2	182	30	15	1830	174	863
16	93	34	8.5	174	31	14	1630	136	601



ILLINOIS RIVER BASIN  
05570000 Spoon River at Seville, IL--Continued

493

17	124	33	11	170	43	20	1470	117	462
18	116	31	9.6	261	68	48	1320	100	355
19	107	28	8.1	660	75	133	1210	83	272
20	98	29	7.7	743	59	118	1080	66	194
21	86	42	9.8	599	67	108	1030	55	152
22	78	56	12	535	53	76	1020	63	176
23	73	65	13	445	39	47	1070	61	176
24	65	58	10	391	28	29	977	57	151
25	82	50	11	356	25	24	886	67	161
26	84	44	10	350	28	27	841	69	156
27	84	39	9.0	345	34	32	845	74	168
28	89	39	9.3	328	29	25	861	85	198
29	85	54	12	314	27	23	845	87	198
30	84	71	16	302	25	21	834	88	198
31	77	83	17	---	---	---	800	87	188
TOTAL	2262	---	249.8	10850	---	2970	40434	---	74462

	JANUARY			FEBRUARY			MARCH		
1	762	77	158	e410	52	82	680	64	118
2	728	66	130	e390	62	103	652	60	105
3	722	57	110	e380	74	122	634	62	106
4	724	56	110	e370	90	152	631	136	243
5	699	58	108	e360	117	207	1270	590	2080
6	645	59	104	e360	167	300	2340	1340	8410
7	712	81	157	e350	179	317	2370	947	6090
8	882	176	421	e340	126	224	1870	574	2930
9	862	171	398	e340	92	164	1520	268	1110
10	846	131	298	e340	81	142	1320	192	686
11	809	91	198	e330	73	126	1190	145	469
12	765	66	136	e330	68	116	1080	105	308
13	726	60	116	e320	67	112	992	94	252
14	720	57	109	e320	67	109	932	87	219
15	693	55	102	e320	66	105	918	81	202
16	672	53	95	e310	66	100	906	80	195
17	658	51	90	e310	66	98	888	78	188
18	623	49	83	e330	65	96	888	78	186
19	e640	91	215	e400	78	125	882	83	198
20	e680	167	404	e700	133	320	846	91	208
21	e720	100	242	e900	262	873	786	96	205
22	e660	61	123	e1550	412	1880	739	87	173
23	e620	51	101	e1500	339	1520	699	69	130
24	e590	49	97	e1400	226	951	696	67	126
25	e550	48	84	e1250	126	472	724	112	219
26	e530	48	80	e1050	145	520	787	152	323
27	e510	47	84	e900	115	322	983	200	534
28	e480	47	80	e760	92	202	1160	248	775
29	e460	47	77	e720	77	156	1350	278	1010
30	e450	47	74	---	---	---	1440	284	1100
31	e430	46	71	---	---	---	1420	248	948
TOTAL	20568	---	4655	17340	---	10016	33593	---	29846

ILLINOIS RIVER BASIN  
**05570000 Spoon River at Seville, IL--Continued**

	APRIL			MAY			JUNE		
1	1370	209	772	681	118	224	6970	2000	37700
2	1290	176	613	1000	251	676	6360	1190	20600
3	1200	174	564	882	198	473	5190	848	11900
4	1110	164	496	817	192	426	2890	705	5530
5	1040	118	333	950	210	537	2230	995	6010
6	977	129	341	962	196	508	1940	542	2860
7	944	156	398	868	171	402	1750	395	1870
8	918	139	345	794	143	306	1580	332	1420
9	878	109	259	990	322	942	1450	331	1290
10	826	100	223	1230	475	1580	1580	483	2070
11	765	92	190	1110	389	1170	1950	543	2850
12	725	77	150	1090	505	1520	2100	498	2830
13	696	62	117	1530	740	3030	1810	530	2590
14	674	67	122	1290	896	3130	1530	582	2410
15	662	78	139	1440	611	2360	1430	395	1520
16	643	92	160	1590	670	2880	1380	275	1020
17	630	105	179	1590	559	2400	1300	268	939
18	608	103	169	1360	430	1580	1170	286	903
19	581	100	157	1310	469	1660	1080	258	754
20	563	119	182	1490	486	1950	998	223	600
21	605	139	227	1370	508	1880	968	210	549
22	695	116	218	1280	523	1820	1000	296	798
23	694	90	169	1680	782	3540	957	246	637
24	621	79	133	1860	1070	5430	864	184	431
25	616	72	120	1940	1130	5920	775	157	329
26	661	73	131	1700	1100	5040	718	149	288
27	670	75	136	1910	853	4380	675	146	267
28	617	75	124	1650	557	2500	645	134	234
29	576	75	116	1430	490	1890	616	119	198
30	576	86	134	1420	984	4090	589	105	166
31	---	---	---	4360	2550	32100	---	---	---
TOTAL	23431	---	7417	43574	---	96344	54495	---	111563
	JULY			AUGUST			SEPTEMBER		
1	555	101	152	201	59	32	222	65	39
2	526	105	148	194	59	31	177	60	28
3	525	130	185	184	58	29	151	60	24
4	575	181	282	187	53	27	133	69	25
5	658	419	755	191	46	24	121	75	25
6	793	524	1130	204	47	26	111	62	19
7	868	504	1180	202	42	23	104	47	13
8	613	273	460	207	47	26	98	43	11
9	568	243	373	168	45	21	93	43	11
10	731	644	1260	149	38	15	90	43	10
11	919	785	1940	136	29	11	86	44	10
12	1050	831	2440	136	30	11	83	46	10
13	1490	1190	4800	128	36	12	80	49	11
14	956	589	1570	118	37	12	78	51	11
15	708	278	538	113	36	11	82	64	15
16	575	214	332	109	35	10	297	188	229
17	510	278	382	104	33	9.2	1400	1190	4510
18	545	446	654	105	34	9.8	684	353	733

**05570000**

e Estimated

ILLINOIS RIVER BASIN  
**05570910 Sangamon River at Fisher, IL**

**LOCATION.**— Lat 40°18'38", long 88°19'20" (NAD of 1927), 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.**—

SURFACE–WATER DISCHARGE AND STAGE

DISCHARGE: October 1978 to current year.

STAGE: Water years 1994 to current year.

SURFACE–WATER QUALITY

CHEMICAL: Water years 1979–91.

BIOLOGICAL: Benthic macroinvertebrates, Water year 1997.

**GAGE.**— Water–stage recorder, phone telemeter, and crest–stage gage. Datum of gage is 683.23 ft above NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Maximum discharge, 13,000 ft<sup>3</sup>/s, Apr. 12, 1994, gage height, 21.58 ft; no flow several days in 1988, 1994, 1999 and 2000.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	28	263	253	e68	78	1490	108	2770	106	26	32
2	27	25	223	241	e66	85	1100	108	1690	98	21	22
3	26	27	209	231	e63	71	763	111	906	94	19	16
4	28	32	204	342	e61	80	548	116	468	96	24	13
5	26	55	203	654	e60	531	431	110	364	86	28	11
6	22	86	212	445	e58	706	364	100	313	75	17	8.9
7	20	74	217	349	e57	460	321	91	271	73	13	7.3
8	19	60	222	277	e56	321	287	84	240	67	11	6.3
9	18	50	222	233	e55	254	246	83	214	63	11	5.5
10	18	43	246	196	e54	204	215	80	209	211	15	4.3
11	16	52	305	184	e52	184	198	82	1310	273	11	5.1
12	15	93	255	180	e51	159	181	87	2460	158	8.8	5.3
13	15	114	221	157	e51	138	170	127	1740	115	7.6	4.9
14	22	79	212	149	e51	134	159	311	926	123	7.3	3.8
15	45	70	194	146	e50	124	145	811	457	142	7.3	4.4
16	39	68	187	132	e50	118	138	718	408	105	6.9	6.2
17	32	61	165	132	e52	118	132	430	1260	92	6.1	10
18	31	557	152	139	e58	113	123	324	911	81	5.9	4.7
19	28	1630	144	101	e90	103	117	437	415	68	5.7	3.4
20	25	1680	123	e120	e230	97	123	475	309	60	7.1	3.4
21	23	1130	127	e110	e270	92	266	361	265	55	10	2.6
22	23	693	138	e92	156	81	231	291	237	50	8.2	2.6
23	23	513	429	e103	110	80	174	287	200	45	5.6	2.4
24	22	911	684	e92	107	82	148	243	177	40	5.9	1.8
25	23	959	461	e98	96	84	146	695	171	35	24	2.8
26	35	646	338	e94	85	921	139	1280	171	32	99	2.1
27	40	483	280	e87	79	2560	126	932	147	31	69	1.2
28	40	407	261	e83	73	1590	116	467	133	29	35	1.2
29	39	345	333	e78	71	1290	111	322	122	25	49	1.9
30	32	307	356	e74	----	1190	102	369	113	26	76	2.3
31	29	----	291	e70	----	1400	----	2350	----	30	52	----
TOTAL	832	11278	7877	5642	2380	13448	8810	12390	19377	2584	692.4	198.4
MEAN	26.8	376	254	182	82.1	434	294	400	646	83.4	22.3	6.61

**05570910 Sangamon River at Fisher, IL--Continued**

MAX	45	1680	684	654	270	2560	1490	2350	2770	273	99	32
MIN	15	25	123	70	50	71	102	80	113	25	5.6	1.2
CFSM	0.11	1.57	1.06	0.76	0.34	1.81	1.22	1.67	2.69	0.35	0.09	0.03
IN.	0.13	1.75	1.22	0.87	0.37	2.08	1.37	1.92	3.00	0.40	0.11	0.03

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 – 2004, BY WATER YEAR (WY)**

MEAN	67.5	170	177	153	255	364	352	404	294	171	78.7	45.5
MAX	645	1453	669	898	843	1225	1135	1349	775	935	711	605
(WY)	1994	1986	1983	1993	2001	1979	1979	1981	1998	1981	1981	1993
MIN	0.55	4.74	6.65	4.35	15.1	31.8	47.9	80.4	20.8	1.94	0.59	0.33
(WY)	1989	2000	1999	2000	1979	2000	2000	1988	1988	1988	1988	1988

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1979 – 2004**

ANNUAL TOTAL	55992.2		85508.8			
ANNUAL MEAN	153		234		211	
HIGHEST ANNUAL MEAN					499	
LOWEST ANNUAL MEAN					32.4	
HIGHEST DAILY MEAN	2450	Jul 11	2770	Jun 1	9250	Apr 12 1994
LOWEST DAILY MEAN	5.3	Aug 28	1.2	Sep 27,28	0.00	A
ANNUAL SEVEN-DAY MINIMUM	8.8	Aug 22	1.9	Sep 24	0.00	A
MAXIMUM PEAK FLOW			3290	May 31	13000	Apr 12 1994
MAXIMUM PEAK STAGE			15.36	May 31	21.58	Apr 12 1994
INSTANTANEOUS LOW FLOW			0.83	Sep 29		
ANNUAL RUNOFF (CFSM)	0.639		0.973		0.877	
ANNUAL RUNOFF (INCHES)	8.68		13.25		11.92	
10 PERCENT EXCEEDS	355		536		514	
50 PERCENT EXCEEDS	62		102		81	
90 PERCENT EXCEEDS	14		9.7		4.7	

A – Several occurrences in 1988, 1994, 1999, and 2000.

ILLINOIS RIVER BASIN  
**05572000 Sangamon River at Monticello, IL**

**LOCATION.**— Lat 40°01'51", long 88°35'20" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: 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.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1990–92, 1997–98, and 2001 to current year.

MISCELLANEOUS: Contaminants in streambed sediments, July 1996; contaminants in fish tissue, July 1996; streambank sediment size, October 1997; streambed sediment size, October 1997.

**BIOLOGICAL**

ALGAE: Water years 1996–98 and 2002–03.

BENTHIC MACROINVERTEBRATES: Water years 1996–98 and 2002.

FISH: Water years 1997–98 and 2002–04.

HABITAT: Water years 1996–98 and 2002–04.

**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, phone telemeter, and crest-stage gage. Datum of gage is 625.89 ft above NGVD of 1929. 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.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 19,000 ft<sup>3</sup>/s, Oct. 4, 1926, gage height, 18.50 ft, from graph based on gage readings, site then in use; maximum gage height, 19.06 ft, Apr. 13, 1994, discharge, 15,900 ft<sup>3</sup>/s; no flow Aug. 28, Sept. 5, 11, 17, 18, Oct. 30, 31, Nov. 1, 1988.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	157	103	620	799	e200	226	3730	298	1850	309	70	235
2	132	96	524	677	e195	227	3300	293	2410	289	67	160
3	120	95	458	613	e190	220	3050	296	3400	276	63	119
4	112	92	428	889	e185	243	2510	291	3390	264	60	94
5	109	97	419	1760	e180	666	1860	294	2370	259	57	79
6	103	99	406	1910	e175	1190	1270	287	1000	243	53	69
7	93	116	404	1500	e170	1350	980	271	680	227	56	62
8	84	143	415	945	e165	1070	832	251	572	210	48	55
9	79	137	413	753	e160	749	725	238	497	212	45	50
10	76	127	418	615	e157	575	635	231	505	393	45	45
11	73	119	440	531	e153	479	572	230	1760	578	41	41
12	71	116	487	492	e151	414	524	238	2710	622	43	38
13	72	112	451	451	e150	364	488	295	3160	500	41	36
14	82	126	406	413	e149	339	456	582	3790	900	35	33
15	82	153	383	386	e148	319	427	958	3920	637	30	33
16	106	138	364	360	e147	312	405	1320	3420	431	29	31
17	129	130	340	350	e146	303	384	1420	2370	322	27	28
18	118	332	323	368	e145	295	365	1110	2140	260	26	24
19	106	1230	304	350	e200	281	348	1610	2230	231	24	23
20	101	1950	284	288	e250	269	342	1500	1930	190	28	25
21	97	2440	261	288	406	257	368	1230	999	163	27	23
22	93	2730	267	295	411	245	460	954	748	144	27	21
23	91	2360	529	258	336	236	509	767	631	130	25	20

**05572000 Sangamon River at Monticello, IL--Continued**

<b>24</b>	89	1830	1070	301	291	233	437	674	539	115	27	19
<b>25</b>	91	1800	1310	259	272	246	403	1250	494	103	38	18
<b>26</b>	89	1890	1090	295	259	1530	380	2130	474	94	112	17
<b>27</b>	93	1750	772	277	244	4740	362	2240	441	87	169	18
<b>28</b>	100	1230	646	241	230	4530	340	2240	399	81	190	16
<b>29</b>	112	873	789	e230	223	5070	320	1910	362	75	322	16
<b>30</b>	116	723	1090	e220	---	4390	303	993	333	77	460	16
<b>31</b>	111	---	1020	e210	---	4780	---	1090	---	75	368	---
TOTAL	3087	23137	17131	17324	6088	36148	27085	27491	49524	8497	2653	1464
MEAN	99.6	771	553	559	210	1166	903	887	1651	274	85.6	48.8
MAX	157	2730	1310	1910	411	5070	3730	2240	3920	900	460	235
MIN	71	92	261	210	145	220	303	230	333	75	24	16
CFSM	0.18	1.40	1.00	1.02	0.38	2.12	1.64	1.61	3.00	0.50	0.16	0.09
IN.	0.21	1.56	1.16	1.17	0.41	2.44	1.83	1.86	3.35	0.57	0.18	0.10

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1908 – 2004, BY WATER YEAR (WY)**

MEAN	170	243	341	413	581	718	802	729	515	284	150	114
MAX	2868	2842	2155	2636	1937	2472	2753	3609	2081	1585	1486	2427
(WY)	1927	1986	1928	1950	2001	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	0.48
(WY)	1989	1915	1964	1977	1931	1931	1931	1934	1934	1988	1988	1988

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1908 – 2004**

ANNUAL TOTAL	119788		219629			
ANNUAL MEAN	328		600		418	
HIGHEST ANNUAL MEAN					1105	
LOWEST ANNUAL MEAN					68.0	
HIGHEST DAILY MEAN	2850	Jul 13	5070	Mar 29	18700	Oct 4 1926
LOWEST DAILY MEAN	20	Aug 28	16	Sep 28–30	0.00	A
ANNUAL SEVEN–DAY MINIMUM	25	Aug 22	17	Sep 24	0.07	Sep 11 1988
MAXIMUM PEAK FLOW			5310	Mar 27,29	19000	B Oct 4 1926
MAXIMUM PEAK STAGE			14.89	Mar 27,29	19.06	C Apr 13 1994
INSTANTANEOUS LOW FLOW			15	Sep 30		
ANNUAL RUNOFF (CFSM)	0.597		1.09		0.761	
ANNUAL RUNOFF (INCHES)	8.10		14.85		10.34	
10 PERCENT EXCEEDS	866		1770		1100	
50 PERCENT EXCEEDS	142		290		158	
90 PERCENT EXCEEDS	41		45		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.

C – Discharge 15,900 ft<sup>3</sup>/s.

**DRAINAGE AREA.**—550 mi<sup>2</sup>.

**PERIOD OF RECORD.**--

## SURFACE-WATER DISCHARGE AND STAGE

STAGE: Water years 1994 to current year.

## SURFACE-WATER QUALITY

CHEMICAL: Water years 1990–92, 1997–98, and 2001 to current year.

MISCELLANEOUS: Contaminants in streambed sediments, July 1996; contaminants in fish tissue, July 1996; streambank sediment size, October 1997; streambed sediment size, October 1997.

## BIOLOGICAL

ALGAE: Water years 1996–98 and 2002–03.

BENTHIC MACROINVERTEBRATES: Water years 1996–98 and 2002.

FISH: Water years 1997–98 and 2002–04.

**HABITAT:** Water years 1996–98 and 2002–04.

**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, phone telemeter, and crest-stage gage. Datum of gage is 625.89 ft above NGVD of 1929. 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.

**EXTREMES FOR PERIOD OF RECORD.—**

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 19,000 ft<sup>3</sup>/s, Oct. 4, 1926, gage height, 18.50 ft, from graph based on gage readings, site then in use; maximum gage height, 19.06 ft, Apr. 13, 1994, discharge, 15,900 ft<sup>3</sup>/s; no flow Aug. 28, Sept. 5, 11, 17, 18, Oct. 30, 31, Nov. 1, 1988.

**REMARKS FOR CURRENT YEAR.**—Sampled as part of the Lower Illinois River Basin (LIRB) National Water Quality Assessment Program (NAWQA).

## SURFACE-WATER QUALITY

[illegible]



## ILLINOIS RIVER BASIN

501

**05572000 Sangamon River at Monticello, IL--Continued**

16...	0820	81700	80020	8.46	493	7.3	84	7.4	627	24.0	22.1	241	288
AUG													
05...	1330	81700	80020	5.31	82	6.8	81	7.6	678	25.5	23.6	261	314
	Carbon- ate, wat flt incrm. titr., field, mg/L (00452)	Chlor- ide, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, unfltrd mg/L (00665)	Total nitro- gen, wat unf by anal ysis, mg/L (62855)	2,6-Di- ethyl- aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto- chlor, water, fltrd, ug/L (49260)	Ala- chlor, water, fltrd, ug/L (46342)
OCT 2003													
07...	3	36.9	38.4	<.04	5.56	.013	.051	.108	6.31	<.006	E.050	E.004	<.004
DEC													
04...	<1	31.9	37.3	<.04	8.56	.014	.033	.060	8.95	<.006	E.013	<.006	<.005
FEB 2004													
17...	1	44.4	46.0	<.04	6.98	.016	.023	.040	7.55	<.006	E.034	<.006	<.005
APR													
21...	<1	33.4	38.8	<.04	8.34	.072	.013	.102	9.42	<.006	E.044	.048	<.005
MAY													
20...	<1	27.5	25.9	<.04	12.5	.051	.074	.21	13.4	<.006	E.169	.546	.055
JUN													
08...	1	27.2	32.3	<.04	12.0	.034	.064	.148	11.7	<.006	E.149	.084	<.005
JUL													
16...	3	26.7	27.7	<.04	7.67	.021	.075	.162	6.91	<.006	E.075	.017	<.005
AUG													
05...	2	39.1	46.4	<.04	2.40	.011	.097	.181	2.85	<.006	E.046	.007	<.005
	alpha- HCH, water, fltrd, ug/L (34253)	Atra- zine, water, fltrd, ug/L (39632)	Azin- phos- methyl, water, fltrd 0.7u GF ug/L (82686)	Ben- flur- alin, water, fltrd 0.7u GF ug/L (82673)	Butyl- ate, water, fltrd, ug/L (04028)	Car- baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo- furan, water, fltrd 0.7u GF ug/L (82674)	Chlor- pyrifos water, fltrd, ug/L (38933)	cis- Per- methrin water fltrd 0.7u GF ug/L (82687)	Cyana- zine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazi- non, water, fltrd, ug/L (39572)	Diel- drin, water, fltrd, ug/L (39381)
OCT 2003													
07...	<.005	.157	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.005
DEC													
04...	<.005	.110	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009
FEB 2004													
17...	<.005	E.087	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009
APR													
21...	<.005	.299	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009
MAY													
20...	<.005	8.68	<.050	<.010	<.004	<.041	<.020	.007	<.006	<.018	<.003	<.005	<.009
JUN													
08...	<.005	1.67	<.050	<.010	<.004	<.041	E.043	<.005	<.006	<.018	<.003	<.005	E.006
JUL													
16...	<.005	.538	<.050	<.010	<.004	<.041	E.053	<.005	<.006	<.018	<.003	<.005	<.009
AUG													
05...	<.005	.223	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009

ILLINOIS RIVER BASIN  
**05572000 Sangamon River at Monticello, IL--Continued**

	Disul- foton, water, fltrd	EPTC, water, fltrd	Ethal- flur- alin, water, fltrd	Etho- prop, water, fltrd	Fonofos water, fltrd	Lindane water, fltrd	Linuron water fltrd	Mala- thion, water, fltrd	Methyl para- thion, water, fltrd	Metola- chlor, water, fltrd	Metri- buzin, water, fltrd	Moli- nate, water, fltrd	Naprop- amide, water, fltrd
Date	0.7u GF ug/L (82677)	0.7u GF ug/L (82668)	0.7u GF ug/L (82663)	0.7u GF ug/L (82672)	0.7u GF ug/L (04095)	0.7u GF ug/L (39341)	0.7u GF ug/L (82666)	0.7u GF ug/L (39532)	0.7u GF ug/L (82667)	0.7u GF ug/L (39415)	0.7u GF ug/L (82630)	0.7u GF ug/L (82671)	0.7u GF ug/L (82684)
OCT 2003													
07...	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.006	.037	<.006	<.002	<.007
DEC													
04...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.038	<.006	<.003	<.007
FEB 2004													
17...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.038	<.006	<.003	<.007
APR													
21...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.259	<.006	<.003	<.007
MAY													
20...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	1.39	.017	<.003	<.007
JUN													
08...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.327	.006	<.003	<.007
JUL													
16...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.155	<.006	<.003	<.007
AUG													
05...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.044	<.006	<.003	<.007

	p,p'- DDE, water, fltrd	Para- thion, water, fltrd	Peb- ulate, water, fltrd	Pendi- meth- alin, water, fltrd	Phorate water fltrd	Prome- ton, water, fltrd	Propy- zamide, water, fltrd	Propa- chlor, water, fltrd	Pro- panil, water, fltrd	Propar- gite, water, fltrd	Sima- zine, water, fltrd	Tebu- thiuron water fltrd	Terba- cil, water, fltrd
Date	0.7u GF ug/L (34653)	0.7u GF ug/L (39542)	0.7u GF ug/L (82669)	0.7u GF ug/L (82683)	0.7u GF ug/L (82664)	0.7u GF ug/L (04037)	0.7u GF ug/L (82676)	0.7u GF ug/L (04024)	0.7u GF ug/L (82679)	0.7u GF ug/L (82685)	0.7u GF ug/L (04035)	0.7u GF ug/L (82670)	0.7u GF ug/L (82665)
OCT 2003													
07...	<.003	<.010	<.004	<.022	<.011	E.01	<.004	<.010	<.011	<.02	<.005	<.02	<.034
DEC													
04...	<.003	<.010	<.004	<.022	<.011	M	<.004	<.025	<.011	<.02	<.005	<.02	<.034
FEB 2004													
17...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034
APR													
21...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.010	<.02	<.034
MAY													
20...	<.003	<.010	<.004	E.011	<.011	.01	<.004	<.025	<.011	<.02	.026	<.02	<.034
JUN													
08...	<.003	<.010	<.004	E.007	<.011	.01	<.004	<.025	<.011	<.02	.020	<.02	<.034
JUL													
16...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.008	<.02	<.034
AUG													
05...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.157	<.02	<.034

		Terbu- fos, water, fltrd	Thio- bencarb water fltrd	Tri- allate, water, fltrd	Tri- flur- alin, water, fltrd	Sus- pended sedi- ment concen- tration mg/L
Date		0.7u GF ug/L (82675)	0.7u GF ug/L (82681)	0.7u GF ug/L (82678)	0.7u GF ug/L (82661)	
OCT 2003						
07...		<.02	<.005	<.002	<.009	68

ILLINOIS RIVER BASIN  
**05572000 Sangamon River at Monticello, IL--Continued**

503

DEC						
	04...	<.02	<.010	<.002	<.009	38
FEB 2004						
	17...	<.02	<.010	<.002	<.009	50
APR						
	21...	<.02	<.010	<.002	<.009	178
MAY						
	20...	<.02	<.010	<.002	<.009	165
JUN						
	08...	<.02	<.010	<.002	E.005	235
JUL						
	16...	<.02	<.010	<.002	<.009	175
AUG						
	05...	<.02	<.010	<.002	<.009	121

Remark codes used in this table:

< -- Less than

E -- Estimated value

M -- Presence verified, not quantified

ILLINOIS RIVER BASIN  
**05573540 Sangamon River at Route 48 at Decatur, IL**

**LOCATION.**— Lat 39°49'52", long 88°58'35" (NAD of 1927), 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.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: October 1982 to current year.

STAGE: Water years 1994 to current year.

SURFACE-WATER QUALITY

CHEMICAL: Water years 1979–91.

**REVISED RECORDS.**— WDR IL–94–2: 1992

**GAGE.**— Water–stage recorder, phone telemeter, and crest–stage gage. Datum of gage is 583.43 ft above NGVD of 1929.

**REMARKS.**— Flow regulated by Lake Decatur Dam, 1.2 mi upstream.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 31,800 ft<sup>3</sup>/s, May 12, 2002, gage height, 24.33 ft; no flow in some years.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for Oct. 1–6, June 12 to July 1, July 12–23, and estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	22	954	1670	171	339	5780	590	1340	288	16	1060
2	10	25	807	1490	e165	311	4600	485	1270	411	16	546
3	8.8	25	702	1330	e155	286	3500	324	1590	453	14	248
4	8.3	26	582	1850	e140	441	3950	215	1770	398	14	110
5	9.2	35	557	3250	e130	1140	2960	47	2130	381	21	131
6	34	33	532	2210	e115	1740	1810	35	2740	232	18	129
7	120	32	499	1930	e100	1610	1730	337	1930	396	11	196
8	282	30	479	1930	e80	1720	1650	394	704	469	10	220
9	289	29	327	1470	e66	1380	1370	325	246	363	13	91
10	133	30	39	885	e50	1160	813	292	762	895	10	44
11	25	33	544	865	e34	1080	341	300	1390	1330	6.0	40
12	17	36	750	837	e20	871	827	283	1750	747	4.9	40
13	14	34	612	764	e45	726	708	384	2520	917	4.5	23
14	33	32	505	840	e80	635	499	2430	2030	750	4.5	15
15	13	30	457	815	e110	349	498	2890	4420	775	4.9	12
16	11	30	413	586	e135	55	505	2090	5960	784	5.7	12
17	9.6	33	417	767	154	26	497	1310	4520	668	6.2	11
18	9.0	742	418	741	179	26	435	1600	4200	567	8.4	13
19	8.4	1200	374	663	265	33	426	1840	3490	375	6.2	14
20	30	1830	352	394	376	85	462	2020	2760	204	18	13
21	20	1980	313	389	421	180	337	1930	1730	91	6.1	9.1
22	17	1680	303	557	417	455	666	1680	1350	71	4.8	6.8
23	14	1830	620	521	459	442	799	1370	1320	207	5.9	6.6
24	13	2260	963	487	498	309	693	969	826	251	16	6.1
25	16	2260	1150	477	497	386	596	1190	699	197	8.6	5.9
26	19	1990	1410	406	454	2700	559	1740	599	91	e200	5.7
27	18	1710	1410	257	366	4620	272	2030	607	27	e1800	5.7
28	19	1540	1110	174	317	5740	43	2040	599	16	2290	5.8
29	19	1390	740	170	315	6360	202	1960	556	8.0	2310	6.9
30	20	1150	110	172	---	6150	500	1890	372	14	1370	7.8

**05573540 Sangamon River at Route 48 at Decatur, IL--Continued**

<b>31</b>	<b>22</b>	<b>---</b>	<b>1310</b>	<b>172</b>	<b>---</b>	<b>6090</b>	<b>---</b>	<b>1760</b>	<b>---</b>	<b>9.7</b>	<b>1230</b>	<b>---</b>
TOTAL	1273.3	22077	19759	29069	6314	47445	38028	36750	56180	12385.7	9453.7	3034.4
MEAN	41.1	736	637	938	218	1530	1268	1185	1873	400	305	101
MAX	289	2260	1410	3250	498	6360	5780	2890	5960	1330	2310	1060
MIN	8.3	22	39	170	20	26	43	35	246	8.0	4.5	5.7

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 – 2004, BY WATER YEAR (WY)**

MEAN	213	529	739	624	899	1115	1078	1464	967	376	124	117
MAX	2217	4041	2294	3087	2803	2802	3674	4027	3131	1947	515	1736
(WY)	1994	1986	1991	1993	2001	1998	1994	1995	1998	1993	1985	1993
MIN	0.24	3.67	2.21	1.23	13.6	165	83.8	108	17.3	2.69	0.33	0.18
(WY)	1995	1983	1990	2003	2003	2000	1986	2001	1988	1989	1996	1998

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1983 – 2004**

ANNUAL TOTAL	126932.08		281769.1			
ANNUAL MEAN	348		770		686	
HIGHEST ANNUAL MEAN					1511	
LOWEST ANNUAL MEAN					164	
HIGHEST DAILY MEAN	2910	May 10	6360	Mar 29	19600	May 12 2002
LOWEST DAILY MEAN	0.10	A	4.5	Aug 13, 14	0.00	B
ANNUAL SEVEN-DAY MINIMUM	0.10	A	5.2	Aug 11	0.00	B
MAXIMUM PEAK FLOW			6740	Mar 28	31800 C	May 12 2002
MAXIMUM PEAK STAGE			15.82	Mar 28	24.33	May 12 2002
INSTANTANEOUS LOW FLOW			4.2	Aug 13, 23		
10 PERCENT EXCEEDS	1150		1940		2000	
50 PERCENT EXCEEDS	85		388		212	
90 PERCENT EXCEEDS	0.46		11		1.5	

A – Estimated, several occurrences.

B – At times in some years.

C – From rating curve extended above 17,000 ft<sup>3</sup>/s.

ILLINOIS RIVER BASIN  
**05576000 South Fork Sangamon River near Rochester, IL**

**LOCATION.**— Lat 39°44'32", long 89°34'02" (NAD of 1927), 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. Auxiliary gage 1.2 miles downstream.

**DRAINAGE AREA.**— 867 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE

DISCHARGE: July 1949 to current year.

STAGE: Water years 1994 to current year.

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

**GAGE.**— Water—stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest—stage gage. Datum of gage is 511.30 ft above NGVD of 1929. Prior to Oct. 1, 1964, water—stage recorder, and Oct. 1, 1964, to Apr. 12, 1966, non—recording gage, at site 1.8 mi downstream at same datum. Auxiliary water—stage recorder at site 1.2 mi downstream. Prior to May 19, 1950, auxiliary non—recording gage at site 6.2 mi downstream. May 19, 1950 to Apr. 29, 1975, auxiliary non—recording gage at site 1.2 mi downstream.

**REMARKS.**— Beginning Apr. 14, 1955, diversion for Springfield's public—water supply periodically occurs upstream from the station and upstream from the dam between the confluence of Horse Creek and the gage. The water is diverted to Lake Springfield. Occasional regulation occurs due to operation of the gate at the diversion dam. Pumpage from Lake Taylorville into stream generally occurs during the fall upstream from the gage.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE: Maximum discharge, 20,300 ft<sup>3</sup>/s, Apr. 14, 1994, gage height, 32.40 ft; maximum gage height, 33.65 ft, May 13, 2002, discharge 14,100 ft<sup>3</sup>/s; no flow Nov. 4–6, 1985, Sept. 9, 1987, and for many days in 1988–90, 92, and 2000.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for Nov. 19 to Dec. 12, Apr. 6–12, June 16–24 and estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	34	681	937	e310	616	2530	344	e1230	87	3.8	e13
2	25	37	565	1170	e300	583	2220	328	e982	48	4.4	e5.5
3	27	53	476	1310	e295	531	1750	316	735	20	4.7	e4.5
4	25	63	420	e1610	e290	501	1340	331	584	106	4.0	e4.1
5	23	58	390	2590	e280	1580	1030	344	507	132	4.2	3.9
6	21	85	372	2770	e270	2640	782	350	474	156	4.3	3.8
7	21	173	353	2860	e265	2750	659	325	497	116	3.5	4.3
8	20	173	335	3300	e260	2980	639	302	446	121	3.3	4.4
9	21	168	327	3660	e250	3100	581	283	315	139	3.9	3.5
10	26	166	325	3710	e240	2970	482	257	267	122	3.7	3.1
11	22	166	303	3350	e235	2460	433	251	340	148	3.5	3.1
12	20	165	291	e2430	e230	e1730	385	264	395	233	4.2	2.9
13	28	164	287	e1430	e225	1090	397	310	456	139	4.6	3.0
14	75	162	263	958	e220	774	365	691	541	108	4.3	2.8
15	68	164	253	791	e215	642	329	2320	607	101	3.9	2.2
16	70	158	251	695	e215	565	320	3160	812	102	4.2	1.9
17	89	e440	230	645	223	517	315	3570	943	89	4.6	1.8
18	122	1270	224	803	226	492	294	4230	1250	66	4.3	1.8
19	114	2330	200	1040	291	458	272	4940	1250	48	4.1	1.8
20	94	2060	142	1080	623	416	266	5110	1140	21	3.9	2.1
21	82	1960	118	1080	1100	373	262	4450	920	7.4	3.8	2.3
22	68	1770	111	1030	1200	336	236	3750	594	6.1	3.8	2.2
23	57	1820	228	911	1190	313	341	2990	371	5.7	3.7	1.8
24	55	2020	946	765	1270	314	350	3080	309	5.0	3.6	1.8
25	49	2030	1170	634	1260	325	426	3290	238	4.7	42	1.8

**05576000 South Fork Sangamon River near Rochester, IL--Continued**

<b>26</b>	40	e1810	1130	551	1110	452	547	2900	193	5.1	e60	1.8
<b>27</b>	34	e1530	1100	e480	942	e1160	486	2360	154	4.9	e80	1.7
<b>28</b>	31	1290	1090	e420	803	1790	420	1960	128	4.9	e94	1.7
<b>29</b>	31	1060	939	e360	686	2400	372	1750	115	4.5	e100	2.1
<b>30</b>	33	840	771	e330	---	2560	353	1600	101	4.6	e70	2.0
<b>31</b>	34	---	789	e320	---	2600	---	e1430	---	4.6	e30	---
TOTAL	1450	24219	15080	44020	15024	40018	19182	57586	16894	2159.5	572.3	92.7
MEAN	46.8	807	486	1420	518	1291	639	1858	563	69.7	18.5	3.09
MAX	122	2330	1170	3710	1270	3100	2530	5110	1250	233	100	13
MIN	20	34	111	320	215	313	236	251	101	4.5	3.3	1.7
CFSM	0.05	0.93	0.56	1.64	0.60	1.49	0.74	2.14	0.65	0.08	0.02	0.00
IN.	0.06	1.04	0.65	1.89	0.64	1.72	0.82	2.47	0.72	0.09	0.02	0.00

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 – 2004, BY WATER YEAR (WY)**

MEAN	195	266	526	589	882	1021	1046	1063	887	370	232	140
MAX	2748	2846	4546	3788	4273	3669	3991	6489	3600	3053	3046	2876
(WY)	1970	1986	1968	1950	1982	1978	1994	2002	1974	1957	1958	1993
MIN	1.06	0.67	0.19	0.75	3.04	0.05	2.80	17.9	3.20	1.74	1.02	1.13
(WY)	1989	1977	1977	1990	2000	2000	2000	1954	1988	1954	1964	1987

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1949 – 2004**

ANNUAL TOTAL	136923.37		236297.5			
ANNUAL MEAN	375		646		600	
HIGHEST ANNUAL MEAN					1461	
LOWEST ANNUAL MEAN					26.3	
HIGHEST DAILY MEAN	5620	May 11	5110	May 20	19000	Apr 14 1994
LOWEST DAILY MEAN	0.87 A	Apr 3	1.7	Sep 27,28	0.00	B
ANNUAL SEVEN-DAY MINIMUM	2.0	Feb 10	1.8	Sep 23	0.00	Jun 9 1988
MAXIMUM PEAK FLOW			5530 C	May 20	20300 D	Apr 14 1994
MAXIMUM PEAK STAGE			23.21 E	May 20	33.65 F	May 13 2002
INSTANTANEOUS LOW FLOW			1.6	G		
ANNUAL RUNOFF (CFSM)	0.433		0.745		0.692	
ANNUAL RUNOFF (INCHES)	5.87		10.14		9.40	
10 PERCENT EXCEEDS	1080		1980		1620	
50 PERCENT EXCEEDS	114		294		165	
90 PERCENT EXCEEDS	3.0		4.0		4.8	

A – Due to regulation.

B – Nov. 4–6, 1985; Sept. 9, 1987; many days in 1988–90, 1992, and 2000.

C – Gage height, 23.12 ft.

D – Gage height, 32.40 ft.

E – Discharge, 5240 ft<sup>3</sup>/s.F – Discharge, 14100 ft<sup>3</sup>/s.

G – Sept. 17, 24, 27, 28.

ILLINOIS RIVER BASIN  
**05576500 Sangamon River at Riverton, IL**

**LOCATION.**— Lat 39°50'35", long 89°32'50" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: February 1908 to December 1912, August 1914 to October 1956, and January 1986 to current year.

STAGE: Water years 1994 to current year.

PARTIAL RECORD: Annual maximum, water years 1957–85.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–91.

MISCELLANEOUS: Water years 1998 and 2002.

**REVISED RECORDS.**— WSP 1208: 1908–9, 1921–22, 1926–27, 1947. WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest–stage gage. Datum of gage is 508.38 ft above NGVD of 1929. 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.**— Some regulation by municipal reservoirs at Decatur (since 1922) and at Springfield (since 1934).

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 68,700 ft<sup>3</sup>/s, May 19, 1943, gage height, 31.52 ft, from graph based on gage readings; minimum daily, 3.0 ft<sup>3</sup>/s, Oct. 3–15, 1914.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** 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.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	117	135	2430	2330	e970	1370	10700	1570	3890	804	268	1670
2	112	137	2110	2970	e940	1480	10000	1730	3360	627	238	1460
3	112	131	1870	3140	e910	1240	9220	1610	2970	642	230	896
4	114	141	1700	3440	e890	1200	7800	1430	2950	801	225	606
5	118	164	1560	5290	e860	2540	6280	1270	3000	778	226	419
6	113	160	1490	6510	e830	4320	5540	1120	3120	820	214	377
7	110	231	1420	7230	e810	5030	4380	962	3350	728	209	358
8	110	242	1360	7170	e790	5220	3620	1060	3110	685	203	355
9	278	230	1460	6730	e770	5040	3450	1230	1980	813	200	383
10	408	230	1440	6170	e750	4900	3100	1110	1230	870	201	343
11	327	237	1180	5050	e730	4330	2460	1060	1900	1720	213	280
12	206	234	1350	4160	e710	3440	1760	1130	2570	2410	212	255
13	165	226	1580	3250	e700	2620	1980	1150	2870	1690	199	241
14	364	230	1420	2570	e690	2150	1930	1850	3250	1450	190	233
15	270	229	1340	2340	e680	1890	1630	4610	3290	1230	185	225
16	251	228	1290	2140	e680	1610	1540	6110	3860	1130	181	224
17	210	216	1120	1920	e710	1280	1500	6530	4480	1120	180	210
18	216	1420	1070	2270	784	1180	1450	6460	5360	956	204	203
19	214	4150	1060	2500	878	1100	1330	6690	5400	814	188	195
20	199	4710	958	2430	1330	1020	1250	7250	5000	628	199	187
21	184	4170	888	2220	2010	968	1330	7210	4390	444	203	183
22	175	4080	856	2070	2130	973	1180	6700	3440	364	226	177
23	162	3830	1090	e1850	2070	1150	1630	5790	2580	320	191	175
24	156	3940	2370	e1650	2040	1240	1920	5090	2280	337	185	176



## ILLINOIS RIVER BASIN

509

**05576500 Sangamon River at Riverton, IL--Continued**

<b>25</b>	156	4310	2880	e1400	2080	1140	2030	5490	1740	393	284	175
<b>26</b>	153	4300	2940	e1200	1970	1610	2190	6120	1450	364	1100	172
<b>27</b>	147	3940	2970	e1300	1790	3690	2060	5420	1220	329	2280	170
<b>28</b>	144	3490	3000	e1200	1580	5640	1740	4890	1120	280	2220	162
<b>29</b>	136	3120	2690	e1100	1410	8190	1310	4590	1050	259	3020	161
<b>30</b>	132	2790	2190	e1050	----	10000	1230	4400	967	258	3190	162
<b>31</b>	135	----	1610	e1000	----	10900	----	4230	----	257	2330	----
TOTAL	5694	51651	52692	95650	33492	98461	97540	115862	87177	24321	19394	10833
MEAN	184	1722	1700	3085	1155	3176	3251	3737	2906	785	626	361
MAX	408	4710	3000	7230	2130	10900	10700	7250	5400	2410	3190	1670
MIN	110	131	856	1000	680	968	1180	962	967	257	180	161
CFSM	0.07	0.66	0.65	1.18	0.44	1.21	1.24	1.43	1.11	0.30	0.24	0.14
IN.	0.08	0.73	0.75	1.36	0.48	1.40	1.39	1.65	1.24	0.35	0.28	0.15

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1908 – 2004, BY WATER YEAR (WY)**

MEAN	839	941	1139	1834	2316	2781	3258	3320	2401	1100	519	569
MAX	12280	5516	7500	12940	7762	8117	14100	16760	8596	4819	5914	12730
(WY)	1927	1942	1928	1950	1951	1939	1922	1943	1998	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 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1908 – 2004**

ANNUAL TOTAL	386229		692767			
ANNUAL MEAN	1058		1893		1745	
HIGHEST ANNUAL MEAN					4808	
LOWEST ANNUAL MEAN					114	
HIGHEST DAILY MEAN	12300	May 12	10900	Mar 31	67700	May 19 1943
LOWEST DAILY MEAN	86	A Jan 24	110	Oct 7, 8	3.0	B
ANNUAL SEVEN-DAY MINIMUM	91	Jan 22	113	Oct 2	3.0	Oct 3 1914
MAXIMUM PEAK FLOW			11000	Mar 31	68700	May 19 1943
MAXIMUM PEAK STAGE			18.77	Mar 31	31.52	C May 19 1943
INSTANTANEOUS LOW FLOW			107	Oct 8		
ANNUAL RUNOFF (CFSM)	0.404		0.723		0.666	
ANNUAL RUNOFF (INCHES)	5.49		9.84		9.05	
10 PERCENT EXCEEDS	2810		4890		4620	
50 PERCENT EXCEEDS	446		1230		660	
90 PERCENT EXCEEDS	113		182		62	

A – Estimated due to backwater from ice.

B – Oct. 3–15, 1914.

C – From graph based on gage readings.

ILLINOIS RIVER BASIN  
**05577500 Spring Creek at Springfield, IL**

**LOCATION.**— Lat 39°48'55", long 89°41'55" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: January to February 1948, April to June 1948, December 1948 to current year.

STAGE: Water years 1994 to current year.

**GAGE.**— Water-stage recorder, phone telemeter, and crest-stage gage. Datum of gage is 524.65 ft above NGVD of 1929. Prior to Dec. 22, 1948, and Mar. 24, 1981 to Mar. 30, 1983, nonrecording gage at same site and datum.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 10,700 ft<sup>3</sup>/s, May 8, 1996, gage height, 16.23 ft; no flow for many days in most years.

**REMARKS FOR CURRENT YEAR.**— Records poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	15	47	35	e21	36	90	96	41	12	10	3.1
2	2.4	23	40	35	e24	37	79	82	33	11	8.0	2.1
3	3.3	20	39	37	40	33	73	73	29	42	6.4	1.6
4	2.4	25	41	111	32	91	67	68	26	26	6.7	1.3
5	2.2	43	44	144	e29	185	62	68	28	16	9.8	0.94
6	2.1	25	41	91	e27	159	59	61	26	37	7.7	0.57
7	1.9	21	36	111	e25	113	57	56	25	21	5.7	0.31
8	1.7	17	36	87	e24	90	54	51	23	21	3.6	0.34
9	35	15	37	72	e26	80	49	50	22	15	3.0	0.58
10	8.1	15	45	62	e28	71	45	51	40	116	3.8	0.62
11	3.9	22	40	59	32	67	44	48	54	194	2.8	0.48
12	5.9	23	32	59	34	62	42	46	35	55	1.7	0.37
13	6.6	20	29	53	31	57	40	45	39	33	1.0	0.31
14	104	17	30	50	e29	59	38	89	26	24	0.90	0.38
15	19	17	33	50	e27	55	37	73	92	18	0.92	1.9
16	9.9	19	34	47	e27	58	37	67	75	14	0.95	5.6
17	6.2	37	32	57	31	59	36	62	47	11	14	2.2
18	6.2	351	28	57	33	54	35	65	38	9.5	31	1.3
19	5.0	353	28	45	50	49	33	58	32	8.1	5.2	1.1
20	3.8	207	23	e39	77	46	44	54	25	5.8	10	0.84
21	2.6	136	25	e36	68	44	43	50	26	4.7	5.1	0.64
22	7.2	101	30	e33	48	40	59	47	e25	4.6	3.1	0.46
23	8.9	111	86	e32	41	40	48	56	23	4.9	1.9	0.34
24	8.8	122	82	e36	40	44	70	56	19	4.3	4.0	0.26
25	10	108	62	e30	37	63	160	80	23	3.5	37	0.20
26	15	88	53	e25	35	122	188	63	18	3.3	29	0.14
27	14	73	49	e24	34	145	130	54	16	2.5	19	0.09
28	13	62	48	e23	33	156	105	51	15	2.1	18	0.07
29	14	54	46	e22	34	137	93	43	15	3.0	14	0.03
30	13	51	41	e22	---	117	86	49	13	20	7.7	0.01
31	13	---	37	e21	---	102	---	49	---	12	3.8	---
TOTAL	351.1	2191	1274	1605	1017	2471	2003	1861	949	754.3	275.77	28.18
MEAN	11.3	73.0	41.1	51.8	35.1	79.7	66.8	60.0	31.6	24.3	8.90	0.94
MAX	104	353	86	144	77	185	188	96	92	194	37	5.6

**05577500 Spring Creek at Springfield, IL--Continued**

MIN	1.7	15	23	21	21	33	33	43	13	2.1	0.90	0.01
CFSM	0.11	0.68	0.38	0.48	0.33	0.74	0.62	0.56	0.30	0.23	0.08	0.01
IN.	0.12	0.76	0.44	0.56	0.35	0.86	0.70	0.65	0.33	0.26	0.10	0.01

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 – 2004, BY WATER YEAR (WY)**

MEAN	21.5	29.5	52.7	56.4	83.6	108	127	127	96.8	42.1	25.4	19.8
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	0.00	0.00	0.00	0.00	0.22	0.23	0.66	0.05	8.05	1.38	0.02	0.00
(WY)	1954	1954	1954	1956	1954	1954	1954	1954	1953	1976	1953	1952

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1948 – 2004**

ANNUAL TOTAL	13463.34		14780.35			
ANNUAL MEAN	36.9		40.4		66.4	
HIGHEST ANNUAL MEAN					156	
LOWEST ANNUAL MEAN					2.15	
HIGHEST DAILY MEAN	379	Jun 14	353	Nov 19	5320	May 8 1996
LOWEST DAILY MEAN	0.00	Aug 28,29	0.01	Sep 30	0.00	A
ANNUAL SEVEN-DAY MINIMUM	0.11	Aug 24	0.11	Sep 24	0.00	A
MAXIMUM PEAK FLOW			401	Nov 18	10700	May 8 1996
MAXIMUM PEAK STAGE			7.23	Nov 18	16.23	May 8 1996
INSTANTANEOUS LOW FLOW			0.00	Sep 30		
ANNUAL RUNOFF (CFSM)	0.345		0.377		0.620	
ANNUAL RUNOFF (INCHES)	4.68		5.14		8.43	
10 PERCENT EXCEEDS	89		87		151	
50 PERCENT EXCEEDS	22		33		21	
90 PERCENT EXCEEDS	1.3		2.1		0.05	

A – Many occurrences in most years.

ILLINOIS RIVER BASIN  
**05578500 Salt Creek near Rowell, IL**

**LOCATION.**— Lat 40°06'54", long 89°02'57" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1942 to current year.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–91.

**REVISED RECORDS.**— WDR IL-75-1: Drainage area. WDR IL-04: 2003

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 610.00 ft above NGVD of 1929 (U.S. Army Corps of Engineers bench mark).

**REMARKS.**— Flow partially regulated due to storage at Clinton Reservoir, 11 mi upstream from gage since Oct. 12, 1977.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 24,500 ft<sup>3</sup>/s, May 16, 1968, gage height, 29.21 ft; maximum discharge after Clinton Reservoir, 7,810 ft<sup>3</sup>/s, Apr. 13, 1994, gage height 24.04 ft; minimum daily discharge, 0.7 ft<sup>3</sup>/s, Oct. 4, 1954.

**REMARKS FOR CURRENT YEAR.**— Records poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.9	13	15	18	e17	e46	120	116	198	67	69	155
2	9.9	13	15	25	e19	e44	109	126	165	63	62	101
3	9.8	13	15	18	e21	e41	109	120	166	58	62	100
4	13	14	15	17	e20	e40	118	116	147	49	61	94
5	14	15	14	16	e19	e40	201	206	130	42	52	85
6	11	18	14	16	e18	e40	251	212	126	42	46	73
7	11	16	14	16	e17	e41	342	235	132	35	41	62
8	11	14	14	15	e16	e42	355	229	119	29	39	54
9	10	14	14	15	e15	e43	378	246	101	60	35	47
10	10	16	14	15	e15	e42	370	356	106	772	30	42
11	10	16	14	e15	e14	e41	346	416	127	784	26	36
12	10	15	13	e15	e14	e50	331	430	156	817	23	34
13	10	15	13	e15	e14	e70	303	444	161	763	22	28
14	10	15	14	e15	e14	100	268	423	232	643	22	26
15	11	16	13	e15	e14	92	234	449	325	533	19	23
16	10	17	13	e15	e14	91	214	502	331	458	18	20
17	10	16	15	e16	e15	92	222	486	306	396	18	19
18	10	15	21	e18	e15	93	206	446	271	365	19	19
19	15	15	26	e17	e18	122	190	397	252	350	18	18
20	12	16	17	e16	e30	151	184	358	219	296	17	17
21	11	16	15	e15	e50	179	176	319	181	372	17	17
22	11	17	e14	e14	e90	179	169	278	160	341	17	17
23	10	16	e13	e14	e80	190	160	240	141	290	16	17
24	10	15	e13	e13	e65	190	151	210	124	242	16	17
25	12	15	e13	e12	e55	190	167	192	108	204	16	18
26	13	15	e13	e12	e52	181	156	180	97	167	16	19
27	11	15	14	e12	e50	172	132	162	90	135	16	28
28	11	15	14	e12	e48	164	121	154	77	128	15	17
29	14	15	14	e13	---	161	118	173	69	118	67	16
30	21	15	16	e14	---	153	119	150	71	96	52	15

ILLINOIS RIVER BASIN  
05578500 Salt Creek near Rowell, IL---Continued

513

31	14	---	19	e15	---	140	---	235	---	79	35	---
TOTAL	355.6	456	461	474	829	3220	6320	8606	4888	8794	982	1234
MEAN	11.5	15.2	14.9	15.3	29.6	104	211	278	163	284	31.7	41.1
MAX	21	18	26	25	90	190	378	502	331	817	69	155
MIN	9.8	13	13	12	14	40	109	116	69	29	15	15

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 – 2003, BY WATER YEAR (WY)**

MEAN	109	154	226	205	329	535	480	517	341	225	134	57.8
MAX	1069	1236	1268	1316	975	2129	1704	1648	850	1370	1576	658
(WY)	1994	1986	1983	1993	1982	1982	1979	1995	1999	1981	1981	1993
MIN	8.31	9.77	12.1	11.0	14.9	22.3	54.8	45.2	13.7	8.51	6.57	5.46
(WY)	1989	1989	1996	1980	1989	2000	2000	1988	1988	1988	1988	1988

**SUMMARY STATISTICS**

**FOR 2002 CALENDAR YEAR**

**FOR 2003 WATER YEAR**

**WATER YEARS 1978 – 2003**

ANNUAL TOTAL	106746.6	36619.6	
ANNUAL MEAN	292	100	276
HIGHEST ANNUAL MEAN			601 1993
LOWEST ANNUAL MEAN			56.3 2000
HIGHEST DAILY MEAN	3020 May 14	817 Jul 12	6960 Apr 13 1994
LOWEST DAILY MEAN	9.8 Oct 3	9.8 Oct 3	3.7 Sep 8 1988
ANNUAL SEVEN-DAY MINIMUM	10 Oct 8	10 Oct 8	4.1 Sep 4 1988
MAXIMUM PEAK FLOW		876 Jul 10	7810 Apr 13 1994
MAXIMUM PEAK STAGE		16.18 Jul 10	24.04 Apr 13 1994
INSTANTANEOUS LOW FLOW		9.7 A	
10 PERCENT EXCEEDS	756	283	700
50 PERCENT EXCEEDS	80	35	108
90 PERCENT EXCEEDS	13	13	11

A – Oct. 1–3, 18.

ILLINOIS RIVER BASIN  
**05578500 Salt Creek near Rowell, IL**

**LOCATION.**— Lat 40°06'54", long 89°02'57" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1942 to current year.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–91.

**REVISED RECORDS.**— WDR IL-75-1: Drainage area. WDR IL-04: 2003

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 610.00 ft above NGVD of 1929 (U.S. Army Corps of Engineers bench mark).

**REMARKS.**— Flow partially regulated due to storage at Clinton Reservoir, 11 mi upstream from gage since Oct. 12, 1977.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 24,500 ft<sup>3</sup>/s, May 16, 1968, gage height, 29.21 ft; maximum discharge after Clinton Reservoir, 7,810 ft<sup>3</sup>/s, Apr. 13, 1994, gage height 24.04 ft; minimum daily discharge, 0.7 ft<sup>3</sup>/s, Oct. 4, 1954.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	12	491	318	e115	130	1120	144	1190	187	59	241
2	14	12	432	298	e112	113	1240	145	1620	176	54	206
3	13	12	404	289	e110	122	1130	147	1520	174	47	177
4	13	13	364	374	e108	142	948	128	1110	167	48	153
5	12	17	338	453	e106	314	819	123	763	157	49	138
6	11	16	323	422	e104	395	722	121	592	150	36	114
7	11	13	300	417	e102	429	653	114	491	153	25	90
8	10	12	288	414	e100	423	603	122	420	135	20	76
9	9.9	12	276	406	e99	429	560	94	367	136	20	58
10	10	12	281	364	e98	377	497	87	357	305	50	43
11	10	13	256	325	e97	323	438	103	694	308	24	35
12	11	13	249	299	e96	284	400	101	776	358	19	29
13	11	12	246	284	e95	271	338	98	904	279	17	27
14	19	12	238	262	e94	241	282	151	883	297	15	22
15	12	12	217	245	e93	224	253	234	900	332	15	19
16	9.3	13	208	236	e92	240	227	282	1050	323	14	17
17	8.8	13	184	228	e91	214	215	294	824	300	13	17
18	8.9	666	193	231	e91	197	196	365	746	268	13	19
19	9.1	886	183	222	e115	181	157	730	648	237	12	14
20	9.8	813	174	e230	e160	171	190	682	529	211	16	14
21	10	856	164	e165	176	154	195	675	445	191	16	12
22	11	836	156	e145	179	144	202	634	397	172	13	11
23	11	772	259	e140	179	131	207	597	351	165	12	11
24	11	782	323	e135	168	122	188	558	309	147	28	11
25	11	771	365	e135	157	120	199	1440	316	127	69	11
26	13	749	376	e155	152	429	177	1370	288	100	278	11
27	12	703	374	e140	144	716	167	1330	256	80	168	11
28	12	644	356	e135	135	782	149	1220	235	66	150	11
29	12	590	353	e130	132	853	120	919	217	59	364	11
30	12	537	339	e125	---	864	132	734	200	62	341	11

ILLINOIS RIVER BASIN  
05578500 Salt Creek near Rowell, IL---Continued

515

31	12	---	322	e120	---	908	---	1100	---	67	284	---
TOTAL	353.8	9824	9032	7842	3500	10443	12724	14842	19398	5889	2289	1620
MEAN	11.4	327	291	253	121	337	424	479	647	190	73.8	54.0
MAX	19	886	491	453	179	908	1240	1440	1620	358	364	241
MIN	8.8	12	156	120	91	113	120	87	200	59	12	11

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 – 2004, BY WATER YEAR (WY)**

MEAN	105	160	229	207	321	528	478	516	353	224	132	57.7
MAX	1069	1236	1268	1316	975	2129	1704	1648	850	1370	1576	658
(WY)	1994	1986	1983	1993	1982	1982	1979	1995	1999	1981	1981	1993
MIN	8.31	9.77	12.1	11.0	14.9	22.3	54.8	45.2	13.7	8.51	6.57	5.46
(WY)	1989	1989	1996	1980	1989	2000	2000	1988	1988	1988	1988	1988

**SUMMARY STATISTICS**

**FOR 2003 CALENDAR YEAR**

**FOR 2004 WATER YEAR**

**WATER YEARS 1978 – 2004**

ANNUAL TOTAL	54556.8	97756.8	
ANNUAL MEAN	149	267	276
HIGHEST ANNUAL MEAN			601 1993
LOWEST ANNUAL MEAN			56.3 2000
HIGHEST DAILY MEAN	886 Nov 19	1620 Jun 2	6960 Apr 13 1994
LOWEST DAILY MEAN	8.8 Oct 17	8.8 Oct 17	3.7 Sep 8 1988
ANNUAL SEVEN-DAY MINIMUM	9.6 Oct 16	9.6 Oct 16	4.1 Sep 4 1988
MAXIMUM PEAK FLOW		1960 May 25	7810 Apr 13 1994
MAXIMUM PEAK STAGE		19.05 May 25	24.04 Apr 13 1994
INSTANTANEOUS LOW FLOW		8.7 Oct 17,18	
10 PERCENT EXCEEDS	373	731	701
50 PERCENT EXCEEDS	70	168	110
90 PERCENT EXCEEDS	12	12	11

ILLINOIS RIVER BASIN  
05579500 Lake Fork near Cornland, IL

**LOCATION.**— Lat 39°57'05", long 89°23'01" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: January 1948 to current year.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–91.

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

**GAGE.**— Water-stage recorder, phone telemeter, and crest-stage gage. Datum of gage is 555.06 ft above NGVD of 1929. Prior to Sept. 6, 1973, nonrecording gage at same site and datum.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 8,930 ft<sup>3</sup>/s, Apr. 12, 1979, gage height, 23.11 ft; minimum, 0.30 ft<sup>3</sup>/s, Sept. 16, 1988.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** 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.

**REMARKS FOR CURRENT YEAR.**— Records poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	15	e200	147	e62	69	531	124	431	97	33	e257
2	13	17	187	143	e60	66	434	125	315	92	30	e210
3	13	14	173	137	e58	59	401	116	257	89	28	e174
4	14	15	159	231	e57	73	350	113	225	90	26	e140
5	14	18	150	514	e56	370	308	110	209	79	24	111
6	14	18	131	e380	e55	420	288	101	170	75	22	88
7	14	18	130	305	e54	308	273	94	160	112	21	77
8	13	18	125	275	e53	240	224	88	157	91	19	68
9	13	18	113	251	e52	204	202	87	148	80	17	61
10	13	18	129	221	e51	171	171	84	151	428	18	54
11	13	18	129	208	e50	162	159	101	295	510	17	49
12	13	19	115	194	e49	149	151	114	378	397	16	47
13	13	18	112	170	e49	138	148	102	253	252	15	43
14	19	16	115	161	e48	136	139	262	200	183	14	41
15	19	19	109	153	e48	127	133	543	484	152	13	55
16	18	17	109	139	e48	129	130	415	996	123	12	50
17	17	17	99	135	e54	124	123	326	588	106	12	43
18	17	669	96	e130	63	117	115	308	405	92	11	39
19	16	1650	92	e120	101	103	113	587	333	80	11	36
20	16	1800	84	e110	141	103	113	456	276	72	12	34
21	16	1120	84	e96	129	95	120	390	246	64	13	33
22	15	678	91	e82	95	89	109	346	225	61	11	31
23	15	569	255	e76	87	89	113	300	191	84	10	30
24	15	695	373	e72	85	89	108	265	173	58	26	30
25	16	605	281	e75	79	90	141	1080	158	51	50	29
26	20	516	225	e82	75	441	150	1030	145	46	874	29
27	15	e415	201	e76	72	1170	139	633	131	43	449	27
28	16	e340	187	e73	68	789	132	484	122	39	369	27



## ILLINOIS RIVER BASIN

517

**05579500 Lake Fork near Cornland, IL--Continued**

<b>29</b>	16	e283	178	e70	68	836	124	400	112	36	982	26
<b>30</b>	15	e230	168	e66	---	730	117	395	103	38	623	26
<b>31</b>	16	---	157	e64	---	595	---	593	---	38	402	---
TOTAL	470	9863	4757	4956	1967	8281	5759	10172	8037	3758	4180	1965
MEAN	15.2	329	153	160	67.8	267	192	328	268	121	135	65.5
MAX	20	1800	373	514	141	1170	531	1080	996	510	982	257
MIN	13	14	84	64	48	59	108	84	103	36	10	26
CFSM	0.07	1.54	0.72	0.75	0.32	1.25	0.90	1.53	1.25	0.57	0.63	0.31
IN.	0.08	1.71	0.83	0.86	0.34	1.44	1.00	1.77	1.40	0.65	0.73	0.34

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 – 2004, BY WATER YEAR (WY)**

MEAN	61.3	82.6	141	147	215	264	288	305	245	133	74.9	41.9
MAX	680	1009	1260	988	712	1116	1016	1146	1099	772	887	546
(WY)	1978	1986	1983	1950	1959	1979	1979	2002	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	3.30	1.57
(WY)	1955	1955	1964	1977	1963	1954	1954	1954	1963	1954	2001	1954

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1948 – 2004**

ANNUAL TOTAL	44973		64165		166	
ANNUAL MEAN	123		175		8.89	
HIGHEST ANNUAL MEAN					372	
LOWEST ANNUAL MEAN					1954	
HIGHEST DAILY MEAN	1800	Nov 20	1800	Nov 20	7000	Dec 4 1982
LOWEST DAILY MEAN	12	Aug 27, 28	10	Aug 23	0.77	Sep 16 1988
ANNUAL SEVEN-DAY MINIMUM	13	Oct 7	11	Aug 17	0.96	Sep 7 1988
MAXIMUM PEAK FLOW			1850	Nov 20	8930	Apr 12 1979
MAXIMUM PEAK STAGE			15.77	Nov 20	23.11	Apr 12 1979
INSTANTANEOUS LOW FLOW			9.9	Aug 23	0.30	Sep 16 1988
ANNUAL RUNOFF (CFSM)	0.576		0.819		0.778	
ANNUAL RUNOFF (INCHES)	7.82		11.15		10.57	
10 PERCENT EXCEEDS	247		422		402	
50 PERCENT EXCEEDS	69		104		62	
90 PERCENT EXCEEDS	15		16		7.0	

ILLINOIS RIVER BASIN  
**05580000 Kickapoo Creek at Waynesville, IL**

**LOCATION.**— Lat 40°15'17", long 89°07'45" (NAD of 1927), 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.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: January 1948 to current year.

STAGE: Water years 1994 to current year.

SURFACE-WATER QUALITY

CHEMICAL: Water years 1978–91.

BIOLOGICAL

BENTHIC MACROINVERTEBRATES: Water year 1997.

**REVISED RECORDS.**— WSP 1175: 1948–49.

**GAGE.**— Water-stage recorder, phone telemeter, and crest-stage gage. Datum of gage is 620.24 ft above NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Sept. 8, 1970, nonrecording gage at same site and datum.

**REMARKS.**— Diurnal fluctuation of low flows caused by City of Heyworth pumping station 10 mi. upstream at highway 136.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 24,600 ft<sup>3</sup>/s, Aug. 15, 1981, gage height, 16.91 ft; no flow Sept. 15, 28, 29, 1988.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	17	160	142	e60	73	e800	129	1270	105	33	44
2	16	15	146	143	e59	78	632	150	685	100	29	34
3	24	13	149	139	e58	70	526	296	537	111	27	29
4	21	13	142	166	e56	85	441	220	446	150	28	26
5	24	21	140	293	e54	598	369	186	375	113	38	24
6	22	32	128	205	e53	625	342	153	330	106	25	22
7	13	23	116	235	e52	440	291	130	294	104	24	20
8	12	20	119	189	e51	337	258	114	273	92	23	19
9	12	16	118	164	e50	287	211	108	257	85	22	17
10	12	15	127	137	e49	232	180	101	414	439	22	16
11	13	16	134	135	e49	212	163	124	1600	555	19	15
12	12	17	109	133	e48	178	149	129	1090	326	17	15
13	13	15	103	116	e48	146	142	127	640	208	17	15
14	19	14	109	113	e48	144	131	289	495	437	16	14
15	31	14	106	115	e47	136	120	627	493	273	15	14
16	19	15	107	104	e47	140	114	448	477	189	17	88
17	13	16	96	116	e47	144	107	350	505	144	21	66
18	10	686	91	125	e46	136	98	335	410	116	21	37
19	10	1060	89	99	103	116	98	1200	333	101	21	26
20	10	711	75	e120	247	109	103	746	304	90	22	21
21	17	567	92	e100	222	100	125	541	272	79	23	22
22	15	453	88	e86	123	90	97	426	238	71	16	18
23	10	387	319	e76	104	89	85	351	199	65	14	16
24	8.2	468	406	e72	99	92	76	290	180	56	37	15
25	11	404	322	e70	90	99	164	2740	189	49	102	14
26	34	336	255	e78	85	707	152	1790	164	45	395	14
27	18	283	220	e74	79	1160	119	757	141	43	121	13
28	18	239	206	e70	67	819	109	573	131	39	68	13

## ILLINOIS RIVER BASIN

519

**05580000 Kickapoo Creek at Waynesville, IL--Continued**

<b>29</b>	19	208	198	e66	65	e1000	96	450	121	35	96	12
<b>30</b>	18	191	180	e64	---	e800	91	853	111	35	95	12
<b>31</b>	16	---	159	e62	---	e750	---	2870	---	38	59	---
TOTAL	506.2	6285	4809	3807	2206	9992	6389	17603	12974	4399	1483	711
MEAN	16.3	210	155	123	76.1	322	213	568	432	142	47.8	23.7
MAX	34	1060	406	293	247	1160	800	2870	1600	555	395	88
MIN	8.2	13	75	62	46	70	76	101	111	35	14	12
CFSM	0.07	0.92	0.68	0.54	0.34	1.42	0.94	2.50	1.91	0.63	0.21	0.10
IN.	0.08	1.03	0.79	0.62	0.36	1.64	1.05	2.88	2.13	0.72	0.24	0.12

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 – 2004, BY WATER YEAR (WY)**

MEAN	53.4	86.5	149	157	214	286	326	278	235	127	76.2	56.8
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	0.31	2.07	0.79	3.69	3.76	19.1	47.7	32.1	9.69	2.40	1.33	0.70
(WY)	1964	1964	1964	1977	1963	2000	1956	1963	1963	1988	1963	1988

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1948 – 2004**

ANNUAL TOTAL	47343.2		71164.2			
ANNUAL MEAN	130		194		171	
HIGHEST ANNUAL MEAN					518	
LOWEST ANNUAL MEAN					38.5	
HIGHEST DAILY MEAN	3780	Jul 10	2870	May 31	16100	Aug 15 1981
LOWEST DAILY MEAN	8.2	Oct 24	8.2	Oct 24	0.00	A
ANNUAL SEVEN-DAY MINIMUM	11	Jan 22	11	Oct 18	0.20	Oct 21 1963
MAXIMUM PEAK FLOW			3370	May 25	24600	Aug 15 1981
MAXIMUM PEAK STAGE			13.13	May 25	16.91	Aug 15 1981
INSTANTANEOUS LOW FLOW			7.6	Oct 24		
ANNUAL RUNOFF (CFSM)	0.571		0.857		0.753	
ANNUAL RUNOFF (INCHES)	7.76		11.66		10.23	
10 PERCENT EXCEEDS	314		471		398	
50 PERCENT EXCEEDS	60		103		62	
90 PERCENT EXCEEDS	13		15		5.0	

A – Sept. 15, 28, 29, 1988.

ILLINOIS RIVER BASIN  
**05580950 Sugar Creek near Bloomington, IL**

**LOCATION.**— Lat 40°28'16", long 89°01'48" (NAD of 1927), 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.**—

SURFACE–WATER DISCHARGE AND STAGE

DISCHARGE: October 1974 to current year.

STAGE: Water years 1994 to current year.

**REVISED RECORDS.**— WDR IL–82–2: Drainage area. WDR IL–87–2: 1985.

**GAGE.**— Water–stage recorder, phone telemeter, and crest–stage gage. Datum of gage is 725.11 ft above NGVD of 1929. Prior to Nov. 4, 1987, 200 ft upstream at same datum.

**REMARKS.**— Sewage–treatment plant effluent 300 ft upstream contains publicly supplied water from Lake Bloomington and Lake Evergreen and ground–water sources.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Maximum discharge, 6,600 ft<sup>3</sup>/s, Dec. 3, 1982, gage height, 14.02 ft, from floodmark; minimum daily, 9.0 ft<sup>3</sup>/s, Dec. 25, 1976.

**REMARKS FOR CURRENT YEAR.**— Records fair. Effluent from sewage–treatment plant upstream averaged 33.1 ft<sup>3</sup>/s and contains publicly supplied water from Lake Bloomington and Lake Evergreen and ground–water sources.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	21	26	30	23	28	103	62	141	24	22	22
2	20	22	25	32	26	27	80	70	94	27	23	21
3	20	38	25	32	30	26	69	46	74	112	23	20
4	20	46	29	74	25	164	59	50	62	73	91	19
5	18	91	53	43	24	274	53	39	54	33	22	17
6	19	29	36	33	25	94	52	35	48	28	19	18
7	18	25	30	31	25	66	49	31	47	27	17	18
8	19	22	29	34	24	57	45	30	46	26	17	19
9	19	21	36	32	25	49	42	29	46	132	19	17
10	20	21	71	30	25	42	39	37	249	201	19	17
11	19	24	39	32	26	40	37	50	142	99	18	16
12	18	23	33	33	25	36	38	64	74	72	18	16
13	19	22	32	31	24	33	37	53	59	68	18	17
14	108	22	32	31	24	46	37	168	53	48	17	16
15	28	22	33	29	23	35	35	67	75	34	17	63
16	24	22	41	29	22	49	34	44	51	30	18	239
17	22	66	32	46	23	45	34	38	45	28	20	43
18	21	477	37	32	32	46	31	213	39	27	21	29
19	22	111	31	30	50	37	30	104	34	26	20	25
20	22	62	29	28	72	34	54	62	31	25	54	24
21	22	44	29	29	43	31	38	48	43	26	21	23
22	22	39	47	27	34	31	31	44	34	27	19	23
23	21	97	93	27	33	32	29	80	29	25	20	22
24	21	67	50	26	32	39	92	60	29	22	158	22
25	99	43	38	25	30	52	122	299	40	22	393	22
26	27	35	37	26	29	282	52	83	28	22	137	22
27	24	31	35	27	28	110	38	61	26	23	57	22
28	25	28	57	25	27	187	36	50	26	23	42	21
29	23	28	41	25	27	133	34	42	26	23	56	21
30	22	27	35	24	—	191	73	747	24	39	30	22

ILLINOIS RIVER BASIN  
05580950 Sugar Creek near Bloomington, IL--Continued

521

31	22	---	31	23	---	163	---	352	---	24	26	---
TOTAL	825	1626	1192	976	856	2479	1503	3158	1769	1416	1452	896
MEAN	26.6	54.2	38.5	31.5	29.5	80.0	50.1	102	59.0	45.7	46.8	29.9
MAX	108	477	93	74	72	282	122	747	249	201	393	239
MIN	18	21	25	23	22	26	29	29	24	22	17	16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2004, BY WATER YEAR (WY)

MEAN	35.5	45.0	50.0	39.8	57.2	78.7	69.9	76.4	55.7	45.6	44.4	40.4
MAX	152	203	201	130	148	238	146	181	118	135	138	178
(WY)	1987	1986	1983	1993	1976	1979	1979	1984	1993	2003	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	17.0
(WY)	1975	1977	1977	1977	1980	1981	1977	1987	1988	1994	1988	1998

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1975 - 2004

ANNUAL TOTAL	18623	18148	
ANNUAL MEAN	51.0	49.6	53.2
HIGHEST ANNUAL MEAN			99.6 1993
LOWEST ANNUAL MEAN			31.7 2000
HIGHEST DAILY MEAN	1450 Jul 10	747 May 30	2500 Mar 4 1979
LOWEST DAILY MEAN	18 A	16 B	9.0 Dec 25 1976
ANNUAL SEVEN-DAY MINIMUM	19 Oct 5	17 Sep 8	11 Jul 31 2001
MAXIMUM PEAK FLOW		2600 May 30	6600 Dec 3 1982
MAXIMUM PEAK STAGE		8.54 May 30	14.02 C Dec 3 1982
INSTANTANEOUS LOW FLOW		5.0 Oct 8	
10 PERCENT EXCEEDS	78	91	96
50 PERCENT EXCEEDS	32	31	31
90 PERCENT EXCEEDS	22	20	18

A - Aug. 23, Oct. 5, 7, and 12.

B - Sept. 11, 12, and 14.

C - From flood mark.

ILLINOIS RIVER BASIN  
**05582000 Salt Creek near Greenview, IL**

**LOCATION.**— Lat 40°07'55", long 89°44'08" (NAD of 1927), in NE1/4NE1/4 sec.2, T.19 N., R.6 W., Menard County, Hydrologic Unit 07130009, on 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.**—

SURFACE–WATER DISCHARGE AND STAGE

DISCHARGE: October 1941 to current year.

STAGE: Water years 1994 to current year.

SURFACE–WATER QUALITY

CHEMICAL: Water years 1978–91.

MISCELLANEOUS: Contaminants in streambed sediments, July 1997; contaminants in fish tissue, July 1997.

**REVISED RECORDS.**— WSP 1175: 1948(P). WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest–stage gage. Datum of gage is 479.00 ft above NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Nov. 3, 1972, nonrecording gage at same site and datum.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Maximum discharge, 41,200 ft<sup>3</sup>/s, May 19, 1943, gage height, 20.50 ft, from graph based on gage readings; minimum daily discharge, 46 ft<sup>3</sup>/s, Sept. 25, 26, Oct. 12–14, 1963.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Flood of July 1929 reached a stage of 20.3 ft., from floodmark, discharge unknown.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	231	227	1790	1220	e550	683	4680	1100	8670	1240	503	1090
2	222	224	1590	1190	e540	685	4050	1200	6630	1180	478	916
3	217	226	1480	1190	e530	668	3720	1280	4640	1150	451	788
4	217	229	1420	1210	e520	670	3520	1320	4070	1160	440	693
5	220	303	1380	1630	e510	1390	3270	1220	3810	1190	469	615
6	215	410	1310	1880	e500	2960	2910	1120	3490	1040	431	551
7	212	372	1230	1600	e490	2560	2530	1030	2890	972	402	503
8	210	335	1180	1660	e480	2120	2260	941	2490	977	376	465
9	209	308	1160	1580	e475	1860	2020	900	2220	933	359	432
10	210	292	1160	1440	e470	1700	1810	865	2180	1250	365	408
11	206	290	1190	1350	e460	1560	1650	867	4250	2270	359	377
12	201	284	1110	1310	e455	1440	1500	918	5300	2280	367	356
13	195	272	1020	1220	e450	1300	1400	965	4430	2050	340	338
14	223	259	1010	1150	e445	1240	1310	1320	3510	1600	322	325
15	286	256	1010	1120	e440	1190	1220	2450	4900	1560	310	323
16	269	255	989	1060	e435	1130	1140	2690	5870	1390	298	363
17	258	259	954	1040	e435	1130	1080	2190	4640	1280	292	537
18	237	1010	907	1040	e440	1120	1020	1940	4090	1180	294	444
19	224	4340	872	965	638	1060	954	2620	3500	1070	295	353
20	217	5120	827	842	880	996	929	4320	2990	984	296	319
21	211	4530	775	e890	1130	948	962	3170	2660	904	308	297
22	209	3740	841	e800	1050	893	970	2660	2410	852	309	287
23	211	3250	1090	e730	895	863	888	2390	2170	823	293	281
24	211	3270	1880	e700	849	861	880	2220	1970	768	303	271
25	229	3340	1950	e670	815	871	1270	8280	1870	696	468	262
26	273	2980	1710	e660	774	1190	1730	10000	1800	638	1260	256
27	269	2710	1570	e700	747	4380	1410	7650	1670	598	1940	251
28	267	2450	1510	e660	721	4990	1210	5810	1530	564	1210	248

## ILLINOIS RIVER BASIN

523

**05582000 Salt Creek near Greenview, IL--Continued**

<b>29</b>	248	2190	1470	e620	692	5300	1110	4810	1420	530	1030	246
<b>30</b>	241	1990	1380	e590	---	5410	1030	4300	1320	519	1480	245
<b>31</b>	235	---	1300	e570	---	4780	---	6820	---	506	1400	---
TOTAL	7083	45721	39065	33287	17816	57948	54433	89366	103390	34154	17448	12840
MEAN	228	1524	1260	1074	614	1869	1814	2883	3446	1102	563	428
MAX	286	5120	1950	1880	1130	5410	4680	10000	8670	2280	1940	1090
MIN	195	224	775	570	435	668	880	865	1320	506	292	245
CFSM	0.13	0.84	0.70	0.60	0.34	1.04	1.01	1.60	1.91	0.61	0.31	0.24
IN.	0.15	0.94	0.81	0.69	0.37	1.19	1.12	1.84	2.13	0.70	0.36	0.26

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 – 2004, BY WATER YEAR (WY)**

MEAN	505	766	1010	1141	1663	2122	2402	2448	1890	1214	665	416
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 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1942 – 2004**

ANNUAL TOTAL	399467		512551		1351	
ANNUAL MEAN	1094		1400		1993	
HIGHEST ANNUAL MEAN					3362	
LOWEST ANNUAL MEAN					315	
HIGHEST DAILY MEAN	13700	Jul 12	10000	May 26	38700	May 19 1943
LOWEST DAILY MEAN	195	Oct 13	195	Oct 13	46	A
ANNUAL SEVEN-DAY MINIMUM	206	Oct 7	206	Oct 7	50	Oct 8 1963
MAXIMUM PEAK FLOW			10900	May 26	41200	May 19 1943
MAXIMUM PEAK STAGE			12.28	May 26	20.50 B	May 19 1943
INSTANTANEOUS LOW FLOW			191	Oct 13		
ANNUAL RUNOFF (CFSM)	0.607		0.776		0.749	
ANNUAL RUNOFF (INCHES)	8.24		10.57		10.18	
10 PERCENT EXCEEDS	2320		3380		3240	
50 PERCENT EXCEEDS	772		980		650	
90 PERCENT EXCEEDS	239		257		129	

A – Sept. 25, 26, Oct. 12–14, 1963.

B – From graph based on gage readings.

ILLINOIS RIVER BASIN  
**05583000 Sangamon River near Oakford, IL**

**LOCATION.**— Lat 40°07'26", long 89°59'06" (NAD of 1927), 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>.

**PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE**

DISCHARGE: October 1909 to March 1912, August 1914 to June 1919, March 1921 to August 1922, October 1928 to December 1933, October 1939 to current year. Monthly discharge only for some periods, published in WSP 1308.

STAGE: Water years 1994 to current year.

**SURFACE—WATER QUALITY**

CHEMICAL: Water years 1978–94 and 1998.

SEDIMENT: Water years 1981, June 1983 to September 1986, water years 1995–1997.

SPECIFIC CONDUCTANCE: Water years 1979–81.

WATER TEMPERATURE: Water years 1976–77, 1979–81.

MISCELLANEOUS: Contaminants in streambed sediments, August 1996; contaminants in fish tissue, August 1996; streambank sediment size, October 1997; streambed sediment size, October 1997; sediment concentration and particle size, water years 1993–94, 1996–98.

**BIOLOGICAL**

ALGAE: Water year 1981.

BENTHIC MACROINVERTEBRATES: Water year 1996.

FISH: Water year 1997.

HABITAT: Water year 1996.

**REVISED RECORDS.**— WSP 715: 1922(M). WSP 1175: 1912(M). WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter, and artificial control. Datum of gage is 452.88 ft above NGVD of 1929 (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 NGVD of 1929. Oct. 1, 1939, to May 14, 1940, nonrecording gage at present site at NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Maximum discharge, 123,000 ft<sup>3</sup>/s, May 20, 1943, gage height, 25.63 ft; minimum daily, 45 ft<sup>3</sup>/s, estimated, Jan. 21–31, 1918.

**SUSPENDED—SEDIMENT CONCENTRATIONS:** Maximum daily, 3,540 mg/L, June 9, 1984; minimum daily, 1 mg/L, Dec. 7, 8, 1996, Jan. 11, 1997.

**SUSPENDED—SEDIMENT LOADS:** Maximum daily, 120,000 tons, Feb. 24, 1985; minimum daily, 1.6 tons, Dec. 7, 1996.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	563	511	5180	3410	e1950	2570	13300	3130	12800	2620	1020	3720
2	537	506	4590	3830	e1900	2480	13300	3460	11300	2450	974	2930
3	529	510	4100	4630	e1860	2550	13000	3700	8650	2270	937	2650
4	514	518	3760	4900	e1820	2400	12500	3690	7350	2240	892	2170
5	511	569	3540	5710	e1780	3020	11600	3450	6930	2380	874	1790
6	508	709	3320	7520	e1740	5890	10100	3220	6680	2250	871	1510
7	502	757	3150	8080	e1720	7640	8820	2990	6240	2160	827	1330
8	495	693	3020	8550	e1700	7780	7480	2760	6010	2140	789	1230
9	495	698	2920	8670	e1680	7680	6360	2660	5550	1980	760	1160
10	505	700	2960	8400	e1650	7430	5830	2780	4650	2350	751	1130
11	720	685	3040	7990	e1620	7160	5240	2700	5240	3720	727	1110
12	724	668	2770	7210	e1600	6570	4580	2700	7240	4830	741	1030
13	649	673	2660	6290	e1590	5590	3870	2750	7340	4900	723	946
14	605	658	2920	5280	e1580	4640	3790	3180	6550	3840	708	895
15	727	643	2810	4440	e1570	4030	3730	4700	7910	3300	675	872
16	859	640	2710	4060	e1560	3660	3410	7610	10400	3030	654	882
17	734	645	2650	3800	e1550	3370	3260	8380	9190	2730	635	1010
18	681	1510	2470	3560	e1550	3030	3150	8530	9000	2610	630	985
19	619	5480	2350	3740	e1600	2840	3020	8710	9050	2380	643	872



ILLINOIS RIVER BASIN  
05583000 Sangamon River near Oakford, IL--Continued

525

20	607	9550	2300	3830	e1900	2660	2920	10600	8630	2170	689	809
21	587	9610	2190	3840	2730	2510	2860	10200	8050	1970	659	775
22	568	8530	2140	3650	3390	2380	2920	9710	7250	1720	675	746
23	552	7830	2270	3370	3410	2320	2800	9260	6060	1570	649	729
24	548	7600	3080	e3000	3300	2410	2950	8510	4930	1430	677	711
25	560	7850	4540	e2700	3220	2590	3830	14600	4480	1320	791	695
26	565	7870	5030	e2400	3220	2820	4700	16400	4020	1280	1960	680
27	606	7590	5010	e2500	3110	5960	4540	14300	3580	1260	3120	668
28	583	7030	4990	e2300	2930	9470	4120	12100	3210	1190	3540	659
29	562	6360	4980	e2200	2720	10800	3710	10400	2970	1110	3260	654
30	551	5740	4630	e2050	---	12300	3300	9490	2780	1060	4120	650
31	525	---	4050	e2000	---	12500	---	10800	---	1030	4540	---
TOTAL	18291	103333	106130	143910	61950	159050	174990	217470	204040	71290	39511	35998
MEAN	590	3444	3424	4642	2136	5131	5833	7015	6801	2300	1275	1200
MAX	859	9610	5180	8670	3410	12500	13300	16400	12800	4900	4540	3720
MIN	495	506	2140	2000	1550	2320	2800	2660	2780	1030	630	650
CFSM	0.12	0.68	0.67	0.91	0.42	1.01	1.15	1.38	1.34	0.45	0.25	0.24
IN.	0.13	0.75	0.78	1.05	0.45	1.16	1.28	1.59	1.49	0.52	0.29	0.26

e Estimated

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 – 2004, BY WATER YEAR (WY)

MEAN	1251	1712	2481	3306	4408	5399	6254	6325	4874	2850	1626	1130
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 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1910 – 2004	
ANNUAL TOTAL	858649		1335963			
ANNUAL MEAN	2352		3650		3476	
HIGHEST ANNUAL MEAN					8523	
LOWEST ANNUAL MEAN					516	
HIGHEST DAILY MEAN	13900	Jul 12	16400	May 26	120000	May 20 1943
LOWEST DAILY MEAN	486	Aug 28	495	Oct 8,9	45 A	B
ANNUAL SEVEN-DAY MINIMUM	504	Oct 4	504	Oct 4	45 A	Jan 21 1918
MAXIMUM PEAK FLOW			16800	May 26	123000	May 20 1943
MAXIMUM PEAK STAGE			15.24	May 26	25.63	May 20 1943
INSTANTANEOUS LOW FLOW			484	Oct 9		
ANNUAL RUNOFF (CFSM)	0.462		0.717		0.682	
ANNUAL RUNOFF (INCHES)	6.27		9.76		9.27	
10 PERCENT EXCEEDS	5030		8530		8940	
50 PERCENT EXCEEDS	1670		2780		1630	
90 PERCENT EXCEEDS	576		649		305	

A – Estimated.

B – Jan 21–23, 1918.

ILLINOIS RIVER BASIN  
05584500 La Moine River at Colmar, IL

**LOCATION.**— Lat 40°19'49", long 90°53'46" (NAD of 1927), 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.**—

**SURFACE–WATER DISCHARGE AND STAGE**

DISCHARGE: October 1944 to current year.

STAGE: Water years 1994 to current year.

**SURFACE–WATER QUALITY**

CHEMICAL: Water years 1975–91 and 1998.

MISCELLANEOUS: Contaminants in streambed sediments, July 1997; contaminants in fish tissue, July 1997; streambank sediment size, October 1997; streambed sediment size, October 1997.

**BIOLOGICAL**

BENTHIC MACROINVERTEBRATES: Water years 1996–1998.

FISH: Water year 1997 and 1998.

HABITAT: Water years 1996–1998.

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter and crest–stage gage. Datum of gage is 491.53 ft above NGVD of 1929. Prior to July 13, 1945, nonrecording gage at same site and datum.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum discharge, 38,900 ft<sup>3</sup>/s, Mar. 5, 1985, gage height, 26.61 ft; maximum gage height, 27.03 ft, Jan. 3, 1965, ice jam; no flow part of each day Dec. 8, 9, 12, 13, 17, 21, 1955, due to temporary dam upstream; no flow Oct. 19, 1988.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	32	142	424	e138	204	381	195	1330	127	34	111
2	20	36	131	396	e137	209	344	226	953	146	32	82
3	17	157	113	392	e136	194	310	228	605	195	31	66
4	15	324	109	362	e135	238	286	219	464	248	33	55
5	13	996	115	328	e134	1610	263	196	393	190	42	47
6	12	723	124	201	e132	1490	246	186	352	141	38	41
7	13	370	122	242	e131	878	240	168	316	172	37	35
8	13	245	113	312	e130	602	234	152	282	170	29	32
9	12	187	117	280	e128	477	223	137	253	127	23	29
10	12	153	3580	275	e125	412	203	132	969	377	20	26
11	10	137	6010	250	e124	355	190	129	1790	704	18	24
12	12	130	8250	258	e122	326	182	126	1080	540	26	23
13	14	118	4080	259	e120	286	175	131	662	271	21	23
14	51	100	1410	231	e120	291	170	143	479	191	16	21
15	142	85	848	222	e119	290	166	158	1150	145	15	375
16	90	82	929	242	e119	270	161	146	659	119	14	3300
17	70	91	970	240	e119	285	159	126	355	115	13	1920
18	52	1630	714	216	e120	296	153	117	294	120	12	549
19	40	1770	608	191	e170	277	144	118	254	100	13	301
20	32	806	493	e205	e400	248	144	119	225	81	17	216
21	27	499	444	e200	e850	235	209	113	220	72	31	169
22	25	367	507	e180	659	213	277	110	302	66	31	140
23	20	304	991	e170	432	199	221	112	257	65	33	121
24	19	289	820	e168	362	207	179	178	196	62	26	107
25	39	252	566	e162	305	216	202	3410	168	58	51	96
26	60	216	480	e160	236	266	218	2150	153	52	105	87
27	59	196	439	e153	227	401	190	741	138	48	2060	79

## ILLINOIS RIVER BASIN

527

**05584500 La Moine River at Colmar, IL---Continued**

<b>28</b>	53	176	561	e152	214	393	163	451	129	45	2780	74
<b>29</b>	47	155	754	e150	202	598	154	337	123	40	845	69
<b>30</b>	42	145	584	e148	----	506	157	374	116	38	281	65
<b>31</b>	39	----	484	e145	----	418	----	1370	----	36	163	----
TOTAL	1095	10771	35608	7314	6346	12890	6344	12498	14667	4861	6890	8283
MEAN	35.3	359	1149	236	219	416	211	403	489	157	222	276
MAX	142	1770	8250	424	850	1610	381	3410	1790	704	2780	3300
MIN	10	32	109	145	119	194	144	110	116	36	12	21
CFSM	0.05	0.55	1.75	0.36	0.33	0.63	0.32	0.62	0.75	0.24	0.34	0.42
IN.	0.06	0.61	2.02	0.42	0.36	0.73	0.36	0.71	0.83	0.28	0.39	0.47

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 – 2004, BY WATER YEAR (WY)**

MEAN	254	260	276	337	537	704	808	779	704	451	168	254
MAX	3502	2693	2686	2077	2384	3734	3193	4471	3081	4194	899	4024
(WY)	1987	1986	1983	1974	2001	1985	1973	1995	1974	1993	1993	1961
MIN	0.67	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 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1945 – 2004**

ANNUAL TOTAL	91389.8		127567			
ANNUAL MEAN	250		349		460	
HIGHEST ANNUAL MEAN					1347	
LOWEST ANNUAL MEAN					23.1	
HIGHEST DAILY MEAN	8250	Dec 12	8250	Dec 12	35600	Mar 5 1985
LOWEST DAILY MEAN	7.3	Aug 28	10	Oct 11	0.00	Oct 19 1988
ANNUAL SEVEN-DAY MINIMUM	7.7	Aug 23	12	Oct 6	0.12	Oct 16 1988
MAXIMUM PEAK FLOW			8830	Dec 12	38900 A	Mar 5 1985
MAXIMUM PEAK STAGE			22.32	Dec 12	27.03 B	Jan 3 1965
INSTANTANEOUS LOW FLOW			9.0	Oct 11		
ANNUAL RUNOFF (CFSM)	0.382		0.532		0.702	
ANNUAL RUNOFF (INCHES)	5.19		7.25		9.54	
10 PERCENT EXCEEDS	529		707		1000	
50 PERCENT EXCEEDS	95		170		127	
90 PERCENT EXCEEDS	16		29		10	

A – Gage height, 26.61 ft.

B – Ice jam.

ILLINOIS RIVER BASIN  
**05585000 La Moine River at Ripley, IL**

**LOCATION.**— Lat 40°01'29", long 90°37'54" (NAD of 1927), 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>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: March 1921 to current year. Prior to October 1931, published as Crooked Creek at Ripley.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

SEDIMENT: Water years 1981 and 1995–97.

CHEMICAL: Water years 1975–91.

SPECIFIC CONDUCTANCE: Water year 1979.

WATER TEMPERATURE: Water year 1979.

MISCELLANEOUS: Sediment concentration and particle size, water years 1995–97.

**REVISED RECORDS.**— WSP 975: 1936. WSP 1208: 1925, 1929, 1933. WDR IL–75–1: Drainage area.

**GAGE.**— U.S. Army Corps of Engineers water–stage recorder, satellite telemeter, and crest–stage gage. Datum of gage is 431.1 ft above NGVD of 1929. Prior to July 28, 1926, nonrecording 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.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 28,000 ft<sup>3</sup>/s, Mar. 7, 1985, gage height, 29.07 ft; maximum gage height, 29.15 ft, May 18, 1995, observed; no flow for part of Sept. 26, 1989.

**SUSPENDED–SEDIMENT CONCENTRATIONS:** Maximum daily, 7,140 mg/L, June 21, 1981; minimum daily mean, 5 mg/L, Dec. 4, 5, 1996.

**SUSPENDED–SEDIMENT LOADS:** Maximum daily, 212,000 tons, May 8, 1996; minimum daily, 0.87 tons, Jan. 20, 1997.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	92	222	664	e220	375	728	319	2750	235	103	388
2	83	85	213	590	e219	373	651	353	1880	634	101	289
3	70	85	205	552	e218	371	584	413	1270	499	99	233
4	62	96	190	547	e216	443	528	397	883	622	99	196
5	56	1150	182	509	e213	2610	486	365	695	504	97	171
6	52	1480	184	428	e212	3100	453	330	595	386	97	154
7	48	1060	190	298	e211	2220	430	306	529	297	104	140
8	46	570	197	311	e210	1280	414	281	476	307	97	127
9	47	384	194	406	e209	906	399	259	430	431	96	118
10	49	301	4240	375	e205	738	379	246	466	344	89	111
11	48	257	6290	386	e203	644	352	262	1750	1140	82	107
12	47	228	5400	352	e200	567	329	269	2420	1100	77	102
13	47	205	5280	345	e199	522	315	285	1420	732	73	98
14	68	186	5540	337	e195	485	303	293	894	450	74	96
15	77	175	5850	311	e192	476	295	330	3220	333	74	95
16	120	160	3020	290	e191	480	289	314	4930	268	70	920
17	179	148	1620	323	e190	476	284	301	1650	244	67	3290
18	133	520	1430	338	e189	497	277	273	714	230	67	2410
19	114	2540	1090	266	e350	496	267	257	544	204	65	783
20	95	2460	889	241	e650	463	264	252	450	194	65	433
21	81	1180	747	273	e1000	419	292	242	395	169	66	325
22	70	721	692	284	1140	390	326	231	390	154	69	264
23	64	543	861	265	818	367	386	279	457	143	95	226
24	59	458	1390	270	634	350	355	355	412	137	96	200
25	79	414	1150	238	557	354	338	4520	373	135	887	179

## ILLINOIS RIVER BASIN

529

**05585000 La Moine River at Ripley, IL--Continued**

<b>26</b>	132	371	839	239	491	707	327	4950	331	129	3340	164
<b>27</b>	132	322	712	e235	419	1980	336	5020	295	123	2150	152
<b>28</b>	146	292	663	e228	398	1030	307	3560	268	117	4860	143
<b>29</b>	129	265	847	e225	381	983	273	1170	257	112	4320	133
<b>30</b>	113	243	1020	e222	---	1020	267	1320	246	110	1910	126
<b>31</b>	102	---	803	e221	---	859	---	e4450	---	106	605	---
TOTAL	2653	16991	52150	10569	10530	25981	11234	32202	31390	10589	20094	12173
MEAN	85.6	566	1682	341	363	838	374	1039	1046	342	648	406
MAX	179	2540	6290	664	1140	3100	728	5020	4930	1140	4860	3290
MIN	46	85	182	221	189	350	264	231	246	106	65	95
CFSM	0.07	0.44	1.30	0.26	0.28	0.65	0.29	0.80	0.81	0.26	0.50	0.31
IN.	0.08	0.49	1.50	0.30	0.30	0.75	0.32	0.93	0.90	0.30	0.58	0.35

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 – 2004, BY WATER YEAR (WY)**

MEAN	424	506	499	613	1044	1297	1555	1429	1163	775	357	431
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 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1921 – 2004**

ANNUAL TOTAL	163779	236556	
ANNUAL MEAN	449	646	840
HIGHEST ANNUAL MEAN			2452
LOWEST ANNUAL MEAN			50.2
HIGHEST DAILY MEAN	6290 Dec 11	6290 Dec 11	26800 Mar 7 1985
LOWEST DAILY MEAN	25 A Jan 24	46 Oct 8	0.96 Sep 25 1989
ANNUAL SEVEN-DAY MINIMUM	26 A Jan 21	47 Oct 7	1.8 Sep 22 1989
MAXIMUM PEAK FLOW		6570 Dec 11	28000 B Mar 7 1985
MAXIMUM PEAK STAGE		20.42 Dec 11	29.15 C May 18 1995
INSTANTANEOUS LOW FLOW		44 Oct 9	0.00 Sep 26 1989
ANNUAL RUNOFF (CFSM)	0.347	0.500	0.650
ANNUAL RUNOFF (INCHES)	4.71	6.81	8.83
10 PERCENT EXCEEDS	1040	1400	2210
50 PERCENT EXCEEDS	189	307	236
90 PERCENT EXCEEDS	42	95	28

A – Estimated due to backwater from ice.

B – Gage height, 29.07 ft.

C – Observed.

ILLINOIS RIVER BASIN  
**05585830 McKee Creek at Chambersburg, IL**

**LOCATION.**—Lat 39°49'04", long 90°39'16" (NAD of 1983), in SW1/4NE1/4 sec. 8, T.3 S., R. 2 W, Pike County, Hydrologic Unit 07130011, on right bank at upstream side of bridge on State Highway 104 at east side of Chambersburg, 3.8 miles downstream from Leineke Branch, 5.5 miles upstream from South Fork McKee Creek, and at mile 7.1.

**DRAINAGE AREA.**—341 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE**

DISCHARGE: August 2002 to current year.

STAGE: August 2002 to current year.

**SURFACE—WATER QUALITY**

CHEMICAL: WATER YEARS 1979–87.

SEDIMENT: October 2002 to current year.

MISCELLANEOUS: Sediment concentration and particle size, water years 2002–03.

**GAGE.**—Water–stage recorder, phone telemeter, automatic water sampler, and crest–stage–gage. Datum of gage is 400.00 ft above NGVD of 1929 (established by Illinois Dept. of Transportation).

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Maximum discharge, 9,420 ft<sup>3</sup>/s, September 1, 2003, gage height, 42.01 ft; Minimum discharge, 3.9 ft<sup>3</sup>/s, October 16, 2002.

**SUSPENDED—SEDIMENT CONCENTRATIONS:** Maximum daily, 3,040 mg/L, May 25, 2004; minimum daily, 15 mg/L, Oct. 18–24, 2003.

**SUSPENDED—SEDIMENT LOADS:** Maximum daily, 66,700 tons, Aug. 26, 2004; minimum daily, 0.48 tons, Dec. 2, 2002.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Flood of June 2002 exceeded the measured discharge of 12,100 ft<sup>3</sup>/s on June 13, 2002, gage height not determined.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for May 27 to June 29 and estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	43	69	129	e52	101	177	81	505	e30	9.9	194
2	57	40	65	121	e52	101	162	143	130	e28	9.6	143
3	50	40	60	117	e51	96	160	107	77	e27	9.4	112
4	46	52	60	149	e51	157	173	83	69	137	10	93
5	42	1190	64	233	e51	4640	191	76	78	79	9.4	79
6	40	657	67	197	e51	1700	196	71	90	47	8.8	68
7	37	213	68	148	e51	516	187	65	104	35	8.6	58
8	34	136	64	e120	e50	307	159	56	110	30	8.3	51
9	37	105	64	e99	e50	223	132	48	118	29	e7.6	44
10	39	89	5500	e90	e50	186	102	45	112	e370	7.2	40
11	46	81	6050	e97	e50	155	87	46	103	e60	7.0	37
12	44	75	943	e89	e50	137	80	74	101	e240	6.8	33
13	35	68	425	e86	e49	124	75	116	92	e300	6.7	31
14	66	60	327	e83	e49	118	71	95	81	83	6.5	28
15	149	54	270	e81	e49	119	69	139	82	44	6.3	27
16	102	52	274	e79	e48	116	66	131	178	32	6.2	27
17	70	53	608	e83	e48	117	63	85	160	43	6.2	31
18	53	691	289	e86	e48	122	60	65	146	23	6.0	47
19	45	1970	228	e78	e90	114	56	58	159	19	5.7	33
20	39	449	186	e82	e250	99	63	69	169	16	7.1	27
21	36	223	164	e74	641	87	101	54	168	14	6.9	23
22	33	160	165	e69	274	81	133	47	160	15	6.3	21
23	31	141	181	e64	204	76	97	45	156	13	6.4	20
24	30	150	349	e60	193	80	86	49	133	12	6.7	18
25	42	139	221	e56	158	89	162	1380	118	11	514	17
26	95	111	162	e56	132	104	151	542	102	11	9580	16

**05585830 McKee Creek at Chambersburg, IL--Continued**

<b>27</b>	129	98	160	e54	116	171	104	185	83	9.9	6860	15
<b>28</b>	86	88	149	e54	106	191	82	98	53	9.5	10100	15
<b>29</b>	67	80	163	e53	101	290	69	73	37	8.9	4620	14
<b>30</b>	56	74	192	e52	----	345	66	58	e33	10	568	14
<b>31</b>	48	----	142	e52	----	212	----	1140	----	10	291	----
TOTAL	1754	7382	17729	2891	3165	10974	3380	5324	3707	1796.3	32712.6	1376
MEAN	56.6	246	572	93.3	109	354	113	172	124	57.9	1055	45.9
MAX	149	1970	6050	233	641	4640	196	1380	505	370	10100	194
MIN	30	40	60	52	48	76	56	45	33	8.9	5.7	14
CFSM	0.17	0.72	1.68	0.27	0.32	1.04	0.33	0.50	0.36	0.17	3.09	0.13
IN.	0.19	0.81	1.93	0.32	0.35	1.20	0.37	0.58	0.40	0.20	3.57	0.15

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 – 2004, BY WATER YEAR (WY)**

MEAN	32.0	127	303	51.5	174	252	217	315	125	134	433	219
MAX	56.6	246	572	93.3	242	354	321	458	127	211	1055	600
(WY)	2004	2004	2004	2004	2003	2004	2003	2003	2003	2003	2004	2003
MIN	7.37	7.97	34.0	9.78	109	150	113	172	124	57.9	59.9	10.1
(WY)	2003	2003	2003	2003	2004	2003	2004	2004	2004	2004	2003	2002

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 2002 – 2004**

ANNUAL TOTAL	92585.4		92190.9			
ANNUAL MEAN	254		252			
HIGHEST ANNUAL MEAN						
LOWEST ANNUAL MEAN						
HIGHEST DAILY MEAN	8230	Sep 1	10100	Aug 28	10100	Aug 28 2004
LOWEST DAILY MEAN	6.0	A Jan 22–24	5.7	Aug 19	3.9	Oct 16 2002
ANNUAL SEVEN–DAY MINIMUM	6.1	A Jan 20	6.2	Aug 13	4.5	Oct 11 2002
MAXIMUM PEAK FLOW			10900	Aug 29	10900	Aug 29 2004
MAXIMUM PEAK STAGE			43.59	Aug 29	43.59	Aug 29 2004
INSTANTANEOUS LOW FLOW			5.6	Aug 19,20	3.9	Oct 16 2002
ANNUAL RUNOFF (CFSM)	0.744		0.739		0.640	
ANNUAL RUNOFF (INCHES)	10.10		10.06		8.69	
10 PERCENT EXCEEDS	535		256		318	
50 PERCENT EXCEEDS	68		78		60	
90 PERCENT EXCEEDS	12		15		7.3	

A – Estimated due to backwater from ice.

ILLINOIS RIVER BASIN  
05585830 McKee Creek at Chambersburg, IL

**LOCATION.**—Lat 39°49'04", long 90°39'16" (NAD of 1983), in SW1/4NE1/4 sec. 8, T.3 S., R. 2 W, Pike County, Hydrologic Unit 07130011, on right bank at upstream side of bridge on State Highway 104 at east side of Chambersburg, 3.8 miles downstream from Leineke Branch, 5.5 miles upstream from South Fork McKee Creek, and at mile 7.1.

**DRAINAGE AREA.**—341 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE**

DISCHARGE: August 2002 to current year.

STAGE: August 2002 to current year.

**SURFACE—WATER QUALITY**

CHEMICAL: WATER YEARS 1979–87.

SEDIMENT: October 2002 to current year.

MISCELLANEOUS: Sediment concentration and particle size, water years 2002–03.

**GAGE.**—Water–stage recorder, phone telemeter, automatic water sampler, and crest–stage–gage. Datum of gage is 400.00 ft above NGVD of 1929 (established by Illinois Dept. of Transportation).

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Maximum discharge, 9,420 ft<sup>3</sup>/s, September 1, 2003, gage height, 42.01 ft; Minimum discharge, 3.9 ft<sup>3</sup>/s, October 16, 2002.

**SUSPENDED—SEDIMENT CONCENTRATIONS:** Maximum daily, 3,040 mg/L, May 25, 2004; minimum daily, 15 mg/L, Oct. 18–24, 2003.

**SUSPENDED—SEDIMENT LOADS:** Maximum daily, 66,700 tons, Aug. 26, 2004; minimum daily, 0.48 tons, Dec. 2, 2002.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Flood of June 2002 exceeded the measured discharge of 12,100 ft<sup>3</sup>/s on June 13, 2002, gage height not determined.

**EXTREMES FOR CURRENT YEAR.**—

**SUSPENDED—SEDIMENT CONCENTRATIONS:** Maximum daily, 3,040 mg/L, May 25; minimum daily, 15 mg/L, Oct. 18–24.

**SUSPENDED—SEDIMENT LOADS:** Maximum daily, 66,700 tons, Aug. 26; minimum daily, 1.2 tons, Oct. 24.

**SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

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	70	32	4.9	43	59	6.8	69	378	71
2	57	38	5.9	40	62	6.7	65	366	65
3	50	36	4.9	40	64	7.0	60	353	58
4	46	34	4.2	52	74	14	60	341	55
5	42	31	3.6	1190	491	1910	64	328	56
6	40	29	3.1	657	404	796	67	315	57
7	37	27	2.7	213	267	157	68	300	55
8	34	25	2.3	136	211	78	64	277	48
9	37	22	2.2	105	185	52	64	253	44
10	39	44	4.4	89	158	38	5500	1870	34700
11	46	113	14	81	133	29	6050	1560	27100
12	44	60	7.4	75	120	24	943	830	2250
13	35	47	4.5	68	110	20	425	555	643
14	66	155	28	60	99	16	327	437	386
15	149	138	55	54	89	13	270	368	269
16	102	80	23	52	79	11	274	342	262
17	70	27	5.3	53	69	9.8	608	604	998
18	53	15	2.1	691	306	1390	289	585	458
19	45	15	1.8	1970	783	4500	228	498	308
20	39	15	1.6	449	353	459	186	401	202
21	36	15	1.4	223	241	146	164	303	134



## ILLINOIS RIVER BASIN

533

**05585830 McKee Creek at Chambersburg, II--Continued**

22	33	15	1.3	160	212	91	165	206	92
23	31	15	1.3	141	230	88	181	174	87
24	30	15	1.2	150	254	103	349	354	337
25	42	58	7.0	139	278	104	221	234	141
26	95	87	20	111	301	90	162	196	86
27	129	47	16	98	325	86	160	184	79
28	86	49	11	88	349	83	149	171	69
29	67	51	9.2	80	373	81	163	186	84
30	56	54	8.2	74	389	77	192	222	117
31	48	56	7.3	---	---	---	142	148	57
TOTAL	1754	---	264.8	7382	---	10486.3	17729	---	69368

	JANUARY			FEBRUARY			MARCH		
1	129	131	45	e52	59	12	101	142	39
2	121	120	39	e52	58	13	101	138	37
3	117	114	36	e51	57	14	96	135	35
4	149	126	51	e51	57	14	157	189	102
5	233	169	106	e51	56	14	4640	1220	16600
6	197	149	81	e51	56	14	1700	703	3600
7	148	117	47	e51	55	13	516	426	609
8	e120	95	36	e50	54	13	307	327	273
9	e99	80	23	e50	54	13	223	289	175
10	e90	73	21	e50	53	12	186	252	127
11	e97	71	21	e50	53	12	155	223	94
12	e89	71	19	e50	38	8.4	137	212	79
13	e86	70	19	e49	33	7.1	124	203	68
14	e83	69	17	e49	35	7.6	118	193	62
15	e81	69	16	e49	38	7.7	119	184	59
16	e79	68	17	e48	41	8.1	116	174	54
17	e83	68	18	e48	44	8.8	117	165	52
18	e86	67	19	e48	53	11	122	155	51
19	e78	66	16	e90	100	44	114	145	45
20	e82	66	19	e250	478	1330	99	136	37
21	e74	65	17	641	404	731	87	126	30
22	e69	65	13	274	246	185	81	117	25
23	e64	64	16	204	214	118	76	107	22
24	e60	63	13	193	197	102	80	98	21
25	57	63	9.6	158	179	76	89	89	21
26	e56	62	13	132	162	58	104	93	26
27	e54	62	14	116	153	48	171	314	154
28	e54	61	14	106	149	43	191	222	114
29	e53	60	13	101	146	40	290	354	308
30	e52	60	12	---	---	---	345	387	374
31	e52	59	12	---	---	---	212	201	116
TOTAL	2892	---	812.6	3165	---	2977.7	10974	---	23409

	APRIL			MAY			JUNE		
1	177	124	60	81	82	18	505	1220	2050
2	162	64	28	143	83	32	130	401	151
3	160	58	25	107	84	24	77	226	44
4	173	56	26	83	85	19	69	147	29
5	191	55	28	76	87	18	78	135	29

ILLINOIS RIVER BASIN  
05585830 McKee Creek at Chambersburg, II--Continued

6	196	53	28	71	88	17	90	128	30
7	187	51	26	65	89	16	104	121	34
8	159	49	21	56	88	13	110	114	33
9	132	49	17	48	88	11	118	108	35
10	102	50	14	45	87	11	112	101	32
11	87	52	12	46	87	11	103	95	26
12	80	54	12	74	86	17	101	95	25
13	75	56	11	116	85	27	92	94	23
14	71	58	11	95	84	22	81	94	21
15	69	59	11	139	81	30	82	94	19
16	66	61	11	131	77	27	178	94	45
17	63	60	10	85	74	17	160	93	41
18	60	59	9.5	65	70	12	146	92	37
19	56	59	8.8	58	67	10	159	90	39
20	63	58	9.9	69	64	12	169	87	40
21	101	57	16	54	74	11	168	84	38
22	133	57	20	47	90	11	160	81	36
23	97	57	15	45	99	12	156	78	33
24	86	60	14	49	197	29	133	75	26
25	162	63	28	1380	3040	12600	118	75	22
26	151	67	27	542	1310	2190	102	81	24
27	104	70	20	185	506	258	83	88	19
28	82	74	16	98	387	104	53	95	13
29	69	77	14	73	350	73	37	102	9.8
30	66	80	14	58	322	50	e33	108	9.8
31	---	---	---	1140	1780	8100	---	---	---
TOTAL	3380	---	563.2	5324	---	23802	3707	---	3013.6

	JULY			AUGUST			SEPTEMBER		
1	e30	115	9.4	9.9	91	2.4	194	260	137
2	e28	122	9.3	9.6	82	2.1	143	202	78
3	e27	128	13	9.4	69	1.8	112	156	47
4	137	135	50	10	67	1.9	93	141	35
5	79	141	30	9.4	72	1.8	79	129	28
6	47	147	19	8.8	77	1.8	68	116	21
7	35	153	14	8.6	82	1.9	58	106	17
8	30	160	13	8.3	86	1.9	51	105	14
9	29	194	15	e7.6	91	1.9	44	105	13
10	e370	313	293	7.2	96	1.9	40	105	11
11	e60	362	83	7.0	100	1.9	37	105	11
12	e240	340	206	6.8	105	1.9	33	105	9.4
13	e300	307	177	6.7	110	2.0	31	105	8.7
14	83	261	59	6.5	129	2.3	28	105	7.9
15	44	214	26	6.3	161	2.7	27	103	7.5
16	32	182	16	6.2	193	3.3	27	101	7.2
17	43	178	20	6.2	209	3.5	31	99	8.3
18	23	173	11	6.0	173	2.8	47	97	12
19	19	169	8.6	5.7	132	2.0	33	95	8.6
20	16	165	7.1	7.1	103	2.0	27	94	6.8
21	14	160	6.2	6.9	108	2.0	23	92	5.7
22	15	156	6.4	6.3	114	1.9	21	92	5.2
23	13	152	5.2	6.4	120	2.1	20	92	4.9
24	12	149	4.6	6.7	126	2.3	18	92	4.5
25	11	145	4.4	514	1070	5560	17	92	4.2

## 535

e Estimated

ILLINOIS RIVER BASIN  
**05586100 Illinois River at Valley City, IL**

**LOCATION.**— Lat 39°42'12", long 90°38'43" (NAD of 1927), 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. Auxiliary gage 10.0 miles upstream.

**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.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1938 to current year. Prior to October 1960, at site 0.2 mi upstream at same datum. Prior to October 1989, published as "at Meredosia." Records are considered equivalent.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1975–93 and 1996 to current year.

SEDIMENT: February 1980 to current year.

SPECIFIC CONDUCTANCE: Water years 1975–81.

WATER TEMPERATURE: Water years 1975–81.

MISCELLANEOUS: Contaminants in streambed sediments, October 1996; contaminants in fish tissue, October 1996; sediment concentration and particle size, water years 1996–2003.

**BIOLOGICAL**

ALGAE: Water years 1980–81, 1997–98, and 2002–03.

BENTHIC MACROINVERTEBRATES: Water years 1997–98 and 2002.

FISH: Water year 1998 and 2003–04.

HABITAT: Water years 1997–98 and 2003.

**GAGE.**— U.S. Army Corps of Engineer's water-stage recorder and satellite telemeter, crest-stage gage, and water-quality monitor. Datum of gage is 418.00 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Nov. 25, 1992 and Oct. 1, 1994 to current; auxiliary gage (05585500) at site 10.0 mi upstream. Nov. 25, 1992 to Sept. 30, 1994; auxiliary gage operated at this site (05586100).

**REMARKS.**— 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. Suspended-sediment samples were collected by a local observer twice weekly with additional samples collected during high runoff periods. Since February 1994, samples used to compute sediment record have been collected at upstream side Rt. 106 bridge at Florence at mile 56.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 123,000 ft<sup>3</sup>/s, May 26–28, 1943; maximum gage height, 28.61 ft, May 26, 1943; minimum daily discharge, 1,330 ft<sup>3</sup>/s, Sept. 2, 1984.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily, 3,720 mg/L, Apr. 14, 1981; minimum daily, 14 mg/L, Dec. 26, 1984, July 21, 1993.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 410,000 tons, June 4, 1980; minimum daily, 172 tons, Sept. 2, 1984.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6140	6650	30900	19400	e7400	17700	34400	17200	43600	38400	9440	24900
2	5820	6970	30000	19700	e6500	14900	36500	18100	44500	36800	9090	25200
3	5030	7600	28600	19700	e6900	14200	38200	18500	45600	35500	9820	25100
4	4390	8680	e26100	21600	e7200	15100	39300	18500	46000	33600	10400	24700
5	4770	11600	e18400	23200	e7500	21000	40000	17400	46400	31800	10100	24200
6	4040	15800	17100	23700	e8000	e23900	40100	16200	46900	29800	10300	e23100
7	3150	17500	16300	22300	e8500	26500	39600	16100	47500	26200	11400	e19700
8	3520	17300	15400	21500	e9400	29200	38700	16300	47800	e21800	11200	18000
9	4630	17300	15100	21600	e10000	31400	37700	15800	47700	19400	10800	16200
10	5720	16400	e18500	22400	e8400	33000	36200	14000	47500	19300	10300	12000
11	4470	15700	e27000	22600	e9400	34200	34600	12600	47400	20000	9190	8490
12	3700	14300	29300	22600	e10000	34700	33100	13600	47500	21500	8720	7620
13	4020	e12500	30600	22200	e12000	34600	31400	13600	47100	22700	7800	7580
14	4030	12000	31900	21000	e9400	34200	29300	14300	46700	22500	7270	8070
15	3960	12000	32800	19700	e11000	33300	25300	16600	47500	22000	7230	9840

**05586100 Illinois River at Valley City, IL—Continued**

<b>16</b>	4480	10900	32100	19400	10100	32600	e20100	e20100	49600	20900	7880	8600
<b>17</b>	5680	11200	30500	18600	8980	31600	16600	e25200	50600	20500	7720	10200
<b>18</b>	6040	13900	29600	17800	9060	30600	14600	27400	50700	19900	6870	11900
<b>19</b>	5860	20800	28300	17000	9890	29300	12200	29200	51100	18600	6570	10900
<b>20</b>	5220	e23500	27000	14800	11000	28200	12200	30900	51200	16900	7730	8250
<b>21</b>	5370	27200	24400	13600	11700	26100	12800	32300	51200	14200	8200	7470
<b>22</b>	5190	29300	e19500	12600	12500	e23200	13400	33000	50900	13400	8680	6650
<b>23</b>	4770	30800	17300	12400	13400	20500	14500	33800	50100	13300	8360	6680
<b>24</b>	5430	31900	18200	12100	15400	18900	16400	34200	49100	14000	8700	6390
<b>25</b>	4250	32200	19000	12300	16700	15800	17800	38500	48100	13900	10700	6640
<b>26</b>	4180	32300	19000	11500	17800	14900	17500	39900	46600	13300	20500	6600
<b>27</b>	4080	32700	19400	10200	18400	18600	17400	42000	45200	11900	19900	6420
<b>28</b>	4220	32600	19300	e9400	18200	22100	18300	42200	43500	9610	e21900	5850
<b>29</b>	5260	32400	18800	e9800	18400	e25300	18000	41400	41800	8710	25300	5440
<b>30</b>	6330	31700	19000	e7000	----	29100	17000	41300	40300	9330	25000	4920
<b>31</b>	5740	----	19300	e6200	----	31900	----	42800	----	9380	24600	----
TOTAL	149490	585700	728700	527900	323130	796600	773200	793000	1419700	629130	361670	367610
MEAN	4822	19520	23510	17030	11140	25700	25770	25580	47320	20290	11670	12250
MAX	6330	32700	32800	23700	18400	34700	40100	42800	51200	38400	25300	25200
MIN	3150	6650	15100	6200	6500	14200	12200	12600	40300	8710	6570	4920

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 – 2004, BY WATER YEAR (WY)**

MEAN	12590	14370	17660	19400	24370	33370	36950	36610	30580	21560	13750	11330
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	5047	5923	4808	4144	10070	10010	11170	6207	6649	5709	5164
(WY)	1965	2003	1963	1963	1963	2003	1956	1988	1988	1988	1941	1976

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1939 – 2004**

ANNUAL TOTAL	5606800		7455830			
ANNUAL MEAN	15360		20370		22690	
HIGHEST ANNUAL MEAN					46810	
LOWEST ANNUAL MEAN					8977	
HIGHEST DAILY MEAN	41600	May 18	51200	Jun 20,21	123000	May 27 1943
LOWEST DAILY MEAN	3150	Oct 7	3150	Oct 7	1330	Sep 2 1984
ANNUAL SEVEN-DAY MINIMUM	4170	Oct 7	4170	Oct 7	2290	Oct 8 1964
MAXIMUM PEAK FLOW			51700	A Jun 21	123000	B C
MAXIMUM PEAK STAGE			14.08	D Jun 21	28.61	B May 26 1943
INSTANTANEOUS LOW FLOW			2860	Oct 8		
10 PERCENT EXCEEDS	32500		40000		47600	
50 PERCENT EXCEEDS	11900		17900		16000	
90 PERCENT EXCEEDS	5200		6410		6490	

A – Gage height, 14.06 ft.

B – At Meredosia.

C – May 26–28, 1943.

D – Discharge, 50,900 ft<sup>3</sup>/s.

ILLINOIS RIVER BASIN  
**05586100 Illinois River at Valley City, IL**

**LOCATION.**— Lat 39°42'12", long 90°38'43" (NAD of 1927), 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. Auxiliary gage 10.0 miles upstream.

**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.

**PERIOD OF RECORD.**—

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DISCHARGE: October 1938 to current year. Prior to October 1960, at site 0.2 mi upstream at same datum. Prior to October 1989, published as "at Meredosia." Records are considered equivalent.

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SEDIMENT: February 1980 to current year.

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WATER TEMPERATURE: Water years 1975–81.

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FISH: Water year 1998 and 2003–04.

HABITAT: Water years 1997–98 and 2003.

**GAGE.**— U.S. Army Corps of Engineer's water-stage recorder and satellite telemeter, crest-stage gage, and water-quality monitor. Datum of gage is 418.00 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Nov. 25, 1992 and Oct. 1, 1994 to current; auxiliary gage (05585500) at site 10.0 mi upstream. Nov. 25, 1992 to Sept. 30, 1994; auxiliary gage operated at this site (05586100).

**REMARKS.**— 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. Suspended-sediment samples were collected by a local observer twice weekly with additional samples collected during high runoff periods. Since February 1994, samples used to compute sediment record have been collected at upstream side Rt. 106 bridge at Florence at mile 56.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 123,000 ft<sup>3</sup>/s, May 26–28, 1943; maximum gage height, 28.61 ft, May 26, 1943; minimum daily discharge, 1,330 ft<sup>3</sup>/s, Sept. 2, 1984.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily, 3,720 mg/L, Apr. 14, 1981; minimum daily, 14 mg/L, Dec. 26, 1984, July 21, 1993.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 410,000 tons, June 4, 1980; minimum daily, 172 tons, Sept. 2, 1984.

**EXTREMES FOR CURRENT YEAR.**—

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily, 1,280 mg/L, May 26; minimum daily, 16 mg/L, Jan. 20.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 138,000 tons, May 26; minimum daily, 533 tons, Sep. 30.

**SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

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	6140	69	717	6650	74	1300	30900	244	20300
2	5820	73	1150	6970	74	1410	30000	228	18500
3	5030	72	981	7600	75	1530	28600	214	16600
4	4390	71	845	8680	96	2310	e26100	206	14500
5	4770	70	907	11600	160	5220	e18400	199	11600
6	4040	70	759	15800	160	6710	17100	189	8780
7	3150	69	584	17500	156	7340	16300	171	7560
8	3520	68	645	17300	151	7040	15400	154	6400
9	4630	66	830	17300	146	6810	15100	148	6060
10	5720	92	1420	16400	141	6310	e18500	283	17800

ILLINOIS RIVER BASIN  
05586100 Illinois River at Valley City, IL--Continued

539

11	4470	82	988	15700	136	5780	e27000	726	53400
12	3700	68	685	14300	130	5030	29300	684	54200
13	4020	57	620	e12500	120	3920	30600	568	46900
14	4030	59	646	12000	108	3510	31900	452	39000
15	3960	64	683	12000	93	3000	32800	355	31400
16	4480	68	828	10900	77	2270	32100	324	28100
17	5680	73	1120	11200	61	1840	30500	301	24800
18	6040	77	1260	13900	65	2560	29600	277	22100
19	5860	82	1300	20800	146	8000	28300	253	19300
20	5220	85	1200	e23500	305	21100	27000	229	16700
21	5370	84	1220	27200	517	38100	24400	206	13600
22	5190	83	1160	29300	536	42400	e19500	186	10400
23	4770	81	1050	30800	506	42100	17300	180	8380
24	5430	80	1170	31900	459	39300	18200	175	8590
25	4250	78	895	32200	411	35700	19000	170	8730
26	4180	76	863	32300	363	31600	19000	165	8460
27	4080	75	825	32700	315	27800	19400	160	8400
28	4220	73	835	32600	279	24600	19300	155	8110
29	5260	72	1030	32400	274	24000	18800	149	7550
30	6330	73	1240	31700	259	22200	19000	138	7090
31	5740	73	1130	----	----	----	19300	127	6620
TOTAL	149490	----	29586	585700	----	430790	728700	----	559930

	JANUARY			FEBRUARY			MARCH		
1	19400	116	6060	e7400	75	2980	17700	154	7390
2	19700	105	5560	e6500	76	3090	14900	155	6220
3	19700	94	4970	e6900	76	3280	14200	157	6000
4	21600	104	6110	e7200	77	3290	15100	216	8850
5	23200	168	10500	e7500	77	3350	21000	300	17100
6	23700	167	10700	e8000	78	3600	e23900	383	24900
7	22300	162	9750	e8500	78	3900	26500	457	32800
8	21500	156	9040	e9400	79	3980	29200	504	39700
9	21600	150	8780	e10000	79	3920	31400	507	43000
10	22400	145	8770	e8400	80	3910	33000	396	35300
11	22600	139	8500	e9400	81	3850	34200	332	30600
12	22600	131	8010	e10000	82	3630	34700	304	28500
13	22200	116	6970	e12000	82	3650	34600	279	26000
14	21000	101	5710	e9400	83	3180	34200	253	23400
15	19700	85	4520	e11000	84	2770	33300	231	20800
16	19400	69	3620	10100	85	2330	32600	218	19200
17	18600	54	2690	8980	91	2210	31600	206	17600
18	17800	38	1820	9060	98	2390	30600	193	16000
19	17000	22	1020	9890	104	2790	29300	181	14300
20	14800	16	643	11000	111	3290	28200	169	12900
21	13600	66	2430	11700	118	3720	26100	156	11000
22	12600	71	2400	12500	124	4210	e23200	144	8940
23	12400	65	2150	13400	134	4860	20500	141	7810
24	12100	64	2100	15400	154	6410	18900	166	8450
25	12300	66	2200	16700	175	7900	15800	192	8160
26	11500	68	2120	17800	180	8650	14900	218	8760
27	10200	70	1940	18400	156	7750	18600	244	12300
28	e9400	72	2040	18200	153	7510	22100	279	16700
29	e9800	74	2630	18400	153	7640	e25300	331	23100
30	e7000	74	2840	----	----	----	29100	356	27900

ILLINOIS RIVER BASIN  
**05586100 Illinois River at Valley City, IL--Continued**

31	e6200	75	2870	---	---	---	31900	338	29100
<b>TOTAL</b>	<b>527900</b>	<b>---</b>	<b>149463</b>	<b>323130</b>	<b>---</b>	<b>124040</b>	<b>796600</b>	<b>---</b>	<b>592780</b>

	APRIL			MAY			JUNE		
1	34400	336	31300	17200	152	7080	43600	540	63500
2	36500	380	37500	18100	153	7490	44500	392	47100
3	38200	370	38100	18500	153	7660	45600	262	32200
4	39300	238	25300	18500	141	7050	46000	272	33800
5	40000	211	22800	17400	124	5850	46400	226	28400
6	40100	186	20100	16200	109	4780	46900	169	21400
7	39600	156	16700	16100	103	4490	47500	143	18400
8	38700	150	15700	16300	101	4440	47800	131	16900
9	37700	169	17100	15800	96	4090	47700	129	16600
10	36200	173	16900	14000	82	3110	47500	132	16900
11	34600	147	13800	12600	68	2300	47400	166	21200
12	33100	151	13400	13600	65	2390	47500	184	23700
13	31400	139	11800	13600	79	2900	47100	157	20000
14	29300	115	9050	14300	209	8220	46700	151	19000
15	25300	103	7060	16600	453	20400	47500	207	26600
16	e20100	58	3230	e20100	550	32700	49600	358	48000
17	16600	53	2370	e25200	338	23100	50600	244	33400
18	14600	43	1700	27400	366	27000	50700	211	28900
19	12200	56	1840	29200	295	23200	51100	199	27400
20	12200	72	2360	30900	329	27500	51200	143	19800
21	12800	65	2240	32300	461	40200	51200	126	17500
22	13400	86	3110	33000	397	35400	50900	120	16500
23	14500	108	4240	33800	291	26500	50100	112	15200
24	16400	99	4360	34200	308	28500	49100	115	15200
25	17800	117	5650	38500	627	65500	48100	131	17100
26	17500	121	5690	39900	1280	138000	46600	121	15200
27	17400	113	5320	42000	587	66500	45200	118	14400
28	18300	103	5120	42200	446	50900	43500	125	14700
29	18000	129	6310	41400	344	38500	41800	129	14600
30	17000	138	6350	41300	243	27000	40300	135	14700
31	---	---	---	42800	277	32100	---	---	---
TOTAL	773200	---	356500	793000	---	774850	1419700	---	718300

	JULY			AUGUST			SEPTEMBER		
1	38400	156	16200	9440	64	1630	24900	387	26100
2	36800	223	22100	9090	74	1800	25200	326	22200
3	35500	227	21800	9820	84	2230	25100	299	20300
4	33600	195	17700	10400	94	2660	24700	275	18400
5	31800	234	20000	10100	105	2860	24200	250	16300
6	29800	277	22200	10300	115	3190	e23100	204	13100
7	26200	303	21500	11400	125	3860	e19700	106	6200
8	e21800	270	15900	11200	134	4060	18000	88	4260
9	19400	230	12100	10800	131	3820	16200	79	3480
10	19300	191	9950	10300	114	3180	12000	71	2290
11	20000	161	8710	9190	106	2630	8490	62	1430
12	21500	163	9470	8720	98	2310	7620	54	1100
13	22700	167	10200	7800	90	1900	7580	50	1020
14	22500	171	10400	7270	82	1620	8070	62	1370
15	22000	175	10400	7230	76	1480	9840	105	2790



## ILLINOIS RIVER BASIN

541

**05586100 Illinois River at Valley City, IL--Continued**

16	20900	179	10100	7880	77	1630	8600	99	2310
17	20500	184	10200	7720	78	1620	10200	135	3730
18	19900	184	9880	6870	79	1470	11900	111	3560
19	18600	174	8710	6570	81	1430	10900	97	2870
20	16900	162	7400	7730	82	1710	8250	87	1940
21	14200	151	5780	8200	83	1850	7470	78	1580
22	13400	139	5050	8680	85	1990	6650	72	1300
23	13300	128	4590	8360	87	1960	6680	67	1210
24	14000	116	4380	8700	102	2400	6390	62	1060
25	13900	106	3960	10700	329	10000	6640	56	1010
26	13300	99	3560	20500	343	18500	6600	51	904
27	11900	92	2970	19900	334	17800	6420	45	787
28	9610	86	2230	e21900	495	31200	5850	41	653
29	8710	79	1860	25300	562	38400	5440	41	608
30	9330	73	1830	25000	418	28200	4920	42	533
31	9380	66	1680	24600	407	27000	----	----	----
TOTAL	629130	----	312810	361670	----	226390	367610	----	164395
YEAR	7455830		4439834						

**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.

## SURFACE-WATER DISCHARGE AND STAGE

STAGE: Water years 1994 to current year.

CHEMICAL: Water years 1975–93 and 1996 to current year.

SEDIMENT: February 1980 to current year.

SPECIFIC CONDUCTANCE: Water years 1975–81.

**WATER TEMPERATURE:** Water years 1975–81.

MISCELLANEOUS: Contaminants in streambed sediments, October 1996; contaminants in fish tissue, October 1996; sediment concentration and particle size, water years 1996–2003.

## ALGAE: Water years 1980–81, 1997–98, and 2002–03.

BENTHIC MACROINVERTEBRATES: Water years 1997–98 and 2002.

FISH: Water year 1998 and 2003–04.

**HABITAT:** Water years 1997–98 and 2003.

**REMARKS.**— 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. Suspended-sediment samples were collected by a local observer twice weekly with additional samples collected during high runoff periods. Since February 1994, samples used to compute sediment record have been collected at upstream side Rt. 106 bridge at Florence at mile 56.

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 123,000 ft<sup>3</sup>/s, May 26–28, 1943; maximum gage height, 28.61 ft, May 26, 1943; minimum daily discharge, 1,330 ft<sup>3</sup>/s, Sept. 2, 1984.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily, 3,720 mg/L, Apr. 14, 1981; minimum daily, 14 mg/L, Dec. 26, 1984, July 21, 1993.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 410,000 tons, June 4, 1980; minimum daily, 172 tons, Sept. 2, 1984.

**REMARKS FOR CURRENT YEAR.**—Sampled as part of the Lower Illinois River Basin (LIRB) National Water Quality Assessment Program (NAWQA).

## SURFACE-WATER QUALITY

[illegible]

ILLINOIS RIVER BASIN  
05586100 Illinois River at Valley City, IL—Continued

543

25...	1130	81700	80020	5.00	16000	16.5	126	8.1	1050	2.5	3.5	208	E253
APR													
07...	1300	81700	80020	10.90	39500	—	—	7.8	760	22.0	13.1	200	241
MAY													
13...	1215	81700	80020	4.61	15300	7.7	90	8.5	826	24.0	23.0	216	257
JUN													
10...	1155	81700	80020	13.70	47400	—	—	7.9	653	28.0	24.7	192	231
JUL													
06...	1105	81700	80020	8.84	30100	5.7	71	8.0	667	24.5	26.5	204	244
AUG													
03...	1145	81700	80020	2.73	7190	6.2	78	8.0	742	27.0	26.8	202	243

Date	Carbon- ate, wat flt incrm. titr., field, mg/L (00452)	Chlor- ide, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, unfltrd mg/L (00665)	Total nitro- gen, wat unf by anal ysis, mg/L (62855)	2,6-Di- ethyl- aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto- chlor, water, fltrd, ug/L (49260)	Ala- chlor, water, fltrd, ug/L (46342)
OCT 2003													
15...	3	85.0	76.2	<.04	1.78	.025	.241	.45	2.85	<.006	E.032	.009	.007
DEC													
02...	<1	56.5	59.9	.06	6.06	.033	.193	.48	7.46	<.006	E.013	.015	.022
FEB 2004													
25...	<1	144	82.9	.08	5.33	.055	.247	.50	6.78	<.006	E.027	.080	<.080
APR													
07...	1	75.5	53.9	<.04	7.39	.037	.133	.32	8.55	—	—	—	—
MAY													
13...	3	83.6	73.3	.14	5.14	.043	.149	.34	6.30	<.006	E.051	.114	.016
JUN													
10...	2	51.7	40.6	<.04	6.90	.060	.144	.36	7.84	<.006	E.272	.430	.013
JUL													
06...	2	57.8	51.6	E.03	3.20	.045	.199	.49	4.23	<.006	E.153	.069	<.005
AUG													
03...	2	72.8	69.5	.07	1.77	.073	.220	.41	2.86	<.006	E.057	.069	<.005

Date	alpha- HCH, water, fltrd, ug/L (34253)	Atra- zine, water, fltrd, ug/L (39632)	Azin- phos- methyl, water, fltrd 0.7u GF ug/L (82686)	Ben- flur- alin, water, fltrd 0.7u GF ug/L (82673)	Butyl- ate, water, fltrd, ug/L (04028)	Car- baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo- furan, water, fltrd 0.7u GF ug/L (82674)	Chlor- pyrifos water, fltrd, ug/L (38933)	cis- Per- methrin water fltrd 0.7u GF ug/L (82687)	Cyana- zine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazi- non, water, fltrd, ug/L (39572)	Diel- drin, water, fltrd, ug/L (39381)
OCT 2003													
15...	<.005	.176	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	E.004	<.005
DEC													
02...	<.005	.160	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	.007	<.009
FEB 2004													
25...	<.005	.445	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	.019	<.009
APR													
07...	—	—	—	—	—	—	—	—	—	—	—	—	—
MAY													
13...	<.005	.743	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	.018	<.009
JUN													
10...	<.005	4.86	<.050	<.010	<.004	<.041	E.137	<.005	<.006	<.018	<.003	.005	<.009

JUL	06...	<.005	1.24	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009
AUG	03...	<.005	.478	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	<.009
	Date	Disul- foton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal- flur- alin, water, fltrd 0.7u GF ug/L (82663)	Etho- prop, water, fltrd 0.7u GF ug/L (82672)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala- thion, water, fltrd, ug/L (39532)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)
OCT 2003	15...	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.006	.056	<.006	<.002	<.007
DEC	02...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.080	<.006	<.003	<.007
FEB 2004	25...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.210	<.006	<.003	<.007
APR	07...	---	---	---	---	---	---	---	---	---	---	---	---	---
MAY	13...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.175	<.006	<.003	<.007
JUN	10...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.834	<.010	<.003	<.007
JUL	06...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.250	<.006	<.003	<.007
AUG	03...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.060	<.006	<.003	<.007
	Date	p,p'- DDE, water, fltrd, ug/L (34653)	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prome- ton, water, fltrd, ug/L (04037)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)
OCT 2003	15...	<.003	<.010	<.004	<.022	<.011	.02	<.004	<.010	<.011	<.02	<.010	E.01	<.034
DEC	02...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.083	E.01	<.034
FEB 2004	25...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	.033	<.02	<.034
APR	07...	---	---	---	---	---	---	---	---	---	---	---	---	---
MAY	13...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.024	<.02	<.034
JUN	10...	<.003	<.010	<.004	<.022	<.011	.03	<.004	<.025	<.011	<.02	.042	<.02	<.034
JUL	06...	<.003	<.010	<.004	<.022	<.011	.03	<.004	<.025	<.011	<.02	.043	E.01	<.034
AUG	03...	<.005	<.010	<.004	<.022	<.011	.03	<.004	<.025	<.011	<.02	.018	E.01	<.034

ILLINOIS RIVER BASIN  
**05586100 Illinois River at Valley City, IL--Continued**

545

		Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	Sus- pended sedi- ment concen- tration mg/L (80154)
OCT 2003						
	15...	<.02	<.005	<.002	<.009	122
DEC						
	02...	<.02	<.010	.006	<.009	226
FEB 2004						
	25...	<.02	<.010	.004	<.009	198
APR						
	07...	--	--	--	--	166
MAY						
	13...	<.02	<.010	<.002	<.009	182
JUN						
	10...	<.02	<.010	<.002	<.009	177
JUL						
	06...	<.02	<.010	<.002	<.009	322
AUG						
	03...	<.02	<.010	<.002	<.009	153

Remark codes used in this table:

< -- Less than  
 E -- Estimated value  
 M -- Presence verified, not quantified

ILLINOIS RIVER BASIN  
**05587000 Macoupin Creek near Kane, IL**

**LOCATION.**— Lat 39°14'03", long 90°23'40" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: March 1921 to November 1933, May to August 1940, October 1940 to current year.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–91.

MISCELLANEOUS: Water year 2002.

**BIOLOGICAL**

BENTHIC MACROINVERTEBRATES: Water year 1997.

**REVISED RECORDS.**— WSP 1175: 1924. WSP 1308: 1922(M), 1928(M), 1931(M). WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, phone telemeter, and crest–stage gage. Datum of gage is 426.77 ft above NGVD of 1929. 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.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 40,100 ft<sup>3</sup>/s, April 12, 1994, gage height, 28.32 ft; maximum gage height, 28.50 ft, May 18, 1943; no flow Oct. 19–27, 1955.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	13	154	239	246	341	922	215	532	48	31	31
2	21	16	134	211	225	319	693	266	375	91	34	26
3	25	16	119	206	273	280	552	234	286	142	28	23
4	25	16	114	2490	307	1560	446	213	239	141	24	21
5	22	97	114	4980	260	5320	382	189	208	129	22	19
6	23	37	109	3790	223	4930	e345	169	187	203	21	17
7	21	32	104	1740	212	3500	304	147	166	213	20	e17
8	20	26	99	840	206	1340	282	127	148	137	18	e16
9	41	25	96	651	191	835	247	115	145	153	16	e16
10	25	25	115	483	e180	653	221	104	158	109	15	e16
11	17	23	112	403	e190	547	204	103	247	124	15	16
12	12	20	103	369	e320	475	188	104	209	72	14	15
13	12	18	90	332	e265	423	173	112	161	64	14	16
14	15	17	88	301	e240	382	162	200	136	52	14	15
15	16	18	89	274	e220	372	158	1340	188	47	13	15
16	15	18	94	252	e200	303	150	1940	166	44	13	16
17	28	252	91	332	e190	316	151	985	128	41	13	15
18	27	5360	90	1330	e210	307	138	430	134	37	12	15
19	23	3570	86	1300	e700	266	129	420	119	35	11	16
20	19	2230	78	700	1530	216	145	792	95	33	15	14
21	15	906	75	516	1600	254	145	473	88	32	16	14
22	13	519	100	429	1060	242	146	275	83	30	15	14
23	12	462	1530	298	770	205	152	209	75	28	14	14
24	12	766	1610	349	861	202	228	178	69	27	183	15
25	13	628	1040	215	858	235	397	259	64	27	606	14
26	13	449	621	222	655	906	345	498	61	26	481	14
27	13	330	431	273	498	3420	268	3420	58	24	463	14

## ILLINOIS RIVER BASIN

547

**05587000 Macoupin Creek near Kane, IL--Continued**

<b>28</b>	14	255	350	312	420	3550	223	7020	57	24	219	13
<b>29</b>	13	206	309	260	343	3470	180	4920	53	23	114	14
<b>30</b>	13	176	279	246	----	2840	167	1440	50	33	58	14
<b>31</b>	13	----	265	325	----	1460	----	692	----	38	40	----
TOTAL	574	16526	8689	24668	13453	39469	8243	27589	4685	2227	2572	495
MEAN	18.5	551	280	796	464	1273	275	890	156	71.8	83.0	16.5
MAX	41	5360	1610	4980	1600	5320	922	7020	532	213	606	31
MIN	12	13	75	206	180	202	129	103	50	23	11	13
CFSM	0.02	0.63	0.32	0.92	0.53	1.47	0.32	1.03	0.18	0.08	0.10	0.02
IN.	0.02	0.71	0.37	1.06	0.58	1.69	0.35	1.18	0.20	0.10	0.11	0.02

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 – 2004, BY WATER YEAR (WY)**

MEAN	228	314	453	523	752	898	1139	943	573	318	200	175
MAX	4037	3703	3538	3514	3358	3844	6645	6949	4060	3216	3233	3161
(WY)	1927	1947	1983	1950	1982	1978	1927	2002	1945	1981	1946	1926
MIN	2.40	4.54	1.77	0.76	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 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1921 – 2004**

ANNUAL TOTAL	131880		149190			
ANNUAL MEAN	361		408		541	
HIGHEST ANNUAL MEAN					1883	
LOWEST ANNUAL MEAN					17.0	
HIGHEST DAILY MEAN	7420	May 11	7020	May 28	32700	May 19 1943
LOWEST DAILY MEAN	11	Aug 28,29	11	Aug 19	0.00	A
ANNUAL SEVEN-DAY MINIMUM	13	Oct 22	13	Oct 22	0.00	Oct 19 1955
MAXIMUM PEAK FLOW			7470	May 28	40100 B	Apr 12 1994
MAXIMUM PEAK STAGE			21.17	May 28	28.50	May 18 1943
INSTANTANEOUS LOW FLOW			10	Oct 12		
ANNUAL RUNOFF (CFSM)	0.416		0.470		0.624	
ANNUAL RUNOFF (INCHES)	5.65		6.39		8.47	
10 PERCENT EXCEEDS	837		859		1150	
50 PERCENT EXCEEDS	100		152		100	
90 PERCENT EXCEEDS	18		15		8.0	

A – Oct. 19–27, 1955.

B – Gage height, 28.32 ft.

ILLINOIS RIVER BASIN  
05587060 Illinois River at Hardin, IL

**LOCATION.**— Lat 39°09'37", long 90°36'55" (NAD of 1927), in NW1/4NW1/4 sec.26, T.10 S., R.2 W., Calhoun County, Hydrologic Unit 07130011, on right bank at downstream side of State Highways 16 and 100 bridge at north edge of 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

STAGE: October 1986 to current year. Gage-height record for February 1932 to Sept. 30, 1986, available in files of U.S. Army Corps of Engineers.

Partial gage-height records from 1878 through 1880 available in files of U.S. Army Corps of Engineers.

PARTIAL RECORD: Miscellaneous discharge measurements, water years 1997–98.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–91.

WATER TEMPERATURE: Water years 1973–77.

MISCELLANEOUS: Contaminants in streambed sediments, October 1996; contaminants in fish tissue, October 1996; sediment concentration and particle size, water years 1997–98.

**GAGE.**— Water-stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest-stage gage. Datum of gage is 400.00 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers).

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height, 42.40 ft, Aug. 3, 1993; minimum, 18.06 ft, Dec. 22, 1989.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

STAGE: 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, 24.89 ft, May 12; minimum, 18.73 ft, Jan 15.

Gage height, feet, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.28	19.36	19.17	19.36	19.59	19.32	19.70	19.26	20.71	19.38	20.94	20.59
2	19.36	19.36	19.24	19.39	19.63	19.44	19.75	19.43	20.25	19.35	20.81	20.45
3	19.33	19.49	19.26	19.27	19.55	19.41	19.67	19.89	19.95	19.64	20.78	19.80
4	19.34	19.38	19.52	19.14	19.55	19.40	19.59	20.55	19.73	19.65	20.69	19.83
5	19.30	19.46	19.09	19.27	19.55	19.40	19.84	21.54	19.64	19.56	20.61	19.64
6	19.38	19.39	19.25	19.32	19.67	19.39	20.10	22.16	19.61	19.50	20.59	19.70
7	19.42	19.47	19.32	19.23	19.41	19.51	20.08	22.21	19.78	19.33	20.36	19.79
8	19.54	19.49	19.07	19.23	19.03	19.44	20.14	22.32	19.57	19.50	20.18	19.74
9	19.56	19.40	19.01	19.13	19.01	19.36	20.20	22.53	19.38	19.53	19.89	19.63
10	19.53	19.23	19.10	19.14	18.96	19.32	20.14	23.39	19.56	20.18	19.69	19.62
11	19.61	19.19	18.94	19.21	18.92	19.40	20.08	24.11	19.75	21.24	19.53	19.56
12	19.60	19.26	18.99	19.27	18.91	19.54	20.11	24.75	19.76	21.50	19.47	19.50
13	19.51	19.29	19.03	19.12	19.20	19.69	20.13	24.43	20.39	21.38	19.58	19.43
14	19.54	19.21	19.39	18.85	19.52	19.79	20.01	23.71	20.86	21.37	19.82	19.52
15	19.53	19.25	19.47	18.77	19.88	19.62	19.90	23.28	20.40	21.36	19.80	19.76
16	19.66	19.25	19.28	19.03	19.99	19.66	19.74	23.24	20.08	21.26	19.58	19.81
17	19.43	19.33	19.30	19.43	19.43	19.73	20.07	23.24	20.02	21.21	19.56	19.66
18	19.53	19.39	19.63	19.52	19.39	19.61	20.23	23.25	20.01	21.54	19.54	19.38
19	19.52	19.26	19.46	19.45	19.49	19.70	20.39	23.27	20.07	22.40	19.54	19.62
20	19.45	19.14	19.16	19.38	19.66	20.13	20.00	23.25	19.97	21.97	19.60	19.77
21	19.48	19.21	19.21	19.39	19.75	20.05	19.67	23.20	19.89	21.47	19.61	19.77
22	19.59	19.11	19.28	19.47	19.58	19.69	19.67	23.11	19.89	21.21	19.50	19.79
23	19.58	19.30	19.32	19.46	19.40	19.59	19.61	23.07	19.86	21.32	19.41	19.45
24	19.57	19.23	19.48	19.45	19.31	19.71	19.58	23.08	19.76	21.44	19.38	19.62
25	19.61	19.14	19.55	19.56	19.24	19.74	19.39	23.14	19.40	21.45	19.70	19.62



**05587060 Illinois River at Hardin, IL--Continued**

<b>26</b>	19.43	19.18	19.43	19.45	19.18	19.66	19.58	23.10	19.85	21.46	19.65	19.44
<b>27</b>	19.38	19.21	19.33	19.36	19.28	19.80	19.38	23.04	19.78	21.38	19.58	19.65
<b>28</b>	19.43	19.11	19.16	19.34	19.29	19.75	19.19	22.91	19.62	21.26	19.55	19.64
<b>29</b>	19.55	19.12	19.03	19.32	---	19.63	19.22	22.63	19.52	21.33	19.31	19.65
<b>30</b>	19.50	19.09	19.11	19.34	---	19.61	19.28	22.05	19.40	21.22	19.25	19.76
<b>31</b>	19.52	---	19.25	19.37	---	19.66	---	21.22	---	21.02	19.42	---
MEAN	19.49	19.28	19.25	19.29	19.41	19.60	19.81	22.59	19.88	20.82	19.84	19.71
MAX	19.66	19.49	19.63	19.56	19.99	20.13	20.39	24.75	20.86	22.40	20.94	20.59
MIN	19.28	19.09	18.94	18.77	18.91	19.32	19.19	19.26	19.38	19.33	19.25	19.38
CAL YR 2002	MEAN 21.81		MAX 34.79		MIN 18.94							
WTR YR 2003	MEAN 19.92		MAX 24.75		MIN 18.77							

ILLINOIS RIVER BASIN  
05587060 Illinois River at Hardin, IL

**LOCATION.**— Lat 39°09'37", long 90°36'55" (NAD of 1927), in NW1/4NW1/4 sec.26, T.10 S., R.2 W., Calhoun County, Hydrologic Unit 07130011, on right bank at downstream side of State Highways 16 and 100 bridge at north edge of 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

STAGE: October 1986 to current year. Gage-height record for February 1932 to Sept. 30, 1986, available in files of U.S. Army Corps of Engineers.

Partial gage-height records from 1878 through 1880 available in files of U.S. Army Corps of Engineers.

PARTIAL RECORD: Miscellaneous discharge measurements, water years 1997–98.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–91.

WATER TEMPERATURE: Water years 1973–77.

MISCELLANEOUS: Contaminants in streambed sediments, October 1996; contaminants in fish tissue, October 1996; sediment concentration and particle size, water years 1997–98.

**GAGE.**— Water-stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest-stage gage. Datum of gage is 400.00 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers).

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height, 42.40 ft, Aug. 3, 1993; minimum, 18.06 ft, Dec. 22, 1989.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

STAGE: 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, 27.24 ft, June 7; minimum, 19.05 ft, Oct. 7.

Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.75	19.91	21.34	20.65	20.43	20.34	21.98	20.52	25.57	25.03	19.51	20.68
2	19.62	19.95	21.19	20.64	20.38	20.18	22.17	20.50	25.75	24.39	19.46	20.65
3	19.51	19.88	21.33	20.62	20.47	20.17	22.32	20.52	26.28	23.75	19.62	20.63
4	19.52	19.96	21.11	21.05	20.47	20.29	22.44	20.62	26.76	22.98	19.71	20.61
5	19.55	20.31	20.55	21.34	20.33	21.06	22.54	20.43	27.08	22.25	19.73	20.50
6	19.39	20.48	20.09	21.14	20.40	21.65	22.55	20.39	27.21	21.46	19.73	20.36
7	19.15	20.43	20.20	20.86	20.51	21.99	22.56	20.32	27.17	20.81	19.71	20.14
8	19.33	20.47	20.35	20.82	20.65	22.14	22.54	20.40	27.03	20.34	19.59	19.79
9	19.70	20.48	20.26	20.65	20.67	22.12	22.38	20.28	26.83	20.05	19.71	19.86
10	19.77	20.31	20.34	20.53	20.71	22.16	22.15	20.18	26.61	20.19	19.68	19.61
11	19.54	20.21	21.34	20.66	20.65	21.91	21.98	20.02	26.36	20.41	19.45	19.37
12	19.46	20.30	21.41	20.74	20.49	21.56	21.80	20.17	26.07	20.63	19.51	19.37
13	19.39	19.89	21.53	20.62	20.37	21.79	21.52	20.25	25.88	20.89	19.36	19.36
14	19.44	20.06	21.64	20.54	20.21	21.74	21.37	20.25	25.69	20.88	19.34	19.59
15	19.47	20.05	21.69	20.58	20.08	21.57	21.12	20.52	25.53	20.81	19.20	20.03
16	19.61	20.02	21.60	20.65	20.05	21.53	20.79	20.92	25.55	20.70	19.35	19.86
17	19.83	19.93	21.47	20.54	19.97	21.59	20.58	21.30	25.73	20.65	19.36	19.72
18	19.66	20.59	21.50	20.58	20.10	21.42	20.42	21.35	25.93	20.50	19.32	19.79
19	19.68	20.72	21.31	20.50	20.14	21.46	20.18	21.56	26.13	20.32	19.24	19.87
20	19.63	21.11	21.02	20.31	20.34	21.28	20.14	21.63	26.21	20.14	19.39	19.65
21	19.82	21.26	20.98	20.32	20.36	21.09	20.22	21.54	26.28	20.03	19.41	19.67
22	19.66	21.41	20.84	20.22	20.23	20.88	20.20	21.64	26.32	19.93	19.46	19.67
23	19.69	21.27	20.78	20.03	20.19	20.47	20.39	21.61	26.35	19.94	19.45	19.84
24	19.86	20.98	20.81	20.22	20.20	20.45	20.60	21.55	26.42	20.06	19.41	19.92
25	19.71	21.21	20.61	20.36	20.37	20.33	20.66	21.96	26.45	20.13	19.81	19.89

**05587060**

CAL YR 2003

UPPER MISSISSIPPI RIVER BASIN  
**05587450 Mississippi River at Grafton, IL**

**LOCATION.**— Lat 38°58'05", long 90°25'42" (NAD of 1927), in NE 1/4 sec.15, T.6 N., R.12 W., Jersey County, Hydrologic Unit 07110009, on left bank 0.2 mi downstream from the mouth of Illinois River, 15.3 mi above Lock and Dam 26, 23.0 mi above mouth of Missouri River, and at mile 218.6 upstream of the mouth of Ohio River.

**DRAINAGE AREA.**— 171,300 mi<sup>2</sup>, approximately.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1986 to current year. Intermittently from 1880 to 1928, computed daily 1928 to 1932 by the National Weather Service and/ or the U.S. Army Corps of Engineers. Discharge previously published as "Mississippi River at Alton, Illinois" (05587500) for October 1927 to September 1986.

STAGE: August 1879 through September 1892, 1929 to September 1986. Stages also available from reports of the National Weather Service.

**GAGE.**— Water-stage recorder and U.S. Army Corps of Engineers satellite telemeter. Datum of gage is 403.79 ft above NGVD of 1929. Auxiliary water-stage recorder 15.3 mi downstream.

**REMARKS.**— Natural flow of river affected by many navigation dams in upper Mississippi River Basin. Flood water from Missouri River overtops or breaches the levees at extremely high stages.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 598,000 ft<sup>3</sup>/s, August 1, 1993, gage height, 441.96 ft, maximum gage height, 432.15 ft, April, 28, 1973, at Alton; minimum discharge, 7,960 ft<sup>3</sup>/s, November 7, 1948, at Alton, result of temporary storage in pool of Lock and Dam 26.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Flood of June 1844 reached an elevation of 435.89 ft, present datum.

**REMARKS FOR CURRENT YEAR.**—Records poor.

DAY	Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31,500	38,300	66,800	57,600	49,500	87,200	191,000	119,000	275,000	269,000	85,100	110,000
2	28,700	38,100	58,700	55,800	47,300	86,200	204,000	122,000	281,000	258,000	84,200	82,100
3	26,200	36,500	66,100	53,700	e42,500	95,000	210,000	118,000	293,000	247,000	84,200	75,200
4	27,000	44,000	62,300	63,700	e37,000	106,000	210,000	119,000	303,000	234,000	88,600	70,600
5	26,800	56,700	48,600	62,200	e38,200	150,000	210,000	112,000	306,000	222,000	95,200	61,000
6	23,700	64,000	46,300	46,500	e39,800	204,000	208,000	107,000	306,000	199,000	99,600	53,700
7	16,200	61,500	51,400	41,200	e38,400	223,000	210,000	96,100	304,000	167,000	97,000	52,600
8	25,200	67,200	56,700	46,600	e38,400	224,000	212,000	96,300	300,000	154,000	88,900	44,700
9	39,600	67,900	54,200	38,100	e34,500	223,000	206,000	92,400	297,000	143,000	90,100	53,100
10	41,800	62,400	60,900	32,500	e34,300	221,000	201,000	92,200	292,000	145,000	90,300	48,200
11	32,900	61,100	111,000	40,500	e35,300	207,000	201,000	88,900	288,000	152,000	78,700	42,400
12	30,500	57,800	100,000	43,400	e39,100	170,000	199,000	87,200	283,000	159,000	81,400	42,500
13	26,000	54,400	87,500	40,900	e45,100	169,000	184,000	92,100	279,000	168,000	79,600	41,700
14	24,500	63,200	77,400	38,900	46,800	151,000	167,000	98,200	276,000	175,000	75,700	48,600
15	30,500	62,100	69,300	47,700	42,500	130,000	141,000	104,000	273,000	175,000	68,900	63,300
16	36,200	60,200	62,900	50,000	39,900	117,000	110,000	102,000	272,000	170,000	73,000	60,300
17	44,700	58,900	64,000	45,100	38,800	124,000	108,000	105,000	276,000	164,000	74,500	54,500

UPPER MISSISSIPPI RIVER BASIN  
05587450 Mississippi River at Grafton, IL--Continued

553

18	35,700	82,200	66,900	47,400	42,600	118,000	105,000	106,000	282,000	154,000	72,600	54,800
19	34,600	80,400	56,300	44,700	43,200	125,000	100,000	114,000	284,000	144,000	69,000	60,900
20	28,000	78,600	47,800	40,700	52,600	127,000	97,700	134,000	284,000	138,000	73,000	58,100
21	35,500	71,300	54,100	43,700	68,400	131,000	101,000	139,000	284,000	131,000	76,100	60,600
22	29,400	77,000	57,400	41,000	78,100	128,000	100,000	146,000	285,000	126,000	74,900	63,400
23	31,900	63,900	68,000	35,900	83,000	114,000	107,000	151,000	286,000	121,000	75,100	74,500
24	37,200	48,600	67,800	44,300	86,200	113,000	108,000	153,000	288,000	122,000	68,500	80,900
25	34,000	66,600	56,200	49,700	87,400	108,000	111,000	172,000	290,000	121,000	75,500	79,800
26	31,700	76,400	51,900	40,800	97,800	113,000	110,000	224,000	290,000	116,000	101,000	83,700
27	21,500	67,100	56,200	34,500	96,900	139,000	108,000	244,000	290,000	106,000	99,400	84,400
28	32,000	57,900	57,900	38,100	92,500	150,000	115,000	261,000	288,000	99,900	169,000	77,900
29	38,400	59,500	50,600	46,600	90,700	176,000	120,000	271,000	283,000	93,700	209,000	71,000
30	36,500	70,500	45,800	51,100	---	172,000	115,000	278,000	277,000	91,300	154,000	71,600
31	36,200	---	54,700	52,200	---	180,000	---	275,000	---	87,700	133,000	---
MEAN	31,440	61,840	62,440	45,660	55,440	147,800	152,300	142,600	287,200	156,500	93,070	64,200
MAX	44,700	82,200	111,000	63,700	97,800	224,000	212,000	278,000	306,000	269,000	209,000	110,000
MIN	16,200	36,500	45,800	32,500	34,300	86,200	97,700	87,200	272,000	87,700	68,500	41,700
IN.	0.21	0.40	0.42	0.61	0.65	0.69	0.69	0.66	1.67	1.05	0.63	0.42
MEAN	84,760	88,780	83,600	74,370	92,220	140,200	178,800	202,900	182,600	149,000	101,800	79,700
MAX	334,900	171,300	169,900	161,000	158,000	217,400	342,100	333,300	287,200	469,300	416,900	309,900
(WY)	(1987)	(1987)	(1993)	(1993)	(1999)	(1997)	(1993)	(1993)	(2004)	(1993)	(1993)	(1993)
MIN	28,060	33,270	31,840	34,800	39,860	56,560	72,770	69,140	36,340	30,420	37,280	30,600
(WY)	(1989)	(1990)	(1990)	(1990)	(2003)	(2003)	(2000)	(1988)	(1988)	(1988)	(1988)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1987 – 2004
ANNUAL MEAN	• 77,650	• 108,300	• 121,700
HIGHEST ANNUAL MEAN	•	•	• 250,700 1993
LOWEST ANNUAL MEAN	•	•	• 53,860 1989
HIGHEST DAILY MEAN	• 248,000 May 12	• 306,000 Jun 5,6	• 596,000 Aug 3, 1993
LOWEST DAILY MEAN	• 16,200 Oct 7	• 16,200 Oct 7	• 16,200 Oct 7, 2003
ANNUAL SEVEN-DAY MINIMUM	• 24,800 Oct 2	• 24,800 Oct 2	• 23,600 Dec 12, 1988

UPPER MISSISSIPPI RIVER BASIN  
05587450 Mississippi River at Grafton, IL--Continued

MAXIMUM PEAK FLOW	•	----	•	307,000 Jun 5,6	•	598,000 Aug 1, 1993
MAXIMUM PEAK STAGE	•	----	•	21.41 Jun 5	•	441.96 Aug 1, 1993
INSTANTANEOUS LOW FLOW	•	----	•	16,200 Oct 7	•	16,200 Oct 7, 2003
ANNUAL RUNOFF (INCHES)	•	6.15	•	8.61	•	9.65
10 PERCENT EXCEEDS	•	170,000	•	250,000	•	246,000
50 PERCENT EXCEEDS	•	57,800	•	82,200	•	94,100
90 PERCENT EXCEEDS	•	30,600	•	38,100	•	42,500

e Estimated

UPPER MISSISSIPPI RIVER BASIN  
**05587455 Mississippi River below Grafton, IL**

555

(Ambient Water–Quality Monitoring Network Station)

**LOCATION.**— Lat 38°57'04", long 90°22'16" (NAD of 1927), in sec.24, T.6 N., R.11 W., Jersey County, Hydrologic Unit 07110009, 11.3 mi above Lock and Dam 26, 19.0 mi above mouth of Missouri River, and at mile 214.6 upstream from the mouth of the Ohio River.

**DRAINAGE AREA.**— 171,300 mi<sup>2</sup>, approximately.

**PERIOD OF RECORD.**—

**SURFACE–WATER QUALITY**

CHEMICAL: March 1989 to current year.

SEDIMENT: October 1989 to current year.

**REMARKS.**— Ambient Water–Quality Monitoring Network station Nov. 1992 to current year. National Stream–Quality Accounting Network station September 1989 to October 1992. Discharge for sediment records obtained from Mississippi River at Grafton (05587450).

**EXTREMES FOR PERIOD OF RECORD.**—

SUSPENDED–SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,910 mg/L, May 23, 1990; minimum daily mean, 1 mg/L, Sept. 10, 1991.

SUSPENDED–SEDIMENT LOADS: Maximum daily, 1,090,000 tons, May 23, 1990; minimum daily, 186 tons, Sept. 10, 1991.

**EXTREMES FOR CURRENT YEAR.**—

SUSPENDED–SEDIMENT CONCENTRATIONS: Maximum daily mean, 790 mg/L, March 7; minimum daily mean, 54 mg/L, Jan. 22.

SUSPENDED–SEDIMENT LOADS: Maximum daily, 476,000 tons, March 7; minimum daily, 3,440 tons, Oct. 7.

**REMARKS FOR CURRENT YEAR.**—Sediment records fair except those for estimated daily loads, which are poor.

**SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

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	e31500	135	11500	e38300	58	6050	e66800	131	23500
2	e28700	118	9150	e38100	70	7210	e58700	184	29100
3	e26200	109	7730	e36500	70	6890	e66100	195	34700
4	e27000	86	6250	e44000	70	8370	e62300	120	20300
5	e26800	90	6510	e56700	88	13500	e48600	95	12500
6	e23700	92	5920	e64000	101	17400	e46300	95	11900
7	e16200	78	3440	e61500	95	15700	e51400	104	14500
8	e25200	81	5630	e67200	93	17000	e56700	101	15500
9	e39600	101	10700	e67900	97	17700	e54200	116	16800
10	e41800	89	10000	e62400	102	17200	e60900	219	38500
11	e32900	93	8280	e61100	119	19800	e111000	440	132000
12	e30500	97	7990	e57800	113	18100	e100000	378	104000
13	e26000	99	6930	e54400	94	13900	e87500	359	84900
14	e24500	101	6680	e63200	106	18100	e77400	364	76200
15	e30500	103	8490	e62100	80	13400	e69300	344	64500
16	e36200	95	9170	e60200	96	15700	e62900	236	40200
17	e44700	77	9230	e58900	114	18200	e64000	221	38200
18	e35700	77	7400	e82200	132	29300	e66900	226	40900
19	e34600	74	6850	e80400	138	29900	e56300	176	27000
20	e28000	101	7630	e78600	165	35000	e47800	127	16500
21	e35500	87	8380	e71300	210	40400	e54100	108	15700
22	e29400	74	5870	e77000	154	31900	e57400	100	15500
23	e31900	70	5980	e63900	173	29400	e68000	165	30700
24	e37200	70	7010	e48600	246	32400	e67800	168	30900
25	e34000	88	8080	e66600	218	38800	e56200	119	18200

UPPER MISSISSIPPI RIVER BASIN  
**05587455 Mississippi River below Grafton, IL--Continued**

26	e31700	86	7360	e76400	131	26900	e51900	90	12600
27	e21500	84	4860	e67100	156	28000	e56200	85	12900
28	e32000	76	6580	e57900	185	29000	e57900	72	11200
29	e38400	74	7690	e59500	163	26200	e50600	73	10000
30	e36500	68	6680	e70500	137	26000	e45800	70	8680
31	e36200	60	5890	---	---	---	e54700	67	9930
TOTAL	974600	---	229860	1854300	---	647420	1935700	---	1018010

	JANUARY			FEBRUARY			MARCH		
1	e57600	63	9860	e49500	78	10400	e87200	133	30000
2	e55800	61	9170	e47300	75	9610	e86200	248	57700
3	e53700	73	10600	e42500	77	10100	e95000	519	133000
4	e63700	120	20900	e37000	77	10500	e106000	528	151000
5	e62200	160	26900	e38200	72	8520	e150000	557	227000
6	e46500	152	19100	e39800	79	10100	e204000	733	406000
7	e41200	128	14200	e38400	84	11700	e223000	790	476000
8	e46600	85	10700	e38400	83	12400	e224000	775	469000
9	e38100	82	8390	e34500	82	12200	e223000	686	414000
10	e32500	98	8570	e34300	77	11500	e221000	487	291000
11	e40500	93	10200	e35300	70	10300	e207000	454	255000
12	e43400	90	10600	e39100	69	9070	e170000	312	143000
13	e40900	88	9730	e45100	73	9830	e169000	351	160000
14	e38900	86	9030	e46800	64	8070	e151000	304	125000
15	e47700	84	10800	e42500	65	7490	e130000	266	93300
16	e50000	82	11000	e39900	75	8090	e117000	224	70800
17	e45100	81	9810	e38800	80	8320	e124000	163	54600
18	e47400	84	10700	e42600	64	7330	e118000	170	54100
19	e44700	83	10200	e43200	58	6790	e125000	171	57600
20	e40700	56	6150	e52600	75	10900	e127000	180	61300
21	e43700	56	6570	e68400	100	18400	e131000	170	59800
22	e41000	54	5950	e78100	88	18600	e128000	153	53100
23	e35900	63	6150	e83000	114	25500	e114000	155	47900
24	e44300	79	9490	e86200	140	32500	e113000	161	49200
25	e49700	82	11000	e87400	150	35500	e108000	150	43600
26	e40800	70	7700	e97800	157	41500	e113000	134	40800
27	e34500	61	5630	e96900	166	43400	e139000	205	78500
28	e38100	63	6470	e92500	173	43200	e150000	262	106000
29	e46600	73	9170	e90700	152	37100	e176000	313	149000
30	e51100	77	10700	---	---	---	e172000	340	159000
31	e52200	79	11100	---	---	---	e180000	236	115000
TOTAL	1415100	---	326540	1606800	---	488920	4581400	---	4631300

APRIL				MAY			JUNE		
1	e191000	251	130000	e119000	126	40400	e275000	484	360000
2	e204000	235	130000	e122000	136	45100	e281000	421	320000
3	e210000	269	152000	e118000	154	49300	e293000	352	278000
4	e210000	369	210000	e119000	123	39600	e303000	287	235000
5	e210000	340	193000	e112000	107	32500	e306000	280	232000
6	e208000	260	146000	e107000	111	31900	e306000	247	204000
7	e210000	261	149000	e96100	145	37500	e304000	232	191000
8	e212000	333	190000	e96300	141	36600	e300000	211	171000
9	e206000	260	145000	e92400	123	30700	e297000	212	170000
10	e201000	179	97100	e92200	121	30100	e292000	220	174000



UPPER MISSISSIPPI RIVER BASIN  
05587455 Mississippi River below Grafton, IL--Continued

557

11	e201000	193	105000	e88900	103	24800	e288000	240	186000
12	e199000	214	115000	e87200	96	22500	e283000	247	188000
13	e184000	206	103000	e92100	92	22800	e279000	253	191000
14	e167000	169	76400	e98200	94	24900	e276000	242	180000
15	e141000	159	60800	e104000	99	27800	e273000	224	165000
16	e110000	112	33600	e102000	78	21700	e272000	206	152000
17	e108000	114	33300	e105000	99	27900	e276000	228	170000
18	e105000	103	29000	e106000	139	39800	e282000	281	213000
19	e100000	85	23000	e114000	147	45300	e284000	259	199000
20	e97700	84	22100	e134000	179	65000	e284000	213	163000
21	e101000	83	22600	e139000	193	72400	e284000	220	169000
22	e100000	72	19500	e146000	218	86000	e285000	217	167000
23	e107000	80	23100	e151000	221	90200	e286000	210	162000
24	e108000	98	28900	e153000	254	105000	e288000	201	156000
25	e111000	172	51400	e172000	280	131000	e290000	190	148000
26	e110000	160	47400	e224000	377	229000	e290000	184	144000
27	e108000	156	45400	e244000	480	316000	e290000	173	135000
28	e115000	154	47900	e261000	545	385000	e288000	166	129000
29	e120000	166	54000	e271000	558	409000	e283000	175	134000
30	e115000	140	43300	e278000	571	429000	e277000	163	122000
31	---	---	---	e275000	547	406000	---	---	---
TOTAL	4569700	---	2526800	4419400	---	3354800	8615000	---	5608000

	JULY			AUGUST			SEPTEMBER		
1	e269000	158	114000	e85100	102	23500	e110000	222	66400
2	e258000	181	126000	e84200	75	17000	e82100	224	49700
3	e247000	194	130000	e84200	76	17400	e75200	192	39000
4	e234000	183	116000	e88600	81	19300	e70600	200	38200
5	e222000	203	121000	e95200	93	23900	e61000	182	29900
6	e199000	149	80500	e99600	106	28600	e53700	165	23900
7	e167000	135	61000	e97000	155	40500	e52600	144	20400
8	e154000	113	47100	e88900	177	42600	e44700	130	15800
9	e143000	127	49300	e90100	157	38200	e53100	104	15000
10	e145000	151	59200	e90300	121	29700	e48200	112	14500
11	e152000	124	51000	e78700	88	18700	e42400	96	11000
12	e159000	124	53300	e81400	87	19000	e42500	93	10700
13	e168000	127	57700	e79600	101	21700	e41700	93	10500
14	e175000	129	61000	e75700	88	18100	e48600	105	13900
15	e175000	144	68000	e68900	79	14700	e63300	138	23700
16	e170000	134	61300	e73000	83	16300	e60300	130	21200
17	e164000	130	57600	e74500	81	16200	e54500	117	17200
18	e154000	117	48400	e72600	78	15400	e54800	119	17600
19	e144000	99	38700	e69000	76	14100	e60900	132	21600
20	e138000	91	33800	e73000	90	17800	e58100	119	18600
21	e131000	99	35000	e76100	137	28100	e60600	110	18000
22	e126000	117	39700	e74900	146	29600	e63400	111	19000
23	e121000	131	42600	e75100	173	35000	e74500	118	23700
24	e122000	118	38800	e68500	158	29100	e80900	120	26300
25	e121000	91	29500	e75500	139	28500	e79800	129	27700
26	e116000	84	26200	e101000	232	63500	e83700	121	27400
27	e106000	86	24700	e99400	331	88800	e84400	121	27600
28	e99900	80	21500	e169000	450	213000	e77900	141	29700
29	e93700	76	19200	e209000	784	443000	e71000	121	23200
30	e91300	82	20200	e154000	519	219000	e71600	92	17700

UPPER MISSISSIPPI RIVER BASIN  
**05587455   Mississippi River below Grafton, IL--Continued**

31	e87700	93	22000	e133000	371	134000	---	---	---
TOTAL	4852600	---	1754300	2885100	---	1764300	1926100	---	719100
YEAR	39635800		23069350						

e Estimated

UPPER MISSISSIPPI RIVER BASIN  
**05587455 Mississippi River below Grafton, IL**

559

(Ambient Water–Quality Monitoring Network Station)

**LOCATION.**— Lat 38°57'04", long 90°22'16" (NAD of 1927), in sec.24, T.6 N., R.11 W., Jersey County, Hydrologic Unit 07110009, 11.3 mi above Lock and Dam 26, 19.0 mi above mouth of Missouri River, and at mile 214.6 upstream from the mouth of the Ohio River.

**DRAINAGE AREA.**— 171,300 mi<sup>2</sup>, approximately.

**PERIOD OF RECORD.**—

**SURFACE–WATER QUALITY**

CHEMICAL: March 1989 to current year.

SEDIMENT: October 1989 to current year.

**REMARKS.**— Ambient Water–Quality Monitoring Network station Nov. 1992 to current year. National Stream–Quality Accounting Network station September 1989 to October 1992. Discharge for sediment records obtained from Mississippi River at Grafton (05587450).

**EXTREMES FOR PERIOD OF RECORD.**—

SUSPENDED–SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,910 mg/L, May 23, 1990; minimum daily mean, 1 mg/L, Sept. 10, 1991.

SUSPENDED–SEDIMENT LOADS: Maximum daily, 1,090,000 tons, May 23, 1990; minimum daily, 186 tons, Sept. 10, 1991.

**SURFACE–WATER QUALITY, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

Date	Time	Sample type	Instan- taneous dis- charge, cfs (00061)	Turbid- ity, wat unf lab, Hach 2100AN NTU (99872)	UV absorb- ance, 254 nm, wat flt units /cm (50624)	UV absorb- ance, 280 nm, wat flt units /cm (61726)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf µS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)	Hard- ness, water, unfltrd mg/L as CaCO <sub>3</sub> (00900)
OCT 22...	1310	Environmental	29,400	12	---	---	10.6	112	8.5	487	17.6	210
NOV 12...	1225	Environmental	57,800	22	---	---	11.8	108	8.0	521	10.4	210
12...	1226	Replicate	---	---	---	---	---	---	---	---	---	200
DEC 01...	1345	Environmental	66,800	34	---	---	11.1	89	8.2	526	6.0	210
JAN 12...	1445	Environmental	43,400	42	0.117	0.086	15.4	111	8.4	569	1.7	260
FEB 23...	1340	Environmental	83,000	22	0.111	0.082	18.1	132	8.1	568	1.9	260
MAR 08...	1445	Environmental	224,000	320	0.179	0.136	9.7	81	7.8	476	7.2	190
APR 14...	1300	Environmental	167,000	51	0.165	0.123	9.2	87	8.0	420	12.3	170
14...	1301	Replicate	---	---	0.160	0.120	9.3	88	8.1	405	12.5	180
MAY 10...	1310	Environmental	92,200	21	0.135	0.099	9.9	112	8.5	409	20.7	210
JUN 14...	1315	Environmental	276,000	89	0.194	0.143	6.7	84	7.6	414	25.6	210
JUL 12...	1325	Environmental	159,000	30	0.194	0.140	7.0	90	8.0	485	27.0	220
12...	1326	Replicate	---	---	0.197	0.143	7.0	90	8.0	494	27.2	220
AUG 09...	1315	Environmental	90,100	97	0.176	0.128	6.8	84	8.0	524	25.3	230
SEP 20...	1345	Environmental	58,100	25	0.154	0.112	8.3	98	8.6	430	23.4	210

UPPER MISSISSIPPI RIVER BASIN  
**05587455 Mississippi River below Grafton, IL--Continued**

**SURFACE-WATER QUALITY, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

Date	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as CaCO <sub>3</sub> (00410)	ANC, wat unf incrm. titr., field, mg/L as CaCO <sub>3</sub> (00419)	Bicar- bonate, wat unf incrm. titr., field, mg/L (00450)	Carbon- ate, wat unf incrm. titr., field, mg/L (00447)	Chlor- ide, water, fltrd, mg/L (00940)	Fluor- ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)
OCT													
22...	47.1	22.3	3.68	26.2	169	170	178	14	38.4	0.2	1.1	37.9	296
NOV													
12...	46.5	21.8	4.02	26.7	165	167	203	<1	40.4	0.3	3.0	39.5	303
12...	46.3	21.6	4.04	26.6	—	—	—	—	40.7	0.2	2.9	39.6	302
DEC													
01...	47.9	20.7	4.01	18.1	154	156	191	<1	33.9	0.2	5.2	36.3	290
JAN													
12...	63.3	25.5	3.32	23.3	188	190	228	2	38.5	0.2	5.8	41.6	329
FEB													
23...	61.5	24.7	3.24	28.1	185	186	227	<1	48.4	0.2	6.0	41.5	364
MAR													
08...	46.2	17.8	4.80	25.3	137	135	165	<1	42.5	0.2	7.8	34.8	288
APR													
14...	40.3	16.1	3.46	14.8	128	129	157	<1	25.0	<0.2	6.3	25.7	237
14...	43.6	18.2	3.36	17.5	—	—	—	—	30.5	<0.2	6.1	29.5	263
MAY													
10...	47.8	21.6	3.06	19.9	149	149	169	6	34.6	0.2	0.6	36.1	287
JUN													
14...	50.9	19.7	3.56	14.6	157	161	196	<1	27.9	0.2	9.0	26.6	274
JUL													
12...	52.9	20.2	3.30	11.3	153	155	189	<1	21.9	0.2	10.0	32.5	286
12...	53.9	20.3	3.30	11.5	—	—	—	—	22.4	0.2	10.0	32.6	284
AUG													
09...	53.1	22.5	3.39	16.3	161	164	201	<1	29.0	0.3	8.5	42.0	303
SEP													
20...	48.5	22.3	3.53	17.0	154	154	181	3	26.3	0.2	1.4	32.4	252

Date	Residue total at 105 deg. C, sus- pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Partic- ulate nitro- gen, susp, water, mg/L (49570)	Phos- phorus, water, fltrd, mg/L (00666)	Phos- phorus, water, unfltrd mg/L (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inor- ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
OCT													
22...	19	0.96	<0.04	0.39	0.008	0.08	—	0.10	0.19	—	—	—	—
NOV													
12...	29	0.78	0.08	0.95	0.020	0.12	—	0.16	0.20	—	—	—	—
12...	29	0.93	0.08	0.94	0.018	0.12	—	0.17	0.23	—	—	—	—
DEC													
01...	42	0.87	0.08	2.71	0.020	0.10	—	0.14	0.21	—	—	—	—
JAN													
12...	60	1.1	<0.04	3.54	0.021	0.06	0.47	0.09	0.22	3.6	<0.1	3.6	5.1
FEB													
23...	28	0.88	0.07	2.65	0.021	0.06	0.29	0.08	0.18	1.9	<0.1	1.8	4.9
MAR													
08...	597d	2.7	0.33	3.06	0.030	0.11	1.51	0.14	0.81	14.2	0.2	14.0	6.9
APR													
14...	158d	1.3	<0.04	0.80	0.011	<0.02	0.69	0.07	0.30	5.0	0.2	4.8	5.8
14...	134d	1.6	E.04n	2.85	0.019	0.05	0.53	0.07	0.30	4.1	<0.1	4.0	5.6
MAY													
10...	55	1.1	<0.04	2.65	0.026	0.07	0.57	0.07	0.19	3.0	<0.1	3.0	5.1

**05587455 Mississippi River below Grafton, IL--Continued**

JUN													
14...	166d	1.2	<0.04	5.05d	0.077	0.12	0.38	0.14	0.35	3.5	<0.1	3.4	6.4
JUL													
12...	72	0.96	<0.04	4.79	0.040	0.09	0.60	0.12	0.22	3.8	<0.1	3.7	6.3
12...	66	1.0	<0.04	4.77	0.038	0.09	0.42	0.12	0.22	2.2	<0.1	2.2	7.0
AUG													
09...	146d	1.0	<0.04	2.98	0.088	0.10	0.43	0.14	0.33	3.0	0.2	2.8	5.5
SEP													
20...	<10	0.98	<0.04	0.82	0.027	0.07	0.45	0.11	0.20	3.0	<0.1	3.0	5.2

**SURFACE-WATER QUALITY, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

Date	Pheo- phytin a, phyto- plank- ton, µg/L (62360)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli- form, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal strep- tococci KF MF, col/ 100 mL (31673)	Chloro- phyll a phyto- plank- ton, fluoro, µg/L (70953)	Alum- inum, water, ftrd, µg/L (01106)	Alum- inum, water, unftrd recover- able, µg/L (01105)	Cadmium water, ftrd, µg/L (01025)	Cadmium water, unftrd µg/L (01027)	Copper, water, ftrd, µg/L (01040)	Iron, water, ftrd, µg/L (01046)	Lead, water, ftrd, µg/L (01049)	Lead, water, unftrd recover- able, µg/L (01051)
OCT													
22...	---	1k	6k	13k	---	---	---	---	---	---	---	---	---
NOV													
12...	---	27	46	21	---	---	---	---	---	---	---	---	---
12...	---	33	33	18k	---	---	---	---	---	---	---	---	---
DEC													
01...	---	34	22	18k	---	4	539	E.04n	0.08	2.6	6	E.07n	1.70
JAN													
12...	17.2	11k	42	69	34.6	---	---	---	---	---	---	---	---
FEB													
23...	E8.0	13k	10k	51	E14.1	---	---	---	---	---	---	---	---
MAR													
08...	46.2	60k	170k	500	41.8	2	5,390d	E.03n	0.32	2.4	11	E.07n	10.5
APR													
14...	28.6	21	17k	2k	24.7	---	---	---	---	---	---	---	---
14...	26.9	---	---	---	22.8	---	---	---	---	---	---	---	---
MAY													
10...	25.7	22	58	1k	49.1	3	519	E.02n	0.07	1.6	E4n	E.06n	1.10
JUN													
14...	11.6	200k	350	25k	10.1	---	---	---	---	---	---	---	---
JUL													
12...	18.0	49	31	45	29.7	6	931	<0.04	0.07	1.7	E4n	0.11	1.60
12...	34.0	54	40	58	87.4	3	964	<0.04	0.06	1.9	E5n	<0.08	1.69
AUG													
09...	12.8	120	110	10k	14.4	---	---	---	---	---	---	---	---
SEP													
20...	19.5	23	24	3k	E45.6	---	---	---	---	---	---	---	---

Date	Mangan- ese, water, ftrd, µg/L (01056)	Mercury water, unftrd recover- able, µg/L (71900)	Zinc, water, ftrd, µg/L (01090)	Zinc, water, unftrd recover- able, µg/L (01092)	2,6-Di- ethyl- aniline water ftrd 0.7µ GF µg/L (82660)	CIAT, water, ftrd, µg/L (04040)	Aceto- chlor, water, ftrd, µg/L (49260)	Ala- chlor, water, ftrd, µg/L (46342)	alpha- HCH, water, ftrd, µg/L (34253)	Atra- zine, water, ftrd, µg/L (39632)	Azin- phos- methyl, water, ftrd 0.7µ GF µg/L (82686)	Ben- flur- alin, water, ftrd 0.7µ GF µg/L (82673)	Butyl- ate, water, ftrd, µg/L (04028)
OCT													
22...	---	---	---	---	---	---	---	---	---	---	---	---	---
NOV													
12...	---	---	---	---	---	---	---	---	---	---	---	---	---
12...	---	---	---	---	---	---	---	---	---	---	---	---	---
DEC													
01...	5.8	<0.02	4	9	---	---	---	---	---	---	---	---	---
JAN													
12...	---	---	---	---	E.003t	E.053	0.039	0.009	<0.005	0.219	<0.050	<0.010	<0.002

UPPER MISSISSIPPI RIVER BASIN  
**05587455 Mississippi River below Grafton, IL--Continued**

FEB													
23...	--	--	--	--	<0.006	E.045	0.051	0.020	<0.005	0.152	<0.050	<0.010	<0.002
MAR													
08...	5.2	0.03	1	39	<0.006	E.044	0.049	<0.004	<0.005	0.180	<0.050	<0.010	<0.002
APR													
14...	--	--	--	--	<0.006	E.013	0.063	0.009	<0.005	0.120	<0.050	<0.010	<0.002
14...	--	--	--	--	<0.006	E.018	0.066	0.009	<0.005	0.118	<0.050	<0.010	<0.002
MAY													
10...	3.9	<0.02	1	6	<0.006	E.020	0.099	0.010	<0.005	0.474	<0.050	<0.010	<0.002
JUN													
14...	--	--	--	--	<0.006	E.129	0.304	0.016	<0.005	2.25	<0.050	<0.010	<0.002
JUL													
12...	1.0	<0.02	3	7	<0.006	E.133	0.095	0.011	<0.005	1.15	<0.050	<0.010	<0.002
12...	0.9	<0.02	1	7	<0.006	E.133	0.095	0.011	<0.005	1.15	<0.050	<0.010	<0.002
AUG													
09...	--	--	--	--	<0.006	E.039	0.076	<0.004	<0.005	0.480	<0.050	<0.010	<0.002
SEP													
20...	--	--	--	--	<0.006	E.039	0.021	<0.004	<0.005	0.220	<0.050	<0.010	<0.002

**SURFACE-WATER QUALITY, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

Date	Car- baryl, water, fltrd 0.7µ GF µg/L (82680)	Carbo- furan, water, fltrd 0.7µ GF µg/L (82674)	Chlor- pyrifos water, fltrd, µg/L (38933)	cis- Per- methrin water fltrd 0.7µ GF µg/L (82687)	Cyana- zine, water, fltrd, µg/L (04041)	DCPA, water fltrd 0.7µ GF µg/L (82682)	Diazi- non, water, fltrd, µg/L (39572)	Diel- drin, water, fltrd, µg/L (39381)	Disul- foton, water, fltrd 0.7µ GF µg/L (82677)	EPTC, water, fltrd 0.7µ GF µg/L (82668)	Ethal- flur- alin, water, fltrd 0.7µ GF µg/L (82663)	Etho- prop, water, fltrd 0.7µ GF µg/L (82672)	Fonofos water, fltrd, µg/L (04095)
OCT													
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
12...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003
FEB													
23...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003
MAR													
08...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003
APR													
14...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003
14...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003
MAY													
10...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003
JUN													
14...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003
JUL													
12...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003
12...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003
AUG													
09...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003
SEP													
20...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003

UPPER MISSISSIPPI RIVER BASIN  
05587455 Mississippi River below Grafton, IL--Continued

563

Date	Lindane water, fltrd, µg/L (39341)	Linuron water fltrd 0.7µ GF µg/L (82666)	Mala- thion, water, fltrd, µg/L (39532)	Methyl para- thion, water, fltrd 0.7µ GF µg/L (82667)	Metola- chlor, water, fltrd, µg/L (39415)	Metri- buzin, water, fltrd, µg/L (82630)	Moli- nate, water, fltrd 0.7µ GF µg/L (82671)	Naprop- amide, water, fltrd 0.7µ GF µg/L (82684)	p,p-' DDE, water, fltrd, µg/L (34653)	Para- thion, water, fltrd, µg/L (39542)	Peb- ulate, water, fltrd 0.7µ GF µg/L (82669)	Pendi- meth- alin, water, fltrd 0.7µ GF µg/L (82683)	Phorate water fltrd 0.7µ GF µg/L (82664)
OCT 22...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 12...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 12...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 01...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 12...	<0.004	<0.035	<0.027	<0.006	0.048	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011
FEB 23...	<0.004	<0.035	<0.027	<0.006	0.022	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011
MAR 08...	<0.004	<0.035	<0.027	<0.060	0.139	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011
APR 14...	<0.004	<0.035	<0.027	<0.006	0.088	<0.006	<0.002	<0.007	<0.005	<0.010	<0.004	<0.022	<0.011
APR 14...	<0.004	<0.035	<0.027	<0.006	0.090	<0.006	<0.002	<0.007	<0.005	<0.010	<0.004	<0.022	<0.011
MAY 10...	<0.004	<0.035	<0.027	<0.006	0.109	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011
JUN 14...	<0.004	<0.035	<0.027	<0.006	0.547	<0.010	<0.002	<0.007	<0.005	<0.010	<0.004	<0.022	<0.011
JUL 12...	<0.004	<0.035	<0.027	<0.006	0.220	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011
JUL 12...	<0.004	<0.035	<0.027	<0.006	0.220	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011
AUG 09...	<0.004	<0.035	<0.027	<0.006	0.057	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011
SEP 20...	<0.004	<0.035	<0.027	<0.006	0.040	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011

SURFACE-WATER QUALITY, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Prome- ton, water, fltrd, µg/L (04037)	Pron- amide, water, fltrd 0.7µ GF µg/L (82676)	Propa- chlor, water, fltrd, µg/L (04024)	Pro- panil, water, fltrd 0.7µ GF µg/L (82679)	Propar- gite, water, fltrd 0.7µ GF µg/L (82685)	Sima- zine, water, fltrd, µg/L (04035)	Tebu- thiuron water fltrd 0.7µ GF µg/L (82670)	Terba- cil, water, fltrd 0.7µ GF µg/L (82665)	Terbu- fos, water, fltrd 0.7µ GF µg/L (82675)	Thio- bencarb water fltrd 0.7µ GF µg/L (82681)	Tri- allate, water, fltrd 0.7µ GF µg/L (82678)	Tri- flur- alin, water, fltrd 0.7µ GF µg/L (82661)
OCT 22...	--	--	--	--	--	--	--	--	--	--	--	--
NOV 12...	--	--	--	--	--	--	--	--	--	--	--	--
NOV 12...	--	--	--	--	--	--	--	--	--	--	--	--
DEC 01...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 12...	E.01n	<0.004	<0.010	<0.011	<0.02	0.047	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
FEB 23...	E.01n	<0.004	<0.010	<0.011	<0.02	0.083	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
MAR 08...	0.02	<0.004	<0.010	<0.011	<0.02	0.068	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
APR 14...	E.01n	<0.004	<0.010	<0.011	<0.02	0.021	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
APR 14...	E.01n	<0.004	<0.010	<0.011	<0.02	0.021	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
MAY 10...	E.01n	<0.004	<0.010	<0.011	<0.02	0.023	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
JUN 14...	E.01n	<0.004	<0.010	<0.011	<0.02	0.028	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009

UPPER MISSISSIPPI RIVER BASIN  
**05587455 Mississippi River below Grafton, IL--Continued**

JUL												
12...	E.01n	<0.004	<0.010	<0.011	<0.02	0.023	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
12...	E.01n	<0.004	<0.010	<0.011	<0.02	0.023	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
AUG												
09...	0.03	<0.004	<0.010	<0.011	<0.02	0.014	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
SEP												
20...	E.01n	<0.004	<0.010	<0.011	<0.02	0.018	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009

Remark codes used in this table:

< --- Less than

E --- Estimated value

Value qualifier codes used in this table:

d --- Diluted sample: method hi range exceeded

k --- Counts outside acceptable range

n --- Below the LRL and above the LT-MDL

t --- Below the long-term MDL



**LOCATION.**— Lat 38°49'28", long 89°58'29" (NAD of 1927), in NW1/4SE1/4 sec.3, T.4 N., R.8 W., Madison County, Hydrologic Unit 07140101, on right bank at upstream side of bridge on State Highway 143 in Edwardsville, and at mile 9.4.

**DRAINAGE AREA.**— 212 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: August 1969 to current year.

STAGE: Water years 1994 to current year.

SURFACE-WATER QUALITY

CHEMICAL: Water years 1978–91.

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

**GAGE.**— Water-stage recorder, phone telemeter, and crest-stage gage. Datum of gage is 425.62 ft above NGVD of 1929. Apr. 8, 1983, to July 2, 1985, nonrecording gage at same site and datum.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 8,310 ft<sup>3</sup>/s, May 13, 2002, gage height, 23.42 ft; Maximum gage height, 24.74 ft, Apr. 12, 1979; no flow many days in 1987–88, 1991.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e3.0	e22	47	91	e36	89	174	256	331	14	61	10
2	e2.5	e15	39	80	e50	81	137	181	168	17	32	8.7
3	e2.4	e10	36	74	e89	74	114	112	121	54	22	7.7
4	e2.3	e7.0	37	1480	e94	874	91	74	94	42	20	6.9
5	e2.2	e9.0	39	546	e77	2960	77	60	76	31	17	6.4
6	e2.1	e12	37	308	e66	1070	69	50	65	397	12	6.2
7	e2.0	e14	34	252	e60	301	64	39	56	177	9.9	5.6
8	e2.8	e10	33	167	e53	188	59	32	49	67	8.7	5.2
9	e4.0	e7.0	33	138	e60	148	52	28	50	41	7.9	4.9
10	6.0	e6.4	38	115	78	121	49	25	62	29	7.8	4.6
11	e12	e5.8	40	100	127	105	51	59	75	23	7.3	4.6
12	e4.5	e5.6	33	94	212	89	47	52	66	29	6.5	4.6
13	e4.2	e5.2	30	84	145	78	42	964	54	25	5.9	4.5
14	e11	e5.0	30	77	e120	77	37	5680	97	20	5.7	4.3
15	e8.0	e7.0	30	72	e110	71	35	5300	53	14	5.5	4.7
16	e12	e5.4	33	63	e100	70	33	757	57	11	5.4	8.6
17	e20	e6.4	31	160	e90	69	32	266	144	11	5.4	5.4
18	e10	3580	30	639	e130	65	31	288	115	10	5.3	5.8
19	e8.0	2730	30	250	265	58	29	1140	98	9.3	5.4	4.9
20	e7.0	418	26	165	333	57	29	689	54	9.7	6.0	4.5
21	e6.5	195	26	e115	250	53	30	236	39	9.8	6.6	4.3
22	e6.0	133	26	e90	163	47	27	153	35	11	8.7	4.0
23	e5.5	129	318	e74	160	45	28	117	30	13	7.0	3.7
24	e5.0	241	348	e64	514	45	37	97	25	13	33	3.4
25	e7.0	160	142	e57	255	49	69	418	21	24	34	3.3
26	e6.4	104	95	e54	161	480	57	1680	19	27	213	3.1
27	e5.6	80	75	e64	122	1380	39	3700	17	27	96	3.1
28	e7.0	67	71	e52	102	568	31	5720	16	21	40	3.2
29	e6.4	56	227	e46	93	1120	29	2490	15	22	28	3.2
30	e6.0	51	233	e42	---	458	45	416	14	370	17	3.3
31	e5.6	---	126	e38	---	258	---	778	---	164	13	---
TOTAL	193.0	8096.8	2373	5651	4115	11148	1644	31857	2116	1732.8	753.0	152.7

**05587900 Cahokia Creek at Edwardsville, IL--Continued**

MEAN	6.23	270	76.5	182	142	360	54.8	1028	70.5	55.9	24.3	5.09
MAX	20	3580	348	1480	514	2960	174	5720	331	397	213	10
MIN	2.0	5.0	26	38	36	45	27	25	14	9.3	5.3	3.1
CFSM	0.03	1.27	0.36	0.86	0.67	1.70	0.26	4.85	0.33	0.26	0.11	0.02
IN.	0.03	1.42	0.42	0.99	0.72	1.96	0.29	5.59	0.37	0.30	0.13	0.03

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 – 2004, BY WATER YEAR (WY)**

MEAN	44.8	104	167	157	217	288	310	259	140	54.8	31.1	45.3
MAX	366	649	915	834	782	1120	1251	1511	562	409	186	486
(WY)	1970	1986	1983	1974	1985	1978	1994	2002	1998	2000	2000	1993
MIN	0.82	1.05	1.08	1.21	14.7	12.0	12.0	15.0	2.04	1.18	1.05	0.15
(WY)	1996	1981	1990	1977	2000	2000	2000	1988	1988	1988	1991	1988

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1969 – 2004**

ANNUAL TOTAL	40522.0		69832.3			
ANNUAL MEAN	111		191		151	
HIGHEST ANNUAL MEAN					297	
LOWEST ANNUAL MEAN					32.4	
HIGHEST DAILY MEAN	3580	Nov 18	5720	May 28	7700	May 13 2002
LOWEST DAILY MEAN	2.0	A Oct 7	2.0	A Oct 7	0.00	B
ANNUAL SEVEN-DAY MINIMUM	2.3	Oct 2	2.3	Oct 2	0.00	Aug 29 1987
MAXIMUM PEAK FLOW			6320	May 15	8310	C May 13 2002
MAXIMUM PEAK STAGE			20.03	May 15	24.74	D Apr 12 1979
ANNUAL RUNOFF (CFSM)	0.524		0.900		0.712	
ANNUAL RUNOFF (INCHES)	7.11		12.25		9.68	
10 PERCENT EXCEEDS	207		292		274	
50 PERCENT EXCEEDS	30		42		27	
90 PERCENT EXCEEDS	5.5		5.4		2.2	

A – Estimated, but may have been less during period of estimated discharges in October.

B – Many days in 1987–88, 1991.

C – Gage height, 23.42 ft.

D – Discharge, 8,200 ft<sup>3</sup>/s.

**LOCATION.**— Lat 38°50'30", long 90°01'59" (NAD of 1927), in SE1/4NW1/4 sec.31, T.5 N., R.8 W., Madison County, Hydrologic Unit 07140101, on right bank at upstream side of bridge on State Highway 143, 0.8 mi northeast of Wanda, 2.2 mi upstream from mouth, 5 mi west of Edwardsville, and at mile 2.9.

**DRAINAGE AREA.**— 36.7 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE

DISCHARGE: April 1940 to current year.

STAGE: Water years 1994 to current year.

**REVISED RECORDS.**— WSP 1175: 1941, 1942(M). WDR IL-75-1: Drainage area.

**GAGE.**— Water—stage recorder, phone telemeter, and crest—stage gage. Datum of gage is 429.52 ft above NGVD of 1929. Prior to Oct. 1, 1960, water—stage recorder at site 60 ft upstream at datum 2.00 ft higher. Oct. 1, 1960, to June 23, 1965, nonrecording gage at site 30 ft upstream at present datum. June 24, 1965, to May 10, 1967, nonrecording gage at present site and datum.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE: Maximum discharge, 9,340 ft<sup>3</sup>/s, Aug. 15, 1946, gage height, 18.41 ft, site and datum then in use; no flow for many days in most years.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.54	1.3	5.7	12	e8.0	17	28	72	67	4.4	6.8	1.2
2	0.43	1.6	4.9	12	e17	14	23	30	33	15	4.6	1.1
3	0.44	1.5	5.0	12	e34	13	19	31	24	48	4.2	0.96
4	0.40	1.0	5.1	992	e25	221	15	14	19	18	4.7	0.91
5	0.39	1.0	5.4	272	e19	287	13	9.8	15	15	4.5	0.83
6	0.36	1.7	4.9	52	e15	64	11	7.6	12	193	2.5	0.94
7	0.34	1.9	4.4	e38	e12	39	11	6.0	10	60	2.0	0.89
8	0.36	1.3	4.4	e31	e10	29	9.3	5.2	9.1	14	1.7	0.71
9	0.62	1.0	4.9	e27	e13	24	7.9	4.5	12	8.8	1.5	0.69
10	0.96	0.93	6.5	e24	e24	19	7.7	4.0	16	6.9	1.5	0.74
11	0.59	0.94	5.3	e22	e60	16	8.1	3.7	13	5.9	1.3	0.75
12	0.55	0.97	4.0	e20	e50	13	7.1	3.5	15	5.4	1.2	0.82
13	0.49	0.76	3.8	e20	e28	12	6.7	352	10	5.0	1.2	0.85
14	0.78	0.76	4.3	e21	e25	12	6.6	719	7.7	4.1	1.1	0.97
15	1.1	0.97	4.7	20	e22	11	6.4	102	8.1	3.6	1.0	3.4
16	0.87	1.1	5.5	19	e20	11	6.4	50	292	3.4	0.97	5.6
17	2.6	7.8	4.7	58	e19	11	5.9	37	101	3.2	0.92	1.7
18	1.7	1220	4.4	142	e24	10	5.3	34	34	3.0	0.91	1.4
19	1.3	109	4.5	36	e34	9.2	4.9	185	23	2.8	0.93	1.1
20	1.1	37	3.8	e27	45	9.0	5.4	62	15	2.7	1.8	1.1
21	1.1	24	4.0	e21	32	7.5	5.9	34	13	2.6	1.4	1.0
22	0.93	17	4.3	e18	25	6.9	4.9	26	11	2.4	1.0	1.1
23	0.88	25	70	e16	29	6.9	5.3	20	8.6	2.2	0.95	1.4
24	0.78	44	32	e14	59	6.8	7.4	17	7.5	2.0	5.3	1.3
25	1.2	19	18	e13	30	9.3	21	99	6.6	3.4	23	0.94
26	0.96	13	13	e16	23	117	8.0	317	6.0	3.3	55	0.77
27	0.86	10	11	e12	19	114	5.7	635	5.6	2.5	7.2	0.73
28	1.2	7.8	11	e11	18	82	5.0	481	5.3	2.1	3.5	0.74
29	1.2	7.0	33	e10	17	118	4.5	66	4.9	2.0	2.7	0.77
30	1.2	6.8	22	e9.0	---	48	17	77	4.6	223	1.9	0.79
31	1.2	---	15	e8.5	---	34	---	151	---	24	1.5	---
TOTAL	27.43	1566.13	329.5	2005.5	756.0	1391.6	292.4	3655.3	809.0	691.7	148.78	36.20

## CAHOKIA CREEK BASIN

**05588000 Indian Creek at Wanda, IL--Continued**

MEAN	0.88	52.2	10.6	64.7	26.1	44.9	9.75	118	27.0	22.3	4.80	1.21
MAX	2.6	1220	70	992	60	287	28	719	292	223	55	5.6
MIN	0.34	0.76	3.8	8.5	8.0	6.8	4.5	3.5	4.6	2.0	0.91	0.69
CFSM	0.02	1.42	0.29	1.76	0.71	1.22	0.27	3.21	0.73	0.61	0.13	0.03
IN.	0.03	1.59	0.33	2.03	0.77	1.41	0.30	3.71	0.82	0.70	0.15	0.04

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 – 2004, BY WATER YEAR (WY)**

MEAN	7.50	19.0	26.2	31.0	36.4	41.0	45.9	41.7	30.9	20.0	12.0	7.53
MAX	68.5	223	173	235	117	197	211	243	202	156	305	94.5
(WY)	1970	1947	1968	1950	1951	1978	1944	1943	1957	1969	1946	1993
MIN	0.00	0.00	0.00	0.00	0.09	0.04	0.26	0.07	0.02	0.05	0.01	0.00
(WY)	1954	1954	1954	1956	1954	1954	1954	1954	1955	1966	1953	1953

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1941 – 2004**

ANNUAL TOTAL	6606.38		11709.54			
ANNUAL MEAN	18.1		32.0		26.5	
HIGHEST ANNUAL MEAN					50.7	
LOWEST ANNUAL MEAN					1.39	
HIGHEST DAILY MEAN	1220	Nov 18	1220	Nov 18	4270	Aug 15 1946
LOWEST DAILY MEAN	0.34	Aug 19, Oct. 7	0.34	Oct 7	0.00	A
ANNUAL SEVEN-DAY MINIMUM	0.38	Aug 19	0.39	Oct 2	0.00	Oct 11 1940
MAXIMUM PEAK FLOW			1980	Jan 4	9340	Aug 15 1946
MAXIMUM PEAK STAGE			12.68	Jan 4	18.41 B	Aug 15 1946
INSTANTANEOUS LOW FLOW			0.34	Oct. 6–8		
ANNUAL RUNOFF (CFSM)	0.493		0.872		0.723	
ANNUAL RUNOFF (INCHES)	6.70		11.87		9.82	
10 PERCENT EXCEEDS	29		53		42	
50 PERCENT EXCEEDS	4.6		7.5		3.7	
90 PERCENT EXCEEDS	0.57		0.93		0.02	

A – Many days in most years.

B – Site and datum then in use.

**05588700 Judy's Branch at Oak Lawn Estates at Glen Carbon, IL**

**LOCATION.**— Lat 38°45'40", long 89°56'50" (NAD of 1983), in SE1/4SE1/4SE1/4 sec.26, T.4 N., R.8 W., Madison County, Hydrologic Unit 07140101, on right bank at upstream side of culvert on abandoned roadway near Oak Lawn Estates in Glen Carbon.

**DRAINAGE AREA.**— 0.40 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: May 2000 to June 2004.

STAGE: Water years 2000 to June 2004.

**SURFACE-WATER QUALITY**

SEDIMENT: June 2000 to June 2004.

MISCELLANEOUS: Sediment concentration and particle size, water years 2001–03.

**GAGE.**— Water-stage recorder, automatic water sampler, and phone telemeter. Datum of gage is 500.00 ft above NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 155 ft<sup>3</sup>/s, June 11, 2002, gage height, 19.82 ft, from rating curve extended above 136 ft<sup>3</sup>/s; no flow at times each year.

**SUSPENDED-SEDIMENT CONCENTRATIONS:** Maximum daily, 4,400 mg/L, June 24, 2000; minimum daily, 7 mg/L, July 26, 2000.

**SUSPENDED-SEDIMENT LOADS:** Maximum daily, 336 tons, June 24, 2000; minimum daily, 0.00 tons, many days.

**REMARKS FOR CURRENT YEAR.**— Records poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004****DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.04	0.03	0.21	0.43	e0.70	0.24	0.19	1.2	0.53	---	---	---
2	0.02	0.03	0.20	0.51	e2.2	0.13	0.18	0.36	0.31	---	---	---
3	0.04	0.03	0.17	0.34	e1.4	0.14	0.16	0.18	0.21	---	---	---
4	0.05	0.03	0.22	12	e0.50	1.1	0.13	0.21	0.19	---	---	---
5	0.05	0.02	0.23	1.4	e0.34	1.4	0.14	0.33	0.19	---	---	---
6	0.05	0.05	0.18	e0.80	e0.22	0.33	0.20	0.33	0.20	---	---	---
7	0.05	0.03	0.20	e0.65	e0.15	0.32	0.24	0.28	0.24	---	---	---
8	0.05	0.02	0.20	e0.52	e0.16	0.19	0.20	0.25	0.24	---	---	---
9	0.07	0.03	0.28	e0.42	e0.25	0.13	0.18	0.23	0.22	---	---	---
10	0.03	0.02	0.22	e0.48	e0.50	0.12	0.14	0.20	0.27	---	---	---
11	0.04	0.03	0.12	0.63	1.3	0.12	0.16	0.23	0.30	---	---	---
12	0.04	0.03	0.11	0.46	0.33	0.09	0.13	0.38	0.25	---	---	---
13	0.04	0.02	0.15	0.45	0.33	0.10	0.15	6.4	0.25	---	---	---
14	0.08	0.02	0.19	0.51	0.34	0.15	0.20	11	0.24	---	---	---
15	0.02	0.03	0.24	0.41	0.26	0.12	0.20	1.2	0.22	---	---	---
16	0.06	0.03	0.18	0.45	0.24	0.08	0.25	0.63	1.2	---	---	---
17	0.07	2.4	0.16	1.4	0.33	0.10	0.18	0.48	0.30	---	---	---
18	0.04	15	0.18	1.2	0.47	0.12	0.15	0.78	4.0	---	---	---
19	0.03	0.68	0.16	0.67	0.59	0.11	0.14	3.9	2.2	---	---	---
20	0.03	0.33	0.15	e0.50	0.40	0.15	0.18	0.96	1.3	---	---	---
21	0.02	0.30	0.21	e0.35	0.22	0.07	0.17	0.59	1.2	---	---	---
22	0.02	0.25	0.29	e0.30	0.31	0.07	0.15	0.42	0.83	---	---	---
23	0.02	0.58	0.77	e0.28	0.25	0.09	0.20	0.30	0.35	---	---	---
24	0.02	0.28	0.27	e0.26	0.17	0.14	0.33	0.26	0.29	---	---	---
25	0.03	0.23	0.27	e0.24	0.15	0.14	0.27	5.2	0.19	---	---	---
26	0.03	0.26	0.30	e0.23	0.14	1.1	0.25	11	0.17	---	---	---
27	0.03	0.24	0.34	e0.22	0.14	0.66	0.22	12	0.16	---	---	---
28	0.04	0.12	0.51	e0.21	0.16	1.4	0.27	3.3	0.14	---	---	---
29	0.02	0.13	1.1	e0.20	0.20	0.80	0.26	0.91	0.13	---	---	---
30	0.03	0.19	0.43	e0.19	---	0.35	0.35	1.4	0.09	---	---	---
31	0.03	---	0.33	e0.18	---	0.20	---	0.55	---	---	---	---

## MISSISSIPPI RIVER BASIN

## 05588700 Judy's Branch at Oak Lawn Estates at Glen Carbon, IL--Continued

TOTAL	1.19	21.44	8.57	26.89	12.75	10.26	5.97	65.46	16.41	---	---	---
MEAN	0.04	0.71	0.28	0.87	0.44	0.33	0.20	2.11	0.55	---	---	---
MAX	0.08	15	1.1	12	2.2	1.4	0.35	12	4.0	---	---	---
MIN	0.02	0.02	0.11	0.18	0.14	0.07	0.13	0.18	0.09	---	---	---
CFSM	0.10	1.79	0.69	2.17	1.10	0.83	0.50	5.28	1.37	---	---	---
IN.	0.11	1.99	0.80	2.50	1.19	0.95	0.56	6.09	1.53	---	---	---

e Estimated

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 – 2004, BY WATER YEAR (WY)

MEAN	0.22	0.38	0.51	0.43	0.37	0.35	0.30	1.10	0.79	0.23	0.30	0.09
MAX	0.45	0.71	1.33	0.87	0.55	0.59	0.47	2.11	1.73	0.41	0.59	0.18
(WY)	2001	2004	2002	2004	2001	2002	2002	2004	2000	2001	2001	2000
MIN	0.04	0.17	0.21	0.10	0.17	0.23	0.20	0.18	0.16	0.09	0.07	0.01
(WY)	2004	2002	2003	2003	2003	2003	2004	2001	2001	2003	2002	2002

## SUMMARY STATISTICS

## FOR 2003 CALENDAR YEAR

## WATER YEARS 2000 – 2004

ANNUAL TOTAL	102.24		
ANNUAL MEAN	0.28		0.36
HIGHEST ANNUAL MEAN			0.51 2002
LOWEST ANNUAL MEAN			0.24 2003
HIGHEST DAILY MEAN	15 Nov 18		22 Jun 24 2000
LOWEST DAILY MEAN	0.00 A		0.00 B
ANNUAL SEVEN-DAY MINIMUM	0.00 Sep 19		0.00 Jul 3 2000
MAXIMUM PEAK FLOW			155 C Jun 11 2002
MAXIMUM PEAK STAGE			19.82 Jun 11 2002
ANNUAL RUNOFF (CFSM)	0.700		0.900
ANNUAL RUNOFF (INCHES)	9.51		12.22
10 PERCENT EXCEEDS	0.41		0.65
50 PERCENT EXCEEDS	0.14		0.17
90 PERCENT EXCEEDS	0.02		0.03

A – Several days.

B – At times in 2000, 2001, 2002, and 2003.

C – From rating curve extended above 136 ft<sup>3</sup>/s (contracted opening measurement of peak flow).

**05588700 Judy's Branch at Oak Lawn Estates at Glen Carbon, IL**

**LOCATION.**— Lat 38°45'40", long 89°56'50" (NAD of 1983), in SE1/4SE1/4SE1/4 sec.26, T.4 N., R.8 W., Madison County, Hydrologic Unit 07140101, on right bank at upstream side of culvert on abandoned roadway near Oak Lawn Estates in Glen Carbon.

**DRAINAGE AREA.**— 0.40 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: May 2000 to June 2004.

STAGE: Water years 2000 to June 2004.

**SURFACE-WATER QUALITY**

SEDIMENT: June 2000 to June 2004.

MISCELLANEOUS: Sediment concentration and particle size, water years 2001–03.

**GAGE.**— Water-stage recorder, automatic water sampler, and phone telemeter. Datum of gage is 500.00 ft above NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 155 ft<sup>3</sup>/s, June 11, 2002, gage height, 19.82 ft, from rating curve extended above 136 ft<sup>3</sup>/s; no flow at times each year.

**SUSPENDED-SEDIMENT CONCENTRATIONS:** Maximum daily, 4,400 mg/L, June 24, 2000; minimum daily, 7 mg/L, July 26, 2000.

**SUSPENDED-SEDIMENT LOADS:** Maximum daily, 336 tons, June 24, 2000; minimum daily, 0.00 tons, many days.

**EXTREMES FOR CURRENT YEAR.**—

**SUSPENDED-SEDIMENT CONCENTRATIONS:** Maximum daily, 1,310 mg/L, Nov. 18; minimum daily, 13 mg/L, Oct. 1, 2.

**SUSPENDED-SEDIMENT LOADS:** Maximum daily, 143 tons, May 27; minimum daily, 0.00 tons, many days.

**SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

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	0.04	13	0.00	0.03	21	0.00	0.21	77	0.04
2	0.02	13	0.00	0.03	23	0.00	0.20	63	0.03
3	0.04	14	0.00	0.03	25	0.00	0.17	52	0.02
4	0.05	14	0.00	0.03	27	0.00	0.22	50	0.03
5	0.05	14	0.00	0.02	28	0.00	0.23	48	0.03
6	0.05	14	0.00	0.05	27	0.00	0.18	46	0.02
7	0.05	15	0.00	0.03	27	0.00	0.20	44	0.02
8	0.05	15	0.00	0.02	26	0.00	0.20	42	0.02
9	0.07	18	0.00	0.03	26	0.00	0.28	40	0.03
10	0.03	20	0.00	0.02	25	0.00	0.22	39	0.02
11	0.04	22	0.00	0.03	24	0.00	0.12	42	0.01
12	0.04	24	0.00	0.03	25	0.00	0.11	46	0.01
13	0.04	26	0.00	0.02	29	0.00	0.15	50	0.02
14	0.08	28	0.00	0.02	33	0.00	0.19	53	0.03
15	0.02	30	0.00	0.03	38	0.00	0.24	57	0.04
16	0.06	33	0.00	0.03	42	0.00	0.18	61	0.03
17	0.07	36	0.00	2.4	458	44	0.16	63	0.03
18	0.04	39	0.00	15	1310	124	0.18	60	0.03
19	0.03	41	0.00	0.68	118	0.23	0.16	58	0.03
20	0.03	44	0.00	0.33	100	0.09	0.15	54	0.02
21	0.02	47	0.00	0.30	108	0.09	0.21	52	0.03
22	0.02	48	0.00	0.25	116	0.08	0.29	48	0.04
23	0.02	44	0.00	0.58	124	0.20	0.77	46	0.10
24	0.02	39	0.00	0.28	132	0.10	0.27	43	0.03
25	0.03	34	0.00	0.23	140	0.09	0.27	41	0.03
26	0.03	29	0.00	0.26	144	0.10	0.30	39	0.03

## MISSISSIPPI RIVER BASIN

## 05588700 Judy's Branch at Oak Lawn Estates at Glen Carbon, IL--Continued

27	0.03	25	0.00	0.24	131	0.08	0.34	37	0.03
28	0.04	20	0.00	0.12	118	0.04	0.51	68	0.19
29	0.02	17	0.00	0.13	104	0.04	1.1	229	0.83
30	0.03	18	0.00	0.19	90	0.05	0.43	85	0.10
31	0.03	20	0.00	---	---	---	0.33	51	0.05
TOTAL	1.19	---	0.00	21.44	---	169.19	8.57	---	1.97

JANUARY			FEBRUARY			MARCH			
1	0.43	53	0.06	e0.70	159	0.75	0.24	43	0.03
2	0.51	58	0.08	e2.2	424	5.2	0.13	40	0.01
3	0.34	63	0.06	e1.4	338	2.4	0.14	38	0.01
4	12	1050	55	e0.50	167	0.28	1.1	126	0.58
5	1.4	139	0.58	e0.34	123	0.17	1.4	125	0.58
6	e0.80	100	0.23	e0.22	104	0.08	0.33	55	0.05
7	e0.65	87	0.19	e0.15	90	0.05	0.32	50	0.05
8	e0.52	80	0.17	e0.16	76	0.04	0.19	41	0.02
9	e0.42	74	0.12	e0.25	104	0.16	0.13	39	0.01
10	e0.48	70	0.10	e0.50	104	0.29	0.12	37	0.01
11	0.63	68	0.11	1.3	174	1.2	0.12	36	0.01
12	0.46	65	0.08	0.33	71	0.06	0.09	34	0.00
13	0.45	63	0.08	0.33	71	0.07	0.10	33	0.00
14	0.51	60	0.08	0.34	66	0.07	0.15	34	0.01
15	0.41	57	0.06	0.26	61	0.04	0.12	35	0.01
16	0.45	55	0.07	0.24	73	0.05	0.08	36	0.00
17	1.4	629	3.1	0.33	85	0.08	0.10	36	0.01
18	1.2	525	1.9	0.47	96	0.12	0.12	37	0.01
19	0.67	300	0.54	0.59	108	0.17	0.11	38	0.01
20	e0.50	217	0.54	0.40	162	0.17	0.15	39	0.02
21	e0.35	172	0.23	0.22	131	0.08	0.07	39	0.00
22	e0.30	136	0.14	0.31	123	0.10	0.07	40	0.00
23	e0.28	124	0.17	0.25	101	0.07	0.09	41	0.01
24	e0.26	117	0.11	0.17	60	0.03	0.14	42	0.02
25	e0.24	109	0.11	0.15	57	0.02	0.14	42	0.02
26	e0.23	102	0.10	0.14	54	0.02	1.1	124	0.83
27	e0.22	94	0.08	0.14	51	0.02	0.66	71	0.13
28	e0.21	101	0.20	0.16	48	0.02	1.4	152	1.1
29	e0.20	96	0.13	0.20	45	0.03	0.80	150	0.35
30	e0.19	166	0.75	---	---	---	0.35	82	0.08
31	e0.18	167	0.83	---	---	---	0.20	64	0.03
TOTAL	26.89	---	66.00	12.75	---	11.84	10.26	---	4.00

APRIL			MAY			JUNE			
1	0.19	58	0.03	1.2	159	1.0	0.53	136	0.20
2	0.18	54	0.03	0.36	104	0.11	0.31	75	0.06
3	0.16	50	0.02	0.18	77	0.04	0.21	65	0.04
4	0.13	46	0.02	0.21	72	0.04	0.19	59	0.03
5	0.14	42	0.02	0.33	70	0.06	0.19	53	0.03
6	0.20	46	0.03	0.33	69	0.06	0.20	52	0.03
7	0.24	44	0.03	0.28	67	0.05	0.24	52	0.03
8	0.20	51	0.03	0.25	66	0.04	0.24	52	0.03
9	0.18	58	0.03	0.23	64	0.04	0.22	52	0.03
10	0.14	64	0.02	0.20	63	0.03	0.27	52	0.04



11	0.16	71	0.03	0.23	62	0.04	0.30	52	0.04
12	0.13	77	0.03	0.38	79	0.20	0.25	52	0.04
13	0.15	83	0.03	6.4	589	58	0.25	52	0.03
14	0.20	83	0.05	11	907	55	0.24	52	0.03
15	0.20	83	0.05	1.2	197	0.69	0.22	52	0.03
16	0.25	83	0.06	0.63	38	0.07	1.2	182	7.0
17	0.18	83	0.04	0.48	47	0.06	0.30	64	0.05
18	0.15	84	0.03	0.78	156	2.3	4.0	481	35
19	0.14	84	0.03	3.9	683	31	2.2	207	1.3
20	0.18	84	0.04	0.96	228	0.61	1.3	133	0.46
21	0.17	84	0.04	0.59	128	0.20	1.2	119	0.39
22	0.15	84	0.03	0.42	102	0.11	0.83	114	0.26
23	0.20	84	0.05	0.30	85	0.07	0.35	109	0.10
24	0.33	84	0.07	0.26	69	0.05	0.29	105	0.08
25	0.27	84	0.06	5.2	412	39	0.19	100	0.05
26	0.25	85	0.06	11	757	83	0.17	95	0.04
27	0.22	85	0.05	12	1040	143	0.16	90	0.04
28	0.27	85	0.06	3.3	161	1.9	0.14	86	0.03
29	0.26	85	0.06	0.91	104	0.25	0.13	81	0.03
30	0.35	101	0.15	1.4	209	5.3	0.09	76	0.02
31	---	---	---	0.55	212	0.31	---	---	---
TOTAL	5.97	---	1.28	65.46	---	422.63	16.41	---	45.54

[illegible]

05588700 Judy's Branch at Oak Lawn Estates at Glen Carbon, IL--Continued

31	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---

e Estimated

**LOCATION.**— Lat 38°45'39", long 89°57'27" (NAD of 1983), in SE1/4SE1/4SW1/4 sec.26, T.4 N., R.8 W., Madison County, Hydrologic Unit 07140101, on left bank at downstream side of culvert on Ronald J. Foster Glen Carbon Heritage Trail in Glen Carbon.

**DRAINAGE AREA.**— 0.23 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE

DISCHARGE: June 2000 to June 2004.

STAGE: Water years 2000 to June 2004.

SURFACE–WATER QUALITY

SEDIMENT: June 2000 to June 2004.

MISCELLANEOUS: Sediment concentration and particle size, water years 2001–03.

PRECIPITATION: June 2000 to current year.

**GAGE.**— Water–stage recorder, phone telemeter, rain gage, automatic water sampler, and crest–stage gage. Datum of gage is 490.00 ft above NGVD of 1929.

**REMARKS.**—Collection, computation and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Maximum discharge, 107 ft<sup>3</sup>/s, June 11, 2002, gage height, 11.64 ft; no flow many days in most years.

SUSPENDED–SEDIMENT CONCENTRATIONS: Maximum daily, 1,610 mg/L, May 13, 2004; minimum daily, 11 mg/L, July 25, 2000.

SUSPENDED–SEDIMENT LOADS: Maximum daily, 108 tons, Aug. 24, 2001; minimum daily, 0.00 tons, many days.

PRECIPITATION: Maximum daily total, 4.28 in., Aug. 24, 2001.

**REMARKS FOR CURRENT YEAR.**— Records poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.01	0.17	0.08	0.29	e0.04	0.07	0.23	2.4	0.33	---	---	---
2	0.01	0.08	0.08	0.36	e0.60	0.06	0.22	0.33	0.17	---	---	---
3	0.01	0.03	0.13	0.58	e0.20	0.14	0.17	0.17	0.13	---	---	---
4	0.01	0.02	0.29	7.0	e0.10	1.9	0.14	0.10	0.11	---	---	---
5	0.00	0.04	0.30	0.92	e0.13	1.0	0.13	0.09	0.11	---	---	---
6	0.00	0.35	0.16	0.22	e0.14	0.27	0.13	0.07	0.13	---	---	---
7	0.00	0.02	0.13	0.19	e0.08	0.26	0.13	0.06	0.14	---	---	---
8	0.00	0.01	0.16	0.22	e0.06	0.37	0.12	0.05	0.09	---	---	---
9	0.11	0.01	0.31	0.20	e0.09	0.39	0.24	0.05	0.44	---	---	---
10	0.06	0.01	0.48	0.16	e0.15	0.39	0.24	0.04	0.20	---	---	---
11	0.04	0.00	0.29	0.16	0.31	0.30	0.20	0.05	0.13	---	---	---
12	0.04	0.01	0.20	0.15	0.16	0.09	0.09	0.44	0.49	---	---	---
13	0.03	0.00	0.22	0.14	0.13	0.09	0.08	4.1	0.13	---	---	---
14	0.29	0.00	0.29	0.14	0.13	0.17	0.08	4.1	0.11	---	---	---
15	0.04	0.11	0.45	0.12	0.11	0.10	0.07	0.35	0.12	---	---	---
16	0.15	0.01	0.44	0.15	0.09	0.15	0.07	0.21	1.6	---	---	---
17	0.60	1.4	0.32	1.5	0.11	0.13	0.08	0.16	0.84	---	---	---
18	0.04	7.1	0.38	0.70	0.16	0.09	0.06	0.93	1.8	---	---	---
19	0.03	0.36	0.37	0.25	0.22	0.08	0.06	1.8	0.26	---	---	---
20	0.02	0.19	0.30	0.19	0.22	0.08	0.26	0.36	0.07	---	---	---
21	0.01	0.13	0.32	e0.16	0.14	0.06	0.08	0.19	0.10	---	---	---
22	0.00	0.11	0.41	e0.14	0.10	0.06	0.10	0.12	0.07	---	---	---
23	0.00	1.0	2.1	e0.16	0.12	0.06	0.10	0.11	0.05	---	---	---
24	0.00	0.42	0.44	e0.17	0.11	0.08	0.57	0.09	0.04	---	---	---
25	0.00	0.17	0.27	e0.13	0.09	0.18	0.37	3.2	0.04	---	---	---
26	0.00	0.13	0.25	e0.09	0.08	2.2	0.10	4.5	0.03	---	---	---
27	0.00	0.11	0.24	e0.07	0.08	0.63	0.07	8.0	0.02	---	---	---
28	0.02	0.09	0.46	e0.06	0.07	1.2	0.07	3.2	0.03	---	---	---

## MISSISSIPPI RIVER BASIN

**05588710 Judy's Branch Tributary at Glen Carbon, IL--Continued**

<b>29</b>	0.02	0.08	1.9	e0.05	0.07	0.60	0.06	0.35	0.01	---	---	---
<b>30</b>	0.01	0.08	0.51	e0.04	---	0.70	0.90	0.75	0.01	---	---	---
<b>31</b>	0.00	---	0.35	e0.03	---	0.29	---	0.40	---	---	---	---
TOTAL	1.55	12.24	12.63	14.74	4.09	12.19	5.22	36.77	7.80	---	---	---
MEAN	0.05	0.41	0.41	0.48	0.14	0.39	0.17	1.19	0.26	---	---	---
MAX	0.60	7.1	2.1	7.0	0.60	2.2	0.90	8.0	1.8	---	---	---
MIN	0.00	0.00	0.08	0.03	0.04	0.06	0.06	0.04	0.01	---	---	---
CFSM	0.22	1.77	1.77	2.07	0.61	1.71	0.76	5.16	1.13	---	---	---
IN.	0.25	1.98	2.04	2.38	0.66	1.97	0.84	5.95	1.26	---	---	---

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 – 2004, BY WATER YEAR (WY)**

MEAN	0.25	0.29	0.29	0.26	0.26	0.37	0.35	0.66	0.39	0.24	0.27	0.14
MAX	0.38	0.44	0.46	0.48	0.43	0.51	0.57	1.19	0.69	0.46	0.46	0.19
(WY)	2001	2001	2002	2004	2001	2002	2002	2004	2003	2001	2000	2003
MIN	0.05	0.13	0.12	0.07	0.14	0.21	0.17	0.20	0.20	0.01	0.09	0.09
(WY)	2004	2003	2001	2003	2004	2001	2004	2001	2001	2002	2002	2002

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****WATER YEARS 2000 – 2004**

ANNUAL TOTAL	104.55	
ANNUAL MEAN	0.29	0.29
HIGHEST ANNUAL MEAN		0.34 2002
LOWEST ANNUAL MEAN		0.26 2003
HIGHEST DAILY MEAN	7.1 Nov 18	10 Aug 24 2001
LOWEST DAILY MEAN	0.00 A	0.00 B
ANNUAL SEVEN-DAY MINIMUM	0.00 Aug 15	0.00 Jul 7 2001
MAXIMUM PEAK FLOW		107 Jun 11 2002
MAXIMUM PEAK STAGE		11.64 Jun 11 2002
ANNUAL RUNOFF (CFSM)	1.25	1.28
ANNUAL RUNOFF (INCHES)	16.91	17.42
10 PERCENT EXCEEDS	0.62	0.67
50 PERCENT EXCEEDS	0.12	0.10
90 PERCENT EXCEEDS	0.00	0.00

A – Many days.

B – Many days in most years.

**LOCATION.**— Lat 38°45'39", long 89°57'27" (NAD of 1983), in SE1/4SE1/4SW1/4 sec.26, T.4 N., R.8 W., Madison County, Hydrologic Unit 07140101, on left bank at downstream side of culvert on Ronald J. Foster Glen Carbon Heritage Trail in Glen Carbon.

**DRAINAGE AREA.**— 0.23 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE

DISCHARGE: June 2000 to June 2004.

STAGE: Water years 2000 to June 2004.

SURFACE–WATER QUALITY

SEDIMENT: June 2000 to June 2004.

MISCELLANEOUS: Sediment concentration and particle size, water years 2001–03.

PRECIPITATION: June 2000 to current year.

**GAGE.**— Water–stage recorder, phone telemeter, rain gage, automatic water sampler, and crest–stage gage. Datum of gage is 490.00 ft above NGVD of 1929.

**REMARKS.**—Collection, computation and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Maximum discharge, 107 ft<sup>3</sup>/s, June 11, 2002, gage height, 11.64 ft; no flow many days in most years.

SUSPENDED–SEDIMENT CONCENTRATIONS: Maximum daily, 1,610 mg/L, May 13, 2004; minimum daily, 11 mg/L, July 25, 2000.

SUSPENDED–SEDIMENT LOADS: Maximum daily, 108 tons, Aug. 24, 2001; minimum daily, 0.00 tons, many days.

PRECIPITATION: Maximum daily total, 4.28 in., Aug. 24, 2001.

**EXTREMES FOR CURRENT YEAR.**—

SUSPENDED–SEDIMENT CONCENTRATIONS: Maximum daily, 1,610 mg/L, May 13; minimum daily, 14 mg/L, Feb. 22.

SUSPENDED–SEDIMENT LOADS: Maximum daily, 72 tons, May 13; minimum daily, 0.00 tons, many days.

**SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

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	0.01	86	0.00	0.17	68	0.05	0.08	28	0.00
2	0.01	82	0.00	0.08	61	0.02	0.08	29	0.00
3	0.01	76	0.00	0.03	42	0.00	0.13	30	0.01
4	0.01	70	0.00	0.02	28	0.00	0.29	28	0.02
5	0.00	64	0.00	0.04	21	0.00	0.30	27	0.02
6	0.00	58	0.00	0.35	74	0.09	0.16	26	0.01
7	0.00	52	0.00	0.02	59	0.00	0.13	25	0.00
8	0.00	48	0.00	0.01	52	0.00	0.16	23	0.00
9	0.11	59	0.03	0.01	44	0.00	0.31	22	0.02
10	0.06	66	0.01	0.01	36	0.00	0.48	21	0.03
11	0.04	64	0.00	0.00	28	0.00	0.29	23	0.02
12	0.04	61	0.00	0.01	26	0.00	0.20	24	0.01
13	0.03	59	0.00	0.00	42	0.00	0.22	25	0.01
14	0.29	59	0.07	0.00	60	0.00	0.29	26	0.02
15	0.04	25	0.00	0.11	77	0.02	0.45	28	0.03
16	0.15	37	0.03	0.01	94	0.00	0.44	29	0.03
17	0.60	59	0.16	1.4	703	27	0.32	30	0.03
18	0.04	34	0.00	7.1	340	14	0.38	28	0.03
19	0.03	32	0.00	0.36	29	0.03	0.37	26	0.03
20	0.02	31	0.00	0.19	19	0.00	0.30	24	0.02
21	0.01	29	0.00	0.13	23	0.00	0.32	23	0.02
22	0.00	28	0.00	0.11	27	0.00	0.41	40	0.10

MISSISSIPPI RIVER BASIN  
**05588710 Judy's Branch Tributary at Glen Carbon, IL--Continued**

23	0.00	26	0.00	1.0	89	0.46	2.1	259	2.1
24	0.00	25	0.00	0.42	60	0.08	0.44	37	0.05
25	0.00	24	0.00	0.17	29	0.01	0.27	30	0.02
26	0.00	23	0.00	0.13	25	0.00	0.25	31	0.02
27	0.00	21	0.00	0.11	25	0.00	0.24	32	0.02
28	0.02	20	0.00	0.09	26	0.00	0.46	44	0.08
29	0.02	21	0.00	0.08	27	0.00	1.9	163	1.0
30	0.01	29	0.00	0.08	28	0.00	0.51	45	0.06
31	0.00	38	0.00	---	---	---	0.35	24	0.02
TOTAL	1.55	---	0.30	12.24	---	41.76	12.63	---	3.83

JANUARY				FEBRUARY				MARCH			
1	0.29	23	0.02	e0.04	27	0.00	0.07	22	0.00		
2	0.36	24	0.02	e0.60	59	0.25	0.06	24	0.00		
3	0.58	73	0.12	e0.20	35	0.03	0.14	31	0.01		
4	7.0	755	23	e0.10	35	0.01	1.9	156	1.4		
5	0.92	45	0.11	e0.13	38	0.02	1.0	81	0.29		
6	0.22	45	0.03	e0.14	41	0.02	0.27	50	0.04		
7	0.19	44	0.02	e0.08	44	0.01	0.26	50	0.04		
8	0.22	44	0.03	e0.06	48	0.01	0.37	51	0.05		
9	0.20	43	0.02	e0.09	51	0.02	0.39	52	0.05		
10	0.16	42	0.02	e0.15	44	0.03	0.39	52	0.05		
11	0.16	42	0.02	0.31	42	0.04	0.30	53	0.04		
12	0.15	41	0.02	0.16	34	0.02	0.09	54	0.01		
13	0.14	41	0.02	0.13	32	0.01	0.09	55	0.01		
14	0.14	40	0.02	0.13	30	0.01	0.17	55	0.03		
15	0.12	40	0.01	0.11	28	0.00	0.10	56	0.01		
16	0.15	39	0.02	0.09	26	0.00	0.15	57	0.02		
17	1.5	113	0.57	0.11	24	0.00	0.13	57	0.02		
18	0.70	56	0.12	0.16	22	0.00	0.09	58	0.01		
19	0.25	47	0.03	0.22	20	0.01	0.08	59	0.01		
20	0.19	45	0.02	0.22	18	0.01	0.08	60	0.01		
21	e0.16	44	0.02	0.14	16	0.00	0.06	62	0.01		
22	e0.14	42	0.02	0.10	14	0.00	0.06	64	0.01		
23	e0.16	41	0.02	0.12	16	0.00	0.06	65	0.01		
24	e0.17	39	0.02	0.11	17	0.00	0.08	67	0.01		
25	e0.13	38	0.02	0.09	15	0.00	0.18	69	0.03		
26	e0.09	36	0.01	0.08	17	0.00	2.2	177	1.9		
27	e0.07	35	0.00	0.08	18	0.00	0.63	111	0.19		
28	e0.06	33	0.00	0.07	20	0.00	1.2	118	0.46		
29	e0.05	32	0.00	0.07	21	0.00	0.60	99	0.16		
30	e0.04	30	0.00	---	---	---	0.70	117	0.24		
31	e0.03	29	0.00	---	---	---	0.29	98	0.08		
TOTAL	14.74	---	24.35	4.09	---	0.50	12.19	---	5.20		

APRIL				MAY				JUNE			
1	0.23	96	0.06	2.4	108	1.8	0.33	71	0.07		
2	0.22	93	0.06	0.33	52	0.05	0.17	58	0.03		
3	0.17	91	0.04	0.17	51	0.02	0.13	57	0.02		
4	0.14	88	0.03	0.10	39	0.01	0.11	56	0.02		
5	0.13	86	0.03	0.09	29	0.00	0.11	55	0.02		
6	0.13	84	0.03	0.07	28	0.00	0.13	53	0.02		

7	0.13	87	0.03	0.06	28	0.00	0.14	52	0.02
8	0.12	89	0.03	0.05	29	0.00	0.09	51	0.01
9	0.24	91	0.06	0.05	29	0.00	0.44	71	0.10
10	0.24	94	0.06	0.04	29	0.00	0.20	66	0.04
11	0.20	96	0.05	0.05	30	0.00	0.13	53	0.02
12	0.09	98	0.02	0.44	67	0.17	0.49	84	0.15
13	0.08	98	0.02	4.1	1610	72	0.13	59	0.02
14	0.08	88	0.02	4.1	300	5.9	0.11	53	0.02
15	0.07	78	0.02	0.35	31	0.03	0.12	42	0.01
16	0.07	68	0.01	0.21	30	0.02	1.6	91	1.0
17	0.08	58	0.01	0.16	29	0.01	0.84	43	0.14
18	0.06	48	0.00	0.93	50	0.27	1.8	143	2.8
19	0.06	38	0.00	1.8	167	1.1	0.26	55	0.05
20	0.26	79	0.08	0.36	136	0.13	0.07	46	0.00
21	0.08	44	0.00	0.19	106	0.05	0.10	46	0.01
22	0.10	48	0.02	0.12	86	0.03	0.07	47	0.00
23	0.10	37	0.01	0.11	67	0.02	0.05	47	0.00
24	0.57	113	0.25	0.09	47	0.01	0.04	48	0.00
25	0.37	61	0.07	3.2	148	4.3	0.04	48	0.00
26	0.10	50	0.01	4.5	538	23	0.03	49	0.00
27	0.07	46	0.00	8.0	681	62	0.02	49	0.00
28	0.07	43	0.00	3.2	248	3.2	0.03	50	0.00
29	0.06	39	0.00	0.35	93	0.09	0.01	50	0.00
30	0.90	71	0.37	0.75	92	0.32	0.01	51	0.00
31	---	---	---	0.40	60	0.07	---	---	---
TOTAL	5.22	---	1.39	36.77	---	174.60	7.80	---	4.57

[illegible]

[illegible]



**LOCATION.**— Lat 38°44'27", long 90°00'07" (NAD of 1983), in NW1/4SW1/4NW1/4 sec.4, T.3 N., R.8 W., Madison County, Hydrologic Unit 07140101, on right bank at upstream side of high bank of stream on Illinois Route 157 in Glen Carbon.

**DRAINAGE AREA.**— 8.33 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: May 2000 to current year.

STAGE: Water years 2000 to current year.

**SURFACE-WATER QUALITY**

SEDIMENT: June 2000 to current year

MISCELLANEOUS: Sediment concentration and particle size, water years 2001–04.

**GAGE.**— Water–stage recorder, phone telemeter, automatic water sampler, and crest–stage gage. Datum of gage is 410.00 ft above NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 2,540 ft<sup>3</sup>/s, Aug. 24, 2001, gage height, 29.04 ft; based on slope/area measurement of peak flow; no flow at times in 2001 and 2002.

**SUSPENDED-SEDIMENT CONCENTRATIONS:** Maximum daily, 5,390 mg/L, Nov. 18, 2003; minimum daily, 19 mg/L, July 24–26, 2000.

**SUSPENDED-SEDIMENT LOADS:** Maximum daily, 17,000 tons, Aug. 24, 2001; minimum daily, 0.00 tons, many days.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.45	5.5	3.1	5.3	e3.3	4.6	9.6	40	8.6	1.4	4.3	1.3
2	0.30	3.8	3.0	5.4	e10	3.9	8.5	9.8	6.1	15	4.5	1.2
3	0.30	1.2	3.2	5.6	e7.5	5.6	7.7	7.0	5.1	17	4.4	1.1
4	0.40	0.96	4.3	183	e6.0	38	6.9	5.7	4.5	4.3	8.1	1.0
5	0.40	1.7	4.6	21	e5.2	26	6.6	5.0	4.3	11	4.8	1.1
6	0.35	9.8	3.3	e11	e4.6	11	6.6	4.4	4.0	13	2.3	1.0
7	0.37	1.7	3.1	e8.0	e4.2	8.9	6.4	3.9	3.7	4.1	2.3	0.96
8	0.38	1.1	3.1	e7.0	e4.0	7.7	5.8	3.3	3.3	3.0	1.9	0.81
9	2.6	1.0	4.1	e6.0	e5.0	7.0	5.6	3.0	5.5	2.6	1.5	0.86
10	2.2	1.1	5.0	e5.5	e8.0	6.3	5.7	2.7	4.7	2.2	1.2	0.83
11	1.5	1.3	2.9	e5.6	13	6.0	5.7	3.0	3.7	2.1	0.97	0.82
12	1.5	1.1	2.5	5.7	7.5	5.4	4.7	6.0	5.9	1.7	0.96	0.79
13	1.5	1.0	2.8	5.3	5.9	5.3	4.5	113	3.4	1.6	0.83	0.77
14	8.6	1.7	3.4	5.2	5.9	6.4	4.4	140	2.6	1.2	0.84	0.79
15	3.2	6.2	3.7	4.7	5.4	5.5	4.4	17	2.4	1.1	0.78	0.82
16	4.0	2.5	3.7	4.7	6.3	5.8	4.6	9.7	15	1.1	0.67	2.6
17	13	22	2.9	24	5.2	5.4	4.4	7.6	9.5	1.0	0.67	0.87
18	1.1	304	3.2	16	6.3	5.0	4.2	15	31	0.95	0.69	0.50
19	0.72	16	2.8	8.7	7.6	4.7	4.0	41	8.3	0.89	0.63	0.49
20	e0.62	9.0	2.5	e6.4	8.2	4.9	5.6	12	4.2	0.91	2.5	0.45
21	e0.56	6.7	2.7	e5.8	6.0	4.2	4.4	8.1	4.5	0.85	1.2	0.43
22	e0.52	5.6	3.2	e5.4	5.4	4.5	4.5	6.4	3.5	0.88	0.69	0.50
23	e0.47	18	23	e5.0	5.7	4.8	4.6	5.5	2.9	1.5	0.75	0.53
24	e0.42	8.8	6.1	e4.6	5.4	4.8	10	4.9	2.4	0.81	20	0.56
25	e0.55	5.6	4.8	e4.4	5.0	5.8	8.2	73	2.0	7.3	24	0.56
26	e0.60	4.9	4.3	e4.2	4.5	42	4.9	166	1.8	1.6	24	0.39
27	e0.52	4.4	4.1	e4.0	4.4	18	4.0	212	1.6	1.0	4.2	0.31
28	e0.90	3.7	5.7	e3.8	4.2	28	4.1	54	1.6	0.86	3.0	0.30
29	e0.75	3.5	23	e3.7	4.4	19	3.6	16	1.4	0.85	2.7	0.30
30	e0.60	3.6	7.1	e3.6	---	17	12	16	1.4	83	1.9	0.33
31	e0.80	---	5.8	e3.4	---	11	---	10	---	6.8	1.5	---

## MISSISSIPPI RIVER BASIN

**05588720 Judy's Branch at Route 157 at Glen Carbon, IL--Continued**

TOTAL	50.18	457.46	157.0	392.0	174.1	332.5	176.2	1021.0	158.9	191.60	128.78	23.27
MEAN	1.62	15.2	5.06	12.6	6.00	10.7	5.87	32.9	5.30	6.18	4.15	0.78
MAX	13	304	23	183	13	42	12	212	31	83	24	2.6
MIN	0.30	0.96	2.5	3.4	3.3	3.9	3.6	2.7	1.4	0.81	0.63	0.30
CFSM	0.19	1.83	0.61	1.52	0.72	1.29	0.71	3.95	0.64	0.74	0.50	0.09
IN.	0.22	2.04	0.70	1.75	0.78	1.48	0.79	4.56	0.71	0.86	0.58	0.10

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 – 2004, BY WATER YEAR (WY)**

MEAN	5.21	8.17	5.88	6.24	7.16	8.30	7.38	17.9	11.7	6.29	6.14	2.09
MAX	8.59	15.2	13.5	12.6	11.5	10.7	12.0	32.9	17.6	13.7	13.9	3.36
(WY)	2002	2004	2002	2004	2001	2004	2002	2004	2003	2001	2001	2000
MIN	1.62	2.37	2.05	1.10	4.41	5.15	5.30	3.14	3.18	0.41	1.15	0.78
(WY)	2004	2003	2003	2003	2003	2001	2003	2001	2001	2002	2002	2004

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 2000 – 2004**

ANNUAL TOTAL	2246.22		3262.99			
ANNUAL MEAN	6.15		8.92		7.43	
HIGHEST ANNUAL MEAN					8.92	
LOWEST ANNUAL MEAN					4.94	
HIGHEST DAILY MEAN	304	Nov 18	304	Nov 18	358	Aug 24 2001
LOWEST DAILY MEAN	0.06	Aug 25,26	0.30	A	0.00	B
ANNUAL SEVEN-DAY MINIMUM	0.12	Aug 20	0.36	Oct 2	0.00	Sep 3 2002
MAXIMUM PEAK FLOW			1700	May 27	2540	C Aug 24 2001
MAXIMUM PEAK STAGE			27.36	May 27	29.04	Aug 24 2001
INSTANTANEOUS LOW FLOW			0.23	Sep 29		
ANNUAL RUNOFF (CFSM)	0.739		1.07		0.892	
ANNUAL RUNOFF (INCHES)	10.03		14.57		12.12	
10 PERCENT EXCEEDS	12		15		14	
50 PERCENT EXCEEDS	2.7		4.3		3.1	
90 PERCENT EXCEEDS	0.36		0.74		0.34	

A – Oct. 2, 3, Sept. 28, 29.

B – At times in 2001 and 2002.

C – Based on slope/area measurement of peak flow.

**LOCATION.**— Lat 38°44'27", long 90°00'07" (NAD of 1983), in NW1/4SW1/4NW1/4 sec.4, T.3 N., R.8 W., Madison County, Hydrologic Unit 07140101, on right bank at upstream side of high bank of stream on Illinois Route 157 in Glen Carbon.

**DRAINAGE AREA.**— 8.33 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: May 2000 to current year.

STAGE: Water years 2000 to current year.

SURFACE-WATER QUALITY

SEDIMENT: June 2000 to current year

MISCELLANEOUS: Sediment concentration and particle size, water years 2001–04.

**GAGE.**— Water-stage recorder, phone telemeter, automatic water sampler, and crest-stage gage. Datum of gage is 410.00 ft above NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 2,540 ft<sup>3</sup>/s, Aug. 24, 2001, gage height, 29.04 ft; based on slope/area measurement of peak flow; no flow at times in 2001 and 2002.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily, 5,390 mg/L, Nov. 18, 2003; minimum daily, 19 mg/L, July 24–26, 2000.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 17,000 tons, Aug. 24, 2001; minimum daily, 0.00 tons, many days.

**EXTREMES FOR CURRENT YEAR.**—

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily, 5,390mg/L, Nov. 18; minimum daily, 23 mg/L, Oct. 1, 2.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 7,000 tons, Nov. 18; minimum daily, 0.02 tons, Oct. 2.

**SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

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	0.45	23	0.03	5.5	72	1.1	3.1	140	1.2
2	0.30	23	0.02	3.8	70	0.71	3.0	127	1.0
3	0.30	32	0.03	1.2	67	0.21	3.2	117	1.0
4	0.40	41	0.04	0.96	65	0.17	4.3	112	1.3
5	0.40	49	0.05	1.7	65	0.30	4.6	109	1.3
6	0.35	58	0.05	9.8	71	1.9	3.3	105	0.93
7	0.37	67	0.07	1.7	78	0.36	3.1	101	0.85
8	0.38	74	0.08	1.1	86	0.26	3.1	97	0.81
9	2.6	75	0.53	1.0	93	0.25	4.1	93	1.0
10	2.2	75	0.45	1.1	100	0.29	5.0	90	1.2
11	1.5	76	0.31	1.3	107	0.37	2.9	88	0.69
12	1.5	76	0.32	1.1	111	0.34	2.5	87	0.59
13	1.5	77	0.31	1.0	103	0.29	2.8	85	0.64
14	8.6	78	1.8	1.7	95	0.43	3.4	83	0.77
15	3.2	83	0.71	6.2	86	1.4	3.7	82	0.82
16	4.0	107	1.2	2.5	78	0.53	3.7	80	0.79
17	13	131	4.4	22	1680	720	2.9	79	0.61
18	1.1	156	0.44	304	5390	7000	3.2	77	0.66
19	0.72	180	0.35	16	312	16	2.8	76	0.57
20	e0.62	205	0.38	9.0	92	2.2	2.5	74	0.49
21	e0.56	230	0.49	6.7	71	1.3	2.7	72	0.54
22	e0.52	243	0.52	5.6	64	0.98	3.2	73	0.69
23	e0.47	222	0.51	18	383	38	2.3	326	33
24	e0.42	197	0.65	8.8	113	3.0	6.1	370	6.1
25	e0.55	173	0.84	5.6	149	2.2	4.8	67	0.86

## MISSISSIPPI RIVER BASIN

**05588720 Judy's Branch at Route 157 at Glen Carbon, IL--Continued**

26	e0.60	149	0.83	4.9	197	2.6	4.3	59	0.69
27	e0.52	125	0.76	4.4	189	2.2	4.1	51	0.57
28	e0.90	100	0.89	3.7	176	1.8	5.7	42	0.94
29	e0.75	81	0.60	3.5	164	1.6	23	354	34
30	e0.60	77	0.49	3.6	152	1.5	7.1	89	1.7
31	e0.80	75	0.50	---	---	---	5.8	134	2.1
TOTAL	50.18	---	18.65	457.46	---	7802.29	157.0	---	98.41

	JANUARY			FEBRUARY			MARCH		
1	5.3	67	0.96	e3.3	73	1.2	4.6	114	1.4
2	5.4	63	0.90	e10	413	36	3.9	94	0.98
3	5.6	58	0.88	e7.5	54	1.7	5.6	72	1.1
4	183	1870	1400	e6.0	61	1.2	38	1720	353
5	21	115	6.6	e5.2	71	1.4	26	1040	97
6	e11	329	16	e4.6	82	1.4	11	222	7.0
7	e8.0	180	4.2	e4.2	92	1.3	8.9	100	2.4
8	e7.0	97	2.1	e4.0	103	1.4	7.7	73	1.5
9	e6.0	95	1.8	e5.0	113	2.2	7.0	64	1.2
10	e5.5	93	1.5	e8.0	123	3.2	6.3	54	0.93
11	e5.6	90	1.5	13	131	4.5	6.0	45	0.73
12	5.7	88	1.3	7.5	130	2.6	5.4	36	0.52
13	5.3	85	1.2	5.9	128	2.1	5.3	27	0.38
14	5.2	83	1.2	5.9	127	2.0	6.4	91	1.5
15	4.7	80	1.0	5.4	125	1.8	5.5	377	5.6
16	4.7	78	0.98	6.3	123	2.1	5.8	108	1.7
17	24	741	66	5.2	121	1.7	5.4	131	1.9
18	16	159	9.2	6.3	128	2.2	5.0	160	2.1
19	8.7	87	2.1	7.6	160	3.3	4.7	189	2.4
20	e6.4	76	1.4	8.2	190	4.2	4.9	217	2.9
21	e5.8	170	3.0	6.0	162	2.6	4.2	246	2.8
22	e5.4	84	1.6	5.4	115	1.7	4.5	216	2.6
23	e5.0	83	1.7	5.7	66	1.0	4.8	70	0.89
24	e4.6	83	1.3	5.4	45	0.65	4.8	59	0.76
25	e4.4	82	1.2	5.0	58	0.78	5.8	91	1.5
26	e4.2	81	1.3	4.5	71	0.86	42	1500	502
27	e4.0	80	1.1	4.4	84	0.98	18	563	32
28	e3.8	79	1.1	4.2	96	1.1	28	710	123
29	e3.7	79	0.93	4.4	109	1.3	19	438	24
30	e3.6	78	1.0	---	---	---	17	473	25
31	e3.4	75	1.1	---	---	---	11	139	4.1
TOTAL	392.0	---	1536.15	174.1	---	88.47	332.5	---	1204.89

	APRIL			MAY			JUNE		
1	9.6	132	3.4	40	926	263	8.6	131	3.0
2	8.5	129	2.9	9.8	315	8.4	6.1	144	2.3
3	7.7	127	2.6	7.0	293	5.6	5.1	153	2.1
4	6.9	124	2.3	5.7	271	4.2	4.5	154	1.9
5	6.6	116	2.1	5.0	249	3.4	4.3	153	1.8
6	6.6	91	1.6	4.4	230	2.8	4.0	153	1.7
7	6.4	65	1.1	3.9	222	2.3	3.7	153	1.5
8	5.8	36	0.57	3.3	215	1.9	3.3	153	1.4
9	5.6	27	0.41	3.0	207	1.7	5.5	152	2.3
10	5.7	45	0.70	2.7	200	1.4	4.7	148	1.9

**05588720 Judy's Branch at Route 157 at Glen Carbon, IL--Continued**

11	5.7	64	0.98	3.0	193	1.6	3.7	131	1.3
12	4.7	82	1.1	6.0	186	3.0	5.9	113	1.8
13	4.5	101	1.2	113	999	972	3.4	95	0.88
14	4.4	120	1.4	140	1700	1460	2.6	76	0.54
15	4.4	134	1.6	17	159	7.4	2.4	58	0.38
16	4.6	138	1.7	9.7	132	3.5	15	648	110
17	4.4	140	1.7	7.6	105	2.2	9.5	709	35
18	4.2	142	1.6	15	209	15	31	1340	548
19	4.0	145	1.6	41	1080	362	8.3	157	4.3
20	5.6	147	2.2	12	140	4.7	4.2	65	0.73
21	4.4	149	1.8	8.1	129	2.8	4.5	109	1.5
22	4.5	152	1.8	6.4	118	2.0	3.5	88	0.84
23	4.6	156	1.9	5.5	107	1.6	2.9	121	0.94
24	10	159	4.4	4.9	96	1.3	2.4	270	1.8
25	8.2	163	3.6	73	1920	1560	2.0	260	1.4
26	4.9	167	2.2	166	3450	3390	1.8	238	1.1
27	4.0	171	1.8	212	2220	2610	1.6	215	0.93
28	4.1	175	2.0	54	477	164	1.6	192	0.81
29	3.6	155	1.5	16	93	4.0	1.4	170	0.65
30	12	260	20	16	106	4.6	1.4	147	0.55
31	---	---	---	10	118	3.3	---	---	---
TOTAL	176.2	---	73.76	1021.0	---	10869.7	158.9	---	733.35

	JULY			AUGUST			SEPTEMBER		
1	1.4	124	0.46	4.3	117	1.3	1.3	195	0.68
2	15	957	296	4.5	141	1.7	1.2	195	0.61
3	17	1030	88	4.4	166	2.0	1.1	195	0.56
4	4.3	121	1.5	8.1	155	3.8	1.0	190	0.54
5	11	456	69	4.8	75	0.97	1.1	170	0.49
6	13	262	17	2.3	83	0.51	1.0	148	0.40
7	4.1	328	3.5	2.3	90	0.57	0.96	127	0.33
8	3.0	400	3.2	1.9	98	0.50	0.81	105	0.23
9	2.6	218	1.5	1.5	106	0.43	0.86	84	0.19
10	2.2	204	1.2	1.2	114	0.38	0.83	62	0.14
11	2.1	191	1.1	0.97	120	0.31	0.82	48	0.11
12	1.7	177	0.83	0.96	122	0.32	0.79	58	0.12
13	1.6	164	0.69	0.83	124	0.28	0.77	69	0.14
14	1.2	118	0.39	0.84	126	0.29	0.79	81	0.17
15	1.1	63	0.18	0.78	128	0.27	0.82	92	0.20
16	1.1	84	0.25	0.67	130	0.23	2.6	104	0.74
17	1.0	104	0.29	0.67	131	0.24	0.87	115	0.27
18	0.95	125	0.32	0.69	130	0.24	0.50	125	0.17
19	0.89	146	0.35	0.63	119	0.20	0.49	128	0.17
20	0.91	167	0.41	2.5	107	0.73	0.45	132	0.16
21	0.85	175	0.40	1.2	94	0.31	0.43	134	0.16
22	0.88	145	0.35	0.69	82	0.15	0.50	138	0.19
23	1.5	112	0.47	0.75	70	0.14	0.53	140	0.20
24	0.81	79	0.17	20	608	158	0.56	144	0.22
25	7.3	279	9.8	24	755	171	0.56	144	0.22
26	1.6	108	0.46	24	437	85	0.39	138	0.14
27	1.0	127	0.35	4.2	128	1.5	0.31	131	0.11
28	0.86	131	0.31	3.0	188	1.5	0.30	124	0.10
29	0.85	88	0.20	2.7	196	1.4	0.30	117	0.09
30	83	1370	915	1.9	196	1.0	0.33	110	0.10

MISSISSIPPI RIVER BASIN  
05588720 Judy's Branch at Route 157 at Glen Carbon, IL--Continued

31	6.8	116	2.2	1.5	196	0.79	---	---	---
TOTAL	191.60	---	1415.88	128.78	---	436.06	23.27	---	7.95
YEAR	3262.99		24285.56						

e Estimated

**LOCATION.**— Lat 39°48'23", long 88°28'34" (NAD of 1927), in NE1/4NW1/4 sec.36, T.16 N., R.6 E., Piatt County, Hydrologic Unit 07140201, on left bank at downstream side of bridge, 0.9 mi northwest of Atwood and at mile 9.0.

**DRAINAGE AREA.**— 149 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE

DISCHARGE: October 1972 to current year.

STAGE: Water years 1994 to current year.

**REVISED RECORDS.**— WDR IL-93-1: 1989(M), 1990-92. WDR IL-94-1: 1989.

**GAGE.**— Water-stage recorder, phone telemeter, and crest-stage gage. Datum of gage is 644.58 ft above NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE: Maximum discharge, 4,030 ft<sup>3</sup>/s, Mar. 5, 1979, gage height, 14.03 ft; maximum gage height, 15.39 ft, Apr. 12, 1994, discharge, 3,390 ft<sup>3</sup>/s; no flow for many days in most years.

**REMARKS FOR CURRENT YEAR.**— Records poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	e5.7	119	353	e45	50	1060	52	85	25	9.4	e6.5
2	5.6	e5.0	95	282	e42	50	796	49	72	23	7.7	e6.0
3	5.7	e5.1	89	239	e41	36	616	43	60	21	7.0	e5.4
4	5.7	e5.4	89	930	e40	99	464	40	55	21	6.5	e5.0
5	4.9	e6.0	86	1680	e38	798	337	43	55	17	6.0	e4.5
6	4.5	e7.2	75	1040	e37	711	268	39	57	16	5.4	e4.2
7	4.6	e7.0	73	621	e36	462	230	35	52	53	4.7	e4.0
8	4.7	e6.0	75	383	e35	305	199	30	47	54	4.5	e3.8
9	4.8	e5.5	75	268	e34	227	166	30	41	32	4.4	e3.6
10	5.2	e5.1	80	198	e33	169	145	30	43	492	e5.7	e3.4
11	5.0	e5.6	71	174	e32	147	133	54	343	963	e7.0	e3.2
12	5.7	e6.4	65	178	e32	119	121	64	484	621	e5.5	e3.1
13	6.0	e6.2	63	151	e31	98	113	97	288	341	e4.3	e3.0
14	8.5	e5.5	54	139	e30	92	102	484	183	561	e3.6	e5.1
15	12	e4.9	51	136	e30	82	91	722	135	489	e3.1	e6.7
16	11	e5.0	52	112	e30	82	88	508	207	283	e2.8	e10
17	e9.0	8.8	40	118	e30	78	83	338	442	176	e2.6	e4.3
18	e7.8	110	38	207	35	72	75	252	381	118	e3.2	e2.9
19	e7.2	1010	35	163	56	60	79	368	229	83	e2.8	e1.9
20	e7.1	790	33	122	101	59	64	362	157	62	e3.8	e1.6
21	e6.8	536	40	106	98	53	72	268	127	47	e6.2	e1.6
22	e6.6	366	42	96	62	46	66	214	109	37	e5.9	e1.4
23	e6.4	281	478	95	54	47	87	185	83	34	e4.5	e1.3
24	e6.0	577	704	102	59	51	78	157	68	26	e3.5	e1.6
25	e5.8	483	451	62	56	54	80	158	57	20	e4.9	e1.4
26	e6.1	336	287	e70	51	659	73	153	49	17	e5.3	e1.35
27	e6.6	255	214	e64	47	2020	62	139	43	14	e8.1	e1.25
28	e6.5	200	192	e59	42	1450	56	121	38	12	e5.8	e1.2
29	e6.6	161	631	e54	43	1130	57	99	33	11	e18	e1.3
30	e6.2	149	771	e51	---	1300	50	98	28	11	e15	e1.4
31	e5.8	---	516	e48	---	1570	---	99	---	11	e7.8	---
TOTAL	200.2	5354.4	5684	8301	1300	12176	5911	5331	4051	4691	185.0	102.00
MEAN	6.46	178	183	268	44.8	393	197	172	135	151	5.97	3.40
MAX	12	1010	771	1680	101	2020	1060	722	484	963	18	10

## KASKASKIA RIVER BASIN

**05590800 Lake Fork at Atwood, IL--Continued**

MIN	4.5	4.9	33	48	30	36	50	30	28	11	2.6	1.2
CFSM	0.04	1.20	1.23	1.80	0.30	2.64	1.32	1.15	0.91	1.02	0.04	0.02
IN.	0.05	1.34	1.42	2.07	0.32	3.04	1.48	1.33	1.01	1.17	0.05	0.03

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 – 2004, BY WATER YEAR (WY)**

MEAN	49.6	101	145	127	198	253	235	271	176	87.6	54.0	23.0
MAX	371	592	452	573	595	957	703	843	738	358	394	272
(WY)	1994	1993	1988	1993	1982	1979	1994	2002	1974	1973	1981	1993
MIN	0.00	0.66	0.46	0.16	1.53	18.0	14.9	32.4	2.65	0.00	0.00	0.00
(WY)	1989	2003	1977	1977	2003	2003	2003	2001	1988	1988	1984	1988

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1973 – 2004**

ANNUAL TOTAL	23974.71		53286.60			
ANNUAL MEAN	65.7		146		143	
HIGHEST ANNUAL MEAN					260	
LOWEST ANNUAL MEAN					35.1	
HIGHEST DAILY MEAN	1010	Nov 19	2020	Mar 27	3810	May 13 2002
LOWEST DAILY MEAN	0.31	A Jan 25, 26	1.2	B Sep 28	0.00	C
ANNUAL SEVEN-DAY MINIMUM	0.33	A Jan 21	1.3	B Sep 23	0.00	C
MAXIMUM PEAK FLOW			2140	Mar 27	4030	D Mar 5 1979
MAXIMUM PEAK STAGE			13.00	Mar 27	15.39	E Apr 12 1994
ANNUAL RUNOFF (CFSM)	0.441		0.977		0.960	
ANNUAL RUNOFF (INCHES)	5.99		13.30		13.05	
10 PERCENT EXCEEDS	167		454		386	
50 PERCENT EXCEEDS	13		52		50	
90 PERCENT EXCEEDS	0.81		4.6		0.76	

A – Estimated due to backwater from ice.

B – Estimated.

C – Many days in most years.

D – Gage height, 14.03 ft.

E – Discharge, 3,390 ft<sup>3</sup>/s.



**LOCATION.**— Lat 39°42'11", long 88°23'11" (NAD of 1927), in SE1/4NW1/4 sec.35, T.15 N., R.7 E., Douglas County, Hydrologic Unit 07140201, on left bank at downstream side of bridge on State Highway 133 at Chesterville, and at mile 254.0.

**DRAINAGE AREA.**— 358 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: May 1995 to current year.

STAGE: May 1995 to current year. Gage-height record for Jan. 1974 to July 1983, and Apr. 4, 1995 to May 11, 1995 available in files of U.S. Army Corps of Engineers.

**GAGE.**— Water-stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest-stage gage. Datum of gage is 600.00 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers).

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 8,530 ft<sup>3</sup>/s, May 13, 2002, gage height, 45.52 ft; minimum discharge, 4.1 ft<sup>3</sup>/s, Sept. 19, 1999.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Flood of Mar. 5, 1979 reached a stage of 44.84 ft, discharge undetermined, from information by the U.S. Army Corps of Engineers.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	32	361	1380	e150	193	3270	186	294	97	50	64
2	31	33	300	1010	e140	203	2320	194	234	88	40	45
3	29	29	261	795	e135	174	1660	180	203	85	35	35
4	29	28	251	1400	e130	233	1230	167	181	90	33	29
5	32	30	248	3440	e125	1040	920	164	168	96	31	23
6	30	35	239	3660	e120	1860	692	160	167	77	31	20
7	28	37	212	2560	e115	1600	549	148	161	97	27	17
8	26	30	206	1610	e110	1120	488	140	152	216	25	15
9	26	30	209	1050	e107	776	428	133	139	151	24	16
10	27	29	212	701	e106	549	369	133	133	199	25	15
11	27	29	240	512	e105	453	336	226	301	765	41	14
12	27	30	204	473	e104	395	314	318	1050	1260	35	13
13	27	31	177	445	e103	338	299	317	1340	1100	28	13
14	35	33	180	408	e103	312	283	395	1020	873	26	13
15	51	30	180	396	e102	296	252	985	625	1020	24	17
16	56	34	174	361	e101	282	231	1330	499	909	23	47
17	44	30	164	359	e100	287	220	1110	690	585	23	40
18	40	125	143	487	e115	270	202	798	1020	397	24	26
19	38	935	138	528	e150	235	186	731	906	274	22	24
20	36	1870	112	444	e230	210	204	1010	606	188	27	18
21	33	1690	123	371	400	207	264	933	443	145	28	16
22	35	1230	148	339	330	173	e240	698	373	117	27	15
23	34	899	434	258	271	165	250	523	312	103	23	15
24	32	1050	1330	e260	274	170	294	453	258	87	23	13
25	30	1320	1520	e270	266	177	283	439	215	72	24	12
26	31	1180	1130	e300	240	379	287	470	192	62	42	14
27	33	879	773	e250	217	2390	246	441	173	57	67	13
28	31	634	562	e220	194	4040	208	390	148	54	57	11
29	29	483	903	e200	183	3290	194	334	131	47	48	10
30	30	414	1800	e180	----	2880	189	306	111	45	85	11
31	28	----	1820	e160	----	3380	----	307	----	49	108	----

## KASKASKIA RIVER BASIN

**05590950 Kaskaskia River at Chesterville, IL--Continued**

TOTAL	1018	13239	14754	24827	4826	28077	16908	14119	12245	9405	1126	634
MEAN	32.8	441	476	801	166	906	564	455	408	303	36.3	21.1
MAX	56	1870	1820	3660	400	4040	3270	1330	1340	1260	108	64
MIN	26	28	112	160	100	165	186	133	111	45	22	10
CFSM	0.09	1.23	1.33	2.24	0.46	2.53	1.57	1.27	1.14	0.85	0.10	0.06
IN.	0.11	1.38	1.53	2.58	0.50	2.92	1.76	1.47	1.27	0.98	0.12	0.07

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 – 2004, BY WATER YEAR (WY)**

MEAN	84.2	123	185	307	500	537	485	830	600	174	50.2	51.2
MAX	355	441	476	801	1219	1233	1123	2146	1378	475	100	200
(WY)	2001	2004	2004	2004	2001	1998	2002	1996	1998	2000	2000	2000
MIN	11.4	18.8	17.7	14.2	39.7	86.5	54.1	114	208	38.0	15.1	8.98
(WY)	1997	2003	2003	2003	2003	2003	2003	2001	2003	2001	1996	1998

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1995 – 2004**

ANNUAL TOTAL	65948.6			141178					
ANNUAL MEAN	181			386			329		
HIGHEST ANNUAL MEAN							551		
LOWEST ANNUAL MEAN							106		
HIGHEST DAILY MEAN	1890 Jul 11			4040 Mar 28			7990 May 13 2002		
LOWEST DAILY MEAN	9.4 A Jan 25–27			10 Sep 29			4.7 Sep 10 1998		
ANNUAL SEVEN-DAY MINIMUM	9.5 A Jan 23			12 Sep 24			6.0 Sep 15 1999		
MAXIMUM PEAK FLOW				4180 Mar 28			8530 May 13 2002		
MAXIMUM PEAK STAGE				41.09 Mar 28			45.52 May 13 2002		
INSTANTANEOUS LOW FLOW				9.7 Sep 29			4.1 Sep 19 1999		
ANNUAL RUNOFF (CFSM)	0.505			1.08			0.919		
ANNUAL RUNOFF (INCHES)	6.85			14.67			12.49		
10 PERCENT EXCEEDS	551			1040			920		
50 PERCENT EXCEEDS	54			180			102		
90 PERCENT EXCEEDS	17			26			14		

A – Estimated due to backwater from ice.

**LOCATION.**— Lat 39°35'00", long 88°24'48" (NAD of 1927), in NW1/4SW1/4 sec.10, T.13 N., R.7 E., Coles County, Hydrologic Unit 07140201, on right upstream side of bridge in Cooks Mills, 3.8 mi downstream from Flat Branch, and at mile 238.1.

**DRAINAGE AREA.**— 473 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: August 1970 to current year.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1977–91. Additional chemical data for water years 1961–68, 1971–72 are published in Water–Resources Investigations 78–24 and 79–25 as site O 02.

SEDIMENT: January 1979 to September 1997.

MISCELLANEOUS: Sediment concentration and particle size, water years 1993–97.

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest–stage gage. Datum of gage is 617.40 ft above NGVD of 1929. Prior to July 30, 1981, at site 200 ft downstream at same datum.

**REMARKS.**— Occasional golf–course irrigation water withdrawals approximately 15.5 miles upstream from the gage.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 11,000 ft<sup>3</sup>/s, May 13, 2002, gage height, 17.85 ft; no flow Sept. 11, 1988.

**SUSPENDED-SEDIMENT CONCENTRATIONS:** Maximum daily, 1,710 mg/L, May 1, 1983; minimum daily, 0 mg/L, Sept. 10, 11, 1988.

**SUSPENDED-SEDIMENT LOADS:** Maximum daily, 26,100 tons, Apr. 13, 1979; minimum daily, 0 ton, Sept. 10, 11, 1988.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	e32	582	1760	e170	208	4020	213	378	135	79	140
2	46	e31	475	1380	e165	222	3460	297	324	121	77	92
3	42	e35	383	1060	e155	210	2450	275	264	118	63	66
4	39	e36	341	1570	e150	282	1690	233	216	153	52	51
5	37	e35	331	3310	e140	761	1240	211	190	157	46	43
6	39	e35	323	3790	e140	1190	969	198	179	155	42	35
7	36	e36	305	3260	e135	1600	790	185	174	144	42	30
8	31	e44	287	2320	e130	1420	657	168	166	182	35	25
9	27	e37	283	1490	e125	1080	561	160	153	278	31	23
10	25	e35	291	1030	e120	835	475	155	145	223	29	24
11	25	e35	303	785	e120	650	399	159	153	354	28	22
12	25	e34	303	631	e120	515	346	284	397	634	49	21
13	25	e34	269	545	e120	415	307	349	744	828	53	19
14	e28	e34	252	496	e120	341	280	386	980	886	38	19
15	e38	e35	251	455	e115	298	254	530	961	840	33	19
16	e60	e36	249	419	e115	275	230	810	915	834	29	22
17	e55	e37	239	414	e115	265	218	1050	895	814	27	60
18	e48	e150	223	576	e130	259	205	1040	879	697	28	63
19	e43	631	206	654	e180	239	189	904	945	530	29	46
20	e40	989	191	634	e300	227	187	820	935	389	34	39
21	e38	1610	157	540	471	221	209	892	797	285	45	32
22	e36	1710	185	440	469	197	243	909	623	226	47	25
23	e36	1400	498	353	388	178	231	814	497	200	37	21
24	e35	1320	886	288	330	173	248	711	396	169	34	22
25	e34	1320	1260	e300	315	175	280	640	311	143	35	20
26	e33	1380	1480	e330	291	455	278	620	256	119	e45	17
27	e32	1290	1230	e300	261	988	263	609	227	100	e70	17
28	e35	1060	952	e260	231	2980	228	569	195	90	e85	17
29	e37	866	977	e220	209	4260	203	493	167	83	e76	15

## KASKASKIA RIVER BASIN

## 05591200 Kaskaskia River at Cooks Mills, IL--Continued

<b>30</b>	e34	707	1280	e200	---	3850	191	462	150	77	e66	13
<b>31</b>	e32	---	1740	e180	---	3870	---	422	---	76	115	---
TOTAL	1146	15034	16732	29990	5830	28639	21301	15568	13612	10040	1499	1058
MEAN	37.0	501	540	967	201	924	710	502	454	324	48.4	35.3
MAX	60	1710	1740	3790	471	4260	4020	1050	980	886	115	140
MIN	25	31	157	180	115	173	187	155	145	76	27	13
CFSM	0.08	1.06	1.14	2.05	0.43	1.95	1.50	1.06	0.96	0.68	0.10	0.07
IN.	0.09	1.18	1.32	2.36	0.46	2.25	1.68	1.22	1.07	0.79	0.12	0.08

e Estimated

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 – 2004, BY WATER YEAR (WY)

MEAN	170	312	509	470	622	747	726	806	528	282	167	101
MAX	1189	2205	1626	1862	2028	2565	2116	2881	1864	1166	952	817
(WY)	1994	1993	1988	1974	1982	1979	1994	2002	1974	1973	1981	1993
MIN	12.7	22.2	16.7	14.2	43.8	101	56.0	103	48.0	16.8	14.9	10.4
(WY)	1985	2003	1977	1977	2003	2003	2003	1976	1988	1988	1988	1999

## SUMMARY STATISTICS

## FOR 2003 CALENDAR YEAR

## FOR 2004 WATER YEAR

## WATER YEARS 1971 – 2004

ANNUAL TOTAL	79214.4		160449			
ANNUAL MEAN	217		438		453	
HIGHEST ANNUAL MEAN					838	
LOWEST ANNUAL MEAN					132	
HIGHEST DAILY MEAN	2020	May 12	4260	Mar 29	10700	May 13 2002
LOWEST DAILY MEAN	9.8	A Jan 25,26	13	Sep 30	0.00	Sep 11 1988
ANNUAL SEVEN-DAY MINIMUM	9.9	A Jan 21	17	Sep 24	2.7	Sep 8 1988
MAXIMUM PEAK FLOW			4420	B Mar 29	11000	May 13 2002
MAXIMUM PEAK STAGE			13.74	C Jan 6	17.85	May 13 2002
INSTANTANEOUS LOW FLOW			12	Sep 30		
ANNUAL RUNOFF (CFSM)	0.459		0.927		0.957	
ANNUAL RUNOFF (INCHES)	6.23		12.62		13.00	
10 PERCENT EXCEEDS	698		1040		1210	
50 PERCENT EXCEEDS	60		214		173	
90 PERCENT EXCEEDS	19		32		20	

A – Estimated due to backwater from ice.

B – Gage height, 13.59 ft.

C – Discharge, 3850 ft<sup>3</sup>/s.

KASKASKIA RIVER BASIN  
05591550 Whitley Creek near Allenville, IL

593

**LOCATION.**— Lat 39°30'24", long 88°31'39" (NAD of 1927), in SE1/4SE1/4 sec.4, T.12 N., R.6 E., Moultrie County, Hydrologic Unit 07140201, on left downstream side of bridge on County Highway 3 (1500 E), 3.3 mi south of Allenville, and at mile 5.8.

**DRAINAGE AREA.**— 34.6 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: February 1980 to current year.

STAGE: Water years 1994 to current year. Gage-height record for January 1963 to February 1980 available in files of U.S. Army Corps of Engineers.

**REVISED RECORDS.**— WDR IL-81-1: 1980.

**GAGE.**— Water-stage recorder and U.S. Army Corps of Engineers satellite telemeter. Datum of gage is 617.00 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers).

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 3,260 ft<sup>3</sup>/s, May 12, 2002, gage height, 13.38 ft, from rating curve extended above 1,890 ft<sup>3</sup>/s; no flow for many days in most years.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Flood of July 1971 reached a stage of 13.67 ft, discharge not determined, from U.S. Army Corps of Engineers.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	e15	25	66	e17	24	94	e30	28	5.0	1.6	31
2	2.1	e15	23	58	e18	21	67	e47	22	4.3	1.3	20
3	1.7	e16	23	64	e16	17	53	30	18	4.1	1.2	15
4	1.4	e18	24	893	e14	129	41	24	16	4.7	1.0	12
5	1.3	e22	24	652	e13	343	35	21	15	9.8	0.84	9.5
6	1.2	25	21	174	e13	157	33	18	15	e7.0	0.75	8.2
7	1.1	22	20	94	e12	93	31	16	13	e8.0	0.67	6.9
8	1.0	22	21	66	e12	64	28	15	12	e6.0	0.64	5.7
9	1.00	21	21	50	e11	51	24	15	11	e5.0	0.65	4.8
10	1.1	20	25	38	e11	41	22	14	11	e9.0	0.65	4.1
11	1.5	21	23	36	e10	38	21	13	12	e15	0.53	3.6
12	2.1	22	20	37	e10	32	20	13	10	e30	0.46	3.2
13	2.9	21	20	31	e10	29	19	14	9.0	e20	0.35	2.8
14	20	21	21	31	e10	28	18	17	8.0	42	0.27	2.7
15	39	21	20	28	e10	26	17	23	7.6	e25	0.23	2.7
16	25	22	20	24	e10	27	17	19	140	e15	0.17	2.8
17	18	23	17	58	e12	25	16	17	106	e9.0	0.13	2.4
18	16	166	18	169	e25	23	15	16	69	e5.0	0.95	2.3
19	15	176	16	84	64	20	15	16	41	e3.5	0.49	1.9
20	14	90	15	54	77	22	16	15	29	2.7	1.5	1.6
21	14	60	15	43	50	19	17	13	24	2.3	1.00	1.4
22	e15	45	16	33	32	18	14	13	20	2.5	0.71	1.3
23	e15	59	216	44	35	19	13	14	16	2.0	0.55	1.2
24	e13	167	157	27	42	19	12	46	14	1.6	0.72	1.0
25	e13	89	86	26	35	19	15	69	11	2.0	4.1	1.1
26	e14	62	60	43	29	124	12	48	10	2.0	29	0.96
27	e13	48	50	21	24	159	11	42	8.6	1.6	9.4	0.87
28	e12	39	46	19	21	89	11	44	7.7	1.3	285	0.95
29	e14	34	255	19	21	108	10	32	6.6	1.2	741	0.90
30	e16	32	149	e18	—	220	10	47	5.7	2.2	94	0.90

KASKASKIA RIVER BASIN  
**05591550 Whitley Creek near Allenville, IL---Continued**

31	e15	---	88	e18	---	155	---	37	---	2.2	51	---
TOTAL	322.70	1414	1555	3018	664	2159	727	798	716.2	251.0	1230.86	153.78
MEAN	10.4	47.1	50.2	97.4	22.9	69.6	24.2	25.7	23.9	8.10	39.7	5.13
MAX	39	176	255	893	77	343	94	69	140	42	741	31
MIN	1.0	15	15	18	10	17	10	13	5.7	1.2	0.13	0.87
CFSM	0.30	1.36	1.45	2.81	0.66	2.01	0.70	0.74	0.69	0.23	1.15	0.15
IN.	0.35	1.52	1.67	3.24	0.71	2.32	0.78	0.86	0.77	0.27	1.32	0.17

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 – 2004, BY WATER YEAR (WY)**

MEAN	13.7	33.0	37.3	37.9	45.3	46.1	51.1	52.4	35.1	11.5	4.59	6.29
MAX	88.0	235	131	122	124	117	146	227	102	39.8	39.7	54.2
(WY)	2001	1993	1983	1993	1982	1998	1994	2002	1998	2000	2004	1993
MIN	0.00	0.00	0.13	0.19	0.78	1.70	0.85	8.19	1.27	0.03	0.00	0.00
(WY)	1989	2000	2000	1981	2003	2003	2003	2000	1991	1991	1984	1983

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1980 – 2004**

ANNUAL TOTAL	5151.15		13009.54			
ANNUAL MEAN	14.1		35.5		31.2	
HIGHEST ANNUAL MEAN					61.0	
LOWEST ANNUAL MEAN					5.12	
HIGHEST DAILY MEAN	267	May 10	893	Jan 4	1680	May 16 1990
LOWEST DAILY MEAN	0.00	A	0.13	Aug 17	0.00	B
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 16	0.31	Aug 11	0.00	B
MAXIMUM PEAK FLOW			3060	Aug 29	3260	C May 12 2002
MAXIMUM PEAK STAGE			13.20	Aug 29	13.38	May 12 2002
INSTANTANEOUS LOW FLOW			0.11	Aug 17		
ANNUAL RUNOFF (CFSM)	0.408		1.03		0.902	
ANNUAL RUNOFF (INCHES)	5.54		13.99		12.26	
10 PERCENT EXCEEDS	25		68		69	
50 PERCENT EXCEEDS	1.4		17		11	
90 PERCENT EXCEEDS	0.16		1.3		0.00	

A – Several days.

B – Many days in most years.

C – From rating curve extended above 1,890 ft<sup>3</sup>/s.

**LOCATION.**— Lat 39°43'52", long 88°39'43" (NAD of 1927), in NW1/4SW1/4 sec.21, T.15 N., R.5 E., Moultrie County, Hydrologic Unit 07140201, on left downstream side of bridge on State Highways 32 and 133, 1.5 mi northwest of Lovington, 1.7 mi upstream from Stringtown Branch, and at mile 25.4.

**DRAINAGE AREA.**— 112 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE**

DISCHARGE: February 1980 to current year.

STAGE: Water years 1994 to current year. Gage—height record for January 1963 to February 1980 available in files of U.S. Army Corps of Engineers.

PARTIAL RECORD: Occasional low—flow measurements, water years 1971–73.

**SURFACE—WATER QUALITY**

CHEMICAL: Water years 1980–91.

**GAGE.**— Water—stage recorder, and U.S. Army Corps of Engineers satellite telemeter. Datum of gage is 632.50 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers).

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Maximum discharge, 10,300 ft<sup>3</sup>/s, May 8, 1996, from rating curve extended above 9,500 ft<sup>3</sup>/s, gage height 16.40 ft; no flow for many days in most years.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Flood of May 1968 reached a stage of 14.66 ft, discharge not determined, from information by U.S. Army Corps of Engineers.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.53	4.3	79	283	e40	61	469	53	60	19	2.1	1.6
2	0.41	4.2	61	231	e44	56	351	51	53	17	1.6	1.1
3	0.34	4.4	59	191	e37	40	263	46	46	17	1.2	0.75
4	0.42	4.8	59	984	e34	148	189	46	44	16	1.0	0.52
5	0.42	6.0	57	1740	e32	886	147	48	44	15	0.92	0.35
6	0.49	6.6	47	e721	e30	700	126	45	44	15	0.79	0.24
7	0.44	6.1	42	e365	e28	472	114	44	41	23	0.55	0.17
8	0.34	6.0	45	258	e27	305	102	42	38	19	0.43	0.13
9	0.32	5.4	44	177	e26	220	83	45	36	15	0.35	0.12
10	0.35	5.0	48	128	e25	157	76	44	37	59	0.24	0.08
11	0.33	5.0	43	117	e24	140	70	102	95	110	0.12	0.07
12	0.24	5.2	30	122	e24	108	66	78	120	54	0.05	0.01
13	0.22	5.6	29	106	e24	89	63	73	77	31	0.03	0.00
14	3.4	5.5	34	100	e24	87	57	228	62	25	0.01	0.00
15	6.9	5.6	33	95	e24	74	53	319	56	19	0.00	0.00
16	8.2	5.4	34	79	e24	77	52	207	120	14	0.00	0.00
17	7.2	5.4	27	101	e25	72	50	153	148	11	0.00	0.00
18	5.9	355	26	289	e29	66	46	129	113	9.0	0.01	0.00
19	5.0	839	25	191	91	54	47	259	77	7.6	0.00	0.00
20	4.1	580	17	130	157	57	47	176	61	6.4	0.16	0.00
21	3.9	361	21	109	127	49	57	131	57	5.3	0.27	0.00
22	4.2	243	31	98	77	43	50	112	52	4.6	0.30	0.00
23	4.1	188	534	e80	74	46	66	101	42	5.0	0.17	0.00
24	3.6	415	659	e68	81	47	63	87	38	4.1	0.13	0.00
25	3.6	339	403	61	74	49	68	96	34	3.0	0.13	0.00
26	3.9	237	258	e72	68	335	61	95	30	2.3	1.9	0.00
27	3.4	183	197	e60	60	873	56	85	28	1.8	2.9	0.00
28	3.3	147	181	47	52	519	53	74	26	1.6	3.2	0.00

## KASKASKIA RIVER BASIN

## 05591700 West Okaw River near Lovington, IL--Continued

29	4.0	116	668	50	53	483	51	65	23	1.4	2.8	0.00
30	4.5	106	681	e44	---	616	48	66	20	2.2	4.8	0.00
31	4.1	---	421	e42	---	659	---	71	---	3.0	2.4	---
TOTAL	88.15	4199.5	4893	7139	1435	7588	3044	3171	1722	536.3	28.56	5.14
MEAN	2.84	140	158	230	49.5	245	101	102	57.4	17.3	0.92	0.17
MAX	8.2	839	681	1740	157	886	469	319	148	110	4.8	1.6
MIN	0.22	4.2	17	42	24	40	46	42	20	1.4	0.00	0.00
CFSM	0.03	1.25	1.41	2.06	0.44	2.19	0.91	0.91	0.51	0.15	0.01	0.00
IN.	0.03	1.39	1.63	2.37	0.48	2.52	1.01	1.05	0.57	0.18	0.01	0.00

e Estimated

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2004, BY WATER YEAR (WY)

MEAN	39.8	85.9	121	106	173	174	179	242	140	59.9	27.2	16.7
MAX	316	530	378	385	669	536	542	873	490	373	351	224
(WY)	1994	1986	1991	1993	1982	1982	2002	1996	1998	1992	1981	1993
MIN	0.00	0.00	0.02	0.64	0.18	6.08	8.82	21.5	7.24	0.08	0.00	0.00
(WY)	1989	2000	2000	2003	2003	2003	2003	1988	1988	1988	1988	1988

## SUMMARY STATISTICS

## FOR 2003 CALENDAR YEAR

## FOR 2004 WATER YEAR

## WATER YEARS 1980 - 2004

ANNUAL TOTAL	21694.89		33849.65		115	
ANNUAL MEAN	59.4		92.5		219	
HIGHEST ANNUAL MEAN					2002	
LOWEST ANNUAL MEAN					2003	
HIGHEST DAILY MEAN	995	May 11	1740	Jan 5	6080	Apr 12 1994
LOWEST DAILY MEAN	0.00	Aug 18	0.00	Aug 15	0.00	Sep 28 1983
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 21	0.00	Sep 13	0.00	Sep 28 1983
MAXIMUM PEAK FLOW			2260	Jan 5	10300	May 8 1996
MAXIMUM PEAK STAGE			10.98	Jan 5	16.40	May 8 1996
ANNUAL RUNOFF (CFSM)	0.531		0.826		1.03	
ANNUAL RUNOFF (INCHES)	7.21		11.24		13.93	
10 PERCENT EXCEEDS	174		239		303	
50 PERCENT EXCEEDS	6.1		44		37	
90 PERCENT EXCEEDS	0.09		0.17		0.00	



KASKASKIA RIVER BASIN  
05592000 Kaskaskia River at Shelbyville, IL

597

**LOCATION.**— Lat 39°24'26", long 88°46'53" (NAD of 1927), in SE1/4SW1/4 sec.8, T.11 N., R.4 E., Shelby County, Hydrologic Unit 07140201, on left bank 700 ft downstream from Lake Shelbyville Dam, 700 ft upstream from bridge on State Highway 16 in Shelbyville, 0.5 mi upstream from railroad bridge, 7 mi upstream from Robinson Creek, and at mile 197.5.

**DRAINAGE AREA.**— 1,054 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE**

DISCHARGE: February 1908 to September 1912, November to December 1912, August to December 1914, October 1940 to current year.

STAGE: Water years 1994 to current year.

**SURFACE—WATER QUALITY**

CHEMICAL: Water years 1978–91.

**REVISED RECORDS.**— WSP 975: 1908. WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder and U.S. Army Corps of Engineers satellite telemeter. Datum of gage is 530.00 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Dec. 6, 1914, nonrecording gage at site 750 ft downstream at datum 1.11 ft higher. Oct. 1 to Dec. 3, 1940, and June 1, 1950 to July 10, 1952, nonrecording gage and Dec. 4, 1940 to May 31, 1950, and July 11, 1952 to June 30, 1969, water–stage recorder, at site 650 ft downstream at datum 5.78 ft higher. June 30, 1969 to Sept. 30, 1998, water–stage recorder, at present site, at datum 5.78 ft higher.

**REMARKS.**— Flow regulated by Lake Shelbyville (station 05591950), flood–control storage 474,000 acre–ft, beginning June 24, 1969.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Maximum discharge, 25,900 ft<sup>3</sup>/s, June 29, 1957, gage height, 22.37 ft; no flow at times in 1953–55, 1984.

**REMARKS FOR CURRENT YEAR.**— Records good.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	39	1700	2300	1640	523	2140	206	34	1070	355	27
2	31	38	1690	2300	1560	448	2250	206	33	956	353	27
3	31	39	1690	2310	1440	510	2250	206	31	865	280	27
4	31	39	1680	2460	1240	739	2260	187	29	866	174	27
5	31	36	1680	2580	1140	897	2260	211	30	740	113	27
6	31	35	1670	2740	1030	1020	2400	168	30	538	58	27
7	31	35	1670	3090	871	1120	2500	74	30	709	27	27
8	32	35	1670	3200	759	1120	2500	28	31	829	25	27
9	34	34	1660	3200	638	1120	2380	29	30	828	25	27
10	32	34	1660	3200	418	1110	2140	29	31	828	25	27
11	32	34	1660	3190	315	1120	2130	27	31	970	25	27
12	33	35	1650	3190	315	1340	2130	28	32	1060	25	26
13	33	35	1650	3170	315	1630	2120	27	33	468	25	27
14	36	36	1640	3160	315	1630	2110	27	203	806	25	27
15	35	36	1760	3150	313	1630	2100	25	469	1080	25	27
16	34	35	1860	3140	315	1630	2100	25	216	1070	25	27
17	35	37	1850	3140	315	1620	1950	25	169	1070	25	27
18	35	54	1850	3150	376	1720	1730	25	384	1070	25	27
19	35	36	1840	3130	587	1830	1460	25	472	1060	26	27
20	36	309	1830	3180	1080	1770	1080	268	473	1060	27	27
21	36	625	1830	3230	1390	1660	871	472	473	1000	26	27
22	36	885	1820	3230	1390	1550	709	468	473	801	26	27
23	37	1000	1830	3210	1300	1420	596	469	473	699	27	27
24	37	1150	1820	3190	1190	1190	551	469	377	845	27	28
25	38	1240	1820	3170	1190	1050	477	470	845	929	27	28
26	38	1240	1820	3000	1130	1050	356	470	1040	925	28	28
27	38	1240	1820	2740	976	1030	318	383	1080	816	27	28

## KASKASKIA RIVER BASIN

**05592000 Kaskaskia River at Shelbyville, IL--Continued**

<b>28</b>	38	1440	1820	2480	829	1050	255	271	1080	645	29	28
<b>29</b>	38	1710	2060	2230	709	1360	201	271	1080	463	27	29
<b>30</b>	38	1700	2310	2130	----	1650	203	263	1080	357	27	29
<b>31</b>	39	----	2300	1930	----	1850	----	36	----	356	27	----
TOTAL	1072	13241	55610	89520	25086	39387	46527	5888	10792	25779	1986	818
MEAN	34.6	441	1794	2888	865	1271	1551	190	360	832	64.1	27.3
MAX	39	1710	2310	3230	1640	1850	2500	472	1080	1080	355	29
MIN	31	34	1640	1930	313	448	201	25	29	356	25	26

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 – 2004, BY WATER YEAR (WY)**

MEAN	370	468	1190	1371	1496	1519	1069	832	915	901	617	300
MAX	2031	1626	3492	3527	4551	4696	3980	4203	2689	2882	2079	1786
(WY)	1970	1994	1986	1993	1974	1979	1979	2002	1996	1974	1973	1973
MIN	5.15	5.44	2.58	3.57	15.4	150	25.3	10.0	8.56	12.5	8.24	3.72
(WY)	1971	1971	1977	1977	1977	2003	1990	1987	1976	1976	1970	1970

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1970 – 2004**

ANNUAL TOTAL	120560		315706			
ANNUAL MEAN	330		863		919	
HIGHEST ANNUAL MEAN					1941	
LOWEST ANNUAL MEAN					230	
HIGHEST DAILY MEAN	2310	Dec 30	3230	Jan 21,22	5100	Mar 24 1998
LOWEST DAILY MEAN	15	Jan 28–30	25	A	0.00	B
ANNUAL SEVEN-DAY MINIMUM	16	Jan 24	25	Aug 8	2.0	Dec 22 1976
MAXIMUM PEAK FLOW			3240	Jan 20	5580 C	Mar 22 1998
MAXIMUM PEAK STAGE			14.64	Jan 20	18.94 D	Mar 20 1982
INSTANTANEOUS LOW FLOW			24	Sep 12		
10 PERCENT EXCEEDS	1420		2250		2230	
50 PERCENT EXCEEDS	46		473		566	
90 PERCENT EXCEEDS	29		27		17	

A – Several days.

B – Oct. 2, 3, 1984.

C – Gage height, 18.77 ft, present datum.

D – Discharge, 5,090 ft<sup>3</sup>/s, present datum.

KASKASKIA RIVER BASIN  
05592050 Robinson Creek near Shelbyville, IL

599

**LOCATION.**— Lat 39°24'21", long 88°53'47" (NAD of 1927), in NW1/4NW1/4 sec.17, T.11 N., R.3 E., Shelby County, Hydrologic Unit 07140201, on right bank at upstream side of bridge on State Highway 16, 0.1 mi downstream from Mud Creek, 4.5 mi west of Shelbyville, and at mile 9.1.

**DRAINAGE AREA.**— 93.1 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: October 1979 to current year.

STAGE: Water years 1994 to current year. Gage-height record for June 22, 1973 to Sept. 30, 1979, available in files of U.S. Army Corps of Engineers.

**GAGE.**— Water-stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest-stage gage. Datum of gage is 550.00 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers).

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 11,300 ft<sup>3</sup>/s, May 2, 1983, gage height, 13.37 ft; maximum gage height, 14.92 ft, Sept. 23, 1993, discharge, 10,700 ft<sup>3</sup>/s; no flow for many days in 1982–85, 1988–89, 1991.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Flood of June 28, 1957, reached a stage of 16.8 ft, present site and datum, with a discharge estimated at 26,400 ft<sup>3</sup>/s.

**REMARKS FOR CURRENT YEAR.**— Records poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.7	e0.85	39	85	e25	71	164	39	37	3.1	2.4	0.64
2	e1.4	e4.0	33	73	e30	64	132	37	29	2.7	2.2	0.57
3	e1.2	e3.5	33	68	e38	54	106	31	23	2.7	1.7	0.52
4	e1.1	e2.8	35	1830	e32	527	83	27	19	3.8	1.3	0.47
5	e1.0	e2.0	37	1560	e27	1180	68	27	18	3.3	1.1	0.46
6	e0.90	e2.5	33	286	e28	417	62	23	18	5.0	0.99	0.45
7	e0.80	e3.5	30	124	e27	204	60	19	17	3.9	0.89	0.41
8	e0.70	e3.0	32	e85	e25	137	56	16	15	3.3	0.82	0.41
9	e0.65	e2.6	33	e64	e24	109	44	15	14	162	0.74	0.40
10	e10	e2.3	39	e55	e24	83	41	14	14	100	0.70	0.36
11	e6.0	e2.6	40	e49	e25	76	41	22	27	33	0.64	0.35
12	e4.0	e2.4	30	e45	e25	63	39	40	22	72	0.64	0.33
13	e3.0	e2.2	29	e42	e26	56	38	33	18	26	0.60	0.28
14	e12	e2.0	33	e40	e28	56	36	352	14	14	0.56	0.25
15	e7.0	e2.7	31	e38	e32	50	34	149	13	10	0.58	0.26
16	e5.0	e3.4	33	e36	e30	52	34	90	48	7.8	0.56	0.25
17	e3.5	e2.8	28	e100	e27	50	33	68	38	5.9	0.56	0.23
18	e2.8	1010	29	319	e80	46	31	57	23	4.9	0.55	0.21
19	e2.3	800	34	131	344	41	28	69	15	4.1	0.49	0.18
20	e1.9	210	26	89	439	41	29	56	12	3.4	0.98	0.15
21	e1.6	123	27	e66	194	40	32	47	15	3.0	0.65	0.14
22	e1.4	88	33	e56	117	35	30	41	16	2.6	0.54	0.12
23	e1.3	111	231	e51	132	37	28	38	11	2.4	0.61	0.11
24	e1.2	256	158	e46	135	40	26	53	8.8	1.9	0.65	0.10
25	e1.1	121	79	e48	103	48	34	79	7.3	2.3	0.73	0.08
26	e2.0	88	53	e42	89	1170	30	67	6.5	2.1	4.1	0.07
27	e1.6	70	44	e37	78	817	25	82	5.6	1.6	3.0	0.11
28	e1.8	58	46	e33	70	327	24	62	4.9	1.4	1.2	0.11
29	e1.4	50	610	e29	68	477	24	43	4.3	1.3	1.3	0.12
30	e1.2	48	264	e26	---	296	25	77	3.7	3.1	1.2	0.13

KASKASKIA RIVER BASIN  
**05592050 Robinson Creek near Shelbyville, IL—Continued**

<b>31</b>	e0.95	—	123	e24	—	233	—	70	—	4.4	0.85	—
TOTAL	82.50	3078.15	2325	5577	2322	6897	1437	1843	517.1	497.0	33.83	8.27
MEAN	2.66	103	75.0	180	80.1	222	47.9	59.5	17.2	16.0	1.09	0.28
MAX	12	1010	610	1830	439	1180	164	352	48	162	4.1	0.64
MIN	0.65	0.85	26	24	24	35	24	14	3.7	1.3	0.49	0.07
CFSM	0.03	1.10	0.81	1.93	0.86	2.39	0.51	0.64	0.19	0.17	0.01	0.00
IN.	0.03	1.23	0.93	2.23	0.93	2.76	0.57	0.74	0.21	0.20	0.01	0.00

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 – 2004, BY WATER YEAR (WY)**

MEAN	24.9	59.1	104	91.9	141	121	133	167	95.4	28.0	17.3	39.1
MAX	208	305	480	343	874	332	460	827	348	187	227	633
(WY)	2001	1986	1983	1982	1982	1998	1994	2002	2001	1993	1981	1993
MIN	0.17	0.51	0.24	0.47	1.87	3.91	3.43	10.9	1.84	1.04	0.30	0.06
(WY)	1998	2000	1990	2000	2000	2000	2000	1988	1988	1991	1988	1983

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1980 – 2004**

ANNUAL TOTAL	12258.66		24617.85			
ANNUAL MEAN	33.6		67.3		84.8	
HIGHEST ANNUAL MEAN					166	
LOWEST ANNUAL MEAN					10.7	
HIGHEST DAILY MEAN	1770	Sep 1	1830	Jan 4	7460	Sep 23 1993
LOWEST DAILY MEAN	0.00	A Aug 29	0.07	Sep 26	0.00	B
ANNUAL SEVEN-DAY MINIMUM	0.09	Aug 24	0.10	Sep 22	0.00	Sep 4 1983
MAXIMUM PEAK FLOW			3300	Jan 4	11300	C May 2 1983
MAXIMUM PEAK STAGE			11.39	Jan 4	14.92	D Sep 23 1993
INSTANTANEOUS LOW FLOW			0.04	Sep 26		
ANNUAL RUNOFF (CFSM)	0.361		0.722		0.910	
ANNUAL RUNOFF (INCHES)	4.90		9.84		12.37	
10 PERCENT EXCEEDS	48		123		160	
50 PERCENT EXCEEDS	5.3		27		18	
90 PERCENT EXCEEDS	0.70		0.59		0.35	

A – Estimated.

B – Many days in 1982–85, 1988–89, 1991.

C – Gage height, 13.37 ft.

D – Discharge, 10,700 ft<sup>3</sup>/s.

KASKASKIA RIVER BASIN  
05592100 Kaskaskia River near Cowden, IL

601

**LOCATION.**— Lat 39°13'47", long 88°50'30" (NAD of 1927), in NW1/4NW1/4 sec.14, T.9 N., R.3 E., Shelby County, Hydrologic Unit 07140201, on left bank at downstream side of bridge on State Highway 128, 0.7 mi downstream from Richland Creek, 1.5 mi southeast of Cowden, and at mile 173.5.

**DRAINAGE AREA.**— 1,330 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE

DISCHARGE: July 1970 to current year.

STAGE: Water years 1994 to current year.

SURFACE—WATER QUALITY

CHEMICAL: Water years 1978–91.

MISCELLANEOUS: Water years 1998 and 2002.

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest–stage gage. Datum of gage is 500.00 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). July 19, 1976, to Oct. 4, 1977, nonrecording gage on upstream side of bypass bridge, 75 ft upstream at same datum.

**REMARKS.**— Flow partially regulated by Lake Shelbyville (station 05591950), 26 mi upstream from gage.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE: Maximum discharge, 25,300 ft<sup>3</sup>/s, May 12, 2002, gage height, 20.36 ft; minimum daily discharge, 4.6 ft<sup>3</sup>/s, Oct. 6, 1984.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	47	1800	2680	e1950	819	2330	367	410	1080	331	54
2	45	54	1780	2630	e1700	674	2460	376	208	1070	314	46
3	45	60	1770	2780	e1600	594	2450	321	157	910	305	43
4	45	53	1780	5750	e1450	1380	2420	296	132	880	240	41
5	45	51	1790	8290	e1250	3700	2400	264	118	875	185	40
6	44	52	1780	5610	e1150	2630	2410	281	110	699	127	39
7	44	51	1760	4000	e1000	1700	2580	214	102	551	85	38
8	44	48	1760	3510	e900	1450	2620	150	95	773	58	37
9	47	47	1760	3450	e760	1380	2580	103	89	823	47	37
10	72	47	1780	3390	e600	1330	2360	93	87	1240	e40	36
11	61	47	1770	3360	e470	1290	2250	88	85	992	41	36
12	50	47	1750	3360	565	1280	2240	87	94	1110	40	36
13	47	46	1740	3330	490	1630	2220	120	88	1010	e40	36
14	131	45	1740	3310	468	1730	2210	179	81	463	43	34
15	140	46	1750	3290	492	1720	2200	344	167	984	42	37
16	88	49	1910	3260	447	1720	2190	198	487	1070	41	38
17	77	48	1930	3320	436	1720	2160	148	300	1070	40	36
18	63	1950	1930	4020	480	1710	1970	125	260	1060	e39	35
19	57	2490	1920	3630	837	1850	1760	121	449	1060	39	35
20	53	1320	1910	3370	1450	1890	1450	129	478	1050	42	35
21	51	833	1910	3390	1840	1800	1180	370	484	1050	44	35
22	49	944	1910	3360	1680	1690	975	484	496	1070	40	35
23	48	1180	2840	3320	1650	1590	841	483	487	878	38	35
24	47	2040	2670	3310	1730	1420	722	482	458	712	38	35
25	46	1630	2220	3280	1490	1220	709	523	467	882	38	35
26	46	1470	2090	3250	1400	2220	581	625	913	891	351	34
27	46	1420	2050	3060	1280	4190	446	1410	1070	919	145	34
28	46	1400	2040	2820	1080	2380	415	2400	1080	e750	71	34
29	47	1690	3780	e2450	958	2100	320	629	1090	523	694	34
30	46	1790	3630	e2300	—	2410	284	856	1090	416	109	34

KASKASKIA RIVER BASIN  
**05592100 Kaskaskia River near Cowden, IL--Continued**

<b>31</b>	46	----	2920	e2200	----	2270	----	2160	----	378	65	----
TOTAL	1763	20995	64170	109080	31603	55487	51733	14426	11632	27239	3772	1114
MEAN	56.9	700	2070	3519	1090	1790	1724	465	388	879	122	37.1
MAX	140	2490	3780	8290	1950	4190	2620	2400	1090	1240	694	54
MIN	44	45	1740	2200	436	594	284	87	81	378	38	34

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 – 2004, BY WATER YEAR (WY)**

MEAN	394	610	1459	1703	1874	1985	1451	1159	1155	1032	714	384
MAX	1769	2572	4259	4425	4787	5897	5221	6113	3258	2954	2360	1868
(WY)	1975	1994	1986	1993	1974	1979	1979	2002	1974	1974	1974	1974
MIN	13.2	12.1	7.27	8.02	69.4	167	49.8	36.3	25.6	24.5	19.6	13.5
(WY)	1988	1977	1977	1977	1977	2003	2003	1987	1988	1976	1976	1976

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1970 – 2004**

ANNUAL TOTAL	148982	393014	
ANNUAL MEAN	408	1074	1162
HIGHEST ANNUAL MEAN			2409 1974
LOWEST ANNUAL MEAN			267 2003
HIGHEST DAILY MEAN	3780 Dec 29	8290 Jan 5	17300 Apr 12 1979
LOWEST DAILY MEAN	36 Aug 25	34 A	4.6 Oct 6 1984
ANNUAL SEVEN-DAY MINIMUM	37 Aug 19	34 Sep 24	6.0 Nov 30 1976
MAXIMUM PEAK FLOW		10500 Jan 5	25300 May 12 2002
MAXIMUM PEAK STAGE		18.10 Jan 5	20.36 May 12 2002
INSTANTANEOUS LOW FLOW		32 Sep 14	
10 PERCENT EXCEEDS	1690	2620	2790
50 PERCENT EXCEEDS	100	704	768
90 PERCENT EXCEEDS	44	41	36

A – Several days.

**LOCATION.**— Lat 38°57'38", long 89°05'20" (NAD of 1927), in NW1/4SE1/4 sec.16, T.6 N., R.1 E., Fayette County, Hydrologic Unit 07140202, on right bank at upstream side of Gallatin Street Bridge in Vandalia, 3.5 mi upstream from Hickory Creek and at mile 135.7.

**DRAINAGE AREA.**— 1,940 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: February 1908 to December 1912, August 1914 to current year. Monthly discharge only for some periods, published in WSP 1308.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–91.

**REVISED RECORDS.**— WSP 1208: 1919. WSP 1508: 1912, 1915(M), 1917–18(M), 1923(M), 1925(M), 1928–31(M). WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest–stage gage. Datum of gage is 453.30 ft above NGVD of 1929. Prior to Oct. 1, 1933, nonrecording gage at present site at datum 2.00 ft higher. Oct. 1, 1933, to Sept. 23, 1968, nonrecording gage at present site and datum.

**REMARKS.**— Flow partially regulated since June 24, 1969, by Lake Shelbyville (station 05591950), 62.2 mi above gage.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 62,700 ft<sup>3</sup>/s, June 29, 1957; maximum gage height, 28.27 ft, May 7, 2002; minimum discharge observed, 3.5 ft<sup>3</sup>/s, Aug. 22, 1911.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	114	86	1920	4530	e3200	1180	3270	578	8520	1220	719	304
2	94	75	1900	3340	e3100	1100	2870	998	7470	1220	555	224
3	88	80	1880	3070	e2600	952	2820	749	2740	1210	502	180
4	84	119	1870	5360	e2300	1390	2720	581	1140	1100	476	153
5	81	114	1880	11100	e1900	5850	2630	477	750	1210	401	138
6	77	105	1880	16900	e1550	6710	2580	418	558	1230	311	124
7	75	102	1870	12300	e1350	6510	2580	392	452	1000	239	113
8	72	107	1840	9100	1230	3570	2710	344	383	811	204	103
9	116	97	1820	6310	1100	2150	2720	273	338	928	142	95
10	190	88	1840	4590	1000	1780	2660	209	314	983	118	89
11	227	86	1850	4060	930	1640	2450	184	291	1450	102	87
12	179	86	1830	3900	1060	1610	2340	167	292	1230	92	85
13	125	83	1800	3780	1010	1580	2300	159	282	1260	86	83
14	120	76	1790	3650	801	1850	2270	748	261	1140	82	79
15	263	79	1790	3570	852	1910	2250	1250	235	724	79	75
16	397	89	1810	3470	826	1890	2220	728	489	1060	73	72
17	267	92	1930	3540	738	1880	2210	438	1360	1170	69	72
18	204	3100	1950	4990	753	1870	2150	324	960	1170	64	71
19	167	8090	1940	5290	1250	1860	1960	279	945	1160	61	68
20	144	7880	1930	4690	2130	1970	1750	257	779	1160	64	65
21	121	6050	1910	4000	2510	2010	1430	246	767	1150	65	63
22	108	2450	1910	3720	2300	1910	1160	363	851	1130	64	63
23	95	1590	2930	3540	2010	1790	975	504	833	1200	64	63
24	90	3370	4640	3490	2440	1680	866	510	754	1140	59	61
25	87	3630	3860	3430	2330	1520	812	520	687	920	64	59
26	85	2310	2640	3370	1860	1940	775	615	654	1020	1090	59
27	81	1880	2290	3320	1650	5250	658	3550	1020	1040	2630	57
28	82	1730	2200	e3000	1470	5720	545	8690	1170	1010	1250	55

KASKASKIA RIVER BASIN  
**05592500 Kaskaskia River at Vandalia, IL--Continued**

<b>29</b>	82	1670	4130	e2800	1280	5480	497	10200	1200	882	1750	54
<b>30</b>	83	1870	5880	e2650	---	4320	438	7430	1220	822	1650	54
<b>31</b>	81	---	5780	e2950	---	4050	---	7310	---	857	541	---
TOTAL	4079	47184	75490	153810	47530	84922	57616	49491	37715	33607	13666	2868
MEAN	132	1573	2435	4962	1639	2739	1921	1596	1257	1084	441	95.6
MAX	397	8090	5880	16900	3200	6710	3270	10200	8520	1450	2630	304
MIN	72	75	1790	2650	738	952	438	159	235	724	59	54

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 – 2004, BY WATER YEAR (WY)**

MEAN	613	1001	1984	2384	2659	2930	2446	2108	1757	1300	869	551
MAX	3349	5459	5783	7027	6884	7565	6462	10460	5486	3122	2599	3366
(WY)	1970	1994	1986	1993	1982	1979	1979	2002	1974	1974	1974	1993
MIN	34.3	39.1	20.6	19.0	233	330	136	165	61.9	48.7	50.5	30.2
(WY)	1988	1977	1977	1977	2000	2003	2003	1987	1988	1988	1976	1976

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1970 – 2004**

ANNUAL TOTAL	268303	607978	
ANNUAL MEAN	735	1661	1713
HIGHEST ANNUAL MEAN			3415
LOWEST ANNUAL MEAN			494
HIGHEST DAILY MEAN	8090 Nov 19	16900 Jan 6	36000 A May 13 2002
LOWEST DAILY MEAN	55 Aug 27	54 Sep 29,30	17 B
ANNUAL SEVEN-DAY MINIMUM	61 Aug 21	57 Sep 24	17 Dec 23 1976
MAXIMUM PEAK FLOW		17800 Jan 6	41000 C May 13 2002
MAXIMUM PEAK STAGE		25.08 Jan 6	28.27 D May 7 2002
INSTANTANEOUS LOW FLOW		53 Sep 28–30	
10 PERCENT EXCEEDS	1880	3800	4340
50 PERCENT EXCEEDS	267	1100	1010
90 PERCENT EXCEEDS	85	81	77

A – Estimated, result of levee break.

B – Dec. 23–29, 1976, Feb. 5–9, 1977.

C – Observed gage height, 26.52 ft, result of levee break.

D – Discharge, 28,500 ft<sup>3</sup>/s, estimated, result of levee break.



KASKASKIA RIVER BASIN  
05592575 Hickory Creek near Brownstown, IL

605

**LOCATION.**— Lat 38°56'13", long 88°57'10" (NAD of 1927), in NW1/4NW1/4 sec.26, T.6 N., R.2 E., Fayette County, Hydrologic Unit 07140202, on left bank at downstream side of county bridge, about 4 mi south of Brownstown, 4.3 mi above Little Hickory Creek, and at mile 12.0.

**DRAINAGE AREA.**— 44.2 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE

DISCHARGE: October 1988 to current year.

STAGE: Water years 1994 to current year.

**REVISED RECORDS.**— WDR IL-93-1: 1989(M), WDR IL-95-1: 1994 (P).

**GAGE.**— Water—stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest—stage gage. Datum of gage is 493.37 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers).

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE: Maximum discharge, 6,250 ft<sup>3</sup>/s, Nov. 14, 1993, gage height, 16.43 ft; maximum gage height, 16.48 ft, discharge, 6,100 ft<sup>3</sup>/s, May 8, 2003; no flow for many days in most years.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.41	1.0	5.5	13	e6.0	39	26	110	56	3.0	1.2	0.65
2	0.39	1.6	5.1	12	e8.9	27	19	34	24	3.0	0.73	0.51
3	0.34	1.7	5.1	14	e17	16	14	49	16	3.7	0.55	0.44
4	0.37	1.2	5.5	1770	e13	485	11	13	11	6.7	0.49	0.44
5	0.36	1.0	6.1	490	e11	375	9.5	8.0	9.3	15	0.51	0.42
6	0.34	1.3	5.9	64	e10	76	8.4	5.6	8.3	55	0.33	0.44
7	0.34	1.5	5.3	30	e8.8	34	8.2	4.1	7.7	12	0.22	0.48
8	0.33	1.3	5.1	24	e8.0	21	6.7	3.4	6.9	5.3	0.14	0.49
9	0.73	1.1	5.2	22	e8.6	18	5.9	2.9	6.4	3.9	0.06	0.51
10	40	1.1	5.8	18	e10	14	5.5	2.5	6.4	3.2	0.03	0.52
11	5.9	1.3	5.3	16	e20	13	5.9	2.7	6.2	2.8	0.00	0.48
12	1.5	1.2	3.8	16	e70	12	5.7	2.0	5.6	2.7	0.00	0.45
13	0.80	0.95	3.7	15	e27	11	5.6	3.2	5.4	2.4	0.00	0.42
14	41	0.88	3.8	15	e31	13	5.2	5.4	5.1	2.1	0.00	0.39
15	16	1.6	4.0	14	e50	12	4.8	7.9	4.8	1.8	0.00	0.35
16	4.0	1.6	4.4	12	e25	11	4.5	3.9	13	1.5	0.00	0.34
17	5.0	1.5	4.1	112	e21	11	4.2	2.7	10	1.4	0.00	0.31
18	6.9	849	4.0	331	e45	11	3.8	2.2	7.7	1.2	0.00	0.30
19	2.5	223	3.8	55	e70	10	3.4	5.5	7.1	1.0	0.00	0.28
20	1.2	37	3.4	25	84	11	3.5	3.3	5.4	0.96	0.00	0.25
21	0.86	18	3.4	e16	44	11	4.0	2.3	4.7	0.90	0.00	0.19
22	0.67	13	3.6	e14	23	9.5	3.7	1.8	4.5	0.80	0.00	0.16
23	0.70	61	414	e12	21	8.9	3.9	1.4	4.4	0.70	0.00	0.12
24	0.63	240	60	e11	23	9.3	4.3	1.3	4.1	0.59	0.00	0.09
25	0.73	27	17	e10	19	9.8	7.9	1.6	3.8	0.72	0.01	0.03
26	0.94	14	11	e9.0	15	511	4.4	41	3.6	0.78	691	0.00
27	0.79	10	8.5	e8.3	13	213	3.3	622	3.6	0.63	48	0.00
28	0.93	8.1	7.9	e7.4	11	66	2.9	1240	3.8	0.49	15	0.00
29	1.0	7.0	455	e6.7	12	118	2.7	73	3.2	0.38	21	0.00
30	1.0	6.2	64	e6.2	---	68	5.3	430	3.1	9.7	2.8	0.00
31	0.98	---	21	e5.6	---	48	---	574	---	4.9	1.1	---
TOTAL	137.64	1535.13	1160.3	3174.2	725.3	2292.5	203.2	3259.7	261.1	149.25	783.17	9.06
MEAN	4.44	51.2	37.4	102	25.0	74.0	6.77	105	8.70	4.81	25.3	0.30

## KASKASKIA RIVER BASIN

## 05592575 Hickory Creek near Brownstown, IL--Continued

MAX	41	849	455	1770	84	511	26	1240	56	55	691	0.65
MIN	0.33	0.88	3.4	5.6	6.0	8.9	2.7	1.3	3.1	0.38	0.00	0.00
CFSM	0.10	1.16	0.85	2.32	0.57	1.67	0.15	2.38	0.20	0.11	0.57	0.01
IN.	0.12	1.29	0.98	2.67	0.61	1.93	0.17	2.74	0.22	0.13	0.66	0.01

e Estimated

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 – 2004, BY WATER YEAR (WY)

MEAN	4.49	30.9	27.2	60.9	51.4	64.4	70.5	97.4	28.1	14.0	8.42	16.4
MAX	18.3	232	208	202	151	134	224	365	93.7	95.1	46.1	135
(WY)	1994	1994	1991	1999	1997	1991	1994	1995	2000	1993	2000	1993
MIN	0.00	0.00	0.10	0.19	3.49	10.8	6.77	2.00	0.28	0.05	0.00	0.00
(WY)	1989	1998	1998	2000	1996	2001	2004	2001	1992	1997	1996	1990

## SUMMARY STATISTICS

## FOR 2003 CALENDAR YEAR

## FOR 2004 WATER YEAR

## WATER YEARS 1989 – 2004

ANNUAL TOTAL	13344.75		13690.55			
ANNUAL MEAN	36.6		37.4		39.5	
HIGHEST ANNUAL MEAN					64.1	
LOWEST ANNUAL MEAN					19.0	
HIGHEST DAILY MEAN	1830	May 8	1770	Jan 4	4080	May 18 1995
LOWEST DAILY MEAN	0.00	Several days	0.00	Many days	0.00	A
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 17	0.00	Aug 11	0.00	Oct 1 1988
MAXIMUM PEAK FLOW			3440	May 28	6250 B	Nov 14 1993
MAXIMUM PEAK STAGE			15.36	May 28	16.48 C	May 8 2003
ANNUAL RUNOFF (CFSM)	0.827		0.846		0.893	
ANNUAL RUNOFF (INCHES)	11.23		11.52		12.13	
10 PERCENT EXCEEDS	59		48		64	
50 PERCENT EXCEEDS	3.8		5.2		3.5	
90 PERCENT EXCEEDS	0.19		0.34		0.00	

A – Many days in most years.

B – Gage height, 16.43 ft.

C – Discharge, 6,100 ft<sup>3</sup>/s.

KASKASKIA RIVER BASIN  
05592800 Hurricane Creek near Mulberry Grove, IL

607

**LOCATION.**— Lat 38°55'21", long 89°14'12" (NAD of 1927), in NW1/4SE1/4 sec.31, T.6 N., R.1 W., Fayette County, Hydrologic Unit 07140202, on left bank at downstream side of bridge on State Highway 140, 300 ft downstream from railroad bridge, 1 mi east of Mulberry Grove, and at mile 14.1.

**DRAINAGE AREA.**— 152 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: October 1970 to current year.

STAGE: Water years 1994 to current year.

SURFACE-WATER QUALITY

CHEMICAL: Water years 1978–91.

**REVISED RECORDS.**— WDR IL-91-1: 1983(P).

**GAGE.**— Water-stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest-stage gage. Datum of gage is 467.00 ft above NGVD of 1929. Prior to Oct. 1, 1975, at same site at datum 0.30 ft lower.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 17,900 ft<sup>3</sup>/s, Dec. 25, 1982, gage height, 19.99 ft; maximum gage height, 21.32 ft, May 13, 2002; no flow for many days in 1987–88, 1991.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	7.9	33	85	e26	52	105	161	1120	18	19	13
2	3.9	10	30	71	e30	51	79	114	123	19	10	10
3	3.4	12	28	89	e60	45	66	81	76	20	7.7	8.3
4	3.7	9.6	28	2790	e50	653	57	41	58	21	7.0	6.0
5	3.9	9.4	30	4850	e44	2280	51	32	48	22	6.8	5.2
6	4.3	12	30	420	e40	535	47	28	42	213	5.6	4.9
7	4.6	22	27	136	e36	129	45	24	38	33	4.9	4.7
8	4.6	17	26	102	e32	84	43	21	35	18	4.7	4.3
9	48	13	26	86	e33	68	39	19	37	13	4.4	4.1
10	308	11	29	73	e39	57	37	18	35	12	4.3	4.0
11	63	11	30	65	e60	53	37	18	32	14	4.1	4.0
12	24	12	25	64	185	47	35	18	30	15	4.0	4.1
13	13	10	23	60	87	44	32	20	28	17	3.9	4.1
14	19	9.0	24	56	74	44	30	87	27	10	3.9	4.2
15	79	9.9	24	54	113	41	30	137	25	7.9	3.9	4.1
16	29	11	25	50	86	40	29	41	49	7.6	3.9	4.1
17	23	11	23	175	74	40	28	28	97	8.6	3.8	4.2
18	29	2400	22	933	126	39	26	28	90	7.5	3.7	4.1
19	17	4220	22	162	240	35	25	50	85	6.5	3.8	3.9
20	12	356	19	100	289	35	24	38	36	6.1	4.4	3.7
21	9.1	108	20	74	180	34	25	24	35	5.9	5.2	3.5
22	8.2	74	21	62	90	31	24	19	43	5.7	5.3	3.5
23	7.7	142	469	e52	89	29	24	16	32	5.5	4.5	3.5
24	7.5	710	248	e45	294	30	24	15	28	6.5	3.9	3.4
25	7.0	135	77	e39	114	33	30	31	25	7.5	4.6	3.4
26	7.5	76	52	e35	72	814	25	147	22	9.6	477	3.4
27	7.5	59	44	e33	57	1510	22	1520	21	8.0	134	3.3
28	7.8	48	46	e31	51	261	20	5100	20	6.1	168	3.0
29	8.4	41	1520	e29	49	601	19	1280	19	5.4	362	3.0
30	7.8	37	754	e28	---	273	22	307	19	79	49	3.1
31	7.3	---	129	e27	---	225	---	3580	---	72	20	---

## KASKASKIA RIVER BASIN

## 05592800 Hurricane Creek near Mulberry Grove, IL--Continued

TOTAL	782.5	8603.8	3904	10876	2720	8213	1100	13043	2375	700.4	1347.3	138.1
MEAN	25.2	287	126	351	93.8	265	36.7	421	79.2	22.6	43.5	4.60
MAX	308	4220	1520	4850	294	2280	105	5100	1120	213	477	13
MIN	3.4	7.9	19	27	26	29	19	15	19	5.4	3.7	3.0
CFSM	0.17	1.89	0.83	2.31	0.62	1.74	0.24	2.77	0.52	0.15	0.29	0.03
IN.	0.19	2.11	0.96	2.66	0.67	2.01	0.27	3.19	0.58	0.17	0.33	0.03

e Estimated

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 – 2004, BY WATER YEAR (WY)

MEAN	29.4	113	189	150	226	261	217	220	120	62.3	29.6	38.9
MAX	276	666	1443	617	775	1024	825	1184	429	305	162	444
(WY)	1987	1986	1983	1974	1985	1978	1994	2002	1973	1982	2000	1993
MIN	0.42	1.93	3.44	1.94	16.4	20.4	20.9	10.9	2.63	2.46	0.43	0.06
(WY)	1989	1972	1990	1977	1978	1981	1986	1988	1988	1988	1988	1988

## SUMMARY STATISTICS

## FOR 2003 CALENDAR YEAR

## FOR 2004 WATER YEAR

## WATER YEARS 1971 – 2004

ANNUAL TOTAL	32260.4		53803.1			
ANNUAL MEAN	88.4		147		138	
HIGHEST ANNUAL MEAN					254	
LOWEST ANNUAL MEAN					28.9	
HIGHEST DAILY MEAN	4220	Nov 19	5100	May 28	13800	Dec 25 1982
LOWEST DAILY MEAN	1.4	Aug 25,26	3.0	Sep 28,29	0.00	A
ANNUAL SEVEN-DAY MINIMUM	1.6	Aug 23	3.2	Sep 24	0.00	Aug 12 1988
MAXIMUM PEAK FLOW			7160	Jan 5	17900 B	Dec 25 1982
MAXIMUM PEAK STAGE			18.26	Jan 5	21.32 C	May 13 2002
ANNUAL RUNOFF (CFSM)	0.581		0.967		0.905	
ANNUAL RUNOFF (INCHES)	7.90		13.17		12.29	
10 PERCENT EXCEEDS	102		176		199	
50 PERCENT EXCEEDS	21		29		23	
90 PERCENT EXCEEDS	4.3		4.3		2.5	

A – Many days in 1987–88, 1991.

B – Gage height, 19.99 ft.

C – Discharge, 14,900 ft<sup>3</sup>/s.

KASKASKIA RIVER BASIN  
**05592900 Ef Kaskaskia River near Sandoval, IL (Fairman)**

609

**LOCATION.**— Lat 38°41'20", long 89°06'00" (NAD of 1927), in NE1/4NW1/4 sec.21, T.3 N., R.1 E., Marion County, Hydrologic Unit 07140202, on left bank at downstream side of bridge on U.S. Highway 51, about 1 mi north of Fairman, about 5 mi north of Sandoval, and at mile 9.9.

**DRAINAGE AREA.**— 113 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE

DISCHARGE: October 1979 to current year.

STAGE: Water years 1994 to current year. Gage–height record for April 1955 to Sept. 30, 1979, available in files of U.S. Army Corps of Engineers.

SURFACE–WATER QUALITY

CHEMICAL: Water years 1978–91.

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest–stage gage. Datum of gage is 460.20 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers).

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Maximum discharge, 17,000 ft<sup>3</sup>/s, May 16, 1990, from rating curve extended above 9,540 ft<sup>3</sup>/s, gage height 20.03 ft; no flow for many days in most years.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	1.6	12	63	e8.6	25	123	40	203	0.76	0.41	11
2	2.6	1.8	9.1	44	e12	62	72	95	56	0.72	0.25	6.0
3	1.8	2.2	7.9	162	e40	52	49	59	26	1.7	0.19	3.9
4	1.2	3.3	7.6	2080	e50	502	36	36	16	6.6	0.31	2.7
5	1.0	4.2	8.1	3730	e36	1030	28	23	11	5.5	0.24	2.3
6	0.82	4.0	8.5	1630	e26	798	23	15	8.7	5.6	0.05	2.2
7	0.64	2.8	8.4	107	e21	135	21	10	6.8	128	0.00	2.1
8	0.59	2.7	8.0	68	e18	70	19	7.3	5.7	38	0.00	1.7
9	0.85	2.8	7.9	49	e17	47	16	5.8	11	10	0.00	1.3
10	0.70	2.9	8.8	37	e29	34	14	4.8	8.0	4.9	0.01	1.2
11	0.54	3.9	9.8	31	e85	28	14	4.4	5.2	46	0.02	1.4
12	3.3	3.7	9.8	28	e220	23	13	3.6	4.4	117	0.00	1.4
13	6.7	3.5	8.9	26	e130	19	12	3.9	3.7	28	0.00	1.3
14	7.0	3.3	8.1	24	e74	18	10	5.1	3.6	10	0.00	1.3
15	56	4.2	7.8	23	e60	17	9.1	7.2	3.5	4.5	0.00	1.2
16	44	4.3	8.4	20	e54	17	8.5	10	4.0	2.7	0.00	1.0
17	17	4.0	9.1	221	e46	17	8.1	9.5	106	1.8	0.00	0.92
18	9.4	674	8.9	948	43	16	7.7	7.1	53	1.3	0.00	0.83
19	6.1	998	8.5	688	95	14	7.7	5.9	15	1.1	0.00	0.73
20	5.1	951	7.6	92	155	14	6.9	4.7	18	0.89	0.39	0.55
21	5.6	104	6.3	e50	158	14	7.2	3.9	10	0.69	0.54	0.31
22	3.8	41	5.9	e33	85	12	7.1	3.2	5.5	0.42	0.41	0.34
23	2.3	63	356	e27	53	11	7.8	2.7	3.4	0.30	0.32	0.22
24	1.5	555	570	e21	48	11	9.5	2.5	2.5	0.22	0.55	0.14
25	1.1	359	121	e18	45	11	19	12	1.8	0.50	0.60	0.00
26	0.64	70	49	e16	36	726	23	884	1.4	0.47	375	0.00
27	0.45	37	32	e14	27	1400	18	1640	1.2	0.44	770	0.00
28	0.71	25	27	e12	21	1030	13	2120	1.1	0.26	882	0.03
29	0.78	18	639	e11	18	328	9.5	1660	0.93	0.19	134	0.00
30	1.0	14	724	e10	---	264	7.4	713	0.82	0.56	65	0.00
31	1.5	---	162	e9.2	---	304	---	644	---	0.55	25	---
TOTAL	190.22	3964.2	2865.4	10292.2	1710.6	7049	619.5	8042.6	597.25	419.67	2255.29	46.07

## KASKASKIA RIVER BASIN

**05592900 Ef Kaskaskia River near Sandoval, IL (Fairman)--Continued**

MEAN	6.14	132	92.4	332	59.0	227	20.6	259	19.9	13.5	72.8	1.54
MAX	56	998	724	3730	220	1400	123	2120	203	128	882	11
MIN	0.45	1.6	5.9	9.2	8.6	11	6.9	2.5	0.82	0.19	0.00	0.00
CFSM	0.05	1.17	0.82	2.94	0.52	2.01	0.18	2.30	0.18	0.12	0.64	0.01
IN.	0.06	1.31	0.94	3.39	0.56	2.32	0.20	2.65	0.20	0.14	0.74	0.02

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 – 2004, BY WATER YEAR (WY)**

MEAN	17.8	100	119	129	172	177	159	167	70.7	42.4	29.6	25.2
MAX	111	628	547	522	591	425	628	862	334	268	196	341
(WY)	1985	1986	1988	1999	1982	1984	1994	1990	2000	1993	1985	1993
MIN	0.00	0.00	0.21	0.03	6.48	4.61	2.10	2.64	0.16	0.06	0.00	0.00
(WY)	2000	2000	1990	1981	1996	1981	1981	1988	1988	1984	2002	2002

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1980 – 2004**

ANNUAL TOTAL	31249.64		38052.00			
ANNUAL MEAN	85.6		104		100	
HIGHEST ANNUAL MEAN					175	
LOWEST ANNUAL MEAN					29.7	
HIGHEST DAILY MEAN	1480	Jun 12,13	3730	Jan 5	7660	May 17 1990
LOWEST DAILY MEAN	0.21	Sep 21	0.00	A	0.00	B
ANNUAL SEVEN-DAY MINIMUM	0.26	Sep 19	0.00	Aug 12	0.00	Oct 9 1980
MAXIMUM PEAK FLOW			4550	Jan 5	17000	C May 16 1990
MAXIMUM PEAK STAGE			17.60	Jan 5	20.03	May 16 1990
ANNUAL RUNOFF (CFSM)	0.758		0.920		0.887	
ANNUAL RUNOFF (INCHES)	10.29		12.53		12.06	
10 PERCENT EXCEEDS	298		162		185	
50 PERCENT EXCEEDS	8.4		9.0		8.5	
90 PERCENT EXCEEDS	0.45		0.42		0.04	

A – Several days.

B – Many days in most years.

C – From rating curve extended above 9,540 ft<sup>3</sup>/s.

KASKASKIA RIVER BASIN  
05593000 Kaskaskia River at Carlyle, IL

611

**LOCATION.**— Lat 38°36'42", long 89°21'22" (NAD of 1927), in NW1/4SE1/4 sec.18 , T.2 N., R.2 W., Clinton County, Hydrologic Unit 07140202, on right bank 300 ft downstream from bridge on U.S. Highway 50 at Carlyle, 16.5 mi upstream from Crooked Creek, and at mile 94.0.

**DRAINAGE AREA.**— 2,719 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: March 1908 to September 1912, November to December 1912, August 1914 to September 1915, May 1938 to current year.

STAGE: Water years 1994 to current year.

**REVISED RECORDS.**— WSP 975: 1908–12, 1915. WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest–stage gage. Datum of gage is 402.92 ft above NGVD of 1929. Prior to July 1, 1938, nonrecording gage at site 100 ft downstream at same datum. July 1, 1938 to Sept. 30, 1940, nonrecording gage, and Oct. 1, 1940 to Oct. 4, 1976, water–stage recorder, 300 ft upstream at same datum.

**REMARKS.**— Flow regulated since Apr. 1, 1967, by Carlyle Lake (station 05592990), 1 mi upstream from gage.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 54,400 ft<sup>3</sup>/s, May 21, 1943, gage height, 33.69 ft; minimum, 7.3 ft<sup>3</sup>/s, Nov. 12, 1964, result of dam construction upstream; minimum unregulated discharge, 11 ft<sup>3</sup>/s, Sept. 17, 1954.

**REMARKS FOR CURRENT YEAR.**— Records good.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	40	3940	5410	4110	1730	5030	395	3200	1880	851	1960
2	110	40	4070	5380	3920	1580	4680	373	3480	1790	767	2050
3	159	40	4230	5370	3680	1940	4200	367	4150	1700	659	1880
4	159	40	4210	5620	3520	2720	3730	357	4450	1510	594	1600
5	160	41	4160	5780	3350	3670	3390	229	4400	1420	546	1410
6	160	42	4130	6480	2990	4440	3020	129	4330	1430	545	1330
7	159	40	4110	7670	2580	4970	2760	69	4270	1430	541	1250
8	159	40	4100	8340	2380	5050	2760	69	4220	1420	400	1080
9	161	39	4080	8220	2110	5060	2750	68	4100	1410	165	719
10	234	40	4070	8140	1660	4830	2760	69	3960	1380	49	561
11	291	41	4060	8090	1360	4220	2760	69	3920	1410	49	426
12	295	41	4040	8010	1240	3670	2760	70	3820	1510	49	325
13	297	40	4030	7940	1240	3350	2760	70	3710	1580	48	276
14	299	40	4010	7960	1150	3140	2650	72	3690	1580	52	235
15	297	42	4070	7980	1070	3020	2420	568	3660	1580	54	235
16	298	41	4160	7900	967	3100	2100	983	3650	1570	54	235
17	302	41	4150	7940	1090	3190	1930	766	3630	1570	54	234
18	299	224	4120	7940	1510	3180	1820	483	3530	1570	54	165
19	293	111	4100	7960	1900	3170	1730	380	3450	1560	56	61
20	291	1600	4090	8010	2440	3010	1650	374	3430	1480	58	61
21	293	3920	4060	7950	2790	2670	1420	375	3300	1330	56	61
22	296	4010	3850	7910	2950	2360	1350	375	3080	1090	55	61
23	229	4030	3750	7980	3130	1990	1310	376	2960	902	56	62
24	82	4090	3830	7780	3310	1670	1180	373	2860	819	57	62
25	38	4090	4140	7630	3550	1580	1090	417	2760	818	60	62
26	38	4070	4150	7180	3180	1840	977	474	2650	799	63	62
27	38	4020	4130	6590	2660	3620	852	644	2440	789	57	62
28	39	4000	4110	6280	2320	4550	584	1150	2250	729	62	62
29	39	3970	4620	5580	2000	5310	363	1790	2090	661	59	63
30	39	3950	5270	5100	—	5490	363	2070	1970	676	605	63

KASKASKIA RIVER BASIN  
**05593000 Kaskaskia River at Carlyle, IL—Continued**

31	41	---	5380	4540	---	5390	---	2510	---	765	1410	---
TOTAL	5667	42773	129220	220660	70157	105510	67149	16514	103410	40158	8185	16713
MEAN	183	1426	4168	7118	2419	3404	2238	533	3447	1295	264	557
MAX	302	4090	5380	8340	4110	5490	5030	2510	4450	1880	1410	2050
MIN	38	39	3750	4540	967	1580	363	68	1970	661	48	61

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 – 2004, BY WATER YEAR (WY)**

MEAN	621	951	2867	3292	3971	3837	3096	2493	2195	1913	1191	688
MAX	3415	6233	9762	7777	9484	10170	9700	9578	6712	4888	4091	3731
(WY)	1994	1994	1994	1983	1974	1979	1979	2002	2002	1973	1974	1974
MIN	40.3	43.1	47.8	47.5	50.3	492	105	53.4	50.0	57.9	51.8	37.8
(WY)	1986	1988	1977	1977	1977	2000	2000	1997	1988	1976	1976	1986

**SUMMARY STATISTICS**

**FOR 2003 CALENDAR YEAR**

**FOR 2004 WATER YEAR**

**WATER YEARS 1968 – 2004**

ANNUAL TOTAL	425031	826116	
ANNUAL MEAN	1164	2257	2253
HIGHEST ANNUAL MEAN			4392
LOWEST ANNUAL MEAN			709
HIGHEST DAILY MEAN	5380 Dec 31	8340 Jan 8	13300 A
LOWEST DAILY MEAN	38 Oct 25–27	38 Oct 25–27	7.9 May 14 1988
ANNUAL SEVEN-DAY MINIMUM	39 Oct 25	39 Oct 25	29 May 13 1988
MAXIMUM PEAK FLOW		8500 Jan 8	13500 B May 27 2002
MAXIMUM PEAK STAGE		22.22 Jan 8	25.04 C May 8 1970
INSTANTANEOUS LOW FLOW		36 Oct 1,24,26	
10 PERCENT EXCEEDS	3940	5050	5530
50 PERCENT EXCEEDS	466	1590	1340
90 PERCENT EXCEEDS	48	56	53

A – May 27, 31, 2002.

B – Gage height 23.72 ft.

C – Discharge unknown.



**LOCATION.**— Lat 38°32'11", long 89°22'54" (NAD of 1927), in NE1/4NW1/4 sec.13, T.1 S., R.3 W., Clinton County, Hydrologic Unit 07140202, on right bank at downstream side of bridge on State Highway 161, 1.8 mi west of Posey, about 6 mi southwest of Carlyle, 7.3 mi above mouth of Crooked Creek, and at mile 83.9.

**DRAINAGE AREA.**— 2,745 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: Fragmentary records of discharge and gage height prior to Oct. 1, 1994, available in files of U.S. Army Corps of Engineers.

STAGE: Oct. 1, 1995 to current year.

**GAGE.**— Water-stage recorder, U.S. Army Corps of Engineers satellite telemeter, phone telemeter, and crest-stage gage. Datum of gage is 395.50 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers).

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height, 25.44 ft, May 28, 2002; minimum, 6.23 ft, Oct. 27, 1996.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

STAGE: Maximum gage height, 26.2 ft, Dec. 22, 1993; minimum, 6.24 ft, Sept. 12, 1977, from information by U. S. Army Corps of Engineers.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 18.74 ft, June 17; minimum, 6.55 ft on several days.

Gage height, feet, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.77	7.00	10.15	10.00	6.90	12.47	10.17	8.04	14.94	11.07	7.76	7.40
2	10.46	7.00	10.04	10.48	6.90	11.57	8.14	8.16	14.23	10.70	6.82	8.94
3	9.71	7.01	9.64	11.94	6.91	10.35	7.30	8.25	13.48	9.97	6.77	8.41
4	9.75	6.99	10.33	11.98	6.91	10.29	7.66	8.35	12.84	9.38	6.73	10.07
5	10.37	7.04	10.41	11.53	6.89	10.83	7.24	11.33	12.17	8.45	7.39	13.12
6	11.77	7.16	10.41	9.87	6.89	10.84	7.55	12.75	11.24	8.24	8.86	13.67
7	12.33	7.12	10.18	9.58	6.88	10.57	8.17	16.01	10.54	8.20	9.02	14.03
8	13.47	7.04	9.54	9.05	6.86	9.38	8.01	16.50	9.94	8.19	9.01	14.75
9	13.41	7.03	9.52	9.00	6.86	9.27	7.50	15.80	9.90	8.18	8.91	14.75
10	12.75	7.27	9.52	9.04	6.86	9.27	7.38	15.57	9.85	8.22	8.41	14.74
11	12.02	7.28	9.51	9.05	6.84	9.08	6.74	14.95	9.60	8.92	7.02	14.72
12	11.15	7.04	9.51	9.05	6.82	8.31	6.93	16.07	11.17	11.68	6.66	14.26
13	9.68	7.04	9.51	9.03	6.83	8.90	6.75	16.06	11.79	13.08	6.62	12.49
14	7.98	6.84	9.51	9.02	7.08	11.20	6.72	15.44	12.92	13.52	6.60	11.56
15	6.76	6.73	9.95	9.03	8.51	13.58	6.71	17.43	16.01	13.22	6.59	10.81
16	6.65	6.78	11.82	9.02	9.82	13.57	6.73	17.96	17.41	12.25	6.57	9.83
17	7.01	6.77	13.42	8.96	11.48	13.36	6.89	17.54	18.40	10.91	6.58	9.02
18	7.01	6.76	14.65	8.68	11.32	12.15	6.74	17.66	18.56	10.85	6.57	8.02
19	7.14	6.77	15.41	7.65	11.48	11.49	6.73	17.95	18.35	10.88	6.57	7.65
20	7.03	6.77	15.71	7.27	12.37	11.44	6.82	17.96	18.25	12.97	6.56	6.76
21	6.99	6.72	15.97	7.14	13.24	11.89	6.67	18.08	18.07	13.37	6.56	6.64
22	7.00	6.67	16.74	7.02	14.91	12.91	6.63	18.29	17.50	14.37	6.57	6.63
23	7.00	6.76	16.51	7.06	17.36	12.43	6.61	18.28	16.47	13.98	6.56	6.60
24	7.00	7.25	15.40	7.09	17.93	12.16	6.68	18.03	15.40	12.53	6.55	6.59
25	7.22	10.56	14.40	7.08	16.77	10.93	7.09	17.07	14.42	11.31	6.55	6.59
26	7.08	12.95	13.48	7.05	15.43	10.76	7.96	16.89	13.74	9.93	6.56	6.79
27	7.00	12.87	12.66	7.03	14.36	10.70	10.12	16.57	13.11	9.25	6.56	7.22
28	7.01	12.28	11.78	7.03	13.47	10.65	10.81	16.20	12.65	9.22	6.56	6.87
29	7.75	11.60	10.74	7.02	---	10.11	9.69	16.06	12.16	9.22	7.79	7.38
30	7.18	10.85	9.78	6.90	---	9.98	8.76	15.86	11.63	9.20	7.19	7.37
31	7.02	---	9.67	6.91	---	10.15	---	15.43	---	8.82	6.72	---

KASKASKIA RIVER BASIN  
05593020 Kaskaskia River near Posey, IL--Continued

MEAN	8.89	7.93	11.80	8.60	10.17	10.99	7.60	15.37	13.89	10.65	7.10	9.79
MAX	13.47	12.95	16.74	11.98	17.93	13.58	10.81	18.29	18.56	14.37	9.02	14.75
MIN	6.65	6.67	9.51	6.90	6.82	8.31	6.61	8.04	9.60	8.18	6.55	6.59
CAL YR 2002	MEAN 16.16		MAX 25.36		MIN 6.65							
WTR YR 2003	MEAN 10.24		MAX 18.56		MIN 6.55							

**LOCATION.**— Lat 38°32'11", long 89°22'54" (NAD of 1927), in NE1/4NW1/4 sec.13, T.1 S., R.3 W., Clinton County, Hydrologic Unit 07140202, on right bank at downstream side of bridge on State Highway 161, 1.8 mi west of Posey, about 6 mi southwest of Carlyle, 7.3 mi above mouth of Crooked Creek, and at mile 83.9.

**DRAINAGE AREA.**— 2,745 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: Fragmentary records of discharge and gage height prior to Oct. 1, 1994, available in files of U.S. Army Corps of Engineers.

STAGE: Oct. 1, 1995 to current year.

**GAGE.**— Water-stage recorder, U.S. Army Corps of Engineers satellite telemeter, phone telemeter, and crest-stage gage. Datum of gage is 395.50 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers).

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height, 25.44 ft, May 28, 2002; minimum, 6.23 ft, Oct. 27, 1996.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

STAGE: Maximum gage height, 26.2 ft, Dec. 22, 1993; minimum, 6.24 ft, Sept. 12, 1977, from information by U. S. Army Corps of Engineers.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 24.34 ft, Jan. 20; minimum, 6.55 ft, Nov. 10.

Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.18	6.63	18.11	---	19.41	13.87	21.67	9.32	18.65	14.06	10.71	14.24
2	6.78	6.63	18.28	---	---	13.21	20.79	9.10	19.06	13.76	10.58	14.45
3	7.57	6.61	18.68	---	18.72	13.93	19.73	8.94	19.93	13.60	10.06	14.16
4	7.59	6.60	18.69	---	18.30	16.01	18.62	8.90	20.28	13.05	9.91	13.34
5	7.59	6.61	18.61	---	17.88	18.82	17.79	8.34	19.99	12.67	9.62	12.76
6	7.58	6.65	18.56	22.94	17.13	20.31	16.98	7.85	19.72	12.86	9.59	12.37
7	7.57	6.61	18.52	23.66	16.12	21.14	16.28	7.03	19.50	12.87	9.58	12.23
8	7.57	6.58	18.49	24.18	15.60	21.35	16.18	6.95	19.39	12.70	9.27	11.71
9	7.58	6.56	18.45	24.29	15.04	21.27	16.17	6.91	19.22	12.64	8.21	10.56
10	7.77	6.56	18.45	24.27	13.91	20.81	16.17	6.90	18.93	12.54	6.85	9.68
11	8.37	6.58	18.44	24.25	12.93	19.78	16.18	6.89	18.84	12.62	6.67	9.35
12	8.40	6.58	18.40	24.22	12.41	18.53	16.18	6.88	18.68	12.84	6.65	8.63
13	8.44	6.58	18.37	24.19	12.32	17.69	16.17	6.89	18.42	13.18	6.63	8.47
14	8.47	6.58	18.35	24.18	12.15	17.19	15.98	6.93	18.38	13.19	6.64	8.05
15	8.47	6.64	18.39	24.19	11.77	16.85	15.50	8.02	18.31	13.17	6.65	8.02
16	8.45	6.61	18.60	24.17	11.50	16.94	14.68	10.94	18.27	13.13	6.64	8.01
17	8.49	6.60	18.61	24.22	11.41	17.18	14.21	10.51	18.23	13.13	6.64	8.01
18	8.45	9.53	18.58	24.29	12.89	17.15	13.85	9.67	18.06	13.12	6.63	7.91
19	8.42	10.01	18.55	24.28	14.01	17.13	13.67	9.22	17.84	13.07	6.63	6.85
20	8.38	12.54	18.50	24.31	15.28	16.90	13.40	8.95	17.86	12.93	6.70	6.70
21	8.39	18.31	18.46	24.30	16.30	16.16	12.82	8.85	17.64	12.45	6.63	6.69
22	8.38	18.63	18.19	24.26	16.61	15.41	12.43	8.83	17.08	11.74	6.61	6.68
23	8.26	18.58	18.17	24.28	17.09	14.54	12.37	8.84	16.70	11.04	6.64	6.67
24	7.40	18.86	18.17	24.23	17.37	13.61	11.88	8.82	16.51	10.58	6.64	6.67
25	6.66	18.91	18.78	24.14	18.01	13.21	11.70	9.22	16.23	10.61	6.66	6.67
26	6.60	18.72	18.78	23.99	17.41	13.49	11.21	10.49	16.02	10.56	7.95	6.66
27	6.58	18.44	18.69	23.61	16.23	17.87	10.79	13.62	15.54	10.53	8.55	6.66
28	6.59	18.29	18.64	23.30	15.35	20.17	10.04	14.94	15.06	10.42	7.70	6.66
29	6.59	18.20	---	22.54	14.58	21.55	9.03	16.09	14.64	10.09	8.75	6.66
30	6.59	18.13	---	21.57	---	22.10	8.89	16.31	14.26	10.14	10.28	6.66
31	6.61	---	---	20.47	---	22.17	---	16.90	---	10.28	12.66	---

KASKASKIA RIVER BASIN  
05593020 Kaskaskia River near Posey, IL--Continued

MEAN	7.67	10.98	----	----	----	17.62	14.71	9.61	17.91	12.24	8.06	9.07
MAX	8.49	18.91	----	----	----	22.17	21.67	16.90	20.28	14.06	12.66	14.45
MIN	6.58	6.56	----	----	----	13.21	8.89	6.88	14.26	10.09	6.61	6.66

KASKASKIA RIVER BASIN  
05593520 Crooked Creek near Hoffman, IL

617

**LOCATION.**— Lat 38°30'25", long 89°16'24" (NAD of 1927), in NE1/4NE1/4 sec.26, T.1 N., R.2 W., Washington County, Hydrologic Unit 07140202, on left bank at downstream side of bridge on County Highway 24, 2.2 mi southwest of Hoffman, 4.8 mi southeast of Posey, about 9 mi upstream from State Highway 127, and at mile 20.9.

**DRAINAGE AREA.**— 254 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE**

DISCHARGE: October 1974 to September 1998.

STAGE: Water years 1994 to current year. October 1968 to September 1974.

**SURFACE–WATER QUALITY**

CHEMICAL: Water years 1979–91.

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest–stage gage. Datum of gage is 420.19 ft above NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum discharge, 26,900 ft<sup>3</sup>/s, from rating curve extended above 16,400 ft<sup>3</sup>/s, May 17, 1990, gage height, 17.40 ft; minimum observed, 1.77 ft, Sept. 22, 1976.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 14.56 ft, May 7; minimum, 2.11 ft, Sept. 19–22.

Gage height, feet, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.22	3.83	2.94	5.34	2.69	4.42	3.61	7.64	3.32	3.06	2.18	---
2	2.22	3.28	2.94	5.00	2.74	6.22	3.44	11.08	3.17	2.97	2.18	---
3	2.21	3.02	2.98	4.47	2.77	6.96	3.33	7.32	3.07	2.75	2.44	---
4	2.26	2.85	3.04	4.01	2.79	6.67	3.28	6.88	3.04	2.66	3.15	5.20
5	2.27	2.80	3.05	3.67	2.85	5.48	3.90	13.24	2.98	2.61	3.31	3.79
6	2.32	2.84	3.05	3.59	2.86	4.46	4.22	14.19	2.94	2.65	2.65	3.14
7	2.26	2.89	3.05	3.55	2.83	4.17	4.14	14.34	2.92	2.64	2.52	2.84
8	2.25	2.84	3.06	3.46	2.80	3.88	3.85	13.68	2.88	2.57	2.60	2.64
9	2.25	2.90	3.08	3.44	2.79	3.63	3.58	13.92	2.82	2.53	2.62	2.50
10	2.24	2.93	3.10	3.34	2.76	3.45	3.42	13.44	2.81	2.61	---	2.39
11	2.24	2.93	3.11	3.19	2.74	3.34	3.30	13.33	4.50	2.64	---	2.31
12	2.26	3.10	3.10	3.09	2.71	4.44	3.19	12.74	10.73	2.57	---	2.25
13	2.25	3.03	3.10	3.00	2.71	7.93	3.11	10.16	12.00	2.44	---	2.23
14	2.25	3.00	3.13	2.94	2.72	10.84	3.05	5.50	12.88	2.32	---	2.24
15	2.26	3.06	3.18	2.88	3.27	9.44	3.00	4.45	12.62	2.26	---	2.21
16	2.26	3.24	3.15	2.84	4.85	6.13	2.96	4.07	11.48	2.27	---	2.17
17	2.26	3.31	3.14	2.79	5.63	4.63	4.64	3.85	6.04	2.31	---	2.19
18	2.25	3.24	3.15	2.74	4.90	4.18	8.28	3.75	4.14	3.84	2.18	2.17
19	2.44	3.15	3.34	2.71	4.73	4.32	6.93	3.63	3.65	5.80	2.18	2.16
20	2.76	3.10	4.39	2.69	7.42	6.60	5.25	3.72	3.38	3.35	2.18	2.11
21	2.67	3.13	4.51	2.68	9.87	9.16	6.18	4.00	3.21	2.82	2.18	2.11
22	2.62	3.10	4.22	2.66	10.81	7.16	5.67	4.74	3.06	2.62	2.19	2.12
23	2.67	3.06	3.67	2.63	11.16	5.52	4.99	4.11	2.96	2.53	2.18	2.19
24	2.62	3.05	3.37	2.63	9.62	4.41	4.30	3.62	2.88	2.48	2.19	2.19
25	2.61	3.03	3.22	2.63	6.49	3.96	7.45	5.27	2.83	2.39	2.15	2.17
26	2.99	3.01	3.09	2.63	5.16	5.52	11.70	10.0	3.24	2.30	2.19	2.20
27	2.94	3.03	3.02	2.61	4.59	7.28	11.71	8.05	3.30	2.23	2.18	2.81
28	2.83	3.01	2.99	2.61	4.38	5.59	7.55	4.93	3.01	2.17	2.17	3.86
29	3.44	3.00	2.97	2.64	---	4.78	8.71	4.11	2.95	2.18	2.20	3.78
30	4.52	2.97	3.18	2.64	---	4.52	7.20	3.73	2.89	2.25	---	3.18
31	4.30	---	4.16	2.66	---	4.20	---	3.51	---	2.18	---	---
MEAN	2.58	3.06	3.27	3.15	4.70	5.59	5.20	7.65	4.72	2.68	---	---
MAX	4.52	3.83	4.51	5.34	11.16	10.84	11.71	14.34	12.88	5.80	---	---

KASKASKIA RIVER BASIN  
05593520 Crooked Creek near Hoffman, IL--Continued

MIN	2.21	2.80	2.94	2.61	2.69	3.34	2.96	3.51	2.81	2.17	---	---
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KASKASKIA RIVER BASIN  
05593520 Crooked Creek near Hoffman, IL

619

**LOCATION.**— Lat 38°30'25", long 89°16'24" (NAD of 1927), in NE1/4NE1/4 sec.26, T.1 N., R.2 W., Washington County, Hydrologic Unit 07140202, on left bank at downstream side of bridge on County Highway 24, 2.2 mi southwest of Hoffman, 4.8 mi southeast of Posey, about 9 mi upstream from State Highway 127, and at mile 20.9.

**DRAINAGE AREA.**— 254 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE**

DISCHARGE: October 1974 to September 1998.

STAGE: Water years 1994 to current year. October 1968 to September 1974, available in files of Illinois Water Science Center.

**SURFACE–WATER QUALITY**

CHEMICAL: Water years 1979–91.

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest–stage gage. Datum of gage is 420.19 ft above NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum discharge, 26,900 ft<sup>3</sup>/s, from rating curve extended above 16,400 ft<sup>3</sup>/s, May 17, 1990, gage height, 17.40 ft; minimum observed, 1.77 ft, Sept. 22, 1976.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 13.65 ft, May 31; minimum, 2.13 ft, Oct. 13, 14.

Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.88	2.55	3.11	6.11	3.06	3.30	8.48	3.47	13.29	2.41	2.81	4.24
2	2.67	2.62	3.00	4.47	3.23	3.68	5.92	5.33	----	----	2.68	3.57
3	2.53	2.65	2.92	4.07	6.95	4.17	4.73	5.31	----	3.33	2.68	3.28
4	2.44	2.67	2.88	7.57	6.01	8.45	4.24	4.42	----	----	2.58	3.11
5	2.36	2.73	2.88	8.03	5.03	12.61	3.88	3.76	----	----	2.49	2.90
6	2.30	2.76	2.91	7.11	4.50	12.88	3.65	3.40	3.47	----	2.44	2.86
7	2.25	2.85	2.91	8.57	4.15	12.51	3.51	3.19	3.31	----	2.37	----
8	2.20	2.93	2.87	7.22	3.89	7.92	3.42	3.04	3.17	----	2.35	2.76
9	2.20	2.84	2.88	4.82	3.66	4.96	3.32	2.93	3.06	----	2.26	2.73
10	2.21	2.76	2.91	4.25	3.70	4.34	3.22	2.83	3.00	3.01	2.27	2.71
11	2.21	2.71	2.97	3.95	3.96	3.99	3.16	2.74	2.98	2.83	2.29	2.68
12	2.19	2.71	3.04	3.82	4.53	3.76	3.11	2.68	3.00	----	2.28	2.65
13	2.14	2.71	3.04	3.73	4.89	3.58	3.05	2.69	----	----	2.25	2.62
14	2.17	2.76	3.02	3.60	4.72	3.45	3.04	2.72	----	----	2.21	2.59
15	2.43	2.78	2.93	3.51	4.06	3.38	3.03	2.99	----	3.23	2.20	2.60
16	2.47	2.87	2.90	3.43	3.83	3.34	3.01	3.05	3.16	2.98	2.25	2.60
17	2.56	2.87	2.88	4.63	3.70	3.40	2.97	3.08	3.05	2.82	2.25	2.64
18	2.69	5.88	2.88	9.23	3.58	3.38	2.93	2.99	3.04	2.78	2.25	2.65
19	2.74	11.76	2.85	7.14	3.53	3.35	2.86	2.81	----	2.70	2.25	2.64
20	2.66	11.45	2.90	8.11	3.74	3.28	2.81	2.73	----	2.61	3.34	2.60
21	2.58	7.12	2.88	5.53	4.37	3.21	2.79	2.82	----	2.54	3.66	2.56
22	2.54	4.46	2.86	4.52	4.86	3.14	2.81	2.86	3.26	2.50	3.06	2.55
23	2.49	3.77	4.41	4.07	5.36	3.12	2.81	2.76	3.02	2.49	2.73	2.53
24	2.44	7.45	6.97	3.87	4.83	3.10	2.91	2.67	2.87	2.47	3.27	2.50
25	2.44	8.61	6.51	3.61	3.96	3.06	3.30	3.10	2.75	2.43	3.05	2.54
26	2.48	6.70	4.96	3.61	3.68	5.12	3.70	10.46	2.66	2.51	9.96	2.52
27	2.58	4.81	4.88	3.47	3.54	12.80	3.73	12.43	2.58	2.49	12.26	2.51
28	2.56	3.80	4.17	3.41	3.43	13.24	3.38	13.05	2.52	----	12.33	2.53
29	2.54	3.44	7.84	3.24	3.31	13.13	3.18	13.01	2.45	2.36	12.79	2.55
30	2.56	3.25	9.68	3.18	----	12.15	3.05	13.00	2.42	2.45	12.71	2.55
31	2.53	----	9.26	3.10	----	10.78	----	13.37	----	2.83	8.82	----
MEAN	2.45	4.31	3.97	5.00	4.21	6.21	3.53	5.02	----	----	4.29	----
MAX	2.88	11.76	9.68	9.23	6.95	13.24	8.48	13.37	----	----	12.79	----

KASKASKIA RIVER BASIN  
05593520 Crooked Creek near Hoffman, IL--Continued

MIN	2.14	2.55	2.85	3.10	3.06	3.06	2.79	2.67	---	---	2.20	---
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KASKASKIA RIVER BASIN  
05593575 Little Crooked Creek near New Minden, IL

621

**LOCATION.**— Lat 38°26'30", long 89°25'00" (NAD of 1927), in center of sec.15, T.1 S., R.3 W., Washington County, Hydrologic Unit 07140202, on right bank at upstream side of bridge on State Highway 177, 2.5 mi west of New Minden, 7.0 mi northwest of Nashville, and at mile 10.6.

**DRAINAGE AREA.**— 84.3 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE

DISCHARGE: October 1967 to current year.

STAGE: Water years 1994 to current year.

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

**GAGE.**— Water—stage recorder, phone telemeter, and crest—stage gage. Datum of gage is 414.12 ft above NGVD of 1929. Prior to July 2, 1973, nonrecording gage at same site and datum.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE: Maximum discharge, 11,900 ft<sup>3</sup>/s, May 17, 1995, gage height, 21.76 ft; no flow at times in most years.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.73	2.4	2.2	22	e2.3	7.6	29	67	253	1.8	5.6	11
2	0.61	2.5	1.8	14	134	19	22	67	34	16	2.7	7.5
3	0.91	2.5	1.6	12	442	21	17	19	17	4.3	1.9	5.5
4	0.69	2.6	1.6	384	94	624	13	9.4	11	14	1.5	123
5	0.53	2.6	2.4	673	35	972	9.3	6.5	7.8	306	1.2	12
6	0.55	2.4	3.3	80	e18	208	7.6	5.4	6.4	609	1.2	5.5
7	0.52	2.4	3.3	22	e11	54	7.4	4.5	5.8	93	1.2	4.5
8	0.49	2.3	2.8	e12	e8.0	27	7.1	3.8	5.2	19	0.97	4.0
9	0.46	2.2	2.8	e9.4	e9.5	18	6.3	3.3	4.7	8.3	0.84	3.1
10	0.45	2.0	3.4	e8.0	e15	14	5.8	3.0	4.1	5.1	0.77	2.5
11	0.48	1.9	5.1	e6.7	e24	11	5.1	2.5	4.0	3.6	0.71	2.3
12	0.47	1.9	4.1	e6.0	e18	9.2	4.9	2.1	34	2.7	0.66	2.0
13	0.42	1.8	3.1	e5.4	e9.5	7.8	4.4	2.3	24	2.5	0.63	1.6
14	0.54	2.6	3.1	e4.8	e7.5	7.3	4.1	4.2	5.5	2.4	0.61	1.2
15	0.63	2.8	3.0	e4.5	e6.0	7.0	3.8	9.1	3.3	3.0	0.59	1.0
16	0.88	2.7	3.1	e4.2	e5.0	7.1	3.4	4.7	3.2	2.3	0.57	1.2
17	1.3	3.5	3.0	177	e4.5	9.0	3.9	3.8	5.4	128	0.56	1.0
18	2.0	499	2.9	840	e4.7	7.8	3.5	3.2	4.5	10	0.52	0.90
19	2.2	937	2.6	155	e5.5	7.2	3.4	12	3.4	3.1	0.66	0.99
20	1.5	120	2.3	30	e10	6.6	3.5	8.1	2.6	1.7	3.2	0.91
21	1.2	21	2.2	e14	24	12	4.1	5.4	2.3	1.2	9.4	0.74
22	1.4	9.3	2.2	e10	20	7.4	4.6	3.8	2.2	1.0	5.1	0.63
23	1.4	31	186	e8.0	14	5.9	6.4	2.9	2.0	1.0	4.1	0.55
24	1.3	323	120	e6.5	11	5.7	7.8	2.4	1.9	3.2	63	0.59
25	1.4	58	26	e5.5	10	6.4	26	181	2.0	3.4	82	0.61
26	1.5	15	10	e5.8	8.8	186	16	1820	2.0	9.4	1170	0.60
27	1.5	7.0	6.1	e4.8	7.4	828	8.2	1410	1.9	3.2	490	0.54
28	1.7	4.5	5.0	e4.0	6.4	279	5.5	1150	1.9	1.8	218	0.49
29	1.6	3.4	775	e3.4	5.7	268	4.7	228	1.6	1.3	1280	0.48
30	1.7	2.7	404	e3.0	---	104	4.4	215	1.6	1.6	375	0.50
31	2.1	---	54	e2.6	---	49	---	976	---	18	24	---
TOTAL	33.16	2072.0	1648.0	2537.6	970.8	3796.0	252.2	6235.4	458.3	1280.9	3747.19	197.43
MEAN	1.07	69.1	53.2	81.9	33.5	122	8.41	201	15.3	41.3	121	6.58

## KASKASKIA RIVER BASIN

## 05593575 Little Crooked Creek near New Minden, IL---Continued

MAX	2.2	937	775	840	442	972	29	1820	253	609	1280	123
MIN	0.42	1.8	1.6	2.6	2.3	5.7	3.4	2.1	1.6	1.0	0.52	0.48
CFSM	0.01	0.82	0.63	0.97	0.40	1.45	0.10	2.39	0.18	0.49	1.43	0.08
IN.	0.01	0.91	0.73	1.12	0.43	1.68	0.11	2.75	0.20	0.57	1.65	0.09

e Estimated

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 – 2004, BY WATER YEAR (WY)

MEAN	20.8	74.6	86.3	87.1	110	137	129	94.8	59.6	44.7	13.4	13.9
MAX	143	600	485	244	407	381	542	910	345	413	121	254
(WY)	1970	1986	1983	1969	1982	1979	1996	1995	2000	1969	2004	1993
MIN	0.17	0.19	0.52	0.08	1.59	1.25	1.48	1.43	0.34	0.61	0.04	0.17
(WY)	1969	1981	1990	1977	1978	1981	1981	1976	1988	1984	1984	1985

## SUMMARY STATISTICS

## FOR 2003 CALENDAR YEAR

## FOR 2004 WATER YEAR

## WATER YEARS 1968 – 2004

ANNUAL TOTAL	25813.15		23228.98		72.4		132		1985	
ANNUAL MEAN	70.7		63.5		8.83		1976			
HIGHEST ANNUAL MEAN										
LOWEST ANNUAL MEAN										
HIGHEST DAILY MEAN	1580	May 7	1820	May 26	8070	May 17	1995			
LOWEST DAILY MEAN	0.42	Oct 13	0.42	Oct 13	0.00	A				
ANNUAL SEVEN-DAY MINIMUM	0.47	Oct 7	0.47	Oct 7	0.00	Nov 22		1967		
MAXIMUM PEAK FLOW			2330	May 26	11900	May 17		1995		
MAXIMUM PEAK STAGE			16.95	May 26	21.76	May 17		1995		
INSTANTANEOUS LOW FLOW			0.37	Oct 14						
ANNUAL RUNOFF (CFSM)	0.839		0.753		0.859					
ANNUAL RUNOFF (INCHES)	11.39		10.25		11.67					
10 PERCENT EXCEEDS	186		124		121					
50 PERCENT EXCEEDS	4.7		4.6		4.7					
90 PERCENT EXCEEDS	0.94		0.89		0.33					

A – At times in most years.

**LOCATION.**— Lat 39°08'56", long 89°21'08" (NAD of 1927), in NW1/4SE1/4 sec.7, T.8 N., R.2 W., Montgomery County, Hydrologic Unit 07140203, on right bank at downstream side of bridge on County Highway 8, 4.5 mi northeast of Coffeen, 6.5 mi east of Hillsboro, and at mile 39.3.

**DRAINAGE AREA.**— 55.5 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE

DISCHARGE: October 1963 to current year.

STAGE: Water years 1994 to current year.

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

**GAGE.**— Water—stage recorder, phone telemeter, and crest—stage gage. Datum of gage is 574.76 ft above NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE: Maximum discharge, 5,910 ft<sup>3</sup>/s, Dec. 7, 1966, from rating curve extended above 2,200 ft<sup>3</sup>/s, gage height, 14.45 ft; maximum gage height, 14.75 ft, Aug. 5, 1998, discharge, 5,030 ft<sup>3</sup>/s; no flow for many days in most years.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.80	e2.2	11	26	e8.0	23	31	19	32	1.9	3.0	0.94
2	0.73	e2.0	9.9	23	e8.5	19	23	18	20	1.7	1.4	e0.65
3	0.63	e4.4	9.2	21	e11	16	19	14	16	2.3	0.90	e0.54
4	0.61	e3.7	8.7	1620	e11	542	16	9.3	14	4.5	1.1	e0.45
5	0.71	e3.3	8.9	1200	e10	965	14	7.6	13	11	1.1	e0.40
6	0.73	e4.5	8.9	76	e10	82	13	6.2	11	3.8	0.62	e0.36
7	0.82	e8.0	8.5	44	e9.5	38	12	5.1	10	3.4	0.51	e0.33
8	0.83	e6.0	7.7	36	e9.5	27	11	4.2	9.2	2.5	0.41	e0.31
9	26	e5.0	8.1	32	e10	23	11	5.0	8.3	2.1	0.37	e0.29
10	77	e4.2	9.4	27	e11	20	9.8	4.5	9.0	2.2	0.33	e0.27
11	12	e3.7	10	25	e14	19	9.6	5.8	25	1.9	0.30	e0.26
12	4.9	e4.0	8.1	24	21	17	8.7	4.8	15	1.9	0.28	e0.25
13	3.2	e3.3	6.0	23	15	16	7.8	40	8.8	1.5	0.28	e0.24
14	11	e3.0	6.0	22	22	16	7.1	638	6.9	1.3	0.28	e0.26
15	6.0	e3.1	6.4	21	32	15	6.8	109	6.5	1.3	0.39	e0.60
16	5.1	e3.4	6.5	20	21	15	6.7	31	34	1.2	0.45	e0.54
17	5.0	e4.0	6.2	77	30	14	6.6	21	15	0.91	0.38	e0.45
18	4.7	1900	5.8	270	123	13	5.7	17	7.6	0.80	0.35	e0.40
19	8.2	834	5.2	43	288	12	5.0	15	6.2	0.76	0.31	e0.35
20	e5.4	70	5.1	29	270	12	4.7	13	4.3	0.71	0.68	e0.31
21	e4.5	38	5.0	e21	81	11	5.2	11	10	0.76	0.83	e0.29
22	e3.7	27	5.2	e18	35	9.8	4.8	8.6	12	0.74	0.72	e0.27
23	e3.1	47	240	e16	139	9.7	4.7	7.4	5.2	3.2	0.96	e0.26
24	e2.7	214	74	e14	199	10	5.3	6.9	2.8	1.6	0.88	e0.25
25	e2.5	39	24	e13	52	11	6.5	11	2.1	1.3	0.96	e0.24
26	e2.7	26	17	e12	33	357	5.7	208	1.9	0.87	336	e0.23
27	e3.2	21	14	e11	27	157	4.3	1500	2.0	0.63	47	e0.21
28	e5.0	17	15	e10	24	48	4.0	1950	2.1	0.53	9.5	e0.20
29	e4.0	14	675	e9.5	23	114	3.5	133	1.6	0.71	11	e0.19
30	e3.1	13	106	e9.0	---	202	5.4	108	1.7	2.8	4.2	e0.19
31	e2.5	---	38	e8.5	---	60	---	91	---	12	1.7	---
TOTAL	211.36	3327.8	1368.8	3801.0	1547.5	2893.5	277.9	5022.4	313.2	72.82	427.19	10.53
MEAN	6.82	111	44.2	123	53.4	93.3	9.26	162	10.4	2.35	13.8	0.35
MAX	77	1900	675	1620	288	965	31	1950	34	12	336	0.94

## KASKASKIA RIVER BASIN

## 05593900 East Fork Shoal Creek near Coffeen, IL--Continued

MIN	0.61	2.0	5.0	8.5	8.0	9.7	3.5	4.2	1.6	0.53	0.28	0.19
CFSM	0.12	2.00	0.80	2.21	0.96	1.68	0.17	2.92	0.19	0.04	0.25	0.01
IN.	0.14	2.23	0.92	2.55	1.04	1.94	0.19	3.37	0.21	0.05	0.29	0.01

e Estimated

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 – 2004, BY WATER YEAR (WY)

MEAN	15.0	27.0	53.3	57.9	65.8	75.4	72.9	71.3	38.2	16.6	10.8	15.1
MAX	192	193	256	279	222	313	347	572	203	176	127	181
(WY)	1970	1994	1983	1974	1982	1978	1994	2002	1973	1982	1998	1993
MIN	0.00	0.08	0.05	0.16	1.75	2.90	4.09	1.36	0.13	0.00	0.00	0.00
(WY)	1964	1998	1977	1977	2000	2000	2000	1988	1988	1964	1988	1964

## SUMMARY STATISTICS

## FOR 2003 CALENDAR YEAR

## FOR 2004 WATER YEAR

## WATER YEARS 1964 – 2004

ANNUAL TOTAL	13655.32		19274.00			
ANNUAL MEAN	37.4		52.7		43.2	
HIGHEST ANNUAL MEAN					113	
LOWEST ANNUAL MEAN					6.76	
HIGHEST DAILY MEAN	1900	Nov 18	1950	May 28	3830	May 7 2002
LOWEST DAILY MEAN	0.06	Aug 30	0.19	A Sep 29,30	0.00	B
ANNUAL SEVEN-DAY MINIMUM	0.16	Aug 24	0.22	A Sep 24	0.00	Oct 1 1963
MAXIMUM PEAK FLOW			2770	Jan 4	5910	C Dec 7 1966
MAXIMUM PEAK STAGE			12.99	Jan 4	14.75	D Aug 5 1998
ANNUAL RUNOFF (CFSM)	0.674		0.949		0.778	
ANNUAL RUNOFF (INCHES)	9.15		12.92		10.57	
10 PERCENT EXCEEDS	51		63		62	
50 PERCENT EXCEEDS	5.0		8.1		4.9	
90 PERCENT EXCEEDS	0.74		0.45		0.10	

A – Estimated, but may have been less during period of estimated discharges in September.

B – Many days in most years.

C – From rating curve extended above 2,200 ft<sup>3</sup>/s, gage height, 14.45 ft.D – Discharge, 5,030 ft<sup>3</sup>/s.

KASKASKIA RIVER BASIN  
05593945 Shoal Creek near Pierron, IL

625

**LOCATION.**— Lat 38°46'33", long 89°29'56" (NAD of 1927), in NW1/4SW1/4 sec. 24, T.4 N., R.4 W., Bond County, Hydrologic Unit 07140203, on left bank at upstream side of bridge on State Highway 143, 1.1 mi east of Baden Baden, 6.5 mi east of Pierron, and at mile 43.0.

**DRAINAGE AREA.**— 678 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: May, 1995 to current year.

STAGE: May 1995 to current year. Gage—height record for Dec. 16, 1970 to May 30, 1978, and Apr. 5, 1995 to May 5, 1995 available in files of U.S. Army Corps of Engineers.

**GAGE.**— Water—stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest—stage gage. Datum of gage is 400.00 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers).

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 24,000 ft<sup>3</sup>/s, May 8, 2002, gage height 60.85 ft; minimum discharge, 4.7 ft<sup>3</sup>/s, Oct. 13, 1997.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Flood of Apr. 23, 1973 reached a stage of 59.48 ft, discharge 14,900 ft<sup>3</sup>/s, from information by the U.S. Army Corps of Engineers.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	29	236	742	e115	310	1010	260	4380	62	223	107
2	24	33	219	566	e120	279	705	452	2500	94	104	82
3	22	35	195	535	e190	260	553	329	952	79	75	66
4	21	47	180	2350	e240	541	446	244	574	221	57	55
5	22	47	178	4790	e200	2880	368	182	442	142	46	46
6	20	45	217	8370	e170	4010	307	153	355	643	40	39
7	19	47	369	7840	e150	4350	273	130	294	755	34	33
8	19	54	369	3220	e135	2400	250	110	249	305	29	29
9	20	48	362	1360	e130	1050	231	101	228	198	26	26
10	32	44	366	905	e145	711	205	90	213	143	24	23
11	163	40	374	735	e180	548	190	89	205	112	23	20
12	108	39	356	662	355	449	182	104	212	103	21	19
13	55	37	327	584	368	373	167	100	218	121	20	17
14	44	35	224	526	266	315	154	1180	248	90	20	15
15	40	37	203	488	254	286	140	3100	270	69	19	15
16	51	38	191	454	296	267	125	3940	345	56	19	14
17	62	37	141	521	274	244	117	4590	356	48	17	14
18	47	1930	122	1740	313	227	112	2370	259	48	17	14
19	50	4230	114	1570	699	209	106	1160	327	40	16	13
20	46	7260	110	725	1120	196	101	1140	288	35	18	12
21	36	5570	106	626	1180	181	99	661	177	33	18	11
22	31	2190	99	550	760	183	98	457	146	36	24	11
23	28	951	268	472	538	159	94	340	139	31	27	10
24	28	1230	1050	385	974	149	101	271	127	29	21	9.8
25	28	1210	669	243	1120	147	108	415	109	33	20	10
26	26	736	379	e180	689	500	121	1160	93	33	241	10
27	26	547	288	e160	522	2860	116	3060	83	34	843	9.8
28	27	438	253	e150	416	3020	105	4860	75	35	452	9.4
29	28	357	1420	e140	348	2380	96	10100	68	28	379	8.5
30	28	289	2390	e130	—	2140	90	10200	63	237	240	8.6

KASKASKIA RIVER BASIN  
**05593945 Shoal Creek near Pierron, IL--Continued**

<b>31</b>	<b>26</b>	<b>---</b>	<b>1390</b>	<b>e120</b>	<b>---</b>	<b>1530</b>	<b>---</b>	<b>7550</b>	<b>---</b>	<b>603</b>	<b>151</b>	<b>---</b>
TOTAL	1204	27630	13165	41839	12267	33154	6770	58898	13995	4496	3264	757.1
MEAN	38.8	921	425	1350	423	1069	226	1900	466	145	105	25.2
MAX	163	7260	2390	8370	1180	4350	1010	10200	4380	755	843	107
MIN	19	29	99	120	115	147	90	89	63	28	16	8.5
CFSM	0.06	1.36	0.63	1.99	0.62	1.58	0.33	2.80	0.69	0.21	0.16	0.04
IN.	0.07	1.52	0.72	2.30	0.67	1.82	0.37	3.23	0.77	0.25	0.18	0.04

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 – 2004, BY WATER YEAR (WY)**

MEAN	140	253	281	489	799	784	674	1399	589	226	196	92.9
MAX	798	921	1195	1350	2128	2009	1902	5141	1491	800	811	353
(WY)	2001	2004	2002	2004	1999	1998	2002	2002	1998	2000	2000	2000
MIN	8.11	15.7	41.3	23.4	65.7	74.9	75.8	128	258	34.3	16.9	11.5
(WY)	1998	1998	2000	2000	2000	2000	2000	2001	1997	1997	1997	1999

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1995 – 2004**

ANNUAL TOTAL	115660		217439.1			
ANNUAL MEAN	317		594		496	
HIGHEST ANNUAL MEAN					995	
LOWEST ANNUAL MEAN					213	
HIGHEST DAILY MEAN	7260	Nov 20	10200	May 30	22500	May 8 2002
LOWEST DAILY MEAN	16	Aug 26,28–30	8.5	Sep 29	5.4	Oct 12 1997
ANNUAL SEVEN-DAY MINIMUM	16	Aug 24	9.4	Sep 24	6.4	Oct 3 1997
MAXIMUM PEAK FLOW			12700	May 29	24000	May 8 2002
MAXIMUM PEAK STAGE			59.36	May 29	60.85	May 8 2002
INSTANTANEOUS LOW FLOW			7.9	Sep 30	4.7	Oct 13 1997
ANNUAL RUNOFF (CFSM)	0.467		0.876		0.731	
ANNUAL RUNOFF (INCHES)	6.35		11.93		9.94	
10 PERCENT EXCEEDS	551		1270		1140	
50 PERCENT EXCEEDS	99		174		109	
90 PERCENT EXCEEDS	25		21		17	

**LOCATION.**— Lat 38°36'35", long 89°29'40" (NAD of 1927), in SW1/4SW1/4 sec.13, T.2 N., R.4 W., Clinton County, Hydrologic Unit 07140203, on right bank at upstream side of bridge on old U.S. Highway 50, 0.4 mi upstream from railroad bridge, 1.7 mi east of Breese, 7 mi upstream from Beaver Creek, and at mile 21.3.

**DRAINAGE AREA.**— 735 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE**

DISCHARGE: November 1909 to December 1912, August to December 1914, October 1945 to current year.

STAGE: Water years 1994 to current year.

**SURFACE—WATER QUALITY**

CHEMICAL: Water years 1979–91.

MISCELLANEOUS: Water Years 1998 and 2002.

**REVISED RECORDS.**— WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest–stage gage. Datum of gage is 413.97 ft above NGVD of 1929. Prior to Dec. 8, 1914, chain gage at site 0.4 mi downstream at different datum. Oct. 1, 1945, to Oct. 10, 1968, nonrecording gage at present site and datum.

**REMARKS.**— About 1.03 ft<sup>3</sup>/s diverted 20 ft above station for municipal supply of Breese is not included in records.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Maximum discharge, 23,300 ft<sup>3</sup>/s, May 9, 2002, gage height, 22.10 ft; maximum gage height, 23.02 ft, April 14, 1979, during period of constricted channel due to bridge construction; no flow for many days in 1954–56, 1988.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Flood of May 19, 1943, reached a stage of 25.6 ft, present site and datum, discharge, 52,000 ft<sup>3</sup>/s on basis of contracted opening measurement of peak flow.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	e34	257	1130	e135	362	1430	285	9880	112	460	169
2	31	e40	212	684	e140	327	884	462	7680	113	191	132
3	27	e48	192	558	e220	302	642	461	5220	105	118	104
4	23	e54	174	2250	e270	404	505	307	2090	115	87	82
5	23	e54	166	3430	e280	1830	410	241	906	195	76	68
6	23	e52	162	3980	e220	2800	338	188	686	174	55	57
7	23	e54	241	6080	e190	3280	295	163	e400	894	47	48
8	22	e56	341	8200	e170	3970	267	143	268	530	40	42
9	23	e60	338	6570	e155	3480	247	e125	243	278	34	38
10	27	e54	337	3100	e170	1610	230	e115	221	200	33	34
11	53	e50	340	1430	e250	829	208	e105	193	152	30	31
12	178	e46	338	940	419	559	199	e110	180	128	27	e26
13	110	e43	322	760	432	425	187	138	196	124	25	e23
14	76	e42	274	635	390	348	173	e330	189	135	24	e20
15	54	e42	191	555	302	296	162	1220	248	99	24	e18
16	49	e42	181	509	308	271	149	1880	364	75	23	e17
17	70	e43	166	707	321	249	138	2390	609	62	23	e16
18	75	2460	134	1640	315	234	132	3170	458	52	22	e16
19	58	3530	123	2130	484	217	126	3110	617	52	23	e15
20	59	3650	119	1250	974	206	122	1820	394	44	30	e15
21	55	4960	117	738	1240	186	117	1060	249	40	29	e14
22	45	6370	113	644	1010	175	112	e800	164	41	30	e13
23	e37	5000	274	553	679	169	110	e620	140	47	41	e13
24	e34	2440	712	479	659	153	106	710	131	39	55	e12
25	e33	1800	936	344	1210	146	117	818	120	48	49	e12

KASKASKIA RIVER BASIN  
**05594000 Shoal Creek near Breese, IL--Continued**

<b>26</b>	e31	1140	519	e220	896	164	121	1180	107	47	257	e12
<b>27</b>	e30	706	332	e190	641	1570	133	2610	95	44	594	e12
<b>28</b>	e31	516	270	e180	501	2680	124	3590	87	46	897	e11
<b>29</b>	e31	399	930	e165	409	2820	114	4070	80	47	1400	e11
<b>30</b>	e31	321	2260	e155	---	2720	105	6270	75	95	444	e11
<b>31</b>	e32	---	2140	e145	---	2150	---	10700	---	565	250	---
TOTAL	1430	34106	13211	50351	13390	34932	8003	49191	32290	4698	5438	1092
MEAN	46.1	1137	426	1624	462	1127	267	1587	1076	152	175	36.4
MAX	178	6370	2260	8200	1240	3970	1430	10700	9880	894	1400	169
MIN	22	34	113	145	135	146	105	105	75	39	22	11
CFSM	0.06	1.55	0.58	2.21	0.63	1.53	0.36	2.16	1.46	0.21	0.24	0.05
IN.	0.07	1.73	0.67	2.55	0.68	1.77	0.41	2.49	1.63	0.24	0.28	0.06

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 – 2004, BY WATER YEAR (WY)**

MEAN	177	303	551	662	905	978	961	868	532	306	181	138
MAX	1704	2557	3925	4171	4385	4334	3062	6322	3697	1853	1493	1774
(WY)	1970	1947	1983	1950	1982	1978	1979	2002	1957	1957	1946	1993
MIN	1.19	4.65	8.03	6.31	8.97	11.9	56.0	12.3	15.9	2.50	7.38	2.32
(WY)	1957	1955	1955	1977	1954	1954	1954	1954	1988	1954	1953	1953

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1910 – 2004**

ANNUAL TOTAL	136671		248132			
ANNUAL MEAN	374		678		544	
HIGHEST ANNUAL MEAN					1119	
LOWEST ANNUAL MEAN					28.5	
HIGHEST DAILY MEAN	6370	Nov 22	10700	May 31	22200	Jun 17 1957
LOWEST DAILY MEAN	18	Aug 21,22,24	11	A Sep 28–30	0.00	B
ANNUAL SEVEN-DAY MINIMUM	19	Aug 20	12	Sep 24	0.00	Jul 27 1954
MAXIMUM PEAK FLOW			11300	May 31	23300	C May 9 2002
MAXIMUM PEAK STAGE			19.56	May 31	23.02	D Apr 14 1979
ANNUAL RUNOFF (CFSM)	0.509		0.922		0.740	
ANNUAL RUNOFF (INCHES)	6.92		12.56		10.06	
10 PERCENT EXCEEDS	780		2100		1430	
50 PERCENT EXCEEDS	110		180		110	
90 PERCENT EXCEEDS	27		30		13	

A – Estimated, but may have been less during period of estimated discharges in September.

B – Many days in 1954–56, 1988.

C – Gage height, 22.10 ft.

D – Discharge, 20,600 ft<sup>3</sup>/s, during period of constricted channel from bridge construction.



**LOCATION.**— Lat 38°27'02", long 89°37'39" (NAD of 1927), in NW1/4NW1/4 sec.14, T.1 S., R.5 W., Washington County, Hydrologic Unit 07140204, on left bank at downstream side of bridge on State Highways 160 and 177, 1 mi northwest of Venedy Station, 2.5 mi downstream from Sugar Creek, 4 mi west of Okawville, and at mile 57.2.

**DRAINAGE AREA.**— 4,393 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE**

DISCHARGE: October 1969 to current year.

STAGE: Water years 1994 to current year. Gage—height record for Mar. 7, 1968, to Sept. 30, 1969, available in files of U.S. Army Corps of Engineers.

**SURFACE—WATER QUALITY**

CHEMICAL: Water years 1975–91.

SEDIMENT: May 1980 to Sept. 1997.

SPECIFIC CONDUCTANCE: Water years 1975–81.

WATER TEMPERATURE: Water years 1975–81.

MISCELLANEOUS: Sediment concentration and particle size, water years 1993–94, 1996–97.

**REVISED RECORDS.**— WDR IL–75–1: Drainage area.

**GAGE.**— Water—stage recorder, U.S. Army Corps of Engineers satellite telemeter and crest—stage gage. Datum of gage is 380.10 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers).

**REMARKS.**— Flow partially regulated by Carlyle Lake (station 05592990), 35 mi upstream from gage.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Maximum discharge, 50,300 ft<sup>3</sup>/s, May 19, 1995, gage height, 25.79 ft; minimum discharge, 54 ft<sup>3</sup>/s, Sept. 12, 13, 1970.

**SUSPENDED—SEDIMENT CONCENTRATIONS:** Maximum daily, 2,590 mg/L, June 1, 1982; minimum daily, 5 mg/L, Dec. 20–29, 1980, Feb. 5, 1981.

**SUSPENDED—SEDIMENT LOADS:** Maximum daily, 46,200 tons, June 1, 1982; minimum daily, 1.9 tons, Jan. 14–16, 19, 23, 24, 1981.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	378	117	4340	9000	e5000	2590	9920	973	12300	2300	1950	3710
2	300	135	4260	7810	e5000	2210	8990	2160	13600	2290	1610	3070
3	209	156	4330	6670	e5470	2080	7180	1810	13900	2470	1220	2530
4	258	154	4400	7610	5400	3170	5650	1640	13200	2230	952	2190
5	279	139	4360	10900	4840	6750	4760	1300	11300	2120	860	1940
6	274	136	4320	13700	4380	8830	4230	913	7940	2840	787	1660
7	270	167	4280	14500	3810	9280	3720	653	5840	3240	753	1530
8	260	179	4340	14000	3290	9570	3430	485	5110	3140	722	1420
9	257	167	4380	14200	2990	9750	3340	408	5050	2470	634	1240
10	255	162	4370	14600	2750	9580	3290	362	4810	2010	447	e950
11	308	160	4360	14100	2700	8030	3260	331	4580	1820	267	e750
12	389	149	4350	12600	2800	5950	3210	306	4470	1760	199	e620
13	520	139	4330	10900	2520	4780	3180	304	4370	1960	175	e500
14	503	133	4300	9850	2360	4240	3140	326	4380	2100	165	e430
15	498	138	4220	9300	2130	3900	3000	831	4340	1990	158	e395
16	477	148	4220	8930	1770	3740	2720	2640	4310	1880	155	e360
17	464	156	4260	8940	1580	3780	2430	3480	4670	1890	151	358
18	507	2470	4240	10400	1680	3810	2230	3560	4720	1910	145	355
19	525	8590	4190	11900	2200	3770	2110	3800	4780	1810	140	340
20	479	10200	4150	12900	3130	3720	2010	4080	4990	1770	156	228
21	452	10700	4120	12600	4280	3510	1900	2870	4570	1660	190	171
22	443	10000	4080	11700	4670	3140	1690	1690	4030	1530	196	157
23	428	9490	4770	10600	4560	2790	1610	1170	3660	1950	210	150
24	397	9870	5570	9870	4390	2420	1550	938	3490	1260	209	143

## KASKASKIA RIVER BASIN

**05594100 Kaskaskia River near Venedy Station, IL--Continued**

<b>25</b>	285	9620	5640	9360	4750	2090	1480	867	3320	1050	218	140
<b>26</b>	181	7970	5460	8930	5050	2000	1380	3700	3190	1030	1820	136
<b>27</b>	137	6150	4880	8490	4360	3810	1260	7520	3030	999	3200	132
<b>28</b>	128	5120	4560	e7800	3590	7480	1130	9560	2810	958	3160	130
<b>29</b>	129	4680	5870	e7100	3040	8770	914	11100	2610	899	4760	126
<b>30</b>	121	4470	8280	e6400	----	9490	713	12100	2420	871	5060	126
<b>31</b>	113	----	9150	e5600	----	9960	----	12000	----	1470	4380	----
TOTAL	10224	101865	148380	321260	104490	164990	95427	93877	171790	57677	35049	25987
MEAN	330	3396	4786	10360	3603	5322	3181	3028	5726	1861	1131	866
MAX	525	10700	9150	14600	5470	9960	9920	12100	13900	3240	5060	3710
MIN	113	117	4080	5600	1580	2000	713	304	2420	871	140	126

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 – 2004, BY WATER YEAR (WY)**

MEAN	996	1942	4534	5030	6127	6496	5969	4732	3636	2585	1610	1024
MAX	5021	12600	17460	12050	18850	16930	16750	18490	8952	7383	5397	5280
(WY)	1994	1994	1983	1991	1982	1979	1979	2002	2002	2000	1998	1993
MIN	96.6	82.6	89.4	74.2	516	891	434	211	102	104	161	102
(WY)	2000	2000	1977	1977	1978	1981	2000	1976	1988	1976	1988	1976

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1970 – 2004**

ANNUAL TOTAL	804675		1331016			
ANNUAL MEAN	2205		3637		3712	
HIGHEST ANNUAL MEAN					6824	
LOWEST ANNUAL MEAN					1194	
HIGHEST DAILY MEAN	10700	Nov 21	14600	Jan 10	48700	May 19 1995
LOWEST DAILY MEAN	113	Oct 31	113	Oct 31	56	Sep 12 1970
ANNUAL SEVEN-DAY MINIMUM	126	Oct 27	126	Oct 27	63	Sep 7 1970
MAXIMUM PEAK FLOW			14900	Jan 10	50300	May 19 1995
MAXIMUM PEAK STAGE			21.57	Jan 10	25.79	May 19 1995
INSTANTANEOUS LOW FLOW			110	Oct 31	54	A
10 PERCENT EXCEEDS	5380		9510		10100	
50 PERCENT EXCEEDS	1200		2770		1980	
90 PERCENT EXCEEDS	164		167		150	

A – Sept. 12, 13, 1970.

KASKASKIA RIVER BASIN  
05594450 Silver Creek near Troy, IL

631

**LOCATION.**— Lat 38°43'00", long 89°49'45" (NAD of 1927), in SE1/4SW1/4 sec.12, T.3 N., R.7 W., Madison County, Hydrologic Unit 07140204, on right bank at upstream side of bridge on U.S. Highway 40, 0.2 mi upstream from railroad bridge, 1.9 mi upstream from East Fork Silver Creek, 1.9 mi southeast of Troy, and at mile 44.6.

**DRAINAGE AREA.**— 154 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE

DISCHARGE: October 1966 to current year.

STAGE: Water years 1994 to current year.

SURFACE–WATER QUALITY

CHEMICAL: Water years 1978–91.

**REVISED RECORDS.**— WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, phone telemeter, and crest–stage gage. Datum of gage is 438.91 ft above NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Maximum discharge, 10,600 ft<sup>3</sup>/s, April 12, 1979, gage height, 17.52 ft; maximum gage height, 17.94 ft, May 17, 1990, discharge, 9,170 ft<sup>3</sup>/s; no flow for several days in 1967–68, 1973, 1988.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	3.5	23	98	e23	53	177	129	693	4.5	178	7.8
2	1.9	5.0	20	68	e34	50	97	183	287	4.4	53	4.5
3	1.9	4.6	19	61	e60	47	70	120	142	20	26	3.5
4	1.9	4.6	21	948	e54	204	58	59	112	112	16	e2.8
5	1.9	5.0	22	2350	e48	610	51	44	95	99	14	e2.3
6	1.9	9.7	22	2950	e44	1250	46	36	79	118	6.4	e2.0
7	1.8	8.8	22	1260	e40	987	44	29	60	278	4.3	e2.2
8	1.8	6.6	21	359	e38	251	42	20	59	114	3.9	e2.1
9	2.3	e5.5	18	113	e40	86	35	15	46	51	4.2	e1.9
10	3.4	e5.0	20	80	e62	64	30	9.6	45	23	3.5	e1.8
11	2.5	e4.6	22	66	e150	56	31	11	42	12	2.8	e1.8
12	2.4	e4.3	24	63	266	50	29	5.4	36	8.2	2.4	e1.7
13	2.3	e4.0	22	59	184	46	26	42	26	13	2.5	e1.7
14	5.4	e3.8	21	54	83	45	21	674	21	11	2.3	e1.8
15	4.1	e5.0	20	52	76	43	18	1120	20	5.0	2.3	e2.0
16	2.9	e4.5	23	48	87	42	17	2250	22	3.8	2.3	e2.5
17	17	e6.0	23	140	64	42	14	1350	22	3.7	2.3	e2.4
18	7.3	1590	24	490	65	41	12	266	115	3.3	2.3	e2.0
19	4.1	3220	22	551	119	38	11	347	191	3.1	2.3	e1.9
20	3.5	2480	19	252	210	36	9.5	555	60	2.8	4.1	e1.8
21	3.0	1090	18	e80	222	34	10	266	39	2.8	2.7	e1.9
22	3.2	266	18	e60	143	32	9.4	83	29	3.0	2.5	e1.9
23	3.9	87	86	e50	96	28	12	54	19	2.7	2.7	e2.5
24	3.5	160	255	e43	169	27	13	42	15	2.6	12	e2.4
25	3.5	197	135	e40	223	28	20	217	13	5.4	34	e2.1
26	3.5	83	70	e43	108	159	19	661	9.4	3.5	157	e1.9
27	3.4	53	53	e37	75	468	20	1780	7.6	2.9	186	e1.8
28	3.7	41	49	e32	63	617	13	4430	6.4	2.9	66	e1.8
29	3.9	32	320	e29	55	690	10	4200	5.3	2.7	207	e1.7
30	3.6	27	485	e27	---	738	13	2440	4.8	375	90	e1.7
31	3.7	---	313	e25	---	538	---	1160	---	494	22	---
TOTAL	111.2	9416.5	2230	10528	2901	7400	977.9	22598.0	2321.5	1787.3	1116.8	70.2

## KASKASKIA RIVER BASIN

**05594450 Silver Creek near Troy, IL--Continued**

MEAN	3.59	314	71.9	340	100	239	32.6	729	77.4	57.7	36.0	2.34
MAX	17	3220	485	2950	266	1250	177	4430	693	494	207	7.8
MIN	1.8	3.5	18	25	23	27	9.4	5.4	4.8	2.6	2.3	1.7
CFSM	0.02	2.04	0.47	2.21	0.65	1.55	0.21	4.73	0.50	0.37	0.23	0.02
IN.	0.03	2.27	0.54	2.54	0.70	1.79	0.24	5.46	0.56	0.43	0.27	0.02

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 – 2004, BY WATER YEAR (WY)**

MEAN	26.9	91.6	157	142	203	220	228	180	113	71.3	31.9	25.1
MAX	165	509	902	562	646	927	738	957	501	570	296	408
(WY)	1987	1985	1983	1974	1982	1978	1994	2002	1998	1969	1998	1993
MIN	0.23	0.34	0.42	0.31	9.25	6.74	13.4	5.26	0.91	1.44	0.75	0.09
(WY)	1972	1972	1977	1977	1978	1981	2000	1977	1988	1984	1971	1988

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1967 – 2004**

ANNUAL TOTAL	36495.9		61458.4			
ANNUAL MEAN	100		168		124	
HIGHEST ANNUAL MEAN					244	
LOWEST ANNUAL MEAN					23.1	
HIGHEST DAILY MEAN	3220	Nov 19	4430	May 28	7740	Apr 12 1979
LOWEST DAILY MEAN	1.8	Oct 7, 8	1.7	A Sep 12,13,29,30	0.00	B
ANNUAL SEVEN-DAY MINIMUM	1.9	Oct 2	1.8	Sep 9	0.00	Sep 29 1968
MAXIMUM PEAK FLOW			4680	May 28	10600	C Apr 12 1979
MAXIMUM PEAK STAGE			15.90	May 28	17.94	D May 17 1990
INSTANTANEOUS LOW FLOW			1.5	Oct 7		
ANNUAL RUNOFF (CFSM)	0.649		1.09		0.803	
ANNUAL RUNOFF (INCHES)	8.82		14.85		10.91	
10 PERCENT EXCEEDS	183		315		300	
50 PERCENT EXCEEDS	19		26		16	
90 PERCENT EXCEEDS	2.6		2.3		0.88	

A – Estimated, but may have been less during periods of estimated discharges in September.

B – Several days in 1967–68, 1973, 1988.

C – Gage height, 17.52 ft.

D – Discharge, 9,170 ft<sup>3</sup>/s.

KASKASKIA RIVER BASIN  
05594800 Silver Creek near Freeburg, IL

633

**LOCATION.**— Lat 38°24'22", long 89°52'26" (NAD of 1927), in NE1/4NE1/4 sec.33, T.1 S., R.7 W., St. Clair County, Hydrologic Unit 07140204, on left bank at downstream side of bridge on State Highway 15, 2.2 mi southeast of Freeburg, 4.8 mi northwest of Fayetteville, and at mile 9.6.

**DRAINAGE AREA.**— 464 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: October 1970 to current year.

STAGE: Water years 1995 to current year. October 1980 to September 1994 (8:00 a.m. gage heights).

SURFACE-WATER QUALITY

CHEMICAL: Water years 1978–91.

**REVISED RECORDS.**— WDR IL-73-1: Drainage area.

**GAGE.**— Water-stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest-stage gage. Datum of gage is 381.40 ft above NGVD of 1929.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 15,300 ft<sup>3</sup>/s, May 19, 1995, gage height, 25.38 ft; no flow, Aug. 4–6, 1993, during period of backwater from the Mississippi River; minimum daily discharge unaffected by backwater, 0.41 ft<sup>3</sup>/s, Sept. 17, 1983.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	27	128	1230	e105	158	1210	223	4190	24	1110	140
2	30	45	106	654	e140	147	853	790	2910	56	1240	73
3	26	70	93	339	e500	148	356	563	2070	45	661	50
4	23	40	94	1070	e580	337	243	322	1270	107	196	34
5	23	32	100	2990	e340	902	193	197	382	213	140	29
6	23	29	104	4220	e260	1150	162	137	210	943	157	24
7	21	63	103	3230	e210	1340	146	105	158	1120	76	22
8	19	67	97	3430	e160	1420	138	87	123	1020	48	19
9	19	47	89	2490	e140	1350	125	75	318	509	35	18
10	23	36	91	1510	e250	682	113	65	327	192	28	18
11	46	32	92	548	628	283	111	74	155	104	26	17
12	49	29	84	321	830	206	105	83	110	69	27	16
13	29	26	80	271	812	169	97	73	110	51	24	16
14	24	25	79	230	571	158	92	299	96	40	20	15
15	57	23	79	202	375	155	87	938	72	39	18	12
16	49	34	78	183	291	144	80	1050	69	36	20	13
17	39	46	80	351	232	147	74	1120	456	28	20	14
18	140	1290	77	1180	222	141	70	1170	380	24	18	12
19	95	3080	77	1500	247	130	65	1200	178	22	17	12
20	51	4570	73	1700	385	117	60	1080	346	20	19	13
21	34	4010	67	1370	533	114	61	1060	162	19	32	11
22	27	3580	67	603	506	105	63	988	85	18	36	11
23	23	2540	363	313	384	103	71	435	66	151	26	10
24	20	1760	665	e220	290	95	99	204	54	190	21	11
25	19	1190	572	e190	314	92	114	316	45	65	25	11
26	19	729	395	e170	430	107	113	1150	39	164	378	11
27	19	373	234	e150	293	485	81	1650	35	76	774	11
28	21	247	181	e135	210	926	67	3450	31	37	449	9.7
29	22	188	728	e125	177	1060	60	5400	28	26	972	8.7
30	24	155	1150	e115	---	1180	60	5280	26	132	814	8.1

KASKASKIA RIVER BASIN  
**05594800 Silver Creek near Freeburg, IL--Continued**

<b>31</b>	26	---	1260	e110	---	1240	---	5020	---	914	378	---
TOTAL	1074	24383	7486	31150	10415	14791	5169	34604	14501	6454	7805	669.5
MEAN	34.6	813	241	1005	359	477	172	1116	483	208	252	22.3
MAX	140	4570	1260	4220	830	1420	1210	5400	4190	1120	1240	140
MIN	19	23	67	110	105	92	60	65	26	18	17	8.1
CFSM	0.07	1.75	0.52	2.17	0.77	1.03	0.37	2.41	1.04	0.45	0.54	0.05
IN.	0.09	1.95	0.60	2.50	0.83	1.19	0.41	2.77	1.16	0.52	0.63	0.05

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 – 2004, BY WATER YEAR (WY)**

MEAN	93.7	286	415	394	590	661	659	571	369	164	126	97.1
MAX	506	1543	2380	1438	1954	2390	1771	3579	1214	902	822	1142
(WY)	1987	1994	1983	1974	1982	1978	1979	1995	1998	2000	1998	1993
MIN	2.55	2.21	6.86	3.87	42.2	34.5	45.3	25.4	12.4	12.9	10.7	4.31
(WY)	1972	1972	1977	1977	1978	1981	1981	1976	1988	1976	1971	1983

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1971 – 2004**

ANNUAL TOTAL	122127		158501.5			
ANNUAL MEAN	335		433		367	
HIGHEST ANNUAL MEAN					660	
LOWEST ANNUAL MEAN					74.6	
HIGHEST DAILY MEAN	5390	Jun 13	5400	May 29	15000	May 19 1995
LOWEST DAILY MEAN	13	Aug 28, Sept. 25	8.1	Sep 30	0.00	A
ANNUAL SEVEN-DAY MINIMUM	14	Aug 22	10	Sep 24	0.75	Sep 15 1983
MAXIMUM PEAK FLOW			5590	May 29	15300	May 19 1995
MAXIMUM PEAK STAGE			17.61	May 29	25.38	May 19 1995
INSTANTANEOUS LOW FLOW			7.8	Sep 30		
ANNUAL RUNOFF (CFSM)	0.721		0.933		0.792	
ANNUAL RUNOFF (INCHES)	9.79		12.71		10.76	
10 PERCENT EXCEEDS	1000		1180		1060	
50 PERCENT EXCEEDS	96		113		75	
90 PERCENT EXCEEDS	22		20		9.3	

A – Aug. 4–6, 1993, during period of backwater from the Mississippi River. Minimum daily discharge unaffected by backwater, 0.41 ft<sup>3</sup>/s, Sept. 17, 1983.

**LOCATION.**— Lat 38°19'26", long 89°58'15" (NAD of 1927), in SW1/4SE1/4 sec.27 projected, T.2 S., R.8 W., St. Clair County, Hydrologic Unit 07140204, on left bank at downstream side of bridge on State Highway 156, 2 mi northeast of Hecker, 5 mi west of New Athens, and at mile 17.3.

**DRAINAGE AREA.**— 129 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1969 to current year.

STAGE: Water years 1995 to current year. October 1980 to September 1994 (8 a.m. gage heights).

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–91.

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

**GAGE.**— Water-stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest-stage gage. Datum of gage is 375.00 ft above NGVD of 1929. June 28, 1976, to Nov. 9, 1978, nonrecording gage at same site and datum.

**REMARKS.**— Two sewage-treatment plants 13–16 mi upstream.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 23,400 ft<sup>3</sup>/s, April 29, 1996, gage height, 44.4 ft, from floodmark; minimum daily discharge, 4.2 ft<sup>3</sup>/s, Oct. 17, 1976.

**REMARKS FOR CURRENT YEAR.**— Records fair except those for estimated daily discharges, which are poor. Effluent from two sewage-treatment plants 13–16 mi upstream averaged about 15.0 ft<sup>3</sup>/s.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	e54	36	92	e45	48	72	492	140	23	68	28
2	18	e26	32	82	e260	45	63	163	101	30	46	25
3	14	24	32	99	e300	74	55	78	81	107	47	23
4	15	22	34	2290	e100	474	51	56	67	93	37	20
5	15	22	40	1690	e74	614	52	53	60	314	40	20
6	14	51	40	223	e64	189	46	48	57	601	31	21
7	14	46	34	139	e54	99	43	43	54	88	29	19
8	14	25	33	108	e48	83	41	38	49	47	25	18
9	20	21	32	92	e75	76	37	35	48	36	23	16
10	49	20	40	77	e190	65	34	31	50	30	22	15
11	20	17	41	75	265	62	42	34	48	27	20	14
12	17	18	31	77	223	54	36	56	53	25	18	14
13	16	16	29	73	108	50	34	72	59	24	19	15
14	49	16	31	68	102	57	32	886	40	23	19	15
15	36	29	33	62	110	51	29	269	37	21	18	17
16	20	32	34	57	71	52	27	97	143	21	17	17
17	64	24	32	674	61	55	27	69	434	46	16	16
18	37	3320	33	947	69	57	29	156	341	21	17	13
19	23	1700	32	182	87	49	23	268	345	19	16	14
20	20	202	28	112	120	48	23	160	66	18	61	13
21	18	112	27	91	90	e43	23	84	47	18	31	12
22	17	77	28	e76	69	38	25	60	42	18	21	12
23	16	121	636	e66	66	39	55	87	36	171	21	12
24	16	263	159	e62	63	e40	60	256	31	36	25	12
25	14	84	83	e58	57	41	92	578	29	125	59	12
26	14	59	61	e55	51	62	44	2300	25	62	628	12
27	14	52	54	e52	46	184	34	1960	24	29	68	12
28	15	46	60	e50	48	107	30	2190	24	25	107	11
29	17	38	1150	e48	49	257	29	402	22	23	192	11

KASKASKIA RIVER BASIN  
**05595200 Richland Creek near Hecker, IL---Continued**

<b>30</b>	e20	38	240	e47	---	138	30	334	23	806	52	11
<b>31</b>	e30	---	134	e46	---	92	---	503	---	345	34	---
TOTAL	685	6575	3309	7870	2965	3343	1218	11858	2576	3272	1827	470
MEAN	22.1	219	107	254	102	108	40.6	383	85.9	106	58.9	15.7
MAX	64	3320	1150	2290	300	614	92	2300	434	806	628	28
MIN	14	16	27	46	45	38	23	31	22	18	16	11
CFSM	0.17	1.70	0.83	1.97	0.79	0.84	0.31	2.97	0.67	0.82	0.46	0.12
IN.	0.20	1.90	0.95	2.27	0.86	0.96	0.35	3.42	0.74	0.94	0.53	0.14

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 – 2004, BY WATER YEAR (WY)**

MEAN	42.7	110	126	109	155	188	182	161	110	78.4	42.0	57.0
MAX	270	516	590	338	505	611	751	1306	513	322	271	471
(WY)	1987	1986	1983	1974	1982	1984	1994	1995	2003	1981	1998	1993
MIN	6.51	7.53	9.66	7.19	19.1	19.4	20.2	18.4	14.9	11.6	7.64	6.66
(WY)	1972	1972	1977	1977	1978	1981	1981	1988	1972	1970	1971	1976

<b>SUMMARY STATISTICS</b>	<b>FOR 2003 CALENDAR YEAR</b>		<b>FOR 2004 WATER YEAR</b>		<b>WATER YEARS 1970 – 2004</b>	
ANNUAL TOTAL	45686		45968			
ANNUAL MEAN	125		126		113	
HIGHEST ANNUAL MEAN					198	
LOWEST ANNUAL MEAN					23.5	
HIGHEST DAILY MEAN	3760	Jun 12	3320	Nov 18	13300	May 17 1995
LOWEST DAILY MEAN	12	A B	11	Sep 28, 29, 30	4.2	Oct 17 1976
ANNUAL SEVEN-DAY MINIMUM	12	Aug 15	12	Sep 24	4.8	Oct 12 1976
MAXIMUM PEAK FLOW			5200	Nov 18	23400	Apr 29 1996
MAXIMUM PEAK STAGE			40.50	Nov 18	44.4 C	Apr 29 1996
INSTANTANEOUS LOW FLOW			9.3	Sep 29		
ANNUAL RUNOFF (CFSM)	0.970		0.974		0.876	
ANNUAL RUNOFF (INCHES)	13.17		13.26		11.91	
10 PERCENT EXCEEDS	180		228		189	
50 PERCENT EXCEEDS	38		46		28	
90 PERCENT EXCEEDS	15		16		9.4	

A – May have been less during period of estimated discharges in January.

B – Several days.

C – From floodmark.



KASKASKIA RIVER BASIN  
05595240 Kaskaskia River near Red Bud, IL

637

**LOCATION.**— Lat 38°11'39", long 89°53'17" (NAD of 1927), in SW1/4SW1/4 sec.9, T.4 S., R.7 W., Randolph County, Hydrologic Unit 07140204, at the river-intake pumphouse of Baldwin Power Station, near southwest corner of Baldwin Lake, about 2.5 mi northwest of Baldwin, about 6 mi southeast of Red Bud and at mi 19.3.

**DRAINAGE AREA.**— 5,505 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

STAGE: Oct. 1994 to current year. Records of gage height for Nov. 1959 to Sept. 30, 1994, available in files of U.S. Army Corps of Engineers.

**GAUGE.**— Water-stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest-stage gage. Datum of gage is 300.00 ft above NGVD of 1929. (Levels by U.S. Army Corps of Engineers).

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height 91.90 ft, May 22, 1995; minimum, 67.36 ft, Mar. 5 and Apr. 7, 1996, but may have been lower during periods of missing record.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

STAGE: Maximum gage height, 94.36 ft, Aug. 6, 1993; minimum 50.8 ft, Oct. 16, 1964, from information by U.S. Army Corps of Engineers.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 73.47 ft, June 14; minimum, 67.62 ft, Aug. 30.

Gage height, feet, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68.71	68.62	68.69	68.77	68.76	68.74	68.84	68.71	68.93	68.84	68.72	68.78
2	68.72	68.71	68.67	68.77	68.74	68.86	68.87	68.64	68.91	68.84	68.58	68.90
3	68.77	68.62	68.58	68.64	68.70	68.92	68.72	68.79	68.76	68.82	68.73	69.18
4	68.73	68.66	68.68	68.81	68.66	68.80	68.72	68.92	68.75	68.77	68.78	69.03
5	68.62	68.71	68.67	68.65	68.62	68.62	68.60	69.62	68.78	68.79	68.83	69.11
6	68.64	68.61	68.76	68.64	68.66	68.78	68.70	69.49	68.69	68.75	68.82	68.93
7	68.73	68.72	68.79	68.65	68.66	68.77	68.63	71.66	68.68	68.78	68.67	68.82
8	68.70	68.76	68.65	68.72	68.68	68.79	68.62	71.83	68.66	68.76	68.68	68.80
9	68.80	68.68	68.76	68.63	68.76	68.62	68.68	71.83	68.73	68.74	68.67	68.85
10	68.66	68.75	68.64	68.58	68.72	68.74	68.68	71.28	68.80	68.63	68.62	68.87
11	68.76	68.60	68.71	68.69	68.65	68.71	68.70	71.52	70.14	68.68	68.63	68.81
12	68.65	68.65	68.78	68.62	68.73	68.82	68.64	72.41	72.66	68.71	68.68	68.86
13	68.63	68.78	68.70	68.73	68.76	68.70	68.75	73.01	73.18	68.79	68.73	68.85
14	68.63	68.68	68.66	68.65	68.64	68.94	68.70	72.66	73.09	68.77	68.72	68.76
15	68.58	68.57	68.76	68.68	68.69	69.02	68.84	71.46	71.11	68.83	68.65	68.78
16	68.64	68.63	68.69	68.65	68.60	68.96	68.81	69.81	69.62	68.68	68.61	68.78
17	68.66	68.72	68.76	68.56	68.75	68.81	68.69	68.83	68.99	68.65	68.53	68.76
18	68.60	68.80	68.94	68.68	68.80	68.81	68.74	69.13	68.78	68.71	68.51	68.68
19	68.69	68.64	68.81	68.77	68.88	68.82	68.86	69.01	69.02	68.93	68.58	68.69
20	68.60	68.68	69.10	68.68	69.07	69.05	68.77	69.11	69.12	69.14	68.65	68.70
21	68.67	68.74	69.34	68.52	69.34	69.03	68.78	68.99	69.09	68.98	68.71	68.73
22	68.73	68.56	68.80	68.63	69.57	69.04	68.74	69.08	69.01	68.87	68.73	68.69
23	68.70	68.60	68.94	68.71	69.68	68.92	68.66	69.11	68.91	68.82	68.67	68.73
24	68.63	68.66	68.87	68.68	69.43	68.84	68.78	69.12	68.91	68.82	68.52	68.78
25	68.68	68.63	68.78	68.64	69.19	68.77	68.87	69.43	68.83	68.70	68.47	68.57
26	68.74	68.58	68.74	68.70	68.94	68.69	68.94	69.55	69.57	68.74	68.49	68.54
27	68.69	68.75	68.71	68.68	68.86	68.84	69.04	69.01	69.66	68.77	68.53	68.68
28	68.38	68.75	68.72	68.75	68.73	68.83	69.03	69.07	68.60	68.61	68.53	68.75
29	68.89	68.79	68.75	68.67	---	68.83	69.02	68.94	69.06	68.70	68.67	68.61
30	68.94	68.64	68.85	68.57	---	68.72	68.95	69.08	68.84	68.78	68.21	68.66
31	68.72	---	68.74	68.68	---	68.76	---	68.90	---	68.70	68.70	---
MEAN	68.69	68.68	68.78	68.67	68.87	68.82	68.78	69.94	69.46	68.78	68.63	68.79
MAX	68.94	68.80	69.34	68.81	69.68	69.05	69.04	73.01	73.18	69.14	68.83	69.18

KASKASKIA RIVER BASIN

05595240 Kaskaskia River near Red Bud, IL--Continued

MIN	68.38	68.56	68.58	68.52	68.60	68.62	68.60	68.64	68.60	68.61	68.21	68.54
CAL YR 2002	MEAN 70.02		MAX 88.43		MIN 68.38							
WTR YR 2003	MEAN 68.91		MAX 73.18		MIN 68.21							

KASKASKIA RIVER BASIN  
05595240 Kaskaskia River near Red Bud, IL

639

**LOCATION.**— Lat 38°11'39", long 89°53'17" (NAD of 1927), in SW1/4SW1/4 sec.9, T.4 S., R.7 W., Randolph County, Hydrologic Unit 07140204, at the river-intake pumphouse of Baldwin Power Station, near southwest corner of Baldwin Lake, about 2.5 mi northwest of Baldwin, about 6 mi southeast of Red Bud and at mi 19.3.

**DRAINAGE AREA.**— 5,505 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

STAGE: Oct. 1994 to current year. Records of gage height for Nov. 1959 to Sept. 30, 1994, available in files of U.S. Army Corps of Engineers.

**GAUGE.**— Water-stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest-stage gage. Datum of gage is 300.00 ft above NGVD of 1929. (Levels by U.S. Army Corps of Engineers).

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height 91.90 ft, May 22, 1995; minimum, 67.36 ft, Mar. 5 and Apr. 7, 1996, but may have been lower during periods of missing record.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

STAGE: Maximum gage height, 94.36 ft, Aug. 6, 1993; minimum 50.8 ft, Oct. 16, 1964, from information by U.S. Army Corps of Engineers.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 76.51 ft, May 30; minimum, 68.10 ft, Dec. 17.

Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68.69	68.57	68.97	69.59	69.99	68.93	69.69	68.75	75.55	69.24	68.81	68.90
2	68.64	68.57	68.99	69.41	69.71	68.75	69.58	68.76	74.64	68.69	68.81	68.79
3	68.64	68.60	68.91	69.32	70.10	68.67	69.20	68.81	74.35	68.77	68.65	68.73
4	68.66	68.61	68.90	69.86	70.12	69.20	68.70	68.77	75.05	68.74	68.69	68.80
5	68.64	68.63	68.99	70.45	69.67	69.68	68.45	68.70	75.45	68.89	68.62	---
6	68.70	68.59	68.94	70.39	69.46	69.33	68.81	68.77	75.08	69.54	68.75	---
7	68.60	68.56	68.98	70.28	69.35	70.45	69.00	68.75	74.15	69.19	68.75	---
8	68.55	68.63	68.99	70.45	69.03	72.69	68.86	68.68	73.13	69.06	68.78	---
9	68.62	68.58	69.05	70.46	68.96	73.33	68.93	68.85	72.32	68.83	68.71	---
10	68.68	68.62	69.00	70.09	68.92	72.72	68.81	68.71	71.83	68.79	68.64	---
11	68.59	68.67	68.97	69.76	69.09	71.40	68.80	68.84	71.40	68.70	68.68	---
12	68.62	68.65	69.02	69.45	68.95	69.37	68.85	68.77	70.92	68.68	68.67	---
13	68.63	68.55	68.97	69.47	68.90	68.98	68.76	68.80	70.57	68.74	68.72	---
14	68.60	68.56	68.94	69.77	68.93	69.04	68.89	68.84	70.49	68.79	68.75	---
15	68.67	68.65	69.06	69.57	68.78	68.92	68.85	68.83	70.39	68.73	68.74	---
16	68.62	68.68	69.01	69.98	68.74	68.88	68.84	68.96	70.44	68.76	68.76	---
17	68.51	68.68	68.40	69.98	68.81	68.91	68.80	69.20	71.33	68.77	68.75	---
18	68.66	70.09	68.95	70.34	68.76	68.98	68.93	69.17	72.26	68.70	68.80	---
19	68.65	70.88	68.96	69.52	68.88	68.94	68.87	69.20	73.38	68.70	68.77	---
20	68.64	70.32	68.97	69.96	68.93	68.97	68.77	69.36	73.32	68.73	68.71	---
21	68.70	69.98	69.05	70.19	69.06	68.85	68.78	69.24	73.02	68.85	68.65	---
22	68.64	70.06	68.99	69.93	69.19	68.86	68.71	68.98	72.61	68.69	68.79	68.68
23	68.73	69.92	69.27	69.64	69.14	68.87	68.71	68.91	72.12	68.75	68.76	68.72
24	68.71	69.87	69.01	69.52	69.03	68.90	68.77	68.81	71.80	68.67	68.66	68.65
25	68.68	69.65	69.00	69.35	68.98	68.84	68.64	68.83	71.58	68.75	68.81	68.60
26	68.62	69.59	69.11	69.40	69.21	68.83	68.71	69.61	71.54	68.73	68.88	68.60
27	68.61	69.49	69.04	69.50	69.16	68.84	68.66	70.86	71.29	68.66	69.05	68.62
28	68.59	69.23	69.14	69.72	68.93	69.30	68.77	73.75	70.95	68.66	68.92	68.65
29	68.60	69.08	69.57	70.30	68.99	69.37	68.76	75.82	70.45	68.59	69.50	68.70
30	68.58	69.09	69.39	70.67	---	69.39	68.78	76.42	69.85	68.75	69.34	68.78
31	68.57	---	69.48	70.40	---	69.55	---	76.29	---	68.83	69.08	---
MEAN	68.63	69.12	69.03	69.89	69.16	69.54	68.86	69.84	72.38	68.81	68.81	---
MAX	68.73	70.88	69.57	70.67	70.12	73.33	69.69	76.42	75.55	69.54	69.50	---

640

## KASKASKIA RIVER BASIN

05595240 Kaskaskia River near Red Bud, IL--Continued

MIN	68.51	68.55	68.40	69.32	68.74	68.67	68.45	68.68	69.85	68.59	68.62	---
CAL YR 2003	MEAN 68.96		MAX 73.18		MIN 68.21							

**LOCATION.**— Lat 38°18'36", long 88°59'18" (NAD of 1927), in SE1/4NW1/4 sec.33, T.2 S., R.2 E., Jefferson County, Hydrologic Unit 07140106, on left bank at downstream side of bridge on State Highway 15, 0.5 mi downstream from Harper Creek, 4.7 mi west of Mt. Vernon, 8.9 mi downstream from Snow Creek, and at mile 133.2.

**DRAINAGE AREA.**— 71.9 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

STAGE: October 1979 to current year. Gage–height record for February 1965 to September 1979 available in files of U.S. Army Corps of Engineers.

**SURFACE–WATER QUALITY**

CHEMICAL: Water years 1978–90.

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter, phone telemeter, and crest–stage gage. Datum of gage is 425.00 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers).

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height, 12.04 ft, Nov.14, 1993; minimum, 0.05 ft, on Oct. 1–3, 1983.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 9.91 ft, May 5; minimum, 0.85 ft, Sept. 18.

Gage height, feet, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.07	1.84	1.52	2.95	1.68	3.01	1.85	2.43	1.46	1.42	1.19	1.07
2	1.05	1.76	1.51	2.22	1.71	4.45	1.81	3.50	1.43	1.56	1.15	1.87
3	1.03	1.72	1.49	2.01	1.74	3.19	1.87	2.53	1.44	1.57	1.23	3.61
4	1.04	1.67	1.49	1.89	1.77	2.48	1.92	3.20	1.53	1.65	1.32	2.01
5	1.03	1.65	1.51	1.85	1.81	2.32	2.01	9.52	1.65	1.71	1.35	1.73
6	1.03	1.63	1.51	1.80	1.88	2.21	2.31	8.79	1.61	1.73	1.34	1.57
7	1.03	1.60	1.51	1.79	1.90	2.07	2.28	8.77	1.59	1.69	1.38	1.35
8	1.02	1.55	1.51	1.80	1.87	1.99	2.34	7.70	1.80	1.66	1.56	1.23
9	1.01	1.51	1.52	1.99	1.84	1.94	2.17	9.18	1.83	1.61	1.68	1.16
10	1.00	1.53	1.54	2.01	1.84	1.87	2.05	8.04	1.87	1.60	1.62	1.12
11	1.00	1.55	1.55	1.96	1.84	1.81	1.98	8.18	3.96	1.60	1.52	1.06
12	1.00	1.62	1.57	1.90	1.82	3.01	1.91	4.50	8.66	1.58	1.44	0.98
13	0.99	1.67	1.58	1.86	1.81	6.65	1.83	2.62	5.35	1.57	1.39	0.93
14	0.96	1.67	1.59	1.82	1.88	5.49	1.78	2.25	7.60	1.56	1.36	0.90
15	0.94	1.68	1.58	1.82	2.38	2.99	1.97	2.09	3.36	1.52	1.34	0.90
16	0.92	1.67	1.57	1.85	2.93	2.44	2.07	1.97	2.23	1.45	1.29	0.93
17	0.91	1.67	1.57	1.80	2.58	2.21	4.78	1.91	1.87	1.39	1.24	0.91
18	0.90	1.66	1.63	1.75	2.29	2.09	4.59	2.29	1.70	1.43	1.18	0.88
19	0.97	1.65	2.48	1.71	2.58	2.88	2.70	1.93	1.58	1.52	1.13	0.87
20	0.97	1.63	2.33	1.70	5.34	4.40	2.63	1.79	1.48	1.57	1.09	0.88
21	0.96	1.58	2.11	1.70	6.85	5.30	3.22	2.32	1.44	1.53	1.05	0.89
22	0.94	1.59	1.86	1.67	8.52	4.20	2.32	1.92	1.45	1.49	1.02	0.93
23	0.94	1.59	1.68	1.64	8.08	2.65	2.08	1.71	1.45	1.60	0.99	0.94
24	0.93	1.59	1.67	1.61	3.83	2.26	---	1.59	1.50	1.65	0.97	0.94
25	1.00	1.58	1.66	1.60	2.76	2.12	---	5.29	1.55	1.60	0.94	0.95
26	1.07	1.57	1.61	1.60	2.43	3.82	6.94	4.62	1.81	1.51	0.91	0.95
27	1.08	1.57	1.57	1.59	2.39	2.93	3.17	2.34	1.88	1.44	0.89	1.05
28	1.17	1.56	1.56	1.59	2.38	2.34	2.37	1.93	1.72	1.39	0.87	1.08
29	1.57	1.56	1.55	1.63	---	2.13	5.26	1.72	1.56	1.33	0.88	1.15
30	1.94	1.55	1.77	1.63	---	2.01	3.15	1.60	1.49	1.27	0.90	1.62
31	1.93	---	2.42	1.64	---	1.92	---	1.51	---	1.25	0.98	---
MEAN	1.08	1.62	1.68	1.82	2.88	2.94	---	3.86	2.33	1.53	1.20	1.22
MAX	1.94	1.84	2.48	2.95	8.52	6.65	---	9.52	8.66	1.73	1.68	3.61
MIN	0.90	1.51	1.49	1.59	1.68	1.81	---	1.51	1.43	1.25	0.87	0.87

BIG MUDDY RIVER BASIN  
**05595700 Big Muddy River near Mt. Vernon, IL**

**LOCATION.**— Lat 38°18'36", long 88°59'18" (NAD of 1927), in SE1/4NW1/4 sec.33, T.2 S., R.2 E., Jefferson County, Hydrologic Unit 07140106, on left bank at downstream side of bridge on State Highway 15, 0.5 mi downstream from Harper Creek, 4.7 mi west of Mt. Vernon, 8.9 mi downstream from Snow Creek, and at mile 133.2.

**DRAINAGE AREA.**— 71.9 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

STAGE: October 1979 to current year. Gage–height record for February 1965 to September 1979 available in files of U.S. Army Corps of Engineers.

**SURFACE–WATER QUALITY**

CHEMICAL: Water years 1978–90.

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter, phone telemeter, and crest–stage gage. Datum of gage is 425.00 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers).

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height, 12.04 ft, Nov.14, 1993; minimum, 0.05 ft, on Oct. 1–3, 1983.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 9.95 ft, Aug. 26; minimum, 1.03 ft, June 12.

Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.57	1.23	1.23	1.88	1.30	1.79	2.31	3.18	5.13	1.66	1.85	1.68
2	1.48	1.23	1.21	1.74	1.50	2.52	2.06	4.11	2.31	2.41	1.80	1.52
3	1.38	1.23	1.18	1.73	3.33	2.05	1.89	2.46	1.83	1.88	1.70	1.39
4	1.32	1.24	1.19	3.18	2.81	8.20	1.77	1.92	1.59	2.41	1.65	1.34
5	1.29	1.24	1.20	6.34	2.19	9.16	1.67	1.71	1.45	2.41	1.62	1.31
6	1.29	1.26	1.22	2.81	1.96	5.62	1.61	1.58	1.35	3.37	1.54	1.29
7	1.27	1.26	1.25	1.89	1.91	2.86	1.57	1.45	1.28	2.58	1.47	1.31
8	1.25	1.26	1.25	1.69	1.75	2.27	1.54	1.33	1.23	1.85	1.39	1.28
9	1.23	1.26	1.27	1.65	1.67	2.03	1.49	1.28	1.17	1.61	1.35	1.23
10	1.22	1.26	1.26	1.57	1.88	1.87	1.43	1.22	1.13	1.54	1.33	1.18
11	1.20	1.29	1.26	1.52	2.36	1.76	1.41	1.18	1.09	1.53	1.32	1.14
12	1.17	1.36	1.38	1.50	2.24	1.69	1.41	1.16	1.05	1.54	1.31	1.15
13	1.14	1.38	1.41	1.50	1.94	1.61	1.38	1.15	1.07	1.63	1.31	1.14
14	1.17	1.38	1.35	1.48	1.78	1.58	1.36	1.22	1.13	1.75	1.31	1.15
15	1.19	1.41	1.29	1.45	1.75	1.58	1.32	1.34	1.17	1.70	1.31	1.17
16	1.21	1.42	1.26	1.43	1.72	1.57	1.30	1.35	1.25	1.68	1.30	1.16
17	1.26	---	1.24	1.69	1.60	1.61	1.30	1.26	1.44	1.67	1.28	1.25
18	1.26	---	1.26	6.99	1.55	1.61	1.28	1.19	1.68	1.66	1.26	1.47
19	1.25	---	1.30	3.48	1.63	1.56	1.26	1.16	1.35	1.64	1.26	1.31
20	1.25	3.08	1.31	2.20	1.95	1.52	1.24	1.15	1.32	1.62	1.35	1.19
21	1.24	2.21	1.32	2.00	2.32	1.54	1.24	1.17	1.35	1.61	2.35	1.15
22	1.23	1.93	1.32	1.75	2.03	1.48	1.25	1.19	1.40	1.58	1.99	1.13
23	1.23	1.89	1.61	1.66	1.80	1.43	1.31	1.11	1.38	1.58	1.69	1.14
24	1.23	5.01	3.24	1.58	1.72	1.42	1.37	1.25	1.35	1.57	2.16	1.10
25	1.23	2.91	2.05	1.52	1.68	1.41	2.68	2.16	1.40	1.61	1.92	1.11
26	1.24	2.04	1.73	1.53	1.61	1.91	2.17	8.93	1.46	1.61	8.21	1.09
27	1.23	1.73	1.61	1.50	1.55	8.03	1.66	9.62	1.45	1.62	8.66	1.07
28	1.24	1.51	1.55	1.45	1.50	5.64	1.48	9.37	1.52	1.60	2.81	1.06
29	1.23	1.39	3.55	1.41	1.47	5.43	1.37	4.74	1.55	1.54	5.50	1.07
30	1.22	1.30	4.26	1.38	---	3.60	1.30	5.22	1.60	1.61	2.79	1.09
31	1.21	---	2.31	1.33	---	3.03	---	8.52	---	1.80	1.95	---
MEAN	1.26	---	1.61	2.09	1.88	2.88	1.55	2.76	1.52	1.80	2.22	1.22
MAX	1.57	---	4.26	6.99	3.33	9.16	2.68	9.62	5.13	3.37	8.66	1.68
MIN	1.14	---	1.18	1.33	1.30	1.41	1.24	1.11	1.05	1.53	1.26	1.06

**LOCATION.**— Lat 38°15'14", long 89°02'23" (NAD of 1927), in NE1/4NE1/4 sec.24, T.3 S., R.1 E., Jefferson County, Hydrologic Unit 07140106, at bridge on County Highway 9, 1.2 mi downstream from Knob Creek, 2.4 mi downstream from Novak Creek, 3.0 mi north of Waltonville, and at mile 6.7.

**DRAINAGE AREA.**— 88.0 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: September 1979 to current year.

STAGE: Water years 1997 to current year. Gage—height record for Feb. 10, 1965 to Sept. 30, 1979 available in files of U.S. Army Corps of Engineers, October 1980 to September 1994 (8 AM gage heights).

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–91.

**REVISED RECORDS.**— WDR IL–94–1: 1982–90.

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest–stage gages. Datum of gage is 412.00 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers).

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 21,200 ft<sup>3</sup>/s, Nov. 14, 1993, gage height, 17.73 ft; no flow at times in most years.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.01	0.00	2.2	14	e2.8	27	53	265	215	1.2	2.9	5.2
2	0.00	0.00	1.7	8.7	e14	56	38	192	48	1.1	3.1	3.8
3	0.00	0.00	1.4	7.5	126	61	27	70	24	1.2	2.7	2.7
4	0.00	0.00	1.3	106	68	1190	20	35	15	1.5	2.2	1.9
5	0.00	0.00	1.3	323	38	1240	15	20	11	4.6	1.7	1.5
6	0.00	0.00	1.3	57	e21	348	11	12	9.4	190	1.3	1.4
7	0.00	0.00	1.3	23	e14	78	10	8.2	8.6	60	1.1	1.3
8	0.00	0.00	1.3	9.9	e11	44	9.2	6.4	7.9	18	0.89	1.1
9	0.00	0.00	1.5	e6.2	e9.0	30	7.9	5.4	7.6	7.9	0.82	1.0
10	0.00	0.00	1.5	e5.0	e25	20	7.3	4.9	6.7	19	0.83	0.70
11	0.00	0.00	1.5	e4.3	76	15	7.2	4.5	5.6	29	0.72	0.52
12	0.00	0.00	1.4	e4.0	52	12	7.0	3.7	4.8	6.7	0.64	0.46
13	0.00	0.00	1.7	e3.7	28	11	6.8	2.8	4.1	4.7	0.62	0.37
14	0.00	0.00	2.0	e3.4	17	10	6.6	3.8	3.9	4.4	0.54	0.31
15	0.00	0.00	1.9	e3.2	e12	10	6.2	5.1	3.9	2.8	0.49	0.33
16	0.00	0.00	1.7	e3.0	e9.0	11	5.7	7.1	4.2	2.1	0.45	0.32
17	0.00	0.00	1.5	32	e7.6	12	5.1	5.0	6.1	1.9	0.43	0.65
18	0.00	61	1.5	444	e6.5	11	4.8	4.4	51	1.6	0.40	1.6
19	0.00	252	1.4	96	e9.0	9.7	4.2	4.2	8.8	1.4	0.44	1.1
20	0.00	50	1.3	37	e25	9.0	3.8	4.0	6.3	1.2	0.62	0.82
21	0.00	12	1.3	e21	42	15	3.5	3.5	4.9	1.0	0.57	0.71
22	0.00	5.2	1.2	e12	28	11	3.3	3.1	3.7	0.84	0.45	0.72
23	0.00	10	1.6	e9.0	17	8.5	4.1	2.6	3.1	0.78	0.41	0.65
24	0.00	149	54	e8.0	13	8.0	8.6	2.2	2.8	0.66	2.4	0.57
25	0.00	45	16	e7.0	11	7.6	115	73	2.4	1.2	3.9	0.45
26	0.00	12	5.9	e7.0	9.2	30	43	841	2.0	0.88	418	0.31
27	0.00	5.5	3.9	e5.9	7.8	597	15	1490	1.8	0.85	333	0.23
28	0.00	4.8	3.3	e5.0	7.3	234	8.6	954	1.6	e1.0	25	0.22
29	0.00	3.7	145	e4.5	7.0	297	6.7	132	1.4	1.5	137	0.18
30	0.00	2.8	122	e3.7	—	124	5.7	434	1.2	4.3	41	0.14

BIG MUDDY RIVER BASIN  
**05595730 Rayse Creek near Waltonville, IL—Continued**

31	0.00	---	34	e3.2	---	98	---	889	---	5.1	11	---
TOTAL	0.01	613.00	418.9	1277.2	713.2	4634.8	469.3	5487.9	476.8	378.41	995.62	31.26
MEAN	0.00	20.4	13.5	41.2	24.6	150	15.6	177	15.9	12.2	32.1	1.04
MAX	0.01	252	145	444	126	1240	115	1490	215	190	418	5.2
MIN	0.00	0.00	1.2	3.0	2.8	7.6	3.3	2.2	1.2	0.66	0.40	0.14
CFSM	0.00	0.23	0.15	0.47	0.28	1.70	0.18	2.01	0.18	0.14	0.36	0.01
IN.	0.00	0.26	0.18	0.54	0.30	1.96	0.20	2.32	0.20	0.16	0.42	0.01

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 – 2004, BY WATER YEAR (WY)**

MEAN	23.2	95.2	96.6	112	148	148	157	151	54.1	25.4	6.14	15.4
MAX	140	670	748	417	466	468	721	942	286	123	47.7	161
(WY)	1985	1986	1983	1999	1985	1984	1996	1995	2000	1982	1981	1993
MIN	0.00	0.00	0.00	0.03	1.78	4.05	12.4	1.35	0.35	0.15	0.00	0.00
(WY)	1996	1996	2000	1981	1996	1981	1981	1988	1992	1984	1991	1983

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1980 – 2004**

ANNUAL TOTAL	21373.62		15496.40		85.6	
ANNUAL MEAN	58.6		42.3		167	
HIGHEST ANNUAL MEAN					1983	
LOWEST ANNUAL MEAN					23.1	
HIGHEST DAILY MEAN	1460	May 7	1490	May 27	11200	Apr 29 1996
LOWEST DAILY MEAN	0.00	Many days	0.00	Many days	0.00	A
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 22	0.00	Oct 2	0.00	Jul 24 1980
MAXIMUM PEAK FLOW			1870	May 27	21200	Nov 14 1993
MAXIMUM PEAK STAGE			11.96	May 27	17.73	Nov 14 1993
ANNUAL RUNOFF (CFSM)	0.665		0.481		0.973	
ANNUAL RUNOFF (INCHES)	9.04		6.55		13.22	
10 PERCENT EXCEEDS	133		63		130	
50 PERCENT EXCEEDS	2.5		4.2		4.5	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

A – At times in most years.



**LOCATION.**— Lat 38°10'34", long 89°00'22" (NAD of 1927), in SE1/4NE1/4 sec.17, T.4 S., R.2 E., Jefferson County, Hydrologic Unit 07140106, on right bank at upstream side of subimpoundment dam, about 2.5 mi south of State Highway 148, 2.5 mi southeast of Waltonville, and about 10 mi upstream from Rend Lake Dam.

**DRAINAGE AREA.**—217 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

STAGE: November 1983 to current year.

**GAGE.**— Water-stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest-stage gage. Datum of gage is 400.00 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers).

**EXTREMES FOR PERIOD OF RECORD.—**

STAGE: Maximum gage height, 14.46 ft, Nov. 15, 1993; minimum, 4.07 ft, Jan. 12, 1990.

**EXTREMES FOR CURRENT YEAR.**—Maximum gage height, 12.83 ft, May 6; minimum, 5.47 ft, Sept. 24.

Gage height, feet, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.64	10.13	11.59	12.09	11.69	11.74	7.99	8.69	9.46	8.97	7.06	6.09
2	5.92	10.25	11.59	12.03	11.69	11.95	7.96	8.58	9.33	8.91	7.07	6.09
3	6.24	10.40	11.60	11.95	11.71	11.95	7.93	8.51	9.28	8.84	7.07	6.11
4	6.43	10.56	11.60	11.92	11.71	11.80	7.87	8.44	9.17	8.77	7.03	6.16
5	6.60	10.72	11.63	11.90	11.69	11.27	7.78	10.36	9.10	8.69	6.98	6.04
6	6.74	10.87	11.61	11.88	11.70	10.61	7.74	12.40	9.05	8.61	6.94	6.00
7	6.87	10.95	11.61	11.85	11.70	9.96	7.78	12.71	8.97	8.52	6.89	5.97
8	6.98	11.03	11.61	11.85	11.67	9.36	7.74	12.43	8.90	8.45	6.84	5.95
9	7.12	11.15	11.60	11.85	11.68	8.84	7.66	12.27	8.82	8.40	6.79	5.92
10	7.28	11.35	11.60	11.81	11.70	8.37	7.60	12.29	8.85	8.33	6.75	5.91
11	7.42	11.50	11.60	11.78	11.67	8.06	7.56	12.25	9.50	8.22	6.71	5.89
12	7.54	11.60	11.60	11.76	11.57	7.97	7.53	12.17	10.99	8.14	6.67	5.88
13	7.65	11.67	11.63	11.76	11.47	8.23	7.49	11.88	12.14	8.07	6.64	5.86
14	7.62	11.74	11.63	11.76	11.45	9.01	7.46	11.56	12.35	8.00	6.61	5.79
15	7.64	11.83	11.63	11.75	11.58	9.17	7.44	11.23	12.12	7.95	6.57	5.76
16	7.75	11.80	11.63	11.75	11.81	8.86	7.44	10.90	11.75	7.87	6.53	5.74
17	7.84	11.77	11.64	11.74	11.82	8.53	7.67	10.61	11.35	7.81	6.51	5.72
18	7.93	11.74	11.60	11.73	11.80	8.27	8.18	10.39	10.94	7.83	6.47	5.69
19	8.12	11.75	12.02	11.72	11.85	8.18	8.22	10.26	10.55	7.95	6.43	5.61
20	8.23	11.73	12.03	11.72	12.09	8.49	8.07	10.10	10.20	7.79	6.39	5.62
21	8.32	11.74	11.97	11.72	12.26	8.68	8.09	9.94	9.91	7.69	6.36	5.60
22	8.42	11.71	11.92	11.71	12.39	8.91	7.93	9.82	9.69	7.59	6.30	5.58
23	8.52	11.69	11.88	11.70	12.43	8.82	7.70	9.71	9.54	7.51	6.27	5.55
24	8.64	11.69	11.89	11.69	12.25	8.54	7.61	9.61	9.44	7.46	6.23	5.51
25	8.85	11.69	11.86	11.68	12.01	8.35	8.03	9.85	9.36	7.42	6.20	5.53
26	9.03	11.67	11.83	11.68	11.87	8.29	9.08	10.91	9.34	7.37	6.17	5.54
27	9.18	11.65	11.82	---	11.80	8.34	9.57	11.02	9.26	7.31	6.13	5.64
28	9.36	11.64	11.81	11.67	11.72	8.30	9.27	10.65	9.17	7.25	6.12	5.64
29	9.63	11.63	11.81	11.68	---	8.17	8.94	10.30	9.08	7.20	6.09	5.67
30	9.80	11.63	11.82	11.67	---	8.03	8.89	9.95	9.00	7.15	6.08	5.95
31	9.98	---	12.02	11.68	---	8.00	---	9.69	---	7.11	6.10	---
MEAN	7.85	11.38	11.73	---	11.81	9.13	8.01	10.63	9.89	7.97	6.55	5.80
MAX	9.98	11.83	12.03	---	12.43	11.95	9.57	12.71	12.35	8.97	7.07	6.16
MIN	5.64	10.13	11.59	---	11.45	7.97	7.44	8.44	8.82	7.11	6.08	5.51

CAL YR 2002	MEAN 9.69	MAX 13.00	MIN 5.48
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BIG MUDDY RIVER BASIN  
**05595765 Big Muddy River Subimpoundment near Waltonville, IL**

**LOCATION.**— Lat 38°10'34", long 89°00'22" (NAD of 1927), in SE1/4NE1/4 sec.17, T.4 S., R.2 E., Jefferson County, Hydrologic Unit 07140106, on right bank at upstream side of subimpoundment dam, about 2.5 mi south of State Highway 148, 2.5 mi southeast of Waltonville, and about 10 mi upstream from Rend Lake Dam.

**DRAINAGE AREA.**— 217 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

STAGE: November 1983 to current year.

**GAGE.**— Water—stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest—stage gage. Datum of gage is 400.00 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers).

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height, 14.46 ft, Nov. 15, 1993; minimum, 4.07 ft, Jan. 12, 1990.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 12.41 ft, May 28; minimum, 6.02 ft, Aug. 23.

Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.24	9.48	11.78	11.94	11.77	9.35	9.40	7.09	12.12	7.39	6.73	7.73
2	6.48	9.63	11.76	11.92	11.82	9.52	8.87	7.86	11.81	7.39	6.70	7.24
3	6.65	9.77	11.75	11.90	11.68	9.71	8.37	8.01	11.27	7.41	6.67	7.00
4	6.66	9.90	11.77	11.94	10.95	10.85	7.93	7.69	10.67	7.34	6.63	6.98
5	6.63	10.04	11.78	12.14	10.17	12.03	7.64	7.38	10.06	7.34	6.55	6.96
6	6.69	10.19	11.76	12.10	9.30	12.27	7.51	7.16	9.52	7.55	6.51	6.94
7	6.90	10.31	11.74	11.96	8.42	11.87	7.45	7.09	9.06	7.69	6.48	6.85
8	7.08	10.42	11.73	11.91	7.60	11.27	7.39	7.05	8.71	7.54	6.45	6.76
9	7.24	10.54	11.74	11.88	7.04	10.61	7.36	7.02	8.47	7.39	6.41	6.76
10	7.39	10.65	11.75	11.84	7.13	9.87	7.32	6.99	8.35	7.33	6.36	6.74
11	7.39	10.79	11.73	11.83	7.40	9.17	7.26	6.96	8.28	7.33	6.32	6.70
12	7.38	10.95	11.72	11.83	7.74	8.51	7.19	6.95	8.24	7.27	6.26	6.67
13	7.35	11.00	11.72	11.82	7.97	7.95	7.06	6.94	8.21	7.21	6.22	6.66
14	7.43	11.08	11.72	11.82	8.11	7.54	7.10	6.95	8.15	7.21	6.21	6.63
15	7.54	11.22	11.71	11.78	8.23	7.32	7.12	6.92	8.09	7.16	6.18	6.62
16	7.69	11.34	11.72	11.78	8.32	7.26	7.09	6.93	8.08	7.13	6.15	6.64
17	7.87	11.44	11.71	11.83	8.39	7.24	7.06	6.91	8.04	7.09	6.14	6.63
18	7.85	11.59	11.71	12.07	8.46	7.22	7.05	6.90	8.19	7.05	6.10	6.60
19	7.83	11.98	11.70	12.16	8.53	7.19	7.01	6.88	8.10	7.02	6.08	6.59
20	7.82	12.08	11.68	12.00	8.62	7.19	6.97	6.86	7.99	7.00	6.08	6.58
21	8.01	11.97	11.66	11.92	8.79	7.07	6.95	6.83	7.95	6.95	6.05	6.58
22	8.21	11.90	11.67	11.89	8.93	7.10	6.91	6.81	7.88	6.90	6.05	6.57
23	8.40	11.89	11.72	11.84	9.03	7.12	6.90	6.78	7.81	6.93	6.04	6.56
24	8.56	11.96	11.75	11.85	9.12	7.10	6.92	6.72	7.76	6.87	6.08	6.56
25	8.77	12.03	11.83	11.85	9.16	7.07	7.12	6.81	7.68	6.85	6.17	6.55
26	8.93	11.96	11.85	11.84	9.19	7.09	7.20	—	7.62	6.80	6.53	6.54
27	9.03	11.92	11.83	11.82	9.22	7.71	7.03	e10.11	7.57	6.77	7.86	6.53
28	9.03	11.86	11.82	11.83	9.25	9.21	6.96	e12.28	7.52	6.74	8.70	6.52
29	9.08	11.80	11.90	11.81	9.27	9.96	6.91	12.26	7.47	6.71	8.91	6.50
30	9.18	11.79	12.06	11.80	—	10.16	6.86	12.00	7.42	6.74	8.83	6.49
31	9.30	—	12.03	11.78	—	9.87	—	12.14	—	6.75	8.32	—
MEAN	7.76	11.12	11.77	11.89	8.95	8.82	7.33	—	8.60	7.12	6.67	6.72
MAX	9.30	12.08	12.06	12.16	11.82	12.27	9.40	—	12.12	7.69	8.91	7.73
MIN	6.24	9.48	11.66	11.78	7.04	7.07	6.86	—	7.42	6.71	6.04	6.49

e Estimated

**LOCATION.**— Lat 38°17'12", long 88°52'19" (NAD of 1927), in NE1/4NE1/4 sec.9, T.3 S., R.3 E., Jefferson County, Hydrologic Unit 07140106, on left bank on upstream side of bridge on State Highway 142, 0.2 mi downstream from Sevenmile Creek, about 2 mi southeast of Mt. Vernon, and at mile 18.8.

**DRAINAGE AREA.**— 76.9 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE**

DISCHARGE: October 1985 to current year.

STAGE: Water years 1995 to current year. October 1985 to September 1994 (8 AM gage heights). Gage–height record for April 1965 to May 1971 available in files of U.S. Army Corps of Engineers.

**GAUGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest–stage gage. Datum of gage is 420.00 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers).

**REMARKS.**— Sewage–treatment plant upstream at Mt. Vernon.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Maximum discharge, 16,100 ft<sup>3</sup>/s, May 17, 1990, gage height 17.03 ft; minimum daily discharge, 0.15 ft<sup>3</sup>/s, Sept 29, 1989.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Flood of Apr. 4, 1968, reached a stage of 14.60 ft, from records of U.S. Army Corps of Engineers.

**REMARKS FOR CURRENT YEAR.**— Records good except those for estimated daily discharges, which are poor. Effluent from sewage–treatment plant upstream at Mt. Vernon averaged about 4.2 ft<sup>3</sup>/s.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	e3.3	6.7	13	e7.5	45	47	216	89	4.7	6.5	20
2	2.9	e3.4	6.1	15	e20	49	37	125	43	51	5.2	14
3	2.9	e3.3	6.2	15	e75	55	29	58	26	10	4.8	12
4	2.9	e3.2	7.0	230	e35	1480	24	35	18	9.8	4.5	12
5	2.8	e3.5	7.7	319	e27	733	20	26	13	84	4.7	11
6	3.0	e3.5	7.0	54	e26	157	19	20	11	48	4.0	11
7	3.2	e3.3	6.2	29	e23	72	19	15	9.7	20	3.8	10
8	3.2	e3.2	6.6	23	e20	46	17	13	8.7	12	3.6	8.9
9	4.3	e2.9	7.2	21	e20	37	15	11	8.5	8.6	3.9	7.0
10	4.5	e3.7	7.8	18	e31	29	14	10	7.2	8.7	3.6	5.5
11	2.9	e5.6	6.2	15	e48	26	15	8.8	6.7	7.3	3.1	4.8
12	e3.2	e4.5	6.0	16	e38	22	15	8.4	6.9	6.6	3.1	4.6
13	e4.0	e3.5	5.4	15	e28	20	14	16	6.9	9.6	3.1	4.5
14	6.9	e4.8	5.1	14	e25	19	13	48	7.1	6.3	3.1	4.5
15	4.7	e3.8	5.0	14	e23	19	12	28	6.1	5.4	3.1	4.6
16	3.9	e3.6	5.1	12	21	20	11	17	7.0	5.0	3.0	5.0
17	5.6	e5.5	5.0	44	19	21	11	14	20	4.9	3.1	4.9
18	e3.3	e55	5.1	372	18	19	10	13	21	4.7	3.1	7.0
19	e3.2	180	5.1	68	22	17	9.6	20	9.4	4.6	3.6	5.2
20	e3.0	23	4.8	34	36	18	9.1	17	7.4	4.5	5.0	4.8
21	e3.0	11	4.8	e22	35	18	9.5	13	6.3	4.3	4.0	4.9
22	e2.9	7.8	4.8	e18	24	15	10	10	5.7	4.3	3.2	4.7
23	e2.9	21	9.2	e15	20	13	12	10	5.3	4.9	6.2	4.6
24	e3.0	103	18	e13	20	13	17	17	5.4	4.3	6.5	4.5
25	e3.0	22	10	e12	19	13	131	320	5.3	7.3	10	4.2
26	e3.1	11	7.0	e13	17	52	40	1370	5.0	5.0	1660	4.0
27	e3.1	10	6.1	e11	16	665	24	1740	4.9	4.7	1320	4.2
28	e3.4	10	5.3	e10	14	217	18	962	4.9	4.6	282	4.1
29	e3.2	8.4	67	e9.0	14	340	14	124	4.8	4.3	512	4.2

BIG MUDDY RIVER BASIN  
**05595820 Casey Fork at Mt. Vernon, IL--Continued**

<b>30</b>	e3.1	7.5	51	e8.5	---	107	13	147	4.7	16	74	4.3
<b>31</b>	e3.5	---	18	e8.0	---	66	---	646	---	11	34	---
TOTAL	108.1	534.3	322.5	1480.5	741.5	4423	649.2	6078.2	384.9	386.4	3989.8	205.0
MEAN	3.49	17.8	10.4	47.8	25.6	143	21.6	196	12.8	12.5	129	6.83
MAX	6.9	180	67	372	75	1480	131	1740	89	84	1660	20
MIN	2.8	2.9	4.8	8.0	7.5	13	9.1	8.4	4.7	4.3	3.0	4.0
CFSM	0.05	0.23	0.14	0.62	0.33	1.86	0.28	2.55	0.17	0.16	1.67	0.09
IN.	0.05	0.26	0.16	0.72	0.36	2.14	0.31	2.94	0.19	0.19	1.93	0.10

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 – 2004, BY WATER YEAR (WY)**

MEAN	10.1	79.2	58.3	102	128	140	163	150	53.5	23.0	14.2	15.0
MAX	62.6	542	233	327	383	456	540	809	279	101	129	155
(WY)	2002	1994	1991	1993	1986	1989	1996	1995	2000	1993	2004	1993
MIN	2.86	3.16	4.51	4.75	10.4	24.1	21.6	4.46	2.98	2.71	1.65	2.06
(WY)	1996	2000	1990	2000	1996	2001	2004	1988	1991	1991	1990	1995

<b>SUMMARY STATISTICS</b>	<b>FOR 2003 CALENDAR YEAR</b>		<b>FOR 2004 WATER YEAR</b>		<b>WATER YEARS 1986 – 2004</b>	
ANNUAL TOTAL	24246.9		19303.4			
ANNUAL MEAN	66.4		52.7		77.7	
HIGHEST ANNUAL MEAN					123	1994
LOWEST ANNUAL MEAN					21.3	1987
HIGHEST DAILY MEAN	2640	May 5	1740	May 27	9940	May 18 1995
LOWEST DAILY MEAN	2.2	Aug 17	2.8	A Oct 5	0.15	Sep 29 1989
ANNUAL SEVEN-DAY MINIMUM	2.4	Aug 13	3.0	B Oct 20	0.38	Dec 11 1989
MAXIMUM PEAK FLOW			2240	Aug 27	16100	May 17 1990
MAXIMUM PEAK STAGE			12.39	Aug 27	17.03	May 17 1990
INSTANTANEOUS LOW FLOW			1.9	Oct 11		
ANNUAL RUNOFF (CFSM)	0.864		0.686		1.01	
ANNUAL RUNOFF (INCHES)	11.73		9.34		13.72	
10 PERCENT EXCEEDS	110		55		114	
50 PERCENT EXCEEDS	7.2		10		11	
90 PERCENT EXCEEDS	3.0		3.4		2.9	

A – But may have been less during periods of estimated discharges in October and November.

B – Estimated.

BIG MUDDY RIVER BASIN  
05595860 Casey Fork Subimpoundment near Bonnie, IL

649

**LOCATION.**— Lat 38°11'15", long 88°55'38" (NAD of 1927), in SW1/4SW1/4 sec.7, T.4 S., R.3 E., Jefferson County, Hydrologic Unit 07140106, on left bank at upstream side of subimpoundment dam, about 1 mi upstream from Atchison Creek, about 2 mi southwest of Bonnie, and about 12 mi upstream from Rend Lake Dam.

**DRAINAGE AREA.**— 133 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

STAGE: November 1983 to current year.

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest–stage gage. Datum of gage is 400.00 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers).

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height, 14.00 ft, Nov. 14, 1993; minimum, 4.31 ft, Jan. 18, 1990.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 12.61 ft, May 6; minimum, 5.58 ft, Sept. 24.

Gage height, feet, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.06	11.94	11.75	12.28	11.74	11.51	8.15	10.08	9.67	9.03	7.14	6.19
2	6.51	11.92	11.75	12.11	11.75	11.64	8.10	9.82	9.50	8.96	7.13	6.17
3	6.92	11.90	11.75	12.04	11.76	11.67	8.07	9.52	9.40	8.89	7.14	6.21
4	7.28	11.89	11.76	11.99	11.78	11.55	8.00	9.27	9.30	8.82	7.09	6.16
5	7.58	11.89	11.79	11.96	11.77	11.24	7.92	10.89	9.20	8.75	7.04	6.06
6	7.74	11.89	11.78	11.94	11.78	10.87	7.81	12.53	9.11	8.69	6.98	6.04
7	7.93	11.88	11.77	11.90	11.79	10.47	7.82	12.51	9.04	8.62	6.94	6.02
8	8.22	11.84	11.78	11.89	11.77	10.06	7.83	12.20	8.97	8.54	6.89	5.99
9	8.50	11.83	11.78	11.88	11.78	9.68	7.74	12.11	8.90	8.47	6.84	5.97
10	8.78	11.94	11.78	11.87	11.79	9.25	7.66	12.23	8.88	8.40	6.79	5.95
11	9.05	12.03	11.78	11.84	11.77	8.86	7.63	12.07	9.34	8.29	6.75	5.93
12	9.29	12.03	11.78	11.82	11.71	8.63	7.60	12.02	10.62	8.21	6.70	5.93
13	9.49	11.99	11.80	11.81	11.63	8.86	7.54	11.80	12.23	8.11	6.67	5.90
14	9.49	11.95	11.82	11.80	11.62	9.38	7.51	11.58	12.45	8.05	6.66	5.87
15	9.48	11.95	11.82	11.79	11.79	9.38	7.52	11.37	12.08	8.02	6.62	5.82
16	9.47	11.93	11.83	11.78	12.12	9.15	7.52	11.14	11.79	7.94	6.58	5.81
17	9.50	11.91	11.83	11.77	12.07	8.90	7.77	10.93	11.53	7.86	6.55	5.77
18	9.68	11.88	11.83	11.76	12.00	8.65	8.05	10.84	11.26	7.85	6.49	5.73
19	9.95	11.88	12.15	11.75	12.01	8.52	7.93	10.75	11.00	7.82	6.46	5.69
20	10.15	11.87	12.27	11.75	12.26	9.06	8.02	10.58	10.72	7.77	6.43	5.67
21	10.31	11.86	12.12	11.75	12.35	9.32	8.62	10.37	10.45	7.78	6.41	5.65
22	10.48	11.85	12.06	11.74	12.40	9.63	8.50	10.19	10.19	7.66	6.38	5.66
23	10.64	11.82	12.02	11.73	12.53	9.51	8.21	10.00	9.95	7.57	6.29	5.63
24	10.77	11.82	12.03	11.72	12.25	9.24	7.98	9.83	9.74	7.51	6.27	5.60
25	10.93	11.82	12.02	11.72	12.00	9.00	8.50	9.92	9.56	7.47	6.26	5.63
26	11.08	11.80	11.99	11.72	11.83	8.92	10.44	10.74	9.45	7.43	6.23	5.66
27	11.20	11.79	11.98	11.70	11.69	8.84	11.18	10.79	9.35	7.40	6.20	5.79
28	11.36	11.78	11.97	11.71	11.56	8.69	10.94	10.57	9.24	7.33	6.18	5.83
29	11.60	11.77	11.96	11.73	---	8.53	10.64	10.35	9.15	7.24	6.18	5.91
30	11.76	11.78	11.99	11.72	---	8.31	10.37	10.10	9.06	7.19	6.12	6.27
31	11.86	---	12.18	11.73	---	8.19	---	9.90	---	7.15	6.15	---
MEAN	9.45	11.88	11.90	11.83	11.90	9.53	8.39	10.87	10.04	8.03	6.60	5.88
MAX	11.86	12.03	12.27	12.28	12.53	11.67	11.18	12.53	12.45	9.03	7.14	6.27
MIN	6.06	11.77	11.75	11.70	11.56	8.19	7.51	9.27	8.88	7.15	6.12	5.60
CAL YR 2002	MEAN 10.02		MAX 12.74	MIN 5.50								

**05595860 Casey Fork Subimpoundment near Bonnie, IL--Continued**

WTR YR 2003	MEAN 9.68	MAX 12.53	MIN 5.60
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**LOCATION.**— Lat 38°11'15", long 88°55'38" (NAD of 1927), in SW1/4SW1/4 sec.7, T.4 S., R.3 E., Jefferson County, Hydrologic Unit 07140106, on left bank at upstream side of subimpoundment dam, about 1 mi upstream from Atchison Creek, about 2 mi southwest of Bonnie, and about 12 mi upstream from Rend Lake Dam.

**DRAINAGE AREA.**— 133 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

STAGE: November 1983 to current year.

**GAGE.**— Water-stage recorder, U.S. Army Corps of Engineers satellite telemeter, and crest-stage gage. Datum of gage is 400.00 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers).

**EXTREMES FOR PERIOD OF RECORD.—**

STAGE: Maximum gage height, 14.00 ft, Nov. 14, 1993; minimum, 4.31 ft, Jan. 18, 1990.

**EXTREMES FOR CURRENT YEAR.**—Maximum gage height, 12.47 ft, May 28; minimum, 6.07 ft, Aug. 23.

Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.62	9.86	11.92	12.08	10.58	9.69	9.14	7.12	12.02	7.42	6.77	9.56
2	6.93	9.86	11.90	12.08	10.62	9.88	8.78	7.86	11.70	7.44	6.74	9.01
3	7.18	9.86	11.89	12.08	10.67	10.03	8.43	7.96	11.32	7.47	6.71	8.47
4	7.23	9.85	11.90	12.13	10.21	10.88	8.10	7.78	10.93	7.43	6.70	7.98
5	7.21	9.86	11.91	12.30	9.65	12.15	7.84	7.56	10.53	7.41	6.57	7.55
6	7.26	9.90	11.90	12.18	9.05	12.17	7.67	7.35	10.12	7.61	6.52	7.23
7	7.50	10.04	11.89	12.06	8.44	11.80	7.57	7.21	9.73	7.62	6.52	7.00
8	7.74	10.18	11.88	12.01	7.85	11.40	7.50	7.12	9.36	7.51	6.48	6.83
9	7.96	10.32	11.88	11.98	7.42	10.96	7.44	7.09	9.03	7.44	6.46	6.81
10	8.17	10.44	11.89	11.95	7.51	10.49	7.38	7.05	8.74	7.39	6.44	6.78
11	8.21	10.59	11.89	11.92	7.78	10.01	7.32	7.02	8.52	7.38	6.38	6.75
12	8.21	10.75	11.88	11.92	8.10	9.50	7.22	7.00	8.38	7.33	6.33	6.71
13	8.18	10.86	11.87	11.90	8.32	9.00	7.11	7.01	8.30	7.28	6.28	6.69
14	8.25	10.99	11.87	11.90	8.46	8.54	7.18	7.12	8.23	7.26	6.26	6.68
15	8.43	11.08	11.86	11.88	8.58	8.11	7.20	7.27	8.15	7.21	6.23	6.69
16	8.63	11.18	11.87	11.87	8.69	7.78	7.18	7.14	8.13	7.18	6.21	6.70
17	8.84	11.29	11.86	11.91	8.76	7.54	7.15	7.01	8.17	7.15	6.22	6.71
18	8.85	11.44	11.87	12.14	8.84	7.39	7.16	6.97	8.66	7.10	6.19	6.69
19	8.85	11.82	11.87	12.22	8.92	7.28	7.19	6.96	8.51	7.07	6.16	6.69
20	8.85	11.98	11.86	12.04	9.04	7.27	7.09	6.97	8.25	7.07	6.14	6.69
21	9.01	11.96	11.84	11.53	9.19	7.17	7.10	6.92	8.08	7.02	6.10	6.69
22	9.18	11.92	11.85	10.97	9.30	7.17	6.98	6.90	7.96	6.97	6.09	6.69
23	9.34	11.92	11.89	10.41	9.38	7.20	6.96	6.91	7.86	6.96	6.09	6.68
24	9.48	12.05	11.90	10.35	9.44	7.21	6.96	6.84	7.82	6.87	6.14	6.68
25	9.50	12.08	11.91	10.40	9.48	7.16	7.18	6.89	7.73	6.84	6.25	6.68
26	9.50	12.03	11.92	10.44	9.52	7.16	7.38	8.43	7.65	6.83	6.79	6.68
27	9.52	12.01	11.92	10.48	9.56	7.67	7.21	11.14	7.60	6.80	8.78	6.67
28	9.66	11.99	11.92	10.50	9.59	8.88	7.09	12.42	7.56	6.78	10.14	6.67
29	9.69	11.95	12.00	10.53	9.61	9.38	7.04	12.20	7.50	6.74	10.38	6.66
30	9.79	11.94	12.10	10.55	---	9.68	6.96	11.83	7.44	6.76	10.50	6.65
31	9.84	---	12.11	10.57	---	9.47	---	11.95	---	6.82	10.07	---
MEAN	8.50	11.07	11.90	11.53	9.05	9.03	7.42	7.97	8.80	7.17	6.96	7.03
MAX	9.84	12.08	12.11	12.30	10.67	12.17	9.14	12.42	12.02	7.62	10.50	9.56
MIN	6.62	9.85	11.84	10.35	7.42	7.16	6.96	6.84	7.44	6.74	6.09	6.65

CAL YR 2003	MEAN 9.53	MAX 12.53	MIN 5.60
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**05595860 Casey Fork Subimpoundment near Bonnie, IL--Continued**

WTR YR 2004	MEAN 8.87	MAX 12.42	MIN 6.09
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**LOCATION.**— Lat 37°54'05", long 89°00'50" (NAD of 1927), in NW1/4 sec.20, T.7 S., R.2 E., Franklin County, Hydrologic Unit 07140106, on left bank 0.8 mi upstream from bridge on State Highway 149 at Plumfield, 1.9 mi downstream from Middle Fork Muddy River, and at mile 86.6.

**DRAINAGE AREA.**— 794 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE**

DISCHARGE: June 1908 to September 1910 and December 1910 to December 1912 (published as "near Cambon"), August 1914 to current year.

STAGE: Water years 1994 to current year.

**SURFACE—WATER QUALITY**

CHEMICAL: Water years 1978–91.

**REVISED RECORDS.**— WSP 700: 1929. WSP 805: 1935. WSP 1508: 1908–10, 1920–21(M), 1928(M), 1932(M). WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter, and concrete control. Datum of gage is 353.24 ft above NGVD of 1929. June 16, 1908, to Dec. 31, 1912, nonrecording gage at site 1.7 mi upstream at different datum. Aug. 14, 1914, to July 12, 1932, nonrecording gage at site 0.2 mi downstream at different datum. July 13, 1932, to Nov. 12, 1938, nonrecording gage at bridge 0.8 mi downstream at datum 0.86 ft higher. Nov. 13, 1938, to Sept. 30, 1974, water–stage recorder at present site at datum 5.0 ft higher. Oct. 1, 1974, to Sept. 30, 1991, auxiliary water–stage recorder at pumping plant at Zeigler, 4 mi downstream, at datum 353.24 ft above NGVD of 1929. Feb. 14, 1937, to Sept. 30, 1974, auxiliary nonrecording gage at same site at datum 5.0 ft higher.

**REMARKS.**— Flow regulated since October 1970 by Rend Lake (station 05595950), 18.6 mi upstream from gage.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Maximum discharge, 42,900 ft<sup>3</sup>/s, May 10, 1961; maximum gage height, 29.67 ft, datum then in use, May 10, 1961; no flow at times in 1908–9, 1914, 1936, 1940–41. Maximum discharge since construction of Rend Lake, 14,200 ft<sup>3</sup>/s, May 1, 1996, gage height, 31.83 ft; maximum stage since construction of Rend Lake, 31.84 ft, May 4, 1983, discharge, 11,800 ft<sup>3</sup>/s; minimum discharge since construction of Rend Lake, 6.8 ft<sup>3</sup>/s, Oct. 13, 1970.

**REMARKS FOR CURRENT YEAR.**— Records good except those above 800 ft<sup>3</sup>/s and estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	25	43	62	e67	145	936	759	2520	393	414	446
2	67	22	45	60	e75	205	890	1250	2280	385	370	411
3	53	22	42	96	e175	261	794	1460	e2000	439	308	356
4	47	22	42	127	344	760	651	1540	e1800	498	253	335
5	47	22	42	291	329	1030	551	1420	1550	485	240	326
6	45	26	43	337	334	1120	486	1240	1290	492	234	314
7	43	27	42	214	377	1200	451	1010	1040	544	215	310
8	40	26	40	141	379	1240	433	700	866	546	201	312
9	38	26	39	89	362	1170	421	456	740	537	189	293
10	36	32	41	73	345	1000	405	358	669	488	179	269
11	35	33	42	64	401	780	398	324	621	437	174	258
12	34	33	41	58	452	597	397	307	593	405	165	250
13	38	33	39	57	462	487	394	301	585	379	160	241
14	37	35	38	56	444	430	380	373	577	370	151	232
15	42	38	38	56	403	412	349	666	584	379	145	224
16	37	38	37	54	337	410	335	869	578	363	141	219
17	37	34	38	69	281	412	329	929	553	356	134	220
18	38	40	38	330	238	410	314	919	598	367	127	212
19	33	67	38	457	218	403	301	890	654	364	122	200
20	31	67	38	402	212	389	293	780	646	345	121	189
21	29	43	37	326	219	408	281	544	586	311	128	179
22	30	42	36	224	234	444	298	384	533	301	124	172
23	30	42	38	137	224	433	368	317	507	295	119	166

BIG MUDDY RIVER BASIN  
**05597000 Big Muddy River at Plumfield, IL---Continued**

<b>24</b>	30	76	41	e100	197	394	436	286	486	326	119	159
<b>25</b>	30	99	39	e94	179	364	616	319	468	328	135	155
<b>26</b>	34	69	38	e86	164	364	659	1010	457	309	155	152
<b>27</b>	35	55	37	e82	150	588	524	1620	445	307	187	147
<b>28</b>	44	49	39	e76	138	735	399	2710	438	286	220	143
<b>29</b>	36	49	56	e73	129	810	357	3080	421	264	515	139
<b>30</b>	30	45	84	e71	---	925	319	2840	406	261	538	130
<b>31</b>	27	---	80	e69	---	962	---	2710	---	324	444	---
TOTAL	1202	1237	1331	4431	7869	19288	13765	32371	25491	11884	6727	7159
MEAN	38.8	41.2	42.9	143	271	622	459	1044	850	383	217	239
MAX	69	99	84	457	462	1240	936	3080	2520	546	538	446
MIN	27	22	36	54	67	145	281	286	406	261	119	130

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 – 2004, BY WATER YEAR (WY)**

MEAN	108	383	649	803	1028	1264	1451	1407	760	409	216	133
MAX	488	3812	3510	3054	3355	4439	3740	6511	2062	1044	691	553
(WY)	1985	1994	1983	1991	1982	1979	1989	1983	1995	1998	2000	1974
MIN	27.3	26.1	31.0	27.2	48.8	73.6	67.4	117	38.9	30.8	21.8	20.6
(WY)	1971	1972	1972	1972	1972	1981	1981	1987	1972	1971	1971	1971

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1971 – 2004**

ANNUAL TOTAL	216516	132755	
ANNUAL MEAN	593	363	716
HIGHEST ANNUAL MEAN			1515
LOWEST ANNUAL MEAN			161
HIGHEST DAILY MEAN	4180 Jun 14	3080 May 29	14000 May 1 1996
LOWEST DAILY MEAN	22 Nov 2–5	22 Nov 2–5	6.8 Oct 13 1970
ANNUAL SEVEN-DAY MINIMUM	24 Oct 31	24 Oct 31	7.3 Aug 17 1971
MAXIMUM PEAK FLOW		3110 May 29	14200 A May 1 1996
MAXIMUM PEAK STAGE		21.27 May 29	31.84 B May 4 1983
INSTANTANEOUS LOW FLOW		22 Nov. 2–5	
10 PERCENT EXCEEDS	1580	784	1840
50 PERCENT EXCEEDS	284	275	327
90 PERCENT EXCEEDS	37	37	42

A – Gage height, 31.83 ft.

B – Discharge, 11,800 ft<sup>3</sup>/s.

**LOCATION.**— Lat 37°43'52", long 88°53'21" (NAD of 1927), in SW1/4SW1/4 sec.16, T.9 S., R.3 E., Williamson County, Hydrologic Unit 07140106, on right bank at downstream side of bridge on State Highway 13, 1.8 mi downstream from Buckley Creek, 2 mi east of Marion, and at mile 32.9.

**DRAINAGE AREA.**— 31.7 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: October 1951 to current year.

STAGE: Water years 1994 to current year.

SURFACE-WATER QUALITY

CHEMICAL: Water years 1978–91.

**REVISED RECORDS.**— WSP 1388: 1952–54. WDR-IL 75-1: Drainage area.

**GAGE.**— Water-stage recorder, phone telemeter, and crest-stage gage. Datum of gage is 415.82 ft above NGVD of 1929. Prior to Aug. 25, 1965, nonrecording gage and crest-stage gage at bridge 800 ft downstream and Aug. 25, 1965, to Oct. 28, 1965, nonrecording gage at present site and datum.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 9,430 ft<sup>3</sup>/s, Dec. 17, 2001, on basis of contracted opening measurement of peak flow, gage height, 13.63 ft; no flow for many days in most years.

**REMARKS FOR CURRENT YEAR.**— Records poor.

Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.20	e0.48	e7.5	27	e5.5	e25	e75	162	80	e0.35	0.25	e0.05
2	0.20	e0.44	e3.5	224	e20	60	e54	239	e45	e0.34	0.25	e0.05
3	0.19	e0.41	2.5	183	e100	50	e37	186	e26	e0.33	0.22	e0.04
4	0.19	e0.39	e2.0	136	e45	440	e27	e128	e14	e0.32	0.21	e0.04
5	0.19	e0.37	e1.7	225	e16	e294	e16	e78	e7.8	e0.41	38	e0.03
6	0.20	e0.45	e1.4	e118	e50	e193	e8.5	e43	e4.0	e1.2	e14	e0.03
7	0.20	e0.65	e1.1	e78	87	e129	e6.2	e25	e2.8	e0.97	e5.4	e0.02
8	0.21	e0.60	e1.0	e53	36	e82	e5.1	e16	2.3	e0.80	e3.4	e0.02
9	0.21	e0.52	e0.82	e37	22	e60	4.4	e10	e1.9	e0.69	e2.0	e0.01
10	0.21	e0.47	e0.71	e26	44	e39	e4.0	e7.4	e1.7	e0.64	e1.6	e0.01
11	0.21	e0.44	e0.71	e19	76	e26	e3.8	e5.0	e1.6	e0.60	e1.3	e0.00
12	0.19	e1.2	e1.3	14	51	e23	e3.6	e4.0	e1.8	e0.56	e1.0	e0.00
13	0.18	10	e3.5	13	e35	e20	e3.5	e3.5	e3.0	e0.52	e0.80	e0.00
14	0.22	2.0	e2.3	12	e25	e17	33	275	e1.7	e0.51	e0.70	e0.00
15	0.22	2.0	e1.9	12	e19	e15	27	e201	e1.0	e0.49	e0.60	e0.00
16	0.24	3.0	e1.3	10	e15	e18	e13	e135	e0.60	e0.49	e0.50	e0.00
17	0.78	2.6	e1.1	21	e13	e20	e7.6	e95	e0.41	e0.47	e0.40	e0.00
18	1.2	17	e0.92	206	e12	e21	e5.2	e69	e0.29	e0.46	e0.30	e0.00
19	0.62	72	e0.92	142	e15	e19	e3.5	e51	e0.34	e0.32	e0.20	e0.00
20	0.49	31	e0.71	e76	e16	e31	e3.2	e33	e0.38	0.02	e0.15	e0.00
21	0.41	11	e0.78	e44	e11	68	e2.8	e20	e0.47	0.13	e0.13	e0.00
22	0.34	10	e2.2	e19	e10	35	144	e12	0.60	0.42	e0.11	e0.00
23	0.31	18	e3.7	e13	e9.0	e29	180	e7.0	0.60	11	e0.10	0.00
24	0.28	137	e4.3	e10	e8.0	e23	158	e4.0	0.58	e4.0	e0.10	0.00
25	0.27	47	e3.2	e8.5	e7.5	e18	152	e4.5	e0.60	e2.0	e0.20	0.00
26	0.38	14	e2.4	e16	e7.0	e25	e108	e110	e0.52	e1.1	e0.25	0.00
27	0.49	10	e2.0	e30	e6.5	e94	e62	213	e0.47	e0.67	e0.14	0.00
28	0.54	63	e2.2	e19	e6.0	103	e36	99	e0.42	e0.49	e0.08	0.00
29	0.59	36	e73	e12	e5.7	257	e20	e48	e0.40	e0.34	e0.07	0.00
30	0.63	e17	153	e8.5	---	166	e10	e24	e0.37	e0.34	e0.06	0.00

BIG MUDDY RIVER BASIN  
**05597500 Crab Orchard Creek near Marion, IL—Continued**

<b>31</b>	e0.55	---	51	e6.5	---	e110	---	136	---	e0.45	e0.05	---
TOTAL	11.14	509.02	334.67	1818.5	773.2	2510	1213.4	2443.4	201.65	31.43	72.57	0.30
MEAN	0.36	17.0	10.8	58.7	26.7	81.0	40.4	78.8	6.72	1.01	2.34	0.01
MAX	1.2	137	153	225	100	440	180	275	80	11	38	0.05
MIN	0.18	0.37	0.71	6.5	5.5	15	2.8	3.5	0.29	0.02	0.05	0.00
CFSM	0.01	0.54	0.34	1.85	0.84	2.55	1.28	2.49	0.21	0.03	0.07	0.00
IN.	0.01	0.60	0.39	2.13	0.91	2.95	1.42	2.87	0.24	0.04	0.09	0.00

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 – 2004, BY WATER YEAR (WY)**

MEAN	4.28	22.1	37.0	38.5	46.1	63.7	56.1	46.4	20.0	6.73	4.92	3.97
MAX	82.5	223	284	214	176	180	296	222	165	61.0	50.6	48.0
(WY)	2002	1986	2002	1982	1985	1979	1996	1996	2000	1958	1985	1993
MIN	0.00	0.00	0.00	0.02	0.14	0.00	0.51	0.24	0.00	0.00	0.00	0.00
(WY)	1953	1954	1954	1981	1964	1954	1981	1965	1953	1959	1953	1952

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1952 – 2004**

ANNUAL TOTAL	11189.46		9919.28		29.1			
ANNUAL MEAN	30.7		27.1				84.1	
HIGHEST ANNUAL MEAN							2002	
LOWEST ANNUAL MEAN							1954	
HIGHEST DAILY MEAN	1070	Jun 12	440	Mar 4	5550	Dec 17 2001		
LOWEST DAILY MEAN	0.15	Sep 20, 21	0.00	Many days	0.00	A		
ANNUAL SEVEN-DAY MINIMUM	0.19	Sep 29	0.00	Sep 11	0.00	Oct 1 1951		
MAXIMUM PEAK FLOW			550	Mar 4	9430	B	Dec 17 2001	
MAXIMUM PEAK STAGE			9.58	Mar 4	13.63	Dec 17 2001		
ANNUAL RUNOFF (CFSM)	0.967		0.855		0.916			
ANNUAL RUNOFF (INCHES)	13.13		11.64		12.45			
10 PERCENT EXCEEDS	71		89		49			
50 PERCENT EXCEEDS	3.0		3.5		2.2			
90 PERCENT EXCEEDS	0.28		0.10		0.00			

A – Many days in most years.

B – On basis of contracted opening measurement of peak flow.

**LOCATION.**— Lat 37°44'55", long 89°20'45" (NAD of 1927), in SE1/4SE1/4 sec.8, T.9 S., R.2 W., Jackson County, Hydrologic Unit 07140106, on left bank just upstream from Lewis Creek, 0.2 mi upstream from South Twentieth Street Bridge, at Murphysboro, and at mile 36.0.

**DRAINAGE AREA.**— 2,169 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: December 1916 to current year (fragmentary prior to 1931).

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1975–92.

SEDIMENT: May 1980 to Sept. 1997.

SPECIFIC CONDUCTANCE: Water years 1975–81.

WATER TEMPERATURE: Water years 1975–81.

MISCELLANEOUS: Sediment concentration and particle size, water years 1993–97.

**REVISED RECORDS.**— WDR IL-79-1: Drainage area.

**GAGE.**— Water-stage recorder, crest-stage gage, and phone telemeter. Datum of gage is 335.5 ft above NGVD of 1929. Prior to June 20, 1931, nonrecording gage at South Twentieth Street Bridge, 1,300 ft downstream, at datum 5 ft lower. June 20, 1931, to July 11, 1933, nonrecording gage at upstream side of railroad bridge across mouth of Lewis Creek at present datum. Since Nov. 14, 1973, auxiliary water-stage recorder 7,700 ft upstream. Oct. 6, 1931, to Nov. 13, 1973, auxiliary nonrecording gage read twice daily at same site. Oct. 1, 1995 to Sept. 30, 1999, water-stage recorder at South Twentieth Street Bridge, 1,300 ft downstream, at present datum.

**REMARKS.**— Flow regulated since October 1970 by Rend Lake (station 05595950), 67.8 mi upstream from gage.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 33,800 ft<sup>3</sup>/s, May 2, 1996, from graph based on discharge record, gage height 36.12 ft; maximum gage height, 37.97 ft, May 12, 1961; maximum daily reverse flow, 4,400 ft<sup>3</sup>/s, June 3, 1947, caused by backwater from Mississippi River; no flow Aug. 13 to Sept. 1, 1936, unaffected by backwater.

**SUSPENDED-SEDIMENT CONCENTRATIONS:** Maximum daily, 1,700 mg/L, Feb. 28, 1987; minimum daily, 2 mg/L, Aug. 10, 11, 1993.

**SUSPENDED-SEDIMENT LOADS:** Maximum daily, 20,500 tons, May 3, 1983; minimum daily, -45 tons, Aug. 6, 1993.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Flood of Feb. 2, 1916, reached a stage of 34.9 ft, present datum, discharge, 28,000 ft<sup>3</sup>/s.

**REMARKS FOR CURRENT YEAR.**— Records fair except those above 500 ft<sup>3</sup>/s and those for estimated daily discharges, which are poor.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	74	386	855	e325	484	4060	e2300	7830	1370	715	1580
2	119	66	305	1000	e370	654	3570	4110	7900	1290	692	1160
3	112	64	245	1090	e600	786	3070	4640	7740	1320	645	e1000
4	108	61	212	e1250	919	2570	2620	4900	7090	1270	e610	e900
5	98	57	186	1800	1060	4000	2150	4860	6010	1160	e580	e820
6	88	56	160	2050	1220	4570	1870	4370	5120	1200	e560	e740
7	83	59	151	2120	1280	5140	1590	3770	4190	1590	e535	e700
8	84	68	148	1830	1200	5770	e1350	3160	3540	1790	e510	671
9	85	68	143	e1300	1090	6040	e1150	2440	2960	1580	e495	647
10	82	66	136	815	984	5590	e1000	e1450	2420	1310	e475	620
11	78	66	140	631	1010	4530	e880	901	2010	1140	e460	590
12	74	126	124	535	1150	3590	e760	663	1880	1080	e450	565
13	66	167	124	462	e1250	2920	e670	589	1830	932	e440	541
14	65	143	124	406	e1250	2150	e600	694	1890	790	e425	520
15	65	143	112	357	e1200	1580	e560	e1400	1940	693	e415	510
16	68	165	110	315	1100	e1250	521	1880	2230	e720	e405	497
17	86	133	110	355	930	e1100	489	2140	2600	756	400	469
18	88	296	101	e1100	781	973	466	2060	2470	e700	399	452

## BIG MUDDY RIVER BASIN

## 05599500 Big Muddy River at Murphysboro, IL--Continued

19	86	719	99	1860	694	885	450	1900	2560	637	390	450
20	78	875	96	2260	664	804	433	1770	2750	530	378	438
21	74	848	94	2130	634	761	420	1630	2780	469	369	427
22	69	737	98	e1350	621	728	683	e1500	2330	450	374	418
23	67	603	104	971	625	706	e1200	e1400	1970	418	392	408
24	65	723	113	701	621	670	1630	e1650	1840	432	400	402
25	67	792	117	e560	591	634	3160	e2200	1720	476	416	395
26	71	704	117	e470	554	709	3490	e3300	1780	490	445	384
27	81	641	119	e420	495	2000	3070	e4200	1730	471	489	375
28	81	571	117	e380	441	2660	2420	e4600	1710	444	e700	370
29	78	490	309	e360	414	3370	1730	e5600	1570	e410	e1100	364
30	76	442	582	e330	----	3940	1120	e6800	1470	e430	1730	360
31	80	----	754	e320	----	4190	----	7350	----	508	1950	----
TOTAL	2540	10023	5736	30383	24073	75754	47182	90227	95860	26856	18344	17773
MEAN	81.9	334	185	980	830	2444	1573	2911	3195	866	592	592
MAX	119	875	754	2260	1280	6040	4060	7350	7900	1790	1950	1580
MIN	65	56	94	315	325	484	420	589	1470	410	369	360
CFSM	0.04	0.15	0.09	0.45	0.38	1.13	0.73	1.34	1.47	0.40	0.27	0.27

e Estimated

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 – 2004, BY WATER YEAR (WY)

MEAN	472	1354	2086	2386	2860	3733	3846	3701	2190	970	515	410
MAX	2700	10110	10030	9489	10600	12290	10510	16410	6972	3393	1307	2821
(WY)	1994	1994	1983	1991	1982	1979	1979	1983	1995	1998	2000	1993
MIN	56.5	44.2	74.3	74.7	377	237	289	298	119	131	72.1	43.8
(WY)	2000	1972	1990	1977	1972	1981	1981	1987	1972	1971	1991	1971

## SUMMARY STATISTICS

## FOR 2003 CALENDAR YEAR

## FOR 2004 WATER YEAR

## WATER YEARS 1971 – 2004

ANNUAL TOTAL	644251	444751	
ANNUAL MEAN	1765	1215	2039
HIGHEST ANNUAL MEAN			3864
LOWEST ANNUAL MEAN			741
HIGHEST DAILY MEAN	13000 May 11	7900 Jun 2	33500 May 2 1996
LOWEST DAILY MEAN	56 Nov 6	56 Nov 6	–2600 A Aug 6 1993
ANNUAL SEVEN-DAY MINIMUM	62 Nov 2	62 Nov 2	–1340 Aug 1 1993
MAXIMUM PEAK FLOW		8380 B Jun 2	33800 C May 2 1996
MAXIMUM PEAK STAGE		22.04 D Jun 1	36.88 May 5 1983
INSTANTANEOUS LOW FLOW		47 Nov 6	
ANNUAL RUNOFF (CFSM)	0.814	0.560	0.940
10 PERCENT EXCEEDS	5200	3100	5500
50 PERCENT EXCEEDS	600	664	832
90 PERCENT EXCEEDS	88	88	100

A – Backwater from the Mississippi River; lowest daily mean unaffected by backwater, 27 ft<sup>3</sup>/s, Nov. 4–5, 1999.

B – Gage height, 21.83 ft.

C – From graph based on discharge record, gage height, 36.12 ft.

D – Discharge, 7,390 ft<sup>3</sup>/s.

**LOCATION.**— Lat 38°37'44", long 90°10'47" (NAD of 1927), Hydrologic Unit 07140101, on downstream side of west pier of Eads Bridge at St. Louis, 15.0 mi downstream from Missouri River, 19.2 mi upstream from Meramec River, and at mile 180.0 above the Ohio River.

**DRAINAGE AREA.**— 697,000 mi<sup>2</sup>, approximately.

**PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE**

DISCHARGE: January 1861 to current year. Monthly discharge only for some periods, published in WSP 1311.

STAGE: March 1933 to current year. Since January 1861, in reports of Mississippi River Commission. Since January 1890, in reports of the National Weather Service.

**SURFACE—WATER QUALITY**

SEDIMENT: April 1948 to current year.

**REVISED RECORDS.**— WDR MO-76-1: Drainage area, WDR MO-98-1: Extreme outside period of record.

**GAGE.**— Water-stage recorder, National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station. Datum of gage is 379.94 ft above NGVD of 1929. Prior to May 5, 1934, nonrecording gage 0.4 mi downstream; May 5, 1934 to Dec. 9, 1952, water-stage recorder at site 20 ft downstream at present datum.

**REMARKS.**— Natural flow of stream affected by many reservoirs and navigation dams in upper Mississippi River Basin and by many reservoirs and diversions for irrigation in Missouri River Basin.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Maximum discharge, 1,080,000 ft<sup>3</sup>/s, August 1, 1993, gage height, 49.58 ft; minimum discharge, 27,800 ft<sup>3</sup>/s, December 12, 1937.

**SEDIMENT CONCENTRATIONS:** Maximum daily mean, 6,720 mg/L, Feb. 24, 1985; minimum daily mean, 19 mg/L, Jan. 21 and 22, 1967.

**SEDIMENT LOADS:** Maximum daily, 9,830,000 tons, Feb. 24, 1985; minimum daily, 2,800 tons, Jan. 21, 1967.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE—WATER DISCHARGE AND STAGE:** Flood of June 27, 1844, reached a stage of 41.32 ft, from floodmarks, discharge, 1,000,000 ft<sup>3</sup>/s, computed by U.S. Army Corps of Engineers. Flood in April 1785 may have reached a stage of 42.0 ft. Minimum flow, 18,000 ft<sup>3</sup>/s, Dec. 23, 1863.

**REMARKS FOR CURRENT YEAR.**—Records good.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76400	68100	118000	121000	88700	129000	301000	213000	396000	343000	177000	283000
2	69100	68700	105000	131000	90300	131000	305000	225000	394000	331000	158000	233000
3	66900	71100	96700	124000	85700	133000	302000	226000	428000	317000	144000	215000
4	68000	80900	100000	132000	79900	149000	291000	225000	451000	299000	147000	194000
5	66900	97000	97400	164000	79500	213000	284000	218000	443000	281000	159000	165000
6	64600	111000	86200	156000	82100	306000	277000	208000	430000	265000	174000	145000
7	62300	122000	82400	133000	84700	379000	272000	191000	415000	245000	192000	134000
8	62200	120000	81000	114000	83500	407000	272000	180000	401000	246000	176000	123000
9	66600	116000	89000	110000	78800	389000	266000	168000	390000	251000	159000	115000
10	80400	113000	105000	107000	77800	361000	258000	156000	385000	249000	156000	117000
11	72900	108000	184000	107000	78400	327000	250000	146000	379000	245000	142000	115000
12	66900	107000	197000	104000	80400	288000	235000	136000	368000	243000	133000	108000
13	64300	103000	193000	102000	85500	270000	221000	146000	369000	242000	130000	105000
14	65300	92400	176000	99900	85200	258000	207000	172000	372000	248000	118000	100000
15	67700	86500	151000	99300	82900	238000	191000	180000	364000	263000	110000	101000
16	69300	85200	138000	98800	80700	222000	161000	175000	370000	270000	99900	107000
17	81300	84000	134000	97400	76800	220000	157000	172000	397000	259000	104000	118000
18	83300	133000	136000	106000	75000	212000	150000	173000	421000	241000	104000	122000
19	77200	158000	141000	111000	76300	207000	149000	183000	426000	228000	97800	125000
20	67700	150000	131000	111000	78900	211000	141000	222000	419000	229000	98200	124000
21	64500	148000	118000	111000	93900	209000	147000	246000	414000	227000	110000	117000

## LOWER MISSISSIPPI RIVER BASIN

**07010000 Mississippi River at St. Louis, MO--Continued**

<b>22</b>	71100	142000	111000	119000	103000	204000	147000	267000	405000	218000	110000	118000
<b>23</b>	71000	143000	120000	111000	115000	187000	151000	287000	400000	206000	106000	137000
<b>24</b>	73600	142000	143000	105000	129000	183000	152000	271000	397000	199000	92200	150000
<b>25</b>	72900	124000	160000	103000	125000	176000	164000	264000	399000	195000	94400	154000
<b>26</b>	74800	124000	143000	106000	145000	181000	172000	301000	394000	186000	148000	151000
<b>27</b>	73400	131000	128000	101000	156000	230000	180000	369000	387000	181000	190000	144000
<b>28</b>	69500	131000	118000	92700	139000	281000	181000	449000	379000	178000	261000	142000
<b>29</b>	69400	121000	122000	84800	131000	290000	206000	460000	368000	181000	314000	134000
<b>30</b>	69200	111000	119000	89400	----	281000	211000	440000	356000	180000	300000	129000
<b>31</b>	65800	----	113000	88500	----	290000	----	416000	----	175000	301000	----
MEAN	70150	113100	127000	111000	95450	243900	213400	241500	397200	239400	155000	140800
MAX	83300	158000	197000	164000	156000	407000	305000	460000	451000	343000	314000	283000
MIN	62200	68100	81000	84800	75000	129000	141000	136000	356000	175000	92200	100000
IN.	0.12	0.18	0.21	0.18	0.15	0.40	0.34	0.40	0.64	0.40	0.26	0.23

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 – 2004, BY WATER YEAR (WY)**

MEAN	138300	142900	123500	114800	144200	228800	302400	295400	273900	222600	145100	136500
MAX	575300	359200	452400	307800	301400	521800	692500	588700	600600	808800	700200	531800
(WY)	1987	1986	1983	1973	1974	1973	1973	1995	1947	1993	1993	1993
MIN	44170	47920	42130	31340	41900	74550	110100	79500	70260	67130	43510	54640
(WY)	1940	1940	1938	1940	1940	1964	1934	1934	1934	1936	1936	1939

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1933 – 2004**

ANNUAL MEAN	129200	179000	189100
HIGHEST ANNUAL MEAN			429700 1993
LOWEST ANNUAL MEAN			67700 1934
HIGHEST DAILY MEAN	396000 May 12	460000 May 29	1050000 Aug 1 1993
LOWEST DAILY MEAN	54000 Jan 15	62200 Oct 8	27800 Dec 12 1937
ANNUAL SEVEN-DAY MINIMUM	60000 Jan 26	65400 Oct 3	28200 Jan 18 1940
MAXIMUM PEAK FLOW		463000 May 29	1080000 Aug 1 1993
MAXIMUM PEAK STAGE		28.19 May 29	49.58 Aug 1 1993
INSTANTANEOUS LOW FLOW		61100 Oct 21	27800 Dec 12 1937
ANNUAL RUNOFF (INCHES)	2.52	3.50	3.69
10 PERCENT EXCEEDS	232000	365000	369000
50 PERCENT EXCEEDS	108000	146000	152000
90 PERCENT EXCEEDS	65900	78700	69400



**LOCATION.**— Lat 38°37'44", long 90°10'47" (NAD of 1927), Hydrologic Unit 07140101, on downstream side of west pier of Eads Bridge at St. Louis, 15.0 mi downstream from Missouri River, 19.2 mi upstream from Meramec River, and at mile 180.0 above the Ohio River.

**DRAINAGE AREA.**— 697,000 mi<sup>2</sup>, approximately.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: January 1861 to current year. Monthly discharge only for some periods, published in WSP 1311.

STAGE: March 1933 to current year. Since January 1861, in reports of Mississippi River Commission. Since January 1890, in reports of the National Weather Service.

**SURFACE-WATER QUALITY**

SEDIMENT: April 1948 to current year.

**REVISED RECORDS.**— WDR MO-76-1: Drainage area, WDR MO-98-1: Extreme outside period of record.

**GAGE.**— Water-stage recorder, National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station. Datum of gage is 379.94 ft above NGVD of 1929. Prior to May 5, 1934, nonrecording gage 0.4 mi downstream; May 5, 1934 to Dec. 9, 1952, water-stage recorder at site 20 ft downstream at present datum.

**REMARKS.**— Natural flow of stream affected by many reservoirs and navigation dams in upper Mississippi River Basin and by many reservoirs and diversions for irrigation in Missouri River Basin.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 1,080,000 ft<sup>3</sup>/s, August 1, 1993, gage height, 49.58 ft; minimum discharge, 27,800 ft<sup>3</sup>/s, December 12, 1937.

**SEDIMENT CONCENTRATIONS:** Maximum daily mean, 6,720 mg/L, Feb. 24, 1985; minimum daily mean, 19 mg/L, Jan. 21 and 22, 1967.

**SEDIMENT LOADS:** Maximum daily, 9,830,000 tons, Feb. 24, 1985; minimum daily, 2,800 tons, Jan. 21, 1967.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Flood of June 27, 1844, reached a stage of 41.32 ft, from floodmarks, discharge, 1,000,000 ft<sup>3</sup>/s, computed by U.S. Army Corps of Engineers. Flood in April 1785 may have reached a stage of 42.0 ft. Minimum flow, 18,000 ft<sup>3</sup>/s, Dec. 23, 1863.

**EXTREMES FOR CURRENT YEAR.**—

**SEDIMENT CONCENTRATIONS:** Maximum daily mean, 1,620 mg/L, March 9; minimum daily mean, 39 mg/L, Feb. 11.

**SEDIMENT LOADS:** Maximum daily, 1,760,000 tons, June 3; minimum daily, 8,300 tons, Feb. 11.

**REMARKS FOR CURRENT YEAR.**—Sediment records fair.

**SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

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	76400	148	30400	68100	118	21700	118000	124	39500
2	69100	141	26200	68700	107	19900	105000	116	32800
3	66900	136	24600	71100	103	19800	96700	115	29900
4	68000	133	24300	80900	103	22500	100000	117	31700
5	66900	167	30100	97000	106	27900	97400	131	34500
6	64600	134	23400	111000	113	34000	86200	103	23900
7	62300	118	19900	122000	135	44500	82400	95	21100
8	62200	117	19600	120000	127	41300	81000	91	20000
9	66600	122	21900	116000	99	31100	89000	90	21600
10	80400	122	26500	113000	108	32900	105000	84	23800
11	72900	129	25300	108000	108	31500	184000	181	90100
12	66900	108	19600	107000	98	28400	197000	255	135000
13	64300	105	18300	103000	108	30100	193000	376	196000
14	65300	130	22900	92400	114	28400	176000	481	228000
15	67700	118	21500	86500	99	23200	151000	507	207000

LOWER MISSISSIPPI RIVER BASIN  
**07010000 Mississippi River at St. Louis, MO--Continued**

16	69300	110	20500	85200	98	22500	138000	407	152000
17	81300	107	23500	84000	94	21400	134000	339	123000
18	83300	109	24600	133000	247	88600	136000	272	99800
19	77200	118	24500	158000	377	161000	141000	208	79200
20	67700	103	18900	150000	277	112000	131000	189	66800
21	64500	139	24200	148000	250	99900	118000	177	56400
22	71100	114	22000	142000	249	95600	111000	146	43800
23	71000	107	20400	143000	211	81400	120000	139	45100
24	73600	109	21600	142000	229	87900	143000	154	59400
25	72900	111	21800	124000	187	62700	160000	231	99600
26	74800	104	21000	124000	179	59800	143000	322	124000
27	73400	116	23000	131000	154	54300	128000	249	86000
28	69500	109	20500	131000	164	58200	118000	234	74700
29	69400	105	19600	121000	155	50800	122000	213	70200
30	69200	107	20000	111000	131	39200	119000	127	40800
31	65800	117	20900	---	---	---	113000	110	33600
TOTAL	2174500	---	701500	3391900	---	1532500	3936700	---	2389300

	JANUARY			FEBRUARY			MARCH		
1	121000	116	38100	88700	64	15300	129000	140	48700
2	131000	94	33100	90300	66	16100	131000	137	48300
3	124000	117	39000	85700	75	17400	133000	161	57700
4	132000	341	121000	79900	72	15600	149000	163	65400
5	164000	391	173000	79500	69	14700	213000	363	209000
6	156000	347	146000	82100	63	13900	306000	587	485000
7	133000	263	94500	84700	65	14900	379000	693	709000
8	114000	204	62700	83500	60	13600	407000	940	1030000
9	110000	145	42900	78800	57	12100	389000	1070	1120000
10	107000	123	35600	77800	56	11700	361000	855	833000
11	107000	107	30900	78400	55	11600	327000	752	664000
12	104000	95	26600	80400	57	12300	288000	811	631000
13	102000	88	24400	85500	55	12700	270000	553	403000
14	99900	108	29100	85200	79	18200	258000	565	394000
15	99300	135	36200	82900	60	13500	238000	435	279000
16	98800	104	27700	80700	59	12800	222000	379	227000
17	97400	90	23700	76800	53	11100	220000	350	208000
18	106000	109	31200	75000	54	10900	212000	287	164000
19	111000	151	45300	76300	55	11400	207000	239	133000
20	111000	181	54300	78900	58	12400	211000	218	124000
21	111000	247	74100	93900	70	17800	209000	232	131000
22	119000	212	68100	103000	68	18800	204000	182	100000
23	111000	179	53700	115000	71	22000	187000	172	86900
24	105000	121	34400	129000	89	30900	183000	152	75300
25	103000	112	31300	125000	89	30100	176000	162	77200
26	106000	87	25000	145000	127	49600	181000	166	81300
27	101000	90	24400	156000	166	69800	230000	312	194000
28	92700	84	21100	139000	156	58500	281000	477	362000
29	84800	82	18800	131000	137	48400	290000	491	385000
30	89400	77	18700	---	---	---	281000	363	276000
31	88500	72	17200	---	---	---	290000	339	266000
TOTAL	3439800	---	1502100	2768000	---	618100	7562000	---	9867800

LOWER MISSISSIPPI RIVER BASIN  
**07010000 Mississippi River at St. Louis, MO--Continued**

663

	APRIL			MAY			JUNE		
1	301000	461	375000	213000	142	81600	396000	1000	1070000
2	305000	529	435000	225000	180	109000	394000	1340	1430000
3	302000	479	391000	226000	159	97100	428000	2120	2450000
4	291000	432	340000	225000	140	84900	451000	1600	1940000
5	284000	402	308000	218000	158	93000	443000	956	1140000
6	277000	339	254000	208000	149	83600	430000	840	975000
7	272000	361	265000	191000	140	72000	415000	657	737000
8	272000	294	216000	180000	157	76200	401000	545	590000
9	266000	242	174000	168000	118	53400	390000	473	498000
10	258000	230	160000	156000	107	45100	385000	422	438000
11	250000	240	162000	146000	107	42200	379000	379	388000
12	235000	227	144000	136000	96	35400	368000	392	390000
13	221000	238	142000	146000	109	42800	369000	421	419000
14	207000	223	125000	172000	325	151000	372000	441	443000
15	191000	194	100000	180000	223	109000	364000	368	362000
16	161000	143	62300	175000	148	69900	370000	391	391000
17	157000	134	56600	172000	118	54900	397000	460	493000
18	150000	114	46100	173000	109	51100	421000	688	782000
19	149000	114	45700	183000	157	77500	426000	716	823000
20	141000	99	37600	222000	260	156000	419000	738	835000
21	147000	95	37500	246000	291	193000	414000	638	713000
22	147000	88	35100	267000	329	237000	405000	486	531000
23	151000	87	35300	287000	417	323000	400000	327	354000
24	152000	93	38300	271000	561	410000	397000	490	525000
25	164000	104	46200	264000	410	292000	399000	398	429000
26	172000	131	60900	301000	395	321000	394000	369	393000
27	180000	159	77000	369000	653	650000	387000	411	429000
28	181000	134	65700	449000	913	1110000	379000	378	387000
29	206000	185	103000	460000	926	1150000	368000	347	345000
30	211000	153	87300	440000	879	1040000	356000	330	317000
31	---	---	---	416000	1000	1120000	---	---	---
TOTAL	6401000	---	4425600	7485000	---	8431700	11917000	---	21017000

	JULY			AUGUST			SEPTEMBER		
1	343000	299	277000	177000	244	117000	283000	1050	800000
2	331000	288	257000	158000	218	93000	233000	967	609000
3	317000	296	253000	144000	164	63800	215000	455	264000
4	299000	275	222000	147000	157	62300	194000	383	201000
5	281000	281	213000	159000	146	62700	165000	629	280000
6	265000	390	279000	174000	137	64200	145000	489	192000
7	245000	320	212000	192000	217	113000	134000	243	88000
8	246000	270	179000	176000	288	137000	123000	196	64900
9	251000	363	246000	159000	292	125000	115000	150	46400
10	249000	311	209000	156000	339	143000	117000	119	37500
11	245000	270	179000	142000	295	113000	115000	103	32100
12	243000	268	176000	133000	225	80600	108000	94	27500
13	242000	249	163000	130000	181	63700	105000	129	36400
14	248000	237	159000	118000	180	57500	100000	116	31400
15	263000	299	212000	110000	154	45900	101000	105	28700
16	270000	346	252000	99900	145	39200	107000	98	28200
17	259000	376	263000	104000	137	38300	118000	107	34200
18	241000	436	283000	104000	122	34300	122000	105	34700

LOWER MISSISSIPPI RIVER BASIN  
**07010000 Mississippi River at St. Louis, MO--Continued**

19	228000	433	267000	97800	98	26000	125000	93	31400
20	229000	425	263000	98200	93	24700	124000	101	33900
21	227000	512	314000	110000	97	28700	117000	91	28800
22	218000	423	249000	110000	102	30300	118000	90	28600
23	206000	414	230000	106000	98	28000	137000	123	45400
24	199000	332	178000	92200	106	26500	150000	193	78100
25	195000	279	147000	94400	95	24200	154000	174	72500
26	186000	245	123000	148000	153	61100	151000	173	70400
27	181000	226	110000	190000	202	104000	144000	153	59700
28	178000	211	101000	261000	277	195000	142000	174	66800
29	181000	277	135000	314000	596	506000	134000	177	64000
30	180000	358	174000	300000	773	626000	129000	179	62300
31	175000	350	166000	301000	946	769000	----	----	----
TOTAL	7421000	----	6491000	4805500	----	3903000	4225000	----	3477900
YEAR	65527400		64357500						

**LOCATION.**— Lat 37°54'10", long 89°50'10" (NAD of 1927), in SW 1/4 sec.24, T.7 S., R.7 W., third principal meridian, Randolph County, Hydrologic Unit 07140105, on downstream side of left pier of main truss of highway bridge at Chester, 8.1 mi downstream from Kaskaskia River, and at mile 109.9 above Ohio River.

**DRAINAGE AREA.**— 708,600 mi<sup>2</sup>, approximately.

**PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE**

DISCHARGE: October 1927 to current year. Monthly discharge only for some periods, published in WSP 1311. Since August 1873, results of discharge measurements in reports of the Mississippi River Commission.

STAGE: July 1942 to current year. Since May 1891, in reports of the Mississippi River Commission and National Weather Service.

**SURFACE–WATER QUALITY**

SEDIMENT: August 1980 to current year.

**REVISED RECORDS.**— WDR MO–76–1: Drainage area. WDR MO–98–1: Extremes outside period of record.

**GAGE.**— Water–stage recorder and U.S. Army Corps of Engineers satellite telemeter. Datum of gage is 341.05 ft above NGVD of 1929. Prior to Feb. 1, 1962, nonrecording gage 0.4 mi downstream at present datum.

**REMARKS.**— Natural flow of stream affected by many reservoirs and navigation dams in upper Mississippi River Basin and by many reservoirs and diversions for irrigation in Missouri River Basin.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Maximum discharge, 1,000,000 ft<sup>3</sup>/s, August 7, 1993, gage height, 49.74 ft; minimum discharge, 30,000 ft<sup>3</sup>/s, December 12, 1937.

SUSPENDED–SEDIMENT CONCENTRATIONS: Maximum daily mean, 3,380 mg/L, Apr. 13, 1987; minimum daily mean, 13 mg/L, Mar. 18, 1981.

SUSPENDED–SEDIMENT LOADS: Maximum daily, 3,330,000 tons, Feb. 25, 1997; minimum daily, 3,580 tons, Mar. 18, 1981.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Flood of June 30, 1844, reached a gage height of 39.8 ft, discharge, 1,050,000 ft<sup>3</sup>/s, computed by the U.S. Army Corps of Engineers.

**REMARKS FOR CURRENT YEAR.**—Records good.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77600	69500	117000	126000	94500	135000	311000	215000	426000	352000	194000	302000
2	79100	70800	119000	132000	95100	130000	316000	226000	411000	340000	189000	269000
3	73400	71500	108000	136000	99200	127000	315000	235000	415000	327000	173000	237000
4	70900	73900	102000	136000	94600	144000	306000	235000	437000	313000	160000	218000
5	71400	83000	103000	167000	89600	180000	294000	232000	445000	297000	159000	196000
6	70500	98400	98700	185000	86900	265000	284000	218000	442000	287000	167000	171000
7	68700	112000	89700	176000	86900	e354000	277000	206000	431000	269000	185000	152000
8	66600	120000	85200	155000	88000	414000	274000	189000	417000	254000	192000	141000
9	65900	119000	84500	137000	86300	407000	270000	179000	403000	257000	178000	130000
10	71200	114000	91500	129000	82900	388000	263000	167000	393000	257000	165000	123000
11	82200	111000	121000	125000	82400	359000	255000	156000	387000	254000	158000	123000
12	76900	107000	179000	122000	83400	320000	244000	146000	378000	250000	145000	119000
13	71300	105000	189000	117000	85200	284000	229000	139000	371000	248000	138000	114000
14	68500	99500	186000	113000	88800	267000	215000	153000	371000	249000	133000	109000
15	68700	91600	169000	110000	89000	251000	202000	177000	368000	257000	123000	106000
16	71400	86500	148000	108000	86000	231000	184000	181000	367000	269000	114000	107000
17	74700	84400	140000	109000	83500	219000	162000	178000	381000	270000	107000	113000
18	84600	110000	135000	120000	80100	217000	156000	176000	403000	258000	109000	122000
19	86600	174000	138000	124000	78500	209000	150000	178000	422000	243000	108000	125000
20	81100	180000	139000	129000	79800	209000	148000	196000	422000	234000	104000	128000
21	71900	174000	130000	131000	84100	210000	143000	229000	416000	236000	106000	125000
22	68900	168000	121000	130000	97600	208000	147000	247000	410000	232000	114000	121000
23	73800	159000	117000	131000	108000	200000	148000	273000	402000	224000	114000	124000

## LOWER MISSISSIPPI RIVER BASIN

**07020500 Mississippi River at Chester, IL--Continued**

<b>24</b>	74900	157000	130000	123000	120000	187000	152000	277000	397000	213000	110000	142000
<b>25</b>	76900	150000	150000	117000	129000	183000	159000	264000	395000	208000	99900	154000
<b>26</b>	77000	136000	159000	116000	132000	178000	168000	288000	393000	202000	113000	157000
<b>27</b>	77600	134000	145000	114000	148000	204000	180000	343000	388000	194000	165000	153000
<b>28</b>	76400	136000	132000	109000	151000	264000	185000	408000	382000	187000	212000	147000
<b>29</b>	73600	133000	131000	100000	140000	304000	189000	449000	374000	188000	295000	143000
<b>30</b>	e72500	123000	136000	92900	----	304000	206000	455000	363000	189000	313000	135000
<b>31</b>	71500	----	128000	94300	----	299000	----	445000	----	198000	305000	----
MEAN	74070	118400	129700	126300	98290	246800	217700	240600	400300	250200	159600	150200
MAX	86600	180000	189000	185000	151000	414000	316000	455000	445000	352000	313000	302000
MIN	65900	69500	84500	92900	78500	127000	143000	139000	363000	187000	99900	106000
IN.	0.12	0.19	0.21	0.21	0.15	0.40	0.34	0.39	0.63	0.41	0.26	0.24

e Estimated

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 – 2004, BY WATER YEAR (WY)**

MEAN	149200	155800	139600	130200	159500	248800	329600	324700	289200	242700	160100	146000
MAX	588300	380400	500100	323200	331000	528400	719100	630900	597200	795300	769500	551000
(WY)	1987	1986	1983	1973	1974	1973	1973	1995	1947	1993	1993	1993
MIN	59490	59320	51070	47810	52860	84200	129400	127200	81040	69050	69580	66030
(WY)	1957	1957	1964	1964	1964	1964	2000	1989	1988	1988	1988	1976

**SUMMARY STATISTICS****FOR 2003 CALENDAR YEAR****FOR 2004 WATER YEAR****WATER YEARS 1942 – 2004**

ANNUAL MEAN	137300	184400	206200
HIGHEST ANNUAL MEAN			441700
LOWEST ANNUAL MEAN			96770
HIGHEST DAILY MEAN	426000	May 13	1000000
LOWEST DAILY MEAN	57200	Jan 16	37600
ANNUAL SEVEN-DAY MINIMUM	61300	Jan 27	38500
MAXIMUM PEAK FLOW			457000
MAXIMUM PEAK STAGE			29.35
INSTANTANEOUS LOW FLOW			65500
ANNUAL RUNOFF (INCHES)	2.63	3.54	3.95
10 PERCENT EXCEEDS	242000	364000	398000
50 PERCENT EXCEEDS	114000	152000	166000
90 PERCENT EXCEEDS	68600	82300	78100

**LOCATION.**— Lat 37°54'10", long 89°50'10" (NAD of 1927), in SW 1/4 sec.24, T.7 S., R.7 W., third principal meridian, Randolph County, Hydrologic Unit 07140105, on downstream side of left pier of main truss of highway bridge at Chester, 8.1 mi downstream from Kaskaskia River, and at mile 109.9 above Ohio River.

**DRAINAGE AREA.**— 708,600 mi<sup>2</sup>, approximately.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1927 to current year. Monthly discharge only for some periods, published in WSP 1311. Since August 1873, results of discharge measurements in reports of the Mississippi River Commission.

STAGE: July 1942 to current year. Since May 1891, in reports of the Mississippi River Commission and National Weather Service.

**SURFACE-WATER QUALITY**

SEDIMENT: August 1980 to current year.

**REVISED RECORDS.**— WDR MO-76-1: Drainage area. WDR MO-98-1: Extremes outside period of record.

**GAGE.**— Water-stage recorder and U.S. Army Corps of Engineers satellite telemeter. Datum of gage is 341.05 ft above NGVD of 1929. Prior to Feb. 1, 1962, nonrecording gage 0.4 mi downstream at present datum.

**REMARKS.**— Natural flow of stream affected by many reservoirs and navigation dams in upper Mississippi River Basin and by many reservoirs and diversions for irrigation in Missouri River Basin.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 1,000,000 ft<sup>3</sup>/s, August 7, 1993, gage height, 49.74 ft; minimum discharge, 30,000 ft<sup>3</sup>/s, December 12, 1937.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 3,380 mg/L, Apr. 13, 1987; minimum daily mean, 13 mg/L, Mar. 18, 1981.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 3,330,000 tons, Feb. 25, 1997; minimum daily, 3,580 tons, Mar. 18, 1981.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Flood of June 30, 1844, reached a gage height of 39.8 ft, discharge, 1,050,000 ft<sup>3</sup>/s, computed by the U.S. Army Corps of Engineers.

**EXTREMES FOR CURRENT YEAR.**—

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,360 mg/L, March 9; minimum daily mean, 90 mg/L, Feb. 11.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 1,510,000 tons, May 30; minimum daily, 18,400 tons, Oct. 14.

**REMARKS FOR CURRENT YEAR.**—Sediment records fair.

**SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

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	77600	160	32100	69500	123	23100	117000	184	58200
2	79100	176	37600	70800	116	22100	119000	200	64200
3	73400	131	26100	71500	112	21600	108000	193	56400
4	70900	137	26300	73900	113	22600	102000	190	52200
5	71400	158	30600	83000	115	25700	103000	197	54800
6	70500	173	32900	98400	129	34300	98700	198	52800
7	68700	162	30000	112000	119	36200	89700	186	45100
8	66600	126	22700	120000	139	44800	85200	173	39700
9	65900	162	28800	119000	173	55500	84500	159	36300
10	71200	124	23900	114000	145	44900	91500	194	48000
11	82200	139	30800	111000	109	32500	121000	288	96300
12	76900	100	20800	107000	126	36300	179000	457	222000
13	71300	125	24000	105000	126	35700	189000	645	329000
14	68500	99	18400	99500	106	28300	186000	521	262000
15	68700	125	23200	91600	137	34000	169000	389	178000
16	71400	142	27300	86500	156	36300	148000	316	127000

LOWER MISSISSIPPI RIVER BASIN  
**07020500 Mississippi River at Chester, IL--Continued**

17	74700	145	29300	84400	171	39100	140000	250	94300
18	84600	159	36300	110000	248	77600	135000	232	84200
19	86600	135	31600	174000	522	246000	138000	266	98900
20	81100	105	23100	180000	415	202000	139000	290	109000
21	71900	108	20900	174000	232	109000	130000	242	85300
22	68900	108	20200	168000	194	88300	121000	165	53900
23	73800	109	21700	159000	180	77100	117000	154	48800
24	74900	95	19300	157000	163	69300	130000	161	56600
25	76900	113	23400	150000	157	63500	150000	205	83400
26	77000	117	24300	136000	159	58300	159000	292	125000
27	77600	103	21600	134000	189	68400	145000	244	95700
28	76400	132	27300	136000	215	78900	132000	189	67200
29	73600	142	28100	133000	199	71600	131000	207	73400
30	e72500	148	29000	123000	182	60500	136000	253	92800
31	71500	135	26300	---	---	---	128000	179	62300
TOTAL	2296300	---	817900	3551100	---	1843500	4021600	---	2952800
<hr/>									
	JANUARY			FEBRUARY			MARCH		
	<hr/>			<hr/>			<hr/>		
1	126000	184	62600	94500	183	46700	135000	134	48400
2	132000	256	91600	95100	185	47500	130000	175	61100
3	136000	315	116000	99200	198	53200	127000	246	84600
4	136000	285	105000	94600	142	36400	144000	235	91100
5	167000	450	204000	89600	122	29500	180000	243	121000
6	185000	683	341000	86900	102	23900	265000	525	379000
7	176000	615	293000	86900	94	22000	e354000	609	568000
8	155000	272	115000	88000	91	21700	414000	1070	1160000
9	137000	194	71800	86300	96	22400	407000	1360	1500000
10	129000	183	63500	82900	92	20700	388000	1160	1210000
11	125000	174	58500	82400	90	19900	359000	979	950000
12	122000	156	51400	83400	104	23400	320000	768	666000
13	117000	126	39700	85200	113	26000	284000	693	532000
14	113000	128	39100	88800	137	32800	267000	603	436000
15	110000	112	33200	89000	147	35400	251000	485	329000
16	108000	120	34700	86000	134	31100	231000	500	312000
17	109000	184	54400	83500	115	25800	219000	347	206000
18	120000	252	81800	80100	175	37700	217000	377	221000
19	124000	269	90100	78500	183	38900	209000	327	185000
20	129000	341	118000	79800	161	34700	209000	300	169000
21	131000	292	104000	84100	180	41000	210000	218	123000
22	130000	295	104000	97600	184	48500	208000	190	106000
23	131000	236	83200	108000	197	57700	200000	197	106000
24	123000	211	70100	120000	253	81900	187000	200	101000
25	117000	207	65400	129000	273	95200	183000	179	88300
26	116000	220	68600	132000	202	71500	178000	162	78100
27	114000	220	67800	148000	161	64500	204000	273	152000
28	109000	192	56400	151000	210	85800	264000	351	251000
29	100000	175	47400	140000	207	78100	304000	374	307000
30	92900	163	40900	---	---	---	304000	405	332000
31	94300	165	42100	---	---	---	299000	375	302000
TOTAL	3914200	---	2814300	2850400	---	1253900	7651000	---	11175600



LOWER MISSISSIPPI RIVER BASIN  
**07020500 Mississippi River at Chester, IL--Continued**

669

	APRIL			MAY			JUNE		
1	311000	390	328000	215000	276	161000	426000	1130	1300000
2	316000	442	378000	226000	293	179000	411000	1080	1200000
3	315000	461	393000	235000	246	156000	415000	1050	1180000
4	306000	379	313000	235000	243	154000	437000	1170	1380000
5	294000	342	271000	232000	196	123000	445000	1100	1320000
6	284000	344	264000	218000	184	109000	442000	1090	1300000
7	277000	310	231000	206000	169	94200	431000	834	971000
8	274000	293	217000	189000	151	76900	417000	554	624000
9	270000	280	204000	179000	177	85500	403000	550	599000
10	263000	266	189000	167000	146	66000	393000	452	480000
11	255000	219	151000	156000	158	66400	387000	428	446000
12	244000	235	155000	146000	144	56900	378000	440	450000
13	229000	235	145000	139000	135	50600	371000	373	374000
14	215000	236	137000	153000	151	63100	371000	355	356000
15	202000	231	126000	177000	252	120000	368000	367	365000
16	184000	214	106000	181000	199	97200	367000	365	362000
17	162000	164	71900	178000	157	75200	381000	464	478000
18	156000	136	57200	176000	152	72300	403000	714	778000
19	150000	138	56100	178000	160	77300	422000	811	923000
20	148000	146	58200	196000	170	90000	422000	807	920000
21	143000	113	43500	229000	231	143000	416000	738	830000
22	147000	120	47600	247000	348	233000	410000	668	740000
23	148000	118	47200	273000	592	438000	402000	571	620000
24	152000	135	55100	277000	569	426000	397000	580	622000
25	159000	149	64000	264000	529	377000	395000	526	560000
26	168000	182	82400	288000	504	392000	393000	502	533000
27	180000	191	92400	343000	586	545000	388000	505	530000
28	185000	180	89900	408000	860	951000	382000	428	441000
29	189000	206	106000	449000	1160	1410000	374000	366	369000
30	206000	225	125000	455000	1230	1510000	363000	381	374000
31	---	---	---	445000	1240	1490000	---	---	---
TOTAL	6532000	---	4604500	7460000	---	9888600	12010000	---	21425000

	JULY			AUGUST			SEPTEMBER		
1	352000	369	350000	194000	305	160000	302000	1100	897000
2	340000	343	315000	189000	261	133000	269000	1080	787000
3	327000	309	273000	173000	265	124000	237000	939	602000
4	313000	326	276000	160000	217	93500	218000	685	404000
5	297000	317	254000	159000	194	83300	196000	514	273000
6	287000	329	255000	167000	188	84900	171000	411	190000
7	269000	318	232000	185000	210	105000	152000	290	120000
8	254000	281	193000	192000	234	121000	141000	214	81400
9	257000	305	211000	178000	266	128000	130000	186	65300
10	257000	375	260000	165000	306	136000	123000	169	56400
11	254000	336	230000	158000	274	117000	123000	157	52000
12	250000	317	214000	145000	237	93200	119000	140	44900
13	248000	293	196000	138000	180	67400	114000	138	42400
14	249000	253	170000	133000	175	62900	109000	142	41700
15	257000	243	169000	123000	190	63400	106000	132	37600
16	269000	298	217000	114000	170	52200	107000	146	42200
17	270000	404	295000	107000	175	50800	113000	159	48400
18	258000	409	285000	109000	165	48300	122000	132	43400

LOWER MISSISSIPPI RIVER BASIN  
**07020500 Mississippi River at Chester, IL--Continued**

19	243000	437	286000	108000	154	44900	125000	119	40300
20	234000	399	252000	104000	146	41000	128000	134	46300
21	236000	401	255000	106000	157	44900	125000	128	43300
22	232000	421	264000	114000	152	47000	121000	125	40800
23	224000	416	251000	114000	121	37500	124000	123	41300
24	213000	377	217000	110000	113	33500	142000	143	54900
25	208000	356	200000	99900	140	37800	154000	189	78800
26	202000	283	154000	113000	198	61000	157000	187	79200
27	194000	245	128000	165000	272	123000	153000	178	73900
28	187000	231	117000	212000	480	278000	147000	157	62200
29	188000	243	123000	295000	580	463000	143000	175	67400
30	189000	311	159000	313000	746	631000	135000	197	68900
31	198000	353	188000	305000	822	676000	----	----	----
TOTAL	7756000	----	6989000	4947900	----	4242500	4506000	----	4526000
YEAR	67496500		72533600						

e Estimated

LOWER MISSISSIPPI RIVER BASIN  
07022000 Mississippi River at Thebes, IL

671

(National Stream–Quality Accounting Network Station)

**LOCATION.**— Lat 37°13'00", long 89°27'50" (NAD of 1927), in NW 1/4 sec.17, T.15 S., R.3 W., Alexander County, Hydrologic Unit 07140105, near center span on downstream side of railroad bridge at Thebes, 5.0 mi downstream from Headwater Diversion Channel, and at mile 43.7 above Ohio River.

**DRAINAGE AREA.**— 713,200 mi<sup>2</sup>, approximately.

**PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE**

**DISCHARGE:** October 1932 to current year. Monthly discharge only for some periods, published in WSP 1311. Prior to April 1941, published as "at Cape Girardeau, Mo".

**STAGE:** March 1933 to February 1938 and October 1939 to current year. Prior to April 1941, published as "at Cape Girardeau, Mo". Since November 1878, under name of "at Grays Point" in files of the U.S. Army Corps of Engineers; January 1879 to May of 1896, published as "at Grays Point"; since May 1896, published as "at Cape Girardeau" in reports of the Mississippi River Commission, February 1891 to February 1894; and since 1904, published as "at Cape Girardeau" in reports of the National Weather Service.

**SURFACE–WATER QUALITY**

**CHEMICAL:** January 1973 to current year.

**SEDIMENT:** October 1980 to current year.

**SPECIFIC CONDUCTANCE:** October 1974 to September 1981.

**WATER TEMPERATURE:** October 1974 to September 1981.

**REVISED RECORDS.**— WSP 1341: 1844(M). WDR MO–76–1: Drainage area, WDR MO–98–1: Extremes outside period of record.

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter and telemark. Datum of gage is 300.00 ft above NGVD of 1929. Mar. 17, 1933, to Dec. 21 1934, nonrecording gage; Dec. 22, 1934, to Apr. 4, 1941, water–stage recorder, at site 8.2 mi upstream at datum 4.65 ft higher; Apr. 5, 1941, to Sept. 30, 1941, nonrecording gage at present site and datum; Oct. 1, 1941, to Oct. 11, 1943, at datum 0.07 ft higher. Prior to Apr. 5, 1941, various auxiliary gages used. Since Oct. 1, 1943, former gage at Cape Girardeau used as auxiliary gage.

**REMARKS.**— Natural flow of stream affected by many reservoirs and navigation dams in the upper Mississippi River Basin and by many reservoirs and diversions for irrigation in the Missouri River Basin. NASQAN station January 1973 to September 1986. Illinois Environmental Protection Agency station October 1986 to September 1994 (during the period, samples were analyzed by the Illinois EPA). Re–established as a NASQAN station October 1994 to current year.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum discharge, 996,000 ft<sup>3</sup>/s, August 7, 1993; maximum gage height, 45.91 ft, May 23, 1995; minimum discharge, 23,400 ft<sup>3</sup>/s, December 13, 1937.

**SPECIFIC CONDUCTANCE:** Maximum daily, 705 microsiemens per centimeter, Aug. 5–7, 1980; minimum daily, 272 microsiemens per centimeter, Apr. 6, 1979.

**WATER TEMPERATURE:** Maximum daily, 31.5 °C, July 10 and 11, 1975, and July 17, 1977; minimum daily, 0.0 °C, on several days during winter periods.

**SUSPENDED–SEDIMENT CONCENTRATIONS:** Maximum daily mean, 3,890 mg/L, Dec. 22, 1985; minimum daily mean, 13 mg/L, Jan. 28, 1981.

**SUSPENDED–SEDIMENT LOADS:** Maximum daily, 6,280,000 tons, Mar. 1, 1985; minimum daily, 2,530 tons, Jan. 28, 1981.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Flood of July 4, 1844, reached an elevation of 345.14 ft, present datum, at Grays Point, from floodmarks, discharge, 1,075,000 ft<sup>3</sup>/s, computed by the U.S. Army Corps of Engineers.

**REMARKS FOR CURRENT YEAR.**— Records good.

**Discharge, cubic feet per second, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81100	72000	127000	133000	97900	143000	326000	227000	484000	383000	204000	322000
2	79300	70000	124000	134000	98700	136000	336000	247000	469000	369000	201000	302000
3	79100	70700	122000	141000	101000	132000	339000	252000	463000	354000	189000	262000
4	74400	71500	112000	142000	103000	146000	333000	256000	475000	338000	174000	238000
5	72100	74700	108000	156000	98300	177000	320000	254000	490000	320000	167000	216000
6	72000	84400	108000	183000	94100	240000	308000	243000	491000	306000	169000	191000
7	71000	99400	101000	193000	92500	343000	299000	226000	483000	294000	179000	168000
8	69200	113000	93000	179000	93200	421000	294000	210000	469000	272000	196000	153000
9	67100	120000	88800	159000	93600	457000	292000	193000	457000	267000	193000	143000

LOWER MISSISSIPPI RIVER BASIN  
**07022000 Mississippi River at Thebes, IL--Continued**

10	67000	119000	89600	144000	91000	449000	287000	181000	443000	269000	179000	133000
11	73000	115000	98200	136000	88300	422000	278000	168000	433000	267000	170000	128000
12	80800	112000	141000	132000	88300	384000	266000	158000	424000	262000	155000	126000
13	76500	108000	188000	128000	89900	336000	250000	147000	411000	259000	147000	121000
14	71700	106000	195000	123000	93600	305000	232000	148000	399000	258000	141000	116000
15	69100	100000	186000	120000	95900	286000	217000	170000	396000	262000	134000	112000
16	69400	93300	166000	116000	96000	263000	202000	186000	395000	274000	125000	110000
17	71800	88500	150000	115000	92600	242000	182000	187000	405000	283000	115000	113000
18	76000	91000	142000	121000	90200	234000	167000	185000	425000	277000	111000	119000
19	84300	145000	140000	131000	86200	225000	161000	184000	449000	261000	111000	126000
20	85700	186000	143000	134000	84200	216000	157000	191000	459000	246000	110000	129000
21	80400	187000	141000	139000	84500	216000	152000	219000	456000	243000	107000	131000
22	72200	181000	131000	139000	90800	213000	152000	250000	450000	244000	110000	128000
23	70200	172000	124000	138000	103000	208000	157000	275000	442000	238000	117000	126000
24	73500	167000	125000	135000	114000	196000	160000	296000	433000	226000	118000	135000
25	75000	163000	139000	127000	126000	188000	177000	287000	429000	219000	113000	152000
26	76500	151000	158000	121000	132000	183000	184000	292000	425000	213000	105000	161000
27	77000	141000	158000	120000	140000	193000	189000	336000	420000	205000	127000	162000
28	77500	142000	144000	117000	153000	240000	198000	400000	413000	197000	183000	157000
29	76200	142000	136000	111000	150000	307000	198000	464000	405000	192000	262000	152000
30	73400	137000	141000	102000	----	328000	209000	495000	394000	194000	327000	146000
31	73000	----	139000	97000	----	320000	----	500000	----	205000	326000	----
MEAN	74690	120800	134100	134400	102100	262900	234100	252500	439600	264400	163400	159300
MAX	85700	187000	195000	193000	153000	457000	339000	500000	491000	383000	327000	322000
MIN	67000	70000	88800	97000	84200	132000	152000	147000	394000	192000	105000	110000
IN.	0.12	0.19	0.22	0.22	0.15	0.43	0.37	0.41	0.69	0.43	0.26	0.25

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 – 2004, BY WATER YEAR (WY)**

MEAN	148600	156100	141300	133800	162600	250700	325700	325000	291600	239400	156400	142500
MAX	589600	389000	531700	333300	350400	542000	731000	655800	584100	765500	768000	539300
(WY)	1987	1986	1983	1973	1974	1985	1973	1973	1947	1993	1993	1993
MIN	45500	50080	53850	33650	46920	80260	115600	88170	72350	73290	45000	59890
(WY)	1940	1940	1956	1940	1940	1934	1934	1934	1934	1936	1936	1937

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1933 – 2004	
ANNUAL MEAN	146000		195200		206600	
HIGHEST ANNUAL MEAN					446000	
LOWEST ANNUAL MEAN					71730	
HIGHEST DAILY MEAN	473000	May 13	500000	May 31	978000	Aug 7 1993
LOWEST DAILY MEAN	62500	Jan 17	67000	Oct 10	24700	Jan 21 1940
ANNUAL SEVEN-DAY MINIMUM	65000	Jan 23	70200	Oct 5	26700	Jan 20 1940
MAXIMUM PEAK FLOW			504000	May 31	996000	Aug 7 1993
MAXIMUM PEAK STAGE			33.27	May 31	45.91	May 23 1995
INSTANTANEOUS LOW FLOW			66500	Oct 10	23400	Dec 13 1937
ANNUAL RUNOFF (INCHES)	2.78		3.73		3.94	
10 PERCENT EXCEEDS	255000		395000		403000	
50 PERCENT EXCEEDS	122000		158000		166000	
90 PERCENT EXCEEDS	71100		84400		76000	

(National Stream–Quality Accounting Network Station)

**LOCATION.**— Lat 37°13'00", long 89°27'50" (NAD of 1927), in NW 1/4 sec.17, T.15 S., R.3 W., Alexander County, Hydrologic Unit 07140105, near center span on downstream side of railroad bridge at Thebes, 5.0 mi downstream from Headwater Diversion Channel, and at mile 43.7 above Ohio River.

**DRAINAGE AREA.**— 713,200 mi<sup>2</sup>, approximately.

**PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE**

**DISCHARGE:** October 1932 to current year. Monthly discharge only for some periods, published in WSP 1311. Prior to April 1941, published as "at Cape Girardeau, Mo".

**STAGE:** March 1933 to February 1938 and October 1939 to current year. Prior to April 1941, published as "at Cape Girardeau, Mo". Since November 1878, under name of "at Grays Point" in files of the U.S. Army Corps of Engineers; January 1879 to May of 1896, published as "at Grays Point"; since May 1896, published as "at Cape Girardeau" in reports of the Mississippi River Commission, February 1891 to February 1894; and since 1904, published as "at Cape Girardeau" in reports of the National Weather Service.

**SURFACE–WATER QUALITY**

**CHEMICAL:** January 1973 to current year.

**SEDIMENT:** October 1980 to current year.

**SPECIFIC CONDUCTANCE:** October 1974 to September 1981.

**WATER TEMPERATURE:** October 1974 to September 1981.

**REVISED RECORDS.**— WSP 1341: 1844(M). WDR MO–76–1: Drainage area, WDR MO–98–1: Extremes outside period of record.

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter and telemark. Datum of gage is 300.00 ft above NGVD of 1929. Mar. 17, 1933, to Dec. 21 1934, nonrecording gage; Dec. 22, 1934, to Apr. 4, 1941, water–stage recorder, at site 8.2 mi upstream at datum 4.65 ft higher; Apr. 5, 1941, to Sept. 30, 1941, nonrecording gage at present site and datum; Oct. 1, 1941, to Oct. 11, 1943, at datum 0.07 ft higher. Prior to Apr. 5, 1941, various auxiliary gages used. Since Oct. 1, 1943, former gage at Cape Girardeau used as auxiliary gage.

**REMARKS.**— Natural flow of stream affected by many reservoirs and navigation dams in the upper Mississippi River Basin and by many reservoirs and diversions for irrigation in the Missouri River Basin. NASQAN station January 1973 to September 1986. Illinois Environmental Protection Agency station October 1986 to September 1994 (during the period, samples were analyzed by the Illinois EPA). Re–established as a NASQAN station October 1994 to current year.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum discharge, 996,000 ft<sup>3</sup>/s, August 7, 1993; maximum gage height, 45.91 ft, May 23, 1995; minimum discharge, 23,400 ft<sup>3</sup>/s, December 13, 1937.

**SPECIFIC CONDUCTANCE:** Maximum daily, 705 microsiemens per centimeter, Aug. 5–7, 1980; minimum daily, 272 microsiemens per centimeter, Apr. 6, 1979.

**WATER TEMPERATURE:** Maximum daily, 31.5 °C, July 10 and 11, 1975, and July 17, 1977; minimum daily, 0.0 °C, on several days during winter periods.

**SUSPENDED–SEDIMENT CONCENTRATIONS:** Maximum daily mean, 3,890 mg/L, Dec. 22, 1985; minimum daily mean, 13 mg/L, Jan. 28, 1981.

**SUSPENDED–SEDIMENT LOADS:** Maximum daily, 6,280,000 tons, Mar. 1, 1985; minimum daily, 2,530 tons, Jan. 28, 1981.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Flood of July 4, 1844, reached an elevation of 345.14 ft, present datum, at Grays Point, from floodmarks, discharge, 1,075,000 ft<sup>3</sup>/s, computed by the U.S. Army Corps of Engineers.

**EXTREMES FOR CURRENT YEAR.**—

**SUSPENDED–SEDIMENT CONCENTRATIONS:** Maximum daily mean, 1,300 mg/L, March 10; minimum daily mean, 69 mg/L, Feb. 12.

**SUSPENDED–SEDIMENT LOADS:** Maximum daily, 1,580,000 tons, March 10; minimum daily, 16,400 tons, Feb. 12.

**SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

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	81100	145	30400	72000	87	16900	127000	146	50100
2	79300	133	28500	70000	100	18900	124000	139	46500
3	79100	124	26400	70700	92	17600	122000	134	43900
4	74400	131	26300	71500	94	18100	112000	137	41400

LOWER MISSISSIPPI RIVER BASIN  
**07022000 Mississippi River at Thebes, IL--Continued**

5	72100	128	24900	74700	100	20100	108000	132	38500
6	72000	110	21400	84400	103	23400	108000	127	36900
7	71000	118	22600	99400	107	28700	101000	123	33500
8	69200	126	23500	113000	121	37100	93000	115	28800
9	67100	113	20400	120000	118	38300	88800	105	25300
10	67000	115	20900	119000	114	36600	89600	113	27400
11	73000	116	22900	115000	100	30900	98200	133	35200
12	80800	127	27700	112000	102	30800	141000	176	68600
13	76500	121	25000	108000	113	32800	188000	288	146000
14	71700	97	18800	106000	131	37600	195000	304	160000
15	69100	99	18400	100000	138	37200	186000	327	164000
16	69400	100	18700	93300	150	37700	166000	375	168000
17	71800	86	16800	88500	138	33000	150000	384	156000
18	76000	85	17400	91000	164	40900	142000	303	117000
19	84300	97	22100	145000	407	163000	140000	272	103000
20	85700	111	25700	186000	538	270000	143000	233	90000
21	80400	80	17400	187000	369	187000	141000	198	75300
22	72200	87	17000	181000	264	129000	131000	163	57500
23	70200	88	16800	172000	223	103000	124000	148	49500
24	73500	100	19900	167000	224	101000	125000	133	44800
25	75000	91	18400	163000	209	92100	139000	165	62200
26	76500	88	18100	151000	163	66400	158000	191	81600
27	77000	85	17700	141000	167	63800	158000	243	104000
28	77500	86	18000	142000	164	62800	144000	245	95200
29	76200	88	18100	142000	158	60700	136000	224	82200
30	73400	83	16500	137000	159	58700	141000	236	89500
31	73000	91	17900	---	---	---	139000	194	72800
TOTAL	2315500	---	654600	3622500	---	1894100	4158600	---	2394700

	JANUARY			FEBRUARY			MARCH		
1	133000	161	57500	97900	126	33300	143000	645	246000
2	134000	140	50600	98700	122	32700	136000	741	273000
3	141000	131	49800	101000	118	32300	132000	192	68600
4	142000	125	47800	103000	139	38600	146000	152	59800
5	156000	191	81600	98300	137	36300	177000	153	73400
6	183000	391	197000	94100	130	33100	240000	161	105000
7	193000	433	225000	92500	114	28400	343000	156	145000
8	179000	315	153000	93200	94	23700	421000	337	391000
9	159000	282	121000	93600	83	21000	457000	1090	1350000
10	144000	262	102000	91000	81	19800	449000	1300	1580000
11	136000	196	71900	88300	73	17400	422000	1030	1170000
12	132000	153	54800	88300	69	16400	384000	807	838000
13	128000	134	46500	89900	70	17000	336000	712	646000
14	123000	119	39700	93600	70	17700	305000	685	565000
15	120000	111	35800	95900	72	18600	286000	566	438000
16	116000	117	36500	96000	75	19400	263000	438	312000
17	115000	103	32200	92600	77	19200	242000	373	245000
18	121000	115	37800	90200	74	18000	234000	333	211000
19	131000	157	55600	86200	104	24100	225000	322	196000
20	134000	187	67800	84200	92	20800	216000	237	138000
21	139000	170	63700	84500	106	24100	216000	231	134000
22	139000	199	74600	90800	135	33000	213000	230	132000
23	138000	202	75000	103000	129	35900	208000	202	114000
24	135000	201	73100	114000	112	34500	196000	167	88300

LOWER MISSISSIPPI RIVER BASIN  
**07022000 Mississippi River at Thebes, IL--Continued**

675

25	127000	174	59800	126000	127	43200	188000	168	85100
26	121000	156	51500	132000	135	48400	183000	165	81900
27	120000	166	54000	140000	211	79500	193000	201	106000
28	117000	147	46600	153000	236	97900	240000	313	204000
29	111000	141	42100	150000	363	146000	307000	417	348000
30	102000	139	38200	----	----	----	328000	551	487000
31	97000	129	33800	----	----	----	320000	534	462000
TOTAL	4166000	----	2176300	2961800	----	1030300	8149000	----	11293100

APRIL			MAY			JUNE			
1	326000	438	385000	227000	201	124000	484000	1050	1370000
2	336000	428	389000	247000	275	183000	469000	1040	1320000
3	339000	503	460000	252000	193	132000	463000	935	1170000
4	333000	514	462000	256000	180	125000	475000	937	1200000
5	320000	442	382000	254000	182	125000	490000	1060	1400000
6	308000	402	334000	243000	189	124000	491000	956	1270000
7	299000	366	295000	226000	180	110000	483000	903	1180000
8	294000	334	265000	210000	167	94400	469000	706	895000
9	292000	300	237000	193000	155	80900	457000	560	691000
10	287000	271	210000	181000	149	73100	443000	459	549000
11	278000	248	186000	168000	146	66200	433000	402	470000
12	266000	240	173000	158000	150	64000	424000	357	409000
13	250000	244	164000	147000	145	57700	411000	346	384000
14	232000	249	156000	148000	159	63700	399000	351	379000
15	217000	217	127000	170000	180	82600	396000	347	371000
16	202000	177	96600	186000	219	110000	395000	355	379000
17	182000	154	75300	187000	167	84200	405000	328	358000
18	167000	140	63200	185000	146	72500	425000	395	455000
19	161000	125	54100	184000	158	78400	449000	571	693000
20	157000	115	48600	191000	253	132000	459000	684	846000
21	152000	116	47800	219000	462	272000	456000	641	790000
22	152000	120	49300	250000	276	186000	450000	593	721000
23	157000	109	46400	275000	292	217000	442000	547	653000
24	160000	118	51300	296000	361	289000	433000	478	559000
25	177000	168	80700	287000	277	214000	429000	450	520000
26	184000	156	77400	292000	508	401000	425000	432	496000
27	189000	129	66000	336000	556	505000	420000	402	456000
28	198000	148	79300	400000	650	706000	413000	347	386000
29	198000	153	82000	464000	846	1060000	405000	347	380000
30	209000	146	82600	495000	1020	1360000	394000	334	356000
31	----	----	----	500000	1030	1390000	----	----	----
TOTAL	7022000	----	5225600	7827000	----	8582700	13187000	----	21106000

JULY			AUGUST			SEPTEMBER			
1	383000	309	319000	204000	297	164000	322000	632	550000
2	369000	302	301000	201000	247	134000	302000	766	625000
3	354000	285	272000	189000	211	108000	262000	756	536000
4	338000	275	251000	174000	211	98900	238000	617	396000
5	320000	255	220000	167000	197	88700	216000	495	289000
6	306000	254	210000	169000	167	76300	191000	389	201000
7	294000	254	201000	179000	159	77100	168000	314	143000
8	272000	266	195000	196000	160	84800	153000	256	106000

LOWER MISSISSIPPI RIVER BASIN  
**07022000 Mississippi River at Thebes, IL--Continued**

9	267000	235	169000	193000	199	104000	143000	196	76000
10	269000	242	175000	179000	234	113000	133000	162	58100
11	267000	290	209000	170000	250	113000	128000	136	47200
12	262000	274	194000	155000	254	108000	126000	123	42000
13	259000	250	175000	147000	231	91500	121000	105	34300
14	258000	247	172000	141000	196	74900	116000	104	32800
15	262000	220	155000	134000	164	59400	112000	108	32900
16	274000	226	167000	125000	163	54800	110000	114	34000
17	283000	281	215000	115000	157	48500	113000	119	36300
18	277000	344	256000	111000	146	43800	119000	106	34100
19	261000	354	249000	111000	132	39900	126000	103	35200
20	246000	358	238000	110000	135	40000	129000	103	35700
21	243000	363	238000	107000	144	41500	131000	97	34200
22	244000	360	237000	110000	126	37600	128000	91	31500
23	238000	365	235000	117000	119	37700	126000	99	33500
24	226000	356	217000	118000	119	38000	135000	102	37500
25	219000	348	206000	113000	104	31700	152000	112	45800
26	213000	291	167000	105000	120	34100	161000	132	57400
27	205000	245	135000	127000	164	56600	162000	131	57300
28	197000	210	112000	183000	187	92900	157000	127	54000
29	192000	200	104000	262000	284	204000	152000	118	48400
30	194000	228	120000	327000	420	372000	146000	107	40500
31	205000	328	182000	326000	555	488000	----	----	----
TOTAL	8197000	----	6296000	5065000	----	3156700	4778000	----	3784700
YEAR	71449400		67594800						



LOWER MISSISSIPPI RIVER BASIN  
**07022000 Mississippi River at Thebes, IL**

677

(National Stream–Quality Accounting Network Station)

**LOCATION.**— Lat 37°13'00", long 89°27'50" (NAD of 1927), in NW 1/4 sec.17, T.15 S., R.3 W., Alexander County, Hydrologic Unit 07140105, near center span on downstream side of railroad bridge at Thebes, 5.0 mi downstream from Headwater Diversion Channel, and at mile 43.7 above Ohio River.

**DRAINAGE AREA.**— 713,200 mi<sup>2</sup>, approximately.

**PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE**

**DISCHARGE:** October 1932 to current year. Monthly discharge only for some periods, published in WSP 1311. Prior to April 1941, published as "at Cape Girardeau, Mo".

**STAGE:** March 1933 to February 1938 and October 1939 to current year. Prior to April 1941, published as "at Cape Girardeau, Mo". Since November 1878, under name of "at Grays Point" in files of the U.S. Army Corps of Engineers; January 1879 to May of 1896, published as "at Grays Point"; since May 1896, published as "at Cape Girardeau" in reports of the Mississippi River Commission, February 1891 to February 1894; and since 1904, published as "at Cape Girardeau" in reports of the National Weather Service.

**SURFACE–WATER QUALITY**

**CHEMICAL:** January 1973 to current year.

**SEDIMENT:** October 1980 to current year.

**SPECIFIC CONDUCTANCE:** October 1974 to September 1981.

**WATER TEMPERATURE:** October 1974 to September 1981.

**REVISED RECORDS.**— WSP 1341: 1844(M). WDR MO–76–1: Drainage area, WDR MO–98–1: Extremes outside period of record.

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter and telemark. Datum of gage is 300.00 ft above NGVD of 1929. Mar. 17, 1933, to Dec. 21 1934, nonrecording gage; Dec. 22, 1934, to Apr. 4, 1941, water–stage recorder, at site 8.2 mi upstream at datum 4.65 ft higher; Apr. 5, 1941, to Sept. 30, 1941, nonrecording gage at present site and datum; Oct. 1, 1941, to Oct. 11, 1943, at datum 0.07 ft higher. Prior to Apr. 5, 1941, various auxiliary gages used. Since Oct. 1, 1943, former gage at Cape Girardeau used as auxiliary gage.

**REMARKS.**— Natural flow of stream affected by many reservoirs and navigation dams in the upper Mississippi River Basin and by many reservoirs and diversions for irrigation in the Missouri River Basin. NASQAN station January 1973 to September 1986. Illinois Environmental Protection Agency station October 1986 to September 1994 (during the period, samples were analyzed by the Illinois EPA). Re–established as a NASQAN station October 1994 to current year.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum discharge, 996,000 ft<sup>3</sup>/s, August 7, 1993; maximum gage height, 45.91 ft, May 23, 1995; minimum discharge, 23,400 ft<sup>3</sup>/s, December 13, 1937.

**SPECIFIC CONDUCTANCE:** Maximum daily, 705 microsiemens per centimeter, Aug. 5–7, 1980; minimum daily, 272 microsiemens per centimeter, Apr. 6, 1979.

**WATER TEMPERATURE:** Maximum daily, 31.5 °C, July 10 and 11, 1975, and July 17, 1977; minimum daily, 0.0 °C, on several days during winter periods.

**SUSPENDED–SEDIMENT CONCENTRATIONS:** Maximum daily mean, 3,890 mg/L, Dec. 22, 1985; minimum daily mean, 13 mg/L, Jan. 28, 1981.

**SUSPENDED–SEDIMENT LOADS:** Maximum daily, 6,280,000 tons, Mar. 1, 1985; minimum daily, 2,530 tons, Jan. 28, 1981.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Flood of July 4, 1844, reached an elevation of 345.14 ft, present datum, at Grays Point, from floodmarks, discharge, 1,075,000 ft<sup>3</sup>/s, computed by the U.S. Army Corps of Engineers.

**SURFACE–WATER QUALITY, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Turbidity, wat unf lab, Hach 2100AN NTU (99872)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf 1/4S/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO <sub>3</sub> (00900)
OCT												
20...	1420	Environmental	85,600	22	0.114	0.081	9.0	97	8.3	572	18.2	210
20...	1428	Blank	---	---	<0.004	<0.004	---	---	---	---	---	---
DEC												
08...	1445	Environmental	92,000	36	0.114	0.085	14.6	118	8.1	581	5.6	260

**SURFACE-WATER QUALITY, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**[illegible]

01...	39.8	14.2	4.68	19.1	110	106	130	<1	15.9	0.3	7.73	43.1	225
	Ammonia + org-N, water, flt'd, mg/L as N (00623)	Ammonia + org-N, water, unflt'd mg/L as N (00625)	Ammonia water, flt'd, mg/L as N (00608)	Nitrite + nitrate water flt'd, mg/L as N (00631)	Nitrite water, flt'd, mg/L as N (00613)	Ortho- phos- phate, water, flt'd, mg/L as P (00671)	Partic- ulate nitro- gen, susp. water, mg/L (49570)	Phos- phorus, water, flt'd, mg/L (00666)	Phos- phorus, water, unflt'd mg/L (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inor- ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, flt'd, mg/L (00681)
Date													
OCT													
20...	0.36	0.82	<0.04	0.27	0.008	0.076	0.47	0.097	0.21oc	3.7	0.2	3.5	4.4
20...	---	---	---	---	---	---	0.04	---	---	0.3	<0.1	0.3	E.2n
DEC													
08...	0.56	0.82	<0.04	2.34	0.015	0.067	0.21c	0.118	0.20oc	2.1c	<0.1	2.1c	83.9d
JAN													
14...	0.61	0.87	0.08	2.22	0.013	0.076	0.29	0.093	0.198	2.2	<0.1	2.2	4.2
FEB													
11...	0.39	0.82	0.08	1.77	0.013	0.035	0.28	0.048	0.143	2.0	<0.1	2.0	4.2
MAR													
10...	0.75	3.2	0.20	2.10	0.031	0.070	1.52	0.088	1.22oc	13.3	<0.1	13.2	6.3
22...	0.57	1.2	0.13	3.69	0.030	0.107	0.41	0.123	0.30oc	3.9	<0.1	3.9	5.0
22...	---	---	<0.010	<0.016	<0.002	<0.006	---	---	---	---	---	---	---
APR													
05...	0.52	1.4	E.02n	3.07	0.043	0.093	0.68	0.109	0.49oc	5.6	0.3	5.3	4.9
05...	0.52	1.4	E.02n	3.08	0.045	0.093	0.64	0.110	0.47oc	5.1	0.2	4.9	5.1
26...	0.41	1.0	0.04	1.82	0.032	0.066	0.54	0.085	0.20oc	3.7	0.2	3.6	4.9
MAY													
12...	0.53	0.87	<0.04	1.87	0.019	0.067	0.38	0.083	0.19oc	2.8	<0.1	2.7	4.2
24...	0.33	1.2	<0.04	2.40	0.071	0.091	0.88	0.109	0.40oc	6.8	<0.1	6.7	4.9
JUN													
02...	0.41	2.8	<0.04	3.74	<0.008	0.110	1.38	0.121	1.15oc	12.4	0.3	12.2	5.2
16...	0.43	1.3	<0.04	4.34	0.015	0.127	0.68	0.140	0.45oc	6.2	0.1	6.1	5.7
JUL													
14...	0.33	0.99	<0.04	3.37	0.016	0.127	0.30	0.147	0.29oc	3.6	<0.1	3.6	5.3
14...	---	---	---	---	---	---	---	---	---	---	---	---	---
AUG													
11...	0.35	0.87	<0.04	2.19	0.011	0.125	0.32	0.147	0.26oc	3.5	<0.1	3.5	4.3
SEP													
01...	0.38	1.6	<0.04	1.02	<0.008	0.115	0.92	0.139	0.52oc	7.7	0.1	7.7	4.6

**SURFACE-WATER QUALITY, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

[illegible]

05...	15.5	46	410	70	11.0	---	---	1.5	---	---	38	---	---
05...	14.2	---	---	---	9.5	---	---	1.4	---	---	36	---	---
26...	23.5	230	780	427	47.3	---	---	1.5	---	---	47	---	---
MAY													
12...	23.3	18k	28	39	33.9	3	0.20	1.7	69	<0.06	53	<0.04	1.1
24...	18.8	150k	350k	350k	12.6	---	---	1.7	---	---	54	---	---
JUN													
02...	23.0	580	940	540	10.4	---	---	1.7	---	---	40	---	---
16...	9.4	92k	170k	142k	5.8	3	0.23	2.0	84	<0.06	43	E.02n	<0.8
JUL													
14...	13.0	42k	150k	10k	E12.4	---	---	2.4	---	---	49	---	---
14...	---	---	---	---	---	---	---	---	---	---	---	---	---
AUG													
11...	7.0	92	72	33k	13.4	3	0.32	2.3	83	<0.06	62	E.03n	<0.8
SEP													
01...	15.9	550	780k	250	8.4	---	---	1.8	---	---	49	---	---

	Cobalt water, fltrd, ¼g/L (01035)	Copper, water, fltrd, ¼g/L (01040)	Iron, water, fltrd, ¼g/L (01046)	Lead, water, fltrd, ¼g/L (01049)	Lithium water, fltrd, ¼g/L (01130)	Mangan- ese, water, fltrd, ¼g/L (01056)	Molyb- denum, water, fltrd, ¼g/L (01060)	Nickel, water, fltrd, ¼g/L (01065)	Selen- ium, water, fltrd, ¼g/L (01145)	Silver, water, fltrd, ¼g/L (01075)	Stront- ium, water, fltrd, ¼g/L (01080)	Vanad- ium, water, fltrd, ¼g/L (01085)	Zinc, water, fltrd, ¼g/L (01090)
Date													
OCT													
20...	0.334	2.6	<6	E.05n	23.4	0.5	3.6	3.11	0.9	<0.2	303	3.1	2
20...	---	---	---	---	---	---	---	---	---	---	---	---	---
DEC													
08...	---	---	E4n	---	13.2	---	---	---	0.9	---	236	2.7	---
JAN													
14...	---	---	E5n	---	9.9	---	---	---	0.9	---	205	1.2	---
FEB													
11...	---	---	10	---	12.7	---	---	---	0.9	---	227	1.3	---
MAR													
10...	0.228	2.2	11	<0.08	5.6	1.7	1.6	3.10	0.9	<0.2	155	2.2	M
22...	---	---	7	---	6.2	---	---	---	1.0	---	177	2.2	---
22...	<0.014	<0.4	<6	<0.08	<0.6	<0.2	<0.4	<0.06	<0.4	<0.2	<0.40	<0.1	<0.6
APR													
05...	---	---	8	---	5.6	---	---	---	1.1	---	162	2.4	---
05...	---	---	7	---	5.5	---	---	---	1.1	---	162	2.4	---
26...	---	---	7	---	9.4	---	---	---	1.0	---	178	3.1	---
MAY													
12...	0.278	1.7	<6	<0.08	9.7	0.5	2.2	1.56	1.1	<0.2	189	3.8	M
24...	---	---	E6n	---	10.3	---	---	---	1.0	---	199	2.5	---
JUN													
02...	---	---	E4n	---	4.9	---	---	---	0.9	---	155	3.2	---
16...	0.193	2.1	<6	<0.08	7.3	0.6	2.0	1.77	1.2	<0.2	166	3.3	M
JUL													
14...	---	---	<6	---	9.6	---	---	---	1.2	---	188	3.8	---
14...	---	---	---	---	---	---	---	---	---	---	---	---	---
AUG													
11...	0.210	2.2	E4n	<0.08	12.5	0.4	3.0	2.46	1.1	<0.2	204	4.1	M
SEP													
01...	---	---	<6	---	9.3	---	---	---	0.9	---	161	3.6	---

**SURFACE-WATER QUALITY, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

[illegible]

20...	<0.006	E.042	0.012	<0.004	<0.005	0.157	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
08...	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r
JAN													
14...	E.003t	E.038	0.034	0.008	<0.005	0.237	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006
FEB													
11...	<0.006	E.036	0.018	<0.004	<0.005	0.170	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006
MAR													
10...	<0.006	E.016	0.022	<0.010	<0.005	0.169	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006
22...	<0.006	E.035	0.044	0.011	<0.005	0.214	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
05...	<0.006	E.021	0.033	0.011	<0.005	0.213	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006
05...	<0.006	E.028	0.032	0.012	<0.005	0.208	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006
26...	<0.006	E.041	0.215	0.020	<0.005	1.51	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006
MAY													
12...	<0.006	E.024	0.104	0.014	<0.005	0.852	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006
24...	E.001t	E.085	0.364	0.041	<0.005	3.78	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006
JUN													
02...	<0.006	E.132	1.17	0.050	<0.005	3.85	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006
16...	<0.006	E.089	0.267	0.017	<0.005	1.77	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006
JUL													
14...	<0.006	E.090	0.054	0.012	<0.005	0.821	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006
14...	<0.006	<0.006	<0.006	<0.004	<0.005	0.012	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006
AUG													
11...	<0.006	E.028	0.046	0.006	<0.005	0.349	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006
SEP													
01...	<0.006	E.032	0.035	0.010	<0.005	0.259	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006

	Cyana- zine, water, fltrd, ¼g/L (04041)	DCPA, water fltrd 0.7¼ GF ¼g/L (82682)	Diazi- non, water, fltrd, ¼g/L (39572)	Diel- drin, water, fltrd, ¼g/L (39381)	Disul- foton, water, fltrd 0.7¼ GF ¼g/L (82677)	EPTC, water, fltrd 0.7¼ GF ¼g/L (82668)	Ethal- alin, water, fltrd 0.7¼ GF ¼g/L (82663)	Etho- prop, water, fltrd 0.7¼ GF ¼g/L (82672)	Fonofos water, fltrd, ¼g/L (04095)	Lindane water, fltrd, ¼g/L (39341)	Linuron water fltrd 0.7¼ GF ¼g/L (82666)	Mala- thion, water, fltrd, ¼g/L (39532)	Methyl para- thion, water, fltrd 0.7¼ GF ¼g/L (82667)														
Date	OCT	20...	20...	DEC	08...	JAN	14...	FEB	11...	MAR	10...	22...	22...	APR	05...	05...	26...	MAY	12...	24...	JUN	02...	16...	JUL	14...	14...	AUG
	<0.018	<0.003	E.003n	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006														
	--	--	--	--	--	--	--	--	--	--	--	--	--														
	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r														
	<0.018	0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006														
	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006														
	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006														
	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006														
	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006														
	--	--	--	--	--	--	--	--	--	--	--	--	--														
	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006														
	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006														
	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.200														
	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006														
	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006														
	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006														
	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006														
	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006														
	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006														
	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006														
	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006														

LOWER MISSISSIPPI RIVER BASIN  
07022000 Mississippi River at Thebes, IL--Continued

11... SEP	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006
01...	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006

SURFACE-WATER QUALITY, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Metola- chlor, water, fltrd, 1/4g/L (39415)	Metri- buzin, water, fltrd, 1/4g/L (82630)	Moli- nate, water, fltrd 0.7¼ GF (82671)	Naprop- amide, water, fltrd 0.7¼ GF (82684)	p,p-' DDE, water, fltrd, 1/4g/L (34653)	Para- thion, water, fltrd, 1/4g/L (39542)	Peb- ulate, water, fltrd 0.7¼ GF (82669)	Pendi- meth- alin, water, fltrd 0.7¼ GF (82683)	Phorate water fltrd 0.7¼ GF (82664)	Prome- ton, water, fltrd, 1/4g/L (04037)	Pron- amide, water, fltrd 0.7¼ GF (82676)	Propa- chlor, water, fltrd, 1/4g/L (04024)	Pro- panil, water, fltrd 0.7¼ GF (82679)
OCT													
20...	0.036	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	<0.01	<0.004	<0.010	<0.011
20...	---	---	---	---	---	---	---	---	---	---	---	---	---
DEC													
08...	---	---	---	---	---	---	---	---	---	---	---	---	---
JAN													
14...	0.040	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	E.01n	<0.004	<0.010	<0.011
FEB													
11...	0.030	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	E.01n	<0.004	<0.010	<0.011
MAR													
10...	0.080	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	E.01n	<0.004	<0.010	<0.011
22...	0.224	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	E.01n	<0.004	<0.010	<0.011
22...	---	---	---	---	---	---	---	---	---	---	---	---	---
APR													
05...	0.088	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	E.01n	<0.004	<0.010	<0.011
05...	0.087	<0.010	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	E.01n	<0.004	<0.010	<0.011
26...	0.193	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	0.03	<0.004	<0.010	<0.011
MAY													
12...	0.142	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	E.01n	<0.004	<0.010	<0.011
24...	0.462	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	0.02	<0.004	<0.010	<0.011
JUN													
02...	1.37	<0.010	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	0.02	<0.004	<0.010	<0.011
16...	0.474	<0.010	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	<0.01	<0.004	<0.010	<0.011
JUL													
14...	0.155	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	E.01n	<0.004	<0.010	<0.011
14...	E.008n	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	<0.01	<0.004	<0.010	<0.011
AUG													
11...	0.066	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	E.01n	<0.004	<0.010	<0.011
SEP													
01...	0.075	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	0.04	<0.004	<0.010	<0.011

SURFACE-WATER QUALITY, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Propar- gite, water, fltrd 0.7¼ GF 1/4g/L (82685)	Sima- zine, water, fltrd, 1/4g/L (04035)	Tebu- thiuron water fltrd 0.7¼ GF 1/4g/L (82670)	Terba- cil, water, fltrd 0.7¼ GF 1/4g/L (82665)	Terbu- fos, water, fltrd 0.7¼ GF 1/4g/L (82675)	Thio- bencarb water fltrd 0.7¼ GF 1/4g/L (82681)	Tri- allate, water, fltrd 0.7¼ GF 1/4g/L (82678)	Tri- flur- alin, water, fltrd 0.7¼ GF 1/4g/L (82661)	Uranium natural water, fltrd, 1/4g/L (22703)	Suspnd. sedi- ment, sieve diametr percent <.063mm (70331)	Sus- pended sedi- ment concen- tration mg/L (80154)
OCT											
20...	<0.02	0.014	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	2.03	88	67
20...	---	---	---	---	---	---	---	---	---	---	---
DEC											
08...	---	---	---	---	---	---	---	---	---	89	51
JAN											
14...	<0.02	0.217	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	---	72	423
FEB											
11...	<0.02	0.063	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	---	---	---
MAR											
10...	<0.02	0.092	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	1.46	---	---
22...	<0.02	0.049	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	---	---	---

LOWER MISSISSIPPI RIVER BASIN  
**07022000 Mississippi River at Thebes, IL--Continued**

683

22...	--	--	--	--	--	--	--	--	<0.04	--	--
APR											
05...	<0.02	0.083	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	--	--r	--r
05...	<0.02	0.085	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	--	--r	--r
26...	<0.02	0.151	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	--	--r	--r
MAY											
12...	<0.02	0.063	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	1.84	--r	--r
24...	<0.02	0.063	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	--	75	424
JUN											
02...	<0.02	0.078	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	--	96	980
16...	<0.02	0.027	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	1.67	83	348
JUL											
14...	<0.02	0.021	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	--	91	181
14...	<0.02	<0.005	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	--	--	--
AUG											
11...	<0.02	0.012	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	2.39	85	225
SEP											
01...	<0.02	<0.020	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	--	98	704

Remark codes used in this table:

< -- Less than

E -- Estimated value

M -- Presence verified, not quantified

Value qualifier codes used in this table:

c -- See laboratory comment

d -- Diluted sample: method hi range exceeded

k -- Counts outside acceptable range

n -- Below the LRL and above the LT-MDL

o -- Result determined by alternate method

t -- Below the long-term MDL

Null value qualifier codes used in this table:

r -- Sample ruined in preparation

ST. LAWRENCE RIVER BASIN  
**414340087313901 Calumet Harbor Disposal Facility at Chicago, IL**

**LOCATION.**— Lat 41°43'29", long 87°31'31" (NAD of 1927), in SE1/4SE1/4 sec.5, T.37 N., R.15 E., Cook County, Hydrologic Unit 04060200, at the Calumet Harbor Disposal Facility in Chicago.

**PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE

STAGE: June 1983 to current.

**GAGE.**— Water—stage recorder. Datum of gage is 00.00 ft, Lake Michigan datum (Low—water datum), based on International Great Lakes Datum of 1955, (the gage datum is 576.781 ft).

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height, 5.68 ft, Oct. 4, 1986; minimum, -1.11 ft, Mar. 3, 2001.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 0.99 ft, Oct. 4; minimum -0.70 ft, Mar. 11.

Gage height, feet, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.78	0.61	0.14	-0.12	-0.49	-0.59	-0.48	0.06	0.29	0.20	0.32	0.32
2	0.80	0.55	0.14	-0.06	-0.46	-0.50	-0.36	0.11	0.24	0.21	0.33	0.35
3	0.85	0.51	0.17	-0.01	-0.36	-0.55	-0.22	0.08	0.28	0.19	0.35	0.30
4	0.92	0.48	0.15	-0.03	-0.30	-0.60	-0.02	0.06	0.29	0.19	0.40	0.27
5	0.93	0.46	0.13	-0.05	-0.40	-0.38	0.15	0.22	0.26	0.25	0.40	0.23
6	0.85	0.46	0.09	-0.03	-0.46	-0.44	0.12	0.22	0.23	0.28	0.40	0.18
7	0.81	0.42	0.01	-0.07	-0.41	-0.54	0.19	0.20	0.24	0.33	0.39	0.14
8	0.75	0.35	-0.03	-0.12	-0.55	-0.49	0.23	0.17	0.23	0.33	0.43	0.13
9	0.72	0.31	-0.07	-0.15	-0.60	-0.45	0.18	0.31	0.22	0.35	0.47	0.14
10	0.72	0.33	-0.13	-0.18	-0.63	-0.55	0.08	0.30	0.20	0.36	0.47	0.13
11	0.74	0.32	-0.15	-0.24	-0.63	-0.66	0.01	0.26	0.24	0.38	0.52	0.11
12	0.75	0.32	-0.16	-0.30	-0.62	-0.61	-0.03	0.20	0.28	0.34	0.61	0.07
13	0.74	0.28	-0.16	-0.35	-0.65	-0.41	-0.08	0.14	0.32	0.31	0.61	0.05
14	0.67	0.27	-0.12	-0.38	-0.59	-0.48	-0.14	0.13	0.32	0.31	0.59	0.09
15	0.65	0.33	-0.12	-0.39	-0.29	-0.56	-0.22	0.17	0.33	0.35	0.56	0.08
16	0.69	0.38	-0.04	-0.42	-0.17	-0.62	-0.16	0.18	0.35	0.33	0.53	0.03
17	0.67	0.48	-0.02	-0.31	-0.24	-0.63	-0.01	0.21	0.36	0.36	0.54	-0.01
18	0.64	0.45	0.11	-0.42	-0.41	-0.46	0.06	0.24	0.37	0.54	0.51	-0.02
19	0.63	0.43	0.15	-0.50	-0.52	-0.27	0.04	0.24	0.43	0.51	0.46	-0.02
20	0.60	0.39	0.09	-0.52	-0.61	-0.26	0.03	0.27	0.41	0.45	0.40	-0.07
21	0.57	0.42	0.01	-0.47	-0.65	-0.37	-0.03	0.23	0.38	0.47	0.33	-0.09
22	0.59	0.48	-0.07	-0.38	-0.42	-0.49	-0.07	0.23	0.35	0.51	0.31	-0.06
23	0.64	0.43	-0.15	-0.35	-0.16	-0.55	-0.11	0.22	0.31	0.54	0.28	-0.07
24	0.65	0.37	-0.17	-0.44	-0.32	-0.59	-0.13	0.20	0.28	0.51	0.25	-0.13
25	0.66	0.33	-0.10	-0.52	-0.43	-0.58	-0.09	0.19	0.25	0.44	0.20	-0.17
26	0.66	0.32	-0.12	-0.43	-0.52	-0.59	-0.07	0.19	0.21	0.36	0.20	-0.20
27	0.63	0.31	-0.17	-0.48	-0.55	-0.52	-0.12	0.17	0.15	0.33	0.22	-0.18
28	0.61	0.28	-0.21	-0.55	-0.56	-0.43	-0.16	0.16	0.14	0.37	0.22	-0.19
29	0.64	0.20	-0.22	-0.41	---	-0.42	-0.17	0.18	0.18	0.37	0.24	-0.19
30	0.67	0.17	-0.19	-0.49	---	-0.46	-0.10	0.16	0.18	0.33	0.24	-0.22
31	0.66	---	-0.17	-0.58	---	-0.47	---	0.31	---	0.32	0.23	---
MEAN	0.71	0.38	-0.04	-0.31	-0.46	-0.50	-0.06	0.19	0.28	0.36	0.39	0.03
MAX	0.93	0.61	0.17	-0.01	-0.16	-0.26	0.23	0.31	0.43	0.54	0.61	0.35
MIN	0.57	0.17	-0.22	-0.58	-0.65	-0.66	-0.48	0.06	0.14	0.19	0.20	-0.22
CAL YR 2002	MEAN 0.66		MAX 1.47		MIN -0.22							
WTR YR 2003	MEAN 0.08		MAX 0.93		MIN -0.66							



ST. LAWRENCE RIVER BASIN  
**414340087313901 Calumet Harbor Disposal Facility at Chicago, IL**

685

**LOCATION.**— Lat 41°43'29", long 87°31'31" (NAD of 1927), in SE1/4SE1/4 sec.5, T.37 N., R.15 E., Cook County, Hydrologic Unit 04060200, at the Calumet Harbor Disposal Facility in Chicago.

**PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE

STAGE: June 1983 to current.

**GAGE.**— Water—stage recorder. Datum of gage is 00.00 ft, Lake Michigan datum (Low—water datum), based on International Great Lakes Datum of 1955, (the gage datum is 576.781 ft).

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height, 5.68 ft, Oct. 4, 1986; minimum, -1.11 ft, Mar. 3, 2001.

**EXTREMES FOR CURRENT YEAR.**— Maximum gage height, 1.72 ft, July 21 and 23; minimum, -0.72 ft, October 8 and 9.

Gage height, feet, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-0.23	-0.14	0.04	-0.15	-0.17	-0.07	0.32	0.36	1.37	1.25	1.41	1.33
2	-0.22	0.05	-0.01	-0.12	-0.16	-0.05	0.33	0.39	1.33	1.28	1.38	1.32
3	-0.28	0.18	-0.03	-0.10	-0.14	-0.08	0.32	0.39	1.31	1.37	1.39	1.31
4	-0.29	0.20	-0.01	-0.04	-0.15	-0.05	0.34	0.35	1.30	1.49	1.54	1.29
5	-0.30	0.27	0.14	0.04	-0.16	0.16	0.29	0.34	1.30	1.49	1.62	1.27
6	-0.28	0.24	0.17	-0.01	-0.10	0.15	0.25	0.33	1.27	1.49	1.60	1.24
7	-0.41	0.16	0.17	-0.10	-0.04	0.12	0.25	0.40	1.23	1.53	1.54	1.22
8	-0.68	0.12	0.14	-0.15	-0.09	0.12	0.25	0.42	1.19	1.49	1.49	1.26
9	-0.56	0.09	0.14	-0.11	-0.23	0.11	0.23	0.47	1.16	1.48	1.43	1.30
10	-0.32	0.03	0.25	-0.11	-0.29	0.06	0.21	0.48	1.24	1.51	1.38	1.28
11	-0.19	0.06	0.29	-0.17	-0.31	0.02	0.23	0.49	1.43	1.51	1.34	1.24
12	-0.41	0.09	0.25	-0.17	-0.26	0.00	0.30	0.51	1.48	1.52	1.34	1.20
13	-0.56	0.05	0.20	-0.16	-0.35	-0.04	0.36	0.60	1.45	1.50	1.39	1.19
14	-0.29	-0.04	0.16	-0.14	-0.41	-0.05	0.31	0.72	1.42	1.49	1.42	1.17
15	-0.12	-0.10	0.12	-0.04	-0.28	-0.05	0.27	0.73	1.40	1.46	1.41	1.14
16	-0.33	-0.10	0.10	-0.04	-0.29	-0.02	0.26	0.69	1.40	1.44	1.37	1.25
17	-0.48	-0.10	0.08	-0.06	-0.30	0.01	0.29	0.67	1.41	1.50	1.34	1.20
18	-0.52	0.18	0.05	-0.04	-0.34	0.03	0.26	0.69	1.40	1.56	1.32	1.17
19	-0.43	0.32	0.05	-0.06	-0.32	0.02	0.20	0.70	1.39	1.56	1.31	1.13
20	-0.46	0.25	0.04	-0.07	-0.21	0.03	0.20	0.72	1.34	1.56	1.26	1.09
21	-0.43	0.23	-0.03	-0.12	-0.13	0.07	0.27	0.76	1.31	1.69	1.24	1.04
22	-0.19	0.23	-0.05	-0.14	-0.14	0.05	0.29	0.83	1.33	1.69	1.19	1.01
23	-0.19	0.31	-0.02	-0.19	-0.11	0.01	0.30	0.93	1.30	1.70	1.16	0.99
24	-0.18	0.32	0.01	-0.15	-0.05	0.00	0.34	0.98	1.29	1.67	1.20	0.97
25	-0.13	0.20	-0.01	-0.13	-0.05	0.01	0.42	1.05	1.28	1.66	1.24	0.94
26	-0.09	0.19	-0.03	-0.06	-0.06	0.04	0.41	1.04	1.27	1.64	1.24	0.92
27	-0.09	0.19	-0.06	0.04	-0.06	0.06	0.38	1.02	1.26	1.61	1.22	0.90
28	-0.09	0.20	-0.05	0.04	-0.08	0.09	0.30	1.06	1.28	1.57	1.31	0.98
29	-0.11	0.16	-0.03	-0.02	-0.09	0.18	0.24	1.07	1.26	1.51	1.41	1.03
30	-0.18	0.09	-0.07	-0.08	---	0.21	0.27	1.19	1.25	1.47	1.39	1.00
31	-0.16	---	-0.12	-0.14	---	0.29	---	1.35	---	1.45	1.35	---
MEAN	-0.30	0.13	0.06	-0.09	-0.19	0.05	0.29	0.70	1.32	1.52	1.36	1.15
MAX	-0.09	0.32	0.29	0.04	-0.04	0.29	0.42	1.35	1.48	1.70	1.62	1.33
MIN	-0.68	-0.14	-0.12	-0.19	-0.41	-0.08	0.20	0.33	1.16	1.25	1.16	0.90
CAL YR 2003	MEAN -0.01		MAX 0.61	MIN -0.68								
WTR YR 2004	MEAN 0.50		MAX 1.70	MIN -0.68								

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device that will register the peak stage occurring between inspections to a 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 a 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. The station description for a site can be obtained by selecting the name of the station.

**CREST-STAGE PARTIAL-RECORD STATIONS**  
[ft<sup>3</sup>/s, cubic feet per second; >, greater than; —, not determined; <, less than]

Station number	Station name	Water year maximum			Period of record maximum		
		Date	Gage height (feet)	Discharge (ft <sup>3</sup> /s)	Date	Gage height (feet)	Discharge (ft <sup>3</sup> /s)
<b><u>BAY CREEK BASIN</u></b>							
03385000	<a href="#">Hayes Creek at Glendale, Ill.</a>	08-07-1998	11.39	766	08-24-1985	19.14	9,450
		01-22-1999	15.02	2,720			
		01-03-2000	13.56	1,640			
		04-03-2001	11.15	706			
		12-17-2001	15.50	3,200			
		05-11-2003	15.86	3,690			
		03-04-2004	10.66	649			
<b><u>ROCK RIVER BASIN</u></b>							
05446000	<a href="#">Rock Creek at Morrison, Ill.</a>	03-31-1998	14.83	1,740	01-06-1946	a16.04	5,770
		04-23-1999	15.77	1,820			
		06-13-2000	16.09	2,160			
(Discontinued)							
<b><u>HENDERSON CREEK BASIN</u></b>							
05468500	<a href="#">Cedar Creek at Little York, Ill.</a>	03-18-1998	12.67	1,290	07-24-1993	18.76	18,100
		04-23-1999	14.89	2,820			
		06-25-2000	12.34	1,200			
		02-25-2001	14.71	2,550			
		06-13-2002	15.05	3,080			
		05-09-2003	13.84	1,770			
		05-30-2004	10.67	866			
<b><u>HADLEY CREEK BASIN</u></b>							
05502020	<a href="#">Hadley Creek near Barry, Ill.</a>	05-22-1998	8.41	2,720	04-21-1973	15.31	>9,000
		—	<7.39	<2,010	04-11-1979	12.89	9,000
		06-26-2000	<7.39	<2,010			
		01-29-2001	13.79	7,870			
		05-11-2002	10.35	4,320			
		09-01-2003	<8.59	<2,850			
		08-26-2004	9.76	3,800			
<b><u>ILLINOIS RIVER BASIN</u></b>							
05527290	<a href="#">Prairie Creek at Cherry Hill Road near Manhattan, Il.</a>	06-13-2004	—	—	—	—	—
05542000	<a href="#">Mazon River near Coal City</a>	05-08-1998	16.53	16,600	07-15-1958	19.70	17,600
		b10-01-1998	—	—	12-04-1982	19.51	22,400
(Discontinued)							
05554000	<a href="#">North Fork Vermilion River near Charlotte, Ill.</a>	05-08-1998	14.06	3,310	10-03-1986	17.09	4,900
		04-17-1999	12.71	2,870	03-11-1990	16.88	4,900
		06-22-2000	9.07	1,800			
		06-06-2001	14.48	3,580			
		05-13-2002	14.54	3,800			
		07-19-2003	12.34	2,940			
		11-19-2003	9.33	1,910			
05557500	<a href="#">East Bureau Creek near Bureau, Ill.</a>	06-30-1998	10.96	1,330	01-24-1938	c17.39	6,200
		06-14-1999	11.10	1,400	02-21-1997	17.09	9,260
		06-01-2000	9.43	733			
		02-09-2001	12.90	2,430			
		05-12-2002	12.62	2,250			
		05-11-2003	11.39	1,550			
		05-31-2004	11.46	1,580			

05563000	<a href="#">Kickapoo Creek near Kickapoo, Ill.</a>	05-09-1998	14.56	7,810	07-27-1967	17.08	27,500
		05-13-1999	16.45	15,100			
		06-25-2000	<9.98	<2,890			
		02-09-2001	13.84	6,560			
		05-12-2002	14.19	7,090			
		05-11-2003	<9.99	<3,110			
		05-31-2004	<9.99	<3,110			
		05563500	<a href="#">Kickapoo Creek at Peoria, Ill.</a>	05-09-1998			
05-13-1999	18.78			13,400			
06-25-2000	<11.72			<4,480			
02-10-2001	e15.37			8,080			
05-12-2002	15.99			8,890			
05-11-2003	<11.72			<4,480			
05-31-2004	<11.73			<4,490			
05586000	<a href="#">North Fork Mauvaise Terre Creek near Jacksonville, Ill.</a>			06-19-1998	9.85	1,110	06-20-1990
		—	<7.50	<225			
		06-26-2000	7.37	313	04-12-1994	12.35	7,160
		06-06-2001	9.95	1,170			
		05-11-2002	11.57	3,940			
		05-11-2003	<7.50	<330			
		08-25-2004	<7.50	<330			
		<b>CACHE RIVER BASIN</b>					
05600000	<a href="#">Big Creek near Wetaug, Ill.</a>	06-30-1998	12.73	2,020	03-19-1943	—	d7,200
		01-22-1999	14.54	2,440			
		01-03-2000	12.22	1,920			
		09-19-2001	5.31	677			
		05-13-2002	15.09	2,630			
		05-07-2003	12.98	2,070			
		05-14-2004	9.92	1,490			

a – At former site and datum.

b – Converted to continuous-record station.

c – At present datum.

d – Affected by breaks in levees.

e – From floodmark.

The following table contains discharge–measurement data obtained at sites other than continuous–record stream–gaging stations or crest–stage stations. The station description for a site can be obtained by selecting the name of the station.

### MISCELLANEOUS DISCHARGE MEASUREMENTS

[ft<sup>3</sup>/s, cubic feet per second]

Station Number	Station name	Measurements	
		Date	Discharge (ft <sup>3</sup> /s)
05422620	<a href="#">Mississippi River at Davenport, IA.</a>	04–24–2001	280,000
		04–25–2001	276,000
05437610	<a href="#">Rock River at Latham Park, IL.</a>	11–12–2002	2,730
		04–30–2003	2,180
		06–25–2003	1,610
		10–01–2003	1,410
		12–10–2003	1,360
		03–11–2004	8,160
		05–19–2004	5,870
		05–28–2004	15,700
		09–09–2004	2,490
		10–26–2004	3,040
05438209	<a href="#">Kishwaukee River near Belvidere, IL.</a>	09–09–1999	43.2
05438280	<a href="#">Coon Creek near Garden Prairie, IL.</a>	09–09–1999	13.8
05513675	<a href="#">Mississippi River at Lock and Dam 25 near Winfield, MO.</a>	09–30–1997	44,500
		12–03–1997	53,900
		01–14–1998	33,600
		03–24–1998	134,000
		06–22–1998	183,000
05527390	<a href="#">Prairie Creek near Webster Siding, IL.</a>	03–10–2004	62.0
		04–30–2004	28.7
		05–24–2004	176
		08–19–2004	3.27
		10–12–2004	1.57
05527675	<a href="#">Brighton Creek at Highway 45, WI.</a>	07–18–2000	4.32
05527960	<a href="#">Mill Creek at Wadsworth, IL.</a>	07–18–2000	48.2
05528032	<a href="#">Bull Creek below Milwaukee Ave near Libertyville, IL.</a>	07–17–2000	9.8
05530510	<a href="#">Willow Creek at Des Plaines River Road near Rosemont, IL.</a>	07–14–2000	47.1
05530660	<a href="#">Silver Creek at Franklin Park, IL.</a>	07–13–2000	5.21
		07–13–2000	4.16
		07–13–2000	5.78
05531044	<a href="#">Salt Creek near Elk Grove Village, IL.</a>	08–21–2003	1.90
		11–05–2003	442
		03–31–2004	172
		05–21–2004	256
		07–09–2004	14
		09–15–2004	0.05
05531045	<a href="#">Salt Creek at Elk Grove Village, IL.</a>	07–14–2000	73.1
05531175	<a href="#">Salt Creek at Wood Dale, IL.</a>	02–25–2000	462
		04–13–2000	78.1
05536176	<a href="#">Plum Creek at Richton Road near Sauk Village, IL.</a>	07–12–2000	13.8
05536236	<a href="#">Deer Creek near Glenwood, IL.</a>	07–12–2000	19.5
05536248	<a href="#">Butterfield Creek at Country Club Road near Flossmoor, IL.</a>	07–12–2000	18.4
05536272	<a href="#">North Creek below 183rd Street near Thornton, IL.</a>	07–12–2000	45.9
05536355	<a href="#">Midlothian Creek at Blue Island, IL.</a>	07–13–2000	2.57
05537550	<a href="#">Long Run Creek at Smith Road near Lemont, IL.</a>	07–11–2000	116
05538270	<a href="#">Hickory Creek at Schmuhl Road near New Lenox, IL.</a>	07–13–2000	43.6
05538490	<a href="#">Spring Creek near Joliet, IL.</a>	07–21–2000	3.28
05539335	<a href="#">Sugar Run at Mills Road at Joliet, IL.</a>	07–11–2000	52.1
05539632	<a href="#">Jackson Creek at Manhattan Road near Elwood, IL.</a>	07–13–2000	91.5
05540260	<a href="#">East Branch Du Page River near Naperville, IL.</a>	07–14–2000	124
05540440	<a href="#">Lily Cache Creek above Caton Farm Road near Lily Cache, IL.</a>	07–21–2000	17.8
05540660	<a href="#">Rock Run near Shorewood, IL.</a>	07–21–2000	5.11

05541130	<a href="#">Grant Creek near Webster Siding, IL.</a>	03-10-2004	9.54
		04-30-2004	4.52
		05-24-2004	14.80
		08-19-2004	0.84
		10-12-2004	0.70
055438845	<a href="#">Genesee Creek near Saylesville, WI.</a>	07-19-2000	11.0
05544080	<a href="#">Jericho Creek near Jericho, WI.</a>	07-19-2000	2.26
05545955	<a href="#">Bassett Creek near Twin Lakes, WI.</a>	07-18-2000	3.47
05548200	<a href="#">North Branch Nippersink Creek near Richmond, IL.</a>	07-20-2000	83.3
05548500	<a href="#">Fox River at Johnsburg, IL.</a>	05-28-2004	5,330
05549000	<a href="#">Boone Creek near McHenry, IL.</a>	07-20-2000	15.3
05549850	<a href="#">Flint Creek near Fox River Grove, IL.</a>	07-17-2000	20.1
05550290	<a href="#">Tyler Creek at Randall Road near Elgin, IL.</a>	07-15-2000	22.7
05551029	<a href="#">Brewster Creek near Valley View, IL.</a>	05-01-2003	111
		06-20-2003	3.87
		06-20-2003	3.84
		11-05-2003	18.8
		03-05-2004	65.4
		03-24-2004	12.5
		03-31-2004	28.9
		07-13-2004	4.69
		09-09-2004	1.37
05551340	<a href="#">Mill Creek at Mooseheart, IL.</a>	07-10-2000	38.9
05551548	<a href="#">Waubensee Creek at Oswego, IL.</a>	07-21-2000	12.0
05551931	<a href="#">Big Rock Creek at Jericho Road near Sugar Grove, IL.</a>	07-24-2000	29.1
05551939	<a href="#">Little Rock Creek at Milhurst Road near Plano, IL.</a>	07-26-2000	23.2
05551985	<a href="#">Somonauk Creek at Somonauk Road near Sandwich, IL.</a>	07-25-2000	11.7
05552190	<a href="#">Indian Creek below Shabbona County Park near Harding, IL.</a>	07-25-2000	53.4
05552450	<a href="#">Buck Creek near Wedron, IL.</a>	07-25-2000	7.2
05560500	<a href="#">Farm Creek at Farmdale, IL.</a>	10-08-1997	2.37
		03-03-1998	36.6
		04-27-1998	23.6
		07-09-1998	7.28
		09-29-1998	1.05
		04-29-1999	69.4
		06-14-1999	39.5
		09-01-1999	1.36
05561500	<a href="#">Fondulac Creek nr East Peoria, IL.</a>	10-08-1997	0.00
		03-03-1998	4.38
		04-27-1998	1.69
		07-09-1998	0.22
		09-29-1998	0.00
		04-30-1999	5.75
		06-14-1999	3.14
		09-01-1999	0.00
05587060	<a href="#">Illinois River at Hardin, IL.</a>	09-29-1997	8,200
		10-02-1997	15,400
		01-13-1998	37,900
		03-23-1998	77,600
		06-22-1998	65,000
421509088473101	<a href="#">Coon Creek at Kishwaukee confluence near Belvidere, IL.</a>	09-09-1999	16.0
421518088553901	<a href="#">Kishwaukee River at Newburg Road near Belvidere, IL.</a>	09-08-1999	143
421520088552901	<a href="#">Beaver Creek at Kishwaukee confluence near Belvidere, IL.</a>	09-08-1999	17.2
421548088490301	<a href="#">Piscasaw Creek at Lawrenceville Road near Belvidere, IL.</a>	09-09-1999	32.8
421938088513001	<a href="#">Unnamed Creek below Candlewick Lake near Belvidere, IL.</a>	09-08-1999	0.44
421939088473601	<a href="#">Geryune Creek at Wolf Road near Belvidere, IL.</a>	09-09-1999	2.59
421941088510501	<a href="#">Beaver Creek at Orth Road near Belvidere, IL.</a>	09-08-1999	8.96
422041088470601	<a href="#">Piscasaw Creek at Russellville Road near Belvidere, IL.</a>	09-09-1999	18.0
421221088462901	<a href="#">Mosquito Creek at Huber Road near Belvidere, IL.</a>	09-09-1999	0.55
421445088465001	<a href="#">Mosquito Creek at Coon Creek confluence near Belvidere, IL.</a>	09-10-1999	1.02

### Ground–Water Data

**402558087351501 Vermilion County, IL, Local number, 23N11W-22.8a1**

**LOCATION.**— Lat 40°25'58", long 87°35'15" (NAD of 1927), in SW1/4SW1/4SW1/4 sec. 22, T.23 N., R.11 W., Hydrologic Unit 05120109, about 2 mi south of Cheneyville. Owner: Kankakee, Beaverville, and Southern Railroad.

**AQUIFER.**— Glacial drift of Quaternary age.

**WELL CHARACTERISTICS.**— Diameter 12 in., depth 146 ft, cased to 126 ft, 12-in. screen, drilled observation artesian well.

**PERIOD OF RECORD.**—

GROUND-WATER LEVELS: December 1993 to current year (fragmentary).

**INSTRUMENTATION.**— Electronic data logger—60-minute recording. Cell-phone telemeter at station.

**DATUM.**— Land-surface datum is 710 ft above NGVD of 1929. Measuring point: Access hole through pump base on concrete pad, 1.3 ft above land-surface datum.

**EXTREMES FOR PERIOD OF RECORD.**—

GROUND-WATER LEVELS: Highest water level, 20.29 ft below land-surface datum, May 17, 2002; lowest, 26.04 ft below land-surface datum, Feb. 16, 2000.

**EXTREMES FOR CURRENT YEAR.**—

GROUND-WATER LEVELS: Highest water level 20.58 ft below land-surface datum, June 21, 22; lowest 22.14 ft below land-surface datum, Nov. 09, Sept. 28, 29, 30.

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**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.12	22.04	21.51	21.25	21.31	21.72	21.28	21.66	21.36	20.89	21.47	21.80
2	22.11	22.00	21.52	21.13	21.31	21.80	21.23	21.67	21.39	20.96	21.48	21.77
3	22.03	22.00	21.50	21.12	21.35	21.78	21.23	21.73	21.39	20.99	21.50	21.75
4	21.97	21.98	21.44	21.09	21.41	21.75	21.23	21.72	21.39	21.00	21.50	21.77
5	21.97	22.03	21.44	21.09	21.39	21.61	21.25	21.72	21.39	21.08	21.55	21.75
6	22.00	22.06	21.44	21.07	21.33	21.62	21.21	21.71	21.39	21.09	21.58	21.75
7	21.97	22.10	21.44	21.04	21.41	21.59	21.17	21.76	21.40	21.07	21.62	21.78
8	21.98	22.13	21.42	21.00	21.41	21.59	21.17	21.76	21.42	21.09	21.66	21.81
9	21.96	22.14	21.42	21.00	21.41	21.59	21.24	21.76	21.43	21.10	21.67	21.84
10	21.95	22.13	21.35	21.00	21.43	21.58	21.24	21.77	21.43	21.01	21.67	21.90
11	21.95	22.05	21.42	20.97	21.45	21.55	21.27	21.76	21.26	20.99	21.70	21.89
12	21.96	22.08	21.45	20.99	21.51	21.55	21.29	21.77	21.16	20.95	21.76	21.90
13	21.96	22.10	21.45	20.99	21.51	21.55	21.28	21.75	20.92	20.92	21.81	21.90
14	21.90	22.10	21.39	20.99	21.53	21.55	21.31	21.77	20.85	20.91	21.85	21.90
15	21.89	22.09	21.39	21.02	21.60	21.56	21.34	21.79	20.82	20.92	21.88	21.88
16	21.93	22.08	21.37	21.02	21.61	21.49	21.34	21.83	20.79	20.95	21.91	21.90
17	21.94	22.08	21.38	20.99	21.66	21.49	21.40	21.79	20.66	20.98	21.89	21.96
18	21.92	21.98	21.38	21.04	21.66	21.56	21.48	21.80	20.66	20.99	21.89	21.97
19	21.93	21.87	21.44	21.10	21.59	21.59	21.60	21.73	20.65	21.00	21.95	22.02
20	21.93	21.84	21.47	21.13	21.56	21.59	21.59	21.66	20.63	21.03	21.95	22.02
21	21.89	21.79	21.45	21.13	21.65	21.60	21.57	21.66	20.59	21.05	21.96	22.04
22	21.93	21.73	21.43	21.16	21.67	21.64	21.60	21.59	20.65	21.14	22.01	22.06
23	21.93	21.69	21.41	21.16	21.64	21.61	21.62	21.54	20.67	21.23	22.03	22.06
24	21.94	21.62	21.41	21.17	21.67	21.61	21.63	21.55	20.75	21.27	22.06	22.08
25	21.94	21.62	21.43	21.17	21.68	21.62	21.62	21.49	20.73	21.30	22.06	22.09
26	21.94	21.53	21.43	21.12	21.70	21.57	21.62	21.47	20.76	21.32	21.92	22.10
27	21.92	21.48	21.38	21.19	21.76	21.50	21.64	21.45	20.78	21.33	21.95	22.09
28	21.89	21.46	21.34	21.20	21.77	21.45	21.64	21.50	20.81	21.37	21.89	22.14
29	21.89	21.47	21.27	21.22	21.74	21.39	21.67	21.53	20.84	21.39	21.84	22.14
30	21.92	21.42	21.28	21.24	----	21.34	21.66	21.47	20.87	21.40	21.82	22.14
31	22.00	----	21.27	21.29	----	21.29	----	21.39	----	21.42	21.81	----
MEAN	21.95	21.89	21.41	21.10	21.54	21.57	21.41	21.66	20.99	21.10	21.79	21.94
MAX	22.12	22.14	21.52	21.29	21.77	21.80	21.67	21.83	21.43	21.42	22.06	22.14
MIN	21.89	21.42	21.27	20.97	21.31	21.29	21.17	21.39	20.59	20.89	21.47	21.75
WTR	YR	2004	MEAN	21.53	HIGH	20.59	LOW	22.14				

**412031088035801 Will County, IL, Local number, 33N10E-15.5d**

**LOCATION.**— Lat 41°20'31", long 88°03'58" (NAD of 1983), in NW1/4NW1/4SW1/4 sec. 15, T.33N., R.10E, Hydrologic Unit 07120001, Piezometer PZ1, about 4.5 miles northeast of Wilmington. Owner: U.S. Forest Service, Midewin National Tallgrass Prairie.

**AQUIFER.**— Glacial drift of Quaternary age.

**WELL CHARACTERISTICS.**— diameter 1.0 inch, depth 14.9 feet, cased to 9.9 feet, slotted screen, observation.

**PERIOD OF RECORD.**—

GROUND-WATER LEVELS: October 2003 through September 2004

**INSTRUMENTATION.**— Electronic data logger—60-minute recording.

**DATUM.**— Land-surface datum is 621.86 ft above NAVD of 1988. Measuring point: Top of PVC casing, 5.0 ft above land-surface datum, October 22, 2003 through May 18, 2004; 3.5 ft above land surface after May 18, 2004.

**REMARKS.**— Piezometer open to fine-grained deposits.

**EXTREMES FOR PERIOD OF RECORD.**—

GROUND-WATER LEVELS: Highest recorded water level, 0.77 ft below land surface datum, Aug. 29, 2004; lowest recorded, 5.29 ft below land surface datum, Aug. 25, 2004.

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**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	2.20	4.18	4.81	2.95
2	---	---	---	---	---	---	---	---	2.62	4.22	4.82	3.29
3	---	---	---	---	---	---	---	---	2.94	4.22	4.85	3.55
4	---	---	---	---	---	---	---	---	3.17	4.05	4.76	3.74
5	---	---	---	---	---	---	---	---	3.35	4.15	4.74	3.86
6	---	---	---	---	---	---	---	---	3.51	4.19	4.79	3.98
7	---	---	---	---	---	---	---	---	3.62	4.25	4.83	4.05
8	---	---	---	---	---	---	---	---	3.72	4.29	4.86	4.15
9	---	---	---	---	---	---	---	---	3.80	4.31	4.88	4.26
10	---	---	---	---	---	---	---	---	3.80	4.14	4.93	4.31
11	---	---	---	---	---	---	---	---	3.41	4.15	4.97	4.35
12	---	---	---	---	---	2.96	---	---	3.21	4.21	5.03	4.38
13	---	---	---	---	3.91	---	---	---	2.06	4.23	5.07	4.40
14	---	3.82	---	---	---	---	---	---	2.22	4.29	5.13	4.44
15	---	---	---	---	---	---	---	---	2.55	4.32	5.16	4.46
16	---	---	---	---	---	---	---	---	2.87	4.35	5.17	4.43
17	---	---	---	---	---	---	---	---	3.16	4.38	5.16	4.42
18	---	---	---	---	---	---	---	3.02	3.33	4.40	5.18	4.48
19	---	---	---	---	---	---	---	---	3.47	4.42	5.18	4.51
20	---	---	---	---	---	---	---	---	3.55	4.45	5.19	4.51
21	---	---	---	---	---	---	---	3.33	3.60	4.46	5.21	4.54
22	4.39	---	---	---	---	---	---	3.38	3.69	4.51	5.21	4.56
23	---	---	---	---	---	---	---	3.19	3.75	4.57	5.25	---
24	---	---	---	---	---	---	---	3.25	3.84	4.59	5.27	---
25	---	1.46	---	---	---	---	---	3.25	3.89	4.60	5.29	---
26	---	---	---	---	---	---	---	2.81	3.97	4.62	5.18	---
27	---	---	---	---	---	---	---	3.06	4.01	4.64	4.44	---
28	---	---	---	3.73	---	---	---	3.29	4.05	4.68	4.24	---
29	---	---	---	---	---	---	---	3.41	4.10	4.71	1.38	---
30	---	---	---	---	---	---	---	3.44	4.14	4.72	1.96	---
31	---	---	---	---	---	---	---	1.60	---	4.78	2.50	---
MEAN	---	---	---	---	---	---	---	---	3.39	4.39	4.69	---
MAX	---	---	---	---	---	---	---	---	4.14	4.78	5.29	---
MIN	---	---	---	---	---	---	---	---	2.06	4.05	1.38	---



**412031088080901 Will County, IL, Local number, 33N9E-13.2d1**

**LOCATION.**— Lat 41°20'31", long 88°08'09" (NAD of 1983), in NW1/4NE1/4SE1/4 sec. 13, T.33N., R.9E, Hydrologic Unit 07120001, Piezometer PZ8S, about 2 miles north of Wilmington. Owner: U.S. Forest Service, Midewin National Tallgrass Prairie.

**AQUIFER.**— Glacial drift of Quaternary age.

**WELL CHARACTERISTICS.**— diameter 1.0 inch, depth 7.8 feet, cased to 5.3 feet, slotted screen, observation.

**PERIOD OF RECORD.**—

GROUND-WATER LEVELS: October 2003 through September 2004.

**INSTRUMENTATION.**— Electronic data logger—60-minute recording.

**DATUM.**— Land-surface datum is 557.34 ft above NAVD of 1988. Measuring point: Top of PVC casing, 3.3 ft above land-surface datum.

**REMARKS.**— Piezometer open to fine-grained deposits.

**EXTREMES FOR PERIOD OF RECORD.**—

GROUND-WATER LEVELS: Highest recorded water level, 0.80 ft above land surface datum, Aug. 29, 2004; lowest recorded, 2.42 ft below land surface datum, Aug. 17, 2004.

**REMARKS FOR CURRENT YEAR.**— Measured water levels during the approximate period of December through late February are considered estimated levels. During much of this period, the ground-water surface within the piezometer was frozen.

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**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1.27	-0.61	-0.41	1.71	-0.37	-0.55	-0.09	-0.69	0.15	2.04	-0.70
2	---	1.23	-0.57	-0.43	1.63	-0.36	-0.53	-0.09	-0.67	0.75	2.13	-0.67
3	---	0.07	-0.57	-0.41	1.44	-0.34	-0.51	-0.03	-0.63	0.89	2.19	-0.65
4	---	0.07	-0.56	-0.41	1.40	-0.34	-0.46	0.05	-0.59	-0.25	0.79	-0.63
5	---	-0.19	-0.60	-0.37	1.35	-0.46	-0.43	0.25	-0.55	-0.29	1.07	-0.60
6	---	-0.24	-0.61	-0.18	1.18	-0.65	-0.40	0.53	-0.51	-0.25	1.40	-0.58
7	---	-0.22	-0.60	-0.10	1.14	-0.64	-0.36	0.58	-0.45	-0.20	1.60	-0.55
8	---	-0.19	-0.59	-0.08	1.13	-0.62	-0.32	0.35	-0.39	-0.11	1.75	-0.52
9	---	-0.16	-0.59	-0.07	0.98	-0.60	-0.27	0.60	-0.34	-0.05	1.89	-0.49
10	---	-0.16	-0.62	-0.02	0.94	-0.56	-0.23	0.68	-0.34	-0.34	1.97	-0.46
11	---	-0.18	-0.64	0.01	0.96	-0.53	-0.17	0.73	-0.39	-0.32	2.06	-0.43
12	---	-0.14	-0.57	-0.12	1.01	-0.50	-0.11	0.93	-0.54	-0.28	2.11	-0.40
13	---	-0.09	-0.54	-0.26	1.00	-0.48	-0.04	0.02	-0.76	-0.24	2.18	-0.36
14	---	-0.07	-0.54	-0.26	1.07	-0.49	0.05	-0.32	-0.75	-0.16	2.25	-0.33
15	---	-0.07	-0.54	-0.11	1.15	-0.47	0.26	-0.53	-0.73	-0.07	2.32	-0.30
16	---	-0.07	-0.58	-0.05	1.31	-0.46	0.50	-0.50	-0.71	0.02	2.37	-0.36
17	---	-0.09	-0.50	-0.04	1.39	-0.46	0.67	-0.47	-0.68	0.29	2.42	-0.33
18	---	-0.16	-0.45	0.08	1.34	-0.45	0.91	-0.46	-0.64	0.77	2.37	-0.29
19	---	-0.61	-0.40	0.72	0.70	-0.42	1.11	-0.47	-0.60	1.00	1.46	-0.25
20	---	-0.61	-0.34	1.08	-0.16	-0.42	1.11	-0.44	-0.56	1.15	1.50	-0.20
21	---	-0.60	-0.32	1.22	-0.26	-0.35	0.05	-0.42	-0.54	1.27	1.33	-0.14
22	1.52	-0.58	-0.47	1.45	-0.28	-0.32	0.20	-0.40	-0.53	1.36	1.52	-0.09
23	1.58	-0.57	-0.49	1.59	-0.31	-0.29	0.43	-0.45	-0.49	1.56	1.65	---
24	1.61	-0.73	-0.42	1.57	-0.34	-0.29	---	-0.45	-0.45	1.68	1.68	---
25	1.60	-0.72	-0.36	1.68	-0.36	-0.33	---	-0.44	-0.40	1.79	0.46	---
26	0.75	-0.71	-0.30	1.71	-0.37	-0.34	---	-0.48	-0.34	1.85	-0.05	---
27	0.87	-0.70	-0.36	1.62	-0.37	-0.38	-0.05	-0.45	-0.28	1.93	-0.25	---
28	0.88	-0.68	-0.43	1.52	-0.37	-0.35	0.10	-0.40	-0.24	2.01	-0.30	---
29	1.06	-0.65	-0.46	1.47	-0.37	-0.48	0.34	-0.36	-0.15	2.07	-0.78	---
30	1.14	-0.65	-0.44	1.58	---	-0.48	0.13	-0.34	-0.05	2.07	-0.75	---
31	1.25	---	-0.43	1.70	---	-0.56	---	-0.69	---	1.89	-0.72	---
MEAN	---	-0.24	-0.50	0.51	0.68	-0.44	---	-0.11	-0.50	0.71	1.34	---
MAX	---	1.27	-0.30	1.71	1.71	-0.29	---	0.93	-0.05	2.07	2.42	---
MIN	---	-0.73	-0.64	-0.43	-0.37	-0.65	---	-0.69	-0.76	-0.34	-0.78	---

**412043088035001 Will County, IL, Local number, 33N10E-15.3f**

**LOCATION.**— Lat 41°20'43", long 88°03'50" (NAD of 1983), in NE1/4SW1/4NE1/4 sec. 15, T.33N., R.10E, Hydrologic Unit 07120001, Piezometer PZ7, about 4.5 miles northeast of Wilmington. Owner: U.S. Forest Service, Midewin National Tallgrass Prairie.

**AQUIFER.**— Glacial drift of Quaternary age.

**WELL CHARACTERISTICS.**— diameter 1.0 inch, depth 15.9 feet, cased to 10.9 feet, slotted screen, observation.

**PERIOD OF RECORD.**—

GROUND-WATER LEVELS: October 2003 through September 2004.

**INSTRUMENTATION.**— Electronic data logger—60-minute recording.

**DATUM.**— Land-surface datum is 626.11 ft above NAVD of 1988. Measuring point: Top of PVC casing, 4.0 ft above land-surface datum.

**REMARKS.**— Piezometer open to fine-grained deposits.

**EXTREMES FOR PERIOD OF RECORD.**—

GROUND-WATER LEVELS: Highest recorded water level, 4.42 ft below land surface datum, June 12, 2004; lowest recorded, 7.46 ft below land surface datum, Aug. 24, 25, and 26, 2004.

<b>DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004</b>												
<b>DAILY MAXIMUM VALUES</b>												
<b>DAY</b>	<b>OCT</b>	<b>NOV</b>	<b>DEC</b>	<b>JAN</b>	<b>FEB</b>	<b>MAR</b>	<b>APR</b>	<b>MAY</b>	<b>JUN</b>	<b>JUL</b>	<b>AUG</b>	<b>SEP</b>
1	---	7.35	5.98	6.50	---	6.47	4.99	6.45	5.20	6.92	7.29	5.97
2	---	7.34	6.05	6.50	---	6.49	5.27	6.43	5.56	6.94	7.29	6.16
3	---	7.33	6.09	6.54	---	6.51	5.53	6.46	5.83	6.95	7.30	6.30
4	---	7.31	6.13	6.55	---	6.50	5.73	6.47	6.05	6.96	7.30	6.41
5	---	7.31	6.16	6.58	---	6.37	5.85	6.50	6.20	6.98	7.32	6.49
6	---	7.10	6.14	6.62	---	4.92	5.94	6.55	6.32	6.99	7.33	6.56
7	---	7.08	6.08	6.64	---	5.23	6.03	6.57	6.40	7.02	7.33	6.63
8	---	7.08	6.05	6.66	---	5.45	6.15	6.56	6.47	7.04	7.34	6.69
9	---	7.08	6.05	6.69	---	5.67	6.23	6.59	6.55	7.05	7.34	6.75
10	---	7.07	6.02	6.70	---	5.82	6.29	6.64	6.57	7.04	7.35	6.79
11	---	7.04	5.62	6.70	---	5.95	6.34	6.66	6.56	7.05	7.36	6.83
12	---	7.04	5.57	6.70	---	6.05	6.38	6.69	6.55	7.07	7.37	6.87
13	---	7.06	5.66	6.69	---	6.11	6.42	6.69	4.93	7.07	7.38	6.90
14	---	7.05	5.78	6.70	6.97	6.18	6.46	6.53	5.35	7.09	7.39	6.93
15	---	7.03	5.85	6.72	6.99	6.23	6.49	5.83	5.66	7.10	7.39	6.95
16	---	7.03	5.94	6.72	7.00	6.26	6.52	5.70	5.88	7.12	7.41	6.97
17	---	7.03	6.00	6.72	7.00	6.30	6.56	5.92	6.09	7.13	7.41	7.00
18	---	7.01	6.06	6.72	7.00	6.35	6.59	6.05	6.24	7.14	7.42	7.03
19	---	6.19	6.13	6.75	6.96	6.37	6.65	6.13	6.35	7.15	7.43	7.05
20	---	5.25	6.18	6.76	6.80	6.39	6.65	6.22	6.43	7.16	7.44	7.06
21	---	5.41	6.21	6.76	6.41	6.41	6.63	6.29	6.47	7.17	7.44	7.09
22	7.36	5.56	6.23	6.79	6.36	6.42	6.66	6.35	6.55	7.19	7.44	7.10
23	7.36	5.65	6.27	6.79	6.34	6.42	6.68	6.34	6.60	7.21	7.45	7.12
24	7.34	5.52	6.31	6.82	6.34	6.42	6.69	6.32	6.66	7.22	7.46	---
25	7.35	5.01	6.36	6.82	6.35	6.41	6.67	6.32	6.71	7.23	7.46	---
26	7.35	5.25	6.40	6.83	6.37	6.37	6.48	6.16	6.75	7.24	7.46	---
27	7.33	5.44	6.41	6.85	6.40	6.24	6.45	6.14	6.78	7.24	7.41	---
28	7.31	5.61	6.41	---	6.44	6.02	6.44	6.26	6.82	7.25	7.40	---
29	7.33	5.72	6.41	---	6.48	5.90	6.46	6.33	6.86	7.26	4.98	---
30	7.33	5.87	6.43	---	---	5.28	6.46	6.35	6.89	7.27	5.30	---
31	7.35	---	6.47	---	---	5.07	---	5.73	---	7.28	5.69	---
MEAN	---	6.49	6.11	---	---	6.08	6.29	6.33	6.28	7.11	7.18	---
MAX	---	7.35	6.47	---	---	6.51	6.69	6.69	6.89	7.28	7.46	---
MIN	---	5.01	5.57	---	---	4.92	4.99	5.70	4.93	6.92	4.98	---

**412053088101801 Will County, IL, Local number, 33N9E-14.8h**

**LOCATION.**— Lat 41°20'53", long 88°10'18" (NAD of 1983), in NW1/4NW1/4NW1/4 sec. 14, T.33N., R.9E, Hydrologic Unit 07120001, Piezometer PZ3, about 3 miles northwest of Wilmington. Owner: U.S. Forest Service, Midewin National Tallgrass Prairie.

**AQUIFER.**— Glacial drift of Quaternary age.

**WELL CHARACTERISTICS.**— diameter 1.0 inch, depth 11.7 feet, cased to 6.7 feet, slotted screen, observation.

**PERIOD OF RECORD.**—

GROUND-WATER LEVELS: October 2003 through September 2004.

**INSTRUMENTATION.**— Electronic data logger—60-minute recording.

**DATUM.**— Land-surface datum is 546.68 ft above NAVD of 1988. Measuring point: Top of PVC casing, 3.3 ft above land-surface datum.

**REMARKS.**— Piezometer open to fine-grained deposits.

**EXTREMES FOR PERIOD OF RECORD.**—

GROUND-WATER LEVELS: Highest recorded water level, 0.09 ft above land surface datum, June 12, 2004; lowest recorded, 4.39 ft below land surface datum, Aug. 19 and 20, 2004.

<b>DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004</b>												
<b>DAILY MAXIMUM VALUES</b>												
<b>DAY</b>	<b>OCT</b>	<b>NOV</b>	<b>DEC</b>	<b>JAN</b>	<b>FEB</b>	<b>MAR</b>	<b>APR</b>	<b>MAY</b>	<b>JUN</b>	<b>JUL</b>	<b>AUG</b>	<b>SEP</b>
1	---	3.76	0.64	1.67	2.95	1.87	0.48	1.64	0.34	2.61	4.01	0.87
2	---	3.75	0.71	1.59	2.94	1.98	0.65	1.84	0.45	2.71	4.04	1.17
3	---	3.31	0.78	1.68	2.93	1.97	0.89	1.93	0.58	2.74	4.06	1.43
4	---	3.11	0.80	1.68	2.94	1.89	1.07	1.98	0.75	1.86	4.05	1.63
5	---	2.56	0.75	1.73	2.94	0.70	1.16	2.10	0.96	2.06	3.63	1.78
6	---	2.56	0.68	1.85	2.83	0.27	1.26	2.19	1.22	2.17	3.73	1.90
7	---	2.63	0.60	1.92	2.90	0.40	1.37	2.20	1.46	2.26	3.81	2.06
8	---	2.68	0.60	1.87	2.91	0.45	1.49	2.13	1.68	2.40	3.90	2.16
9	---	2.70	0.62	1.96	2.84	0.50	1.60	2.23	1.81	2.45	3.96	2.28
10	---	2.66	0.46	2.00	2.83	0.53	1.68	2.28	1.77	2.29	4.03	2.38
11	---	2.60	0.46	1.95	2.85	0.66	1.78	2.30	1.62	2.43	4.09	2.47
12	---	2.69	0.57	1.86	2.89	0.78	1.85	2.37	0.14	2.56	4.15	2.58
13	---	2.74	0.61	1.87	2.89	0.85	1.93	2.06	0.28	2.64	4.21	2.68
14	---	2.72	0.69	1.87	2.92	0.91	2.02	1.21	0.34	2.77	4.28	2.79
15	---	2.68	0.75	2.07	2.98	1.01	2.11	0.55	0.44	2.87	4.32	2.86
16	---	2.66	0.83	2.08	3.03	1.08	2.19	0.66	0.59	2.95	4.31	2.71
17	---	2.63	0.95	2.05	3.08	1.15	2.28	0.84	0.86	3.04	4.24	2.87
18	---	2.44	1.06	2.19	3.08	1.18	2.35	0.88	1.14	3.12	4.27	2.99
19	---	0.55	1.23	2.32	2.97	1.26	2.48	1.01	1.40	3.20	4.39	3.09
20	---	0.63	1.36	2.40	2.41	1.41	2.48	1.19	1.56	3.26	4.39	3.17
21	---	0.67	1.39	2.42	1.99	1.49	2.10	1.35	1.56	3.33	4.36	3.26
22	3.82	0.75	1.30	2.53	2.04	1.58	2.25	1.45	1.63	3.42	4.29	3.33
23	3.87	0.78	1.37	2.57	1.87	1.58	2.38	0.97	1.83	3.52	4.22	---
24	3.92	0.38	1.51	2.64	1.79	1.58	2.41	0.84	1.95	3.60	4.24	---
25	3.92	0.40	1.62	2.70	1.90	1.36	2.12	0.81	2.06	3.66	4.16	---
26	3.59	0.41	1.70	2.73	1.94	1.33	2.02	0.58	2.17	3.73	3.07	---
27	3.57	0.45	1.58	2.77	2.00	1.22	2.14	0.75	2.25	3.78	2.37	---
28	3.56	0.51	1.48	2.77	1.98	1.28	2.25	1.03	2.30	3.84	1.94	---
29	3.62	0.53	1.47	2.80	1.89	0.60	2.34	1.27	2.42	3.88	0.29	---
30	3.66	0.58	1.58	2.85	---	0.58	2.22	1.31	2.51	3.92	0.42	---
31	3.73	---	1.65	2.92	---	0.36	---	0.19	---	3.97	0.61	---
MEAN	---	1.92	1.03	2.20	2.60	1.09	1.84	1.42	1.34	3.00	3.61	---
MAX	---	3.76	1.70	2.92	3.08	1.98	2.48	2.37	2.51	3.97	4.39	---
MIN	---	0.38	0.46	1.59	1.79	0.27	0.48	0.19	0.14	1.86	0.29	---

**412131088032601 Will County, IL, Local number, 33N10E-10.1e**

**LOCATION.**— Lat 41°21'31", long 88°03'26" (NAD of 1983), in SE1/4SE1/4NE1/4 sec. 10, T.33N., R.10E, Hydrologic Unit 07120001, Piezometer PZ6, about 5.5 miles northeast of Wilmington. Owner: U.S. Forest Service, Midewin National Tallgrass Prairie.

**AQUIFER.**— Glacial drift of Quaternary age.

**WELL CHARACTERISTICS.**— diameter 1.0 inch, depth 11.8 feet, cased to 6.8 feet, slotted screen, observation.

**PERIOD OF RECORD.**—

GROUND-WATER LEVELS: October 2003 through September 2004.

**INSTRUMENTATION.**— Electronic data logger—60-minute recording.

**DATUM.**— Land-surface datum is 632.13 ft above NAVD of 1988. Measuring point: Top of PVC casing, 3.2 ft above land-surface datum.

**REMARKS.**— Piezometer open to fine-grained deposits.

**EXTREMES FOR PERIOD OF RECORD.**—

GROUND-WATER LEVELS: Highest recorded water level, 1.05 ft below land surface datum, June 12, 2004; lowest recorded, 3.81 ft below land surface datum, Aug. 17, 2004.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	3.31	2.29	2.35	---	2.08	1.54	1.98	1.65	2.90	3.47	2.31
2	---	3.24	2.32	2.31	---	2.09	1.66	2.10	1.79	2.96	3.55	2.46
3	---	3.01	2.34	2.37	---	2.10	1.82	2.11	1.92	2.92	3.59	2.58
4	---	2.98	2.32	2.34	---	2.08	1.85	2.16	1.97	2.56	3.25	2.66
5	---	2.67	2.24	2.34	---	1.47	1.87	2.22	1.99	2.64	3.24	2.71
6	---	2.51	2.01	2.37	---	1.51	1.89	2.31	2.06	2.72	3.30	2.78
7	---	2.63	2.07	2.35	---	1.68	1.92	2.35	2.13	2.70	3.40	2.86
8	---	2.68	2.13	2.32	---	1.73	2.05	2.25	2.25	2.84	3.43	2.89
9	---	2.70	2.15	2.38	---	1.84	2.04	2.33	2.31	2.78	3.49	2.95
10	---	2.67	1.85	2.40	---	1.87	2.08	2.38	2.26	2.49	3.52	3.00
11	---	2.68	1.77	2.34	---	1.95	2.12	2.32	2.01	2.58	3.54	3.01
12	---	2.79	1.93	2.37	---	2.02	2.13	2.38	1.90	2.67	3.53	3.06
13	---	2.82	1.98	2.37	---	2.05	2.17	2.15	1.58	2.70	3.61	3.10
14	---	2.77	2.06	2.40	2.75	1.94	2.20	1.60	1.68	2.83	3.68	3.11
15	---	2.76	2.04	2.43	2.79	1.99	2.23	1.60	1.78	2.89	3.72	3.14
16	---	2.73	1.98	2.42	2.81	1.98	2.31	1.81	1.92	2.89	3.76	3.00
17	---	2.72	2.07	2.38	2.82	1.97	2.33	1.99	2.10	2.85	3.81	3.08
18	---	2.60	2.18	2.46	2.80	1.99	2.37	1.98	2.21	2.93	3.76	3.10
19	---	1.52	2.25	2.54	2.61	2.00	2.48	1.90	2.32	2.97	3.60	3.14
20	---	1.70	2.31	2.58	2.25	2.07	2.45	2.02	2.38	3.02	3.58	3.19
21	---	1.82	2.27	2.54	2.10	2.07	2.12	2.06	2.34	3.02	3.59	3.22
22	3.36	1.94	2.25	2.64	2.15	2.11	2.20	2.08	2.40	3.07	3.66	3.22
23	3.42	2.02	2.25	2.61	2.06	2.07	2.28	1.75	2.48	3.18	3.72	3.26
24	3.41	1.54	2.31	2.70	2.09	2.07	2.29	1.87	2.56	3.20	3.70	---
25	3.40	1.71	2.38	2.62	2.15	1.97	2.12	1.86	2.60	3.29	3.65	---
26	3.18	1.84	2.44	2.62	2.18	1.89	1.98	1.72	2.67	3.28	3.37	---
27	3.16	1.97	2.37	2.67	2.23	1.79	2.07	1.89	2.72	3.36	2.99	---
28	3.19	2.07	2.32	---	2.25	1.83	2.17	2.00	2.70	3.45	2.91	---
29	3.23	2.10	2.23	---	2.20	1.45	2.23	2.05	2.78	3.46	1.58	---
30	3.24	2.24	2.32	---	---	1.53	2.19	2.04	2.84	3.43	1.87	---
31	3.31	---	2.39	---	---	1.36	---	1.34	---	3.40	2.13	---
MEAN	---	2.42	2.19	---	---	1.89	2.11	2.02	2.21	2.97	3.35	---
MAX	---	3.31	2.44	---	---	2.11	2.48	2.38	2.84	3.46	3.81	---
MIN	---	1.52	1.77	---	---	1.36	1.54	1.34	1.58	2.49	1.58	---

**412210088093001 Will County, IL, Local number, 33N9E-2.2d**

**LOCATION.**— Lat 41°22'10", long 88°09'30" (NAD of 1983), in NW1/4NE1/4SE1/4 sec. 2, T.33N., R.9E, Hydrologic Unit 07120004, Piezometer PZ5, about 4 miles northwest of Wilmington. Owner: U.S. Forest Service, Midewin National Tallgrass Prairie.

**AQUIFER.**— Glacial drift of Quaternary age.

**WELL CHARACTERISTICS.**— diameter 1.0 inch, depth 11.6 feet, cased to 6.6 feet, slotted screen, observation.

**PERIOD OF RECORD.**—

GROUND-WATER LEVELS: October 2003 through September 2004.

**INSTRUMENTATION.**— Electronic data logger—60-minute recording.

**DATUM.**— Land-surface datum is 541.78 ft above NAVD of 1988. Measuring point: Top of PVC casing, 3.4 ft above land-surface datum.

**REMARKS.**— Piezometer open to fine-grained deposits.

**EXTREMES FOR PERIOD OF RECORD.**—

GROUND-WATER LEVELS: Highest recorded water level, 2.14 ft above land surface datum, June 12, 2004; lowest recorded, 0.45 ft below land surface datum, Aug. 3, 2004.

**REMARKS FOR CURRENT YEAR.**— Measured water levels during the approximate period of December through late February are considered estimated levels. During much of this period, the ground-water surface within the piezometer was frozen.

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**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	-0.33	-0.83	-0.85	-0.23	-1.05	-1.04	-1.05	-1.06	0.05	0.32	-0.79
2	---	-0.36	-0.81	-0.85	-0.26	-0.95	-0.96	-0.90	-0.99	0.11	0.40	-0.69
3	---	-0.93	-0.83	-0.83	-0.35	-0.90	-0.88	-0.81	-0.85	0.12	0.45	-0.61
4	---	-0.85	-0.83	-0.79	-0.41	-0.92	-0.81	-0.72	-0.71	-0.69	-0.04	-0.54
5	---	-1.21	-0.96	-0.84	-0.45	-1.48	-0.78	-0.63	-0.61	-0.75	-0.21	-0.48
6	---	-1.00	-1.10	-0.77	-0.52	-1.22	-0.75	-0.55	-0.50	-0.62	-0.10	-0.45
7	---	-0.87	-1.03	-0.73	-0.57	-1.09	-0.72	-0.54	-0.39	-0.55	-0.02	-0.37
8	---	-0.78	-0.97	-0.73	-0.62	-1.01	-0.67	-0.58	-0.29	-0.42	0.06	-0.31
9	---	-0.72	-0.94	-0.74	-0.68	-0.94	-0.64	-0.50	-0.22	-0.40	0.13	-0.26
10	---	-0.70	-1.25	-0.74	-0.71	-0.90	-0.63	-0.46	-0.25	-0.81	0.16	-0.21
11	---	-0.69	-1.17	-0.75	-0.72	-0.82	-0.59	-0.42	-0.68	-0.66	0.20	-0.17
12	---	-0.64	-1.01	-0.86	-0.69	-0.76	-0.57	-0.36	-1.36	-0.52	0.20	-0.11
13	---	-0.60	-0.96	-0.98	-0.69	-0.72	-0.53	-0.66	-1.07	-0.44	0.24	-0.08
14	---	-0.54	-0.92	-0.95	-0.71	-0.81	-0.51	-1.09	-1.04	-0.31	0.28	-0.05
15	---	-0.57	-0.90	-0.79	-0.68	-0.84	-0.49	-1.07	-1.05	-0.21	0.34	-0.03
16	---	-0.62	-0.95	-0.78	-0.62	-0.83	-0.45	-0.90	-0.95	-0.16	0.38	-0.28
17	---	-0.66	-0.86	-0.74	-0.58	-0.87	-0.41	-0.78	-0.82	-0.08	0.42	-0.29
18	---	-0.81	-0.88	-0.78	-0.61	-0.85	-0.36	-0.78	-0.73	-0.01	0.38	-0.21
19	---	-1.27	-0.84	-0.57	-0.91	-0.87	-0.30	-0.81	-0.60	0.05	-0.05	-0.14
20	---	-1.16	-0.77	-0.50	-1.26	-0.78	-0.31	-0.71	-0.50	0.09	-0.05	-0.09
21	---	-1.05	-0.75	-0.44	-1.24	-0.73	-0.73	-0.67	-0.51	0.13	-0.12	-0.04
22	-0.20	-0.96	-0.83	-0.35	-1.19	-0.69	-0.65	-0.65	-0.59	0.16	-0.04	0.00
23	-0.19	-0.97	-0.91	-0.29	-1.20	-0.70	-0.58	-1.09	-0.43	0.21	0.04	---
24	-0.17	-1.28	-0.85	-0.28	-1.13	-0.70	-0.56	-0.94	-0.36	0.25	0.04	---
25	-0.20	-1.14	-0.77	-0.21	-1.08	-0.90	-0.74	-0.94	-0.28	0.29	-0.44	---
26	-0.52	-1.06	-0.71	-0.20	-1.03	-0.92	-0.81	-0.92	-0.20	0.31	-0.73	---
27	-0.49	-1.01	-0.76	-0.24	-1.00	-1.03	-0.71	-0.81	-0.15	0.36	-0.97	---
28	-0.48	-0.96	-0.85	-0.30	-0.98	-0.97	-0.59	-0.67	-0.16	0.39	-1.12	---
29	-0.38	-0.94	-1.00	-0.32	-1.01	-1.19	-0.53	-0.59	-0.07	0.41	-1.24	---
30	-0.37	-0.89	-0.94	-0.28	---	-1.09	-0.61	-0.58	0.01	0.39	-1.04	---
31	-0.36	---	-0.87	-0.23	---	-1.18	---	-1.36	---	0.24	-0.91	---
MEAN	---	-0.85	-0.90	-0.60	-0.76	-0.93	-0.63	-0.76	-0.58	-0.10	-0.10	---
MAX	---	-0.33	-0.71	-0.20	-0.23	-0.69	-0.30	-0.36	0.01	0.41	0.45	---
MIN	---	-1.28	-1.25	-0.98	-1.26	-1.48	-1.04	-1.36	-1.36	-0.81	-1.24	---

**412249088015801 Will County, IL, Local number, 34N10E-36.6a**

**LOCATION.**— Lat 41°22'49", long 88°01'58" (NAD of 1983), in SW1/4SE1/4SW1/4 sec. 36, T.34N., R.10E, Hydrologic Unit 07120001, Piezometer PZ9, about 4 miles southeast of Elwood. Owner: U.S. Forest Service, Midewin National Tallgrass Prairie.

**AQUIFER.**— Glacial drift of Quaternary age.

**WELL CHARACTERISTICS.**— diameter 1.0 inch, depth 20.8 feet, cased to 15.8 feet, slotted screen, observation.

**PERIOD OF RECORD.**—

GROUND-WATER LEVEL: October 2003 through September 2004.

**INSTRUMENTATION.**— Electronic data logger—60-minute recording.

**DATUM.**— Land-surface datum is 644.40 ft above NAVD of 1988. Measuring point: Top of PVC casing, 3.9 ft above land-surface datum.

**REMARKS.**— Piezometer open to fine-grained deposits.

**EXTREMES FOR PERIOD OF RECORD.**—

GROUND-WATER LEVELS: Highest recorded water level, 1.32 ft below land surface datum, April 1, 2004; lowest recorded, 13.97 ft below land surface datum, Oct. 23, 2003.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

<b>DAILY MAXIMUM VALUES</b>												
<b>DAY</b>	<b>OCT</b>	<b>NOV</b>	<b>DEC</b>	<b>JAN</b>	<b>FEB</b>	<b>MAR</b>	<b>APR</b>	<b>MAY</b>	<b>JUN</b>	<b>JUL</b>	<b>AUG</b>	<b>SEP</b>
1	---	---	---	---	---	5.63	1.50	4.31	1.95	4.72	7.46	5.17
2	---	---	---	---	---	6.08	1.71	4.36	2.48	4.73	7.62	5.23
3	---	---	---	---	---	6.08	2.11	4.40	2.74	4.71	7.81	5.38
4	---	---	---	---	---	5.79	2.38	4.28	2.84	4.72	8.06	5.49
5	---	---	---	---	---	5.32	2.52	4.43	2.97	4.81	8.29	5.53
6	---	---	---	---	---	3.95	2.57	4.57	3.26	4.71	8.38	5.72
7	---	---	---	---	---	3.26	2.73	4.82	3.49	4.75	8.47	5.91
8	---	---	---	---	---	3.21	3.16	4.69	3.72	4.92	8.61	5.91
9	---	---	---	---	---	3.32	3.31	4.68	3.84	4.98	8.66	6.10
10	---	---	---	---	---	3.31	3.43	4.89	3.84	5.01	8.80	6.22
11	---	---	---	---	---	3.39	3.59	4.93	3.84	4.96	8.93	6.34
12	---	---	---	---	---	3.57	3.61	4.94	3.82	5.00	9.05	6.57
13	---	---	---	---	7.28	3.65	3.69	4.96	2.22	5.02	9.25	6.74
14	---	12.25	---	---	---	3.63	3.81	4.76	2.17	5.20	9.48	6.95
15	---	---	---	---	7.67	3.73	3.88	3.57	2.39	5.29	9.60	7.12
16	---	---	---	---	7.74	3.59	3.94	2.98	2.53	5.34	9.62	7.47
17	---	---	---	---	7.78	3.66	4.11	2.97	2.90	5.51	9.58	7.74
18	---	---	---	---	7.78	3.93	4.11	3.12	3.16	5.54	9.59	8.07
19	---	---	---	---	7.45	4.04	4.40	3.12	3.32	5.60	9.84	8.30
20	---	---	---	---	7.13	3.95	4.39	3.24	3.32	5.76	9.87	8.39
21	---	---	---	---	6.93	4.07	4.36	3.30	3.37	5.79	10.05	8.64
22	---	---	---	---	6.82	4.05	4.43	3.29	3.72	6.02	10.09	8.78
23	13.97	---	---	---	6.40	3.89	4.44	3.24	3.77	6.30	10.24	---
24	---	5.25	---	---	6.15	3.93	4.48	3.02	4.07	6.37	10.29	---
25	---	---	---	---	6.13	4.04	4.17	2.90	4.08	6.36	10.37	---
26	---	---	---	---	5.97	3.90	4.09	2.60	4.22	6.38	10.33	---
27	---	---	---	---	5.98	3.55	4.00	2.72	4.29	6.55	10.31	---
28	---	---	---	5.98	5.95	3.00	4.00	3.08	4.43	6.75	10.27	---
29	---	---	---	---	5.81	2.78	4.20	3.13	4.52	6.90	6.63	---
30	---	---	---	---	---	1.95	4.24	3.05	4.58	6.95	5.40	---
31	---	---	---	---	---	1.56	---	2.25	---	7.25	5.14	---
MEAN	---	---	---	---	---	3.86	3.58	3.76	3.40	5.58	8.91	---
MAX	---	---	---	---	---	6.08	4.48	4.96	4.58	7.25	10.37	---
MIN	---	---	---	---	---	1.56	1.50	2.25	1.95	4.71	5.14	---

**412257088054801 Will County, IL, Local number, 34N10E-32.1b**

**LOCATION.**— Lat 41°22'57", long 88°05'48" (NAD of 1983), in NE1/4SE1/4SE1/4 sec. 32, T.34N., R.10E, Hydrologic Unit 07120004, Piezometer PZ2, about 1.5 miles southeast of Elwood. Owner: U.S. Forest Service, Midewin National Tallgrass Prairie.

**AQUIFER.**— Glacial drift of Quaternary age.

**WELL CHARACTERISTICS.**— diameter 1.0 inch, depth 11.8 feet, cased to 6.8 feet, slotted screen, observation.

**PERIOD OF RECORD.**—

GROUND-WATER LEVELS: October 2003 through September 2004.

**INSTRUMENTATION.**— Electronic data logger—60-minute recording.

**DATUM.**— Land-surface datum is 651.78 ft above NAVD of 1988. Measuring point: Top of PVC casing, 3.2 ft above land-surface datum.

**REMARKS.**— Piezometer open to fine-grained deposits.

**EXTREMES FOR PERIOD OF RECORD.**—

GROUND-WATER LEVELS: Highest recorded water level, 0.53 ft below land surface datum, Aug. 28, 2004; lowest recorded, 6.10 ft below land surface datum, Oct. 25, 2003.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

DAY	DAILY MAXIMUM VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	6.01	4.01	4.14	---	3.55	3.03	4.06	3.30	4.63	4.74	4.43
2	---	5.94	4.03	4.12	---	3.66	3.16	4.12	3.43	4.66	4.75	4.45
3	---	4.85	4.01	4.20	---	3.72	3.30	4.17	3.63	4.66	4.78	4.46
4	---	4.83	4.01	4.20	---	3.77	3.43	4.22	3.84	4.61	4.63	4.47
5	---	4.62	3.97	4.28	---	2.61	3.50	4.29	4.06	4.38	4.56	4.48
6	---	4.50	3.55	4.29	---	2.80	3.57	4.36	4.23	4.41	4.58	4.48
7	---	4.54	3.60	4.29	---	2.99	3.64	4.39	4.34	4.43	4.60	4.50
8	---	4.57	3.71	4.30	---	3.12	3.81	4.41	4.42	4.46	4.63	4.52
9	---	4.57	3.78	4.35	---	3.28	3.88	4.50	4.46	4.46	4.64	4.53
10	---	4.58	3.43	4.35	---	3.34	3.95	4.57	4.44	4.42	4.65	4.55
11	---	4.58	3.11	4.32	---	3.48	4.02	4.58	4.39	4.43	4.65	4.55
12	---	4.61	3.34	4.36	---	3.64	4.04	4.61	3.51	4.45	4.66	4.56
13	---	4.63	3.42	4.35	---	3.71	4.09	4.46	3.30	4.46	4.66	4.58
14	---	4.62	3.56	4.35	4.70	3.64	4.12	3.29	3.38	4.50	4.69	4.59
15	---	4.61	3.59	4.38	4.76	3.69	4.15	3.21	3.52	4.52	4.70	4.59
16	---	4.62	3.71	4.38	4.78	3.70	4.19	3.44	3.70	4.53	4.71	4.58
17	---	4.62	3.76	4.38	4.77	3.73	4.24	3.63	3.95	4.55	4.72	4.59
18	---	4.59	3.87	4.42	4.78	3.76	4.23	3.64	4.13	4.56	4.70	4.61
19	---	4.09	4.00	4.44	4.67	3.79	4.33	3.69	4.27	4.58	4.62	4.62
20	---	4.13	4.03	4.45	4.48	3.87	4.33	3.86	4.34	4.58	4.63	4.63
21	---	4.16	4.00	4.45	4.10	3.93	4.24	4.00	4.31	4.60	4.59	4.64
22	6.08	4.14	4.03	4.48	4.09	3.98	4.29	4.07	4.40	4.61	4.61	4.65
23	6.07	4.13	4.05	4.48	3.50	3.99	4.34	3.51	4.45	4.63	4.63	---
24	6.08	2.93	4.08	4.51	3.38	3.99	4.35	3.70	4.47	4.66	4.63	---
25	6.10	3.18	4.12	4.51	3.50	3.86	4.27	3.70	4.49	4.67	4.55	---
26	6.08	3.36	4.15	4.50	3.58	3.80	4.02	3.64	4.52	4.67	4.51	---
27	6.02	3.51	4.13	4.54	3.69	3.38	4.14	3.84	4.54	4.68	4.37	---
28	5.98	3.64	4.10	---	3.74	3.46	4.23	4.08	4.54	4.69	4.28	---
29	6.02	3.69	4.03	---	3.69	2.89	4.30	4.15	4.58	4.70	4.20	---
30	6.02	3.91	4.10	---	---	3.01	4.30	4.14	4.60	4.70	4.33	---
31	6.01	---	4.15	---	---	2.83	---	3.02	---	4.72	4.40	---
MEAN	---	4.36	3.85	---	---	3.52	3.98	3.98	4.12	4.57	4.59	---
MAX	---	6.01	4.15	---	---	3.99	4.35	4.61	4.60	4.72	4.78	---
MIN	---	2.93	3.11	---	---	2.61	3.03	3.02	3.30	4.38	4.20	---

**412422088100401 Will County, IL, Local number, 34N9E-26.6h**

**LOCATION.**— Lat 41°24'22", long 88°10'04" (NAD of 1983), in NW1/4NE1/4NW1/4 sec. 26, T.34N., R.9E, Hydrologic Unit 07120004, Piezometer PZ4, about 3 miles southeast of Channahon. Owner: U.S. Forest Service, Midewin National Tallgrass Prairie.

**AQUIFER.**— Glacial drift of Quaternary age.

**WELL CHARACTERISTICS.**— diameter 1.0 inch, depth 4.5 feet, cased to 2.0 feet, slotted screen, observation.

**PERIOD OF RECORD.**—

GROUND-WATER LEVELS: October 2003 through September 2004.

**INSTRUMENTATION.**— Electronic data logger—60-minute recording.

**DATUM.**— Land-surface datum is 535.85 ft above NAVD of 1988. Measuring point: Top of PVC casing, 3.0 ft above land-surface datum.

**REMARKS.**— Piezometer open to fine-grained deposits.

**EXTREMES FOR PERIOD OF RECORD.**—

GROUND-WATER LEVELS: Highest recorded water level, 0.67 ft above land surface datum, Nov. 18, 2003; lowest recorded, 2.78 ft below land surface datum, Aug. 3, 2004.

**REMARKS FOR CURRENT YEAR.**— Measured water levels during the approximate period of December through late February are considered estimated levels. During much of this period, the ground-water surface within the piezometer was frozen.

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**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	0.49	0.23	0.23	1.23	0.14	0.09	0.02	0.17	1.53	2.65	0.40
2	---	0.49	0.27	0.20	1.16	0.15	0.17	0.17	0.20	1.60	2.73	0.61
3	---	-0.22	0.26	0.22	1.06	0.17	0.22	0.24	0.29	1.54	2.78	0.78
4	---	-0.07	0.26	0.24	1.00	0.17	0.25	0.30	0.47	0.36	2.21	0.91
5	---	-0.28	0.18	0.22	0.94	-0.20	0.28	0.41	0.71	0.24	0.29	1.01
6	---	-0.18	0.00	0.32	0.85	-0.10	0.37	0.60	0.88	0.38	0.66	1.04
7	---	0.03	0.07	0.36	0.72	0.06	0.43	0.63	1.00	0.63	0.90	1.15
8	---	0.12	0.13	0.27	0.60	0.11	0.52	0.43	1.16	0.92	1.07	1.20
9	---	0.16	0.15	0.16	0.69	0.13	0.57	0.60	1.20	1.00	1.18	1.24
10	---	0.18	-0.05	0.23	0.75	0.15	0.62	0.09	1.06	0.09	1.17	1.29
11	---	0.20	-0.11	0.26	0.81	0.19	0.66	0.22	0.35	0.28	1.22	1.31
12	---	0.26	0.00	0.19	0.86	0.19	0.70	0.28	-0.02	0.51	1.18	1.36
13	---	0.39	0.09	0.16	0.87	0.22	0.75	0.12	0.02	0.79	1.28	1.40
14	---	0.47	0.14	0.20	0.91	0.22	0.79	-0.30	0.14	1.06	1.35	1.44
15	---	0.48	0.15	0.27	0.93	0.24	0.86	0.02	0.22	1.19	1.43	1.57
16	---	0.45	0.15	0.34	1.01	0.24	0.92	0.19	0.25	1.21	1.54	0.61
17	---	0.34	0.19	0.34	1.06	0.24	0.96	0.24	0.36	1.27	1.85	0.77
18	---	0.22	0.22	0.43	1.02	0.24	1.03	0.24	0.54	1.40	1.91	0.94
19	---	-0.37	0.26	0.63	0.81	0.24	1.11	0.21	0.77	1.46	1.06	1.10
20	---	-0.10	0.38	0.68	0.02	0.32	1.04	0.24	0.97	1.54	1.04	1.21
21	---	0.02	0.42	0.72	-0.04	0.38	0.29	0.30	0.90	1.53	0.76	1.28
22	0.43	0.09	0.29	0.91	0.11	0.42	0.29	0.36	0.70	1.60	0.96	1.32
23	0.52	0.11	0.20	0.99	0.16	0.46	0.40	0.04	0.90	1.70	1.10	---
24	0.57	-0.35	0.26	0.79	0.20	0.46	0.48	0.20	1.00	1.94	1.08	---
25	0.54	-0.10	0.37	0.99	0.21	0.21	0.20	0.20	1.12	2.20	-0.20	---
26	0.10	0.00	0.46	0.99	0.22	0.19	0.21	0.20	1.27	2.33	-0.20	---
27	0.15	0.08	0.40	0.90	0.23	0.19	0.27	0.25	1.31	2.45	-0.20	---
28	0.18	0.14	0.29	0.88	0.22	0.21	0.42	0.39	1.22	2.55	-0.21	---
29	0.23	0.17	0.17	0.99	0.19	-0.04	0.60	0.54	1.41	2.63	-0.12	---
30	0.31	0.19	0.19	1.12	---	0.06	0.41	0.55	1.45	2.63	0.19	---
31	0.41	---	0.22	1.24	---	-0.03	---	-0.25	---	2.48	0.26	---
MEAN	---	0.11	0.20	0.53	0.65	0.18	0.53	0.25	0.73	1.39	1.06	---
MAX	---	0.49	0.46	1.24	1.23	0.46	1.11	0.63	1.45	2.63	2.78	---
MIN	---	-0.37	-0.11	0.16	-0.04	-0.20	0.09	-0.30	-0.02	0.09	-0.21	---



**422803087475301 Lake County, IL, Local number, 46N12E-14.6g1**

**LOCATION.**— Lat 42°28'03", long 87°47'53" (NAD of 1927), in SW1/4NE1/4NW1/4 sec. 14, T.46 N., R.12 E., 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.**— Diameter 10 in., depth 940 ft, cased to 589 ft, unscreened, drilled observation artesian well.

**PERIOD OF RECORD.**—

GROUND-WATER LEVELS: November 1988 to September 1997, December 1998 to current year (fragmentary). Miscellaneous water-level measurements from December 1981 to November 1988 are available in files of the U.S. Geological Survey.

**INSTRUMENTATION.**— Manual steel-tape measurement made every 2 months.

**DATUM.**— Land-surface datum is 586 ft above NGVD of 1929. Measuring point: Top coupling on 1.25-in. plastic pipe, 2.73 ft above land-surface datum.

**REMARKS.**— Ground-water levels affected by regional pumping.

**EXTREMES FOR PERIOD OF RECORD.**—

GROUND-WATER LEVELS: Highest water level, 208.11 ft below land-surface datum, July 12, 2004; lowest, 235.35 ft below land-surface datum, Oct. 30, 1990.

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**WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

	<b>WATER LEVEL</b>		<b>WATER LEVEL</b>		<b>WATER LEVEL</b>		<b>WATER LEVEL</b>
OCT 07	212.86	FEB 05	211.06	MAY 18	209.56	SEP 13	211.78
DEC 08	211.69	MAR 29	210.03	JUL 12	208.11		
WATER YEAR 2004		HIGH 208.11		JUL 12		LOW 212.86	OCT 07

**422803087475302 Lake County, IL, Local number, 46N12E-14.6g2**

**LOCATION.**— Lat 42°28'03", long 87°47'53" (NAD of 1927), in SW1/4NE1/4NW1/4 sec. 14, T.46 N., R.12 E., 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.**— One of three piezometers in 10-in. borehole, diameter 1.25 in., depth 2,264 ft, cased to 2,244 ft, 2-in. screen, drilled observation artesian well.

**PERIOD OF RECORD.**—

GROUND-WATER LEVELS: November 1988 to September 1997, December 1998 to current year (fragmentary). Miscellaneous water-level measurements from December 1981 to November 1988 are available in files of the U.S. Geological Survey.

**INSTRUMENTATION.**— Manual steel-tape measurement made every 2 months.

**DATUM.**— Land-surface datum is 586 ft above NGVD of 1929. Measuring point: Top coupling on 1.25-in. plastic pipe, 2.67 ft above land-surface datum.

**REMARKS.**— Ground-water levels affected by regional pumping.

**EXTREMES FOR PERIOD OF RECORD.**—

GROUND-WATER LEVELS: Highest water level, 197.88 ft below land-surface datum, Dec. 14, 1988; lowest, 208.37 ft below land-surface datum, Nov. 6, 1992.

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**WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

	<b>WATER LEVEL</b>		<b>WATER LEVEL</b>		<b>WATER LEVEL</b>		<b>WATER LEVEL</b>
OCT 07	199.68	FEB 05	199.74	MAY 18	199.28	SEP 13	199.33
DEC 08	199.44	MAR 29	199.33	JUL 12	198.89		
WATER YEAR 2004		HIGH 198.89		JUL 12		LOW 199.74	FEB 05

**422803087475303 Lake County, IL, Local number, 46N12E-14.6g3**

**LOCATION.**— Lat 42°28'03", long 87°47'53" (NAD of 1927), in SW1/4NE1/4NW1/4 sec. 14, T.46 N., R.12 E., 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.**— One of three piezometers in 10-in. borehole, diameter 1.25 in., depth 1,684 ft, cased to 1,666 ft, 2-in. screen, drilled observation artesian well.

**PERIOD OF RECORD.**—

GROUND-WATER LEVELS: November 1988 to September 1997, December 1998 to current year (fragmentary). Miscellaneous water-level measurements from December 1981 to November 1988 are available in files of the U.S. Geological Survey.

**INSTRUMENTATION.**— Manual steel-tape measurement made every 2 months.

**DATUM.**— Land-surface datum is 586 ft above NGVD of 1929. Measuring point: Top coupling on 1.25-in. plastic pipe, 2.67 ft above land-surface datum.

**REMARKS.**— Ground-water levels affected by regional pumping.

**EXTREMES FOR PERIOD OF RECORD.**—

GROUND-WATER LEVELS: Highest water level, 199.57 ft below land-surface datum, Oct. 23, 2000; lowest, 232.7 ft below land-surface datum, Oct. 18, Nov. 12, 18, 19, 28, 29, 1989.

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**WATER LEVELS, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

	<b>WATER LEVEL</b>		<b>WATER LEVEL</b>		<b>WATER LEVEL</b>		<b>WATER LEVEL</b>
OCT 07	209.07	FEB 05	208.47	MAY 18	207.34	SEP 13	207.55
DEC 08	208.55	MAR 29	207.73	JUL 12	206.58		
WATER YEAR 2004		HIGH 206.58		JUL 12		LOW 209.07	OCT 07

**422803087475304 Lake County, IL, Local number, 46N12E-14.6g4**

**LOCATION.**— Lat 42°28'03", long 87°47'53" (NAD of 1927), in SW1/4NE1/4NW1/4 sec. 14, T.46 N., R.12 E., 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.**— One of three piezometers in 10-in. borehole, diameter 1.25 in., depth 1,203 ft, cased to 1,186 ft, 2-in. screen, drilled observation artesian well.

**PERIOD OF RECORD.**—

GROUND-WATER LEVELS: November 1988 to September 1997, December 1998 to current year. Miscellaneous water-level measurements from December 1981 to November 1988 are available in files of the U.S. Geological Survey.

**INSTRUMENTATION.**— Electronic data logger—60-minute recording.

**DATUM.**— Land-surface datum is 586 ft above NGVD of 1929. Measuring point: Top coupling on 1.25-in. plastic pipe, 2.73 ft above land-surface datum.

**REMARKS.**— Ground-water levels affected by regional pumping.

**EXTREMES FOR PERIOD OF RECORD.**—

GROUND-WATER LEVELS: Highest water level, 206.79 ft below land-surface datum, April 12, 2001; lowest, 235.66 ft below land-surface datum, Dec. 22, 1989.

**EXTREMES FOR CURRENT YEAR.**—

GROUND-WATER LEVELS: Highest water level 207.03 ft below land-surface datum, May 31; lowest, 211.98 ft below land-surface datum, Oct. 2.

**DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY MAXIMUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	211.96	211.20	210.40	209.74	209.27	208.57	208.23	208.00	207.33	207.62	209.68	210.85
2	211.98	210.97	210.44	209.33	209.22	208.90	208.24	208.05	207.65	207.63	209.76	210.71
3	211.70	210.87	210.31	209.55	209.28	208.89	208.16	208.14	207.84	207.50	209.80	210.57
4	211.65	210.59	210.14	209.52	209.46	208.73	208.28	207.95	207.81	207.46	209.94	210.53
5	211.83	210.87	210.10	209.71	209.43	208.36	208.37	208.04	207.65	207.73	210.25	210.43
6	211.89	210.92	210.09	209.77	208.86	208.46	208.15	207.98	207.51	207.53	210.34	210.21
7	211.77	211.09	210.07	209.77	209.27	208.58	208.07	208.27	207.52	207.53	210.31	210.33
8	211.76	211.14	209.92	209.67	209.29	208.58	207.98	208.02	207.56	207.65	210.31	210.33
9	211.69	211.14	209.78	209.70	209.03	208.73	208.18	207.92	207.58	207.73	210.17	210.34
10	211.60	210.94	209.51	209.74	208.99	208.72	208.19	207.98	207.53	207.77	210.05	210.49
11	211.56	210.43	209.91	209.51	208.98	208.54	208.27	207.99	207.44	207.70	210.22	210.68
12	211.68	210.38	210.04	209.37	209.09	208.72	208.22	207.90	207.56	207.61	210.45	210.87
13	211.71	210.69	210.06	209.51	209.05	208.74	208.10	207.92	207.45	207.59	210.67	210.94
14	211.55	210.69	209.73	209.36	209.02	208.60	208.14	208.05	207.53	207.56	210.88	210.92
15	211.64	210.45	209.63	209.36	209.25	208.69	208.09	208.21	207.67	207.61	211.00	210.87
16	211.75	210.38	209.49	209.36	209.23	208.51	207.99	208.19	207.63	207.61	210.95	211.19
17	211.78	210.41	209.58	209.28	209.25	208.37	208.11	207.98	207.58	207.85	210.80	211.36
18	211.60	210.03	209.56	209.35	209.22	208.57	208.02	207.95	207.67	208.05	210.67	211.55
19	211.53	210.12	209.76	209.47	208.85	208.64	208.16	207.94	207.84	208.06	210.78	211.62
20	211.35	210.10	209.79	209.46	208.45	208.58	208.13	207.75	207.65	208.17	210.79	211.59
21	211.22	210.22	209.72	209.43	208.87	208.72	207.90	207.88	207.43	208.32	210.80	211.48
22	211.25	210.11	209.54	209.41	208.90	208.72	208.13	207.61	207.48	208.59	210.82	211.48
23	211.22	209.88	209.57	209.41	208.83	208.54	208.14	207.43	207.46	208.86	210.87	211.43
24	211.24	210.24	209.64	209.28	208.96	208.38	208.20	207.65	207.65	209.00	210.94	211.47
25	211.36	210.24	209.78	209.31	209.03	208.42	207.86	207.53	207.66	209.04	211.01	211.62
26	211.35	210.08	209.82	209.04	208.98	208.45	207.90	207.53	207.63	209.03	211.04	211.67
27	211.19	210.03	209.78	208.99	209.01	208.46	207.99	207.45	207.65	208.99	211.04	211.55
28	210.83	210.00	209.46	209.18	208.95	208.26	207.87	207.65	207.65	209.02	210.97	211.48
29	210.90	210.07	209.41	209.19	208.83	208.28	207.97	207.70	207.65	209.06	210.95	211.47
30	210.90	210.02	209.55	209.13	—	208.18	207.94	207.43	207.66	209.18	210.91	211.55
31	211.05	—	209.74	209.25	—	208.25	—	207.21	—	209.49	210.90	—
MEAN	211.50	210.48	209.82	209.42	209.06	208.55	208.10	207.85	207.60	208.15	210.58	211.05
MAX	211.98	211.20	210.44	209.77	209.46	208.90	208.37	208.27	207.84	209.49	211.04	211.67
MIN	210.83	209.88	209.41	208.99	208.45	208.18	207.86	207.21	207.33	207.46	209.68	210.21

**422803087475304 Lake County, IL, Local number, 46N12E-14.6g4--Continued**

<b>CAL</b>	YR	2003	MEAN	209.68	HIGH	207.48	LOW	212.78
<b>WTR</b>	YR	2004	MEAN	209.35	HIGH	207.21	LOW	211.98

## MISCELLANEOUS GROUND-WATER LEVELS FOR CAMPTON TOWNSHIP, KANE COUNTY, ILLINOIS

[?, unknown data; –, measurement unavailable]

STATION NUMBER	STATION NAME	GEOLOGIC UNIT	MEASURING	DEPTH OF	DATE	DEPTH TO	WATER-LEVEL ALTITUDE (FEET ABOVE NGVD OF 1929)
			POINT OPEN INTERVAL ALTITUDE (FEET ABOVE NGVD OF 1929)	(FEET BELOW MEASURING POINT)		WATER (FEET BELOW MEASURING POINT)	
415333088241701	40N7E-26.5H1	Bedrock	802	45-120	May	9.5	792.5
415348088263501	40N7E-33.5A2	Bedrock	830	?-218	May	59.0	771.0
415349088243601	40N7E-35.7A1	Bedrock	805	88-107	May	42.1	762.9
415353088241601	40N7E-26.5H1	Bedrock	781	57-160	May	21.0	760.0
415355088243801	40N7E-35.7B1	Bedrock	813	91-200	May	50.7	762.3
415402088291601	40N7E-31.7C1	Bedrock	895	?-190	May	92.5	802.5
415406088241401	40N7E-34.4C1	Bedrock	780	53-170	May	16.5	763.5
415410088245001	40N7E-34.1D1	Bedrock	821	93-200	May	54.3	766.7
415410088245901	40N7E-34.1D2	Bedrock	840	?	May	59.4	780.6
415417088245301	40N7E-34.1E1	Bedrock	831	94-140	May	64.0	767.0
415421088233401	40N7E-36.8F1	Pleistocene sand and gravel	813	?	May	31.2	781.8
415421088265601	40N7E-33.7F1	Pleistocene sand and gravel	901	?-212	May	129.6	771.4
415423088251401	40N7E-34.3F1	Bedrock	840	105-150	May	15.7	824.3
415431088243501	40N7E-35.7G1	Bedrock	834	93-375	May	49.8	784.2
415433088253401	40N7E-34.7F1	Bedrock	850	111-300	May	58.3	791.7
415433088253501	40N7E-34.6H1	Bedrock	895	148-220	May	102.1	792.9
415436088242601	40N7E-35.6H1	Bedrock	793	50-120	May	11.6	781.4
415440088272401	40N7E-29.2A1	Bedrock	892	?-380	May	105.5	786.5
415446088250201	40N7E-27.2B1	Bedrock	858	120-230	May	47.9	810.1
415451088251201	40N7E-27.3B2	Bedrock	910	175-240	May	55.8	854.2
415451088251401	40N7E-27.3B1	Bedrock	930	182-287	May	125.2	804.8
415452088261101	40N7E-28.2C1	Bedrock	925	207-280	May	142.4	782.6
415453088251401	40N7E-27.3C1	Bedrock	920	204-295	May	127.1	792.9
415454088231901	40N7E-25.6B1	Bedrock	845	115-210	May	71.0	774.0
415455088230601	40N7E-25.5C2	Bedrock	880	161-260	May	135.3	744.7
415455088240101	40N7E-26.3C1	Bedrock	794	?-200	May	11.7	782.3
415457088230801	40N7E-25.5C1	Bedrock	840	128-240	May	85.7	754.3
415458088225201	40N7E-25.3C1	Bedrock	845	>160	May	98.6	746.4
415503088230601	40N7E-25.4D1	Bedrock	836	130-180	May	93.5	742.5
415504088271101	40N7E-28.8D1	Pleistocene sand and gravel	918	?-200	May	129.7	788.3
415508088231901	40N7E-25.6E1	Bedrock	814	88-160	May	31.3	782.7
415510088231901	40N7E-25.6E2	Bedrock	808	84-160	May	25.5	782.5
415511088225201	40N7E-25.3E1	Maquoketa, Galena, Platteville, and Ancell Groups	818	126-680	May	102.9	715.1
415512088232001	40N7E-25.6E3	Bedrock	803	72-150	May	17.8	785.2
415514088242701	40N7E-26.6F1	Bedrock	835	?	May	54.8	780.2
415525088243901	40N7E-26.7G1	Bedrock	840	86-295	May	58.8	781.2
415525088244701	40N7E-26.8H2	Bedrock	830	89-170	May	57.0	773.0
415527088250101	40N7E-27.2H1	Bedrock	834	95-515	May	294.3	539.7
415528088250301	40N7E-27.2H2	Bedrock	834	?-485	May	55.7	778.3

415532088224201	40N7E-25.2H1	Pleistocene sand and gravel	816	162-182	May	47.9	768.2
415532088253901	40N7E-22.6A1	Bedrock	902	163-280	May	132.3	769.7
415534088250501	40N7E-22.2A1	Galena, Platteville and Ancell Groups	862	360-700	May	369.7	492.3
415536088223901	40N7E-24.1A2	Pleistocene sand and gravel	807	155-175	May	34.9	772.1
415536088224601	40N7E-24.2A1	Pleistocene sand and gravel	814	?-175	May	41.2	772.8
415538088244001	40N7E-23.7A1	Bedrock	842	?-180	May	72.1	769.9
415540088224001	40N7E-24.1A1	Pleistocene sand and gravel	802	150-165	May	29.1	772.9
415544088252601	40N7E-22.6B1	Bedrock	886	?-300	May	98.4	787.6
415545088224201	40N7E-24.2B1	Pleistocene sand and gravel	792	145-165	May	24.9	767.1
415546088241201	40N7E-23.4B1	Bedrock	854	110-260	May	67.9	786.1
415547088263901	40N7E-21.5C1	Pleistocene sand and gravel	920	252-260	May	114.4	805.6
415552088223401	40N7E-24.1C1	Bedrock	800	165-400	May	134.7	665.3
415553088263901	40N7E-21.5D1	Pleistocene sand and gravel	900	33-41	May	15.1	884.9
415555088272001	40N7E-20.2D1	Pleistocene sand and gravel	906	?-240	May	80.6	825.4
415600088270001	40N7E-21.7E1	Maquoketa, Galena, Platteville and Ancell Groups	904	240-710	May	258.7	645.3
415600088271201	40N7E-20.1E1	Pleistocene sand and gravel	905	?-230	May	72.9	832.1
415600088274201	40N7E-20.4E1	Galena, Platteville and Ancell Groups	966	?-800	May	>300	<666
415600088280301	40N7E-20.6E2	Pleistocene sand and gravel	953	?-245	May	88.5	864.5
415601088275701	40N7E-20.6E1	Pleistocene sand and gravel	967	?-276	May	112.3	854.7
415602088231901	40N7E-16.6F1	Bedrock	804	149-320	May	69.7	734.3
415603088254301	40N7E-22.6E1	Pleistocene sand and gravel	886	?-215	May	81.9	804.1

415603088262701	40N7E-21.3E3	Pleistocene sand and gravel	908	?-212	May	109.8	798.2
415603088270901	40N7E-21.8F1	Maquoketa, Galena, Platteville and Ancell Groups	899	?-850	May	59.2	839.8
415603088280501	40N7E-20.7F1	Bedrock	953	250-300	May	88.1	864.9
415604088272201	40N7E-20.2F1	Bedrock	893	211-300	May	51.2	841.8
415607088225901	40N7E-24.4F1	Bedrock	826	171-220	May	94.5	731.5
415609088254901	40N7E-22.7F2	Pleistocene sand and gravel	883	210-238	May	85.7	797.3
415609088255201	40N7E-22.7F1	Pleistocene sand and gravel	883	236-240	May	87.1	795.9
415611088241601	40N7E-23.5F1	Bedrock	816	147-350	May	34.1	781.9
415613088225601	40N7E-24.3G1	Bedrock	847	196-250	May	120.7	726.3
415613088230301	40N7E-24.4G1	Bedrock	839	186-250	May	113.0	726.0
415613088261401	40N7E-26.2G1	Pleistocene sand and gravel	904	?	May	110.5	793.5
415614088231201	40N7E-24.5G1	Bedrock	825	167-220	May	101.5	723.5
415614088260501	40N7E-21.1G1	Pleistocene sand and gravel	902	?-235	May	104.4	797.6
415615088230601	40N7E-24.4G2	Bedrock	830	175-225	May	102.6	727.4
415616088254501	40N7E-22.7G1	Pleistocene sand and gravel	880	?-210	May	80.5	799.5
415617088231201	40N7E-24.5G2	Bedrock	812	149-205	May	81.7	730.3
415618088231001	40N7E-24.5G3	Bedrock	812	149-220	May	80.4	731.6
415621088223901	40N7E-24.1H1	Pleistocene sand and gravel	868	?-143	May	82.9	785.1
415623088224001	40N7E-24.1H2	Pleistocene sand and gravel	851	?-116	May	58.6	792.4
415623088264901	40N7E-21.6H2	Bedrock	869	261-280	May	76.5	792.5
415624088264701	40N7E-16.6A1	Bedrock	866	194-280	May	67.7	798.3
415628088225301	40N7E-13.3A1	Bedrock	804	156-450	May	81.7	722.3
415630088223401	40N7E-13.1A2	Bedrock	812	175-400	May	77.5	734.5
415630088223701	40N7E-13.1A1	Pleistocene sand and gravel	811	57-63	May	18.4	792.6
415631088260401	40N7E-16.1B1	Bedrock	898	234-238	May	95.3	802.7
415638088280801	40N7E-17.7C1	Bedrock	912	?-240	May	60.4	851.6
415640088241901	40N7E-14.5C1	Bedrock	827	163-220	May	45.5	781.5
415642088242201	40N7E-14.5C2	Bedrock	825	163-220	May	43.8	781.2
415642088263101	40N7E-16.3C1	Pleistocene sand and gravel	846	?-186	May	24.7	821.3
415642088263102	40N7E-16.4C1	Pleistocene sand and gravel	851	?-186	May	17.4	833.6
415643088243201	40N7E-14.6C1	Bedrock	829	172-225	May	48.5	780.5
415643088254001	40N7E-15.6D1	Bedrock	872	248-290	May	67.9	804.1



415645088241601	40N7E-14.4D1	Bedrock	826	162-200	May	46.0	780.0
415646088290101	40N7E-18.5D1	Pleistocene sand and gravel	933	?-215	May	89.3	843.7
415647088243601	40N7E-14.7D1	Bedrock	826	174-220	May	44.0	782.0
415647088285701	40N7E-18.4D1	Pleistocene sand and gravel	942	?-213	May	98.2	843.8
415648088242201	40N7E-14.5D1	Bedrock	827	172-260	May	41.8	785.2
415651088245301	40N7E-15.1E1	Bedrock	857	?->160	May	55.0	802.0
415651088280601	40N7E-17.7E1	Pleistocene sand and gravel	946	?-242	May	133.7	812.3
415651088290901	40N7E-18.6E1	Pleistocene sand and gravel	932	?-230	May	103.4	828.6
415659088245301	40N7E-15.1F1	Bedrock	861	200-240	May	54.8	806.2
415705088253201	40N7E-15.5G1	Bedrock	858	202-320	May	54.8	803.2
415711088243401	40N7E-14.6H1	Bedrock	819	?-400	May	271.0	548.0
415720088232801	40N7E-12.7A1	Bedrock	790	133-260	May	89.6	700.4
415722088265501	40N7E-10.6B1	Pleistocene sand and gravel	931	?-226	May	120.0	811.0
415729088241901	40N7E-11.5B1	Bedrock	850	203-260	May	84.9	765.1
415731088260501	40N7E-9.1B1	Pleistocene sand and gravel	925	?-252	May	119.0	806.0
415736088273101	40N7E-3.2D1	Bedrock	938	242-365	May	114.1	823.9
415738088243401	40N7E-11.6D1	Galena, Platteville and Ancell Groups	830	370-660	May	396.0	434.0
415738088253501	40N7E-10.5D1	Bedrock	901	225-300	May	104.1	796.9
415741088245301	40N7E-10.1D1	Pleistocene sand and gravel	851	139-145	May	51.0	800.0
415742088253301	40N7E-10.5D2	Bedrock	905	242-500	May	353.0	552.0
415746088233301	40N7E-12.7E3	Bedrock	854	179-296	May	160.0	694.0
415746088234901	40N7E-11.1E1	Bedrock	855	196-305	May	164.5	690.5
415748088250201	40N7E-10.2E1	Pleistocene sand and gravel	861	?-170	May	59.3	801.7
415748088255101	40N7E-10.7E1	Bedrock	910	246-620	May	250.2	659.8
415749088233501	40N7E-12.7E1	Bedrock	840	165-300	May	143.2	696.8
415750088233101	40N7E-12.7E2	Bedrock	826	153-270	May	132.8	693.2
415756088233001	40N7E-12.7F1	Pleistocene sand and gravel	826	?-50	May	9.5	816.5
415758088245101	40N7E-11.8G1	Bedrock	865	198-260	May	58.3	806.7
415802088245201	40N7E-11.8H1	Pleistocene sand and gravel	869	?-200	May	69.8	799.2
415803088250501	40N7E-10.2H1	Pleistocene sand and gravel	885	200-210	May	89.2	795.8
415806088241001	40N7E-11.4H1	Bedrock	900	264-295	May	98.0	802.0

415812088240101	40N7E-2.3A1	Pleistocene sand and gravel	896	?-251	May	102.4	793.6
415813088243901	40N7E-2.7H1	Bedrock	868	199-500	May	165.2	702.8
415813088250201	40N.7E-3.2A6	Pleistocene sand and gravel	878	186-200	May	78.5	799.5
415813088250701	40N7E-3.2A4	Bedrock	866	?	May	71.0	795.0
415814088223501	40N7E-1.1A1	Bedrock	821	66-200	May	44.8	776.2
415814088250701	40N7E-3.2A5	Pleistocene sand and gravel	888	186-200	May	96.0	792.0
415818088245401	40N.7E-3.1B1	Pleistocene sand and gravel	873	170-185	May	76.2	796.8
415818088250201	40N.7E-3.2B1	Pleistocene sand and gravel	891	?-200	May	94.2	796.8
415819088262701	40N7E-4.3B1	Pleistocene sand and gravel	929	42-46	May	3.7	925.3
415820088253101	40N7E-3.5B1	Bedrock	898	219-380	May	119.0	779.0
415823088254201	40N7E-3.6C1	Bedrock	909	225-250	May	119.5	789.5
415825088263501	40N7E-4.2C1	Bedrock	934	153-580	May	425.0	509.0
415830088261501	40N7E-4.2D1	Bedrock	931	152-505	May	294.0	637.0
415838088223501	40N7E-1.1E1	Bedrock	818	76-180	May	21.9	796.1
415844088230501	40N7E-1.4F1	Bedrock	846	148-240	May	58.2	787.8
415852088224701	40N7E-1.2G1	Bedrock	824	88-240	May	31.0	793.0
415854088225601	40N7E-1.3G2	Bedrock	834	110-280	May	108.5	725.5
415855088225601	40N7E-1.3G1	Bedrock	838	120-175	May	51.0	787.0
415900088225601	40N7E-1.3H1	Bedrock	841	135-185	May	58.6	782.4
415901088224201	40N7E-1.1H1	Bedrock	825	?-250	May	65.9	759.1
415904088225301	40N7E-1.3H2	Bedrock	843	20-320	May	141.0	702.0

**MISCELLANEOUS GROUND-WATER LEVELS FOR CAMPTON TOWNSHIP, KANE COUNTY, ILLINOIS**

[?, unknown data; –, measurement unavailable]

STATION NUMBER	STATION NAME	GEOLOGIC UNIT	MEASURING	DEPTH OF	DATE	DEPTH TO	WATER-LEVEL ALTITUDE (FEET ABOVE NGVD OF 1929)
			POINT OPEN INTERVAL ALTITUDE (FEET ABOVE NGVD OF 1929)	(FEET BELOW MEASURING POINT)		WATER (FEET BELOW MEASURING POINT)	
415348088263501	40N7E-33.5A2	Bedrock	830	?-218	June	59.9	770.2
415349088243601	40N7E-35.7A1	Bedrock	805	88-107	June	42.4	762.7
415353088241601	40N7E-35.5A1	Bedrock	781	57-160	June	21.7	759.4
415355088243801	40N7E-35.7B1	Bedrock	813	91-200	June	49.4	763.6
415402088263501	40N7E-33.5A1	Bedrock	828	118-183	June	55.3	772.7
415402088291601	40N7E-31.7C1	Bedrock	895	?-190	June	95.9	799.1
415403088263501	40N7E-33.4E1	Bedrock	853	UNKNOWN	June	79.2	773.9
415406088241401	40N7E-34.4C1	Bedrock	780	53-170	June	16.8	763.2
415410088245001	40N7E-34.1D1	Bedrock	821	93-200	June	60.3	760.7
415410088245901	40N7E-34.1D2	Bedrock	840	?	June	78.0	762.0
415417088245301	40N7E-34.1E1	Bedrock	831	94-140	June	71.0	760.0
415421088233401	40N7E-36.8F1	Pleistocene sand and gravel	813	?	June	32.0	781.1
415421088265601	40N7E-33.7F1	Pleistocene sand and gravel	901	?-212	June	131.5	769.6
415423088251401	40N7E-34.3F1	Bedrock	840	105-150	June	21.9	818.2
415431088243501	40N7E-35.7G1	Bedrock	834	93-375	June	54.0	780.0
415433088253401	40N7E-34.7F1	Bedrock	850	111-300	June	66.5	783.5
415433088253501	40N7E-34.6H1	Bedrock	895	148-220	July	114.9	780.1
415433088253601	40N7E-34.7H1	Bedrock	865	?-140	July	89.6	775.4
415436088242601	40N7E-35.6H1	Bedrock	793	50-120	June	15.1	777.9
415440088272401	40N7E-29.2A1	Bedrock	892	?-380	June	112.3	779.7
415442088254601	40N7E-27.7A1	Bedrock	940	?-280	June	152.4	787.6
415446088250201	40N7E-27.2B1	Bedrock	858	120-230	June	56.7	801.4
415449088261401	40N7E-28.2B1	Bedrock	942	215-280	June	162.3	779.9
415451088251201	40N7E-27.3B2	Bedrock	910	175-240	June	55.9	854.1
415451088251401	40N7E-27.3B1	Bedrock	930	182-287	July	143.4	786.6
415451088251701	40N7E-27.4B1	Unknown	928	Unknown	June	106.8	821.2
415452088261101	40N7E-28.2C1	Bedrock	925	207-280	June	151.9	773.1
415453088251401	40N7E-27.3C1	Bedrock	920	204-295	July	148.4	771.6
415454088231901	40N7E-25.6B1	Bedrock	845	115-210	June	72.3	772.8
415455088230601	40N7E-25.5C2	Bedrock	880	161-260	June	138.4	741.6
415455088240101	40N7E-26.3C1	Bedrock	794	?-200	July	13.3	780.7
415457088230701	40N7E-25.5C3	Bedrock	840	118-205	June	78.4	761.5
415457088230801	40N7E-25.5C1	Bedrock	840	128-240	June	87.8	752.3
415458088225201	40N7E-25.3C1	Bedrock	845	>160	June	99.7	745.3
415503088230601	40N7E-25.4D1	Bedrock	836	130-180	June	94.7	741.3
415504088271101	40N7E-28.8D1	Pleistocene sand and gravel	918	?-200	June	132.2	785.8
415508088231901	40N7E-25.6E1	Bedrock	814	88-160	June	32.4	781.7
415510088231901	40N7E-25.6E2	Bedrock	808	84-160	June	26.4	781.6
415511088225201	40N7E-25.3E1	Maquoketa, Galena, Platteville, and Ancell Groups	818	126-680	June	95.8	722.2
415512088232001	40N7E-25.6E3	Bedrock	803	72-150	June	18.2	784.8
415514088242701	40N7E-26.6F1	Bedrock	835	?	June	66.0	769.0
415515088242701	40N7E-26.6F2	Bedrock	835	?-340	June	105.2	729.8

415525088243901	40N7E-26.7G1	Bedrock	840	86-295	June	73.0	767.0
415525088244701	40N7E-26.8H2	Bedrock	830	89-170	June	69.1	760.9
415527088250101	40N7E-27.2H1	Bedrock	834	95-515	June	298.0	536.0
415528088244801	40N7E-26.8H1	Bedrock	818	?-205	June	57.2	760.8
415528088250301	40N7E-27.2H2	Bedrock	834	?-485	June	56.0	778.0
415532088224201	40N7E-25.2H1	Pleistocene sand and gravel	816	162-182	June	48.7	767.3
415532088245301	40N7E-22.1A1	Bedrock	836	?-210	June	49.0	787.0
415532088253901	40N7E-22.6A1	Bedrock	902	163-280	June	132.9	769.1
415533088241701	40N7E-26.5H1	Bedrock	802	45-120	June	11.7	790.3
415534088242901	40N7E-23.6A1	Bedrock	810	?-255	June	53.3	756.7
415534088250501	40N7E-22.2A1	Galena, Platteville and Ancell Groups	862	360-700	June	368.9	493.1
415536088223901	40N7E-24.1A2	Pleistocene sand and gravel	807	155-175	June	35.5	771.5
415536088224601	40N7E-24.2A1	Pleistocene sand and gravel	814	?-175	June	42.7	771.3
415536088260901	40N7E-21.1A1	Pleistocene sand and gravel	897	?-227	July	119.4	777.7
415538088244001	40N7E-23.7A1	Bedrock	842	?-180	June	88.3	753.7
415540088224001	40N7E-24.1A1	Pleistocene sand and gravel	802	150-165	June	29.8	772.2
415544088252601	40N7E-22.6B1	Bedrock	886	?-300	July	104.5	781.5
415545088224201	40N7E-24.2B1	Pleistocene sand and gravel	792	145-165	June	25.9	766.1
415546088241201	40N7E-23.4B1	Bedrock	854	110-260	June	66.5	787.5
415547088263901	40N7E-21.5C1	Pleistocene sand and gravel	920	252-260	June	119.7	800.3
415552088223401	40N7E-24.1C1	Bedrock	800	165-400	June	74.6	725.4
415553088263901	40N7E-21.5D1	Pleistocene sand and gravel	900	33-41	July	14.5	885.5
415555088272001	40N7E-20.2D1	Pleistocene sand and gravel	906	?-240	June	78.2	827.8
415557088262101	40N7E-21.3E2	Pleistocene sand and gravel	906	218-220	June	115.6	790.7
415559088232901	40N7E-24.5C1	Ancell Group	800	613-875	July		253.0
415600088262201	40N7E-21.3E1	Pleistocene sand and gravel	907	?-218	June	114.6	792.5
415600088270001	40N7E-21.7E1	Maquoketa, Galena, Platteville and Ancell Groups	904	240-710	June	283.4	620.6

415600088271201	40N7E-20.1E1	Pleistocene sand and gravel	905	?-230	June	75.2	829.8
415600088274201	40N7E-20.4E1	Galena, Platteville and Ancell Groups	966	?-800	June	369.0	597.0
415600088275301	40N7E-20.5E1	Pleistocene sand and gravel	966	?-279	June	112.4	853.7
415600088280301	40N7E-20.6E2	Pleistocene sand and gravel	953	?-245	June	90.0	863.0
415601088275701	40N7E-20.6E1	Pleistocene sand and gravel	967	?-276	June	111.5	855.5
415602088231901	40N7E-16.6F1	Bedrock	804	149-320	July	83.4	720.6
415602088264501	40N7E-21.5F1	Pleistocene sand and gravel	905	?-214	June	111.8	793.2
415603088254301	40N7E-22.6E1	Pleistocene sand and gravel	886	?-215	June	86.8	799.2
415603088262701	40N7E-21.3E3	Pleistocene sand and gravel	908	?-212	June	115.1	792.9
415603088270901	40N7E-21.8F1	Maquoketa, Galena, Platteville and Ancell Groups	899	?-850	June	59.0	840.0
415603088271701	40N7E-20.1F1	Pleistocene sand and gravel	911	220-227	June	118.9	792.1
415603088280501	40N7E-20.7F1	Bedrock	953	250-300	June	88.8	864.2
415604088272201	40N7E-20.2F1	Bedrock	893	211-300	July	51.9	841.1
415607088225901	40N7E-24.4F1	Bedrock	826	171-220	July	54.9	771.1
415609088254901	40N7E-22.7F2	Pleistocene sand and gravel	883	210-238	June	93.6	789.4
415609088255201	40N7E-22.7F1	Pleistocene sand and gravel	883	236-240	June	85.4	797.6
415611088241601	40N7E-23.5F1	Bedrock	816	147-350	June	34.8	781.2
415613088225601	40N7E-24.3G1	Bedrock	847	196-250	June	80.7	766.3
415613088230301	40N7E-24.4G1	Bedrock	839	186-250	June	72.8	766.2
415613088235901	40N7E-23.3G1	Ancell Group	810	614-870	July		400.0
415613088261401	40N7E-26.2G1	Pleistocene sand and gravel	904	?	June	128.5	775.6
415614088231201	40N7E-24.5G1	Bedrock	825	167-220	June	60.8	764.2
415614088260501	40N7E-21.1G1	Pleistocene sand and gravel	902	?-235	July	104.9	797.1
415615088230601	40N7E-24.4G2	Bedrock	830	175-225	June	63.6	766.4

415616088254501	40N7E-22.7G1	Pleistocene sand and gravel	880	?-210	July	86.4	793.6
415616088264401	40N7E-21.5H1	Pleistocene sand and gravel	913	?-231	June	120.4	792.6
415616088264501	40N7E-21.5H2	Bedrock	905	234-310	June	114.8	790.2
415617088231201	40N7E-24.5G2	Bedrock	812	149-205	June	40.7	771.4
415618088231001	40N7E-24.5G3	Bedrock	812	149-220	June	40.3	771.7
415621088223901	40N7E-24.1H1	Pleistocene sand and gravel	868	?-143	June	80.3	787.7
415623088224001	40N7E-24.1H2	Pleistocene sand and gravel	851	?-116	June	58.0	793.0
415623088264901	40N7E-21.6H2	Bedrock	869	261-280	June	89.2	779.8
415624088264701	40N7E-16.6A1	Bedrock	866	194-280	June	76.1	789.9
415628088225301	40N7E-13.3A1	Bedrock	804	156-450	June	68.5	735.5
415629088243301	40N7E-14.6A1	Bedrock	826	175-?	June	47.0	779.0
415630088223401	40N7E-13.1A2	Bedrock	812	175-400	June	76.5	735.5
415630088223701	40N7E-13.1A1	Pleistocene sand and gravel	811	57-63	July	19.9	791.1
415631088260401	40N7E-16.1B1	Bedrock	898	234-238	June	101.5	796.5
415632088254301	40N7E-15.6B1	Pleistocene sand and gravel	890	220-230	July	105.3	784.7
415638088280801	40N7E-17.7C1	Bedrock	912	?-240	June	61.9	850.1
415640088241901	40N7E-14.5C1	Bedrock	827	163-220	June	60.4	766.6
415642088242201	40N7E-14.5C2	Bedrock	825	163-220	June	59.4	765.6
415642088243001	40N7E-11.6C2	Maquoketa, Galena, Platteville and Ancell Groups	829	167->500	June	>328	<501
415642088263101	40N7E-16.3C1	Pleistocene sand and gravel	846	?-186	June	29.2	816.8
415642088263102	40N7E-16.4C1	Pleistocene sand and gravel	851	?-186	June	23.0	828.0
415643088243201	40N7E-14.6C1	Bedrock	829	172-225	June	63.4	765.6
415643088254001	40N7E-15.6D1	Bedrock	872	248-290	June	73.2	798.8
415645088241601	40N7E-14.4D1	Bedrock	826	162-200	June	61.5	764.6
415646088290101	40N7E-18.5D1	Pleistocene sand and gravel	933	?-215	June	92.2	840.8
415647088243601	40N7E-14.7D1	Bedrock	826	174-220	June	59.3	766.7
415647088285701	40N7E-18.4D1	Pleistocene sand and gravel	942	?-213	July	97.3	844.7
415648088242201	40N7E-14.5D1	Bedrock	827	172-260	June	57.4	769.7
415651088245301	40N7E-15.1E1	Bedrock	857	?->160	July	63.4	793.6
415651088280601	40N7E-17.7E1	Pleistocene sand and gravel	946	?-242	July	135.8	810.2

415651088290901	40N7E-18.6E1	Pleistocene sand and gravel	932	?-230	July	106.6	825.4
415652088283201	40N7E-18.2E1	Pleistocene sand and gravel	898	?-194	June	45.5	852.5
415654088274801	40N7E-17.5E1	Pleistocene sand and gravel	950	?-245	July	101.6	848.4
415656088235201	40N7E-11.2E1	Bedrock	800	?-270	June	44.5	755.5
415657088223901	40N7E-13.1E2	Unknown	795	Unknown	June	79.9	715.1
415657088224001	40N7E-13.2E1	Bedrock	800	?-260	June	137.0	663.0
415658088224001	40N7E-13.1E1	Pleistocene sand and gravel	790	?-101	June	14.5	775.5
415659088245301	40N7E-15.1F1	Bedrock	861	200-240	June	58.3	802.8
415659088283801	40N7E-18.2F1	Pleistocene sand and gravel	962	?-258	July	115.3	846.7
415701088224101	40N7E-13.2F1	Unknown	785	Unknown	June	131.9	653.1
415705088253201	40N7E-15.5G1	Bedrock	858	202-320	July	59.8	798.2
415711088243401	40N7E-14.6H1	Bedrock	819	?-400	July	303.0	516.1
415715088260501	40N7E-16.1A1	Pleistocene sand and gravel	915	200-207	July	137.6	777.4
415720088232801	40N7E-12.7A1	Bedrock	790	133-260	June	121.7	668.3
415720088241301	40N7E-11.4A2	Pleistocene sand and gravel	836	?-175	June	65.8	770.2
415720088241401	40N7E-11.3A1	Bedrock	836	178-250	June	68.9	767.1
415720088241501	40N7E-11.4A1	Bedrock	840	190-265	June	84.6	755.4
415722088265501	40N7E-10.6B1	Pleistocene sand and gravel	931	?-226	July	126.1	804.9
415723088232601	40N7E-12.7A2	Pleistocene sand and gravel	783	98-110	June	25.8	757.2
415729088241901	40N7E-11.5B1	Bedrock	850	203-260	July	91.2	758.8
415731088260501	40N7E-9.1B1	Pleistocene sand and gravel	925	?-252	July	131.4	793.6
415736088273101	40N7E-3.2D1	Bedrock	938	242-365	June	114.0	824.0
415738088243401	40N7E-11.6D1	Galena, Platteville and Ancell Groups	830	370-660	July	391.2	438.8
415738088253501	40N7E-10.5D1	Bedrock	901	225-300	July	109.5	791.5
415741088232501	40N7E-12.6C1	Bedrock	788	132-235	June	116.9	671.1
415741088245301	40N7E-10.1D1	Pleistocene sand and gravel	851	139-145	June	54.0	797.0
415742088223701	40N7E-12.1D1	Bedrock	790	?-260	June	21.8	768.3
415742088253301	40N7E-10.5D2	Bedrock	905	242-500	July	350.0	555.0
415745088241901	40N7E-11.5E1	Pleistocene sand and gravel	840	?-271	June	93.8	746.2
415746088233301	40N7E-12.7E3	Bedrock	854	179-296	June	179.7	674.3

415746088234901	40N7E-11.1E1	Bedrock	855	196-305	July	181.2	673.8
415747088243101	40N7E-11.6E1	Pleistocene sand and gravel	853	?-206	July	56.0	797.0
415748088250201	40N7E-10.2E1	Pleistocene sand and gravel	861	?-170	June	221.6	639.4
415748088255101	40N7E-10.7E1	Bedrock	910	246-620	July	252.0	658.0
415749088233501	40N7E-12.7E1	Bedrock	840	165-300	June	164.2	675.8
415750088233101	40N7E-12.7E2	Bedrock	826	153-270	June	155.1	670.9
415752088224701	40N7E-12.2F1	Bedrock	837	?-220	June	64.5	772.5
415754088232101	40N7E-12.6F1	Bedrock	827	UNKNOWN	June	161.5	665.5
415754088242201	40N7E-11.5F1	Bedrock	887	?-250	June	89.3	797.7
415754088243301	40N7E-11.6F1	Pleistocene sand and gravel	888	?-239	June	89.0	799.0
415755088252501	40N7E-10.4G1	Pleistocene sand and gravel	891	?-210	June	102.0	789.0
415756088233001	40N7E-12.7F1	Pleistocene sand and gravel	826	?-50	June	10.3	815.7
415757088231501	40N7E-12.4F2	Unknown	882	Unknown	June	222.9	659.1
415757088242801	40N7E-11.7G1	Bedrock	865	?-300	June	189.2	675.8
415758088231401	40N7E-12.4F1	Bedrock	877	195-340	June	208.8	668.2
415758088231501	40N7E-12.4F3	Maquoketa, Galena, Platteville and Ancell Groups	882	191-651	June	>200	<662
415758088245101	40N7E-11.8G1	Bedrock	865	198-260	June	61.9	803.1
415759088250101	40N7E-10.2G1	Pleistocene sand and gravel	853	?-169	June	53.0	800.1
415802088245201	40N7E-11.8H1	Pleistocene sand and gravel	869	?-200	June	72.8	796.2
415803088250501	40N7E-10.2H1	Pleistocene sand and gravel	885	200-210	June	92.8	792.2
415804088251501	40N7E-10.3H1	Pleistocene sand and gravel	886	?-228	June	86.2	799.8
415804088255601	40N7E-10.8H1	Pleistocene sand and gravel	915	220-223	June	135.5	779.5
415806088233001	40N7E-12.7D1	Bedrock	805	137-220	June	118.0	687.0
415806088233101	40N7E-12.8G1	Bedrock	852	177-295	June	179.1	673.0
415806088241001	40N7E-11.4H1	Bedrock	900	264-295	July	101.6	798.4
415809088225101	40N7E-12.3H1	Bedrock	843	?-360	June	130.1	712.9
415809088232901	40N7E-12.1G1	Bedrock	834	81-205	June	55.5	778.6
415812088240101	40N7E-2.3A1	Pleistocene sand and gravel	896	?-251	July	96.7	799.3
415813088243901	40N7E-2.7H1	Bedrock	868	199-500	July	195.2	672.8



415813088250201	40N.7E-3.2A6	Pleistocene sand and gravel	878	186-200	June	72.0	806.0
415813088250701	40N7E-3.2A4	Bedrock	866	?	June	72.0	794.0
415814088223501	40N7E-1.1A1	Bedrock	821	66-200	June	55.8	765.3
415814088250701	40N7E-3.2A5	Pleistocene sand and gravel	888	186-200	June	72.0	816.0
415815088245801	40N7E-3.2A2	Pleistocene sand and gravel	870	180-192	June	68.8	801.2
415817088250001	40N7E-3.2A3	Pleistocene sand and gravel	883	190-200	June	94.7	788.3
415818088245401	40N.7E-3.1B1	Pleistocene sand and gravel	873	170-185	July	80.4	792.6
415818088250001	40N7E-3.2A1	Pleistocene sand and gravel	887	194-204	June	102.0	785.0
415818088250201	40N.7E-3.2B1	Pleistocene sand and gravel	891	?-200	June	98.5	792.5
415819088262701	40N7E-4.3B1	Pleistocene sand and gravel	929	42-46	June	5.4	923.6
415820088253101	40N7E-3.5B1	Bedrock	898	219-380	July	118.9	779.1
415823088254201	40N7E-3.6C1	Bedrock	909	225-250	July	126.0	783.0
415825088223101	40N7E-1.1C2	Unknown	816	Unknown	June	67.8	748.2
415825088223801	40N7E-1.1C1	Pleistocene sand and gravel	827	214-224	June	80.2	746.8
415825088263501	40N7E-4.2C1	Bedrock	934	153-580	July	409.6	524.4
415830088261501	40N7E-4.2D1	Bedrock	931	152-505	June	178.1	752.9
415831088285901	40N7E-6.4E1	Bedrock	976	280-355	June	199.5	776.6
415833088254701	40N7E-3.7D1	Bedrock	903	?-255	June	30.0	873.0
415838088223501	40N7E-1.1E1	Bedrock	818	76-180	June	42.3	775.7
415844088230501	40N7E-1.4F1	Bedrock	846	148-240	June	64.6	781.4
415852088224701	40N7E-1.2G1	Bedrock	824	88-240	June	46.3	777.7
415854088225601	40N7E-1.3G2	Bedrock	834	110-280	June	116.7	717.4
415855088225601	40N7E-1.3G1	Bedrock	838	120-175	June	58.5	779.5
415859088261801	40N7E-4.2H1	Pleistocene sand and gravel	943	?-40	June	21.0	922.1
415900088225601	40N7E-1.3H1	Bedrock	841	135-185	June	64.1	776.9
415901088224201	40N7E-1.1H1	Bedrock	825	?-250	June	74.8	750.2
415904088225301	40N7E-1.3H2	Bedrock	843	20-320	June	161.7	681.3

**Meteorological Data**

**LOCATION.**— Lat 40°06'40", long 88°13'35" (NAD of 1927), in NW1/4NE1/4 sec.18, T.19 N., R.9 E., Champaign County, Hydrologic Unit 05120109, on right bank 300 ft. upstream from Mathews Ave., on University of Illinois campus in Urbana, and at mile 1.6.

**DRAINAGE AREA.**— 4.46 mi<sup>2</sup>, of which 0.88 mi<sup>2</sup> is noncontributing.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: July 1948 to current year.

STAGE: Water years 1994 to current year.

PRECIPITATION: September 2003 to current year.

**REVISED RECORDS.**— WDR IL-75-1: Drainage area. WDR IL-83-1: 1982(M). WDR IL-98: 1979-96 (selected events).

**GAGE.**— Water-stage recorder, phone telemeter, acoustic-velocity meter, rain gage, and Parshall flume. Datum of gage is 694.00 ft. above NGVD. Prior to Oct. 1, 1974, at datum 14.25 ft higher. From Oct. 1, 1974 to Sept. 30, 2001, at datum 14.10 ft. higher. From Apr. 19, 2002 to June 26, 2002, at site 95 ft. downstream at same datum. From June 27, 2002 to July 24, 2003 at site 250 ft. upstream at same datum.

**REMARKS.**— Since Aug. 1, 1960, storm runoff from 0.88 mi<sup>2</sup> at headwaters has been diverted to Saline Branch through the Northwest Diversion Conduit. Prior to the 1970's, effluent from sewage-treatment plant about 0.5 mi upstream from gage. Since July 1999, a retention basin 1.0 mi upstream temporarily detains water during periods of heavy runoff. Water enters the retention basin by gravity flow during periods of heavy runoff, and is pumped out during the recession, with a maximum rate of 20 ft<sup>3</sup>/s not to exceed a maximum in-stream rate of 60 ft<sup>3</sup>/s. Since Oct. 1999, some temporary storage occurs in underground conduits 0.6 mi upstream during runoff events. Channel construction near this gage (03337000) began Aug. 30, 2001. Streamflow diversion pumpage for channel construction began Sept. 1, 2001 causing frequent fluctuations in stage. Channel construction and pumpage for channel construction ended May 6, 2003. PRECIPITATION: Collection, computation, and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 946 ft<sup>3</sup>/s, from rating based on two indirect measurements, Aug. 12, 1993, gage height, 24.03 ft, present datum, from flood marks; minimum daily, 0.03 ft<sup>3</sup>/s, Feb. 12, 1981.

**PRECIPITATION:** Maximum daily total, 2.54 in, March 26, 2004.

**EXTREMES FOR CURRENT YEAR.**—

**PRECIPITATION:** Maximum daily total, 2.54 in, Mar. 26.

**Precipitation, total, inches**  
**WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.08	0.00	0.01	0.03	0.07	0.00	0.21	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.02	0.07	0.25	0.01	0.01
3	0.22	0.00	0.01	0.54	0.00	0.00	0.00	0.00	0.00	0.78	0.00	0.03
4	0.00	0.11	0.06	0.81	0.00	1.24	0.00	0.01	0.00	0.00	0.22	0.00
5	0.00	0.20	0.12	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.01	0.00	0.10	0.02	0.00	0.00	0.02	1.26	0.33	0.00
10	0.00	0.05	0.17	0.00	0.00	0.00	0.00	0.01	1.77	0.22	0.00	0.00
11	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.10	0.68	0.03	0.00	0.00
12	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.69	0.00	0.59	0.00	0.00
14	0.61	0.00	0.00	0.00	0.00	0.08	0.00	0.51	0.00	0.00	0.00	1.69
15	0.00	0.07	0.02	0.00	0.00	0.02	0.00	0.00	0.66	0.00	0.00	0.01
16	0.00	0.02	0.00	0.02	0.00	0.13	0.00	0.00	0.39	0.00	0.00	0.00
17	0.00	0.31	0.00	0.31	0.00	0.04	0.00	0.04	0.00	0.98	0.01	0.00
18	0.00	2.09	0.00	0.00	0.00	0.01	0.00	0.87	0.00	0.00	0.01	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.05	0.03	0.78	0.00	0.00	0.00	0.30	0.00
21	0.00	0.00	0.10	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.61	0.00	0.00	0.00	0.36	0.00	0.00	0.02	0.01	0.00
23	0.00	0.72	0.49	0.00	0.04	0.00	0.00	0.03	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.05	0.22	0.11	0.00	0.00	0.05	0.00

## WABASH RIVER BASIN

**03337000 Boneyard Creek at Urbana, IL--Continued**

<b>25</b>	0.26	0.00	0.00	0.00	0.00	0.63	0.04	0.39	0.35	0.00	0.91	0.00
<b>26</b>	0.00	0.07	0.00	0.00	0.00	2.54	0.00	0.01	0.00	0.00	0.09	0.00
<b>27</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00
<b>28</b>	0.04	0.00	0.69	0.00	0.00	0.52	0.00	0.00	0.00	0.00	0.35	0.00
<b>29</b>	0.00	0.00	0.33	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.22	0.00
<b>30</b>	0.00	0.00	0.00	0.00	---	0.62	0.17	0.19	0.00	0.39	0.00	0.00
<b>31</b>	0.00	---	0.00	0.00	---	0.08	---	0.04	---	0.00	0.02	---
<b>TOTAL</b>	1.13	3.83	2.61	1.69	0.38	6.10	1.58	3.52	3.94	5.31	2.70	1.74
<b>MEAN</b>	0.04	0.13	0.08	0.05	0.01	0.20	0.05	0.11	0.13	0.17	0.09	0.06
<b>MAX</b>	0.61	2.09	0.69	0.81	0.15	2.54	0.78	0.87	1.77	1.26	0.91	1.69

WTR YR 2004 TOTAL 34.53 MEAN 0.09 MAX 2.54

**LOCATION.**— Lat 42°29'21", long 87°55'35" (NAD of 1927), in SE1/4 sec.3, T.46 N., R.11 E., Lake County, Hydrologic Unit 07120004, on 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: July 1967 to current year.

STAGE: Water years 1994 to current year.

PARTIAL RECORD: Occasional low-flow measurements, water years 1961–63, and annual maximum gage heights, water years 1962–66.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–1991 and 1999 to 2001. Additional chemical data for water years 1959–60, 1964–69, 1971–77 are published in Water-Resources Investigations 78–22 and 79–23 as site G 08.

MISCELLANEOUS: Water years 1999–2000; contaminants in streambed sediment, Water years 1998 and 2000; contaminants in fish tissue, Water year 1998.

PRECIPITATION: October 1999 to current year.

**BIOLOGICAL**

ALGAE: Pigment and biomass, Water year 2000.

BENTHIC MACROINVERTEBRATES: Water years 1999–2001.

FISH: Water years 1999–2001.

HABITAT: Water years 1999–2001.

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

**GAGE.**— Water–stage recorder, phone telemeter, raingage, and crest–stage gage. Datum of gage is 662.00 ft above NGVD of 1929. Oct. 17, 1961 to June 29, 1967, crest–stage gage at left downstream side of bridge at datum 4.29 ft higher.

**REMARKS.**— Collection, computation, and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 3,500 ft<sup>3</sup>/s, May 23, 2004, gage height, 11.09 ft, no flow, at times in most years.

**PRECIPITATION:** Maximum daily total, 3.55 in., June 12, 2000.

**EXTREMES FOR CURRENT YEAR.**— Maximum daily total, 1.77 in., Nov. 2, but may have been greater during period of missing record, June 12 to Aug. 30.

Precipitation, total, inches  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.44	0.00	0.00	0.00	0.62	0.00	0.00	0.00	----	----	0.00
2	0.00	1.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	----	----	0.00
3	0.23	0.65	0.00	0.00	0.00	0.01	0.00	0.00	0.00	----	----	0.00
4	0.00	0.69	0.09	0.00	0.00	0.72	0.00	0.00	0.00	----	----	0.00
5	0.00	0.00	0.21	0.00	0.00	0.75	0.00	0.00	0.00	----	----	0.16
6	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	----	----	0.00
7	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.04	0.00	----	----	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.12	----	----	0.00
9	0.00	0.00	0.94	0.00	0.00	0.00	0.00	0.55	0.16	----	----	0.00
10	0.00	0.00	0.74	0.00	0.00	0.01	0.00	0.36	0.20	----	----	0.00
11	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.34	0.07	----	----	0.00
12	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.58	----	----	----	0.00
13	0.02	0.00	0.00	0.00	0.00	0.03	0.00	0.45	----	----	----	0.00
14	0.73	0.00	0.00	0.00	0.00	0.13	0.00	0.62	----	----	----	0.00
15	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	----	----	----	0.67
16	0.00	0.01	0.04	0.00	0.00	0.00	0.00	0.00	----	----	----	0.01
17	0.00	0.20	0.00	0.03	0.00	0.07	0.58	0.57	----	----	----	0.00
18	0.00	0.65	0.00	0.00	0.00	0.05	0.00	0.31	----	----	----	0.00
19	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	----	----	----	0.00
20	0.00	0.00	0.00	0.00	0.05	0.00	0.77	0.20	----	----	----	0.00
21	0.00	0.00	0.00	0.00	0.06	0.00	0.12	1.57	----	----	----	0.00
22	0.00	0.00	0.00	0.00	0.08	0.00	0.00	1.22	----	----	----	0.00

ILLINOIS RIVER BASIN  
**05527800 Des Plaines River at Russell, IL--Continued**

<b>23</b>	0.00	0.32	0.00	0.00	0.00	0.00	0.00	0.06	----	----	----	0.00
<b>24</b>	0.28	0.01	0.00	0.00	0.00	0.00	0.81	0.43	0.00	----	----	0.00
<b>25</b>	0.05	0.00	0.00	0.00	0.00	0.00	0.15	0.02	0.05	----	----	0.00
<b>26</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.01	0.00	----	----	0.00
<b>27</b>	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	----	----	0.00
<b>28</b>	0.03	0.00	0.22	0.00	0.00	0.00	0.80	0.00	0.00	----	----	0.00
<b>29</b>	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	----	----	0.00
<b>30</b>	0.00	0.00	0.00	0.00	----	0.00	0.15	0.93	----	----	----	0.00
<b>31</b>	0.00	----	0.00	0.00	----	0.00	----	0.17	----	----	0.00	----
TOTAL	1.44	4.78	2.27	0.04	0.19	4.65	2.09	8.23	----	----	----	0.84
MEAN	0.05	0.16	0.07	0.00	0.01	0.15	0.07	0.27	----	----	----	0.03
MAX	0.73	1.77	0.94	0.03	0.08	0.81	0.77	1.57	----	----	----	0.67

CAL YR 2003 TOTAL 26.41 MEAN 0.07 MAX 1.77

**LOCATION.**— Lat 42°20'39", long 87°56'18" (NAD of 1927), in SE1/4SW1/4 sec.27, T.45 N., R.11 E., Lake County, Hydrologic Unit 07120004, on left bank at upstream side of 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1945 to September 1958, October 1968 to current year.

STAGE: Water years 1994 to current year.

PARTIAL RECORD: Annual maximum, water years 1960–68.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1977–91.

PRECIPITATION: October 1999 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, phone telemeter, and rain gage. Datum of gage is 650.30 ft above NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Prior to May 26, 1946, nonrecording gage. May 27, 1946, to Sept. 30, 1958, water–stage recorder. Dec. 17, 1959, to September 1968, crest–stage gage. October 1968 to September 1998, water stage recorder at site 800 ft upstream at same datum.

**REMARKS.**— Effluent from sewage–treatment plants, 0.5 mi upstream. Collection, computation, and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 3,890 ft<sup>3</sup>/s, May 25, 2004, gage height, 11.76 ft; maximum gage height, 11.95 ft, Sept. 27, 1986; no flow Sept. 26 to Oct. 19, 1956, and part of each day Aug. 27–30, Sept. 1, 2, 1970.

**PRECIPITATION:** Maximum daily total, 2.76 in., Oct. 13, 2001.

**EXTREMES FOR CURRENT YEAR.**— Maximum daily total, 2.16 in., June 10.

**Precipitation, total, inches**  
**WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.39	0.00	0.00	0.00	0.15	0.04	0.00	0.00	0.00	0.00	0.00
2	0.00	1.58	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.31	0.37	0.00	0.00	0.00	0.02	0.00	0.00	0.00	1.14	0.67	0.00
4	0.00	1.00	0.12	0.00	0.00	0.76	0.00	0.00	0.00	0.03	0.60	0.00
5	0.00	0.00	0.34	0.00	0.00	0.67	0.00	0.00	0.00	0.01	0.00	0.02
6	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.03	0.00	0.02
7	0.00	0.00	0.00	0.00	0.01	0.03	0.00	0.03	0.00	0.06	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00
9	0.00	0.00	0.89	0.00	0.00	0.00	0.00	0.24	0.17	0.44	0.00	0.00
10	0.00	0.00	0.64	0.00	0.00	0.01	0.00	0.21	2.16	0.00	0.00	0.00
11	0.06	0.01	0.00	0.28	0.13	0.00	0.00	0.00	0.35	0.00	0.03	0.00
12	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.99	0.07	0.00	0.00	0.00
13	0.06	0.00	0.00	0.00	0.00	0.04	0.00	0.35	0.00	0.00	0.00	0.00
14	0.77	0.00	0.00	0.00	0.11	0.14	0.00	0.90	0.08	0.00	0.00	0.00
15	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37
16	0.00	0.01	0.01	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.23	0.00	0.11	0.06	0.03	0.51	1.82	0.22	0.00	0.36	0.00
18	0.00	1.10	0.00	0.00	0.08	0.09	0.00	0.41	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.11	0.00	0.75	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.05	0.00	0.14	1.15	0.91	0.05	0.00	0.00
22	0.00	0.00	0.00	0.00	0.10	0.00	0.00	1.35	0.00	0.01	0.00	0.00
23	0.00	0.34	0.00	0.00	0.00	0.00	0.00	0.02	0.12	0.00	0.00	0.00
24	0.28	0.00	0.00	0.00	0.00	0.55	0.43	0.02	0.18	0.00	0.28	0.00
25	0.07	0.00	0.00	0.00	0.00	0.11	0.02	0.08	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.73	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.00
28	0.04	0.00	0.29	0.00	0.00	1.11	0.00	0.00	0.08	0.00	0.54	0.00
29	0.08	0.00	0.00	0.00	0.00	0.00	0.03	0.13	0.00	0.00	0.00	0.00

ILLINOIS RIVER BASIN  
05528000 Des Plaines River near Gurnee, IL--Continued

30	0.00	0.00	0.00	0.00	---	0.00	0.18	1.10	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.24	---	0.00	0.00	---
TOTAL	1.67	5.04	2.37	0.44	0.70	4.47	2.10	9.10	4.34	1.77	2.77	0.41
MEAN	0.05	0.17	0.08	0.01	0.02	0.14	0.07	0.29	0.14	0.06	0.09	0.01
MAX	0.77	1.58	0.89	0.28	0.13	1.11	0.75	1.82	2.16	1.14	0.67	0.37

WTR YR 2004 TOTAL 35.18 MEAN 0.10 MAX 2.16



**LOCATION.**— Lat 41°53'10", long 87°57'33" (NAD of 1927), 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.**—

SURFACE—WATER DISCHARGE AND STAGE

DISCHARGE: June 1989 to current year.

STAGE: Water years 1994 to current year.

PARTIAL RECORD: Annual maximum, water years 1961–80.

PRECIPITATION: October 1989 to March 1996 and December 1996 to current year.

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

**GAGE.**— Water-stage recorder, phone telemeter, rain gage, and crest-stage gage. Datum of gage is 652.65 ft above NGVD of 1929. Water years 1997 and 1998, datum incorrectly published as 655.00 ft above NGVD of 1929. Prior to October 1, 1996, at site 990 ft upstream at datum 2.35 ft higher. Prior to June 1, 1989, crest-stage gage at datum 7.84 ft higher.

**REMARKS.**— Occasional regulation by sewage treatment plants upstream from station. Since May 28, 1996, some flow temporarily diverted for flood control to Elmhurst Quarry Flood Control Reservoir about 1.0 miles upstream from gage. Collection, computation and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE: Maximum discharge, 2,230 ft<sup>3</sup>/s, Aug. 27, 1972, gage height, 12.76 ft, datum 660.49 ft above NGVD of 1929, maximum gage height, 13.56 ft, Aug. 6, 1989; minimum discharge, 18 ft<sup>3</sup>/s, July 1, 1989.

PRECIPITATION: Maximum daily total, 3.67 in., September 11, 2000, but may have been greater during periods of missing record.

**EXTREMES FOR CURRENT YEAR.**—Maximum daily total, 1.76 in., Nov. 4.

Precipitation, total, inches  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.03	0.00	0.00	0.00	0.32	0.00	0.04	0.00	0.00	0.00	0.00
2	0.00	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00
3	0.18	0.84	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.95	1.16	0.00
4	0.00	1.76	0.26	0.00	0.00	0.94	0.00	0.00	0.00	0.01	0.19	0.00
5	0.00	0.00	0.40	0.00	0.00	0.69	0.00	0.00	0.00	0.03	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.01
7	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.11	0.00	0.06	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.51	0.00	0.00	0.00	0.00	0.02	0.02	0.89	0.00	0.00
10	0.00	0.00	0.60	0.00	0.00	0.00	0.00	0.13	0.42	0.02	0.00	0.00
11	0.02	0.01	0.00	0.21	0.00	0.00	0.00	0.01	0.00	0.70	0.00	0.00
12	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00
13	0.02	0.00	0.00	0.00	0.00	0.03	0.00	0.18	0.00	0.00	0.00	0.00
14	0.99	0.00	0.01	0.00	0.02	0.20	0.00	0.78	0.00	0.00	0.00	0.00
15	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25
16	0.00	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01
17	0.00	0.42	0.00	0.12	0.04	0.14	0.03	0.00	0.00	0.00	0.22	0.00
18	0.00	1.34	0.00	0.01	0.14	0.13	0.00	0.27	0.00	0.00	0.23	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
20	0.00	0.00	0.00	0.00	0.15	0.40	0.41	0.28	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.42	0.00	0.03	0.00	0.00
22	0.00	0.00	0.01	0.00	0.02	0.00	0.00	0.25	0.01	0.54	0.00	0.00
23	0.00	0.63	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.00	0.00	0.00
24	0.13	0.00	0.00	0.00	0.00	0.46	0.58	0.00	0.20	0.00	1.32	0.00
25	0.37	0.00	0.00	0.00	0.00	0.02	0.01	0.13	0.00	0.00	0.11	0.00
26	0.00	0.00	0.00	0.00	0.00	0.65	0.00	0.00	0.00	0.05	0.09	0.00
27	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00
28	0.02	0.00	0.17	0.00	0.00	0.63	0.00	0.00	0.03	0.00	1.34	0.00
29	0.02	0.00	0.00	0.00	0.01	0.01	0.04	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.10	1.57	0.00	0.13	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.24	---	0.00	0.00	---

## ILLINOIS RIVER BASIN

**05531300 Salt Creek at Elmhurst, IL--Continued**

TOTAL	1.77	5.88	1.98	0.35	0.40	4.65	1.18	4.72	0.80	3.60	4.91	0.27
MEAN	0.06	0.20	0.06	0.01	0.01	0.15	0.04	0.15	0.03	0.12	0.16	0.01
MAX	0.99	1.76	0.60	0.21	0.15	0.94	0.58	1.57	0.42	0.95	1.34	0.25

CAL YR 2003 TOTAL 29.86 MEAN 0.08 MAX 2.48

WTR YR 2004 TOTAL 30.51 MEAN 0.08 MAX 1.76

ILLINOIS RIVER BASIN  
**05531410 Salt Creek at 22nd. St. at Oakbrook, IL**

727

**LOCATION.**— Lat 41°50'50", long 87°56'13" (NAD of 1927), in SE1/4SW1/4 sec.24, T.39 N., R.11 E., Du Page County, Hydrologic Unit 07120004, on right bank at upstream side of bridge on 22nd Street in Oak Brook and at mile 14.9.

**DRAINAGE AREA.**— 103 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

STAGE: June 1994 to current year.

PRECIPITATION: October 1995 to current year.

**GAGE.**— Water—stage recorder and an unheated tipping—bucket rain gage. Datum of gage is 600.00 ft above NGVD of 1929.

**REMARKS.**— Collection, computation and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

STAGE: Maximum gage height, 55.03 ft, Feb. 21, 1997; minimum, 46.76 ft, Sept. 27, 28, 1995.

PRECIPITATION: Maximum daily total, 3.38 in., September 11, 2000, but may have been greater during periods of missing record.

**EXTREMES FOR CURRENT YEAR.**—Maximum daily total, 1.59 in., August 24.

**Precipitation, total, inches**  
**WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.05	0.00	0.00	0.00	0.21	0.00	0.07	0.00	0.00	0.00	0.00
2	0.00	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.00
3	0.22	0.87	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.67	1.00	0.00
4	0.00	1.50	0.32	0.00	0.00	0.95	0.00	0.00	0.00	0.02	0.20	0.00
5	0.00	0.00	0.38	0.01	0.00	0.58	0.00	0.00	0.00	0.07	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.09	0.00	0.02	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.36	0.00	0.00	0.00	0.00	0.03	0.04	0.75	0.00	0.00
10	0.00	0.00	0.54	0.00	0.00	0.00	0.00	0.11	1.49	0.01	0.00	0.00
11	0.03	0.01	0.00	0.18	0.00	0.00	0.00	0.00	0.18	0.07	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.53	0.00	0.00	0.00
13	0.02	0.00	0.00	0.00	0.00	0.01	0.00	0.27	0.00	0.00	0.00	0.00
14	0.92	0.00	0.01	0.00	0.00	0.24	0.00	0.85	0.23	0.00	0.00	0.00
15	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27
16	0.00	0.02	0.01	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.01
17	0.00	0.37	0.00	0.07	0.00	0.08	0.09	0.00	0.00	0.00	0.51	0.00
18	0.00	1.26	0.00	0.00	0.00	0.11	0.00	0.31	0.00	0.00	0.18	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.04	0.48	0.28	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.35	0.68	0.10	0.00	0.00
22	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.14	0.00	0.04	0.00	0.00
23	0.00	0.68	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
24	0.12	0.01	0.00	0.00	0.00	0.40	0.51	0.00	0.18	0.00	1.59	0.00
25	0.43	0.00	0.00	0.00	0.00	0.01	0.02	0.12	0.00	0.00	0.11	0.00
26	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.05	0.37	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.00
28	0.02	0.00	0.08	0.00	0.00	0.75	0.00	0.00	0.05	0.00	1.41	0.00
29	0.02	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.10	1.35	0.00	0.12	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.19	---	0.00	0.00	---
TOTAL	1.78	5.45	1.72	0.26	0.02	4.18	1.21	4.50	3.56	2.15	5.76	0.28
MEAN	0.06	0.18	0.06	0.01	0.00	0.13	0.04	0.15	0.12	0.07	0.19	0.01
MAX	0.92	1.50	0.54	0.18	0.02	0.95	0.51	1.35	1.49	0.75	1.59	0.27

WTR YR 2004 TOTAL 30.87 MEAN 0.08 MAX 1.59

ILLINOIS RIVER BASIN  
05533400 Sawmill Creek near Lemont, IL

**LOCATION.**— Lat 41°42'28", long 87°57'47" (NAD of 1927), 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.**—

**SURFACE–WATER DISCHARGE AND STAGE**

DISCHARGE: December 1985 to current year.

STAGE: Water years 1994 to current year.

PARTIAL RECORD: Annual maximum, water years 1961–79.

PRECIPITATION: April 1986 to current year.

**SURFACE–WATER QUALITY**

MISCELLANEOUS: Water year 2000; contaminants in streambed sediments, water year 2000.

**BIOLOGICAL**

ALGAE: Pigment and biomass, Water year 2000.

BENTHIC MACROINVERTEBRATES: Water year 2000.

FISH: Water year 2001.

HABITAT: Water year 2000.

**REVISED RECORDS.**— WDR IL–77–1: 1961–76(M).

**GAGE.**— Water–stage recorder, phone telemeter, unheated tipping–bucket rain gage, and crest–stage gage. Datum of gage is 630.00 ft above NGVD of 1929. Oct. 11, 1961, to Sept. 30, 1976, crest–stage gage on bridge 50 ft downstream at datum 11.22 ft higher.

**REMARKS.**— For precipitation records, 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.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Maximum discharge, 3,070 ft<sup>3</sup>/s, July 18, 1996, gage height, 17.53 ft; no flow at times in most years.

PRECIPITATION: Maximum daily total, 6.17 in., July 17, 1996.

**EXTREMES FOR CURRENT YEAR.**—Maximum daily total, 2.37 in., August 28.

**PRECIPITATION, TOTAL, IN INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.04	0.00	0.00	s0.01	0.38	0.00	0.05	0.01	0.00	0.00	0.00
2	0.00	1.19	0.00	0.00	s0.01	0.00	0.00	0.00	0.28	0.00	0.00	0.00
3	0.24	0.75	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.51	0.99	0.00
4	0.00	1.26	0.31	0.00	s0.02	1.08	0.00	0.00	0.00	0.00	0.26	0.00
5	0.00	0.00	0.47	0.00	0.00	0.50	0.00	0.00	0.00	0.48	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73	0.00	0.03
7	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.10	0.00	0.02	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.20	0.04	0.37	0.00	0.00
10	0.00	0.00	0.55	0.00	0.00	0.00	0.00	0.18	1.76	0.02	0.00	0.00
11	0.03	0.00	0.00	0.26	s0.04	0.00	0.00	0.00	0.41	0.00	0.00	0.00
12	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.63	0.53	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.01	0.00	1.13	0.00	0.03	0.00	0.00
14	0.97	0.00	0.00	0.00	0.00	0.18	0.00	0.86	0.60	0.00	0.00	0.00
15	0.00	0.03	s0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56
16	0.01	0.10	0.01	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.54	0.00	0.00	s0.03	0.13	0.07	0.00	0.00	0.00	0.56	0.00
18	0.00	1.44	0.00	0.00	0.26	0.19	0.00	0.55	0.00	0.00	0.17	0.00
19	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.27	0.02	0.93	0.11	0.00	0.00	0.01	0.00
21	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.58	0.42	1.23	0.00	0.00
22	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.31	0.00	0.07	0.00	0.00
23	0.00	0.91	0.00	0.00	0.02	0.00	0.00	0.28	0.00	0.00	0.00	0.00
24	0.12	0.00	0.00	0.00	0.00	0.43	0.61	0.00	0.06	0.00	0.89	0.00
25	0.52	0.00	0.01	0.00	0.00	0.03	0.02	0.15	0.00	0.00	0.40	0.00
26	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.01	0.27	0.00
27	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.18	0.00
28	0.07	0.00	0.21	0.00	0.00	1.09	0.00	0.00	0.08	0.00	2.37	0.00

**05533400 Sawmill Creek near Lemont, IL--Continued**

<b>29</b>	0.00	0.00	0.00	0.00	0.02	0.00	0.13	0.00	0.00	0.00	0.01	0.00
<b>30</b>	0.00	0.00	0.00	0.00	—	0.04	0.28	1.88	0.00	0.22	0.00	0.00
<b>31</b>	0.00	—	0.00	0.00	—	0.00	—	0.45	—	0.00	0.00	—
TOTAL	1.97	6.28	2.07	0.31	0.70	4.44	2.04	7.46	4.19	3.69	7.11	0.59

s Snowfall-affected precipitation

**DRAINAGE AREA.**— 208 mi<sup>2</sup>. (Does not include part of watershed diverted to Lake Michigan.)

**PERIOD OF RECORD.**--

DISCHARGE: 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).

STAGE: Water years 1994 to current year.

PRECIPITATION: October 2000 to current year.

**REVISED RECORDS.**— WSP 1507: 1950, 1953. WDR IL-81-2: Drainage area.

**GAGE.**— Water-stage recorder, phone telemeter, rain gage, and crest-stage gage. Datum of gage is 575.00 ft above NGVD of 1929 (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. 14 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.**— 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.

**EXTREMES FOR PERIOD OF RECORD.—**

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 4,440 ft<sup>3</sup>/s, July 14, 1957, gage height, 20.11 ft, site then in use; maximum gage height, 20.50 ft, Nov. 28, 1990; minimum daily discharge, 7.9 ft<sup>3</sup>/s Oct. 6, 1950.

PRECIPITATION: Maximum daily total, 2.32 in., May 11, 2002 and Nov. 18, 2003.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** 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.—**

**PRECIPITATION:** Maximum recorded daily total, 2.32 in., Nov. 18.

Precipitation, total, inches  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

[illegible]

**05536290 Little Calumet River at South Holland, IL--Continued**

<b>27</b>	----	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.00
<b>28</b>	----	0.00	0.08	0.00	0.00	0.56	0.00	0.00	0.08	0.00	1.36	0.00
<b>29</b>	----	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00
<b>30</b>	0.00	0.00	0.00	0.00	----	0.12	0.00	1.96	0.00	0.20	0.00	0.00
<b>31</b>	0.00	----	0.00	0.00	----	0.04	----	0.36	----	0.00	0.00	----
TOTAL	----	----	1.12	0.24	0.20	----	1.04	4.96	3.56	3.40	----	1.84
MEAN	----	----	0.04	0.01	0.01	----	0.03	0.16	0.12	0.11	----	0.06
MAX	----	----	0.36	0.16	0.12	----	0.36	1.96	1.08	1.12	----	1.20

ILLINOIS RIVER BASIN  
05540060 Kress Creek at West Chicago, IL

**LOCATION.**— Lat 41°51'23", long 88°12'15" (NAD of 1927), 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.**—

SURFACE—WATER DISCHARGE AND STAGE

DISCHARGE: November 1985 to current year.

STAGE: Water years 1994 to current year.

PARTIAL RECORD: Annual maximum, water years 1961–80.

PRECIPITATION: April 1986 to current year.

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

**GAGE.**— Water-stage recorder, phone telemeter, rain gage, and crest-stage gage. Datum of gage is 700.00 ft above NGVD of 1929. Prior to November 8, 1985 at datum 5.44 ft higher.

**REMARKS.**— Collection, computation and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE: Maximum discharge, 1,980 ft<sup>3</sup>/s, July 18, 1996, gage height, 9.24 ft; minimum discharge, .02 ft<sup>3</sup>/s, Sept. 1, 2, 9, 1988.

PRECIPITATION: Maximum daily total, 6.88 in., July 17, 1996, but may have been greater during periods of missing record.

**EXTREMES FOR CURRENT YEAR.**—Maximum daily total, 2.08 in., May 30.

**Precipitation, total, inches**  
**WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.02	0.00	0.00	0.01	0.23	0.00	0.01	0.03	0.00	0.00	0.00
2	0.00	0.81	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00
3	0.18	0.69	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.42	1.07	0.00
4	0.00	1.32	0.23	0.00	0.00	0.82	0.00	0.00	0.00	0.03	0.29	0.00
5	0.00	0.00	0.28	0.00	0.00	0.66	0.00	0.00	0.00	0.04	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.03	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.89	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00
10	0.00	0.00	0.88	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
11	0.03	0.02	0.00	0.15	0.08	0.00	0.00	0.00	0.49	0.02	0.00	0.00
12	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.57	0.64	0.00	0.00	0.00
13	0.04	0.00	0.00	0.00	0.00	0.06	0.00	0.22	0.00	0.00	0.00	0.00
14	1.01	0.00	0.00	0.00	0.04	0.16	0.00	0.97	0.17	0.00	0.00	0.00
15	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
16	0.00	0.03	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01
17	0.00	0.26	0.00	0.00	0.04	0.10	0.01	0.00	0.01	0.00	0.28	0.00
18	0.00	1.63	0.00	0.01	0.07	0.11	0.00	0.36	0.00	0.00	0.01	0.00
19	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.25	0.27	0.91	0.25	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.66	0.66	0.00	0.00	0.00
22	0.00	0.00	0.01	0.00	0.04	0.00	0.00	0.39	0.00	0.21	0.00	0.00
23	0.00	0.52	0.00	0.00	0.00	0.00	0.00	0.03	0.09	0.00	0.02	0.00
24	0.14	0.00	0.00	0.00	0.00	0.53	0.53	0.00	0.15	0.00	0.43	0.00
25	0.25	0.00	0.00	0.00	0.00	0.11	0.01	0.18	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.56	0.00	0.00	0.00	0.02	0.00	0.00
27	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.00
28	0.04	0.01	0.24	0.00	0.00	1.15	0.00	0.00	0.04	0.00	1.01	0.00
29	0.01	0.00	0.00	0.00	0.02	0.01	0.13	0.00	0.00	0.00	0.00	0.00
30	0.01	0.00	0.00	0.00	---	0.07	0.17	2.08	0.00	0.10	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.38	---	0.00	0.00	---
TOTAL	1.72	5.35	2.54	0.20	0.56	4.89	1.82	6.11	2.41	1.61	3.42	0.27
MEAN	0.06	0.18	0.08	0.01	0.02	0.16	0.06	0.20	0.08	0.05	0.11	0.01



**05540060 Kress Creek at West Chicago, IL--Continued**

MAX	1.01	1.63	0.89	0.15	0.25	1.15	0.91	2.08	0.66	0.60	1.07	0.26
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CAL YR 2003 TOTAL 30.52 MEAN 0.08 MAX 2.22

WTR YR 2004 TOTAL 30.90 MEAN 0.08 MAX 2.08

**EXTREMES FOR CURRENT YEAR.**—Maximum daily total, 2.84 in., August 28.

[illegible]

**LOCATION.**— Lat 42°26'36", long 88°14'51" (NAD of 1927), 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.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: August 1966 to current year.

STAGE: Water years 1994 to current year.

SURFACE-WATER QUALITY

CHEMICAL: Water years 1976–91.

SEDIMENT: Dec. 1997 to May 1999.

MISCELLANEOUS: Sediment concentration and particle size, water years 1998–99.

PRECIPITATION: October 1999 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, phone telemeter, unheated tipping-bucket rain gage, and crest-stage gage. Datum of gage is 746.00 ft above NGVD of 1929.

**REMARKS.**— Suspended-sediment samples were collected twice weekly with more frequent samples collected during high runoff periods. Collection, computation, and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 2,910 ft<sup>3</sup>/s, Sept. 26, 1986, gage height, 14.26 ft; minimum discharge, 6.6 ft<sup>3</sup>/s, Aug. 7, 1988.

SUSPENDED-SEDIMENT CONCENTRATION: Maximum daily, 244 mg/L, May 17, 1999; minimum daily, 8 mg/L, Nov. 24, 1998.

SUSPENDED-SEDIMENT LOAD: Maximum daily, 247 tons, May 17, 1999; minimum daily, 1.9 tons, Nov. 24, 1998.

PRECIPITATION: Maximum daily total, 2.82 in., June 12, 2000.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: 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.**— Maximum daily total, 1.93 in., May 22.

Precipitation, total, inches  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	1.80	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
3	0.26	0.70	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.55	0.72	0.00
4	0.00	0.37	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.14	0.00
5	0.00	0.00	0.24	0.00	0.04	0.00	0.00	0.00	0.00	0.02	0.00	0.01
6	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.01	0.01	0.00	0.03
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.17	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.20	0.00	0.00	0.00
9	0.00	0.00	0.91	0.00	0.05	0.03	0.00	0.46	0.04	0.10	0.00	0.00
10	0.00	0.00	0.92	0.00	0.00	0.00	0.00	0.89	1.90	0.00	0.00	0.00
11	0.08	0.00	0.00	0.14	0.00	0.00	0.00	0.02	0.06	0.00	0.03	0.00
12	0.00	0.00	0.00	0.02	0.01	0.01	0.00	0.34	0.08	0.00	0.00	0.00
13	0.07	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00
14	0.57	0.00	0.00	0.00	0.01	0.00	0.00	1.77	0.01	0.00	0.00	0.00
15	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81
16	0.00	0.01	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.54	0.00	0.01	0.01	0.00	0.13	0.49	0.47	0.00	0.06	0.00
18	0.00	0.92	0.00	0.00	0.37	0.01	0.00	0.32	0.00	0.00	0.01	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.73	0.29	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.01	0.00	0.01	0.16	1.39	0.99	0.19	0.00	0.00
22	0.00	0.01	0.00	0.00	0.00	0.01	0.00	1.93	0.01	0.00	0.00	0.00
23	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.11	0.25	0.00	0.00	0.00
24	0.24	0.00	0.00	0.00	0.00	0.00	0.43	0.02	0.32	0.00	0.82	0.00

## ILLINOIS RIVER BASIN

**05548280 Nippersink Creek near Spring Grove, IL--Continued**

<b>25</b>	0.02	0.00	0.00	0.00	0.00	0.00	0.02	0.07	0.00	0.00	0.01	0.00
<b>26</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>27</b>	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62	0.00
<b>28</b>	0.05	0.00	0.27	0.00	0.00	0.85	0.00	0.00	0.03	0.00	1.06	0.00
<b>29</b>	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00
<b>30</b>	0.01	0.00	0.00	0.00	---	0.00	0.04	1.14	0.00	0.00	0.00	0.00
<b>31</b>	0.00	---	0.00	0.00	---	0.00	---	0.50	---	0.00	0.00	---
<b>TOTAL</b>	1.36	4.86	2.51	0.18	0.51	0.97	1.52	10.09	4.38	1.05	3.47	0.85
<b>MEAN</b>	0.04	0.16	0.08	0.01	0.02	0.03	0.05	0.33	0.15	0.03	0.11	0.03
<b>MAX</b>	0.57	1.80	0.92	0.14	0.37	0.85	0.73	1.93	1.90	0.55	1.06	0.81

CAL YR 2003 TOTAL 24.07 MEAN 0.07 MAX 1.80

WTR YR 2004 TOTAL 31.75 MEAN 0.09 MAX 1.93

**LOCATION.**— Lat 42°03'31", long 88°18'14" (NAD of 1927), in SE1/4SE1/4 sec.3, T.41 N., R.9 E., Kane County, Hydrologic Unit 07120006, on right bank 50 ft upstream from bridge on Big Timber Road, .5 mi west of Elgin, and at mile 1.6.

**DRAINAGE AREA.**— 38.9 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: May 1998 to current year.

STAGE: May 1998 to current year.

PARTIAL RECORD: Annual maximum, water years 1962, 1963, 1965–80. Miscellaneous discharge measurements, November 1990.

PRECIPITATION: October 1998 to current year.

**GAGE.**— Water-stage recorder, phone telemeter, rain gage, and crest-stage gage. Datum of gage is 745.00 ft above NGVD of 1929. Prior to Sept. 30, 1980, at downstream side of bridge 100 ft downstream and at datum 7.36 ft higher.

**REMARKS.**— Collection, computation and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 1,650 ft<sup>3</sup>/s, Aug. 22, 2002, gage height, 8.26 ft, from rating curve extended above 580 ft<sup>3</sup>/s; minimum discharge, 0.63 ft<sup>3</sup>/s, several days in water year 2004.

PRECIPITATION: Maximum daily total, 4.40 in., August 22, 2002.

**EXTREMES FOR CURRENT YEAR.**—Maximum daily total, 2.58 in., May 30.

Precipitation, total, inches  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.39	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	1.68	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
3	0.34	0.36	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.17	2.00	0.00
4	0.00	1.30	0.11	0.00	0.00	0.93	0.00	0.01	0.00	0.20	0.42	0.00
5	0.00	0.00	0.27	0.00	0.00	0.74	0.00	0.00	0.00	0.07	0.00	0.07
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
7	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.04	0.00	0.04	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
9	0.00	0.00	0.99	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00
10	0.00	0.00	1.12	0.00	0.00	0.01	0.00	1.08	1.22	0.00	0.00	0.00
11	0.08	0.01	0.00	0.05	0.00	0.00	0.00	0.00	0.63	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	1.31	0.00	0.00	0.00
13	0.09	0.00	0.00	0.00	0.00	0.09	0.00	0.24	0.00	0.00	0.00	0.00
14	0.95	0.00	0.00	0.00	0.00	0.12	0.00	1.09	0.14	0.00	0.00	0.05
15	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42
16	0.00	0.03	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.05	0.05	0.00
17	0.00	0.39	0.00	0.11	0.00	0.18	0.10	0.42	0.00	0.00	0.04	0.00
18	0.00	1.15	0.00	0.00	0.26	0.15	0.00	0.47	0.00	0.00	0.06	0.00
19	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.28	0.03	0.67	0.10	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.02	0.00	0.17	1.08	0.90	0.63	0.00	0.00
22	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.78	0.00	0.09	0.00	0.00
23	0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.00	0.00	0.00
24	0.28	0.00	0.00	0.00	0.00	0.91	0.66	0.00	0.10	0.00	0.16	0.00
25	0.10	0.00	0.00	0.00	0.00	0.46	0.02	0.15	0.00	0.00	0.07	0.00
26	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.00	0.00	0.03	0.00
27	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.02	0.00	0.00	0.24	0.00
28	0.02	0.00	0.44	0.00	0.00	0.90	0.00	0.00	0.02	0.00	0.88	0.00
29	0.03	0.00	0.00	0.00	0.02	0.00	0.02	0.02	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.22	2.58	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.11	---	0.00	0.00	---
TOTAL	1.91	5.63	2.94	0.17	0.70	5.19	1.86	8.91	4.37	2.01	3.95	0.55
MEAN	0.06	0.19	0.09	0.01	0.02	0.17	0.06	0.29	0.15	0.06	0.13	0.02
MAX	0.95	1.68	1.12	0.11	0.28	0.93	0.67	2.58	1.31	0.75	2.00	0.42

CAL YR 2003 TOTAL 27.94 MEAN 0.08 MAX 1.77

WTR YR 2004 TOTAL 38.19 MEAN 0.10 MAX 2.58

ILLINOIS RIVER BASIN  
**05551030 Brewster Creek at Valley View, IL**

**LOCATION.**— Lat 41°58'19", long 88°16'47" (NAD of 1983), in SW1/4SW1/4 sec. 12, T. 40 N., R. 8 E., Kane County, Hydrologic Unit 07120007, on private property about 500 feet upstream of state Highway 25 at Valley View, 2.5 miles southeast of South Elgin, and at mile 0.8.

**DRAINAGE AREA.**— 14.0 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE

DISCHARGE: May 2002 to current year.

STAGE: May 2002 to current year.

PARTIAL RECORD: Annual maximum, water years 1962 to 1979, at site 500 ft downstream on State Highway 25 and at datum 10.08 ft higher.

SURFACE—WATER QUALITY

SEDIMENT: June 2002 to current year.

MISCELLANEOUS: Sediment concentration and particle size, water years 2002–03

PRECIPITATION: May 2002 to current year.

**REVISED RECORDS.**— WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder, phone telemeter, automatic water sampler, and rain gage. Datum of gage is 700.00 ft above NAVD of 1988.

**REMARKS.**— Occasional pumpage from quarry into creek about 0.5 mi. upstream. Collection, computation and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE—WATER DISCHARGE AND STAGE: Maximum discharge, 685 ft<sup>3</sup>/s, June 10, 1967, gage height, 1.65 ft, site and datum then in use; minimum discharge, 0.40 ft<sup>3</sup>/s, Sept. 26, 2004, due to pumping.

PRECIPITATION: Maximum daily total, 3.32 in., August 13, 2002.

SUSPENDED—SEDIMENT CONCENTRATIONS: Maximum daily, 1450 mg/L, Mar. 29, 2004; minimum daily, 10 mg/L, June 25, 2004.

SUSPENDED—SEDIMENT LOADS: Maximum daily, 217 tons, Mar. 29, 2004; minimum daily, 0.06 tons, Sept. 16, 19–20, 2003, and Sept. 25–26, 2004.

**EXTREMES FOR CURRENT YEAR.**—Maximum daily total, 2.41 in., May 30.

**Precipitation, total, inches**  
**WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.15	0.00	0.00	0.00	0.12	0.00	0.01	0.00	0.00	0.00	0.00
2	0.00	1.33	0.00	0.00	0.02	0.00	0.00	0.00	0.05	0.00	0.00	0.00
3	0.07	0.49	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.30	1.06	0.00
4	0.00	1.12	0.17	0.00	0.00	0.91	0.00	0.00	0.00	0.01	0.33	0.00
5	0.00	0.00	0.32	0.00	0.00	0.89	0.00	0.00	0.00	0.05	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.16	0.00	0.01	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.95	0.00	0.01	0.00	0.00	0.00	0.00	0.43	0.00	0.00
10	0.00	0.00	1.20	0.00	0.00	0.00	0.00	0.16	1.92	0.01	0.00	0.00
11	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	1.49	0.00	0.00	0.00
12	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.46	0.89	0.00	0.00	0.00
13	0.01	0.00	0.00	0.00	0.00	0.05	0.00	0.02	0.00	0.00	0.00	0.00
14	1.14	0.00	0.00	0.00	0.00	0.12	0.00	1.07	0.05	0.00	0.00	0.00
15	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22
16	0.00	0.04	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.14	0.00	0.13	0.06	0.11	0.00	0.08	0.00	0.00	0.21	0.00
18	0.00	1.45	0.00	0.00	0.15	0.12	0.00	0.50	0.00	0.00	0.37	0.00
19	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.17	0.04	0.57	0.63	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.08	1.75	0.77	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.92	0.00	0.00	0.00	0.00
23	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.23	0.00
24	0.10	0.00	0.00	0.00	0.00	0.68	0.60	0.00	0.03	0.00	0.17	0.00
25	0.12	0.00	0.00	0.00	0.00	0.12	0.01	0.10	0.00	0.00	0.03	0.00
26	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.01	0.00

**05551030 Brewster Creek at Valley View, IL--Continued**

<b>27</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00
<b>28</b>	0.03	0.00	0.27	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.88	0.00
<b>29</b>	0.00	0.00	0.00	0.00	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00
<b>30</b>	0.00	0.00	0.00	0.00	---	0.01	0.30	2.41	0.00	0.00	0.00	0.00
<b>31</b>	0.00	---	0.00	0.00	---	0.01	---	0.23	---	0.00	0.00	---
TOTAL	1.47	5.06	2.92	0.32	0.63	3.55	1.57	8.53	5.20	0.81	3.44	0.22
MEAN	0.05	0.17	0.09	0.01	0.02	0.11	0.05	0.28	0.17	0.03	0.11	0.01
MAX	1.14	1.45	1.20	0.13	0.17	0.91	0.60	2.41	1.92	0.43	1.06	0.22

CAL YR 2003 TOTAL 24.51 MEAN 0.07 MAX 2.60

WTR YR 2004 TOTAL 33.72 MEAN 0.09 MAX 2.41

ILLINOIS RIVER BASIN  
05551200 Ferson Creek near St. Charles, IL

**LOCATION.**— Lat 41°55'58", long 88°20'28" (NAD of 1927), 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.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: December 1960 to current year.

STAGE: Water years 1994 to current year.

SURFACE-WATER QUALITY

MISCELLANEOUS: Water year 2000; contaminants in streambed sediments, water year 2000.

PRECIPITATION: August 2000 to current year.

BIOLOGICAL

ALGAE: Pigment and biomass, Water year 2000.

BENTHIC MACROINVERTEBRATES: Water year 2000.

HABITAT: Water year 2000.

**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, phone telemeter, crest-stage gage, and rain gage. Datum of gage is 704.84 ft above NGVD of 1929.

**REMARKS.**— Collection, computation and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 2,580, Feb. 21, 1997, from rating curve extended above 1,960 ft<sup>3</sup>/s, gage height, 8.77 ft; maximum gage height, 9.66 ft, Feb. 8, 1965, from floodmark, ice jam; minimum discharge, 0.10 ft<sup>3</sup>/s, several days in 1961 and 1965.

PRECIPITATION: Maximum recorded daily total, 3.27 in., August 13, 2002.

**EXTREMES FOR CURRENT YEAR.**— Maximum daily total, 2.81 in., May 30.

**Precipitation, total, inches**  
**WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.01	0.16	0.00	0.01	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.04	0.01	0.00	0.00	0.24	0.00	0.00	0.00
3	0.19	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	1.18	0.00
4	0.00	1.15	0.21	0.00	0.00	0.81	0.00	0.00	0.00	0.00	0.32	0.00
5	0.00	0.00	0.27	0.00	0.00	0.73	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
7	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.11	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	1.01	0.00	0.03	0.00	0.00	0.06	0.04	0.00	0.00	0.00
10	0.00	0.02	1.03	0.00	0.00	0.01	0.00	0.22	0.69	0.00	0.00	0.00
11	0.05	0.01	0.00	0.27	0.13	0.00	0.00	0.01	0.00	0.00	0.00	0.00
12	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.59	0.00	0.00	0.00	0.00
13	0.11	0.00	0.00	0.00	0.00	0.12	0.00	0.03	0.00	0.00	0.00	0.00
14	0.91	0.00	0.00	0.00	0.12	0.13	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32
16	0.00	0.05	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.03	0.01
17	0.00	0.29	0.00	0.10	0.00	0.11	0.00	0.00	0.00	0.00	0.12	0.00
18	0.00	1.44	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.49	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.28	0.03	0.55	1.35	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.01	0.01	0.00	0.10	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.01	0.00	0.12	0.00	0.00	0.00	0.00	0.40	0.00	0.00
23	0.00	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.24	0.00
24	0.15	0.00	0.00	0.00	0.01	0.65	0.00	0.00	0.00	0.00	0.36	0.00
25	0.09	0.00	0.00	0.00	0.00	0.24	0.01	0.00	0.00	0.00	0.17	0.00
26	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.03	0.00
27	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.00
28	0.00	0.00	0.37	0.00	0.00	0.87	0.00	0.00	0.00	0.00	0.49	0.00
29	0.00	0.00	0.00	0.00	0.03	0.00	0.04	0.00	0.00	0.00	0.00	0.00



**05551200 Ferson Creek near St. Charles, IL--Continued**

<b>30</b>	0.00	0.00	0.00	0.00	---	0.19	0.24	2.81	0.00	0.03	0.00	0.00
<b>31</b>	0.00	---	0.00	0.00	---	0.00	---	0.55	---	0.01	0.00	---
TOTAL	1.51	3.48	2.91	0.39	0.78	4.61	0.94	5.74	0.97	0.45	3.96	0.35
MEAN	0.05	0.12	0.09	0.01	0.03	0.15	0.03	0.19	0.03	0.01	0.13	0.01
MAX	0.91	1.44	1.03	0.27	0.28	0.87	0.55	2.81	0.69	0.40	1.18	0.32

CAL YR 2003 TOTAL 26.53 MEAN 0.07 MAX 1.44

WTR YR 2004 TOTAL 26.09 MEAN 0.07 MAX 2.81

ILLINOIS RIVER BASIN  
05551330 Mill Creek near Batavia, IL

**LOCATION.**— Lat 41°50'45", long 88°20'57" (NAD of 1927), in NW1/4NW1/4SE1/4 sec.20, T.39 N., R.8 E., Kane County, Hydrologic Unit 07120007, on left bank at bridge on Deer Path road, 1 mi. west of Batavia, and at mile 2.9.

**DRAINAGE AREA.**— 27.6 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: May 1998 to current year.

STAGE: Water years 1998 to current year.

PARTIAL RECORD: Miscellaneous discharge measurements, water year 1998.

PRECIPITATION: October 1999 to current year.

**GAGE.**— Water-stage recorder, phone telemeter, unheated tipping-bucket rain gage, and crest-stage gage. Datum of gage is 685.00 ft above NGVD of 1929.

**REMARKS.**— Effluent from sewage-treatment plant 5 mi upstream. Collection, computation, and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 1,080 ft<sup>3</sup>/s, Apr. 23, 1999, gage height, 7.52 ft; minimum discharge, 0.22 ft<sup>3</sup>/s, September 29, 2004.

PRECIPITATION: Maximum daily total, 2.84 in, August 13, 2002.

**EXTREMES FOR CURRENT YEAR.**—

PRECIPITATION: Maximum daily total, 1.30 in, May 30.

Precipitation, total, inches  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.05	0.00	0.00	0.00	0.18	0.00	0.01	0.00	0.00	0.00	0.00
2	0.00	0.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.17	0.62	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.79	0.00
4	0.00	1.19	0.16	0.00	0.00	0.72	0.00	0.00	0.00	0.00	0.28	0.00
5	0.00	0.00	0.23	0.00	0.01	0.50	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.07	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.77	0.00	0.00	0.00	0.00	0.00	0.00	1.04	0.00	0.00
10	0.00	0.00	0.76	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00
11	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00
13	0.06	0.00	0.00	0.00	0.00	0.08	0.00	0.08	0.00	0.00	0.00	0.00
14	1.01	0.00	0.00	0.00	0.00	0.10	0.00	0.86	0.00	0.00	0.00	0.00
15	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28
16	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00
17	0.00	0.18	0.00	0.11	0.00	0.12	0.02	0.00	0.00	0.00	0.20	0.00
18	0.00	1.25	0.00	0.00	0.02	0.14	0.00	0.28	0.00	0.00	0.13	0.00
19	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.24	0.17	0.43	0.19	0.00	0.07	0.00	0.00
21	0.00	0.00	0.00	0.00	0.01	0.00	0.04	0.54	0.00	0.05	0.00	0.00
22	0.00	0.00	0.01	0.00	0.04	0.00	0.00	0.18	0.00	0.26	0.00	0.00
23	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00
24	0.08	0.00	0.00	0.00	0.00	0.49	0.45	0.00	0.00	0.00	0.14	0.00
25	0.17	0.00	0.00	0.00	0.00	0.15	0.01	0.16	0.00	0.00	0.10	0.00
26	0.00	0.00	0.00	0.00	0.00	0.39	0.00	0.00	0.00	0.04	0.22	0.00
27	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54	0.00
28	0.02	0.01	0.23	0.00	0.00	0.84	0.00	0.00	0.00	0.00	0.60	0.00
29	0.01	0.00	0.00	0.00	0.04	0.01	0.08	0.00	0.00	0.00	0.00	0.00
30	0.01	0.00	0.00	0.00	---	0.08	0.15	1.30	0.00	0.07	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.02	---	0.00	0.00	---
TOTAL	1.59	4.72	2.17	0.12	0.36	4.00	1.18	4.03	0.00	1.53	3.03	0.28
MEAN	0.05	0.16	0.07	0.00	0.01	0.13	0.04	0.13	0.00	0.05	0.10	0.01
MAX	1.01	1.25	0.77	0.11	0.24	0.84	0.45	1.30	0.00	1.04	0.79	0.28

**05551330 Mill Creek near Batavia, IL--Continued**

CAL YR 2003 TOTAL 29.65 MEAN 0.08 MAX 2.08  
WTR YR 2004 TOTAL 23.01 MEAN 0.06 MAX 1.30

ILLINOIS RIVER BASIN  
05551675 Blackberry Creek near Montgomery, IL

**LOCATION.**— Lat 41°44'27", long 88°23'00" (NAD of 1927), in NW1/4SE1/4 sec.25, T.38 N., R.7 E., Kane County, Hydrologic Unit 07120007, on right bank at bridge on Jericho Rd., 1.0 mi west of Montgomery, and at mile 13.0.

**DRAINAGE AREA.**— 55.0 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE

DISCHARGE: June 1998 to current year.

STAGE: Water years 1998 to current year.

PRECIPITATION: October 1999 to current year.

**GAGE.**— Water–stage recorder, phone telemeter, unheated tipping–bucket rain gage, and crest–stage gage. Datum of gage is 654.00 ft above NGVD of 1929.

**REMARKS.**— Collection, computation, and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Maximum discharge, 1,040 ft<sup>3</sup>/s, Apr. 23, 1999, gage height, 8.61 ft; minimum, 0.16 ft<sup>3</sup>/s, Sept. 6, 7, 2003.

PRECIPITATION: Maximum daily total, 2.62 in, October 13, 2001.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE: Maximum measured, 1,170 ft<sup>3</sup>/s, Feb. 22, 1997, gage height unknown.

**EXTREMES FOR CURRENT YEAR.**—

PRECIPITATION: Maximum daily total, 1.26 in, November 4.

Precipitation, total, inches  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.01	0.00	0.00	0.00	0.13	0.00	0.00	0.01	0.00	0.00	0.00
2	0.00	0.79	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00
3	0.14	0.56	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.22	0.71	0.00
4	0.00	1.26	0.20	0.00	0.00	0.68	0.00	0.00	0.00	0.01	0.27	0.00
5	0.00	0.00	0.21	0.00	0.00	0.46	0.00	0.00	0.00	0.06	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01
7	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.78	0.00	0.00	0.00	0.00	0.06	0.00	0.47	0.00	0.00
10	0.00	0.01	0.70	0.00	0.00	0.00	0.00	0.10	0.61	0.02	0.00	0.00
11	0.02	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.33	0.06	0.00	0.00
12	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.20	0.12	0.00	0.00	0.00
13	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.00	0.00	0.00	0.00
14	0.76	0.00	0.00	0.00	0.05	0.00	0.00	0.67	0.02	0.00	0.00	0.00
15	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31
16	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.18	0.00	0.10	0.00	0.00	0.03	0.00	0.00	0.00	0.31	0.00
18	0.00	1.25	0.00	0.00	0.07	0.00	0.00	0.12	0.00	0.00	0.16	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
20	0.00	0.00	0.00	0.00	0.18	0.07	0.43	0.03	0.00	0.05	0.00	0.00
21	0.00	0.00	0.00	0.01	0.00	0.00	0.04	0.45	0.23	0.25	0.00	0.00
22	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.14	0.01	0.01	0.00	0.00
23	0.00	0.36	0.01	0.00	0.01	0.00	0.00	0.02	0.00	0.00	0.00	0.00
24	0.09	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.07	0.00	0.20	0.00
25	0.24	0.00	0.00	0.00	0.00	0.02	0.00	0.05	0.00	0.00	0.12	0.00
26	0.00	0.01	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.15	0.00
27	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00
28	0.01	0.00	0.18	0.00	0.00	0.43	0.00	0.00	0.05	0.00	0.39	0.00
29	0.01	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.25	0.00	0.82	0.00	0.08	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.22	---	0.00	0.00	---
TOTAL	1.34	4.52	2.09	0.13	0.40	2.33	0.50	3.46	1.54	1.25	2.53	0.32
MEAN	0.04	0.15	0.07	0.00	0.01	0.08	0.02	0.11	0.05	0.04	0.08	0.01

**05551675 Blackberry Creek near Montgomery, IL--Continued**

MAX	0.76	1.26	0.78	0.10	0.18	0.68	0.43	0.82	0.61	0.47	0.71	0.31
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CAL YR 2003 TOTAL 30.53 MEAN 0.08 MAX 1.69

WTR YR 2004 TOTAL 20.41 MEAN 0.06 MAX 1.26

MISSISSIPPI RIVER BASIN  
05588710 Judy's Branch Tributary at Glen Carbon, IL

**LOCATION.**— Lat 38°45'39", long 89°57'27" (NAD of 1983), in SE1/4SE1/4SW1/4 sec.26, T.4 N., R.8 W., Madison County, Hydrologic Unit 07140101, on left bank at downstream side of culvert on Ronald J. Foster Glen Carbon Heritage Trail in Glen Carbon.

**DRAINAGE AREA.**— 0.23 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: June 2000 to June 2004.

STAGE: Water years 2000 to June 2004.

SURFACE-WATER QUALITY

SEDIMENT: June 2000 to June 2004.

MISCELLANEOUS: Sediment concentration and particle size, water years 2001–03.

PRECIPITATION: June 2000 to current year.

**GAGE.**— Water-stage recorder, phone telemeter, rain gage, automatic water sampler, and crest-stage gage. Datum of gage is 490.00 ft above NGVD of 1929.

**REMARKS.**—Collection, computation and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 107 ft<sup>3</sup>/s, June 11, 2002, gage height, 11.64 ft; no flow many days in most years.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily, 1,610 mg/L, May 13, 2004; minimum daily, 11 mg/L, July 25, 2000.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 108 tons, Aug. 24, 2001; minimum daily, 0.00 tons, many days.

PRECIPITATION: Maximum daily total, 4.28 in., Aug. 24, 2001.

**EXTREMES FOR CURRENT YEAR.**—

PRECIPITATION: Maximum daily total, 2.24 in., Nov.17, but may have been greater during periods of missing record, Mar. 18 to Apr.6, and May 1–17.

**Precipitation, total, inches**  
**WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.01	0.43	0.00	0.06	0.20	0.01	---	---	0.00	0.01	0.00	0.00
2	0.00	0.00	0.00	0.10	0.87	0.00	---	---	0.00	0.88	0.13	0.00
3	0.05	0.00	0.17	0.02	0.14	0.36	---	---	0.00	0.48	0.19	0.00
4	0.00	0.08	0.11	2.22	0.00	1.18	---	---	0.00	0.00	0.54	0.00
5	0.00	0.40	0.14	0.00	0.20	0.14	---	---	0.00	0.64	0.00	0.00
6	0.00	0.23	0.00	0.00	0.00	0.01	---	---	0.00	0.05	0.00	0.00
7	0.00	0.00	0.00	0.00	0.01	0.00	0.00	---	0.00	0.00	0.00	0.00
8	0.00	0.01	0.00	0.00	0.03	0.00	0.00	---	0.00	0.00	0.00	0.00
9	0.41	0.00	0.18	0.00	0.00	0.00	0.00	---	0.32	0.00	0.00	0.00
10	0.00	0.00	0.08	0.00	0.00	0.00	0.22	---	0.05	0.02	0.00	0.00
11	0.03	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.12	0.00	0.00	0.00
13	0.04	0.00	0.00	0.00	0.00	0.04	0.00	---	0.08	0.00	0.00	0.00
14	0.36	0.34	0.03	0.00	0.00	0.12	0.00	---	0.00	0.00	0.00	0.00
15	0.00	0.08	0.22	0.00	0.00	0.01	0.00	---	0.00	0.00	0.00	0.15
16	0.70	0.00	0.01	0.08	0.00	0.37	0.00	---	0.85	0.00	0.00	0.12
17	0.11	2.24	0.00	1.11	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00
18	0.00	2.18	0.06	0.00	0.00	---	0.00	0.57	0.95	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	---	0.00	0.71	0.00	0.00	0.15	0.00
20	0.00	0.00	0.00	0.00	0.05	---	0.21	0.00	0.00	0.00	0.25	0.00
21	0.00	0.00	0.00	0.00	0.00	---	0.01	0.00	0.12	0.00	0.00	0.00
22	0.00	0.00	0.58	0.00	0.01	---	0.17	0.00	0.00	0.00	0.00	0.00
23	0.00	0.74	0.42	0.01	0.04	---	0.00	0.00	0.00	0.11	0.22	0.00
24	0.00	0.00	0.00	0.00	0.00	---	0.33	0.16	0.00	0.03	1.04	0.00
25	0.10	0.00	0.00	0.00	0.00	---	0.01	1.30	0.00	0.66	1.10	0.00
26	0.00	0.00	0.00	0.00	0.00	---	0.00	1.41	0.00	0.00	0.07	0.00
27	0.02	0.00	0.00	0.01	0.00	---	0.00	1.46	0.00	0.00	0.00	0.00
28	0.17	0.00	0.65	0.10	0.00	---	0.03	0.01	0.00	0.00	0.10	0.00
29	0.00	0.00	0.25	0.00	0.02	---	0.00	0.00	0.02	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	---	0.26	0.31	0.00	2.14	0.00	0.00
31	0.00	---	0.00	0.00	---	---	---	0.21	---	0.00	0.00	---

**05588710 Judy's Branch Tributary at Glen Carbon, IL--Continued**

TOTAL	2.00	6.73	2.90	3.71	1.57	---	---	---	2.51	5.02	3.79	0.27
MEAN	0.06	0.22	0.09	0.12	0.05	---	---	---	0.08	0.16	0.12	0.01
MAX	0.70	2.24	0.65	2.22	0.87	---	---	---	0.95	2.14	1.10	0.15

CAL YR 2003 TOTAL 45.38 MEAN 0.12 MAX 2.24

**374152088080101 Rain Gage at Old Shawneetown, IL**

**LOCATION.**— Lat 37°41'52", long 88°08'01" (NAD of 1983), in SE1/4NW1/4 sec.32, T.9 S., R.10 E., Gallatin County, Hydrologic Unit 05140203, at Village of Old Shawneetown Pumphouse on Main St.

**PERIOD OF RECORD.**—

PRECIPITATION: November 2001 to current year.

**GAGE.**— An 8-inch diameter, unheated tipping bucket rain gage.

**REMARKS.**— Collection, computation and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**— Maximum daily total, 2.64 in., November 10, 2002.

**EXTREMES FOR CURRENT YEAR.**— Maximum daily total, 1.50 in., May 26.

**Precipitation, total, inches**  
**WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.08	0.14	0.59	0.00	0.26	1.01	0.00	0.00	0.00
2	0.00	0.00	0.00	0.31	0.54	0.00	0.00	0.56	0.00	0.80	0.00	0.00
3	0.01	0.00	0.03	0.12	0.00	1.12	0.00	0.35	0.00	0.40	0.00	0.00
4	0.00	0.00	0.12	0.77	0.00	0.15	0.00	0.00	0.00	0.00	0.02	0.00
5	0.00	0.00	0.04	0.00	0.57	0.12	0.00	0.00	0.00	0.42	0.39	0.00
6	0.00	0.24	0.00	0.00	0.01	0.00	0.00	0.00	0.00	1.06	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.38	0.00	0.06	0.02	0.00	0.00	0.00	0.00	0.32	0.00	0.00	0.00
10	0.00	0.00	0.12	0.00	0.00	0.00	0.05	0.45	0.02	0.00	0.00	0.00
11	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00
12	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00
13	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.11	0.14	0.00	0.00	0.00
14	0.38	0.18	0.00	0.00	0.00	0.05	0.00	0.08	0.00	0.41	0.00	0.00
15	0.00	0.45	0.14	0.00	0.00	0.17	0.00	0.27	0.22	0.00	0.00	0.00
16	0.23	0.01	0.13	0.00	0.00	0.17	0.00	0.00	0.06	0.00	0.00	0.00
17	0.23	0.12	0.00	0.65	0.00	0.00	0.00	0.10	1.24	0.04	0.00	0.00
18	0.00	1.33	0.07	0.32	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00
19	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
20	0.00	0.00	0.00	0.00	0.00	0.37	0.00	0.00	0.00	0.00	0.22	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
22	0.00	0.00	0.02	0.00	0.00	0.00	0.87	0.00	0.00	1.31	0.00	0.00
23	0.00	1.19	0.33	0.00	0.00	0.00	0.75	0.00	0.00	0.23	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	1.10	0.00
25	0.63	0.00	0.00	0.07	0.00	0.01	0.12	0.91	0.00	0.05	0.02	0.00
26	0.11	0.00	0.00	0.22	0.00	0.02	0.00	1.50	0.00	0.01	0.07	0.00
27	0.00	0.94	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00
28	0.11	0.08	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.74	0.00	0.00	0.35	0.00	0.01	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.16	0.57	0.85	0.00	0.46	0.00	0.00
31	0.00	---	0.00	0.00	---	0.10	---	0.01	---	0.00	0.00	---
TOTAL	2.08	5.11	1.81	2.56	1.26	3.46	2.56	5.67	3.36	5.23	1.83	0.00
MEAN	0.07	0.17	0.06	0.08	0.04	0.11	0.09	0.18	0.11	0.17	0.06	0.00
MAX	0.63	1.33	0.74	0.77	0.57	1.12	0.87	1.50	1.24	1.31	1.10	0.00

CAL YR 2003 TOTAL 45.00 MEAN 0.12 MAX 1.75

WTR YR 2004 TOTAL 34.93 MEAN 0.10 MAX 1.50



WABASH RIVER BASIN  
**400610088122201 Rain Gage at Urbana Middle School at Urbana, IL**

749

**LOCATION.**— Lat 40°06'10", long 88°12'22" (NAD of 1927), in SE1/4NW1/4SE1/4, Sec.17, T.19 N., R.9 E., Champaign County, Hydrologic Unit 05120109, on top of the northeast side of the 8th grade west wing building of Urbana Middle School at Urbana, IL.

**PERIOD OF RECORD.**—

PRECIPITATION: July 2000 to current year.

**GAGE.**— An unheated tipping-bucket rain gage.

**REMARKS.**— Collection, computation, and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 4.03 in, July 9, 2003.

**EXTREMES FOR CURRENT YEAR.**—

PRECIPITATION: Maximum daily total, 2.47 in, Mar. 26.

**Precipitation, total, inches**  
**WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.08	0.00	0.01	0.03	0.08	0.00	0.17	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.01	0.13	0.00	0.00	0.01	0.08	0.15	0.00	0.00
3	0.21	0.00	0.00	0.46	0.00	0.00	0.00	0.00	0.00	0.99	0.00	0.00
4	0.00	0.06	0.06	0.63	0.00	1.10	0.00	0.01	0.00	0.03	0.17	0.00
5	0.00	0.26	0.20	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.04	0.00	0.00	0.00	---	0.00	0.00	0.00	0.88	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.01	0.00	0.00
8	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.01	0.00	---	---	0.00	0.00	0.01	0.89	0.79	0.00
10	0.00	0.06	0.17	0.00	---	---	0.00	0.03	1.96	0.15	0.00	0.00
11	0.00	0.14	0.00	0.00	0.00	---	0.00	0.10	0.58	0.02	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	---	0.00	0.36	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.38	0.00	0.53	0.00	0.00
14	0.56	0.00	0.00	0.00	0.00	0.07	0.00	0.58	0.00	0.00	0.00	1.48
15	0.00	0.06	0.01	0.00	0.00	---	0.00	0.00	0.35	0.00	0.00	0.04
16	0.00	0.01	0.00	0.01	0.00	---	0.00	0.00	0.41	0.00	0.00	0.00
17	0.00	0.26	0.00	0.29	0.00	---	0.00	0.00	0.00	0.86	0.00	0.00
18	0.00	1.92	0.00	0.01	0.00	---	0.00	0.85	0.01	0.00	0.02	0.00
19	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.02	0.00
20	0.00	0.00	---	0.00	0.05	---	0.55	0.00	0.00	0.00	0.25	0.00
21	0.00	0.00	---	0.00	0.00	---	0.00	0.00	0.00	0.00	0.01	0.00
22	0.00	0.00	---	0.00	0.00	---	0.30	0.00	0.00	0.01	0.00	0.00
23	0.00	0.79	0.45	0.00	0.02	---	0.00	0.02	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.09	0.17	0.13	0.00	0.00	0.06	0.00
25	0.29	0.00	0.00	0.00	0.00	0.53	0.05	0.44	0.29	0.00	1.17	0.00
26	0.00	0.07	0.00	0.00	0.00	2.47	0.00	0.01	0.00	0.00	0.04	0.00
27	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00
28	0.03	0.00	0.63	0.00	0.00	0.53	0.00	0.00	0.00	0.00	0.26	0.00
29	0.00	0.00	0.30	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.14	0.00
30	0.00	0.00	0.00	0.00	---	0.62	0.20	0.21	0.00	0.35	0.00	0.00
31	0.00	---	0.00	0.00	---	0.08	---	0.04	---	0.00	0.00	---
TOTAL	1.09	3.76	---	1.42	---	---	1.27	3.34	3.69	4.87	3.18	1.52
MEAN	0.04	0.13	---	0.05	---	---	0.04	0.11	0.12	0.16	0.10	0.05
MAX	0.56	1.92	---	0.63	---	---	0.55	0.85	1.96	0.99	1.17	1.48

WABASH RIVER BASIN  
**400641088152501 Rain Gage at Healy Street at Champaign, IL**

**LOCATION.**— Lat 40°06'41", long 88°15'25" (NAD of 1983), in NW1/4NW1/4NW1/4, Sec.13, T.19 N., R.8 E., Champaign County, Hydrologic Unit 05120109, on top of private–residence garage at 809 W. Healey Street in Champaign, IL.

**PERIOD OF RECORD.**—

PRECIPITATION: March 2004 to current year.

**GAGE.**— An unheated tipping–bucket rain gage.

**REMARKS.**— Collection, computation, and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR CURRENT YEAR.**—

PRECIPITATION: Maximum recorded daily total, 1.70 in, July 9.

**Precipitation, total, inches**  
**WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	0.00	0.25	0.00	0.00	0.00	0.00
2	---	---	---	---	---	---	0.00	0.04	0.12	0.23	0.00	0.00
3	---	---	---	---	---	---	0.00	0.04	0.01	0.58	0.00	0.00
4	---	---	---	---	---	---	0.00	0.01	0.00	0.00	0.23	0.00
5	---	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00	0.00
6	---	---	---	---	---	---	0.00	0.00	0.00	1.34	0.00	0.00
7	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.03	0.00
8	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
9	---	---	---	---	---	---	0.00	0.00	0.05	1.70	0.74	0.00
10	---	---	---	---	---	---	0.00	0.00	1.36	0.22	0.22	0.00
11	---	---	---	---	---	---	0.00	0.09	0.75	0.03	0.00	0.00
12	---	---	---	---	---	---	0.00	0.24	0.00	0.00	0.00	0.00
13	---	---	---	---	---	---	0.00	0.79	0.00	0.62	0.00	0.00
14	---	---	---	---	---	---	0.00	0.74	0.00	0.00	0.00	---
15	---	---	---	---	---	---	0.00	0.00	0.76	0.00	0.00	---
16	---	---	---	---	---	---	0.00	0.00	0.37	0.00	0.00	---
17	---	---	---	---	---	---	0.00	0.07	0.00	0.65	0.00	---
18	---	---	---	---	---	---	0.00	1.07	0.01	0.00	0.00	---
19	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	---
20	---	---	---	---	---	---	0.95	0.00	0.00	0.00	0.35	---
21	---	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00	0.00
22	---	---	---	---	---	---	0.47	0.00	0.00	0.02	0.00	0.00
23	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
24	---	---	---	---	---	---	0.19	0.22	0.00	0.00	0.04	0.00
25	---	---	---	---	---	---	0.04	0.30	0.47	0.00	1.08	0.00
26	---	---	---	---	---	---	0.00	0.02	0.00	0.00	0.14	0.00
27	---	---	---	---	---	---	0.00	0.01	0.00	0.00	0.03	0.00
28	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.42	0.00
29	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.31	0.00
30	---	---	---	---	---	---	0.16	0.21	0.00	0.40	0.00	0.00
31	---	---	---	---	---	0.00	---	0.02	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	1.81	4.13	3.91	5.79	3.59	---
MEAN	---	---	---	---	---	---	0.06	0.13	0.13	0.19	0.12	---
MAX	---	---	---	---	---	---	0.95	1.07	1.36	1.70	1.08	---

ILLINOIS RIVER BASIN  
412657087372001 Rain Gage at Crete, IL

751

**LOCATION.**— Lat 41°26'57", long 87°37'20" (NAD of 1927), in NW1/4SE1/4 sec. 9, T.34 N., R.14 E., Will County, Hydrologic Unit 07120003, at Crete Public Works Yard on Douglas Lane in Crete, IL.

**PERIOD OF RECORD.**—

PRECIPITATION: October 2000 to current year.

**GAGE.**— An unheated tipping-bucket rain gage.

**REMARKS.**— Collection, computation, and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/ or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 2.28 in, May 11, 2002.

**EXTREMES FOR CURRENT YEAR.**—

PRECIPITATION: Maximum daily total, 2.04 in, November 18.

Precipitation, total, inches  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.04	0.00	0.60	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00
3	0.16	0.24	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.68	1.00	0.00
4	0.04	0.84	0.04	0.00	0.08	0.88	0.00	0.00	0.00	0.12	0.44	0.00
5	0.00	0.12	0.64	0.00	0.04	0.52	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.36	0.04	0.04	0.04	0.00
10	0.00	---	0.28	0.00	0.00	0.00	0.00	0.72	0.60	0.00	0.00	0.00
11	0.00	---	0.00	0.20	0.08	0.00	0.00	0.04	0.92	0.00	0.00	0.00
12	0.04	0.00	0.00	0.16	0.00	0.00	0.00	0.40	0.48	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.00	0.04	0.00	0.00
14	1.04	0.00	0.04	0.04	0.00	0.16	0.00	0.28	0.40	0.00	0.00	0.00
15	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	1.36
16	0.20	0.04	0.00	0.00	0.00	0.08	0.04	0.00	0.00	0.00	0.00	0.20
17	0.00	0.48	0.00	0.08	0.00	0.16	0.32	0.00	0.00	0.00	0.00	0.00
18	0.00	2.04	0.00	0.00	0.00	0.12	0.00	0.36	0.00	0.00	0.36	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.16	0.00	0.44	0.00	0.00	0.00	0.12	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.52	0.00	0.00
22	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.44	0.00	0.40	0.00	0.00
23	0.00	0.60	0.00	0.00	0.04	0.00	0.00	0.04	0.00	0.00	0.00	0.00
24	0.00	0.00	0.04	0.00	0.00	0.24	0.44	0.00	0.00	0.00	0.88	0.00
25	0.60	0.00	0.00	0.04	0.00	0.24	0.20	0.36	0.00	0.00	1.00	0.00
26	0.00	0.04	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.40	0.00
27	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	---
28	---	0.00	0.12	0.00	0.00	0.64	0.00	0.00	0.04	0.00	1.16	---
29	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	---
30	0.00	0.00	0.00	0.00	---	0.32	0.64	1.40	0.00	0.08	0.00	---
31	0.00	---	0.00	0.00	---	0.00	---	0.08	---	0.00	0.00	---
TOTAL	---	---	1.48	0.56	0.40	4.44	2.08	5.16	2.88	1.88	6.00	---
MEAN	---	---	0.05	0.02	0.01	0.14	0.07	0.17	0.10	0.06	0.19	---
MAX	---	---	0.64	0.20	0.16	0.88	0.64	1.40	0.92	0.68	1.16	---

ILLINOIS RIVER BASIN  
**413113087342201 Rain Gage near Chicago Heights, IL**

**LOCATION.**— Lat 41°31'13", long 87°34'22" (NAD of 1927), in NW1/4SW1/4, sec.13, T.35 N., R.14 E., Cook County, Hydrologic Unit 07120003, on northwest corner of concrete block building 200 ft. south of Joe Orr Road, 1.3 miles east of Cottage Grove Avenue, 2.2 miles northeast of Chicago Heights, and 0.9 mile east of gaging station Deer Creek near Chicago Heights, IL (05536235).

**PERIOD OF RECORD.**—

PRECIPITATION: December 2000 to current year.

**GAGE.**— An unheated tipping-bucket rain gage.

**REMARKS.**— Collection, computation, and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/ or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 5.72 in, July 21, 2001.

**EXTREMES FOR CURRENT YEAR.**—

PRECIPITATION: Maximum recorded daily total, 3.12 in, August 28.

Precipitation, total, inches  
**WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	0.00	0.00	---	---	---	0.00	0.08	0.00	0.00	0.00	0.00
2	---	1.24	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
3	---	0.24	0.00	---	---	---	0.00	---	0.00	0.84	1.08	0.00
4	---	1.44	0.24	---	---	---	0.00	---	0.00	0.48	0.52	0.00
5	0.00	0.20	0.84	---	---	---	0.00	---	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	---	---	---	0.00	---	0.00	0.00	0.00	0.00
7	---	0.00	0.00	---	---	---	0.00	---	0.00	0.00	0.00	0.00
8	---	0.00	0.00	---	---	---	0.00	---	0.00	0.00	0.00	0.00
9	---	0.00	0.24	---	---	---	0.00	---	0.00	0.36	0.00	0.00
10	---	---	0.40	---	---	---	0.00	---	0.00	0.04	0.00	0.00
11	---	---	0.00	---	---	---	0.00	---	0.96	0.00	0.00	0.00
12	---	---	0.00	---	---	---	0.00	---	0.64	0.00	0.08	0.00
13	---	0.00	0.00	---	---	---	0.00	---	0.00	0.00	0.00	0.00
14	---	0.00	0.08	---	---	---	0.00	---	0.64	0.00	0.00	0.00
15	---	0.00	0.00	---	---	---	0.00	---	0.00	0.00	0.00	1.44
16	---	0.12	0.00	---	---	---	0.00	---	0.00	0.12	0.00	0.40
17	---	0.60	0.00	---	---	---	0.44	---	0.00	0.00	0.00	0.00
18	---	2.88	0.00	---	---	---	0.00	0.56	0.00	0.00	0.44	0.00
19	---	0.00	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
20	---	0.00	---	---	---	---	0.52	0.00	0.00	0.00	0.20	0.00
21	---	0.00	---	---	---	---	0.00	0.00	0.44	0.84	0.00	0.00
22	---	0.00	---	---	---	---	0.00	1.96	0.04	0.00	0.00	0.00
23	---	1.08	---	---	---	---	0.00	0.36	0.00	0.00	0.00	0.00
24	---	0.00	---	---	---	0.48	0.60	0.00	0.00	0.00	1.24	0.00
25	---	0.00	---	---	---	0.36	0.36	0.60	0.00	0.12	0.92	0.00
26	---	0.08	---	---	---	0.24	0.00	0.00	0.00	0.00	0.16	0.00
27	---	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.88	0.00
28	---	0.00	---	---	---	1.04	0.00	0.00	0.08	0.00	3.12	0.00
29	---	0.00	---	---	---	0.00	0.08	0.00	0.00	0.00	0.12	0.00
30	0.00	0.00	---	---	---	0.96	0.88	1.96	0.00	0.20	0.00	0.00
31	0.00	---	---	---	---	0.04	---	0.48	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	2.88	---	2.80	3.00	8.76	1.84
MEAN	---	---	---	---	---	---	0.10	---	0.09	0.10	0.28	0.06
MAX	---	---	---	---	---	---	0.88	---	0.96	0.84	3.12	1.44

ILLINOIS RIVER BASIN  
**414158088095600 Spring Brook WWTF near Naperville, IL**

753

**LOCATION.**— Latitude 41°41'58", longitude 88°09'56" (NAD of 1927), in SW1/4NW1/4SW1/4 sec.12, T. 37 N., R.09 E., Will County, Hydrologic Unit 07120004, on Naperville– Plainfield Road 2.0 mi south of 75th Street, and at the Spring Brook Wastewater Treatment Facility near Naperville.

**PERIOD OF RECORD.**—

PRECIPITATION: July 1997 to current year.

**GAGE.**— An 8-in.-diameter, heated, 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.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 4.37 in., August 4, 1998.

**EXTREMES FOR CURRENT YEAR.**—Maximum daily total, 2.16 in., August 28.

**PRECIPITATION, TOTAL, IN INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.03	0.03	0.00	0.00	0.00
2	0.00	0.92	0.00	0.00	s0.19	0.00	0.00	0.00	0.16	0.00	0.00	0.00
3	0.14	0.79	0.00	0.01	s0.03	0.02	0.00	0.00	0.00	0.00	0.95	0.00
4	0.00	1.35	0.37	0.18	0.00	0.81	0.00	0.00	0.00	0.00	0.39	0.00
5	0.00	0.00	0.24	s0.01	s0.06	0.46	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
7	0.00	0.00	0.00	0.00	s0.01	0.01	0.00	0.09	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	s0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00
10	0.00	0.00	0.72	0.00	0.00	0.00	0.00	0.05	1.79	0.00	0.00	0.00
11	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00
12	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.16	1.17	0.00	0.00	0.00
13	0.02	0.00	0.00	0.00	0.00	0.02	0.00	0.03	0.00	0.00	0.00	0.00
14	0.87	0.00	0.00	0.00	0.00	0.15	0.00	0.78	0.24	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22
16	0.01	0.06	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.05
17	0.00	0.35	0.00	s0.11	0.00	0.01	0.00	0.00	0.00	0.00	0.19	0.00
18	0.00	1.44	0.00	0.00	0.00	0.08	0.00	0.49	0.00	0.00	0.16	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.22	0.00	0.45	0.01	0.00	0.09	0.00	0.00
21	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.28	0.00	0.93	0.00	0.00
22	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.06	0.00	0.07	0.00	0.00
23	0.00	0.51	0.00	0.00	0.01	0.01	0.00	0.35	0.00	0.00	0.00	0.00
24	0.02	0.00	0.00	0.00	0.00	0.34	0.51	0.00	e0.04	0.00	0.94	0.00
25	0.55	0.00	0.00	0.00	0.00	0.00	0.07	0.20	0.00	0.00	0.24	0.00
26	0.00	0.00	0.00	0.00	0.00	0.39	0.00	0.00	0.00	0.00	0.28	0.00
27	0.01	0.01	0.00	s0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00
28	0.00	0.00	0.16	0.00	0.00	0.99	0.00	0.00	0.00	0.00	2.16	0.00
29	0.00	0.00	0.00	s0.01	0.01	0.00	0.07	0.00	0.00	0.00	0.01	0.00
30	0.00	0.00	0.00	0.00	—	0.04	0.27	1.66	0.00	0.19	0.00	0.00
31	0.00	—	0.00	0.00	—	0.00	—	0.38	—	0.01	0.00	—
TOTAL	1.63	5.43	1.93	0.36	0.54	3.54	1.39	4.62	3.64	1.29	5.79	0.34

s Snowfall-affected precipitation

e Estimated

**414306088042100 Bolingbrook Wastewater Treatment Facility at Bolingbrook, IL**

**LOCATION.**— Latitude 41°43'06", longitude 88°04'21" (NAD of 1927), in SW1/4NE1/4SE1/4 sec.3, T.37 N., R.10 E., Will County, Hydrologic Unit 07120004, on Royce Road 0.3 mi west of State Highway 53, and at the Bolingbrook Wastewater Treatment Facility, at Bolingbrook.

**PERIOD OF RECORD.**—

PRECIPITATION: July 1997 to current year.

**GAGE.**— A 6-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.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 3.99 in., August 4, 1998.

**EXTREMES FOR CURRENT YEAR.**—Maximum daily total, 3.09 in., August 28.

**PRECIPITATION, TOTAL, IN INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004****DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.07	0.00	0.00	s0.04	0.13	0.00	0.02	0.03	0.00	0.00	0.00
2	0.00	0.99	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00
3	0.18	0.73	0.00	0.00	s0.01	0.01	0.00	0.00	0.00	0.58	1.07	0.00
4	0.00	1.74	0.37	0.00	0.00	0.94	0.00	0.00	0.00	0.00	0.27	0.00
5	0.00	0.00	0.31	0.00	0.00	0.40	0.00	0.00	0.00	0.48	0.00	0.00
6	0.00	0.00	0.00	0.00	s0.01	0.00	0.00	0.00	0.00	0.40	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.06	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00
10	0.00	0.00	0.62	0.00	0.00	0.00	0.00	0.06	1.86	0.01	0.00	0.00
11	0.00	0.00	0.00	0.01	s0.07	0.00	0.00	0.00	0.34	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.58	0.00	0.00	0.00
13	0.02	0.00	0.00	0.00	0.00	0.03	0.00	0.37	0.00	0.02	0.00	0.00
14	0.90	0.00	s0.01	0.00	0.00	0.17	0.00	0.64	0.30	0.00	0.00	0.00
15	0.00	0.01	s0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29
16	0.00	0.08	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.01
17	0.00	0.34	0.00	s0.07	0.00	0.05	0.01	0.00	0.00	0.00	0.09	0.00
18	0.00	1.18	0.00	0.00	0.00	0.13	0.00	0.44	0.00	0.00	0.14	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.20	0.00	0.38	0.12	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.35	0.37	0.78	0.00	0.00
22	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.15	0.00	0.25	0.00	0.00
23	0.00	0.64	0.01	0.00	0.01	0.01	0.00	0.18	0.00	0.00	0.00	0.00
24	0.09	0.01	0.00	0.00	0.00	0.44	0.64	0.00	0.04	0.00	1.37	0.00
25	0.48	0.00	0.00	0.00	0.00	0.00	0.01	0.17	0.00	0.00	0.14	0.00
26	0.00	0.00	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.29	0.00
27	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.00
28	0.02	0.00	0.15	0.00	0.00	0.86	0.00	0.00	0.03	0.00	3.09	0.00
29	0.00	0.00	0.00	0.00	0.01	0.00	0.06	0.00	0.00	0.00	0.01	0.00
30	0.00	0.00	0.00	0.00	—	0.05	0.24	1.66	0.00	0.15	0.00	0.00
31	0.00	—	0.00	0.00	—	0.00	—	0.43	—	0.00	0.00	—
TOTAL	1.70	5.81	1.96	0.08	0.36	3.59	1.34	4.81	3.72	2.91	6.85	0.30

s Snowfall-affected precipitation

ILLINOIS RIVER BASIN  
**414411087575000 Marienbrook WWTF at Darien, IL**

755

**LOCATION.**— Latitude 41°44'11", longitude 87°57'50" (NAD of 1927), in NE1/4NE1/4SW1/4 sec. 34, T.38 N., R.11 E., Du Page County, Hydrologic Unit 07120004, on Nantucket Road 0.6 mi east of Frontage Road, and located at the Marienbrook Wastewater treatment Facility at Darien.

**PERIOD OF RECORD.**—

PRECIPITATION: October 1990 to October 1991 and July 1997 to current year.

**GAGE.**— A 6-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.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 3.16 in., November 27, 1990.

**EXTREMES FOR CURRENT YEAR.**—Maximum daily total, 2.41 in., August 28.

**PRECIPITATION, TOTAL, IN INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	e0.01	e0.38	0.00	0.04	0.00	0.00	0.00	0.00
2	0.00	1.04	0.00	0.00	e0.01	0.00	0.00	0.00	0.07	0.00	0.00	0.00
3	0.19	0.70	0.00	0.00	0.00	e0.03	0.00	0.00	0.00	0.41	e0.99	0.00
4	0.00	1.78	0.27	0.00	e0.02	0.71	0.00	0.00	0.00	0.00	0.21	0.00
5	0.00	0.00	0.34	0.00	0.00	0.47	0.00	0.00	0.00	0.35	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
9	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.02	0.36	0.00	0.00
10	0.00	0.00	0.54	0.00	0.00	0.00	0.00	0.00	1.77	0.02	0.00	0.00
11	0.00	0.00	0.00	e0.26	e0.04	0.00	0.00	0.00	0.16	0.00	0.00	0.00
12	0.00	0.00	0.00	e0.05	0.00	0.00	0.00	0.28	0.50	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	0.00	0.00	0.00	0.00
14	0.84	0.00	0.00	0.00	0.00	0.12	0.00	0.83	0.15	0.00	0.00	0.00
15	0.00	0.03	e0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27
16	0.00	0.05	e0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.43	0.00	s0.04	e0.03	0.00	0.00	0.00	0.00	0.00	0.02	0.00
18	0.00	1.21	0.00	0.00	e0.26	0.02	0.00	0.31	0.00	0.00	0.10	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	e0.27	0.00	0.73	0.02	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	e0.02	0.00	0.00	0.02	0.29	0.18	0.00	0.00
22	0.00	0.00	e0.04	0.00	0.00	0.00	0.00	0.23	0.00	0.10	0.00	0.00
23	0.00	0.30	0.00	0.00	e0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.01	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.01	0.00	0.90	0.00
25	0.49	0.00	e0.01	0.00	0.00	0.00	0.03	0.09	0.00	0.00	0.21	0.00
26	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.01	0.25	0.00
27	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.00
28	0.01	0.00	e0.21	0.00	0.00	0.67	0.00	0.00	0.06	0.00	2.41	0.00
29	0.00	0.00	0.00	0.00	e0.02	0.00	0.05	0.00	0.00	0.00	0.01	0.00
30	0.00	0.00	0.00	0.00	—	0.00	0.28	1.64	0.00	0.17	0.00	0.00
31	0.00	—	0.00	0.00	—	0.00	—	0.01	—	0.00	0.00	—
TOTAL	1.54	5.56	1.89	0.35	0.70	2.64	1.56	4.30	3.03	2.14	5.56	0.27

s Snowfall-affected precipitation

e Estimated

**414430088035600 Woodridge Wastewater Treatment Facility at Woodridge, IL**

**LOCATION.**— Latitude 41°44'30", longitude 88°03'56" (NAD of 1927), in NE1/4NW1/4NW1/4 sec.35, T. 38 N., R.10 E., Du Page County, Hydrologic Unit 07120004, on State Highway 53 0.5 mi south of 75th Street, and located at the Woodridge Wastewater Treatment Facility at Woodridge.

**PERIOD OF RECORD.**—

PRECIPITATION: July 1997 to current year.

**GAGE.**— A 12-in.-diameter, heated, 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.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 6.77 in., August 4, 1998.

**EXTREMES FOR CURRENT YEAR.**—Maximum daily total, 3.66 in., August 28.

**PRECIPITATION, TOTAL, IN INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004****DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.05	0.00	0.00	s0.01	0.19	0.00	0.03	0.09	0.00	0.00	0.00
2	0.00	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00
3	0.23	0.89	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.55	1.04	0.00
4	0.01	1.50	0.38	0.00	0.00	0.97	0.00	0.00	0.00	0.00	0.27	0.00
5	0.00	0.00	0.32	0.00	0.00	0.41	0.00	0.00	0.00	0.32	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.08	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.46	0.00	0.00	0.00	0.00	0.00	0.03	0.57	0.00	0.00
10	0.00	0.00	0.63	0.00	0.00	0.00	0.00	0.09	1.62	0.00	0.00	0.00
11	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.47	0.00	0.00	0.00
12	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.20	0.71	0.00	0.00	0.00
13	0.03	0.00	0.00	0.00	0.00	0.02	0.00	0.35	0.00	0.00	0.00	0.00
14	0.89	0.00	0.00	0.00	s0.02	0.18	0.00	0.79	0.15	0.00	0.00	0.00
15	0.00	0.00	s0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35
16	0.00	0.04	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.37	0.00	s0.01	0.00	0.10	0.01	0.00	0.00	0.00	0.23	0.01
18	0.00	1.32	0.00	0.00	0.28	0.13	0.00	0.26	0.00	0.00	0.13	0.00
19	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.26	0.01	0.40	0.10	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.78	0.34	0.51	0.00	0.00
22	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.15	0.00	0.11	0.00	0.00
23	0.00	0.65	0.00	0.00	0.01	0.00	0.00	0.15	0.00	0.00	0.00	0.00
24	0.09	0.00	0.00	0.00	0.00	0.38	0.65	0.00	0.02	0.00	1.23	0.00
25	0.46	0.00	0.00	0.00	0.00	0.00	0.01	0.16	0.00	0.00	0.16	0.00
26	0.00	0.00	0.00	0.00	0.00	0.36	0.00	0.00	0.00	0.00	0.22	0.00
27	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.00
28	0.02	0.00	0.17	0.00	0.00	0.81	0.00	0.00	0.05	0.00	3.66	0.00
29	0.00	0.00	0.00	0.00	0.01	0.00	0.06	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	—	0.03	0.20	1.82	0.00	0.16	0.00	0.00
31	0.00	—	0.00	0.00	—	0.00	—	0.58	—	0.00	0.00	—
TOTAL	1.74	5.70	1.99	0.25	0.67	3.64	1.33	5.54	3.73	2.64	7.43	0.36

s Snowfall-affected precipitation



ILLINOIS RIVER BASIN  
**414613088091000 Naperville Municipal Building at Naperville, IL**

757

**LOCATION.**— Latitude 41°46'13", longitude 88°09'10" (NAD of 1927), in SE1/4SW1/4SE1/4 sec.13, T. 38 N., R.9 E., Du Page County, Hydrologic Unit 07120004, on Eagle Street 1.8 mi from Aurora Avenue, and located at the Naperville Municipal Building at Naperville.

**PERIOD OF RECORD.**—

PRECIPITATION: July 1997 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.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 3.91 in., August 4, 1998.

**EXTREMES FOR CURRENT YEAR.**— Maximum daily total, 1.72 in., May 30.

**PRECIPITATION, TOTAL, IN INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	s0.01	0.16	0.00	0.02	0.00	0.00	0.00	0.00
2	0.00	0.64	0.00	0.00	s0.15	0.00	0.00	0.00	0.50	0.00	0.00	0.00
3	0.24	0.79	0.00	0.01	0.03	0.00	0.00	0.00	0.00	0.46	0.92	0.00
4	0.00	1.62	0.31	0.05	0.00	0.79	0.00	0.00	0.00	0.01	0.24	0.00
5	0.00	0.00	0.20	s0.01	s0.01	0.58	0.00	0.00	0.00	0.15	0.00	0.00
6	0.00	0.00	0.00	0.00	s0.05	0.00	0.00	0.00	0.00	0.88	0.00	0.04
7	0.00	0.00	0.00	0.00	s0.03	0.01	0.00	0.09	0.00	0.01	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.01	0.00
10	0.00	0.00	0.84	0.00	0.00	0.00	0.00	0.09	1.18	0.01	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.15	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.88	0.00	0.00	0.00
13	0.04	0.00	0.00	0.00	0.00	0.04	0.00	0.08	0.00	0.00	0.00	0.00
14	0.76	0.00	0.00	0.00	0.00	0.13	0.00	1.10	0.13	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24
16	0.00	0.03	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00
17	0.00	0.36	0.00	s0.12	0.00	0.10	0.00	0.00	0.00	0.00	0.45	0.00
18	0.00	1.50	0.00	0.00	0.00	0.13	0.00	0.30	0.00	0.00	0.11	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.20	0.27	0.54	0.01	0.00	0.01	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.49	0.25	0.00	0.00
22	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.10	0.00	0.16	0.00	0.00
23	0.00	0.51	0.00	s0.02	0.00	0.00	0.00	0.09	0.02	0.00	0.00	0.00
24	0.12	0.00	0.00	0.00	0.00	0.38	0.52	0.00	0.06	0.00	0.70	0.00
25	0.40	0.00	0.00	0.00	0.00	0.01	0.02	0.16	0.00	0.00	0.29	0.00
26	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.44	0.00
27	0.01	0.00	0.00	s0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.00
28	0.01	0.00	0.19	0.00	0.00	1.21	0.00	0.00	0.03	0.00	1.71	0.00
29	0.00	0.00	0.00	0.00	0.01	0.00	0.04	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	—	0.04	0.15	1.72	0.00	0.15	0.00	0.00
31	0.00	—	0.00	0.00	—	0.00	—	0.51	—	0.00	0.00	—
TOTAL	1.58	5.45	2.09	0.22	0.50	4.26	1.27	5.09	3.78	3.14	5.30	0.28

s Snowfall-affected precipitation

**LOCATION.**— Latitude 41°46'52", longitude 88°13'59" (NAD of 1927), SE1/4NE1/4NE1/4 sec.17, T.38 N., R.9 E., Du Page County, Hydrologic Unit 07120004, on North Aurora Avenue 1.4 mi south of State Highway 59, and located at the Naperville Township Highway Division, at Naperville.

PRECIPITATION: July 1997 to December 2003.

**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.

PRECIPITATION: Maximum daily total, 2.74 in., October 13, 2001.

**EXTREMES FOR CURRENT YEAR.**—Maximum daily total, 1.32 in., November 4.

[illegible]

ILLINOIS RIVER BASIN  
**414655088102300 Naperville North Operations Center at Naperville, IL**

759

**LOCATION.**— Latitude 41°46'55", Longitude 88°10'23" (NAD of 1927), in NE1/4NW1/4NE1/4 sec.14, T.38 N., R.9 E., Du Page County, Hydrologic Unit 07120004, on State Highway 34 2.0 mi east of State Highway 59, and located at the Naperville North Operations Center at Naperville.

**PERIOD OF RECORD.**—

PRECIPITATION: July 1997 to current year.

**GAGE.**— A 6-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.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 2.74 in.(estimated), October 13, 2001.

**EXTREMES FOR CURRENT YEAR.**— Maximum daily total, 1.55 in., May 30.

**PRECIPITATION, TOTAL, IN INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.01	0.00	0.00	s0.04	0.14	0.01	0.02	0.00	0.00	0.00	0.01
2	0.00	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.00
3	0.22	0.79	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.48	0.81	0.00
4	0.00	1.33	0.33	0.00	s0.12	0.71	0.00	0.00	0.00	0.00	0.20	0.00
5	0.00	0.00	0.20	0.00	0.00	0.56	0.00	0.01	0.00	0.10	0.00	0.00
6	0.00	0.00	0.00	0.00	s0.01	0.00	0.00	0.00	0.00	0.49	0.01	0.02
7	0.00	0.00	0.00	0.00	s0.07	0.02	0.00	0.09	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	s0.02	s0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.56	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.03	0.00
10	0.00	0.00	0.85	0.00	0.00	0.00	0.00	0.08	1.29	0.01	0.00	0.00
11	0.00	0.00	0.00	0.00	s0.04	0.00	0.00	0.00	0.52	0.19	0.01	0.00
12	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.26	1.24	0.00	0.00	0.00
13	0.04	0.00	0.00	0.00	0.00	0.05	0.00	0.25	0.00	0.00	0.00	0.00
14	0.75	0.00	s0.01	0.00	0.00	0.15	0.00	0.84	0.12	0.00	0.00	0.00
15	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
16	0.00	0.05	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.30	0.00	s0.11	0.00	0.10	0.02	0.00	0.00	0.00	0.46	0.00
18	0.00	1.35	0.00	0.00	0.00	0.11	0.00	0.29	0.00	0.00	0.11	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
20	0.00	0.00	0.00	0.00	0.19	0.20	0.57	0.00	0.00	0.03	0.00	0.00
21	0.00	0.00	0.00	s0.02	0.01	0.00	0.04	0.79	0.55	0.04	0.00	0.00
22	0.00	0.00	0.01	s0.02	0.01	0.00	0.00	0.09	0.00	0.05	0.00	0.00
23	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.06	0.03	0.00	0.00	0.00
24	0.14	0.00	0.00	s0.02	0.00	0.41	0.49	0.00	0.11	0.00	0.59	0.00
25	0.40	0.00	0.01	0.00	0.00	0.03	0.01	0.19	0.00	0.00	0.27	0.00
26	0.00	0.00	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.00	0.61	0.00
27	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.44	0.00
28	0.01	0.00	0.23	0.00	0.00	1.25	0.01	0.00	0.09	0.00	1.26	0.00
29	0.01	0.00	0.00	s0.01	0.02	0.00	0.08	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	—	0.03	0.19	1.55	0.00	0.17	0.00	0.00
31	0.00	—	0.00	0.00	—	0.00	—	0.45	—	0.01	0.00	—
TOTAL	1.58	5.05	2.20	0.20	0.52	4.27	1.42	4.97	4.23	2.58	4.81	0.24

s Snowfall-affected precipitation

ILLINOIS RIVER BASIN  
**414747087582700 Westmont Water Department at Westmont, IL**

**LOCATION.**— Latitude 41°47'47", longitude 87°58'27" (NAD of 1927), in SW1/4SW1/4NW1/4 sec. 10, T.38 N., R.11 E., Du Page County, Hydrologic Unit 07120004, on Burlington Avenue 500 ft east of Cass Avenue, and located at the Westmont Water Department at Westmont.

**PERIOD OF RECORD.**—

PRECIPITATION: July 1997 to current year.

**GAGE.**— A 6-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.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 2.94 in., October 17, 1998.

**EXTREMES FOR CURRENT YEAR.**— Maximum daily total, 2.69 in., August 28.

**PRECIPITATION, TOTAL, IN INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.06	0.00	0.00	s0.01	0.20	0.00	0.04	0.03	0.00	0.00	0.00
2	0.00	0.70	0.00	0.15	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00
3	0.25	0.91	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.88	0.88	0.00
4	0.00	1.96	0.36	0.00	s0.06	0.82	0.00	0.00	0.00	0.01	0.22	0.00
5	0.00	0.00	0.24	0.00	0.00	0.56	0.00	0.00	0.00	0.28	0.00	0.00
6	0.00	0.00	0.00	0.00	s0.03	0.00	0.00	0.00	0.00	0.35	0.00	0.00
7	0.00	0.00	0.00	0.00	e0.01	0.01	0.00	0.08	0.00	0.04	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.36	0.00	0.00	0.00	0.00	0.00	0.08	0.56	0.01	0.00
10	0.00	0.01	0.55	0.00	0.00	0.00	0.00	0.07	1.33	0.00	0.00	0.01
11	0.03	0.01	0.00	0.00	s0.01	0.00	0.00	0.00	0.43	0.06	0.01	0.00
12	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.21	0.80	0.00	0.00	0.00
13	0.02	0.00	0.00	0.00	0.00	0.02	0.00	0.21	0.00	0.00	0.00	0.00
14	1.02	0.00	0.00	0.00	0.00	0.26	0.00	0.87	0.20	0.00	0.00	0.00
15	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35
16	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
17	0.00	0.35	0.00	s0.13	0.00	0.05	0.14	0.00	0.00	0.00	0.24	0.00
18	0.00	e1.26	0.00	0.00	0.00	0.11	0.00	0.30	0.00	0.00	0.11	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.23	0.16	0.45	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.45	0.14	0.00	0.00
22	0.00	0.00	0.02	0.00	0.01	0.00	0.00	0.28	0.00	0.08	0.00	0.00
23	0.00	e0.60	0.00	0.00	0.01	0.00	0.00	0.03	0.06	0.00	0.00	0.00
24	0.11	0.00	0.00	0.00	0.00	0.38	0.50	0.00	0.07	0.00	1.31	0.00
25	0.43	0.00	0.00	0.00	0.00	0.01	0.02	0.15	0.00	0.00	0.12	0.00
26	0.00	0.00	0.00	0.00	0.00	0.46	0.00	0.00	0.00	0.03	0.31	0.00
27	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.00
28	0.02	0.00	0.22	0.00	0.00	0.88	0.00	0.00	0.11	0.00	2.69	0.00
29	0.02	0.00	0.00	0.00	0.02	0.00	0.05	0.01	0.00	0.00	0.01	0.00
30	0.00	0.00	0.00	0.00	—	0.00	0.19	1.56	0.00	0.16	0.00	0.00
31	0.00	—	0.00	0.00	—	0.00	—	0.39	—	0.00	0.00	—
TOTAL	1.91	5.98	1.75	0.28	0.39	3.94	1.35	4.89	3.73	2.59	6.27	0.37

s Snowfall-affected precipitation

e Estimated

ILLINOIS RIVER BASIN  
**414843088042500 Morton Arboretum near Lisle, IL**

761

**LOCATION.**— Latitude 41°48'43", longitude 88°04'25" (NAD of 1927), in SE1/4NE1/4NE1/4 sec.3, T.38 N., R. 10 E., Du Page County, Hydrologic Unit 07120004, on State Highway 53 0.3 mi north of U.S. Highway 88, and located on the roof of the main office building of Morton Arboretum near Lisle.

**PERIOD OF RECORD.**—

PRECIPITATION: June 1989 to November 1991 and July 1997 to current year.

**GAGE.**— A 6-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.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 3.88 in., October 13, 2001.

**EXTREMES FOR CURRENT YEAR.**—Maximum daily total, 1.58 in., May 30.

**PRECIPITATION, TOTAL, IN INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.02	0.00	0.00	s0.07	0.21	0.00	0.03	0.00	0.00	0.00	0.00
2	0.00	0.56	0.00	0.00	s0.01	0.00	0.00	0.00	0.44	0.00	0.00	0.00
3	0.19	0.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.79	0.00
4	0.00	1.41	0.38	0.00	s0.11	0.80	0.00	0.00	0.00	0.02	0.18	0.00
5	0.00	0.00	0.28	0.00	0.00	0.59	0.00	0.00	0.00	0.09	0.00	0.00
6	0.00	0.00	0.00	0.00	s0.01	0.00	0.00	0.00	0.00	0.38	0.00	0.06
7	0.00	0.00	0.00	0.00	s0.01	0.01	0.00	0.08	0.00	0.02	0.00	0.00
8	0.00	0.00	0.00	s0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.02	0.80	0.00	0.00
10	0.00	0.00	0.65	0.00	0.00	0.00	0.00	0.08	1.16	0.01	0.00	0.00
11	0.02	0.01	0.00	0.00	s0.02	0.00	0.00	0.00	0.31	0.50	0.00	0.00
12	0.00	0.01	0.00	0.00	s0.01	0.00	0.00	0.21	0.72	0.00	0.00	0.00
13	0.02	0.00	0.00	0.00	0.00	0.03	0.00	0.06	0.00	0.00	0.00	0.00
14	0.81	0.00	0.00	0.00	0.00	0.20	0.00	0.95	0.10	0.00	0.00	0.00
15	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24
16	0.00	0.04	0.00	0.00	0.00	0.04	0.00	0.01	0.00	0.00	0.00	0.00
17	0.00	0.36	0.00	s0.12	0.00	0.06	0.01	0.00	0.00	0.00	0.26	0.00
18	0.00	1.24	0.00	s0.01	0.00	0.09	0.00	0.19	0.00	0.00	0.12	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.19	0.07	0.42	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.43	0.54	0.08	0.00	0.00
22	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.11	0.00	0.03	0.00	0.00
23	0.00	0.53	0.00	0.00	0.00	0.00	0.00	0.02	0.05	0.00	0.00	0.00
24	0.17	0.00	0.00	s0.01	0.00	0.32	0.51	0.00	0.14	0.00	0.70	0.00
25	0.37	0.00	0.00	0.00	0.00	0.01	0.02	0.16	0.00	0.00	0.13	0.00
26	0.00	0.00	0.00	0.00	0.00	0.49	0.00	0.00	0.00	0.00	0.44	0.00
27	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.00
28	0.01	0.00	0.17	0.00	0.00	0.77	0.00	0.00	0.09	0.00	0.81	0.00
29	0.01	0.00	0.00	0.00	0.01	0.00	0.03	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	—	0.00	0.13	1.58	0.00	0.11	0.00	0.00
31	0.00	—	0.00	0.00	—	0.00	—	0.27	—	0.00	0.00	—
TOTAL	1.61	5.07	1.94	0.15	0.46	3.69	1.13	4.18	3.57	2.51	3.79	0.30

s Snowfall-affected precipitation

ILLINOIS RIVER BASIN  
**415037087581700 Oak Brook Well at Oak Brook, IL**

**LOCATION.**— Latitude 41°50'37", longitude 87°58'17" (NAD of 1927), in SW1/4NE1/4NW1/4 sec.27, T.39 N., R.11 E., Du Page County, Hydrologic Unit 07120004, on Midwest Road 50 ft north of U.S. Highway 88, and located on the roof of the Oakbrook well housing, at Oak Brook.

**PERIOD OF RECORD.**—

PRECIPITATION: July 1997 to current year. Prior to Water year 2003, published as "Oak Brook Lift Station at Oak Brook, IL."

**GAGE.**— A 12-in.-diameter, heated, 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.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 2.90 in, October 17, 1998.

**EXTREMES FOR CURRENT YEAR.**—Maximum daily total, 1.94 in., August 28.

**PRECIPITATION, TOTAL, IN INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.02	0.00	0.00	0.00	0.26	0.00	0.04	0.00	0.00	0.00	0.00
2	0.00	0.64	0.00	0.00	s0.01	0.00	0.00	0.00	0.18	0.00	0.00	0.00
3	0.23	0.89	0.00	0.00	s0.09	0.00	0.00	0.00	0.00	1.06	0.95	0.00
4	0.00	1.51	0.33	0.00	s0.01	0.92	0.00	0.00	0.00	0.02	0.18	0.00
5	0.00	0.00	0.31	0.00	0.00	0.52	0.00	0.00	0.00	0.05	0.00	0.00
6	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.28	0.00	0.02
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.37	0.00	s0.01	0.00	0.00	0.00	0.05	0.53	0.00	0.00
10	0.00	0.00	0.56	0.00	0.00	0.00	0.00	0.12	1.74	0.01	0.00	0.00
11	0.00	0.01	0.00	s0.01	s0.01	0.00	0.00	0.00	0.17	0.03	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.56	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.16	0.00	0.00	0.00	0.00
14	0.81	0.00	0.00	0.00	0.00	0.24	0.00	0.72	0.17	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
16	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.40	0.00	s0.13	0.00	0.05	0.05	0.00	0.00	0.00	0.27	0.00
18	0.00	1.26	0.00	0.00	0.00	0.08	0.00	0.28	0.00	0.00	0.17	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.21	0.04	0.38	0.30	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.69	0.06	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.02	0.00	0.00
23	0.00	0.60	0.00	s0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.14	0.00	0.00	0.00	0.00	0.37	0.58	0.00	0.17	0.00	1.38	0.00
25	0.40	0.00	0.00	0.00	0.00	0.00	0.01	0.14	0.00	0.00	0.11	0.00
26	0.00	0.00	0.00	0.00	0.00	0.81	0.00	0.00	0.00	0.01	0.43	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.00
28	0.00	0.00	0.17	0.00	0.00	0.68	0.00	0.00	0.04	0.00	1.94	0.00
29	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	—	0.00	0.12	1.54	0.00	0.12	0.00	0.00
31	0.00	—	0.00	0.00	—	0.00	—	0.17	—	0.00	0.00	—
TOTAL	1.59	5.34	1.74	0.16	0.36	3.99	1.15	4.24	3.77	2.19	5.85	0.28

s Snowfall-affected precipitation

ILLINOIS RIVER BASIN  
**415037088110600 Blackwell Forest Preserve near Warrenville, IL**

763

**LOCATION.**— Latitude 41°50'37", longitude 88°11'06" (NAD of 1927), in SW1/4SW1/4SW1/4 sec.23, T.39 N., R.9 E., Du Page County, Hydrologic Unit 07120004, on Mack Road 1 mi east of State Highway 59, and located on the north side of the roof of the Blackwell Forest Preserve maintenance building near Warrenville.

**PERIOD OF RECORD.**—

PRECIPITATION: July 1997 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.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 5.06 in., September 11, 2000.

**EXTREMES FOR CURRENT YEAR.**—Maximum daily total, 1.87 in., May 30.

**PRECIPITATION, TOTAL, IN INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.02	0.00	0.00	s0.01	0.20	0.00	0.01	0.00	0.00	0.00	0.00
2	0.00	0.64	0.00	0.00	s0.01	0.00	0.00	0.00	0.08	0.00	0.00	0.00
3	e0.22	0.64	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.44	0.95	0.00
4	0.00	1.21	0.23	0.00	0.00	0.73	0.00	0.00	0.00	0.06	0.27	0.00
5	0.00	0.00	0.23	0.00	0.00	0.49	0.00	0.00	0.00	0.05	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.05
7	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.08	0.00	0.03	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.00	0.00
10	0.00	0.00	0.76	0.00	0.00	0.00	0.00	0.12	0.95	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.00
12	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.77	0.00	0.00	0.00
13	0.02	0.00	0.00	0.00	0.00	0.06	0.00	0.32	0.00	0.00	0.00	0.00
14	0.82	0.00	0.00	0.00	s0.01	0.13	0.00	0.74	0.11	0.00	0.00	0.00
15	0.00	0.01	s0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23
16	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.18	0.00	s0.03	0.00	0.07	0.01	0.00	0.00	0.00	0.52	0.00
18	0.00	1.32	0.00	0.00	0.00	0.09	0.00	0.25	0.00	0.00	0.13	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.22	0.09	0.73	0.12	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	s0.01	0.00	0.00	0.04	0.37	0.58	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.37	0.00	0.05	0.00	0.00
23	0.00	0.47	0.00	0.00	0.00	0.00	0.00	0.06	0.06	0.00	0.05	0.00
24	0.10	0.00	0.00	0.00	0.00	0.40	0.47	0.00	0.18	0.00	0.33	0.00
25	0.24	0.00	0.00	0.00	0.00	0.07	0.01	0.16	0.00	0.00	0.15	0.00
26	0.00	0.00	0.00	0.00	0.00	0.51	0.00	0.00	0.00	0.01	0.11	0.00
27	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00
28	0.02	0.00	0.26	0.00	0.00	1.12	0.00	0.00	0.06	0.00	0.81	0.00
29	0.01	0.00	0.00	0.00	0.01	0.00	0.11	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	—	0.03	0.13	1.87	0.00	0.10	0.00	0.00
31	0.00	—	0.00	0.00	—	0.00	—	0.34	—	0.00	0.00	—
TOTAL	1.45	4.53	2.11	0.04	0.29	4.02	1.50	5.14	3.40	1.24	3.56	0.28

s Snowfall-affected precipitation

e Estimated

ILLINOIS RIVER BASIN  
**415125088045700 Wheaton Sewer Department at Wheaton, IL**

**LOCATION.**— Latitude 41°51'25", longitude 88°04'57" (NAD of 1927), in SE1/4NE1/4NW1/4 sec.22, T.39 N., R.10 E., Du Page County, Hydrologic Unit 07120004, on Lorraine St. 0.25 mi south of State Highway 38, and located on top of a lift station at the Wheaton Sewer Department, at Wheaton.

**PERIOD OF RECORD.**—

PRECIPITATION: July 1997 to current year.

**GAGE.**— A 12-in.-diameter, heated, 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.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 4.13 in., October 13, 2001.

**EXTREMES FOR CURRENT YEAR.**—Maximum daily total, 1.70 in., May 30.

**PRECIPITATION, TOTAL, IN INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.01	0.00	0.00	0.00	0.12	0.00	0.03	0.01	0.00	0.00	0.00
2	0.00	0.61	0.02	0.02	0.00	0.03	0.00	0.00	0.45	0.00	0.00	0.00
3	0.20	0.93	0.00	0.00	s0.03	0.01	0.00	0.00	0.00	0.00	0.85	0.00
4	0.00	1.34	0.29	0.00	0.00	0.71	0.00	0.02	0.00	0.00	0.33	0.00
5	0.00	0.00	0.26	0.00	0.00	0.66	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	s0.02	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.03
7	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.01	0.00	0.00	0.01
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
9	0.00	0.00	0.71	0.00	0.00	0.03	0.00	0.00	0.02	0.00	0.00	0.01
10	0.00	0.00	0.78	0.00	s0.02	0.01	0.00	0.12	1.29	0.00	0.02	0.00
11	0.05	0.03	0.00	0.00	s0.07	0.00	0.00	0.03	0.16	0.00	0.00	0.00
12	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.16	0.53	0.00	0.00	0.00
13	0.02	0.00	0.00	s0.02	0.00	0.02	0.02	0.34	0.00	0.00	0.00	0.00
14	1.00	0.00	0.00	0.00	s0.06	0.19	0.00	1.05	0.24	0.00	0.00	0.01
15	0.00	0.02	s0.02	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01	0.21
16	0.00	0.04	0.00	0.00	s0.01	0.06	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.34	0.00	s0.09	s0.05	0.07	0.01	0.00	0.00	0.00	0.25	0.00
18	0.00	1.34	0.00	0.00	0.00	0.08	0.00	0.28	0.00	0.00	0.23	0.00
19	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	s0.01	0.20	0.09	0.52	0.53	0.00	0.02	0.00	0.00
21	0.02	0.00	0.00	s0.01	0.01	0.00	0.10	0.39	0.00	0.00	0.01	0.02
22	0.00	0.00	0.02	0.00	0.03	0.00	0.00	0.39	0.00	0.05	0.00	0.00
23	0.00	0.61	0.02	0.00	0.01	0.03	0.00	0.04	0.00	0.00	0.00	0.00
24	0.11	0.00	0.00	0.00	0.02	0.52	0.52	0.00	e0.11	0.00	0.71	0.00
25	0.36	0.02	0.01	0.00	0.00	0.04	0.02	0.23	0.00	0.00	0.19	0.00
26	0.00	0.01	0.00	0.00	0.00	0.67	0.01	0.00	0.00	0.01	0.17	0.00
27	0.03	0.01	0.00	s0.02	0.00	0.00	0.02	0.00	0.00	0.02	0.24	0.01
28	0.02	0.00	0.23	0.00	0.00	1.12	0.00	0.00	0.00	0.00	1.00	0.02
29	0.01	0.00	0.00	0.00	0.00	0.01	0.08	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.03	0.00	—	0.02	0.23	1.70	0.00	0.13	0.02	0.00
31	0.00	—	0.00	0.00	—	0.01	—	0.31	—	0.01	0.02	—
TOTAL	1.85	5.33	2.39	0.19	0.51	4.51	1.56	5.72	2.86	0.24	4.05	0.32

s Snowfall-affected precipitation

e Estimated



**LOCATION.**— Latitude 41°51'31", longitude 88°14'36" (NAD of 1927), in NW1/4SW1/4SW1/4 sec.17, T.39 N., R.9 E., Du Page County, Hydrologic Unit 07120004, on McChesney Road 0.5 mi north of Eola Road, and at the National Accelerator Lab near West Chicago.

**PERIOD OF RECORD.**—

PRECIPITATION: April 1989 to October 1995 and July 1997 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.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 5.09 in., July 9, 2002.

**EXTREMES FOR CURRENT YEAR.**—Maximum daily total, 1.73 in., May 30.

**PRECIPITATION, TOTAL, IN INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.01	0.00	0.00	0.00	0.21	0.00	0.03	0.00	0.00	0.00	0.00
2	0.00	0.94	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.00	0.00	0.00
3	0.22	0.69	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.59	1.15	0.00
4	0.00	1.43	0.21	0.00	0.00	0.95	0.00	0.00	0.00	0.12	0.33	0.00
5	0.00	0.00	0.31	0.00	0.00	0.64	0.00	0.00	0.00	0.06	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.11	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.10	0.00	0.04	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	1.04	0.00	0.00	0.00	0.00	0.00	0.00	0.82	0.00	0.01
10	0.00	0.00	0.98	0.00	0.00	0.00	0.00	0.25	1.12	0.00	0.00	0.00
11	0.02	0.01	0.00	s0.01	0.00	0.00	0.00	0.01	0.83	0.10	0.00	0.00
12	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.33	0.73	0.00	0.00	0.00
13	0.04	0.00	0.00	0.00	0.00	0.08	0.00	0.37	0.00	0.00	0.00	0.00
14	1.26	0.00	0.00	0.00	0.00	0.16	0.00	1.06	0.14	0.00	0.00	0.00
15	0.00	0.02	s0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
16	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00
17	0.00	0.18	0.00	s0.09	0.00	0.08	0.00	0.00	0.01	0.00	0.22	0.00
18	0.00	1.67	0.00	0.00	0.00	0.11	0.00	0.37	0.00	0.00	0.13	0.00
19	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
20	0.00	0.00	0.00	0.00	0.22	0.34	0.76	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.01	0.00	0.04	0.49	0.74	0.02	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.25	0.00	0.00
23	0.00	0.52	0.01	0.00	0.01	0.00	0.00	0.00	0.13	0.00	0.00	0.00
24	0.14	0.00	0.00	0.00	0.00	0.59	0.57	0.00	0.21	0.00	0.16	0.00
25	0.23	0.00	0.00	0.00	0.00	0.14	0.00	0.20	0.00	0.00	0.12	0.00
26	0.00	0.00	0.00	0.00	0.00	0.53	0.01	0.00	0.00	0.03	0.23	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.00
28	0.03	0.00	0.28	0.00	0.00	1.14	0.00	0.00	0.04	0.00	1.00	0.00
29	0.01	0.00	0.00	0.00	0.03	0.00	0.12	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	—	0.01	0.16	1.73	0.00	0.10	0.00	0.00
31	0.00	—	0.00	0.00	—	0.00	—	0.58	—	0.00	0.00	—
TOTAL	1.95	5.53	2.84	0.10	0.27	5.02	1.66	5.87	4.44	2.24	3.69	0.27

s Snowfall-affected precipitation

ILLINOIS RIVER BASIN  
415300088054600 Wheaton Water Department at Wheaton, IL

**LOCATION.**— Latitude 41°53'00", longitude 88°05'46" (NAD of 1927), in NW1/4SE1/4NE1/4 sec.09, T.39 N., R.10 E., Du Page County, Hydrologic Unit 07120004, on Country Side Street 0.2 mi west of President Street, and located behind the Wheaton Water Department pump station at Wheaton.

**PERIOD OF RECORD.**—

PRECIPITATION: July 1997 to current year.

**GAGE.**— A 12-in.-diameter, heated, 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.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 4.13 in.(estimated), October 13, 2002.

**EXTREMES FOR CURRENT YEAR.**—Maximum daily total, 2.49 in., May 30.

**PRECIPITATION, TOTAL, IN INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.01	0.00	0.00	0.00	0.00
2	0.00	0.58	0.00	0.00	0.20	0.00	0.00	0.00	0.04	0.00	0.00	0.00
3	0.16	0.84	0.00	0.02	s0.06	0.01	0.00	0.00	0.00	0.00	e0.85	0.00
4	0.00	1.17	0.26	0.00	0.00	0.76	0.00	0.00	0.00	0.00	e0.33	0.00
5	0.00	0.00	0.37	0.00	s0.15	0.66	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	s0.04	0.00	0.00	0.00	0.00	0.00	0.00	e0.03
7	0.00	0.00	0.00	0.00	s0.01	0.02	0.00	0.12	0.00	0.00	0.00	e0.01
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.01
10	0.00	0.00	0.71	0.00	0.00	0.00	0.00	0.11	1.16	0.00	0.00	0.00
11	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00
12	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.35	0.73	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.32	0.00	0.00	0.00	0.00
14	0.96	0.00	s0.02	0.00	0.00	0.19	0.00	1.12	0.12	0.00	0.00	e0.01
15	0.00	0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	e0.21
16	0.00	0.02	0.00	0.00	0.00	0.04	0.03	0.00	0.00	0.00	0.00	0.00
17	0.00	0.27	0.00	s0.14	0.00	0.12	0.00	0.00	0.00	0.00	0.27	0.00
18	0.00	1.44	0.00	0.00	0.00	0.22	0.00	0.27	0.00	0.00	0.19	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
20	0.00	0.00	0.00	0.00	0.19	0.20	0.56	0.24	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.01	0.00	0.07	0.33	0.00	0.00	0.00	e0.02
22	0.00	0.00	0.01	0.00	0.07	0.00	0.00	0.36	0.00	0.00	0.00	0.00
23	0.00	0.59	0.05	s0.07	0.00	0.00	0.00	0.01	0.00	0.03	0.00	0.00
24	0.08	0.00	0.00	0.00	0.00	0.46	0.50	0.00	e0.11	0.00	e0.71	0.00
25	0.26	0.00	0.00	0.00	0.00	0.06	0.02	0.18	0.00	0.00	e0.19	0.00
26	0.00	0.00	0.00	s0.03	0.00	0.51	0.00	0.00	0.00	0.00	e0.17	0.00
27	0.00	0.00	0.00	s0.11	0.00	0.00	0.00	0.00	0.00	0.00	e0.24	e0.01
28	0.02	0.00	0.25	0.00	0.00	1.29	0.00	0.00	0.00	0.01	e1.00	e0.02
29	0.01	0.00	0.00	s0.03	0.02	0.00	0.09	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	—	0.00	0.14	2.49	0.00	0.07	e0.02	0.00
31	0.00	—	0.00	0.00	—	0.00	—	0.12	—	0.00	e0.02	—
TOTAL	1.52	4.95	2.34	0.40	0.75	4.72	1.41	6.03	2.31	0.11	4.00	0.32

s Snowfall-affected precipitation

e Estimated

ILLINOIS RIVER BASIN  
415331088280301 Rain Gage at Well No. 4 at Elburn, IL

767

**LOCATION.**— Lat 41°53'31", long 88°28'03" (NAD of 1927), in SW1/4NW1/4 sec.5, T.39 N., R.7 E., Kane County, Hydrologic Unit 07120007, at Village of Elburn Water Supply Well #4 on E. North St.

**PERIOD OF RECORD.**—

PRECIPITATION: September 2000 to current year.

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

**REMARKS.**— Collection, computation and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 4.50 in., August 13, 2002.

**EXTREMES FOR CURRENT YEAR.**— Maximum daily total, 1.73 in., May 30.

Precipitation, total, inches  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.08	0.00	0.00	0.00	0.14	0.00	0.05	0.00	0.00	0.00	0.00
2	0.00	1.01	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.16	0.42	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.25	1.10	0.00
4	0.00	1.03	0.13	0.00	0.00	0.86	0.00	0.00	0.00	0.12	0.23	0.00
5	0.00	0.00	0.24	0.00	0.00	0.79	0.00	0.00	0.00	0.06	0.00	0.01
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01
7	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.15	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
9	0.00	0.00	0.93	0.00	0.00	0.00	0.00	0.00	0.00	0.85	0.00	0.00
10	0.00	0.02	1.19	0.00	0.00	0.01	0.00	0.13	1.03	0.00	0.00	0.00
11	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.01	1.04	0.00	0.00	0.00
12	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.21	0.88	0.00	0.00	0.00
13	0.09	0.00	0.00	0.00	0.00	0.10	0.00	0.05	0.00	0.00	0.00	0.00
14	0.73	0.00	0.00	0.00	0.00	0.11	0.00	0.88	0.18	0.00	0.00	0.00
15	0.00	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36
16	0.00	0.06	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.00
17	0.00	0.75	0.00	0.01	0.00	0.09	0.00	0.05	0.01	0.00	0.12	0.00
18	0.00	1.27	0.00	0.00	0.06	0.06	0.00	0.33	0.00	0.00	0.20	0.00
19	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.27	0.01	0.63	0.70	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.81	0.51	0.07	0.00	0.00
22	0.00	0.00	0.01	0.00	0.10	0.00	0.00	0.41	0.00	0.23	0.00	0.00
23	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00
24	0.10	0.01	0.00	0.00	0.01	0.67	0.58	0.00	0.10	0.00	0.08	0.00
25	0.08	0.00	0.00	0.00	0.00	0.30	0.01	0.20	0.00	0.00	0.17	0.00
26	0.00	0.00	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.00	0.00
27	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.00
28	0.03	0.01	0.42	0.00	0.00	0.64	0.00	0.00	0.04	0.00	0.24	0.00
29	0.02	0.00	0.00	0.00	0.05	0.00	0.01	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.35	0.15	1.73	0.00	0.02	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.34	---	0.00	0.00	---
TOTAL	1.25	4.97	2.93	0.01	0.53	4.53	1.45	6.11	3.79	1.63	2.48	0.38
MEAN	0.04	0.17	0.09	0.00	0.02	0.15	0.05	0.20	0.13	0.05	0.08	0.01
MAX	0.73	1.27	1.19	0.01	0.27	0.86	0.63	1.73	1.04	0.85	1.10	0.36

CAL YR 2003 TOTAL 28.62 MEAN 0.08 MAX 2.67  
WTR YR 2004 TOTAL 30.06 MEAN 0.08 MAX 1.73

ILLINOIS RIVER BASIN  
**415356087575000 Elmhurst Quarry at Elmhurst, IL**

**LOCATION.**— Latitude 41°53'56", longitude 87°57'50" (NAD of 1927), in SE1/4SW1/4NE sec.3, T.39 N., R.11 E., Du Page County, Hydrologic Unit 07120004, on the Du Page County Flood Control Project service road 50 ft west of State Highway 83, and located on top of the flood control building at Elmhurst.

**PERIOD OF RECORD.**—

PRECIPITATION: July 1997 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.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 2.78 in., October 17, 1998.

**EXTREMES FOR CURRENT YEAR.**— Maximum daily total, 1.55 in., August 24.

**PRECIPITATION, TOTAL, IN INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.06	0.00	0.00	0.00	0.25	0.00	0.03	0.00	0.00	0.00	0.00
2	0.00	0.70	0.00	0.00	s0.13	0.00	0.00	0.00	0.09	0.00	0.00	0.00
3	0.19	0.88	0.00	0.00	s0.05	0.01	0.00	0.00	0.00	1.07	1.02	0.00
4	0.00	1.33	0.23	0.01	0.00	0.87	0.00	0.00	0.00	0.02	0.23	0.00
5	0.00	0.00	0.36	0.05	s0.01	0.67	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.14	0.00	0.05
7	0.00	0.00	0.00	0.00	s0.01	0.01	0.00	0.08	0.00	0.04	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.51	0.00	0.00	0.00	0.00	0.00	0.02	0.97	0.00	0.00
10	0.00	0.00	0.60	0.00	0.00	0.00	0.00	0.21	1.37	0.01	0.00	0.00
11	0.01	0.00	0.00	s0.01	0.00	0.00	0.00	0.00	0.20	0.20	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.48	0.00	0.00	0.00
13	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00
14	1.01	0.00	s0.02	0.00	0.00	0.16	0.00	0.86	0.18	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28
16	0.00	0.02	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.32	0.00	s0.10	0.00	0.06	0.00	0.00	0.00	0.00	0.09	0.00
18	0.00	1.28	0.00	0.00	0.00	0.10	0.00	0.33	0.00	0.00	0.22	0.00
19	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.15	0.20	0.43	0.41	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.02	0.00	0.01	0.29	0.72	0.02	0.00	0.00
22	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.43	0.00	0.75	0.00	0.00
23	0.00	0.56	0.00	s0.03	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00
24	0.09	0.00	0.00	s0.01	0.00	0.41	0.58	0.00	0.18	0.00	1.55	0.00
25	0.33	0.00	0.00	0.00	0.00	0.02	0.01	0.12	0.00	0.00	0.10	0.00
26	0.00	0.00	0.00	s0.02	0.00	0.45	0.00	0.00	0.00	0.03	0.03	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00
28	0.01	0.00	0.15	0.00	0.00	0.62	0.00	0.00	0.01	0.00	1.29	0.00
29	0.01	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	—	0.00	0.09	1.50	0.00	0.10	0.00	0.00
31	0.00	—	0.00	0.00	—	0.00	—	0.26	—	0.00	0.00	—
TOTAL	1.66	5.16	1.87	0.23	0.49	3.86	1.15	4.90	3.26	3.35	4.69	0.33

s Snowfall-affected precipitation

**415423088081500 Carol Stream Wastewater Treatment Facility at Carol Stream, IL**

**LOCATION.**— Latitude 41°54'23", longitude 88°08'15" (NAD of 1927), in SE1/4NW1/4SE1/4 sec.31, T.40 N., R.10 E., Du Page County, Hydrologic Unit 07120004, on Kuhn Road 100 ft north of State Highway 64, and located on the north side of the main building of the Carol Stream Wastewater Treatment Facility, at Carol Stream.

**PERIOD OF RECORD.**—

PRECIPITATION: July 1997 to current year.

**GAGE.**— A 6-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.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 2.51 in., October 13, 2001.

**EXTREMES FOR CURRENT YEAR.**—Maximum daily total, 2.00 in., May 30.

**PRECIPITATION, TOTAL, IN INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.10	0.00	0.00	s0.03	0.29	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	1.18	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00
3	0.19	0.60	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.19	0.96	0.00
4	0.00	1.24	0.27	0.00	s0.03	0.84	0.00	0.00	0.00	0.04	0.24	0.00
5	0.00	0.00	0.31	0.00	0.00	0.65	0.00	0.00	0.00	0.03	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.07
7	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.16	0.00	0.05	0.00	0.00
8	0.00	0.00	0.00	0.00	s0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.81	0.00	0.00	0.00	0.00	0.00	0.01	0.69	0.00	0.00
10	0.00	0.00	0.82	0.00	0.00	0.00	0.00	0.13	1.16	0.00	0.00	0.00
11	0.01	0.01	0.00	0.00	s0.02	0.00	0.00	0.00	0.39	0.03	0.00	0.00
12	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.65	0.46	0.00	0.00	0.00
13	0.02	0.00	0.00	0.00	0.00	0.05	0.00	0.72	0.00	0.00	0.00	0.00
14	0.96	0.00	s0.03	0.00	0.00	0.18	0.00	0.85	0.27	0.00	0.00	0.00
15	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
16	0.00	0.04	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.23	0.00	s0.04	0.00	0.08	0.01	0.01	0.00	0.00	0.32	0.00
18	0.00	1.44	0.00	s0.01	0.00	0.12	0.00	0.48	0.00	0.00	0.31	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.26	0.08	0.86	0.31	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	s0.01	0.01	0.00	0.09	0.56	0.74	0.01	0.00	0.00
22	0.00	0.00	0.01	0.00	0.06	0.00	0.00	0.42	0.00	0.63	0.00	0.00
23	0.00	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.12	0.00	0.00	0.00	0.00	0.49	0.60	0.00	0.11	0.00	0.49	0.00
25	0.24	0.00	0.00	0.00	0.00	0.12	0.00	0.20	0.00	0.00	0.10	0.00
26	0.00	0.00	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.03	0.13	0.00
27	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00
28	0.04	0.00	0.29	0.00	0.00	1.25	0.00	0.00	0.02	0.00	1.18	0.00
29	0.02	0.00	0.00	0.00	0.01	0.00	0.10	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	—	0.00	0.13	2.00	0.00	0.08	0.00	0.00
31	0.00	—	0.00	0.00	—	0.00	—	0.22	—	0.00	0.00	—
TOTAL	1.61	5.51	2.54	0.06	0.43	4.65	1.79	6.71	3.31	1.83	3.97	0.33

s Snowfall-affected precipitation

ILLINOIS RIVER BASIN  
**415457088150600 Du Page County Airport near St. Charles, IL**

**LOCATION.**— Latitude 41°54'57", longitude 88°15'06" (NAD of 1927), in NW1/4SW1/4SE1/4 sec. 30, T.40N., R.9 E., Du Page County, Hydrologic Unit 07120004, on Tower Road 0.4 mi south of Keil Street, and located near the southeast corner of the first aeroplane hanger of the Du Page County Airport near St. Charles.

**PERIOD OF RECORD.**—

PRECIPITATION: February 1986 to current year.

**GAGE.**— An 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.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 4.26 in., August 14, 1987.

**EXTREMES FOR CURRENT YEAR.**—Maximum daily total, 1.87 in., May 30.

**PRECIPITATION, TOTAL, IN INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.03	0.00	0.00	0.00	0.27	0.00	0.01	0.00	0.00	0.00	0.00
2	0.00	0.94	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00
3	0.15	0.48	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.46	0.95	0.00
4	0.00	1.01	0.20	0.00	s0.03	0.87	0.00	0.00	0.00	0.11	0.26	0.00
5	0.00	0.00	0.25	s0.05	0.00	0.65	0.00	0.00	0.00	0.04	0.00	0.00
6	0.00	0.00	0.00	0.00	s0.05	0.00	0.00	0.00	0.00	0.03	0.00	0.02
7	0.00	0.00	0.00	0.00	s0.10	0.02	0.00	0.09	0.00	0.04	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.81	0.00	0.00	0.00	0.00	0.00	0.01	0.54	0.00	0.00
10	0.00	0.00	0.88	0.00	0.00	0.00	0.00	0.21	0.98	0.00	0.00	0.00
11	0.04	0.01	0.00	s0.03	0.00	0.00	0.00	0.01	0.75	0.01	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.75	0.00	0.00	0.00
13	0.05	0.00	0.00	0.00	s0.01	0.08	0.00	0.61	0.00	0.00	0.00	0.00
14	1.06	0.00	s0.01	0.00	0.00	0.14	0.00	0.97	0.19	0.00	0.00	0.00
15	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
16	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00
17	0.00	0.14	0.00	s0.02	0.00	0.08	0.01	0.06	0.01	0.00	0.13	0.00
18	0.00	1.48	0.00	0.00	0.00	0.12	0.00	0.36	0.00	0.00	0.34	0.00
19	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.26	0.03	0.42	0.64	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.01	0.00	0.03	0.73	0.50	0.01	0.00	0.00
22	0.00	0.00	0.01	0.00	0.09	0.00	0.00	0.15	0.00	0.63	0.00	0.00
23	0.00	0.62	0.00	s0.01	0.00	0.00	0.00	0.03	0.00	0.00	0.02	0.00
24	0.13	0.00	0.00	s0.02	0.00	0.51	0.53	0.00	0.12	0.00	0.11	0.00
25	0.13	0.00	0.00	0.00	0.00	0.20	0.00	0.17	0.00	0.00	0.09	0.00
26	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.04	0.02	0.00
27	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.00
28	0.03	0.00	0.25	0.00	0.00	0.88	0.00	0.00	0.02	0.00	0.87	0.00
29	0.03	0.00	0.00	0.00	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	s0.01	—	0.09	0.18	1.87	0.00	0.05	0.00	0.00
31	0.00	—	0.00	0.00	—	0.00	—	0.29	—	0.00	0.00	—
TOTAL	1.64	4.77	2.41	0.14	0.57	4.31	1.28	6.62	3.51	1.96	3.16	0.28

s Snowfall-affected precipitation

ILLINOIS RIVER BASIN  
**415518087583000 Addison Wastewater Treatment Facility at Addison, IL**

771

**LOCATION.**— Latitude 41°55'18", longitude 87°58'30" (NAD of 1927), in SE1/4SW1/4SW1/4 sec. 27, T.40 N., R.11 E., Du Page County, Hydrologic Unit 07120004, on Villa Avenue 0.5 mi south of State Highway 20, and located on the southern most building of the Addison Wastewater Treatment Facility at Addison.

**PERIOD OF RECORD.**—

PRECIPITATION: July 1997 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.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 3.79 in., October 13, 2001.

**EXTREMES FOR CURRENT YEAR.**—Maximum daily total, 1.65 in., May 30.

**PRECIPITATION, TOTAL, IN INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.04	0.00	0.00	0.00	0.25	0.00	0.01	0.00	0.00	0.00	0.00
2	0.00	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00
3	0.00	0.75	0.00	0.00	0.00	0.02	0.00	0.00	0.00	1.06	0.76	0.00
4	0.00	1.13	0.18	0.00	0.00	0.77	0.00	0.00	0.00	0.01	0.20	0.00
5	0.00	0.00	0.32	0.00	0.00	0.64	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.08
7	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.06	0.00	0.03	0.00	0.00
8	0.00	0.00	0.00	0.00	s0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.52	0.00	0.00	0.00	0.00	0.03	0.02	0.79	0.00	0.00
10	0.00	0.00	0.56	0.00	0.00	0.00	0.00	0.16	0.54	0.01	0.00	0.00
11	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.02	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00
13	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.36	0.00	0.00	0.00	0.00
14	1.03	0.00	s0.01	0.00	0.00	0.15	0.00	0.83	0.00	0.00	0.00	0.00
15	0.00	0.00	s0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
16	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.21	0.00	s0.11	s0.01	0.08	0.06	0.06	0.00	0.00	0.17	0.00
18	0.00	1.11	0.00	0.00	s0.01	0.06	0.00	0.29	0.00	0.00	0.21	0.00
19	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.16	0.42	0.37	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.31	0.71	0.04	0.00	0.00
22	0.00	0.00	s0.01	0.00	0.04	0.00	0.00	0.50	0.00	0.17	0.00	0.00
23	0.00	0.47	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
24	0.09	0.00	0.00	0.00	0.00	0.34	0.46	0.00	0.09	0.00	1.26	0.00
25	0.27	0.00	0.00	0.00	0.00	0.04	0.00	0.14	0.00	0.00	0.10	0.00
26	0.00	0.00	0.00	0.00	0.00	0.36	0.00	0.00	0.00	0.01	0.04	0.00
27	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.25	0.00
28	0.01	0.00	0.15	0.00	0.00	0.63	0.00	0.00	0.01	0.00	0.77	0.00
29	0.03	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	—	0.00	0.09	1.65	0.00	0.09	0.00	0.00
31	0.00	—	0.00	0.00	—	0.00	—	0.20	—	0.00	0.00	—
TOTAL	1.44	4.40	1.76	0.11	0.24	3.80	1.03	4.84	1.64	2.35	3.76	0.29

s Snowfall-affected precipitation

ILLINOIS RIVER BASIN  
**415651088051900    Bloomingdale Lift Station at Bloomingdale, IL**

**LOCATION.**— Latitude 41°56'51", longitude 88°05'19" (NAD of 1927), in SW1/4SW1/4SW1/4 sec.15, T.40 N. R.10 E., Du Page County, Hydrologic Unit 07120004, on a service road 300 ft south of Leslie Lane, and located next to the Bloomingdale lift station at Bloomingdale.

**PERIOD OF RECORD.**—

PRECIPITATION: March 1990 to November 1995 and February 1997 to current year.

**GAGE.**— A 12-in.-diameter, heated, 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.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 3.45 in., October 13, 2001.

**EXTREMES FOR CURRENT YEAR.**—Maximum daily total, 1.95 in., May 30.

**PRECIPITATION, TOTAL, IN INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.03	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.99	0.00	0.00	s0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.20	0.38	0.00	0.00	s0.21	0.02	0.00	0.00	0.00	0.17	0.84	0.00
4	0.00	1.18	0.20	0.06	0.00	0.82	0.00	0.00	0.00	0.06	0.26	0.00
5	0.00	0.00	0.33	s0.02	0.00	0.58	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	s0.18	0.00	0.00	0.00	0.00	0.06	0.00	0.05
7	0.00	0.00	0.00	0.00	s0.01	0.01	0.00	0.08	0.00	0.02	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.68	0.00	0.00	0.00	0.00	0.00	0.03	0.58	0.00	0.00
10	0.00	0.00	0.74	0.00	0.00	0.00	0.00	0.67	1.18	0.00	0.00	0.00
11	0.02	0.00	0.01	0.05	0.00	0.00	0.00	0.01	0.42	0.03	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.55	0.00	0.00	0.00
13	0.01	0.00	0.00	0.00	0.00	0.03	0.00	0.62	0.00	0.00	0.00	0.00
14	0.67	0.00	0.02	0.00	0.00	0.14	0.00	0.78	0.10	0.00	0.00	0.00
15	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
16	0.00	0.02	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.01
17	0.00	0.19	0.00	s0.09	0.00	0.08	0.01	0.08	0.00	0.00	0.18	0.00
18	0.00	1.17	0.00	0.00	0.00	0.09	0.00	0.49	0.00	0.00	0.38	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.19	0.03	0.67	0.56	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.77	0.75	0.07	0.00	0.00
22	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.28	0.01	0.01	0.00	0.00
23	0.00	0.56	0.00	s0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
24	0.08	0.00	0.00	0.00	0.00	0.45	0.52	0.00	0.08	0.00	0.28	0.00
25	0.19	0.00	0.00	0.00	0.00	0.12	0.00	0.16	0.00	0.00	0.06	0.00
26	0.00	0.00	0.00	0.01	0.00	0.35	0.00	0.00	0.00	0.01	0.15	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00
28	0.05	0.00	0.22	0.00	0.00	1.17	0.00	0.00	0.01	0.00	1.33	0.00
29	0.02	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	—	0.00	0.12	1.95	0.00	0.05	0.00	0.00
31	0.00	—	0.00	0.00	—	0.00	—	0.13	—	0.00	0.00	—
TOTAL	1.24	4.53	2.20	0.25	0.66	4.21	1.43	7.12	3.13	1.06	3.74	0.26

s Snowfall-affected precipitation



ILLINOIS RIVER BASIN  
415737088031100 Spring Creek Reservoir near Bloomingdale, IL

773

**LOCATION.**— Latitude 41°57'37", longitude 88°03'11" (NAD of 1927), in SE1/4NE1/4NE1/4 sec.14, R.10 E., T.40 N., Du Page County, Hydrologic Unit 07120004, at the end of the bike trail of the Spring Creek Reservoir 0.5 mi west of Lake Street, and located on the top of the pump control building near Bloomingdale.

**PERIOD OF RECORD.**—

PRECIPITATION: July 1997 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.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 3.91 in., October 13, 2001.

**EXTREMES FOR CURRENT YEAR.**—Maximum daily total, 1.95 in. (estimated), May 30.

**PRECIPITATION, TOTAL, IN INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	e0.03	0.00	0.00	0.00	e0.29	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	e0.99	0.00	0.00	e0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	e0.20	e0.38	0.00	0.00	e0.01	e0.02	0.00	0.00	0.00	e0.17	0.74	0.00
4	0.00	e1.18	e0.20	0.00	0.00	e0.82	0.00	0.00	0.00	e0.06	0.37	0.00
5	0.00	0.00	e0.33	0.00	0.00	e0.58	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.06	0.00	e0.05
7	0.00	0.00	0.00	0.00	0.00	e0.01	0.00	0.09	0.00	e0.02	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	e0.68	0.00	0.00	0.00	0.00	0.00	0.01	e0.58	0.00	0.00
10	0.00	0.00	e0.74	0.00	0.00	0.00	0.00	e0.67	1.23	0.00	0.00	0.00
11	0.00	0.00	0.00	e0.05	0.00	0.00	0.00	e0.01	0.28	e0.03	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.53	0.57	0.00	0.00	0.00
13	e0.01	0.00	0.00	0.00	0.00	0.02	0.00	e0.62	0.00	0.00	0.00	0.00
14	e0.67	0.00	e0.02	0.00	0.00	0.21	0.00	e0.78	0.10	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
16	0.00	e0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
17	0.00	e0.19	0.00	e0.09	0.00	0.10	e0.01	e0.08	0.00	0.00	0.07	0.00
18	0.00	e1.17	0.00	0.00	0.00	0.13	0.00	e0.49	0.00	0.00	0.29	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00
20	0.00	0.00	0.00	0.00	e0.19	0.04	0.61	e0.56	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.04	e0.77	0.00	e0.07	0.00	0.00
22	0.00	0.00	s0.01	0.00	e0.05	0.00	0.00	e0.28	0.00	e0.01	0.00	0.00
23	0.00	e0.56	0.00	0.00	0.00	0.00	0.00	e0.01	0.00	0.00	0.00	0.00
24	e0.08	0.00	0.00	0.00	0.00	0.53	0.49	0.00	e0.08	0.00	0.20	0.00
25	e0.19	0.00	0.00	0.00	0.00	e0.12	0.01	e0.16	0.00	0.00	e0.06	0.00
26	0.00	0.00	0.00	0.00	0.00	e0.35	0.01	0.00	0.00	e0.01	e0.15	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.26	0.00
28	e0.05	0.00	e0.22	0.00	0.00	e1.17	0.00	0.00	e0.01	0.00	e1.33	0.00
29	e0.02	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	—	0.00	0.14	e1.95	0.00	0.04	0.00	0.00
31	0.00	—	0.00	0.00	—	0.00	—	0.10	—	0.00	0.00	—
TOTAL	1.22	4.52	2.20	0.14	0.26	4.39	1.35	7.10	2.28	1.05	3.57	0.16

s Snowfall-affected precipitation

e Estimated

**415751087591000 Wood Dale Wastewater Treatment Facility at Wood Dale, IL**

**LOCATION.**— Latitude 41°57'51", longitude 87°59'10" (NAD of 1927), in SE1/4SW1/4SE1/4 sec.9, T.40 N., R.11 E., Du Page County, Hydrologic Unit 07120004, on Irving Park Road 1.4 mi east of Walnut Road, and located on building east of the water tower of the Wood Dale Wastewater Treatment Facility at Wood Dale.

**PERIOD OF RECORD.**—

PRECIPITATION: July 1997 to current year.

**GAGE.**— An 8-in. diameter, heated, 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.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 3.66 in., October 13, 2001.

**EXTREMES FOR CURRENT YEAR.**— Maximum daily total, 1.71 in., May 30.

**PRECIPITATION, TOTAL, IN INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.07	0.00	0.00	0.00	0.14	0.00	0.01	0.00	0.00	0.00	0.00
2	0.00	0.81	0.00	0.00	s0.01	0.00	0.00	0.00	0.02	0.00	0.00	0.00
3	0.21	0.56	0.00	0.00	s0.01	0.03	0.00	0.00	0.00	1.64	1.10	0.00
4	0.00	0.86	0.19	0.00	0.00	0.75	0.00	0.00	0.00	0.02	0.30	0.00
5	0.00	0.00	0.31	0.00	0.00	0.66	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.02
7	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.18	0.00	0.01	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.54	0.00	0.00	0.00	0.00	0.00	0.02	0.76	0.00	0.00
10	0.00	0.00	0.61	0.00	0.00	0.00	0.00	0.20	1.19	0.01	0.00	0.00
11	0.00	0.01	0.00	s0.16	s0.07	0.00	0.00	0.00	0.18	0.01	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.32	0.00	0.00	0.00
13	0.01	0.00	0.00	0.00	0.00	0.03	0.00	0.73	0.00	0.00	0.00	0.00
14	1.11	0.00	s0.01	0.00	0.00	0.15	0.00	0.97	0.25	0.00	0.00	0.00
15	0.00	0.00	s0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34
16	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
17	0.00	0.27	0.00	s0.02	0.00	0.09	0.06	0.15	0.00	0.00	0.09	0.00
18	0.00	1.06	0.00	0.00	s0.09	0.13	0.00	0.47	0.00	0.00	0.38	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.18	0.02	0.60	0.46	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.03	0.00	0.02	0.82	0.93	0.05	0.00	0.00
22	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.40	0.00	0.00	0.00	0.00
23	0.00	0.49	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
24	0.08	0.00	0.00	0.00	0.00	0.45	0.51	0.00	0.10	0.00	0.64	0.00
25	0.21	0.00	0.00	0.00	0.00	0.08	0.01	0.16	0.00	0.00	0.08	0.00
26	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.00	0.00	0.02	0.18	0.00
27	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.00
28	0.04	0.00	0.17	0.00	0.00	0.79	0.00	0.00	0.02	0.00	1.44	0.00
29	0.02	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	—	0.00	0.10	1.71	0.00	0.08	0.00	0.00
31	0.00	—	0.00	0.00	—	0.00	—	0.19	—	0.00	0.00	—
TOTAL	1.69	4.15	1.85	0.18	0.42	3.69	1.34	6.71	3.03	2.64	4.54	0.37

s Snowfall-affected precipitation

ILLINOIS RIVER BASIN  
415755087525300 O'Hare Airport at Chicago, IL

775

**LOCATION.**— Latitude 41°57'55", longitude 87°52'53" (NAD of 1927), in NE1/4NW1/4 sec.16, T.40 N., R.12 E., Cook County, Hydrologic Unit 07120004, on Montrose Road 500 ft West of Mannheim Road, and located on the fence 100 ft past a guard house of the O'Hare Airport at Chicago.

**PERIOD OF RECORD.**—

PRECIPITATION: October 1, 1998 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.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 3.59 in., August 22, 2002.

**EXTREMES FOR CURRENT YEAR.**—Maximum daily total, 1.50 in., May 30.

**PRECIPITATION, TOTAL, IN INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**

**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.19	0.07	0.02	0.00	s0.01	0.40	0.01	0.00	0.01	0.04	0.00	0.00
2	0.10	0.76	0.00	0.00	s0.01	0.00	0.00	0.00	0.00	0.05	0.00	0.00
3	0.17	0.62	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.32	1.14	0.00
4	0.00	0.84	0.22	0.00	0.00	0.67	0.01	0.00	0.00	0.04	0.23	0.00
5	0.01	0.00	0.36	0.00	0.00	0.71	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.01
7	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.04	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.10	0.41	0.00	s0.01	0.00	0.00	0.01	0.00	0.57	0.00	0.00
10	0.00	0.07	0.51	0.00	0.00	0.00	0.00	0.18	1.11	0.01	0.00	0.02
11	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00
12	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.44	0.17	0.00	0.00	0.00
13	0.01	0.17	0.00	0.00	0.00	0.01	0.00	0.24	0.00	0.00	0.00	0.00
14	1.09	0.00	s0.01	0.00	0.00	0.17	0.00	0.61	0.18	0.00	0.00	0.10
15	0.09	0.00	s0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49
16	0.00	0.02	s0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01
17	0.05	0.40	0.00	0.00	0.00	0.08	0.09	0.09	0.03	0.00	0.06	0.00
18	0.06	1.14	0.00	0.00	0.00	0.11	0.01	0.39	0.00	0.00	0.33	0.01
19	0.00	0.00	0.00	s0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.01	0.00	0.00	0.00	0.15	0.02	0.38	0.49	0.13	0.00	0.00	0.03
21	0.10	0.01	0.00	0.00	0.00	0.00	0.00	0.45	0.64	0.09	0.00	0.01
22	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.59	0.00	0.00	0.00	0.02
23	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.05	0.00	0.00	0.00	0.00	0.38	0.48	0.00	0.19	0.00	0.94	0.01
25	0.29	0.10	0.00	0.00	0.00	0.01	0.00	0.08	0.08	0.00	0.06	0.00
26	0.00	0.05	0.00	0.00	0.00	0.33	0.00	0.01	0.08	0.06	0.00	0.14
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.41	0.00
28	0.02	0.02	0.15	0.00	0.00	0.52	0.00	0.00	0.05	0.00	1.05	0.00
29	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.02	0.00	0.00	0.00
30	0.01	0.02	0.00	0.00	—	0.00	0.07	1.50	0.02	0.07	0.00	0.00
31	0.00	—	0.00	0.00	—	0.00	—	0.12	—	0.00	0.00	—
TOTAL	2.30	5.04	1.70	0.01	0.21	3.42	1.07	5.25	2.81	1.41	4.22	0.85

s Snowfall-affected precipitation

ILLINOIS RIVER BASIN  
**415801088095700 Bartlett Wastewater Treatment Facility at Bartlett, IL**

**LOCATION.**— Latitude 41°58'01", longitude 88°09'57" (NAD of 1927), in SE1/4SE1/4NE1/4 sec.11, T.40 N., R.9 E., Du Page County, Hydrologic Unit 07120004, on Stearns Road 0.7 mi west of Jefferson Road, and located on the building next to the overflow settlement tanks of the Bartlett Wastewater Treatment Facility, near Bartlett.

**PERIOD OF RECORD.**—

PRECIPITATION: July 1997 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.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 3.20 in., August 22, 2002.

**EXTREMES FOR CURRENT YEAR.**— Maximum daily total, 2.19 in., May 30.

**PRECIPITATION, TOTAL, IN INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.13	0.00	0.00	s0.06	0.25	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.88	0.00	0.00	s0.04	0.01	0.00	0.00	0.01	0.00	0.00	0.00
3	0.22	0.35	0.00	0.00	s0.01	0.03	0.00	0.00	0.00	0.22	1.26	0.00
4	0.01	1.31	0.19	0.00	s0.02	0.75	0.00	0.00	0.00	0.05	0.23	0.00
5	0.00	0.00	0.24	s0.02	0.00	0.63	0.00	0.00	0.00	0.03	0.00	0.00
6	0.00	0.00	0.00	0.00	s0.07	0.00	0.00	0.00	0.00	0.02	0.00	0.02
7	0.00	0.00	0.00	0.00	s0.03	0.03	0.00	0.00	0.00	0.10	0.00	0.00
8	0.02	0.00	0.00	s0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.78	0.00	0.00	0.00	0.00	0.00	0.02	0.78	0.00	0.00
10	0.00	0.01	0.73	0.00	0.00	0.00	0.00	0.02	1.29	0.00	0.00	0.00
11	0.07	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.52	0.00	0.00	0.00
12	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.21	0.67	0.00	0.01	0.00
13	0.05	0.00	0.00	0.00	0.00	0.05	0.00	0.58	0.00	0.00	0.00	0.00
14	1.10	0.00	0.01	0.00	0.00	0.16	0.00	0.91	0.19	0.00	0.00	0.00
15	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27
16	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00
17	0.00	0.19	0.00	s0.07	0.00	0.04	0.03	0.14	0.05	0.00	0.19	0.00
18	0.00	1.29	0.00	0.00	0.00	0.07	0.00	0.37	0.00	0.00	0.46	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.24	0.02	0.42	0.67	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.03	0.00	0.00	1.24	0.61	0.05	0.00	0.00
22	0.00	0.00	s0.01	0.00	0.07	0.00	0.00	0.81	0.00	0.00	0.00	0.00
23	0.00	0.53	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
24	0.12	0.01	0.06	s0.01	0.00	0.54	0.15	0.00	0.14	0.00	0.17	0.00
25	0.09	0.00	0.02	0.00	0.00	0.17	0.00	0.14	0.00	0.00	0.06	0.00
26	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.02	0.02	0.00
27	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00
28	0.04	0.00	0.24	0.00	0.00	1.19	0.00	0.00	0.03	0.00	1.37	0.00
29	0.03	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	—	0.00	0.01	2.19	0.00	0.04	0.00	0.00
31	0.00	—	0.00	s0.01	—	0.00	—	0.70	—	0.00	0.00	—
TOTAL	1.77	4.78	2.28	0.12	0.58	4.26	0.61	8.00	3.57	1.31	4.03	0.29

s Snowfall-affected precipitation

ILLINOIS RIVER BASIN  
**420052088034200 Schaumburg Public Works at Schaumburg, IL**

777

**LOCATION.**— Latitude 42°00'52", longitude 88°03'42" (NAD of 1927), in SE1/4SE1/4NW1/4 sec.26, T.41 N., R.10 E., Cook County, Hydrologic Unit 07120004, on Plum Grove Road 1.9 mi south of State Highway 72, and located on the roof of the Schaumburg Public Works building at Schaumburg.

**PERIOD OF RECORD.**—

PRECIPITATION: July 1997 to current year.

**GAGE.**— An 8-in.-diameter, heated, 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.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 4.22 in., August 22, 2002.

**EXTREMES FOR CURRENT YEAR.**—Maximum daily total, 2.24 in., May 30.

**PRECIPITATION, TOTAL, IN INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.11	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.85	0.00	0.00	s0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.29	0.30	0.00	0.00	s0.02	0.00	0.00	0.00	0.00	0.72	1.03	0.00
4	0.00	0.90	0.06	0.00	0.00	0.36	0.00	0.00	0.00	0.07	0.27	0.00
5	0.00	0.00	0.06	0.00	0.00	0.69	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	s0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
7	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.03	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.48	0.00	0.00	0.00	0.00	0.01	0.00	0.34	0.00	0.00
10	0.00	0.01	0.59	0.00	0.00	0.00	0.00	0.47	1.28	0.01	0.00	0.00
11	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.02	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54	0.84	0.00	0.00	0.00
13	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.36	0.00	0.00	0.00	0.00
14	0.98	0.00	0.00	0.00	0.00	0.10	0.00	0.47	0.13	0.00	0.00	0.00
15	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
16	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.17	0.00	s0.05	0.00	0.00	0.04	0.20	0.00	0.00	0.00	0.00
18	0.00	1.18	0.00	0.00	0.00	0.01	0.00	0.44	0.00	0.00	0.35	0.00
19	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.17	0.02	0.35	0.55	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.06	0.00	0.03	1.01	0.50	0.18	0.00	0.00
22	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.64	0.00	0.00	0.00	0.00
23	0.00	0.48	0.00	s0.01	0.01	0.00	0.00	0.02	0.04	0.00	0.00	0.00
24	0.08	0.00	0.00	0.00	0.00	0.43	0.33	0.00	0.06	0.00	0.15	0.00
25	0.08	0.00	0.00	s0.01	0.00	0.09	0.03	0.11	0.00	0.00	0.02	0.00
26	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.00
27	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00
28	0.04	0.00	0.18	0.00	0.00	0.86	0.00	0.00	0.02	0.00	1.25	0.00
29	0.02	0.00	0.00	0.00	0.00	0.00	0.05	0.01	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	—	0.00	0.10	2.24	0.00	0.03	0.00	0.00
31	0.00	—	0.00	0.00	—	0.00	—	0.42	—	0.00	0.00	—
TOTAL	1.55	4.03	1.38	0.07	0.39	3.06	0.93	7.52	3.20	1.37	3.20	0.21

s Snowfall-affected precipitation

ILLINOIS RIVER BASIN  
**420057088001700 Busse Woods Forest Preserve near Elk Grove Village, IL**

**LOCATION.**— Latitude 42°00'57", longitude 88°00'17" (NAD of 1927), in SE1/4SW1/4NE1/4 sec.29, T.41 N., R.11 E., Cook County, Hydrologic Unit 07120004, on Cosman Street 0.2 mi south of Arlington Heights Road, and located on top of a maintenance shed for Busse Woods Forest Preserve at Elk Grove Village.

**PERIOD OF RECORD.**—

PRECIPITATION: July 1997 to current year.

**GAGE.**— A 6-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.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 4.25 in., August 22, 2002.

**EXTREMES FOR CURRENT YEAR.**— Maximum daily total, 1.85 in., May 30.

**PRECIPITATION, TOTAL, IN INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.15	0.00	0.00	s0.01	0.19	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.98	0.00	0.00	s0.01	0.00	0.00	0.00	0.04	0.00	0.00	0.00
3	0.32	0.43	0.00	0.00	0.00	0.03	0.00	0.00	0.00	1.38	1.22	0.00
4	0.00	1.07	0.20	0.00	0.00	0.83	0.00	0.00	0.00	0.05	0.26	0.00
5	0.00	0.00	0.31	0.00	0.00	0.62	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.03
7	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.08	0.00	0.04	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.67	0.00	0.00	0.00	0.00	0.02	0.01	0.55	0.00	0.00
10	0.00	0.01	0.66	0.00	0.00	0.00	0.00	0.79	1.62	0.01	0.00	0.00
11	0.03	0.01	0.00	0.09	s0.19	0.00	0.00	0.00	0.33	0.04	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.77	0.01	0.00	0.00
13	0.01	0.00	0.00	0.00	s0.06	0.02	0.00	0.71	0.00	0.00	0.00	0.00
14	1.15	0.00	0.01	0.00	0.00	0.15	0.00	0.91	0.12	0.00	0.00	0.00
15	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
16	0.00	0.03	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.20	0.00	s0.06	0.00	0.03	0.01	0.21	0.04	0.00	0.01	0.00
18	0.00	1.23	0.00	0.00	0.00	0.06	0.00	0.33	0.00	0.00	0.40	0.00
19	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
20	0.00	0.00	0.00	0.00	0.21	0.05	0.54	1.57	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.03	0.00	0.09	1.06	0.70	0.51	0.00	0.00
22	0.00	0.00	s0.01	0.00	0.04	0.00	0.00	0.87	0.01	0.01	0.00	0.00
23	0.00	0.60	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.00
24	0.10	0.00	0.00	s0.04	0.00	0.49	0.52	0.00	0.08	0.00	0.24	0.00
25	0.12	0.00	0.00	0.00	0.00	0.11	0.02	0.15	0.00	0.00	0.04	0.00
26	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.02	0.01	0.00
27	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00
28	0.03	0.00	0.17	0.00	0.00	1.00	0.00	0.00	0.04	0.00	1.38	0.00
29	0.02	0.00	0.00	0.00	0.00	0.00	0.05	0.01	0.00	0.00	0.00	0.00
30	0.01	0.00	0.00	0.00	—	0.00	0.19	1.85	0.00	0.05	0.00	0.00
31	0.00	—	0.00	s0.05	—	0.00	—	0.65	—	0.00	0.00	—
TOTAL	1.80	4.73	2.04	0.24	0.55	4.00	1.42	9.54	3.78	2.69	3.80	0.20

s Snowfall-affected precipitation

ILLINOIS RIVER BASIN  
420354088170500 Elgin Water Treatment Facility at Elgin, IL

779

**LOCATION.**— Latitude 42°03'54", longitude 88°17'05" (NAD of 1927), in SW1/4NE1/4NE1/4 sec.2, T.41 N., R.8 E., Kane County, Hydrologic Unit 07120006, within the water-treatment facility on the south side of the frontage road (along the south side of U.S. Highway 90), approximately 0.5 mi east of State Highway 31 at Elgin.

**PERIOD OF RECORD.**—

PRECIPITATION: March 1989 to September 1995 and March 1997 to current year.

**GAGE.**— A 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.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 4.22 in.(estimated), August 22, 2002.

**EXTREMES FOR CURRENT YEAR.**—Maximum daily total, 1.48 in., November 2.

**PRECIPITATION, TOTAL, IN INCHES, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.36	0.00	0.00	0.00	0.00	0.00	—	—	—	—	—
2	0.00	1.48	0.00	0.00	0.00	0.00	0.00	—	—	—	—	—
3	0.25	0.35	0.00	0.00	0.00	0.00	0.00	—	—	—	—	—
4	0.00	1.05	0.07	0.00	0.00	0.00	0.00	—	—	—	—	—
5	0.00	0.00	0.26	0.00	0.00	0.00	0.00	—	—	—	—	—
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—	—	—	—
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—	—	—	—
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—	—	—	—
9	0.00	0.00	0.85	0.00	0.00	0.00	0.00	—	—	—	—	—
10	0.00	0.00	0.93	0.00	0.00	0.01	0.00	—	—	—	—	—
11	0.04	0.00	0.00	0.00	0.00	0.00	0.00	—	—	—	—	—
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—	—	—	—
13	0.06	0.00	0.00	0.00	0.00	0.05	0.00	—	—	—	—	—
14	0.80	0.00	0.00	0.00	0.00	0.10	0.00	—	—	—	—	—
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—	—	—	—
16	0.00	0.02	0.00	0.00	0.00	0.03	0.00	—	—	—	—	—
17	0.00	0.27	0.00	s0.03	0.00	0.09	0.07	—	—	—	—	—
18	0.00	0.94	0.00	0.00	0.00	0.02	0.00	—	—	—	—	—
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—	—	—	—
20	0.00	0.00	0.00	0.00	0.00	0.02	0.51	—	—	—	—	—
21	0.00	0.00	0.00	0.00	0.00	0.00	0.10	—	—	—	—	—
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—	—	—	—
23	0.00	0.22	0.01	0.00	0.00	0.00	0.00	—	—	—	—	—
24	0.22	0.00	0.00	0.00	0.00	0.73	—	—	—	—	—	—
25	0.09	0.00	0.00	0.00	0.00	0.35	—	—	—	—	—	—
26	0.00	0.00	0.00	0.00	0.00	0.37	—	—	—	—	—	—
27	0.01	0.00	0.00	0.00	0.00	0.00	—	—	—	—	—	—
28	0.02	0.00	0.30	0.00	0.00	0.67	—	—	—	—	—	—
29	0.02	0.00	0.00	0.00	0.00	0.00	—	—	—	—	—	—
30	0.00	0.00	0.00	0.00	—	0.00	—	—	—	—	—	—
31	0.00	—	0.00	0.00	—	0.00	—	—	—	—	—	—
TOTAL	1.51	4.69	2.42	0.03	0.00	2.44	—	—	—	—	—	—

s Snowfall-affected precipitation

ROCK RIVER BASIN  
**420553088320201 Rain Gage at Well No. 5 and 6 at Hampshire, IL**

**LOCATION.**— Lat 42°05'53", long 88°32'02" (NAD of 1927), in SE1/4SE1/4 sec.21, T.42 N., R.6 E., Kane County, Hydrologic Unit 07090006, at Village of Hampshire Water Supply Wells #5 and #6 on N. Klick Street.

**PERIOD OF RECORD.**—

PRECIPITATION: October 2000 to current year.

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

**REMARKS.**— Collection, computation and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 4.07 in., August 22, 2002.

**EXTREMES FOR CURRENT YEAR.**— Maximum daily total, 1.45 in., November 2.

Precipitation, total, inches  
**WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004**  
**DAILY SUM VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.17	0.00	0.00	0.00	0.12	0.00	0.04	0.00	0.00	0.00	0.00
2	0.00	1.45	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01
3	0.15	0.26	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.10	0.60	0.00
4	0.00	0.80	0.07	0.00	0.00	0.72	0.00	0.00	0.00	0.17	0.05	0.00
5	0.00	0.00	0.15	0.00	0.00	0.45	0.00	0.00	0.00	0.03	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
7	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.04	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.68	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00
10	0.00	0.00	0.95	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00
11	0.06	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.74	0.00	0.00	0.00
12	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.44	0.72	0.00	0.00	0.00
13	0.11	0.00	0.00	0.00	0.00	0.11	0.00	1.05	0.00	0.00	0.00	0.00
14	0.72	0.00	0.00	0.00	0.01	0.06	0.00	1.22	0.06	0.00	0.00	0.00
15	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
16	0.00	0.01	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.37	0.00	0.00	0.00	0.06	0.04	0.37	0.01	0.00	0.00	0.00
18	0.00	1.06	0.00	0.00	0.01	0.04	0.00	0.36	0.00	0.00	0.01	0.00
19	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.14	0.00	0.89	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.02	0.01	0.00	0.13	1.33	0.57	0.18	0.00	0.00
22	0.00	0.01	0.00	0.00	0.11	0.00	0.00	1.01	0.00	0.00	0.00	0.00
23	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00
24	0.24	0.00	0.00	0.00	0.00	0.80	0.47	0.00	0.06	0.00	0.01	0.00
25	0.05	0.00	0.00	0.00	0.00	0.18	0.01	0.13	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.00
27	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00
28	0.04	0.00	0.20	0.00	0.00	0.47	0.00	0.00	0.01	0.00	0.00	0.00
29	0.02	0.00	0.00	0.00	0.05	0.00	0.06	0.03	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.08	0.13	1.05	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	1.40	4.22	2.07	0.03	0.34	3.46	1.73	7.22	2.18	0.98	0.75	0.05
MEAN	0.05	0.14	0.07	0.00	0.01	0.11	0.06	0.23	0.07	0.03	0.02	0.00
MAX	0.72	1.45	0.95	0.02	0.14	0.80	0.89	1.33	0.74	0.50	0.60	0.03

CAL YR 2003 TOTAL 24.84 MEAN 0.07 MAX 1.52

WTR YR 2004 TOTAL 24.43 MEAN 0.07 MAX 1.45



ILLINOIS RIVER BASIN  
422834088255800 Rain Gage At Hebron, IL

781

**LOCATION.**— Lat 42°28'34", long 88°25'58" (NAD of 1927), in SE1/4NE1/4 sec.8, T.46 N., R.17 E., Kane County, Hydrologic Unit 07120006, at Village of Hebron sewer water lift station on Freeman Rd.

**PERIOD OF RECORD.**—

PRECIPITATION: July 2002 to current year.

**GAGE.**— A 6-in. diameter unheated tipping-bucket rain gage.

**REMARKS.**— Collection, computation and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Precipitation data could be subject to error for days with freezing and/or thawing of precipitation.

**EXTREMES FOR PERIOD OF RECORD.**—

PRECIPITATION: Maximum daily total, 1.39 in., July 15, 2003.

**EXTREMES FOR CURRENT YEAR.**— Maximum daily total, 1.37 in., Nov. 2.

Precipitation, total, inches  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.13	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	1.37	0.00	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
3	0.17	0.30	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.70	0.91	0.00
4	0.00	0.41	0.03	0.00	0.03	0.44	0.00	0.01	0.00	0.01	0.05	0.00
5	0.00	0.00	0.03	0.00	0.00	0.36	0.00	0.00	0.00	0.01	0.00	0.12
6	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.07	0.00	0.06
7	0.00	0.00	0.00	0.00	0.08	0.02	0.00	0.04	0.00	0.09	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.01	0.00	0.00
9	0.00	0.00	0.58	0.00	0.00	0.00	0.00	0.31	0.01	0.06	0.02	0.00
10	0.00	0.00	0.73	0.00	0.00	0.00	0.00	0.35	0.60	0.00	0.00	0.00
11	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.02	0.00
12	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.53	0.25	0.00	0.00	0.00
13	0.06	0.00	0.00	0.00	0.00	0.06	0.00	0.03	0.00	0.00	0.00	0.00
14	0.44	0.00	0.00	0.00	0.00	0.05	0.00	0.81	0.04	0.00	0.00	0.00
15	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
16	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
17	0.00	0.48	0.00	0.07	0.00	0.09	0.22	0.67	0.41	0.00	0.03	0.00
18	0.00	0.41	0.00	0.00	0.00	0.04	0.00	0.19	0.00	0.00	0.03	0.00
19	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.08	0.00	0.48	0.87	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.01	0.09	0.00	0.08	1.16	0.72	0.26	0.00	0.00
22	0.00	0.02	0.00	0.00	0.09	0.00	0.00	0.69	0.01	0.00	0.00	0.00
23	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.33	0.08	0.00	0.00	0.00
24	0.24	0.00	0.00	0.00	0.00	0.61	0.16	0.00	0.30	0.00	0.47	0.00
25	0.01	0.00	0.00	0.00	0.01	0.23	0.01	0.05	0.00	0.00	0.01	0.00
26	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.00
28	0.07	0.00	0.22	0.00	0.00	0.39	0.00	0.00	0.02	0.00	0.55	0.00
29	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00
30	0.01	0.00	0.00	0.00	---	0.05	0.06	1.17	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.16	---	0.00	0.00	---
TOTAL	1.18	3.27	1.62	0.10	0.41	2.78	1.01	7.56	2.52	1.21	2.62	0.45
MEAN	0.04	0.11	0.05	0.00	0.01	0.09	0.03	0.24	0.08	0.04	0.08	0.01
MAX	0.44	1.37	0.73	0.07	0.09	0.61	0.48	1.17	0.72	0.70	0.91	0.26

CAL YR 2003 TOTAL 20.07 MEAN 0.05 MAX 1.39  
WTR YR 2004 TOTAL 24.73 MEAN 0.07 MAX 1.37

**Biological Data**

**PERIPHYTON ALGAE, PIGMENT AND BIOMASS, WATER YEAR 1989**

Date	Time	Drain- age area, mi <sup>2</sup> (81024)	Peri- phyton biomass ash weight, g/m <sup>2</sup> (00572)	Peri- phyton biomass dry weight, g/m <sup>2</sup> (00573)	Chloro- phyll a peri- phyton, chromo- fluoro, mg/m <sup>2</sup> (70957)
<b>05520500 KANKAKEE RIVER AT MOMENCE, IL (LAT 41 09 36N LONG 087 40 07W)</b>					
JUL 1989					
30...	1500	2294.00	19	140.0	13.2
30...	1505	2294.00	7.0	100.0	13.2
30...	1510	2294.00	4.5	100.0	9.7
30...	1515	2294.00	3.4	74.00	13.2
30...	1520	2294.00	5.8	120.0	16.5
<b>05531500 SALT CREEK AT WESTERN SPRINGS, IL (LAT 41 49 33N LONG 087 54 02W)</b>					
AUG 1989					
03...	1500	115.00	11	79.00	4.9
03...	1505	115.00	22	110.0	1.6
03...	1510	115.00	31	100.0	3.8
03...	1515	115.00	9.2	110.0	12.1
03...	1520	115.00	8.7	85.00	15.4
<b>05532500 DES PLAINES RIVER AT RIVERSIDE, IL (LAT 41 49 20N LONG 087 49 15W)</b>					
AUG 1989					
03...	1005	630.00	16	140.0	27.4
03...	1010	630.00	40	350.0	84.5
03...	1015	630.00	15	140.0	28.5
03...	1020	630.00	14	120.0	36.2
03...	1100	630.00	14	160.0	58.1
<b>05536000 NORTH BRANCH CHICAGO RIVER AT NILES, IL (LAT 42 00 44N LONG 087 47 44W)</b>					
AUG 1989					
01...	1500	100.00	4.3	100.0	14.3
01...	1505	100.00	3.8	79.00	14.3
01...	1510	100.00	13	100.0	32.9
01...	1515	100.00	5.9	93.00	26.3
01...	1520	100.00	5.4	88.00	13.2
<b>05540258 EAST BRANCH DU PAGE RIVER AT NAPERVILLE, IL (LAT 41 42 52N LONG 088 06 44W)</b>					
JUL 1989					
28...	1500	69.58	6.9	110.0	12.1
28...	1505	69.58	19	150.0	29.6
28...	1510	69.58	10	120.0	13.2
28...	1515	69.58	9.1	120.0	20.8
28...	1520	69.58	8.7	150.0	37.3
<b>05543500 ILLINOIS RIVER AT MARSEILLES, IL (LAT 41 19 37N LONG 088 43 03W)</b>					
JUL 1989					
31...	1500	8259.00	14	210.0	19.7
31...	1505	8259.00	9.3	170.0	15.4
31...	1510	8259.00	14	190.0	26.3
31...	1515	8259.00	18	150.0	55.9
31...	1520	8259.00	14	180.0	7.1
31...	1525	8259.00	11	110.0	20.8

**05544908 HONEY CREEK AT BELL SCHOOL RD NEAR EAST TROY, WI (LAT 42 47 43N LONG 088 19 15W)**

JUL 1989

27...	1500	--	10	130.0	16.5
27...	1505	--	16	150.0	42.8
27...	1510	--	8.8	120.0	21.9
27...	1515	--	7.8	130.0	25.2
27...	1520	--	4.8	94.00	9.7
27...	1525	--	4.2	99.00	9.1

**05550000 FOX RIVER AT ALGONQUIN, IL (LAT 42 09 59N LONG 088 17 25W)**

JUL 1989

26...	1500	1403.00	29	230.0	64.7
26...	1505	1403.00	26	160.0	36.2
26...	1510	1403.00	13	110.0	14.3
26...	1515	1403.00	12	160.0	38.4
26...	1520	1403.00	5.6	110.0	17.6
26...	1525	1403.00	6.5	120.0	17.6

**05552200 INDIAN CREEK NEAR HARDING, IL (LAT 41 30 50N LONG 088 47 50W)**

JUL 1989

24...	1715	136.23	2.3	95.00	23.0
24...	1720	136.23	2.2	76.00	11.0
24...	1725	136.23	2.1	87.00	12.1
24...	1730	136.23	1.3	72.00	5.2
24...	1735	136.23	2.1	82.00	6.9

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## PERIPHYTON ALGAE, PIGMENT AND BIOMASS, WATER YEAR 1990

Chloro-  
phyll a  
peri-  
phyton,  
chromo-  
fluoro,  
mg/m<sup>2</sup>  
(70957)

Date	Time	Instan- taneous dis- charge, cfs (00061)	Drain- age area, mi <sup>2</sup> (81024)	Peri- phyton biomass ash weight, g/m <sup>2</sup> (00572)	Peri- phyton biomass dry weight, g/m <sup>2</sup> (00573)
------	------	---	--	---	---

## 05515480 MILL CREEK AT HWY 39 NR KINGSFORD HEIGHTS, IN (LAT 41 27 04N LONG 086 44 14W)

AUG 1990

01...	1035	--	--	580	690.0	69.0
01...	1055	--	--	460	490.0	37.0
01...	1120	--	--	330	380.0	26.0
01...	1145	--	--	310	380.0	29.0

## 05517120 PITNER DITCH AT STATE HWY 8 NEAR LA CROSSE, IN (LAT 41 19 02N LONG 086 50 55W)

AUG 1990

02...	1115	--	44.5	310	320.0	.6
02...	1155	--	44.5	330	350.0	3.5

## 05517725 CROOKED CREEK AT 100 SOUTH ROAD NEAR WANATAH, IN (LAT 41 25 12N LONG 086 57 46W)

AUG 1990

01...	1600	--	--	3300	3400	36.0
01...	1620	--	--	380	410.0	18.0
01...	1635	--	--	310	340.0	7.3
01...	1735	--	--	370	440.0	69.0

## 05520500 KANKAKEE RIVER AT MOMENCE, IL (LAT 41 09 36N LONG 087 40 07W)

AUG 1990

02...	1640	--	2294.00	410	440.0	62.5
02...	1705	--	2294.00	450	490.0	49.4
02...	1725	--	2294.00	860	930.0	34.0
02...	1745	--	2294.00	740	780.0	43.9
02...	1810	--	2294.00	440	460.0	55.9

## 05525680 LANGAN CREEK AT ROAD 1300 E NEAR CLIFTON, IL (LAT 40 58 08N LONG 087 53 04W)

JUL 1990

31...	1015	--	94.2	330	350.0	30.0
31...	1035	--	94.2	460	490.0	58.0
31...	1055	--	94.2	320	330.0	31.0
31...	1115	--	94.2	320	340.0	53.0
31...	1135	--	94.2	1000	1100	88.0

## 05531500 SALT CREEK AT WESTERN SPRINGS, IL (LAT 41 49 33N LONG 087 54 02W)

JUL 1990

25...	1000	89	115.00	490	540.0	13.2
25...	1030	89	115.00	440	500.0	24.1
25...	1045	87	115.00	360	390.0	9.0
25...	1100	87	115.00	530	570.0	43.9
25...	1130	87	115.00	450	490.0	81.2

## 05532500 DES PLAINES RIVER AT RIVERSIDE, IL (LAT 41 49 20N LONG 087 49 15W)

JUL 1990

25...	1510	--	630.00	730	770.0	64.7
25...	1530	--	630.00	1100	1200	93.2

25...	1550	---	630.00	2700	2800	102
25...	1615	---	630.00	1100	1200	83.4
25...	1635	---	630.00	750	810.0	97.6

**05536000 NORTH BRANCH CHICAGO RIVER AT NILES, IL (LAT 42 00 44N LONG 087 47 44W)**

JUL 1990

28...	1625	49	100.00	310	320.0	8.1
28...	1640	49	100.00	430	590.0	121
28...	1700	49	100.00	280	300.0	32.9
28...	1725	49	100.00	440	510.0	121
28...	1750	49	100.00	290	300.0	13.2

**055363252 LITTLE CALUMET R AT HALSTED AVE AT HARVEY, IL (LAT 41 37 45N LONG 087 38 30W)**

JUL 1990

28...	1005	---	254	270	280.0	2.1
28...	1025	---	254	530	570.0	61.4
28...	1050	---	254	340	360.0	68.0

**05539900 W BRANCH DU PAGE RIVER NR WEST CHICAGO, IL (LAT 41 54 39N LONG 088 10 44W)**

JUL 1990

23...	1705	---	28.50	560	580.0	8.9
23...	1750	---	28.50	300	310.0	3.2
23...	1820	---	28.50	280	290.0	3.8
23...	1845	---	28.50	310	330.0	3.3
23...	1905	---	28.50	360	400.0	6.6

**05540258 EAST BRANCH DU PAGE RIVER AT NAPERVILLE, IL (LAT 41 42 52N LONG 088 06 44W)**

JUL 1990

30...	0900	---	69.58	590	610.0	43.9
30...	0920	---	69.58	310	330.0	18.6
30...	0935	---	69.58	410	430.0	36.2
30...	0955	---	69.58	360	380.0	34.0
30...	1015	---	69.58	530	560.0	57.0

**05540490 DU PAGE RIVER AT HAMEL WOODS AT SHOREWOOD, IL (LAT 41 31 54N LONG 088 11 34W)**

JUL 1990

30...	1445	---	319.85	340	360.0	30.7
30...	1510	---	319.85	270	280.0	14.3
30...	1530	---	319.85	300	310.0	25.2
30...	1550	---	319.85	270	270.0	4.1
30...	1610	---	319.85	280	290.0	13.2

**05544090 MUKWONAGO RIVER AT MARSH RD NR MUKWONAGO, WI (LAT 42 51 17N LONG 088 23 44W)**

JUL 1990

26...	1100	---	---	280	290.0	3.9
26...	1125	---	---	310	340.0	12.0
26...	1145	---	---	390	420.0	22.0
26...	1205	---	---	360	380.0	8.3
26...	1225	---	---	320	330.0	7.1

**05544908 HONEY CREEK AT BELL SCHOOL RD NEAR EAST TROY, WI (LAT 42 47 43N LONG 088 19 15W)**

JUL 1990

26...	1605	---	---	360	370.0	11.0
26...	1620	---	---	330	350.0	26.3
26...	1645	---	---	460	490.0	35.1
26...	1650	---	---	310	320.0	18.6
26...	1710	---	---	490	530.0	17.6

**05550000 FOX RIVER AT ALGONQUIN, IL (LAT 42 09 59N LONG 088 17 25W)**

JUL 1990

27...	1245	---	1403.00	340	370.0	17.6
27...	1300	---	1403.00	1300	1400	4.3
27...	1325	---	1403.00	650	730.0	7.9
27...	1400	---	1403.00	750	900.0	3.6
27...	1420	---	1403.00	1200	1300	.9

**05551700 BLACKBERRY CREEK NEAR YORKVILLE, IL (LAT 41 40 18N LONG 088 26 29W)**

JUL 1990

24...	1035	42	70.20	520	550.0	47.2
24...	1055	42	70.20	750	570.0	38.4
24...	1115	42	70.20	610	640.0	51.6
24...	1140	42	70.20	760	790.0	52.7
24...	1200	42	70.20	650	690.0	28.5

**05551933 BIG ROCK CREEK ABOVE HENNING ROAD NEAR PLANO, ILL (LAT 41 41 58N LONG 088 30 30W)**

JUL 1990

24...	1640	---	111.39	600	640.0	55.0
24...	1700	---	111.39	810	860.0	34.0
24...	1720	---	111.39	450	480.0	35.0
24...	1740	---	111.39	660	690.0	56.0
24...	1755	---	111.39	500	520.0	23.0

**05552200 INDIAN CREEK NEAR HARDING, IL (LAT 41 30 50N LONG 088 47 50W)**

JUL 1990

29...	1120	---	136.23	370	400.0	95.4
29...	1145	---	136.23	330	350.0	39.5
29...	1200	---	136.23	430	470.0	75.7
29...	1225	---	136.23	370	390.0	42.8
29...	1250	---	136.23	350	360.0	15.4

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## PERIPHYTON ALGAE, PIGMENT AND BIOMASS, WATER YEAR 2000

[illegible]





11...	1330	116	23.5	6.3	7.4	570	22.0	14	456	467	21
<b>05538270 HICKORY CREEK AT SCHMUHL RD NR NEW LENOX, IL (LAT 41 31 04N LONG 087 55 39W)</b>											
JUL 2000 13...	1230	44	49.13	7.2	7.7	735	22.5	5.1	261	268	8.4
<b>05538490 SPRING CREEK NEAR JOLIET, IL (LAT 41 32 22N LONG 088 03 17W)</b>											
JUL 2000 21...	0830	3.3	18.00	8.8	7.9	1120	17.4	14	176	188	29
<b>05539335 SUGAR RUN AT MILLS ROAD AT JOLIET, IL (LAT 41 30 09N LONG 088 04 41W)</b>											
JUL 2000 11...	1000	52	12.8	8.6	7.8	595	21.0	10	115	122	20
<b>05539632 JACKSON C AT MANHATTAN RD NR ELWOOD, IL (LAT 41 25 47N LONG 088 05 46W)</b>											
JUL 2000 13...	1715	92	43.5	7.8	7.6	644	23.0	9.7	217	228	19
<b>05540032 W BR DUPAGE R AT GARYS MILL RD NR W CHICAGO, IL (LAT 41 51 30N LONG 088 11 37W)</b>											
JUL 2000 10...	1700	E108	60.6	8.6	8.0	974	27.0	21	436	450	15
<b>05540260 EAST BRANCH DU PAGE RIVER NEAR NAPERVILLE, IL (LAT 41 42 40N LONG 088 07 41W)</b>											
JUL 2000 14...	1000	124	80.40	7.8	8.0	1010	23.9	7.6	153	184	24
<b>05540440 LILY CACHE C ABOVE CANTON FARM RD NR LILY CACHE, IL (LAT 41 34 12n LONG 88 11 07w)</b>											
JUL 2000 21...	1230	---	44.1	8.3	7.8	755	21	9.1	309	346	47
<b>05540660 ROCK RUN NEAR SHOREWOOD, IL (LAT 41 29 07N LONG 088 11 09W)</b>											
JUL 2000 21...	1230	5.1	14.10	16.1	8.4	1050	23.4	1.2	60.8	63.8	6.1
Date	Time	Instan- taneous dis- charge, cfs (00061)	Drain- age area, mi <sup>2</sup> (81024)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)	Pheo- phytin a, peri- phyton, mg/m <sup>2</sup> (62359)	Peri- phyton biomass ash weight, g/m <sup>2</sup> (00572)	Peri- phyton biomass dry weight, g/m <sup>2</sup> (00573)	Chloro- phyll a peri- phyton, chromo- fluoro, mg/m <sup>2</sup> (70957)
<b>05543800 FOX RIVER AT WATERTOWN RD NEAR WAUKESHA, WI (LAT 43 03 12N LONG 088 11 14W)</b>											
JUL 2000 19...	1035	57	77.4	6.5	7.8	1250	17.0	2	153	182	4.6

**055438135 PEWAUKEE RIVER NEAR PEWAUKEE, WI (LAT 43 02 49N LONG 088 12 57W)**

JUL 2000											
19...	1650	--	37.8	5.0	7.4	647	22.0	37	457	486	54
19...	1730	--	37.8	--	--	--	--	5.9	99.7	124	12

**055438845 GENESEE CREEK AT SAYLESVILLE, WI (LAT 42 56 40N LONG 088 18 58W)**

JUL 2000											
19...	0920	11	27.8	7.7	8.1	669	22.1	16	271	280	33

**05544080 JERICHO CREEK NR JERICHO, WI (LAT 42 51 32N LONG 088 25 57W)**

JUL 2000											
19...	1400	2.3	12.2	11.7	8.4	646	18.8	20	242	253	15

**05545955 BASSETT CREEK NR TWIN LAKES, WI (LAT 42 32 27N LONG 088 13 40W)**

JUL 2000											
18...	1240	3.5	5.09	4.8	7.8	1770	19.5	4.1	38.6	40.6	4.7
18...	1300	--	5.09	--	--	--	--	<.1	317	334	<.1

**05548105 NIPPERSINK CREEK ABOVE WONDER LAKE, IL (LAT 42 23 07N LONG 088 22 10W)**

JUL 2000											
20...	1220	55	84.50	9.1	8.0	820	17.0	20	284	303	54

**05548200 NORTH BRANCH NIPPERSINK CREEK NEAR RICHMOND, IL (LAT 42 27 53N LONG 088 18 00W)**

JUL 2000											
20...	0830	83	66.10	7.7	7.9	694	18.6	.84	30.1	33	3.6

**05549000 BOONE CREEK NEAR MC HENRY, IL (LAT 42 19 15N LONG 088 18 45W)**

JUL 2000											
20...	1620	15	15.50	11.7	8.1	740	18.0	2.9	70.9	86.6	9.8

**05549850 FLINT CREEK NEAR FOX RIVER GROVE, IL (LAT 42 12 40N LONG 088 10 23W)**

JUL 2000											
17...	1130	20	37.00	7.5	8.0	942	26.6	6.4	131	138	8.5

**05550290 TYLER CREEK AT RANDALL ROAD NEAR ELGIN, IL (LAT 42 03 25N LONG 088 20 18W)**

JUL 2000											
15...	1245	23	31.4	8.6	8.0	803	21.0	14	283	295	32

**05550500 POPLAR CREEK AT ELGIN, IL (LAT 42 01 34N LONG 088 15 20W)**

JUL 2000											
15...	0900	21	35.20	7.2	7.7	983	22.0	11	284	298	25

**05551200 FERSON CREEK NEAR ST. CHARLES, IL (LAT 41 55 58N LONG 088 20 28W)**

JUL 2000											
20...	1400	15	51.70	13.4	8.4	881	21.0	4.9	51.7	57.2	16

20...	1500	—	51.70	—	—	—	—	19	241	253	70	
05551340 MILL CREEK AT MOOSEHEART, IL (LAT 41 49 20N LONG 088 19 29W)												
JUL 2000	10...	1500	39	31.00	7.5	8.1	728	24.9	2.3	109	111	3.7

**PERIPHYTON ALGAE, PIGMENT AND BIOMASS, WATER YEAR 2002**

Date	Time	Drain- age area, mi <sup>2</sup> (81024)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)	Pheo- phytin a, peri- phyton, mg/m <sup>2</sup> (62359)	Peri- phyton biomass ash weight, g/m <sup>2</sup> (00572)	Peri- phyton biomass dry weight, g/m <sup>2</sup> (00573)	Chloro- phyll a peri- phyton, chromo- fluoro, mg/m <sup>2</sup> (70957)
<b>05525500 SUGAR CREEK AT MILFORD, IL (LAT 40 37 48N LONG 087 43 26W)</b>										
SEP 2002 05...	0930	446.00	--	--	--	--	2.7	115.0	131.5	8.2
<b>05531500 SALT CREEK AT WESTERN SPRINGS, IL (LAT 41 49 33N LONG 087 54 02W)</b>										
JUL 2002 18...	1130	115.00	--	--	--	--	15	166.3	194.4	18.7
<b>05532500 DES PLAINES RIVER AT RIVERSIDE, IL (LAT 41 49 20N LONG 087 49 15W)</b>										
JUL 2002 17...	1330	630.00	--	--	--	--	18	159.9	187.4	40.2
<b>05553500 ILLINOIS RIVER AT OTTAWA, IL (LAT 41 20 32N LONG 088 50 48W)</b>										
JUL 2002 15...	1115	10949.00	--	--	--	--	30	152.8	189.3	87.3
<b>05572000 SANGAMON RIVER AT MONTICELLO, IL (LAT 40 01 51N LONG 088 35 20W)</b>										
AUG 2002 01...	1115	550.00	5.7	8.3	606	26.0	14	145.2	158.3	35.2
<b>05586100 ILLINOIS RIVER AT VALLEY CITY, IL (LAT 39 42 12N LONG 090 38 43W)</b>										
JUL 2002 16...	1115	26744.00	--	--	--	--	7.0	206.5	246.1	5.2

**PERIPHYTON ALGAE, PIGMENT AND BIOMASS, WATER YEAR 2003**

Date	Time	Drain- age area, mi <sup>2</sup> (81024)	Dis- solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)	Pheo- phytin a, peri- phyton, mg/m <sup>2</sup> (62359)	Peri- phyton biomass ash weight, g/m <sup>2</sup> (00572)	Peri- phyton biomass dry weight, g/m <sup>2</sup> (00573)	Chloro- phyll a peri- phyton, chromo- fluoro, mg/m <sup>2</sup> (70957)
<b>05525500 SUGAR CREEK AT MILFORD, IL (LAT 40 37 48N LONG 087 43 26W)</b>										
AUG 2003 14...	0835	446.00	--	7.8	682	23.1	1.9	85.1	97.90	7.2
<b>05531500 SALT CREEK AT WESTERN SPRINGS, IL (LAT 41 49 33N LONG 087 54 02W)</b>										
AUG 2003 13...	0830	115.00	--	7.4	947	22.3	4.4	96.0	106.6	8.2
<b>05532500 DES PLAINES RIVER AT RIVERSIDE, IL (LAT 41 49 20N LONG 087 49 15W)</b>										
AUG 2003 11...	1300	630.00	--	7.6	959	23.7	2.9	64.7	81.50	6.8
<b>05553500 ILLINOIS RIVER AT OTTAWA, IL (LAT 41 20 32N LONG 088 50 48W)</b>										
AUG 2003 19...	1245	10949.00	6.7	8.4	744	10.4	25	138.3	163.9	88.0
<b>05572000 SANGAMON RIVER AT MONTICELLO, IL (LAT 40 01 51N LONG 088 35 20W)</b>										
AUG 2003 18...	0930	550.00	5.9	7.9	739	24.3	3.2	78.4	88.90	6.1
<b>05586100 ILLINOIS RIVER AT VALLEY CITY, IL (LAT 39 42 12N LONG 090 38 43W)</b>										
AUG 2003 20...	1400	26744.00	6.4	8.1	713	30.2	4.2	95.4	105.4	6.1

**LOCATION.**— Lat 40°37'48", long 87°43'26" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: July 1948 to current year.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–91, and 1999 to current year.

MISCELLANEOUS: Contaminants in streambed sediments, August 1999; contaminants in fish tissue, August 1999.

**BIOLOGICAL**

ALGAE: Water years 2002–03.

BENTHIC MACROINVERTEBRATES: Water years 1999 and 2002.

FISH: Water years 1999 and 2002–04.

HABITAT: Water years 1999 and 2002–04.

**REVISED RECORDS.**— WDR IL–75–1: Drainage area.

**GAGE.**— Water–stage recorder and phone telemeter. Datum of gage is 622.00 ft above NGVD of 1929. Prior to July 23, 1970, nonrecording gage at same site and datum.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 22,900 ft<sup>3</sup>/s, Feb. 21, 1951, gage height, 20.90 ft, from rating curve extended above 8,200 ft<sup>3</sup>/s; maximum gage height, 28.16 ft, Apr. 12, 1994, discharge, 19,400 ft<sup>3</sup>/s; minimum discharge, 2.0 ft<sup>3</sup>/s, Sept. 1, 2, 7, 1972, Oct. 8, 1994.

**REMARKS FOR CURRENT YEAR.**—Fish community samples were collected as part of the National Water–Quality Assessment (NAWQA) program in the upper Illinois River Basin (Moulton and others, 2002). Collections were made with two passes with a barge electroshocker and supplementary seine hauls and kicks. Fishes were identified by C. A. Taylor, Illinois Natural History Survey, Champaign. Reach A begins 512 ft. downstream of Bridge 1100N, and continues downstream 820 ft.

FISH				
Order	Family	Scientific name	Common name	Number individuals
				Reach A 8/18/2004
Atheriniformes	Poeciliidae	<i>Gambusia affinis</i>	western mosquitofish	1
Cypriniformes	Catostomidae	<i>Catostomus commersoni</i>	white sucker	1
		<i>Hypentelium nigricans</i>	northern hog sucker	3
		<i>Moxostoma erythrurum</i>	golden redhorse	21
		<i>Moxostoma macrolepidotum</i>	shorthead redhorse	10
	Cyprinidae	<i>Campostoma anomalum</i>	central stoneroller	3
		<i>Cyprinella lutrensis</i>	red shiner	10

## ILLINOIS RIVER BASIN

## 05525500 Sugar Creek at Milford, IL--Continued

Perciformes		<i>Cyprinella spiloptera</i>	spotfin shiner	144
		<i>Cyprinus carpio</i>	common carp	1
		<i>Luxilus chrysocephalus</i>	striped shiner	3
		<i>Nocomis biguttatus</i>	hornyhead chub	29
		<i>Notropis buccatus</i>	silverjaw minnow	3
		<i>Notropis stramineus</i>	sand shiner	51
		<i>Phenacobius mirabilis</i>	suckermouth minnow	3
		<i>Pimephales notatus</i>	bluntnose minnow	101
		<i>Pimephales promelas</i>	fathead minnow	3
		<i>Pimephales vigilax</i>	bullhead minnow	8
		<i>Semotilus atromaculatus</i>	creek chub	7
	Centrarchidae	<i>Lepomis cyanellus</i>	green sunfish	19
		<i>Lepomis humilis</i>	orangespotted sunfish	1
		<i>Lepomis macrochirus</i>	bluegill	1
		<i>Micropterus dolomieu</i>	smallmouth bass	5
		<i>Micropterus salmoides</i>	largemouth bass	1
		<i>Pomoxis annularis</i>	white crappie	1
		<i>Pomoxis nigromaculatus</i>	black crappie	1
	Percidae	<i>Etheostoma nigrum</i>	johnny darter	1
		<i>Percina maculata</i>	blackside darter	1
		<i>Percina phoxocephala</i>	slenderhead darter	4
Siluriformes	Ictaluridae	<i>Ameiurus natalis</i>	yellow bullhead	2



**LOCATION.**— Lat 40°37'48", long 87°43'26" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: July 1948 to current year.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–91, and 1999 to current year.

MISCELLANEOUS: Contaminants in streambed sediments, August 1999; contaminants in fish tissue, August 1999.

**BIOLOGICAL**

ALGAE: Water years 2002–03.

BENTHIC MACROINVERTEBRATES: Water years 1999 and 2002.

FISH: Water years 1999 and 2002–04.

HABITAT: Water years 1999 and 2002–04.

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

**GAGE.**— Water-stage recorder and phone telemeter. Datum of gage is 622.00 ft above NGVD of 1929. Prior to July 23, 1970, nonrecording gage at same site and datum.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 22,900 ft<sup>3</sup>/s, Feb. 21, 1951, gage height, 20.90 ft, from rating curve extended above 8,200 ft<sup>3</sup>/s; maximum gage height, 28.16 ft, Apr. 12, 1994, discharge, 19,400 ft<sup>3</sup>/s; minimum discharge, 2.0 ft<sup>3</sup>/s, Sept. 1, 2, 7, 1972, Oct. 8, 1994.

**REMARKS FOR CURRENT YEAR.**— Physical and geomorphic habitat data were collected as part of the National Water-Quality Assessment (NAWQA) program in the upper Illinois River Basin. The data were collected according to Fitzpatrick and others, 1998. Reach A begins 512 ft. upstream of a Bridge 1100N, and continues downstream 820 ft.

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**Tabular-Text Files of Habitat Data for Water Year 2004**

The following links list up to five tab-delimited text files containing habitat data collected at this site. An explanation of column headers in these files can be accessed at [this link](#).

[Reach](#) — General description of the sampled reach.

[Geomorphic Channel Unit \(GCU\)](#) — Fluvial geomorphic descriptors of channel shape and stream velocity (for example pool, riffle, or run).

[Transect](#) — Channel and bank measurements made along transects (cross sections) within each reach.

[Channel features](#) — Measurements of bars, shelves, and islands at each transect (cross section).

[Transect Points](#) — Channel and substrate measurements and observations at points along a transect (cross section).

**LOCATION.**— Lat 41°49'33", long 87°54'02" (NAD of 1927), in NE1/4SE1/4 sec.31, T.39 N., R.12 E., Cook County, Hydrologic Unit 07120004, on left pier 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.**—

**SURFACE–WATER DISCHARGE AND STAGE**

DISCHARGE: October 1945 to current year.

STAGE: Water years 1994 to current year.

**SURFACE–WATER QUALITY**

CHEMICAL: Water years 1978–91 and 1999 to current year.

MISCELLANEOUS: Contaminants in streambed sediments, August 1998; contaminants in fish tissue, August 1998.

**BIOLOGICAL**

ALGAE: Water years 1989, 1990, and 2002–03.

BENTHIC MACROINVERTEBRATES: Water years 1999 and 2002.

FISH: Water years 1999–2000 and 2002–04.

HABITAT: Water years 1999 and 2002–04.

**REVISED RECORDS.**— WSP 1915: Drainage area. WRD IL–87–2: Drainage area. WRD IL–97–2: July 21 – Sept. 26, 1996.

**GAGE.**— Water–stage recorder, phone telemeter, and crest–stage gage. Datum of gage is 624.93 ft above NGVD of 1929. Prior to July 26, 1946, nonrecording gage at same site and datum.

**REMARKS.**— Occasional regulation by sewage treatment plants upstream from station. Since May 28, 1996, some flow temporarily diverted for flood control to Elmhurst Quarry Flood Control Reservoir 12.3 miles upstream from gage.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum discharge, 3,540 ft<sup>3</sup>/s, Aug. 17, 1987, gage height, 10.54 ft; minimum, no flow, May 27, 1998, due to bridge construction.

**REMARKS FOR CURRENT YEAR.**—Fish community samples were collected as part of the National Water–Quality Assessment (NAWQA) program in the upper Illinois River Basin (Moulton and others, 2002). Collections were made with two passes with a barge electroshocker and supplementary seine hauls and kicks. Fishes were identified by C. A. Taylor, Illinois Natural History Survey, Champaign. Reach A begins 187 ft. upstream of a Cook County Forest Preserve trail bridge, and continues upstream for 984 ft.

FISH

Order	Family	Scientific name	Common name	Number individuals
				Reach A 8/3/2004
Atheriniformes	Cyprinodontidae	<i>Fundulus notatus</i>	blackstripe topminnow	1
Cypriniformes	Catostomidae	<i>Catostomus commersoni</i>	white sucker	1
	Cyprinidae	<i>Carassius auratus</i>	goldfish	2
		<i>Cyprinella spiloptera</i>	spotfin shiner	36
		<i>Notropis stramineus</i>	sand shiner	14
		<i>Pimephales notatus</i>	bluntnose minnow	91
		<i>Semotilus atromaculatus</i>	creek chub	17

**05531500 Salt Creek at Western Springs, IL--Continued**

## Perciformes

## Centrarchidae

<i>Lepomis cyanellus</i>	green sunfish	27
<i>Lepomis humilis</i>	orangespotted sunfish	22
<i>Lepomis macrochirus</i>	bluegill	18
<i>Micropterus salmoides</i>	largemouth bass	2

## Siluriformes

## Ictaluridae

<i>Ameiurus natalis</i>	yellow bullhead	33
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**LOCATION.**— Lat 41°49'33", long 87°54'02" (NAD of 1927), in NE1/4SE1/4 sec.31, T.39 N., R.12 E., Cook County, Hydrologic Unit 07120004, on left pier 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.**—

**SURFACE–WATER DISCHARGE AND STAGE**

DISCHARGE: October 1945 to current year.

STAGE: Water years 1994 to current year.

**SURFACE–WATER QUALITY**

CHEMICAL: Water years 1978–91 and 1999 to current year.

MISCELLANEOUS: Contaminants in streambed sediments, August 1998; contaminants in fish tissue, August 1998.

**BIOLOGICAL**

ALGAE: Water years 1989, 1990, and 2002–03.

BENTHIC MACROINVERTEBRATES: Water years 1999 and 2002.

FISH: Water years 1999–2000 and 2002–04.

HABITAT: Water years 1999 and 2002–04.

**REVISED RECORDS.**— WSP 1915: Drainage area. WRD IL–87–2: Drainage area. WRD IL–97–2: July 21 – Sept. 26, 1996.

**GAGE.**— Water–stage recorder, phone telemeter, and crest–stage gage. Datum of gage is 624.93 ft above NGVD of 1929. Prior to July 26, 1946, nonrecording gage at same site and datum.

**REMARKS.**— Occasional regulation by sewage treatment plants upstream from station. Since May 28, 1996, some flow temporarily diverted for flood control to Elmhurst Quarry Flood Control Reservoir 12.3 miles upstream from gage.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum discharge, 3,540 ft<sup>3</sup>/s, Aug. 17, 1987, gage height, 10.54 ft; minimum, no flow, May 27, 1998, due to bridge construction.

**REMARKS FOR CURRENT YEAR.**— Physical and geomorphic habitat data were collected as part of the National Water–Quality Assessment (NAWQA) program in the upper Illinois River Basin. The data were collected according to Fitzpatrick and others, 1998. Reach A begins 187 ft. upstream from a Cook County Forest Preserve trail bridge, and continues upstream for 984 ft.

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[Transect](#) — Channel and bank measurements made along transects (cross sections) within each reach.

[Channel features](#) — Measurements of bars, shelves, and islands at each transect (cross section).

[Transect Points](#) — Channel and substrate measurements and observations at points along a transect (cross section).

**LOCATION.**— Lat 41°49'20", long 87°49'15" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1943 to current year. Monthly discharge only for some periods, published in WSP 1308.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1987–92 and 1999 to 2004.

SEDIMENT: April 1979 to September 1982, January 2003 to current year.

MISCELLANEOUS: Contaminants in streambed sediments, August 1998; contaminants in fish tissue, August 1998; sediment concentration and particle size, water years 1998–2003.

**BIOLOGICAL**

ALGAE: Water years 1989, 1990, and 2002–03.

BENTHIC MACROINVERTEBRATES: Water years 1999 and 2002.

FISH: Water years 1999–2000 and 2002–04.

HABITAT: Water years 1999 and 2002–04.

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

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter, automatic water sampler, and rain gage, and concrete dam. Datum of gage is 594.68 ft above NGVD of 1929. Prior to Nov. 27, 1946, nonrecording gage at bridge 400 ft upstream at same datum.

**REMARKS.**— Occasional regulation by gates at Hoffman Dam.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 9,770 ft<sup>3</sup>/s, Aug. 15, 1987, gage height, 9.90 ft; no flow Aug. 22–24, 1962, and part of Sept. 5, 1968, Aug. 31, 1974, Oct. 7, 1974.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 297 mg/L Apr. 12, 1979; minimum daily mean, 3 mg/L Jan. 24, Feb. 1, 3, 4, 1982

SUSPENDED-SEDIMENT LOADS: Maximum daily, 3,240 tons Apr. 12, 1979; minimum daily, 1.5 tons Feb. 3, 4, 1982.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Flood of Mar. 18, 1919, reached a discharge of 7,450 ft<sup>3</sup>/s, gage height, 9.43 ft., present datum, from information furnished by Metropolitan Water Reclamation District of Greater Chicago.

**REMARKS FOR CURRENT YEAR.**—Fish community samples were collected as part of the National Water–Quality Assessment (NAWQA) program in the upper Illinois River Basin (Moulton and others, 2002). Collections were made with two passes with a barge electroshocker and supplementary seine hauls and kicks. Fishes were identified by C. A. Taylor, Illinois Natural History Survey, Champaign. Reach A begins 492 ft. upstream of Joliet Rd. Bridge and continues upstream for 984 ft.

FISH

Order	Family	Scientific name	Common name	Number individuals
Reach A 8/3/2004				

Atheriniformes

Cyprinodontidae

*Fundulus notatus*

blackstripe  
topminnow

1

Clupeiformes

Clupeidae

*Dorosoma  
cepedianum*

gizzard shad

5

Cypriniformes

Catostomidae

**05532500 Des Plaines River at Riverside, IL--Continued**

Perciformes	Cyprinidae	<i>Catostomus commersoni</i>	white sucker	4
		<i>Camptostoma anomalum</i>	central stoneroller	1
		<i>Cyprinella spiloptera</i>	spotfin shiner	37
		<i>Cyprinus carpio</i>	common carp	1
		<i>Luxilus chrysocephalus</i>	striped shiner	1
		<i>Nocomis biguttatus</i>	hornyhead chub	6
		<i>Notropis stramineus</i>	sand shiner	138
		<i>Phenacobius mirabilis</i>	suckermouth minnow	2
		<i>Pimephales notatus</i>	bluntnose minnow	69
	Centrarchidae	<i>Lepomis cyanellus</i>	green sunfish	24
		<i>Lepomis humilis</i>	orangespotted sunfish	4
		<i>Lepomis macrochirus</i>	bluegill	32
		<i>Lepomis macrochirus</i> x <i>Lepomis cyanellus</i>	bluegill x green sunfish	2
		<i>Micropterus dolomieu</i>	smallmouth bass	1
		<i>Micropterus salmoides</i>	largemouth bass	3
	Percidae	<i>Etheostoma nigrum</i>	johnny darter	12
		<i>Percina maculata</i>	blackside darter	13
		<i>Stizostedion canadense</i>	sauger	1
Siluriformes	Ictaluridae	<i>Ameiurus melas</i>	black bullhead	2
		<i>Ameiurus natalis</i>	yellow bullhead	11
		<i>Noturus gyrinus</i>	tadpole madtom	2

**LOCATION.**— Lat 41°49'20", long 87°49'15" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1943 to current year. Monthly discharge only for some periods, published in WSP 1308.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1987–92 and 1999 to 2004.

SEDIMENT: April 1979 to September 1982, January 2003 to current year.

MISCELLANEOUS: Contaminants in streambed sediments, August 1998; contaminants in fish tissue, August 1998; sediment concentration and particle size, water years 1998–2003.

**BIOLOGICAL**

ALGAE: Water years 1989, 1990, and 2002–03.

BENTHIC MACROINVERTEBRATES: Water years 1999 and 2002.

FISH: Water years 1999–2000 and 2002–04.

HABITAT: Water years 1999 and 2002–04.

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

**GAGE.**— Water–stage recorder, U.S. Army Corps of Engineers satellite telemeter, automatic water sampler, and rain gage, and concrete dam. Datum of gage is 594.68 ft above NGVD of 1929. Prior to Nov. 27, 1946, nonrecording gage at bridge 400 ft upstream at same datum.

**REMARKS.**— Occasional regulation by gates at Hoffman Dam.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 9,770 ft<sup>3</sup>/s, Aug. 15, 1987, gage height, 9.90 ft; no flow Aug. 22–24, 1962, and part of Sept. 5, 1968, Aug. 31, 1974, Oct. 7, 1974.

SUSPENDED–SEDIMENT CONCENTRATIONS: Maximum daily mean, 297 mg/L Apr. 12, 1979; minimum daily mean, 3 mg/L Jan. 24, Feb. 1, 3, 4, 1982

SUSPENDED–SEDIMENT LOADS: Maximum daily, 3,240 tons Apr. 12, 1979; minimum daily, 1.5 tons Feb. 3, 4, 1982.

**EXTREMES OUTSIDE PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Flood of Mar. 18, 1919, reached a discharge of 7,450 ft<sup>3</sup>/s, gage height, 9.43 ft., present datum, from information furnished by Metropolitan Water Reclamation District of Greater Chicago.

**REMARKS FOR CURRENT YEAR.**— Physical and geomorphic habitat data were collected as part of the National Water–Quality Assessment (NAWQA) program in the upper Illinois River Basin. The data were collected according to Fitzpatrick and others, 1998. Reach A begins 492 ft. upstream from Joliet Rd. Bridge and continues upstream for 984 ft.

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**Tabular–Text Files of Habitat Data for Water Year 2004**

The following links list up to five tab–delimited text files containing habitat data collected at this site. An explanation of column headers in these files can be accessed at [this link](#).

[Reach](#) — General description of the sampled reach.

[Geomorphic Channel Unit \(GCU\)](#) — Fluvial geomorphic descriptors of channel shape and stream velocity (for example pool, riffle, or run).

[Transect](#) — Channel and bank measurements made along transects (cross sections) within each reach.

[Channel features](#) — Measurements of bars, shelves, and islands at each transect (cross section).

[Transect Points](#) — Channel and substrate measurements and observations at points along a transect (cross section).

ILLINOIS RIVER BASIN  
05553500 Illinois River at Ottawa, IL

**LOCATION.**— Lat 41°20'17", long 88°51'10" (NAD of 1927), in SW1/4SW1/4 sec.11, T.33 N., R.3 E., LaSalle County, Hydrologic Unit 07130001, downstream of the railroad bridge, 0.25 miles, and downstream 0.5 miles of the Route 23 bridge in Ottawa and the confluence with the Fox River.

**DRAINAGE AREA.**— 10,949 mi<sup>2</sup>.

**PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE**

DISCHARGE: March 11, 1903 to December 31, 1903.

PARTIAL RECORD: Miscellaneous discharge measurements, water years 1903–1904.

**SURFACE–WATER QUALITY**

CHEMICAL: Water years 1997 to 2004.

MISCELLANEOUS: Contaminants in streambed sediments, August 1998; contaminants in fish tissue, August, 1998.

**BIOLOGICAL**

ALGAE: Water years 1998–99 and 2002–03.

BENTHIC MACROINVERTEBRATES: Water years 1998–99 and 2002.

FISH: Water years 1998–99 and 2002–04.

HABITAT: Water years 1998–99.

**GAGE.**— Prior to November 1, 1903, vertical staff at west end of first pier from the north abutment of the railroad bridge at same datum. November 1, 1903 to February 21, 1904, chain gage read twice daily. Datum of gage is 579.48 ft above NGVD of 1929.

**REMARKS.**— Discharges for surface–water quality data for water years 1997 to current are computed by adding discharges of Illinois River at Marseilles (05543500) and Fox River at Dayton, IL (05552500).

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE–WATER DISCHARGE AND STAGE:** Maximum discharge, 46,900 ft<sup>3</sup>/s, Apr. 15, 1903, gage height, –119.08 ft (460.40 ft above NGVD of 1929); minimum discharge, 6,740 ft<sup>3</sup>/s, Sept. 8, 1903.

**REMARKS FOR CURRENT YEAR.**—Fish community samples were collected as part of the National Water–Quality Assessment program (NAWQA) in the lower Illinois River Basin (Moulton and others, 2002). Collections were made with an DC boat electroshocker and supplementary seine hauls. Fishes were identified by C. A. Taylor, Illinois Natural History Survey, Champaign. Reach A begins at the red buoy near river mile 239, marking the top of Hitt Island, and continues downstream for 3281 ft, which is 492 ft downstream of the Ottawa navigation light number 238.5.

FISH				
Order	Family	Scientific name	Common name	Number individuals
Reach A 8/4/2004				
Clupeiformes	Clupeidae	<i>Alosa chrysochloris</i>	skipjack herring	1
		<i>Dorosoma cepedianum</i>	gizzard shad	37
Cypriniformes	Catostomidae	<i>Carpionodes carpio</i>	river carpsucker	4
		<i>Carpionodes velifer</i>	highfin carpsucker	1
		<i>Ictiobus bubalus</i>	smallmouth buffalo	61
		<i>Moxostoma erythrum</i>	golden redhorse	2
		<i>Moxostoma macrolepidotum</i>	shorthead redhorse	4
	Cyprinidae			



**05553500 Illinois River at Ottawa, IL--Continued**

		<i>Ctenopharyngodon idella</i>	grass carp	2
		<i>Cyprinella spiloptera</i>	spotfin shiner	4
		<i>Cyprinus carpio</i>	common carp	8
		<i>Hypophthalmichthys molitrix</i>	silver carp	1
		<i>Hypophthalmichthys nobilis</i>	bighead carp	1
		<i>Macrhybopsis storeriana</i>	silver chub	1
		<i>Notropis atherinoides</i>	emerald shiner	111
		<i>Notropis stramineus</i>	sand shiner	3
Lepisosteiformes	Lepisosteidae			
		<i>Lepisosteus platostomus</i>	shortnose gar	3
Perciformes	Centrarchidae			
		<i>Lepomis macrochirus</i>	bluegill	1
		<i>Micropterus dolomieu</i>	smallmouth bass	2
		<i>Micropterus salmoides</i>	largemouth bass	1
	Percichthyidae			
		<i>Morone chrysops</i>	white bass	1
		<i>Morone mississippiensis</i>	yellow bass	3
Siluriformes	Ictaluridae			
		<i>Ictalurus punctatus</i>	channel catfish	2

ILLINOIS RIVER BASIN  
**05554490 Vermilion River at McDowell, IL**

**LOCATION.**— Lat 40°49'42", long 88°34'29" (NAD of 1927), in SW1/4 sec.6, T.27 N., R.6 E., Livingston County, Hydrologic Unit 07130002, at county road bridge, 0.3 mi. east of McDowell, 0.4 mi. downstream from Turtle Creek, 7.3 mi downstream from confluence of North and South Branches, and at mile 68.4.

**DRAINAGE AREA.**— 551 mi<sup>2</sup>

**PERIOD OF RECORD.**—

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1978–91.

**BIOLOGICAL**

BENTHIC MACROINVERTEBRATES: Water year 1997.

**REMARKS.**—Water–discharge records from the Vermilion River at Pontiac (Station 05554500) were used to estimate mean daily discharges for this station. Station established as a low–flow water–quality sampling site in August 1997 as part of the National Water–Quality Assessment (NAWQA), Lower Illinois River Basin synoptic study.

**REMARKS FOR CURRENT YEAR.**— Benthic macroinvertebrate community samples were collected as part of the National Water–Quality Assessment program (NAWQA) in the lower Illinois River Basin. One quantitative (Richest–Targeted Habitat) sample was collected in accordance with the NAWQA protocols (Cuffney and others, 1993). The quantitative sample was a composite of macroinvertebrates from about 10 submerged tree branches. Branches were cut underwater, gathered in a 425µm mesh net, and invertebrates were washed or picked from the branches. The average length and average diameter of each branch were measured and used to calculate an approximate surface area. All samples were processed by the USGS National Water–Quality Laboratory. Phylum, Class, Order, Suborder, Family, Subfamily, and Tribe are listed and arranged according to the USGS National Water–Quality Laboratory taxonomic hierarchy. Reach A begins 33 meters downstream from the 1400 N bridge and continues downstream for 176 meters. The surface area sampled at reach A was 0.27 m<sup>2</sup>.

**BENTHIC MACROINVERTEBRATES**

[sp., species; A, Adults; LV, Larvae; P, Pupae; X, present; –, not found or not applicable; dam., damaged; imm., immature; indet., indeterminate; mount, poor mount; ref., reference]

**PHYLUM**

**Class**

**Order**

**(Suborder)**

**Family**

**Subfamily**

**(Tribe)**

**Taxon**

**Life stage**

**Quantitative sample**

Abundance  
(count)

Density  
(number/m<sup>2</sup>)

**Laboratory notes**

Reach A 8/11/1997						
ANNELIDA						
<b>Oligochaeta</b>						
Tubificida						
(Tubificina)						
<b>Naididae</b>						
	Naididae	—	3	11	—	
ARTHROPODA						
<b>Arachnida</b>						
	Acari	—	12	45	—	
<b>Insecta</b>						
Coleoptera						
(Adephaga)						
<b>Gyrinidae</b>						
	Dineutus sp.	L	3	11	—	
(Polyphaga)						
<b>Elmidae</b>						
	Dubiraphia sp.	A	514	1929	—	
	Elmidae	L	6	23	imm.	
	Macronychus glabratus Say	A	3	11	—	
	Macronychus glabratus Say	L	13	49	—	
	Stenelmis sp.	A	47	176	—	
<b>Hydrophilidae</b>						
	Berosus sp.	A	6	23	—	
	Berosus sp.	L	2	8	—	
<b>Scirtidae</b>						
	Scirtidae	L	24	90	—	
Diptera						
	Diptera	A	3	11	—	
(Nematocera)						
<b>Ceratopogonidae</b>						
	Ceratopogonidae	L	12	45	—	
Forcipomyiinae						
	Atrichopogon sp.	L	96	360	—	
<b>Chironomidae</b>						
Chironominae						
	Chironominae	P	6	23	—	
(Chironomini)						
	Chironomini	L	15	56	—	
	Dicrotendipes sp.	L	12	45	—	
	Endochironomus sp.	L	3	11	—	
	Glyptotendipes sp.	L	69	259	—	
	Parachironomus sp.	L	6	23	—	
	Polypedilum sp.	L	66	248	—	
	Stenochironomus sp.	L	3	11	—	
	Tribelos sp.	L	3	11	—	
(Tanytarsini)						
	Tanytarsini	L	6	23	—	

ILLINOIS RIVER BASIN  
**05554490 Vermilion River at McDowell, II--Continued**

		Tanytarsus sp.	L	6	23	—
	Tanypodinae					
		(Pentaneurini)				
		Thienemannimyia group sp. (Coffman and Ferrington, 1996)	L	3	11	—
		Ablabesmyia sp.	L	6	23	—
		Labrundinia sp.	L	9	34	—
		(Procladiini)				
		Procladius sp.	L	3	11	—
	<b>Psychodidae</b>					
		Psychodidae	P	3	11	—
Ephemeroptera						
	(Furcatergalia)					
	<b>Ephemeridae</b>					
		Hexagenia sp.	L	3	11	—
	<b>Leptohyphidae</b>					
		Tricorythodes sp.	L	62	233	—
	(Setisura)					
	<b>Heptageniidae</b>					
		Heptageniidae	L	3	11	imm.; dam.
		Stenacron interpunctatum (Say)	L	11	41	—
		Stenonema exiguum Traver	L	1	4	—
		Stenonema mexicanum (Ulmer)	L	1	4	—
Hemiptera						
	(Heteroptera)					
	<b>Corixidae</b>					
		Corixidae	L	18	68	imm.
	Corixinae					
		(Corixini)				
		Palmarcorixa gillettei Abbott	A	15	56	—
		Trichocorixa sp.	A	3	11	—
	<b>Gerridae</b>					
		Gerridae	L	3	11	imm.
Odonata						
	(Zygoptera)					
	<b>Coenagrionidae</b>					
		Argia sp.	L	15	56	—
		Coenagrionidae	L	41	154	imm.; dam.
Trichoptera						
	(Annulipalpia)					
	<b>Polycentropodidae</b>					
		Polycentropodinae				
		Cynellus fraternus (Banks)	L	5	19	—
	(Spicipalpia)					

**05554490 Vermilion River at McDowell, II--Continued**

	<b>Hydroptilidae</b>					
	Hydroptilinae					
		Hydroptila sp.	L	12	45	—
<b>Malacostraca</b>						
Amphipoda						
		Amphipoda	—	18	68	imm.
MOLLUSCA						
<b>Gastropoda</b>						
Basommatophora						
	<b>Physidae</b>					
		Physidae	—	3	11	imm.; dam.
PLATYHELMINTHES						
<b>Turbellaria</b>						
		Turbellaria	—	40	150	—

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ILLINOIS RIVER BASIN  
05564300 Mackinaw River near Kappa, IL

**LOCATION.**— Lat 40°40'46", long 88°56'26" (NAD of 1927), in sec., T., R., McLean County, Hydrologic Unit 07130004. Located at CR1725 E, 3.4 miles east of Kappa.

**DRAINAGE AREA.**— 309 mi<sup>2</sup>

**PERIOD OF RECORD.**—

BIOLOGICAL

BENTHIC MACROINVERTEBRATES: Water year 1997.

**REMARKS.**—Station established as a low-flow water-quality sampling site in August 1997 as part of the National Water-Quality Assessment (NAWQA), Lower Illinois River Basin synoptic study.

**REMARKS FOR CURRENT YEAR.**— Benthic macroinvertebrate community samples were collected as part of the National Water-Quality Assessment program (NAWQA) in the lower Illinois River Basin. One quantitative (Richest-Targeted Habitat) sample was collected in accordance with the NAWQA protocols (Cuffney and others, 1993). The quantitative sample was a composite of macroinvertebrates from about 10 submerged tree branches. Branches were cut underwater, gathered in a 425µm mesh net, and invertebrates were washed or picked from the branches. The average length and average diameter of each branch were measured and used to calculate an approximate surface area. All samples were processed by the USGS National Water-Quality Laboratory. Phylum, Class, Order, Suborder, Family, Subfamily, and Tribe are listed and arranged according to the USGS National Water-Quality Laboratory taxonomic hierarchy. Reach A begins 19 meters downstream from the 2700 N bridge and continues downstream for 96 meters. The surface area sampled at reach A was 0.18 m<sup>2</sup>.

BENTHIC MACROINVERTEBRATES

[sp., species; A, Adults; LV, Larvae; P, Pupae; X, present; –, not found or not applicable; dam., damaged; imm., immature; indet., indeterminate; mount, poor mount; ref., reference]

PHYLUM

Class

Order

(Suborder)

Family

Subfamily

(Tribe)

Taxon

Life stage

Quantitative sample

Abundance  
(count)

Density  
(number/m<sup>2</sup>)

Laboratory notes

Reach A  
8/14/1997

ANNELIDA

**Oligochaeta**

Tubificida

(Tubificina)

**Naididae**

Naididae

—

18

100

—

ARTHROPODA

**Arachnida**

Acari

—

43

239

—

**Insecta**

Coleoptera

(Polyphaga)

**Elmidae**

Dubiraphia sp.

A

14

78

—

Elmidae

L

73

406

imm.; dam.

Macronychus glabratus Say

A

39

217

—

Macronychus glabratus Say

L

79

439

—

Stenelmis sp.

A

6

33

—

**Hydrophilidae**

Berosus sp.

A

1

6

—

Berosus sp.

L

4

22

—

Diptera

(Brachycera)

**Empididae**

Hemerodromiinae

Hemerodromia sp.

L

4

22

—

Hemerodromiinae

P

4

22

—

(Nematocera)

**Ceratopogonidae**

Ceratopogonidae

L

36

200

—

Forcipomyiinae

Atrichopogon sp.

L

18

100

—

**Chironomidae**

Chironominae

Chironominae

P

11

61

—

(Chironomini)

Chironomini

L

22

122

—

Cryptotendipes sp.

L

4

22

—

Dicrotendipes sp.

L

4

22

—

Polypedilum sp.

L

14

78

—

Stenochironomus sp.

L

4

22

—

Xestochironomus sp.

L

4

22

—

(Tanytarsini)

Cladotanytarsus sp.

L

4

22

—

Rheotanytarsus sp.

L

4

22

—

Tanytarsini

L

7

39

—

Tanytarsus sp.

L

36

200

—

Orthocladiinae

Corynoneura sp.

L

4

22

—

ILLINOIS RIVER BASIN  
**05564300 Mackinaw River near Kappa, IL--Continued**

	Cricotopus bicinctus group	L	4	22	—
	Cricotopus/Orthocladius sp.	L	7	39	—
	Orthocladiinae	L	7	39	—
	Rheocricotopus sp.	L	4	22	—
	Tanypodinae				
	(Pentaneurini)				
	Thienemannimyia group sp. (Coffman and Ferrington, 1996)	L	7	39	—
Ephemeroptera	Ephemeroptera	L	68	378	imm.; dam.
	(Furcatergalia)				
	<b>Caenidae</b>				
	Caenis sp.	L	23	128	—
	<b>Leptohyphidae</b>				
	Tricorythodes sp.	L	313	1739	—
	(Pisciforma)				
	<b>Baetidae</b>				
	Baetidae	L	16	89	imm.; dam.
	Baetis intercalaris McDunnough	L	1	6	—
	Baetis sp.	L	4	22	—
	Centroptilum/Proclonon sp.	L	7	39	—
	(Setisura)				
	<b>Heptageniidae</b>				
	Heptageniidae	L	4	22	—
	Heptageniidae	L	63	350	imm.; dam.
	Stenacron sp.	L	1	6	—
	Stenonema exiguum Traver	L	13	72	—
	Stenonema sp.	L	67	372	—
	<b>Isonychiidae</b>				
	Isonychia sp.	L	2	11	—
Hemiptera					
	(Heteroptera)				
	<b>Corixidae</b>				
	Corixidae	L	23	128	imm.
	<b>Gerridae</b>				
	Gerridae	L	15	83	imm.
Odonata					
	(Anisoptera)				
	Anisoptera	L	22	122	imm.
	(Zygoptera)				
	Zygoptera	L	7	39	imm.
	<b>Calopterygidae</b>				
	Hetaerina titia (Drury)	L	4	22	ref.
Trichoptera					



## 05564300 Mackinaw River near Kappa, IL--Continued

(Annulipalpia)						
	<b>Hydropsychidae</b>					
	Hydropsychinae	Hydropsychidae	L	68	378	imm.
		Hydropsyche rossi Flint, Voshell, and Parker/simulans Ross	L	34	189	—
		Hydropsyche bidens Ross	L	6	33	—
	<b>Polycentropodidae</b>					
	Polycentropodinae					
		Neureclipsis sp.	L	4	22	—
		Paranyctiophylax sp.	L	38	211	—
(Integripalpia)						
	<b>Leptoceridae</b>					
	Leptocerinae	Leptoceridae	L	7	39	imm.
		Nectopsyche candida (Hagen)	L	7	39	—
(Spicpalpia)						
	<b>Hydroptilidae</b>					
	Hydroptilinae	Hydroptilidae	P	14	78	—
		Hydroptila angusta Ross	P	11	61	—
		Hydroptila sp.	L	47	261	—
<b>Malacostraca</b>						
Amphipoda		Amphipoda	—	7	39	imm.
Decapoda		Decapoda	—	4	22	imm.; gender
MOLLUSCA						
<b>Gastropoda</b>						
Basommatophora						
	<b>Lymnaeidae</b>					
		Lymnaeidae	—	7	39	imm.
PLATYHELMINTHES						
<b>Turbellaria</b>		Turbellaria	—	4	22	—

ILLINOIS RIVER BASIN  
05568830 Spoon River at Elmore, IL

**LOCATION.**— Lat 40°57'25", long 89°58'34" (NAD of 1927), in sec., T., R., Peoria County, Hydrologic Unit 07130005. Located at CR6, 0.1 miles east of Elmore.

**DRAINAGE AREA.**— 432 mi<sup>2</sup>

**PERIOD OF RECORD.**—

BIOLOGICAL

BENTHIC MACROINVERTEBRATES: Water year 1997.

**REMARKS.**—Station established as a low-flow water-quality sampling site in August 1997 as part of the National Water-Quality Assessment (NAWQA), Lower Illinois River Basin synoptic study.

**REMARKS FOR CURRENT YEAR.**— Biological samples were collected upstream from the CR6 bridge. Benthic macroinvertebrate community samples were collected as part of the National Water-Quality Assessment program (NAWQA) in the lower Illinois River Basin. One quantitative (Richest-Targeted Habitat) sample was collected in accordance with the NAWQA protocols (Cuffney and others, 1993). The quantitative sample was a composite of macroinvertebrates from about 10 submerged tree branches. Branches were cut underwater, gathered in a 425µm mesh net, and invertebrates were washed or picked from the branches. The average length and average diameter of each branch were measured and used to calculate an approximate surface area. All samples were processed by the USGS National Water-Quality Laboratory. Phylum, Class, Order, Suborder, Family, Subfamily, and Tribe are listed and arranged according to the USGS National Water-Quality Laboratory taxonomic hierarchy. Reach A begins upstream of the SR 78 bridge and continues upstream for 102 meters. The surface area sampled at reach A was 0.36 m<sup>2</sup>.

BENTHIC MACROINVERTEBRATES

[sp., species; A, Adults; LV, Larvae; P, Pupae; X, present; –, not found or not applicable; dam., damaged; imm., immature; indet., indeterminate; mount, poor mount; ref., reference]

PHYLUM

Class				Quantitative sample			Laboratory notes	
Order								
(Suborder)								
Family								
Subfamily								
(Tribe)								
Taxon								
				Life stage	Abundance (count)	Density (number/m <sup>2</sup> )		
				Reach A				
				8/4/1997				

ANNELIDA

**Oligochaeta**

Tubificida

(Tubificina)

**Naididae**

Naididae

—

23

64

—

ARTHROPODA

**Arachnida**

Acari

—

59

163

—

**Insecta**

Coleoptera

(Polyphaga)

**Curculionidae**

Curculionidae

A

6

17

—

**Elmidae**

Dubiraphia sp.

A

6

17

—

Elmidae

L

46

127

imm.; dam.

Macronychus glabratus Say

A

20

55

—

Macronychus glabratus Say

L

42

116

—

Stenelmis sp.

A

17

47

—

Diptera

(Brachycera)

**Empididae**

Hemerodromiinae

Hemerodromia sp.

L

17

47

—

(Nematocera)

**Chironomidae**

Chironomidae

P

8

22

—

Chironominae

Chironominae

P

6

17

—

(Chironomini)

Dicrotendipes sp.

L

6

17

—

Glyptotendipes sp.

L

6

17

—

Microtendipes sp.

L

6

17

—

Polypedilum sp.

L

35

97

—

Stenochironomus sp.

L

12

33

—

(Tanytarsini)

Rheotanytarsus sp.

L

46

127

—

Tanytarsini

L

17

47

—

Tanytarsus sp.

L

29

80

—

Orthocladiinae

Orthocladiinae

P

6

17

—

Parakiefferiella sp.

L

6

17

—

Tanypodinae

(Pentaneurini)

Thienemannimyia group sp.

L

29

80

—

(Coffman and Ferrington,  
1996)

**Simuliidae**

ILLINOIS RIVER BASIN  
**05568830 Spoon River at Elmore, IL--Continued**

Ephemeroptera	Simuliidae	L	1	3	imm.
(Furcatergalia)	Ephemeroptera	L	265	732	imm.; dam.
<b>Leptohyphidae</b>					
(Pisciforma)	Tricorythodes sp.	L	465	1285	—
<b>Baetidae</b>					
	Baetidae	L	180	498	imm.; dam.
	Baetis intercalaris	L	12	33	—
	McDunnough	L	79	218	—
(Setisura)	Baetis sp.	L			—
<b>Heptageniidae</b>					
	Heptagenia flavescens (Walsh)	L	1	3	—
	Heptageniidae	L	71	196	imm.; dam.
	Stenacron sp.	L	6	17	—
	Stenonema exiguum Traver	L	10	28	—
	Stenonema sp.	L	60	166	—
<b>Isonychiidae</b>					
	Isonychia sp.	L	22	61	—
Hemiptera					
(Heteroptera)					
<b>Corixidae</b>					
	Corixidae	L	6	17	—
<b>Gerridae</b>					
	Trepobatinae				
	Metrobates sp.	A	9	25	—
<b>Veliidae</b>					
	Rhagoveliinae				
	Rhagovelia sp.	L	14	39	—
Odonata					
(Zygoptera)					
<b>Coenagrionidae</b>					
	Coenagrionidae	L	6	17	imm.
Trichoptera					
(Annulipalpia)					
<b>Hydropsychidae</b>					
	Hydropsychidae	L	122	337	imm.
	Hydropsychinae				
	Hydropsyche rossi Flint, Voshell, and Parker/simulans Ross	L	48	133	—
	Cheumatopsyche sp.	L	17	47	—
	Hydropsyche bidens Ross	L	134	370	—

## 05568830 Spoon River at Elmore, IL--Continued

		Hydropsyche bidens Ross	P	1	3	—
		Hydropsyche bidens Ross/orris Ross	L	279	771	—
		Hydropsyche sp.	L	29	80	—
		Hydropsyche sp.	P	1	3	—
	<b>Polycentropodidae</b>					
	Polycentropodinae					
	(Integripalpia)	Paranyctiophylax sp.	L	18	50	—
	<b>Leptoceridae</b>					
	Leptocerinae					
		Nectopsyche candida (Hagen)	L	1	3	—
	(Spicripalpia)					
	<b>Hydroptilidae</b>					
	Hydroptilinae					
		Hydroptila sp.	L	6	17	—
MOLLUSCA						
	<b>Gastropoda</b>					
	Basommatophora					
	<b>Physidae</b>					
	Physinae					
		Physa sp.	—	1	3	—

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ILLINOIS RIVER BASIN  
05569875 Cedar Creek near Ellisville, IL

**LOCATION.**— Lat 40°40'18", long 90°22'33" (NAD of 1927), in SW1/4 SW1/4 SE1/4 sec.15, T.8 N., R.1 E., Fulton County, Hydrologic Unit 07130005. Located at CR20, 3.1 miles east of Avon.

**DRAINAGE AREA.**— 271.2 mi<sup>2</sup>

**PERIOD OF RECORD.**—

**BIOLOGICAL**

BENTHIC MACROINVERTEBRATES: Water year 1997.

**REMARKS.**—Station established as a low-flow water-quality sampling site in August 1997 as part of the National Water-Quality Assessment (NAWQA), Lower Illinois River Basin synoptic study.

**REMARKS FOR CURRENT YEAR.**— Biological samples were collected downstream from the CR20 bridge. Benthic macroinvertebrate community samples were collected as part of the National Water-Quality Assessment program (NAWQA) in the lower Illinois River Basin. One quantitative (Richest-Targeted Habitat) sample was collected in accordance with the NAWQA protocols (Cuffney and others, 1993). The quantitative sample was a composite of macroinvertebrates from about 10 submerged tree branches. Branches were cut underwater, gathered in a 425µm mesh net, and invertebrates were washed or picked from the branches. The average length and average diameter of each branch were measured and used to calculate an approximate surface area. All samples were processed by the USGS National Water-Quality Laboratory. Phylum, Class, Order, Suborder, Family, Subfamily, and Tribe are listed and arranged according to the USGS National Water-Quality Laboratory taxonomic hierarchy. Reach A begins downstream from the SR 41 bridge and continues downstream for about 100 meters. The surface area sampled at reach A was 0.39 m<sup>2</sup>.

**BENTHIC MACROINVERTEBRATES**

[sp., species; A, Adults; LV, Larvae; P, Pupae; X, present; —, not found or not applicable; dam., damaged; imm., immature; indet., indeterminate; mount, poor mount; ref., reference]

**PHYLUM**

**Class**

Order

(Suborder)

**Family**

Subfamily

(Tribe)

Taxon

Life stage

Quantitative sample

Abundance  
(count)

Density  
(number/m<sup>2</sup>)

Laboratory notes

Reach A  
8/5/1997

## 05569875 Cedar Creek near Ellisville, IL--Continued

## ANNELIDA

**Oligochaeta**Tubificida  
(Tubificina)**Naididae**

Oligochaeta	—	6	15	—
Naididae	—	3	8	—

## ARTHROPODA

**Insecta**

Coleoptera

(Polyphaga)

**Elmidae**

Ancyronyx variegata (Germar)	A	3	8	—
Ancyronyx variegata (Germar)	L	31	79	—
Dubiraphia sp.	A	120	308	—
Elmidae	L	111	285	imm.; dam.
Macronychus glabratus Say	A	33	85	—
Macronychus glabratus Say	L	89	228	—
Stenelmis sp.	A	22	56	—
Stenelmis sp.	L	13	33	—

Collembola

Collembola	—	3	8	—
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Diptera

Diptera	A	3	8	—
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(Brachycera)

**Empididae**

Hemerodromiinae

Hemerodromia sp.	L	3	8	—
Hemerodromiinae	P	3	8	—

(Nematocera)

**Ceratopogonidae**

Ceratopogonidae	L	3	8	—
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Forcipomyiinae

Atrichopogon sp.	L	9	23	—
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**Chironomidae**

Chironomidae	P	3	8	—
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Chironominae

Chironominae	P	18	46	—
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(Chironomini)

Chironomini	L	18	46	—
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Dicrotendipes sp.	L	27	69	—
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Glyptotendipes sp.	L	45	115	—
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Parachironomus sp.	L	12	31	—
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Polypedilum sp.	L	138	354	—
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Stenochironomus sp.	L	21	54	—
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Tribelos sp.	L	15	38	—
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(Tanytarsini)

Cladotanytarsus sp.	L	12	31	—
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## ILLINOIS RIVER BASIN

## 05569875 Cedar Creek near Ellisville, IL--Continued

	Paratanytarsus sp.	L	3	8	—
	Rheotanytarsus sp.	L	12	31	—
	Tanytarsus sp.	L	36	92	—
Orthocladiinae					
	Cricotopus bicinctus group	L	3	8	—
	Cricotopus/Orthocladius sp.	L	6	15	—
	Nanocladius sp.	L	12	31	—
	Parakiefferiella sp.	L	6	15	—
Tanypodinae					
	Tanypodinae	L	15	38	—
(Pentaneurini)					
	Thienemannimyia group sp.	L	60	154	—
	(Coffman and Ferrington, 1996)				
	Ablabesmyia sp.	L	18	46	—
	Labrundinia sp.	L	6	15	—
	Nilotanypus sp.	L	3	8	—
<b>Culicidae</b>					
	Culicidae	L	3	8	imm.
Ephemeroptera					
	Ephemeroptera	L	33	85	imm.; dam.
(Furcatergalia)					
<b>Leptohyphidae</b>					
	Tricorythodes sp.	L	276	708	—
(Pisciforma)					
<b>Baetidae</b>					
	Baetidae	L	18	46	—
(Setisura)					
<b>Heptageniidae</b>					
	Heptageniidae	L	12	31	dam.
	Stenacron interpunctatum (Say)	L	6	15	—
	Stenacron sp.	L	6	15	—
	Stenonema sp.	L	7	18	—
Hemiptera					
(Heteroptera)					
<b>Corixidae</b>					
	Corixidae	L	3	8	imm.
Corixinae					
(Corixini)					
	Trichocorixa sp.	A	3	8	—
<b>Gerridae</b>					
	Gerridae	L	9	23	imm.
Odonata					
(Anisoptera)					
<b>Aeshnidae</b>					
	Aeshnidae	L	1	3	dam.
(Zygoptera)					



## 05569875 Cedar Creek near Ellisville, IL--Continued

<b>Coenagrionidae</b>					
	Argia sp.	L	21	54	—
Trichoptera	Coenagrionidae	L	30	77	imm.; dam.
(Annulipalpia)					
<b>Hydropsychidae</b>					
	Hydropsychidae	L	6	15	imm.
	Hydropsychinae				
	Hydropsyche rossi Flint, Voshell, and	L	13	33	—
	Parker/simulans Ross	L	1	3	—
	Cheumatopsyche sp.	L	19	49	—
	Hydropsyche bidens Ross	L			
<b>Polycentropodidae</b>					
	Polycentropodinae				
	Cyrnellus fraternus (Banks)	L	2	5	—
	Paranyctiophylax sp.	L	35	90	—
(Integripalpia)					
<b>Leptoceridae</b>					
	Leptocerinae				
	Nectopsyche candida (Hagen)	L	4	10	—
	Nectopsyche sp.	L	1	3	—
<b>Malacostraca</b>					
Amphipoda					
	Amphipoda	—	3	8	—
MOLLUSCA					
<b>Gastropoda</b>					
Basommatophora					
<b>Physidae</b>					
	Physidae	—	3	8	—
	Physinae				
	Physa sp.	—	1	3	—
PLATYHELMINTHES					
<b>Turbellaria</b>					
	Turbellaria	—	18	46	—

**LOCATION.**— Lat 40°01'51", long 88°35'20" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: 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.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1990–92, 1997–98, and 2001 to current year.

MISCELLANEOUS: Contaminants in streambed sediments, July 1996; contaminants in fish tissue, July 1996; streambank sediment size, October 1997; streambed sediment size, October 1997.

**BIOLOGICAL**

ALGAE: Water years 1996–98 and 2002–03.

BENTHIC MACROINVERTEBRATES: Water years 1996–98 and 2002.

FISH: Water years 1997–98 and 2002–04.

HABITAT: Water years 1996–98 and 2002–04.

**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, phone telemeter, and crest-stage gage. Datum of gage is 625.89 ft above NGVD of 1929. 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.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 19,000 ft<sup>3</sup>/s, Oct. 4, 1926, gage height, 18.50 ft, from graph based on gage readings, site then in use; maximum gage height, 19.06 ft, Apr. 13, 1994, discharge, 15,900 ft<sup>3</sup>/s; no flow Aug. 28, Sept. 5, 11, 17, 18, Oct. 30, 31, Nov. 1, 1988.

**REMARKS FOR CURRENT YEAR.**—Fish community samples were collected as part of the National Water–Quality Assessment program (NAWQA) in the lower Illinois River Basin (Moulton and others, 2002). Collections were made with two passes with a barge electroshocker and supplementary seine hauls and kicks. Fishes were identified by C. A. Taylor, Illinois Natural History Survey, Champaign. Reach A begins 820 ft. upstream of the gage and continues upstream for 984 ft.

FISH

Order

Family

Scientific name

Common name

Number  
individuals

Reach A  
8/17/2004

Clupeiformes

Clupeidae

*Dorosoma  
cepedianum*

gizzard shad

6

Cypriniformes

Catostomidae

*Moxostoma  
erythrurum*

golden redhorse

6

*Moxostoma  
macrolepidotum*

shorthead redhorse

3

Cyprinidae

*Cyprinella* sp.

satinfish shiners

134

*Cyprinus carpio*

common carp

1

*Lythrurus  
umbratilis*

redfin shiner

1

**05572000 Sangamon River at Monticello, IL--Continued**

Perciformes	Centrarchidae	<i>Notemigonus crysoleucas</i>	golden shiner	1
		<i>Notropis stramineus</i>	sand shiner	7
		<i>Pimephales notatus</i>	bluntnose minnow	21
		<i>Pimephales vigilax</i>	bullhead minnow	1
	Percidae	<i>Lepomis cyanellus</i>	green sunfish	40
		<i>Lepomis macrochirus</i>	bluegill	54
		<i>Lepomis megalotis</i>	longear sunfish	45
		<i>Micropterus salmoides</i>	largemouth bass	10
		<i>Pomoxis annularis</i>	white crappie	1
		<i>Pomoxis nigromaculatus</i>	black crappie	2
Percopsiformes	Aphredoderidae	<i>Etheostoma asprigene</i>	mud darter	4
		<i>Etheostoma flabellare</i>	fantail darter	1
		<i>Etheostoma nigrum</i>	johnny darter	2
		<i>Percina phoxocephala</i>	slenderhead darter	3
Salmoniformes		<i>Aphredoderus sayanus</i>	pirate perch	9
Siluriformes	Esocidae	<i>Esox americanus vermiculatus</i>	grass pickerel	3
	Ictaluridae	<i>Ameiurus natalis</i>	yellow bullhead	5
		<i>Ictalurus punctatus</i>	channel catfish	1
		<i>Noturus flavus</i>	stonecat	1
		<i>Noturus nocturnus</i>	freckled madtom	3

**LOCATION.**— Lat 40°01'51", long 88°35'20" (NAD of 1927), 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.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: 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.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1990–92, 1997–98, and 2001 to current year.

MISCELLANEOUS: Contaminants in streambed sediments, July 1996; contaminants in fish tissue, July 1996; streambank sediment size, October 1997; streambed sediment size, October 1997.

**BIOLOGICAL**

ALGAE: Water years 1996–98 and 2002–03.

BENTHIC MACROINVERTEBRATES: Water years 1996–98 and 2002.

FISH: Water years 1997–98 and 2002–04.

HABITAT: Water years 1996–98 and 2002–04.

**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, phone telemeter, and crest-stage gage. Datum of gage is 625.89 ft above NGVD of 1929. 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.

**EXTREMES FOR PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE:** Maximum discharge, 19,000 ft<sup>3</sup>/s, Oct. 4, 1926, gage height, 18.50 ft, from graph based on gage readings, site then in use; maximum gage height, 19.06 ft, Apr. 13, 1994, discharge, 15,900 ft<sup>3</sup>/s; no flow Aug. 28, Sept. 5, 11, 17, 18, Oct. 30, 31, Nov. 1, 1988.

**REMARKS FOR CURRENT YEAR.**— Physical and geomorphic habitat data were collected as part of the National Water–Quality Assessment (NAWQA) program in the lower Illinois River Basin. The data were collected according to Fitzpatrick and others, 1998. Reach A begins 820 ft. upstream of the gage and continues upstream for 984 ft.

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**Tabular–Text Files of Habitat Data for Water Year 2004**

The following links list up to five tab-delimited text files containing habitat data collected at this site. An explanation of column headers in these files can be accessed at [this link](#).

[Reach](#) — General description of the sampled reach.

[Geomorphic Channel Unit \(GCU\)](#) — Fluvial geomorphic descriptors of channel shape and stream velocity (for example pool, riffle, or run).

[Transect](#) — Channel and bank measurements made along transects (cross sections) within each reach.

[Channel features](#) — Measurements of bars, shelves, and islands at each transect (cross section).

[Transect Points](#) — Channel and substrate measurements and observations at points along a transect (cross section).

**LOCATION.**— Lat 40°11'45", long 90°27'16" (NAD of 1927), in NE1/4 SE1/4 sec.36, T.3 N., R.1 W., Schuyler County, at bridge on US Highway 24, 1.3 miles southeast of Ray.

**DRAINAGE AREA.**— 118 mi<sup>2</sup>

**PERIOD OF RECORD.**—

SURFACE–WATER DISCHARGE AND STAGE

PARTIAL RECORD: Discharge measurements, Water year 1981.

SURFACE–WATER QUALITY

MISCELLANEOUS: Water year 1981.

BIOLOGICAL

BENTHIC MACROINVERTEBRATES: Water year 1997.

**REMARKS.**— Station established as a low–flow water–quality sampling site in August 1997 as part of the National Water–Quality Assessment (NAWQA), Lower Illinois River Basin synoptic study.

**REMARKS FOR CURRENT YEAR.**— Benthic macroinvertebrate community samples were collected as part of the National Water–Quality Assessment program (NAWQA) in the lower Illinois River Basin. One quantitative (Richest–Targeted Habitat) sample was collected in accordance with the NAWQA protocols (Cuffney and others, 1993). The quantitative sample was a composite of macroinvertebrates from about 10 submerged tree branches. Branches were cut underwater, gathered in a 425µm mesh net, and invertebrates were washed or picked from the branches. The average length and average diameter of each branch were measured and used to calculate an approximate surface area. All samples were processed by the USGS National Water–Quality Laboratory. Phylum, Class, Order, Suborder, Family, Subfamily, and Tribe are listed and arranged according to the USGS National Water–Quality Laboratory taxonomic hierarchy. Reach A begins 20 meters downstream from the US Route 24 bridge and continues downstream for 72 meters. The surface area sampled at reach A was 0.23 m<sup>2</sup>.

**BENTHIC MACROINVERTEBRATES**

[sp., species; A, Adults; LV, Larvae; P, Pupae; X, present; –, not found or not applicable; dam., damaged; imm., immature; indet., indeterminate; mount, poor mount; ref., reference]

**PHYLUM**

Class

Order

(Suborder)

Family

Subfamily

(Tribe)

Life stage

Quantitative sample

Laboratory notes

ILLINOIS RIVER BASIN  
05583900 Sugar Creek near Ray, IL--Continued

Taxon			Abundance (count)	Density (number/m <sup>2</sup> )	
Reach A 8/6/1997					
ANNELIDA					
Oligochaeta					
	Oligochaeta	—	23	99	imm.
	Tubificida				
	(Tubificina)				
	Naididae				
	Naididae	—	17	73	—
ARTHROPODA					
Insecta					
	Coleoptera				
	(Polyphaga)				
	Elmidae				
	Dubiraphia sp.	A	52	223	—
	Elmidae	L	17	73	—
	Macronychus glabratus	L	7	30	—
	Say				
	Stenelmis sp.	L	1	4	—
	Hydrophilidae				
	Tropisternus sp.	L	7	30	—
	Collembola				
	Collembola	—	6	26	—
	Diptera				
	Diptera	L	6	26	—
	(Brachycera)				
	Empididae				
	Hemerodromiinae				
	Hemerodromia sp.	L	12	51	—
	(Nematocera)				
	Ceratopogonidae				
	Ceratopogonidae	L	63	270	indet.
	Ceratopogonidae	P	6	26	—
	Chironomidae				
	Chironomidae	L	6	26	—
	Chironomidae	P	7	30	—
	Chironominae				
	Chironominae	P	35	150	—
	(Chironomini)				
	Chironomini	L	98	420	—
	Chironomus sp.	L	6	26	—
	Dicrotendipes sp.	L	657	2814	—
	Glyptotendipes sp.	L	92	394	—
	Paracladopelma sp.	L	6	26	—
	Phaenopsectra sp.	L	6	26	—
	Polypedilum sp.	L	52	223	—
	Stelechomyia perpulchra (Mitchell)	L	6	26	—
	Stenochironomus sp.	L	29	124	—
	(Tanytarsini)				

**05583900 Sugar Creek near Ray, IL--Continued**

	Cladotanytarsus sp.	L	12	51	—
	Tanytarsini	L	81	347	—
	Tanytarsus sp.	L	737	3156	—
Orthoclaadiinae					
	Cricotopus bicinctus group	L	12	51	—
	Nanocladius sp.	L	12	51	—
	Parakiefferiella sp.	L	12	51	—
Tanypodinae					
	Tanypodinae	L	29	124	—
	Tanypodinae	P	12	51	—
(Pentaneurini)					
	Thienemannimyia group sp. (Coffman and Ferrington, 1996)	L	455	1949	—
	Ablabesmyia sp.	L	12	51	—
	Labrundinia sp.	L	46	197	—
Ephemeroptera					
(Furcatergalia)	Ephemeroptera	L	17	73	dam.
<b>Caenidae</b>					
	Caenidae	L	35	150	imm.
Hemiptera					
(Heteroptera)					
<b>Corixidae</b>					
	Corixidae	L	23	99	imm.
Odonata					
(Anisoptera)					
	Anisoptera	L	12	51	imm.; 1 lost
(Zygoptera)					
<b>Coenagrionidae</b>					
	Coenagrion/Enallagma sp.	L	1	4	—
	Coenagrionidae	L	6	26	—
Trichoptera					
	Trichoptera	L	29	124	imm.
(Annulipalpia)					
<b>Hydropsychidae</b>					
	Hydropsychidae	L	23	99	imm.
<b>Polycentropodidae</b>					
Polycentropodinae					
	Paranyctiophylax sp.	L	63	270	—
(Integripalpia)					
<b>Leptoceridae</b>					
Leptocerinae					
	Nectopsyche sp.	P	1	4	—
(Spicpalpia)					
<b>Hydroptilidae</b>					
Hydroptilinae					
	Hydroptila sp.	L	13	56	—
	Hydroptila sp.	P	12	51	—

ILLINOIS RIVER BASIN  
05583900 Sugar Creek near Ray, IL--Continued

		Hydroptila waubesiana Betten	P	6	26	—
Malacostraca						
	Amphipoda					
	(Gammaridea)	Amphipoda	—	12	51	imm.
		Hyaellidae				
		Hyaella azteca (Saussure)	—	65	278	—
MOLLUSCA						
	Gastropoda					
	Basommatophora					
		Ancylidae				
		Ferrissia sp.	—	1	4	—
		Physidae				
		Physinae				
		Physa sp.	—	1	4	—

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**LOCATION.**— Lat 39°42'12", long 90°38'43" (NAD of 1927), 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. Auxiliary gage 10.0 miles upstream.

**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.

**PERIOD OF RECORD.**—

**SURFACE-WATER DISCHARGE AND STAGE**

DISCHARGE: October 1938 to current year. Prior to October 1960, at site 0.2 mi upstream at same datum. Prior to October 1989, published as "at Meredosia." Records are considered equivalent.

STAGE: Water years 1994 to current year.

**SURFACE-WATER QUALITY**

CHEMICAL: Water years 1975–93 and 1996 to current year.

SEDIMENT: February 1980 to current year.

SPECIFIC CONDUCTANCE: Water years 1975–81.

WATER TEMPERATURE: Water years 1975–81.

MISCELLANEOUS: Contaminants in streambed sediments, October 1996; contaminants in fish tissue, October 1996; sediment concentration and particle size, water years 1996–2003.

**BIOLOGICAL**

ALGAE: Water years 1980–81, 1997–98, and 2002–03.

BENTHIC MACROINVERTEBRATES: Water years 1997–98 and 2002.

FISH: Water year 1998 and 2003–04.

HABITAT: Water years 1997–98 and 2003.

**GAGE.**— U.S. Army Corps of Engineer's water-stage recorder and satellite telemeter, crest-stage gage, and water-quality monitor. Datum of gage is 418.00 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Nov. 25, 1992 and Oct. 1, 1994 to current; auxiliary gage (05585500) at site 10.0 mi upstream. Nov. 25, 1992 to Sept. 30, 1994; auxiliary gage operated at this site (05586100).

**REMARKS.**— 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. Suspended-sediment samples were collected by a local observer twice weekly with additional samples collected during high runoff periods. Since February 1994, samples used to compute sediment record have been collected at upstream side Rt. 106 bridge at Florence at mile 56.

**EXTREMES FOR PERIOD OF RECORD.**—

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 123,000 ft<sup>3</sup>/s, May 26–28, 1943; maximum gage height, 28.61 ft, May 26, 1943; minimum daily discharge, 1,330 ft<sup>3</sup>/s, Sept. 2, 1984.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily, 3,720 mg/L, Apr. 14, 1981; minimum daily, 14 mg/L, Dec. 26, 1984, July 21, 1993.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 410,000 tons, June 4, 1980; minimum daily, 172 tons, Sept. 2, 1984.

**REMARKS FOR CURRENT YEAR.**—Fish community samples were collected as part of the National Water-Quality Assessment program (NAWQA) in the lower Illinois River Basin (Moulton and others, 2002). Collections were made with an DC boat electroshocker and supplementary seine hauls. Fishes were identified by C. A. Taylor, Illinois Natural History Survey, Champaign. The sampling reach begins at river mile 59, upstream of Big Blue Island, and continues downstream for 2460 feet.

FISH				
Order	Family	Scientific name	Common name	Number individuals
Reach A 8/5/2004				
Atheriniformes	Poeciliidae	<i>Gambusia affinis</i>	western mosquitofish	2
Clupeiformes	Clupeidae	<i>Alosa chrysochloris</i>	skipjack herring	8

**05586100 Illinois River at Valley City, IL--Continued**

Cypriniformes	Catostomidae	<i>Dorosoma cepedianum</i>	gizzard shad	117
		<i>Carpiodes carpio</i>	river carpsucker	2
		<i>Carpiodes cyprinus</i>	quillback	2
		<i>Ictiobus bubalus</i>	smallmouth buffalo	1
		<i>Ictiobus cyprinellus</i>	bigmouth buffalo	3
		<i>Ictiobus niger</i>	black buffalo	1
	Cyprinidae	<i>Ctenopharyngodon idella</i>	grass carp	1
		<i>Cyprinella lutrensis</i>	red shiner	4
		<i>Cyprinus carpio</i>	common carp	18
		<i>Cyprinus carpio</i> x <i>Carassius auratus</i>	common carp x goldfish	1
		<i>Hypophthalmichthys molitrix</i>	silver carp	8
		<i>Notropis atherinoides</i>	emerald shiner	92
Lepisosteiformes	Lepisosteidae			
		<i>Lepisosteus platostomus</i>	shortnose gar	2
Perciformes	Centrarchidae			
		<i>Lepomis macrochirus</i>	bluegill	9
		<i>Micropterus salmoides</i>	largemouth bass	1
	Percichthyidae	<i>Morone chrysops</i>	white bass	17
	Sciaenidae	<i>Aplodinotus grunniens</i>	freshwater drum	6
Siluriformes	Ictaluridae			
		<i>Ictalurus punctatus</i>	channel catfish	6

**LOCATION.**— Lat 39°21'35", long 90°29'45" (NAD of 1927), in NW1/4 NW1/4 NE1/4 sec.36, T.11 N., R.13 W., Greene County, Hydrologic Unit 07130011. Located at CR 675NE, 2.25 miles south of Walkerville and at mile 12.7.

**DRAINAGE AREA.**— 385.2 mi<sup>2</sup>

**PERIOD OF RECORD.**—

BIOLOGICAL

BENTHIC MACROINVERTEBRATES: Water year 1997.

**REMARKS.**—Station established as a low-flow water-quality sampling site in August 1997 as part of the National Water-Quality Assessment (NAWQA), Lower Illinois River Basin synoptic study.

**REMARKS FOR CURRENT YEAR.**— Benthic macroinvertebrate community samples were collected as part of the National Water-Quality Assessment program (NAWQA) in the lower Illinois River Basin. One quantitative (Richest-Targeted Habitat) sample was collected in accordance with the NAWQA protocols (Cuffney and others, 1993). The quantitative sample was a composite of macroinvertebrates from about 10 submerged tree branches. Branches were cut underwater, gathered in a 425µm mesh net, and invertebrates were washed or picked from the branches. The average length and average diameter of each branch were measured and used to calculate an approximate surface area. All samples were processed by the USGS National Water-Quality Laboratory. Phylum, Class, Order, Suborder, Family, Subfamily, and Tribe are listed and arranged according to the USGS National Water-Quality Laboratory taxonomic hierarchy. Reach A begins 75 meters upstream from the CR 675 NE bridge and continues upstream for 101 meters. The surface area sampled at reach A was 0.41 m<sup>2</sup>.

#### BENTHIC MACROINVERTEBRATES

[sp., species; A, Adults; LV, Larvae; P, Pupae; X, present; —, not found or not applicable; dam., damaged; imm., immature; indet., indeterminate; mount, poor mount; ref., reference]

#### PHYLUM

Class

Order

(Suborder)

Family

Subfamily

(Tribe)

Taxon

Life stage

Quantitative sample

Abundance  
(count)

Density  
(number/m<sup>2</sup>)

Laboratory notes

Reach A  
8/7/1997

## 05586598 Apple Creek at CR675 NE near Walkerville, IL--Continued

## ANNELIDA

## Oligochaeta

## Tubificida

## (Tubificina)

## Naididae

## Naididae

-

115

279

-

## ARTHROPODA

## Arachnida

## Acari

-

187

454

-

## Insecta

## Coleoptera

## (Polyphaga)

## Dryopidae

## Helichus lithophilus (Germar)

A

1

2

-

## Elmidae

## Elmidae

L

259

629

imm.

## Macronychus glabratus Say

A

14

34

-

## Macronychus glabratus Say

L

32

78

-

## Stenelmis sp.

A

87

211

-

## Stenelmis sp.

L

17

41

-

## Scirtidae

## Scirtidae

A

1

2

-

## Diptera

## (Brachycera)

## Empididae

## Hemerodromiinae

## Hemerodromia sp.

L

29

70

-

## Hemerodromiinae

P

14

34

-

## (Nematocera)

## Chironomidae

## Chironomidae

L

11

27

-

## Chironominae

## Chironominae

P

14

34

-

## (Chironomini)

## Chironomini

L

115

279

-

## Dicrotendipes sp.

L

101

245

-

## Endochironomus sp.

L

14

34

-

## Glyptotendipes sp.

L

29

70

-

## Microtendipes sp.

L

29

70

-

## Parachironomus sp.

L

29

70

-

## Polypedilum sp.

L

562

1364

-

## Stenochironomus sp.

L

144

350

-

## (Tanytarsini)

## Rheotanytarsus sp.

L

216

524

-

## Tanytarsini

L

58

141

-

## Tanytarsus sp.

L

43

104

-

## Orthoclaadiinae

## Cricotopus/Orthocladus sp.

L

14

34

-

## Nanocladius sp.

L

29

70

-

## 05586598 Apple Creek at CR675 NE near Walkerville, IL--Continued

	Rheocricotopus sp.	L	43	104	—
Tanypodinae					
(Pentaneurini)					
	Thienemannimyia group sp. (Coffman and Ferrington, 1996)	L	101	245	—
	Labrundinia sp.	L	14	34	—
	Pentaneurini	L	29	70	—
<b>Simuliidae</b>					
	Simuliidae	L	87	211	imm.
	Simuliidae	P	29	70	dam.
	Simulium sp.	L	106	257	—
	Simulium sp.	P	18	44	—
Ephemeroptera					
	Ephemeroptera	L	245	595	imm.; dam.
(Furcatergalia)					
<b>Caenidae</b>					
	Caenis sp.	L	31	75	—
(Pisciforma)					
<b>Baetidae</b>					
	Baetidae	L	190	461	imm.; dam.
	Baetis intercalaris McDunnough	L	86	209	—
	Baetis sp.	L	29	70	—
(Setisura)					
<b>Heptageniidae</b>					
	Heptageniidae	L	46	112	imm.; dam.
	Stenacron interpunctatum (Say)	L	1	2	—
	Stenacron sp.	L	29	70	—
Hemiptera					
(Heteroptera)					
<b>Corixidae</b>					
	Corixidae	L	14	34	imm.
<b>Gerridae</b>					
	Gerridae	L	14	34	imm.
Megaloptera					
<b>Corydalidae</b>					
Corydalinae					
	Corydalus cornutus (Linnaeus)	L	1	2	—
Trichoptera					
(Annulipalpia)					
<b>Hydropsychidae</b>					
	Hydropsychidae	L	794	1927	imm.
	Hydropsychidae	P	1	2	dam.
Hydropsychinae					

## 05586598 Apple Creek at CR675 NE near Walkerville, IL--Continued

		Hydropsyche rossi Flint, Voshell, and Parker/simulans Ross	L	131	318	—
		Cheumatopsyche pettiti (Banks)	A	17	41	—
		Cheumatopsyche pettiti (Banks)	P	2	5	—
		Cheumatopsyche sp.	A	1	2	—
		Cheumatopsyche sp.	L	1056	2563	—
		Cheumatopsyche sp.	P	2	5	—
		Hydropsyche betteni Ross/depravata Hagen	L	29	70	—
		Hydropsyche bidens Ross	L	1	2	—
		Hydropsyche sp.	L	86	209	—
		Hydropsyche sp.	P	3	7	—
	(Integripalpia)					
	<b>Leptoceridae</b>					
	Leptocerinae					
		Nectopsyche candida (Hagen)	L	2	5	—
	(Spicipalpia)					
	<b>Hydroptilidae</b>					
		Hydroptilidae	L	14	34	dam.
	Hydroptilinae					
		Hydroptila sp.	L	14	34	—
<b>Malacostraca</b>						
	Decapoda					
	(Pleocyemata)					
	<b>Cambaridae</b>					
		Cambaridae	—	2	5	imm.
	Isopoda					
	(Asellota)					
	<b>Asellidae</b>					
		Caecidotea sp.	—	14	34	—
<b>MOLLUSCA</b>						
	<b>Gastropoda</b>					
	Basommatophora					
	<b>Physidae</b>					
	Physinae					
		Physa sp.	—	1	2	—

**LOCATION.**— Lat 39°18'16", long 89°47'15" (NAD of 1927), in SW1/4NW1/4 sec.20, T.10 N., R.6 W., Macoupin County, Hydrologic Unit 07130007, 0.1 mi. upstream from Sugar Creek, 0.5 mi downstream from Shaw Point, and 1.8 mi northeast of Carlinville. To reach gage, drive east from Carlinville 1.6 mi then turn north on county road and drive 0.7 mi to site.

**DRAINAGE AREA.**— 132 mi<sup>2</sup>

**PERIOD OF RECORD.**—

**SURFACE-WATER QUALITY**

MISCELLANEOUS: Water years 1979 and 1997.

**BIOLOGICAL**

BENTHIC MACROINVERTEBRATES: Water year 1997.

**REMARKS.**—Established in the summer of 1979 as a coal hydrology synoptic site downstream of mining activity. Station established as a low-flow water-quality sampling site in August 1997 as part of the National Water-Quality Assessment (NAWQA), Lower Illinois River Basin synoptic study.

**REMARKS FOR CURRENT YEAR.**— Benthic macroinvertebrate community samples were collected as part of the National Water-Quality Assessment program (NAWQA) in the lower Illinois River Basin. One quantitative (Richest-Targeted Habitat) sample was collected in accordance with the NAWQA protocols (Cuffney and others, 1993). The quantitative sample was a composite of macroinvertebrates from about 10 submerged tree branches. Branches were cut underwater, gathered in a 425µm mesh net, and invertebrates were washed or picked from the branches. The average length and average diameter of each branch were measured and used to calculate an approximate surface area. All samples were processed by the USGS National Water-Quality Laboratory. Phylum, Class, Order, Suborder, Family, Subfamily, and Tribe are listed and arranged according to the USGS National Water-Quality Laboratory taxonomic hierarchy. Reach A begins 120 meters upstream from the SR 20 bridge and continues upstream for 100 meters. The surface area sampled at reach A was 0.30 m<sup>2</sup>.

#### BENTHIC MACROINVERTEBRATES

[sp., species; A, Adults; LV, Larvae; P, Pupae; X, present; —, not found or not applicable; dam., damaged; imm., immature; indet., indeterminate; mount, poor mount; ref., reference]

#### PHYLUM

Class

Order

(Suborder)

Family

Subfamily

(Tribe)

Taxon

Life stage

Quantitative sample

Abundance  
(count)

Density  
(number/m<sup>2</sup>)

Laboratory notes

ILLINOIS RIVER BASIN  
**05586645 Macoupin Creek near Carlinville, IL--Continued**

Reach A 8/8/1997						
ANNELIDA						
<b>Oligochaeta</b>						
	Oligochaeta	—	154	522	—	
	Tubificida					
	(Tubificina)					
	<b>Naididae</b>					
	Naididae	—	38	129	—	
ARTHROPODA						
<b>Arachnida</b>						
	Acari	—	19	64	—	
<b>Insecta</b>						
	Coleoptera					
	(Polyphaga)					
	<b>Elmidae</b>					
	Dubiraphia sp.	A	39	132	—	
	Elmidae	L	86	291	imm.; dam.	
	Stenelmis sp.	A	1	3	—	
	Stenelmis sp.	L	33	112	—	
	<b>Hydrophilidae</b>					
	Berosus sp.	L	10	34	—	
	<b>Scirtidae</b>					
	Scirtidae	A	1	3	—	
	Diptera					
	(Nematocera)					
	<b>Chironomidae</b>					
	Chironomidae	L	4	14	—	
	Chironomidae	P	13	44	—	
	Chironominae					
	Chironominae	P	38	129	—	
	(Chironomini)					
	Chironomini	L	48	163	—	
	Dicrotendipes sp.	L	422	1430	—	
	Endochironomus sp.	L	125	424	—	
	Glyptotendipes sp.	L	1162	3938	—	
	Polypedilum sp.	L	38	129	—	
	Stenochironomus sp.	L	19	64	—	
	Tribelos sp.	L	10	34	—	
	Ephemeroptera					
	(Setisura)					
	<b>Heptageniidae</b>					
	Heptageniidae	L	10	34	dam.	
	Stenacron interpunctatum (Say)	L	1	3	—	
	Stenacron sp.	L	10	34	—	
	Hemiptera					
	(Heteroptera)					
	<b>Corixidae</b>					
	Corixidae	L	144	488	imm.	
	Corixinae					
	(Corixini)					



**05586645 Macoupin Creek near Carlinville, IL--Continued**

		Palmacorixa sp.	L	19	64	—
		Trichocorixa sp.	L	218	739	—
Odonata						
	(Zygoptera)					
	<b>Coenagrionidae</b>					
		Argia sp.	L	98	332	—
		Coenagrionidae	L	174	590	imm.
Trichoptera						
	(Annulipalpia)					
	<b>Hydropsychidae</b>					
		Hydropsychidae	L	19	64	imm.
	(Spicipalpia)					
	<b>Hydroptilidae</b>					
	Hydroptilinae					
		Hydroptila sp.	L	10	34	—
<b>Malacostraca</b>						
Amphipoda						
		Amphipoda	—	251	851	imm.; dam.
	(Gammaridea)					
	<b>Hyalellidae</b>					
		Hyalella azteca (Saussure)	—	161	546	—
CNIDARIA						
<b>Hydrozoa</b>						
Hydroida						
	<b>Hydridae</b>					
		Hydra sp.	—	38	129	—
MOLLUSCA						
<b>Gastropoda</b>						
		Gastropoda	—	19	64	imm.; dam.
PLATYHELMINTHES						
<b>Turbellaria</b>						
		Turbellaria	—	68	230	—

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A	Page	D	Page
Addison Creek at Bellwood, IL	<a href="#">237</a>	Deer Creek near Chicago Heights, IL	<a href="#">332</a>
Addison Wastewater Treatment Facility at Addison, IL	<a href="#">771</a>	Des Plaines River at Riverside, IL	<a href="#">243, 245, 249, 801, 803</a>
Agricultural Tile Drain at County Road 1800E near Lahogue, IL	<a href="#">463, 464</a>	Des Plaines River at Russell, IL	<a href="#">200, 721</a>
Agricultural Tile Drain near Lahogue, IL	<a href="#">461, 462</a>	Des Plaines River near Des Plaines, IL	<a href="#">210</a>
Apple Creek at CR675 NE near Walkerville, IL	<a href="#">831</a>	Des Plaines River near Gurnee, IL	<a href="#">204, 723</a>
Apple River near Hanover, IL	<a href="#">117</a>	Drainage Ditch at Libertyville, IL	<a href="#">206, 207</a>
<b>B</b>		Du Page County Airport near St. Charles, IL	<a href="#">770</a>
Bartlett Wastewater Treatment Facility at Bartlett, IL	<a href="#">776</a>	Du Page River at Shorewood, IL	<a href="#">372</a>
Bay Creek at Pittsfield, IL	<a href="#">180</a>	<b>E</b>	
Bear Creek near Marcelline, IL	<a href="#">178</a>	East Branch Du Page River at Bolingbrook, IL	<a href="#">366</a>
Big Bureau Creek at Princeton, IL	<a href="#">469</a>	East Branch Du Page River near Downers Grove, IL	<a href="#">362</a>
Big Muddy River Subimpoundment near Waltonville, IL	<a href="#">645, 646</a>	East Fork Shoal Creek near Coffeen, IL	<a href="#">623</a>
Big Muddy River at Murphysboro, IL	<a href="#">657</a>	Edwards River near New Boston, IL	<a href="#">170</a>
Big Muddy River at Plumfield, IL	<a href="#">653</a>	Edwards River near Orion, IL	<a href="#">168</a>
Big Muddy River near Mt. Vernon, IL	<a href="#">641, 642</a>	Ef Kaskaskia River near Sandoval, IL (Fairman)	<a href="#">609</a>
Blackberry Creek near Montgomery, IL	<a href="#">443, 744</a>	Elgin Water Treatment Facility at Elgin, IL	<a href="#">779</a>
Blackberry Creek near Yorkville, IL	<a href="#">445</a>	Elkhorn Creek near Penrose, IL	<a href="#">160</a>
Blackwell Forest Preserve near Warrenville, IL	<a href="#">763</a>	Elmhurst Quarry at Elmhurst, IL	<a href="#">768</a>
Bloomington Lift Station at Bloomington, IL	<a href="#">772</a>	Embarras River at Lawrenceville, IL	<a href="#">84</a>
Bolingbrook Wastewater Treatment Facility at Bolingbrook, IL	<a href="#">754</a>	Embarras River at Ste. Marie, IL	<a href="#">80</a>
Boneyard Creek at Lincoln Ave. at Urbana, IL	<a href="#">60</a>	Embarras River near Camargo, IL	<a href="#">78</a>
Boneyard Creek at Race Street at Urbana, IL	<a href="#">62, 64</a>	<b>F</b>	
Boneyard Creek at Urbana, IL	<a href="#">58, 719</a>	Farm Creek at Farmdale, IL	<a href="#">476</a>
Bonpas Creek at Browns, IL	<a href="#">88</a>	Ferson Creek near St. Charles, IL	<a href="#">437, 740</a>
Brewster Creek at Valley View, IL	<a href="#">431, 433, 738</a>	Flag Creek near Willow Springs, IL	<a href="#">253</a>
Brewster Creek nr Valley View, IL	<a href="#">423, 425, 427</a>	Fondulac Creek near East Peoria, IL	<a href="#">478</a>
Buffalo Creek near Wheeling, IL	<a href="#">208</a>	Fox Lake near Lake Villa, IL	<a href="#">391, 392</a>
Busse Woods Forest Preserve near Elk Grove Village, IL	<a href="#">778</a>	Fox River at Algonquin, IL	<a href="#">410</a>
Butterfield Creek at Flossmoor, IL	<a href="#">334</a>	Fox River at Algonquin, IL (Tailwater)	<a href="#">412, 413</a>
<b>C</b>		Fox River at Dayton, IL	<a href="#">447, 449, 453</a>
Cache River at Forman, IL	<a href="#">110</a>	Fox River at Johnsborg, IL	<a href="#">399, 401</a>
Cahokia Creek at Edwardsville, IL	<a href="#">565</a>	Fox River at Montgomery, IL	<a href="#">441</a>
Calumet Harbor Disposal Facility at Chicago, IL	<a href="#">684, 685</a>	Fox River at South Elgin, IL	<a href="#">419, 421</a>
Carol Stream Wastewater Treatment Facility at Carol Stream, IL	<a href="#">769</a>	Fox River near Mc Henry, IL (Tailwater)	<a href="#">407, 408</a>
Casey Fork Subimpoundment near Bonnie, IL	<a href="#">649, 651</a>	Fox River near McHenry, IL	<a href="#">403, 405</a>
Casey Fork at Mt. Vernon, IL	<a href="#">647</a>	Fox River near New Munster, WI	<a href="#">387</a>
Cedar Creek near Ellisville, IL	<a href="#">818</a>	<b>G</b>	
Channel Lake near Antioch, IL	<a href="#">389, 390</a>	Grant Creek near Webster Siding, IL	<a href="#">374</a>
Chicago River at Chicago Lock at Chicago, IL	<a href="#">325</a>	Green River near Geneseo, IL	<a href="#">164</a>
Chicago River at Columbus Drive at Chicago, IL.	<a href="#">327</a>		
Chicago Sanitary Ship Canal at Romeoville, IL	<a href="#">346</a>		
Crab Orchard Creek near Marion, IL	<a href="#">655</a>		
Crooked Creek near Hoffman, IL	<a href="#">617, 619</a>		

	Page		Page
<b>H</b>		<b>L</b>	
Henderson Creek near Oquawka, IL	<a href="#">174</a>	La Moine River at Colmar, IL	<a href="#">526</a>
Hickory Creek at Joliet, IL	<a href="#">350</a>	La Moine River at Ripley, IL	<a href="#">528</a>
Hickory Creek near Brownstown, IL	<a href="#">605</a>	Lake County, IL, Local number, 46N12E–14.6g1	<a href="#">701</a>
Hurricane Creek near Mulberry Grove, IL	<a href="#">607</a>	Lake County, IL, Local number, 46N12E–14.6g2	<a href="#">702</a>
		Lake County, IL, Local number, 46N12E–14.6g3	<a href="#">703</a>
<b>I</b>		Lake County, IL, Local number, 46N12E–14.6g4	<a href="#">704</a>
Illinois River at Chillicothe, IL	<a href="#">473</a>	Lake Fork at Atwood, IL	<a href="#">587</a>
Illinois River at Hardin, IL	<a href="#">548</a> , <a href="#">550</a>	Lake Fork near Cornland, IL	<a href="#">516</a>
Illinois River at Henry, IL	<a href="#">471</a>	Lake Michigan at Chicago Lock at Chicago, IL	<a href="#">113</a>
Illinois River at Kingston Mines, IL	<a href="#">484</a>	Lansing Ditch near Lansing, IL	<a href="#">336</a>
Illinois River at Marseilles, IL	<a href="#">377</a> , <a href="#">379</a> , <a href="#">383</a>	Little Calumet River at Munster, IN	<a href="#">328</a>
Illinois River at Ottawa, IL	<a href="#">457</a> , <a href="#">804</a>	Little Calumet River at South Holland, IL	<a href="#">340</a> , <a href="#">730</a>
Illinois River at Valley City, IL	<a href="#">536</a> , <a href="#">538</a> , <a href="#">542</a> , <a href="#">829</a>	Little Crooked Creek near New Minden, IL	<a href="#">621</a>
Indian Creek at Wanda, IL	<a href="#">567</a>	Little Wabash River at Carmi, IL	<a href="#">101</a>
Indian Creek near Wyoming, IL	<a href="#">486</a>	Little Wabash River below Clay City, IL	<a href="#">97</a>
Iroquois River at Iroquois, IL	<a href="#">187</a>	Little Wabash River near Effingham, IL	<a href="#">95</a>
Iroquois River near Chebanse, IL	<a href="#">195</a>	Long Run near Lemont, IL	<a href="#">348</a>
Iroquois River near Foresman, IN	<a href="#">186</a>	Lusk Creek near Eddyville, IL	<a href="#">107</a>
<b>J</b>		<b>M</b>	
Judy's Branch Tributary at Glen Carbon, IL	<a href="#">575</a> , <a href="#">577</a> , <a href="#">746</a>	Mackinaw River near Congerville, IL	<a href="#">480</a>
Judy's Branch at Oak Lawn Estates at Glen Carbon, IL	<a href="#">569</a> , <a href="#">571</a>	Mackinaw River near Green Valley, IL	<a href="#">482</a>
Judy's Branch at Route 157 at Glen Carbon, IL	<a href="#">581</a> , <a href="#">583</a>	Mackinaw River near Kappa, IL	<a href="#">810</a>
<b>K</b>		Macoupin Creek near Carlinville, IL	<a href="#">835</a>
Kankakee River at Momence, IL	<a href="#">184</a>	Macoupin Creek near Kane, IL	<a href="#">546</a>
Kankakee River at Shelby, IN	<a href="#">182</a>	Marienbrook WWTF at Darien, IL	<a href="#">755</a>
Kankakee River near Wilmington, IL	<a href="#">198</a>	Mazon River near Coal City, IL	<a href="#">375</a>
Kaskaskia River at Carlyle, IL	<a href="#">611</a>	Mc Donald Creek near Mount Prospect, IL	<a href="#">212</a>
Kaskaskia River at Chesterville, IL	<a href="#">589</a>	McKee Creek at Chambersburg, IL	<a href="#">530</a> , <a href="#">532</a>
Kaskaskia River at Cooks Mills, IL	<a href="#">591</a>	Middle Fork Vermilion River Above Oakwood, IL	<a href="#">56</a>
Kaskaskia River at Shelbyville, IL	<a href="#">597</a>	Midlothian Creek at Oak Forest, IL	<a href="#">342</a>
Kaskaskia River at Vandalia, IL	<a href="#">603</a>	Mill Creek at Milan, IL	<a href="#">166</a>
Kaskaskia River near Cowden, IL	<a href="#">601</a>	Mill Creek at Old Mill Creek, IL	<a href="#">202</a>
Kaskaskia River near Posey, IL	<a href="#">613</a> , <a href="#">615</a>	Mill Creek near Batavia, IL	<a href="#">439</a> , <a href="#">742</a>
Kaskaskia River near Red Bud, IL	<a href="#">637</a> , <a href="#">639</a>	Mississippi River at Chester, IL	<a href="#">665</a> , <a href="#">667</a>
Kaskaskia River near Venedy Station, IL	<a href="#">629</a>	Mississippi River at Clinton, IA	<a href="#">119</a> , <a href="#">121</a>
Kickapoo Creek at Waynesville, IL	<a href="#">518</a>	Mississippi River at Grafton, IL	<a href="#">552</a>
Kishwaukee River at Belvidere, IL	<a href="#">147</a>	Mississippi River at Keokuk, IA	<a href="#">176</a>
Kishwaukee River near Perryville, IL	<a href="#">153</a>	Mississippi River at St. Louis, MO	<a href="#">659</a> , <a href="#">661</a>
Kress Creek at West Chicago, IL	<a href="#">354</a> , <a href="#">732</a>	Mississippi River at Thebes, IL	<a href="#">671</a> , <a href="#">673</a> , <a href="#">677</a>
		Mississippi River below Grafton, IL	<a href="#">555</a> , <a href="#">559</a>
		Morton Arboretum near Lisle, IL	<a href="#">761</a>
		<b>N</b>	
		N.B. Chicago River at Grand Ave at Chicago, IL	<a href="#">269</a> , <a href="#">271</a> , <a href="#">273</a> , <a href="#">275</a> , <a href="#">276</a> , <a href="#">278</a> , <a href="#">280</a> , <a href="#">285</a> , <a href="#">290</a> , <a href="#">295</a> , <a href="#">300</a> , <a href="#">305</a> , <a href="#">310</a> , <a href="#">315</a> , <a href="#">320</a>
		Naperville Municipal Building at Naperville, IL	<a href="#">757</a>

	Page		Page	
Naperville North Operations Center at Naperville, IL	<a href="#">759</a>	S		
Naperville Township Highway Division at Naperville, IL	<a href="#">758</a>			
National Accelerator Laboratory near West Chicago, IL	<a href="#">765</a>		Salt Creek at 22nd. St. at Oakbrook, IL	<a href="#">228, 229, 727</a>
Nb Chicago River at Albany Avenue at Chicago, IL	<a href="#">267</a>		Salt Creek at Brookfield, IL	<a href="#">239, 241</a>
Nippersink Creek near Spring Grove, IL	<a href="#">397, 735</a>		Salt Creek at Elmhurst, IL	<a href="#">226, 725</a>
Nippersink Lake at Fox Lake, IL	<a href="#">395, 396</a>		Salt Creek at Rolling Meadows, IL	<a href="#">216</a>
North Branch Chicago River at Deerfield, IL	<a href="#">257</a>		Salt Creek at Western Springs, IL	<a href="#">231, 233, 798, 800</a>
North Branch Chicago River at Niles, IL	<a href="#">265</a>		Salt Creek at Wood Dale, IL	<a href="#">222, 224</a>
North Fork Embarras River near Oblong, IL	<a href="#">82</a>		Salt Creek near Elk Grove Village, IL	<a href="#">218, 220</a>
North Fork Vermilion River near Bismarck, IL	<a href="#">66</a>		Salt Creek near Greenvew, IL	<a href="#">522</a>
			Salt Creek near Rowell, IL	<a href="#">512, 514</a>
O		Sangamon River at Fisher, IL	<a href="#">496</a>	
O'Hare Airport at Chicago, IL	<a href="#">775</a>	Sangamon River at Monticello, IL	<a href="#">498, 500, 822, 824</a>	
Oak Brook Well at Oak Brook, IL	<a href="#">762</a>	Sangamon River at Riverton, IL	<a href="#">508</a>	
Ohio R. at Lock53 nr Grand Chain, KY	<a href="#">112</a>	Sangamon River at Route 48 at Decatur, IL	<a href="#">504</a>	
Ohio River at Metropolis, IL	<a href="#">109</a>	Sangamon River near Oakford, IL	<a href="#">524</a>	
Ohio River at Old Shawneetown, IL–KY	<a href="#">103</a>	Sawmill Creek near Lemont, IL	<a href="#">255, 728</a>	
P		Schaumburg Public Works at Schaumburg, IL	<a href="#">777</a>	
Pecatonica River at Freeport, IL	<a href="#">131</a>	Shoal Creek near Breese, IL	<a href="#">627</a>	
Pecatonica River at Martintown, WI	<a href="#">129</a>	Shoal Creek near Pierron, IL	<a href="#">625</a>	
Pecatonica River nr Shirland, IL	<a href="#">135</a>	Silver Creek near Freeburg, IL	<a href="#">633</a>	
Piscasaw Creek near Walworth, WI	<a href="#">145</a>	Silver Creek near Troy, IL	<a href="#">631</a>	
Pope Creek near Keithsburg, IL	<a href="#">172</a>	Sinsinawa River near Menominee, IL	<a href="#">115</a>	
Poplar Creek at Elgin, IL	<a href="#">417</a>	Skillet Fork at Wayne City, IL	<a href="#">99</a>	
Prairie Creek near Webster Siding, IL.	<a href="#">197</a>	Skokie River at Lake Forest, IL	<a href="#">259</a>	
R		Skokie River near Highland Park, IL	<a href="#">261</a>	
Rain Gage At Hebron, Il	<a href="#">781</a>	South Branch Kishwaukee River at Dekalb, IL	<a href="#">149</a>	
Rain Gage at Crete, IL	<a href="#">751</a>	South Branch Kishwaukee River near Fairdale, IL	<a href="#">151</a>	
Rain Gage at Healy Street at Champaign, IL	<a href="#">750</a>	South Fork Saline River near Carrier Mills, IL	<a href="#">105</a>	
Rain Gage at Old Shawneetown, IL	<a href="#">748</a>	South Fork Sangamon River near Rochester, IL	<a href="#">506</a>	
Rain Gage at Urbana Middle School at Urbana, IL	<a href="#">749</a>	Spoon River at Elmore, IL	<a href="#">814</a>	
Rain Gage at Well No. 4 at Elburn, IL	<a href="#">767</a>	Spoon River at London Mills, IL	<a href="#">488</a>	
Rain Gage at Well No. 5 and 6 at Hampshire, IL	<a href="#">780</a>	Spoon River at Seville, IL	<a href="#">490, 492</a>	
Rain Gage near Chicago Heights, IL	<a href="#">752</a>	Spring Brook WWTF near Naperville, IL	<a href="#">753</a>	
Rayse Creek near Waltonville, IL	<a href="#">643</a>	Spring Brook at 87th Street near Naperville, IL	<a href="#">368, 370</a>	
Richland Creek near Hecker, IL	<a href="#">635</a>	Spring Brook at Forest Preserve near Warrenville, IL	<a href="#">356</a>	
Robinson Creek near Shelbyville, IL	<a href="#">599</a>	Spring Creek Reservoir near Bloomingdale, IL	<a href="#">773</a>	
Rock River above Sinnissippi Dam at Rock Falls, Il	<a href="#">157</a>	Spring Creek at Springfield, IL	<a href="#">510</a>	
Rock River at Afton, WI	<a href="#">127</a>	Squaw Creek at Round Lake, IL	<a href="#">393</a>	
Rock River at Auburn St at Rockford, Il	<a href="#">142, 143</a>	St. Joseph Creek at Route 34 at Lisle, IL	<a href="#">364</a>	
Rock River at Byron, IL	<a href="#">155</a>	Sugar Creek at Milford, IL	<a href="#">189, 191, 795, 797</a>	
Rock River at Como, IL	<a href="#">158</a>	Sugar Creek near Bloomington, IL	<a href="#">520</a>	
Rock River at Latham Park, Il	<a href="#">139, 140</a>	Sugar Creek near Brodhead, WI	<a href="#">133</a>	
Rock River at Rockton, IL	<a href="#">137</a>	Sugar Creek near Ray, IL	<a href="#">825</a>	
Rock River near Joslin, IL	<a href="#">162</a>			
		T		
		Thorn Creek at Glenwood, IL	<a href="#">330</a>	
		Thorn Creek at Thornton, IL	<a href="#">338</a>	
		Tinley Creek near Palos Park, IL	<a href="#">344</a>	

Tyler Creek at Elgin, IL [415, 737](#)

## V

Vermilion County, IL, Local number, 23N11W–22.8a1 [691](#)  
 Vermilion River at McDowell, IL [806](#)  
 Vermilion River at Pontiac, IL [465](#)  
 Vermilion River near Danville, IL [68](#)  
 Vermilion River near Leonore, IL [467](#)

## W

Wabash River at Mount Carmel, IL [86](#)  
 Wabash River at New Harmony, IN [90, 92, 94](#)  
 Wabash River at Riverton, IN [72](#)  
 Wabash River at Terre Haute, IN [70](#)  
 Wabash River at Vincennes, IN [74, 76](#)  
 Weller Creek at Des Plaines, IL [214](#)  
 West Branch Du Page River near Naperville, IL [360, 734](#)

West Branch Du Page River near Warrenville, IL [358](#)  
 West Branch Du Page River near West Chicago, IL [352](#)  
 West Fk Of N Br Chicago River at Northbrook, IL [263](#)  
 West Okaw River near Lovington, IL [595](#)  
 Westmont Water Department at Westmont, IL [760](#)  
 Wheaton Sewer Department at Wheaton, IL [764](#)  
 Wheaton Water Department at Wheaton, IL [766](#)  
 Whitley Creek near Allenville, IL [593](#)  
 Will County, IL, Local number, 33N10E–10.1e [696](#)  
 Will County, IL, Local number, 33N10E–15.3f [694](#)  
 Will County, IL, Local number, 33N10E–15.5d [692](#)  
 Will County, IL, Local number, 33N9E–13.2d1 [693](#)  
 Will County, IL, Local number, 33N9E–14.8h [695](#)  
 Will County, IL, Local number, 33N9E–2.2d [697](#)  
 Will County, IL, Local number, 34N10E–32.1b [699](#)  
 Will County, IL, Local number, 34N10E–36.6a [698](#)  
 Will County, IL, Local number, 34N9E–26.6h [700](#)  
 Wood Dale Wastewater Treatment Facility at Wood Dale, IL [774](#)  
 Woodridge Wastewater Treatment Facility at Woodridge, IL [756](#)