

Water Resources Data Wisconsin Water Year 2000

Water-Data Report WI-00-1



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



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

CALENDAR FOR WATER YEAR 2000

1999

OCTOBER

NOVEMBER

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Water Resources Data Wisconsin Water Year 2000

By H.S. Garn, D.L. Olson, and B.R. Ellefson

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State of Wisconsin and with other agencies



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City of Hillsboro
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City of Peshtigo
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Stockbridge/Munsee Indian Tribe
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City of Black River Falls
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Lauderdale Lakes Lake Management District

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Middleton, Wisconsin 53562

PREFACE

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

This report is the culmination of a concerted effort by a number of people who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. The authors had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines. Most of the data were collected, computed and processed from area field offices. Technicians-in-charge of the field offices are:

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Jeffrey J. Hanig, Merrill, northeast
Josef Habale, Middleton, southwest

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P. A. Stark assembled, edited, and formatted the report. Additional assistance in data processing and preparation of the report was provided by R. B. Bodoh, M. M. Greenwood, G. W. Gill, H. R. House.

This report was prepared under the general supervision of Warren A. Gebert, District Chief; Herbert S. Garn, Hydrologic Studies and Data Section Chief; Peter E. Hughes, Environmental Studies Section Chief; and James T. Krohelski, Hydrogeologic Studies and Data Section Chief.

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Water-resources data for the 2000 water year for Wisconsin include records of streamflow at gaging stations, partial-record stations, and miscellaneous sites, records of precipitation, and records of chemical, biological, and physical characteristics of surface water. In addition, water levels in observation wells are reported. These data were collected by the U.S. Geological Survey in cooperation with State and local agencies and other Federal agencies in Wisconsin.

14. SUBJECT TERMS

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RECORDS ARE PUBLISHED IN THIS VOLUME**

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[Letters after station names designate type of data: (c) chemical, (d) discharge, (g) gage height, (m) microbiological, (pr) precipitation, (r) radiochemical, (sd) secchi-depth, (s) sediment, (t) water temperature]

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

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**SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH
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[Letters after station names designate type of data: (c) chemical, (d) discharge, (g) gage height, (m) microbiological, (pr) precipitation, (r) radiochemical, (sd) secchi-depth, (s) sediment, (t) water temperature]

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**SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH
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East Branch Pecatonica River near Blanchardville (d).....	05433000	386
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Birches Creek at Lackey Lane near Lake Geneva (d,pr,t).....	05545133	428
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DISCONTINUED SURFACE-WATER DISCHARGE STATIONS

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The following continuous-record surface-water discharge stations in Wisconsin have been discontinued. Daily streamflow 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 are currently operated as crest-stage partial-record stations. Some of the discontinued project stations with less than 3 years of record have not been included. Information regarding these stations may be obtained from the District Office at the address given on the back side of the title page of this report

Station name	Station number	Drainage area (mi ²)	Period of record
STREAMS TRIBUTARY TO LAKE SUPERIOR			
Tower Avenue at Superior, WI	04024080	0.034	1993-95
Little Balsam Creek at Patzau, WI	04024314	4.89	1976-78
Little Balsam Creek near Patzau, WI	04024315	5.05	1976-78
Little Balsam Creek Tributary near Patzau, WI	04024318	0.60	1976-78
Little Balsam Creek near Foxboro, WI	04024320	6.27	1977-78
Amnicon River near Poplar (Amnicon Falls), WI	04025000	110	1914-16
Bois Brule (Brule) River near Brule, WI	04026000	160	1914-17
Sioux River near Washburn, WI	04026300*	33.9	1965-66
Pine Creek at Moquah, WI	04026347	6.20	1976-78
Pine Creek Tributary at Moquah, WI	04026348	0.48	1976-78
Pine Creek near Moquah, WI	04026349	19.9	1976-78
Bad River near Mellen, WI	04026450*	82.0	1971-75
Bad River at Mellen, WI	04026500	98.3	1948-55
Alder Creek near Upson, WI	04026870	22.2	1972-77
Montreal River near Kimball, WI	04028500	100	1924-26
West Fork Montreal River at Gile, WI	04029000	75.0	1918-26, 1943-47
West Fork Montreal River near Kimball, WI	04029500	86.2	1924-26
STREAMS TRIBUTARY TO LAKE MICHIGAN			
North Branch Pine River at Windsor Dam nr Alvin, WI	04063640*	27.8	1967-68
Pine River near Florence, WI	04064000	510	1914-23
Menominee River, at Mouth, at Marinette, WI	04067651	4,070	1988-90, 1994-95
Peshtigo River at High Falls near Crivitz, WI	04068000	537	1912-57
Pensaukee River near Krakow, WI	04071795	35.8	1993-95
Pensaukee River near Pensaukee, WI	04071858	134	1973-96
Suamico River at Suamico, WI	04072000	60.7	1951-52
Lawrence Creek near Westfield, WI	04072750	13.4	1968-73
Grand River near Kingston, WI	04073050	73.5	1968-75
West Branch White River near Wautoma, WI	04073405	38.9	1964-65
Silver Creek at South Koro Road near Ripon, WI	040734644	36.2	1987-96
Swamp Creek above Rice Lake at Mole Lake, WI	04074538	46.3	1977-83, 1985-87
Swamp Creek below Rice Lake at Mole Lake, WI	04074548	56.8	1977-79, 1982-85
Wolf River near White Lake, WI	04075000	485	1935-38
Evergreen Creek near Langlade, WI	04075200*	8.09	1964-73
Wolf River above West Branch Wolf River, WI	04075500	616	1928-62
West Branch Wolf River at Neopit, WI	04076000	93.2	1911-17
West Branch Wolf River near Keshena, WI	04076500	163	1928-32
Little Wolf River near Galloway, WI	04079602	22.6	1974-79
Spaulding Creek near Big Falls, WI	04079700*	5.57	1964-66
Little Wolf River at Royalton, WI	04080000	507	1914-70, 1983-85
Tomorrow River near Nelsonville, WI	04080798	44.0	1993-95
Emmons Creek near Rural, WI	04080950	25.1	1968-74
Storm Sewer to Mirror Lake at Waupaca, WI	04080976	0.04	1971-74
Waupaca River near Waupaca, WI	04081000	265	1916-66, 1983-85
Daggets Creek at Butte Des Morts, WI	04081800	10.6	1977
West Branch Fond du Lac River at Fond du Lac, WI	04083000	83.1	1939-54
East Branch Fond du Lac River near Fond du Lac, WI	04083500	78.4	1939-54
Brothertown Creek at Brothertown, WI	04084200	5.10	1976-77
East River at Midway Road near De Pere, WI	04085109	47.0	1993-95
Bower Creek, at County MM, near De Pere, WI	04085119	14.8	1991-95, 1996-97

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS

Station name	Station number	Drainage area (mi ²)	Period of record
STREAMS TRIBUTARY TO LAKE MICHIGAN—CONTINUED			
East Twin River at Mishicot, WI	04085281	110	1972-96
Onion River at Hingham, WI	04085813	37.2	1979-80
Onion River near Sheboygan Falls, WI	04085845	94.1	1979-82
Milwaukee River at Kewaskum, WI	04086150	138	1968-81
East Branch Milwaukee River near New Fane, WI	04086200	54.1	1968-81
North Branch Milwaukee River near Random Lake, WI	040863075	51.4	1993-95
North Branch Milwaukee River near Fillmore, WI	04086340	148	1968-81
Milwaukee River at Waubeka, WI	04086360	432	1968-81, 1994
Mud Lake Outlet near Decker Corner, WI	04086488	7.36	1983-84
Lincoln Creek, at 47th Street, at Milwaukee, WI	040869415	9.56	1993-1995, 1997 ¹
Milwaukee River above North Ave Dam at Milwaukee, WI	04087010	702	1982-84
Menomonee River at Germantown, WI	04087018	19.0	1975-77
Jefferson Park Drainageway at Germantown, WI	04087019	1.82	1976-78
Menomonee River at Butler, WI	04087040	60.6	1975-79
Little Menomonee River near Freistadt, WI	04087050	8.0	1975-79
Noyes Creek at Milwaukee, WI	04087060	1.94	1975-80, 1990
Little Menomonee River at Milwaukee, WI	04087070	19.7	1975-77
Honey Creek at Wauwatosa, WI	04087119	10.3	1975-81
Schoonmaker Creek at Wauwatosa, WI	04087125	1.94	1975-79
Hawley Road Storm Sewer at Milwaukee, WI	04087130	1.83	1975-77
Menomonee River at Milwaukee, WI	04087138	134	1982-84
Kinnickinnic River at Milwaukee, WI	04087160	20.4	1976-83
Milwaukee River at Mouth at Milwaukee, WI	04087170	872	1994-96
ST. CROIX RIVER BASIN			
Namekagon River at Trego, WI	05332000	433	1914-27
Loon Creek near Danbury, WI	05335010	17.6	1970-71
Bashaw Brook near Shell Lake, WI	05335380	26.6	1964-66
Clam River near Webster, WI	05335500	361	1941-42
St. Croix River near Grantsburg, WI	05336000	2,980	1923-70
Wood River near Grantsburg, WI	05339000	185	1939-40
Rice Creek near Balsam Lake, WI	05341375	12.5	1988-89
Balsam Branch at Balsam Lake, WI	05341402	52.8	1988-90
Kinnickinnic River near River Falls, WI	05342000	165	1917-21
CHIPPEWA RIVER BASIN			
West Fork Chippewa River at Lessards, nr Winter, WI	05355500	474	1912-16
Couderay River near Couderay, WI	05356121	169	1981-83
Flambeau River at Flambeau Flowage (Flambeau Reservoir), WI	05357500	622	1927-61
Flambeau River near Butternut, WI	05358000	688	1914-39
Pine Creek near Oxbo, WI	05358300	38.9	1971-75
Flambeau River at Babbs Island near Winter, WI	05358500	967	1929-75
South Fork Flambeau River near Phillips, WI	05359500	609	1929-75
Price Creek near Phillips, WI	05359600*	16.9	1964-66
Flambeau River near (at) Ladysmith, WI	05360000	1,790	1903-06, 1914-61
Chippewa River near Holcombe, WI	05361000	3,720	1944-49
South Fork Jump River near Ogema, WI	05361500	327	1944-54
Chippewa River at Holcombe, WI	05362500	4,680	1943-49
Fisher River at (near) Holcombe, WI	05363000	81.5	1944-45
O'Neil Creek near Chippewa Falls, WI	05363500	78.1	1944-45
Yellow River near Hannibal, WI	05363700	86.7	1962-63
Yellow River at Cadott, WI	05364000*	364	1943-61
Duncan Creek at Bloomer, WI	05364500*	50.3	1944-52
Duncan Creek Tributary near Tilden, WI	05364850	4.17	1987-89
Duncan Creek at Chippewa Falls, WI	05365000	117	1943-55

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS

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Station name	Station number	Drainage area (mi ²)	Period of record
CHIPPEWA RIVER BASIN—CONTINUED			
Eau Claire River near Augusta, WI	05366000	509	1914–26
Bridge Creek at Augusta, WI	05366300	35.0	1980
Eau Claire River near Fall Creek, WI	05366500*	760	1943–55
Chippewa River at (near) Eau Claire, WI	05367000	6,620	1903–09, 1944–54
Red Cedar River near Cameron, WI	05367425	442	1966–70
Red Cedar River near Cameron, WI	05367426	443	1971–73
Red Cedar River near Colfax, WI	05367500	1,100	1914–61, 1990
Eau Galle River near Woodville, WI	05369900	39.4	1978–83
Eau Galle River at Low-Watr Bridge at Spring Valley, WI	05369945	47.9	1982–83, 1986–96
French Creek near Spring Valley, WI	05369955	6.03	1981–83
Lousy Creek near Spring Valley, WI	05369970	5.97	1981–83
Lohn Creek near Spring Valley, WI	05369985	2.53	1981–83
Eau Galle River at Elmwood, WI	05370500	91.6	1943–54
BUFFALO RIVER BASIN			
Buffalo River near Tell, WI	05372000	406	1933–51
WAUMANDEE CREEK BASIN			
Joos Valley Creek near Fountain City, WI	05378183	5.89	1990–96
Eagle Creek, at County Highway G, near Fountain City, WI	05378185	14.3	1990–96
TREMPEALEAU RIVER BASIN			
Bruce Valley Creek near Pleasantville, WI	05379288	10.1	1980
Elk Creek near Independence, WI	05379305	108	1980
Trempealeau River at Arcadia, WI	05379400	553	1960–77
Trempealeau River near Trempealeau, WI	05380000	719	1932–34
BLACK RIVER BASIN			
Black River at Medford, WI	05380806	48.1	1984–87
Poplar River near Owen, WI	05380900*	155	1964–66
LA CROSSE RIVER BASIN			
Little LaCrosse River near Leon, WI	05382500	76.9	1934–61, 1979–81
LaCrosse River near West Salem, WI	05383000	396	1914–70
COON CREEK BASIN			
Spring Coulee Creek near Coon Valley, WI	05386490	9.01	1979–81
Coon Creek at Coon Valley, WI	05386500	77.2	1934–40, 1978–81
Coon Creek near Stoddard, WI	05386999	120	1934–40, 1979–81
BAD AXE RIVER BASIN			
North Fork Bad Axe River near Genoa, WI	05387100*	80.8	1964–66
WISCONSIN RIVER BASIN			
Wisconsin River at Conover, WI	05390180	177	1967–71
Pelican River near Rhinelander, WI	05391226	101	1976–79
Wisconsin River at Whirlpool Rapids, nr Rhinelander, WI	05392000	1,220	1906–61
Bearskin Creek near Harshaw, WI	05392350*	31.1	1964–66
Tomahawk River near Bradley, WI	05392400	422	1915–27, 1929
Tomahawk River at Bradley, WI	05393000	544	1930–73
New Wood River near Merrill, WI	05394000	82.2	1953–61
Rib River at Rib Falls, WI	05396000	303	1925–57
Little Rib River near Wausau, WI	05396500	79.1	1914–16
East Branch Eau Claire River near Antigo, WI	05397000	81.5	1949–55
Eau Claire River near Antigo, WI	05397110	185	1975–81
Bull Junior Creek (Bull Creek Junior) nr Rothschild, WI	05398500	27.4	1944–52
Big Eau Pleine River near Colby, WI	05399000	78.1	1941–54

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS

Station name	Station number	Drainage area (mi ²)	Period of record
WISCONSIN RIVER BASIN--CONTINUED			
Hamann Creek near Stratford, WI	05399431	11.3	1977-79
Wisconsin River at Knowlton, WI	05400000	4,530	1921-42
Plover River near Stevens Point, WI	05400500	145	1914-20, 1944-52
Little Plover River near Arnott, WI	05400600	2.24	1959-75
Little Plover River at Plover, WI	05400650	19.0	1959-87
Fourmile Creek near Kellner, WI	05400870	75.0	1964-67
Buena Vista Creek near Kellner, WI	05400853	53.1	1964-67
Tenmile Creek Ditch 5 near Bancroft, WI	05401020	9.73	1964-73
Fourteenmile Creek near New Rome, WI	05401100	91.1	1964-79
Wisconsin River near Necedah, WI	05401500	5,990	1903-14, 1944-50
Big Roche a Cri Creek near Hancock, WI	05401510	9.61	1964-67
Big Roche a Cri Creek near Adams, WI	05401535	52.8	1964-78
Yellow River at Sprague, WI	05402500	392	1927-40
Yellow River at Necedah, WI	05403000	491	1941-57
Lemonweir River at New Lisbon, WI	05403500	507	1944-87, 1994
Hulbert Creek near Wisconsin Dells, WI	05403630	11.2	1971-77
Dell Creek near Lake Delton, WI	05403700	44.9	1957-65, 1971-80
Narrows Creek at Loganville, WI	05404200	40.1	1964-66
Wisconsin River at Prairie du Sac, WI	05406000	9,180	1946-54
Black Earth Creek at Cross Plains, WI	05406460	12.8	1985-86, 1990-93
Black Earth Creek at Mills Street at Cross Plains, WI	05406476	25.5	1990-95
Garfoot Creek near Cross Plains, WI	05406491	5.39	1985-86, 1990-94, 1994-98
Black Earth Creek at South Valley Road nr Black Earth, WI	05406497	40.6	1990-93
Trout Creek at Confluence with Arneson Creek near Barneveld, WI	05406573	8.37	1976-78
Trout Creek at Twin Parks Dam 8 nr Barneveld, WI	05406574	9.02	1976-79
Trout Creek at County Highway T nr Barneveld, WI	05406575	12.1	1976-78
Trout Creek near Ridgeway, WI	05406577	13.5	1976-79
Knight Hollow Creek near Arena, WI	05406590	7.57	1976-78
Otter Creek near Highland, WI	05406640	16.8	1968-69, 1970-75
Kickapoo River at Ontario, WI	05407500	151	1939, 1973-77
Knapp Creek near Bloomingdale, WI	05408500	8.44	1955-69
West Fork Kickapoo River near Readstown, WI	05409000	106	1939
Kickapoo River at Soldiers Grove, WI	05409500	530	1939
North Fork Nederlo Creek near Gays Mills, WI	05409830	2.21	1968-79
Nederlo Creek near Gays Mills, WI	05409890	9.46	1968-80
Kickapoo River at Gays Mills, WI	05410000	617	1914-34, 1964-77
GRANT RIVER BASIN			
Pigeon Creek near Lancaster, WI	05413400*	6.93	1964-66
Kuenster Creek at Muskellunge Road nr North Andover, WI	054134435	9.59	1982-96
Rattlesnake Creek near North Andover, WI	05413449	42.4	1987-96
Rattlesnake Creek near Beetown, WI	05413451	45.2	1990-91
GALENA RIVER BASIN			
Little Platte River near Platteville, WI	05414213	79.7	1987-90
Sinsinawa River near Hazel Green, WI	05414800	24.9	1987-90
Pats Creek near Belmont, WI	05414894	5.42	1981-82
Madden Branch Tributary near Belmont, WI	05414915	2.83	1981-82
Madden Branch near Meekers Grove, WI	05414920	15.04	1981-82
Galena River at Buncombe, WI	05415000	125	1939-92
APPLE RIVER BASIN			
Apple River near Shullsburg, WI	05418731	9.34	1981-82
ROCK RIVER BASIN			

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS

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Station name	Station number	Drainage area (mi ²)	Period of record
West Branch Rock River near Waupun, WI	05423000	40.7	1949-70, 1978-81
West Branch Rock River at County Trunk Highway D near Waupun, WI	05423100	43.9	1978-81
Johnson Creek near Johnson Creek, WI	05425537	1.13	1978-80
Johnson Creek near Johnson Creek, WI	05425539	13.3	1978-80
Pratt Creek near Juneau, WI	05425928	3.54	1978-80
Rock River at Jefferson, WI	05426031	1,850	1978-94 ²
Whitewater Creek near Whitewater, WI	05426500	11.8	1926-28, 1946-54
Whitewater Creek at Millis Road near Whitewater, WI	05426900	20.6	1978-81
Whitewater Creek at Whitewater, WI	05427000	22.8	1926-28, 1946-54
Koshkonong Creek near Rockdale, WI	05427507	150	1977-82
Token Creek near Madison, WI	05427800	24.3	1964-66, 1976-81
Sixmile Creek near Waunakee, WI	05427900	41.1	1976-82
South Fork Pheasant Branch at Highway 14 near Middleton, WI	05427945	5.74	1978-81
Pheasant Branch at Century Avenue at Middleton, WI	05427950	20.8	1977-81
Pheasant Branch at mouth at Middleton, WI	05427952	24.5	1978-81
Willow Creek at Madison, WI	05427970	3.15	1974-83
Olbrich Park Storm Ditch at Madison, WI	05428665	2.57	1976-80
Manitou Way Storm Sewer at Madison, WI	05429040	0.23	1971-77
Nakoma Storm Sewer at Madison, WI	05429050	2.30	1972-77
Lake Wingra Outlet at Madison, WI	05429120	6.00	1971-77
Nine Springs Creek Storm Sewer Tributary at Madison, WI	05429268	0.18	1991-93
Door Creek near Cottage Grove, WI	05429580	15.3	1976-79
Yahara River near Edgerton, WI	05430000	430	1917-18
Oregon Branch at Oregon, WI	05430030	9.93	1979-81
Badfish Creek at County Highway A near Stoughton, WI	05430095	40.9	1956-66, 1986-88
Badfish Creek near Stoughton, WI	05430100	41.3	1956-66
Delavan Lake Trib at South Shore Drive at Delavan, WI	05431018	7.66	1985-86, 1989-91
Jackson Creek at Petrie Road near Elkhorn, WI	05431014	8.96	1984-95
Livingston Branch Pecatonica River nr Livingston, WI	05432055	16.4	1987-91
Yellowstone River near Blanchardville, WI	05433500*	28.5	1954-65, 1978-79
Pecatonica River at Dill, WI	05434000	944	1914-19
Steiner Branch near Waldwick, WI	05433510	5.9	1978-79
Skinner Creek at Skinner Hollow Road near Monroe, WI	05434235	32.6	1978-81
Skinner Creek at Klondyke Road near Monroe, WI	05434240	35.0	1978-81
West Branch Sugar River near Mount Vernon, WI	05435980	32.7	1979-80
Mount Vernon Creek near Mount Vernon, WI	05436000	16.4	1954-65, 1976-80
ILLINOIS RIVER BASIN			
White River near Burlington, WI	05545300	110	1964-66, 1973-82

¹ No winter record in water year 1997² No winter record in water years 1993 and 1994

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

The following daily- or continuous-record surface-water-quality stations were discontinued prior to the 1999 water year. Discontinued stations with less than 1 year of record or where data collection frequency was less than daily are not included. Some of the stations in the list are still in operation for purposes other than collection of daily or continuous water-quality data. Information regarding these stations may be obtained from the District Office at the address given on the back of the title page of this report.

[Type of record: T (water temperature), SC (specific conductance), DO (dissolved-oxygen concentration), PH (pH), SED (daily sediment discharge), C (daily discharge of one or more chemical constituents)]

Station name	Station number	Drainage area (mi ²)	Type of record	Period of record
STREAMS TRIBUTARY TO LAKE SUPERIOR				
Little Balsam Creek at Patzau, WI	04024314	5.00	SED	1976-78
Little Balsam Creek near Patzau, WI	04024315	4.57	SED	1976-78
Little Balsam Creek Tributary near Patzau, WI	04024318	0.64	SED	1976-78
Little Balsam Creek near Foxboro, WI	04024320	6.27	SED	1977-78
Nemadji River near South Superior, WI	04024430	420	SED	1974-78
North Fish Creek near Benoit, WI	04026346	36	SED	1990-91
Pine Creek at Moquah, WI	04026347	5.90	SED	1976-78
Pine Creek Tributary at Moquah, WI	04026348	0.57	SED	1976-78
Pine Creek near Moquah, WI	04026349	21.5	SED	1976-78
North Fish Creek near Moquah, WI	040263491	65.4	SED	1990-91
North Fish Creek near Ashland, WI	04026350	74.4	SED	1990-91
Bad River near Odanah, WI	04027000	597	T,SC	1976-78
White River near Mason, WI	04027080	--	T	1970-72
Sadjak Springs Trib to White River near Mason, WI	04027086	1.00	T	1970-72
Bad River at Odanah, WI	04027595	970	T,SC	1978-81
STREAMS TRIBUTARY TO LAKE MICHIGAN				
Escanaba River at mouth at Escanaba, MI	040590345	928	SED	1988-90
Popple River near Fence, WI	04063700	139	T	1964-80
Menominee River near McAllister, WI	04067500	3,930	T,SC	1979-80
			SED	1988-90
Menominee River at mouth at Marinette, WI	04067651	4,070	SED	1988-90
Peshtigo River at Peshtigo, WI	04069500	1,080	T	1989-90
			SED	1988-90
Peshtigo River at mouth near Peshtigo, WI	04069530	1,100	SED	1988-90
Oconto River near Oconto, WI	04071765	966	SED	1989-90
Oconto River at mouth at Oconto, WI	04071775	982	SED	1989-90
Duck Creek near Howard, WI	04072150	108	C	1992
White Creek at Forest Glen Beach near Green Lake, WI	04073462	3.05	SED,C	1982-88
Middle Branch Embarrass River near Wittenberg, WI	0407809265	76.3	T	1990-91
Fox River at Appleton, WI	04084445	5,950	T	1987-90
			SED	1986-90
Fox River at State Highway 55 at Kaukauna, WI	04084475	5,980	SED	1989-90
Fox River at Wrightstown, WI	04085000	6,050	T,SC	1975-81
Fox River at Little Rapids, WI	04085054	6,100	SED	1989-90
Fox River at De Pere, WI	04085059	6,110	SED	1989-90
Bower Creek at Sunnyview Road near De Pere, WI	04085118	4.82	SED,C	1985-86
Bower Creek at Highway MM near DePete, WI	04085119	14.8	T,C	1991-97 ²
East River at Monroe Street in Green Bay, WI	040851378	144.9	SED,C	1985-86
Fox River at mouth at Green Bay, WI	04085139	6,330	T,SC,DO,PH	1989-90
Manitowoc River at Manitowoc, WI	04085427	526	T,SC	1979-80
Cedar Lake near Kiel, WI	04085500	1.43	T	1974-77
Otter Creek #3A at County Highway J near Plymouth, WI	0408570045	9.10	C	1994-97 ²
Otter Creek at Laack Farm near Plymouth, WI	0408570047	9.16	C	1994-97 ²
Onion River at Hingham, WI	04085813	37.2	T,SC,SED	1979-80
			C	1980
Onion River near Sheboygan Falls, WI	04085845	94.1	T,SC,SED	1979-80
			C	1980
Parnell Creek near Dundee, WI	04086175	9.35	T	1997
Milwaukee River near Cedarburg, WI	04086600	607	SED	1982-84

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

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Station name	Station number	Drainage area (mi ²)	Type of record	Period of record
STREAMS TRIBUTARY TO LAKE MICHIGAN--CONTINUED				
Lincoln Creek at 47th Street at Milwaukee, WI	040869415	9.56	T	1993-97 ²
			DO	1994-97 ²
Milwaukee River at Milwaukee, WI	04087000	696	T,SC	1973-80 ²
			SED	1982-84
Milwaukee River above North Avenue Dam at Milwaukee, WI	04087010	702	SED	1982-84
Menomonee River at Germantown, WI	04087018	19	SED	1975-77
Jefferson Park Drain at Germantown, WI	04087019	1.82	SED	1977-78
Menomonee River at Menomonee Falls, WI	04087030	34.7	SED	1975-77, 1982-84
Menomonee River at Butler, WI	04087040	60.64	SED	1975-77
Little Menomonee River near Freistadt, WI	04087050	8.0	SED	1975-77
Noyes Creek at Milwaukee, WI	04087060	1.94	SED	1975-77
Little Menomonee River at Milwaukee, WI	04087070	19.7	SED	1975-77
Underwood Creek at Wauwatosa, WI	04087088	18.2	SED	1975-77
Honey Creek at Wauwatosa, WI	04087119	10.3	SED	1975-77
Menomonee River at Wauwatosa, WI	04087120	123	SED	1975-77, 1982-84
Schoonmaker Creek at Wauwatosa, WI	04087125	1.94	SED	1975-77
Hawley Road Storm Sewer at Wauwatosa, WI	04087130	1.83	SED	1975-77
Menomonee River at Milwaukee, WI	04087138	134	SED	1983-84
Menomonee River at Falk Corp at Milwaukee, WI	04087140	133.82	SED	1975-77, 1982
Kinnickinnic River at South 11th Street at Milwaukee, WI	04087159	20.2	SED	1983-84
ST. CROIX RIVER BASIN				
Round Lake near Gordon, WI	461342091561002	--	T	1981-85
St. Croix River at St. Croix Falls, WI	05340500	6,240	T,SC	1975-81
			SED	1982
Rice Creek near Balsam Lake, WI	05341375	12.5	C	1988-89
Balsam Branch at Balsam Lake, WI	05341402	52.8	C	1988-89
CHIPPEWA RIVER BASIN				
Duncan Creek Tributary near Tilden, WI	05364850	4.17	T,C,SED	1987-89
			DO	1987-88 ¹
Red Cedar River near Colfax, WI	05367500	1,090	C	1959, 1990
Hay River at Wheeler, WI	05368000	418	C	1959, 1990
Chippewa River at Durand, WI	05369500	9,010	T,SC	1975-81 ²
			SED	1974-79
Eau Galle River near Woodville, WI	05369900	39.4	T,SC	1978-83 ²
Eau Galle River at Low-Water Bridge at Spring Valley, WI	05369945	47.9	T	1982-83, 1987-93
			SC	1983
Eau Galle River at Spring Valley, WI	05370000	64.1	T,SC	1978-90
WAUMANDEE CREEK BASIN				
Joos Valley Creek near Fountain City, WI	05378183	5.89	T,C	1990-96
			DO	1990-92
Eagle Creek at County Highway G near Fountain City, WI	05378185	14.3	T,C	1990-96
			DO	1990-92
TREMPEALEAU RIVER BASIN				
Bruce Valley Creek near Pleasantville, WI	05379288	10.1	T,SC,SED,C	1980
Elk Creek near Independence, WI	05379305	108	T,SC,SED,C	1980
BLACK RIVER BASIN				
Black River near Galesville, WI	05382000	2,080	SED	1976-79
WISCONSIN RIVER BASIN				
Lake Clara near Tomahawk, WI	453100089343002	0.46	T	1982-86
Little Rock Lake near Woodruff, WI	455946089415704	--	T	1984-87
Buena Vista Creek near Kellner, WI	05400853	53.1	T	1965-67
Tennile Creek Ditch 5 near Bancroft, WI	05401020	9.73	T	1965-72
Dell Creek near Lake Delton, WI	05403700	44.9	T,SED	1958-65
Black earth Creek at Cross Plains, WI	05406460	12.8	C,SED	1985-86
			T	1985-86, 1990-95
			DO	1984-86, 1989-95

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi ²)	Type of record	Period of record
WISCONSIN RIVER BASIN--CONTINUED				
Brewery Creek at Cross Plains, WI	05406470	10.5	T,C,SED DO	1985-86, 1990-98 1990-91
Black Earth Creek at Mills Street at Cross Plains, WI	05406476	25.5	T,DO	1990-95
Garfoot Creek near Cross Plains, WI	05406491	5.39	SED DO	1985-86, 1992-98 1984-85, 1990-98
			T,C	1985-86, 1990-98
Black Earth Creek at South Valley Rd near Black Earth, WI	05406497	40.6	T,DO	1990-98
Black Earth Creek at Black Earth, WI	05406500	45.6	T DO	1954-65, 1985-86 1986 ¹
			SED	1956-65, 1985-86
			C	1985-86
Trout Creek Confluence Ameson Creek near Barneveld, WI	05406573	8.37	T,SC	1976-79
Trout Creek at Twin Parks Dam 8 near Barneveld, WI	05406574	9.02	SED	1976-79
Trout Creek at CTH T near Barneveld, WI	05406575	12.1	T,SED	1976-78
Trout Creek near Ridgeway, WI	05406577	13.5	T,SED	1976-79
Wisconsin River at Muscoda, WI	05407000	10,400	T,SC SED	1975-80 ¹ , 1981 1975-79
Kickapoo River at Ontario, WI	05407500	150	T SED	1974-77 1973-77
Kickapoo River near Rockton, WI	05407920	260	T,SED	1972-77
Kickapoo River at LaFarge, WI	05408000	266	T,SC SED	1971-77 1972-77
North Fork Nederlo Creek at mouth near Gays Mills, WI	05409842	2.31	T	1970 ¹ , 1974-78
South Fork Nederlo Creek near Gays Mills, WI	05409860	4.11	T	1970 ¹ , 1974-78
Nederlo Creek at Utica Town Hall near Gays Mills, WI	05409870	6.70	T	1968-78
GRANT RIVER BASIN				
Kuenster Creek at Muskellunge Road near North Andover, WI	054134435	9.59	T,DO C	1992-96 1993-96
Rattlesnake Creek near North Andover, WI	05413449	42.4	T,DO C	1987-96 1992-94
GALENA RIVER BASIN				
Little Platte River near Platteville, WI	05414213	79.7	T DO	1987-90 1987-90 ¹
Sinsinawa River near Hazel Green, WI	05414800	24.9	T DO	1987-90 1987-90 ¹
Pats Creek near Belmont, WI	05414894	5.42	T,SC,C DO	1981-82 1982 ¹
Madden Branch Tributary near Belmont, WI	05414915	2.83	T,SC,C DO	1981-82 1981 ¹
Madden Branch near Meekers Grove, WI	05414920	15.06	T,SC,C DO PH	1981-82 1981-82 ¹ 1982 ¹
APPLE RIVER BASIN				
Apple River near Shullsburg, WI	05418731	9.34	T,SC,C DO	1981-82 1981 ¹
ROCK RIVER BASIN				
Crawfish River at Milford, WI	05426000	762	SED	1980-82
Rock River at Indianford, WI	05427570	2,630	T SC,DO,PH	1975-78 1976-78
South Fork Pheasant Branch at Hwy 14 near Middleton, WI	05427945	5.74	SED	1978-81
Pheasant Branch at Centruy Avenue at Middleton, WI	05427950	20.8	SED	1978-81
Pheasant Branch at mouth at Middleton, WI	05427952	24.5	SED	1978-81
Willow Creek at Madison, WI	05427970	3.15	SED	1973-84
Rock River at Afton, WI	05430500	3,340	T	1955-83
Jackson Creek at Petrie Road near Elkhorn, WI	05431014	8.96	C,SED	1984-85 1993-95
Delavan Lake Trib at South Shore Drive at Delavan, WI	05431018	9.99	SED,C	1984-85, 1990-91
Livingston Branch Pecatonica River near Livingston, WI	05432055	16.4	T	1987-91

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

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Station name	Station numberr	Drainage area (mi ²)	Type of record	Period of record
			DO	1987-91 ¹
ROCK RIVER BASIN--CONTINUED				
Yellowstone River near Blanchardville, WI	05433500	28.5	T	1954-60
			SED	1958-60, 1978-79
Steiner Branch near Waldwick, WI	05433510	5.90	T,SC,SED,C	1978-79
Pecatonica River at Martintown, WI	05434500	1,034	SED	1980-82
Mount Vernon Creek near Mount Vernon, WI	05436000	16.4	T	1954-60
			SED	1956-60
Sugar River near Brodhead, WI	05436500	523	SED	1978-86
ILLINOIS RIVER BASIN				
Powers Lake Tributary at Powers Lake, WI	05548163	1.83	C	1987

¹ Seasonal record, non-freezing periods² Numerous periods of missing record³ Station currently in operation for constituents(s) not listed here

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with local, State and Federal agencies, obtains a large amount of data pertaining to the water resources of Wisconsin each year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the Geological Survey, the data are published annually in this report series entitled "Water Resources Data - Wisconsin." Lake stage and in-lake water-quality data previously published in this series are now published annually in a report series "Water-Quality and Lake-Stage Data for Wisconsin Lakes." This Open-File Report series began in 1994; 2000 water year data for lakes are published in Open-File Report 01-86.

Water-resources data for Wisconsin for the 2000 water year includes records of streamflow at gaging stations, partial-record stations, and miscellaneous sites; stage and contents of lakes and reservoirs; chemical, physical, and biological characteristics of surface and ground water; and water levels in observation wells. Records from several stations in bordering states are also included. This report contains discharge records from 152 gaging stations and peak stage and discharge from 81 crest-stage stations; stage for 7 lakes and contents for 24 reservoirs; water-quality data from 47 streams and from 3 lakes; precipitation from 11 sites; and water-level records from 48 observation wells. Additional water data were collected at various sites not involved in the systematic data-collection program, and are published in this report as miscellaneous measurements.

This series of annual reports for Wisconsin began in the 1961 water year with streamflow data, the 1964 water year with water-quality data, and the 1971 water year with ground-water data. Beginning with the 1975 water year, streamflow, water-quality, and ground-water data for each State were published in present format. These annual reports are for sale, in paper copy or microfiche, by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for Wisconsin were published in U.S. Geological Survey Water-Supply Papers. Records of stream discharges and of water levels in lakes and reservoirs were published annually through 1960 and then for the 5-year periods 1961-65 and 1966-70 in the series "Surface-Water Supply of the United States". Chemical-quality, water-temperature, and suspended-sediment data were published annually, from 1941 to 1970, in the series "Quality of Surface Waters of the United States." Records of ground-water levels were published annually from 1935 to 1974, in the series "Ground-Water Levels in the United States." The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from U.S. Geological Survey, Box 25425, Federal Center, Denver, CO 80225.

Publications similar to this report are published annually by the Geological Survey for all States. These official Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report WI-00-1." For archiving and general distribution, the reports for 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161.

Additional information, including current prices for ordering specific reports, may be obtained from the District Chief at the address given on the back of the title page, or by telephone (608)828-9901.

Water-resources data, including stage and discharge data at most streamflow-gaging stations, water levels in selected wells, and some water-quality data, are available through the World Wide Web on the Internet. Current and historical data provided in water-data reports are available. The Universal Resource Locator (URL) to the Wisconsin District's home page is: <http://wi.water.usgs.gov/>. Information on all U.S. Geological Survey reports and products (including maps, images, and computerized data) is available by calling 1-888-ASK-USGS. Additional earth science information is available by accessing the U.S. Geological Survey Home Page at <http://www.usgs.gov>.

COOPERATION

The U.S. Geological Survey and the State of Wisconsin have worked under cooperative agreements since 1913 collecting streamflow data, since 1955 collecting water-quality data, and since 1964 collecting ground-water level data. Agencies that worked cooperatively with the Survey during this year collecting data are:

Wisconsin Department of Natural Resources, George E. Meyer, secretary.
Southeastern Wisconsin Regional Planning Commission, Phillip Evenson, executive director.
U.S. Army Corps of Engineers.
Wisconsin Department of Transportation, Harold Amundson, chief bridge engineer.
The University of Wisconsin-Extension, Geological and Natural History Survey, James Robertson, state geologist and director.
Dane County Department of Planning and Development, Jeanie Sieling, director.
Dane County Regional Planning Commission, Thomas Favour, executive director.
City of Madison, Susan Bauman, mayor.
City of Middleton, Dan Ramsey, mayor.
City of Beaver Dam, Robert Sackett, utilities superintendent.
City of Thorp, Roger Hoffman, mayor.
Madison Metropolitan Sewerage District, James L. Nemke, chief engineer and director.
Milwaukee Metropolitan Sewerage District, Ralph Hollman, acting executive director.
Green Bay Metropolitan Sewerage District, Paul E. Thormodsgard, general manager.

City of Hillsboro, Janice G. Boehme, mayor.
 Illinois Department of Transportation, Melvin Allison, chief, bureau of planning.
 City of Waupun, Dennis Westhuis, manager, public utilities.
 City of Peshtigo, J. F. Dale Berman, mayor.
 Rock County Public Works Department, Thomas G. Kautz, parks and conservation director.
 Village of Wittenberg, Joe Yaeger, president.
 Menominee Indian Tribe of Wisconsin, Betty Jo Wozniak, administrator.
 Oneida Indian Tribe of Wisconsin, Melissa Schmitz, environmental department.
 Town of Delavan, Wayne Polzon, town chairman.
 Green Lake Sanitary District, Charlie Marks, administrator.
 City of Fond du Lac, Mark O. Lentz, city engineer.
 City of Barron, Bard Kittleson, mayor.
 Lac du Flambeau Band of Lake Superior Chippewa, Thomas Maulson, president.
 Stockbridge/Munsee Indian Tribe, Robert Chicks, tribal President.
 City of Sparta, Milo Seubert, mayor.
 City of Brookfield, Kathryn C. Bloomberg, mayor.
 City of Black River Falls, Loren Radcliffe.
 Fontana/Walworth Water Pollution Control Commission, Dean M. Donner, superintendent.
 Bad River Band of Lake Superior Chippewa Indians, Donald Moore, tribal chairman.
 Walworth County Metropolitan Sewerage District, Joseph S. Cannestra, administrator.
 City of Muskego, David DeAngelis, mayor.
 Department of Agriculture, Trade and Consumer Protection, Ben Brancel, secretary.
 Milwaukee County, Greg Failey, airport environmental compliance manager.
 Kickapoo Valley Reserve, Marcy West, executive director.
 Minnesota Pollution Control Agency, Bruce Biser, chief financial officer.
 U.S. Fish and Wildlife Service, Richard S. King, biologist.
 Minnesota-Wisconsin Boundary Commission.
 Rock River Watershed, Mike Kelly, Treasurer.
 City of Fort Atkinson, Paul Christenson.
 Lauderdale Lakes Lake Management District, Scott Mason, chairman.
 Federal Energy Regulatory Commission Licensees
 Consolidated Paper Company
 Dairyland Power Cooperative
 Northern States Power Company
 Wolf River Hydropower
 Wisconsin Electric Power Company
 Wisconsin Public Service Corporation
 Wisconsin Valley Improvement Company

The following organizations aided in collecting streamflow records: Wisconsin Valley Improvement Co., Wisconsin Public Service Corp., Northern States Power Co., Dairyland Power Cooperative, Wisconsin Electric Power Co., Scott Paper Co., Milwaukee County Park Commission, and Niagara of Wisconsin Paper Corp. Organizations that provided data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

Streamflow

The statewide average precipitation of 32.82 inches for the 2000 water year was 1.14 inches greater than the normal annual precipitation of 31.68 inches for water years 1961-90. Average precipitation values affecting streamflow conditions ranged from 90 percent of normal in northwest Wisconsin to 121 percent of normal in southeast Wisconsin (summary tables provided by Lyle Anderson, State Climatology Office, University of Wisconsin, Madison, written commun., 2001). Although precipitation for the year averaged only 104 percent of normal, the 2000 water year had extremes of beginning dry, turning very wet in the spring, and ending dry again. The year began below normal the first quarter of the year in all climatic divisions of the State. Record high temperatures in February and March and below normal snowfall brought an early spring and dry conditions statewide during March and April (Wisconsin Agricultural Statistics Service, 2000). The northern part of the State was still below normal for May. May and June brought record wet weather and cool temperatures for the southern half of the State: southeast Wisconsin received over 270 percent of normal rainfall for May, and southwest Wisconsin received over 250 percent of normal rainfall for June. June was the wettest month statewide, averaging 173 percent of normal. The last quarter of the year was more variable with the northern half of the State being below normal and the remainder near normal; heavy rains exceeding 10 inches for the month occurred in localized areas during July and September.

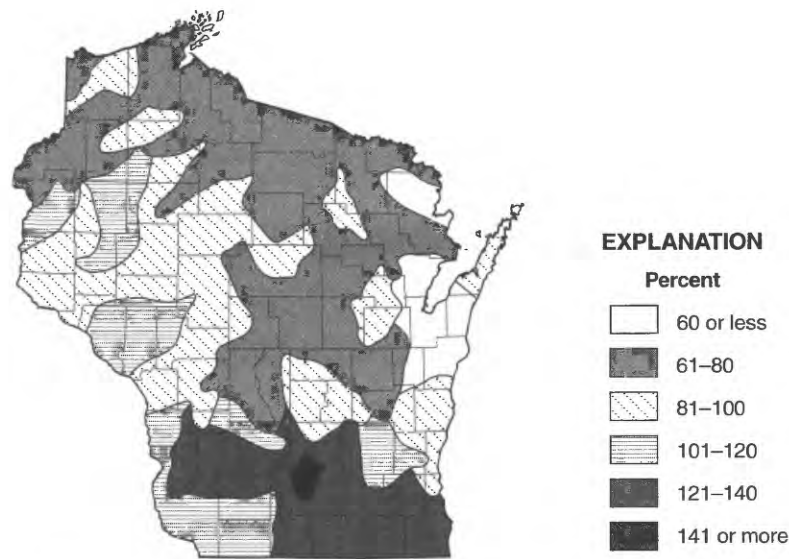


Figure 1. 2000 runoff as percentage of long-term average runoff.

Runoff differed for rivers throughout the State and ranged from 33 percent in east central Wisconsin to 166 percent in south central Wisconsin. Runoff was lowest (33 percent of the average annual runoff from 1964-2000) for the Lake Michigan tributary Kewaunee River near Kewaunee, and highest (166 percent of the average annual runoff from 1974-2000) for the Pheasant Branch at Middleton station in south central Wisconsin. Departures of runoff in the 2000 water year as a percent of long-term average runoff in the State (determined using stations with drainage areas greater than 150 square miles and at least 20 years of record) are shown in Figure 1.

Annual discharges for the individual water years (1916-2000) at the Oconto River near Gillett, Jump River at Sheldon, and Sugar River near Brodhead are shown in Figure 2. The comparison of monthly and annual discharges for the 2000 water year to discharge for a 85-year base period at the same three gaging stations are shown in Figure 3.

Low flows occurred at 4 gaging stations where the annual minimum 7-consecutive day average flows (Q7) had recurrence intervals of 5 or more years. An additional 10 stations had Q7 flows with recurrence intervals that were between 2 and 5 years. Precipitation continued below normal in October through December of 1999 throughout Wisconsin, following the dry months of August and September. This resulted in the Q7 values which approached or exceeded the 5-year recurrence interval at a number of stations in north central, northeast and southeastern Wisconsin, generally in December. Below normal precipitation totals occurred again in August and September 2000 in northwest and west central Wisconsin (Lyle Anderson, State Climatology Office, University of Wisconsin, Madison, written commun., 2001). The Q7 values and recurrence intervals for gaging stations that equalled or exceeded 5 years are listed in the following table:

Station number	Station name	Date	Q7 (ft ³ /s)	Recurrence interval (years)
04085200	Kewaunee River near Kewaunee	Dec. 21	9.0	5
04087159	Kinnickinnic River at South 11th Street at Milwaukee	Jan. 23	4.2	5
05360500	Flambeau River near Bruce	Dec. 18	485	6
05369500	Chippewa River at Durand	Dec. 18	2260	8

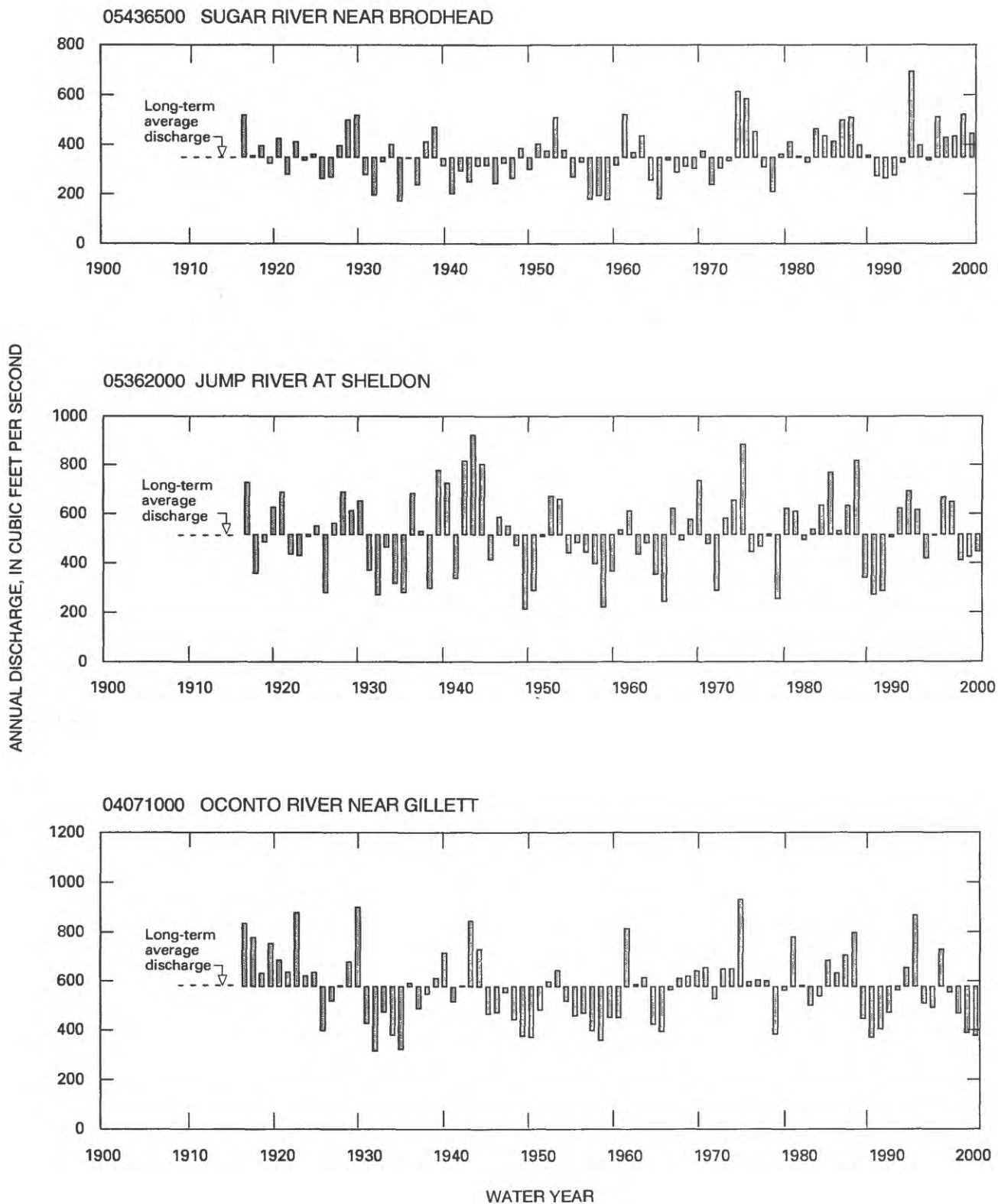


Figure 2. Comparison of annual discharge at representative gaging stations to their long-term average discharge for water years 1916–2000.

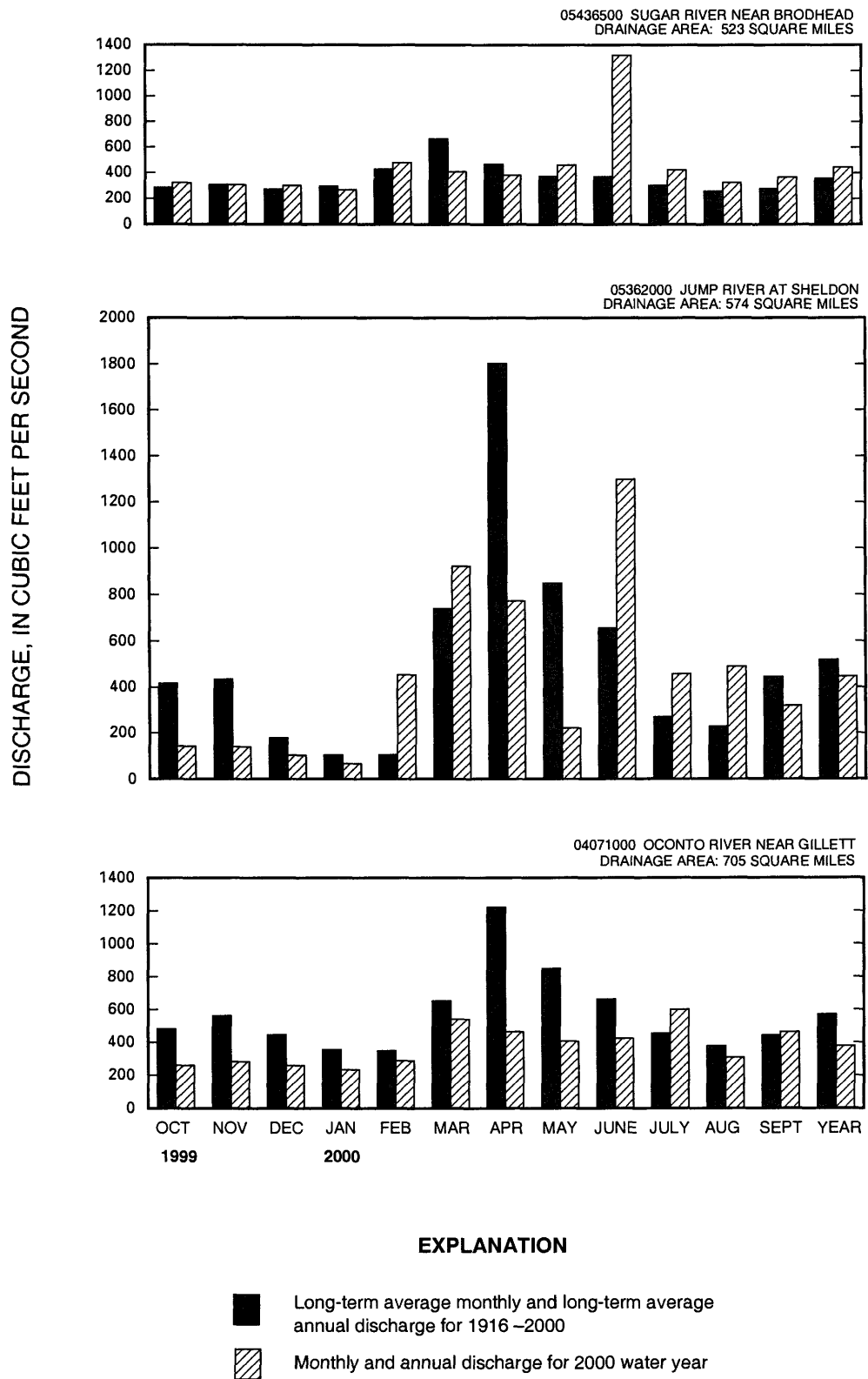


Figure 3. Comparison of discharge at representative gaging stations during 1999 water year with discharge for 1916–2000.

Runoff from frequent heavy rains in mid May to early June caused flooding throughout southern Wisconsin. Much of southern Wisconsin had sustained flooding caused by heavy rains May 17-19 and May 27 through June 2 (National Oceanic and Atmospheric Administration, May and June, 2000). Many areas in west central, central, east central, southwest, south central, and southeastern Wisconsin received more than 5 inches of rain during May. Areas in the southwest, south central, and southeastern parts received more than 10 inches, and as much as 18 inches of rain in this period (Rusty Kapela, National Weather Service, Milwaukee/Sullivan, written commun., July 13, 2000). Madison set a record for the wettest May in history with a total of 9.63 inches, 307 percent of normal (Wisconsin State Journal, June 1, 2000). Flooding was widespread from fast-moving lines of severe thunderstorms accompanied by high winds and some tornadoes: flooding was less severe on larger streams, but severe locally on smaller streams where discharges had recurrence intervals that exceeded 25 years (Krug and others, 1991). The sustained rainfall caused record-high water levels and closed county boat landings on the Yahara chain of lakes in Dane County. Lake Mendota set a new record-high water level on June 5, 2000, beating the old record set in 1993 (Wisconsin State Journal, June 7, 2000), and which exceeded the 100-year recurrence interval. Lake Monona also rose to a new record on June 14 after 2.2 inches of rain, beating the former record set in 1996 and the highest level since records began in 1915. By mid June, monthly rainfall in Madison totalled 6.63 inches, 390 percent of normal, and flood damages in Dane County alone amounted to over \$11 million (Capital Times, June 14, 2000). Governor Thompson requested federal disaster assistance for damages totalling over \$28 million caused by severe storms and floods in 16 southern and central Wisconsin Counties (Wisconsin State Journal, June 24, 2000). Statewide, more than 400,000 acres of cropland in 40 counties were damaged by excessive rain (Wisconsin State Journal, June 27, 2000).

More isolated severe storms in July, August and September also caused floods with discharges that equalled or exceeded those with a recurrence interval of 10 years or more (Krug and others, 1991). Thunderstorms during the month of July caused flooding in 6 southeastern counties and 2 northwestern counties. Monthly rainfall totals for July exceeded 12 inches in Burnett County (315 percent of normal) and 10 inches in Oneida County (Brian Hahn, National Weather Service, Milwaukee/Sullivan, written commun., September 6, 2000). Intense rainfall in Rusk and Sawyer Counties in the northwest in mid August exceeded the 100-year 3-hour precipitation value of 3.8 inches (Huff and Angel, 1992). Over 8 inches of rain on September 10-11 in Eau Claire (Wisconsin State Journal, September 12, 2000) exceeded the 100-year 24-hour precipitation value of about 6.5 inches. Chippewa Falls received a total of 10.48 inches for September, the maximum in the State and 257 percent of normal.

Peak discharges at stations which had recurrence intervals that equalled or exceeded 10 years are summarized in the following table:

Station number	Station name	Drainage area (mi ²)	Date	Peak discharge (ft ³ /s)	Recurrence interval (years)
04077400	Wolf River near Shawano	816	July 10	4020	20
04087100	Honey Creek at Milwaukee	3.26	July 2	1850	>500
04087200	Oak Creek near South Milwaukee	13.8	July 2	1360	>500
04087250	Pike Creek near Kenosha	7.25	June 12	235	45
04087159	Kinnickinnic River at Milwaukee	18.8	July 2	6170	10
04087204	Oak Creek at South Milwaukee	25.0	July 2	1120	40
04087220	Root River near Franklin	49.2	July 3	2420	14
04087233	Root River Canal near Franklin	57.0	July 3	1300	25
04087257	Pike River near Racine	38.5	June 12	1580	94
05364100	Seth Creek near Cadott	3.25	Sep. 11	774	85
05371800	Buffalo River Tributary near Osseo	1.44	July 8	136	18
05382200	French Creek near Ettrick	14.3	June 1	2450	30
05392350	Bearskin Creek near Harshaw	31.1	July 10	165	100
05405000	Baraboo River near Baraboo	609	June 2	5540	11
05405600	Rowan Creek at Poynette	10.4	June 1	975	17
05407200	Crooked Creek near Boscobel	12.9	June 1	1440	17
05414213	Little Platte River near Platteville	79.7	June 1	9200	>500

Station number	Station name	Drainage area (mi ²)	Date	Peak discharge (ft ³ /s)	Recurrence interval (years)
05414900	Pats Creek near Elk Grove	8.50	June 1	6600	180
05427948	Pheasant Branch at Middleton	18.3	June 2	902	31
05429500	Yahara River near McFarland	327	June 5	681	23
05430175	Yahara River near Fulton	518	June 1	2260	10
05543830	Fox River at Waukesha	126	July 2	1730	18
05548150	N. Branch Nippersink Creek near Genoa City	13.6	June 12	563	500

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Water Quality

Suspended-sediment yields for water year 2000 at two monitoring stations in southern Wisconsin showed suspended sediment yields in southwestern Wisconsin greater than long-term average and in southeastern Wisconsin yields were near the long-term average. The suspended-sediment yield at the Grant River at Burton in southwestern Wisconsin was 390 tons/mi² (tons per square mile), or 154 percent of the average annual yield for 1978-2000. The suspended-sediment yield for Jackson Creek Tributary near Elkhorn in southeastern Wisconsin for water year 2000 was 74 tons/mi², which was 101 percent of the average annual yield for the period 1984-2000. The total phosphorus yield for Jackson Creek Tributary was 404 lbs/mi² (pounds per square mile), or 92 percent of the 1984-2000 annual average.

Ground-Water Levels

In general, shallow ground-water levels during the 2000 water year were normal to above normal for most of the wells in the southern part of the State. Wells in Door, Marathon, Polk, Vilas, and Waushara Counties had below normal ground-water levels at the beginning of the water year, and these levels remained below normal for the entire water year. The large extent of normal and above-normal ground-water levels can be attributed to near normal rainfall during the 2000 water year and normal rainfall during the previous water year.

SPECIAL NETWORKS AND PROGRAMS

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

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

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical climate of precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to accomplish the following objectives; (1) provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 191 precipitation chemistry monitoring sites, (2) provide the mechanism to evaluate the effectiveness of the significant reduction in SO₂ emissions that began in 1995 as implementation of the Clean Air Act Amendments (CAAA) occurred, (3) provide the scientific basis and nationwide evaluation mechanism for implementation of the Phase II CAAA emission reductions for SO₂ and NO_x scheduled to begin in 2000.

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

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

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

Assessment activities are being conducted in 53 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents will be measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

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

Additional information about the NAWQA Program is available through the world wide web at:

http://wwwrvares.er.usgs.gov/nawqa/nawqa_home.html

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are from the 2000 water year that began October 1, 1999, and ended September 30, 2000. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data; stage and content data for lakes and reservoirs; precipitation data; surface and ground water; and ground-water-level data. Figure 4 shows major surface-water drainage basins and an index of hydrologic records. The locations of the stations and wells where the data were collected are shown in basin location maps and figure 5.

The following sections of introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

In this report each data station, whether streamsite or well, is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream order number" is used for most surface-water stations on streams and a unique 15-digit number is used for lakes, wells, and precipitation monitoring sites.

Downstream Order and Station Number

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

The station-identification number is assigned according to downstream order. No station-number distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight- to ten-digit number for each station, such as 04087000, 054310157, or 0407809265, which appears just to the left of the station name, includes the two-digit Part number "04" or "05" plus the six- to eight-digit downstream-order number ("087000", "4310157", or "07809265"). The Part number designates the major river basin; for example, records in this report are in Part 04 (St. Lawrence River basin) or Part 05 (Upper Mississippi River basin).

In some special cases, stations on streams may be identified with the numbering system used for ground-water and lake-data sites described in the following paragraph. This is generally done only for special purpose short-term stations where station density precludes convenient assignment of downstream order numbers.

Numbering System for Ground-Water, Lake, and Precipitation Data Sites

Wells, springs, sites on lakes, and precipitation gages where data are collected are identified by a unique 15-digit number that is a concatenation of the site's latitude, longitude, and a two-digit sequence number. The sequence number is used to distinguish between sites located at the same latitude-longitude designation. The site identification number is permanently assigned to the site; actual latitude and longitude of the site are subject to update and are stored separately. Each ground-water site is also identified by a local number based on the cadastral-survey system of the U.S. Government. The number consists of an abbreviation of the county name, the township, range and section, and a four-digit number assigned to the well.

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained from a continuous stage-recording device by which either instantaneous or mean daily discharges may be computed for any time, or any period of time, during the period of record. Complete records of lake or reservoir content, similarly, are those for which stage or content may be computed or estimated with reasonable accuracy for any time, or period of time. They may be obtained from a continuous stage-recording device, but need not be. Because daily mean discharges are commonly published for such stations, they are referred to as "daily stations." By contrast, partial records consist of discrete measurements, without using a continuous stage-recording device. Two types of surface-water partial-record stations are operated: (1) crest-stage partial-record stations, for which maximum discharge is recorded; and (2) miscellaneous stations, for which periodic discharge measurements and/or limited water-quality analyses are made. Each type of station is presented separately in this report.

Data Collection and Computation

The basic data collected at complete-record gaging stations include stage and discharge measurements of streams, and stage, surface area, and content measurements of lakes and reservoirs. Factors affecting stage-discharge relationships, weather records, and other information supplement the basic data used to determine daily flow. Records of stage are obtained by reading a non-recording gage, from a continuous graph, from a tape punched at selected intervals on a water-stage recorder, or from electronic data logger. Measurements of discharge are made with a current meter by using methods described in "U.S. Geological Survey Techniques of Water Resources Investigations" listed in "Publications on techniques of water-resources investigations."

Rating tables of stream stage and corresponding discharges are prepared from stage-discharge relationship curves. Extended-rating curves, based on step-backwater techniques, velocity-area studies, logarithmic plotting, and indirect measurements of peak discharge are used to estimate discharges greater than those measured. Daily mean discharges are computed from gage heights and rating tables, and the monthly and yearly means are computed from the daily figures. If the stage-discharge relationship varies due to changes in the control, such as aquatic growth, debris, or scour and fill, daily mean discharge is computed by a shifting-control method in which correction factors, based on individual discharge measurements and notes by observers, are used when the gage heights are applied to the rating tables.

The slope method is used to compute discharge at stream-gaging stations where backwater from lakes or reservoirs, tributary streams, or other sources affect the stage-discharge relationship. Acoustic velocity meters have also been installed at some locations where aforementioned problems occur. The rate of change of stage is used to compute discharge at stations where the stage-discharge relationship is affected by rapid changes in stage. When ice conditions at stream-gaging stations affect the stage-discharge relationship, gage-height records, winter discharge measurements, temperature and precipitation data, and comparable records of discharge for nearby stations are used to compute discharge. At gaging stations where gage-height records are faulty or non-existent for some periods, the daily discharges are estimated based on the recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for nearby stations.

Descriptions of the stations and tabulations of data are included in this report. A table showing daily, monthly, and yearly discharges is given for each gaging station on a stream or canal. A table showing the monthly summary of stage is given for gaging stations on lakes.

Data Presentation

Streamflow data in this report are presented in a format that is considerably different from the format in data reports prior to the 1992 water year. The major changes are that statistical characteristics of discharge now appear in tabular summaries following the water-year data table and less information is provided in the text or stations manuscript above the table. These changes represent the results of a pilot program to reformat the annual water-data report to meet current user needs and data preferences.

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

Station manuscripts

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

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the gage 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 provided by the U.S. Army Corps of Engineers or other agencies.

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

PERIOD OF RECORD.--This indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one that was in operation when the present station was not, and whose location was such that records from it can reasonably be considered equivalent with records from the present station.

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

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

REMARKS.--All periods of estimated daily-discharge record will either be identified by date in this paragraph of the station description for water-discharge stations, or flagged in the daily-discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a remarks statement is used to identify an estimated record, this information will be presented as the first entry of the paragraph. The paragraph is also used to present information about the accuracy of the records, special methods of computation, conditions that affect natural flow at the station and any other pertinent items.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Information concerning major floods or unusually low flows that occurred outside the stated period of record is included here. The information may or may not have been obtained by the U.S. Geological Survey.

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

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

The data presented for most gaging stations on lakes include a description of the station and a monthly summary table of stage.

Headings for AVERAGE DISCHARGE, EXTREMES FOR PERIOD OF RECORD, AND EXTREMES FOR CURRENT YEAR have been deleted and the information contained in these paragraphs, except for the listing of secondary instantaneous peak discharges in the EXTREMES FOR CURRENT YEAR paragraph, is now presented in the tabular summaries following the discharge table or in the REMARKS paragraph, as appropriate. The RATING TABLE heading has also been deleted. No changes have been made to the data presentation of lake contents.

Data table of daily mean values

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month is usually also 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 are omitted if there is extensive regulation or diversion, or if the drainage area includes large noncontributing areas.

Statistics of monthly mean data

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

Summary statistics

A table titled "SUMMARY STATISTICS" follows the statistics of monthly mean data tabulation. This table consists of four columns, with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period as appropriate. The designated period selected, "WATER YEARS _____ - _____," will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (see line headings below), except for the "ANNUAL" 7-DAY MINIMUM statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

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

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

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

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

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

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

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

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

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

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

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

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

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

Acre-foot (AC-FT) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equal 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 area drained, assuming the runoff is distributed uniformly in time and area.

Inches (INCHES) indicates 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 is exceeded 10 percent of the time for the designated period.

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

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

Data collected at crest-stage partial-record stations are given in a table of annual maximum stages and discharges that follows the information for continuous-record sites. The crest-stage partial-record stations table is followed by a list of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for special reasons are called measurements at miscellaneous sites.

Identifying Estimated Daily Discharge

Estimated daily-discharge values are identified by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of the Records

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

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

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft³/s; to the nearest tenth between 1.0 and 10 ft³/s; to the nearest whole number between 10 and 1,000 ft³/s; and to 3 significant figures for more than 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

Discharge at many stations, indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff, in inches, are not published unless satisfactory adjustments can be made for diversions, or changes in contents or 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.

Other Records Available

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

Records of Surface-Water Quality

Records of stream-water quality ordinarily are obtained at or near streamgaging stations, because interpretation of records of stream-water quality nearly always requires corresponding stream discharge data. The stream discharge shown with a water-quality analysis is the instantaneous value corresponding to the time of sample collection ("Streamflow, Instantaneous") whenever possible. When an instantaneous discharge value is not available, the daily mean discharge ("Discharge, in Cubic Feet per Second") is given if available. Water samples from lakes are collected at locations identified by latitude and longitude; the depth at which the sample was collected is given with each analysis. Records of surface-water quality in this report include a variety of types of data and measurement frequencies.

Classification and Arrangement of Records

The water-quality data collected at surface-water sites fall into two general classifications. Continuous-record stations are sites where data are collected on a regularly scheduled basis as part of a monitoring program or interpretive investigation. Water-quality records for these stations accompany stream-discharge or lake-stage records, where available, in the Surface Water Records section of this report. More limited water-quality data are collected at gaging stations and other sites on streams. These data include measurements of water temperature and specific conductance made at gaging stations and water-quality analyses of samples collected at gaging stations and other sites on streams for reconnaissance and other special purposes. These data are presented separately at the end of the Surface-Water Records section.

On-site Measurements and Sample Collection

In obtaining water-quality data, care is taken to assure that the data obtained represent the quality of the water at the time of sampling. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen concentration, are made on site when the samples are taken. To assure that measurements made in the laboratory also reflect the original quality of the water, prescribed procedures are followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for on-site measurements and for collecting, treating, and shipping samples are detailed in the TWRI Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. These references are listed in the PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS section of this report. These methods are consistent with ASTM standards and generally follow ISO standards.

One sample can adequately define the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections using depth-integrating samplers to obtain a representative sample needed for an accurate mean concentration and for use in calculating the discharge of suspended and dissolved materials. Water quality in lakes may differ with depth and laterally at a particular depth depending on thermal stratification and other physical and biological factors.

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

For chemical-quality stations equipped with digital monitors, daily maximum, minimum, and mean values for each constituent or property are computed and reported herein. Records of recorded values used in the computations are on file at the U.S. Geological Survey (USGS) Wisconsin District Office.

Transport of suspended and dissolved materials

Samples used for computing discharge of suspended and dissolved materials (suspended sediment, suspended solids, phosphorus, and nitrogen) are collected using a number of sampling methods. Sample types include flow-integrated samples collected using a depth-integrating sampler at multiple locations in a stream cross section (equal-width increment or EWI samples), samples collected using depth-integrating sampler at a single location in a cross section, or point samples collected by an automated sampler from a single point in a cross section. Coefficients are used to compensate for concentration differences between flow-integrated samples and samples collected at single points or single locations.

Samples are collected more frequently during periods of rapidly-changing stream discharge than during stable periods. Discharges of suspended and dissolved materials for days of rapidly-changing stream discharge are computed by the subdivided day (time-discharge weighted average) method. Methods used in the computation of sediment records are described in the TWRI Book 3, Chapters C1 and C3 listed in PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS. These methods are consistent with ASTM standards and generally follow ISO standards. For periods when no samples were collected, discharges of suspended and dissolved material are estimated from stream discharge and constituent concentrations from adjacent time periods and periods with similar stream discharges. Suspended-sediment and suspended-solids discharges of less than 0.005 tons/day are reported as 0.00 tons/day, and phosphorus and nitrogen discharges of less than 0.005 pounds per day (lb/day) are reported as 0.00 lb/day.

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

Laboratory Measurements

Samples for suspended-sediment concentration and particle-size determination are analyzed by the USGS Iowa District Sediment Laboratory. Chemical analyses, other than field measurements, are done by the USGS National Water Quality Laboratory unless indicated otherwise in the descriptive heading for the station. Methods used by USGS laboratories to analyze water and sediment samples and to compute sediment records are described in the TWRI Book 5, Chapter C1. Methods used by the U.S. Geological Survey laboratories are given in the TWRI Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, A4, and A5. These methods are consistent with ASTM standards and generally follow ISO standards.

In March 1989, the USGS National Water-Quality Laboratory discovered a bias in their turbidimetric method for sulfate analysis, indicating that values below 75 mg/L have a median positive bias of 2 mg/L above the true value for the period between 1982 and July 1989. The magnitude of the bias differs among stations.

A problem has been identified with total phosphorus and total Kjeldahl nitrogen analyses done by the USGS National Water Quality Laboratory prior to Oct. 1, 1991. Some time after 1975, an error was introduced during a rewrite of the laboratory method for digestion of samples for total phosphorus or total Kjeldahl nitrogen analyses. The error resulted in incomplete digestion of samples causing a negative bias in the total phosphorus and total Kjeldahl nitrogen concentrations reported for many samples. The amount of bias is variable, but it generally increases with increasing concentrations of particulate phosphorus, suspended sediment, or organic carbon in the sample. In the absence of split-sample data, there is no scientifically defensible way to correct for the bias. Total phosphorus loads calculated using concentration data for samples analyzed prior to October 1991 may also have a sizeable negative bias. A new digestion procedure was implemented effective Oct. 1, 1991, that eliminated the bias.

Dissolved Trace-Element Concentrations

Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter ($\mu\text{g/L}$) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's to 100's of nanograms per liter (ng/L). Data above the $\mu\text{g/L}$ level should be reviewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey began using new trace-element protocols at some stations in water year 1994. Full implementation of the protocols took place during the 1995 water year.

Sampling Method Codes

Water-quality analyses stored in USGS computer files (WATSTORE) contains codes that identify the sampling method used to collect the sample. Codes in use for Wisconsin data are as follows:

<u>Method</u>	<u>Method Code</u>
Equal Width Increment (EWI)	10
Equal Discharge Increment (EDI)	20
Single Vertical	30
Multiple Vertical	40
Point Sample	50
Weighted Bottle	60
Grab Sample	70
Van Dorn Sampler	100
Submersible Pump	4040
Peristaltic Pump	4080

Collecting and Analyzing Agencies

All water-quality analyses stored in USGS computer files (WATSTORE) contain codes that identify the agencies that collected the sample (collecting agency) and analyzed it (analyzing agency). Codes in use for Wisconsin data are as follows:

<u>Agency</u>	<u>Agency Code</u>
U.S. Geological Survey	1028
U.S. Geological Survey, National Water- Quality Laboratory	80020
Wisconsin State Laboratory of Hygiene	85543
Wisconsin Department of Natural Resources	85545

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, laboratories (if other than USGS), cooperation, and extremes for daily discharges of suspended and dissolved materials. For each station, tables of data collected at less-than-daily frequency are presented first followed by tables of daily values.

The concentrations of some constituents are given as less than a particular value (see "Remark Codes"); that value is the detection for the analytical method used for the analysis. Occasionally these values differ, or an actual concentration is given that is less than a higher detection limit indicated for the constituent in another analysis. These differences are due to differences in analytical methods.

The five-digit numbers in parentheses in column headings in many of the water-quality tables are codes that identify the constituent or property in USGS computer files (WATSTORE).

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

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

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

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station. The periods are shown separately for records of constituents or properties measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for each constituent or property.

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

REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the records. Laboratories other than USGS laboratories are identified.

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

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

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

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

Remark Codes

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

PRINTED OUTPUT

REMARK

E, e	Estimated value
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
K	Results based on colony count outside the acceptance range (non-ideal colony count)
V	Analyte was detected in both the environmental and the associated blanks

Records of Ground-Water Levels

Water-level data for 48 wells are given in this report. The locations of these wells are shown in figure 5. These wells are part of a national network of observation wells, and the water-level data are intended to provide a sampling and historical record of water-level changes in the Nation's most important aquifers.

Data in this report represent natural water-table and artesian conditions in the principal aquifers of the State, except in the sandstone aquifer in southeastern Wisconsin where heavy municipal and industrial pumping is causing a continual decline in the water level. Water in this aquifer is under artesian pressure where confined by the overlying Maquoketa Shale.

Although records of water levels for 48 wells are presented in this report, water-level data are currently being collected for a total of 135 wells in Wisconsin through a cooperative program with the Wisconsin Geological and Natural History Survey (WG&NHS). Many federal, state, county and local agencies, as well as interested area residents, assist in this program by measuring and reporting water levels. All water level data are placed in computer storage. Reports containing hydrographs, showing water-level changes in all of these wells, are periodically published by the WG&NHS.

The amplitude of water-level changes is typified by nine well hydrographs in this report that show annual maximum and minimum water levels for the period of record.

Data Collection and Computation

Measurements of water levels are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well ensure that measurements at each well are consistently accurate and reliable.

Tables of water-level data are presented by county arranged in alphabetical order. The prime identification number for a given well is the 15-digit number that appears in the heading. It is followed by the secondary identification number (the local number), that consists of a two-letter abbreviation of the county name, the township-range-section location of the well, and a four-digit identification number that is unique within the county.

Water-level records are obtained from direct measurements with a steel tape or from a continuous water-level 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. The altitude of the lsd above sea level and the distance of the measuring point (MP) above or below the lsd is given in each well description. Water levels are normally reported to a hundredth of a foot. The absolute value of the depth to water may be in error by a few tenths of a foot, but the error in determining the net change in water level between successive measurements is normally only a hundredth or a few hundredths of a foot.

Data Presentation

Each well record consists of two parts, the station description and the data table of water levels observed during the water year. The description of the well precedes the tabular data. The comments below clarify information presented under the various headings.

LOCATION.--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); the hydrologic-unit number; and the land owner's name.

AQUIFER.--This entry designates by name the primary aquifer(s) open to the well.

WELL CHARACTERISTICS.--This entry describes the well in terms of depth, diameter, casing depth and/or screened interval, method of construction, and use.

INSTRUMENTATION.--This paragraph provides information on both the frequency of measurement and the collection method.

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

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level.

PERIOD OF RECORD.--This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water-level records by the U.S. Geological Survey and the words "to current year" if the records are to be continued into the following year.

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

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

ACCESS TO U.S. GEOLOGICAL SURVEY WATER DATA

The U.S. Geological Survey provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry and historic daily-mean and peak-flow discharge data for most current or discontinued gaging stations through the world wide web (WWW). These data may be accessed at

<http://water.usgs.gov>

Some water-quality and ground-water data also are available through the WWW. In addition, data can be provided in various machine-readable formats on magnetic tape or 3-1/2 inch floppy disk. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division's District offices. (See address on the back of the title page.)

DEFINITION OF TERMS

Terms used in this report with reference to streamflow, water-quality, and other hydrologic data are defined below. For conversion of inch-pound units and International System (SI) units see the table on the inside of the back cover.

Acid neutralizing capacity (ANC) is the equivalent sum of all bases or base-producing materials, solutes plus particulates, in an aqueous system that can be titrated with acid to an equivalence point.

Acre-foot (acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot. It is the equivalent of 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters.

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

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

Alkalinity is the capacity of solutes in an aqueous system to neutralize acid.

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

Bacteria are microscopic, unicellular organisms, typically spherical, rod-like, or spiral and threadlike in shape, and often clumped into colonies. Some bacteria cause disease; others perform essential roles in the natural recycling of materials such as decomposing organic matter into forms available for reuse by plants.

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

Fecal coliform bacteria are present in the intestines of warmblooded animals and are used to determine the sanitary quality of water. They are defined as those organisms that produce blue colonies within 24 hours when incubated at 44.5°C + 0.2° on M-FC culture medium. Their concentrations are expressed as number of colonies per 100 ml of sample.

Fecal streptococci bacteria are also found in the intestines of warmblooded animals. Their presence in water is used to verify fecal pollution. They are characterized as gram-positive, spherical bacteria capable of growth in brain-heart infusion broth. They are defined as those organisms that produce red or pink colonies within 48 hours at 35° ± 1.0° on KF-streptococcus culture medium. Their concentrations are expressed as number of colonies per 100 ml of sample.

Enterococcus bacteria are commonly found in the feces of humans and other warm-blooded animals. Although some strains are ubiquitous and not related to fecal pollution, the presence of enterococci in water is an indication of fecal pollution and the possible presence of enteric pathogens. Enterococcus bacteria are those bacteria which produce pink to red colonies with black or reddish-brown precipitate after incubation at 41°C on mE agar and subsequent transfer to EIA medium. Enterococci include *Streptococcus faecalis*, *Streptococcus faecium*, *Streptococcus avium*, and their variants.

Bedload is the sediment which moves along in essentially continuous contact with the streambed by rolling, sliding, and making brief excursions into the flow a few diameters above the bed.

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

Bed material is the unconsolidated material at the bottom of a streambed, lake, pond, reservoir, or estuary.

Benthic invertebrates are invertebrate animals inhabiting the bottoms of lakes, streams, and other water bodies. They are useful as indicators of water quality.

Biochemical oxygen demand (BOD) measures the quantity of dissolved oxygen, in milligrams per liter, used by microorganisms for the decomposition of organic matter.

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

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m³), and periphyton and benthic organisms in grams per square mil (g/m²).

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

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

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

Bottom material: See Bed material.

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

Cfs-day is the volume of water produced by a flow of 1 cubic foot per second for 24 hours. It is the equivalent of 86,400 cubic feet, 1.9835 acre-feet, 646,000 gallons, or 2,447 cubic meters.

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

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

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

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

Cubic foot per second (ft³/s) represents a volume of 1 cubic foot of water passing a given point during 1 second and is the equivalent of 7.48 gallons per second, 448.8 gallons per minute, or 0.02832 cubic meters per second.

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

Discharge is the volume of fluid or mass of suspended sediment passing a given point in a given period of time.

Mean discharge (MEAN) is the arithmetic average of all daily mean discharges for a specific period of time.

Instantaneous discharge is the discharge at a particular time.

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

Dissolved is an operational definition used by Federal and State agencies collecting water data as that material in a water sample which passes through a 0.45 μ m membrane filter. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

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

Drainage area of a stream at a specified location is measured in a horizontal plane and constitutes an area enclosed by a topographic divide from which surface runoff above the specified point drains by gravity into the stream. Values of the drainage areas given herein include closed basins and noncontributing areas within the basin, as noted.

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

Extractable organic halides (EOX) are organic compounds which contain halogen atoms such as chlorine. These organic compounds are semi-volatile and extractable by ethyl acetate from air-dried stream bottom sediments. The ethyl acetate extract is combusted, and the concentration is determined by microcoulometric determination of the halides formed. The concentration is reported as micrograms of chlorine per gram of the dry weight of the stream bottom sediments.

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

Gaging station is a particular site on a stream or lake where systematic hydrologic data are collected.

Geologic unit is a geologic formation or group of formations; in this report, the term is used in the same sense as "aquifer" and refers to the geologic formation(s) open to the uncased or screened portion of a well.

Hardness is a physical-chemical characteristic of water that is attributable principally to the presence of calcium and magnesium and is expressed as calcium carbonate (CaCO_3). Hardness is commonly recognized by the increased quantity of soap required to produce lather.

Hydrologic unit designates part or all of a surface-drainage basin delineated by the Office of Water Data Coordination; each hydrologic unit is identified by an 8-digit number.

Lake stage is the elevation of the lake's water surface referred to some arbitrary gage datum.

Membrane filter is a thin microporous material of specific pore size used to filter bacteria, algae, and other very small particles from water.

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

Methylene blue active substances (MBAS) are apparent detergents. The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

Micrograms per gram ($\mu\text{g/g}$) indicates the concentration of a chemical constituent as the mass (micrograms) of that constituent per unit mass (gram) of sediment.

Micrograms per kilogram ($\mu\text{g/kg}$) indicates the concentration of a chemical constituent as mass (micrograms) of that constituent per unit mass (kilogram) of sediment.

Micrograms per liter ($\mu\text{g/L}$) indicates the concentration of a chemical constituent as the mass (micrograms) of that constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter.

Microsiemens per centimeter ($\mu\text{S/cm}$, US/CM) is a unit expressing the amount of electrical conductivity of a solution as measured between opposite faces of a centimeter cube of solution at a specified temperature. Siemens is the International System of unit nomenclature. It is synonymous with mhos and is the reciprocal of resistance in ohms.

Milligrams per liter (mg/L) indicates the concentration of a chemical constituent or suspended sediment as the mass (milligrams) per unit volume (liter) of water.

Most probable number (MPN) is an index of the number of coliform bacteria that, more probably than any other number, would give the results shown by the laboratory examination; it is not an actual enumeration. It is determined from the distribution of gas-positive cultures among multiple inoculated tubes.

Multiple-plate samples are artificial substrates of known surface area used for obtaining benthic-invertebrate samples. They consist of a series of spaced, hardboard plates on an eyebolt.

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

Organism is any living entity.

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

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

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

Parameter code is a 5-digit number used in the U.S. Geological Survey computerized data system, National Water Information System (NWIS), to uniquely identify a specific constituent. The codes used in NWIS are the same as those used in the U.S. Environmental Protection Agency data system STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

Partial-record station is a site for the systematic collection of limited streamflow or water-quality data over a period of years.

Particle size is measured as the diameter, in millimeters (mm), of suspended sediment and bed material determined by sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) measure the fall diameter of particles in distilled water (chemically dispersed) or native water (surface water at the time and point of sampling).

Particle-size classification for this report is based on recommendations of the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

<u>Classification</u>	<u>Size (mm)</u>	<u>Method of analysis</u>
Clay	0.00024 - 0.004	Sedimentation.
Silt004 - .062	Sedimentation.
Sand062 - 2.0	Sedimentation or sieve.
Gravel	2.0 - 64.0	Sieve.

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

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

Periphyton is the assemblage of microorganisms attached to and living upon submerged solid surface. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

Pesticides are chemical compounds used to control undesirable plants and animals. They include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides control insects and plants respectively and are the two categories reported.

Picocurie (PCi) is one trillionth (1×10^{-12}) of a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} disintegrations per second. A picocurie yields 2.22 disintegrations per minute.

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

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

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

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

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

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

Polychlorinated biphenyls (PCB's) are industrial chemicals composed of biphenyl compounds containing various amounts of chlorine. Their chemical structure is similar to the organochlorine insecticides.

Polychlorinated naphthalenes (PCN's) are industrial chemicals composed of naphthalene compounds containing various amounts of chlorine. Their chemical structure is similar to the organochlorine insecticides.

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

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

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

River mile as used herein, is the distance above the mouth of Delaware Bay, measured along the center line of the navigation channel or the main stem of the Delaware River. River mile data were furnished by the Delaware River Basin Commission.

Runoff in inches (IN, in) indicates the depth of water that would cover a drainage area if all runoff for a given time period were uniformly distributed.

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

Secchi disk is a black and white plate, 20-25 cm in diameter, which is lowered into a lake on a calibrated line until it is no longer visible. The depth, in meters, at which the disk just disappears is reported as a measure of transparency.

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

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

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in a sample zone (from the water surface to approximately 0.3 ft above the streambed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). The entire sample is used for the analysis.

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

Suspended-sediment discharge is the rate at which dry mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) times discharge (ft³/s) times 0.0027.

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

Suspended total residue at 105°C concentration is the concentration of suspended sediment in the sampled zone expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). A small aliquot of the sample is used for the analysis.

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

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

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

Solute is any substance dissolved in water.

Specific conductance is a measure of the ability of water to conduct electrical current and is expressed in microsiemens per centimeter at 25°C. It is related to the number and specific types of ions in solution, and is useful for approximating the concentration of dissolved solids in the water. Commonly, the concentration of dissolved solids mg/L is from 55 to 75 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

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

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

Substrate is the physical surface upon which an organism lives.

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

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

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

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

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

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

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

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

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

Synoptic studies are short-term investigations of specific water-quality conditions during selected seasonal or hydrologic periods to provide improved spatial resolution for critical water-quality conditions. For the period and conditions sampled, they assess the spatial distribution of selected water-quality conditions in relation to causative factors, such as land use and contaminant sources.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per acre-foot indicates the dry weight of a constituent in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the measure of a substance that passes a stream section in solution or suspension during a 24-hour period.

Total is the total amount of a given constituent in a water-sediment sample, regardless of the constituent’s physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as “total.” The term indicates the sample consists of a water-sediment mixture and that the analytical method determines all of the constituent in the sample.

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

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

Total in bottom material is the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as “total in bottom material.”

Volatile organic compounds (VOCs) are organic compounds that can be isolated from the water phase of a sample by purging the water sample with inert gas, such as helium, and subsequently analyzed by gas chromatography. Many VOCs are man-made chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They are often components of fuels, solvents, hydraulic fluids, paint thinners, and dry cleaning agents commonly used in urban settings. VOC contamination of drinking-water supplies is a human health concern because many are toxic and are known or suspected human carcinogens (U.S. Environment Protection Agency, 1996).

WDR is the abbreviation for “Water-Data Report” used in the summary REVISIONS paragraph to indicate previously published State annual basic data report (WRD was used an abbreviation for “Water-Resources Data” in reports published prior to 1976).

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

WSP is the abbreviation for “Water-Supply Paper” used in references to previously published reports.

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S. Geological Survey, Branch of Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

Book 1. Collection of Water Data by Direct Measurement

Section D. Water Quality

- 1-D1. *Water temperature—influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J.F. Ficke, and G. F. Smoot: USGS–TWRI Book 1, Chapter D1. 1975. 65 pages.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W.W. Wood: USGS–TWRI Book 1, Chapter D2. 1976. 24 pages.

Book 2. Collection of Environmental Data

Section D. Surface Geophysical Methods

- 2-D1. *Application of surface geophysics to ground-water investigations*, by A.A. R. Zohdy, G.P. Eaton, and D.R. Mabey: USGS–TWRI Book 2, Chapter D1. 1974. 116 pages.
- 2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F.P. Haeni: USGS–TWRI Book 2, Chapter D2. 1988. 86 pages.

Section E. Subsurface Geophysical Methods

- 2-E1. *Application of borehole geophysics to water-resources investigations*, by W.S. Keys and L.M. MacCary: USGS–TWRI Book 2, Chapter E1. 1971. 126 pages.
- 2-E2. *Borehole geophysics applied to ground-water investigations*, by W.S. Keys: USGS–TWRI Book 2, Chapter E2. 1990. 150 pages.

Section F. Drilling and Sampling Methods

- 2-F1. *Application of drilling, coring, and sampling techniques to test holes and wells*, by Eugene Shuter and W.E. Teasdale: USGS–TWRI Book 2, Chapter F1. 1989. 97 pages.

Book 3. Applications of Hydraulics

Section A. Surface-Water Techniques

- 3-A1. *General field and office procedures for indirect discharge measurements*, by M.A. Benson and Tate Dalrymple: USGS–TWRI Book 3, Chapter A1. 1967. 30 pages.
- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M.A. Benson: USGS–TWRI Book 3, Chapter A2. 1967. 12 pages.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G.L. Bodhaine: USGS–TWRI Book 3, Chapter A3. 1968. 60 pages.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H.F. Matthai: USGS–TWRI Book 3, Chapter A4. 1967. 44 pages.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS–TWRI Book 3. Chapter A5. 1967. 29 pages.
- 3-A6. *General procedure for gaging streams*, by R.W. Carter and Jacob Davidian: USGS–TWRI Book 3, Chapter A6. 1968. 13 pages.
- 3-A7. *Stage measurement at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS–TWRI Book 3, Chapter A7. 1968. 28 pages.

- 3-A8. *Discharge measurements at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS-TWRI Book 3, Chapter A8. 1969. 65 pages.
- 3-A9. *Measurement of time of travel in streams by dye tracing*, by F.A. Kilpatrick and J.F. Wilson, Jr.: USGS-TWRI Book 3, Chapter A9. 1989. 27 pages.
- 3-A10. *Discharge ratings at gaging stations*, by E.J. Kennedy: USGS-TWRI Book 3, Chapter A10. 1984. 59 pages.
- 3-A11. *Measurement of discharge by the moving-boat method*, by G.F. Smoot and C.E. Novak: USGS-TWRI Book 3, Chapter A11. 1969. 22 pages.
- 3-A12. *Fluorometric procedures for dye tracing*, Revised, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS-TWRI Book 3, Chapter A12. 1986. 34 pages.
- 3-A13. *Computation of continuous records of streamflow*, by E.J. Kennedy: USGS-TWRI Book 3, Chapter A13. 1983. 53 pages.
- 3-A14. *Use of flumes in measuring discharge*, by F.A. Kilpatrick and V.R. Schneider: USGS-TWRI Book 3, Chapter A14. 1983. 46 pages.
- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS-TWRI Book 3, Chapter A15. 1984. 48 pages.
- 3-A16. *Measurement of discharge using tracers*, by F.A. Kilpatrick and E.D. Cobb: USGS-TWRI Book 3, Chapter A16. 1985. 52 pages.
- 3-A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS-TWRI Book 3, Chapter A17. 1985. 38 pages.
- 3-A18. *Determination of stream reaeration coefficients by use of tracers*, by F.A. Kilpatrick, R.E. Rathbun, Nobuhiro Yotsukura, G.W. Parker, and L.L. DeLong: USGS-TWRI Book 3, Chapter A18. 1989. 52 pages.
- 3-A19. *Levels at streamflow gaging stations*, by E.J. Kennedy: USGS-TWRI Book 3, Chapter A19. 1990. 31 pages.
- 3-A20. *Simulation of soluble waste transport and buildup in surface waters using tracers*, by F.A. Kilpatrick: USGS-TWRI Book 3, Chapter A20. 1993. 38 pages.
- 3-A21. *Stream-gaging cableways*, by C. Russell Wagner: USGS-TWRI Book 3, Chapter A21. 1995. 56 pages.

Section B. Ground-Water Techniques

- 3-B1. *Aquifer-test design, observation, and data analysis*, by R.W. Stallman: USGS-TWRI Book 3, Chapter B1. 1971. 26 pages.
- 3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G.D. Bennett: USGS-TWRI Book 3, Chapter B2. 1976. 172 pages.
- 3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J.E. Reed: USGS-TWRI Book 3, Chapter B3. 1980. 106 pages.
- 3-B4. *Regression modeling of ground-water flow*, by R.L. Cooley and R.L. Naff: USGS-TWRI Book 3, Chapter B4. 1990. 232 pages.
- 3-B4. *Supplement I. Regression modeling of ground-water flow --Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems*, by R.L. Cooley: USGS-TWRI Book 3, Chapter B4. 1993. 8 pages.
- 3-B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems—An introduction*, by O.L. Franke, T.E. Reilly, and G.D. Bennett: USGS-TWRI Book 3, Chapter B5. 1987. 15 pages.
- 3-B6. *The principle of superposition and its application in ground-water hydraulics*, by T.E. Reilly, O.L. Franke, and G.D. Bennett: USGS-TWRI Book 3, Chapter B6. 1987. 28 pages.
- 3-B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow*, by E.J. Wexler: USGS-TWRI Book 3, Chapter B7. 1992. 190 pages.

Section C. Sedimentation and Erosion Techniques

- 3-C1. *Fluvial sediment concepts*, by H.P. Guy: USGS-TWRI Book 3, Chapter C1. 1970. 55 pages.
- 3-C2. *Field methods for measurement of fluvial sediment*, by H.P. Guy and V.W. Norman: USGS-TWRI Book 3, Chapter C2. 1970. 59 pages.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS-TWRI Book 3, Chapter C3. 1972. 66 pages.

Book 4. Hydrologic Analysis and Interpretation**Section A. Statistical Analysis**

- 4-A1. *Some statistical tools in hydrology*, by H.C. Riggs: USGS-TWRI Book 4, Chapter A1. 1968. 39 pages.
- 4-A2. *Frequency curves*, by H.C. Riggs: USGS-TWRI Book 4, Chapter A2. 1968. 15 pages.

Section B. Surface Water

- 4-B1. *Low-flow investigations*, by H.C. Riggs: USGS-TWRI Book 4, Chapter B1. 1972. 18 pages.
- 4-B2. *Storage analyses for water supply*, by H.C. Riggs and C.H. Hardison: USGS-TWRI Book 4, Chapter B2. 1973. 20 pages.
- 4-B3. *Regional analyses of streamflow characteristics*, by H.C. Riggs: USGS-TWRI Book 4, Chapter B3. 1973. 15 pages.

Section D. Interrelated Phases of the Hydrologic Cycle

- 4-D1. *Computation of rate and volume of stream depletion by wells*, by C.T. Jenkins: USGS-TWRI Book 4, Chapter D1. 1970. 17 pages.

Book 5. Laboratory Analysis**Section A. Water Analysis**

- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M.J. Fishman and L.C. Friedman, editors: USGS-TWRI Book 5, Chapter A1. 1989. 545 pages.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P.R. Barnett and E.C. Mallory, Jr.: USGS-TWRI Book 5, Chapter A2. 1971. 31 pages.
- 5-A3. *Methods for the determination of organic substances in water and fluvial sediments*, edited by R.L. Wershaw, M.J. Fishman, R.R. Grabbe, and L.E. Lowe: USGS-TWRI Book 5, Chapter A3. 1987. 80 pages.
- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by L.J. Britton and P.E. Greeson, editors: USGS-TWRI Book 5, Chapter A4. 1989. 363 pages.
- 5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS-TWRI Book 5, Chapter A5. 1977. 95 pages.
- 5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments*, by L.C. Friedman and D.E. Erdmann: USGS-TWRI Book 5, Chapter A6. 1982. 181 pages.

Section C. Sediment Analysis

- 5-C1. *Laboratory theory and methods for sediment analysis*, by H.P. Guy: USGS-TWRI Book 5, Chapter C1. 1969. 58 pages.

Book 6. Modeling Techniques**Section A. Ground Water**

- 6-A1. *A modular three-dimensional finite-difference ground-water flow model*, by M.G. McDonald and A.W. Harbaugh: USGS-TWRI Book 6, Chapter A1. 1988. 586 pages.
- 6-A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model*, by S.A. Leake and D.E. Prudic: USGS-TWRI Book 6, Chapter A2. 1991. 68 pages.
- 6-A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual*, by L.J. Torak: USGS-TWRI Book 6, Chapter A3. 1993. 136 pages.
- 6-A4. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions*, by R.L. Cooley: USGS-TWRI Book 6, Chapter A4. 1992. 108 pages.

- 6-A5. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 3: Design philosophy and programming details*, by L.J. Torak: USGS-TWRI Book 6, Chapter A5, 1993. 243 pages.
- 6-A6. *A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction*, by Eric D. Swain and Eliezer J. Wexler. 1996. 125 pages.

Book 7. Automated Data Processing and Computations

Section C. Computer Programs

- 7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P.C. Trescott, G.F. Pinder, and S.P. Larson: USGS-TWRI Book 7, Chapter C1. 1976. 116 pages.
- 7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L.F. Konikow and J.D. Bredehoeft: USGS-TWRI Book 7, Chapter C2. 1978. 90 pages.
- 7-C3. *A model for simulation of flow in singular and interconnected channels*, by R.W. Schaffranek, R.A. Baltzer, and D.E. Goldberg: USGS-TWRI Book 7, Chapter C3. 1981. 110 pages.

Book 8. Instrumentation

Section A. Instruments for Measurement of Water Level

- 8-A1. *Methods of measuring water levels in deep wells*, by M.S. Garber and F.C. Koopman: USGS-TWRI Book 8, Chapter A1. 1968. 23 pages.
- 8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J.D. Craig: USGS-TWRI Book 8, Chapter A2. 1983. 57 pages.

Section B. Instruments for Measurement of Discharge

- 8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G.F. Smoot and C.E. Novak: USGS-TWRI Book 8, Chapter B2. 1968. 15 pages.

Book 9. Handbooks for Water-Resources Investigations

Section A. National Field Manual for the Collection of Water-Quality Data

- 9-A1. *National Field Manual for the Collection of Water-Quality Data: Preparations for Water Sampling*, by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS-TWRI book 9, chap. A1. 1998. 47 p.
- 9-A2. *National Field Manual for the Collection of Water-Quality Data: Selection of Equipment for Water Sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS-TWRI book 9, chap. A2. 1998. 94 p.
- 9-A3. *National Field Manual for the Collection of Water-Quality Data: Cleaning of Equipment for Water Sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS-TWRI book 9, chap. A3. 1998. 75 p.
- 9-A4. *National Field Manual for the Collection of Water-Quality Data: Collection of Water Samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS-TWRI book 9, chap. A4. 1999. 156 p.
- 9-A5. *National Field Manual for the Collection of Water-Quality Data: Processing of Water Samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS-TWRI book 9, chap. A5. 1999. 149 p.
- 9-A6. *National Field Manual for the Collection of Water-Quality Data: Field Measurements*, edited by F.D. Wilde and D.B. Radtke: USGS-TWRI Book 9, Chapter A6. 1998. Variously paginated.
- 9-A7. *National Field Manual for the Collection of Water-Quality Data: Biological Indicators*, by D.N. Myers and F.D. Wilde: USGS-TWRI Book 9, Chapter A7. 1997. 49 pages.
- 9-A8. *National Field Manual for the Collection of Water-Quality Data: Bottom-material samples*, by D.B. Radtke: USGS-TWRI Book 9, Chapter A8. 1998. 48 pages.
- 9-A9. *National Field Manual for the Collection of Water-Quality Data: Safety in Field Activities*, by S.L. Lane and R.G. Fay: USGS-TWRI Book 9, Chapter A9. 1998. 60 pages.

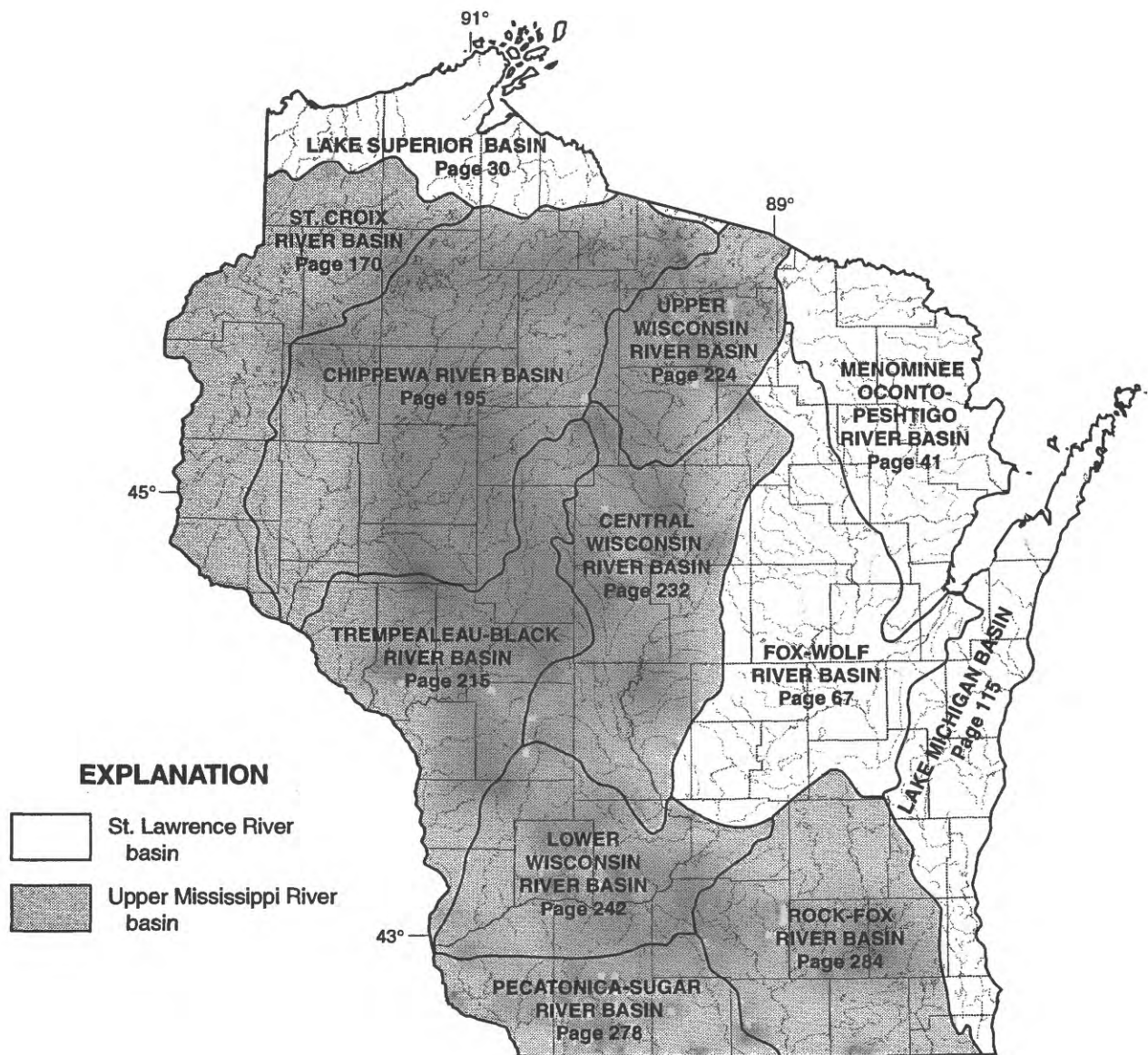
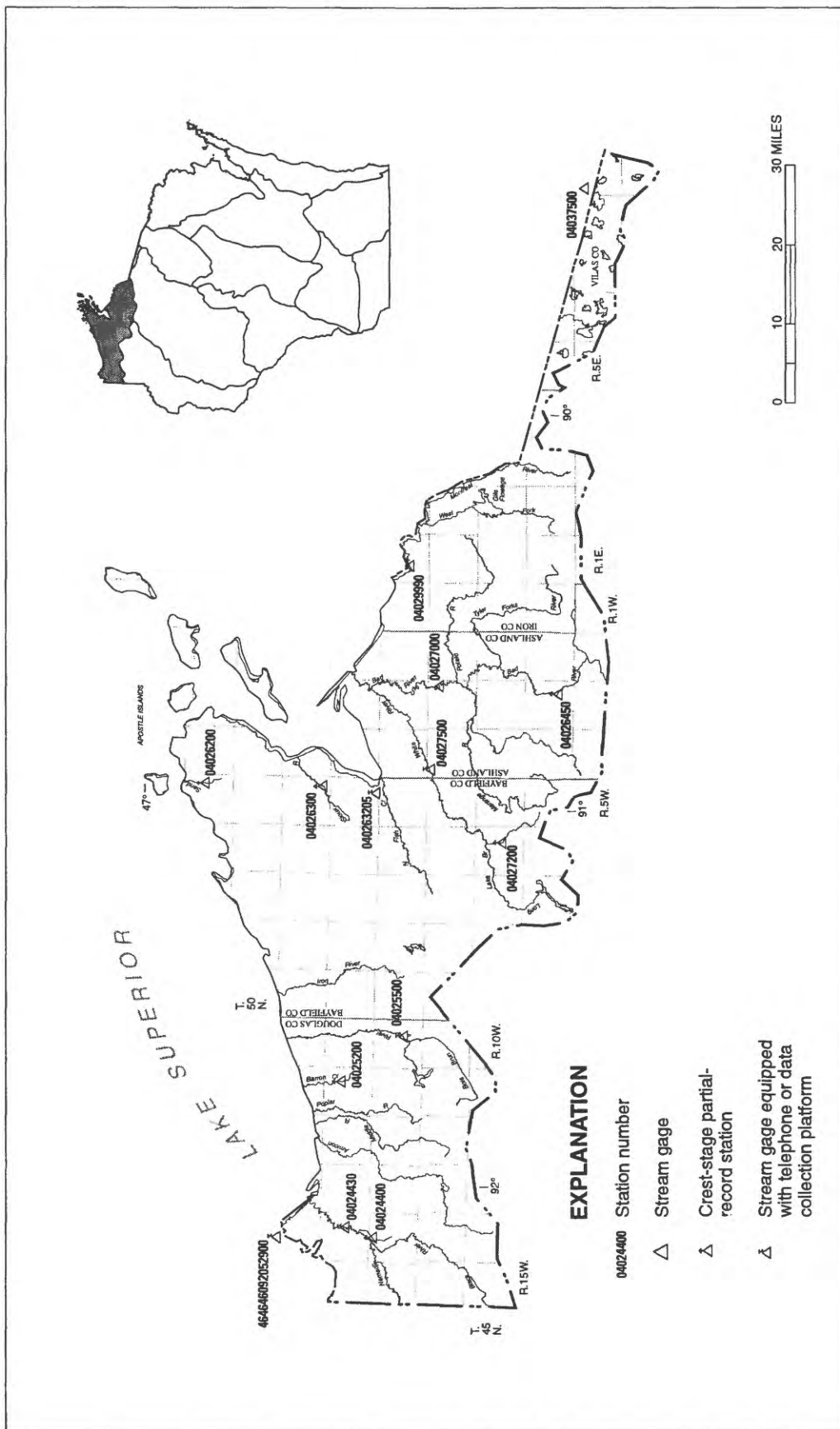


Figure 4. Major surface-water drainage basins and index of hydrologic records.

ST. LAWRENCE RIVER BASIN RECORDS



LAKE SUPERIOR BASIN

464646092052900 SUPERIOR BAY DULUTH SHIP CANAL AT DULUTH, MN

LOCATION.--Lat 46°46'46", long 92°05'29", in SE ¼ SE ¼ sec.27, T.50 N., R.14 W., St. Louis County, Hydrologic Unit 04020300, on left bank about 200 ft downstream from lift bridge on Lake Avenue at Canal Park marine museum in Duluth, MN.

DRAINAGE AREA.--4,200 mi², approximately, equals total drainage area to Superior Bay.

PERIOD OF RECORD.--October 1994 to current year (fragmentary).

REVISED RECORDS.--WRD WI-96-1: Drainage area.

GAGE.--Acoustical Velocity Meter (AVM) system. Two-path transducer installation.

REMARKS.--Records fair (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2270	-205	398	651	1680	2750	416	-216	1200	2820	1090	1770
2	1820	-604	1400	888	904	1820	1630	1480	1040	172	-44	865
3	4190	2030	1470	735	2340	918	-3640	1060	492	702	-1770	1280
4	3470	1890	218	2210	2860	694	-1330	1510	1960	1270	72	572
5	1080	101	-576	867	1040	539	1040	933	710	-33	490	-334
6	2510	737	1210	1440	1080	900	-835	1180	757	-100	1020	78
7	2570	1580	1460	747	2010	1730	2810	-9.4	705	735	1860	309
8	2180	2010	1320	1010	1470	1430	1110	2900	-480	1070	-800	29
9	2840	696	1270	907	128	4710	-852	1920	1320	264	-921	422
10	1560	1920	194	1780	1840	2920	1400	2660	16	822	318	167
11	1690	1590	927	1810	583	1310	1270	4850	944	1380	-188	246
12	1690	1340	1460	1000	222	2400	698	2790	1530	1640	-1140	300
13	2180	1170	643	1450	-306	1410	2000	488	456	1230	598	256
14	1880	-287	1320	699	537	1230	1260	-122	948	-297	566	-1400
15	2660	1050	-3500	1730	849	2720	1400	3310	-300	1900	619	-15
16	996	624	-867	314	412	1550	2590	2810	-804	713	367	394
17	1170	1130	1730	723	739	1050	1700	2080	1310	-557	310	539
18	1650	1280	274	1370	1050	1350	762	2780	1550	1900	547	-196
19	894	1810	570	1580	1190	1020	596	1580	1070	796	-448	-430
20	1330	1080	2300	1270	482	1100	2090	1760	2570	-1230	-332	854
21	-674	1770	1420	90	682	1070	503	2330	2300	1380	1580	1040
22	-4890	702	1300	1660	1440	1730	1420	882	1170	-429	460	2170
23	-422	2010	1180	1920	313	1450	1730	-957	2760	645	-330	-1670
24	1920	378	1530	925	738	1730	1010	-1240	1570	2720	-12	-1010
25	-27	1260	2830	1510	226	-3340	706	-821	2020	3130	1920	1700
26	472	1530	1160	870	2450	862	616	994	1280	380	-1140	458
27	2240	-621	2790	1180	2520	-3480	599	752	779	-326	-2480	827
28	1210	-244	215	593	897	1590	119	957	1600	-1510	-465	332
29	2180	-355	1150	440	2570	1900	1300	552	2380	-2450	83	245
30	2780	1640	1240	1650	---	1030	1250	796	2150	-233	-406	413
31	1760	---	444	2360	---	168	---	396	---	781	-1110	---
TOTAL	47179	29012	28480	36379	32946	38261	25368	40384.6	35003	19285	314	10211
MEAN	1522	967	919	1174	1136	1234	846	1303	1167	622	10.1	340
MAX	4190	2030	2830	2360	2860	4710	2810	4850	2760	3130	1920	2170
MIN	-4890	-621	-3500	90	-306	-3480	-3640	-1240	-804	-2450	-2480	-1670

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2000, BY WATER YEAR (WY)

	1995	1996	1997	1998	1999	2000
MEAN	1024	884	984	1069	1022	1053
MAX	1933	1317	1205	1993	1786	1580
(WY)	1996	1997	1997	1996	1996	1996
MIN	110	638	895	242	547	726
(WY)	1997	1995	1999	1998	1998	2000

SUMMARY STATISTICS

FOR 2000 WATER YEAR

WATER YEARS 1995 - 2000

ANNUAL TOTAL	342822.6	
ANNUAL MEAN	937	1206
HIGHEST ANNUAL MEAN		1476
LOWEST ANNUAL MEAN		937
HIGHEST DAILY MEAN	4850	May 11
LOWEST DAILY MEAN	-4890	Oct 22
ANNUAL SEVEN-DAY MINIMUM	-591	Jul 28
10 PERCENT EXCEEDS	2310	2570
50 PERCENT EXCEEDS	1020	908
90 PERCENT EXCEEDS	-424	-478

STREAMS TRIBUTARY TO LAKE SUPERIOR

04024430 NEMADJI RIVER NEAR SOUTH SUPERIOR, WI

LOCATION.--Lat 46°38'00", long 92°05'38", in SW ¼ sec.14, T.48 N., R.14 W., Douglas County, Hydrologic Unit 04010301, on right bank at downstream side of bridge on County Trunk Highway C, 2.0 mi south of South Superior and 7.8 mi downstream from Black River.

DRAINAGE AREA.--420 mi².

PERIOD OF RECORD.--December 1973 to current year.

REVISED RECORDS.--WDR WI-75-1: 1974(M). WDR WI-82-1: Drainage area and 1981.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 601.13 ft above sea level.

REMARKS.--Records good except those for Mar. 9, 10, Mar. 24 to Apr. 8, Apr. 14 to June 15, and June 18 to July 20, which are fair, and those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

EXTREMES OUTSIDE THE PERIOD OF RECORD.--A flood of Aug. 17, 1972, may have exceeded floods at this location since then.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	182	685	e180	e86	e56	e1300	390	249	137	142	76	64
2	166	503	e190	e84	e56	e800	376	251	135	129	82	64
3	155	404	e200	e80	e56	e600	419	241	132	117	87	64
4	146	339	e200	e78	e56	e580	466	223	127	108	81	65
5	143	297	e180	e76	e56	e560	402	215	123	102	74	64
6	137	267	e170	e70	e58	e540	402	212	118	98	69	62
7	136	241	e160	e66	e58	e540	429	195	111	97	67	61
8	163	229	e160	e66	e56	e900	359	339	110	104	65	60
9	226	218	e170	e66	e54	3510	e310	900	103	302	80	64
10	201	207	e160	e70	e58	2830	e290	597	98	380	80	69
11	175	193	e150	e72	e56	e1500	e280	495	98	221	71	71
12	162	181	e150	e66	e56	e1100	e270	513	94	238	66	69
13	153	181	e140	e60	e60	e800	e270	433	91	427	64	62
14	146	176	e130	e62	e64	e700	267	354	91	275	67	59
15	145	169	e140	e62	e68	e560	263	290	98	189	379	56
16	150	162	e100	e62	e68	e450	256	273	1040	146	391	54
17	152	156	e90	e58	e66	e400	250	285	1110	138	235	52
18	148	154	e100	e56	e68	e420	244	256	592	112	190	51
19	144	150	e110	e54	e70	e430	262	226	507	97	159	50
20	143	151	e110	e50	e72	e640	270	200	485	94	129	49
21	141	155	e90	e48	e76	e660	310	185	888	91	111	49
22	136	152	e70	e45	e80	e780	380	192	617	86	104	49
23	134	161	e64	e48	e86	e880	405	217	520	80	98	50
24	127	e190	e66	e47	e92	792	374	202	402	76	90	51
25	124	e220	e70	e48	e110	1030	344	178	319	72	83	51
26	122	257	e76	e50	e450	847	329	159	272	75	78	63
27	121	307	e80	e50	e1800	707	311	149	263	85	73	61
28	118	e260	e82	e50	e1400	591	285	150	215	86	71	55
29	117	e190	e86	e50	e1000	513	275	169	182	81	69	51
30	1340	e180	e92	e52	---	455	260	157	159	75	66	50
31	1400	---	e90	e54	---	411	---	148	---	72	64	---
TOTAL	7053	7135	3856	1886	6306	26826	9748	8653	9237	4395	3419	1740
MEAN	228	238	124	60.8	217	865	325	279	308	142	110	58.0
MAX	1400	685	200	86	1800	3510	466	900	1110	427	391	71
MIN	117	150	64	45	54	400	244	148	91	72	64	49
CFSM	.54	.57	.30	.14	.52	2.06	.77	.66	.73	.34	.26	.14
IN.	.62	.63	.34	.17	.56	2.38	.86	.77	.82	.39	.30	.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2000, BY WATER YEAR (WY)

	MEAN	327	316	143	83.1	106	479	1343	589	482	371	219	343
MAX	1082	1200	418	177	336	1088	2426	1355	1357	1145	1047	1485	
(WY)	1983	1992	1992	1984	1984	1995	1986	1979	1993	1999	1999	1986	
MIN	41.0	33.9	28.2	27.3	29.8	102	244	119	82.9	46.6	40.6	34.4	
(WY)	1977	1977	1977	1977	1977	1980	1987	1998	1988	1988	1976	1976	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1974 - 2000

ANNUAL TOTAL	182108	90254		
ANNUAL MEAN	499	247		400
HIGHEST ANNUAL MEAN				786
LOWEST ANNUAL MEAN				200
HIGHEST DAILY MEAN	5740	Jul 26	3510	Mar 9
LOWEST DAILY MEAN	(a) 64	Dec 23	(a) 45	Jan 22
ANNUAL SEVEN-DAY MINIMUM	(a) 72	Jan 8	(a) 48	Jan 20
INSTANTANEOUS PEAK FLOW			3920	Mar 9
INSTANTANEOUS PEAK STAGE			17.92	Mar 9
ANNUAL RUNOFF (CFSM)	1.19		.59	
ANNUAL RUNOFF (INCHES)	16.13		7.99	
10 PERCENT EXCEEDS	1110		540	981
50 PERCENT EXCEEDS	230		144	150
90 PERCENT EXCEEDS	90		56	58

(a) Ice affected

(b) From rating curve extended above 9,000 ft³/s

(e) Estimated due to ice effect or missing record

04025500 BOIS BRULE RIVER AT BRULE, WI

LOCATION.--Lat 46°32'16", long 91°35'43", in NW ¼ SW ¼ sec.23, T.47 N., R.10 W., Douglas County, Hydrologic Unit 04010301, on right bank, 1.4 mi southwest of Brule Post Office, 1.4 mi downstream from Nebagamon Creek, and 1.7 mi upstream from Little Bois Brule River.

DRAINAGE AREA.--118 mi².

PERIOD OF RECORD.--October 1942 to September 1981, January 1984 to current year. Prior to January 1943, monthly discharge published in WSP 1307. January 1984 to September 1994, incorrectly published as "near Brule."

REVISED RECORDS.--WSP 1337: 1943(M), 1944, 1945-50(M). WDR WI-92-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 948.49 ft above sea level. Prior to October 1964, nonrecording gage at same site and datum, supplemented by water-stage recorder part of 1959-62.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	172	181	153	135	e140	269	200	162	145	140	136	131
2	167	169	153	134	e140	222	197	161	149	139	147	130
3	164	162	154	134	e140	202	201	159	147	137	134	131
4	162	158	155	133	e140	198	200	156	145	135	129	129
5	160	155	156	e130	e140	197	197	155	143	134	128	126
6	159	153	153	e130	e130	200	198	154	140	134	129	126
7	162	152	151	e130	e130	211	192	153	138	141	128	126
8	169	151	149	e130	e130	238	188	186	137	155	131	125
9	167	152	148	e130	134	257	184	192	133	183	141	138
10	163	151	147	138	133	e230	180	184	132	178	134	144
11	160	151	146	135	e130	e210	179	184	132	159	128	136
12	157	151	145	e130	e130	e200	179	181	129	159	128	130
13	154	150	144	e130	e130	e190	177	173	130	159	129	126
14	156	149	144	e130	e130	e180	176	166	136	152	146	125
15	158	148	144	e130	e130	e180	176	159	150	143	185	124
16	159	148	e140	e140	e130	e170	173	161	199	139	192	124
17	158	151	e140	e140	e130	e170	172	162	196	136	197	123
18	157	147	e140	e140	e130	e170	174	156	192	134	188	122
19	158	148	e140	e140	e130	e180	172	152	180	134	172	122
20	158	148	e140	e130	140	186	177	149	183	133	157	132
21	156	147	e130	e130	139	194	184	148	183	132	148	123
22	153	149	e130	e130	140	209	182	157	182	130	144	123
23	150	154	e130	e130	141	223	181	165	174	128	140	126
24	149	163	e140	e130	143	236	177	159	166	128	135	125
25	149	165	e140	e130	157	247	174	152	158	131	133	123
26	148	171	e140	e130	190	239	172	145	163	170	132	122
27	148	173	e140	e130	195	236	169	143	157	165	131	122
28	147	168	e140	e130	196	227	169	158	151	151	130	122
29	147	161	e150	e130	253	216	168	153	147	140	130	124
30	181	155	e140	e130	---	207	164	150	142	134	128	119
31	186	---	137	e130	---	203	---	148	---	130	129	---
TOTAL	4934	4681	4459	4099	4221	6497	5432	4983	4659	4463	4439	3799
MEAN	159	156	144	132	146	210	181	161	155	144	143	127
MAX	186	181	156	140	253	269	201	192	199	183	197	144
MIN	147	147	130	130	130	170	164	143	129	128	128	119
CFSM	1.35	1.32	1.22	1.12	1.23	1.78	1.53	1.36	1.32	1.22	1.21	1.07
IN.	1.56	1.48	1.41	1.29	1.33	2.05	1.71	1.57	1.47	1.41	1.40	1.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2000, BY WATER YEAR (WY)

	MEAN	159	161	143	133	134	155	276	232	193	169	150	157
	MAX	259	295	205	164	187	265	399	495	416	345	289	297
	(WY)	1978	1972	1972	1984	1966	1945	1976	1950	1944	1952	1999	1951
	MIN	110	119	113	104	106	105	157	140	122	108	114	108
	(WY)	1949	1949	1948	1948	1948	1943	1959	1958	1948	1964	1948	1948

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1943 - 2000

ANNUAL TOTAL	70923	56666	
ANNUAL MEAN	194	155	172
HIGHEST ANNUAL MEAN			223
LOWEST ANNUAL MEAN			133
HIGHEST DAILY MEAN	633	269	1270
LOWEST DAILY MEAN	(a)110	119	74
ANNUAL SEVEN-DAY MINIMUM	(a)120	122	89
INSTANTANEOUS PEAK FLOW		(b)317	(c)1520
INSTANTANEOUS PEAK STAGE		(a)3.91	(d)5.20
INSTANTANEOUS LOW FLOW		118	67
ANNUAL RUNOFF (CFSM)	1.65	1.31	1.45
ANNUAL RUNOFF (INCHES)	22.36	17.86	19.76
10 PERCENT EXCEEDS	307	192	256
50 PERCENT EXCEEDS	162	149	147
90 PERCENT EXCEEDS	130	130	120

- (a) Ice affected
 (b) Gage height, 2.52 ft
 (c) From rating curve extended above 750 ft³/s
 (d) From graph based on gage readings
 (e) Estimated due to ice effect or missing record

STREAMS TRIBUTARY TO LAKE SUPERIOR

040263205 WHITTLESEY CREEK NEAR ASHLAND, WI

LOCATION.--Lat 46°35'40", long 90°57'47", in SE 1/4 NW 1/4 sec.35, T.48 N., R.5 W., Bayfield County, Hydrologic Unit 04010301, at Cherryville road, 3.7 mi west of courthouse in Ashland.

DRAINAGE AREA.--37.6 mi², of which 15.46 mi² is noncontributing.

PERIOD OF RECORD.--April 1999 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 615 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	e22	e18	e18	e18	28	21	e19	e19	e19	e18	19
2	20	e20	e18	e18	e18	22	20	e19	e20	e35	e17	19
3	19	e20	e18	e18	e18	22	21	e18	e19	e21	e17	19
4	19	e20	e18	e18	e18	23	20	e18	e19	e20	e17	19
5	19	e19	e18	e18	e18	22	20	e18	e19	e19	e17	19
6	20	e19	e18	e18	e18	23	22	e18	e19	e19	e17	19
7	20	e19	e18	e18	e18	24	20	e20	e19	e19	e17	18
8	20	e19	e18	e18	e18	27	19	e40	e19	e37	e18	18
9	20	e19	e18	e18	e18	e30	19	e30	e19	e30	e17	23
10	20	e19	e18	e18	e18	e28	19	e25	e19	e24	e17	20
11	19	e19	e18	e18	e18	26	19	e22	e19	e23	e18	19
12	19	e18	e18	e18	e18	20	19	e21	e19	e22	e19	18
13	19	e18	e18	e18	e18	20	19	e20	e19	e21	e18	18
14	20	e18	e18	e18	e18	19	19	e19	e19	e20	e24	18
15	20	e18	e18	e18	e18	19	19	e19	e20	e20	e31	18
16	20	e18	e18	e18	e17	19	19	e19	e26	e20	e25	18
17	20	e18	e18	e18	e16	19	19	e19	e22	e19	e19	18
18	20	e18	e18	e18	e17	19	19	e19	e21	e19	e18	18
19	20	e19	e18	e18	e17	19	e19	e19	e21	e19	e18	18
20	20	e18	e18	e18	e18	20	e19	e19	e21	e18	e18	18
21	20	e18	e18	e18	e18	24	e19	e19	e22	e18	e18	18
22	20	e19	e18	e18	e18	25	e19	e19	e21	e18	e18	18
23	19	e18	e18	e18	e18	23	e19	e19	e21	e18	e18	18
24	19	e23	e18	e18	e18	28	e18	e19	e20	e17	e18	18
25	19	e21	e18	e18	e34	32	e18	e19	e19	e17	e18	18
26	19	e20	e18	e18	e45	25	e18	e19	e21	e18	e18	18
27	19	e19	e18	e18	e35	35	e18	e19	e20	e19	e18	18
28	19	e19	e18	e18	e32	24	e19	e19	e19	e19	e18	18
29	19	e19	e18	e18	e47	22	e19	e19	e19	e19	18	18
30	21	e19	e18	e18	---	22	e19	e19	e18	e18	18	18
31	e24	---	e18	e18	---	21	---	e22	---	e18	19	---
TOTAL	612	573	558	558	620	730	577	633	598	643	579	554
MEAN	19.7	19.1	18.0	18.0	21.4	23.5	19.2	20.4	19.9	20.7	18.7	18.5
MAX	24	23	18	18	47	35	22	40	26	37	31	23
MIN	19	18	18	18	16	19	18	18	18	17	17	18
CFSM	.89	.86	.81	.81	.97	1.06	.87	.92	.90	.94	.84	.83
IN.	1.03	.96	.94	.94	1.04	1.23	.97	1.06	1.00	1.08	.97	.93

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2000, BY WATER YEAR (WY)

	1999	2000	1999	2000	1999	2000	1999	2000	1999	2000	1999	2000
MEAN	19.7	19.1	18.0	18.0	21.4	23.5	21.9	19.9	21.2	28.7	20.7	19.3
MAX	19.7	19.1	18.0	18.0	21.4	23.5	24.5	20.4	22.6	36.6	22.8	20.2
(WY)	2000	2000	2000	2000	2000	2000	1999	2000	1999	1999	1999	2000
MIN	19.7	19.1	18.0	18.0	21.4	23.5	19.2	19.4	19.9	20.7	18.7	18.5
(WY)	2000	2000	2000	2000	2000	2000	2000	1999	2000	2000	2000	2000

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1999 - 2000

ANNUAL TOTAL	7235		
ANNUAL MEAN	19.8	19.8	
HIGHEST ANNUAL MEAN		19.8	2000
LOWEST ANNUAL MEAN		19.8	2000
HIGHEST DAILY MEAN	286 Jul 5	286 Jul 5	1999
LOWEST DAILY MEAN	18 May 1	(e)16 Feb 17	2000
ANNUAL SEVEN-DAY MINIMUM	18 May 25	(e)17 Aug 1	2000
INSTANTANEOUS PEAK FLOW		(a)60 Feb 29	1999
INSTANTANEOUS PEAK STAGE		(a)1.95 Feb 29	1999
ANNUAL RUNOFF (CFSM)		.89	
ANNUAL RUNOFF (INCHES)		12.16	
10 PERCENT EXCEEDS	25	22	24
50 PERCENT EXCEEDS	20	19	19
90 PERCENT EXCEEDS	18	18	18

(a) May have been greater during periods of estimated record

(b) From inside gage; 7.18 ft from crest-stage gage

(e) Estimated due to ice effect or missing record

040263491 NORTH FISH CREEK NEAR MOQUAH, WI

LOCATION.--Lat 46°32'56", long 91°03'43", in SW ¼ SE ¼ sec.13, T.47 N., R.6 W., Bayfield County, Hydrologic Unit 04010301, on left bank just downstream from bridge on old U.S. Highway 2, and 1.3 mi southeast of Moquah.

DRAINAGE AREA.--65.4 mi².

PERIOD OF RECORD.--October 1989 to September 1991, October 1994 to September 1997, July to September 2000.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 660 ft above sea level, from topographic map.

REMARKS.--Records good (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	51	51	53
2	---	---	---	---	---	---	---	---	---	93	50	51
3	---	---	---	---	---	---	---	---	---	60	50	52
4	---	---	---	---	---	---	---	---	---	53	49	51
5	---	---	---	---	---	---	---	---	---	52	50	51
6	---	---	---	---	---	---	---	---	---	61	51	51
7	---	---	---	---	---	---	---	---	---	57	50	51
8	---	---	---	---	---	---	---	---	---	143	52	51
9	---	---	---	---	---	---	---	---	---	99	51	60
10	---	---	---	---	---	---	---	---	---	63	50	53
11	---	---	---	---	---	---	---	---	---	55	50	52
12	---	---	---	---	---	---	---	---	---	54	52	51
13	---	---	---	---	---	---	---	---	---	52	50	51
14	---	---	---	---	---	---	---	---	---	51	60	51
15	---	---	---	---	---	---	---	---	---	50	87	51
16	---	---	---	---	---	---	---	---	---	49	68	51
17	---	---	---	---	---	---	---	---	---	48	59	51
18	---	---	---	---	---	---	---	---	---	49	55	51
19	---	---	---	---	---	---	---	---	---	49	53	51
20	---	---	---	---	---	---	---	---	---	49	52	51
21	---	---	---	---	---	---	---	---	---	49	52	51
22	---	---	---	---	---	---	---	---	---	49	51	52
23	---	---	---	---	---	---	---	---	---	49	51	52
24	---	---	---	---	---	---	---	---	---	49	50	51
25	---	---	---	---	---	---	---	---	---	50	50	51
26	---	---	---	---	---	---	---	---	---	54	50	51
27	---	---	---	---	---	---	---	---	---	54	50	51
28	---	---	---	---	---	---	---	---	---	54	50	51
29	---	---	---	---	---	---	---	---	---	55	50	51
30	---	---	---	---	---	---	---	---	---	52	50	51
31	---	---	---	---	---	---	---	---	---	51	51	---
TOTAL	---	---	---	---	---	---	---	---	---	1804	1645	1547
MEAN	---	---	---	---	---	---	---	---	---	58.2	53.1	51.6
MAX	---	---	---	---	---	---	---	---	---	143	87	60
MIN	---	---	---	---	---	---	---	---	---	48	49	51
CFSM	---	---	---	---	---	---	---	---	---	.89	.81	.79
IN.	---	---	---	---	---	---	---	---	---	1.03	.94	.88

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2000, BY WATER YEAR (WY)

	MEAN	76.5	66.6	55.4	55.8	56.9	106	150	79.8	74.8	85.4	58.3	79.4
MAX	110	102	64.0	63.7	64.1	141	248	98.6	97.6	155	74.4	135	
(WY)	1991	1997	1997	1997	1997	1990	1996	1995	1991	1996	1990	1990	
MIN	50.7	53.1	50.8	53.5	51.9	63.8	87.8	59.6	56.8	51.2	52.1	51.6	
(WY)	1995	1995	1995	1991	1995	1996	1990	1990	1990	1995	1991	2000	

SUMMARY STATISTICS

FOR 2000 WATER YEAR
(JULY - SEPTEMBER)

WATER YEARS 1990 - 2000

ANNUAL MEAN										79.7		
HIGHEST ANNUAL MEAN										87.9		1996
LOWEST ANNUAL MEAN										67.5		1995
HIGHEST DAILY MEAN										1460		Apr 19 1996
LOWEST DAILY MEAN										(e)45		Jan 2 1995
ANNUAL SEVEN-DAY MINIMUM										(e)48		Dec 29 1994
INSTANTANEOUS PEAK FLOW										2310		Apr 19 1996
INSTANTANEOUS PEAK STAGE										14.21		Apr 19 1996
INSTANTANEOUS LOW FLOW										(a)35		Dec 19 1989
ANNUAL RUNOFF (CFSM)										1.22		
ANNUAL RUNOFF (INCHES)										16.56		
10 PERCENT EXCEEDS										104		
50 PERCENT EXCEEDS										59		
90 PERCENT EXCEEDS										51		

(a) Result of freezeup

(e) Estimated

STREAMS TRIBUTARY TO LAKE SUPERIOR

04027000 BAD RIVER NEAR ODANAH, WI

LOCATION.--Lat 46°29'15", long 90°41'45", in SE 1/4 sec.2, T.46 N., R.3 W., Ashland County, Hydrologic Unit 04010302, Bad River Indian Reservation, on left bank just downstream from Elm Hoist bridge, 5.0 mi downstream from Potato River, 8.5 mi south of Odanah, and 23 mi from mouth.

DRAINAGE AREA.--597 mi².

PERIOD OF RECORD.--July 1914 to December 1922 (monthly discharge for some periods published in WSP 1307) May 1948 to current year.

REVISED RECORDS.--WSP 1337: 1922. WDR WI-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 668.30 ft above sea level. May 17, 1948, to Nov. 6, 1959, and Oct. 19, 1960, to Nov. 23, 1961, water-stage recorder. Nov. 7, 1959, to Oct. 18, 1960, and Nov. 24, 1961, to July 12, 1962, nonrecording gage. Prior to Nov. 11, 1922, water-stage recorder at site 2 mi downstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

EXTREMES OUTSIDE THE PERIOD OF RECORD.--Flood of June 24, 1946, reached a stage of at least 22.2 ft, top of former downstream bridge submerged, information from Indian Service.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	201	296	322	e200	e130	e2700	1340	415	249	241	216	171
2	191	288	337	e190	e130	e2200	1250	418	262	338	242	166
3	188	267	322	e190	e140	2530	1110	391	271	450	212	168
4	182	249	297	e190	e140	1530	1040	369	248	350	196	185
5	180	238	e300	e180	e140	1310	923	334	229	278	182	185
6	180	230	e300	e170	e150	1310	862	311	213	240	183	172
7	182	226	e300	e180	e150	1410	840	293	205	212	179	162
8	196	235	e320	e190	e150	1590	731	612	208	1190	177	157
9	219	225	e280	e200	e150	1840	651	1070	202	5270	288	207
10	224	219	e250	e200	e140	e1400	e580	774	190	3840	588	197
11	217	212	e200	e200	e140	e1200	e520	626	188	2380	737	162
12	206	208	e230	e190	e120	e1100	e500	586	179	1470	1040	155
13	203	205	e220	e170	e130	e900	e480	532	171	953	1050	152
14	198	204	e200	e180	e140	e800	e500	471	168	687	523	150
15	204	202	e190	e180	e150	e700	e520	420	179	527	1450	145
16	219	200	e170	e170	e160	e640	e560	377	287	417	1110	138
17	226	196	e160	e160	e160	e600	e600	348	508	343	781	135
18	231	195	e170	e170	e160	e640	e640	330	436	287	619	130
19	240	194	e200	e160	e160	683	738	294	378	249	492	128
20	252	193	e220	e150	e160	587	841	270	436	227	385	125
21	263	193	e180	e140	e160	726	1120	252	879	211	316	126
22	260	198	e160	e140	e160	1190	1090	252	817	203	276	125
23	247	234	e160	e150	e160	1530	1000	285	751	186	248	128
24	234	351	e160	e140	e170	1580	858	279	619	171	220	132
25	222	389	e180	e130	e220	1740	732	259	497	157	200	132
26	220	394	e190	e130	e700	1590	640	240	442	190	193	146
27	214	420	e200	e130	e2600	2130	568	223	497	407	243	138
28	212	397	e190	e130	e2100	2060	507	237	404	365	237	127
29	210	e320	e200	e130	e2200	1680	463	275	332	315	210	120
30	221	e230	e210	e130	---	1400	427	266	280	272	189	116
31	276	---	e200	e130	---	1360	---	253	---	235	179	---
TOTAL	6718	7608	7018	5100	11370	42656	22631	12062	10725	22661	13161	4480
MEAN	217	254	226	165	392	1376	754	389	358	731	425	149
MAX	276	420	337	200	2600	2700	1340	1070	879	5270	1450	207
MIN	180	193	160	130	120	587	427	223	168	157	177	116
CFSM	.36	.42	.38	.28	.66	2.30	1.26	.65	.60	1.22	.71	.25
IN.	.42	.47	.44	.32	.71	2.66	1.41	.75	.67	1.41	.82	.28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2000, BY WATER YEAR (WY)

	MEAN	468	523	291	190	200	681	2163	1049	650	494	304	353
MAX	1861	2151	638	410	713	2494	4187	2752	2054	2311	1565	1775	
(WY)	1986	1992	1992	1992	1984	1973	1960	1950	1951	1949	1972	1977	
MIN	67.1	95.2	107	95.0	69.3	113	513	202	121	77.9	68.2	74.3	
(WY)	1949	1949	1977	1917	1964	1917	1987	1998	1948	1964	1948	1976	

04027000 BAD RIVER NEAR ODANAH, WI--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1914 - 2000	
ANNUAL TOTAL	222849		166190			
ANNUAL MEAN	611		454		616	
HIGHEST ANNUAL MEAN					942	
LOWEST ANNUAL MEAN					346	
HIGHEST DAILY MEAN	4970	Apr 6	5270	Jul 9	22000	Apr 24 1960
LOWEST DAILY MEAN	(a)160	Dec 17,22-24	116	Sep 30	52	(b)Oct 1 1948
ANNUAL SEVEN-DAY MINIMUM	(a)176	Dec 21	128	Sep 18	54	Feb 19 1964
INSTANTANEOUS PEAK FLOW			5540	Jul 9	(c)27700	Apr 24 1960
INSTANTANEOUS PEAK STAGE			9.79	Jul 9	(d)21.70	Apr 24 1960
INSTANTANEOUS LOW FLOW			113	Sep 30	(f)34	Nov 8 1976
ANNUAL RUNOFF (CFSM)	1.02		.76		1.03	
ANNUAL RUNOFF (INCHES)	13.89		10.36		14.02	
10 PERCENT EXCEEDS	1340		1090		1420	
50 PERCENT EXCEEDS	317		234		273	
90 PERCENT EXCEEDS	193		149		120	

(a) Ice affected

(b) Also occurred Aug. 6, 7, 1964

(c) From rating curve extended above 12,000 ft³/s and a comparison with contracted-opening measurement of peak flow 45,600 ft³/s at Odanah, drainage area, 990 mi²

(d) From floodmarks

(e) Estimated due to ice effect or missing record

(f) Result of freezeup

STREAMS TRIBUTARY TO LAKE SUPERIOR
04027500 WHITE RIVER NEAR ASHLAND, WI

LOCATION.--Lat 46°29'50", long 90°54'15", in NE $\frac{1}{4}$ sec.6, T.46 N., R.4 W., Ashland County, Hydrologic Unit 04010302, at downstream end of powerplant of Lake Superior District Power Co., 0.3 mi downstream from bridge on State Highway 112 over dam, and 4.5 mi south of Ashland city limits.

DRAINAGE AREA.--301 mi².

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

REVISED RECORDS.--WDR WI-82-1: Drainage area. WDR WI-92-1: 1952-53(M), 1960(M), 1967(M), 1972(M), and 1978(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 660.15 ft above sea level (Lake Superior District Power Co. bench mark). Prior to May 20, 1976, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Diurnal fluctuation caused by hydroelectric plant at gage. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	160	213	212	191	e180	480	257	199	188	183	204	171
2	157	203	209	194	190	408	250	198	187	225	179	170
3	154	193	208	193	189	336	242	194	193	198	185	173
4	152	185	207	187	194	284	241	191	187	192	182	179
5	151	183	208	175	189	268	242	189	171	190	178	178
6	153	185	207	122	190	278	240	188	179	188	178	174
7	153	185	203	153	189	273	242	187	176	185	178	169
8	159	184	204	171	188	298	242	435	175	190	178	164
9	167	185	203	177	188	308	216	495	173	226	203	185
10	166	194	190	197	188	278	217	519	170	225	238	221
11	168	183	189	194	189	243	208	475	167	214	213	212
12	164	183	202	178	175	234	181	332	171	201	185	190
13	162	183	179	131	156	202	215	252	170	188	177	181
14	160	184	200	166	187	207	210	230	170	182	192	170
15	159	185	178	176	188	193	231	212	186	182	381	164
16	168	187	172	196	188	195	215	189	218	181	445	165
17	173	183	102	177	187	188	215	190	237	176	496	166
18	173	180	121	169	185	242	220	192	223	174	449	168
19	170	181	178	178	184	191	233	184	202	169	367	176
20	171	181	199	172	e180	204	258	175	213	173	265	176
21	174	185	161	e160	e180	257	262	174	206	174	193	167
22	176	221	113	e140	e180	291	306	182	223	170	194	163
23	174	196	e130	e190	e150	303	277	200	217	168	195	167
24	174	254	e140	e170	e200	312	262	197	208	168	191	168
25	171	259	e150	e180	e210	406	211	189	201	168	176	169
26	168	259	e150	e180	821	389	213	180	200	203	172	169
27	168	274	e170	e180	668	360	217	175	201	257	182	167
28	168	257	182	e170	508	375	211	183	201	331	187	158
29	169	232	193	e180	515	332	203	217	193	308	187	156
30	176	207	196	e170	---	299	200	204	184	230	175	159
31	196	---	197	e170	---	255	---	191	---	225	167	---
TOTAL	5154	6084	5553	5347	7176	8889	6937	7318	5790	6244	7092	5195
MEAN	166	203	179	172	247	287	231	236	193	201	229	173
MAX	196	274	212	197	821	480	306	519	237	331	496	221
MIN	151	180	102	122	156	188	181	174	167	168	167	156
CFSM	.55	.67	.60	.57	.82	.95	.77	.78	.64	.67	.76	.58
IN.	.64	.75	.69	.66	.89	1.10	.86	.90	.72	.77	.88	.64

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2000, BY WATER YEAR (WY)

	MEAN	236	249	202	187	195	310	571	360	286	270	228	238
MAX	445	509	285	248	318	666	1062	867	707	697	744	635	
(WY)	1983	1992	1961	1952	1984	1973	1996	1950	1952	1953	1972	1960	
MIN	152	160	150	146	136	178	231	175	140	142	147	146	
(WY)	1949	1977	1964	1991	1968	1965	2000	1998	1948	1988	1948	1948	

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1948 - 2000

	ANNUAL TOTAL	99446	76779	
ANNUAL MEAN	272	210	278	
HIGHEST ANNUAL MEAN			426	1953
LOWEST ANNUAL MEAN			210	2000
HIGHEST DAILY MEAN	1380	Jul 5	821	Feb 26
LOWEST DAILY MEAN	102	Dec 17	102	Dec 17
ANNUAL SEVEN-DAY MINIMUM	143	Dec 17	143	Dec 17
INSTANTANEOUS PEAK FLOW			(a) 2000	Feb 26
INSTANTANEOUS PEAK STAGE			3.91	Feb 26
ANNUAL RUNOFF (CFSM)	.91		.70	
ANNUAL RUNOFF (INCHES)	12.29		9.49	
10 PERCENT EXCEEDS	499		273	464
50 PERCENT EXCEEDS	197		188	210
90 PERCENT EXCEEDS	161		166	160

(a) Result of regulation

(b) From rating curve extended above 3,000 ft³/s

(e) Estimated due to ice effect or missing record

ANNUAL TOTAL	100882		88280				
ANNUAL MEAN	276		241			315	
HIGHEST ANNUAL MEAN						487	1952
LOWEST ANNUAL MEAN						85.7	1971
HIGHEST DAILY MEAN	2380	Apr 8	1300	Mar 1	9880		Jul 3 1992
LOWEST DAILY MEAN	53	Oct 5	53	Oct 5		7.2	Oct 24 1948
ANNUAL SEVEN-DAY MINIMUM	61	Nov 15	61	Nov 15		7.7	Oct 29 1948
ANNUAL RUNOFF (CFSM)	1.05		.92			1.20	
ANNUAL RUNOFF (INCHES)	14.32		12.53			16.32	
10 PERCENT EXCEEDS	648		586			646	
50 PERCENT EXCEEDS	167		150			191	
90 PERCENT EXCEEDS	71		71			85	

STREAMS TRIBUTARY TO LAKE SUPERIOR

04037500 CISCO BRANCH ONTONAGON RIVER AT CISCO LAKE OUTLET, MI

LOCATION.--Lat 46°15'12", long 89°27'05", in NE $\frac{1}{4}$ sec.32, T.45 N., R.41 W., Gogebic County, Hydrologic Unit 04020102, on left bank 80 ft downstream from Cisco Lake Dam, 2.5 mi upstream from Langford Creek, 5.0 mi upstream from U.S. Highway 2, and 13 mi west of Watersmeet.

DRAINAGE AREA.--50.7 mi².

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

REVISED RECORDS.--WSP 1911: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,672.69 ft above sea level. Prior to Oct. 1, 1968, nonrecording gage at same site and at datum 4.00 ft higher.

REMARKS.--Records excellent except for discharges below 3.0 ft³/s, which are poor (see page 12). Flow regulated by Cisco Lake (station 04037400). Several measurements of water temperature were made during the year. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.79	39	79	35	33	80	36	19	.50	2.1	22	1.2
2	.70	36	51	36	33	79	37	2.6	.45	101	20	1.2
3	.65	36	11	46	33	78	37	1.7	.46	188	14	1.2
4	.58	37	3.5	56	33	76	38	1.1	.48	184	8.5	1.2
5	.52	35	3.5	56	33	75	18	1.0	.47	181	3.0	7.6
6	.52	34	3.8	55	33	41	2.5	.86	.49	175	2.8	19
7	24	35	4.0	55	25	2.0	2.1	.81	.53	147	2.5	18
8	57	34	12	53	18	.88	1.9	12	.59	164	2.7	8.0
9	67	33	19	52	17	20	1.5	23	6.7	185	9.9	1.1
10	64	32	19	26	18	67	1.6	37	12	181	16	.93
11	40	42	19	2.6	25	85	1.6	72	13	176	16	1.0
12	11	50	19	2.6	34	84	1.5	93	35	171	16	15
13	5.8	49	19	2.6	33	101	1.5	89	62	105	15	20
14	1.2	46	19	9.3	33	117	1.4	85	70	19	53	12
15	.93	46	29	18	34	117	1.6	42	68	4.8	73	12
16	.90	45	48	18	48	89	1.5	1.1	39	4.7	44	13
17	.90	45	58	26	57	35	1.7	.69	13	9.2	22	12
18	12	44	57	34	56	19	1.6	.53	13	22	12	13
19	34	43	56	33	54	19	1.5	.52	13	27	2.8	13
20	46	43	46	33	54	19	1.8	.47	44	27	2.6	12
21	45	43	27	33	35	29	1.9	.41	89	26	2.4	12
22	40	41	18	33	21	37	1.4	.42	111	25	2.2	28
23	41	54	18	33	22	49	1.2	.41	123	26	2.2	46
24	43	80	18	19	22	82	16	.37	75	21	2.2	45
25	42	92	18	3.3	21	101	35	.35	49	15	2.0	18
26	41	90	18	3.5	23	102	61	.37	49	15	1.8	.99
27	43	86	18	11	23	114	68	.39	43	7.8	1.7	.98
28	40	83	19	25	40	123	52	.42	38	3.3	1.4	.89
29	40	81	29	34	69	122	32	.44	22	3.3	1.3	.81
30	40	80	36	33	---	119	31	.44	2.9	3.3	1.2	.74
31	40	---	35	33	---	68	---	.45	---	10	1.2	---
TOTAL	823.49	1534	829.8	909.9	980	2149.88	490.8	487.85	994.57	2229.5	377.4	335.84
MEAN	26.6	51.1	26.8	29.4	33.8	69.4	16.4	15.7	33.2	71.9	12.2	11.2
MAX	67	92	79	56	69	123	68	93	123	188	73	46
MIN	.52	32	3.5	2.6	17	.88	1.2	.35	.45	2.1	1.2	.74
CFSM	.52	1.01	.53	.58	.67	1.37	.32	.31	.65	1.42	.24	.22
IN.	.60	1.13	.61	.67	.72	1.58	.36	.36	.73	1.64	.28	.25

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2000, BY WATER YEAR (WY)

	MEAN	68.1	67.1	47.7	39.2	34.9	44.1	60.3	46.4	44.9	33.0	25.5	37.1
MAX	151	116	84.1	62.6	81.0	92.1	117	160	123	113	99.7	104	104
(WY)	1986	1968	1961	1983	1945	1973	1997	1996	1953	1953	1978	1977	1977
MIN	13.1	14.5	23.5	23.1	20.6	24.1	2.02	.17	.11	.25	.15	.23	.23
(WY)	1958	1945	1990	1959	1950	1956	1948	1977	1977	1977	1970	1976	1976

SUMMARY STATISTICS

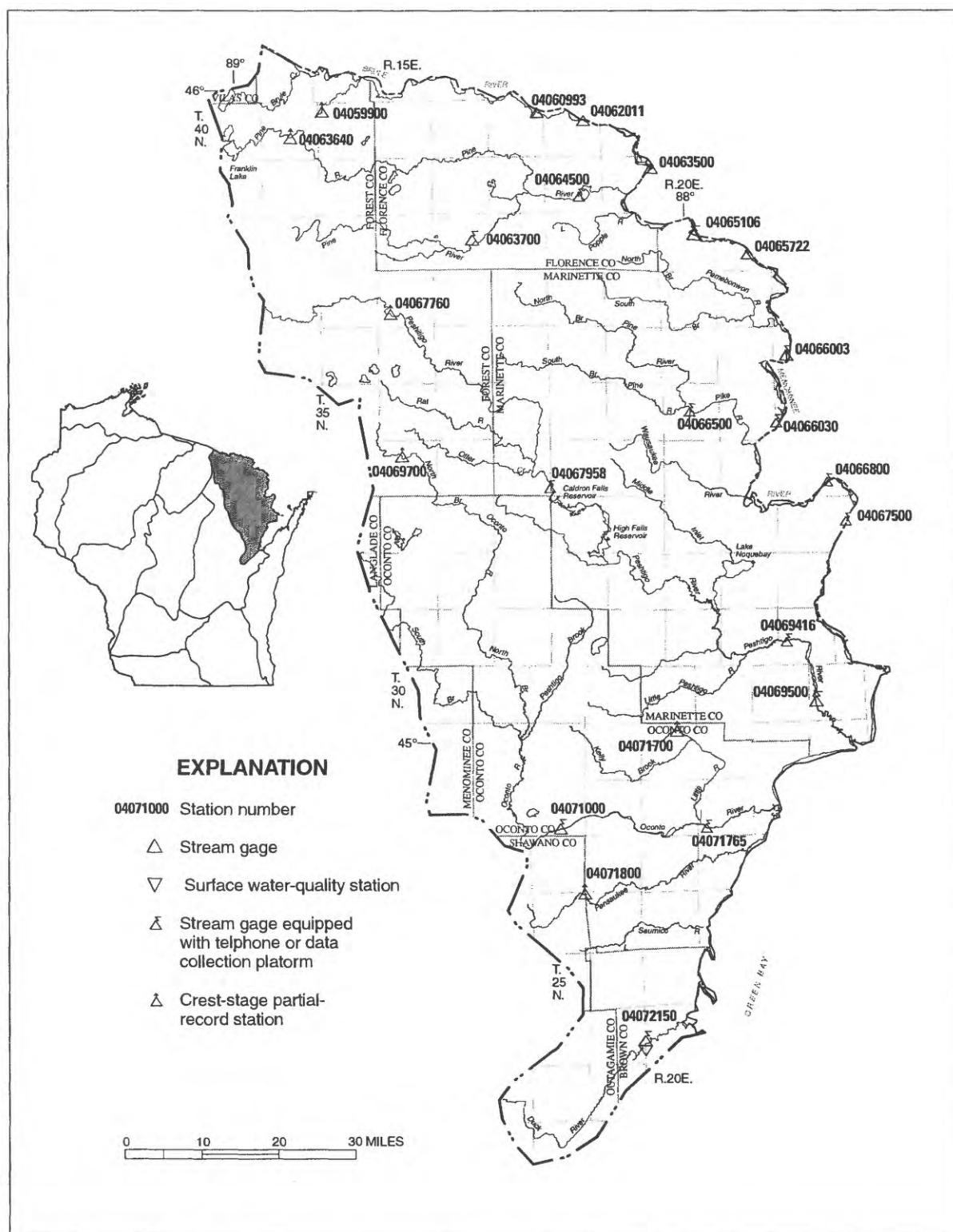
FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1945 - 2000

ANNUAL TOTAL	13352.83	12143.03	
ANNUAL MEAN	36.6	33.2	45.7
HIGHEST ANNUAL MEAN			65.9
LOWEST ANNUAL MEAN			25.2
HIGHEST DAILY MEAN	174	Jul 5	288
LOWEST DAILY MEAN	.30	May 3	.08
ANNUAL SEVEN-DAY MINIMUM	.34	Apr 29	.09
INSTANTANEOUS PEAK FLOW			288
INSTANTANEOUS PEAK STAGE			(a) 6.10
ANNUAL RUNOFF (CFSM)	.72		.90
ANNUAL RUNOFF (INCHES)	9.80		12.25
10 PERCENT EXCEEDS	87	80	103
50 PERCENT EXCEEDS	28	22	37
90 PERCENT EXCEEDS	.74	.90	.92

(a) Present datum



MENOMINEE-OCONTO-PESHTIGO BASIN

STREAMS TRIBUTARY TO LAKE MICHIGAN

04060993 BRULE RIVER NEAR FLORENCE, WI

LOCATION.--Lat 45°57'39", long 88°18'57", in NW ¼ SE ¼ sec.9, T.41 N., R.32 W., Michigan Meridian, Iron County, Hydrologic Unit 04030106, on left bank 30 ft upstream from bridge on U.S. Highway 2, 4.0 mi upstream from Paint River, 4.0 mi northwest of Florence, and 8.0 mi upstream from confluence with Michigamme River.

DRAINAGE AREA.--366 mi², approximately.

PERIOD OF RECORD.--January 1914 to February 1916, June 1944 to current year.

REVISED RECORDS.--WSP 1387: 1914-16. WDR MI-92-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,240 ft above sea level, from topographic map. Prior to Aug. 29, 1944, nonrecording gage, and Aug. 19, 1944 to Apr. 4, 1994, water-stage recorder at site 3.0 mi downstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Discharge includes some mine pumpage prior to August 1977. Several measurements of water temperature were made during the year. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	243	270	e240	e220	e170	e430	397	294	216	284	282	243
2	229	244	e240	e220	e180	e400	370	294	232	309	280	289
3	218	238	e240	e220	e180	e350	354	277	224	445	253	327
4	209	227	e240	e220	e190	e350	346	266	217	419	236	333
5	209	232	e240	e220	e190	362	330	263	211	348	224	270
6	203	222	e240	e220	e190	363	320	257	203	379	221	237
7	236	218	e230	e220	e200	408	310	247	196	372	224	224
8	323	218	e230	e220	e210	483	295	251	199	531	241	218
9	309	219	e230	e220	e210	626	287	254	246	721	407	211
10	276	219	e220	e220	e220	548	275	240	238	617	381	211
11	270	223	e220	e220	e220	474	275	248	232	465	300	276
12	244	217	e220	e220	e220	415	275	280	230	384	262	410
13	228	216	e260	e220	e230	364	279	287	206	343	243	354
14	230	213	227	e210	e230	342	289	267	212	310	230	282
15	267	210	230	e210	e230	333	302	254	211	284	240	273
16	277	209	210	e210	e230	309	312	241	216	262	255	253
17	280	210	154	e210	e240	314	309	234	211	268	234	230
18	259	210	e160	e210	e240	313	336	231	200	256	225	224
19	250	214	e160	e210	e240	295	367	227	210	231	222	218
20	246	216	e170	e210	e240	291	415	224	263	235	230	234
21	239	219	e180	e200	e240	295	467	224	544	240	218	237
22	244	220	e190	e200	e240	320	446	228	447	232	210	237
23	253	260	e190	e190	e250	376	402	231	345	225	205	241
24	246	e290	e200	e190	e260	439	359	225	364	222	199	242
25	233	e320	e200	e180	e270	559	332	224	782	214	189	229
26	227	e300	e200	e180	e300	543	313	214	665	249	193	223
27	236	e280	e200	e180	e430	684	306	210	540	488	204	216
28	219	e270	e200	e170	e440	703	296	209	408	581	199	207
29	217	e260	e210	e170	e440	589	295	215	364	520	192	200
30	235	e250	e210	e170	---	497	292	216	316	418	188	196
31	281	---	e210	e170	---	436	---	216	---	317	187	---
TOTAL	7636	7114	6551	6330	7130	13211	9951	7548	9148	11169	7374	7545
MEAN	246	237	211	204	246	426	332	243	305	360	238	252
MAX	323	320	260	220	440	703	467	294	782	721	407	410
MIN	203	209	154	170	170	291	275	209	196	214	187	196
CFSM	.67	.65	.58	.56	.67	1.16	.91	.67	.83	.98	.65	.69
IN.	.78	.72	.67	.64	.72	1.34	1.01	.77	.93	1.14	.75	.77

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2000, BY WATER YEAR (WY)

	MEAN	325	334	275	251	244	322	645	496	392	339	289	309
MAX	612	600	424	369	406	833	1235	1104	712	983	604	582	
(WY)	1986	1916	1986	1986	1984	1973	1967	1965	1981	1953	1972	1959	
MIN	179	202	175	156	163	178	235	242	194	185	186	182	
(WY)	1949	1990	1990	1995	1995	1965	1990	1998	1988	1989	1948	1948	

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1914 - 2000

ANNUAL TOTAL	118026	100707	
ANNUAL MEAN	323	275	350
HIGHEST ANNUAL MEAN			512
LOWEST ANNUAL MEAN			221
HIGHEST DAILY MEAN	3170	782	4420
LOWEST DAILY MEAN	154	154	130
ANNUAL SEVEN-DAY MINIMUM	172	172	140
INSTANTANEOUS PEAK FLOW		(a) 814	4700
INSTANTANEOUS PEAK STAGE		(b) 6.06	(c) 8.41
INSTANTANEOUS LOW FLOW		(d) 95	(d) 95
ANNUAL RUNOFF (CFSM)	.88	.75	.96
ANNUAL RUNOFF (INCHES)	12.00	10.24	13.00
10 PERCENT EXCEEDS	500	409	550
50 PERCENT EXCEEDS	246	240	289
90 PERCENT EXCEEDS	213	200	205

(a) Gage height, 4.72 ft

(b) Backwater from ice

(c) Present site and datum; peak stage at previous site and datum, 8.60 ft, Dec. 20, 1983, backwater from ice

(d) Result of freezeup

(e) Estimated due to ice effect or missing record

04062011 BRULE RIVER NEAR COMMONWEALTH, WI

LOCATION.--Lat 45°56'51" long 88°12'55", in NW ¼ sec.14, T.40 N., R.18 E., Wisconsin Meridian, Florence County, Hydrologic Unit 04030106, on right bank 900 ft downstream from Brule Island Dam, 1.5 mi upstream from confluence with Michigamme River, and 2.8 mi north of Commonwealth, WI.

DRAINAGE AREA.--1,020 mi².

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

REVISED RECORD.--WDR MI-91-1: 1990(M).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,130 ft above sea level, from topographic map.

REMARKS.--Records good (see page 12). Flow regulated by powerplant 900 ft upstream and by Lower Paint Dam 8.2 mi upstream. Records not adjusted for diversion to Michigamme River by Paint River Diversion Canal. Gage-height telemeter at station.

COOPERATION.--Gage-height record was provided by Wisconsin Electric Power Co., under general supervision of the Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	349	417	357	349	292	652	523	418	320	425	424	382
2	346	370	393	355	331	582	493	393	336	438	418	383
3	338	334	388	350	322	472	474	418	334	519	367	495
4	304	371	368	327	322	499	460	368	330	530	356	443
5	323	378	367	337	323	543	449	389	336	489	321	382
6	329	310	383	339	322	472	459	402	325	474	345	340
7	342	363	328	344	310	549	417	361	301	514	377	305
8	e462	360	344	348	326	594	432	338	315	706	354	308
9	459	327	369	337	321	774	398	380	373	923	565	349
10	385	361	371	358	320	711	399	373	445	700	486	340
11	395	344	257	335	321	594	397	343	265	618	404	432
12	359	382	387	341	326	532	408	441	353	524	421	513
13	367	331	402	311	324	461	390	416	331	455	335	461
14	333	330	343	343	321	502	413	374	338	406	369	401
15	390	338	374	369	308	461	430	373	331	420	395	342
16	424	346	328	341	342	427	458	364	348	400	353	354
17	380	323	235	279	318	404	451	354	327	348	361	384
18	404	336	224	347	304	436	445	341	318	395	357	323
19	369	332	292	343	348	435	509	312	311	368	330	323
20	369	349	406	325	344	419	568	370	404	361	350	326
21	368	352	282	322	e319	438	591	306	736	351	361	348
22	378	355	289	341	e307	443	557	359	579	349	330	347
23	353	397	318	317	363	523	499	364	453	343	358	387
24	389	539	304	295	371	550	521	339	430	340	317	361
25	343	495	304	335	405	665	432	330	920	344	319	311
26	348	428	345	331	480	662	432	320	869	386	317	331
27	352	428	313	304	670	806	452	320	633	575	280	360
28	360	386	315	312	554	846	411	317	520	776	311	310
29	339	399	330	328	564	688	394	311	495	659	e340	317
30	361	355	338	314	---	600	428	318	421	533	311	313
31	402	---	351	313	---	557	---	356	---	412	275	---
TOTAL	11420	11136	10405	10290	10478	17297	13690	11168	12797	15081	11207	10971
MEAN	368	371	336	332	361	558	456	360	427	486	362	366
MAX	462	539	406	369	670	846	591	441	920	923	565	513
MIN	304	310	224	279	292	404	390	306	265	340	275	305

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2000, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	417	399	344	331	339	439	937	851	478	464	362
MAX	712	571	416	424	410	634	2288	2757	730	887	467
(WY)	1991	1993	1992	1997	1997	1998	1996	1996	1996	1999	1997
MIN	276	307	270	259	270	359	322	355	334	272	285
(WY)	1990	1990	1990	1991	1991	1994	1990	1998	1992	1990	1998

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1990 - 2000

ANNUAL TOTAL	186777	145940	
ANNUAL MEAN	512	399	477
HIGHEST ANNUAL MEAN			810
LOWEST ANNUAL MEAN			325
HIGHEST DAILY MEAN	3390	Jul 15	7750
LOWEST DAILY MEAN	224	Dec 18	182
ANNUAL SEVEN-DAY MINIMUM	292	Dec 17	202
INSTANTANEOUS PEAK FLOW			8480
INSTANTANEOUS PEAK STAGE		8.54	May 10
10 PERCENT EXCEEDS	1010	535	651
50 PERCENT EXCEEDS	371	361	370
90 PERCENT EXCEEDS	314	313	281

(e) Estimated due to ice effect or missing record

STREAMS TRIBUTARY TO LAKE MICHIGAN

04063500 MENOMINEE RIVER AT TWIN FALLS NEAR IRON MOUNTAIN, MI

LOCATION.--Lat 45°52'17", long 88°04'12" in NE 1/4 SE 1/4 sec.12, T.40 N., R.31 W., Michigan Meridian, Dickinson County, Hydrologic Unit 04030108, on left bank 150 ft downstream from Wisconsin Electric Power Company powerhouse at Twin Falls Dam, 3.6 mi north of Iron Mountain, and at mile 106.6.

DRAINAGE AREA. --1,800 mi².

PERIOD OF RECORD.--January 1914 to current year. Published as "near Florence, WI" October 1957 to September 1989.

REVISED RECORDS.--WDR MI-91-1: 1990 (M). WDR MI-92-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,062 ft above sea level (levels by Wisconsin Electric Power Co.). Prior to September 1957, headwater and tailwater gages and generation data entered hourly in daily log sheets by company employees. October 1957 to September 1989, water-stage recorder at site 10.4 mi upstream at different datum. November 1989 to July 1993, water-stage recorder at site 150 ft upstream at same datum.

REMARKS.--Records good (see page 12). Prior to September 1957, discharge determined from powerplant records computed on basis of load-discharge rating of hydroelectric units and rating for tailwater gage during periods of spill; ratings developed by U.S. Geological Survey. Flow regulated by powerplants, by Michigamme Reservoir, capacity, 119,950 acre-ft, by Peavy Pond, capacity, 33,860 acre-ft, on Michigamme River, and by many smaller reservoirs upstream from station. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	883	1250	1090	966	1610	1560	1830	1650	1050	1110	1160	1450
2	791	1210	1060	799	1610	1550	1830	2130	1180	1360	1230	790
3	964	1410	1040	1240	1610	2090	2010	1840	836	1400	1300	689
4	781	1320	653	1320	1620	2580	2000	1930	936	1450	1220	954
5	872	1040	841	1340	1670	2580	1690	1800	1170	1660	837	1260
6	764	882	1160	1350	1670	2480	1770	1530	1030	2100	923	969
7	749	876	1360	1370	1620	2260	1800	842	1050	1960	1350	799
8	1300	1010	1470	1410	1650	1990	1320	1620	959	2130	1130	870
9	655	1060	1260	1410	1620	2120	1380	1870	878	2650	1580	729
10	868	1030	1340	1410	1620	2300	1350	1770	874	2760	1730	805
11	1030	1050	1080	1380	1620	2420	1520	1650	931	2370	1740	1270
12	984	924	1010	1410	1630	2560	1810	1500	962	2120	983	1230
13	1020	825	1280	1350	1640	2640	1820	802	1200	1720	1080	1390
14	860	820	1140	1400	1650	2630	1560	1020	1270	1810	1190	1340
15	845	1050	1270	1400	1640	2720	819	1600	1220	1400	1220	838
16	817	1080	1300	1410	1640	2620	742	1500	1420	851	1020	647
17	831	1140	1410	1410	1650	2550	1540	1470	885	1470	1030	650
18	1070	1150	901	1410	1640	2390	1830	1400	886	1530	1150	915
19	1070	1080	962	1410	1670	2400	1780	1270	1130	1490	875	956
20	904	881	1290	1510	1660	2410	2140	746	1440	1410	989	899
21	882	1100	1310	1680	1260	2110	2150	824	1550	1500	1160	921
22	891	1020	1290	1690	1030	1420	1840	1100	1710	919	1230	818
23	912	974	1220	1690	1060	1290	1850	1200	1560	914	1130	853
24	853	1080	1000	1740	1390	1140	2070	1340	1540	1460	852	888
25	1030	1210	1010	1810	1950	961	2070	1230	1380	1380	918	929
26	965	1230	991	1790	1920	843	1850	1270	2240	1330	916	765
27	992	1420	1180	1730	1790	958	1740	835	2440	1540	914	884
28	989	1150	1420	1620	1660	1130	1650	690	2040	2280	966	907
29	883	1040	1390	1640	1610	1190	1250	884	2170	2240	967	822
30	880	1070	1040	1620	---	1660	1430	1300	1770	1960	882	937
31	839	---	738	1620	---	1710	---	1250	---	1070	989	---
TOTAL	28174	32382	35506	45335	46410	61262	50441	41863	39707	51344	34661	28174
MEAN	909	1079	1145	1462	1600	1976	1681	1350	1324	1656	1118	939
MAX	1300	1420	1470	1810	1950	2720	2150	2130	2440	2760	1740	1450
MIN	655	820	653	799	1030	843	742	690	836	851	837	647

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2000, BY WATER YEAR (WY)

MEAN	1472	1599	1458	1406	1387	1610	3158	3042	2133	1612	1307	1403
MAX	3537	3465	2640	2253	2514	3544	8159	6319	5035	4309	2359	3149
(WY)	1986	1986	1984	1983	1984	1973	1916	1960	1916	1953	1972	1968
MIN	726	725	765	691	647	692	707	595	799	721	545	718
(WY)	1949	1964	1925	1924	1926	1914	1990	1987	1988	1925	1925	1925

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1914 - 2000
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ANNUAL TOTAL	606506		495259				
ANNUAL MEAN	1662		1353			1799	
HIGHEST ANNUAL MEAN						3069	1916
LOWEST ANNUAL MEAN						922	1925
HIGHEST DAILY MEAN	6110	May 10	2760	Jul 10		18100	Apr 26 1960
LOWEST DAILY MEAN	653	Dec 4	647	Sep 16		57	Sep 26 1975
ANNUAL SEVEN-DAY MINIMUM	829	Oct 1	829	Oct 1		277	Oct 18 1975
INSTANTANEOUS PEAK FLOW			4280	May 4		(a) 19500	Apr 26 1960
INSTANTANEOUS PEAK STAGE			8.93	May 4		(b) 12.54	Apr 27 1996
10 PERCENT EXCEEDS	2560		2000			3030	
50 PERCENT EXCEEDS	1400		1280			1470	
90 PERCENT EXCEEDS	925		844			855	

(a) Gage height 14.15 ft, site and datum then in use
(b) Present site and datum

LOCATION.--Lat 45°45'49", long 88°27'47", in NW ¼ NW ¼ sec.23, T.38 N., R.16 E., Florence County, Hydrologic Unit 04030108, on left bank 20 ft upstream from bridge on U. S. Forest Service Road 2159, 1.8 mi downstream from Mud Creek, 2.6 mi northwest of fence, and 11.5 mi upstream from mouth.

PERIOD OF RECORD.--October 1963 to current year.

REVISED RECORDS.--WDR WI-76-1: 1972 (M). WDR WI-80-1: Drainage area. WDR WI-81-1: 1965 (M).

GAGE.--Water-stage recorder. Datum of gage is 1,406.16 ft above sea level. Prior to June 18, 1964, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	54	e66	e38	e39	e170	158	129	36	142	71	70
2	41	54	68	e39	e38	e160	146	123	40	180	62	128
3	39	52	65	e38	e37	e150	138	116	40	264	55	157
4	38	50	61	e37	e37	e150	132	111	37	272	48	179
5	38	49	59	e36	e37	e150	125	102	36	236	43	172
6	38	49	e58	e35	e37	e160	121	93	33	209	41	150
7	42	48	e56	e36	e36	e190	117	89	32	187	40	134
8	62	46	e50	e37	e36	e220	109	111	34	180	46	119
9	77	46	48	e38	e38	e270	104	100	34	195	72	106
10	73	46	45	e38	e38	e250	95	87	32	193	72	97
11	69	46	40	e38	e37	e230	91	82	30	172	60	167
12	64	46	e42	e37	e35	e210	89	95	28	152	52	243
13	60	45	e41	e36	e36	e180	87	123	27	133	49	237
14	57	45	e41	e36	e37	e160	88	116	29	114	48	205
15	59	45	e40	e36	e37	e140	96	98	31	100	126	167
16	66	45	e40	e36	e37	e130	106	87	33	90	146	139
17	72	43	e38	e36	e36	e120	110	85	33	80	124	117
18	76	42	e36	e37	e37	e120	127	81	31	71	114	100
19	77	42	e36	e36	e38	e120	149	74	33	63	101	88
20	74	43	e36	e36	e37	e110	191	68	42	57	89	83
21	72	42	e36	e37	e38	e110	260	61	138	53	80	79
22	70	42	e35	e38	e39	119	288	61	173	48	74	76
23	66	57	e33	e38	e41	137	283	63	158	44	69	78
24	64	95	e32	e37	e43	155	265	60	143	45	61	80
25	62	105	e32	e37	e46	188	240	55	127	43	56	67
26	61	102	e34	e37	e74	194	210	48	155	50	52	58
27	58	97	e35	e36	e110	198	181	43	182	91	49	54
28	56	86	e35	e35	e120	199	160	43	165	120	45	53
29	54	e80	e36	e37	e150	202	147	42	180	116	42	50
30	53	e70	e37	e39	---	198	136	39	174	102	39	47
31	53	---	e38	e39	---	178	---	38	---	85	38	---
TOTAL	1833	1712	1349	1146	1401	5268	4549	2523	2266	3887	2064	3500
MEAN	59.1	57.1	43.5	37.0	48.3	170	152	81.4	75.5	125	66.6	117
MAX	77	105	68	39	150	270	288	129	182	272	146	243
MIN	38	42	32	35	35	110	87	38	27	43	38	47
CFSM	.43	.41	.31	.27	.35	1.22	1.09	.59	.54	.90	.48	.84
IN.	.49	.46	.36	.31	.37	1.41	1.22	.68	.61	1.04	.55	.94

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2000, BY WATER YEAR (WY)

MEAN	116	112	65.0	48.2	47.9	88.5	303	216	141	82.9	66.5	107
MAX	265	220	116	86.6	107	356	613	617	345	260	147	356
(WY)	1972	1986	1992	1969	1984	1973	1979	1965	1993	1999	1978	1980
MIN	25.0	30.9	23.9	24.6	26.0	30.5	54.6	52.0	21.2	17.5	23.1	16.4
(WY)	1990	1977	1990	1977	1982	1964	1990	1998	1988	1988	1989	1989

STREAMS TRIBUTARY TO LAKE MICHIGAN

04063700 POPPLE RIVER NEAR FENCE, WI--Continued
(HYDROLOGIC BENCHMARK STATION)

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1964 - 2000	
ANNUAL TOTAL	36243		31498			
ANNUAL MEAN	99.3		86.1		116	
HIGHEST ANNUAL MEAN					175	
LOWEST ANNUAL MEAN					64.3	
HIGHEST DAILY MEAN	556	Jul 11	288	Apr 22	1610	Apr 25 1979
LOWEST DAILY MEAN	(a)25	Jan 9-11	27	Jun 13	10	Aug 12 1989
ANNUAL SEVEN-DAY MINIMUM	(b)26	Jan 7	30	Jun 10	12	(b)Jul 3 1988
INSTANTANEOUS PEAK FLOW			(c)291	Apr 22	1640	Apr 25 1979
INSTANTANEOUS PEAK STAGE			(a)2.32	Mar 9	4.70	Apr 26 1996
INSTANTANEOUS LOW FLOW			26	Jun 13,14	(d)5.9	Oct 28 1976
ANNUAL RUNOFF (CFSM)	.71		.62		.84	
ANNUAL RUNOFF (INCHES)	9.70		8.43		11.36	
10 PERCENT EXCEEDS	252		178		252	
50 PERCENT EXCEEDS	57		62		71	
90 PERCENT EXCEEDS	33		36		33	

- (a) Ice affected
 (b) Also occurred Sept. 20, 1989
 (c) Gage height, 2.31 ft
 (d) Result of temporary storage from beaver dam
 (e) Estimated due to ice effect or missing record

04064500 PINE RIVER BELOW PINE RIVER POWERPLANT NEAR FLORENCE, WI

LOCATION.--Lat 45°50'16", long 88°13'31", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ (revised) sec.22, T.39 N., R.18 E., Florence County, Hydrologic Unit 04030108, on left bank 60 ft upstream from bridge on County Trunk Highway N, 1.9 mi downstream from powerplant of Wisconsin-Michigan Power Co., 6.0 mi south of Florence, and 7.0 mi downstream from Popple River.

DRAINAGE AREA.--533 mi².

PERIOD OF RECORD.--October 1923 to December 1975, October 1996 to current year.

REVISED RECORDS.--WRD WI-97-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,098.84 ft above mean sea level. Prior to October 1968, record obtained from Pine River Powerplant 1.9 mi upstream with a drainage area of 528 mi².

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Flow regulated by Pine River Powerplant 1.9 mi upstream; since storage capacity is small, monthly flows are not affected appreciably. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	194	243	261	e170	e160	e660	569	469	237	477	338	305
2	186	222	297	e170	e160	e620	529	442	240	497	363	381
3	177	224	326	e180	e170	e560	499	434	241	801	295	479
4	157	219	269	e170	e160	e580	470	396	231	816	249	514
5	167	197	261	e180	e160	e560	446	399	221	732	217	482
6	198	211	246	e190	e160	e600	436	343	197	665	220	428
7	181	212	160	e180	e170	e720	400	360	189	596	211	387
8	285	195	244	e190	e160	897	384	363	183	792	243	353
9	327	238	243	e190	e180	1030	375	391	186	853	404	315
10	331	204	244	e180	e170	879	335	349	176	786	391	300
11	279	201	190	e190	e160	803	348	325	185	703	313	513
12	251	198	203	e190	e160	752	326	416	171	599	280	726
13	246	197	e230	e190	e170	654	345	511	151	549	242	684
14	233	197	e210	e190	e160	585	330	478	200	461	261	592
15	243	207	e200	e200	e170	542	375	412	191	401	477	500
16	278	204	e190	e190	e150	425	430	380	191	345	566	428
17	312	206	e150	e180	e150	413	417	340	206	351	486	394
18	288	191	e160	e190	e160	463	474	331	179	310	410	318
19	288	176	e190	e190	e160	428	549	317	211	274	366	282
20	276	202	e210	e180	e160	398	669	286	257	270	328	305
21	272	211	e170	e170	e160	385	877	279	590	256	298	264
22	268	187	e170	e180	e180	431	910	291	693	238	285	270
23	256	256	e160	e180	e170	516	866	325	639	218	275	265
24	255	378	e150	e170	e200	607	800	280	543	219	248	250
25	234	435	e140	e170	e230	776	696	286	525	218	219	254
26	249	405	e150	e170	e340	796	651	264	668	268	218	227
27	223	370	e160	e180	e470	894	601	240	751	429	231	204
28	234	339	e150	e170	e500	879	541	229	672	528	199	255
29	236	318	e160	e160	e540	813	519	234	659	519	212	191
30	221	269	e180	e160	---	732	485	246	567	448	184	172
31	229	---	e180	e160	---	642	---	216	---	377	174	---
TOTAL	7574	7312	6254	5560	6040	20040	15652	10632	10350	14996	9203	11038
MEAN	244	244	202	179	208	646	522	343	345	484	297	368
MAX	331	435	326	200	540	1030	910	511	751	853	566	726
MIN	157	176	140	160	150	385	326	216	151	218	174	172
CFSM	.46	.46	.38	.34	.39	1.21	.98	.64	.65	.91	.56	.69
IN.	.53	.51	.44	.39	.42	1.40	1.09	.74	.72	1.05	.64	.77

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 2000, BY WATER YEAR (WY)

	MEAN	375	389	258	217	198	318	939	800	545	388	304	367
MAX	1017	694	431	473	351	1188	1882	2127	1424	1000	760	1115	
(WY)	1929	1946	1971	1939	1969	1973	1967	1965	1939	1999	1938	1928	
MIN	100	185	139	120	80.7	74.5	325	209	190	117	80.3	108	
(WY)	1949	1964	1964	1964	1964	1964	1931	1998	1948	1934	1933	1998	

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1924 - 2000

ANNUAL TOTAL	138359	124651	
ANNUAL MEAN	379	341	425
HIGHEST ANNUAL MEAN			658
LOWEST ANNUAL MEAN			210
HIGHEST DAILY MEAN	2510	1030	4380
LOWEST DAILY MEAN	(a)140	(a)140	.00
ANNUAL SEVEN-DAY MINIMUM	(a)153	(a)153	41
INSTANTANEOUS PEAK FLOW		(c)1170	
INSTANTANEOUS PEAK STAGE		(a)4.92	
ANNUAL RUNOFF (CFSM)	.71	.64	.80
ANNUAL RUNOFF (INCHES)	9.66	8.70	10.84
10 PERCENT EXCEEDS	794	645	878
50 PERCENT EXCEEDS	249	268	300
90 PERCENT EXCEEDS	170	170	150

- (a) Ice affected
 (b) No flow at times during 1924, 1926-27, 1930-31, 1933, 1940
 (c) Gage height, 4.60 ft
 (e) Estimated due to ice effect or missing record

STREAMS TRIBUTARY TO LAKE MICHIGAN

04065106 MENOMINEE RIVER AT NIAGARA, WI

LOCATION.--Lat 45°46'04", long 87°58'50", in NE ¼, NE ¼ sec.15, T.38 N., R.20 E., Marinette County, Hydrologic Unit 04030108, on right bank 0.7 mi downstream from Little Quinnesec Falls Dam, at Niagara.

DRAINAGE AREA.--2,470 mi².

PERIOD OF RECORD.--October 1992 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 880 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Flow regulated by powerplants, by Michigamme Reservoir, capacity, 119,950 acre-ft, by Peavy Pond, capacity, 33,860 acre-ft, on Michigamme River, and by smaller reservoirs upstream of gage. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1290	1540	1350	1100	e1800	2440	2520	2150	1480	1790	1520	1990
2	1170	1610	1400	e1100	e1800	2610	2520	2530	1420	1750	1690	1480
3	1140	1660	1380	e1500	e1800	2810	2490	2350	1290	2210	1730	1380
4	1120	1660	1160	e1500	e1700	3340	2460	2390	1120	2390	1690	1600
5	1110	1300	1180	e1500	e1800	3370	2260	2330	1470	2440	1240	1850
6	1110	1160	1450	e1500	e1700	3330	2250	1960	1340	2880	1260	1570
7	1020	1220	1610	e1500	e1800	3290	2300	1240	1270	2780	1540	1340
8	1520	1300	1640	e1600	e1800	3050	1810	2020	1190	2830	1440	1290
9	1260	1310	1580	e1600	e1700	3440	1740	2290	1180	3770	2160	1240
10	1270	1330	1630	e1600	e1800	3430	1810	2200	1100	3800	2180	1220
11	1400	1340	1300	e1600	e1800	3470	1900	2100	1120	3260	2220	1800
12	1370	1220	1260	e1600	e1800	3440	2180	1890	1250	2860	1410	2420
13	1330	1080	1530	e1600	e1800	3410	2260	1490	1390	2380	1380	2370
14	1210	1080	1590	e1500	e1700	3470	2150	1490	1520	2310	1590	2160
15	1220	1400	1530	e1400	e1800	3360	1240	2060	1500	2070	1800	1560
16	1210	1350	1610	e1500	e1900	3220	1300	1950	1710	1280	1650	1270
17	1210	1370	e1500	e1500	e1800	2880	1900	1880	1140	1890	1770	1220
18	1390	1420	1190	e1500	e1800	2920	2420	1850	1140	1870	1720	1240
19	1480	1380	1180	e1500	e1800	2930	2390	1640	1410	1790	1330	1310
20	1350	1120	e1500	e1600	e1800	2900	2920	1150	1740	1800	1340	1260
21	1250	1260	e1600	e1700	e1500	2670	3350	1140	2030	1800	1660	1210
22	1260	1350	e1500	e1700	e1300	2080	3030	1410	2500	1190	1600	1330
23	1250	1360	e1400	e1700	e1300	1800	2960	1610	2390	1240	1550	1190
24	1180	1450	e1200	e1800	e1500	2030	2880	1710	2200	1680	1280	1190
25	1360	1660	e1200	e1800	e2200	1830	3050	1660	1960	1740	1230	1210
26	1290	1820	e1200	e1800	e2300	1900	2550	1570	2930	1640	1250	1200
27	1290	1960	e1500	e1800	2590	2030	2360	1080	3340	2160	1280	1180
28	1340	1450	e1600	e1800	2360	2260	2320	1070	2890	3180	1270	1160
29	1270	1450	e1600	e1700	2390	2050	1950	1190	2930	2830	1210	1150
30	1180	1480	e1300	e1800	---	2500	1990	1590	2540	2700	1200	1210
31	1080	---	e1100	e1700	---	2540	---	1480	---	1620	1200	---
TOTAL	38930	42090	43770	49100	53140	86800	69260	54470	52490	69930	47390	43600
MEAN	1256	1403	1412	1584	1832	2800	2309	1757	1750	2256	1529	1453
MAX	1520	1960	1640	1800	2590	3470	3350	2530	3340	3800	2220	2420
MIN	1020	1080	1100	1100	1300	1800	1240	1070	1100	1190	1200	1150

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2000, BY WATER YEAR (WY)

	1744	1784	1768	1775	1934	2163	3388	3609	2528	2245	1659	1674
MEAN	1744	1784	1768	1775	1934	2163	3388	3609	2528	2245	1659	1674
MAX	2810	2531	2458	2258	2286	2800	6167	7555	4184	3547	2290	2225
(WY)	1996	1993	1993	1993	1997	2000	1996	1996	1993	1999	1996	1994
MIN	1256	1283	1263	1369	1391	1764	1953	1175	1587	1264	1080	1248
(WY)	2000	1995	1999	1995	1995	1994	1994	1998	1998	1998	1998	1998

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1993 - 2000
ANNUAL TOTAL	778430	650970	
ANNUAL MEAN	2133	1779	2189
HIGHEST ANNUAL MEAN			3135
LOWEST ANNUAL MEAN			1707
HIGHEST DAILY MEAN	7830	Jul 15	16000
LOWEST DAILY MEAN	1020	Oct 7	917
ANNUAL SEVEN-DAY MINIMUM	1140	Oct 1	951
INSTANTANEOUS PEAK FLOW		4480	16100
INSTANTANEOUS PEAK STAGE		8.71	15.11
10 PERCENT EXCEEDS	3690	2790	3440
50 PERCENT EXCEEDS	1700	1600	1880
90 PERCENT EXCEEDS	1240	1190	1220

(e) Estimated due to ice effect or missing record

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04065722 MENOMINEE RIVER NEAR VULCAN, MI

LOCATION.--Lat 45°44'12", long 87°51'48", sec.34, T.39 N., R.29 W., Michigan Meridian, Dickinson County, Hydrologic Unit 04030108, on left bank 0.35 mi downstream from Sturgeon Falls Dam, 3.0 mi south of Vulcan, and at mile 78.7.

DRAINAGE AREA.--2,900 mi².

PERIOD OF RECORD.--December 1987 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 820 ft above sea level, from topographic map.

REMARKS.--Records good (see page 12). Flow regulated by powerplants, by Michigamme Reservoir, capacity, 119,950 acre-ft, by Peavy Pond, capacity, 33,860 acre-ft, on Michigamme River, and by smaller reservoirs upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1470	e1800	1620	1210	e2000	3130	3340	2530	1590	2250	1630	2480
2	1340	e2000	1620	1280	e2000	3360	3220	2970	1570	1930	1800	2090
3	1280	e2100	1550	1600	e2070	3560	3200	2810	1440	2420	1860	1920
4	1260	e2100	1300	1720	1990	4290	3100	2740	1270	2730	1850	2020
5	1230	e1600	1350	1750	2030	4310	2910	2740	1610	2710	1360	2360
6	1220	e1400	1630	1740	1960	4380	2820	2240	1480	3030	1280	1900
7	1220	e1400	1770	1760	2100	4410	2890	1600	1430	3190	1620	1650
8	1660	e1500	1840	1800	2110	4320	2270	2200	1310	3010	1520	1500
9	1530	e1470	1790	1830	1900	4800	2200	2690	1280	4160	2280	1460
10	1560	1480	1780	1900	2080	4780	2180	2500	1220	4380	2490	1420
11	1700	1480	1460	1900	2050	4770	2360	2490	1290	3920	2580	1950
12	1670	1390	1370	1840	2070	4520	2650	2130	1400	e3100	1700	3550
13	1530	1220	1600	1850	2030	4400	2720	1860	1600	e2800	1530	3420
14	1470	1210	1780	e1720	1990	4430	2660	1860	1720	e2700	1740	3080
15	1420	1530	1720	e1700	2020	4130	1620	2500	1680	e2200	1940	2300
16	1340	1460	1770	e1700	2090	3960	1730	2320	1860	e1400	1800	1640
17	1440	1540	1690	e1700	2070	3500	2410	2240	1330	e2300	1860	1600
18	1700	1540	1380	e1700	1960	3550	2960	2200	1270	e2300	1880	1500
19	e1730	1540	1310	e1700	2020	3500	3070	1940	1560	e2300	1330	1600
20	e1500	1280	1650	e1800	2070	3460	3740	1320	2000	e2200	1400	1520
21	e1450	1370	1740	e2000	1710	3300	4310	1370	2450	e1700	1740	1440
22	e1450	1470	1700	e2100	1450	2720	4110	1630	3070	1360	1690	1470
23	e1450	1480	1580	e2100	1480	2470	3920	1800	2920	1270	1620	1370
24	e1450	1780	1400	e2200	1640	2790	3700	1990	2750	1760	1250	1390
25	e1600	2010	1260	e2200	2450	2580	3800	1910	2360	1800	1310	1420
26	e1600	2220	1250	e2200	2530	2830	3190	1840	3270	1810	1310	1350
27	e1600	2360	1620	e2100	2850	3020	2930	1230	3770	2180	1300	1400
28	e1600	1840	1710	e2000	2780	3420	2940	1240	3540	3310	1330	1270
29	e1500	1730	1790	e2000	2910	3080	2360	1330	3340	3000	1270	1280
30	e1400	1720	1540	e2000	---	3510	2360	1810	3120	3000	1260	1340
31	e1400	---	1160	e2000	---	3460	---	1650	---	1800	1210	---
TOTAL	45770	49020	48730	57100	60410	114740	87670	63680	60500	78020	50740	54690
MEAN	1476	1634	1572	1842	2083	3701	2922	2054	2017	2517	1637	1823
MAX	1730	2360	1840	2200	2910	4800	4310	2970	3770	4380	2580	3550
MIN	1220	1210	1160	1210	1450	2470	1620	1230	1220	1270	1210	1270

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2000, BY WATER YEAR (WY)

	1955	2253	2136	2017	2053	2573	4187	3779	2825	2283	1699	1866
MEAN	1955	2253	2136	2017	2053	2573	4187	3779	2825	2283	1699	1866
MAX	3401	4412	3008	2533	2548	3701	8159	8850	4832	4196	2598	2456
(WY)	1996	1989	1989	1993	1997	2000	1996	1996	1993	1999	1996	1994
MIN	1081	1382	1388	1489	1442	2028	1356	1344	1062	1100	1184	1223
(WY)	1990	1990	1999	1995	1995	1994	1990	1998	1988	1988	1998	1989

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1988 - 2000

	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1988 - 2000
ANNUAL TOTAL	922670	771070	
ANNUAL MEAN	2528	2107	2512
HIGHEST ANNUAL MEAN			3781
LOWEST ANNUAL MEAN			1864
HIGHEST DAILY MEAN	9290	May 10	21500
LOWEST DAILY MEAN	1160	Dec 31	846
ANNUAL SEVEN-DAY MINIMUM	1290	Oct 1	932
INSTANTANEOUS PEAK FLOW		5250	22000
INSTANTANEOUS PEAK STAGE		8.80	17.39
INSTANTANEOUS LOW FLOW		837	603
10 PERCENT EXCEEDS	4660	3340	4040
50 PERCENT EXCEEDS	1970	1820	2060
90 PERCENT EXCEEDS	1390	1330	1320

(e) Estimated due to ice effect or missing record

STREAMS TRIBUTARY TO LAKE MICHIGAN

04066003 MENOMINEE RIVER BELOW PEMENE CREEK NEAR PEMBINE, WI

LOCATION.--Lat 45°34'46", long 87°47'13", in NE $\frac{1}{4}$, sec.29, T. 37 N., R.28 W., Michigan Meridian, Menominee County, MI, Hydrologic Unit 04030108, on left bank 40 ft downstream from County Trunk Z bridge, 0.9 mi downstream from Pemene Creek, 3.9 mi west of Nathan, MI, 10.6 mi southeast of Pembine, and at mile 64.3.

DRAINAGE AREA.--3,140 mi².

PERIOD OF RECORD.--October 1949 to current year. Published as "near Pembine" (04066000) prior to August 1982. Monthly discharges for some periods published in WSP 1307.

GAGE.--Water-stage recorder. Elevation of gage is 740 ft above sea level, from topographic map. October 1949 to Oct. 27, 1972, water-stage recorder at site 1.0 mi upstream at elevation 745, from river-profile map, and Oct. 28, 1972, to August 1982, water-stage recorder at site 1.5 mi upstream at elevation 770, from river-profile map.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Flow regulated by powerplants and by Michigamme Reservoir, capacity, 119,950 acre-ft, and Peavy Pond, capacity, 33,860 acre-ft, on the Michigamme River, and by many smaller reservoirs above station. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1630	1510	1840	e1400	e1900	e3200	3520	2460	1540	2340	1710	2240
2	1480	1980	1740	e1400	e2000	e3600	3400	2970	1490	1700	1830	3080
3	1380	1910	1740	e1600	e2000	e4000	3300	2800	1340	2250	1950	2480
4	1310	1960	1550	e1800	e2100	4640	3340	2660	1330	2730	1990	2640
5	1290	1740	1430	e1700	e2100	4580	3070	2720	1470	2540	1630	2930
6	1280	1430	1550	e1800	e2000	4730	2990	2190	1420	2640	1350	2430
7	1280	1410	1870	e1700	e2000	4710	2990	1930	1350	3170	1590	2040
8	1470	1490	1920	e1800	e2100	4760	2450	1790	1260	2560	1680	1710
9	1830	1530	1870	e1900	e2000	5150	2430	2750	1270	4140	2130	1530
10	1600	1540	1900	e2000	e2000	5310	2260	2430	1210	4500	2650	1560
11	1690	1560	1700	e1900	e2100	5140	2410	2460	1210	3920	2710	2040
12	1820	1540	1500	e1900	e2100	4810	2840	2080	1230	3460	2180	3830
13	1600	1350	1610	e1900	e2000	4650	2790	2090	1460	2780	1580	4150
14	1630	1280	1890	e2000	e2000	4560	2980	1980	1560	2630	1690	3840
15	1550	1420	e1700	e1900	e2100	4330	2040	2300	1660	2490	2000	3110
16	1510	1650	e1600	e1900	e2100	4140	1860	2370	1680	1710	2260	2010
17	1570	1510	e1600	e1900	e2000	3700	2240	2200	1500	1640	2080	1870
18	1770	1610	e1500	e1900	e2100	3660	3110	2150	1240	2050	2030	1560
19	1910	1650	e1400	e2000	e2100	3650	3300	2100	1500	1960	1660	1580
20	1820	1540	e1500	e2000	e2100	3610	3640	1490	1750	1880	1550	1640
21	1590	1330	e1500	e2000	e2000	3590	4760	1350	2350	1960	1620	1550
22	1590	1610	e1500	e2000	e1700	2990	4410	1510	2990	1740	1790	1440
23	1640	1580	e1500	e2100	e1700	2740	4250	1660	2900	1290	1670	1520
24	1510	1960	e1500	e2200	e1700	3010	3830	1930	2640	1570	1540	1390
25	1500	2160	e1400	e2200	e2400	2870	3920	1880	2270	1800	1400	1480
26	1690	2320	e1500	e2200	e2600	3210	3470	1820	2780	1870	1380	1390
27	1690	2640	e1500	e2200	e2700	3320	2960	1480	3650	1960	1390	1450
28	1570	2220	e1700	e2100	e2900	3700	2980	1220	3640	3170	1400	1330
29	1640	1760	e1800	e2000	e3000	3370	2390	1240	3010	3350	1350	1250
30	1460	1850	e1700	e2000	---	3680	2320	1650	3270	3190	1340	1240
31	1320	---	e1600	e2000	---	3720	---	1630	---	2320	1300	---
TOTAL	48620	51040	50610	59400	61600	123130	92250	63290	57970	77310	54430	62310
MEAN	1568	1701	1633	1916	2124	3972	3075	2042	1932	2494	1756	2077
MAX	1910	2640	1920	2200	3000	5310	4760	2970	3650	4500	2710	4150
MIN	1280	1280	1400	1400	1700	2740	1860	1220	1210	1290	1300	1240

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2000, BY WATER YEAR (WY)

MEAN	2467	2606	2289	2124	2108	2643	5525	4773	3360	2558	2087	2305
MAX	5660	5766	3939	3035	3810	7461	10000	12100	6118	6523	3505	5335
(WY)	1986	1986	1986	1986	1984	1973	1967	1960	1953	1953	1952	1968
MIN	1028	1043	1167	1080	1201	1461	1432	1341	1152	1201	1003	1009
(WY)	1977	1977	1977	1977	1964	1964	1990	1987	1988	1988	1977	1976

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1950 - 2000

ANNUAL TOTAL	969850	801960	
ANNUAL MEAN	2657	2191	
HIGHEST ANNUAL MEAN			2904
LOWEST ANNUAL MEAN			4318
HIGHEST DAILY MEAN	10400	Jul 16	5310
LOWEST DAILY MEAN	1270	Sep 6	1210
ANNUAL SEVEN-DAY MINIMUM	1360	Oct 2	1280
INSTANTANEOUS PEAK FLOW			(a) 5620
INSTANTANEOUS PEAK STAGE			(c) 10.94
10 PERCENT EXCEEDS	4930		3590
50 PERCENT EXCEEDS	2010		1910
90 PERCENT EXCEEDS	1500		1400

- (a) Gage height, 10.01 ft
 (b) Gage height, 13.90 ft, site and datum then in use
 (c) Ice affected
 (e) Estimated due to ice effect or missing record

04066030 MENOMINEE RIVER AT WHITE RAPIDS DAM NEAR BANAT, MI

LOCATION.--Lat 45°28'55", long 87°48'08", in SE $\frac{1}{4}$ SE $\frac{1}{4}$, sec.30, T. 36 N., R.28 W., Michigan Meridian, Menominee County, Hydrologic Unit 04030108, on left bank at powerplant at White Rapids Dam, 5.7 mi southwest of Banat, MI.

DRAINAGE AREA.--3,190 mi².

PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Water-stage recorder. Datum of gage is 680.00 ft above sea level (levels by Wisconsin Electric Power Company).

REMARKS.--Records good (see page 12). Flow regulated by powerplants, by Michigamme Reservoir, capacity, 119,950 acre-ft, by Peavy Pond, capacity, 33,860 acre-ft, on the Michigamme River, and by many smaller reservoirs above station. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1860	1460	1570	1300	2050	3710	3760	2530	1720	2540	1420	2660
2	1290	1790	1910	1240	2080	3860	3460	2960	1510	2050	1880	3390
3	1500	1910	1580	1320	2190	4110	3440	3210	1670	2530	1940	2320
4	1310	2030	1680	2130	2260	4540	3320	2750	1240	2620	1880	2740
5	1280	1840	1680	1800	2440	4750	3090	2630	1480	2940	1770	2860
6	1310	1480	1440	1970	2100	4950	3140	2650	1670	2930	1300	2640
7	1320	1320	1860	1800	2250	4910	2940	2040	1530	3410	1650	2260
8	1350	1620	2010	1900	2140	4920	2640	1700	1230	2770	1770	1780
9	2100	1540	2030	2050	2150	5200	2290	2900	1380	4310	2040	1610
10	1730	1790	1840	2130	2220	5650	2460	2720	1390	4420	2800	1380
11	1530	1450	1460	2040	2330	5430	2390	2550	1260	3990	2690	2340
12	1970	1620	1870	2130	2340	5020	2650	2270	1330	3630	2110	3870
13	1740	1310	1480	1950	2120	4830	2850	2300	1630	2950	1710	4270
14	1580	1310	1900	2170	2250	4680	2850	1800	1610	2540	1750	4180
15	1590	1380	2020	1870	2340	4410	2330	2510	1630	2490	1970	3390
16	1600	1840	1600	2000	2270	4250	1810	2530	1870	1780	2160	2110
17	1390	1550	1690	2000	2200	3950	2220	2450	1650	1680	2240	2020
18	1680	1460	1500	2010	2190	3550	3030	2150	1270	2060	2190	1900
19	1970	1610	1360	2070	2270	3810	3470	2160	1540	2110	1470	1600
20	1940	1550	1580	2100	2260	3640	3690	1750	1880	1880	1470	1830
21	1670	1370	1640	2110	2170	3800	4640	1220	2820	1940	1490	1690
22	1670	1610	1480	2210	1870	3040	4690	1410	3090	1810	2050	1700
23	1620	1690	1560	2340	1690	2770	4410	1750	3380	1320	1740	1700
24	1600	1840	1500	2290	1590	3250	4150	2310	2790	1350	1530	1540
25	1450	2400	1460	2280	2360	3010	3890	1950	2520	1940	1360	1570
26	1560	2420	1430	2480	2910	3280	3640	1890	3110	1720	1210	1510
27	1650	2420	1480	2560	3060	3600	3170	1530	3590	2190	1330	1520
28	1660	2500	1600	2280	3500	3580	2840	1320	3960	2930	1350	1690
29	1590	1650	2220	2110	3000	3740	2730	1310	3210	3670	1310	1660
30	1570	2060	1700	2330	---	3690	2420	1680	3640	3060	1270	1390
31	1440	---	1690	2270	---	3730	---	1910	---	2640	1280	---
TOTAL	49520	51820	51820	63240	66600	127660	94410	66840	62600	80200	54130	67120
MEAN	1597	1727	1672	2040	2297	4118	3147	2156	2087	2587	1746	2237
MAX	2100	2500	2220	2560	3500	5650	4690	3210	3960	4420	2800	4270
MIN	1280	1310	1360	1240	1590	2770	1810	1220	1230	1320	1210	1380

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2000, BY WATER YEAR (WY)

	1999	2000	1999	2000	1999	2000	1999	2000	1999	2000	1999	2000
MEAN	1578	1693	1597	1907	2320	3452	3390	3697	2584	3585	2129	1926
MAX	1597	1727	1672	2040	2345	4118	3634	5238	3081	4584	2511	2237
(WY)	2000	2000	2000	2000	1999	2000	1999	1999	1999	1999	1999	2000
MIN	1558	1659	1522	1774	2297	2787	3147	2156	2087	2587	1746	1616
(WY)	1999	1999	1999	1999	2000	1999	2000	2000	2000	2000	2000	1999

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1999 - 2000

ANNUAL TOTAL	992420	835960		
ANNUAL MEAN	2719	2284		
HIGHEST ANNUAL MEAN			2490	
LOWEST ANNUAL MEAN			2697	1999
HIGHEST DAILY MEAN	10600	Jul 16	2284	2000
LOWEST DAILY MEAN	1230	Sep 6,12	10600	Jul 16 1999
ANNUAL SEVEN-DAY MINIMUM	1340	Oct 2	1210	Aug 26
INSTANTANEOUS PEAK FLOW			1300	Aug 25
INSTANTANEOUS PEAK STAGE			6530	Mar 9
10 PERCENT EXCEEDS	4990		9.64	Mar 9
50 PERCENT EXCEEDS	2150			
90 PERCENT EXCEEDS	1480			

STREAMS TRIBUTARY TO LAKE MICHIGAN

04066500 PIKE RIVER AT AMBERG, MI

LOCATION.--Lat 45°30'00", long 88°00'00", in SE $\frac{1}{4}$ SE $\frac{1}{4}$, sec.16, T. 35 N., R.20 E., Marinette County, MI,
Hydrologic Unit 04030108, on right bank 35 ft upstream from bridge on County Trunk Highway V, 0.4 mi southwest of Amberg.

DRAINAGE AREA.--255 mi².

PERIOD OF RECORD.--February 1914 to September 1970, June to September 2000.

REVISED RECORDS.--WSP 699: 1927. WSP 1207: Drainage area. WSP 1337: 1914(M), 1916-19(M), 1921-24(M), 1926(M), 1928(M), 1929, 1930(M), 1931, 1932-33(M), 1935, 1936-37(M), 1938, 1939-36(M).

GAGE.--Water-stage recorder. Elevation of gage is 860 ft above sea level, from topographic map. Oct. 7, 1946 to Sept. 30, 1970, water-stage recorder at site 0.5 mi downstream at elevation 865 ft above mean sea level (from survey level line along railroad). See WSP 1727 for history of changes prior to Oct. 7, 1946.

REMARKS.--Records good (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	117	126	148	215
2	---	---	---	---	---	---	---	---	122	125	242	356
3	---	---	---	---	---	---	---	---	119	141	310	417
4	---	---	---	---	---	---	---	---	114	147	257	404
5	---	---	---	---	---	---	---	---	111	133	190	314
6	---	---	---	---	---	---	---	---	108	120	152	236
7	---	---	---	---	---	---	---	---	102	113	137	185
8	---	---	---	---	---	---	---	---	101	143	135	160
9	---	---	---	---	---	---	---	---	107	210	161	145
10	---	---	---	---	---	---	---	---	107	206	171	134
11	---	---	---	---	---	---	---	---	105	173	151	228
12	---	---	---	---	---	---	---	---	101	140	132	528
13	---	---	---	---	---	---	---	---	99	117	120	634
14	---	---	---	---	---	---	---	---	101	116	112	482
15	---	---	---	---	---	---	---	---	117	109	131	331
16	---	---	---	---	---	---	---	---	122	102	172	255
17	---	---	---	---	---	---	---	---	119	96	154	212
18	---	---	---	---	---	---	---	---	112	91	134	185
19	---	---	---	---	---	---	---	---	139	89	119	171
20	---	---	---	---	---	---	---	---	171	90	108	167
21	---	---	---	---	---	---	---	---	264	90	101	162
22	---	---	---	---	---	---	---	---	311	89	99	162
23	---	---	---	---	---	---	---	---	249	88	98	175
24	---	---	---	---	---	---	---	---	193	86	95	176
25	---	---	---	---	---	---	---	---	169	84	94	165
26	---	---	---	---	---	---	---	---	160	91	94	155
27	---	---	---	---	---	---	---	---	177	194	92	146
28	---	---	---	---	---	---	---	---	164	283	91	139
29	---	---	---	---	---	---	---	---	151	268	90	135
30	---	---	---	---	---	---	---	---	137	212	86	132
31	---	---	---	---	---	---	---	---	---	167	86	---
TOTAL	---	---	---	---	---	---	---	---	4269	4239	4262	7306
MEAN	---	---	---	---	---	---	---	---	142	137	137	244
MAX	---	---	---	---	---	---	---	---	311	283	310	634
MIN	---	---	---	---	---	---	---	---	99	84	86	132
CFSM	---	---	---	---	---	---	---	---	.56	.54	.54	.96
IN.	---	---	---	---	---	---	---	---	.62	.62	.62	1.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2000, BY WATER YEAR (WY)

MEAN	178	207	159	134	124	214	461	340	268	182	155	173
MAX	454	422	296	215	194	503	1016	820	699	525	365	452
(WY)	1942	1920	1929	1939	1942	1921	1922	1960	1916	1914	1914	1941
MIN	83.2	119	93.5	82.7	78.1	98.8	188	181	111	90.2	80.3	89.1
(WY)	1949	1954	1918	1964	1948	1964	1931	1925	1948	1948	1934	1948

SUMMARY STATISTICS

FOR 2000 WATER YEAR
(JUNE-SEPTEMBER)

WATER YEARS 1914 - 2000

ANNUAL MEAN									216		
HIGHEST ANNUAL MEAN									344		1916
LOWEST ANNUAL MEAN									133		1931
HIGHEST DAILY MEAN									2620	Apr 11	1922
LOWEST DAILY MEAN						634	Sep 13		26	Dec 27	1925
ANNUAL SEVEN-DAY MINIMUM						88	Jul 19		53	Mar 5	1928
INSTANTANEOUS PEAK FLOW						658	Sep 13		(b)2800	Apr 10	1922
INSTANTANEOUS PEAK STAGE						4.71	Sep 13		(a) (c)7.80	Apr 10	1922
INSTANTANEOUS LOW FLOW						81	Jul 25,26		26	Dec 27	1925
ANNUAL RUNOFF (CFSM)									.85		
ANNUAL RUNOFF (INCHES)									11.49		
10 PERCENT EXCEEDS						267			398		
50 PERCENT EXCEEDS						138			161		
90 PERCENT EXCEEDS						91			100		

(a) Site and datum then in use

(b) From rating curve extended above 1,100 ft³/s

(c) From graph based on gage readings

04066800 MENOMINEE RIVER AT KOSS, MI

LOCATION.--Lat 45°23'14", long 87°42'07", in SE ¼ NE ¼, sec.36, T. 35 N., R.28 W., Michigan Meridian, Menominee County, MI, Hydrologic Unit 04030108, on left upstream bank 30 ft from river and 18 ft west of County Trunk JJ (Koss) bridge, 0.3 mi southeast of Koss and 3.4 mi upstream of Grand Rapids Dam.

DRAINAGE AREA.--3,700 mi².

PERIOD OF RECORD.--July 1907 to March 1909 (published as "at Koss"), July 1913 to September 1981 (published as 04067000 Menominee River below Koss, MI), June 1998 to current year. Records prior to October 1913 published in WSP 244, 264, and 384.

REVISED RECORDS.--WRD WI-80-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 665 ft above sea level, from topographic map. June 1913 to September 1981, headwater and tailwater gages and generation data entered hourly in daily log sheet by Wisconsin Public Service Corp. employees at powerplant 4 mi downstream. Records of daily discharge furnished by Wisconsin Public Service Corp. Prior to June 1913, chain gage on railroad bridge at Koss.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Flow regulated by powerplants and by Michigamme Reservoir, capacity, 119,950 acre-ft, and Peavy Pond, capacity, 33,860 acre-ft, on the Michigamme River, and by many smaller reservoirs above station. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1420	1430	2020	e1800	e2300	e3900	4230	2800	1910	3400	2100	2200
2	1570	1660	1810	e1600	e2200	e4300	4040	3020	1770	2660	1780	3630
3	1790	1890	1810	e1600	e2200	e4700	3730	3610	1810	2250	2240	3300
4	1640	1990	1720	e1800	e2300	e5200	3610	3170	1630	2920	2180	3250
5	1330	1850	1720	e2000	e2300	e5600	3800	2950	1570	2950	2220	3240
6	1330	1690	1630	e1900	e2400	e6000	3120	2880	1760	3190	1730	3250
7	1350	1490	1670	e2100	e2300	e6600	3430	2720	1710	3220	1660	2560
8	1400	1490	1940	e2000	e2300	e6380	3170	1680	1540	3390	1820	2140
9	1660	1570	2010	e2100	e2300	5800	2800	2470	1470	3770	2060	1650
10	1980	1570	1980	e2300	e2400	6330	2620	3190	1530	4690	2470	1640
11	1660	1620	1700	e2300	e2400	6250	2670	2850	1470	4790	2940	1920
12	1590	1680	1670	e2300	e2400	5830	2800	2760	1540	4060	2620	3460
13	2020	1460	1770	e2300	e2300	5420	3100	2500	1660	3680	1940	5110
14	1530	1420	1540	e2200	e2300	5090	3150	2340	1720	2810	1800	4980
15	1630	1470	2170	e2200	e2400	4810	3040	2490	1730	2740	1890	4630
16	1640	1550	e1600	e2200	e2400	4540	2280	2810	1810	2600	2130	3230
17	1540	1840	e1600	e2100	e2400	4370	2550	2830	1910	1630	2350	2040
18	1540	1560	e1700	e2100	e2300	3760	2910	2450	1590	1960	2240	2370
19	1850	1520	e1700	e2200	e2300	3830	3780	2450	1570	2100	2070	1690
20	2010	1700	e1500	e2200	e2400	3820	4090	2310	1950	2040	1620	1780
21	1790	1530	e1600	e2200	e2300	3820	4690	1790	2530	1760	1600	1990
22	1700	1470	e1700	e2300	e2200	3810	5560	1570	3090	1920	1770	1920
23	1680	1780	e1600	e2200	e2000	3290	5410	1890	3570	1690	2070	1880
24	1680	1820	e1700	e2400	e2000	3360	4920	2050	3270	1430	1610	1850
25	1620	2300	e1700	e2400	e2100	3850	4650	2190	2920	1670	1640	1760
26	1520	2580	e1600	e2400	e2700	3570	4200	2160	2640	1800	1470	1640
27	1620	2520	e1600	e2500	e3100	4010	3880	1890	3660	1920	1390	1640
28	1670	2520	e1700	e2400	e3500	4180	3330	1710	4010	2750	1600	1670
29	1640	2360	e1800	e2300	e3700	4410	3310	1490	3990	3840	1530	1640
30	1520	1920	e2000	e2300	---	4220	3030	1720	3410	3470	1600	1550
31	1550	---	e2100	e2400	---	4140	---	1920	---	3210	1540	---
TOTAL	50470	53250	54360	67100	70200	145190	107900	74660	66740	86310	59680	75610
MEAN	1628	1775	1754	2165	2421	4684	3597	2408	2225	2784	1925	2520
MAX	2020	2580	2170	2500	3700	6600	5560	3610	4010	4790	2940	5110
MIN	1330	1420	1500	1600	2000	3290	2280	1490	1470	1430	1390	1550

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 2000, BY WATER YEAR (WY)

	MEAN	2554	2822	2197	1983	1880	2722	6575	5706	3869	2775	2157	2434
	MAX	6178	5597	3588	3174	3176	7973	13650	13180	10780	6159	3800	5538
	(WY)	1929	1917	1919	1969	1969	1973	1916	1960	1916	1953	1972	1928
	MIN	1131	1170	1166	989	864	1199	2479	2220	1708	1111	731	1013
	(WY)	1977	1977	1931	1926	1926	1934	1964	1977	1977	1934	1934	1933

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1913 - 2000

ANNUAL TOTAL	1094520	911470	
ANNUAL MEAN	2999	2490	3145
HIGHEST ANNUAL MEAN			5262
LOWEST ANNUAL MEAN			1642
HIGHEST DAILY MEAN	10700	May 11	(a) 6600 Mar 7
LOWEST DAILY MEAN	1280	Sep 13	1330 Oct 5, 6
ANNUAL SEVEN-DAY MINIMUM	1490	Oct 2	1490 Oct 2
INSTANTANEOUS PEAK FLOW			(b)
INSTANTANEOUS PEAK STAGE			(a) 13.38 Mar 7
10 PERCENT EXCEEDS	5780		4010
50 PERCENT EXCEEDS	2330		2180
90 PERCENT EXCEEDS	1580		1570
			1380

(a) Ice affected

(b) Unknown, ice affected

(c) Estimated due to ice effect or missing record

STREAMS TRIBUTARY TO LAKE MICHIGAN

04067500 MENOMINEE RIVER NEAR MC ALLISTER, WI

LOCATION.--Lat 45°19'33", long 87°39'48", in SW ¼ SE ¼ sec.17, T.33 N., R.23 E., Marinette County, Hydrologic Unit 04030108, on right bank 85 ft downstream from bridge on County Highway JJ, 2.9 mi downstream from Grand Rapids Dam, 2.6 mi east of McAllister, 1.9 mi downstream from Little Cedar River, and at mile 22.6.

DRAINAGE AREA.--3,930 mi².

PERIOD OF RECORD.--March 1945 to September 1961; October 1961 to September 1979, miscellaneous measurements and peaks only; October 1979 to September 1986; October 1986 to March 1987, crest-stage partial-record station; April 1988 to September 1990; April 1993 to September 1995; October 1997 to current year.

REVISED RECORDS.--WDR WI-80-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 622.20 ft above sea level (Michigan Department of Transportation reference mark). Prior to May 15, 1945, nonrecording gage 1,400 ft downstream at same datum; May 16, 1945 to September 1961, water-stage recorder 1,000 ft downstream at same datum; October 1961 to September 1979, crest-stage gage 1,100 ft downstream at same datum; October 1979 to September 1986, water-stage recorder at same site and datum; October 1986 to March 1987, crest-stage gage at same site and datum. April 1988 to September 1990, and April 1993 to September 1995, water-stage recorder at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Flow regulated by powerplants, by Michigamme Reservoir, capacity, 119,950 acre-ft, and Peavy Pond, capacity, 33,860 acre-ft on the Michigamme River, and by many smaller reservoirs above station. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1400	1450	2150	e2000	e2500	e4100	4350	2890	2070	3610	2430	2140
2	1390	1710	1920	e1700	e2400	e4500	4220	3020	1870	2730	1800	3680
3	1380	1940	2000	e1700	e2400	e5000	3930	3730	1820	2270	2180	3740
4	1720	2100	1870	e1800	e2400	e5400	3780	3410	1720	2980	2290	3520
5	1430	2050	1860	e2100	e2500	e5800	3840	3100	1490	2950	2230	3520
6	1400	1840	1770	e2100	e2500	e6200	3320	3050	1840	3220	1800	3540
7	1430	1550	1730	e2200	e2400	e6600	3580	2910	1790	3170	1550	2950
8	1470	1500	2050	e2200	e2500	e6400	3240	2130	1630	3470	1890	2540
9	1700	1780	2140	e2300	e2500	e6200	2950	2420	1460	3700	2160	2080
10	2140	1640	2150	e2500	e2500	6770	2660	3300	1670	4690	2420	1900
11	1780	1780	1770	e2400	e2500	6750	2730	2890	1520	4850	3060	2070
12	1690	1770	1770	e2400	e2600	6390	2850	2910	1420	4100	2820	3440
13	2190	1580	1890	e2400	e2400	6010	3110	2600	1680	3850	2150	5380
14	1610	1440	1640	e2400	e2400	5750	3210	2510	1780	2890	1850	5300
15	1760	1450	2320	e2400	e2500	5380	3180	2530	1820	2710	2030	4910
16	1770	1530	1850	e2300	e2600	5020	2410	2940	1980	2620	2190	3590
17	1700	1920	1500	e2300	e2500	4780	2480	2970	2120	1700	2480	2440
18	1640	1680	1880	e2300	e2400	4350	2990	2710	1620	1980	2410	2630
19	1890	1640	1750	e2300	e2500	4200	3870	2600	1620	2200	2160	2180
20	2160	1760	1580	e2400	e2500	4290	4200	2440	1960	2280	1720	1900
21	1930	1620	e1700	e2400	e2500	4190	4890	1980	2620	1870	1630	2090
22	1810	1570	e1800	e2400	e2400	4150	5930	1680	3270	2110	1750	e2100
23	1780	1900	e1700	e2300	e2200	3520	5740	2020	3680	1780	2220	e2100
24	1720	1950	e1800	e2500	e2100	3500	5200	2160	3500	1490	1680	e2000
25	1740	2380	e1800	e2500	e2100	4030	4850	2440	3040	1690	1690	e2000
26	1570	2730	e1800	e2600	e2900	3760	4480	2330	2690	1930	1490	1820
27	1710	2670	e1700	e2700	e3400	4250	4110	2010	3680	2040	1380	1680
28	1780	2650	e1800	e2600	e3700	4330	3440	1790	4010	2890	1530	1760
29	1780	2550	e1900	e2500	e3900	4490	3350	1490	4170	3740	1480	1810
30	1730	1910	e2200	e2500	---	4370	3090	1700	3390	3650	1430	1760
31	1760	---	e2300	e2600	---	4300	---	2010	---	3360	1480	---
TOTAL	52960	56040	58090	71800	74700	154780	111980	78670	68930	88520	61380	82570
MEAN	1708	1868	1874	2316	2576	4993	3733	2538	2298	2855	1980	2752
MAX	2190	2730	2320	2700	3900	6770	5930	3730	4170	4850	3060	5380
MIN	1380	1440	1500	1700	2100	3500	2410	1490	1420	1490	1380	1680

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2000, BY WATER YEAR (WY)

	MEAN	2918	3209	2575	2387	2408	3111	6433	5240	3884	3205	2368	2659
MAX	6755	7332	4561	3777	4710	5687	12800	15930	6958	7127	4056	5952	
(WY)	1986	1986	1986	1983	1984	1983	1951	1960	1993	1951	1952	1959	
MIN	1195	1753	1532	1621	1245	1897	1869	1636	1296	1374	1312	1390	
(WY)	1949	1990	1990	1949	1948	1956	1990	1998	1988	1988	1998	1989	

04067500 MENOMINEE RIVER NEAR MC ALLISTER, WI--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1945 - 2000	
ANNUAL TOTAL	1128960		960420		3376	
ANNUAL MEAN	3093		2624		5496	1960
HIGHEST ANNUAL MEAN					2118	1948
LOWEST ANNUAL MEAN					31800	May 9 1960
HIGHEST DAILY MEAN	10500	May 11	6770	Mar 10	810	Oct 26 1948
LOWEST DAILY MEAN	1360	Sep 13	1380	(a) Oct 3	952	Oct 24 1948
ANNUAL SEVEN-DAY MINIMUM	1450	Oct 1	1450	Oct 1	32500	May 9 1960
INSTANTANEOUS PEAK FLOW			(b) 7300	Mar 10	(d) 20.00	May 9 1960
INSTANTANEOUS PEAK STAGE			(c) 12.90	Mar 8	(f) 538	Oct 6 1946
INSTANTANEOUS LOW FLOW					6030	
10 PERCENT EXCEEDS	5980		4210		2600	
50 PERCENT EXCEEDS	2380		2300		1640	
90 PERCENT EXCEEDS	1650		1630			

(a) Also occurred Aug. 27

(b) Gage height, 12.50 ft

(c) Ice affected

(d) From graph based on gage readings

(e) Estimated due to ice effect or missing record

(f) Observed

STREAMS TRIBUTARY TO LAKE MICHIGAN

04067958 PESHTIGO RIVER NEAR WABENO, WI

LOCATION.--Lat 45°23'16", long 88°18'18", in NW ¼ NW ¼ sec.31, T.34 N., R.18 E., Marinette County, Hydrologic Unit 04030105, on left upstream bank 50 ft from river's edge and 12 ft north of County Trunk C, 12.2 mi west of Athelstane and 17.7 mi east of Wabeno.

DRAINAGE AREA.--447 mi².

PERIOD OF RECORD.--June 1998 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 980 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	185	224	e230	e180	e150	e680	416	363	206	378	334	268
2	177	215	e240	e190	e150	e660	386	345	216	362	295	418
3	173	203	e240	e180	e160	e620	370	332	208	457	261	595
4	171	198	228	e170	e160	e640	349	315	205	631	241	665
5	172	195	219	e180	e160	e620	330	300	198	644	224	622
6	173	191	e210	e180	e160	e600	319	284	188	575	214	531
7	178	202	e200	e180	e160	e660	306	272	181	483	207	425
8	195	210	e210	e190	e170	e760	294	269	182	453	217	353
9	217	201	e220	e190	e160	873	282	292	203	538	236	305
10	238	195	e220	e200	e160	819	274	309	217	706	244	278
11	242	192	e210	e190	e160	730	270	294	216	814	246	376
12	243	192	e200	e190	e170	658	264	300	201	877	229	700
13	227	194	e200	e180	e170	574	264	344	186	869	214	842
14	212	196	e200	e180	e160	494	270	383	201	761	202	844
15	210	205	e180	e170	e160	442	277	363	228	618	220	720
16	228	199	e180	e170	e150	e380	304	333	239	492	243	566
17	242	194	e140	e170	e160	e330	330	314	238	400	290	454
18	246	191	e150	e170	e150	e330	348	318	224	342	271	377
19	241	191	e170	e170	e150	343	391	314	227	308	256	330
20	234	195	e170	e170	e160	320	484	302	255	276	237	309
21	251	201	e160	e170	e160	314	669	279	369	251	216	289
22	257	202	e160	e170	e160	320	753	265	466	233	198	282
23	237	231	e150	e170	e170	349	735	258	466	220	187	293
24	226	304	e150	e170	e190	398	663	251	398	212	176	294
25	218	334	e150	e160	e230	483	576	246	335	208	167	284
26	208	337	e150	e160	e310	563	495	236	315	220	165	269
27	202	303	e150	e160	e410	594	431	223	363	304	161	255
28	201	e260	e160	e160	e520	628	387	212	447	358	158	241
29	199	e240	e170	e160	e580	601	378	206	426	420	156	232
30	201	e230	e170	e160	---	536	381	209	394	418	150	229
31	203	---	e180	e150	---	469	---	206	---	375	153	---
TOTAL	6607	6625	5767	5390	5910	16788	11996	8937	8198	14203	6768	12646
MEAN	213	221	186	174	204	542	400	288	273	458	218	422
MAX	257	337	240	200	580	873	753	383	466	877	334	844
MIN	171	191	140	150	150	314	264	206	181	208	150	229
CFSM	.48	.49	.42	.39	.46	1.21	.89	.64	.61	1.02	.49	.94
IN.	.55	.55	.48	.45	.49	1.40	1.00	.74	.68	1.18	.56	1.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2000, BY WATER YEAR (WY)

	1998	1999	2000	1998	1999	2000	1998	1999	2000	1998	1999	2000
MEAN	213	245	186	164	206	410	453	385	308	374	214	250
MAX	213	270	186	174	209	542	506	481	385	481	248	422
(WY)	2000	1999	1999	2000	1999	2000	1999	1999	1999	1999	1999	2000
MIN	213	221	186	154	204	279	400	288	267	183	176	160
(WY)	1999	2000	2000	1999	2000	1999	2000	2000	1998	1998	1998	1998

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1998 - 2000

ANNUAL TOTAL	107575	109835	
ANNUAL MEAN	295	300	299
HIGHEST ANNUAL MEAN			300
LOWEST ANNUAL MEAN			299
HIGHEST DAILY MEAN	1020	May 9	1020
LOWEST DAILY MEAN	(a)130	Jan 5	(a)130
ANNUAL SEVEN-DAY MINIMUM	(a)140	Jan 1	(a)153
INSTANTANEOUS PEAK FLOW			(c)892
INSTANTANEOUS PEAK STAGE			(a)5.72
INSTANTANEOUS LOW FLOW			(d)124
ANNUAL RUNOFF (CFSM)	.66	.67	.67
ANNUAL RUNOFF (INCHES)	8.95	9.14	9.10
10 PERCENT EXCEEDS	553	575	534
50 PERCENT EXCEEDS	228	238	226
90 PERCENT EXCEEDS	160	160	159

- (a) Ice affected
- (b) Also occurred July 12, 13
- (c) Gage height, 5.32 ft
- (d) Result of freezeup
- (e) Estimated due to ice effect or missing record

04069416 PESHTIGO RIVER NEAR PORTERFIELD, WI

LOCATION.--Lat 45°08'36", long 87°48'02", in SE ¼ NE ¼ sec.19, T.31 N., R.22 E., Marinette County, Hydrologic Unit 04030105, on right bank 15 ft upstream from County Trunk E bridge, 0.8 mi south of Porterfield.

DRAINAGE AREA.--1,020 mi².

PERIOD OF RECORD.--June 1998 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 625 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Diurnal fluctuation caused by powerplant upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	368	475	456	e350	e330	e1000	718	693	500	565	596	449
2	310	501	409	e340	e330	e1300	619	764	575	546	581	862
3	310	519	386	e340	e330	e1300	569	677	588	658	571	823
4	299	488	420	e340	e330	e1200	621	638	492	711	454	1100
5	307	383	408	e370	e330	e1500	603	562	478	822	428	1000
6	319	345	389	e400	e330	1190	564	440	433	895	416	899
7	376	348	370	e380	e330	1200	540	502	398	765	363	749
8	353	347	371	e370	e330	1270	522	513	407	724	489	719
9	439	410	342	e370	e340	1500	500	558	417	1070	598	620
10	525	377	355	e370	e330	1700	496	548	463	1030	458	539
11	417	402	469	e360	e340	1590	494	557	419	1270	486	667
12	428	384	377	e360	e340	1320	486	694	449	1250	463	957
13	413	301	349	e360	e350	1130	460	697	406	1150	415	1300
14	464	331	340	e350	e350	1070	465	694	390	1130	374	1380
15	424	365	352	e350	e350	900	478	577	401	1110	497	1450
16	447	365	387	e360	e340	918	520	543	435	868	591	1260
17	639	360	253	e350	e330	719	659	685	504	680	504	789
18	484	364	e300	e360	e340	634	638	745	489	607	582	744
19	435	308	e270	e350	e350	627	757	835	496	523	589	618
20	466	311	e290	e350	e350	650	873	749	524	465	518	578
21	539	354	e310	e340	e340	673	1490	588	679	498	473	628
22	484	348	e310	e330	e340	686	1660	598	595	463	414	550
23	468	419	e300	e340	e330	684	1580	670	679	377	396	635
24	414	649	e290	e340	e360	705	1540	596	732	356	352	614
25	395	641	e280	e340	e410	809	1320	535	641	389	346	559
26	527	570	e290	e330	e500	944	1080	464	558	394	367	519
27	484	701	e280	e340	e620	857	830	378	565	679	382	495
28	433	497	e270	e350	e780	963	713	420	543	731	377	508
29	460	511	e310	e330	e900	994	701	406	680	727	333	459
30	464	493	e410	e320	---	959	726	404	618	801	312	386
31	486	---	e400	e330	---	838	---	460	---	726	331	---
TOTAL	13377	12867	10743	10870	11330	31830	23222	18190	15554	22980	14056	22856
MEAN	432	429	347	351	391	1027	774	587	518	741	453	762
MAX	639	701	469	400	900	1700	1660	835	732	1270	598	1450
MIN	299	301	253	320	330	627	460	378	390	356	312	386
CFSM	.42	.42	.34	.34	.38	1.01	.76	.58	.51	.73	.44	.75
IN.	.49	.47	.39	.40	.41	1.16	.85	.66	.57	.84	.51	.83

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2000, BY WATER YEAR (WY)

MEAN	438	478	373	392	457	882	880	779	590	641	412	488
MAX	445	527	400	434	526	1027	986	971	641	844	453	762
(WY)	1999	1999	1999	1999	1999	2000	1999	1999	1999	1999	2000	2000
MIN	432	429	347	351	391	738	774	587	518	338	353	316
(WY)	2000	2000	2000	2000	2000	1999	2000	2000	2000	1998	1998	1999

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1998 - 2000

ANNUAL TOTAL	215930	207875	
ANNUAL MEAN	592	568	587
HIGHEST ANNUAL MEAN			605
LOWEST ANNUAL MEAN			568
HIGHEST DAILY MEAN	2040	(a) Apr 9	2040
LOWEST DAILY MEAN	212	Aug 31	164
ANNUAL SEVEN-DAY MINIMUM	261	Aug 31	218
INSTANTANEOUS PEAK FLOW			2130
INSTANTANEOUS PEAK STAGE			(c)10.53
ANNUAL RUNOFF (CFSM)	.58		.58
ANNUAL RUNOFF (INCHES)	7.88		7.81
10 PERCENT EXCEEDS	1040	958	955
50 PERCENT EXCEEDS	484	485	475
90 PERCENT EXCEEDS	310	330	319

(a) Also occurred May 11

(b) Result of freezeup

(c) Ice affected

(d) Gage height, 9.47 ft

(e) Estimated due to ice effect or missing record

STREAMS TRIBUTARY TO LAKE MICHIGAN

04069500 PESHTIGO RIVER AT PESHTIGO, WI

LOCATION.--Lat 45°02'49", long 87°44'40", in NE ¼ sec.30, T.30 N., R.23 E., Marinette County, Hydrologic Unit 04030105, on left bank 75 ft downstream from Chicago and Northwestern Railway bridge, 0.5 mi downstream from Wisconsin Public Service Corp. Powerplant at Peshtigo, and 11.5 mi upstream from mouth.

DRAINAGE AREA.--1,080 mi².

PERIOD OF RECORD.--June 1953 to current year.

REVISED RECORDS.--WDR WI-80-1: Drainage area. WDR WI-84-1: 1983 average discharge.

GAGE.--Water-stage recorder. Datum of gage is 584.64 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Diurnal fluctuation caused by two powerplants upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	383	497	493	e300	e350	e1100	754	687	489	555	624	408
2	262	521	486	e290	e340	1320	656	711	611	529	633	931
3	270	590	415	e300	e340	1390	588	684	604	614	578	892
4	262	549	477	e400	e340	1210	610	630	502	702	442	1150
5	272	436	465	e480	e340	1660	563	578	449	798	424	1090
6	267	360	431	e440	e340	1270	622	422	411	963	400	985
7	310	354	407	e420	e330	1260	536	475	358	860	340	824
8	321	359	405	e390	e330	1300	507	460	393	765	485	705
9	365	451	344	e360	e330	1560	510	504	379	1140	651	661
10	482	410	367	e360	e340	1720	449	472	468	1090	445	514
11	402	404	437	e360	e340	1610	485	499	385	1280	541	667
12	380	406	410	e350	e350	1400	456	636	419	1350	464	940
13	407	301	377	e350	e350	1160	452	718	398	1210	427	1300
14	393	328	353	e350	e350	1120	409	723	354	1190	340	1380
15	386	365	391	e340	e360	900	467	620	367	1160	533	1440
16	384	368	405	e370	e360	866	481	541	439	959	579	1250
17	647	364	182	e340	e360	887	627	657	493	737	512	847
18	588	378	e260	e370	e350	604	641	756	487	638	525	751
19	481	307	e270	e420	e370	629	773	898	482	531	588	618
20	466	306	e310	e430	e370	627	986	812	534	473	498	580
21	591	373	e380	e440	e370	650	1520	622	726	487	440	631
22	505	373	e340	e410	e360	681	1760	605	644	457	414	556
23	526	432	e300	e400	e340	676	1640	710	703	358	392	617
24	444	641	e260	e400	e350	677	1630	658	807	345	339	597
25	399	731	e250	e380	e430	760	1390	585	746	361	339	553
26	483	654	e270	e380	e640	923	1180	472	586	392	304	500
27	548	756	e250	e380	e760	951	854	339	587	603	362	469
28	427	612	e240	e380	e820	988	739	391	500	883	348	482
29	459	576	e270	e350	e960	1040	672	377	648	697	301	440
30	471	544	e410	e340	---	997	691	363	617	818	259	335
31	499	---	e400	e340	---	867	---	407	---	787	290	---
TOTAL	13080	13746	11055	11620	11970	32803	23648	18012	15586	23732	13817	23113
MEAN	422	458	357	375	413	1058	788	581	520	766	446	770
MAX	647	756	493	480	960	1720	1760	898	807	1350	651	1440
MIN	262	301	182	290	330	604	409	339	354	345	259	335
CFSM	.39	.42	.33	.35	.38	.98	.73	.54	.48	.71	.41	.71
IN.	.45	.47	.38	.40	.41	1.13	.81	.62	.54	.82	.48	.80

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2000, BY WATER YEAR (WY)

	MEAN	794	893	630	542	550	1071	2035	1451	1046	659	587	739
MAX	1728	2197	1128	1219	1449	3272	3813	4639	2768	1362	1242	1706	
(WY)	1986	1986	1966	1960	1984	1973	1979	1960	1993	1993	1974	1959	
MIN	310	328	250	268	282	424	485	538	228	300	285	264	
(WY)	1990	1977	1990	1990	1990	1964	1990	1977	1988	1989	1957	1989	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1953 - 2000

ANNUAL TOTAL	227767	212182	
ANNUAL MEAN	624	580	916
HIGHEST ANNUAL MEAN			1559
LOWEST ANNUAL MEAN			580
HIGHEST DAILY MEAN	2120	Apr 9	9600
LOWEST DAILY MEAN	182	Dec 17	84
ANNUAL SEVEN-DAY MINIMUM	257	Aug 31	172
INSTANTANEOUS PEAK FLOW			(a) 263
INSTANTANEOUS PEAK STAGE			1900
ANNUAL RUNOFF (CFSM)	.58		4.39
ANNUAL RUNOFF (INCHES)	7.85		.54
10 PERCENT EXCEEDS	1160		7.31
50 PERCENT EXCEEDS	500		11.53
90 PERCENT EXCEEDS	306		

(a) Ice affected

(b) From rating curve extended above 5,000 ft³/s on basis of computation of peak flow through dam gates

(c) Estimated due to ice effect or missing record

04071000 OCONTO RIVER NEAR GILLETT, WI

LOCATION.--Lat 44°51'53", long 88°18'00", in NW ¼ sec.34, T.28 N., R.18 E., Oconto County, Hydrologic Unit 04030104, on left bank 300 ft upstream from County Trunk Highway BB bridge, 2.0 mi upstream from Christy Brook, 2.0 mi south of Gillett, and at mile 29.

DRAINAGE AREA.--705 mi².

PERIOD OF RECORD.--June 1906 to March 1909, October 1913 to current year. Monthly discharge for some periods published in WSP 1307.

REVISED RECORDS.--WSP 1207: 1922. WSP 1307: 1907-8(M), 1914-16(M), 1918-21(M), 1923-33(M), 1937-38(M), 1943(M). WDR WI-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 732.87 ft above sea level (levels by Wisconsin Department of Transportation). See WSP 1727 for history of changes prior to Aug. 25, 1938.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	250	263	e280	e240	e230	e640	412	448	336	319	439	260
2	251	262	e310	e250	e230	e640	393	437	580	301	403	344
3	243	289	318	e230	e230	e740	376	424	761	290	397	569
4	240	287	314	e230	e230	e700	364	407	714	294	357	631
5	234	268	310	e230	e230	e660	354	391	596	299	325	627
6	235	262	304	e230	e230	e840	342	365	509	269	309	561
7	234	261	298	e230	e230	e1100	336	336	439	253	301	460
8	239	262	284	e250	e230	e600	326	332	402	599	300	397
9	249	262	286	e250	e230	688	323	330	378	1140	314	361
10	261	263	e270	e230	e230	678	317	345	347	1290	335	314
11	264	260	e250	e240	e230	666	314	340	334	1570	326	663
12	261	257	e260	e250	e230	604	308	342	323	1650	307	737
13	256	256	e290	e250	e240	542	307	356	305	1440	302	745
14	252	256	e280	e240	e230	500	301	356	291	1150	289	752
15	252	255	e250	e240	e240	465	311	338	278	813	333	676
16	261	254	e250	e240	e230	439	326	349	344	576	362	588
17	259	255	e230	e240	e230	417	339	399	433	483	388	512
18	275	254	e220	e240	e230	397	371	572	453	392	349	435
19	284	254	e240	e230	e230	388	393	650	402	351	334	374
20	309	249	e260	e240	e230	390	491	694	413	344	313	367
21	305	247	e260	e230	e230	394	725	618	447	332	293	362
22	293	248	e250	e230	e230	401	862	517	487	326	279	357
23	274	276	e220	e230	e240	400	925	463	495	315	271	369
24	263	322	e230	e220	e250	369	928	421	435	301	265	383
25	261	404	e220	e220	e380	394	803	377	403	284	245	373
26	261	411	e220	e230	e520	430	666	356	393	280	237	351
27	259	363	e220	e230	e660	452	573	344	366	385	238	337
28	258	343	e220	e220	e580	462	514	336	355	595	240	325
29	255	330	e230	e220	e600	470	468	327	344	716	236	315
30	254	e300	e230	e230	---	455	453	317	335	663	229	306
31	260	---	e230	e220	---	435	---	314	---	537	222	---
TOTAL	8052	8473	8034	7260	8310	16756	13921	12601	12698	18557	9538	13851
MEAN	260	282	259	234	287	541	464	406	423	599	308	462
MAX	309	411	318	250	660	1100	928	694	761	1650	439	752
MIN	234	247	220	220	230	369	301	314	278	253	222	260
CFSM	.37	.40	.37	.33	.41	.77	.66	.58	.60	.85	.44	.65
IN.	.42	.45	.42	.38	.44	.88	.73	.66	.67	.98	.50	.73

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1906 - 2000, BY WATER YEAR (WY)

	MEAN	486	564	449	359	351	650	1216	867	670	465	382	450
MAX	1216	1377	900	700	643	1867	3435	2185	1744	1022	742	1347	
(WY)	1942	1986	1907	1907	1984	1973	1922	1960	1916	1922	1960	1928	
MIN	199	259	216	206	204	240	379	357	197	226	158	190	
(WY)	1949	1934	1990	1957	1948	1934	1931	1931	1988	1988	1934	1933	

STREAMS TRIBUTARY TO LAKE MICHIGAN

04071000 OCONTO RIVER NEAR GILLET, WI--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1906 - 2000	
ANNUAL TOTAL	136299		138051			
ANNUAL MEAN	373		377		576	
HIGHEST ANNUAL MEAN					930	1973
LOWEST ANNUAL MEAN					315	1931
HIGHEST DAILY MEAN	1220	Apr 9	1650	Jul 12	6790	Apr 10 1922
LOWEST DAILY MEAN	203	Sep 2	(b)220	(a)Dec 18	95	Jun 3,6 1907
ANNUAL SEVEN-DAY MINIMUM	214	Sep 2	(b)223	Dec 23	137	Aug 9 1908
INSTANTANEOUS PEAK FLOW			1680	Jul 12	8400	Apr 10 1922
INSTANTANEOUS PEAK STAGE			(c)3.89	Mar 7	(d)11.20	Apr 10 1922
INSTANTANEOUS LOW FLOW			(f)201	Dec 12	(f)93	Nov 26 1941
ANNUAL RUNOFF (CFSM)	.53		.54		.82	
ANNUAL RUNOFF (INCHES)	7.19		7.28		11.10	
10 PERCENT EXCEEDS	635		628		1050	
50 PERCENT EXCEEDS	304		317		439	
90 PERCENT EXCEEDS	230		230		258	

(a) Also occurred Dec. 23, 25-28, Jan. 24, 25, 28, 29, 31, which are ice affected, and Aug. 31

(b) Ice affected

(c) Ice jam

(d) From floodmarks, caused by failure of a dam at Pulcifer 4 mi above station

(e) Estimated due to ice effect or missing record

(f) Result of freezeup

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04071765 OCONTO RIVER NEAR OCONTO, WI

LOCATION.--Lat 44°51'38", long 87°59'02", in NW ¼ NW ¼ sec.32, T.28 N., R.21 E., Oconto County, Hydrologic Unit 04030104, on right bank 50 ft upstream from County Highway J bridge, 0.7 mi downstream from mouth of Little River, and 4.6 mi west of Oconto.

DRAINAGE AREA.--966 mi².

PERIOD OF RECORD.--October 1988 to September 1990, October 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 583 ft above sea level.

REMARKS.--Records good except those for June 1 to July 6, which are fair, and those for estimated daily discharges, which are poor (see page 12). Flow regulated by Machickanee Flowage (capacity, 556 acre-ft) 3.9 mi upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	254	248	326	e230	e230	573	472	579	463	357	658	346
2	214	259	350	e250	e230	460	445	438	823	320	668	394
3	221	236	347	e240	e230	468	407	504	964	301	550	773
4	209	264	257	e230	e240	510	392	455	935	298	480	868
5	206	268	294	e240	e240	644	385	449	762	293	450	785
6	199	238	346	e240	e240	893	359	407	616	309	351	724
7	207	237	293	e230	e240	998	358	382	544	283	327	640
8	219	260	293	e300	e240	870	351	359	419	869	361	471
9	212	250	261	e250	e240	851	337	336	424	1970	358	431
10	236	255	263	e230	e240	781	329	341	400	1600	400	381
11	236	242	199	e240	e240	760	320	369	341	1850	378	811
12	250	246	194	e260	e230	706	331	392	344	1890	354	1470
13	246	247	349	e260	e240	636	317	410	363	1700	395	1210
14	239	240	317	e240	e240	549	310	380	303	1650	375	1190
15	216	245	300	e250	e240	539	315	360	300	1160	504	1050
16	256	243	252	e250	e240	500	321	421	433	766	469	834
17	252	240	e210	e250	e240	475	351	498	519	629	498	669
18	248	238	e200	e250	e240	444	389	890	561	487	465	629
19	275	240	e200	e240	e240	462	416	898	523	399	423	527
20	273	237	e230	e250	e240	433	672	905	476	389	363	457
21	331	232	e240	e240	e240	445	1150	825	549	418	340	448
22	293	222	e240	e230	e240	476	1170	645	570	342	307	495
23	225	372	e200	e230	e240	466	1160	541	570	314	292	479
24	224	365	e210	e220	e250	483	1140	527	525	355	e280	512
25	250	371	e200	e220	e400	446	998	444	444	286	248	504
26	245	485	e200	e230	e560	469	814	381	462	303	245	462
27	225	415	e200	e230	e660	525	699	373	421	586	245	415
28	222	359	e210	e220	e580	512	597	379	382	718	245	418
29	258	341	e220	e230	e620	528	549	386	421	900	215	395
30	260	309	e230	e230	---	500	502	400	395	893	199	357
31	244	---	e230	e230	---	470	---	344	---	659	234	---
TOTAL	7445	8404	7861	7440	8550	17872	16356	15018	15252	23294	11677	19145
MEAN	240	280	254	240	295	577	545	484	508	751	377	638
MAX	331	485	350	300	660	998	1170	905	964	1970	668	1470
MIN	199	222	194	220	230	433	310	336	300	283	199	346
CFSM	.25	.29	.26	.25	.31	.60	.56	.50	.53	.78	.39	.66
IN.	.29	.32	.30	.29	.33	.69	.63	.58	.59	.90	.45	.74

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2000, BY WATER YEAR (WY)

	MEAN	332	411	305	296	367	858	819	637	757	489	345	469
MAX	574	556	382	344	565	1132	1460	995	1439	751	518	1044	
(WY)	1998	1989	1989	1998	1998	1990	1998	1990	1990	2000	1990	1990	1990
MIN	240	280	251	240	263	577	423	448	370	260	261	196	
(WY)	2000	2000	1990	2000	1990	2000	1990	1998	1999	1989	1989	1999	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1989 - 2000

ANNUAL TOTAL	151357	158314		
ANNUAL MEAN	415	433		
HIGHEST ANNUAL MEAN			507	
LOWEST ANNUAL MEAN			623	1990
HIGHEST DAILY MEAN	1460	Apr 8	1970	Jul 9
LOWEST DAILY MEAN	153	Sep 4	(b)194	Dec 12
ANNUAL SEVEN-DAY MINIMUM	181	Sep 3	(b)206	Dec 23
INSTANTANEOUS PEAK FLOW			2420	Jul 9
INSTANTANEOUS PEAK STAGE			7.53	Jul 9
ANNUAL RUNOFF (CFSM)	.43		.45	
ANNUAL RUNOFF (INCHES)	5.83		6.10	
10 PERCENT EXCEEDS	742		775	900
50 PERCENT EXCEEDS	346		354	366
90 PERCENT EXCEEDS	210		230	220

(a) Estimated, discharge measurement of 4,700 ft³/s on Mar. 31, 1998

(b) Ice affected

(c) Also occurred Sept. 3, 1999

(d) Estimated, gage height 10.91 ft, backwater from ice

(e) Estimated due to ice effect or missing record

STREAMS TRIBUTARY TO LAKE MICHIGAN

04072150 DUCK CREEK NEAR HOWARD, WI

LOCATION.--Lat 42°32'09", long 88°07'47" (revised), in SW $\frac{1}{4}$ sec.19, T.24 N., R.24 E., Brown County, Hydrologic Unit 04030103, at County Highway FF near Howard and about 1 mi upstream from mouth.

DRAINAGE AREA.--108 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1988 to current year.

GAGE.--Continuous water-stage recorder since April 1988. Elevation of gage is 615 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges and discharges less than 0.5 ft³/s, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.46	1.2	e.94	e.86	e90	5.9	8.4	28	8.8	1.0	.78
2	.09	.52	1.3	e.94	e.90	e70	5.6	7.2	184	6.7	1.8	1.1
3	.09	.46	1.5	e.94	e.92	e45	5.6	6.3	239	5.7	.98	3.4
4	.10	.46	2.1	e.94	e.98	e30	5.4	5.6	136	4.7	.50	2.8
5	.10	.46	2.0	e.94	e1.0	e25	5.3	4.8	100	4.1	.41	2.4
6	.10	.46	1.6	e.94	e1.0	e21	5.1	4.2	102	3.7	.64	2.4
7	.09	.50	1.6	.64	e1.0	e17	4.8	3.9	85	3.0	.60	1.9
8	.10	.57	1.5	.28	e1.1	e15	4.4	3.6	55	194	3.3	1.5
9	.10	.56	1.4	.18	e1.1	e14	4.3	3.0	39	214	2.6	1.5
10	.10	.58	1.4	1.1	e1.1	e13	4.3	2.6	29	151	2.8	1.9
11	.10	.54	1.3	e.98	e1.1	e12	4.0	2.8	20	84	2.7	9.1
12	.09	.52	1.4	e1.0	e1.1	e11	3.6	6.6	15	45	2.2	14
13	.11	.57	1.4	e1.0	e1.1	9.9	3.5	9.0	16	25	1.8	25
14	.11	.58	1.3	e1.0	e1.1	8.8	3.4	10	18	16	6.1	23
15	.11	.57	1.6	e1.0	e1.1	7.9	3.0	8.1	17	11	33	17
16	.16	.60	1.6	e1.0	e1.0	7.1	3.4	13	28	7.1	56	12
17	.17	.64	1.5	e1.0	e1.0	6.4	3.5	20	37	5.0	40	8.8
18	.17	.65	1.1	e1.0	e1.0	6.2	3.5	145	38	3.6	24	6.3
19	.18	.66	e1.0	e.96	e1.0	6.4	3.6	274	30	2.9	16	4.8
20	.17	.82	e.90	e.94	e1.0	7.5	20	181	25	2.3	11	5.4
21	.17	.88	e.70	e.92	e1.0	8.1	51	91	24	2.0	7.6	5.6
22	.17	.80	e.76	e.92	e1.0	8.5	79	56	29	1.7	5.5	5.0
23	.15	2.8	.12	e.92	e1.5	7.9	54	39	30	2.0	4.3	5.2
24	.17	2.7	.07	e.94	e8.0	7.9	32	28	22	1.7	3.5	4.5
25	.18	2.3	.68	e.94	e46	7.8	21	20	16	1.1	2.9	4.6
26	.15	2.9	.74	e.94	e80	7.8	15	14	14	.87	2.5	5.4
27	.13	2.3	.06	e.92	e160	8.4	11	11	15	1.5	2.1	4.0
28	.12	1.8	.30	e.92	e150	7.7	10	13	13	2.2	1.8	3.6
29	.17	1.5	1.0	e.80	e130	7.6	9.9	15	14	1.5	1.5	3.0
30	.23	1.3	e.84	e.80	---	7.0	9.1	16	12	1.0	1.1	2.1
31	.24	---	e.88	e.80	---	6.6	---	17	---	1.0	.82	---
TOTAL	4.21	30.46	34.85	27.54	597.96	508.5	394.2	1039.1	1430	814.17	241.05	188.08
MEAN	.14	1.02	1.12	.89	20.6	16.4	13.1	33.5	47.7	26.3	7.78	6.27
MAX	.24	2.9	2.1	1.1	160	90	79	274	239	214	56	25
MIN	.09	.46	.06	.18	.86	6.2	3.0	2.6	12	.87	.41	.78
CFSM	.00	.01	.01	.01	.19	.15	.12	.31	.44	.24	.07	.06
IN.	.00	.01	.01	.01	.21	.18	.14	.36	.49	.28	.08	.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2000, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	10.8	33.8	18.6	7.29	27.9	140	158	43.4	97.8	35.4	7.11	8.72	
MAX	52.7	207	93.5	36.8	102	250	318	109	370	295	28.1	36.8	
(WY)	1996	1993	1993	1996	1998	1991	1994	1990	1990	1993	1994	1990	
MIN	.14	1.02	.59	.11	.51	16.4	9.40	2.79	.000	.000	.000	.000	
(WY)	2000	2000	1990	1990	1989	2000	1990	1988	1988	1988	1988	1989	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1988 - 2000

ANNUAL TOTAL	8652.67	5310.12	
ANNUAL MEAN	23.7	14.5	50.3
HIGHEST ANNUAL MEAN			123
LOWEST ANNUAL MEAN			14.5
HIGHEST DAILY MEAN	(a) 560	Feb 12	274
LOWEST DAILY MEAN	.00	Sep 4	.06
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 4	.09
INSTANTANEOUS PEAK FLOW			(b)
INSTANTANEOUS PEAK STAGE			(a) 13.58
INSTANTANEOUS LOW FLOW			.06
ANNUAL RUNOFF (CFSM)	.22		.13
ANNUAL RUNOFF (INCHES)	2.98		1.83
10 PERCENT EXCEEDS	59		31
50 PERCENT EXCEEDS	8.0		2.8
90 PERCENT EXCEEDS	.10		.29

(a) Ice affected

(b) Unknown, ice affected

(c) Based on rating curve extended above 1,500 ft³/s on basis of contracted-opening measurement of peak flow

(d) Estimated from floodmarks

(e) Estimated due to ice effect or missing record

04072150 DUCK CREEK NEAR HOWARD, WI--Continued
(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

WATER-QUALITY RECORD

PERIOD OF RECORD.--October 1988 to December 1992, April 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

		DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)
OCT 13...	1515	.11	745	10.1	7.8	751	12.5	60.7	38.0	8.3	33.4	244
NOV 10...	1620	.50	734	11.1	8.1	854	7.9	71.2	41.5	7.6	41.2	264
DEC 14...	1530	1.3	745	14.6	8.2	1190	1.2	92.0	43.7	7.5	97.3	306
JAN 12...	0800	.81	751	7.8	7.7	1310	.2	99.5	51.8	9.1	82.6	365
FEB 09...	0750	1.1	742	4.4	7.6	1750	.2	114	55.0	10.8	162	373
MAR 14...	1540	8.8	753	15.3	8.3	960	5.7	85.7	34.2	8.9	51.5	218
APR 11...	1500	3.5	745	13.9	8.4	1040	6.8	86.3	40.5	8.2	61.7	232
MAY 09...	0900	3.4	744	6.9	7.6	1060	19.3	96.0	47.3	7.8	46.9	221
23...	1300	40	730	11.9	8.1	887	23.0	--	--	--	--	--
JUN 12...	1645	14	745	11.3	8.2	939	18.8	104	37.4	7.0	28.6	260
27...	1015	15	755	8.6	8.0	917	20.5	--	--	--	--	--
JUL 11...	1615	74	742	9.1	7.8	619	24.2	61.8	22.1	9.5	18.8	162
25...	1015	1.2	754	10.3	8.0	829	20.1	--	--	--	--	--
31...	1540	.90	741	11.6	8.4	755	25.3	67.1	31.8	7.3	33.8	228
AUG 23...	1010	4.4	755	10.1	8.1	781	19.4	--	--	--	--	--
SEP 04...	1630	2.6	747	13.2	8.5	742	20.4	68.7	31.4	9.6	37.6	210
DATE	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
OCT 13...	288	5	72.6	.1	5.8	47.1	.77	.90	.020	<.050	<.010	.222
NOV 10...	322	--	82.8	.1	7.6	56.0	.57	.96	<.020	<.050	<.010	.128
DEC 14...	373	--	176	.2	3.3	67.0	.49	.54	<.020	<.050	<.010	.090
JAN 12...	445	--	167	.2	11.2	80.1	.97	.94	.377	1.46	.031	.054
FEB 09...	455	--	291	.4	11.8	102	1.0	1.2	.626	1.73	.046	.082
MAR 14...	254	6	117	.2	5.4	112	.65	.75	<.020	1.65	.015	.091
APR 11...	281	1	133	.2	.7	109	.66	.70	<.020	<.050	<.010	.041
MAY 09...	269	0	106	.2	4.2	176	.98	1.2	.046	.052	<.010	.265
23...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 12...	312	2	78.3	.2	2.6	104	2.0	1.7	.084	5.85	.033	.124
27...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 11...	197	--	50.3	.2	8.4	51.5	1.1	1.4	.022	3.81	.045	.245
25...	--	--	--	--	--	--	--	--	--	--	--	--
31...	262	8	74.3	.2	8.7	53.1	.90	.95	.024	.084	<.010	.242
AUG 23...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 04...	246	5	75.4	<.1	9.1	50.9	.76	1.2	<.020	.176	<.010	.210

STREAMS TRIBUTARY TO LAKE MICHIGAN

04072150 DUCK CREEK NEAR HOWARD, WI--Continued
(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)
OCT 13...	.172	.213	443	40	42	--	--	--	--	--	--	--
NOV 10...	.099	.170	501	20	14	<.003	<.002	<.002	<.002	.014	<.002	<.002
DEC 14...	.076	.100	698	20	7	<.003	<.002	<.002	<.002	.027	<.002	<.002
JAN 12...	.044	.070	770	40	63	<.003	<.002	<.002	<.002	.019	<.002	<.002
FEB 09...	.066	.097	1040	30	34	<.003	<.002	<.002	<.002	.030	<.002	<.002
MAR 14...	.073	.106	596	30	15	<.003	.014	<.002	<.002	.026	<.002	<.002
APR 11...	.018	.055	628	20	15	<.003	<.002	<.002	<.002	.028	<.002	<.002
MAY 09...	.225	.315	684	60	194	<.003	.009	<.002	<.002	.065	<.002	<.002
23...	--	--	--	--	--	<.003	.258	.055	<.002	1.67	<.002	<.002
JUN 12...	.097	.143	627	20	7	<.003	.014	<.002	<.002	.644	<.002	<.002
27...	--	--	--	--	--	<.003	.020	<.002	<.002	1.10	<.002	<.002
JUL 11...	.202	.247	383	30	11	<.003	.038	.005	<.002	1.14	<.002	<.002
25...	--	--	--	--	--	<.003	.006	<.002	<.002	.620	<.002	<.002
31...	.209	.277	465	10	35	<.003	<.002	<.002	<.002	.372	<.002	<.002
AUG 23...	--	--	--	--	--	<.003	<.002	<.002	<.002	.266	<.002	<.002
SEP 04...	.182	.276	437	20	15	<.003	<.002	<.002	<.002	.083	<.002	<.002
DATE	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ- INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	DI- AZINON, DISS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
OCT 13...	--	--	--	--	--	--	--	--	--	--	--	--
NOV 10...	<.003	<.003	<.004	<.004	<.002	E.006	99	<.002	<.001	<.017	<.002	<.004
DEC 14...	<.003	<.003	<.004	.009	<.002	E.024	100	<.002	<.001	<.017	<.002	<.004
JAN 12...	<.003	<.003	<.004	<.004	<.002	E.016	111	<.002	<.001	<.017	<.002	<.004
FEB 09...	<.003	<.003	<.004	.012	<.002	E.022	103	<.002	<.001	<.017	<.002	<.004
MAR 14...	<.003	<.003	<.004	.009	<.002	E.017	75	<.002	<.001	<.017	<.002	<.004
APR 11...	<.003	<.003	<.004	<.010	<.002	E.022	106	<.002	<.001	<.017	<.002	<.004
MAY 09...	<.003	<.003	<.004	.011	<.002	E.029	94	<.002	<.001	<.017	<.002	<.004
23...	<.003	<.003	<.004	<.010	<.002	E.14	98	<.002	<.001	<.017	<.002	<.004
JUN 12...	<.003	E.053	<.004	.010	<.002	E.11	93	<.002	<.001	<.017	<.002	<.004
27...	<.003	E.040	<.004	.007	<.002	E.11	108	<.002	<.001	<.017	E.002	<.004
JUL 11...	<.003	E.30	<.004	.012	<.002	E.25	100	.007	<.001	<.017	.006	<.004
25...	<.003	<.003	<.004	<.004	<.002	E.21	113	<.002	<.001	<.017	<.002	<.004
31...	<.003	<.003	<.004	E.007	<.002	E.15	114	.006	<.001	<.017	<.002	<.004
AUG 23...	<.003	<.003	<.004	.006	<.002	E.16	114	.006	<.001	<.017	<.002	<.004
SEP 04...	<.003	<.003	<.004	<.004	<.002	E.046	91	.009	<.001	<.017	<.002	<.004

04072150 DUCK CREEK NEAR HOWARD, WI--Continued
(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

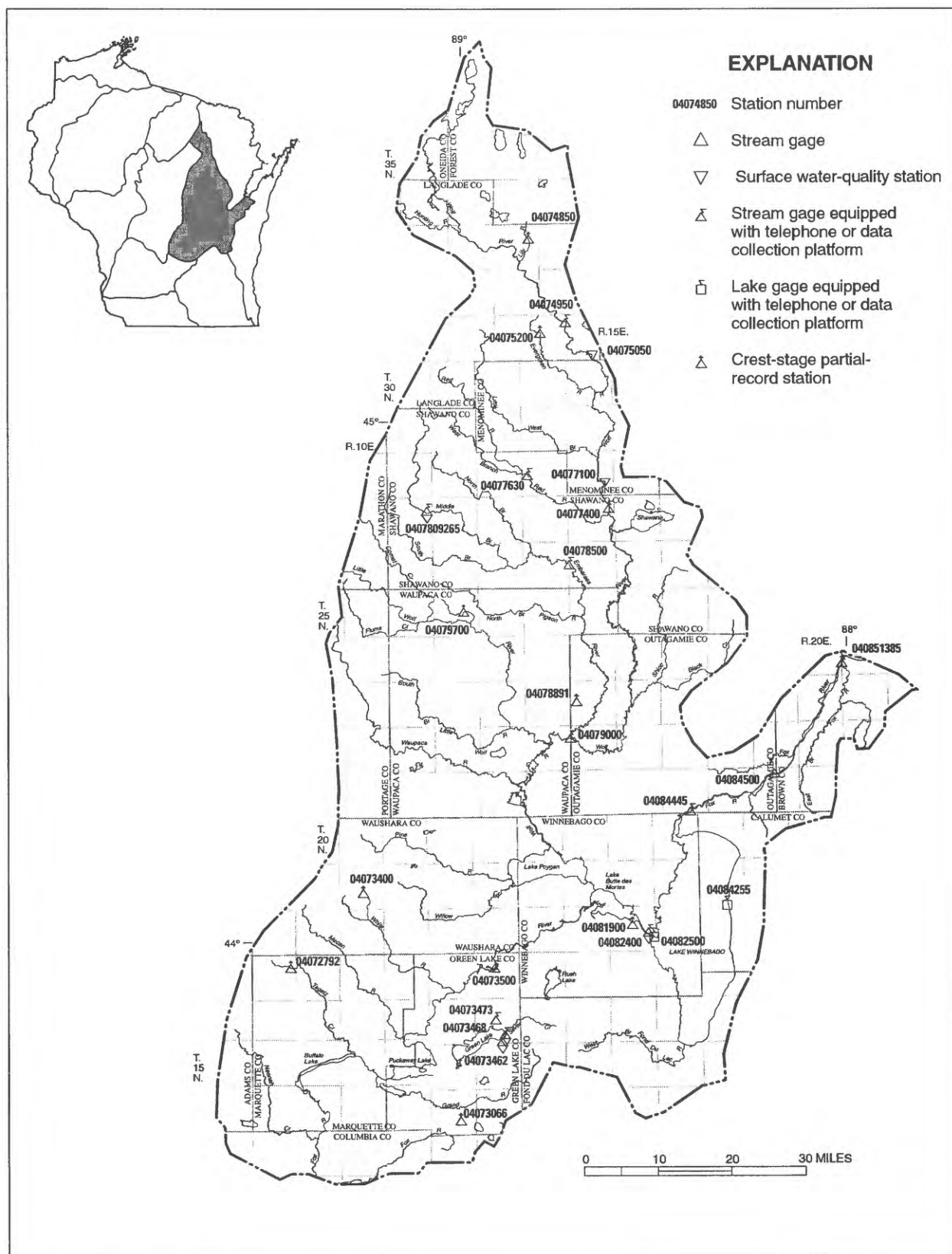
DATE	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (UG/L) (91065)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)
OCT 13...	--	--	--	--	--	--	--	--	--	--	--
NOV 10...	<.003	<.003	91	<.004	<.002	<.005	<.001	<.006	.010	<.004	<.004
DEC 14...	<.003	<.003	95	<.004	<.002	<.005	<.001	<.006	.011	<.004	<.004
JAN 12...	<.003	<.003	103	<.004	<.002	<.005	<.001	<.006	.013	<.004	<.004
FEB 09...	<.003	<.003	86	<.004	<.002	<.005	<.001	<.006	.024	<.004	<.004
MAR 14...	<.003	<.003	70	<.004	<.002	<.005	<.001	<.006	.015	<.004	<.004
APR 11...	<.003	<.003	100	<.004	<.002	<.005	<.001	<.006	.014	<.004	<.004
MAY 09...	<.003	<.003	78	<.004	<.002	<.005	<.010	<.006	.023	<.004	<.004
23...	<.003	<.003	94	<.004	<.002	<.005	<.001	<.080	1.73	<.010	<.004
JUN 12...	<.003	<.003	94	<.004	<.002	<.005	<.001	<.006	.344	.005	<.004
27...	<.003	<.003	103	<.004	<.002	<.005	<.001	<.006	.112	<.004	<.004
JUL 11...	<.003	<.003	93	<.004	<.002	<.005	<.001	<.006	.378	.009	<.004
25...	<.003	<.003	106	<.004	<.002	<.005	<.001	<.006	.137	<.004	<.004
31...	<.003	<.003	104	<.004	<.002	<.005	<.001	<.006	.065	<.004	<.004
AUG 23...	<.003	<.003	117	<.004	<.002	<.005	<.001	<.006	.055	<.004	<.004
SEP 04...	<.003	<.003	86	<.004	<.002	<.005	<.001	<.006	.013	<.004	<.004
DATE	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)
OCT 13...	--	--	--	--	--	--	--	--	--	--	--
NOV 10...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.008	<.003	<.007	<.004
DEC 14...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	.020	<.003	<.007	<.004
JAN 12...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.009	<.003	<.007	<.004
FEB 09...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.008	<.003	<.007	<.004
MAR 14...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.008	<.003	<.007	<.004
APR 11...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.014	<.003	<.007	<.004
MAY 09...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.011	<.003	<.007	<.004
23...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018	<.003	<.007	<.004
JUN 12...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.010	<.003	<.007	<.004
27...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.010	<.003	<.007	<.004
JUL 11...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.038	<.003	<.007	<.004
25...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.009	E.004	<.007	<.004
31...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.008	<.003	<.007	<.004
AUG 23...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.012	<.003	<.007	<.004
SEP 04...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.009	<.003	<.007	<.004

STREAMS TRIBUTARY TO LAKE MICHIGAN

04072150 DUCK CREEK NEAR HOWARD, WI--Continued
(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SAM- PLING METHOD, CODES (82398)
OCT 13...	--	--	--	--	--	--	--	--	--	--	30
NOV 10...	<.013	.021	<.010	<.007	<.013	<.002	<.001	E.002	--	--	30
DEC 14...	<.013	.026	E.007	<.007	<.013	<.002	<.001	<.002	--	--	10
JAN 12...	<.013	.101	<.010	<.007	<.013	<.002	<.001	<.002	274	48	70
FEB 09...	<.013	.014	.012	<.007	<.013	<.002	<.001	<.002	141	81	70
MAR 14...	<.013	.023	<.010	<.007	<.013	<.002	<.001	<.002	--	--	10
APR 11...	<.013	.027	<.010	<.007	<.013	<.002	<.001	<.002	--	--	10
MAY 09...	<.013	.010	<.010	<.007	<.013	<.002	<.001	<.002	--	--	10
23...	<.013	.028	<.010	<.007	<.013	<.002	<.001	<.002	--	--	10
JUN 12...	<.013	.013	<.010	<.007	<.013	<.002	<.001	<.002	--	--	10
27...	--	.019	<.010	<.007	<.013	<.002	<.001	<.002	--	--	10
JUL 11...	<.013	.521	<.010	<.007	<.013	<.002	<.001	<.002	--	--	10
25...	<.013	.111	<.010	<.007	<.013	<.002	<.001	<.002	--	--	10
31...	<.013	.164	E.003	<.007	<.013	<.002	<.001	<.002	--	--	10
AUG 23...	<.013	.034	<.010	<.010	<.013	<.002	<.001	<.002	--	--	10
SEP 04...	<.013	.136	<.010	<.007	<.013	<.002	<.001	<.002	--	--	10



Base from U.S. Geological Survey 1:100,000 digital data;
modified by Wisconsin Department of Natural Resources.
Wisconsin Transverse Mercator projection.

FOX-WOLF RIVER BASIN

STREAMS TRIBUTARY TO LAKE MICHIGAN

04073462 WHITE CREEK AT FOREST GLEN BEACH NEAR GREEN LAKE, WI

LOCATION.--Lat 43°48'58", long 88°55'42", in SE ¼ SE ¼ NW ¼ sec.34, T.16 N., R.13 E., Green Lake County, Hydrologic Unit 04030201, at culvert on Spring Grove Road at Forest Glen Beach, 2.6 mi southeast of Green Lake.

DRAINAGE AREA.--3.05 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1981 to June 1988, October 1996 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 800 ft, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	.85	.27	.17	.12	3.3	.77	1.7	6.1	4.1	2.0	2.4
2	1.3	.89	.28	.18	.12	2.9	.75	1.6	8.1	5.3	1.9	2.6
3	1.1	.86	.32	.17	.12	2.6	.74	1.6	8.9	4.7	1.8	2.8
4	1.1	.74	.30	.17	.11	2.4	.66	1.7	9.8	4.1	1.7	2.3
5	1.1	.69	.27	.16	.11	2.3	.63	1.6	10	3.8	1.8	2.2
6	1.0	.61	.26	.16	e.10	2.2	.71	1.5	9.9	3.5	1.8	2.1
7	1.0	.58	.25	.16	.10	2.1	.74	1.5	10	3.5	1.6	2.1
8	1.0	.58	.25	.16	e.10	2.0	.67	1.4	11	3.5	1.6	1.9
9	1.0	.59	.26	.16	.10	1.9	.64	1.4	11	3.6	1.6	1.8
10	1.0	.65	.24	.23	.10	1.7	.58	1.3	10	3.4	1.6	1.9
11	.96	.62	.24	.27	.10	1.6	.61	1.4	10	3.2	1.5	7.5
12	1.0	.59	.24	.21	.10	1.5	.56	1.5	9.7	3.2	1.5	5.8
13	1.2	.57	.23	.18	.10	1.5	.55	1.1	9.8	3.2	7.7	4.7
14	1.1	.53	.24	e.16	.10	1.4	.52	1.1	9.6	3.1	3.1	5.0
15	1.1	.51	.25	e.15	.10	1.5	.48	1.0	9.1	3.0	2.6	4.4
16	1.1	.48	.22	e.15	.09	1.4	.48	1.1	8.8	2.9	2.3	4.2
17	1.0	.48	.20	e.15	e.09	1.3	.47	1.3	8.1	2.8	2.6	4.1
18	.98	.52	e.19	e.15	e.09	1.3	.45	2.9	7.8	2.7	2.2	4.0
19	.95	.48	e.18	.15	.09	1.3	.58	2.2	7.3	2.4	2.1	4.1
20	.90	.46	e.17	.15	.09	1.3	2.4	2.1	7.5	2.5	1.9	4.1
21	.91	.45	e.17	e.14	.09	1.2	1.4	2.3	6.7	2.7	1.9	3.8
22	.99	.43	e.16	e.14	.13	1.1	1.2	2.6	6.2	2.6	9.9	3.9
23	.94	.81	e.15	.14	3.8	1.1	1.8	2.6	5.7	2.4	5.1	3.8
24	.92	.48	e.15	e.14	9.2	1.1	1.4	2.7	5.5	2.3	3.9	3.6
25	1.0	.43	e.14	.14	7.8	1.1	1.4	2.7	5.2	2.3	3.3	3.3
26	.95	.41	e.15	.14	8.0	1.2	1.4	2.7	5.1	2.2	3.0	3.3
27	.92	.36	.17	.14	6.0	1.1	1.5	2.8	4.9	2.1	2.8	3.2
28	.92	.33	.18	.20	4.6	1.1	1.5	2.9	4.9	2.2	2.6	3.1
29	.91	.29	.18	.14	3.9	.98	1.6	2.8	4.6	2.2	2.5	3.4
30	.88	.27	.18	.13	---	.89	1.5	2.9	4.3	2.1	2.4	3.5
31	.83	---	.17	.13	---	.82	---	2.9	---	2.0	2.2	---
TOTAL	31.26	16.54	6.66	5.02	45.55	49.19	28.69	60.9	235.6	93.6	84.5	104.9
MEAN	1.01	.55	.21	.16	1.57	1.59	.96	1.96	7.85	3.02	2.73	3.50
MAX	1.3	.89	.32	.27	9.2	3.3	2.4	2.9	11	5.3	9.9	7.5
MIN	.83	.27	.14	.13	.09	.82	.45	1.0	4.3	2.0	1.5	1.8
CFSM	.33	.18	.07	.05	.51	.52	.31	.64	2.57	.99	.89	1.15
IN.	.38	.20	.08	.06	.56	.60	.35	.74	2.87	1.14	1.03	1.28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2000, BY WATER YEAR (WY)

MEAN	3.10	3.46	2.88	1.98	3.60	7.22	7.36	4.42	4.05	3.23	2.56	3.52
MAX	12.9	12.7	7.47	5.28	9.29	16.1	15.7	8.31	7.85	5.53	4.39	18.5
(WY)	1987	1986	1986	1983	1984	1986	1998	1983	2000	1999	1986	1986
MIN	.31	.30	.21	.16	1.57	1.59	.96	1.96	1.29	1.40	.83	.45
(WY)	1999	1988	1999	2000	2000	2000	2000	2000	1988	1987	1987	1998

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1982 - 2000

ANNUAL TOTAL	1053.29	762.41	
ANNUAL MEAN	2.89	2.08	4.20
HIGHEST ANNUAL MEAN			7.94
LOWEST ANNUAL MEAN			2.08
HIGHEST DAILY MEAN	22	11	89
LOWEST DAILY MEAN	.11	(a) .09	(a) .09
ANNUAL SEVEN-DAY MINIMUM	.12	(a) .09	(a) .09
INSTANTANEOUS PEAK FLOW		116	781
INSTANTANEOUS PEAK STAGE		5.49	10.14
ANNUAL RUNOFF (CFSM)	.95	.68	1.38
ANNUAL RUNOFF (INCHES)	12.85	9.30	18.72
10 PERCENT EXCEEDS	6.2	5.0	8.7
50 PERCENT EXCEEDS	2.1	1.3	2.7
90 PERCENT EXCEEDS	.21	.15	.46

(a) Ice affected

(b) Also occurred Feb. 19-21 and ice-affected days, Feb. 17 and 18, 2000

(e) Estimated due to ice effect or missing record

04073462 WHITE CREEK AT FOREST GLEN BEACH NEAR GREEN LAKE, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1981 to June 1988, October 1996 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: October 1981 to June 1988, October 1996 to current year.

TOTAL AMMONIA-NITROGEN DISCHARGE: October 1981 to June 1988.

TOTAL-PHOSPHORUS DISCHARGE: October 1981 to June 1988, October 1996 to current year.

INSTRUMENTATION.--Automatic pumping sampler since December 1981.

REMARKS.--Records are good.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 51,300 mg/L, Apr. 3, 1982; minimum observed, 1 mg/L, Sept. 26, 1981, Nov. 28, 1984, Sept. 5, 1985, Jan. 14, 1987, Aug. 12, 1998, and Sept. 2, 1998.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 2,420 tons, Apr. 3, 1982; minimum daily, 0.00 ton, on many days during 1982, 1987, 1988, 1997, 1998, 1999, and 2000 water years.

TOTAL AMMONIA-NITROGEN CONCENTRATIONS: Maximum observed, 8.4 mg/L, Apr. 3, 1982; minimum observed, <0.01 mg/L, many days.

TOTAL AMMONIA-NITROGEN DISCHARGE.--Maximum daily, 490 lb, Apr. 3, 1982; minimum daily, 0.01 lb, Nov. 27, Dec. 2-4, 1987.

TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 7.6 mg/L, May 31, 1987; minimum observed, <0.01 mg/L, many days.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 1,130 lb, Sept. 10, 1986; minimum daily, 0.04 lb, Oct. 26 and Dec. 25-26, 1998.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 12,600 mg/L, Aug. 22; minimum observed, 7 mg/L, Mar. 29.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 110 tons, Aug. 22; minimum daily, 0 ton, Jan. 5-10 and Jan. 12 to Feb. 22.

TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 10.8 mg/L, Aug. 22; minimum observed, 0.035 mg/L, Oct. 1.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 219 lb, Aug. 22; minimum daily, 0.06 lb, Dec. 23-26, Jan. 5-9, 14-18, 21, 22, Feb. 4, 6-8, and 11.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.03	.02	.01	.00	.15	.01	.15	6.7	.20	.13	.13
2	.10	.03	.02	.01	.00	.12	.01	.13	4.5	3.8	.13	.20
3	.06	.03	.02	.01	.00	.11	.01	.12	2.4	1.4	.12	.25
4	.06	.02	.02	.01	.00	.10	.01	.12	1.5	.84	.11	.18
5	.05	.02	.02	.00	.00	.09	.01	.10	1.5	.52	.12	.15
6	.05	.02	.02	.00	.00	.08	.01	.09	1.4	.38	.11	.12
7	.05	.02	.02	.00	.00	.08	.02	.09	1.4	.36	.10	.11
8	.04	.02	.02	.00	.00	.07	.01	.08	1.5	.36	.10	.09
9	.04	.02	.02	.00	.00	.07	.01	.07	1.4	.36	.09	.07
10	.04	.02	.01	.00	.00	.06	.01	.06	1.3	.34	.09	.07
11	.04	.02	.01	.01	.00	.05	.01	.06	1.2	.31	.08	.13
12	.04	.02	.01	.00	.00	.05	.01	.06	1.1	.31	.08	3.0
13	.04	.02	.01	.00	.00	.05	.01	.05	1.0	.30	.43	.42
14	.04	.02	.01	.00	.00	.04	.01	.04	.95	.29	.31	.32
15	.03	.02	.01	.00	.00	.04	.01	.04	.85	.27	.24	.35
16	.03	.02	.01	.00	.00	.04	.01	.04	.77	.26	.20	.31
17	.03	.02	.01	.00	.00	.04	.01	.11	.67	.25	.20	.27
18	.03	.02	.01	.00	.00	.03	.01	.37	.61	.23	.16	.25
19	.03	.02	.01	.00	.00	.03	.09	.15	.54	.21	.13	.23
20	.02	.01	.01	.00	.00	.03	1.0	.12	.50	.21	.10	.21
21	.02	.01	.01	.00	.00	.03	.05	.11	.37	.22	.09	.18
22	.02	.01	.01	.00	.00	.03	.04	.12	.33	.21	110	.17
23	.02	.08	.01	.00	4.6	.02	.14	.13	.30	.19	3.4	.15
24	.02	.03	.01	.00	4.4	.03	.07	.13	.29	.18	.88	.12
25	.03	.03	.01	.00	1.4	.02	.06	.13	.27	.17	.32	.10
26	.03	.03	.01	.00	.95	.02	.05	.12	.26	.16	.14	.09
27	.03	.02	.01	.00	.40	.02	.05	.13	.25	.15	.12	.08
28	.03	.02	.01	.00	.25	.02	.05	.13	.25	.16	.10	.07
29	.03	.02	.01	.00	.18	.02	.40	.12	.23	.15	.09	.07
30	.03	.02	.01	.00	---	.02	.14	.12	.21	.15	.08	.06
31	.02	---	.01	.00	---	.02	---	.12	---	.14	.09	---
TOTAL	1.15	0.69	0.40	0.05	12.18	1.58	2.33	3.41	34.55	13.08	160.91	20.82

WTR Yr 2000 TOTAL 251.15

STREAMS TRIBUTARY TO LAKE MICHIGAN

04073462 WHITE CREEK AT FOREST GLEN BEACH NEAR GREEN LAKE, WI--Continued

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.23	.21	.14	.07	.07	1.1	.15	.93	17	1.1	.97	1.1
2	.61	.23	.14	.07	.07	.94	.15	.84	14	12	.93	1.4
3	.42	.22	.16	.07	.07	.83	.14	.82	6.1	4.7	.87	1.5
4	.41	.19	.15	.07	.06	.75	.13	.81	6.1	3.5	.81	1.2
5	.39	.18	.13	.06	.07	.70	.12	.72	5.8	2.7	.87	1.1
6	.36	.16	.12	.06	.06	.65	.14	.65	5.1	2.3	.82	1.0
7	.35	.15	.12	.06	.06	.62	.14	.63	4.8	2.2	.76	1.0
8	.34	.15	.12	.06	.06	.59	.13	.60	4.6	2.2	.75	.87
9	.32	.16	.12	.06	.07	.54	.12	.55	4.5	2.2	.72	.81
10	.31	.17	.12	.09	.07	.48	.11	.50	4.6	2.1	.70	.83
11	.29	.17	.11	.10	.06	.45	.12	.51	4.5	1.9	.66	37
12	.30	.16	.11	.08	.07	.41	.11	.52	4.4	2.0	.63	13
13	.33	.16	.11	.07	.07	.39	.11	.40	4.5	1.9	.81	3.0
14	.30	.15	.11	.06	.07	.37	.10	.36	4.5	1.9	2.4	2.3
15	.29	.14	.11	.06	.07	.39	.09	.33	4.4	1.8	1.6	2.0
16	.29	.14	.10	.06	.07	.34	.09	.34	4.3	1.7	1.1	1.9
17	.26	.14	.09	.06	.07	.32	.09	.89	4.0	1.6	1.1	1.7
18	.25	.14	.08	.06	.07	.31	.09	3.1	4.0	1.5	1.0	1.6
19	.23	.13	.08	.07	.07	.31	.33	.82	3.8	1.4	.92	1.5
20	.22	.12	.07	.07	.07	.31	3.5	.76	3.5	1.4	.85	1.5
21	.21	.11	.07	.06	.08	.27	.50	.79	2.0	1.5	.82	1.3
22	.23	.10	.07	.06	.11	.25	.29	.84	1.7	1.4	219	1.2
23	.22	.73	.06	.07	16	.23	.50	.84	1.6	1.3	12	1.2
24	.22	.26	.06	.07	23	.24	.87	.85	1.5	1.2	3.0	1.1
25	.25	.23	.06	.07	9.6	.23	.85	.87	1.4	1.2	1.4	.97
26	.23	.22	.06	.07	6.7	.24	.75	.88	1.4	1.1	.83	.93
27	.22	.19	.07	.07	3.0	.23	.68	.91	1.4	1.1	.81	.88
28	.23	.17	.07	.10	1.9	.21	.64	.93	1.3	1.1	.84	.84
29	.22	.15	.07	.07	1.4	.19	2.0	.91	1.3	1.1	.91	.89
30	.22	.14	.07	.07	---	.17	.86	.92	1.2	1.1	.95	.87
31	.21	---	.07	.07	---	.16	---	.94	---	1.0	.96	---
TOTAL	8.96	5.57	3.02	2.14	63.14	13.22	13.90	24.76	129.3	65.2	340.98	86.49

WTR YR 2000 TOTAL 756.68

04073462 WHITE CREEK AT FOREST GLEN BEACH NEAR GREEN LAKE, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
OCT					
01...	1509	1.2	.035	15	10
02...	0355	1.7	.116	40	50
21...	1405	.89	.043	9	10
NOV					
17...	1604	.48	.053	14	10
23...	0745	1.1	.219	41	50
DEC					
29...	1155	.18	.075	21	10
JAN					
11...	0900	.27	.069	8	50
FEB					
23...	0915	.24	.155	13	50
23...	1335	1.6	.556	162	50
23...	1645	7.1	1.16	800	50
23...	1720	12	.823	502	50
23...	2320	9.4	.772	417	50
24...	0520	8.4	.477	160	50
24...	1720	10	.426	173	50
25...	1720	7.3	.171	39	50
25...	2320	8.8	.203	59	50
27...	1120	6.0	.088	23	50
29...	1423	3.9	.063	17	10
MAR					
29...	1050	.97	.036	7	10
APR					
19...	0815	.45	.036	9	50
19...	1410	1.0	.082	28	50
20...	0215	3.3	.414	406	50
20...	0255	6.5	.691	621	50
20...	0705	2.5	.211	52	50
20...	1305	1.9	.097	16	50
22...	1305	1.2	.043	10	50
23...	0540	2.5	.039	33	50
24...	1205	1.5	.128	17	10
29...	0310	1.7	.930	460	50
29...	0910	1.6	.108	36	50
MAY					
17...	1230	1.0	.055	12	50
18...	0005	3.4	.296	83	50
18...	0605	4.4	.312	70	50
18...	1205	3.0	.135	26	50
19...	0005	2.2	.072	28	50
21...	0610	2.3	.063	17	50
23...	1210	2.6	.059	18	50
JUN					
01...	0430	5.6	.287	154	50
01...	1630	3.9	.082	24	50
01...	1820	8.8	.382	387	50
02...	0035	8.5	.311	254	50
02...	0635	7.6	.577	311	50
02...	1235	8.1	.293	165	50
03...	0035	8.6	.136	148	50
04...	0035	9.2	.120	62	50
05...	0635	11	.106	52	50
08...	1410	11	.078	52	10
20...	0800	8.3	.097	26	50
21...	1152	6.8	.052	20	50
JUL					
02...	1925	14	2.28	1280	50
02...	2335	6.8	.204	140	50
AUG					
13...	1030	14	1.36	2100	50
13...	1105	83	5.19	6580	50
13...	1135	55	2.73	2770	50
13...	1340	12	.971	444	50
13...	1600	5.8	.427	134	50
13...	2200	3.8	.161	48	50
14...	1000	3.1	.150	35	50
16...	1630	2.3	.083	32	50
22...	1625	8.7	.665	590	50
22...	1635	42	3.73	5490	50
22...	1700	111	10.8	12600	50
22...	1730	86	5.15	4580	50
22...	1840	23	2.09	1270	50
23...	0215	6.5	.601	360	50
23...	1415	4.6	.385	184	50
24...	0215	4.2	.172	112	50
26...	0815	2.9	.048	17	50
30...	1610	2.3	.075	12	10

STREAMS TRIBUTARY TO LAKE MICHIGAN

04073462 WHITE CREEK AT FOREST GLEN BEACH NEAR GREEN LAKE, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
SEP					
03...	0540	3.0	.102	34	50
11...	0725	6.6	.498	410	50
11...	0750	21	1.74	2300	50
11...	0825	39	1.64	1580	50
11...	0920	15	1.35	744	50
11...	1255	8.0	.531	281	50
11...	1855	5.1	.820	327	50
11...	2145	10	.633	358	50
12...	0345	6.5	.502	244	50
12...	0945	5.5	.495	232	50
13...	1545	4.6	.081	19	50
15...	0925	4.5	.087	30	10
22...	1315	3.9	.059	16	50

04073468 GREEN LAKE INLET AT COUNTY TRUNK HIGHWAY A NEAR GREEN LAKE, WI

LOCATION.--Lat 43°49'28", long 88°55'36", in NE ¼ SE ¼ SE ¼ sec.27, T.16 N., R.13 E., Green Lake County, Hydrologic Unit 04030201, on left bank at downstream side of County Trunk Highway A, 2.3 mi southeast of Green Lake.

DRAINAGE AREA.--53.5 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1987 to current year.

GAGE.--Acoustical Velocity Meter (AVM) system. Single-path, mid-depth transducer installation. Cross-path, dual-depth transducers installed on June 6, 1990. Datum of gage is 790.00 ft above sea level (from Wisconsin Department of Natural Resources benchmark).

REMARKS.--Records poor (see page 12). Flows fluctuate due to seiche from Green Lake. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	7.3	13	10	10	65	15	34	94	18	12	24
2	15	14	13	4.7	6.3	47	17	25	133	27	12	82
3	17	12	17	6.0	10	38	15	25	102	35	9.5	84
4	15	5.7	19	8.9	9.9	32	14	23	107	27	e9.8	67
5	18	14	18	8.5	7.5	27	-6.9	21	118	27	e11	72
6	15	10	14	11	8.5	25	32	15	102	24	e35	66
7	7.3	7.2	14	10	10	28	17	21	92	20	e24	52
8	15	9.2	15	12	8.6	27	5.0	13	78	24	e11	40
9	11	12	12	8.9	7.5	39	18	18	64	24	e10.5	29
10	11	17	15	11	6.0	21	12	11	50	22	e10	28
11	9.5	5.2	12	15	10	22	12	19	50	19	e9.5	105
12	12	16	11	7.2	6.8	20	13	23	36	18	e9.0	151
13	12	9.3	11	7.9	8.8	18	12	19	34	17	e80	103
14	13	13	11	9.6	8.7	23	11	24	42	17	e50	104
15	16	11	11	9.6	7.6	25	22	19	47	15	e38	92
16	11	11	15	7.7	8.8	20	11	22	40	11	e32	63
17	14	8.7	10	6.3	7.9	17	6.4	23	35	17	31	56
18	12	9.5	10	7.8	7.9	19	14	113	32	13	30	46
19	9.2	10	8.5	9.3	10	19	26	69	35	11	20	36
20	13	12	10	11	9.7	20	104	62	34	15	16	43
21	10	10	12	7.6	9.5	24	66	56	29	15	12	50
22	14	12	11	8.2	12	26	61	46	37	12	36	42
23	12	8.2	8.9	8.4	28	27	75	34	25	9.4	100	51
24	7.7	37	8.3	6.8	55	22	60	25	25	13	60	39
25	7.9	19	6.7	8.9	72	24	44	25	21	11	47	40
26	14	14	11	10	120	17	37	23	21	9.8	45	36
27	4.0	17	11	8.8	102	31	31	21	24	11	34	35
28	16	11	13	9.2	87	21	33	19	19	13	24	32
29	5.5	14	11	9.8	79	19	30	23	21	12	26	25
30	11	11	9.9	8.5	---	17	27	22	18	11	20	29
31	11	---	12	9.1	---	17	---	24	---	10	20	---
TOTAL	375.1	367.3	374.3	277.7	735.0	797	833.5	917	1565	528.2	884.3	1722
MEAN	12.1	12.2	12.1	8.96	25.3	25.7	27.8	29.6	52.2	17.0	28.5	57.4
MAX	18	37	19	15	120	65	104	113	133	35	100	151
MIN	4.0	5.2	6.7	4.7	6.0	17	-6.9	11	18	9.4	9.0	24
CFSM	.23	.23	.23	.17	.47	.48	.52	.55	.98	.32	.53	1.07
IN.	.26	.26	.26	.19	.51	.55	.58	.64	1.09	.37	.61	1.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2000, BY WATER YEAR (WY)

	MEAN	20.6	26.2	20.9	15.8	25.3	65.7	63.4	38.8	44.2	35.4	24.5	21.5
MAX	64.1	71.3	47.5	46.1	60.7	107	185	89.9	156	190	67.5	57.4	
(WY)	1996	1996	1993	1996	1996	1997	1993	1993	1993	1993	1990	2000	
MIN	7.00	12.2	5.73	6.66	6.71	24.5	27.8	16.1	4.57	3.78	5.03	9.01	
(WY)	1989	2000	1990	1989	1989	1999	2000	1988	1988	1988	1988	1988	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1987 - 2000

ANNUAL TOTAL	10039.7	9376.4	
ANNUAL MEAN	27.5	25.6	34.2
HIGHEST ANNUAL MEAN			79.9
LOWEST ANNUAL MEAN			18.7
HIGHEST DAILY MEAN	213	151	705
LOWEST DAILY MEAN	4.0	-6.9	-6.9
ANNUAL SEVEN-DAY MINIMUM	9.3	7.9	2.1
ANNUAL RUNOFF (CFSM)	.51	.48	.64
ANNUAL RUNOFF (INCHES)	6.98	6.52	8.68
10 PERCENT EXCEEDS	53	60	70
50 PERCENT EXCEEDS	22	17	21
90 PERCENT EXCEEDS	10	8.5	7.7

(e) Estimated due to missing record

STREAMS TRIBUTARY TO LAKE MICHIGAN

04073468 GREEN LAKE INLET AT COUNTY TRUNK HIGHWAY A NEAR GREEN LAKE, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1987 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: February 1987 to current year.

TOTAL-PHOSPHORUS DISCHARGE: February 1987 to current year.

INSTRUMENTATION.--Automatic pumping sampler from March 1997; manual samples February 1987 to February 1997.

REMARKS.--Records are fair. Phosphorus analyses by the Wisconsin State Laboratory of Hygiene. Samples are point samples unless otherwise indicated.

COOPERATION.--Observer furnished by the Green Lake Sanitary District.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 701 mg/L, May 30, 1989; minimum observed, 0 mg/L, Mar. 25, 1988.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 456 tons, May 31, 1989; minimum daily, -3.1 ton, Apr. 5, 2000.

TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 1.45 mg/L, May 30, 1989; minimum observed, <0.02 mg/L, Oct. 10, 1991.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 3,230 lb, May 31, 1989; minimum daily, -13 lb, Apr. 5, 2000.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 260 mg/L, Mar. 25; minimum observed, 5 mg/L, Jan. 15.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 39 tons, Apr. 20; minimum daily, -3.1 tons, Apr. 5.

TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.319 mg/L, Mar. 25; minimum observed, 0.040 mg/L, Sept. 19.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 165 lb, Sept. 12; minimum daily, -13 lb, Apr. 5.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	.25	.42	.22	.66	1.6	1.4	7.0	8.6	1.4	1.1	1.7
2	1.5	.49	.44	.10	.40	1.2	1.4	5.3	12	2.1	1.1	6.8
3	1.5	.41	.56	.12	.64	.98	1.2	5.0	8.0	2.6	.94	8.2
4	1.1	.20	.65	.17	.59	.85	.99	4.6	8.6	1.3	1.0	7.6
5	1.2	.50	.62	.16	.44	.74	-3.1	4.2	14	1.0	1.2	9.6
6	.93	.36	.47	.19	.48	.76	11	2.8	18	1.1	3.8	10
7	.40	.25	.48	.18	.55	.98	5.4	4.0	9.0	1.2	2.7	9.8
8	.72	.32	.51	.20	.46	1.2	1.8	2.4	4.4	1.9	1.3	8.8
9	.46	.43	.41	.15	.39	3.2	5.2	3.1	2.5	2.0	1.3	7.2
10	.43	.58	.50	.17	.31	1.5	2.9	1.6	2.5	1.6	1.2	6.0
11	.37	.17	.40	.23	.50	1.2	2.2	2.6	3.8	1.1	1.2	19
12	.49	.53	.35	.11	.33	.95	2.0	2.9	2.5	.90	1.2	30
13	.51	.31	.35	.11	.42	.80	1.3	1.9	1.8	.92	11	23
14	.54	.43	.33	.13	.41	.99	.97	2.1	3.0	1.0	7.0	21
15	.69	.34	.32	.13	.35	1.1	1.6	1.5	7.2	.95	5.5	14
16	.49	.34	.46	.12	.39	.83	.58	2.1	12	.81	4.7	7.1
17	.65	.27	.30	.11	.34	.70	.27	2.7	9.9	1.3	4.2	4.4
18	.55	.30	.30	.15	.34	.73	.44	30	8.5	1.1	3.9	1.9
19	.41	.32	.24	.20	.43	.73	1.3	7.3	8.6	1.1	2.3	.86
20	.54	.36	.28	.26	.40	.84	39	6.2	7.8	1.5	1.7	1.2
21	.44	.30	.34	.21	.38	1.1	34	6.9	6.4	1.4	1.2	1.7
22	.57	.35	.29	.25	.48	1.4	26	6.5	7.6	1.1	3.5	1.8
23	.51	.25	.24	.29	1.1	1.7	15	3.6	4.2	.89	8.2	2.8
24	.31	1.1	.22	.26	2.0	1.5	7.2	8.5	3.7	1.2	5.0	2.6
25	.31	.58	.17	.39	1.9	1.5	3.7	6.8	2.6	1.1	4.0	2.9
26	.53	.44	.28	.51	2.2	1.0	3.6	3.4	2.2	.94	3.5	2.8
27	.15	.53	.29	.49	1.8	3.5	3.5	1.6	2.4	1.1	2.3	2.9
28	.61	.34	.31	.57	2.1	2.5	4.4	.82	1.8	1.2	1.5	2.9
29	.20	.45	.27	.67	1.9	2.1	4.7	1.0	1.9	1.2	1.6	2.4
30	.40	.36	.23	.58	---	1.8	4.9	1.1	1.5	1.0	1.3	2.8
31	.40	---	.28	.61	---	1.7	---	1.4	---	.96	1.3	---
TOTAL	19.61	11.86	11.31	8.04	22.69	41.68	184.85	140.92	187.0	38.97	91.74	223.76

WTR YR 2000 TOTAL 982.43

04073468 GREEN LAKE INLET AT COUNTY TRUNK HIGHWAY A NEAR GREEN LAKE, WI--Continued

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	3.2	5.1	3.6	2.8	49	14	40	82	15	13	21
2	11	6.0	5.3	1.6	1.8	32	14	30	118	22	13	96
3	11	4.9	6.8	2.1	3.0	24	13	28	81	24	11	97
4	8.4	2.4	7.7	3.1	2.8	19	12	26	94	15	11	75
5	9.3	5.8	7.3	2.9	2.2	14	-13	24	107	13	13	80
6	7.3	4.0	5.6	3.6	2.5	13	44	16	79	13	41	71
7	3.2	2.8	5.7	3.4	2.9	15	20	23	68	14	28	55
8	5.9	3.7	6.2	3.9	2.5	15	6.9	14	58	20	13	42
9	3.9	5.1	5.0	3.0	2.2	27	23	19	44	21	13	30
10	3.7	7.1	6.1	3.6	1.8	14	15	11	31	17	12	32
11	3.3	2.2	4.9	4.9	3.0	14	13	20	27	13	12	134
12	4.6	7.2	4.4	2.4	2.1	13	13	24	20	11	11	165
13	5.0	4.3	4.4	2.6	2.8	11	11	18	21	11	103	113
14	5.6	6.3	4.2	3.1	2.9	13	9.1	21	31	12	65	99
15	7.6	5.0	4.1	3.1	2.6	14	16	16	41	11	50	84
16	5.6	5.0	5.9	2.5	3.1	10	6.6	18	40	9.2	43	57
17	7.8	3.9	4.0	2.0	2.9	8.6	3.4	19	36	14	40	46
18	6.7	4.3	4.0	2.4	3.0	8.7	6.0	131	34	12	40	20
19	4.9	4.5	3.2	2.9	4.0	8.5	13	85	38	11	26	8.7
20	6.6	5.0	3.9	3.2	4.0	8.9	128	71	39	16	20	12
21	5.5	4.2	4.7	2.3	4.0	11	94	61	32	15	15	17
22	7.0	4.7	4.0	2.4	5.4	12	77	48	41	12	45	18
23	6.3	3.3	3.3	2.5	13	13	76	31	26	9.6	130	27
24	3.9	15	3.0	2.0	27	11	68	32	26	13	74	25
25	3.9	7.6	2.4	2.5	73	13	52	32	21	12	55	25
26	6.7	5.8	4.0	2.9	123	9.3	44	26	20	10	48	22
27	2.0	6.8	4.2	2.4	88	26	37	21	23	12	34	21
28	7.8	4.4	4.5	2.5	82	19	39	16	17	14	21	19
29	2.6	5.7	4.0	2.7	65	18	36	14	19	13	22	14
30	5.2	4.5	3.5	2.3	---	16	32	11	16	11	16	16
31	5.2	---	4.4	2.5	---	16	---	9.2	---	11	14	---
TOTAL	189.5	154.7	145.8	86.9	535.3	496.0	923.0	955.2	1330	426.8	1052	1541.7

WTR YR 2000 TOTAL 7836.9

STREAMS TRIBUTARY TO LAKE MICHIGAN

04073468 GREEN LAKE INLET AT COUNTY TRUNK HIGHWAY A NEAR GREEN LAKE, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
OCT					
10...	1200	43	.060	14	50
17...	1300	43	.102	17	50
31...	1200	28	.085	13	50
NOV					
07...	1300	32	.071	13	50
14...	1445	-6.6	.089	12	50
23...	0345	89	.075	11	50
DEC					
05...	1215	32	.076	13	50
29...	1101	12	--	9	50
JAN					
15...	1200	5.7	.060	5	50
29...	1330	14	.050	26	50
FEB					
12...	1200	-8.1	.057	18	50
24...	1645	54	.088	14	50
25...	1715	62	.232	9	50
26...	1945	127	.173	6	50
27...	1145	99	.151	6	50
28...	0445	93	.184	9	50
29...	0200	64	.159	9	50
MAR					
05...	1200	21	.098	10	50
08...	1400	-9.0	.098	15	50
09...	0645	113	.131	34	50
12...	1215	38	.116	17	50
19...	1200	19	.082	14	50
24...	1430	100	.091	26	50
25...	1400	85	.319	260	50
26...	1215	71	.105	22	50
26...	2030	17	.095	22	50
27...	1400	77	.172	47	50
APR					
05...	1400	134	.156	25	50
06...	0315	136	.290	156	50
07...	0300	169	.198	104	50
07...	1915	107	.280	164	50
14...	1915	139	.151	31	50
19...	1200	139	.068	9	50
20...	0330	141	.160	60	50
20...	1900	81	.289	224	50
23...	0045	101	.219	141	50
23...	1200	120	.175	59	50
24...	1100	88	.217	64	50
24...	1101	89	.217	26	10
MAY					
01...	1200	38	.219	78	50
08...	1230	2.6	.196	70	50
12...	1215	-117	.195	47	50
15...	1200	16	.153	28	50
18...	0015	-1.3	.151	47	50
18...	1615	67	.257	152	50
19...	0945	136	.224	30	50
22...	1200	34	.192	55	50
24...	0030	-91	.161	33	50
24...	1745	134	.268	168	50
28...	1145	140	.155	14	50
31...	2100	269	.063	23	50
JUN					
01...	0445	119	.156	30	50
01...	2100	14	.175	39	50
02...	0445	158	.145	24	50
02...	1230	130	.184	39	50
03...	1245	117	.139	27	50
04...	1345	103	.166	33	50
05...	0515	125	.171	20	50
05...	2115	113	.162	82	50
06...	1715	107	.135	60	50
08...	0430	114	.141	23	50
09...	2000	126	.126	13	50
11...	1845	89	.094	32	50
13...	1130	82	.110	18	50
14...	1300	102	.139	26	50
16...	1230	156	.183	111	50
21...	1259	38	.218	79	50
21...	2044	114	.206	83	50
26...	0944	101	.177	39	50

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04073468 GREEN LAKE INLET AT COUNTY TRUNK HIGHWAY A NEAR GREEN LAKE, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDEED (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
JUL						
02...	1814	--	93	.153	28	50
03...	0259	--	100	.133	30	50
05...	1159	--	-13	.084	13	50
08...	0659	--	124	.155	29	50
09...	1014	--	205	.169	33	50
12...	1214	--	14	.111	18	50
19...	1200	--	23	.186	35	50
AUG						
02...	1200	--	4.9	.203	36	50
16...	1015	32	--	.249	55	50
22...	1715	--	210	.228	34	50
23...	0100	--	81	.243	38	50
23...	1630	--	78	.239	25	50
24...	0800	--	115	.232	32	50
26...	0630	--	143	.206	31	50
27...	2115	--	56	.174	23	50
31...	2400	--	-16	.126	24	50
SEP						
09...	1315	--	39	.186	95	50
11...	1200	--	77	.252	66	50
12...	1115	--	159	.193	75	50
13...	1300	--	107	.210	84	50
14...	1245	--	116	.172	78	50
17...	1200	--	52	.164	30	50
19...	1115	--	108	.040	8	50
24...	1200	--	40	.121	25	50
30...	0700	--	85	.103	38	50

STREAMS TRIBUTARY TO LAKE MICHIGAN

04073473 PUCHYAN RIVER DOWNSTREAM NORTH LAWSON DRIVE NEAR GREEN LAKE, WI

LOCATION.--Lat 43°51'27", long 88°56'47", in NE ¼ SE ¼ sec.16, T.16 N., R.13 E., Green Lake County, Hydrologic Unit
04030201, on right bank 220 ft downstream from bridge on North Lawson Drive, 1.0 mi northeast of dam at outlet of Green Lake
at Green Lake.

DRAINAGE AREA.--105 mi².

PERIOD OF RECORD.--November 1996 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 777.47 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Flow regulated by dams
1.1 mi and 180 ft upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	15	15	10	e12	32	41	130	145	58	26	53
2	15	12	14	11	e12	31	40	130	158	58	25	60
3	14	12	14	11	e12	31	39	129	153	67	25	64
4	14	12	14	11	e12	26	36	127	157	65	25	62
5	14	12	14	11	e12	19	37	125	216	60	25	62
6	18	11	14	12	e12	19	36	123	276	55	27	61
7	23	12	14	11	e12	19	34	118	276	55	24	61
8	24	12	13	11	e12	20	35	102	273	54	23	66
9	23	12	13	11	e12	18	35	67	242	54	22	76
10	23	12	13	12	e12	19	35	66	201	53	22	79
11	23	16	12	12	e11	20	35	63	190	52	21	140
12	25	16	12	11	e11	20	35	66	177	53	21	192
13	23	15	11	12	e11	20	37	68	180	53	26	182
14	25	12	e11	12	e11	22	36	61	188	52	27	180
15	25	12	e11	13	e11	23	33	59	185	50	26	170
16	26	11	e11	12	e11	22	32	59	178	50	25	164
17	25	11	e11	12	e11	22	33	60	160	48	30	160
18	24	11	e11	12	e11	23	35	87	151	41	29	150
19	24	11	e11	12	e11	23	38	92	145	49	28	132
20	23	11	e11	e12	e11	24	72	94	159	55	29	109
21	23	11	e10	e11	e11	26	76	93	150	46	29	102
22	19	12	e10	e11	e13	26	76	93	134	41	37	97
23	17	17	e10	e12	e16	27	83	92	113	38	59	94
24	17	15	e10	e12	e21	44	96	89	66	36	61	89
25	17	14	e10	e12	26	61	104	82	64	34	57	87
26	16	14	11	e12	30	56	101	77	58	32	58	85
27	15	13	11	e12	28	54	126	87	61	30	59	79
28	16	12	11	e12	29	51	148	87	63	29	58	76
29	16	14	11	e12	31	51	146	80	62	29	57	76
30	17	15	10	e12	---	49	138	75	60	28	55	72
31	15	---	10	e12	---	44	---	94	---	27	55	---
TOTAL	613	385	364	361	435	942	1848	2775	4641	1452	1091	3080
MEAN	19.8	12.8	11.7	11.6	15.0	30.4	61.6	89.5	155	46.8	35.2	103
MAX	26	17	15	13	31	61	148	130	276	67	61	192
MIN	14	11	10	10	11	18	32	59	58	27	21	53
CFSM	.19	.12	.11	.11	.14	.29	.59	.85	1.47	.45	.34	.98
IN.	.22	.14	.13	.13	.15	.33	.65	.98	1.64	.51	.39	1.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2000, BY WATER YEAR (WY)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
MEAN	14.5	9.63	12.6	21.3	38.8	83.1	138	97.7	99.0	79.8	49.7	44.3		
MAX	19.8	12.8	14.8	36.6	56.0	184	247	115	155	136	72.4	103		
(WY)	2000	2000	1997	1997	1997	1997	1998	1999	2000	1999	1999	2000		
MIN	6.99	6.60	10.4	11.6	15.0	30.4	61.6	89.5	59.6	46.8	28.2	13.7		
(WY)	1999	1999	1999	2000	2000	2000	2000	2000	1998	2000	1998	1998		

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1997 - 2000

ANNUAL TOTAL	21391.9	17987												
ANNUAL MEAN	58.6	49.1												
HIGHEST ANNUAL MEAN										54.0				
LOWEST ANNUAL MEAN										56.9				1999
HIGHEST DAILY MEAN	248	Jul 28	276	Jun 6,7						49.1				2000
LOWEST DAILY MEAN	7.0	Jan 1	(a)10	(b)Dec 21-25						383	Apr 2	1998		
ANNUAL SEVEN-DAY MINIMUM	8.5	Jan 1	(a)10	Dec 19						2.8	Nov 8	1998		
INSTANTANEOUS PEAK FLOW			316	Jun 6						3.3	Nov 3	1998		
INSTANTANEOUS PEAK STAGE			5.10	Jun 6						423	Apr 2	1998		
ANNUAL RUNOFF (CFSM)	.56		.47							5.60	Apr 2	1998		
ANNUAL RUNOFF (INCHES)	7.58		6.37							.51				
10 PERCENT EXCEEDS	136		129							6.99				
50 PERCENT EXCEEDS	36		27							38				
90 PERCENT EXCEEDS	11		11							11				

(a) Ice affected

(b) Also occurred Dec. 30, 31, and Jan. 1

(e) Estimated due to ice effect or missing record

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04073500 FOX RIVER AT BERLIN, WI

LOCATION.--Lat 43°57'14", long 88°57'08", in NE ¼ sec.16, T.17 N., R.13 E., Green Lake County, Hydrologic Unit 04030201, on left bank, 0.4 mi downstream from government dam, 1.0 mi south of Huron Street bridge in Berlin, 2.5 mi upstream from Barnes Creek, and at mile 89.0.

DRAINAGE AREA.--1,340 mi².

PERIOD OF RECORD.--January 1898 to current year.

REVISED RECORDS.--WSP 1337: 1910. WDR WI-80-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 744.52 ft above mean tide at New York City (by U.S. Army Corps of Engineers). Prior to Oct. 27, 1954, nonrecording gage at site 0.3 mi upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Usually less than about 10 ft³/s was diverted into the basin from the Wisconsin River at Portage Canal throughout the year. Data-collection platform and gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	765	835	1030	e680	e600	1920	1120	1650	1710	1720	771	951
2	776	828	1040	e660	e600	1910	1110	1620	1870	1670	436	987
3	775	795	1040	e660	e620	1890	1090	1580	1980	1680	311	1040
4	769	810	1040	e660	e620	1860	1030	1540	2100	1660	324	1080
5	795	822	1040	e660	e620	1820	982	1500	2290	1630	377	1070
6	817	801	1010	e660	e620	1760	1020	1450	2410	1600	465	1070
7	804	797	1020	e640	e620	1690	994	1400	2490	1550	503	1070
8	818	797	1030	e640	e640	1640	924	1340	2550	1510	547	1060
9	809	791	1030	e640	e640	1620	919	1280	2580	1470	550	1040
10	796	796	1000	e640	e640	1580	908	1170	2580	1440	529	1050
11	778	762	973	e640	e640	1530	903	1120	2570	1410	530	1180
12	781	792	961	e640	e660	1490	877	1210	2540	1380	546	1410
13	797	807	953	e640	e660	1460	883	1250	2490	1340	609	1530
14	771	804	944	e620	e660	1410	909	1280	2490	1300	663	1640
15	795	767	946	e620	e680	1380	903	1280	2520	1240	679	1700
16	799	769	934	e620	e680	1360	845	1270	2550	1190	649	1720
17	780	773	e840	e620	e700	1320	780	1270	2540	1150	728	1730
18	779	795	e780	e620	e700	1290	797	1430	2500	1090	750	1730
19	779	910	e780	e620	e700	1260	853	1550	2460	1030	749	1720
20	779	951	e760	e600	e720	1240	1030	1660	2450	989	755	1720
21	785	954	e760	e600	e720	1220	1200	1740	2440	979	717	1690
22	771	965	e740	e600	e760	1220	1300	1810	2380	948	753	1650
23	686	989	e740	e600	e900	1220	1420	1870	2330	916	890	1610
24	686	1050	e720	e600	e1200	1220	1540	1880	2260	887	989	1570
25	757	1090	e720	e600	1490	1230	1620	1850	2190	857	1010	1520
26	773	1100	e700	e600	1660	1240	1680	1800	2100	817	1010	1480
27	736	1110	e700	e600	1980	1250	1710	1740	2020	828	995	1450
28	752	1100	e700	e600	2010	1230	1710	1690	1940	804	981	1410
29	749	1080	e680	e600	1930	1190	1710	1640	1870	791	984	1370
30	789	1040	e680	e600	---	1170	1680	1610	1790	776	964	1330
31	832	---	e680	e600	---	1150	---	1590	---	751	948	---
TOTAL	24078	26680	26971	19380	25670	44770	34447	47070	68990	37403	21712	41578
MEAN	777	889	870	625	885	1444	1148	1518	2300	1207	700	1386
MAX	832	1110	1040	680	2010	1920	1710	1880	2580	1720	1010	1730
MIN	686	762	680	600	600	1150	780	1120	1710	751	311	951
CFSM	.58	.66	.65	.47	.66	1.08	.86	1.13	1.72	.90	.52	1.03
IN.	.67	.74	.75	.54	.71	1.24	.96	1.31	1.92	1.04	.60	1.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1898 - 2000, BY WATER YEAR (WY)

	MEAN	980	1075	896	697	766	1756	2217	1462	1192	924	804	894
MAX	3819	2463	1871	1631	1803	4272	4225	3801	4230	4072	2540	3491	
(WY)	1987	1986	1986	1939	1966	1973	1979	1973	1905	1993	1993	1938	
MIN	347	380	369	311	318	495	667	600	367	384	346	364	
(WY)	1959	1977	1977	1959	1959	1964	1902	1934	1988	1988	1958	1958	

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1898 - 2000

ANNUAL TOTAL	450265	418749	
ANNUAL MEAN	1234	1144	1141
HIGHEST ANNUAL MEAN			2203
LOWEST ANNUAL MEAN			559
HIGHEST DAILY MEAN	3030	Jul 28	6900
LOWEST DAILY MEAN	(a)520	Jan 6-17	217
ANNUAL SEVEN-DAY MINIMUM	(a)520	Jan 6	266
INSTANTANEOUS PEAK FLOW			6900
INSTANTANEOUS PEAK STAGE			15.50
INSTANTANEOUS LOW FLOW			210
ANNUAL RUNOFF (CFSM)	.92	.85	.85
ANNUAL RUNOFF (INCHES)	12.50	11.62	11.57
10 PERCENT EXCEEDS	2020	1860	2170
50 PERCENT EXCEEDS	1100	989	865
90 PERCENT EXCEEDS	661	620	500

(a) Ice affected

(e) Estimated due to ice effect or missing record

STREAMS TRIBUTARY TO LAKE MICHIGAN

04074950 WOLF RIVER AT LANGLADE, WI

LOCATION.--Lat 45°11'24", long 88°44'00", in SE ¼ SW ¼ sec.3, T.31 N., R.14 E., Langlade County, Hydrologic Unit 04030202, on left bank, upstream of bridge on State Highway 64 at Langlade, 1.5 mi east of White Lake, 3.0 mi upstream from White Lake Creek, and at about mile 170 above mouth.

DRAINAGE AREA.--463 mi².

PERIOD OF RECORD.--March 1966 to September 1979, October 1980 to current year.

REVISED RECORDS.--WDR WI-81-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 1,240 ft above sea level, from topographic map. Prior to Oct. 1, 1976, nonrecording gage 50 ft downstream at same elevation.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	251	276	e260	e250	e280	e1000	428	448	297	486	402	411
2	262	278	e320	e250	e280	e980	393	329	465	437	334	568
3	246	298	e280	e240	e280	e900	380	322	437	340	348	714
4	232	305	e250	e240	e280	e760	381	328	331	441	341	681
5	233	282	e230	e240	e280	e640	390	358	335	485	295	651
6	281	249	e220	e250	e280	581	369	349	312	474	267	569
7	289	243	e220	e260	e280	503	335	343	295	424	279	503
8	268	240	e220	e260	e280	525	351	332	315	826	359	513
9	269	242	e230	e260	e270	670	321	298	297	1360	406	435
10	271	243	e260	e270	e270	639	306	284	257	1270	412	416
11	263	241	e230	e280	e260	660	352	293	255	1290	388	521
12	263	243	e250	e280	e260	665	289	339	242	1390	342	740
13	299	242	e240	e280	e270	588	319	396	249	1380	303	753
14	272	239	e220	e280	e280	564	387	389	278	1280	279	690
15	258	256	e210	e280	e280	543	380	382	301	1190	419	584
16	278	329	e190	e280	e280	462	362	415	350	1090	427	576
17	285	331	e180	e270	e270	448	387	370	350	1010	460	502
18	272	321	e220	e260	e270	443	437	430	318	923	395	433
19	266	288	e220	e250	e270	430	468	489	321	848	330	471
20	263	294	e210	e240	e280	412	515	448	324	786	352	487
21	255	289	e200	e250	e290	373	625	375	446	728	338	380
22	252	286	e200	e250	e300	365	660	295	453	676	281	371
23	247	335	e210	e260	e310	367	639	288	421	628	267	444
24	243	444	e210	e260	e340	388	556	348	397	535	267	482
25	243	448	e210	e260	e400	479	548	326	381	436	306	466
26	243	429	e210	e260	e700	536	535	275	372	415	271	351
27	246	406	e210	e260	e860	546	496	242	396	420	257	348
28	247	e310	e220	e260	e840	461	371	251	460	455	256	407
29	256	e280	e240	e270	e800	460	405	265	465	447	251	415
30	268	e260	e240	e270	---	484	475	308	416	453	246	303
31	278	---	e240	e270	---	464	---	298	---	449	281	---
TOTAL	8099	8927	7050	8090	10340	17336	12860	10613	10536	23372	10159	15185
MEAN	261	298	227	261	357	559	429	342	351	754	328	506
MAX	299	448	320	280	860	1000	660	489	465	1390	460	753
MIN	232	239	180	240	260	365	289	242	242	340	246	303
CFSM	.56	.64	.49	.56	.77	1.21	.93	.74	.76	1.63	.71	1.09
IN.	.65	.72	.57	.65	.83	1.39	1.03	.85	.85	1.88	.82	1.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2000, BY WATER YEAR (WY)

MEAN	438	442	367	316	317	471	810	601	481	374	327	407
MAX	813	788	578	548	482	1227	1330	1312	1013	874	632	813
(WY)	1986	1986	1986	1969	1984	1973	1976	1973	1991	1968	1972	1968
MIN	196	204	226	191	213	278	263	289	173	183	188	171
(WY)	1977	1977	1977	1999	1982	1982	1990	1998	1988	1989	1989	1989

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1966 - 2000

ANNUAL TOTAL	125361	142567	
ANNUAL MEAN	343	390	447
HIGHEST ANNUAL MEAN			666
LOWEST ANNUAL MEAN			326
HIGHEST DAILY MEAN	917	May 8	1390
LOWEST DAILY MEAN	(a)180 (b)Jan 1,2	(a)180 Dec 17	2420
ANNUAL SEVEN-DAY MINIMUM	(a)183 Jan 7	(a)203 Dec 16	137
INSTANTANEOUS PEAK FLOW		1410 Jul 12	2440
INSTANTANEOUS PEAK STAGE		9.49 Jul 12	10.40
INSTANTANEOUS LOW FLOW		(c)102 Dec 17	(c)102
ANNUAL RUNOFF (CFSM)	.74	.84	.97
ANNUAL RUNOFF (INCHES)	10.07	11.45	13.13
10 PERCENT EXCEEDS	593	631	751
50 PERCENT EXCEEDS	281	322	370
90 PERCENT EXCEEDS	210	242	240

- (a) Ice affected
 (b) Also occurred Jan. 5, 9-13, 24, 25, and Dec. 17
 (c) Result of freezeup
 (e) Estimated due to ice effect or missing record

04077400 WOLF RIVER NEAR SHAWANO, WI

LOCATION.--Lat 44°50'09", long 88°37'30", in SE ¼ NW ¼ sec.12, T.27 N., R.15 E., Shawano County, Hydrologic Unit 04030202, on left bank 350 ft downstream from dam, 3.7 mi north of Shawano, 1.5 mi upstream from Red River, and at mile 130.6.

DRAINAGE AREA.--816 mi².

PERIOD OF RECORD.--May 1907 to March 1909, October 1910 to current year. Monthly discharge only for some periods, published in WSP 1307. Published as "at Keshena" prior to April 1928. Published as "at Keshena Falls" April 1928 to September 1981. Published as "at Keshena Falls near Keshena" October 1981 to September 1985. Prior to October 1985, all records published under station number 04077000.

REVISED RECORDS.--WSP 1337: 1914-15(M), 1918-19(M), 1921, 1923(M), 1926(M), 1928(M), 1933. WDR WI-80-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 810 ft above sea level, from topographic map. Prior to Mar. 23, 1928, nonrecording gage at bridge in Keshena 4.1 mi upstream at different datum, and from Mar. 23, 1928 to Sept. 30, 1985, water-stage recorder at site 5.8 mi upstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair, and those for ice-affected periods, which are poor (see page 12). Minor regulation by power dam upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	436	497	564	e430	e410	e1300	659	643	568	588	663	624
2	431	480	657	e420	e400	e1400	599	740	1110	675	619	821
3	430	463	808	e420	e410	e1500	563	545	1150	620	542	1050
4	420	503	697	e410	e420	1340	537	485	861	543	513	1200
5	396	514	591	e410	e410	1120	545	429	715	650	564	1080
6	406	463	528	e420	e400	1100	540	483	573	654	538	933
7	465	465	466	e410	e400	1090	520	500	561	661	487	812
8	508	458	465	e420	e420	957	470	487	546	1030	542	734
9	523	453	470	e410	e430	886	475	506	517	2100	609	741
10	497	461	522	e430	e410	1110	474	492	463	2520	628	689
11	495	466	459	e430	e400	948	447	481	461	2200	629	884
12	463	452	565	e420	e390	895	519	498	475	1800	607	1440
13	491	453	636	e410	e400	924	465	526	460	1710	755	1550
14	542	446	597	e400	e400	820	508	610	488	1630	582	1320
15	536	442	605	e420	e420	849	609	588	558	1540	925	1180
16	495	457	e420	e420	e410	828	637	663	667	1420	776	1030
17	503	560	264	e410	e400	726	608	712	772	1300	784	800
18	505	577	e350	e410	e400	629	455	776	685	1210	797	755
19	506	536	e380	e400	e420	658	627	949	617	1150	643	811
20	490	585	e440	e390	e420	656	934	865	627	1030	592	795
21	497	519	e420	e380	e440	644	1340	740	753	995	595	683
22	411	533	e400	e380	e450	595	1530	611	811	907	590	619
23	449	686	e390	e390	e490	571	1190	544	737	899	554	663
24	443	889	e400	e390	e580	615	991	483	707	826	478	813
25	443	853	e410	e400	e700	668	888	503	639	737	471	810
26	434	844	e420	e410	e840	759	798	490	622	711	512	731
27	444	782	e410	e390	e1100	813	752	434	614	895	497	594
28	445	713	e420	e390	e1300	853	692	422	604	767	411	570
29	461	527	e430	e400	e1300	756	577	423	713	778	425	639
30	484	407	e440	e400	---	699	524	434	716	712	464	618
31	500	---	e430	e410	---	681	---	486	---	639	456	---
TOTAL	14549	16484	15054	12630	15370	27390	20473	17548	19790	33897	18248	25989
MEAN	469	549	486	407	530	884	682	566	660	1093	589	866
MAX	542	889	808	430	1300	1500	1530	949	1150	2520	925	1550
MIN	396	407	264	380	390	571	447	422	460	543	411	570
CFSM	.58	.67	.60	.50	.65	1.08	.84	.69	.81	1.34	.72	1.06
IN.	.66	.75	.69	.58	.70	1.25	.93	.80	.90	1.55	.83	1.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1907 - 2000, BY WATER YEAR (WY)

	MEAN	716	745	605	522	504	732	1333	1093	895	687	614	701
MAX	1573	1517	1115	937	888	1972	2526	2265	1990	1186	1277	1699	
(WY)	1942	1912	1986	1986	1984	1973	1922	1960	1993	1968	1912	1941	
MIN	376	383	335	323	315	385	574	510	328	366	294	330	
(WY)	1949	1977	1928	1926	1936	1956	1990	1931	1988	1933	1934	1933	

STREAMS TRIBUTARY TO LAKE MICHIGAN

04077400 WOLF RIVER NEAR SHAWANO, WI--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1907 - 2000	
ANNUAL TOTAL	220813		237422		763	
ANNUAL MEAN	605		649		1119	
HIGHEST ANNUAL MEAN					510	
LOWEST ANNUAL MEAN					1973	
HIGHEST DAILY MEAN	1810	May 9	2520	Jul 10	(a) 5200	Mar 15 1973
LOWEST DAILY MEAN	(b) 264	Dec 17	(b) 264	Dec 17	(a) 194	Feb 7 1936
ANNUAL SEVEN-DAY MINIMUM	(a) (b) 378	Dec 17	(a) (b) 378	Dec 17	(a) 260	Feb 3 1936
INSTANTANEOUS PEAK FLOW			4020	Jul 10		
INSTANTANEOUS PEAK STAGE			12.45	Jul 10	(c) 15.59	Dec 2 1983
INSTANTANEOUS LOW FLOW			(b) 90	Dec 17	(d) 77	Nov 19 1989
ANNUAL RUNOFF (CFSM)	.74		.79		.94	
ANNUAL RUNOFF (INCHES)	10.07		10.82		12.70	
10 PERCENT EXCEEDS	885		1030		1280	
50 PERCENT EXCEEDS	540		556		640	
90 PERCENT EXCEEDS	410		410		414	

(a) Ice affected

(b) Regulation

(c) From high-water mark in well, at site and datum then in use, backwater from ice

(d) Regulation; minimum unregulated discharge 91 ft³/s, Dec. 22, 1939, site then in use, result of freezeup

(e) Estimated due to ice effect or missing record

04077630 RED RIVER, AT MORGAN ROAD, NEAR MORGAN, WI

LOCATION.--Lat 44°53'53", long 88°50'39", in NW ¼ NE ¼ sec.19, T.28 N., R.14 E., Shawano County, Hydrologic Unit 04030202, on left bank 1.7 mi northwest of Morgan, 1.1 mi downstream of the confluence with the West Branch of the Red River, and 2.2 mi upstream of Smith Creek.

DRAINAGE AREA.--114 mi².

PERIOD OF RECORD.--October 1992 to current year.

REVISED RECORDS.--WDR WI-95-1: 1993(M).

GAGE.--Water-stage recorder. Elevation of gage is 990 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	82	e98	e74	e70	e190	88	101	131	122	96	131
2	75	80	e90	e74	e68	e170	87	99	309	113	92	178
3	74	79	85	e72	e68	e150	87	95	295	112	89	205
4	73	78	83	e70	e70	e140	86	92	247	105	87	210
5	73	80	82	e68	e70	e120	85	89	214	99	87	166
6	75	81	79	e70	e68	e120	82	87	193	95	89	129
7	75	79	e78	e68	e70	124	82	85	156	92	89	117
8	79	78	e90	e68	e68	131	80	91	136	193	95	111
9	83	79	e86	e70	e70	145	79	91	125	400	102	106
10	83	79	e82	e70	e72	132	79	88	112	353	97	102
11	79	79	e76	e68	e70	e100	80	86	112	281	90	263
12	79	79	e78	e68	e68	e100	80	92	125	193	86	366
13	77	79	e78	e70	e70	e96	81	92	109	145	118	319
14	77	77	e78	e68	e70	93	84	89	123	136	117	259
15	78	78	e76	e70	e72	91	84	84	156	125	226	187
16	83	77	e74	e68	e70	87	86	100	198	113	230	142
17	94	77	e70	e70	e70	e78	93	127	216	106	184	127
18	91	77	e70	e72	e70	e84	99	188	168	100	141	119
19	85	78	e72	e68	e72	e86	102	219	150	98	121	115
20	82	78	e72	e66	e74	86	171	181	169	97	108	117
21	81	78	e70	e64	e76	87	281	137	241	96	101	114
22	79	78	e70	e66	e78	89	261	118	238	95	97	115
23	78	98	e68	e68	e80	90	189	110	181	93	97	140
24	78	137	e70	e66	e86	96	147	102	146	90	93	136
25	77	121	e70	e68	e94	112	127	96	128	88	90	123
26	78	100	e72	e68	e160	115	116	91	124	94	92	117
27	80	93	e70	e66	e250	111	108	86	132	131	91	112
28	78	e84	e70	e66	e230	111	104	89	132	135	90	106
29	80	e84	e72	e66	e220	104	105	91	194	121	88	102
30	85	e90	e74	e68	---	97	104	88	153	111	87	100
31	84	---	e76	e68	---	92	---	90	---	101	85	---
TOTAL	2468	2537	2379	2126	2674	3427	3337	3274	5113	4233	3355	4634
MEAN	79.6	84.6	76.7	68.6	92.2	111	111	106	170	137	108	154
MAX	94	137	98	74	250	190	281	219	309	400	230	366
MIN	73	77	68	64	68	78	79	84	109	88	85	100
CFSM	.70	.74	.67	.60	.81	.97	.98	.93	1.50	1.20	.95	1.35
IN.	.81	.83	.78	.69	.87	1.12	1.09	1.07	1.67	1.38	1.09	1.51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2000, BY WATER YEAR (WY)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	130	134	107	96.6	103	129	207	162	169	136	129	120
MAX	175	221	164	126	124	170	331	254	313	217	209	160
(WY)	1996	1993	1993	1993	1998	1998	1996	1993	1996	1996	1995	1993
MIN	79.6	84.6	73.7	63.5	79.3	111	111	106	97.0	78.8	86.6	72.7
(WY)	2000	2000	1999	1999	1995	2000	2000	2000	1999	1995	1999	1999

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1993 - 2000

	1999 CALENDAR YEAR	2000 WATER YEAR	1993 - 2000
ANNUAL TOTAL	36882	39557	
ANNUAL MEAN	101	108	135
HIGHEST ANNUAL MEAN			184
LOWEST ANNUAL MEAN			104
HIGHEST DAILY MEAN	391	400	952
LOWEST DAILY MEAN	(a)56	(a)64	(a)56
ANNUAL SEVEN-DAY MINIMUM	(a)58	(a)67	(a)58
INSTANTANEOUS PEAK FLOW		457	1060
INSTANTANEOUS PEAK STAGE		7.44	8.88
INSTANTANEOUS LOW FLOW		(b)38	(b)31
ANNUAL RUNOFF (CFSM)	.89	.95	1.19
ANNUAL RUNOFF (INCHES)	12.04	12.91	16.11
10 PERCENT EXCEEDS	138	179	213
50 PERCENT EXCEEDS	89	90	115
90 PERCENT EXCEEDS	70	70	79

- (a) Ice affected
(b) Result of freezeup
(c) Estimated due to ice effect or missing record

STREAMS TRIBUTARY TO LAKE MICHIGAN

0407809265 MIDDLE BRANCH EMBARRASS RIVER NEAR WITTENBERG, WI

LOCATION.--Lat 44°49'31", long 89°07'05", in NW ¼ NW ¼ sec.13, T.27 N., R.11 E., Shawano County, Hydrologic Unit 04030202, on right bank 60 ft upstream from Cardinal Lane, 2.5 mi east of Wittenberg, and 2.5 mi upstream from Wilson Creek.

DRAINAGE AREA.--76.3 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,118.24 ft above sea level (levels by Wisconsin Department of Transportation).

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Flow affected by pumping for irrigation many times during summer months. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	28	32	e14	e18	e86	39	44	48	56	39	35
2	28	28	32	e14	e17	e82	38	41	154	49	36	47
3	27	28	32	e14	e17	e74	38	40	219	47	35	91
4	27	25	31	e14	e17	e70	37	38	230	45	34	112
5	27	18	31	e14	e17	e66	36	37	172	42	33	103
6	26	18	25	e14	e17	e62	35	37	150	39	33	65
7	23	20	18	e14	e17	e66	34	36	122	38	32	60
8	16	24	17	e14	e17	e74	33	37	79	37	27	55
9	16	26	17	e15	e18	92	33	35	68	79	19	48
10	18	26	e17	e15	e17	80	34	35	55	132	19	43
11	26	26	e17	e15	e17	e54	33	35	48	106	24	133
12	31	27	e17	e15	e16	e48	33	35	54	62	27	229
13	29	33	e16	e15	e16	48	33	34	48	51	30	295
14	28	31	e16	e15	e17	44	34	34	61	46	50	249
15	30	31	e15	e16	e17	42	35	35	97	42	112	130
16	30	26	e14	e15	e17	40	35	36	151	39	162	78
17	30	18	e14	e16	e17	37	34	40	141	37	169	64
18	32	18	e13	e16	e17	37	36	95	89	36	88	56
19	32	20	e13	e16	e17	37	43	133	87	36	61	52
20	30	24	e14	e15	e18	37	88	124	119	37	49	52
21	29	29	e13	e16	e18	36	171	75	190	36	43	51
22	29	30	e13	e16	e19	36	182	59	199	34	40	48
23	28	35	e13	e16	e20	36	148	58	125	34	38	59
24	28	44	e13	e17	e23	37	88	49	111	33	36	69
25	28	54	e13	e17	e25	44	68	42	106	33	36	60
26	28	44	e13	e17	e49	58	57	40	86	32	35	53
27	28	39	e13	e16	e90	55	51	37	90	30	34	49
28	28	36	e13	e16	e86	54	47	36	72	19	34	46
29	28	34	e14	e17	e84	50	46	36	73	27	34	44
30	28	e33	e14	e17	---	45	45	36	68	36	34	41
31	28	---	e14	e17	---	42	---	34	---	36	34	---
TOTAL	844	873	547	478	755	1669	1664	1483	3312	1406	1477	2517
MEAN	27.2	29.1	17.6	15.4	26.0	53.8	55.5	47.8	110	45.4	47.6	83.9
MAX	32	54	32	17	90	92	182	133	230	132	169	295
MIN	16	18	13	14	16	36	33	34	48	19	19	35
CFSM	.36	.38	.23	.20	.34	.71	.73	.63	1.45	.59	.62	1.10
IN.	.41	.43	.27	.23	.37	.81	.81	.72	1.61	.69	.72	1.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2000, BY WATER YEAR (WY)

	MEAN	51.6	55.9	37.3	29.0	32.6	69.1	134	91.2	89.9	51.8	48.8	54.0
MAX	94.7	128	73.3	45.7	44.1	116	241	167	222	96.3	100	97.9	
(WY)	1996	1993	1993	1996	1998	1990	1996	1993	1993	1996	1995	1992	
MIN	23.2	27.2	13.5	15.4	18.5	41.0	40.4	46.7	31.6	21.9	25.1	23.4	
(WY)	1990	1990	1990	2000	1995	1999	1990	1998	1995	1995	1998	1999	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1990 - 2000

ANNUAL TOTAL	15190	17025	
ANNUAL MEAN	41.6	46.5	62.1
HIGHEST ANNUAL MEAN			100
LOWEST ANNUAL MEAN			43.0
HIGHEST DAILY MEAN	294	May 9	697
LOWEST DAILY MEAN	(a)13	(b)Dec 18	(a)11
ANNUAL SEVEN-DAY MINIMUM	(a)13	Dec 21	12
INSTANTANEOUS PEAK FLOW			905
INSTANTANEOUS PEAK STAGE			(c)5.09
ANNUAL RUNOFF (CFSM)	.55	.61	.81
ANNUAL RUNOFF (INCHES)	7.41	8.30	11.06
10 PERCENT EXCEEDS	70	90	124
50 PERCENT EXCEEDS	32	35	42
90 PERCENT EXCEEDS	18	16	21

(a) Ice affected

(b) Also occurred Dec. 19 and 21-28, each day ice affected

(c) Recorded gage height, 5.09 ft, result of drawdown; outside crest-gage peak 5.29 ft

(e) Estimated due to ice effect or missing record

0407809265 MIDDLE BRANCH EMBARRASS RIVER NEAR WITTENBERG, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: December 1989 to current year.

INSTRUMENTATION.--Continuous water temperature recorder since December 1989. Sensor located at midstream.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Record was faulty Dec. 16 to Feb. 29, June 8, 24, 25, June 27 to July 7, and Sept. 26-28.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum, 30.5°C, June 18, 1994, July 14, 1995, and July 30, 1999; minimum, 0.0°C, on many days during winter.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 27.0°C, July 16 and Aug. 2, 10; minimum, 0.0°C, probably many days in winter when record was faulty.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	12.5	9.5	11.0	11.5	7.5	9.0	3.0	.5	1.5	---	---	---
2	12.5	8.5	10.5	8.0	4.5	6.5	3.0	1.5	2.0	---	---	---
3	10.5	7.5	8.5	6.0	3.0	4.5	3.5	2.5	3.0	---	---	---
4	11.0	5.5	8.0	6.0	2.0	4.5	2.5	2.0	2.5	---	---	---
5	12.0	7.5	9.5	7.5	3.5	5.5	2.5	1.5	2.0	---	---	---
6	11.0	7.0	9.0	6.0	3.0	4.0	2.5	.5	1.5	---	---	---
7	12.0	7.5	9.5	5.5	1.5	3.5	2.0	.5	1.0	---	---	---
8	12.5	9.5	10.5	7.5	3.5	5.5	3.5	.5	1.5	---	---	---
9	14.5	8.0	11.0	10.0	6.0	7.5	3.0	1.0	1.5	---	---	---
10	14.5	9.5	11.5	8.5	6.0	7.5	2.0	.5	1.0	---	---	---
11	13.5	8.5	11.0	7.0	5.0	6.0	2.0	.5	1.0	---	---	---
12	14.0	11.0	12.5	8.0	5.5	6.5	2.5	1.5	2.0	---	---	---
13	13.0	9.5	11.5	8.5	4.5	6.5	2.5	1.0	1.5	---	---	---
14	11.0	8.5	9.5	7.0	4.5	5.5	2.5	1.0	1.5	---	---	---
15	12.5	8.5	10.0	6.0	3.0	4.5	1.5	.5	1.0	---	---	---
16	12.0	9.5	10.5	5.0	2.5	3.5	---	---	---	---	---	---
17	10.0	8.0	9.0	5.0	2.5	3.5	---	---	---	---	---	---
18	9.5	7.0	8.0	5.0	2.0	3.5	---	---	---	---	---	---
19	9.0	7.0	8.0	7.0	4.5	5.5	---	---	---	---	---	---
20	9.0	5.5	7.0	6.5	5.0	5.5	---	---	---	---	---	---
21	10.0	6.0	8.0	6.5	4.5	5.5	---	---	---	---	---	---
22	8.5	5.5	7.0	7.5	5.0	6.0	---	---	---	---	---	---
23	6.0	3.5	5.0	7.0	5.0	6.0	---	---	---	---	---	---
24	7.0	2.5	4.5	5.5	4.0	5.0	---	---	---	---	---	---
25	8.0	3.5	5.5	5.0	3.5	4.0	---	---	---	---	---	---
26	8.0	4.5	5.5	4.0	3.0	4.0	---	---	---	---	---	---
27	8.0	3.5	6.0	3.0	1.5	2.0	---	---	---	---	---	---
28	9.0	5.0	6.5	2.5	.5	1.5	---	---	---	---	---	---
29	8.5	5.5	7.0	1.5	.5	.5	---	---	---	---	---	---
30	10.5	7.5	9.0	1.0	.5	.5	---	---	---	---	---	---
31	11.0	7.0	9.0	---	---	---	---	---	---	---	---	---
MONTH	14.5	2.5	8.7	11.5	.5	4.8	3.5	.5	1.6	---	---	---

STREAMS TRIBUTARY TO LAKE MICHIGAN

0407809265 MIDDLE BRANCH EMBARRASS RIVER NEAR WITTENBERG, WI--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	---	---	---	1.5	.5	1.0	11.0	7.5	9.0	18.5	13.0	15.5
2	---	---	---	3.0	.5	1.0	12.0	7.0	9.0	20.5	12.5	16.0
3	---	---	---	4.0	.5	1.5	11.5	7.5	9.5	21.5	13.0	16.5
4	---	---	---	4.5	1.0	2.0	10.5	6.0	7.5	23.0	15.0	18.5
5	---	---	---	5.5	1.0	3.0	8.5	5.0	6.5	24.5	17.0	20.5
6	---	---	---	6.0	2.0	3.5	11.5	5.5	8.0	24.5	18.0	21.0
7	---	---	---	8.0	3.0	5.0	7.5	5.0	6.5	25.5	19.0	22.0
8	---	---	---	8.0	4.5	6.0	10.5	3.0	6.5	24.5	20.0	22.0
9	---	---	---	6.0	3.5	5.0	11.0	4.5	7.0	21.0	17.5	19.5
10	---	---	---	5.5	2.0	3.5	11.0	4.0	7.0	19.0	15.0	17.0
11	---	---	---	6.0	2.0	3.5	8.5	5.0	6.5	15.5	14.5	15.0
12	---	---	---	5.5	1.5	3.5	10.5	4.0	6.5	16.5	14.5	15.0
13	---	---	---	6.0	2.0	3.5	11.0	4.5	7.5	14.5	11.0	13.0
14	---	---	---	7.0	2.0	4.0	14.0	6.5	10.0	15.0	9.5	12.0
15	---	---	---	5.5	2.5	3.5	11.5	8.0	9.5	16.5	9.5	13.0
16	---	---	---	7.0	1.5	3.5	8.0	6.0	7.5	15.5	12.0	13.5
17	---	---	---	7.0	1.0	3.5	6.0	4.5	5.5	16.5	11.5	13.5
18	---	---	---	5.0	2.0	3.5	7.5	4.5	5.5	14.0	12.0	13.0
19	---	---	---	4.5	2.5	3.5	7.0	5.0	6.0	13.5	11.0	12.0
20	---	---	---	4.0	2.5	3.0	6.0	5.0	5.5	15.0	11.0	13.0
21	---	---	---	5.0	3.0	3.5	7.5	4.0	6.0	16.0	12.0	13.5
22	---	---	---	8.0	3.5	5.5	10.0	6.5	8.5	18.0	13.5	15.0
23	---	---	---	11.5	4.0	7.5	12.5	9.0	10.5	20.5	15.0	17.5
24	---	---	---	7.5	6.0	7.0	15.0	10.5	12.0	20.5	15.5	17.5
25	---	---	---	10.5	6.5	8.0	17.0	10.5	13.0	21.0	14.5	17.5
26	---	---	---	10.0	6.5	8.0	18.5	11.0	14.0	20.5	14.5	17.0
27	---	---	---	8.5	6.0	7.0	19.0	12.0	15.0	17.0	14.5	15.5
28	---	---	---	7.5	5.5	6.0	16.5	12.5	14.0	19.5	14.5	16.5
29	---	---	---	9.5	4.5	6.5	18.5	12.0	14.0	20.0	13.5	16.5
30	---	---	---	11.0	4.0	7.5	18.5	10.5	14.0	17.0	15.0	16.0
31	---	---	---	12.0	5.5	8.5	---	---	---	20.0	15.5	17.5
MONTH	---	---	---	12.0	.5	4.6	19.0	3.0	8.9	25.5	9.5	16.2
JUNE				JULY			AUGUST			SEPTEMBER		
1	17.0	15.5	16.0	---	---	---	25.0	21.5	23.0	23.0	20.0	21.5
2	15.5	14.5	15.0	---	---	---	27.0	21.5	23.5	20.0	18.5	19.5
3	14.5	13.5	14.0	---	---	---	25.0	20.0	22.0	20.5	18.0	19.0
4	14.5	13.5	14.0	---	---	---	26.0	20.5	22.5	19.5	17.5	18.0
5	15.0	13.0	14.0	---	---	---	21.5	19.5	20.5	18.5	16.5	17.0
6	17.0	13.5	15.5	---	---	---	22.5	19.0	20.5	18.5	15.0	16.5
7	16.5	14.5	15.5	---	---	---	25.0	19.0	22.0	18.0	15.5	17.0
8	---	---	---	20.5	18.5	19.0	24.0	20.0	22.0	19.5	15.0	17.0
9	22.5	17.0	19.5	22.0	18.5	20.0	26.0	19.0	22.5	20.5	15.5	17.5
10	22.5	19.5	21.0	21.5	19.0	20.0	27.0	19.0	22.5	21.0	17.5	19.0
11	25.0	20.5	22.0	23.0	19.5	21.0	26.5	19.0	22.5	20.0	18.5	19.5
12	21.5	18.5	20.0	22.5	19.5	20.5	25.0	19.5	22.0	20.0	17.5	18.5
13	19.0	18.0	18.5	26.0	20.0	22.5	24.0	21.0	22.0	17.5	16.5	17.0
14	19.0	17.5	18.0	26.0	20.5	23.0	23.5	21.0	22.0	17.5	16.0	16.5
15	19.5	17.5	18.0	26.0	20.5	23.0	23.5	20.5	22.0	16.5	14.0	15.5
16	18.0	16.0	17.5	27.0	20.0	23.0	21.0	19.0	20.0	15.5	13.0	14.0
17	18.5	15.0	16.5	26.5	20.5	23.0	19.0	18.0	18.5	16.5	13.0	14.5
18	18.5	15.5	17.0	21.5	18.5	19.5	20.5	17.0	18.5	17.5	13.5	15.0
19	21.0	17.0	18.5	22.5	17.5	19.5	20.0	17.0	18.0	17.0	15.0	16.0
20	19.5	17.5	18.5	21.5	17.5	19.0	20.5	16.0	18.0	17.0	14.0	15.5
21	20.0	18.0	19.0	20.0	16.5	18.5	21.0	16.0	18.0	15.5	13.0	14.0
22	19.5	17.5	18.5	21.0	16.5	18.5	20.0	18.0	19.0	13.5	12.5	13.0
23	18.5	17.5	18.0	23.0	15.5	19.0	23.0	18.0	20.0	13.5	12.0	12.5
24	---	---	---	24.0	17.0	20.0	24.0	18.0	20.5	13.0	10.0	11.5
25	---	---	---	23.5	18.5	20.5	22.5	18.5	20.5	13.0	9.5	11.0
26	22.0	18.5	20.0	22.5	19.5	20.5	24.5	19.5	21.5	---	---	---
27	---	---	---	23.5	19.5	21.0	23.0	19.0	20.5	---	---	---
28	---	---	---	22.5	19.0	20.5	23.5	19.5	21.0	---	---	---
29	---	---	---	24.0	18.5	21.0	25.0	20.0	22.0	15.0	10.5	12.5
30	---	---	---	25.0	19.5	22.0	24.0	18.5	21.0	16.0	12.5	14.0
31	---	---	---	26.5	20.0	23.0	26.5	20.5	23.0	---	---	---
MONTH	25.0	13.0	17.6	27.0	15.5	20.7	27.0	16.0	21.0	23.0	9.5	16.0

04078500 EMBARRASS RIVER NEAR EMBARRASS, WI

LOCATION.--Lat 44°43'29", long 88°44'10", in SW ¼ sec.18, T.26 N., R.15 E., Shawano County, Hydrologic Unit 04030202, on right bank 40 ft downstream from bridge on county road, 1.3 mi downstream from Mill Creek, and 4.0 mi northwest of Embarrass.

DRAINAGE AREA.--384 mi².

PERIOD OF RECORD.--June 1919 to September 1985, December 1993 to current year.

REVISED RECORDS.--WSP 1337: 1920-26(M), 1928, 1929-30(M), 1933-34, 1936-37, 1938(M), 1940. WDR WI-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 803.95 ft above sea level. Prior to Aug. 23, 1938, nonrecording gage at same site and datum. Aug. 23, 1938 to May 8, 1984, at site 40 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Slight diurnal fluctuation caused by powerplants above station. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	127	113	e110	e100	e500	185	201	215	306	145	127
2	117	119	135	e100	e98	e520	176	189	594	241	137	158
3	114	116	135	e100	e100	e500	171	171	814	214	131	273
4	108	113	130	e100	e100	e430	166	167	751	198	123	414
5	107	113	129	e98	e100	394	157	160	755	188	118	403
6	112	113	129	e100	e100	337	157	153	735	176	118	328
7	118	105	121	e98	e100	333	147	147	570	163	119	241
8	114	103	104	e100	e110	343	143	141	440	188	156	213
9	116	105	106	e100	e110	365	142	139	315	381	181	196
10	113	108	108	e100	e110	374	138	147	277	498	164	184
11	110	108	90	e100	e100	305	139	142	234	457	134	410
12	108	109	93	e100	e100	276	139	147	208	355	115	1260
13	107	110	123	e100	e100	213	141	154	191	245	199	1480
14	105	112	124	e96	e100	209	145	148	211	213	502	1180
15	112	114	123	e98	e110	205	147	138	315	196	784	903
16	121	115	e100	e98	e100	194	147	153	463	175	997	460
17	123	112	e110	e98	e98	185	160	210	673	159	920	355
18	125	111	e100	e98	e100	173	182	482	625	143	750	277
19	135	107	e110	e96	e100	175	196	778	425	138	448	256
20	129	105	e110	e94	e110	174	303	675	468	136	265	248
21	122	106	e100	e92	e110	177	860	505	724	134	238	242
22	123	110	e100	e92	e110	185	987	347	789	131	206	228
23	116	134	e98	e94	e120	191	854	299	662	126	187	262
24	112	222	e100	e92	e130	199	586	284	493	123	173	311
25	112	247	e100	e94	e150	247	417	251	458	119	159	302
26	113	213	e110	e94	e470	257	294	192	410	131	149	262
27	112	181	e100	e94	e560	269	271	174	350	236	146	220
28	111	158	e110	e94	e500	243	237	170	334	270	142	207
29	117	139	e110	e96	e460	232	209	167	306	221	138	200
30	122	117	e110	e98	---	216	205	162	318	178	133	187
31	126	---	e110	e100	---	189	---	160	---	161	127	---
TOTAL	3584	3852	3441	3024	4656	8610	8201	7353	14123	6600	8304	11787
MEAN	116	128	111	97.5	161	278	273	237	471	213	268	393
MAX	135	247	135	110	560	520	987	778	814	498	997	1480
MIN	104	103	90	92	98	173	138	138	191	119	115	127

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1919 - 2000, BY WATER YEAR (WY)

	MEAN	265	286	196	151	158	391	752	438	355	219	189	241
MAX	1324	932	908	377	517	1386	1892	1324	1105	826	579	886	
(WY)	1987	1986	1987	1939	1986	1973	1922	1973	1943	1978	1928	1938	
MIN	86.8	89.5	67.3	52.8	57.8	98.5	151	148	111	75.5	44.5	59.5	
(WY)	1949	1934	1934	1959	1959	1931	1931	1931	1977	1932	1931	1933	

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1919 - 2000
ANNUAL TOTAL	70691	83535	
ANNUAL MEAN	194	228	298
HIGHEST ANNUAL MEAN			515
LOWEST ANNUAL MEAN			126
HIGHEST DAILY MEAN	1220 May 9	1480 Sep 13	6280 Apr 10 1922
LOWEST DAILY MEAN	83 Sep 26,27	90 Dec 11	24 Aug 3 1931
ANNUAL SEVEN-DAY MINIMUM	88 Sep 12	(a)93 Jan 20	27 Aug 2 1931
INSTANTANEOUS PEAK FLOW		1650 Sep 13	(b)7080 Apr 12 1965
INSTANTANEOUS PEAK STAGE		6.04 Sep 13	(b)12.13 Apr 12 1965
10 PERCENT EXCEEDS	366	469	653
50 PERCENT EXCEEDS	136	148	192
90 PERCENT EXCEEDS	103	100	95

(a) Ice affected

(b) Affected by failure of dam near Pella, 9.2 mi above station

(c) Estimated due to ice effect or missing record

STREAMS TRIBUTARY TO LAKE MICHIGAN

04079000 WOLF RIVER AT NEW LONDON, WI

LOCATION.--Lat 44°23'32", long 88°44'25", in NE ¼ SE ¼ sec.12, T.22 N., R.14 E., Waupaca County, Hydrologic Unit 04030202, on right bank 100 ft downstream from Pearl Street bridge in New London, 0.2 mi downstream from Embarrass River, and at mile 56.3.

DRAINAGE AREA.--2,260 mi².

PERIOD OF RECORD.--March 1896 to current year. Prior to October 1913 monthly discharges only, published in WSP 1307.

REVISED RECORDS.--WSP 1114: 1943(M). WSP 1337: 1931. WDR WI-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 747.94 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Oct. 4, 1951, nonrecording gage.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter and data-collection platform at station.

COOPERATION.--Values prior to October 1913 taken from House Document 276, 72nd Congress, First Session (computed by Corps of Engineers).

EXTREMES OUTSIDE OF PERIOD OF RECORD.--Flood of Apr. 16, 1888, reached a stage of 11.6 ft, from information by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	690	878	e1000	e760	e680	e2300	1540	1900	1580	2230	1680	985
2	688	845	e1000	e760	e680	e2200	1500	1720	2060	2070	1560	1070
3	684	814	e960	e760	e680	e2200	1480	1550	2490	1930	1390	1210
4	698	808	983	e740	e700	e2400	1440	1460	2750	1780	1280	1470
5	721	820	1000	e720	e700	e2600	1340	1360	2990	1650	1220	1730
6	720	812	1010	e740	e680	2870	1290	1300	3140	1470	1140	1850
7	716	822	1020	e720	e700	2880	1220	1260	3210	1360	1050	1910
8	741	815	1000	e700	e700	2780	1200	1180	3230	1340	1050	1890
9	748	817	952	e720	e720	2700	1180	1110	3170	1500	1230	1810
10	757	824	e860	e740	e740	2680	1160	1050	3030	1750	1380	1680
11	749	830	e800	e720	e720	2650	1130	1040	2810	2010	1420	1690
12	756	838	e780	e700	e700	2550	1060	1080	2450	2180	1370	2070
13	757	836	e820	e700	e720	2430	1030	1190	2100	2260	1270	2450
14	741	831	e840	e680	e720	2290	1030	1190	1860	2290	1370	2690
15	757	813	e840	e680	e740	2160	986	1150	1800	2320	1750	2860
16	772	804	e800	e700	e720	2030	977	1130	1970	2350	2060	2970
17	779	808	e780	e700	e720	1870	998	1220	2230	2350	2350	3060
18	818	798	e720	e680	e740	1720	1060	1700	2410	2340	2550	3140
19	891	793	e720	e660	e760	1600	1150	2290	2500	2340	2630	3200
20	912	793	e740	e640	e780	1540	1350	2610	2540	2320	2640	3210
21	898	792	e740	e620	e800	1520	1750	2750	2540	2270	2640	3080
22	868	796	e720	e620	e840	1520	2210	2780	2520	2210	2530	2860
23	807	879	e720	e640	e920	1520	2500	2760	2510	2120	2260	2660
24	780	974	e700	e620	e980	1510	2640	2700	2500	2000	1890	2490
25	794	1070	e720	e640	e1100	1530	2690	2510	2560	1820	1590	2320
26	801	1200	e720	e640	e1300	1500	2700	2220	2620	1630	1390	2180
27	801	1260	e720	e620	e1700	1560	2710	1900	2650	1510	1250	2060
28	815	1240	e700	e640	e2100	1560	2620	1700	2620	1570	1180	1950
29	830	1210	e720	e640	e2200	1580	2390	1580	2560	1720	1180	1820
30	859	e1100	e740	e660	---	1580	2120	1490	2420	1820	1150	1660
31	872	---	e740	e660	---	1570	---	1430	---	1780	1070	---
TOTAL	24220	26920	25565	21220	26240	63400	48451	52310	75820	60290	50520	66025
MEAN	781	897	825	685	905	2045	1615	1687	2527	1945	1630	2201
MAX	912	1260	1020	760	2200	2880	2710	2780	3230	2350	2640	3210
MIN	684	792	700	620	680	1500	977	1040	1580	1340	1050	985
CFSM	.35	.40	.36	.30	.40	.90	.71	.75	1.12	.86	.72	.97
IN.	.40	.44	.42	.35	.43	1.04	.80	.86	1.25	.99	.83	1.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1896 - 2000, BY WATER YEAR (WY)

MEAN	1481	1616	1223	955	932	2131	3939	2769	2147	1488	1146	1337
MAX	4761	4738	2892	2149	2003	7566	9169	7452	5764	5005	2845	4544
(WY)	1987	1986	1993	1960	1984	1973	1922	1960	1993	1993	1924	1938
MIN	533	617	555	523	523	679	1157	901	595	581	443	429
(WY)	1949	1934	1934	1959	1936	1964	1931	1931	1988	1988	1933	1933

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04079000 WOLF RIVER AT NEW LONDON, WI--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1896 - 2000	
ANNUAL TOTAL	462503		540981			
ANNUAL MEAN	1267		1478		1770	
HIGHEST ANNUAL MEAN					3200	1973
LOWEST ANNUAL MEAN					866	1931
HIGHEST DAILY MEAN	2960	Apr 13	3230	Jun 8	15500	Apr 13 1922
LOWEST DAILY MEAN	650	Sep 24	(a) 620	(b) Jan 21	216	Aug 27 1931
ANNUAL SEVEN-DAY MINIMUM	658	Sep 18	(a) 629	Jan 21	337	Sep 3 1933
INSTANTANEOUS PEAK FLOW			(c) 3240	Jun 8		
INSTANTANEOUS PEAK STAGE			(c) 6.01	Jun 8	(d) 11.83	Apr 3 1979
ANNUAL RUNOFF (CFSM)	.56		.65		.80	
ANNUAL RUNOFF (INCHES)	7.61		8.90		10.64	
10 PERCENT EXCEEDS	2140		2620		3500	
50 PERCENT EXCEEDS	1110		1260		1280	
90 PERCENT EXCEEDS	700		711		710	

- (a) Ice affected
- (b) Also occurred Jan. 22, 24, 27
- (c) Also occurred Sept. 20
- (d) Backwater from ice
- (e) Estimated due to ice effect or missing record

STREAMS TRIBUTARY TO LAKE MICHIGAN

04082400 FOX RIVER AT OSHKOSH, WI

LOCATION.--Lat 44°00'49", long 88°32'27" in SW ¼ SW ¼ sec.24, T.18 N., R.16 E., Winnebago County, Hydrologic Unit 04030201, on right bank about 400 ft downstream from U.S. Highway 45 and State Highway 26 bridge, at Oshkosh.

DRAINAGE AREA.--5,310 mi².

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Acoustical Velocity Meter (AVM) system. Single-path transducer installation.

REMARKS.--Records fair, except those for estimated daily discharges and days with negative mean daily flow, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	708	8110	2930	2450	2120	7140	3360	e5200	4510	4940	4100	e2500
2	2090	937	4050	2660	1760	4920	2190	e3500	9390	1570	1650	2280
3	-1100	-251	3910	2070	2370	4880	7960	e4800	4420	5780	3030	3590
4	1900	66	3970	2650	2230	4930	4330	e4100	7300	4990	1980	3050
5	3250	4090	4620	1630	2060	4450	-4900	e4500	8320	3230	1290	3580
6	-1450	753	1090	3010	1960	4630	8770	e3800	9990	4350	6160	2980
7	-442	1290	3470	2060	2140	5290	-2620	e4200	8470	3130	2200	7660
8	6420	2770	3980	2570	1870	4640	6530	e2200	9350	3260	-334	3780
9	1520	2170	4450	2210	2220	5830	4330	e1000	8980	6410	3470	3300
10	3560	753	2660	2820	2460	4980	-1150	3680	9060	1360	2150	5640
11	-633	2930	1750	3280	2060	4520	6760	1210	6040	4370	692	3400
12	2590	2740	2710	1440	1980	4770	3580	6010	7610	5240	3910	9300
13	3610	3220	2610	2560	2200	4510	2440	8940	7510	7690	4220	6460
14	359	2630	3010	1960	1950	4200	5670	1390	9010	6020	404	8280
15	2430	2760	4910	2240	2050	5030	e2300	-75	9340	3180	8350	7290
16	4920	217	3840	2460	2370	3340	e3800	1880	10400	4950	579	6740
17	3460	1880	653	2010	1960	-64	e3000	1000	6540	7620	3660	7610
18	-1960	1380	1940	2690	2320	5420	e2400	2830	7580	978	6640	6370
19	4770	5030	2060	2280	2110	2640	e3000	8330	6750	4740	3550	7640
20	887	151	3220	2370	2200	4240	e4000	7280	5860	5270	4250	9880
21	2900	1520	1340	2040	2150	3900	e3200	6250	12200	2230	5920	5990
22	9800	4730	2190	2150	2270	3290	e7200	6230	7660	2990	6890	1020
23	80	1880	2100	2380	2320	1940	e4100	7780	3090	3460	5540	10500
24	-4640	5140	2150	1980	2670	2780	e5400	9130	7490	1090	4910	7930
25	3340	1170	2030	2520	2060	9150	e5000	5630	6560	4940	4710	6240
26	-75	4450	2580	2050	4390	-795	e5800	721	8280	3620	3500	5980
27	-1320	6400	2120	2020	6210	5680	e5200	3460	6150	4520	3050	3120
28	3780	3270	2060	2100	4270	2910	e6400	6580	4760	945	797	5220
29	2410	3040	2090	2220	5930	431	e5200	6550	6310	1760	6400	4420
30	4370	1150	1920	2180	---	2610	e4600	4690	5230	4290	380	4490
31	1460	---	2400	2130	---	3600	---	4720	---	2750	e3000	---
TOTAL	58994	76376	84813	71190	74660	125792	117850	137516	224160	121673	107048	166240
MEAN	1903	2546	2736	2296	2574	4058	3928	4436	7472	3925	3453	5541
MAX	9800	8110	4910	3280	6210	9150	8770	9130	12200	7690	8350	10500
MIN	-4640	-251	653	1440	1760	-795	-4900	-75	3090	945	-334	1020
CFSM	.36	.48	.52	.43	.48	.76	.74	.84	1.41	.74	.65	1.04
IN.	.41	.54	.59	.50	.52	.88	.83	.96	1.57	.85	.75	1.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2000, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	3264	4081	3490	2658	2980	5122	8014	6133	5403
MAX	6411	6201	6811	3673	3930	6348	12870	11050	11980
(WY)	1996	1996	1993	1992	1999	1992	1993	1993	1993
MIN	1875	2520	2031	1907	1870	3594	3928	3333	2645
(WY)	1999	1998	1999	1999	1995	1999	2000	1998	1994

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1992 - 2000

	1999 CALENDAR YEAR	2000 WATER YEAR	1992 - 2000
ANNUAL TOTAL	1206316	1366312	
ANNUAL MEAN	3305	3733	4418
HIGHEST ANNUAL MEAN			7221
LOWEST ANNUAL MEAN			3289
HIGHEST DAILY MEAN	9970	12200	18600
LOWEST DAILY MEAN	-4640	-4900	-6270
ANNUAL SEVEN-DAY MINIMUM	511	511	511
ANNUAL RUNOFF (CFSM)	.62	.70	.83
ANNUAL RUNOFF (INCHES)	8.45	9.57	11.31
10 PERCENT EXCEEDS	6120	7500	8640
50 PERCENT EXCEEDS	3150	3280	3680
90 PERCENT EXCEEDS	896	993	1530

(e) Estimated due to missing record

04082500 LAKE WINNEBAGO AT OSHKOSH, WI

LOCATION.--Lat 44°00'35", long 88°31'38", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.25, T.18 N., R.16 E., Winnebago County, Hydrologic Unit 04030203, at 905 Bay Shore Drive, 800 ft east of mouth of the upper Fox River.

DRAINAGE AREA.--5,880 mi², at lake outlet at Menasha Dam. Area of Lake Winnebago, 215 mi².

PERIOD OF RECORD.--October 1938 to current year in reports of Geological Survey. Records from 1882 to 1938 in files of Geological Survey and U.S. Army Corps of Engineers. A report on Fox River by U.S. Army Corps of Engineers, published as House Document No. 146, 67th Congress, 2nd session, contains semi-monthly records of inflow of Lake Winnebago for the period 1896-1917.

REVISED RECORD.--WDR WI-83-1: Drainage area.

GAGE.--Water-stage recorder. Nonrecording gage read once daily October 1938 to October 1978. Datum of gage is 745.05 ft above mean tide at New York City (levels by U.S. Army Corps of Engineers). Datum of Deuchman gage is 745.00 ft above mean tide at New York City.

REMARKS.--Lake elevations controlled by dams at Menasha and Neenah, which are operated in the interest of navigation. Crests of both dams are at elevation 746.73 ft. Present limits of regulation are from 21 $\frac{1}{4}$ in. above the crest of Menasha dam to crest during navigation season, plus additional 18 in. below crest during winter. Oshkosh staff gage gives true level of lake, while Deuchman gage readings are affected by loss of head in the channel between lake and dam. Data-collection platform at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height observed, 5.33 ft (Deuchman gage) Nov. 8, 1881; minimum observed, -2.00 ft (Deuchman gage) Nov. 28, 1891.

EXTREMES FOR CURRENT YEAR.--Maximum daily mean gage height, 3.10 ft, Sept. 4; minimum recorded, 1.59 ft, Feb. 23-25.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.75	2.70	2.59	2.13	1.86	1.84	2.76	2.87	2.83	2.88	2.95	2.90
2	2.76	2.77	2.60	2.12	1.85	1.90	2.76	2.87	2.89	2.92	2.98	3.01
3	2.78	2.76	2.59	2.11	1.83	1.94	2.72	2.83	2.94	2.97	2.95	3.06
4	2.75	2.75	2.60	2.13	1.83	1.98	2.77	2.80	2.95	2.97	2.93	3.10
5	2.74	2.74	2.59	2.11	1.82	2.02	2.76	2.80	3.04	2.98	2.91	3.07
6	2.77	2.76	2.54	2.09	1.80	2.06	2.62	2.78	3.00	2.98	2.91	3.03
7	2.73	2.76	2.49	2.09	1.79	2.10	2.83	2.77	3.02	2.96	2.92	2.96
8	2.70	2.76	2.48	2.07	1.77	2.14	2.67	2.73	3.02	2.95	2.95	2.99
9	2.75	2.76	2.47	2.07	1.76	2.23	2.67	2.75	3.02	3.04	2.95	2.97
10	2.75	2.81	2.47	2.07	1.76	2.26	2.69	2.69	2.99	3.08	2.96	2.98
11	2.76	2.78	2.48	2.07	1.76	2.30	2.64	2.67	3.04	3.04	2.95	3.05
12	2.74	2.78	2.48	2.08	1.75	2.34	2.64	2.74	3.01	2.97	2.92	3.06
13	2.78	2.77	2.48	2.08	1.76	2.39	2.60	2.70	2.98	2.91	2.98	3.04
14	2.76	2.79	2.47	2.07	1.75	2.43	2.59	2.77	2.93	2.91	3.05	3.04
15	2.76	2.78	2.42	2.05	1.74	2.46	2.64	2.78	2.91	2.91	3.01	3.04
16	2.77	2.77	2.37	2.04	1.74	2.52	2.65	2.81	2.84	2.88	3.04	2.99
17	2.77	2.75	2.39	2.02	1.73	2.54	2.59	2.85	2.88	2.85	3.08	3.00
18	2.78	2.74	2.37	2.01	1.71	2.50	2.57	3.06	2.80	2.87	3.09	2.88
19	2.74	2.70	2.35	2.01	1.69	2.58	2.60	3.00	2.77	2.85	3.07	2.78
20	2.76	2.73	2.26	2.01	1.66	2.60	2.79	3.00	2.74	2.83	3.01	2.82
21	2.72	2.71	2.31	2.00	1.64	2.62	2.69	3.02	2.68	2.86	2.95	2.86
22	2.70	2.71	2.29	1.98	1.62	2.64	2.75	3.03	2.75	2.87	2.95	2.91
23	2.78	2.71	2.27	1.97	1.61	2.66	2.77	3.02	2.79	2.87	3.00	2.83
24	2.75	2.71	2.26	1.96	1.61	2.66	2.79	2.96	2.78	2.87	2.98	e2.85
25	2.71	2.72	2.24	1.95	1.64	2.59	2.81	2.95	2.80	2.85	2.96	2.88
26	2.74	2.68	2.22	1.94	1.67	2.68	2.83	2.94	2.80	2.86	2.95	2.84
27	2.73	2.68	2.20	1.93	1.72	2.68	2.84	2.89	2.83	2.88	2.92	2.89
28	2.73	2.68	2.19	1.91	1.76	2.75	2.86	2.84	2.85	2.92	2.88	2.88
29	2.74	2.67	2.17	1.90	1.78	2.75	2.86	2.78	2.87	2.96	2.86	2.86
30	2.73	2.65	2.15	1.89	---	2.75	2.86	2.74	2.88	2.95	2.88	2.86
31	2.76	---	2.14	1.88	---	2.75	---	2.74	---	2.95	2.86	---
MEAN	2.75	2.74	2.38	2.02	1.74	2.41	2.72	2.84	2.89	2.92	2.96	2.95
MAX	2.78	2.81	2.60	2.13	1.86	2.75	2.86	3.06	3.04	3.08	3.09	3.10
MIN	2.70	2.65	2.14	1.88	1.61	1.84	2.57	2.67	2.68	2.83	2.86	2.78

e Estimated

STREAMS TRIBUTARY TO LAKE MICHIGAN

04083420 PARSONS CREEK, UPSTREAM SITE, NEAR FOND DU LAC, WI

LOCATION.--Lat 43°41'36", long 88°28'19", in SE ¼ SW ¼ sec.9, T.14 N., R.17 E., Fond du Lac County, Hydrologic Unit 04030203, on left downstream side of culvert at Hickory Road, 5.9 mi south of Fond du Lac.

DRAINAGE AREA.--5.3 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 875 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.1	1.1	e.90	e.56	2.6	1.4	2.6	10	1.4	1.3	.98
2	1.7	1.1	1.1	e.90	e.56	2.2	1.4	2.2	7.7	3.5	1.2	14
3	1.5	1.1	1.2	e.86	e.58	2.0	1.5	1.9	3.2	3.9	1.2	7.0
4	1.5	1.1	1.4	e.84	e.56	1.8	1.4	1.9	3.2	2.0	1.1	2.6
5	1.5	1.1	1.4	e.82	e.56	1.7	1.4	1.8	11	1.8	1.4	2.1
6	1.4	1.1	1.2	e.86	e.56	1.7	1.4	1.8	3.4	1.7	1.7	1.9
7	1.4	1.1	1.1	e.84	e.58	1.7	1.5	1.7	2.7	1.7	1.2	1.9
8	1.4	1.1	1.1	e.84	e.58	1.9	1.7	1.6	2.4	2.7	1.2	1.6
9	1.4	1.1	1.2	e.80	e.60	2.3	1.8	1.6	2.1	2.6	1.2	1.5
10	1.4	1.1	1.2	e.78	e.58	1.8	1.6	1.6	1.9	1.8	1.2	1.8
11	1.4	1.0	1.0	e.76	e.58	1.5	1.6	1.6	2.1	1.6	1.1	3.3
12	1.4	1.1	1.1	e.74	e.56	1.4	1.5	1.7	2.0	1.4	1.1	3.0
13	1.5	1.1	1.1	e.72	e.56	1.4	1.5	1.5	2.0	1.4	1.5	2.1
14	1.5	1.1	1.1	e.70	e.54	1.5	1.5	1.5	2.5	1.3	1.2	8.2
15	1.5	1.0	e1.1	e.70	e.56	1.6	1.4	1.2	2.1	1.3	1.1	2.8
16	1.5	1.0	e1.0	e.68	e.56	1.5	1.5	1.4	2.2	1.3	1.0	2.0
17	1.5	1.0	e1.0	e.68	e.54	1.4	1.5	1.6	1.9	1.3	1.8	1.8
18	1.4	1.0	e.90	e.66	e.54	1.3	1.5	10	1.7	1.2	1.3	1.7
19	1.3	1.1	e1.0	e.66	e.52	1.3	1.9	5.1	1.7	1.3	1.2	1.7
20	1.2	1.1	e.90	e.64	e.52	2.0	9.2	2.9	2.0	1.3	1.1	2.1
21	1.2	1.1	e.88	e.64	e.52	1.9	7.1	2.4	1.9	1.2	1.1	1.8
22	1.3	1.1	e.86	e.62	e6.8	1.6	3.3	2.2	1.6	1.2	10	2.9
23	1.2	1.6	e.84	e.62	18	1.5	6.3	2.1	1.6	1.1	3.9	4.2
24	1.3	1.3	e.82	e.62	7.7	1.6	3.4	1.8	1.6	1.1	1.9	2.4
25	1.3	1.2	e.80	e.60	4.1	1.6	2.7	1.7	1.6	1.1	1.5	2.1
26	1.3	1.2	e.86	e.60	6.5	1.7	2.3	1.6	1.6	1.1	1.4	1.9
27	1.2	1.2	e.84	e.60	3.9	2.1	2.1	1.7	1.5	1.3	1.4	1.9
28	1.2	1.1	e.82	e.58	2.8	1.9	2.0	2.0	1.6	1.4	1.4	1.8
29	1.1	1.1	e.84	e.58	2.5	1.7	2.1	1.8	1.6	1.4	1.3	1.6
30	1.2	1.1	e.88	e.58	---	1.6	1.9	1.7	1.5	1.3	1.3	1.6
31	1.2	---	e.90	e.56	---	1.5	---	1.9	---	1.5	1.3	---
TOTAL	42.3	33.5	31.54	21.98	64.02	53.3	71.4	68.1	83.9	50.2	51.6	86.28
MEAN	1.36	1.12	1.02	.71	2.21	1.72	2.38	2.20	2.80	1.62	1.66	2.88
MAX	1.7	1.6	1.4	.90	.18	2.6	9.2	10	11	3.9	10	14
MIN	1.1	1.0	.80	.56	.52	1.3	1.4	1.2	1.5	1.1	1.0	.98
CFSM	.26	.21	.19	.13	.42	.32	.45	.41	.53	.31	.31	.54
IN.	.30	.24	.22	.15	.45	.37	.50	.48	.59	.35	.36	.61

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2000, BY WATER YEAR (WY)

	1998	1999	2000	1998	1999	2000	1998	1999	2000	1998	1999	2000
MEAN	1.43	1.37	1.16	1.27	2.65	3.85	4.95	3.32	2.57	2.57	1.86	2.06
MAX	1.49	1.61	1.34	1.89	3.25	8.33	7.25	3.94	2.80	3.92	2.10	2.88
(WY)	1999	1999	1999	1999	1998	1999	2000	1999	2000	1999	1999	2000
MIN	1.36	1.12	1.02	.71	2.21	1.48	2.38	2.20	2.21	1.62	1.66	1.44
(WY)	2000	2000	2000	2000	2000	1999	2000	2000	1999	2000	2000	1998

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1998 - 2000

ANNUAL TOTAL	890.34	658.12	
ANNUAL MEAN	2.44	1.80	
HIGHEST ANNUAL MEAN			2.48
LOWEST ANNUAL MEAN			3.24
HIGHEST DAILY MEAN	30	(a) May 17	18 Feb 23
LOWEST DAILY MEAN	(b).80	Dec 25	(b).52 Feb 19-21
ANNUAL SEVEN-DAY MINIMUM	(b).83	Dec 23	(b).54 Feb 15
INSTANTANEOUS PEAK FLOW			89 Aug 22
INSTANTANEOUS PEAK STAGE			8.54 Aug 22
INSTANTANEOUS LOW FLOW			(c)340 Mar 31 1998
ANNUAL RUNOFF (CFSM)	.46		(d)9.78 Mar 31 1999
ANNUAL RUNOFF (INCHES)	6.25		.28 Mar 6 1999
10 PERCENT EXCEEDS	3.6		.47
50 PERCENT EXCEEDS	1.8		6.35
90 PERCENT EXCEEDS	1.1		4.0
			1.7
			1.1

(a) Also occurred July 19

(b) Ice affected

(c) From rating curve extended above 30 ft³/s on basis of slope-area measurement of peak flow

(d) From floodmark

(e) Estimated due to ice effect or missing record

04083420 PARSONS CREEK, UPSTREAM SITE, NEAR FOND DU LAC, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 30, 1997 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: April 1998 to current year.

SUSPENDED-SOLIDS DISCHARGE: December 1997 to July 1999, February to September 2000.

TOTAL-PHOSPHORUS DISCHARGE: December 1997 to July 1999, February to September 2000.

INSTRUMENTATION.--Continuous water-temperature recorder since April 1998. Stage-activated water-quality sampler since December 1997.

REMARKS.--Chemical analyses by the Wisconsin State Laboratory of Hygiene. Samples are point samples unless otherwise indicated. Records represent water temperature at sensor within 0.5°C.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE.--Maximum observed, 23.0°C, July 5, 1999; minimum observed, 0.0°C, many days.

SUSPENDED-SOLIDS DISCHARGE.--Maximum daily, 516 tons, Mar. 31, 1998; minimum daily, 0.004 ton, Sept. 30, 2000.

TOTAL-PHOSPHORUS DISCHARGE.--Maximum daily, 1,570 lb, Mar. 31, 1998; minimum daily, 0.14 lb, Mar. 27-28, 1999.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE.--Maximum observed, 21.5°C, May 4-7; minimum observed, 0.0°C, many days.

SUSPENDED-SOLIDS DISCHARGE.--Maximum daily, 37 tons, Sept. 2; minimum daily, 0.004 ton, Sept. 30.

TOTAL-PHOSPHORUS DISCHARGE.--Maximum daily, 165 lb, Sept. 2; minimum daily, 0.18 lb, many days.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	11.0	9.0	10.0	12.5	8.5	10.0	3.5	.5	2.0	1.5	1.0	1.0
2	10.0	8.0	9.0	9.0	5.5	7.0	6.0	3.0	4.5	2.0	.5	1.0
3	8.0	7.0	7.5	5.5	3.0	4.5	8.5	6.0	7.5	2.0	.5	1.5
4	8.5	5.5	7.5	7.0	2.5	5.0	9.0	7.0	8.5	1.0	.5	1.0
5	11.0	8.0	9.5	9.0	6.0	7.0	7.0	3.5	5.0	.5	.0	.5
6	10.0	8.0	9.0	6.5	4.0	5.5	3.5	2.0	3.0	1.0	.0	.5
7	11.5	8.0	10.0	6.5	3.5	5.0	3.5	1.5	2.5	1.0	.0	.5
8	13.0	10.5	11.5	9.5	5.5	7.5	4.5	2.5	3.5	1.0	.0	.0
9	13.5	10.5	12.0	12.5	9.5	11.0	5.5	4.0	5.0	2.5	1.0	1.5
10	15.0	12.0	13.5	11.5	8.0	10.5	4.0	1.5	2.5	2.0	.0	1.0
11	12.0	9.5	11.0	8.0	7.0	7.5	2.5	.5	1.5	2.0	.5	1.5
12	13.5	10.5	12.0	9.0	6.0	7.5	4.0	2.0	3.0	.5	.0	.0
13	13.5	9.0	11.5	9.5	6.0	8.0	3.5	1.5	2.5	.0	.0	.0
14	10.5	7.0	8.5	9.0	5.5	7.0	3.5	2.0	2.5	.0	.0	.0
15	12.5	8.0	10.5	6.0	3.0	4.5	4.0	2.5	3.0	.0	.0	.0
16	12.5	10.0	12.0	5.0	3.0	4.0	3.0	.0	1.0	.5	.0	.0
17	10.0	8.0	8.5	5.0	3.0	4.0	.0	.0	.0	.0	.0	.0
18	9.5	6.5	8.0	8.0	4.0	6.0	.0	.0	.0	.5	.0	.0
19	10.5	7.5	9.0	9.5	8.0	8.5	.0	.0	.0	.0	.0	.0
20	9.0	6.5	8.0	8.0	6.5	7.5	.0	.0	.0	.0	.0	.0
21	10.5	6.5	8.5	7.5	5.0	6.5	.0	.0	.0	.0	.0	.0
22	10.0	7.0	8.0	9.0	7.0	8.0	.0	.0	.0	.0	.0	.0
23	7.5	5.5	6.5	10.0	7.0	8.5	.0	.0	.0	.0	.0	.0
24	6.5	3.5	5.0	8.0	5.0	6.5	.0	.0	.0	.0	.0	.0
25	9.0	4.5	7.0	5.0	3.0	4.0	.0	.0	.0	.0	.0	.0
26	9.0	6.0	7.5	5.0	3.0	4.0	.0	.0	.0	.0	.0	.0
27	9.0	5.5	7.5	5.0	3.0	4.0	.0	.0	.0	.0	.0	.0
28	10.0	8.0	8.5	3.5	1.5	2.5	.0	.0	.0	.0	.0	.0
29	12.0	8.0	10.0	2.5	1.0	1.5	.0	.0	.0	.0	.0	.0
30	13.5	10.5	12.0	1.5	.0	1.0	.5	.0	.0	.0	.0	.0
31	12.0	9.0	10.5	---	---	---	1.0	.5	1.0	.0	.0	.0
MONTH	15.0	3.5	9.3	12.5	.0	6.1	9.0	.0	1.9	2.5	.0	.3

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	.0	.0	.0	7.5	3.0	5.0	10.5	7.0	8.5	18.0	11.0	13.5
2	.0	.0	.0	6.0	1.5	3.5	13.5	6.0	9.5	18.0	8.5	13.0
3	.0	.0	.0	6.5	1.0	3.5	12.0	7.5	9.5	19.5	10.5	14.5
4	.0	.0	.0	8.5	3.0	5.5	7.5	4.5	6.0	21.5	13.0	17.0
5	.0	.0	.0	9.5	3.5	6.5	8.0	2.5	5.5	21.5	14.0	17.5
6	.0	.0	.0	11.0	4.5	7.5	12.5	5.5	8.5	21.5	14.5	18.0
7	.5	.0	.0	14.0	7.0	10.5	9.5	1.5	4.5	21.5	16.0	18.5
8	.5	.0	.0	14.0	10.0	12.0	9.0	.0	4.0	19.5	16.0	17.5
9	1.0	.0	.5	11.0	2.5	6.5	11.0	3.5	6.5	17.5	12.5	15.0
10	1.0	.5	1.0	4.5	1.5	3.0	8.5	3.0	5.5	14.5	10.5	12.5
11	.5	.0	.0	6.0	.5	3.0	6.0	3.5	5.0	13.5	12.0	12.5
12	.0	.0	.0	6.0	1.0	3.5	10.5	2.5	6.5	13.5	12.5	13.5
13	.0	.0	.0	5.5	3.0	4.0	8.5	5.0	7.0	12.5	9.0	10.5
14	.5	.0	.0	8.0	2.5	5.0	16.0	6.0	10.5	12.0	7.5	9.5
15	1.5	.5	1.0	9.5	5.0	7.0	12.5	7.0	10.0	14.0	8.0	11.0
16	1.5	.5	1.0	7.0	2.0	4.0	7.0	5.5	6.0	13.0	11.0	12.0
17	.5	.0	.0	6.5	.5	3.5	5.5	4.5	5.0	13.0	10.5	12.0
18	1.0	.5	.5	4.5	1.0	3.0	9.0	5.0	7.0	12.0	9.5	11.0
19	1.5	.5	1.0	4.0	3.0	3.5	9.0	7.5	8.0	14.0	8.0	10.5
20	1.5	.5	1.0	5.5	3.5	4.5	8.0	5.0	6.5	14.0	8.0	11.0
21	2.5	.0	1.0	7.5	5.0	6.5	13.0	4.5	8.0	14.0	10.0	12.0
22	2.5	.0	1.5	9.5	6.5	8.0	14.5	5.0	9.5	15.0	12.0	13.5
23	1.5	.0	.5	13.5	6.5	10.0	15.0	8.0	11.0	17.0	12.5	14.5
24	2.5	1.5	2.0	10.5	8.0	9.5	16.0	6.5	11.0	16.5	13.0	15.0
25	5.5	2.0	3.5	12.0	7.5	9.5	16.0	6.5	11.0	16.0	11.5	13.5
26	6.5	3.0	5.0	9.5	5.0	7.5	17.0	7.0	11.5	14.0	11.5	12.5
27	6.5	3.5	4.5	9.0	5.0	7.0	17.5	9.0	13.0	12.5	11.5	12.0
28	6.0	1.5	4.0	7.0	4.5	5.5	13.5	8.5	11.0	12.5	10.5	11.5
29	8.5	4.0	6.0	8.5	4.0	6.0	15.0	8.5	11.0	13.5	9.5	11.5
30	---	---	---	11.0	3.0	7.0	17.0	7.0	12.0	14.0	11.5	12.5
31	---	---	---	12.5	4.5	8.5	---	---	---	14.0	13.5	13.5
MONTH	8.5	.0	1.2	14.0	.5	6.1	17.5	.0	8.3	21.5	7.5	13.3
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	16.5	13.0	15.0	19.0	15.0	17.0	17.0	15.5	16.5	20.0	18.5	19.5
2	16.0	13.5	15.0	19.0	16.0	17.0	17.5	16.0	16.5	20.5	17.5	19.0
3	15.0	11.0	13.0	18.5	16.0	16.5	17.0	14.0	15.5	20.0	18.0	19.0
4	14.0	12.0	12.5	17.0	14.5	16.0	18.0	14.5	16.0	18.5	14.5	16.0
5	15.5	11.5	13.0	18.0	14.5	16.5	17.0	15.0	15.5	15.0	12.5	14.0
6	16.0	10.5	13.0	18.0	15.5	17.0	18.5	15.0	16.5	15.0	12.0	13.5
7	16.0	12.0	14.0	17.0	14.5	16.0	19.0	16.0	17.5	17.5	14.0	15.5
8	19.0	13.5	16.0	16.5	15.0	15.5	19.0	17.0	18.0	17.0	15.0	16.0
9	19.5	16.0	17.5	19.0	16.0	17.5	19.5	17.0	18.0	18.5	15.5	17.0
10	20.0	16.5	18.0	19.5	16.5	18.0	18.5	16.0	17.5	19.5	17.5	18.5
11	19.5	16.5	18.0	18.0	15.5	17.0	18.5	16.0	17.0	18.5	17.0	18.0
12	16.5	13.0	14.0	18.0	15.5	16.5	18.0	15.0	16.5	17.0	15.0	16.0
13	14.5	12.5	13.5	19.5	15.5	17.5	18.0	16.5	17.0	16.5	13.5	15.0
14	16.0	14.0	15.0	19.5	16.5	18.0	18.5	16.5	17.5	17.0	15.0	16.0
15	17.0	14.0	15.5	18.5	15.5	17.0	19.5	17.0	18.0	15.0	12.0	13.0
16	16.0	15.0	15.5	18.5	15.0	17.0	17.5	14.5	16.0	13.5	10.0	12.0
17	15.5	12.0	14.0	19.5	16.0	17.5	16.0	14.0	15.0	15.0	12.0	13.5
18	16.5	12.5	14.5	17.5	14.0	15.0	17.0	14.5	15.5	16.0	12.5	14.5
19	18.0	14.0	16.0	15.0	13.5	14.5	16.0	14.0	15.0	16.0	14.5	15.5
20	18.5	15.0	16.5	15.0	13.0	14.0	15.5	12.5	14.5	14.5	12.5	14.0
21	18.5	16.0	17.0	15.0	12.5	14.0	16.5	13.5	15.0	12.5	10.5	11.5
22	16.5	15.0	15.5	16.0	13.0	14.5	20.0	15.5	17.0	12.0	11.0	11.5
23	17.0	13.5	15.5	16.0	12.5	14.5	18.5	16.5	17.5	13.0	12.0	12.5
24	16.0	14.5	15.5	17.0	13.0	15.0	18.5	16.5	17.5	12.0	10.0	11.0
25	18.5	14.5	16.0	17.0	14.5	15.5	18.0	16.0	17.0	11.5	8.5	10.0
26	17.5	16.0	17.0	18.5	15.5	17.0	18.0	16.5	17.0	12.5	9.5	11.0
27	17.0	14.0	15.5	18.5	16.0	17.5	17.5	16.0	16.5	12.0	10.5	11.0
28	15.5	13.5	14.5	17.5	16.0	17.0	18.0	15.5	17.0	12.0	9.0	10.5
29	16.0	13.0	14.5	17.5	16.0	16.5	17.5	16.5	17.0	13.5	10.5	12.0
30	17.5	13.0	15.5	17.5	16.0	16.5	17.0	15.0	16.0	14.0	12.5	13.0
31	---	---	---	17.5	16.0	16.5	21.0	16.5	18.5	---	---	---
MONTH	20.0	10.5	15.2	19.5	12.5	16.3	21.0	12.5	16.6	20.5	8.5	14.3
YEAR	21.5	.0	9.1									

04083420 PARSONS CREEK, UPSTREAM SITE, NEAR FOND DU LAC, WI--Continued

SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED(TONS PER DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	.075	.012	.035	8.44	.057	.064	.028
2	---	---	---	---	---	.061	.012	.025	1.98	3.40	.057	e37.0
3	---	---	---	---	---	.053	.013	.019	.14	.63	.055	e1.20
4	---	---	---	---	---	.047	.012	.016	.10	.14	.053	.071
5	---	---	---	---	---	.042	.012	.016	e22.0	.12	.067	.056
6	---	---	---	---	---	.039	.012	.017	e.50	.11	.080	.052
7	---	---	---	---	---	.038	.013	.017	.087	.10	.060	.051
8	---	---	---	---	---	.041	.014	.018	.080	.17	.060	.043
9	---	---	---	---	---	.049	.016	.019	.069	.16	.063	.041
10	---	---	---	---	---	.036	.014	.020	.064	.12	.061	.049
11	---	---	---	---	---	.028	.014	.022	.070	.10	.060	.090
12	---	---	---	---	---	.025	.013	.025	.067	.093	.060	.081
13	---	---	---	---	---	.025	.013	.024	.068	.090	.081	.058
14	---	---	---	---	---	.025	.015	.025	.086	.087	.065	3.18
15	---	---	---	---	---	.025	.019	.022	.071	.086	.060	.091
16	---	---	---	---	---	.023	.024	.028	.074	.086	.058	.047
17	---	---	---	---	---	.020	.032	.043	.065	.085	.10	.035
18	---	---	---	---	---	.019	.039	3.76	.061	.085	.073	.028
19	---	---	---	---	---	.018	.087	.47	.059	.091	.066	.024
20	---	---	---	---	---	.026	7.76	.11	.071	.089	.065	.025
21	---	---	---	---	---	.024	.71	.074	.067	.080	.062	.019
22	---	---	---	---	---	.020	.17	.070	.060	.077	32.8	e.35
23	---	---	---	---	.24	.018	.95	.066	.058	.074	.59	e.60
24	---	---	---	---	1.57	.018	.15	.058	.060	.069	.073	.016
25	---	---	---	---	.24	.017	.093	.054	.060	.066	.055	.011
26	---	---	---	---	.31	.018	.069	.052	.059	.064	.050	.009
27	---	---	---	---	.13	.020	.054	.055	.056	.072	.046	.007
28	---	---	---	---	.089	.018	.044	.066	.062	.077	.043	.006
29	---	---	---	---	.077	.015	.039	.059	.061	.074	.038	.005
30	---	---	---	---	---	.013	.031	.060	.058	.069	.036	.004
31	---	---	---	---	---	.013	---	.065	---	.075	.034	---
TOTAL	---	---	---	---	2.656	0.909	10.456	5.410	34.753	6.696	35.135	43.277

e Estimated

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	1.58	.19	.67	57.6	.21	.76	.35
2	---	---	---	---	---	.99	.18	.53	25.5	14.4	.74	e165
3	---	---	---	---	---	.66	.20	.44	2.08	8.84	.75	e20.0
4	---	---	---	---	---	.45	.19	.40	1.66	1.92	.69	.71
5	---	---	---	---	---	.31	.19	.38	e100	1.04	.83	.52
6	---	---	---	---	---	.23	.18	.37	e4.50	.64	.94	.45
7	---	---	---	---	---	.23	.19	.36	1.27	.57	.67	.41
8	---	---	---	---	---	.26	.22	.34	1.12	.92	.63	.32
9	---	---	---	---	---	.31	.23	.34	.94	.87	.63	.28
10	---	---	---	---	---	.24	.21	.33	.83	.62	.58	.32
11	---	---	---	---	---	.20	.20	.33	.89	.52	.54	.54
12	---	---	---	---	---	.18	.19	.36	.82	.48	.51	.45
13	---	---	---	---	---	.19	.19	.33	.81	.45	.65	.30
14	---	---	---	---	---	.20	.21	.31	.98	.44	.50	35.5
15	---	---	---	---	---	.21	.24	.26	.78	.42	.44	2.52
16	---	---	---	---	---	.20	.29	.31	.76	.41	.40	1.35
17	---	---	---	---	---	.18	.35	.37	.62	.41	.59	1.11
18	---	---	---	---	---	.18	.41	30.7	.54	.40	.36	.94
19	---	---	---	---	---	.18	.52	6.70	.49	.42	.27	.88
20	---	---	---	---	---	.26	40.1	1.36	.55	.41	.22	.99
21	---	---	---	---	---	.25	10.8	.79	.49	.39	.18	.78
22	---	---	---	---	---	.22	1.49	.47	.41	.41	133	e3.00
23	---	---	---	---	---	.21	7.30	.30	.37	.43	12.5	e6.50
24	---	---	---	---	30.4	.22	1.61	.24	.35	.43	2.75	.83
25	---	---	---	---	6.94	.22	1.08	.22	.33	.44	1.80	.66
26	---	---	---	---	11.3	.23	.87	.21	.31	.47	1.41	.56
27	---	---	---	---	5.87	.28	.74	.22	.27	.57	1.10	.50
28	---	---	---	---	3.13	.25	.66	.27	.28	.67	.89	.42
29	---	---	---	---	2.08	.23	.64	.24	.25	.69	.69	.32
30	---	---	---	---	---	.21	.55	.23	.23	.69	.55	.24
31	---	---	---	---	---	.20	---	.25	---	.82	.46	---
TOTAL	---	---	---	---	59.72	9.76	70.42	48.63	206.03	40.40	167.03	246.75

e Estimated

STREAMS TRIBUTARY TO LAKE MICHIGAN

04083420 PARSONS CREEK, UPSTREAM SITE, NEAR FOND DU LAC, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	RESIDUE VOLATILE, SUS- PENDE (MG/L) (00535)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	SAM- PLING METHOD, CODES (82398)
FEB												
23...	1100	21	7.8	2.12	1.02	1.86	--	428	69	--	--	50
24...	0930	4.9	8.0	.740	--	.459	--	28	--	--	--	50
24...	1050	6.6	8.1	.680	--	.412	--	24	--	--	--	50
24...	1145	9.1	8.0	.659	--	.451	--	43	--	--	--	50
24...	1300	15	7.9	.692	--	.674	--	124	--	--	--	50
24...	1515	15	7.8	.858	--	.908	--	166	--	--	--	50
24...	1745	10	7.8	1.13	--	.987	--	92	--	--	--	50
25...	0815	3.3	8.2	.409	--	.281	--	15	--	--	--	50
25...	2200	4.4	8.1	.303	--	.248	--	21	--	--	--	50
26...	0330	7.8	8.1	.252	--	.262	--	31	--	--	--	50
26...	1045	6.2	8.1	.354	--	.380	--	16	--	--	--	50
MAR												
30...	1246	1.5	8.4	.018	.008	.025	--	<5	--	--	<10	10
APR												
13...	1602	1.5	8.6	.041	.010	.034	--	<5	--	--	10	10
19...	1235	2.0	8.5	.086	.021	.058	1.7	12	<5	616	--	50
19...	1250	2.0	--	--	--	--	--	--	--	--	80	50
19...	1320	2.0	8.5	.091	.015	.045	1.0	9	<5	586	--	50
19...	1620	2.7	8.5	.044	.013	.069	1.3	25	6	580	--	50
19...	1920	2.2	--	--	--	--	--	--	--	--	160	50
20...	0130	2.6	8.4	.140	.019	.096	2.3	36	8	644	--	50
20...	0200	3.1	8.4	.133	.017	.095	2.0	40	8	--	190	50
20...	0250	4.0	8.5	.144	.019	.156	3.0	79	13	650	600	50
20...	0400	10	8.4	.118	.020	.679	11	520	90	1050	810	50
20...	0410	12	8.3	.134	.018	.989	17	725	120	1270	910	50
20...	0440	19	8.2	.229	.076	1.66	21	1170	200	1710	4600	50
20...	0505	24	8.2	.251	.080	1.61	16	1050	180	1570	5100	50
20...	0720	19	8.1	.479	.337	1.19	13	380	75	928	50000	50
20...	0900	14	8.1	.415	.573	1.38	10	274	52	808	--	50
20...	1100	9.6	8.2	.259	.355	.679	5.1	96	18	648	33000	50
20...	1146	8.7	8.0	.232	.309	.570	4.3	76	14	--	34000	10
20...	1147	8.7	8.1	.218	.312	.575	4.8	80	14	--	23000	50
20...	1700	5.9	8.1	.076	.120	.215	2.0	30	7	630	3300	50
20...	2000	6.2	8.2	.074	.086	.174	2.1	34	7	648	2100	50
20...	2155	8.2	8.2	.065	.071	.188	2.3	56	11	660	1200	50
20...	2240	9.6	8.2	.069	.079	.207	2.4	63	12	664	1400	50
21...	0440	11	8.2	.218	.224	.408	3.6	51	11	664	19000	50
21...	0740	8.7	--	.211	--	.412	--	35	--	--	--	50
21...	1340	5.9	--	.074	--	.203	--	24	--	--	--	50
22...	0140	4.0	--	.040	--	.092	--	19	--	--	--	50
22...	2240	2.9	--	.039	--	.072	--	23	--	--	--	50
23...	0355	4.4	--	.048	--	.092	--	33	--	--	--	50
23...	0445	5.9	--	.045	--	.119	--	54	--	--	--	50
23...	0540	8.7	--	.042	--	.158	--	80	--	--	--	50
23...	0620	10	--	.063	--	.208	--	98	--	--	--	50
23...	0920	10	--	.132	--	.271	--	83	--	--	--	50
23...	1235	7.4	--	.092	--	.345	--	48	--	--	--	50
23...	1835	4.9	--	.035	--	.164	--	35	--	--	--	50
24...	0635	3.5	--	.033	--	.082	--	20	--	--	--	50
MAY												
04...	1512	1.8	8.5	.042	.014	.039	<2.0	10	<5	--	40	10
18...	0120	6.6	--	.070	.072	.360	6.0	186	37	--	21000	50
18...	0135	8.2	--	.068	.064	.419	8.8	246	46	--	10000	50
18...	0150	9.6	--	.071	.062	.505	7.4	342	62	--	13000	50
18...	0205	9.6	--	.072	.066	.542	7.5	346	64	--	12000	50
18...	0350	12	--	.082	.092	.480	6.5	242	48	--	54000	50
18...	0520	11	--	.207	.187	.586	7.4	192	38	--	130000	50
18...	0650	14	--	.338	.396	.923	9.9	209	42	--	190000	50
18...	0740	14	--	.339	.493	1.10	10	244	49	--	290000	50
18...	0832	13	--	.349	.457	.922	8.5	182	38	--	220000	10
18...	0833	13	--	.363	.432	.905	--	188	37	--	250000	50
18...	0834	13	--	--	--	--	--	--	--	--	210000	50
18...	0935	13	--	.291	.433	.834	7.4	157	33	--	160000	50
18...	1235	10	--	.172	.311	.556	<6.0	80	19	--	82000	50
18...	1535	10	--	.152	.212	.413	<6.0	67	16	--	75000	50
18...	1940	7.8	--	.096	.171	.312	<6.0	46	12	--	27000	50
18...	2100	9.6	--	.089	.135	.277	<6.0	59	13	--	16000	50
19...	0205	7.8	--	.154	.260	.486	<6.0	64	14	--	66000	50
19...	0640	5.9	8.4	.083	--	.229	--	28	6	--	--	50
19...	1140	4.4	8.4	.053	--	.152	--	19	5	--	--	50
19...	1640	4.0	8.4	.045	--	.134	--	21	5	--	--	50
19...	2140	3.5	8.4	.048	--	.119	--	25	6	--	--	50
20...	0240	3.3	8.4	.052	--	.097	--	21	5	--	--	50
20...	0740	2.9	8.4	.036	--	.071	--	12	<5	--	--	50
20...	1240	3.1	8.5	.027	--	.097	--	22	6	--	--	50
20...	1740	2.7	8.5	.037	--	.117	--	43	9	--	--	50

STREAMS TRIBUTARY TO LAKE MICHIGAN

04083420 PARSONS CREEK, UPSTREAM SITE, NEAR FOND DU LAC, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	RESIDUE VOLATILE, TILE, SUS- PENDE (MG/L) (00535)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	SAM- PLING METHOD, CODES (82398)
JUN											
01...	0225	2.7	--	.053	--	.141	--	52	--	--	50
01...	0310	3.1	--	.056	--	.168	--	66	--	--	50
01...	0425	7.4	--	.049	--	.360	--	222	--	--	50
01...	0540	11	--	.109	--	.645	--	304	--	--	50
01...	0655	16	--	.109	--	.726	--	344	--	--	50
01...	0955	12	--	.511	--	1.60	--	238	--	--	50
01...	1355	6.6	--	.226	--	.625	--	71	--	--	50
01...	1855	6.2	--	.109	--	.347	--	90	--	--	50
01...	2030	24	--	<.013	--	1.13	--	612	--	--	50
01...	2130	23	--	.230	--	1.13	--	494	--	--	50
01...	2230	23	--	.492	--	1.82	--	504	--	--	50
01...	2330	24	--	.620	--	1.83	--	390	--	--	50
02...	0300	14	--	.235	--	.751	--	109	--	--	50
02...	0805	7.8	--	.104	--	.417	--	47	--	--	50
02...	2250	3.7	--	.031	--	.146	--	21	--	--	50
03...	2350	2.9	--	.028	--	.098	--	17	--	--	50
15...	1115	2.1	--	.019	--	.096	--	55	--	700	10
JUL											
02...	1910	2.2	--	<.013	--	.156	--	69	--	--	50
02...	1925	3.5	--	<.013	--	.292	--	171	--	--	50
02...	1940	4.4	--	<.013	--	.317	--	185	--	--	50
02...	1955	4.9	--	<.013	--	.356	--	210	--	--	50
02...	2110	16	--	<.013	--	.842	--	634	--	--	50
02...	2120	19	--	.038	--	1.27	--	944	--	--	50
02...	2135	20	--	.096	--	1.74	--	976	--	--	50
02...	2320	14	--	.231	--	1.03	--	274	--	--	50
03...	0030	9.1	--	.233	--	.713	--	150	--	--	50
03...	0210	5.9	--	.197	--	.523	--	84	--	--	50
03...	0530	4.2	--	.132	--	.519	--	68	--	--	50
03...	0930	4.0	--	.112	--	.406	--	38	--	--	50
03...	1330	3.1	--	.051	--	.267	--	26	--	--	50
06...	1344	1.7	--	.022	--	.064	--	11	--	1900	10
20...	1056	1.4	--	<.013	--	.059	--	26	--	--	10
AUG											
03...	1054	1.2	8.2	<.013	--	.118	--	71	--	820	10
16...	1119	1.1	8.3	.014	--	.073	--	21	--	600	10
22...	1630	10	--	.052	.036	.279	<6.0	183	--	100	50
22...	1645	11	--	.061	.053	1.18	8.0	840	--	69000	50
22...	1700	14	--	.080	.057	2.12	7.8	1660	--	15000	50
22...	1730	57	--	.299	.502	5.88	17	3770	--	470000	50
22...	1750	77	--	.205	.081	3.81	15	3620	--	150000	50
22...	1800	67	--	.454	.266	3.33	16	2410	--	150000	50
22...	1815	55	--	.872	.692	3.38	22	1560	--	590000	50
22...	1835	40	--	.818	.925	3.24	17	1030	--	1100000	50
22...	1910	33	--	.567	.943	3.02	15	620	--	940000	50
22...	2110	23	--	.337	.658	1.19	7.8	256	--	1100000	50
23...	0250	7.0	--	.249	.503	.824	<6.0	82	--	350000	50
23...	1320	2.6	--	.096	--	.325	--	15	--	--	50
31...	1102	1.3	--	.045	.043	.067	<3.0	<40	<10	690	10
SEP											
14...	0230	2.9	--	<.013	--	.162	--	49	--	--	50
14...	0300	3.7	--	<.013	--	.206	--	73	--	--	50
14...	0315	4.7	--	<.013	--	.238	--	96	--	--	50
14...	0400	13	--	<.013	--	.443	--	246	--	--	50
14...	0420	17	--	<.013	--	.593	--	348	--	--	50
14...	0445	20	--	.403	--	1.28	--	480	--	--	50
14...	0710	14	--	.442	--	1.06	--	162	--	--	50
14...	1140	11	--	.303	.589	.870	--	86	--	--	50
14...	1142	11	--	.328	.586	.884	--	84	--	--	10
14...	1525	6.6	--	.052	--	.617	--	39	--	--	50
15...	1015	2.7	--	<.013	--	.134	--	10	--	--	50
28...	1146	1.5	--	.013	.031	.045	--	<5	--	290	10

STREAMS TRIBUTARY TO LAKE MICHIGAN

04083423 PARSONS CREEK, MIDDLE SITE, NEAR FOND DU LAC, WI

LOCATION.--Lat 43°41'47", long 88°28'29", in NE ¼ SW ¼ sec.9, T.14 N., R.17 E., Fond du Lac County, Hydrologic Unit 04030203, on left bank 400 ft upstream from bridge on County Highway B, 5.6 mi south of Fond du Lac.

DRAINAGE AREA.--5.6 mi².

PERIOD OF RECORD.--October 1997 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED-SOLIDS DISCHARGE: December 1997 to July 1999, February to September 2000.

TOTAL-PHOSPHORUS DISCHARGE: December 1997 to July 1999, February to September 2000.

INSTRUMENTATION.--Stage-activated water-quality sampler since December 1997.

REMARKS.--Chemical analyses by the Wisconsin State Laboratory of Hygiene. Samples are point samples unless otherwise indicated.

Water-discharge records computed by subtracting three percent from the downstream site discharge.

EXTREMES FOR PERIOD OF RECORD.--

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 569 tons, Mar. 31, 1998; minimum daily, 0.006 ton, many days, 2000.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 2,040 lb, Mar. 31, 1998; minimum daily, 0.18 lb, Mar. 30, 1999.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SOLIDS DISCHARGE.--Maximum daily, 46 tons, Sept. 2; minimum daily, 0.006 ton, many days.

TOTAL-PHOSPHORUS DISCHARGE.--Maximum daily, 240 lb, Sept. 2; minimum daily, 0.22 lb, Apr. 13.

SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (TONS PER DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	.092	.006	.047	9.26	.071	.090	.041
2	---	---	---	---	---	.071	.006	.034	2.63	2.91	.085	e46.0
3	---	---	---	---	---	.062	.006	.026	.20	1.02	.079	e1.80
4	---	---	---	---	---	.055	.006	.022	.13	.29	.074	.089
5	---	---	---	---	---	.049	.006	.021	e27.5	.22	.091	.068
6	---	---	---	---	---	.044	.006	.022	e6.90	.19	.10	.062
7	---	---	---	---	---	.042	.006	.023	.12	.17	.079	.062
8	---	---	---	---	---	.042	.007	.024	.11	.28	.076	.055
9	---	---	---	---	---	.049	.008	.026	.095	.27	.081	.052
10	---	---	---	---	---	.035	.007	.027	.088	.21	.080	.062
11	---	---	---	---	---	.029	.006	.029	.095	.18	.082	.12
12	---	---	---	---	---	.026	.006	.033	.087	.17	.087	.10
13	---	---	---	---	---	.025	.006	.034	.088	.17	.13	.070
14	---	---	---	---	---	.023	.009	.034	.11	.17	.10	4.20
15	---	---	---	---	---	.021	.013	.035	.090	.16	.094	.12
16	---	---	---	---	---	.019	.020	.043	.092	.16	.090	.059
17	---	---	---	---	---	.016	.033	.058	.081	.15	.17	.045
18	---	---	---	---	---	.015	.051	4.83	.076	.15	.11	.035
19	---	---	---	---	---	.014	.086	.65	.073	.15	.092	.031
20	---	---	---	---	---	.019	8.16	.16	.089	.15	.088	.034
21	---	---	---	---	---	.017	.83	.091	.084	.14	.085	.026
22	---	---	---	---	---	.014	.18	.084	.071	.13	39.4	e.53
23	---	---	---	---	.30	.012	1.02	.078	.071	.12	1.75	e.90
24	---	---	---	---	2.13	.012	.20	.069	.073	.12	.15	.026
25	---	---	---	---	.27	.011	.12	.063	.074	.11	.069	.019
26	---	---	---	---	.50	.010	.092	.061	.072	.10	.064	.015
27	---	---	---	---	.18	.011	.072	.064	.068	.10	.057	.012
28	---	---	---	---	.11	.009	.058	.075	.076	.10	.052	.010
29	---	---	---	---	.096	.008	.051	.068	.074	.10	.050	.009
30	---	---	---	---	---	.007	.041	.067	.071	.091	.046	.007
31	---	---	---	---	---	.006	---	.073	---	.10	.043	---
TOTAL	---	---	---	---	3.586	0.865	11.118	6.971	48.648	8.452	43.644	54.659

e Estimated

STREAMS TRIBUTARY TO LAKE MICHIGAN

99

04083423 PARSONS CREEK, MIDDLE SITE, NEAR FOND DU LAC, WI--Continued

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	1.97	.27	.94	71.9	.32	.96	.99
2	---	---	---	---	---	1.24	.25	.72	32.5	11.3	1.01	e240
3	---	---	---	---	---	.88	.25	.59	2.84	12.1	1.03	e25.3
4	---	---	---	---	---	.64	.24	.54	2.12	2.81	.95	1.50
5	---	---	---	---	---	.46	.23	.51	e167	1.57	1.13	1.01
6	---	---	---	---	---	.35	.23	.50	e6.80	.99	1.25	.81
7	---	---	---	---	---	.34	.24	.48	1.82	.84	.93	.72
8	---	---	---	---	---	.37	.26	.47	1.57	1.29	.87	.57
9	---	---	---	---	---	.47	.30	.47	1.31	1.17	.90	.47
10	---	---	---	---	---	.35	.25	.46	1.18	.87	.86	.50
11	---	---	---	---	---	.31	.24	.47	1.23	.74	.86	.84
12	---	---	---	---	---	.30	.23	.50	1.10	.67	.89	.64
13	---	---	---	---	---	.31	.22	.47	1.08	.63	1.26	.39
14	---	---	---	---	---	.32	.25	.44	1.27	.61	.99	42.9
15	---	---	---	---	---	.32	.29	.43	1.02	.56	.87	3.60
16	---	---	---	---	---	.29	.34	.49	1.00	.53	.79	1.92
17	---	---	---	---	---	.27	.44	.55	.82	.49	1.20	1.51
18	---	---	---	---	---	.27	.52	49.9	.72	.46	.62	1.25
19	---	---	---	---	---	.28	.92	8.73	.66	.44	.42	1.14
20	---	---	---	---	---	.42	59.3	1.71	.76	.43	.32	1.28
21	---	---	---	---	---	.40	14.6	.95	.68	.46	.25	1.00
22	---	---	---	---	---	.35	2.39	.61	.54	.47	179	e4.50
23	---	---	---	---	---	.32	8.80	.41	.51	.48	21.0	e9.10
24	---	---	---	---	43.4	.33	2.23	.34	.49	.51	4.10	1.13
25	---	---	---	---	9.72	.33	1.51	.31	.47	.55	3.05	.84
26	---	---	---	---	15.4	.32	1.21	.30	.43	.55	2.61	.69
27	---	---	---	---	7.10	.40	1.02	.32	.39	.65	2.16	.58
28	---	---	---	---	3.60	.35	.89	.38	.41	.71	1.80	.53
29	---	---	---	---	2.51	.32	.85	.34	.37	.77	1.60	.46
30	---	---	---	---	---	.29	.74	.34	.34	.78	1.39	.41
31	---	---	---	---	---	.28	---	.37	---	.98	1.17	---
TOTAL	---	---	---	---	81.73	13.85	99.51	74.04	303.33	45.73	236.24	346.58

e Estimated

STREAMS TRIBUTARY TO LAKE MICHIGAN

04083423 PARSONS CREEK, MIDDLE SITE, NEAR FOND DU LAC, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	RESIDUE TOTAL AT 105 DEG. C, PENDE (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDE (MG/L) (00535)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	COLI- FORM, 0.7 UM-MF (COLS./ 100 ML) (31625)	SAM- PLING METHOD, CODES (82398)
FEB												
23...	1100	22	7.8	2.13	1.00	1.93	--	424	70	--	--	50
24...	0930	6.5	8.0	.933	--	.588	--	42	--	--	--	50
24...	1050	7.9	8.0	1.27	--	.922	--	112	--	--	--	50
24...	1145	11	7.9	1.34	--	1.11	--	137	--	--	--	50
24...	1300	15	7.9	.950	--	.742	--	117	--	--	--	50
24...	1515	17	7.8	.843	--	.893	--	175	--	--	--	50
24...	1745	13	7.8	1.27	--	1.07	--	109	--	--	--	50
25...	2200	5.8	8.2	.344	--	.271	--	26	--	--	--	50
26...	0330	8.7	8.1	.496	--	.416	--	50	--	--	--	50
26...	1045	7.2	8.1	.407	--	.391	--	24	--	--	--	50
MAR												
30...	1246	1.7	8.4	.025	.009	.031	--	5	--	--	<10	10
APR												
13...	1436	1.6	8.7	.051	.009	.031	--	<5	--	--	<10	10
19...	1235	2.0	8.4	.073	.024	.074	1.3	19	6	606	--	50
19...	1250	2.1	--	--	--	--	--	--	--	--	6400	50
19...	1320	2.2	8.4	.186	.214	.602	3.5	59	22	666	--	50
19...	1620	2.7	8.5	.053	.019	.055	1.1	<20	<20	556	170	50
20...	0130	3.3	8.3	.247	.321	1.65	5.2	285	95	948	--	50
20...	0200	4.3	8.3	.566	.807	4.50	12	535	195	1180	120000	50
20...	0250	5.9	8.3	.449	.661	2.94	9.3	360	125	976	65000	50
20...	0400	10	8.3	.588	.796	3.04	16	400	130	1030	50000	50
20...	0410	13	8.3	.462	.595	2.36	14	470	115	1080	46000	50
20...	0440	21	8.1	.216	.162	1.26	16	710	120	1300	13000	50
20...	0505	24	8.0	.263	.139	1.50	18	920	160	1460	7700	50
20...	0720	20	8.0	.510	.321	1.10	13	365	63	934	41000	50
20...	0900	15	8.0	.478	.610	1.61	14	320	62	874	--	50
20...	1100	12	8.0	.303	.394	.780	6.0	128	23	692	26000	50
20...	1316	9.1	8.1	.189	.026	.473	3.5	55	10	--	1600	10
20...	1317	9.1	8.1	.181	.257	.466	3.5	57	11	--	11000	50
20...	1700	7.3	8.1	.088	.138	.250	2.3	36	7	706	3700	50
20...	2000	7.5	8.1	.103	.130	.302	2.6	41	10	712	5700	50
20...	2155	9.7	8.2	.145	.183	.453	3.6	61	17	680	9100	50
20...	2240	12	8.2	.140	.177	.460	3.8	72	19	678	11000	50
21...	0440	12	8.1	.237	.229	.428	3.9	52	12	686	20000	50
21...	0740	10	--	.215	--	.399	--	35	--	--	--	50
21...	1340	7.2	--	.072	--	.208	--	18	--	--	--	50
22...	0140	4.7	--	.036	--	.093	--	17	--	--	--	50
23...	0355	5.1	--	.067	--	.148	--	37	--	--	--	50
23...	0445	7.0	--	.069	--	.222	--	62	--	--	--	50
23...	0540	9.1	--	.048	--	.157	--	69	--	--	--	50
23...	0620	11	--	.054	--	.180	--	91	--	--	--	50
23...	0920	12	--	.113	--	.256	--	73	--	--	--	50
23...	1235	8.7	--	.109	--	.380	--	48	--	--	--	50
23...	1835	5.9	--	.043	--	.163	--	32	--	--	--	50
MAY												
04...	1402	1.8	8.6	.052	.023	.067	2.8	12	<5	--	7500	10
18...	0120	6.8	--	.136	.220	.616	--	187	43	--	58000	50
18...	0135	7.3	--	.156	.333	.954	8.0	206	52	--	130000	50
18...	0150	8.3	--	.165	.380	1.17	9.3	294	72	--	100000	50
18...	0205	11	--	.185	.440	1.58	11	420	104	--	160000	50
18...	0350	12	--	.111	.170	.642	7.5	238	50	--	57000	50
18...	0520	14	--	.290	.622	1.70	12	352	96	--	220000	50
18...	0650	13	--	.370	.448	1.03	11	192	44	--	210000	50
18...	0656	14	--	.348	.413	.947	10	199	42	--	150000	10
18...	0657	14	--	--	--	--	--	--	--	--	260000	50
18...	0740	15	--	.346	.470	1.10	11	236	50	--	200000	50
18...	0935	14	--	.388	.472	.976	8.7	167	37	--	200000	50
18...	1235	12	--	.229	.384	.704	<6.0	96	23	--	150000	50
18...	1535	11	--	.171	.241	.484	<6.0	81	20	--	90000	50
18...	1940	9.5	--	.172	.347	.682	<6.0	72	22	--	63000	50
18...	2100	11	--	.178	.271	.529	<6.0	71	18	--	72000	50
19...	0205	9.5	--	.118	.193	.399	<6.0	69	15	--	40000	50
19...	0640	7.5	8.4	.114	--	.281	--	32	8	--	--	50
19...	1140	5.9	8.5	.068	--	.166	--	19	5	--	--	50
19...	1640	5.0	8.5	.051	--	.147	--	23	6	--	--	50
19...	2140	4.4	8.4	.058	--	.152	--	37	8	--	--	50
20...	0240	4.0	8.4	.052	--	.119	--	28	7	--	--	50
20...	0740	3.6	8.5	.039	--	.078	--	13	<5	--	--	50
20...	1240	3.5	8.5	.038	--	.085	--	13	<5	--	--	50
20...	1740	3.1	8.6	.039	--	.084	--	16	<5	--	--	50

04083423 PARSONS CREEK, MIDDLE SITE, NEAR FOND DU LAC, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	RESIDUE TOTAL AT 105 DEG. C, PENDEDED (MG/L) (00530)	RESIDUE VOLATILE, TILE, SUS- PENDEDED (MG/L) (00535)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	SAM- PLING METHOD, CODES (82398)
JUN										
01...	0225	3.3	.147	--	.498	--	97	--	--	50
01...	0310	4.0	.383	--	1.86	--	250	--	--	50
01...	0425	6.8	.187	--	.902	--	192	--	--	50
01...	0540	13	.153	--	.803	--	288	--	--	50
01...	0655	17	.135	--	.707	--	316	--	--	50
01...	0955	13	.574	--	1.66	--	266	--	--	50
01...	1355	7.9	.302	--	.703	--	71	--	--	50
01...	1855	9.3	.582	--	3.83	--	585	--	--	50
01...	2030	24	.152	--	.879	--	382	--	--	50
01...	2130	26	.180	--	.996	--	472	--	--	50
01...	2230	27	.584	--	1.55	--	430	--	--	50
01...	2330	25	.528	--	1.82	--	448	--	--	50
02...	0300	16	.282	--	.831	--	124	--	--	50
02...	0805	9.3	.168	--	.476	--	53	--	--	50
02...	2250	4.8	.073	--	.173	--	31	--	--	50
03...	2350	3.2	.063	--	.109	--	18	--	--	50
15...	1100	2.4	<.013	--	.080	--	14	--	570	10
JUL										
02...	1910	2.2	.040	--	.126	--	36	--	--	50
02...	1925	3.5	.063	--	.198	--	79	--	--	50
02...	1940	4.8	.180	--	.700	--	206	--	--	50
02...	1955	6.5	.327	--	1.24	--	360	--	--	50
02...	2110	10	.076	--	.870	--	458	--	--	50
02...	2120	14	.062	--	.980	--	600	--	--	50
02...	2135	19	.048	--	.950	--	612	--	--	50
02...	2320	15	.061	--	.691	--	344	--	--	50
03...	0030	11	.233	--	.856	--	204	--	--	50
03...	0210	7.5	.247	--	.649	--	124	--	--	50
03...	0530	5.0	.127	--	.487	--	100	--	--	50
03...	0930	4.3	.117	--	.487	--	86	--	--	50
03...	1330	3.7	.094	--	.414	--	102	--	--	50
06...	1530	1.9	.044	--	.134	--	51	--	24000	10
20...	1043	1.4	<.013	--	.059	--	28	--	--	10
AUG										
03...	1031	1.5	.026	--	.094	<3.0	25	6	4100	10
16...	1042	1.2	.070	--	.126	<3.0	--	--	6000	10
22...	1630	7.7	.216	.309	1.53	10	528	--	110000	50
22...	1645	28	.867	1.43	13.9	28	2870	--	590000	50
22...	1700	30	.778	1.12	4.26	19	1220	--	970000	50
22...	1730	46	--	.154	--	13	3130	--	230000	50
22...	1750	82	.564	.285	5.70	23	4380	--	700000	50
22...	1800	94	.382	.131	4.11	17	3280	--	350000	50
22...	1815	75	.436	.228	2.90	17	1910	--	170000	50
22...	1835	54	.870	.687	3.12	22	1230	--	590000	50
22...	1910	36	.747	.932	2.89	18	772	--	700000	50
22...	2110	28	.471	.739	1.58	9.2	312	--	470000	50
23...	0250	9.1	.295	.552	1.02	6.4	154	--	470000	50
23...	1320	3.0	.147	--	.541	--	110	--	--	50
31...	0922	1.4	.075	.064	.157	<2.0	37	10	25000	10
SEP										
14...	0230	3.0	.036	--	.342	--	60	--	--	50
14...	0300	4.0	.099	--	.739	--	111	--	--	50
14...	0315	5.1	.147	--	.941	--	133	--	--	50
14...	0400	12	.034	--	.642	--	260	--	--	50
14...	0420	17	.014	--	.631	--	314	--	--	50
14...	0445	21	.014	--	.694	--	380	--	--	50
14...	0710	17	.577	--	1.19	--	210	--	--	50
14...	1044	13	.479	.697	1.16	--	149	--	--	10
14...	1045	13	.437	.688	1.15	--	162	--	--	50
14...	1525	7.9	.061	--	.662	--	68	--	--	50
15...	1015	3.0	<.013	--	.174	--	19	--	--	50
28...	1116	2.0	.025	.031	.047	--	<5	--	320	10

STREAMS TRIBUTARY TO LAKE MICHIGAN

04083425 PARSONS CREEK, DOWNSTREAM SITE, NEAR FOND DU LAC, WI

LOCATION.--Lat 43°41'50", long 88°28'31", in NE ¼ SW ¼ sec.9, T.14 N., R.17 E., Fond du Lac County, Hydrologic Unit 04030203, on left upstream side of bridge on County Trunk B, 5.6 mi south of Fond du Lac.

DRAINAGE AREA.--5.7 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 860 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	1.3	1.2	e1.0	e.66	3.0	1.7	2.9	12	1.8	1.5	1.4
2	2.0	1.3	1.2	e1.0	e.66	2.5	1.6	2.4	9.6	3.9	1.5	16
3	1.7	1.3	1.3	e.96	e.68	2.3	1.6	2.1	3.9	4.6	1.5	8.4
4	1.7	1.3	1.4	e.94	e.66	2.2	1.6	2.0	3.8	2.4	1.4	3.0
5	1.7	1.3	1.5	e.92	e.66	2.1	1.6	2.0	14	2.1	1.6	2.3
6	1.6	1.3	1.3	e.96	e.66	2.1	1.6	1.9	4.7	2.0	1.8	2.0
7	1.6	1.3	1.2	e.94	e.68	2.1	1.6	1.8	3.5	1.9	1.4	2.0
8	1.6	1.3	1.2	e.94	e.68	2.3	1.8	1.8	3.1	3.0	1.3	1.8
9	1.6	1.3	1.3	e.90	e.70	2.9	2.1	1.8	2.7	2.8	1.3	1.7
10	1.5	1.3	1.4	e.88	e.68	2.2	1.8	1.8	2.5	2.2	1.3	2.0
11	1.5	1.2	1.2	e.86	e.68	1.9	1.7	1.8	2.6	1.9	1.3	3.9
12	1.5	1.2	1.2	e.84	e.66	1.9	1.7	1.9	2.4	1.8	1.3	3.3
13	1.7	1.3	1.2	e.82	e.66	1.9	1.6	1.8	2.4	1.7	1.9	2.3
14	1.6	1.2	1.2	e.80	e.64	2.0	1.6	1.7	2.9	1.7	1.5	9.7
15	1.6	1.2	1.2	e.80	e.66	1.9	1.5	1.6	2.4	1.6	1.3	3.2
16	1.6	1.2	e1.1	e.78	e.66	1.8	1.5	1.9	2.5	1.6	1.2	2.3
17	1.6	1.2	e1.1	e.78	e.64	1.7	1.6	2.0	2.2	1.5	2.3	2.0
18	1.5	1.2	e1.0	e.76	e.64	1.6	1.6	12	2.0	1.5	1.5	1.9
19	1.5	1.2	e1.1	e.76	e.62	1.8	2.0	6.6	2.0	1.5	1.3	1.9
20	1.4	1.2	e1.0	e.74	e.62	2.6	11	3.6	2.4	1.5	1.2	2.3
21	1.4	1.2	e.98	e.74	e.62	2.4	8.8	2.8	2.3	1.5	1.2	2.0
22	1.4	1.2	e.96	e.72	e8.0	2.2	4.1	2.6	1.9	1.4	12	3.7
23	1.4	1.7	e.94	e.72	23	2.0	7.5	2.4	1.9	1.4	4.9	5.8
24	1.4	1.4	e.92	e.72	9.7	2.0	4.2	2.1	1.9	1.3	2.0	3.1
25	1.4	1.3	e.90	e.70	5.3	2.1	3.1	1.9	1.9	1.4	1.7	2.5
26	1.4	1.3	e.96	e.70	7.8	2.0	2.7	1.9	1.9	1.3	1.7	2.3
27	1.4	1.2	e.94	e.70	4.6	2.4	2.4	2.0	1.8	1.4	1.6	2.1
28	1.4	1.2	e.92	e.68	3.1	2.2	2.3	2.3	2.0	1.5	1.5	2.2
29	1.3	1.2	e.94	e.68	2.9	2.0	2.3	2.1	1.9	1.5	1.5	2.1
30	1.3	1.2	e.98	e.68	---	1.8	2.2	2.1	1.8	1.4	1.5	2.0
31	1.3	---	e1.0	e.66	---	1.7	---	2.2	---	1.7	1.4	---
TOTAL	47.1	38.0	34.74	25.08	78.22	65.6	82.4	79.8	102.9	58.8	60.4	101.2
MEAN	1.52	1.27	1.12	.81	2.70	2.12	2.75	2.57	3.43	1.90	1.95	3.37
MAX	2.0	1.7	1.5	1.0	23	3.0	11	12	14	4.6	12	16
MIN	1.3	1.2	.90	.66	.62	1.6	1.5	1.6	1.8	1.3	1.2	1.4
CFSM	.27	.22	.20	.14	.47	.37	.48	.45	.60	.33	.34	.59
IN.	.31	.25	.23	.16	.51	.43	.54	.52	.67	.38	.39	.66

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2000, BY WATER YEAR (WY)

	1998	1999	2000	1998	1999	2000	1998	1999	2000	1998	1999	2000
MEAN	1.63	1.53	1.28	1.43	3.16	4.74	5.66	3.96	3.14	3.05	2.19	2.40
MAX	1.75	1.80	1.48	2.13	3.88	10.3	8.14	4.92	3.43	4.53	2.42	3.37
(WY)	1999	1999	1999	1999	1999	1998	1998	1999	2000	1999	1999	2000
MIN	1.52	1.27	1.12	.81	2.70	1.85	2.75	2.57	2.74	1.90	1.95	1.69
(WY)	2000	2000	2000	2000	2000	1999	2000	2000	1999	2000	2000	1998

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1998 - 2000

ANNUAL TOTAL	1048.94	774.24	
ANNUAL MEAN	2.87	2.12	2.54
HIGHEST ANNUAL MEAN			2.97
LOWEST ANNUAL MEAN			2.12
HIGHEST DAILY MEAN	35	(a) May 17	146
LOWEST DAILY MEAN	(b) .90	Dec 25	(b) .62
ANNUAL SEVEN-DAY MINIMUM	(b) .93	Dec 23	(b) .64
INSTANTANEOUS PEAK FLOW			97
INSTANTANEOUS PEAK STAGE		5.86	Aug 22
INSTANTANEOUS LOW FLOW			(c) 425
ANNUAL RUNOFF (CFSM)	.50	.37	7.60
ANNUAL RUNOFF (INCHES)	6.85	5.05	.62
10 PERCENT EXCEEDS	4.4	3.1	.45
50 PERCENT EXCEEDS	2.1	1.6	6.06
90 PERCENT EXCEEDS	1.2	.78	4.7
			2.0
			1.2

(a) Also occurred July 19

(b) Ice affected

(c) From rating curve extended above 60 ft³/s on basis of slope-area measurement of peak flow

(e) Estimated due to ice effect or missing record

04083425 PARSONS CREEK, DOWNSTREAM SITE, NEAR FOND DU LAC, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 30, 1997 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: November 1997 to current year.

SUSPENDED-SOLIDS DISCHARGE: December 1997 to July 1999, February to September 2000.

TOTAL-PHOSPHORUS DISCHARGE: December 1997 to July 1999, February to September 2000.

INSTRUMENTATION.--Continuous water-temperature recorder since November 1997. Stage-activated water-quality sampler since December 1997.

REMARKS.--Chemical analyses by the Wisconsin State Laboratory of Hygiene. Samples are point samples unless otherwise indicated. Records represent water temperature at sensor within 0.5°C.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum observed, 27.0°C, July 5, 1999; minimum observed, 0.0°C, many days.

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 627 tons, Mar. 31, 1998; minimum daily, 0.010 ton, many days in 1998.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 2,070 lb, Mar. 31, 1998; minimum daily, 0.19 lb, Mar. 30, 31, and Apr. 2, 1999.

EXTREMES FOR CURRENT.--

WATER TEMPERATURE: Maximum observed, 24.0°C, Aug. 31 and Sept. 1; minimum observed, 0.0°C, many days.

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 49 tons, Sept. 2; minimum daily, 0.011 ton, many days.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 265 lb, Sept. 2; minimum daily, 0.26 lb, Apr. 13.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	11.5	8.5	10.0	13.5	8.5	10.5	3.0	.0	1.5	.0	.0	.0
2	11.0	7.5	9.0	8.5	4.5	7.0	6.0	2.5	4.0	.5	.0	.0
3	7.5	7.0	7.5	6.0	2.5	4.0	8.5	6.0	7.5	.5	.5	.5
4	10.0	5.5	7.5	7.0	2.0	4.5	9.0	7.0	8.0	.5	.5	.5
5	12.0	7.5	9.5	9.0	5.5	7.0	7.0	3.0	4.5	.5	.0	.0
6	11.0	7.5	9.0	7.0	4.0	5.0	3.5	1.5	2.5	.5	.0	.0
7	12.5	8.0	10.0	7.0	3.0	5.0	3.5	1.0	2.0	.5	.0	.0
8	13.5	10.5	11.5	10.5	4.5	7.5	5.0	2.0	3.0	.0	.0	.0
9	15.0	10.5	12.5	13.5	9.0	11.0	5.0	3.5	4.5	1.0	.0	.5
10	16.0	12.0	14.0	11.5	7.5	10.5	3.5	.5	2.0	1.0	.0	.0
11	13.5	9.5	11.5	8.5	6.5	7.5	2.5	.0	1.0	1.5	.5	1.0
12	14.5	10.5	12.0	9.0	6.0	7.5	4.0	1.5	2.5	.5	.0	.0
13	13.5	8.5	11.0	10.0	5.5	8.0	3.5	1.5	2.5	.0	.0	.0
14	11.0	7.0	8.5	8.5	4.5	7.0	3.0	1.5	2.0	.0	.0	.0
15	13.5	8.0	10.5	5.5	3.0	4.5	3.5	2.0	2.5	.0	.0	.0
16	13.0	10.0	12.0	5.5	2.5	3.5	2.0	.0	.5	.0	.0	.0
17	10.0	8.0	8.5	5.5	2.5	4.0	.0	.0	.0	.0	.0	.0
18	9.5	6.5	8.0	8.0	3.5	5.5	.0	.0	.0	.0	.0	.0
19	11.0	7.5	9.0	10.0	7.5	8.5	.0	.0	.0	.0	.0	.0
20	9.5	6.5	8.0	7.5	6.0	7.0	.0	.0	.0	.0	.0	.0
21	11.0	6.0	8.5	7.5	5.0	6.0	.0	.0	.0	.0	.0	.0
22	9.5	6.0	7.5	9.5	6.5	8.0	.0	.0	.0	.0	.0	.0
23	7.0	4.5	6.0	10.0	6.5	8.5	.0	.0	.0	.0	.0	.0
24	7.5	3.0	5.0	7.5	4.5	6.0	.0	.0	.0	.0	.0	.0
25	9.5	4.0	6.5	5.5	2.5	4.0	.0	.0	.0	.0	.0	.0
26	9.5	5.5	7.5	4.5	2.0	3.5	.0	.0	.0	.0	.0	.0
27	10.0	5.0	7.5	5.5	2.5	4.0	.0	.0	.0	.0	.0	.0
28	11.0	7.5	8.5	3.5	1.0	2.5	.0	.0	.0	.0	.0	.0
29	13.0	7.5	10.0	2.5	.0	1.0	.0	.0	.0	.0	.0	.0
30	14.5	10.5	12.5	1.5	.0	.5	.0	.0	.0	.0	.0	.0
31	13.0	9.0	11.0	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	16.0	3.0	9.4	13.5	.0	6.0	9.0	.0	1.6	1.5	.0	.1

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	.0	.0	.0	7.5	3.0	5.0	10.5	7.5	9.0	18.5	11.5	14.0
2	.0	.0	.0	6.5	1.5	3.5	14.0	6.0	10.0	18.5	9.0	13.5
3	.0	.0	.0	7.0	.5	3.5	13.0	7.0	9.5	20.0	10.5	15.0
4	.0	.0	.0	9.5	2.5	5.5	7.5	4.0	5.5	22.5	13.5	17.5
5	.0	.0	.0	10.5	3.5	6.5	8.0	2.0	5.0	23.0	14.5	18.5
6	.0	.0	.0	11.5	4.5	8.0	13.5	5.0	8.5	22.5	15.5	19.0
7	.0	.0	.0	15.0	7.0	11.0	9.0	.0	4.0	23.5	16.5	20.0
8	.0	.0	.0	15.0	10.5	12.5	9.0	.0	3.5	22.0	17.0	19.0
9	.0	.0	.0	11.5	2.0	6.5	11.5	3.0	6.5	17.5	12.5	15.5
10	.0	.0	.0	4.5	1.0	2.5	9.0	2.5	5.5	16.0	10.5	13.5
11	.0	.0	.0	6.5	.0	3.0	6.0	3.0	4.5	14.0	12.0	13.0
12	.0	.0	.0	6.5	.5	3.5	11.5	2.0	6.5	14.5	12.5	14.0
13	.0	.0	.0	5.5	3.0	4.0	8.5	4.5	6.5	12.5	8.5	10.5
14	.0	.0	.0	8.0	2.0	5.0	17.0	6.0	11.0	14.0	7.0	10.5
15	.5	.0	.0	10.0	4.5	7.0	12.5	6.5	10.0	16.0	8.0	12.0
16	.5	.5	.5	7.5	1.5	4.0	6.5	5.0	5.5	13.5	11.5	12.5
17	.5	.0	.0	7.0	.0	3.0	5.5	4.5	5.0	15.0	11.0	12.5
18	.5	.0	.0	4.5	.5	2.5	9.5	5.0	7.0	12.0	9.0	11.0
19	1.0	.0	.5	4.0	2.5	3.0	9.0	7.5	8.0	14.0	8.0	11.0
20	1.0	.5	.5	5.0	3.5	4.5	7.5	5.0	6.5	15.0	8.0	11.5
21	1.0	.0	.5	7.5	5.0	6.0	13.0	4.5	8.0	15.5	10.0	12.5
22	1.5	.0	.5	10.0	6.5	8.0	15.0	5.0	9.5	16.5	12.5	14.0
23	1.5	.0	.5	14.0	6.5	10.0	15.0	8.0	11.0	19.0	13.0	15.5
24	3.0	1.5	2.0	10.5	8.0	9.5	16.0	7.0	11.0	19.0	13.5	16.0
25	5.5	1.5	3.5	12.5	7.0	9.5	16.0	6.5	11.0	18.5	11.5	14.5
26	7.0	3.0	5.0	9.5	4.5	7.5	17.5	7.0	12.0	15.5	12.0	13.5
27	7.0	3.0	4.5	9.5	5.0	7.0	18.0	9.0	13.5	13.5	11.5	12.0
28	6.0	1.5	3.5	7.5	4.0	5.5	14.0	8.5	11.5	14.0	10.5	12.0
29	9.0	3.5	6.5	9.5	3.5	6.0	15.5	8.0	11.0	15.0	9.5	12.5
30	---	---	---	12.0	3.0	7.0	17.5	7.5	12.5	15.5	11.5	13.5
31	---	---	---	13.5	4.5	8.5	---	---	---	15.0	13.5	14.0
MONTH	9.0	.0	1.0	15.0	.0	6.1	18.0	.0	8.3	23.5	7.0	14.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	16.5	13.5	15.0	22.0	15.5	18.5	20.5	16.0	17.5	24.0	19.0	21.0
2	16.5	13.5	15.0	19.0	17.0	18.0	20.5	16.5	18.0	21.0	18.0	19.5
3	16.0	11.5	13.5	18.5	16.5	17.0	20.0	14.5	17.0	20.5	18.0	19.5
4	14.0	12.0	13.0	19.5	15.0	17.0	21.5	15.0	18.0	18.5	14.5	16.5
5	16.0	11.5	13.5	21.0	15.0	17.5	18.5	15.5	16.5	17.0	13.0	14.5
6	16.5	10.5	14.0	21.5	16.5	18.0	22.0	15.5	18.0	17.0	12.0	14.5
7	17.5	12.5	15.0	19.5	15.0	17.0	22.5	16.5	19.5	20.0	14.0	16.5
8	20.5	14.0	17.0	17.0	15.5	16.0	22.5	18.5	20.0	19.5	15.5	17.5
9	22.0	16.5	19.0	21.0	16.5	18.5	23.5	18.0	20.0	21.0	16.0	18.0
10	22.5	17.5	20.0	22.5	17.5	19.0	22.0	16.5	19.0	21.5	18.0	19.5
11	22.0	16.5	19.0	21.0	16.0	18.5	22.5	16.0	19.0	19.0	17.5	18.5
12	16.5	13.5	14.5	20.5	16.0	18.0	21.5	15.0	18.0	17.5	15.0	16.5
13	16.0	13.0	14.0	22.5	16.0	19.0	20.5	17.5	18.0	18.0	13.5	15.5
14	17.0	14.0	15.5	22.5	17.5	19.5	21.0	17.0	18.5	17.5	15.0	16.0
15	19.5	14.5	16.5	22.0	16.5	19.0	23.5	17.5	19.5	15.0	12.0	13.5
16	18.0	15.0	16.5	21.5	16.0	18.5	20.5	15.0	17.5	14.5	10.0	12.5
17	17.5	12.5	15.0	22.5	17.0	19.5	16.0	14.5	15.5	16.5	12.0	14.0
18	19.0	13.0	16.0	18.5	14.5	16.0	19.5	14.5	16.5	17.5	12.5	15.0
19	21.0	14.5	17.0	17.0	14.0	15.5	19.0	14.5	16.5	17.5	15.0	16.0
20	20.0	16.0	17.5	17.0	13.5	15.0	18.5	13.0	15.5	15.0	12.0	14.0
21	21.0	16.5	18.5	17.5	13.0	15.0	19.0	13.5	16.5	14.0	10.5	12.0
22	17.0	15.0	16.5	19.0	13.5	15.5	20.0	16.0	18.0	12.0	11.0	11.5
23	19.5	14.0	16.5	19.5	13.0	16.0	20.0	17.0	18.0	13.0	12.0	12.5
24	17.5	15.0	16.0	20.5	13.5	16.5	21.0	17.0	18.5	12.0	10.0	11.0
25	21.0	15.0	17.5	20.0	14.5	17.0	21.0	16.5	18.5	12.0	8.5	10.5
26	20.0	16.5	18.0	22.0	16.0	18.5	20.5	17.0	18.0	13.5	9.0	11.0
27	19.5	14.5	17.0	22.5	17.0	19.0	20.0	16.5	17.5	12.5	10.5	11.5
28	17.5	14.5	15.5	21.0	17.0	18.5	21.0	16.0	18.0	13.0	9.0	11.0
29	18.5	13.0	15.5	20.5	16.5	18.0	20.0	17.0	18.0	15.0	10.0	12.5
30	20.5	13.5	16.5	20.0	16.5	18.0	20.0	15.5	17.5	14.5	12.5	13.5
31	---	---	---	19.5	17.0	17.5	24.0	17.0	20.5	---	---	---
MONTH	22.5	10.5	16.1	22.5	13.0	17.6	24.0	13.0	18.0	24.0	8.5	14.9
YEAR	24.0	.0	9.4									

04083425 PARSONS CREEK, DOWNSTREAM SITE, NEAR POND DU LAC, WI--Continued

SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED(TONS PER DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	.11	.011	.059	9.70	.080	.10	.047
2	---	---	---	---	---	.086	.011	.043	2.64	2.62	.096	e49.0
3	---	---	---	---	---	.076	.011	.033	.20	.98	.090	e2.00
4	---	---	---	---	---	.069	.011	.028	.14	.32	.085	.10
5	---	---	---	---	---	.062	.011	.028	e29.0	.24	.10	.079
6	---	---	---	---	---	.057	.011	.029	e.75	.21	.12	.071
7	---	---	---	---	---	.054	.011	.029	.13	.19	.089	.071
8	---	---	---	---	---	.056	.012	.030	.12	.31	.085	.063
9	---	---	---	---	---	.066	.014	.032	.10	.29	.090	.060
10	---	---	---	---	---	.047	.012	.032	.095	.23	.088	.071
11	---	---	---	---	---	.040	.012	.035	.10	.20	.091	.14
12	---	---	---	---	---	.036	.011	.039	.094	.19	.096	.12
13	---	---	---	---	---	.035	.011	.039	.095	.18	.14	.080
14	---	---	---	---	---	.033	.015	.038	.12	.18	.11	4.01
15	---	---	---	---	---	.031	.023	.039	.096	.18	.10	.14
16	---	---	---	---	---	.028	.034	.047	.099	.17	.097	.075
17	---	---	---	---	---	.024	.056	.063	.087	.17	.18	.060
18	---	---	---	---	---	.022	.085	4.96	.082	.16	.12	.051
19	---	---	---	---	---	.022	.14	.55	.079	.16	.099	.047
20	---	---	---	---	---	.031	8.06	.14	.097	.16	.095	.054
21	---	---	---	---	---	.028	.89	.098	.092	.16	.092	.043
22	---	---	---	---	---	.023	.22	.091	.078	.14	43.5	e.60
23	---	---	---	---	.31	.020	1.02	.084	.078	.13	1.33	e1.00
24	---	---	---	---	2.07	.020	.21	.075	.080	.12	.15	.051
25	---	---	---	---	.27	.019	.14	.068	.081	.12	.081	.039
26	---	---	---	---	.48	.017	.10	.066	.079	.11	.075	.033
27	---	---	---	---	.20	.020	.083	.069	.076	.12	.067	.028
28	---	---	---	---	.13	.016	.068	.081	.085	.12	.060	.026
29	---	---	---	---	.11	.014	.061	.073	.082	.11	.058	.023
30	---	---	---	---	---	.012	.049	.072	.079	.10	.054	.021
31	---	---	---	---	---	.012	---	.079	---	.12	.050	---
TOTAL	---	---	---	---	3.57	1.186	11.403	7.149	44.634	8.570	47.588	58.203

e Estimated

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	3.54	.30	.98	94.2	.37	1.11	1.04
2	---	---	---	---	---	2.02	.28	.76	36.3	11.9	1.17	e265
3	---	---	---	---	---	1.30	.28	.62	3.29	12.4	1.19	e27.0
4	---	---	---	---	---	.85	.27	.57	2.55	3.19	1.12	1.59
5	---	---	---	---	---	.56	.27	.54	e190	1.87	1.34	1.08
6	---	---	---	---	---	.39	.26	.53	e7.50	1.23	1.50	.87
7	---	---	---	---	---	.38	.28	.51	2.19	1.05	1.13	.77
8	---	---	---	---	---	.41	.31	.50	1.89	1.61	1.07	.61
9	---	---	---	---	---	.51	.35	.51	1.58	1.46	1.13	.51
10	---	---	---	---	---	.39	.30	.49	1.43	1.08	1.09	.54
11	---	---	---	---	---	.35	.29	.50	1.49	.91	1.11	.92
12	---	---	---	---	---	.33	.27	.54	1.32	.82	1.15	.70
13	---	---	---	---	---	.35	.26	.51	1.30	.78	1.67	.43
14	---	---	---	---	---	.35	.29	.48	1.53	.75	1.32	52.8
15	---	---	---	---	---	.35	.33	.46	1.23	.68	1.19	3.73
16	---	---	---	---	---	.32	.38	.53	1.20	.64	1.08	1.99
17	---	---	---	---	---	.30	.47	.62	.99	.59	1.58	1.56
18	---	---	---	---	---	.29	.55	65.5	.87	.56	.79	1.29
19	---	---	---	---	---	.31	1.25	10.7	.79	.53	.52	1.18
20	---	---	---	---	---	.46	74.6	2.20	.91	.52	.38	1.32
21	---	---	---	---	---	.44	19.7	1.10	.81	.55	.29	1.04
22	---	---	---	---	---	.38	2.40	.69	.64	.56	217	e5.00
23	---	---	---	---	---	.35	13.1	.45	.61	.57	21.3	e10.0
24	---	---	---	---	51.6	.36	2.26	.38	.58	.60	4.35	1.16
25	---	---	---	---	10.9	.37	1.54	.34	.56	.65	3.23	.87
26	---	---	---	---	20.6	.36	1.24	.33	.51	.65	2.76	.71
27	---	---	---	---	10.2	.44	1.05	.35	.46	.76	2.28	.60
28	---	---	---	---	6.50	.38	.92	.41	.48	.84	1.90	.54
29	---	---	---	---	4.96	.35	.88	.37	.44	.90	1.68	.47
30	---	---	---	---	---	.32	.77	.37	.39	.91	1.46	.42
31	---	---	---	---	---	.30	---	.40	---	1.14	1.23	---
TOTAL	---	---	---	---	104.76	17.81	125.45	93.24	358.04	51.07	280.12	385.74

e Estimated

STREAMS TRIBUTARY TO LAKE MICHIGAN

04083425 PARSONS CREEK, DOWNSTREAM SITE, NEAR FOND DU LAC, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	RESIDUE VOLATILE, SUS- PENDE (MG/L) (00535)
FEB										
23...	1100	1028	85543	23	--	--	7.5	--	310	60
24...	0930	1028	85543	6.7	--	--	7.7	--	37	--
24...	1050	1028	85543	8.2	--	--	7.7	--	70	--
24...	1145	1028	85543	11	--	--	8.0	--	102	--
24...	1300	1028	85543	16	--	--	7.9	--	96	--
24...	1515	1028	85543	18	--	--	8.0	--	139	--
24...	1745	1028	85543	13	--	--	7.8	--	142	--
25...	0815	1028	85543	4.4	--	--	8.2	--	10	--
25...	2200	1028	85543	6.0	--	--	8.1	--	20	--
26...	0330	1028	85543	9.0	--	--	8.0	--	40	--
26...	1045	1028	85543	7.4	--	--	8.1	--	16	--
MAR										
30...	1152	1028	85543	1.8	--	--	8.4	--	<5	--
APR										
13...	1602	1028	85543	1.6	--	--	8.7	--	<5	--
19...	1235	1028	85543	2.1	1.9	--	8.4	584	30	8
19...	1250	1028	85543	2.2	--	--	--	--	--	--
19...	1320	1028	85543	2.3	3.6	--	8.4	648	58	22
19...	1620	1028	85543	2.8	1.7	--	8.4	580	20	6
19...	1920	1028	85543	2.7	--	--	--	--	--	--
20...	0130	1028	85543	3.4	4.4	--	8.2	758	150	43
20...	0200	1028	85543	4.4	15	--	8.1	1270	585	200
20...	0250	1028	85543	6.1	21	--	8.1	1180	495	170
20...	0400	1028	85543	11	21	--	8.1	1290	595	195
20...	0410	1028	85543	14	20	--	7.9	1280	610	185
20...	0440	1028	85543	21	18	--	8.0	1260	610	130
20...	0505	1028	85543	25	20	--	8.0	1340	765	145
20...	0720	1028	85543	20	11	--	8.1	912	342	62
20...	0900	1028	85543	16	11	--	8.0	874	292	56
20...	1022	1028	85543	13	--	--	7.9	--	134	--
20...	1023	1028	85543	13	6.7	--	8.1	--	145	28
20...	1100	1028	85543	12	5.2	--	8.0	716	90	20
20...	1700	1028	85543	7.6	5.1	--	8.1	760	73	23
20...	2000	1028	85543	7.8	2.2	--	8.1	672	31	8
20...	2155	1028	85543	10	2.6	--	8.2	728	42	14
20...	2240	1028	85543	12	5.3	--	8.1	754	95	26
21...	0440	1028	85543	13	4.0	--	8.0	712	52	11
21...	0740	1028	85543	11	--	--	--	--	30	--
21...	1340	1028	85543	7.4	--	--	--	--	18	--
22...	0140	1028	85543	4.8	--	--	--	--	19	--
22...	2240	1028	85543	3.4	--	--	--	--	20	--
23...	0355	1028	85543	5.3	--	--	--	--	51	--
23...	0445	1028	85543	7.2	--	--	--	--	93	--
23...	0540	1028	85543	9.4	--	--	--	--	78	--
23...	0620	1028	85543	12	--	--	--	--	92	--
23...	0920	1028	85543	12	--	--	--	--	69	--
23...	1235	1028	85543	9.0	--	--	--	--	42	--
23...	1835	1028	85543	6.1	--	--	--	--	27	--
24...	0635	1028	85543	4.5	--	--	--	--	19	--
MAY										
04...	1342	1028	85543	2.0	<2.0	--	8.6	--	<10	<10
18...	0120	1028	85543	7.0	8.1	86	--	--	215	55
18...	0135	1028	85543	7.6	9.8	110	--	--	252	74
18...	0150	1028	85543	8.6	13	140	--	--	330	92
18...	0205	1028	85543	11	16	190	--	--	465	145
18...	0350	1028	85543	12	10	98	--	--	244	52
18...	0520	1028	85543	15	14	180	--	--	382	108
18...	0650	1028	85543	14	12	110	--	--	188	46
18...	0651	1028	85543	14	12	110	--	--	184	44
18...	0652	1028	85543	14	--	--	--	--	--	--
18...	0740	1028	85543	16	10	95	--	--	208	44
18...	0935	1028	85543	14	7.9	82	--	--	149	31
18...	1235	1028	85543	12	<6.0	85	--	--	97	21
18...	1535	1028	85543	11	<6.0	60	--	--	71	16
18...	1940	1028	85543	9.8	<6.0	90	--	--	84	28
18...	2100	1028	85543	11	<6.0	55	--	--	62	17
19...	0205	1028	85543	9.8	<6.0	52	--	--	58	14
19...	0640	1028	85543	7.8	--	--	8.2	--	27	6
19...	1140	1028	85543	6.1	--	--	8.4	--	15	<5
19...	1640	1028	85543	5.1	--	--	8.4	--	16	<5
19...	2140	1028	85543	4.5	--	--	8.4	--	29	7
20...	0240	1028	85543	4.1	--	--	8.4	--	23	6
20...	0740	1028	85543	3.7	--	--	8.4	--	10	<5
20...	1240	1028	85543	3.6	--	--	8.5	--	10	<5
20...	1740	1028	85543	3.2	--	--	8.5	--	13	<5

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04083425 PARSONS CREEK, DOWNSTREAM SITE, NEAR FOND DU LAC, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DRAIN- AGE AREA (SQ. MI.) (81024)	SAM- PLING METHOD, CODES (82398)
FEB									
23...	2.36	--	--	1.90	.852	--	860	5.70	50
24...	1.11	--	--	.786	--	--	860	5.70	50
24...	1.57	--	--	1.14	--	--	860	5.70	50
24...	1.79	--	--	1.37	--	--	860	5.70	50
24...	1.35	--	--	1.04	--	--	860	5.70	50
24...	.952	--	--	.914	--	--	860	5.70	50
24...	1.21	--	--	1.11	--	--	860	5.70	50
25...	.504	--	--	.341	--	--	860	5.70	50
25...	.336	--	--	.297	--	--	860	5.70	50
26...	.835	--	--	.673	--	--	860	5.70	50
26...	.466	--	--	.439	--	--	860	5.70	50
MAR									
30...	.020	--	--	.033	.013	<10	860	5.70	10
APR									
13...	.048	--	--	.030	.012	<10	860	5.70	10
19...	.072	--	--	.074	.024	--	860	5.70	50
19...	--	--	--	--	--	1200	860	5.70	50
19...	.185	--	--	.620	.221	--	860	5.70	50
19...	.094	--	--	.132	.068	--	860	5.70	50
19...	--	--	--	--	--	250	860	5.70	50
20...	.268	--	--	.735	.242	--	860	5.70	50
20...	.724	--	--	4.75	1.04	140000	860	5.70	50
20...	1.30	--	--	4.21	1.17	190000	860	5.70	50
20...	1.16	--	--	4.99	1.45	120000	860	5.70	50
20...	.950	--	--	4.19	1.20	150000	860	5.70	50
20...	.415	--	--	2.25	.648	55000	860	5.70	50
20...	.342	--	--	1.85	.387	17000	860	5.70	50
20...	.524	--	--	1.15	.397	42000	860	5.70	50
20...	.483	--	--	1.60	.649	--	860	5.70	50
20...	.324	--	--	.947	.487	39000	860	5.70	10
20...	.336	--	--	.957	.497	28000	860	5.70	50
20...	.284	--	--	.748	.417	21000	860	5.70	50
20...	.274	--	--	.817	.399	15000	860	5.70	50
20...	.114	--	--	.322	.184	3500	860	5.70	50
20...	.159	--	--	.409	.221	8700	860	5.70	50
20...	.257	--	--	.894	.421	40000	860	5.70	50
21...	.248	--	--	.520	.308	16000	860	5.70	50
21...	.213	--	--	.456	--	--	860	5.70	50
21...	.072	--	--	.254	--	--	860	5.70	50
22...	.044	--	--	.121	--	--	860	5.70	50
22...	.053	--	--	.093	--	--	860	5.70	50
23...	.566	--	--	.527	--	--	860	5.70	50
23...	.425	--	--	.766	--	--	860	5.70	50
23...	.185	--	--	.504	--	--	860	5.70	50
23...	.107	--	--	.534	--	--	860	5.70	50
23...	.127	--	--	.313	--	--	860	5.70	50
23...	.124	--	--	.408	--	--	860	5.70	50
23...	.044	--	--	.152	--	--	860	5.70	50
24...	.042	--	--	.098	--	--	860	5.70	50
MAY									
04...	.034	--	--	.051	.020	640	860	5.70	10
18...	.248	4.2	3.14	1.07	.404	310000	860	5.70	50
18...	.295	5.0	3.20	1.32	.488	340000	860	5.70	50
18...	.343	6.1	3.21	1.73	.610	320000	860	5.70	50
18...	.452	7.7	3.48	2.39	.760	520000	860	5.70	50
18...	.267	4.4	3.36	1.03	.416	230000	860	5.70	50
18...	.426	7.5	3.10	2.16	.779	360000	860	5.70	50
18...	.458	5.5	3.46	1.32	.643	330000	860	5.70	50
18...	.438	5.2	3.51	1.24	.636	280000	860	5.70	10
18...	--	--	--	--	--	350000	860	5.70	70
18...	.392	4.5	3.42	1.20	.560	260000	860	5.70	50
18...	.398	4.1	4.47	1.05	.546	280000	860	5.70	50
18...	.278	3.8	4.81	.926	.530	170000	860	5.70	50
18...	.185	2.3	4.94	.527	.284	110000	860	5.70	50
18...	.282	4.0	4.91	1.10	.545	250000	860	5.70	50
18...	.167	2.7	4.85	.562	.312	110000	860	5.70	50
19...	.188	3.0	5.51	.564	.309	94000	860	5.70	50
19...	.118	--	--	.290	--	--	860	5.70	50
19...	.067	--	--	.190	--	--	860	5.70	50
19...	.045	--	--	.159	--	--	860	5.70	50
19...	.063	--	--	.158	--	--	860	5.70	50
20...	.056	--	--	.130	--	--	860	5.70	50
20...	.044	--	--	.091	--	--	860	5.70	50
20...	.037	--	--	.152	--	--	860	5.70	50
20...	.048	--	--	.097	--	--	860	5.70	50

STREAMS TRIBUTARY TO LAKE MICHIGAN

04083425 PARSONS CREEK, DOWNSTREAM SITE, NEAR FOND DU LAC, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDE (MG/L) (00535)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
JUN									
01...	0225	1028	85543	3.4	--	--	79	--	.148
01...	0310	1028	85543	4.1	--	--	294	--	.421
01...	0425	1028	85543	7.0	--	--	234	--	.433
01...	0540	1028	85543	14	--	--	325	--	.335
01...	0655	1028	85543	18	--	--	294	--	.193
01...	0955	1028	85543	14	--	--	250	--	.561
01...	1355	1028	85543	8.2	--	--	64	--	.306
01...	1855	1028	85543	9.6	--	--	810	--	.764
01...	2030	1028	85543	25	--	--	432	--	.338
01...	2130	1028	85543	27	--	--	468	--	.277
01...	2230	1028	85543	28	--	--	400	--	.640
01...	2330	1028	85543	26	--	--	428	--	.535
02...	0300	1028	85543	16	--	--	127	--	.300
02...	0805	1028	85543	9.6	--	--	47	--	.180
02...	2250	1028	85543	5.0	--	--	26	--	.072
03...	2350	1028	85543	3.3	--	--	14	--	.081
15...	1045	1028	85543	2.5	--	--	25	--	.017
JUL									
02...	1910	1028	85543	2.3	--	--	39	--	.048
02...	1925	1028	85543	3.6	--	--	82	--	.075
02...	1940	1028	85543	5.0	--	--	146	--	.117
02...	1955	1028	85543	6.7	--	--	308	--	.343
02...	2110	1028	85543	10	--	--	382	--	.116
02...	2120	1028	85543	15	--	--	516	--	.098
02...	2135	1028	85543	20	--	--	552	--	.080
02...	2320	1028	85543	15	--	--	292	--	.112
03...	0030	1028	85543	11	--	--	176	--	.286
03...	0210	1028	85543	7.8	--	--	100	--	.282
03...	0530	1028	85543	5.1	--	--	64	--	.150
03...	0930	1028	85543	4.4	--	--	50	--	.130
03...	1330	1028	85543	3.8	--	--	46	--	.093
06...	1520	1028	85543	2.0	--	--	36	--	.044
20...	0946	1028	85543	1.5	--	--	41	--	.016
AUG									
03...	1020	1028	85543	1.5	<6.0	<9	107	21	.027
16...	1031	1028	85543	1.2	<3.0	13	77	18	.060
22...	1630	1028	85543	8.0	14	--	764	--	.298
22...	1645	1028	85543	29	41	--	3230	--	1.54
22...	1700	1028	85543	31	37	--	1790	--	1.35
22...	1730	1028	85543	48	30	--	3180	--	.462
22...	1750	1028	85543	84	23	--	4880	--	.608
22...	1800	1028	85543	97	20	--	3470	--	.467
22...	1815	1028	85543	78	19	--	2040	--	.485
22...	1835	1028	85543	56	21	--	1310	--	.920
22...	1910	1028	85543	37	18	--	760	--	.844
22...	2110	1028	85543	29	9.7	--	280	--	.536
23...	0250	1028	85543	9.4	6.1	--	112	--	.313
23...	1320	1028	85543	3.1	--	--	73	--	.154
31...	0908	1028	85543	1.6	<2.0	9	42	<10	.091
SEP									
14...	0230	1028	85543	3.1	--	--	53	--	.039
14...	0300	1028	85543	4.1	--	--	111	--	.092
14...	0315	1028	85543	5.3	--	--	436	--	.361
14...	0400	1028	85543	13	--	--	282	--	.189
14...	0420	1028	85543	17	--	--	308	--	.142
14...	0445	1028	85543	21	--	--	360	--	.104
14...	0710	1028	85543	17	--	--	190	--	.581
14...	1038	1028	85543	14	--	--	146	--	.484
14...	1040	1028	85543	14	--	--	149	--	.438
14...	1050	1028	85543	14	--	--	30	--	.314
14...	1525	1028	85543	8.2	--	--	45	--	.088
15...	1015	1028	85543	3.1	--	--	13	--	.017
28...	1104	1028	85543	2.1	--	--	<5	--	.018

04083425 PARSONS CREEK, DOWNSTREAM SITE, NEAR FOND DU LAC, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTH- DIS- SOLVED (MG/L AS P) (00671)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD) (72000)	DRAIN- AGE AREA (SQ. MI.) (81024)	SAM- PLING METHOD, CODES (82398)
JUN								
01...	--	--	.421	--	--	860	5.70	50
01...	--	--	2.32	--	--	860	5.70	50
01...	--	--	1.65	--	--	860	5.70	50
01...	--	--	1.68	--	--	860	5.70	50
01...	--	--	.933	--	--	860	5.70	50
01...	--	--	1.70	--	--	860	5.70	50
01...	--	--	.732	--	--	860	5.70	50
01...	--	--	5.31	--	--	860	5.70	50
01...	--	--	1.71	--	--	860	5.70	50
01...	--	--	1.37	--	--	860	5.70	50
01...	--	--	1.74	--	--	860	5.70	50
01...	--	--	1.90	--	--	860	5.70	50
02...	--	--	.918	--	--	860	5.70	50
02...	--	--	.520	--	--	860	5.70	50
02...	--	--	.188	--	--	860	5.70	50
03...	--	--	.127	--	--	860	5.70	50
15...	--	--	.094	--	540	860	5.70	10
JUL								
02...	--	--	.125	--	--	860	5.70	50
02...	--	--	.201	--	--	860	5.70	50
02...	--	--	.405	--	--	860	5.70	50
02...	--	--	1.19	--	--	860	5.70	50
02...	--	--	.862	--	--	860	5.70	50
02...	--	--	.965	--	--	860	5.70	50
02...	--	--	.976	--	--	860	5.70	50
02...	--	--	.739	--	--	860	5.70	50
03...	--	--	.916	--	--	860	5.70	50
03...	--	--	.675	--	--	860	5.70	50
03...	--	--	.460	--	--	860	5.70	50
03...	--	--	.455	--	--	860	5.70	50
03...	--	--	.347	--	--	860	5.70	50
06...	--	--	.106	--	9000	860	5.70	10
20...	--	--	.065	--	--	860	5.70	10
AUG								
03...	.99	6.77	.149	--	4400	860	5.70	10
16...	1.0	3.31	.168	--	10000	860	5.70	10
22...	--	--	2.82	.680	350000	860	5.70	50
22...	--	--	14.7	1.86	1100000	860	5.70	50
22...	--	--	9.54	2.38	1100000	860	5.70	50
22...	--	--	5.17	.401	350000	860	5.70	50
22...	--	--	7.08	.362	590000	860	5.70	50
22...	--	--	4.74	.209	470000	860	5.70	50
22...	--	--	3.41	.338	230000	860	5.70	50
22...	--	--	3.31	.758	350000	860	5.70	50
22...	--	--	3.14	.996	700000	860	5.70	50
22...	--	--	1.65	.789	350000	860	5.70	50
23...	--	--	1.03	.586	350000	860	5.70	50
23...	--	--	.456	--	--	860	5.70	50
31...	1.0	5.68	.160	.064	32000	860	5.70	10
SEP								
14...	--	--	.284	--	--	860	5.70	50
14...	--	--	.751	--	--	860	5.70	50
14...	--	--	3.29	--	--	860	5.70	50
14...	--	--	1.57	--	--	860	5.70	50
14...	--	--	1.24	--	--	860	5.70	50
14...	--	--	1.17	--	--	860	5.70	50
14...	--	--	1.28	--	--	860	5.70	50
14...	--	--	1.23	.726	--	860	5.70	10
14...	--	--	1.21	.732	--	860	5.70	50
14...	--	--	1.97	1.62	--	860	5.70	10
14...	--	--	.663	--	--	860	5.70	50
15...	--	--	.175	--	--	860	5.70	50
28...	--	--	.047	.031	330	860	5.70	10

STREAMS TRIBUTARY TO LAKE MICHIGAN

04083425 PARSONS CREEK, DOWNSTREAM SITE, NEAR FOND DU LAC, WI--Continued

PRECIPITATION QUANTITY

PERIOD OF RECORD.--Nov. 25, 1997 to current year.

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established Nov. 25, 1997. Rainfall estimated to be 0.00 for Dec. 15, Jan. 2, 6, 9-10, 15, 30, Feb. 10, 14-15, 19-20, and Apr. 7-8, because recorded precipitation interpreted as snowmelt.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 3.00 in., Mar. 30, 1998.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.01 in., Aug. 22.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.00	.00	.00	.00	.00	.00	.32	1.38	.00	.00	.04
2	.28	.00	.00	e.00	.00	.00	.00	.00	.01	1.27	.00	1.62
3	.07	.00	.26	.00	.00	.00	.02	.00	.03	.08	.00	.41
4	.01	.00	.23	.00	.00	.00	.00	.00	.50	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.37	.00	.60	.00
6	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	e.00	.00	.08	.09	.00	.00
8	.04	.00	.00	.00	.00	.21	e.00	.06	.00	.50	.00	.00
9	.01	.00	.23	e.00	.00	.05	.00	.08	.00	.18	.00	.00
10	.00	.12	.00	e.00	e.00	.00	.00	.01	.00	.05	.00	.23
11	.00	.00	.00	.00	.00	.00	.05	.12	.34	.00	.00	.91
12	.02	.00	.00	.00	.00	.00	.00	.07	.00	.00	.05	.02
13	.21	.00	.00	.00	.00	.11	.00	.00	.31	.00	.58	.03
14	.00	.00	.00	.00	e.00	.06	.00	.00	.01	.00	.00	.77
15	.00	.00	e.00	e.00	e.00	.01	.01	.00	.00	.00	.00	.00
16	.03	.00	.00	.00	.00	.00	.00	.28	.20	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.11	.73	.00	.00	.76	.00
18	.00	.00	.00	.00	.00	.00	.00	.70	.00	.00	.00	.00
19	.00	.02	.09	.00	e.00	.08	.42	.01	.00	.00	.00	.34
20	.00	.00	.03	.00	e.00	.31	1.03	.00	.44	.00	.00	.02
21	.00	.00	.00	.00	.00	.01	.03	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	2.01	.66
23	.00	.60	.00	.00	.00	.00	.47	.00	.00	.00	.01	.03
24	.00	.00	.00	.00	.20	.07	.00	.00	.03	.00	.00	.00
25	.00	.00	.00	.00	.10	.00	.00	.00	.01	.00	.00	.00
26	.00	.03	.00	.00	.15	.21	.00	.00	.05	.24	.13	.00
27	.00	.00	.00	.00	.00	.07	.00	.11	.00	.09	.00	.00
28	.00	.00	.00	.00	.00	.02	.13	.11	.23	.49	.00	.00
29	.00	.00	.00	.00	.08	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	e.00	---	.00	.00	.09	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.20	---	.25	.00	---
TOTAL	0.76	0.77	0.84	0.00	0.53	1.21	2.27	2.90	3.99	3.24	4.14	5.08

e Estimated

04084255 LAKE WINNEBAGO NEAR STOCKBRIDGE, WI

LOCATION.--Lat 44°04'17", long 88°19'52", Stockbridge Indian Reservation, Calumet County, Hydrologic Unit 04030203, on east shore of Lake Winnebago, 300 ft south of County Highway E and 1.6 mi west of Stockbridge.

DRAINAGE AREA.--5,880 mi², at lake outlet at Menasha Dam. Area of Lake Winnebago, 215 mi².

PERIOD OF RECORD.--November 1982 to current year.

GAGE.--Water-stage recorder. Datum of gage is 745.05 ft above mean tide of New York City (levels by U. S. Army Corps of Engineers).

REMARKS.--Lake elevations controlled by dams at Menasha and Neenah, which are operated in the interest of navigation. Crests of both dams are at elevation 746.73 ft. Present limits of regulation are from 21 1/4 in. above the crest of Menasha dam to crest during navigation season, plus additional 18 in. below crest during winter. Data-collection platform at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily mean gage height, 3.85 ft, July 9, 11, 1993; minimum observed, 0.30 ft, Mar. 1, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum daily mean gage height, 3.09 ft, Sept. 12; minimum recorded, 1.54 ft, Feb. 24, 25.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.78	2.77	2.62	2.06	1.82	1.82	2.73	2.81	2.80	2.92	2.93	2.80
2	2.76	2.77	2.53	2.07	1.79	1.87	2.72	2.80	2.92	2.89	2.91	2.94
3	2.68	2.75	2.53	2.06	1.79	1.91	2.74	2.77	2.90	2.91	2.90	3.00
4	2.71	2.72	2.53	2.10	1.78	1.94	2.78	2.77	2.89	2.95	2.91	2.96
5	2.73	2.74	2.49	2.07	1.77	1.99	2.73	2.76	2.90	2.95	2.90	2.99
6	2.66	2.73	2.50	2.06	1.75	2.02	2.82	2.74	2.99	2.92	2.95	2.99
7	2.64	2.71	2.47	2.05	1.74	2.05	2.53	2.73	3.01	2.92	2.97	3.01
8	2.68	2.72	2.43	2.02	1.72	2.10	2.62	2.72	3.01	2.97	2.93	2.98
9	2.69	2.73	2.42	2.01	1.72	2.10	2.69	2.68	3.02	3.05	2.94	2.96
10	2.71	2.64	2.46	2.03	1.72	2.21	2.60	2.65	3.03	3.02	2.94	2.98
11	2.71	2.70	2.43	2.03	1.72	2.27	2.59	2.60	2.98	2.97	2.91	3.04
12	2.69	2.74	2.42	2.01	1.71	2.31	2.62	2.71	2.91	2.92	2.92	3.09
13	2.68	2.75	2.41	2.03	1.72	2.37	2.55	2.94	2.92	2.92	3.00	3.08
14	2.73	2.77	2.37	2.01	1.72	2.41	2.56	2.87	2.96	2.91	3.00	3.06
15	2.71	2.76	2.39	1.99	1.70	2.42	2.48	2.76	2.98	2.87	3.05	3.00
16	2.73	2.70	2.44	1.99	1.70	2.45	2.41	2.76	2.98	2.87	3.03	3.00
17	2.77	2.71	2.34	1.97	1.68	2.44	2.45	2.75	2.87	2.89	3.04	2.95
18	2.72	2.67	2.32	1.97	1.67	2.47	2.52	2.76	2.82	2.81	3.06	2.90
19	2.75	2.70	2.30	1.96	1.65	2.48	2.47	2.88	2.77	2.82	3.00	2.88
20	2.78	2.68	2.33	1.96	1.63	2.53	2.35	2.96	2.76	2.87	2.95	2.92
21	2.76	2.64	2.27	1.95	1.60	2.58	2.57	2.99	2.87	2.84	2.91	2.88
22	2.79	2.65	2.25	1.93	1.58	2.60	2.69	3.00	2.83	2.82	2.94	2.77
23	2.76	2.71	2.22	1.93	1.57	2.61	2.71	3.01	2.77	2.85	3.00	2.78
24	2.74	2.80	2.20	1.91	1.58	2.60	2.71	3.02	2.77	2.84	2.98	2.80
25	2.73	2.71	2.18	1.90	1.60	2.77	2.75	3.00	2.79	2.85	2.96	2.83
26	2.71	2.68	2.18	1.89	1.63	2.72	2.77	2.84	2.84	2.86	2.93	2.87
27	2.66	2.70	2.15	1.87	1.69	2.79	2.78	2.72	2.86	2.87	2.87	2.82
28	2.65	2.68	2.13	1.86	1.72	2.72	2.77	2.69	2.87	2.87	2.83	2.83
29	2.67	2.64	2.11	1.85	1.74	2.71	2.77	2.73	2.89	2.86	2.82	2.88
30	2.71	2.61	2.09	1.84	---	2.70	2.80	2.70	2.91	2.87	2.81	2.87
31	2.72	---	2.08	1.83	---	2.71	---	2.69	---	2.89	2.84	---
MEAN	2.72	2.71	2.34	1.97	1.70	2.38	2.64	2.80	2.89	2.90	2.94	2.93
MAX	2.79	2.80	2.62	2.10	1.82	2.79	2.82	3.02	3.03	3.05	3.06	3.09
MIN	2.64	2.61	2.08	1.83	1.57	1.82	2.35	2.60	2.76	2.81	2.81	2.77

STREAMS TRIBUTARY TO LAKE MICHIGAN

04084445 FOX RIVER AT APPLETON, WI

LOCATION.--Lat 44°14'53", long 88°25'23" in NW ¼ SE ¼ sec.34, T.21 N., R.17 E., Outagamie County, Hydrologic Unit 04030204, on left bank at south end of Lutz Park, approximately 2,600 ft upstream of Memorial Drive bridge at Appleton.

DRAINAGE AREA.--5,950 mi².

PERIOD OF RECORD.--July 1986 to current year.

GAGE.--Acoustical Velocity Meter (AVM) system. Two-path transducer installation.

REMARKS.--Records good, except for estimated daily discharges, which are fair (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1510	1510	4470	2950	2740	2730	2730	4940	5600	3190	1920	e1500
2	1470	1220	4580	2670	2720	2740	2780	5400	4980	3160	1940	e2000
3	1330	1290	4470	2870	2720	2740	2690	5750	5800	3100	1890	e2500
4	1330	1450	4460	3080	2710	2780	2570	5330	5760	3160	1980	e1700
5	1490	1470	4340	3060	2720	2720	2780	4890	6140	3150	2040	e2100
6	1380	1400	4340	2960	2640	2760	3070	4860	6830	3150	2060	e3500
7	1440	1390	4480	2840	2540	2800	3430	4820	7440	3160	2020	e4000
8	1500	1460	4410	2910	2660	2500	3350	4810	7830	3820	e2000	e4300
9	1450	1500	3360	2900	2650	1780	3630	4520	7830	3730	e1900	e4600
10	1440	1300	2260	2920	2660	1830	3570	4100	7840	4290	e1700	e4700
11	1420	1230	2350	2910	2780	2010	3540	3490	7640	5530	e1700	e6200
12	1490	1500	2350	2870	2690	2050	3560	e2800	7580	6030	e1800	e7600
13	1360	1530	3370	2910	2650	2140	3670	e2700	7900	5550	e2500	e7400
14	1410	1380	4390	2910	2670	2210	3610	e2700	8100	4620	e2300	e7800
15	1490	1920	5130	2900	2650	2260	3410	e2600	8660	4080	e2700	e7000
16	1430	2570	4230	2860	2660	2120	3260	e2800	9370	4110	e3300	e8000
17	1410	2690	3020	2850	2930	2210	3290	e3000	8930	3490	e4000	e8200
18	1390	2670	3220	2800	3410	2410	3120	3980	8830	2870	e5200	e8400
19	1460	2720	3210	2870	3480	2340	2510	4660	8220	2680	e6200	e8600
20	1430	2650	3180	2870	3460	2260	2410	5410	7400	1810	e5400	e8200
21	1570	2690	3090	2770	3430	2490	2830	5480	6230	1550	e4500	e7000
22	1350	2630	3170	2820	3430	2520	3750	5930	4970	1730	e4800	e5600
23	1060	3290	3100	2830	3450	2500	3870	7190	4440	1810	e5400	5270
24	1310	3780	3090	2800	3140	2520	4000	8710	4420	1810	e5400	5110
25	1540	3860	3090	2830	2750	2550	3940	8630	4430	1850	e5400	4780
26	1410	3840	3050	2820	2780	2600	3980	8560	4020	1910	e5200	3770
27	1360	3690	3030	2790	2770	2610	4400	8290	3060	1880	e5200	2850
28	1360	3620	3000	2780	2720	2560	4830	8270	3140	1830	e4600	2810
29	1360	3540	3000	2780	2710	2640	4740	8240	3110	1790	e2600	3050
30	1440	3570	2990	2770	---	2700	4840	7430	3070	1780	e1500	3090
31	1420	---	2980	2760	---	2730	---	6050	---	1780	e1800	---
TOTAL	43810	69360	109210	88660	83320	75810	104160	166340	189570	94400	100950	151630
MEAN	1413	2312	3523	2860	2873	2445	3472	5366	6319	3045	3256	5054
MAX	1570	3860	5130	3080	3480	2800	4840	8710	9370	6030	6200	8600
MIN	1060	1220	2260	2670	2540	1780	2410	2600	3060	1550	1500	1500
CFSM	.24	.39	.59	.48	.48	.41	.58	.90	1.06	.51	.55	.85
IN.	.27	.43	.68	.55	.52	.47	.65	1.04	1.19	.59	.63	.95

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2000, BY WATER YEAR (WY)

	MEAN	3939	4742	4148	3789	3902	4910	6290	5481	5300	4110	3082	3390
MAX	13510	7863	7509	5575	5422	7702	11920	11900	13300	15110	6259	8899	
(WY)	1987	1996	1993	1987	1987	1994	1993	1993	1993	1993	1993	1986	
MIN	1413	2312	2541	2535	2312	2445	2688	2682	1243	944	971	1226	
(WY)	2000	2000	1990	1990	1995	2000	1990	1988	1988	1988	1988	1988	

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1986 - 2000
ANNUAL TOTAL	1272090	1277220	
ANNUAL MEAN	3485	3490	4381
HIGHEST ANNUAL MEAN			8107
LOWEST ANNUAL MEAN			2995
HIGHEST DAILY MEAN	10600	9370	18000
LOWEST DAILY MEAN	1060	1060	840
ANNUAL SEVEN-DAY MINIMUM	1340	1340	899
ANNUAL RUNOFF (CFSM)	.59	.59	.74
ANNUAL RUNOFF (INCHES)	7.95	7.99	10.00
10 PERCENT EXCEEDS	5610	6160	8280
50 PERCENT EXCEEDS	3220	2910	3650
90 PERCENT EXCEEDS	1430	1490	1670

(e) Estimated due to ice effect or missing record

04084500 FOX RIVER AT RAPIDE CROCHE DAM, NEAR WRIGHTSTOWN, WI

LOCATION.--Lat 44°19'03", long 88°11'50", in SE ¼ sec.4, T.21 N., R.19 E., Outagamie County, Hydrologic Unit 04030204, at Rapide Croche Dam, 2.0 mi upstream from Wrightstown, and 18 mi upstream from mouth.

DRAINAGE AREA.--6,010 mi².

PERIOD OF RECORD.--March 1896 to September 1917 (monthly discharge only), October 1917 to current year.

REVISED RECORD.--WDR WI-80-1: Drainage area. WDR WI-81-1: 1980.

GAGE.--Recording headwater and tailwater gages and electric generation are read 24 times a day and used to compute the discharge records.

REMARKS.--Flow regulated by storage in Lake Winnebago (see sta. 04082500 and 04084255). Daily discharges determined from records of flow through turbines, head, gate openings, and lockages through navigation canal. Usually less than about 20 ft³/s is diverted into basin from Wisconsin River at Portage Canal throughout the year.

COOPERATION.--Figures of daily discharge furnished by Kaukauna Electric and Water Department. Records reviewed by Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1600	1460	4050	3020	2610	2870	2970	5180	6500	3150	1810	1600
2	1420	1150	4350	2800	2700	3160	2990	5760	5010	3100	1900	2080
3	1230	1200	4630	2790	2710	3110	2960	6220	5980	3100	1760	2560
4	1250	1420	4690	2810	2690	2980	2710	5960	6150	3090	1850	1820
5	1420	1460	4630	3180	2940	3110	2920	5090	6310	3080	1980	2180
6	1340	1320	4480	2930	2760	2790	3060	5150	6850	3110	2020	3640
7	1280	1350	4530	2830	2420	3180	3810	5120	7250	3130	1950	4040
8	1440	1530	4590	2990	2740	2830	3670	5100	7880	3860	2070	4400
9	1390	1440	3450	2770	2770	1860	3920	5750	7810	3990	2030	4680
10	1310	1200	2060	3030	2760	1960	4050	4430	7800	4490	1810	4740
11	1250	1050	2380	2600	2860	2090	4030	3900	7590	5390	1720	6410
12	1290	1410	2190	2580	2850	2250	4040	3120	7600	6320	1960	7890
13	1300	1600	3200	2560	2730	2220	4070	3030	8390	6030	2660	7570
14	1290	1320	4350	2780	2610	2470	4050	3060	8600	4940	2480	8360
15	1400	1620	5500	2790	2840	2510	3370	2770	8780	4240	2910	7300
16	1330	2590	4450	2550	2620	2280	3140	3080	9880	4220	3360	8050
17	1110	2530	2800	2560	2830	2340	3230	3250	9440	3740	4180	8490
18	1320	2790	3290	2590	3590	2500	3200	4680	9420	2640	5350	8690
19	1370	2640	4280	2630	3690	2590	2820	5020	8470	2740	6280	8850
20	1270	2640	2870	2620	3660	2420	2960	5860	7510	1670	5590	8630
21	1600	2570	2810	2480	3730	2620	2840	5860	6300	1250	4550	7630
22	1110	2710	3340	2620	3810	2750	3520	6900	5170	1660	4860	5960
23	852	3080	2920	2580	3910	2390	3680	7440	4290	1600	5460	5940
24	1130	3820	2980	2570	3690	2660	3790	9560	4340	1600	5460	5820
25	1550	3820	2780	2640	3130	2780	3980	9830	4320	1700	5580	5890
26	1270	3850	2760	2680	3210	2670	3980	8840	4200	1810	5490	4310
27	1260	3760	2780	2810	3140	2930	4030	8440	2760	1810	5380	3040
28	1380	3690	2760	2550	2970	2710	4970	8120	2970	1790	4640	3020
29	1320	3680	2810	2530	3120	2830	5140	8450	3000	1700	2650	3230
30	1270	3570	2900	2800	---	2820	5150	7410	2880	1760	1650	3430
31	1410	---	2960	2690	---	2930	---	6190	---	1560	1840	---
TOTAL	40762	68270	108570	84360	88090	81610	109050	178570	193450	94270	103230	160250
MEAN	1315	2276	3502	2721	3038	2633	3635	5760	6448	3041	3330	5342
MAX	1600	3850	5500	3180	3910	3180	5150	9830	9880	6320	6280	8850
MIN	852	1050	2060	2480	2420	1860	2710	2770	2760	1250	1650	1600

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1896 - 2000, BY WATER YEAR (WY)

	3304	3975	3992	4001	4075	4934	7159	6060	5044	3483	2697	2846
MEAN	3304	3975	3992	4001	4075	4934	7159	6060	5044	3483	2697	2846
MAX	14230	12740	9879	7831	7831	12440	19360	20160	13330	15600	9623	11020
(WY)	1987	1985	1983	1960	1939	1973	1929	1960	1993	1993	1924	1938
MIN	728	1242	1562	1432	1768	1596	1590	1260	1098	983	761	709
(WY)	1933	1931	1959	1977	1977	1964	1954	1931	1931	1931	1936	1933

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1896 - 2000

ANNUAL TOTAL	1276972	1310482	
ANNUAL MEAN	3499	3581	
HIGHEST ANNUAL MEAN			4305
LOWEST ANNUAL MEAN			8427
HIGHEST DAILY MEAN	11800	Jul 24	9880
LOWEST DAILY MEAN	852	Oct 23	852
ANNUAL SEVEN-DAY MINIMUM	1220	Oct 22	1220
10 PERCENT EXCEEDS	5750		6350
50 PERCENT EXCEEDS	3220		2960
90 PERCENT EXCEEDS	1350		1420
			4305
			8427
			1626
			24000
			138
			499
			7790
			3590
			1670

STREAMS TRIBUTARY TO LAKE MICHIGAN

040851385 FOX RIVER, AT OIL TANK DEPOT, AT GREEN BAY, WI

LOCATION.--Lat 44°31'43", long 88°00'36" in section 25, T.24 N., R.20 E., Brown County, Hydrologic Unit 04030204, about 0.5 mi upstream of Interstate Highway 43 bridge in Green Bay, and 0.8 mi upstream from mouth.

DRAINAGE AREA.--6,330 mi².

PERIOD OF RECORD.--October 1988 to current year.

GAGE.--Acoustical Velocity Meter (AVM) system. Two-path transducer installation.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

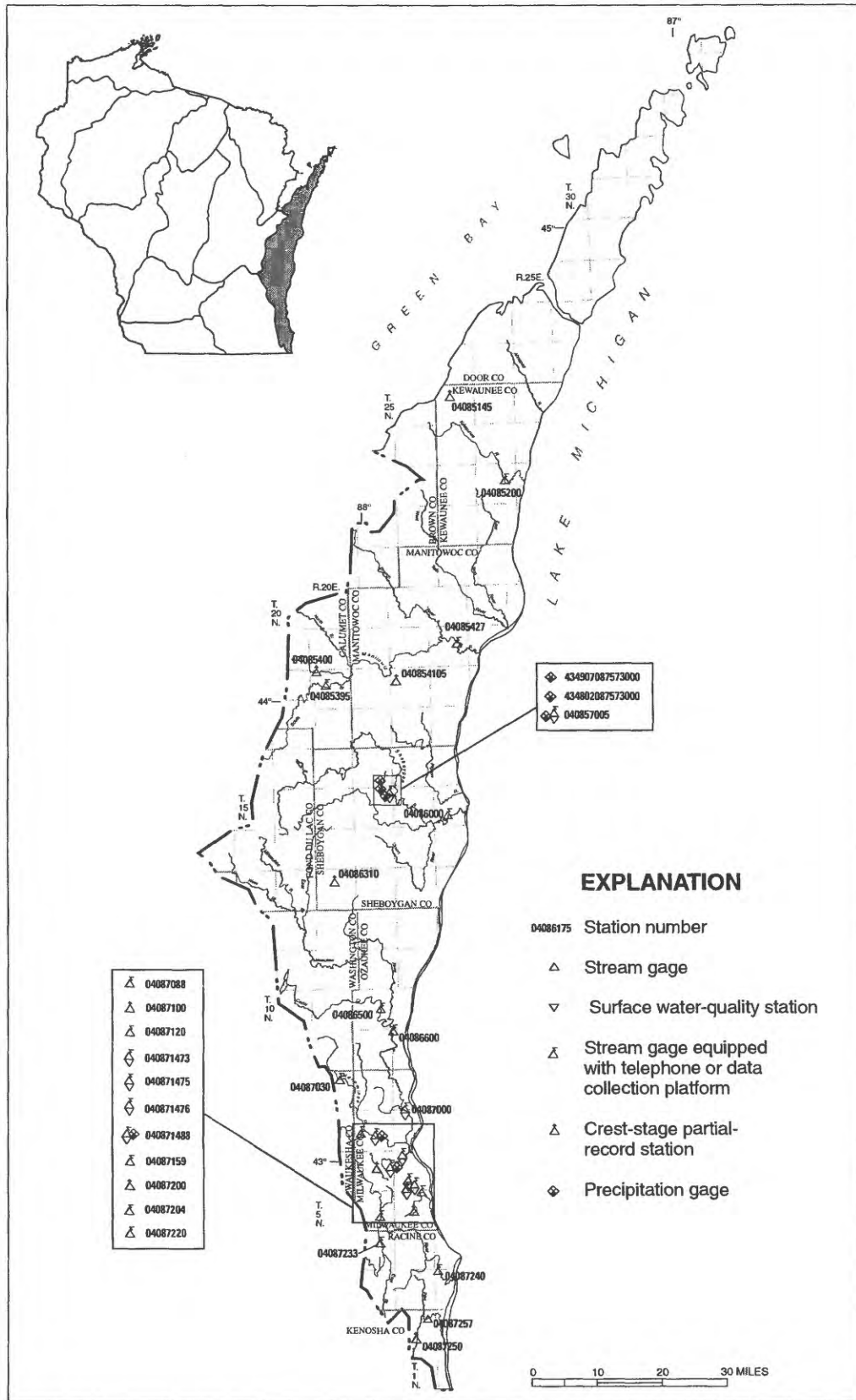
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1360	1580	4280	2430	2780	3110	2840	4710	6730	3360	1050	684
2	1150	113	4410	2890	2510	2570	3180	5630	6560	2680	-106	507
3	489	574	4570	1880	2510	3000	2550	5970	6400	2190	e1900	2490
4	1710	1230	4850	3250	2770	3050	2470	5510	5340	3220	e1990	2030
5	1200	1000	4790	3080	2850	2750	2040	5530	6960	2680	2220	1410
6	583	804	4070	3580	2470	2600	2520	5230	7450	2090	1820	3870
7	1160	1520	4540	2720	2110	3190	2010	5060	7850	3320	2480	4450
8	1050	1190	4340	2720	2610	2860	4250	5090	8680	e3850	1960	3830
9	1240	999	4180	2240	2450	318	2960	5270	8010	7010	1310	4650
10	599	93	2390	3130	2770	2050	3950	3590	8170	3530	1630	5100
11	1490	1350	1970	3430	2720	1540	3480	3560	7120	5820	e1720	6710
12	1370	831	2030	2190	2820	2000	3730	3690	8140	6650	1990	8610
13	341	1300	2740	2780	2500	1980	3560	3100	7960	6500	1920	6320
14	1880	1430	3910	2720	2710	2020	3660	2650	8590	4860	2920	7710
15	75	-186	5930	2700	2990	2470	2840	2980	8930	e4110	2980	7360
16	284	2480	5240	3170	1870	813	3340	2760	10300	e4130	2420	9110
17	1320	2940	2730	2600	3080	3120	3610	3360	9100	3920	3920	8540
18	478	2140	3310	2960	3430	2150	3630	5280	8970	e2900	5650	9040
19	1700	1980	2960	2850	3110	2120	1950	6590	8970	e2700	6660	8900
20	1640	3360	3460	2740	3670	2310	2010	5890	7630	e1820	6140	8560
21	142	2610	3170	2730	3360	2500	4380	6070	7250	e1570	6220	e7070
22	1750	2610	3010	2650	3480	2710	4140	6190	5440	e1740	4290	e5660
23	-239	3530	3030	2970	3850	2110	4020	7340	4540	e1820	5470	5800
24	1140	2710	2830	2350	3810	2560	3970	9880	4070	e1820	5710	6540
25	1260	4190	3770	2920	4090	2700	4430	8700	5130	e1860	5720	5380
26	305	3800	2130	2810	4760	2710	4360	9200	4320	e1920	5200	4870
27	1280	4160	3360	2620	4560	2080	4300	8280	3140	1360	5100	2940
28	619	3780	2610	2640	3090	2750	4440	9050	3150	618	4830	3840
29	971	3260	2650	2810	3000	2310	5250	8930	2680	-211	2800	4120
30	1640	3730	2690	2870	---	2950	5150	7880	3260	-1050	1370	e3120
31	1590	---	3460	2750	---	2820	---	6140	---	-240	2130	---
TOTAL	31577	61108	109410	86180	88730	74221	105020	179110	200840	88547	101414	159221
MEAN	1019	2037	3529	2780	3060	2394	3501	5778	6695	2856	3271	5307
MAX	1880	4190	5930	3580	4760	3190	5250	9880	10300	7010	6660	9110
MIN	-239	-186	1970	1880	1870	318	1950	2650	2680	-1050	-106	507
CFSM	.16	.32	.56	.44	.48	.38	.55	.91	1.06	.45	.52	.84
IN.	.19	.36	.64	.51	.52	.44	.62	1.05	1.18	.52	.60	.94

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2000, BY WATER YEAR (WY)

	MEAN	3334	4967	4486	3889	3967	5919	7240	6229	6594	4961	3684	3427
	MAX	8504	8668	9446	6092	5814	7827	13660	13220	14780	15620	6855	6172
	(WY)	1996	1993	1993	1993	1996	1994	1993	1993	1993	1993	1993	1993
	MIN	1019	2037	2977	2768	2070	2394	3010	2710	2484	2140	1804	1355
	(WY)	2000	2000	1990	1990	1995	2000	1990	1998	1994	1995	1998	1998

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1989 - 2000
ANNUAL TOTAL	1314600	1285378	
ANNUAL MEAN	3602	3512	4977
HIGHEST ANNUAL MEAN			9102
LOWEST ANNUAL MEAN			3512
HIGHEST DAILY MEAN	11500	Jul 23	10300
LOWEST DAILY MEAN	-1230	Aug 25	-1050
ANNUAL SEVEN-DAY MINIMUM	699	Sep 23	203
ANNUAL RUNOFF (CFSM)	.57		.55
ANNUAL RUNOFF (INCHES)	7.73		7.55
10 PERCENT EXCEEDS	5980		6720
50 PERCENT EXCEEDS	3460		2960
90 PERCENT EXCEEDS	1230		1220

(e) Estimated due to missing record



Base from U.S. Geological Survey 1:100,000 digital data;
modified by Wisconsin Department of Natural Resources.
Wisconsin Transverse Mercator projection.

LAKE MICHIGAN BASIN

STREAMS TRIBUTARY TO LAKE MICHIGAN

04085200 KEWAUNEE RIVER NEAR KEWAUNEE, WI

LOCATION.--Lat 44°27'30", long 87°33'23", in SE ¼ SW ¼ (revised) sec.14, T.23 N., R.24 E., Kewaunee County, Hydrologic Unit 04030102, on left bank just upstream from bridge on County Trunk Highway F, 2.3 mi west of Kewaunee, and about 7.0 mi upstream from mouth.

DRAINAGE AREA.--127 mi².

PERIOD OF RECORD.--Annual maximum, water years 1958-65, and occasional low-flow measurements, water years 1963-64. September 1964 to July 1996, November 1997 to current year. No winter records for years 1965 and 1966.

REVISED RECORDS.--WDR WI-79-1: Drainage area. WDR WI-85-1: 1962(M), 1965(M), 1967-69(M), 1971(M), 1973-74(M), 1976(M), 1978(M), 1980-82(M).

GAGE.--Water-stage recorder. Datum of gage is 579.64 ft above sea level (Wisconsin State Highway Commission benchmark). Apr. 3, 1957, to Sept. 2, 1964, crest-stage gage only at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	14	13	12	e13	115	22	22	26	12	12	9.1
2	15	14	13	12	e13	84	21	21	44	11	11	11
3	14	13	14	12	e12	64	21	20	43	12	11	14
4	13	13	15	12	e13	56	20	19	35	12	11	16
5	12	13	17	12	e13	51	19	19	36	11	9.7	13
6	12	13	16	13	e13	47	19	18	36	10	10	12
7	12	14	14	12	e13	46	18	17	30	11	9.8	11
8	13	14	13	13	e14	47	17	16	26	22	12	11
9	14	14	13	13	e13	51	17	16	38	56	19	9.8
10	13	15	14	21	e14	43	16	15	48	59	19	8.2
11	11	14	14	e16	e14	36	16	16	28	41	14	11
12	12	15	13	e13	e14	33	16	20	24	27	12	31
13	13	15	13	e14	e15	31	16	40	25	21	11	24
14	13	16	13	e13	e15	31	16	33	32	22	11	19
15	14	15	14	e13	e15	30	15	26	32	32	35	15
16	14	15	13	e13	e13	29	16	31	e28	27	32	13
17	12	15	13	e13	e13	27	16	45	e25	19	28	12
18	13	15	12	e13	e12	26	16	233	e23	16	23	10
19	13	16	12	e12	e14	25	16	286	e22	14	18	11
20	12	15	12	e12	e14	26	41	159	e21	14	15	13
21	12	14	8.9	e11	e13	28	94	87	e20	13	13	12
22	12	14	9.9	e11	e13	30	77	57	e26	13	11	13
23	12	19	8.3	e13	e20	29	53	44	21	12	11	15
24	12	23	8.0	e14	109	29	38	36	18	11	9.8	13
25	12	19	8.4	e13	420	31	30	30	15	11	9.4	11
26	12	16	9.6	e13	e810	29	25	26	16	9.4	9.6	10
27	12	15	9.9	e13	e720	28	22	24	21	11	9.8	9.5
28	12	14	9.8	e13	327	28	21	23	16	22	9.7	8.9
29	13	14	10	e14	170	26	23	22	15	16	9.0	9.2
30	13	14	11	e13	---	25	24	21	13	15	8.5	8.5
31	14	---	11	e13	---	23	---	23	---	14	8.0	---
TOTAL	396	450	375.8	405	2872	1204	781	1465	803	596.4	432.3	384.2
MEAN	12.8	15.0	12.1	13.1	99.0	38.8	26.0	47.3	26.8	19.2	13.9	12.8
MAX	15	23	17	21	810	115	94	286	48	59	35	31
MIN	11	13	8.0	11	12	23	15	15	13	9.4	8.0	8.2
CFSM	.10	.12	.10	.10	.78	.31	.20	.37	.21	.15	.11	.10
IN.	.12	.13	.11	.12	.84	.35	.23	.43	.24	.17	.13	.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2000, BY WATER YEAR (WY)

	MEAN	45.9	65.5	52.0	36.7	64.1	255	201	82.1	84.3	41.1	32.8	54.5
MAX	221	458	226	265	314	567	450	354	483	342	113	454	
(WY)	1985	1986	1993	1973	1984	1986	1993	1973	1990	1993	1975	1986	
MIN	10.1	10.9	9.10	9.83	11.9	38.8	26.0	21.2	12.3	8.29	7.90	8.98	
(WY)	1967	1977	1977	1977	1977	2000	2000	1977	1988	1965	1970	1966	

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04085200 KEWAUNEE RIVER NEAR KEWAUNEE, WI--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1964 - 2000	
ANNUAL TOTAL	17092.7		10164.7			
ANNUAL MEAN	46.8		27.8		84.6	
HIGHEST ANNUAL MEAN					178	
LOWEST ANNUAL MEAN					27.8	
HIGHEST DAILY MEAN	1250	Feb 12	810	Feb 26	5950	Jun 23 1990
LOWEST DAILY MEAN	8.0	Dec 24	8.0	(a) Dec 24	5.9	Jul 30 1965
ANNUAL SEVEN-DAY MINIMUM	8.7	Sep	9.0	Dec 21	6.3	Aug 22 1970
INSTANTANEOUS PEAK FLOW			(b) 1000	Feb 26	(c) 8570	Jun 23 1990
INSTANTANEOUS PEAK STAGE			(d) 13.24	Feb 26	(d) 16.03	Mar 30 1960
INSTANTANEOUS LOW FLOW			(f) 5.4	Dec 1	(f) 3.8	Dec 15 1997
ANNUAL RUNOFF (CFSM)	.37		.22		.67	
ANNUAL RUNOFF (INCHES)	5.01		2.98		9.06	
10 PERCENT EXCEEDS	91		37		170	
50 PERCENT EXCEEDS	26		14		31	
90 PERCENT EXCEEDS	11		11		13	

- (a) Also occurred Aug. 31
 (b) Gage height, 11.67 ft
 (c) Gage height, 16.00 ft, from crest-stage gage
 (d) Backwater from ice
 (e) Estimated due to ice effect or missing record
 (f) Result of freezeup

STREAMS TRIBUTARY TO LAKE MICHIGAN

04085395 SOUTH BRANCH MANITOWOC RIVER AT HAYTON, WI

LOCATION.--Lat 44°01'29", long 88°07'05", in SW ¼ SW ¼ sec.16, T.18 N., R.20 E., Calumet County, Hydrologic Unit 04030101, on left bank 100 ft downstream from Weeks Road bridge, at Hayton.

DRAINAGE AREA.--109 mi².

PERIOD OF RECORD.--July 1993 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 808 ft above sea level, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges and periods of flow less than 3 ft³/s, which are poor (see page 12).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	15	15	e8.2	e9.0	275	41	43	105	25	21	21
2	26	14	15	e8.4	e9.0	238	40	43	172	24	18	169
3	26	14	16	e8.8	e9.0	197	39	40	174	33	16	237
4	24	14	20	e9.0	e9.2	157	37	36	152	36	15	230
5	23	15	23	e9.2	e9.4	125	36	33	141	31	15	192
6	22	15	24	e9.0	e9.4	104	36	30	131	28	18	148
7	20	14	22	e8.4	e9.4	90	34	28	121	25	15	110
8	20	14	20	e8.2	e9.4	81	33	27	111	87	19	88
9	19	15	20	e8.0	e9.4	79	33	26	100	130	29	77
10	19	14	21	e8.0	e9.4	75	33	25	88	126	16	80
11	18	14	21	e8.2	e9.2	65	33	24	78	108	14	133
12	17	14	20	e8.4	e9.0	57	33	114	70	83	13	178
13	18	14	19	e8.2	e9.6	54	32	166	64	63	16	183
14	18	13	19	e8.0	e9.8	53	31	116	88	57	15	219
15	18	13	19	e8.0	e10	52	29	80	91	54	28	210
16	18	13	19	e8.0	e10	53	29	71	91	51	20	193
17	18	13	e17	e8.0	e10	51	30	82	79	48	38	173
18	17	13	e15	e7.8	e11	47	32	312	67	44	39	152
19	17	13	e14	e7.8	e11	46	33	333	58	43	31	134
20	17	13	e13	e7.6	e12	48	85	282	58	41	24	131
21	17	13	e14	e7.6	14	55	127	228	57	37	20	129
22	16	13	e12	e7.8	16	56	123	185	49	33	21	122
23	16	19	e9.4	e7.8	29	55	103	155	43	30	41	125
24	15	22	e8.6	e7.8	79	53	86	133	39	27	60	126
25	16	20	e7.6	e7.8	141	56	74	113	36	24	58	117
26	15	18	e7.2	e7.8	230	53	66	97	33	22	42	104
27	15	17	e7.2	e7.8	281	54	60	83	31	22	29	92
28	15	17	e7.4	e7.8	281	52	55	77	29	23	23	82
29	15	16	e7.6	e8.0	288	49	50	72	28	21	22	75
30	15	15	e7.8	e8.2	---	46	46	67	27	19	21	69
31	14	---	e8.0	e8.8	---	44	---	63	---	20	21	---
TOTAL	570	447	468.8	252.4	1553.2	2520	1519	3184	2411	1415	778	4099
MEAN	18.4	14.9	15.1	8.14	53.6	81.3	50.6	103	80.4	45.6	25.1	137
MAX	26	22	24	9.2	288	275	127	333	174	130	60	237
MIN	14	13	7.2	7.6	9.0	44	29	24	27	19	13	21
CFSM	.17	.14	.14	.07	.49	.75	.46	.94	.74	.42	.23	1.25
IN.	.19	.15	.16	.09	.53	.86	.52	1.09	.82	.48	.27	1.40

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2000, BY WATER YEAR (WY)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	15.2	21.7	15.1	12.8	48.9	95.4	106	57.3	71.6	67.9	23.0	29.1
MAX	29.3	47.5	24.0	21.6	86.7	189	259	103	170	232	49.4	137
(WY)	1994	1996	1994	1997	1999	1997	1998	2000	1996	1993	1999	2000
MIN	7.17	10.9	8.74	6.21	6.42	54.5	48.2	30.1	12.1	2.46	8.48	4.02
(WY)	1995	1995	1995	1995	1995	1999	1995	1995	1995	1995	1995	1998

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1993 - 2000
ANNUAL TOTAL	20523.8	19217.4	
ANNUAL MEAN	56.2	52.5	46.7
HIGHEST ANNUAL MEAN			103
LOWEST ANNUAL MEAN			17.3
HIGHEST DAILY MEAN	250	Jun 28	914
LOWEST DAILY MEAN	4.8	(a) Jan 2	7.2 (a) Dec 26-27
ANNUAL SEVEN-DAY MINIMUM	4.8	(a) Jan 2	7.5 (a) Dec 25
INSTANTANEOUS PEAK FLOW			349
INSTANTANEOUS PEAK STAGE			5.12
INSTANTANEOUS LOW FLOW			6.95
ANNUAL RUNOFF (CFSM)	.52	.48	(b).89
ANNUAL RUNOFF (INCHES)	7.00	6.56	.43
10 PERCENT EXCEEDS	137	131	114
50 PERCENT EXCEEDS	38	28	22
90 PERCENT EXCEEDS	11	8.9	7.0

(a) Ice affected

(b) Also occurred July 31 to Aug. 1, 1995

(c) Estimated due to ice effect or missing record

04085427 MANITOWOC RIVER AT MANITOWOC, WI

LOCATION.--Lat 44°06'26", long 87°42'55", in NE 1/4 NW 1/4 sec.23, T.19 N., R.23 E., Manitowoc County, Hydrologic Unit 04030101, on right bank 300 ft upstream from bridge on County Trunk Highway JJ, just west of the Manitowoc city limits and 6.6 mi upstream from mouth.

DRAINAGE AREA.--526 mi².

PERIOD OF RECORD.--July 1972 to September 1996, December 1997 to current year.

REVISED RECORDS.--WDR WI-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 610.12 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	38	55	e33	e35	e840	164	181	409	79	51	74
2	76	38	45	e35	e35	e680	158	163	559	75	57	85
3	64	47	50	e36	e36	636	143	154	546	82	50	210
4	58	42	54	e36	e36	616	145	145	518	83	44	269
5	56	38	57	e37	e37	593	145	137	554	90	42	270
6	56	34	62	e35	e37	566	118	126	546	86	48	267
7	55	37	66	e34	e37	544	128	112	525	78	44	265
8	48	34	61	e33	e37	525	101	97	498	675	52	259
9	45	32	66	e31	e37	497	109	93	459	823	53	243
10	51	36	70	e32	e37	460	110	89	417	626	57	248
11	47	36	88	e33	e36	416	95	87	371	573	54	291
12	45	36	76	e34	e36	371	93	150	318	514	45	335
13	44	33	69	e33	e37	330	97	276	271	438	41	329
14	42	36	64	e32	e38	292	95	324	250	427	40	354
15	46	40	64	e32	e40	258	99	336	248	329	55	365
16	43	40	61	e31	e40	232	91	345	236	259	59	369
17	42	37	e45	e31	e41	215	88	359	223	208	80	367
18	46	35	e56	e31	e42	197	101	742	210	168	86	360
19	45	36	e40	e31	e43	182	114	762	185	137	102	347
20	41	36	e35	e30	e43	174	171	722	154	118	101	344
21	44	42	e33	e30	e43	190	284	716	140	104	85	333
22	42	40	e30	e30	e45	207	370	716	147	90	78	324
23	44	45	e29	e30	e45	214	374	693	131	77	92	289
24	53	48	e28	e30	e90	212	366	659	111	69	119	275
25	44	62	e28	e30	e350	217	353	617	104	61	131	265
26	34	56	e28	e30	e620	238	327	567	103	54	129	248
27	32	49	e29	e30	e660	220	295	502	95	57	122	232
28	31	52	e29	e30	e740	216	259	479	96	54	110	208
29	26	51	e30	e30	e780	199	229	442	89	49	97	187
30	29	44	e31	e32	---	185	205	396	84	45	90	166
31	31	---	e32	e33	---	172	---	354	---	50	82	---
TOTAL	1432	1230	1511	995	4133	10894	5427	11541	8597	6578	2296	8178
MEAN	46.2	41.0	48.7	32.1	143	351	181	372	287	212	74.1	273
MAX	76	62	88	37	780	840	374	762	559	823	131	369
MIN	26	32	28	30	35	172	88	87	84	45	40	74
CFSM	.09	.08	.09	.06	.27	.67	.34	.71	.54	.40	.14	.52
IN.	.10	.09	.11	.07	.29	.77	.38	.82	.61	.47	.16	.58

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2000, BY WATER YEAR (WY)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	197	253	184	116	196	841	959	379	279	145	74.9	147																	
MAX	1465	1367	575	503	1104	1951	2672	991	1396	1071	343	1711																	
(WY)	1987	1986	1983	1973	1984	1985	1979	1978	1993	1993	1986	1986																	
MIN	18.8	23.1	16.3	20.4	20.8	226	181	53.8	18.1	13.6	13.7	14.9																	
(WY)	1977	1977	1977	1977	1977	1980	2000	1977	1988	1988	1988	1976																	

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1972 - 2000

	1999	2000	1972-2000
ANNUAL TOTAL	63924	62812	
ANNUAL MEAN	175	172	317
HIGHEST ANNUAL MEAN			728
LOWEST ANNUAL MEAN			82.7
HIGHEST DAILY MEAN	683	840	8000
LOWEST DAILY MEAN	23	26	7.0
ANNUAL SEVEN-DAY MINIMUM	24	29	8.1
INSTANTANEOUS PEAK FLOW		(a) 1240	(b) 8280
INSTANTANEOUS PEAK STAGE		(c) 8.43	(d) 13.30
INSTANTANEOUS LOW FLOW		22	6.8
ANNUAL RUNOFF (CFSM)	.33	.33	.60
ANNUAL RUNOFF (INCHES)	4.52	4.44	8.18
10 PERCENT EXCEEDS	445	466	825
50 PERCENT EXCEEDS	111	86	120
90 PERCENT EXCEEDS	28	33	30

- (a) Gage height, 7.49 ft
 (b) Gage height, 13.24 ft
 (c) Backwater from ice
 (d) From floodmarks
 (e) Estimated due to ice effect or missing record
 (f) Also occurred Oct. 3-5, 1989

STREAMS TRIBUTARY TO LAKE MICHIGAN

434907087573000 OTTER CREEK RAIN GAGE #2 NEAR PLYMOUTH, WI

LOCATION.--Lat 43°49'07", long 87°57'30", in NE 1/4 NW 1/4 sec.35, T.16 N., R.21 E., Sheboygan County, Hydrologic Unit 04030101, on Garton Road, 0.5 mi east of junction with CTH E, near Plymouth.

PERIOD OF RECORD.--January 1991 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established on Jan. 9, 1991. Rainfall estimated to be 0.00 for Dec. 14, 15, 19, 20, 29, Jan. 15, and Feb. 10, 15, 16, 17 because recorded precipitation interpreted as collector snowmelt.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 4.61 in., Aug. 6, 1998.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.31 in., July 8.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.07	.00	.00	.00	.00	.00	.00	.15	2.00	.00	.00	.00
2	.22	.00	.00	.04	.00	.00	.00	.00	.01	1.20	.00	2.01
3	.08	.00	.31	.00	.00	.00	.02	.00	.00	.00	.00	.39
4	.00	.00	.36	.00	.00	.00	.00	.00	.39	.00	.00	.00
5	.00	.00	.01	.00	.00	.00	.00	.00	.43	.00	.58	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.04	.01	.00	.00
8	.01	.00	.00	.00	.00	.11	.00	.04	.00	2.31	.04	.00
9	.01	.00	.35	.07	.00	.18	.01	.06	.00	.04	.00	.00
10	.00	.00	.00	.11	.00	.01	.00	.00	.00	.00	.00	.32
11	.00	.00	.00	.00	.00	.00	.05	.12	.39	.00	.00	1.23
12	.00	.00	.00	.00	.00	.00	.06	.68	.00	.00	.01	.01
13	.17	.00	.00	.00	.00	.09	.02	.00	.07	.03	.27	.01
14	.00	.00	.00	.00	.00	.17	.00	.00	.35	.06	.00	.60
15	.00	.00	.00	.00	.00	.05	.07	.00	.00	.00	.18	.00
16	.08	.00	.00	.00	.00	.00	.01	.41	.08	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.11	.91	.00	.00	1.35	.00
18	.00	.00	.00	.00	.00	.00	.00	.85	.00	.00	.00	.00
19	.00	.04	.00	.00	.00	.05	.28	.00	.00	.00	.00	.12
20	.00	.00	.00	.00	.00	.26	1.23	.00	.28	.01	.00	.05
21	.00	.00	.00	.00	.00	.03	.01	.00	.01	.01	.00	.00
22	.00	.00	.00	.00	.00	.01	.00	.10	.00	.00	1.43	.60
23	.00	.54	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09
24	.00	.00	.00	.00	.39	.25	.00	.00	.01	.00	.00	.01
25	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00
26	.00	.03	.00	.00	.60	.17	.00	.00	.01	.00	.03	.00
27	.00	.00	.00	.00	.00	.01	.00	.09	.00	.68	.00	.00
28	.00	.00	.00	.00	.00	.01	.21	.34	.20	.00	.00	.00
29	.00	.00	.00	.00	.01	.00	.14	.00	.01	.00	.00	.00
30	.01	.00	.00	.00	---	.00	.00	.12	.04	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.26	---	.47	.00	---
TOTAL	0.65	0.61	1.03	0.22	1.00	1.40	2.22	4.13	4.33	4.82	3.98	5.44

STREAMS TRIBUTARY TO LAKE MICHIGAN

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434802087573000 OTTER CREEK RAIN GAGE #1 NEAR PLYMOUTH, WI

LOCATION.--Lat 43°48'02", long 87°57'30", in SE 1/4 NW 1/4 sec.2, T.15 N., R.21 E., Sheboygan County, Hydrologic Unit 04030101, on Green Tree Road, 0.45 mi east of junction with CTH E, near Plymouth.

PERIOD OF RECORD.--January 1991 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established on Jan. 9, 1991. Rainfall estimated to be 0.00 for Dec. 14, 15, 19, 20, Jan. 15, and Feb. 15 because recorded precipitation interpreted as collector snowmelt.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 4.84 in., Aug. 6, 1998.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.54 in., July 8.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.07	.00	.00	.00	.00	.00	.00	.15	1.78	.00	.00	.00
2	.22	.00	.00	.04	.00	.00	.00	.00	.00	.89	.00	2.50
3	.06	.00	.27	.00	.00	.00	.01	.00	.00	.00	.00	.28
4	.00	.00	.36	.00	.00	.00	.00	.00	.35	.00	.00	.00
5	.00	.00	.02	.00	.00	.00	.00	.00	.55	.00	.55	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.10	.00	.00	.00
8	.01	.00	.00	.00	.00	.08	.02	.09	.00	2.54	.01	.00
9	.00	.00	.37	.06	.00	.24	.00	.07	.00	.02	.00	.00
10	.00	.00	.00	.10	.00	.00	.00	.00	.00	.00	.00	.41
11	.00	.00	.00	.00	.00	.00	.07	.16	.25	.00	.00	1.08
12	.01	.00	.00	.00	.00	.00	.06	.53	.00	.00	.01	.02
13	.19	.00	.00	.00	.00	.12	.01	.01	.06	.02	.22	.01
14	.01	.00	.00	.00	.00	.11	.00	.00	.33	.04	.00	.62
15	.00	.00	.00	.00	.00	.06	.06	.00	.01	.00	.15	.01
16	.07	.00	.00	.00	.00	.00	.02	.39	.07	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.12	.88	.00	.00	1.30	.00
18	.00	.00	.00	.00	.00	.00	.00	.79	.00	.01	.00	.00
19	.00	.03	.00	.00	.00	.08	.32	.00	.00	.00	.00	.09
20	.00	.00	.00	.00	.00	.30	1.33	.00	.25	.00	.00	.05
21	.00	.01	.00	.00	.00	.02	.01	.00	.01	.00	.00	.01
22	.00	.00	.00	.00	.00	.01	.00	.08	.00	.00	1.43	.63
23	.00	.53	.00	.00	.00	.00	.00	.00	.00	.00	.01	.08
24	.00	.00	.00	.00	.40	.24	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00
26	.00	.02	.00	.00	.65	.14	.00	.00	.01	.00	.02	.00
27	.00	.00	.00	.00	.00	.02	.00	.09	.00	.53	.00	.00
28	.00	.00	.00	.00	.00	.00	.16	.35	.28	.01	.00	.00
29	.00	.00	.00	.00	.01	.00	.11	.00	.00	.00	.00	.00
30	.01	.00	.00	.00	---	.00	.00	.09	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.48	---	.45	.00	---
TOTAL	0.65	0.59	1.02	0.20	1.06	1.42	2.30	4.16	4.06	4.51	3.71	5.79

STREAMS TRIBUTARY TO LAKE MICHIGAN

040857005 OTTER CREEK, AT WILLOW ROAD, NEAR PLYMOUTH, WI

LOCATION.--Lat 43°47'20", long 87°55'20", in NW ¼ NW ¼ sec.7, T.15 N., R.22 E., Sheboygan County, Hydrologic Unit 04030101, on left bank downstream from bridge on Willow Road, 900 ft upstream from the Sheboygan River, and 4.2 mi northeast of Plymouth.

DRAINAGE AREA.--9.5 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1990 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 760 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	2.7	3.1	e3.0	e2.2	13	4.4	5.6	48	2.9	3.7	2.6
2	3.5	2.4	3.3	e2.9	e2.2	10	4.4	5.2	53	3.4	3.3	72
3	3.5	2.4	3.8	e2.8	e2.2	8.1	3.9	4.6	21	6.0	3.0	21
4	3.3	2.4	4.4	e2.7	e2.1	7.0	3.9	4.2	13	4.9	2.8	12
5	3.0	2.5	5.6	e2.6	e2.1	6.4	3.9	3.9	32	4.1	3.0	7.4
6	2.7	2.8	4.5	e2.8	e2.1	5.9	3.7	3.7	16	3.7	3.9	5.2
7	2.7	2.8	4.1	e2.7	e2.1	5.9	4.0	3.7	9.9	3.3	3.2	4.2
8	2.6	3.0	3.8	e2.8	e2.2	6.4	4.7	3.7	7.8	48	3.0	3.2
9	2.5	2.9	4.2	e2.9	e2.2	7.9	5.7	3.8	5.9	28	2.8	2.9
10	2.6	2.8	5.0	e3.1	e2.1	6.6	5.4	3.7	4.8	15	2.6	4.1
11	2.5	2.8	4.2	e3.0	e2.1	5.4	5.1	3.6	4.7	8.4	2.4	11
12	2.5	2.9	4.0	e2.9	e2.1	4.8	5.2	6.7	4.6	5.8	2.3	16
13	2.8	2.9	3.7	e2.8	e2.1	5.0	4.8	6.3	4.6	4.7	2.5	9.8
14	2.7	2.9	3.7	e2.7	e2.1	5.2	4.6	4.9	5.3	4.0	2.6	16
15	2.7	2.8	e3.6	e2.8	e2.2	6.6	4.3	4.1	6.1	3.6	2.7	11
16	3.0	2.7	e3.5	e2.7	e2.1	5.8	4.5	5.1	5.3	3.2	2.4	6.8
17	2.9	2.7	e3.3	e2.7	e2.1	4.8	5.1	5.9	4.5	2.9	7.1	4.8
18	2.9	2.9	e3.1	e2.6	e2.1	4.4	5.1	41	4.0	2.7	5.3	3.9
19	2.9	3.0	e3.2	e2.6	e2.1	4.7	6.1	26	3.6	2.7	3.9	3.4
20	2.9	3.0	e3.1	e2.5	e2.1	6.5	36	15	3.9	2.6	3.4	3.5
21	2.9	3.2	e3.0	e2.5	e2.3	8.0	36	9.4	3.8	2.6	3.0	3.4
22	2.6	3.2	e2.9	e2.5	e2.8	7.0	18	7.7	3.4	2.6	25	4.7
23	2.6	4.1	e2.8	e2.4	e10	6.1	12	6.8	3.3	2.5	17	10
24	2.5	4.5	e2.7	e2.4	e30	6.6	8.3	5.4	3.2	2.4	7.3	6.8
25	2.5	3.9	e2.6	e2.4	41	6.9	6.6	4.3	3.2	2.4	5.0	5.4
26	2.4	3.7	e2.8	e2.3	59	5.7	5.6	3.9	3.1	2.4	4.1	4.7
27	2.5	3.5	e2.7	e2.3	48	6.1	5.1	3.8	2.9	4.6	3.6	3.9
28	2.5	3.4	e2.8	e2.3	22	5.8	4.7	5.1	3.1	3.3	3.2	3.6
29	2.5	3.3	e2.9	e2.3	15	5.2	5.8	5.0	3.2	3.2	3.0	3.3
30	2.6	3.3	e2.8	e2.2	---	4.8	5.5	4.8	3.0	3.0	2.9	3.1
31	2.8	---	e2.9	e2.2	---	4.4	---	6.8	---	3.7	2.8	---
TOTAL	85.5	91.4	108.1	81.4	272.7	197.0	232.4	223.7	290.2	192.6	142.8	269.7
MEAN	2.76	3.05	3.49	2.63	9.40	6.35	7.75	7.22	9.67	6.21	4.61	8.99
MAX	3.5	4.5	5.6	3.1	59	13	36	41	53	48	25	72
MIN	2.4	2.4	2.6	2.2	2.1	4.4	3.7	3.6	2.9	2.4	2.3	2.6
CFSM	.29	.32	.37	.28	.99	.67	.82	.76	1.02	.65	.48	.95
IN.	.33	.36	.42	.32	1.07	.77	.91	.88	1.14	.75	.56	1.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2000, BY WATER YEAR (WY)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	2.98	4.64	4.64	4.56	7.84	13.6	12.6	5.95	7.95	4.97
MAX	4.82	8.67	11.5	8.15	13.9	25.4	35.6	9.77	17.3	12.9
(WY)	1992	1993	1994	1995	1996	1997	1998	1999	2000	1995
MIN	2.11	2.47	2.34	2.63	2.09	6.35	6.24	3.60	2.39	2.18
(WY)	1995	1998	1998	2000	1995	2000	1997	1992	1994	1995

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1991 - 2000

	1999 CALENDAR YEAR	2000 WATER YEAR	1991 - 2000
ANNUAL TOTAL	2692.9	2187.5	
ANNUAL MEAN	7.38	5.98	6.32
HIGHEST ANNUAL MEAN			10.9
LOWEST ANNUAL MEAN			3.41
HIGHEST DAILY MEAN	105 Jul 21	72 Sep 2	186 Mar 31 1998
LOWEST DAILY MEAN	(a)2.0 Jan 11	(a)2.1 (b)Feb 4	1.3 Sep 15 1995
ANNUAL SEVEN-DAY MINIMUM	(a)2.0 Jan 9	(a)2.1 Feb 10	1.4 Sep 11 1995
INSTANTANEOUS PEAK FLOW		194 Sep 2	255 Mar 31 1998
INSTANTANEOUS PEAK STAGE		7.24 Sep 2	(c)8.26 Mar 17 1993
INSTANTANEOUS LOW FLOW		(d)1.5 Dec 20	1.3 (f)Oct 20 1996
ANNUAL RUNOFF (CFSM)	.78	.63	.67
ANNUAL RUNOFF (INCHES)	10.54	8.57	9.05
10 PERCENT EXCEEDS	15	9.8	12
50 PERCENT EXCEEDS	4.2	3.6	3.5
90 PERCENT EXCEEDS	2.5	2.4	2.1

- (a) Ice affected
 (b) Also occurred Feb. 5-7, 10-14, 16-20
 (c) Backwater from ice
 (d) Result of freezeup
 (e) Estimated due to ice effect or missing record
 (f) Also occurred Sept. 15-18, Oct. 2, 1955, Oct. 20-21, 1996, and Sept. 11, 22, 1998

WATER-QUALITY RECORDS

[illegible]

STREAMS TRIBUTARY TO LAKE MICHIGAN

040857005 OTTER CREEK, AT WILLOW ROAD, NEAR PLYMOUTH, WI--Continued

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	1.3	.76
2	---	---	---	---	---	---	---	---	---	---	1.2	.75
3	---	---	---	---	---	---	---	---	---	---	1.2	.73
4	---	---	---	---	---	---	---	---	---	---	2.5	.72
5	---	---	---	---	---	---	---	---	---	---	1.7	.72
6	---	---	---	---	---	---	---	---	---	---	1.1	.66
7	---	---	---	---	---	---	---	---	---	---	1.1	.67
8	---	---	---	---	---	---	---	---	---	---	1.1	.69
9	---	---	---	---	---	---	---	---	---	---	.96	.69
10	---	---	---	---	---	---	---	---	---	---	25	.71
11	---	---	---	---	---	---	---	---	---	---	3.5	.74
12	---	---	---	---	---	---	---	---	---	---	1.7	.79
13	---	---	---	---	---	---	---	---	---	---	1.3	.79
14	---	---	---	---	---	---	---	---	---	---	1.1	.75
15	---	---	---	---	---	---	---	---	---	---	1.0	.79
16	---	---	---	---	---	---	---	---	---	---	1.0	.80
17	---	---	---	---	---	---	---	---	---	---	1.0	.80
18	---	---	---	---	---	---	---	---	---	---	1.0	.79
19	---	---	---	---	---	---	---	---	---	---	1.0	.87
20	---	---	---	---	---	---	---	---	---	---	.95	.94
21	---	---	---	---	---	---	---	---	---	---	.91	.91
22	---	---	---	---	---	---	---	---	---	---	.89	.88
23	---	---	---	---	---	---	---	---	---	---	1.5	.87
24	---	---	---	---	---	---	---	---	---	---	1.5	.86
25	---	---	---	---	---	---	---	---	---	---	1.2	.86
26	---	---	---	---	---	---	---	---	---	---	1.1	.85
27	---	---	---	---	---	---	---	---	---	---	1.0	6.9
28	---	---	---	---	---	---	---	---	---	---	.98	11
29	---	---	---	---	---	---	---	---	---	---	.89	5.4
30	---	---	---	---	---	---	---	---	---	---	.82	2.1
31	---	---	---	---	---	---	---	---	---	---	.79	---
TOTAL	---	---	---	---	---	---	---	---	---	---	62.29	45.79

040857005 OTTER CREEK, AT WILLOW ROAD, NEAR PLYMOUTH, WI--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	13.0	9.5	11.0	14.0	8.0	10.0	3.0	.0	1.5	.0	.0	.0
2	12.0	9.0	10.5	8.0	4.5	7.0	6.0	3.0	4.5	.0	.0	.0
3	9.5	7.5	8.5	6.5	2.5	4.5	8.0	6.0	7.5	.0	.0	.0
4	12.0	6.5	9.0	7.5	2.0	4.5	8.0	7.0	7.5	.0	.0	.0
5	13.5	8.5	10.5	9.0	5.5	7.0	7.0	3.0	5.0	.0	.0	.0
6	12.5	8.0	10.0	7.5	4.0	5.5	3.5	2.0	2.5	.0	.0	.0
7	11.5	7.5	9.5	8.0	3.0	5.5	3.5	1.0	2.0	.0	.0	.0
8	14.0	9.5	11.5	11.0	5.0	8.0	4.5	1.5	3.0	.0	.0	.0
9	16.0	10.0	13.0	14.5	10.0	12.0	5.0	3.5	4.5	1.0	.0	.5
10	17.5	13.0	14.5	12.5	8.0	11.0	4.0	.5	2.0	1.5	.0	.5
11	15.0	10.0	12.0	8.5	6.0	7.5	2.5	.0	1.0	1.5	.0	.5
12	14.5	10.5	12.0	9.5	6.0	7.5	4.5	2.0	3.0	.0	.0	.0
13	13.5	8.5	11.5	10.5	5.5	8.0	3.0	.5	2.0	.0	.0	.0
14	11.5	7.0	9.0	9.0	5.0	7.5	3.0	1.5	2.0	.0	.0	.0
15	13.5	7.5	10.5	7.0	3.0	5.0	4.0	2.5	3.0	.0	.0	.0
16	13.5	10.5	12.0	6.0	2.5	4.0	2.5	.0	1.0	.0	.0	.0
17	10.5	7.5	9.0	6.5	3.0	4.5	.0	.0	.0	.0	.0	.0
18	10.0	6.0	8.0	7.5	3.0	5.0	.0	.0	.0	.0	.0	.0
19	11.5	7.5	9.5	9.5	5.5	7.5	.0	.0	.0	.0	.0	.0
20	10.5	6.5	8.0	7.5	6.5	7.0	.0	.0	.0	.0	.0	.0
21	12.0	6.0	9.0	7.5	5.0	6.5	.0	.0	.0	.0	.0	.0
22	10.5	6.0	8.0	10.0	6.5	8.0	.0	.0	.0	.0	.0	.0
23	7.5	4.5	6.0	9.5	6.5	8.0	.0	.0	.0	.0	.0	.0
24	8.0	3.0	5.5	7.5	4.5	6.0	.0	.0	.0	.0	.0	.0
25	10.0	4.5	7.0	5.5	3.0	4.0	.0	.0	.0	.0	.0	.0
26	10.0	5.5	7.5	5.0	2.0	4.0	.0	.0	.0	.0	.0	.0
27	9.5	4.5	7.0	5.5	3.0	4.0	.0	.0	.0	.0	.0	.0
28	11.0	7.5	8.5	4.0	1.5	2.5	.0	.0	.0	.0	.0	.0
29	12.5	7.0	9.5	3.0	.5	1.5	.0	.0	.0	.0	.0	.0
30	14.0	9.0	11.5	2.5	.0	1.0	.0	.0	.0	.0	.0	.0
31	13.5	9.0	11.0	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	17.5	3.0	9.7	14.5	.0	6.1	8.0	.0	1.7	1.5	.0	.0
FEBRUARY			MARCH			APRIL			MAY			
1	.0	.0	.0	4.0	2.0	3.5	11.0	7.0	9.0	---	---	---
2	.0	.0	.0	6.5	1.0	3.0	13.0	6.0	9.5	19.5	9.5	---
3	.0	.0	.0	7.0	.5	3.5	12.0	7.0	9.0	20.0	10.5	15.0
4	.0	.0	.0	9.0	2.0	5.0	7.5	4.0	5.5	23.0	13.5	18.0
5	.0	.0	.0	9.0	2.5	5.5	7.5	2.0	5.0	24.0	15.5	19.5
6	.0	.0	.0	10.0	2.5	6.5	13.5	4.5	8.5	24.0	15.5	19.5
7	.0	.0	.0	14.5	5.0	9.5	9.0	.5	4.0	25.5	17.5	21.0
8	.0	.0	.0	14.0	8.5	11.5	9.5	.0	4.0	22.5	17.0	19.5
9	.0	.0	.0	11.0	2.0	6.0	11.0	3.5	7.0	19.5	13.0	16.0
10	.0	.0	.0	4.5	1.0	2.5	9.5	3.0	6.0	19.0	11.0	15.0
11	.0	.0	.0	6.5	.0	3.0	6.5	3.5	5.5	14.5	12.5	13.5
12	.0	.0	.0	6.5	.0	3.5	12.0	2.5	6.5	15.5	13.0	14.5
13	.0	.0	.0	5.5	2.5	4.0	9.5	5.0	7.0	14.5	10.0	12.0
14	.0	.0	.0	8.0	1.5	5.0	17.0	6.0	11.0	15.0	8.0	11.5
15	.0	.0	.0	9.0	4.5	6.5	12.5	6.0	9.5	18.0	8.5	13.0
16	.0	.0	.0	8.0	1.0	4.5	6.0	5.0	5.5	13.5	12.0	12.5
17	.0	.0	.0	7.0	.0	3.0	5.5	4.5	5.0	15.0	11.5	12.5
18	.0	.0	.0	4.5	1.0	3.0	9.5	5.0	7.0	12.0	10.5	11.5
19	.0	.0	.0	3.5	2.5	3.0	8.0	7.0	7.5	16.0	9.5	12.5
20	.0	.0	.0	5.0	3.0	4.0	7.0	5.0	6.0	18.0	10.0	13.5
21	.5	.0	.0	7.0	4.5	6.0	12.5	4.5	8.0	17.5	10.0	13.5
22	.5	.0	.5	10.0	5.5	7.5	14.5	5.5	9.5	16.0	12.5	14.0
23	.0	.0	.0	14.0	6.0	9.5	16.5	8.5	12.0	21.0	13.0	16.5
24	1.0	.0	.5	9.0	7.0	8.0	16.5	7.5	11.5	20.5	14.0	17.0
25	1.5	.5	1.0	12.5	6.5	9.0	17.0	7.0	11.5	20.5	12.5	16.0
26	3.0	1.0	1.5	10.5	4.5	7.5	18.0	7.5	12.5	17.5	12.5	15.0
27	3.5	1.0	2.0	9.5	4.5	7.0	18.0	8.5	13.0	14.0	12.0	13.0
28	4.5	.5	2.0	8.5	4.0	6.0	16.5	8.5	12.5	14.5	11.0	12.5
29	6.5	1.5	4.0	8.0	4.0	5.5	16.5	8.5	12.0	17.5	10.5	14.0
30	---	---	---	12.0	2.5	7.0	18.0	8.0	13.0	16.0	12.0	14.0
31	---	---	---	13.5	4.0	8.5	---	---	---	15.5	14.5	15.0
MONTH	6.5	.0	.4	14.5	.0	5.7	18.0	.0	8.4	25.5	8.0	14.9

STREAMS TRIBUTARY TO LAKE MICHIGAN

040857005 OTTER CREEK, AT WILLOW ROAD, NEAR PLYMOUTH, WI--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	17.0	14.0	15.5	25.0	17.5	21.0	24.5	18.0	21.0	23.5	18.5	20.5
2	17.0	14.5	15.5	21.5	18.5	20.5	22.0	14.0	19.0	20.5	18.5	19.5
3	19.0	13.0	15.5	20.5	17.0	18.5	25.0	12.0	16.5	21.5	19.5	20.0
4	17.5	14.5	15.5	23.0	16.0	19.5	28.0	13.5	19.0	19.5	16.5	18.0
5	18.0	12.0	15.0	25.5	17.0	21.0	23.0	14.0	17.5	19.5	15.0	17.0
6	20.0	13.0	16.0	22.0	15.0	19.0	24.5	16.5	20.0	19.5	13.5	16.5
7	21.0	14.0	17.0	28.0	13.5	18.0	27.5	17.5	22.0	21.5	14.5	17.5
8	24.5	15.5	19.5	19.5	15.5	17.5	26.0	19.5	22.0	20.0	16.0	18.5
9	26.0	18.0	21.5	23.5	19.0	21.0	29.5	17.0	22.0	23.0	15.5	19.5
10	26.5	18.5	22.5	24.5	20.5	22.0	30.5	15.5	21.5	23.0	19.0	21.0
11	24.5	18.0	21.5	24.5	18.5	21.0	27.5	14.0	20.0	20.0	18.0	19.0
12	18.0	15.0	15.5	23.5	18.0	20.0	31.5	12.0	20.0	19.5	16.5	18.0
13	18.5	14.5	16.0	24.5	17.5	21.5	25.0	19.0	21.0	20.0	15.0	17.5
14	19.5	15.5	17.5	22.5	17.5	20.5	26.0	17.5	21.5	19.0	16.0	17.5
15	22.0	16.0	18.5	21.5	16.5	19.0	30.0	17.5	22.5	16.0	13.5	15.0
16	20.5	17.0	18.5	22.0	14.0	18.5	26.5	12.0	17.5	17.0	11.5	14.0
17	21.0	14.0	17.5	21.5	15.5	19.0	17.0	14.0	16.0	19.0	13.0	16.0
18	21.0	14.5	18.0	15.5	10.0	13.5	21.0	16.5	18.0	19.5	13.5	16.5
19	24.0	15.5	19.5	18.5	12.0	15.0	19.5	11.5	15.0	17.5	16.0	17.0
20	20.5	16.5	18.5	21.0	11.0	16.5	19.0	9.5	14.0	16.0	12.5	15.0
21	23.5	18.0	20.5	23.0	11.5	16.5	19.5	10.0	15.5	14.5	10.5	12.0
22	21.0	17.0	19.0	19.0	10.0	15.5	22.0	15.5	19.0	12.5	10.0	11.5
23	23.0	16.0	19.5	20.0	9.0	14.0	22.0	17.0	19.0	14.5	12.5	13.5
24	20.5	17.0	19.0	22.5	10.0	16.0	22.0	17.0	19.5	14.5	11.0	12.5
25	26.0	17.5	21.5	23.5	11.0	17.5	23.0	17.0	19.5	14.0	9.5	11.5
26	23.5	19.5	21.0	28.5	16.5	21.0	21.5	18.0	19.5	15.5	10.0	12.5
27	23.0	16.5	19.5	24.5	18.5	20.5	20.5	16.0	18.5	13.0	10.5	12.0
28	20.0	16.0	17.5	21.5	17.0	19.0	20.5	16.0	18.5	14.0	9.0	11.5
29	21.5	15.0	18.0	23.5	17.5	20.0	21.5	15.0	19.5	16.0	10.5	13.0
30	23.0	15.0	19.0	24.0	18.0	20.5	20.0	13.5	17.0	15.5	13.0	14.0
31	---	---	---	21.0	18.5	19.5	26.0	17.0	22.0	---	---	---
MONTH	26.5	12.0	18.3	28.5	9.0	18.8	31.5	9.5	19.1	23.5	9.0	15.9

SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED(TONS PER DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	.04	.06	.10	.06	.41	.09	.12	41	.11	.10	.07
2	.05	.03	.07	.09	.06	.29	.09	.12	11	.15	.09	33
3	.05	.03	.08	.09	.06	.21	.09	.12	2.2	.38	.09	2.5
4	.05	.03	.12	.09	.05	.17	.10	.12	.90	.27	.09	.68
5	.04	.03	.43	.08	.05	.14	.10	.10	11	.22	.10	.34
6	.04	.04	.18	.09	.05	.12	.11	.09	1.5	.23	.18	.21
7	.04	.04	.16	.09	.05	.10	.11	.08	.56	.22	.11	.09
8	.04	.04	.15	.09	.05	.18	.12	.07	.38	35	.11	.06
9	.03	.04	.17	.09	.05	.25	.14	.06	.29	3.6	.11	.05
10	.03	.04	.30	.09	.05	.09	.12	.05	.23	1.2	.10	.08
11	.03	.04	.16	.09	.05	.07	.11	.05	.23	.46	.10	1.9
12	.03	.04	.15	.09	.05	.06	.10	.42	.22	.22	.09	1.7
13	.04	.04	.14	.08	.05	.07	.09	.27	.22	.15	.10	.38
14	.04	.04	.14	.08	.05	.07	.09	.15	.31	.13	.10	2.7
15	.04	.04	.14	.08	.05	.09	.08	.11	.39	.12	.11	.73
16	.04	.04	.13	.08	.05	.08	.09	.11	.31	.10	.10	.19
17	.04	.04	.12	.08	.05	.06	.10	.30	.23	.09	.83	.10
18	.04	.04	.11	.08	.05	.06	.10	12	.20	.09	.29	.07
19	.04	.04	.12	.07	.05	.06	.17	2.5	.19	.09	.19	.06
20	.04	.04	.11	.07	.05	.13	13	.93	.20	.09	.15	.05
21	.04	.04	.11	.07	.06	.18	1.1	.52	.20	.08	.13	.05
22	.04	.04	.10	.07	.21	.16	.77	.38	.18	.08	20	.14
23	.04	.11	.10	.07	4.2	.11	.92	.31	.17	.08	3.2	.53
24	.03	.09	.09	.07	13	.12	.99	.23	.15	.08	.65	.27
25	.03	.06	.09	.07	4.7	.19	.40	.18	.15	.08	.29	.16
26	.03	.06	.10	.06	14	.12	.16	.16	.13	.08	.21	.11
27	.03	.06	.09	.06	3.3	.12	.08	.16	.12	.24	.16	.07
28	.03	.06	.09	.06	.84	.11	.07	.29	.12	.14	.13	.05
29	.03	.06	.10	.06	.53	.09	.10	.28	.12	.08	.11	.05
30	.04	.07	.09	.06	---	.08	.10	.19	.11	.07	.09	.04
31	.04	---	.10	.06	---	.08	---	.48	---	.09	.08	---
TOTAL	1.17	1.41	4.10	2.41	41.87	4.07	19.69	20.95	73.01	44.02	28.19	46.43

WTR YR 2000 TOTAL 287.32

040857005 OTTER CREEK, AT WILLOW ROAD, NEAR PLYMOUTH, WI--Continued

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.97	.55	1.0	1.2	.60	11	1.3	1.5	220	1.7	1.9	1.4
2	1.2	.49	1.1	1.1	.59	7.0	1.4	1.4	109	2.4	1.7	369
3	1.1	.48	1.2	1.1	.59	4.8	1.3	1.3	20	7.2	1.5	42
4	1.1	.50	1.7	1.0	.55	3.5	1.4	1.2	10	4.8	1.5	15
5	.99	.52	5.6	.98	.55	2.7	1.5	1.1	68	3.0	1.6	7.0
6	.88	.57	2.5	1.0	.54	2.1	1.5	1.2	13	2.6	3.1	4.2
7	.85	.58	2.2	1.0	.53	1.8	1.5	1.2	6.9	2.3	1.8	2.7
8	.83	.61	2.0	1.0	.55	2.4	1.7	1.3	5.1	209	1.8	1.9
9	.78	.59	3.5	1.0	.55	4.3	1.9	1.4	3.9	40	1.7	1.7
10	.80	.58	5.2	1.1	.52	3.1	1.6	1.4	3.1	15	1.6	2.5
11	.76	.57	3.1	1.1	.52	2.4	1.4	1.5	3.1	6.9	1.5	22
12	.79	.59	2.0	1.0	.52	2.0	1.4	4.8	3.0	3.9	1.4	26
13	.87	.60	1.9	.96	.52	2.0	1.2	3.7	3.0	2.9	1.5	8.8
14	.88	.59	1.8	.92	.52	1.9	1.1	2.6	3.7	2.3	1.5	33
15	.89	.58	1.8	.94	.55	2.3	1.1	2.0	4.7	2.0	1.6	14
16	.99	.56	1.7	.89	.52	1.9	1.1	2.3	3.7	1.7	1.4	5.4
17	.99	.56	1.6	.88	.52	1.5	1.3	4.1	2.7	1.5	15	3.1
18	.99	.59	1.5	.84	.52	1.3	1.3	95	2.2	1.3	5.0	2.3
19	1.0	.61	1.5	.83	.52	1.3	2.1	26	1.9	1.3	2.1	1.8
20	.94	.62	1.4	.79	.52	2.7	73	9.4	1.9	1.2	1.8	1.7
21	.88	.66	1.4	.78	.57	3.9	15	5.1	1.8	1.1	1.6	1.5
22	.74	.65	1.3	.77	2.9	3.0	9.6	4.0	1.5	1.1	156	3.4
23	.69	1.7	1.2	.73	33	2.4	12	3.7	1.5	1.1	42	12
24	.62	1.6	1.2	.72	115	2.6	13	3.1	1.6	1.1	9.0	4.6
25	.58	1.3	1.1	.71	102	2.6	6.0	2.6	1.7	1.1	4.9	3.0
26	.53	1.2	1.2	.68	193	1.5	2.7	2.4	1.7	1.1	3.6	2.2
27	.54	1.2	1.1	.67	87	1.6	1.4	2.4	1.6	4.3	2.9	1.5
28	.53	1.1	1.2	.66	25	1.5	1.2	3.5	1.8	2.2	2.3	1.2
29	.53	1.1	1.2	.65	15	1.4	1.5	3.4	1.9	1.6	2.0	1.1
30	.56	1.1	1.1	.62	---	1.3	1.4	3.0	1.7	1.5	1.7	1.0
31	.58	---	1.2	.61	---	1.2	---	4.6	---	1.9	1.5	---
TOTAL	25.38	22.95	57.5	27.23	584.27	85.0	163.9	202.2	505.7	331.1	278.5	597.0

WTR YR 2000 TOTAL 2880.73

STREAMS TRIBUTARY TO LAKE MICHIGAN

040857005 OTTER CREEK, AT WILLOW ROAD, NEAR PLYMOUTH, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML) (31625)	SAM- PLING METHOD, CODES (82398)
OCT										
06...	0842	--	2.7	8.3	.022	.060	<.3	<5	2000	10
12...	1242	--	2.6	8.2	.013	.057	2.5	<5	2400	10
19...	1016	--	2.9	8.2	.024	.065	1.8	<5	6000	10
26...	1002	--	2.2	8.3	<.013	.041	3.1	<5	20	10
NOV										
02...	0906	--	2.2	8.3	.008	.038	2.9	<5	730	10
16...	0856	--	2.7	8.4	<.013	.038	.8	<5	2300	10
23...	1135	--	3.0	--	.143	.093	--	12	--	50
23...	2335	--	3.2	--	.108	.086	--	11	--	50
24...	1135	--	3.2	--	.059	.060	--	6	--	50
DEC										
02...	0846	--	3.2	8.2	.084	.061	.3	8	810	10
05...	0250	--	5.9	--	.594	.365	--	84	--	50
05...	1450	--	5.5	--	.097	.116	--	9	--	50
06...	0250	--	4.8	--	.112	.101	--	15	--	50
FEB										
09...	0832	2.2	--	8.3	.120	.046	1.0	9	270	10
22...	1620	2.8	--	--	1.14	.456	--	62	--	50
22...	1650	2.8	--	--	1.01	.401	--	68	--	50
22...	1730	2.8	--	--	1.42	.541	--	62	--	50
22...	1810	2.8	--	--	1.54	.544	--	59	--	50
22...	1925	2.8	--	--	.557	.356	--	49	--	50
23...	0725	10	--	--	1.01	.423	--	58	--	50
23...	1410	10	--	7.9	.755	.842	17	324	--	50
23...	1545	10	--	7.9	.687	.609	13	164	3100	50
23...	1635	10	--	7.9	.732	.630	10	108	3000	50
24...	0045	30	--	7.7	.807	.968	18	340	3900	50
24...	0430	30	--	7.9	.674	.514	9.3	80	1500	50
24...	0640	30	--	--	.675	.491	--	68	--	50
24...	1022	30	--	7.9	.862	.582	9.7	85	4900	10
24...	1023	30	--	7.9	.857	.583	11	79	5600	50
24...	1235	30	--	--	.961	.873	--	239	--	50
24...	1350	30	--	--	.825	.917	--	316	--	50
24...	1630	30	--	--	.725	.811	--	202	--	50
24...	2310	30	--	--	.682	.649	--	76	--	50
25...	1110	--	37	--	.489	.409	--	36	--	50
25...	2310	--	39	--	.434	.408	--	29	--	50
26...	1110	--	39	--	.439	.422	--	22	--	50
26...	1515	--	63	--	.507	.735	--	147	--	50
26...	1615	--	80	--	.604	.960	--	215	--	50
26...	1710	--	93	--	.566	.945	--	230	--	50
27...	0050	--	71	--	.353	.417	--	32	--	50
27...	1935	--	35	8.0	.208	.265	--	19	830	50
28...	1502	--	20	8.1	.164	.188	2.6	12	370	10
28...	1503	--	20	8.0	.154	.205	2.9	14	440	50
MAR										
08...	2020	--	6.9	--	.017	.110	--	20	--	50
09...	1700	--	8.4	--	.072	.100	--	10	--	50
10...	0500	--	6.9	--	.122	.089	--	5	--	50
20...	1925	--	7.9	--	.112	.103	--	10	--	50
21...	0725	--	8.1	--	.115	.097	--	7	--	50
21...	1925	--	7.6	--	.057	.083	--	10	--	50
24...	1500	--	6.9	--	.024	.071	--	6	--	50
25...	0300	--	7.9	--	.055	.090	--	13	--	50
30...	0936	--	4.8	8.4	.028	.048	<6.0	6	70	10
APR										
06...	1502	--	3.8	8.8	.035	.074	<3.0	11	520	10
13...	1108	--	5.0	8.2	.030	.046	2.0	7	1100	10
19...	1305	--	5.7	8.4	.097	.096	2.3	18	4200	50
20...	0105	--	7.9	8.6	.069	.062	2.3	8	2800	50
20...	0405	--	15	8.2	.239	.765	10	260	45000	50
20...	0510	--	22	8.3	.203	.345	4.6	92	14000	50
20...	0555	--	33	8.1	.172	1.12	15	500	42000	50
20...	0700	--	43	8.1	.156	.884	10	492	14000	50
20...	1448	--	45	8.1	.138	.445	3.8	95	7700	10
20...	1449	--	45	8.3	.134	.460	4.6	102	9600	50
20...	1900	--	44	--	.044	.062	--	8	--	50
21...	0700	--	41	--	.035	.076	--	11	--	50
21...	1900	--	27	--	.049	.084	--	14	--	50
22...	1900	--	15	--	.060	.108	--	17	--	50
24...	0700	--	8.9	--	.120	.358	--	54	--	50
27...	1008	--	5.2	8.2	.019	.047	.7	<5	580	10

040857005 OTTER CREEK, AT WILLOW ROAD, NEAR PLYMOUTH, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEED (MG/L) (00530)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML) (31625)	SAM- PLING METHOD, CODES (82398)
MAY									
04...	1208	4.4	8.6	.024	.051	1.6	11	2100	10
11...	1104	3.5	8.5	.049	.076	1.3	<5	5200	10
12...	0905	6.9	--	.135	.158	--	27	--	50
12...	2105	7.1	--	.247	.137	--	30	--	50
13...	0905	6.6	--	.122	.104	--	14	--	50
16...	1410	5.7	--	.072	.085	--	8	--	50
17...	2335	11	--	.157	.350	--	83	--	50
18...	0055	18	8.1	.206	.709	8.1	190	310000	50
18...	0235	27	8.0	.165	.790	11	261	270000	50
18...	0405	37	7.8	.184	.764	7.7	254	170000	50
18...	0735	48	7.9	.205	.351	5.6	176	120000	50
18...	1112	52	8.0	.180	.460	3.9	78	26000	10
18...	1113	52	7.9	.159	.465	4.1	82	42000	50
18...	1114	52	--	--	--	--	--	38000	50
18...	1935	40	8.1	.124	.305	2.6	52	19000	50
19...	0505	30	8.1	.163	.205	1.9	35	5400	50
19...	1935	20	--	.102	.151	--	35	--	50
20...	0735	16	--	.094	.118	--	22	--	50
20...	1935	13	--	.063	.114	--	23	--	50
21...	1935	8.4	--	.063	.092	--	19	--	50
25...	1704	4.0	8.5	.071	.114	2.2	15	7700	50
31...	0510	5.7	--	.062	.129	--	40	8000	50
JUN									
01...	0330	13	--	.097	.419	--	112	120000	50
01...	0445	30	--	.316	1.31	--	412	260000	50
01...	0605	53	--	.227	1.20	--	536	240000	50
01...	0735	66	--	.275	.857	--	285	84000	50
01...	1304	47	7.7	.089	.439	3.8	50	35000	10
01...	1305	47	--	.077	.467	--	61	53000	50
01...	2040	61	--	.162	1.37	--	792	--	50
01...	2220	89	--	.218	1.09	--	624	--	50
01...	2325	104	--	.185	.811	--	340	--	50
02...	0315	82	--	.092	.462	--	73	--	50
02...	1405	43	--	.060	.248	--	48	--	50
03...	1405	20	--	.042	.155	--	36	--	50
04...	1405	13	--	.036	.141	--	22	--	50
05...	0205	19	--	.067	.177	--	47	--	50
05...	0420	39	--	.132	.947	--	620	--	50
05...	0550	50	--	.088	.636	--	272	--	50
05...	0925	47	--	.089	.405	--	81	--	50
05...	1325	31	--	.048	.311	--	75	--	50
06...	0125	20	--	.035	.169	--	43	--	50
15...	1250	6.1	--	.017	.121	--	18	3500	10
22...	1130	3.4	--	.037	.084	--	20	--	10
28...	1050	3.0	--	.034	.108	--	14	--	10
JUL									
03...	0330	6.4	--	.077	.212	--	37	--	50
03...	1530	5.9	--	.036	.138	--	15	--	50
06...	1305	3.8	--	.029	.131	--	24	14000	50
08...	0730	13	--	.069	.347	--	90	--	50
08...	0900	29	--	.259	1.09	--	542	--	50
08...	1240	40	--	.118	.749	--	268	--	50
08...	1320	66	--	.198	1.21	--	532	--	50
08...	1505	97	--	.211	1.27	--	600	--	50
08...	1530	114	--	.187	1.09	--	440	--	50
08...	2010	88	--	.188	.556	--	98	--	50
08...	2245	48	--	.183	.408	--	51	--	50
09...	0600	32	--	.122	.272	--	55	--	50
10...	1800	13	--	.038	.175	--	26	--	50
12...	2018	5.2	--	.023	.115	--	12	3400	50
20...	1309	2.6	--	<.013	.082	2.3	76	3700	10
27...	1042	4.2	--	.079	--	3.3	8	1200000	10

STREAMS TRIBUTARY TO LAKE MICHIGAN

040857005 OTTER CREEK, AT WILLOW ROAD, NEAR PLYMOUTH, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	SAM- PLING METHOD, CODES (82398)
AUG								
03...	1243	3.0	<.013	.093	--	11	1300	10
10...	1344	2.5	.019	.116	--	15	1900	10
16...	1251	2.4	.014	.108	1.7	60	1700	10
17...	0720	7.1	.080	.266	2.7	32	83000	50
17...	1115	13	.188	.600	6.2	73	440000	50
17...	2315	6.4	.131	.276	2.7	23	81000	50
22...	1650	9.8	.076	.330	2.8	40	25000	50
22...	1720	30	.091	.909	--	430	--	50
22...	1730	45	.124	1.48	11	860	--	50
22...	1900	71	.231	1.57	--	556	--	50
22...	1930	85	.221	1.53	8.8	418	E470000	50
22...	2005	102	.193	1.52	7.1	296	160000	50
22...	2250	78	.100	.926	4.5	174	E470000	50
22...	2350	57	.085	.792	--	110	--	50
23...	0320	24	.100	.567	--	69	--	50
23...	1045	16	.090	.322	2.2	65	--	10
31...	1358	2.7	.057	.100	1.1	<10	16000	10
SEP								
02...	0255	3.7	.047	.143	--	16	--	50
02...	0500	42	.469	1.60	--	488	--	50
02...	0510	57	.482	1.72	--	556	--	50
02...	0530	95	.360	1.79	--	652	--	50
02...	0625	133	.347	1.45	--	326	--	50
02...	0645	159	.360	1.31	--	298	--	50
02...	0700	184	.435	1.34	--	294	--	50
02...	1050	152	.135	.907	--	128	--	50
02...	1315	97	.091	.702	--	60	--	50
02...	1755	36	.114	.489	--	47	--	50
03...	1525	21	.074	.352	--	47	--	50
04...	1525	12	.044	.189	--	15	--	50
06...	0325	5.9	.039	.164	--	19	--	50
07...	1302	4.4	.018	.112	.8	7	1300	10
11...	1015	8.7	.054	.293	--	48	--	50
11...	1215	16	.096	.441	--	98	--	50
12...	0015	16	.127	.416	--	54	--	50
12...	1215	16	.037	.284	--	35	--	50
13...	0015	12	<.013	.193	--	24	--	50
13...	1215	9.8	<.013	.161	--	10	--	50
14...	0015	7.6	<.013	.139	.9	13	4800	50
14...	0500	14	.041	.392	2.6	85	77000	50
14...	0645	21	.056	.476	3.3	113	71000	50
14...	1254	19	.042	.414	1.8	55	25000	10
14...	1255	19	.025	.393	1.9	56	38000	50
21...	1428	3.4	.014	.082	.8	5	6300	10
22...	1645	5.2	.029	.134	--	11	--	50
23...	0240	11	.078	.261	--	31	--	50
23...	1440	9.5	.105	.199	--	13	--	50
24...	0240	7.9	.023	.133	--	16	--	50
28...	0912	3.7	.015	.061	.7	<5	3600	10

040857005 OTTER CREEK, AT WILLOW ROAD, NEAR PLYMOUTH, WI--Continued

PRECIPITATION QUANTITY

PERIOD OF RECORD.--October 1990 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established on Oct. 1, 1990. Rainfall estimated to be 0.00 for Dec. 14, 15, 19, 20, Jan. 30, and Feb. 10, 12, 14, 15 because recorded precipitation interpreted as collector snowmelt. Rainfall data missing for the period Aug. 13-18.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 5.41 in., Aug. 6, 1998.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.91 in., Sept. 2.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.00	.00	.00	.00	.00	.00	.14	1.74	.00	.00	.00
2	.27	.00	.00	.03	.00	.00	.00	.00	.00	.81	.00	2.91
3	.05	.00	.27	.00	.00	.00	.00	.00	.00	.00	.00	.27
4	.00	.00	.32	.00	.00	.00	.00	.00	.33	.00	.00	.00
5	.00	.00	.01	.00	.00	.00	.00	.00	.48	.00	.47	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00
7	.00	.00	.00	.00	.00	.00	.02	.00	.10	.01	.00	.00
8	.01	.00	.00	.00	.00	.13	.01	.04	.00	2.74	.01	.00
9	.00	.00	.40	.03	.00	.19	.00	.07	.00	.02	.00	.00
10	.00	.00	.00	.04	.00	.00	.00	.00	.00	.00	.00	.21
11	.00	.00	.00	.00	.00	.00	.10	.02	.11	.00	.00	.97
12	.00	.00	.00	.00	.00	.00	.00	.46	.00	.00	.01	.00
13	.17	.00	.00	.00	.00	.11	.01	.00	.08	.01	---	.03
14	.00	.00	.00	.00	.00	.10	.00	.00	.40	.02	---	.61
15	.00	.00	.00	.00	.00	.06	.04	.00	.00	.00	---	.00
16	.03	.00	.00	.00	.00	.00	.01	.38	.09	.00	---	.00
17	.00	.00	.00	.00	.00	.00	.08	.87	.00	.00	---	.00
18	.00	.00	.00	.00	.00	.00	.00	.79	.00	.01	---	.00
19	.00	.01	.00	.00	.00	.04	.32	.00	.00	.00	.00	.07
20	.00	.00	.00	.00	.00	.27	1.05	.00	.20	.00	.00	.05
21	.00	.00	.00	.00	.00	.00	.01	.01	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.10	.00	.00	2.49	.59
23	.00	.40	.00	.00	.00	.00	.00	.00	.00	.00	.00	.08
24	.00	.00	.00	.00	.38	.27	.00	.00	.01	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.01	.00	.00	.69	.11	.00	.00	.05	.00	.03	.00
27	.00	.00	.00	.00	.00	.02	.00	.11	.00	1.43	.00	.00
28	.00	.00	.00	.00	.00	.00	.17	.30	.30	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.16	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.12	.01	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.33	---	.52	.00	---
TOTAL	0.59	0.42	1.00	0.10	1.07	1.30	1.98	3.74	3.90	5.57	3.06	5.79

04086000 SHEBOYGAN RIVER AT SHEBOYGAN, WI

LOCATION.--Lat 43°44'30", long 87°45'14", in SE 1/4 NW 1/4 sec.28, T.15 N., R.23 E., Sheboygan County, Hydrologic Unit 04030101, on left bank 0.5 mi upstream from bridge on State Highway 28, near west city limits of Sheboygan, and 3.9 mi upstream from mouth.

DRAINAGE AREA.--418 mi².

PERIOD OF RECORD.--June 1916 to September 1924 (published as "near Sheboygan"), October 1950 to current year. Monthly discharge for some periods published in WSP 1307, 1727.

REVISED RECORDS.--WSP 1307: 1917(M), 1919(M), 1921(M), 1923(M). WSP 1727: 1951. WDR WI-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 580.49 ft, above sea level. June 1916 to June 1924, nonrecording gage 0.4 mi downstream at different datum. November 1950 to June 1951, nonrecording gage near present site at different datum. July 1951 to September 1998, water-stage recorder at site 0.3 mi upstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Diurnal fluctuation caused by numerous powerplants above station. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	89	86	e110	e140	849	235	285	574	102	106	127
2	116	84	104	e110	e140	778	225	269	1060	106	101	704
3	116	88	99	e100	e140	701	216	245	827	152	95	897
4	111	82	116	e110	e140	593	209	213	602	181	87	606
5	104	82	144	e110	e140	513	195	190	734	152	91	440
6	100	81	147	e110	e140	471	188	169	733	130	112	330
7	100	81	132	e110	e140	435	194	155	650	114	109	296
8	100	81	120	e100	e140	403	192	146	579	281	105	279
9	100	83	123	e110	e130	395	204	140	520	831	102	262
10	101	83	139	e120	e140	359	219	133	439	701	96	248
11	94	91	138	e130	e140	299	201	125	388	502	88	320
12	90	85	134	e120	e130	231	193	172	374	370	82	576
13	100	81	123	e110	e130	251	179	182	363	309	87	462
14	102	80	120	e100	e140	259	164	183	359	299	89	538
15	103	84	123	e120	e140	265	169	157	371	265	87	636
16	106	83	123	e120	e150	264	163	151	349	229	84	458
17	107	81	e90	e110	e150	248	168	173	322	206	132	360
18	109	80	e130	e110	e160	228	178	730	289	177	152	302
19	102	81	e110	e100	e160	228	190	1020	265	161	124	265
20	98	80	e100	e100	e160	249	550	851	252	140	101	246
21	97	81	e94	e110	e160	292	1100	693	245	121	110	234
22	95	84	e90	e110	e180	300	839	534	197	101	153	247
23	94	92	e90	e110	e230	286	674	555	141	82	643	349
24	92	106	e94	e120	e460	277	560	546	124	84	351	367
25	89	113	e100	e120	e800	302	495	437	120	83	278	307
26	88	106	e100	e120	e1100	303	443	288	121	81	209	267
27	90	100	e100	e130	e1600	305	394	219	90	103	178	243
28	94	99	e110	e130	1130	301	350	246	101	100	173	250
29	88	96	e110	e130	980	281	335	257	111	87	169	248
30	91	89	e120	e130	---	265	298	244	109	85	141	216
31	91	---	e120	e130	---	247	---	237	---	95	134	---
TOTAL	3083	2626	3529	3550	9490	11178	9720	9945	11409	6430	4569	11080
MEAN	99.5	87.5	114	115	327	361	324	321	380	207	147	369
MAX	116	113	147	130	1600	849	1100	1020	1060	831	643	897
MIN	88	80	86	100	130	228	163	125	90	81	82	127
CF5M	.24	.21	.27	.27	.78	.86	.78	.77	.91	.50	.35	.88
IN.	.27	.23	.31	.32	.84	.99	.87	.89	1.02	.57	.41	.99

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2000, BY WATER YEAR (WY)

MEAN	153	202	163	116	185	678	724	304	226	119	116	140
MAX	741	1372	505	370	887	2052	1994	1027	926	607	1433	1143
(WY)	1987	1986	1983	1960	1984	1918	1993	1960	1996	1993	1924	1986
MIN	29.6	31.7	19.7	17.1	20.9	110	141	41.5	25.2	19.8	11.1	20.4
(WY)	1958	1951	1959	1959	1958	1968	1970	1958	1958	1958	1958	1958

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1916 - 2000

ANNUAL TOTAL	113677		86609			
ANNUAL MEAN	311		237		261	
HIGHEST ANNUAL MEAN					526	1986
LOWEST ANNUAL MEAN					47.1	1958
HIGHEST DAILY MEAN	1880	Jun 13	1600	Feb 27	7000	Aug 6 1924
LOWEST DAILY MEAN	49	Sep 18,19,25	80	Nov 14,18,20	1.0	Aug 27 1922
ANNUAL SEVEN-DAY MINIMUM	51	Sep 16	81	Nov 14	8.9	Aug 14 1958
INSTANTANEOUS PEAK FLOW			(a)1920	Feb 27	7820	Aug 6 1998
INSTANTANEOUS PEAK STAGE			(b)6.70	Feb 26	12.02	Aug 6 1998
INSTANTANEOUS LOW FLOW			65	Nov 2	1.0	Aug 27 1922
ANNUAL RUNOFF (CFSM)	.75		.57		.62	
ANNUAL RUNOFF (INCHES)	10.12		7.71		8.47	
10 PERCENT EXCEEDS	671		540		610	
50 PERCENT EXCEEDS	191		140		115	
90 PERCENT EXCEEDS	78		89		38	

(a) Gage height, 5.78 ft

(b) Backwater from ice

(e) Estimated due to ice effect or missing record

04086500 CEDAR CREEK NEAR CEDARBURG, WI

LOCATION.--Lat 43°19'23", long 87°58'43", in SE ¼ SW ¼ sec.14, T.10 N., R.21 E., Ozaukee County, Hydrologic Unit 04040003, on left bank 40 ft upstream from bridge on State Highway 60, 1.9 mi north of Cedarburg, and 6.6 mi upstream from mouth.

DRAINAGE AREA.--120 mi².

PERIOD OF RECORD.--August 1930 to September 1970, July 1973 to September 1981, August 1983 to September 1987, October 1990 to current year.

REVISED RECORDS.--WSP 1307: 1932-34(M), 1937(M), 1939(M), 1945(M), 1948-49(M). WDR WI-77-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 795.33 ft above sea level (levels by Corps of Engineers). Nonrecording gage and crest-stage gage August 1930 to September 1970 at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	38	36	e24	e22	155	57	80	501	32	38	24
2	52	38	32	e23	e21	129	54	77	835	29	36	31
3	59	37	34	e22	e22	106	52	68	965	51	48	61
4	60	37	42	e22	e21	94	49	61	812	69	35	57
5	57	37	65	e22	e22	87	46	55	628	49	30	46
6	51	37	78	e22	e22	83	45	51	486	39	103	37
7	48	37	61	e21	e22	82	44	48	375	33	92	34
8	46	37	51	e21	e23	86	55	46	293	34	59	31
9	44	37	48	e22	e23	106	79	56	210	60	43	29
10	40	38	79	e22	e24	123	107	76	133	51	34	28
11	39	67	70	e23	e23	95	100	69	96	51	28	31
12	38	e84	56	e22	e23	78	94	122	86	45	25	71
13	38	e70	49	e22	e24	70	88	160	86	39	24	77
14	36	e50	45	e22	e24	67	84	106	88	36	26	75
15	37	e40	45	e21	e25	65	76	78	99	32	27	101
16	39	e35	48	e21	e26	63	68	69	87	28	25	75
17	40	e32	48	e21	e27	56	73	78	77	25	29	58
18	37	29	e46	e21	e28	50	68	495	70	23	57	45
19	35	29	e40	e21	e29	48	67	814	60	21	46	39
20	33	30	e36	e21	e30	66	219	968	55	21	36	36
21	36	29	e33	e21	e56	96	370	779	54	21	30	40
22	39	29	e27	e21	e98	95	360	557	46	20	27	46
23	39	31	e25	e21	e130	84	333	409	40	19	27	181
24	37	52	e24	e21	e300	78	309	314	39	17	27	212
25	38	50	e23	e22	e350	94	252	224	39	17	25	129
26	38	43	e22	e21	e320	85	179	137	36	16	25	88
27	38	40	e22	e22	294	82	142	106	36	18	30	70
28	37	38	e22	e22	248	78	117	122	33	18	28	61
29	38	36	e23	e21	186	73	100	153	38	37	26	55
30	37	35	e24	e21	---	67	89	131	37	32	25	49
31	38	---	e24	e22	---	61	---	166	---	30	25	---
TOTAL	1299	1222	1278	671	2463	2602	3776	6675	6440	1013	1136	1917
MEAN	41.9	40.7	41.2	21.6	84.9	83.9	126	215	215	32.7	36.6	63.9
MAX	60	84	79	24	350	155	370	968	965	69	103	212
MIN	33	29	22	21	21	48	44	46	33	16	24	24
CFSM	.35	.34	.34	.18	.71	.70	1.05	1.79	1.79	.27	.31	.53
IN.	.40	.38	.40	.21	.76	.81	1.17	2.07	2.00	.31	.35	.59

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2000, BY WATER YEAR (WY)

	MEAN	44.3	57.9	50.2	50.5	67.5	192	166	86.9	76.7	44.7	25.6	45.8
MAX	306	376	268	273	253	575	586	291	454	298	106	485	
(WY)	1955	1986	1992	1975	1984	1976	1993	1933	1996	1952	1960	1986	
MIN	5.65	6.66	4.92	3.74	5.32	19.9	38.9	14.0	3.34	1.40	1.45	2.48	
(WY)	1935	1938	1964	1940	1959	1940	1958	1958	1934	1936	1934	1932	

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1930 - 2000
ANNUAL TOTAL	42647	30492	
ANNUAL MEAN	117	83.3	75.2
HIGHEST ANNUAL MEAN			168
LOWEST ANNUAL MEAN			7.16
HIGHEST DAILY MEAN	1070	Jul 23	3320
LOWEST DAILY MEAN	17	Sep 20	.20
ANNUAL SEVEN-DAY MINIMUM	18	Sep 19	.24
INSTANTANEOUS PEAK FLOW		997	3600
INSTANTANEOUS PEAK STAGE		9.06	(a)12.25
INSTANTANEOUS LOW FLOW		16	.20
ANNUAL RUNOFF (CFSM)	.97	.69	.63
ANNUAL RUNOFF (INCHES)	13.22	9.45	8.52
10 PERCENT EXCEEDS	282	145	170
50 PERCENT EXCEEDS	62	44	33
90 PERCENT EXCEEDS	26	22	7.4

(a) From graph based on gage readings, backwater from ice

(e) Estimated due to ice effect or missing record

STREAMS TRIBUTARY TO LAKE MICHIGAN

04086600 MILWAUKEE RIVER NEAR CEDARBURG, WI

LOCATION.--Lat 43°16'49", long 87°56'34", in NW ¼ NW ¼ sec.6, T.9 N., R.22 E., Ozaukee County, Hydrologic Unit 04040003, on right bank 60 ft downstream from Pioneer Road bridge, 2.6 mi southeast of Cedarburg, 1.0 mi west of I-43, and 26.25 mi upstream from mouth.

DRAINAGE AREA.--607 mi².

PERIOD OF RECORD.--November 1981 to current year.

GAGE.--Water-stage recorder. Datum of gage is 653.558 ft above sea level (Southeastern Wisconsin Regional Planning Commission bench mark).

REMARKS.--Records fair except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	273	e144	168	e140	e170	1010	302	343	1260	149	200	166
2	250	e145	174	e150	e170	861	284	340	2110	137	224	271
3	262	e148	176	e150	e170	724	260	339	2150	211	190	505
4	260	e141	207	e150	e170	613	243	331	1750	334	153	416
5	243	136	286	e150	e180	537	224	314	1450	276	177	405
6	218	135	353	e160	e180	482	213	295	1260	224	281	334
7	204	131	322	e160	e180	444	221	280	1030	184	398	313
8	186	130	279	e160	e180	450	243	266	843	228	275	286
9	170	132	265	e160	e180	496	277	298	669	400	209	265
10	165	145	290	e170	e190	500	336	317	500	512	163	239
11	156	181	312	e180	e190	448	360	312	386	500	145	258
12	148	288	280	e180	e190	385	362	387	318	432	136	474
13	150	222	251	e180	e200	342	353	485	292	370	134	493
14	148	194	231	e190	e200	322	336	415	321	345	129	492
15	157	180	219	e180	e200	312	304	335	357	287	131	677
16	e170	167	230	e190	e210	302	272	293	311	244	126	599
17	e170	159	e190	e190	e200	299	260	318	285	208	196	492
18	e170	153	e130	e190	e210	289	252	1260	275	179	246	409
19	e165	151	e130	e190	e220	279	263	2150	251	156	258	344
20	e161	147	e150	e190	e230	312	604	2300	230	143	196	330
21	e169	148	e150	e190	e250	382	1120	1940	228	139	168	295
22	e169	149	e160	e180	e270	411	1130	1510	217	138	153	341
23	e159	162	e180	e170	e300	418	1110	1220	194	118	154	654
24	e152	201	e160	e160	e800	427	1080	943	176	112	173	750
25	e140	247	e140	e160	e1000	444	934	698	169	110	207	605
26	e134	238	e140	e160	e1200	422	755	498	168	108	223	523
27	e125	229	e140	e160	e1300	405	605	393	159	121	187	420
28	e131	213	e140	e160	1500	386	492	396	155	106	192	349
29	e143	203	e140	e160	1210	358	416	440	162	177	192	326
30	e143	177	e140	e160	---	336	375	419	173	241	177	283
31	e138	---	e140	e170	---	324	---	448	---	185	161	---
TOTAL	5429	5196	6273	5240	11650	13720	13986	20283	17849	7074	5954	12314
MEAN	175	173	202	169	402	443	466	654	595	228	192	410
MAX	273	288	353	190	1500	1010	1130	2300	2150	512	398	750
MIN	125	130	130	140	170	279	213	266	155	106	126	166
CFSM	.29	.29	.33	.28	.66	.73	.77	1.08	.98	.38	.32	.68
IN.	.33	.32	.38	.32	.71	.84	.86	1.24	1.09	.43	.36	.75

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2000, BY WATER YEAR (WY)

	MEAN	303	461	372	261	447	904	949	497	499	278	217	297
MAX	1157	1565	757	406	997	1793	2501	902	1887	767	349	1593	
(WY)	1987	1986	1983	1985	1984	1986	1993	1999	1996	1993	1987	1986	
MIN	99.8	158	120	120	115	417	453	219	89.5	69.7	69.5	108	
(WY)	1998	1998	1990	1994	1995	1995	1994	1988	1988	1988	1988	1994	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1982 - 2000

ANNUAL TOTAL	180829	124968	
ANNUAL MEAN	495	341	457
HIGHEST ANNUAL MEAN			720
LOWEST ANNUAL MEAN			247
HIGHEST DAILY MEAN	2970	2300	4870
LOWEST DAILY MEAN	71	106	42
ANNUAL SEVEN-DAY MINIMUM	88	116	49
INSTANTANEOUS PEAK FLOW		(a) 2360	5500
INSTANTANEOUS PEAK STAGE		(b) 10.55	12.88
INSTANTANEOUS LOW FLOW			42
ANNUAL RUNOFF (CFSM)	.82	.56	.75
ANNUAL RUNOFF (INCHES)	11.08	7.66	10.22
10 PERCENT EXCEEDS	1080	607	990
50 PERCENT EXCEEDS	312	230	280
90 PERCENT EXCEEDS	130	143	120

(a) Gage height, 9.21 ft

(b) Ice affected

(c) Estimated due to ice effect or missing record

04087000 MILWAUKEE RIVER AT MILWAUKEE, WI
(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

LOCATION.--Lat 43°06'00", long 87°54'32", in NE 1/4 NE 1/4, sec.5, T.7 N., R.22 E., Milwaukee County, Hydrologic Unit 04040003, on left bank near northeast limits of Milwaukee in Estabrook Park, 2,000 ft downstream from Port Washington Road bridge and 6.6 mi upstream from mouth.

DRAINAGE AREA.--696 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1914 to current year. Published as "near Milwaukee" prior to 1936.

REVISED RECORDS.--WSP 564: 1918(M). WSP 924: 1940. WSP 1207: 1936(M). WSP 1337: 1915-17(M), 1918, 1919-21(M), 1922, 1923(M), 1924, 1925-33(M). WDR WI-79-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 607.23 ft above sea level (levels by U. S. Army Corps of Engineers). Prior to Apr. 6, 1929, nonrecording gage near present site at different datum. Apr. 6, 1929, to Jan. 8, 1934, nonrecording gage at bridge 0.5 mi upstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Occasional regulation caused by recreation dam approximately 1,200 ft upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	264	373	182	e150	e180	1090	337	439	1760	207	193	154
2	232	160	185	e160	e180	909	318	411	2990	615	244	389
3	299	158	196	e160	e180	752	302	404	2530	623	218	332
4	298	154	209	e160	e180	624	284	400	2130	348	189	396
5	273	152	337	e160	e190	540	269	388	1890	350	810	331
6	259	150	321	e170	e190	486	253	363	1490	293	333	290
7	237	146	340	e170	e190	450	318	333	1230	244	378	269
8	222	144	304	e170	e190	446	355	355	906	546	327	388
9	216	143	293	e170	e190	535	349	470	788	372	249	228
10	211	159	314	e180	e200	518	399	386	612	784	199	655
11	205	190	322	e190	e200	491	445	318	525	547	167	932
12	142	233	299	e200	e200	432	430	507	735	467	152	1030
13	169	245	271	e190	e210	384	420	505	449	400	153	563
14	177	215	259	e200	e210	356	401	492	412	377	143	721
15	177	197	258	e190	e210	356	382	412	426	321	134	600
16	214	193	231	e180	e220	342	349	358	432	276	131	581
17	192	183	e200	e170	e210	327	325	619	331	237	408	498
18	192	180	e130	e170	e220	316	313	3910	360	209	221	433
19	185	174	e140	e160	e230	340	424	3320	338	189	254	376
20	180	173	e160	e170	e240	422	858	2780	337	168	215	374
21	186	169	e160	e160	e260	416	1580	2310	299	161	178	319
22	185	167	e170	e160	e300	442	1440	1840	274	152	165	500
23	177	205	e190	e160	e350	443	1390	1450	261	147	161	809
24	167	196	e170	e170	e870	472	1280	1100	240	132	152	771
25	156	234	e150	e170	e1100	477	1120	823	227	127	165	647
26	155	243	e150	e170	e1300	467	921	634	220	124	276	512
27	151	234	e150	e170	e1400	442	719	567	213	368	207	431
28	153	226	e150	e170	1550	427	593	602	265	187	179	373
29	154	216	e150	e170	1420	400	519	526	246	144	179	310
30	151	205	e150	e170	---	374	453	566	219	229	178	282
31	157	---	e150	e180	---	354	---	799	---	238	164	---
TOTAL	6136	5817	6691	5320	12570	14830	17546	28387	23135	9582	7122	14494
MEAN	198	194	216	172	433	478	585	916	771	309	230	483
MAX	299	373	340	200	1550	1090	1580	3910	2990	784	810	1030
MIN	142	143	130	150	180	316	253	318	213	124	131	154
CFSM	.28	.28	.31	.25	.62	.69	.84	1.32	1.11	.44	.33	.69
IN.	.33	.31	.36	.28	.67	.79	.94	1.52	1.24	.51	.38	.77

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2000, BY WATER YEAR (WY)

	MEAN	278	350	300	255	395	1042	973	511	407	230	210	267
MAX	1316	1956	981	864	2200	3545	3024	1720	2007	1200	2936	2304	
(WY)	1987	1986	1929	1916	1938	1929	1993	1973	1996	1952	1924	1938	
MIN	52.8	62.4	40.7	45.8	47.4	181	237	86.4	56.3	25.0	19.4	27.4	
(WY)	1947	1950	1964	1959	1959	1940	1958	1958	1934	1936	1934	1932	

STREAMS TREIBUTARY TO LAKE MICHIGAN

04087000 MILWAUKEE RIVER AT MILWAUKEE, WI--Continued
(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1914 - 2000	
ANNUAL TOTAL	200676		151630			
ANNUAL MEAN	550		414		434	
HIGHEST ANNUAL MEAN					874 1986	
LOWEST ANNUAL MEAN					112 1958	
HIGHEST DAILY MEAN	3670	Apr 23	3910	May 18	14800	Mar 20 1918
LOWEST DAILY MEAN	102	Sep 26	124	Jul 26	(a) .00	Sep 8 1943
ANNUAL SEVEN-DAY MINIMUM	118	Sep 20	144	Jul 20	8.3	Aug 3 1936
INSTANTANEOUS PEAK FLOW			4580	May 18	16500	Jun 21 1997
INSTANTANEOUS PEAK STAGE			5.70	May 18	10.00	Jun 21 1997
INSTANTANEOUS LOW FLOW					(a) .00	Sep 8 1943
ANNUAL RUNOFF (CFSM)	.79		.60		.62	
ANNUAL RUNOFF (INCHES)	10.73		8.10		8.47	
10 PERCENT EXCEEDS	1230		791		985	
50 PERCENT EXCEEDS	306		267		230	
90 PERCENT EXCEEDS	144		157		72	

(a) Result of regulation

(e) Estimated due to ice effect or missing record

04087000 MILWAUKEE RIVER AT MILWAUKEE, WI--Continued
(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-65, 1967-69, 1971, 1973 to current year. National Stream-Quality Accounting Network data collection began in January 1973 and was discontinued September 1994. National Water-Quality Assessment Program sampling began in April 1993.

REMARKS.--Chemical analyses of some constituents for Wisconsin District program samples were done by the Wisconsin State Laboratory of Hygiene and National Water-Quality Laboratory.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

		DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	
OCT													
13...	0900	--	169	745	9.2	8.3	808	14.6	68.4	38.8	3.9	40.9	
NOV													
10...	1100	--	152	734	9.9	8.3	865	11.4	63.2	42.9	3.7	51.4	
DEC													
14...	0915	--	263	745	13.3	8.6	755	1.6	73.3	38.3	3.4	34.6	
JAN													
11...	1340	190	--	741	13.4	8.1	990	.4	70.7	39.6	3.4	71.2	
FEB													
08...	1215	190	--	752	13.8	8.1	1110	.2	79.0	43.7	4.1	76.9	
MAR													
14...	0830	--	348	753	13.5	8.3	742	3.5	70.3	36.0	3.3	37.1	
APR													
11...	0930	--	442	745	11.5	8.4	880	6.1	65.1	35.7	3.2	81.5	
MAY													
08...	1100	--	321	732	7.2	8.8	785	22.0	67.3	36.6	2.8	41.4	
JUN													
12...	1045	--	430	745	7.7	8.1	715	21.3	64.0	31.4	2.5	32.5	
JUL													
11...	1000	--	268	742	7.0	7.7	710	22.7	56.0	29.6	3.1	34.6	
31...	0915	--	248	741	7.3	8.2	819	22.6	56.0	33.6	3.8	50.8	
SEP													
04...	1015	--	394	747	8.6	8.5	710	22.6	50.3	31.2	4.0	41.8	
DATE		ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
OCT													
13...	274	318	8	79.0	.2	5.4	40.8	.43	.90	.023	.594	<.010	
NOV													
10...	279	338	1	92.4	.2	.6	38.5	.54	.82	.066	.840	<.010	
DEC													
14...	276	322	7	68.6	.1	8.4	38.6	.59	.70	<.020	1.66	.013	
JAN													
11...	270	329	--	125	.2	7.8	37.2	.52	.51	.065	2.60	.022	
FEB													
08...	303	370	--	133	.2	11.1	39.8	.45	.57	.169	3.05	.037	
MAR													
14...	256	306	4	74.7	.1	6.2	39.5	.56	.72	.037	--	.013	
APR													
11...	240	287	3	150	.2	.6	37.5	.51	.77	<.020	.696	.011	
MAY													
08...	271	301	15	80.7	.1	2.6	30.2	.75	1.2	<.020	.284	.010	
JUN													
12...	256	312	--	62.7	.1	9.5	24.0	1.4	1.0	.095	1.09	<.010	
JUL													
11...	226	276	--	63.4	.1	10.1	25.0	.53	.84	.049	1.88	.014	
31...	249	299	2	92.6	.2	9.0	31.8	.58	1.2	.062	.603	<.010	
SEP													
04...	215	248	7	72.8	<.1	7.2	25.5	.53	.51	.060	.656	.012	

STREAMS TRIBUTARY TO LAKE MICHIGAN

04087000 MILWAUKEE RIVER AT MILWAUKEE, WI--Continued
(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)
OCT 13...	.029	.020	.097	468	20	2	--	--	--	--	--	--
NOV 10...	.043	.032	.108	481	40	25	<.003	<.002	<.002	<.002	.021	<.002
DEC 14...	.051	.043	.076	452	30	8	<.003	<.002	<.002	<.002	.020	<.002
JAN 11...	.050	.041	.072	547	20	7	<.003	<.002	<.002	<.002	.022	<.002
FEB 08...	.096	.085	.111	602	20	6	<.003	<.002	<.002	<.002	.021	<.002
MAR 14...	.039	.275	.066	459	30	12	<.003	<.002	<.002	<.002	.014	<.002
APR 11...	.017	<.010	.064	556	30	17	<.003	<.002	<.002	<.002	.020	<.002
MAY 08...	.107	.081	.216	462	30	18	<.003	.020	<.002	<.002	.049	<.002
JUN 12...	.113	.094	.180	421	30	7	<.003	.022	<.002	<.002	.198	<.002
JUL 11...	.116	.093	.182	389	E10	7	<.003	.006	<.002	<.002	.172	<.002
31...	.108	.180	.163	465	E10	3	<.003	<.002	<.002	<.002	.058	<.002
SEP 04...	.085	.060	.139	386	E10	3	<.003	<.002	<.002	<.002	.022	<.002
DATE	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ- INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)
OCT 13...	--	--	--	--	--	--	--	--	--	--	--	--
NOV 10...	<.002	<.003	<.003	<.004	<.004	<.002	E.037	111	<.002	<.001	<.017	<.002
DEC 14...	<.002	E.003	<.003	<.004	<.008	<.002	E.032	99	<.002	<.001	<.017	<.002
JAN 11...	<.002	<.003	<.003	<.004	<.004	<.002	E.035	121	<.002	<.001	<.017	<.002
FEB 08...	<.002	<.003	<.003	<.004	<.004	<.002	E.029	99	<.002	<.001	<.017	<.002
MAR 14...	<.002	<.003	<.015	<.004	<.004	<.002	E.016	64	<.002	<.001	<.017	<.002
APR 11...	<.002	<.003	<.003	<.004	<.004	<.002	E.027	100	<.005	<.001	<.017	<.002
MAY 08...	<.002	<.003	<.003	<.004	.008	<.002	E.046	106	.005	<.001	<.017	<.002
JUN 12...	<.002	E.009	E.018	<.004	.020	<.002	E.064	94	.007	<.001	<.017	<.002
JUL 11...	<.002	E.009	<.003	E.003	.031	<.002	E.043	105	.014	<.001	<.017	<.002
31...	<.002	E.005	<.003	<.004	E.011	<.002	E.047	118	.010	<.001	<.017	<.002
SEP 04...	<.002	E.009	<.003	<.004	<.004	<.002	E.028	99	.011	<.001	<.017	<.002

04087000 MILWAUKEE RIVER AT MILWAUKEE, WI--Continued
(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (91065)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)
OCT 13...	--	--	--	--	--	--	--	--	--	--	--	--
NOV 10...	<.004	<.003	<.003	98	<.004	<.002	<.005	<.001	<.006	<.002	<.004	<.004
DEC 14...	<.004	<.003	<.003	97	<.004	<.002	<.005	<.001	<.006	.017	<.004	<.004
JAN 11...	<.004	<.003	<.003	103	<.004	<.002	<.005	<.001	<.006	<.002	<.004	<.004
FEB 08...	<.004	<.003	<.003	85	<.004	<.002	<.005	<.001	<.006	<.002	<.004	<.004
MAR 14...	<.004	<.003	<.003	61	<.004	<.002	<.005	<.001	<.006	.005	<.004	<.004
APR 11...	<.004	<.003	<.003	89	<.004	<.002	<.005	<.001	<.006	.008	<.004	<.004
MAY 08...	<.004	<.003	<.003	90	<.004	<.002	<.005	<.010	<.020	.012	<.004	<.004
JUN 12...	<.004	<.003	<.003	85	<.004	<.002	<.005	<.001	<.006	.045	<.004	<.004
JUL 11...	<.004	<.003	<.003	94	<.004	<.002	<.005	<.001	<.006	.116	.008	<.004
31...	<.004	<.003	<.003	103	<.004	<.002	<.005	<.001	<.006	.008	<.004	<.004
SEP 04...	<.004	<.003	<.003	92	<.004	<.002	<.005	<.001	<.006	<.002	<.004	<.004
DATE	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P, P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)
OCT 13...	--	--	--	--	--	--	--	--	--	--	--	--
NOV 10...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.005	<.003	<.007	<.004	--
DEC 14...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.008	<.003	<.007	<.004	<.013
JAN 11...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.008	<.003	<.007	<.004	<.013
FEB 08...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.005	<.003	<.007	<.004	<.013
MAR 14...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.006	<.003	<.007	<.004	<.013
APR 11...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.016	<.003	<.007	<.004	<.013
MAY 08...	<.003	<.006	<.004	<.004	<.006	<.005	<.002	E.010	<.003	<.007	<.004	<.013
JUN 12...	<.003	<.006	<.004	<.004	E.004	<.005	<.002	E.008	<.003	<.007	<.004	<.013
JUL 11...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.014	<.003	<.007	<.004	<.013
31...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	.016	.003	<.007	<.004	<.013
SEP 04...	<.003	<.006	<.004	<.004	<.004	<.005	<.002	.018	<.003	<.007	<.004	<.013

STREAMS TRIBUTARY TO LAKE MICHIGAN

04087000 MILWAUKEE RIVER AT MILWAUKEE, WI--Continued
(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TER- BUTHYL- AZINE, WATER, DISS, REC (UG/L) (04022)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN (70331)	SAM- PLING METHOD, CODES (82398)
OCT 13...	--	--	--	--	--	--	--	--	--	--	10
NOV 10...	.009	<.010	<.007	<.013	--	<.002	<.001	<.002	--	--	10
DEC 14...	.010	E.004	<.007	<.013	--	<.002	<.001	<.002	--	--	10
JAN 11...	<.005	<.010	<.007	<.013	--	<.002	<.001	<.002	142	86	10
FEB 08...	.006	<.010	<.007	<.013	--	<.002	<.001	<.002	107	91	70
MAR 14...	.007	<.010	<.015	<.013	--	<.002	<.001	<.002	--	--	10
APR 11...	.045	E.012	<.007	<.013	E.014	<.002	<.001	<.002	--	--	10
MAY 08...	.033	<.010	<.007	<.013	--	<.002	<.001	<.002	--	--	10
JUN 12...	.096	<.010	<.007	<.013	--	<.002	<.001	<.002	--	--	10
JUL 11...	.094	.015	<.007	<.013	--	<.002	<.001	<.002	--	--	10
31...	.053	E.019	<.007	<.013	--	<.002	<.001	<.002	--	--	10
SEP 04...	.014	E.007	<.007	<.013	--	<.002	<.001	<.002	--	--	10

04087030 MENOMONEE RIVER AT MENOMONEE FALLS, WI

LOCATION.--Lat 43°10'22", long 88°06'14", in SE ¼ NE ¼ sec.10, T.8 N., R.20 E., Waukesha County, Hydrologic Unit 04040003, on right bank, 150 ft upstream from Pilgrim Road (County Trunk Highway YY) bridge in Menomonee Falls, at mile 21.1.

DRAINAGE AREA.--34.7 mi².

PERIOD OF RECORD.--November 1974 to September 1977, July 1979 to current year.

REVISED RECORDS.--WDR WI-77-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 755.51 ft above sea level (Wisconsin Department of Transportation benchmark). Prior to Aug. 20, 1996, water-stage recorder at present site at datum 2.01 ft lower.

REMARKS.--Records fair except those for estimated daily discharges, which are poor (see page 12). Occasional regulation caused by dam in Menomonee Falls, about 1.0 mi upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	4.0	5.6	e6.8	e6.0	35	14	23	190	6.3	12	4.9
2	9.7	5.7	5.7	e7.8	e6.0	29	14	21	276	50	9.7	8.0
3	9.9	5.2	7.3	e7.4	e6.0	25	13	18	282	149	7.2	19
4	8.7	5.2	9.0	e7.6	e6.2	23	12	19	249	120	6.8	18
5	7.7	5.4	21	e7.6	e6.2	21	11	18	212	48	66	11
6	7.3	4.7	15	e7.6	e6.2	18	11	15	148	25	102	8.1
7	5.9	4.6	11	e7.4	e6.2	18	17	13	85	14	51	6.8
8	5.4	5.2	9.1	e7.2	e6.4	31	21	15	52	22	26	5.7
9	5.7	5.4	19	e7.0	e6.8	62	25	31	36	19	18	5.0
10	5.6	11	23	e8.0	e6.8	47	29	34	26	64	13	9.4
11	5.5	10	16	e8.2	e6.6	34	27	25	22	44	9.1	58
12	4.6	7.8	13	e8.6	e6.4	28	26	149	27	29	7.1	94
13	5.0	7.1	11	e8.4	e6.4	25	23	92	30	22	9.9	46
14	4.6	6.3	11	e8.2	e6.6	23	21	53	37	21	9.5	66
15	4.4	5.7	12	e7.8	e6.8	22	20	36	38	14	8.6	47
16	7.3	5.3	12	e7.4	e6.8	19	18	31	28	11	6.5	26
17	6.0	5.1	14	e7.6	e6.8	17	17	121	20	10	34	18
18	5.5	4.9	12	e7.4	e7.0	15	17	587	15	8.5	24	13
19	5.3	5.2	8.5	e7.2	e7.4	18	34	720	12	7.4	16	11
20	5.3	5.4	e7.6	e7.0	e6.8	30	146	658	14	7.3	12	14
21	4.7	5.4	e6.6	e6.4	e30	31	171	494	12	7.0	8.8	13
22	4.0	5.6	e6.0	e6.0	e60	27	140	328	8.9	6.5	7.2	41
23	3.7	6.8	e5.6	e5.8	e130	24	121	201	7.8	5.7	7.1	103
24	3.6	6.3	e5.4	e6.0	117	27	94	109	7.5	5.3	6.1	69
25	3.7	6.2	e5.2	e5.8	101	28	63	52	7.5	5.3	5.3	40
26	4.0	6.0	e5.2	e6.0	74	24	45	35	7.1	5.3	17	26
27	4.3	6.0	e5.2	e5.8	65	24	35	31	6.1	21	17	20
28	4.6	5.6	e5.4	e5.8	47	21	29	52	9.9	17	11	17
29	3.7	5.6	e5.6	e5.8	39	18	26	49	11	13	8.3	15
30	3.7	5.4	e6.0	e5.8	---	16	23	43	8.0	9.3	7.0	13
31	3.8	---	e6.4	e5.8	---	15	---	55	---	15	6.2	---
TOTAL	173.2	178.1	305.4	217.2	793.4	795	1263	4128	1884.8	801.9	549.4	845.9
MEAN	5.59	5.94	9.85	7.01	27.4	25.6	42.1	133	62.8	25.9	17.7	28.2
MAX	10	11	23	8.6	130	62	171	720	282	149	102	103
MIN	3.6	4.0	5.2	5.8	6.0	15	11	13	6.1	5.3	5.3	4.9
CFSM	.16	.17	.28	.20	.79	.74	1.21	3.84	1.81	.75	.51	.81
IN.	.19	.19	.33	.23	.85	.85	1.35	4.43	2.02	.86	.59	.91

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2000, BY WATER YEAR (WY)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	19.8	27.9	23.5	17.6	32.9	58.6	65.0	33.2	30.5	20.1	14.8	19.5														
MAX	94.3	137	70.4	72.8	87.4	124	193	133	142	86.1	34.9	151														
(WY)	1982	1986	1985	1988	1984	1976	1993	2000	1997	1994	1986	1986														
MIN	3.31	3.38	3.00	2.29	4.04	18.3	21.6	3.80	3.33	1.55	1.47	1.86														
(WY)	1977	1977	1977	1977	1995	1980	1994	1977	1988	1988	1988	1976														

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1975 - 2000

	1999 CALENDAR YEAR	2000 WATER YEAR	1975 - 2000
ANNUAL TOTAL	14243.1	11935.3	
ANNUAL MEAN	39.0	32.6	30.1
HIGHEST ANNUAL MEAN			53.4
LOWEST ANNUAL MEAN			7.32
HIGHEST DAILY MEAN	419	720	(e) 960
LOWEST DAILY MEAN	2.7	3.6	.63
ANNUAL SEVEN-DAY MINIMUM	3.3	3.9	.82
INSTANTANEOUS PEAK FLOW		916	(a) 1500
INSTANTANEOUS PEAK STAGE		7.01	(b) 8.31
INSTANTANEOUS LOW FLOW		2.9	2.9
ANNUAL RUNOFF (CFSM)	1.12	.94	.87
ANNUAL RUNOFF (INCHES)	15.27	12.80	11.78
10 PERCENT EXCEEDS	98	63	65
50 PERCENT EXCEEDS	16	11	14
90 PERCENT EXCEEDS	4.6	5.4	4.3

(a) From rating curve extended above 717 ft³/s

(b) From floodmarks

(e) Estimated due to ice effect or missing record

STREAMS TRIBUTARY TO LAKE MICHIGAN

04087088 UNDERWOOD CREEK AT WAUWATOSA, WI

LOCATION.--Lat 43°03'17", long 88°02'46", in SW ¼ NW ¼ sec.20, T.7 N., R.21 E., Milwaukee County, Hydrologic Unit 04040003, at U.S. Highway 45, on right bank, just downstream of the Chicago, Milwaukee, St. Paul and Pacific Railroad bridge, on Milwaukee County Park Commission property, at Wauwatosa, and 0.8 mi upstream from mouth.

DRAINAGE AREA.--18.2 mi².

PERIOD OF RECORD.--December 1974 to November 1979, July 1980 to current year.

REVISED RECORDS.--WDR WI-77-1: Drainage area. WRD WI-85-1: 1984. WRD WI-94-1: 1993(M). WRD WI-98-1: 1978(M, date).

GAGE.--Water-stage recorder, crest-stage gage, and steel plate weir. Datum of gage is 683.78 ft above sea level (Southeastern Wisconsin Regional Planning Commission bench mark). Prior to Sept. 10, 1993, the orifice was located 10 ft downstream from Chicago, Milwaukee, St. Paul and Pacific Railroad bridge. The orifice was moved to 30 ft upstream from Chicago, Milwaukee, St. Paul and Pacific Railroad bridge on Sept. 10, 1993, and is at same elevation.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	4.6	3.8	3.2	e3.9	9.7	5.2	12	210	5.5	8.0	6.8
2	7.4	3.5	3.6	7.1	e3.9	7.3	5.4	8.1	85	337	8.9	37
3	16	3.4	6.2	4.8	e3.8	7.2	5.8	7.1	37	219	6.9	23
4	10	3.5	9.8	4.9	e3.8	6.9	4.8	6.9	26	54	5.4	8.8
5	7.0	3.4	25	3.8	e3.7	6.2	4.7	6.7	39	23	162	6.5
6	6.2	3.3	6.7	4.0	e3.7	6.0	5.0	6.2	20	16	61	5.7
7	5.8	3.4	5.1	3.7	e3.7	5.9	21	5.9	16	12	21	5.6
8	5.3	3.6	4.6	5.9	e4.0	9.5	22	19	14	40	12	32
9	5.2	3.5	8.3	5.3	e4.5	13	14	70	12	15	8.6	8.6
10	5.2	12	7.8	14	e4.6	6.8	10	30	10	29	7.1	51
11	5.6	7.6	5.2	6.1	e5.0	5.8	11	14	11	14	6.5	310
12	5.9	4.6	4.6	4.5	e4.3	5.4	7.8	262	51	9.9	5.9	194
13	5.9	4.1	4.1	4.4	e4.2	5.2	6.2	47	25	8.6	7.3	52
14	4.7	3.7	5.2	4.7	e4.0	5.1	5.7	22	38	16	5.9	107
15	4.4	3.5	7.6	4.7	e3.9	5.9	5.8	16	23	9.0	5.4	36
16	15	3.5	5.6	3.6	e3.8	5.6	6.0	15	15	7.7	4.9	22
17	6.1	3.6	4.6	4.0	e3.7	4.8	7.2	92	12	7.1	127	16
18	5.0	3.6	5.8	3.9	e4.0	4.6	5.9	507	9.9	6.6	26	13
19	4.6	4.2	4.0	3.9	e4.3	13	41	219	9.0	6.7	12	12
20	4.4	3.6	e3.8	e3.9	4.7	28	121	60	15	6.5	8.3	26
21	4.1	3.6	e3.7	e3.8	8.4	13	76	34	8.8	6.2	7.2	14
22	4.1	3.6	e3.6	e3.6	32	8.7	28	28	7.3	5.9	7.1	68
23	3.8	12	e3.5	e3.5	42	7.5	42	22	6.6	5.8	6.8	111
24	3.8	6.6	e3.4	e3.5	54	18	21	17	6.7	5.6	5.8	32
25	3.8	4.5	e3.4	e3.4	24	10	15	13	6.4	5.3	5.3	21
26	3.8	4.1	e3.4	e3.4	19	7.8	12	12	6.2	5.5	48	16
27	3.9	3.8	e3.4	e3.4	14	7.7	9.9	49	6.0	40	12	13
28	4.0	3.5	e3.4	e3.4	10	7.8	9.0	49	11	70	8.0	11
29	3.8	3.6	e3.5	e3.5	9.5	6.3	10	22	7.8	12	6.9	10
30	3.8	3.7	e3.6	e3.6	---	5.6	8.8	32	6.0	7.1	7.3	9.6
31	5.0	---	3.4	e3.7	---	5.4	---	60	---	15	7.2	---
TOTAL	182.0	135.2	169.7	139.2	294.4	259.7	547.2	1763.9	750.7	1021.0	631.7	1278.6
MEAN	5.87	4.51	5.47	4.49	10.2	8.38	18.2	56.9	25.0	32.9	20.4	42.6
MAX	16	12	25	14	54	28	121	507	210	337	162	310
MIN	3.8	3.3	3.4	3.2	3.7	4.6	4.7	5.9	6.0	5.3	4.9	5.6
CFSM	.32	.25	.30	.25	.56	.46	1.00	3.13	1.37	1.81	1.12	2.34
IN.	.37	.28	.35	.28	.60	.53	1.12	3.61	1.53	2.09	1.29	2.61

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2000, BY WATER YEAR (WY)

	MEAN	8.82	11.2	10.6	8.89	13.5	23.6	27.8	17.3	17.0	13.6	16.4	13.2
MAX	26.9	42.2	27.2	39.1	26.3	73.4	73.6	56.9	68.8	37.5	98.1	56.0	
(WY)	1987	1986	1983	1988	1985	1979	1993	2000	1997	1999	1998	1986	
MIN	2.43	1.81	1.57	.031	1.83	6.74	6.24	2.28	4.80	3.29	3.49	3.06	
(WY)	1976	1977	1977	1977	1977	1981	1977	1977	1976	1976	1976	1982	

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1975 - 2000

ANNUAL TOTAL	7613.2	7173.3	
ANNUAL MEAN	20.9	19.6	15.2
HIGHEST ANNUAL MEAN			23.2
LOWEST ANNUAL MEAN			4.21
HIGHEST DAILY MEAN	568	Apr 23	1420
LOWEST DAILY MEAN	(a)3.3 (b)Jan 6-11	3.2 Jan 1	.00 (c)
ANNUAL SEVEN-DAY MINIMUM	(a)3.3 Jan 5	(a)3.4 Dec 26	.00 Jan 11 1977
INSTANTANEOUS PEAK FLOW		2940 Jul 2	(d)7500 Aug 6 1998
INSTANTANEOUS PEAK STAGE		9.06 Jul 2	13.10 Aug 6 1998
ANNUAL RUNOFF (CFSM)	1.15	1.08	.84
ANNUAL RUNOFF (INCHES)	15.56	14.66	11.35
10 PERCENT EXCEEDS	35	39	31
50 PERCENT EXCEEDS	8.4	6.8	7.0
90 PERCENT EXCEEDS	3.6	3.6	3.1

(a) Ice affected

(b) Also occurred Nov. 6

(c) No flow on all or part of many days during 1977 winter period

(d) From rating curve extended above 96 ft³/s based on slope-area measurement of peak flow

(e) Estimated due to ice effect or missing record

04087120 MENOMONEE RIVER AT WAUWATOSA, WI

LOCATION.--Lat 43°02'44", long 87°59'59", in NE ¼ NW ¼ sec.27, T.7 N., R.21 E., Milwaukee County, Hydrologic Unit 04040003, on left bank near upstream side of 70th Street bridge in Wauwatosa, 800 ft downstream from Honey Creek, and at mile 6.2.

DRAINAGE AREA.--123 mi².

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 628.86 ft above sea level. Prior to Nov. 1, 1974, nonrecording gage at present site and datum then in use. Prior to June 21, 1997 at 0320, datum was 2.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	16	16	e22	e18	86	40	81	1100	29	49	26
2	40	15	16	e32	e18	71	39	63	906	862	52	167
3	79	15	28	28	e18	63	38	55	619	1180	36	81
4	60	17	45	26	e18	57	35	52	486	307	30	46
5	33	15	153	23	e18	51	34	50	570	142	664	32
6	26	15	48	22	e18	48	33	44	365	88	729	27
7	25	14	33	22	e18	46	104	41	244	63	180	25
8	21	15	29	34	e18	69	139	99	182	236	94	154
9	20	15	51	25	e21	125	106	339	144	92	62	33
10	19	58	87	62	e22	83	88	177	119	343	45	224
11	19	62	44	39	e20	65	92	84	105	181	37	943
12	19	26	33	28	e20	55	75	901	284	89	32	1220
13	19	21	28	26	e18	50	65	276	156	62	37	277
14	18	18	32	e25	e20	46	60	151	222	98	37	555
15	17	17	52	e24	e20	52	54	104	184	48	30	212
16	59	16	39	20	e20	51	48	90	110	37	26	118
17	29	16	26	26	e20	40	49	334	80	33	530	82
18	19	16	41	22	e20	36	46	3530	63	29	128	62
19	17	18	24	22	e21	76	210	2090	52	27	62	52
20	17	17	e22	e21	e24	162	746	1070	80	27	43	118
21	17	16	e20	e19	40	98	661	772	64	26	35	70
22	16	15	e18	e18	172	72	348	565	42	24	36	327
23	15	62	e17	e17	259	62	376	345	36	22	39	715
24	14	44	e16	e17	397	111	221	213	37	21	29	235
25	14	25	e15	e17	288	87	156	138	33	21	26	140
26	14	19	e15	e16	186	65	119	105	30	21	187	99
27	14	18	e15	e16	150	66	95	234	31	256	66	77
28	15	17	e15	e16	114	64	81	291	65	299	38	64
29	16	15	e16	e16	92	56	86	155	74	112	31	55
30	15	15	e17	e17	---	47	68	210	37	49	28	47
31	15	---	e19	e17	---	43	---	322	---	78	26	---
TOTAL	767	668	1030	735	2088	2103	4312	12981	6520	4902	3444	6283
MEAN	24.7	22.3	33.2	23.7	72.0	67.8	144	419	217	158	111	209
MAX	79	62	153	62	397	162	746	3530	1100	1180	729	1220
MIN	14	14	15	16	18	36	33	41	30	21	26	25
CFSM	.20	.18	.27	.19	.59	.55	1.17	3.40	1.77	1.29	.90	1.70
IN.	.23	.20	.31	.22	.63	.64	1.30	3.93	1.97	1.48	1.04	1.90

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2000, BY WATER YEAR (WY)

	MEAN	64.5	79.9	77.4	58.8	96.2	202	207	114	110	80.2	76.4	84.3
MAX	232	422	222	191	239	582	715	419	566	257	278	562	
(WY)	1982	1986	1988	1974	1971	1979	1993	2000	1997	1964	1998	1986	
MIN	7.15	11.9	4.65	4.45	4.18	17.5	28.7	17.1	12.6	10.6	10.5	6.50	
(WY)	1964	1963	1964	1963	1963	1968	1963	1977	1962	1963	1962	1963	

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1962 - 2000

	ANNUAL TOTAL	45185.4	45833	
ANNUAL MEAN	124	125	104	
HIGHEST ANNUAL MEAN			195	1986
LOWEST ANNUAL MEAN			24.0	1963
HIGHEST DAILY MEAN	2690	Apr 23	3530	May 18
LOWEST DAILY MEAN	4.8	Sep 26	14	(a) Oct 24-27
ANNUAL SEVEN-DAY MINIMUM	8.7	Sep 5	15	Oct 22
INSTANTANEOUS PEAK FLOW			5640	Jul 2
INSTANTANEOUS PEAK STAGE			12.48	Jul 2
ANNUAL RUNOFF (CFSM)	1.01		1.02	(c) 13500
ANNUAL RUNOFF (INCHES)	13.67		13.86	(d) Apr 21 1973
10 PERCENT EXCEEDS	250		234	(f) 18.63
50 PERCENT EXCEEDS	55		44	Jun 21 1997
90 PERCENT EXCEEDS	14		16	

(a) Also occurred Nov. 7

(b) Ice affected

(c) From rating curve extended above 6,000 ft³/s on basis of slope-area measurement of peak flow, gage height, 13.92 ft, datum then in use

(d) Also occurred June 21, 1997, discharge determined from rating curve extended above 9,430 ft³/s on basis of slope-area measurement of peak flow

(e) Estimated due to ice effect or missing record

(f) High-water mark on gage-house door was 18.87 ft

STREAMS TRIBUTARY TO LAKE MICHIGAN

040871473 WILSON PARK CREEK AT GMIA INFALL AT MILWAUKEE, WI

LOCATION.--Lat 42°56'33", long 87°53'10", in SW ¼ SW ¼ sec.27, T.6 N., R.22 E., Milwaukee County, Hydrologic Unit 04040003, at Milwaukee.

DRAINAGE AREA.--0.89 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1996 to May 1997, November 1997 to current year.

REVISED RECORDS.--WDR WI-98-1: 1997 (M, February monthly).

GAGE.--Water-stage recorder. Elevation of gage is 670 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.21	.06	.01	.01	.00	.59	.13	.60	14	.12	.19	.16
2	.28	.10	.02	.20	.01	.21	.10	.37	3.3	5.7	.24	2.5
3	1.6	.05	.21	.03	.00	.24	.08	.34	.96	32	.11	.61
4	.79	.06	.26	.03	.00	.26	.08	.33	.87	8.6	.09	.27
5	.39	.05	2.0	.04	.00	.23	.09	.30	2.2	.94	8.1	.13
6	.30	.03	.17	.01	.00	.17	.08	.32	.76	.64	14	.09
7	.30	.03	.07	.02	.01	.16	1.6	.32	.63	.48	.55	.09
8	.15	.08	.09	.05	.00	.25	2.0	2.1	.56	4.9	.53	.13
9	.14	.05	.12	.17	.07	.32	1.1	.49	.49	.65	.50	.09
10	.12	.46	.07	.88	.21	.16	.46	1.6	.40	1.9	.37	1.5
11	.11	.30	.02	.14	.02	.14	.55	.89	.35	.46	.25	8.0
12	.12	.08	.02	.04	.01	.13	.33	12	3.8	.32	.16	16
13	.12	.06	.02	.02	.00	.12	.26	.95	.74	.31	.19	.69
14	.10	.03	.26	.02	.01	.14	.26	.60	.90	.27	.12	6.4
15	.11	.02	.51	.01	.03	.13	.22	.48	.51	.21	.11	.78
16	.41	.03	.15	.02	.08	.13	.21	.61	.34	.18	.09	.48
17	.13	.03	.03	.01	.03	.12	.28	3.1	.27	.16	12	.38
18	.10	.04	.02	.01	.02	.10	.23	29	.26	.15	1.8	.33
19	.10	.10	.02	.01	.01	.95	2.5	13	.25	.13	.54	.27
20	.09	.02	.04	.01	.02	3.5	16	1.4	1.0	.20	.36	1.4
21	.11	.02	.01	.01	.08	.61	12	.87	.29	.18	.29	.38
22	.11	.02	.01	.01	3.4	.36	1.4	.73	.23	.14	.86	4.2
23	.10	.81	.02	.00	2.2	.31	2.3	.59	.21	.09	.55	9.7
24	.10	.16	.01	.00	3.7	.74	.82	.49	.22	.08	.22	.77
25	.09	.04	.01	.00	.95	.29	.58	.45	.21	.10	.18	.47
26	.06	.02	.01	.00	.78	.26	.48	.45	.16	.12	.84	.40
27	.06	.03	.01	.00	.43	.24	.42	2.6	.13	1.0	.34	.35
28	.06	.01	e.01	.00	.27	.15	.37	4.7	.71	1.4	.21	.26
29	.08	.01	.01	.00	.26	.13	.35	.97	.32	.23	.19	.22
30	.06	.01	.01	.00	---	.12	.34	.99	.16	.17	.16	.22
31	.05	---	.01	.00	---	.12	---	3.7	---	2.1	.17	---
TOTAL	6.55	2.81	4.23	1.75	12.60	11.38	45.62	95.85	35.23	63.93	44.31	57.27
MEAN	.21	.094	.14	.056	.43	.37	1.52	3.09	1.17	2.06	1.43	1.91
MAX	1.6	.81	2.0	.88	3.7	3.5	16	29	14	32	14	16
MIN	.05	.01	.01	.00	.00	.10	.08	.30	.13	.08	.09	.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2000, BY WATER YEAR (WY)

	1997	1998	1999	2000	1997	1998	1999	2000	1997	1998	1999	2000
MEAN	.27	.31	.18	.45	.85	.75	1.68	1.60	1.16	1.01	1.00	.91
MAX	.33	.72	.27	1.08	1.20	1.48	2.56	3.09	1.88	2.06	1.43	1.91
(WY)	1999	1999	1997	1999	1997	1998	1999	2000	1999	2000	2000	2000
MIN	.21	.094	.11	.056	.43	.36	.70	.63	.43	.17	.19	.20
(WY)	2000	2000	1999	2000	2000	1999	1997	1998	1998	1998	1999	1998

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1997 - 2000

ANNUAL TOTAL	296.37	381.53	
ANNUAL MEAN	.81	1.04	.96
HIGHEST ANNUAL MEAN			1.04 2000
LOWEST ANNUAL MEAN			.87 1999
HIGHEST DAILY MEAN	29 Apr 23	32 Jul 3	32 Jul 3 2000
LOWEST DAILY MEAN	.01 Many days	.00 Many days	.00 Many days
ANNUAL SEVEN-DAY MINIMUM	.01 Many periods	.00 Many periods	.00 Many periods
INSTANTANEOUS PEAK FLOW		34 Jul 2-3	34 Jul 2-3 2000
INSTANTANEOUS PEAK STAGE		16.97 Jul 3	16.97 Jul 3 2000
INSTANTANEOUS LOW FLOW		.00 Many days	.00 Many days
10 PERCENT EXCEEDS	1.3	2.0	1.6
50 PERCENT EXCEEDS	.26	.21	.25
90 PERCENT EXCEEDS	.02	.01	.02

(e) Estimated due to ice effect or missing record

040871473 WILSON PARK CREEK AT GMIA INFALL AT MILWAUKEE, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1996 to May 1997, November 1997 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: November 1996 to May 1997, November 1997 to current year.

INSTRUMENTATION.--Stage-activated water-quality sampler since November 1996. Continuous water-temperature recorder since November 1996.

REMARKS.--Chemical analyses are by the Wisconsin State Laboratory of Hygiene. Samples are point samples unless otherwise indicated. Records represent water temperature at sensor within 0.5°C.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum observed, 25.5°C, Aug. 6, 1998; minimum observed, 0.0°C, many days during winter.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum observed, 22.0°C, Aug. 15; minimum observed, 0.0°C, many days during winter.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	14.0	12.5	13.0	12.0	10.5	11.0	3.0	2.5	3.0	.0	.0	.0
2	13.0	12.0	12.5	11.5	8.5	9.5	4.5	2.5	3.5	.0	.0	.0
3	12.0	11.0	11.5	8.5	7.0	7.5	7.0	4.5	6.0	.5	.0	.0
4	12.0	11.0	11.5	7.5	6.0	6.5	7.5	6.5	7.0	.5	.0	.0
5	12.0	11.0	11.5	8.5	7.0	7.5	7.5	5.5	6.5	.0	.0	.0
6	12.0	11.0	11.5	8.0	6.5	7.5	6.0	4.5	5.0	.0	.0	.0
7	12.5	11.0	11.5	7.0	6.0	6.5	4.5	4.0	4.0	.0	.0	.0
8	13.0	12.0	12.5	8.5	6.5	7.0	4.5	3.5	4.0	.0	.0	.0
9	13.5	12.5	13.0	10.5	8.0	9.5	5.5	4.0	5.0	.0	.0	.0
10	14.5	13.5	14.0	11.0	9.5	10.5	5.5	4.0	5.0	.0	.0	.0
11	14.0	12.5	13.0	10.0	8.5	9.0	4.0	3.5	3.5	.0	.0	.0
12	13.5	12.0	12.5	9.0	8.0	8.5	4.0	3.5	3.5	.0	.0	.0
13	13.5	12.0	13.0	9.0	8.0	8.5	4.0	3.0	3.5	.0	.0	.0
14	12.0	10.5	11.5	9.0	7.5	8.5	4.0	3.5	3.5	.0	.0	.0
15	12.5	11.0	11.5	8.0	6.5	7.0	4.5	3.5	4.0	.0	.0	.0
16	13.5	12.0	13.0	7.0	5.5	6.5	4.5	3.0	3.5	.0	.0	.0
17	13.5	11.0	12.0	6.0	5.5	6.0	3.5	2.5	3.0	.0	.0	.0
18	11.5	9.5	10.5	7.0	5.5	6.0	2.5	2.0	2.0	.0	.0	.0
19	10.5	10.0	10.5	8.5	7.0	7.5	2.0	1.5	2.0	.0	.0	.0
20	10.5	9.0	9.5	8.0	7.0	7.5	2.0	1.5	2.0	.0	.0	.0
21	10.0	8.5	9.0	7.5	6.5	7.0	1.5	.5	1.0	.0	.0	.0
22	10.0	9.0	9.5	8.5	7.5	8.0	.5	.0	.0	.0	.0	.0
23	9.0	8.0	8.5	10.0	8.0	8.5	.0	.0	.0	.0	.0	.0
24	8.0	7.0	7.5	9.5	7.5	8.5	.0	.0	.0	.0	.0	.0
25	8.5	7.0	7.5	7.5	6.0	6.5	.0	.0	.0	.0	.0	.0
26	9.0	8.0	8.5	6.5	5.5	6.0	.0	.0	.0	.0	.0	.0
27	9.0	8.0	8.5	6.0	5.5	6.0	.0	.0	.0	.0	.0	.0
28	10.0	8.5	9.0	5.5	4.0	5.0	.0	.0	.0	.0	.0	.0
29	10.5	9.0	9.5	4.5	3.5	4.0	.0	.0	.0	.0	.0	.0
30	12.0	10.5	11.0	3.5	2.5	3.0	.0	.0	.0	.0	.0	.0
31	12.0	10.5	11.0	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	14.5	7.0	10.9	12.0	2.5	7.3	7.5	.0	2.6	.5	.0	.0

STREAMS TRIBUTARY TO LAKE MICHIGAN

040871473 WILSON PARK CREEK AT GMIA INFALL AT MILWAUKEE, WI--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	.0	.0	.0	2.0	.5	1.5	7.0	5.5	6.0	12.0	9.5	10.5
2	.0	.0	.0	1.5	.5	1.0	8.0	5.5	6.5	12.0	10.0	11.0
3	.0	.0	.0	1.5	.0	.5	8.0	6.0	7.0	13.0	10.0	11.5
4	.0	.0	.0	2.0	.5	1.0	7.0	5.0	6.0	14.5	11.5	13.0
5	.0	.0	.0	2.5	1.0	1.5	5.5	3.5	4.5	16.0	13.0	14.5
6	.0	.0	.0	3.5	1.5	2.5	8.0	4.0	6.0	17.0	14.5	15.5
7	.0	.0	.0	6.0	3.0	4.5	7.0	3.5	5.5	17.5	15.0	16.0
8	.0	.0	.0	7.5	5.0	6.5	4.5	2.0	3.5	17.5	15.5	16.5
9	.0	.0	.0	7.5	4.0	6.0	6.5	3.0	4.5	18.0	14.0	16.0
10	.0	.0	.0	4.5	2.5	3.5	6.0	4.0	4.5	14.5	12.5	13.5
11	.0	.0	.0	3.0	2.0	2.5	5.0	3.5	4.0	14.0	12.5	13.0
12	.0	.0	.0	3.0	1.5	2.0	5.5	3.5	4.5	15.0	13.0	14.5
13	.0	.0	.0	3.5	2.0	2.5	6.0	4.5	5.0	14.5	12.0	13.0
14	.0	.0	.0	4.0	2.0	3.0	8.5	5.0	6.5	12.5	10.5	11.5
15	.0	.0	.0	5.0	3.0	4.0	8.5	7.5	8.0	13.0	10.5	11.5
16	.0	.0	.0	4.5	2.5	3.5	7.5	5.5	6.5	13.0	11.5	12.0
17	.0	.0	.0	3.5	2.0	2.5	6.0	5.0	5.5	12.5	11.5	12.0
18	.0	.0	.0	3.0	1.5	2.0	7.0	5.0	6.0	12.0	10.5	11.5
19	.0	.0	.0	3.0	2.0	2.5	7.0	6.0	6.5	10.5	9.5	10.0
20	.0	.0	.0	4.0	2.5	3.0	7.0	6.0	6.5	13.0	9.5	11.0
21	.0	.0	.0	6.0	3.5	4.5	8.5	5.5	6.5	13.0	10.5	12.0
22	.0	.0	.0	7.0	5.0	5.5	9.0	6.0	7.5	14.0	12.0	12.5
23	.0	.0	.0	7.5	5.0	6.0	9.0	7.0	8.0	15.0	12.5	13.5
24	.0	.0	.0	7.5	6.0	6.5	9.5	7.0	8.0	15.0	14.0	14.5
25	.0	.0	.0	7.5	6.5	7.0	9.5	7.0	8.0	15.0	12.5	14.0
26	.0	.0	.0	7.0	5.0	6.5	10.0	7.0	8.5	14.0	13.0	13.5
27	.0	.0	.0	7.5	5.5	6.5	10.5	8.0	9.5	13.5	12.5	12.5
28	.5	.0	.0	6.5	5.0	5.5	10.5	8.0	9.5	12.5	11.5	12.0
29	1.5	.0	.5	6.0	4.5	5.0	10.5	8.5	9.5	13.0	10.5	11.5
30	---	---	---	6.5	4.0	5.0	10.5	7.5	9.0	14.0	12.0	13.0
31	---	---	---	6.5	4.0	5.5	---	---	---	14.0	13.0	13.5
MONTH	1.5	.0	.0	7.5	.0	3.9	10.5	2.0	6.6	18.0	9.5	12.9
JUNE			JULY			AUGUST			SEPTEMBER			
1	17.0	13.0	14.5	19.5	16.5	18.0	20.0	18.5	19.0	21.5	20.0	20.5
2	17.0	15.0	16.0	19.0	17.5	---	20.0	19.0	19.5	21.0	20.0	20.5
3	15.5	13.0	14.5	---	---	---	19.5	18.0	19.0	21.0	20.0	20.5
4	15.0	13.0	14.0	---	---	---	18.5	17.5	18.0	20.5	18.0	19.0
5	14.0	12.0	13.0	19.5	16.5	18.5	18.5	17.5	18.0	18.0	16.5	17.5
6	15.0	12.0	13.5	19.0	18.0	18.5	19.5	17.5	18.5	17.0	16.0	17.0
7	15.0	13.0	14.0	19.0	17.5	18.5	20.0	18.5	19.5	19.0	16.5	17.5
8	17.5	14.5	16.0	18.5	17.5	18.0	21.0	19.5	20.0	19.0	18.0	18.5
9	18.5	16.5	17.5	19.0	18.0	18.5	21.5	20.0	20.5	20.0	18.0	19.0
10	20.0	17.0	18.0	20.0	18.5	19.5	21.5	19.5	20.5	20.5	19.0	19.5
11	19.5	17.0	18.5	19.5	18.5	19.0	20.5	19.0	20.0	20.5	19.5	20.0
12	17.5	14.5	15.5	19.5	18.5	19.0	20.0	18.5	19.5	19.5	18.5	19.0
13	15.5	14.5	15.0	20.5	18.0	19.0	20.5	19.0	19.5	19.0	17.0	18.0
14	17.5	15.0	16.0	20.5	19.0	20.0	21.0	19.5	20.5	18.5	17.5	18.0
15	17.5	16.0	16.5	20.0	18.5	19.5	22.0	20.0	21.0	18.0	16.0	17.0
16	17.5	16.5	17.0	20.0	18.0	19.0	21.0	19.0	19.5	16.5	14.5	15.5
17	17.0	15.5	16.0	20.5	18.5	19.5	19.0	18.0	18.5	16.5	15.0	15.5
18	17.0	14.5	15.5	20.0	18.0	18.5	19.0	18.5	18.5	17.0	15.5	16.0
19	17.5	15.0	16.0	18.0	17.0	17.5	19.0	18.0	18.5	17.5	16.5	17.0
20	18.0	16.0	17.0	18.0	17.0	17.5	18.5	17.5	18.0	17.0	16.0	16.5
21	18.5	17.5	18.0	18.0	16.5	17.5	18.5	17.0	18.0	16.0	14.5	15.0
22	18.0	16.5	17.0	18.0	16.5	17.0	19.5	18.0	18.5	15.0	14.0	14.5
23	18.0	16.0	17.0	18.0	16.0	17.0	20.0	19.0	19.5	15.5	14.5	15.0
24	18.0	16.5	17.0	17.5	15.5	17.0	20.0	18.5	19.5	15.5	14.0	14.5
25	19.5	16.5	18.0	18.0	16.5	17.0	19.5	18.0	19.0	14.5	13.5	13.5
26	19.5	18.0	19.0	19.0	17.0	18.0	19.5	18.5	19.0	14.0	12.5	13.5
27	19.0	17.0	18.0	20.0	18.0	19.0	19.5	18.5	19.0	14.0	13.0	13.5
28	18.0	16.0	17.0	20.5	19.0	19.5	19.5	18.5	19.0	13.5	13.0	13.0
29	17.5	16.0	16.5	20.0	19.0	19.5	20.0	19.5	19.5	14.0	13.0	13.5
30	18.5	15.5	17.0	19.5	19.0	19.0	19.5	19.0	19.5	15.0	13.5	14.0
31	---	---	---	19.5	19.0	19.0	21.0	19.0	19.5	---	---	---
MONTH	20.0	12.0	16.3	20.5	15.5	18.5	22.0	17.0	19.2	21.5	12.5	16.7

040871473 WILSON PARK CREEK AT GMIA INFALL AT MILWAUKEE, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH WATER WHOLE LAB (STANDARD UNITS) (00403)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA) (00916)	MAGNESIUM, TOTAL RECOVERABLE (MG/L) (00921)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, AMMONIA DIS-SOLVED TOTAL (MG/L AS N) (00608)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L) (00310)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)
JAN 03...	2030	.01	--	--	--	--	--	--	--	--	--
18...	1000	.01	7.4	140	54	2.0	1.22	.042	<6.0	20	<5
19...	1810	.01	--	--	--	--	--	--	--	--	--
FEB 23...	1450	4.0	--	--	--	--	--	--	--	--	--
MAR 06...	1100	.16	7.7	110	46	.63	.197	.034	<6.0	12	<5
APR 06...	1142	.05	--	--	--	--	--	--	--	--	--
07...	1730	1.9	--	--	--	--	--	--	--	--	--
MAY 25...	1218	.45	--	--	--	--	--	--	--	--	--
SEP 05...	1116	.12	7.6	96.0	38	.49	.160	.048	.5	11	<5
22...	1708	13	--	--	--	--	--	--	--	--	--

DATE	COPPER, TOTAL RECOVERABLE (UG/L) (01119)	LEAD, TOTAL RECOVERABLE (UG/L) (01114)	ZINC, TOTAL RECOVERABLE (UG/L) (01094)	1,2,4-ETHANEDIOL, WATER, UNFLTRD REC (MG/L) (91075)	1,2,4-PROPANEDIOL, WATER, UNFLTRD REC (MG/L) (91080)	OIL AND GREASE, TOTAL RECOVERABLE GRAVIMETRIC (MG/L) (00556)	GLYCOL HYDRO-LIZERS UNFILTERED, TOTAL RECOVERABLE (COLS./100ML) (99920)	PSEUDOMONAS UNFILTERED, TOTAL RECOVERABLE (COLS./100ML) (99921)	PRESUMPTIVE MONAS UNFILTERED, TOTAL RECOVERABLE (COLS./100ML) (99922)	SAMPLING METHOD, CODES (82398)
JAN 03...	--	--	--	--	--	<1	--	--	--	70
18...	1	<1	30	<18.0	<18.0	<1	4900.0	70.000	120.00	70
19...	--	--	--	--	--	3	--	--	--	70
FEB 23...	--	--	--	--	--	3	--	--	--	70
MAR 06...	1	1	<20	<18.0	<18.0	5	--	--	--	70
APR 06...	--	--	--	--	--	--	1800.0	720.00	20.000	70
07...	--	--	--	--	--	2	--	--	--	70
MAY 25...	--	--	--	--	--	--	1200.0	10.000	20.000	70
SEP 05...	<1	1	<20	<18.0	<18.0	4	620.00	10.000	800.00	70
22...	--	--	--	--	--	1	--	--	--	70

COMPOSITE SAMPLES

BEGINNING DATE	BEGINNING TIME	ENDING DATE	ENDING TIME	RUNOFF VOLUME THOUSANDS OF CUBIC FEET (99904)	PH WATER WHOLE LAB (STANDARD UNITS) (00403)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA) (00916)	MAGNESIUM, TOTAL RECOVERABLE (MG/L) (00921)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, AMMONIA DIS-SOLVED TOTAL (MG/L AS N) (00608)	PHOSPHORUS TOTAL (MG/L AS P) (00665)
000103	1535	000104	0950	.98	7.9	86.0	38	1.8	.720	.063
000119	1555	000119	2320	.38	7.8	150	55	2.3	1.39	.035
000213	0610	000213	2050	.17	7.8	170	51	3.2	1.79	.122
000222	1405	000224	1200	630	7.6	38.0	10	1.5	<.013	.148
000224	1530	000228	0440	290	--	--	--	.75	.016	--
000407	1250	000408	0250	120	7.8	40.0	15	.76	.202	.078
000922	1300	000922	2215	320	7.7	29.0	9.1	.63	.102	.111

STREAMS TRIBUTARY TO LAKE MICHIGAN

040871473 WILSON PARK CREEK AT GMIA INFALL AT MILWAUKEE, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	CADMIUM TOTAL RECOVER -ABLE (UG/L) (01113)	COPPER, TOTAL RECOVER -ABLE (UG/L) (01119)	LEAD, TOTAL RECOVER -ABLE (UG/L) (01114)	ZINC, TOTAL RECOVER -ABLE (UG/L) (01094)	1,2,- ETHANE- DIOL, WATER, UNFLTRD REC (MG/L) (91075)	1,2,- PROP- ANEDIOL WATER, UNFLTRD REC (MG/L) (91080)	SAM- PLING METHOD, CODES (82398)
JAN 03-04	<60	37	8	<1	3	1	20	<18.0	<18.0	50
JAN 19-19	<6.0	22	<5	--	<1	<1	<20	<18.0	<18.0	50
FEB 13-13	<6.0	42	11	--	3	<1	30	<18.0	<18.0	50
FEB 22-24	<24	33	32	--	9	5	70	<18.0	<18.0	50
FEB 24-28	<20	18	8	--	--	--	--	<18.0	20.0	50
APR 07-08	2.5	18	15	--	7	5	40	<18.0	<18.0	50
SEP 22-22	--	13	33	--	5	4	<20	<18.0	<18.0	50

040871475 WILSON PARK CREEK AT GMIA OUTFALL # 7 AT MILWAUKEE, WI

LOCATION.--Lat 42°57'24", long 87°54'25", in NW ¼ NW ¼ sec.28, T.6 N., R.22 E., Milwaukee County, Hydrologic Unit 04040003, at Milwaukee.

DRAINAGE AREA.--2.25 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1996 to May 1997, November 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 670 ft above sea level, from topographic map.

REMARKS.--Records are good except those for estimated daily discharges, which are poor (see page 12).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.41	.14	.13	e.12	e.15	1.9	.26	1.7	e41	.37	.65	.34
2	.66	.13	.14	e.50	e.15	.51	.26	.78	e7.0	e98	.97	7.0
3	7.8	.13	.62	e.40	e.14	.39	.25	.97	e2.7	113	.32	1.7
4	2.9	.13	1.8	e.45	e.15	.36	.21	.86	2.6	e17	.25	.41
5	.78	.12	9.0	e.30	e.15	.33	.19	.74	8.8	e2.1	49	.28
6	.45	.11	.58	e.35	e.18	.30	.19	.62	2.1	e1.2	22	.23
7	.39	.11	.27	e.30	e.20	.30	6.8	.59	1.5	.91	1.6	.22
8	.30	.12	.21	e.35	.22	.30	7.9	6.7	1.3	15	.97	.56
9	.27	.13	.49	e.60	.41	.59	4.8	33	1.1	2.1	.83	.21
10	.25	1.4	.38	e3.0	1.1	.28	1.2	5.0	1.0	6.5	.55	3.8
11	.22	.48	.19	e.50	.44	.25	1.7	2.1	.91	1.5	.40	53
12	.20	.16	.17	e.30	.27	.23	.81	33	15	1.1	.33	34
13	.20	.15	.16	e.20	.43	.22	.60	2.8	2.8	.81	.45	2.2
14	.19	.14	1.3	e.17	.40	.21	.49	1.6	4.0	.78	.31	20
15	.19	.13	2.5	e.16	.30	.21	.38	1.1	1.9	.55	.26	2.5
16	1.1	.12	.52	e.16	.35	.22	.33	1.5	1.1	.42	.22	1.3
17	.24	.12	.24	e.15	.22	.22	.48	15	.86	.37	38	.93
18	.19	.13	.19	e.15	.23	.19	.34	91	.76	.30	7.0	.73
19	.18	.18	.17	e.17	.27	2.2	10	24	.69	.26	1.2	.63
20	.18	.14	.19	e.16	.21	12	54	4.2	3.5	.33	.74	4.9
21	.18	.13	.15	e.15	.58	2.1	29	2.6	.90	.25	.54	.70
22	.18	.13	e.14	e.15	14	.96	3.9	2.2	.66	.21	2.5	16
23	.16	2.5	e.14	e.14	7.8	.65	8.5	1.7	.56	.25	1.1	27
24	.15	.38	e.14	e.14	13	2.2	2.8	1.2	.60	.24	.44	2.7
25	.16	.18	e.13	e.14	3.3	.89	1.8	.82	.51	.24	.38	1.4
26	.15	.17	e.13	e.13	2.8	.73	1.4	.69	.49	.24	2.6	.98
27	.14	.16	e.13	e.13	1.3	.78	1.2	8.3	.43	3.9	.41	.78
28	.14	.14	e.13	e.13	.76	.61	.95	18	2.7	5.9	.32	.57
29	.14	.13	e.12	e.15	.74	.42	.79	2.8	1.1	.70	.31	.47
30	.14	.12	.12	e.17	---	.35	.69	2.7	.43	.52	.33	.39
31	.13	---	e.12	e.16	---	.28	---	13	---	8.7	.35	---
TOTAL	18.77	8.31	20.70	10.08	50.25	31.18	142.22	281.27	109.00	283.75	135.33	185.93
MEAN	.61	.28	.67	.33	1.73	1.01	4.74	9.07	3.63	9.15	4.37	6.20
MAX	7.8	2.5	9.0	3.0	14	12	54	91	41	113	49	53
MIN	.13	.11	.12	.12	.14	.19	.19	.59	.43	.21	.22	.21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2000, BY WATER YEAR (WY)

	1997	1998	1999	2000
MEAN	1.02	.96	.67	1.99
MAX	1.44	2.19	1.00	4.40
(WY)	1999	1999	1997	1999
MIN	.61	.28	.49	.33
(WY)	2000	2000	1998	2000

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1997 - 2000

ANNUAL TOTAL	969.41	1276.79		
ANNUAL MEAN	2.66	3.49		
HIGHEST ANNUAL MEAN			3.18	
LOWEST ANNUAL MEAN			3.49	2000
HIGHEST DAILY MEAN	96	Apr 23	113	Jul 3 2000
LOWEST DAILY MEAN	.10 (a)	Jan 1	.11	Nov 6, 7 1999
ANNUAL SEVEN-DAY MINIMUM	.10	Jan 4	.12	Nov 2 1999
INSTANTANEOUS PEAK FLOW			(e) 770	Jul 2 2000
INSTANTANEOUS PEAK STAGE			19.43	Jul 2 2000
INSTANTANEOUS LOW FLOW			.11	Nov 6, 7 1999
10 PERCENT EXCEEDS	4.3		7.0	5.0
50 PERCENT EXCEEDS	.43		.45	.52
90 PERCENT EXCEEDS	.13		.14	.15

(a) Also occurred Jan. 4-5, 7-10, 12, 14, 1999

(b) Also occurred Jan. 7-11, 14, 1999

(e) Estimated due to ice effect or missing record

STREAMS TRIBUTARY TO LAKE MICHIGAN

040871475 WILSON PARK CREEK AT GMIA OUTFALL #7 AT MILWAUKEE, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1996 to May 1997, October 1997 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: November 1996 to May 1997, October 1997 to current year.

DISSOLVED OXYGEN: October 1997 to November 1998 (discontinued).

INSTRUMENTATION.--Stage-activated water-quality sampler since November 1996. Continuous water-temperature recorder since November 1996. Continuous dissolved oxygen from October 1997 to November 1998.

REMARKS.--Chemical analyses are by the Wisconsin State Laboratory of Hygiene. Samples are point samples unless otherwise indicated. Records represent water temperature at sensor within 0.5°C. Dissolved-oxygen concentrations greater than 30 mg/L are out of calibration range of meter.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum observed, 26.5°C, July 15, 1998; minimum observed, 0.5°C, Feb. 18, 21, 1997, and Jan. 22-23, 1999.

DISSOLVED OXYGEN: Maximum observed, 14.1 mg/L, Feb. 27, 1998; minimum observed, 0.0 mg/L, June 27 and July 7, 1998.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum observed, 24.5°C, July 28; minimum observed, 1.5°C, Feb. 22.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	15.5	15.0	15.0	13.0	11.5	12.5	9.5	9.0	9.0	11.5	11.0	11.5
2	15.5	14.5	14.5	11.5	10.0	10.5	9.5	9.0	9.5	11.5	8.0	9.5
3	14.5	11.5	13.0	10.5	9.5	9.5	11.0	9.5	9.5	10.5	8.5	10.0
4	14.0	12.5	13.0	11.5	10.5	11.0	10.5	9.0	9.5	10.5	9.0	9.5
5	14.0	13.5	14.0	11.5	11.0	11.5	9.0	7.5	8.0	11.0	10.0	10.5
6	14.0	13.5	13.5	11.0	10.0	10.5	8.5	7.5	8.0	11.0	10.0	10.5
7	14.0	13.5	14.0	11.0	10.5	11.0	9.0	8.5	8.5	11.0	10.0	10.5
8	14.5	14.0	14.0	11.5	11.0	11.0	9.0	8.5	8.5	11.0	9.5	10.5
9	14.5	14.0	14.5	11.5	11.5	11.5	9.5	8.5	8.5	10.0	6.5	9.5
10	14.5	14.5	14.5	12.0	9.5	11.5	8.5	7.5	8.0	6.5	4.5	5.5
11	14.5	14.0	14.5	11.5	10.5	11.0	8.5	8.0	8.0	8.5	6.5	7.5
12	14.5	14.0	14.5	11.5	11.0	11.5	8.5	8.0	8.5	9.5	8.0	9.0
13	14.5	13.5	14.0	11.5	11.5	11.5	8.5	8.0	8.5	9.5	8.5	9.0
14	14.0	13.0	13.5	11.5	10.5	11.0	8.5	6.0	8.0	10.0	9.0	9.5
15	14.0	14.0	14.0	11.0	10.0	10.0	7.5	6.0	6.5	10.0	9.5	9.5
16	15.5	14.0	14.5	10.5	9.5	10.0	7.5	6.5	7.0	10.0	9.5	9.5
17	14.5	13.0	13.5	10.5	10.0	10.5	7.5	6.0	6.5	11.0	9.5	10.0
18	13.5	12.5	13.0	11.0	10.5	10.5	7.0	6.0	6.5	11.0	10.0	10.5
19	13.5	13.0	13.5	11.5	10.5	11.0	7.0	6.5	7.0	11.0	10.0	10.5
20	13.5	13.0	13.0	11.0	10.5	10.5	8.0	5.5	6.5	10.5	9.0	9.5
21	13.5	13.0	13.0	11.0	10.5	11.0	5.5	4.5	5.0	10.5	9.5	10.0
22	13.5	11.0	12.0	11.0	11.0	11.0	10.0	5.0	6.0	11.0	10.0	10.5
23	11.0	10.5	10.5	12.5	10.5	11.5	11.5	9.5	10.5	11.0	10.0	10.5
24	11.5	10.0	11.0	11.5	10.5	11.0	11.5	10.5	11.0	11.0	10.0	10.5
25	12.0	11.5	12.0	11.0	10.5	10.5	11.5	11.0	11.0	11.0	10.0	10.5
26	12.0	11.5	12.0	11.0	10.5	10.5	11.5	10.5	11.0	11.0	10.0	10.5
27	12.0	11.5	12.0	10.5	10.0	10.5	11.5	10.5	11.0	11.0	10.0	10.5
28	12.5	12.0	12.0	10.0	9.5	9.5	11.5	11.0	11.0	11.0	10.5	10.5
29	12.5	12.0	12.5	9.5	7.5	8.5	11.5	11.0	11.5	11.0	10.5	11.0
30	12.5	12.5	12.5	9.0	8.0	8.5	11.5	11.0	11.5	11.0	9.5	10.5
31	13.0	12.5	12.5	---	---	---	11.5	11.0	11.5	10.5	10.0	10.5
MONTH	15.5	10.0	13.2	13.0	7.5	10.7	11.5	4.5	8.7	11.5	4.5	9.9

040871475 WILSON PARK CREEK AT GMIA OUTFALL #7 AT MILWAUKEE, WI--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	10.5	9.5	10.5	7.0	4.5	5.0	7.0	6.5	6.5	10.5	8.5	9.5
2	11.0	9.5	10.5	5.0	4.5	4.5	7.0	6.5	7.0	10.0	9.0	9.5
3	10.5	9.0	10.0	5.0	4.5	4.5	7.0	6.5	7.0	10.5	10.0	10.0
4	9.5	8.5	9.0	5.0	4.5	4.5	7.0	6.0	6.5	10.5	10.0	10.5
5	9.5	8.5	9.0	5.0	4.5	5.0	7.0	6.5	6.5	11.0	10.5	10.5
6	10.0	9.5	9.5	5.0	5.0	5.0	7.0	6.5	6.5	11.0	10.5	11.0
7	10.0	9.5	9.5	5.5	5.0	5.0	7.5	3.5	5.5	11.0	10.5	11.0
8	10.0	9.5	9.5	6.0	5.5	5.5	5.5	4.0	4.5	20.5	11.0	12.5
9	10.0	7.0	9.0	6.5	6.0	6.0	8.0	4.5	6.0	19.0	12.5	15.0
10	7.5	5.5	6.5	6.0	5.5	5.5	7.0	6.0	6.0	13.0	11.5	12.0
11	8.0	6.0	7.0	6.0	5.5	5.5	6.0	5.5	6.0	13.0	12.0	12.5
12	8.5	7.5	8.0	5.5	5.0	5.5	6.5	5.5	6.0	17.0	12.0	15.0
13	9.0	7.0	8.0	5.5	5.5	5.5	6.5	6.0	6.5	13.5	11.5	12.0
14	8.5	7.5	8.0	5.5	5.5	5.5	7.0	6.5	6.5	11.5	10.5	11.0
15	9.0	6.5	8.0	6.0	5.5	5.5	7.5	7.0	7.0	11.5	11.0	11.5
16	7.0	5.5	6.0	5.5	5.5	5.5	7.5	7.0	7.0	12.0	11.5	12.0
17	6.0	5.0	5.5	5.5	5.0	5.5	7.0	6.5	7.0	12.0	11.5	12.0
18	6.0	4.5	5.0	5.5	5.5	5.5	7.0	6.5	7.0	12.0	9.5	11.0
19	5.5	4.5	5.0	5.5	4.5	5.0	7.5	7.0	7.0	10.5	9.0	9.5
20	5.5	4.5	5.0	5.5	4.0	5.0	8.0	5.5	7.0	12.0	10.0	11.0
21	5.5	4.0	5.0	6.0	5.5	5.5	8.5	5.0	6.5	12.0	10.5	11.0
22	4.5	1.5	2.5	6.5	6.0	6.0	8.5	6.5	7.5	12.5	11.5	11.5
23	2.5	2.0	2.0	6.5	6.0	6.5	9.0	8.0	8.5	12.5	11.5	12.0
24	5.0	2.5	3.0	9.0	6.5	7.0	9.0	7.5	8.0	13.5	12.0	12.5
25	4.0	3.0	3.5	7.5	7.0	7.0	8.5	7.5	8.0	12.5	12.0	12.5
26	5.0	3.5	4.5	8.0	6.5	7.0	8.5	7.5	8.0	12.5	12.0	12.5
27	5.5	4.0	4.5	8.0	6.5	7.0	9.0	8.0	8.5	13.5	12.0	12.5
28	5.5	4.0	4.5	7.0	6.5	6.5	9.0	8.0	8.5	12.5	11.0	12.0
29	6.5	4.5	4.5	6.5	6.5	6.5	8.5	8.5	8.5	12.5	11.0	11.5
30	---	---	---	7.0	6.5	6.5	8.5	8.5	8.5	13.5	12.0	12.5
31	---	---	---	7.0	6.5	6.5	---	---	---	15.0	12.5	13.5
MONTH	11.0	1.5	6.6	9.0	4.0	5.7	9.0	3.5	7.0	20.5	8.5	11.7
JUNE				JULY			AUGUST			SEPTEMBER		
1	---	---	---	14.5	14.0	14.0	18.5	18.0	18.5	18.5	18.0	18.0
2	---	---	---	21.0	14.0	15.5	23.0	18.0	19.0	21.0	18.0	20.0
3	---	---	---	---	---	---	19.0	18.0	18.5	20.5	19.5	20.0
4	14.5	13.0	13.5	---	---	---	18.0	17.5	18.0	20.0	18.5	19.0
5	13.5	12.0	13.0	---	---	---	19.5	17.5	18.0	18.5	18.0	18.5
6	13.5	12.0	13.0	---	---	---	20.0	18.0	19.0	18.5	18.0	18.0
7	14.0	12.5	13.0	17.5	16.5	17.0	19.0	18.0	18.5	18.0	18.0	18.0
8	14.5	13.5	13.5	19.5	16.5	18.0	19.0	18.0	18.5	20.0	18.0	18.5
9	14.5	14.0	14.0	18.0	17.0	17.5	19.5	18.5	19.0	18.0	18.0	18.0
10	14.5	14.0	14.0	20.5	17.0	19.0	19.5	18.5	19.0	22.5	18.0	19.5
11	15.0	14.0	14.5	18.5	17.5	17.5	19.0	18.5	18.5	20.5	18.5	19.5
12	14.5	14.0	14.0	18.0	17.0	17.5	18.5	18.0	18.5	19.5	18.0	19.0
13	14.5	13.5	14.0	17.5	17.0	17.5	19.5	18.0	18.5	18.5	17.5	18.0
14	20.0	14.0	15.0	18.0	17.5	17.5	19.0	18.0	18.5	19.0	17.5	18.5
15	16.5	14.5	15.0	18.0	17.0	17.5	18.5	18.0	18.5	18.0	16.5	17.0
16	14.5	14.0	14.5	17.5	17.0	17.5	18.5	18.0	18.0	17.0	16.0	16.5
17	14.5	13.5	14.0	17.5	17.0	17.0	19.5	17.0	18.5	17.0	16.0	16.5
18	14.0	13.5	13.5	17.5	17.0	17.0	19.5	18.5	18.5	17.0	16.5	16.5
19	14.0	13.5	13.5	17.0	17.0	17.0	18.5	18.0	18.0	17.0	17.0	17.0
20	18.0	13.5	15.5	18.0	16.5	17.0	18.0	17.5	18.0	17.5	16.5	17.0
21	15.0	14.5	15.0	18.0	16.5	17.0	18.0	17.5	17.5	17.0	16.0	16.5
22	14.5	14.0	14.5	17.0	16.5	16.5	22.5	17.5	18.5	16.5	14.5	15.5
23	14.5	14.0	14.0	16.5	16.5	16.5	20.0	18.5	19.0	16.5	15.0	15.5
24	14.0	14.0	14.0	16.5	16.5	16.5	18.5	18.0	18.5	16.0	15.5	15.5
25	14.5	14.0	14.0	16.5	16.5	16.5	18.0	18.0	18.0	15.5	15.0	15.0
26	15.0	14.0	14.5	16.5	16.5	16.5	20.5	18.0	18.5	15.5	14.5	15.0
27	15.0	14.0	14.0	21.0	16.5	18.5	19.0	18.5	18.5	15.5	15.0	15.0
28	18.0	14.0	15.0	24.5	17.5	19.5	18.5	18.0	18.5	15.0	14.5	15.0
29	16.5	14.5	15.0	20.0	18.5	19.0	18.5	18.0	18.0	15.0	14.0	14.5
30	14.5	14.0	14.5	18.5	18.0	18.0	18.0	18.0	18.0	15.0	15.0	15.0
31	---	---	---	20.0	18.5	19.0	18.5	18.0	18.0	---	---	---
MONTH	20.0	12.0	14.1	24.5	14.0	17.3	23.0	17.0	18.4	22.5	14.0	17.2

STREAMS TRIBUTARY TO LAKE MICHIGAN

040871475 WILSON PARK CREEK AT GMIA OUTFALL #7 AT MILWAUKEE, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH WATER WHOLE LAB (STANDARD UNITS) (00403)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA) (00916)	MAGNESIUM, TOTAL RECOVERABLE (MG/L) (00921)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO-CHEMICAL, 5 DAY (MG/L) (00310)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L) (00335)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
DEC 23...	1000	.70	--	--	--	--	--	--	--	--	--
JAN 03...	1945	.92	--	--	--	--	--	--	--	--	--
18...	0915	.42	7.5	200	94	1.5	.825	.026	<200	200	9
19...	1905	.42	--	--	--	--	--	--	--	--	--
FEB 23...	1530	12	--	--	--	--	--	--	--	--	--
MAR 06...	1200	.30	7.9	120	46	2.8	1.81	.025	290	460	<5
APR 06...	1042	.19	--	--	--	--	--	--	--	--	--
07...	1750	7.3	--	--	--	--	--	--	--	--	--
MAY 25...	1052	1.0	--	--	--	--	--	--	--	--	--
SEP 05...	1008	.27	8.1	92.0	31	.72	.179	.039	3.1	<9	<5
22...	1556	41	--	--	--	--	--	--	--	--	--

DATE	COPPER, TOTAL RECOVERABLE (UG/L) (01119)	LEAD, TOTAL RECOVERABLE (UG/L) (01114)	ZINC, TOTAL RECOVERABLE (UG/L) (01094)	1,2, - ETHANE-DIOL, WATER, UNFLTRD (MG/L) (91075)	1,2, - PROP-ANEDIOL, WATER, UNFLTRD REC (MG/L) (91080)	OIL AND GREASE, TOTAL RECOVER, GRAVI-METRIC (MG/L) (00556)	GLYCOL HYDRO-LIZERS UNFIL-TERED, TOTAL RECOV (COLS./100ML) (99920)	PSEU-MONAS UNFIL-TERED, TOTAL RECOV (COLS./100ML) (99921)	PRESUMP AERO-MONAL UNFIL-TERED, TOTAL RECOV (COLS./100ML) (99922)	SAM-PLING METHOD, CODES (82398)
DEC 23...	--	--	--	<18.0	<18.0	--	--	--	--	70
JAN 03...	--	--	--	--	--	<1	--	--	--	70
18...	<1	<1	<20	<18.0	25.0	3	39000	5700.0	300.00	70
19...	--	--	--	--	--	<1	--	--	--	70
FEB 23...	--	--	--	--	--	3	--	--	--	70
MAR 06...	2	<1	60	<18.0	200	5	--	--	--	70
APR 06...	--	--	--	--	--	--	8100.0	900.00	220.00	70
07...	--	--	--	--	--	7	--	--	--	70
MAY 25...	--	--	--	--	--	--	89000	10.000	20.000	70
SEP 05...	3	1	20	<18.0	<18.0	4	4000.0	160.00	610.00	70
22...	--	--	--	--	--	<1	--	--	--	70

COMPOSITE SAMPLES

BEGIN-NING DATE	BEGIN-NING TIME	ENDING DATE	ENDING TIME	RUNOFF VOLUME THOUSANDS OF CUBIC FEET (99904)	PH WATER WHOLE LAB (STANDARD UNITS) (00403)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA) (00916)	MAGNESIUM, TOTAL RECOVERABLE (MG/L) (00921)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOSPHORUS TOTAL (MG/L AS P) (00665)
000103	1545	000104	1110	48	7.8	170	77	5.1	1.03	.033
000119	1600	000119	2350	12	7.9	190	92	2.9	.998	.034
000213	0625	000213	2110	27	7.8	180	65	9.9	1.05	.250
000222	1125	000224	1400	2700	7.6	42.0	12	3.4	.356	.229
000224	1925	000227	1400	800	--	--	--	2.3	.871	--
000407	1235	000408	0340	460	7.8	43.0	13	3.2	.740	.096
000922	1230	000922	2145	1100	7.7	34.0	10	.89	.156	.127

040871475 WILSON PARK CREEK AT GMIA OUTFALL #7 AT MILWAUKEE, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	CADMIUM TOTAL RECOVER -ABLE (UG/L) (01113)	COPPER, TOTAL RECOVER -ABLE (UG/L) (01119)	LEAD, TOTAL RECOVER -ABLE (UG/L) (01114)	ZINC, TOTAL RECOVER -ABLE (UG/L) (01094)	1,2,- ETHANE- DIOL, WATER, UNFLTRD REC (MG/L) (91075)	1,2,- PROP- ANEDIOL WATER, UNFLTRD REC (MG/L) (91080)	SAM- PLING METHOD, CODES (82398)
JAN 03-04	3900	4200	14	1	8	4	110	77.0	3000	50
JAN 19-19	570	880	8	--	1	1	40	<18.0	480	50
FEB 13-13	4000	8800	21	--	9	8	130	590	4200	50
FEB 22-24	580	660	67	--	21	12	140	39.0	340	50
FEB 24-27	260	430	5	--	--	--	--	25.0	170	50
APR 07-08	1600	3100	30	--	13	8	160	220	1300	50
SEP 22-22	--	17	50	--	9	3	50	<18.0	<18.0	50

STREAMS TRIBUTARY TO LAKE MICHIGAN

040871476 HOLMES AVENUE CREEK TRIB AT GMIA OUTFALL #1 AT MILWAUKEE, WI

LOCATION.--Lat 42°56'30", long 87°54'37", in NE ¼ NE ¼ sec.32, T.6 N., R.22 E., Milwaukee County, Hydrologic Unit 04040003, at Milwaukee.

DRAINAGE AREA.--0.03 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1996 through May 1997, November 1997 to current year.

GAGE.--Water-stage recorder in culvert. Elevation of gage is 700 ft above sea level, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor (see page 12).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.01	e.00	e.00	.00	.00	.01	.00	.02	.69	e.00	.00	e.00
2	e.01	e.00	e.00	.01	.00	.00	.00	.00	.01	e2.9	.04	e.43
3	e.17	e.00	e.03	.00	.00	.00	.00	.00	.01	e.60	.00	e.12
4	e.01	e.00	e.13	.00	.00	.00	.00	.00	.06	e.01	.00	.00
5	e.00	e.00	e.12	.00	.00	.00	.00	.00	.20	e.00	1.6	.00
6	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00	e.00	.23	.00
7	e.00	e.00	e.00	.00	.00	.00	.25	.00	.00	.00	.00	.00
8	e.00	e.00	e.00	.00	.00	.00	.14	.33	.00	.51	.00	.02
9	e.00	e.00	.01	.01	.00	.01	.03	.73	.00	.00	.00	.00
10	e.00	e.12	.00	.03	.00	.00	.00	.00	.00	.15	.00	.19
11	e.00	e.00	.00	.00	.00	.00	.01	.02	.01	.00	.00	1.4
12	e.00	e.00	.00	.00	.00	.00	.00	.70	.53	.00	.00	.80
13	e.00	e.00	.00	.00	.00	.00	.00	.00	.01	.00	.02	.10
14	e.00	e.00	.04	.00	.00	.00	.00	.00	.13	.01	.00	.53
15	e.00	e.00	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	e.05	e.00	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00
17	e.00	e.00	.00	.00	.00	.00	.00	.71	.00	.00	1.1	.00
18	e.00	e.00	.00	.00	.00	.00	.00	1.6	e.00	.00	.08	.00
19	e.00	e.01	.00	.00	.00	.06	.28	.14	e.00	.00	.00	.00
20	e.00	e.00	.00	.00	.00	.24	1.1	.01	e.13	.02	.00	.26
21	e.00	e.00	.00	.00	.00	.00	.13	.00	e.00	.00	.00	.00
22	e.00	e.00	.00	.00	.10	.00	.00	.02	e.00	.00	.11	.66
23	e.00	e.09	.00	.00	.04	.00	.12	.00	e.00	.00	.02	.27
24	e.00	e.00	.00	.00	.19	.03	.00	.00	e.00	.00	.00	.01
25	e.00	e.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00
26	e.00	e.00	.00	.00	.00	.01	.00	.00	e.00	.00	.14	.00
27	e.00	e.00	.00	.00	.00	.00	.00	.34	e.00	.17	.00	.00
28	e.00	e.00	.00	.00	.00	.01	.00	.44	e.05	.33	.00	.00
29	e.00	e.00	.00	.00	.03	.00	.00	.01	e.02	.00	.00	.00
30	e.00	e.00	.00	.00	---	.00	.00	.06	e.00	.02	.00	.00
31	e.00	---	.00	.00	---	.00	---	.42	---	.31	e.00	---
TOTAL	0.25	0.22	0.38	0.05	0.36	0.37	2.06	5.58	1.85	5.02	3.34	4.79
MEAN	.008	.007	.012	.002	.012	.012	.069	.18	.062	.16	.11	.16
MAX	.17	.12	.13	.03	.19	.24	1.1	1.6	.69	2.9	1.6	1.4
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2000, BY WATER YEAR (WY)

	1997	1998	1999	2000
MEAN	.018	.020	.018	.033
MAX	.028	.043	.041	.057
(WY)	1999	1999	1997	1999
MIN	.008	.007	.010	.002
(WY)	2000	2000	1998	2000

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1997 - 2000

	1999	2000	1997-2000
ANNUAL TOTAL	15.91	24.27	
ANNUAL MEAN	.044	.066	.057
HIGHEST ANNUAL MEAN			.066
LOWEST ANNUAL MEAN			.048
HIGHEST DAILY MEAN	1.9	Jun 13	(e)2.9 Jul 2
LOWEST DAILY MEAN	.00	Many days	.00 Many days
ANNUAL SEVEN-DAY MINIMUM	.00	Many periods	.00 Many periods
INSTANTANEOUS PEAK STAGE			4.45 Jul 2
INSTANTANEOUS LOW FLOW			.00 Many days
10 PERCENT EXCEEDS	.09	.14	.12
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

(e) Estimated due to ice effect or missing record

040871476 HOLMES AVENUE CREEK TRIB AT GMIA OUTFALL #1 AT MILWAUKEE, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1996 to May 1997, November 1997 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: November 1996 to May 1997, November 1997 to Sept. 6, 1999 (discontinued).

INSTRUMENTATION.--Stage-activated water-quality sampler since November 1996. Continuous water-temperature recorder from November 1996 to September 1999.

REMARKS.--Chemical analyses are by the Wisconsin State Laboratory of Hygiene. Samples are point samples unless otherwise indicated. Records represent water temperature at sensor within 0.5°C.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum observed, 27.5°C, June 9, 11, 28, 1999; minimum observed, 0.0°C, many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	OIL AND GREASE, TOTAL RECOV. GRAVI- METRIC (MG/L) (00556)	GLYCOL HYDRO- LIZERS UNFIL- TERED, TOTAL RECOV (COLS./ 100ML) (99920)	PSEU- MONAS UNFIL- TERED TOTAL RECOV (COLS./ 100ML) (99921)	PRESUMP. AERO- MONAS UNFIL- TERED TOTAL RECOV (COLS./ 100ML) (99922)	SAM- PLING METHOD, CODES (82398)
JAN							
03...	2110	<.01	3	--	--	--	70
FEB							
23...	1610	.05	<1	--	--	--	70
APR							
06...	0952	.01	--	4900.0	1400.0	10.000	70
07...	1820	.01	6	--	--	--	70
MAY							
25...	1028	.01	--	260000	10.000	20.000	70
SEP							
05...	0926	<.01	--	4000.0	310.00	780.00	70
22...	1612	.64	5	--	--	--	70

COMPOSITE SAMPLES

BEGIN- NING DATE	BEGIN- NING TIME	ENDING DATE	ENDING TIME	RUNOFF VOLUME THOUSANDS OF CUBIC FEET (99904)	PH WATER WHOLE LAB RECOV- ERABLE (STAND- ARD UNITS) (00403)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	MAGNE- SIUM, TOTAL RECOVER -ABLE (MG/L) (00921)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
000103	1538	000104	1032	.86	7.9	210	16	16	8.77	.059
000222	1127	000224	1025	25	7.4	56.0	12	4.1	.549	.399
000407	1237	000408	0036	4.4	7.8	43.0	11	3.5	.790	.181
000922	1236	000922	2106	39	7.5	18.0	3.1	.90	.139	.125
DATE	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	OXYGEN DEMAND, CHEM- ICAL, (LOW LEVEL) (MG/L) (00335)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	CADMIUM TOTAL RECOVER -ABLE (UG/L) (01113)	COPPER, TOTAL RECOVER -ABLE (UG/L) (01119)	LEAD, TOTAL RECOVER -ABLE (UG/L) (01114)	ZINC, TOTAL RECOVER -ABLE (UG/L) (01094)	1,2,- ETHANE- DIOL, WATER, UNFLTRD REC (MG/L) (91075)	1,2,- PROP- ANEDIOL WATER, UNFLTRD REC (MG/L) (91080)	SAM- PLING METHOD, CODES (82398)
JAN										
03-04	39000	60000	30	12	17	19	110	370	35000	50
FEB										
22-24	1600	2800	234	--	27	41	140	48.0	750	50
APR										
07-08	1500	2500	129	--	42	120	190	<18.0	1300	50
SEP										
22-22	--	78	23	--	7	3	100	<18.0	<18.0	50

STREAMS TRIBUTARY TO LAKE MICHIGAN

040871488 WILSON PARK CREEK AT ST. LUKES HOSPITAL AT MILWAUKEE, WI

LOCATION.--Lat 42°59'16", long 87°57'07", in SE ¼ SE ¼ sec.12, T.6 N., R.21 E., Milwaukee County, Hydrologic Unit 04040003, at Milwaukee.

DRAINAGE AREA.--11.34 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1996 to May 1997, November 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 640 ft above sea level, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor (see page 12).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	2.1	2.1	2.8	3.2	12	3.6	10	209	5.0	7.2	4.9
2	7.0	2.3	2.1	6.7	3.0	5.2	3.4	6.8	53	401	7.5	48
3	35	2.3	6.4	4.2	3.0	4.7	3.1	6.4	16	274	5.6	13
4	14	2.6	11	6.1	3.3	4.3	3.6	6.1	15	33	5.3	5.9
5	6.3	2.8	40	4.4	2.4	3.9	2.9	5.8	44	15	216	4.8
6	5.0	2.3	5.0	4.3	2.2	4.2	3.1	5.0	13	11	52	4.7
7	4.9	2.3	3.4	3.0	2.4	4.3	33	4.9	11	9.5	13	4.7
8	4.5	2.6	2.7	4.1	2.4	17	38	26	9.5	76	9.3	8.7
9	3.8	2.7	7.1	6.4	4.7	9.6	26	139	8.5	14	8.0	4.5
10	3.5	15	4.4	17	6.6	4.9	12	23	7.7	32	6.7	23
11	3.2	6.7	2.4	5.3	3.9	3.6	13	12	8.0	10	5.5	286
12	3.3	3.3	2.2	3.5	2.8	3.2	8.2	146	72	8.3	4.9	132
13	3.9	3.3	2.4	3.6	4.2	3.5	6.5	16	15	7.4	6.3	18
14	3.2	3.1	7.7	2.7	4.9	3.5	6.0	11	26	8.1	5.0	97
15	2.9	2.6	15	2.7	4.6	4.3	5.1	9.4	13	6.6	4.9	17
16	11	2.6	6.0	2.5	7.5	3.6	4.6	12	8.5	5.9	4.6	12
17	3.6	2.4	2.9	2.4	3.9	3.8	6.1	68	7.1	6.2	167	9.4
18	2.8	2.4	2.4	3.0	3.3	2.8	5.3	388	6.5	5.6	36	8.2
19	3.2	3.8	2.4	2.4	4.4	16	51	80	6.6	5.5	9.6	7.5
20	2.7	2.4	2.7	2.5	4.6	51	196	23	23	5.9	7.3	32
21	2.7	2.2	2.0	2.1	9.0	12	105	16	7.2	5.6	6.7	8.6
22	2.6	2.2	2.1	2.2	53	7.6	18	14	6.3	4.9	13	87
23	2.3	17	1.7	2.4	37	6.2	35	12	6.0	4.6	8.8	129
24	2.6	5.0	e1.8	1.9	55	13	12	9.9	6.3	4.9	6.0	19
25	2.4	2.7	e2.3	2.0	19	6.5	9.6	7.7	5.4	5.0	5.9	11
26	2.5	2.5	e2.2	2.2	15	6.6	8.2	7.0	5.3	5.0	21	9.9
27	2.6	2.5	e2.2	2.3	10	7.3	7.3	44	5.2	27	5.9	7.8
28	2.3	2.1	e2.1	2.5	7.4	7.4	6.9	77	18	49	5.4	6.9
29	2.2	2.1	3.0	2.4	6.1	5.1	6.5	16	8.9	8.2	5.3	6.3
30	2.2	2.1	3.2	3.2	---	3.9	6.0	17	5.3	5.8	5.4	6.0
31	2.0	---	2.9	3.5	---	3.9	---	65	---	35	5.2	---
TOTAL	156.4	110.0	155.8	116.3	288.8	244.9	645.0	1284.0	646.3	1095.0	670.3	1032.8
MEAN	5.05	3.67	5.03	3.75	9.96	7.90	21.5	41.4	21.5	35.3	21.6	34.4
MAX	35	17	40	17	55	51	196	388	209	401	216	286
MIN	2.0	2.1	1.7	1.9	2.2	2.8	2.9	4.9	5.2	4.6	4.6	4.5
CFSM	.44	.32	.44	.33	.88	.70	1.90	3.65	1.90	3.11	1.91	3.04
IN.	.51	.36	.51	.38	.95	.80	2.12	4.21	2.12	3.59	2.20	3.39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2000, BY WATER YEAR (WY)

	1997	1998	1999	2000
MEAN	7.54	6.68	5.34	11.5
MAX	10.0	12.2	6.09	21.9
(WY)	1999	1999	1997	1999
MIN	5.05	3.67	5.03	3.75
(WY)	2000	2000	2000	2000

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1997 - 2000

ANNUAL TOTAL	5806.9	6445.6		
ANNUAL MEAN	15.9	17.6		
HIGHEST ANNUAL MEAN			17.3	
LOWEST ANNUAL MEAN			17.6	2000
HIGHEST DAILY MEAN	508	Jun 13	17.0	1999
LOWEST DAILY MEAN	1.3	Jan 2	508	Jun 13 1999
ANNUAL SEVEN-DAY MINIMUM	1.9	Jan 1	1.3	Jan 2 1999
INSTANTANEOUS PEAK FLOW			1.9	Dec 31 1998
INSTANTANEOUS PEAK STAGE			20.82	Jul 2 2000
INSTANTANEOUS LOW FLOW			.95	Dec 20 1999
ANNUAL RUNOFF (CFSM)	1.40	1.55	1.53	
ANNUAL RUNOFF (INCHES)	19.05	21.14	20.75	
10 PERCENT EXCEEDS	30	35	30	
50 PERCENT EXCEEDS	5.3	5.9	5.8	
90 PERCENT EXCEEDS	2.3	2.4	2.6	

(e) Estimated due to ice effect or missing record

040871488 WILSON PARK CREEK AT ST. LUKES HOSPITAL AT MILWAUKEE, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1996 to April 1997, November 1997 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: November 1996 to April 1997, November 1997 to current year.

DISSOLVED OXYGEN: November, 1996 to April 1997, November 1997 to current year.

INSTRUMENTATION.--Stage-activated water-quality sampler since November 1996. Continuous water-temperature recorder since November 1996. Dissolved-oxygen recorder since November 1996.

REMARKS.--Chemical analyses are by the Wisconsin State Laboratory of Hygiene. Samples are point samples unless otherwise indicated. Dissolved-oxygen concentrations greater than 30 mg/L are out of calibration range of meter. Records represent water temperature at sensor within 0.5°C.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum observed, 29.5°C, July 30, 1999; minimum observed, 0.0°C, many days during winter.

DISSOLVED OXYGEN: Maximum observed, 22.7 mg/L, Oct. 14, 2000; minimum observed, 0.0 mg/L, Feb. 24, 1997.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum observed, 27.5°C, Sept. 1; minimum observed, 0.0°C, many days during winter.

DISSOLVED OXYGEN: Maximum observed, 22.7 mg/L, Oct. 14; minimum observed, 1.6 mg/L, Sept. 22.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	16.0	11.0	13.5	16.0	10.5	13.0	6.0	2.0	4.0	2.5	.5	1.5
2	14.5	11.0	12.5	10.5	7.0	8.5	8.5	4.5	6.5	4.5	.5	3.0
3	12.0	9.5	11.0	8.5	5.5	7.0	10.5	8.0	9.5	4.5	.0	3.5
4	14.5	10.5	12.0	10.0	5.5	8.0	10.5	8.5	9.5	3.5	.0	2.0
5	15.5	10.0	12.5	11.0	8.0	9.0	9.5	4.5	6.5	2.0	.0	1.0
6	14.5	10.0	12.0	10.0	7.0	8.5	5.5	3.5	4.5	3.5	.5	1.5
7	16.5	11.0	13.5	10.5	6.5	8.5	6.0	3.0	4.0	2.5	.0	1.5
8	17.5	12.0	14.5	13.0	7.5	10.0	7.5	3.0	5.5	3.5	1.0	2.0
9	18.5	12.5	15.5	15.0	11.0	13.0	8.5	6.0	7.0	5.5	2.0	4.0
10	19.0	15.5	17.0	13.5	9.0	12.0	7.5	3.0	4.5	5.5	3.0	4.5
11	17.0	12.5	14.5	11.0	8.5	9.5	5.5	2.5	4.0	4.5	1.5	3.0
12	16.5	13.0	14.5	12.0	8.5	10.0	7.5	4.5	5.5	3.0	.5	2.0
13	16.0	11.0	13.5	13.0	8.5	10.5	6.0	3.5	4.5	3.0	.0	1.5
14	14.5	10.0	12.0	11.5	8.0	9.5	6.5	4.0	5.0	2.0	.5	1.0
15	16.5	10.5	13.5	10.0	7.0	8.0	6.5	4.5	5.5	3.0	.0	1.5
16	16.5	13.0	15.0	9.0	5.5	7.0	5.5	1.5	3.5	2.5	.0	1.5
17	13.0	9.5	11.0	8.5	6.0	7.0	2.0	.5	1.0	2.5	.0	1.5
18	12.5	9.0	11.0	11.0	6.0	8.5	2.5	.5	1.5	2.0	.0	1.0
19	14.0	10.0	11.5	11.0	8.5	10.0	4.5	1.5	3.0	3.0	.5	1.5
20	13.0	9.5	10.5	9.5	8.0	9.0	4.5	.5	2.0	3.5	.5	2.0
21	13.5	8.0	10.5	10.0	7.0	8.5	2.5	.5	1.0	3.5	1.5	2.5
22	12.0	7.5	9.5	11.5	9.0	10.0	2.0	.5	1.0	3.0	1.5	2.5
23	9.5	7.0	8.0	13.0	9.0	11.0	2.0	.5	1.0	3.0	1.5	2.5
24	10.5	6.0	8.0	10.0	6.5	8.5	1.5	.0	.5	4.0	2.0	3.0
25	12.0	7.0	9.0	8.5	5.0	6.5	2.0	.0	1.0	3.5	.0	2.5
26	12.0	9.0	10.0	8.5	5.0	6.5	2.0	.0	1.0	3.5	2.0	2.5
27	12.5	8.0	10.0	8.5	5.0	6.5	2.0	.0	1.0	4.0	2.0	3.0
28	12.5	9.5	11.0	7.0	4.0	5.5	2.0	.5	1.0	4.0	2.0	3.0
29	14.5	10.0	12.5	6.0	3.0	4.0	2.0	.5	1.0	4.0	2.5	3.0
30	15.5	12.5	13.5	5.5	2.5	3.5	1.5	.5	1.0	4.0	2.0	3.0
31	15.0	12.0	13.5	---	---	---	1.5	.5	1.0	4.0	2.5	3.5
MONTH	19.0	6.0	12.1	16.0	2.5	8.6	10.5	.0	3.5	5.5	.0	2.3

STREAMS TRIBUTARY TO LAKE MICHIGAN

040871488 WILSON PARK CREEK AT ST. LUKES HOSPITAL AT MILWAUKEE, WI--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	4.5	3.0	4.0	10.5	8.0	9.5	13.5	12.0	12.5	20.0	13.0	15.5
2	4.5	.5	4.0	11.0	6.5	8.5	16.5	11.5	14.0	20.0	12.0	15.5
3	4.5	3.0	3.5	11.5	6.5	8.5	16.0	12.0	14.0	21.0	13.0	16.5
4	4.0	3.0	3.5	12.5	7.5	9.5	12.0	10.0	10.5	22.5	15.5	18.5
5	4.5	3.5	4.0	13.5	8.5	10.5	12.5	8.5	10.5	24.0	16.0	20.0
6	5.0	3.5	4.5	14.0	9.0	11.5	14.5	7.5	12.0	25.0	17.5	20.5
7	5.5	.5	4.5	19.0	11.5	15.0	11.5	1.5	6.5	23.5	18.5	20.5
8	5.5	3.5	4.5	19.0	12.5	16.0	8.0	1.5	4.5	24.0	19.0	21.0
9	5.5	2.0	4.0	14.5	8.0	11.5	10.5	4.0	7.0	20.5	12.5	17.0
10	4.0	2.5	3.0	9.0	5.5	7.5	8.0	4.5	6.0	18.5	12.0	14.5
11	3.5	.0	1.5	10.5	6.0	8.0	6.5	5.0	5.5	16.5	13.0	14.5
12	2.5	.0	1.0	11.5	7.0	9.0	12.0	3.5	7.5	17.5	14.5	16.0
13	4.5	1.0	2.5	11.0	9.0	10.0	9.5	6.0	7.5	15.0	11.5	13.5
14	5.0	.0	3.0	12.5	8.0	10.5	16.0	7.0	11.0	16.5	9.5	13.0
15	5.5	2.5	4.5	13.5	10.0	11.0	13.0	8.0	11.0	19.0	10.0	14.0
16	6.5	.5	3.0	11.5	7.5	9.5	8.0	7.0	7.5	16.5	12.5	14.5
17	2.5	.0	1.0	11.5	6.5	9.0	7.5	5.0	7.0	15.0	12.0	13.5
18	1.5	.0	.5	10.0	7.5	9.0	11.0	7.0	9.0	13.0	9.5	11.5
19	2.5	.0	.5	9.5	7.0	8.5	10.0	7.5	9.0	12.0	9.5	10.5
20	7.5	.5	3.0	9.0	4.5	6.5	8.5	6.0	8.0	17.5	10.5	13.5
21	7.5	2.5	4.0	10.0	6.0	8.0	11.0	5.5	7.5	18.0	11.5	15.0
22	6.0	2.0	3.5	12.0	8.0	10.0	14.5	6.0	10.0	20.0	14.0	16.5
23	6.0	2.5	4.0	13.5	8.0	10.5	12.5	8.0	10.0	22.5	15.0	18.5
24	7.5	4.0	5.5	12.5	9.5	11.0	15.0	7.5	10.5	22.0	16.0	18.5
25	8.0	6.0	7.0	14.5	10.0	12.0	15.5	7.0	11.0	20.5	13.5	17.0
26	11.5	7.5	9.5	13.5	8.0	11.0	17.5	7.5	12.0	17.0	13.0	15.0
27	12.0	7.5	9.0	13.5	9.0	11.0	18.0	9.5	13.5	14.0	12.5	13.0
28	11.5	5.5	8.5	11.0	8.0	9.5	17.5	10.0	14.0	13.0	11.0	12.0
29	12.0	7.5	10.0	12.0	8.0	9.5	17.5	10.5	13.5	18.0	10.5	14.0
30	---	---	---	15.0	8.0	11.0	18.5	10.0	14.5	17.0	11.5	14.0
31	---	---	---	16.0	9.0	12.5	---	---	---	15.5	14.0	14.5
MONTH	12.0	.0	4.2	19.0	4.5	10.2	18.5	1.5	9.9	25.0	9.5	15.5
JUNE				JULY			AUGUST			SEPTEMBER		
1	20.5	14.0	16.5	24.5	17.5	21.0	24.5	19.0	21.5	27.5	22.0	24.0
2	18.5	14.5	16.5	23.0	19.5	21.0	24.0	20.0	21.5	24.5	20.5	22.5
3	20.0	12.5	15.5	20.0	17.5	18.5	23.5	17.5	20.5	24.0	20.0	22.0
4	15.5	13.0	14.0	22.5	16.5	19.0	23.0	18.5	21.0	21.0	16.5	18.5
5	17.5	12.0	14.0	23.5	16.0	19.5	20.5	18.0	19.5	20.5	16.0	18.0
6	20.5	11.0	15.5	23.0	17.0	20.0	23.5	18.0	20.5	21.5	16.5	18.5
7	20.5	13.0	16.5	22.5	16.5	19.5	25.5	18.5	21.5	24.0	17.5	20.5
8	24.0	14.5	19.5	20.5	17.0	18.5	26.0	19.5	22.5	23.5	19.5	21.5
9	24.5	16.5	20.5	23.5	18.0	20.5	25.5	20.0	22.5	24.5	20.0	22.0
10	25.5	17.5	21.5	24.5	18.5	21.0	24.5	19.5	22.0	24.5	21.5	22.5
11	23.5	16.5	20.5	24.5	17.5	20.5	25.5	19.5	22.0	22.5	18.5	20.5
12	16.5	14.0	15.0	23.5	17.5	20.5	25.5	19.0	22.0	21.0	17.5	19.0
13	18.5	14.5	16.0	25.0	18.0	21.5	25.0	20.5	22.5	22.0	16.0	18.5
14	21.0	15.5	18.0	25.0	19.0	22.5	26.0	21.0	23.0	20.0	16.5	18.5
15	22.5	16.0	19.0	25.0	18.5	22.0	27.0	21.0	24.0	17.5	14.5	16.0
16	21.0	17.0	18.5	25.0	18.5	21.5	24.0	18.5	21.0	19.5	13.0	16.0
17	20.5	14.0	17.0	26.5	20.0	22.5	21.0	17.0	19.0	20.5	14.0	17.0
18	21.5	14.5	18.0	22.5	17.0	20.0	22.0	18.5	20.0	22.0	15.0	18.5
19	23.5	15.0	19.0	21.5	17.0	19.0	21.5	17.5	19.0	20.5	17.5	19.0
20	22.5	17.0	19.5	22.0	17.0	19.5	22.0	16.0	19.0	18.0	14.5	17.0
21	23.5	18.0	20.5	20.5	16.5	19.0	23.0	16.5	19.5	18.0	12.5	15.0
22	21.0	16.5	19.0	20.0	17.0	18.5	23.5	19.0	21.0	15.5	14.0	14.5
23	22.5	16.5	19.5	23.0	16.0	19.5	24.0	19.0	21.5	16.0	14.5	15.5
24	20.5	17.5	19.0	24.0	17.0	20.0	24.0	19.5	21.5	17.0	13.5	15.0
25	25.5	17.5	21.5	22.0	18.0	20.0	24.0	18.5	21.0	15.5	12.5	13.5
26	23.5	19.5	21.5	24.0	18.0	21.0	23.5	20.0	21.0	18.0	12.0	14.5
27	23.5	17.5	20.0	24.5	20.5	22.0	24.0	19.5	21.5	15.0	12.5	14.0
28	19.5	16.5	18.0	24.0	19.5	21.5	24.0	20.0	21.5	17.0	12.0	14.0
29	22.0	15.0	18.5	23.5	19.5	21.5	23.0	20.5	21.5	18.0	12.0	15.0
30	23.5	16.0	20.0	21.0	19.5	20.5	23.0	19.5	21.0	18.0	13.5	16.0
31	---	---	---	21.0	19.5	20.0	26.5	20.5	23.0	---	---	---
MONTH	25.5	11.0	18.3	26.5	16.0	20.4	27.0	16.0	21.2	27.5	12.0	17.9

040871488 WILSON PARK CREEK AT ST. LUKES HOSPITAL AT MILWAUKEE, WI--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	14.6	8.7	11.0	---	---	---	---	---	---
2	---	---	---	15.7	9.8	12.5	---	---	---	---	---	---
3	11.6	8.6	9.5	16.6	11.6	13.7	---	---	---	---	---	---
4	12.6	8.6	10.0	16.7	9.8	13.0	---	---	---	---	---	---
5	15.0	8.7	11.2	16.6	9.7	12.0	---	---	---	---	---	---
6	16.4	8.7	11.9	16.2	10.9	13.0	---	---	---	---	---	---
7	20.4	8.6	12.3	16.3	11.6	13.4	---	---	---	---	---	---
8	22.1	6.2	10.6	15.4	8.5	11.8	---	---	---	---	---	---
9	18.4	5.6	10.4	14.3	8.0	10.1	---	---	---	---	---	---
10	20.4	6.2	11.2	13.1	8.4	10.4	---	---	---	---	---	---
11	20.6	7.4	13.0	13.1	9.4	11.2	---	---	---	---	---	---
12	21.2	7.8	13.3	13.9	9.9	12.3	---	---	---	---	8.3	9.3
13	19.4	6.8	11.7	---	---	---	---	---	---	---	8.6	10.1
14	22.7	10.1	14.7	---	---	---	---	---	---	---	---	---
15	20.5	8.0	13.2	---	---	---	---	---	---	---	---	---
16	10.6	5.6	7.6	14.9	10.7	13.2	---	---	---	---	---	---
17	18.3	7.9	12.3	13.8	9.5	11.3	---	---	---	---	---	---
18	17.8	8.7	12.6	13.4	7.8	10.4	---	---	---	---	9.2	11.4
19	20.1	8.4	11.9	10.5	7.0	8.7	---	---	---	---	---	---
20	18.6	9.1	12.5	12.5	7.7	9.6	---	---	---	---	---	---
21	18.0	7.8	12.2	13.7	9.3	10.9	---	---	---	---	---	---
22	16.2	7.8	11.3	13.7	8.3	10.7	---	---	---	---	---	---
23	15.5	9.6	11.9	10.7	7.0	8.6	---	---	---	---	---	---
24	15.8	10.0	12.2	---	---	---	---	---	---	---	---	---
25	15.8	8.4	11.5	---	---	---	---	---	---	---	---	---
26	15.7	8.1	10.8	---	---	---	---	---	---	---	---	---
27	16.3	8.2	11.1	---	---	---	---	---	---	---	---	---
28	16.7	9.1	12.0	---	---	---	---	---	---	---	---	---
29	16.0	7.8	11.2	---	---	---	---	---	---	---	---	---
30	14.1	7.5	9.8	---	---	---	---	---	---	---	---	---
31	14.8	7.8	10.8	---	---	---	---	---	---	---	---	---
MONTH	22.7	5.6	11.5	16.7	7.0	11.4	---	---	---	---	8.3	10.3
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	15.5	10.8	13.2	---	---	---
2	---	---	---	---	---	---	14.3	10.4	12.5	17.5	8.9	14.1
3	---	---	---	---	---	---	14.1	10.7	12.4	17.8	9.9	14.2
4	---	---	---	---	---	---	17.7	12.6	15.4	16.2	9.4	12.6
5	---	---	---	---	---	---	17.1	13.2	15.5	18.9	8.9	13.5
6	---	---	---	---	---	---	16.1	10.2	13.8	18.3	9.6	13.8
7	---	---	---	---	---	---	---	---	---	18.4	11.4	13.7
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	14.6	10.6	12.8
11	---	---	---	12.6	11.0	11.6	---	---	---	14.4	4.7	10.5
12	8.6	6.8	7.8	12.4	9.8	11.2	---	---	---	---	---	---
13	9.8	7.1	8.3	12.0	10.7	11.3	---	---	---	---	---	---
14	7.7	6.5	7.2	13.0	10.4	11.8	---	---	---	---	---	---
15	8.6	6.3	7.4	12.7	10.1	11.6	---	---	---	---	---	---
16	9.0	6.2	7.2	14.7	11.6	13.4	---	---	---	---	---	---
17	10.0	5.9	8.7	15.2	13.0	14.2	---	---	---	---	---	---
18	10.6	8.9	10.0	14.1	11.8	13.0	---	---	---	---	---	---
19	10.2	7.4	9.4	14.9	7.6	11.6	---	---	---	---	---	---
20	9.8	7.0	8.7	---	---	---	---	---	---	---	---	---
21	10.7	7.1	8.8	11.5	7.2	9.9	---	---	---	---	---	---
22	---	---	---	10.8	6.5	8.1	---	---	---	---	---	---
23	10.7	8.5	9.7	9.5	6.1	7.8	---	---	---	---	---	---
24	---	---	---	9.0	4.9	6.8	---	---	---	---	---	---
25	7.6	4.7	6.4	9.1	5.7	7.9	13.4	8.1	10.8	17.8	5.9	11.5
26	4.9	2.8	3.8	11.2	5.6	8.8	13.0	8.8	10.4	20.2	5.9	12.5
27	5.0	3.0	3.9	---	---	---	13.1	8.4	10.7	---	---	---
28	8.3	3.8	5.8	---	---	---	---	---	---	---	---	---
29	7.7	4.9	6.3	---	---	---	---	---	---	---	---	---
30	---	---	---	15.0	11.3	13.0	---	---	---	---	---	---
31	---	---	---	16.2	10.3	12.7	---	---	---	---	---	---
MONTH	10.7	2.8	7.5	16.2	4.9	10.9	17.7	8.1	12.7	20.2	4.7	12.9

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000[illegible]

040871488 WILSON PARK CREEK AT ST. LUKES HOSPITAL AT MILWAUKEE, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	COPPER, TOTAL RECOVER- ABLE (UG/L) (01119)	LEAD, TOTAL RECOVER- ABLE (UG/L) (01114)	ZINC, TOTAL RECOVER- ABLE (UG/L) (01094)	1,2,- ETHANE- DIOL, WATER, UNFLTRD REC (MG/L) (91075)	1,2,- PROP- ANEDIOL WATER, UNFLTRD REC (MG/L) (91080)	OIL AND GREASE, TOTAL RECOV. GRAVI- METRIC (MG/L) (00556)	GLYCOL HYDRO- LIZERS UNFIL- TERED TOTAL RECOV (COLS./ 100ML) (99920)	PSEU- MONAS UNFIL- TERED TOTAL RECOV (COLS./ 100ML) (99921)	PRESUMP AERO- MONAS UNFIL- TERED TOTAL RECOV (COLS./ 100ML) (99922)	SAM- PLING METHOD, CODES (82398)
JAN										
03...	--	--	--	--	--	2	--	--	--	70
18...	3	<1	<20	<18.0	<18.0	2	58000	1100.0	1100.0	70
19...	--	--	--	--	--	<1	--	--	--	70
FEB										
23...	--	--	--	--	--	3	--	--	--	70
MAR										
06...	4	2	30	<18.0	<18.0	5	--	--	--	70
APR										
06...	--	--	--	--	--	--	4700.0	80.000	40.000	70
07...	--	--	--	--	--	1	--	--	--	70
MAY										
25...	--	--	--	--	--	--	9200.0	10.000	10.000	70
SEP										
05...	3	1	<20	<18.0	<18.0	4	120.00	150.00	<10.000	70
22...	--	--	--	--	--	2	--	--	--	70

COMPOSITE SAMPLES

BEGIN- NING DATE	BEGIN- NING TIME	ENDING DATE	ENDING TIME	RUNOFF VOLUME THOUSANDS OF CUBIC FEET (99904)	PH WATER WHOLE LAB RECOV- ERABLE (STAND- ARD UNITS) (00403)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	MAGNE- SIUM, TOTAL RECOVER -ABLE (MG/L) (00921)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
000103	2045	000104	1550	420	7.8	130	42	1.8	.434	.129
000119	2045	000120	0600	62	7.9	110	50	.79	.025	.141
000213	1050	000214	0450	330	7.6	140	39	1.4	.022	.184
000222	1140	000224	1635	11000	7.4	85.0	27	4.7	.065	.450
000224	1815	000228	0945	4800	--	--	--	.92	<.013	--
000407	1540	000408	0725	1800	7.8	52.0	17	1.2	.220	.080
000922	1250	000922	2205	5600	7.6	35.0	13	1.5	.172	.255

DATE	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	CADMIUM TOTAL RECOVER -ABLE (UG/L) (01113)	COPPER, TOTAL RECOVER -ABLE (UG/L) (01119)	LEAD, TOTAL RECOVER -ABLE (UG/L) (01114)	ZINC, TOTAL RECOVER -ABLE (UG/L) (01094)	1,2,- ETHANE- DIOL, WATER, UNFLTRD REC (MG/L) (91075)	1,2,- PROP- ANEDIOL WATER, UNFLTRD REC (MG/L) (91080)	SAM- PLING METHOD, CODES (82398)
JAN										
03-04	<300	380	30	1	11	67	100	<18.0	210	50
JAN										
19-20	<200	180	20	--	3	2	20	<18.0	94.0	50
FEB										
13-14	<200	350	45	--	16	12	140	<18.0	140	50
FEB										
22-24	84	230	263	--	31	33	210	<18.0	<18.0	50
FEB										
24-28	39	99	12	--	--	--	--	<18.0	36.0	50
APR										
07-08	310	560	30	--	11	11	90	35.0	250	50
SEP										
22-22	--	39	164	--	20	20	100	<18.0	24.0	50

STREAMS TRIBUTARY TO LAKE MICHIGAN

04087159 KINNICKINNIC RIVER AT SOUTH 11TH STREET AT MILWAUKEE, WI

LOCATION.--Lat 42°59'51", long 87°55'35", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.8, T.6 N., R.22 E., Milwaukee County, Hydrologic Unit 04040003, on left bank 150 ft upstream from footbridge on South 11th Street, 3.2 mi upstream from mouth, at Milwaukee.

DRAINAGE AREA.--18.8 mi².

PERIOD OF RECORD.--October 1982 to current year. Low-flow records equivalent to records for Kinnickinnic River at Milwaukee, WI (04087160) September 1976 to January 1983 (discontinued). Discontinued gage was located 0.3 mi downstream from present gage.

REVISED RECORDS.--WDR WI-97-1: Drainage area.

GAGE.--Water-stage recorder and steel plate weir. Elevation of gage is 590 ft above sea level, from river-profile map.

REMARKS.--Records good except those for estimated daily discharges, which are poor, and those for discharges greater than 500 ft³/s, which are fair (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	5.5	5.6	4.5	e5.4	19	6.3	18	373	6.6	11	11
2	11	6.1	5.4	12	e5.6	8.5	6.4	9.0	80	844	11	118
3	58	6.0	14	6.8	e5.4	7.2	6.4	8.6	26	462	8.3	31
4	23	6.5	19	9.4	e5.4	6.6	6.8	8.5	22	45	7.3	11
5	11	6.2	73	6.0	e5.2	6.2	6.1	8.4	75	20	603	8.0
6	10	5.4	8.3	e5.8	5.1	6.7	5.7	7.2	19	15	75	7.6
7	9.1	5.1	6.8	e5.4	5.0	6.5	55	6.9	14	12	19	7.6
8	9.4	5.7	6.3	7.5	5.3	47	65	39	13	153	14	20
9	9.0	6.4	14	9.7	9.9	19	39	260	11	19	13	7.4
10	7.2	36	9.1	30	12	7.8	17	36	10	53	11	49
11	7.3	12	5.4	8.6	6.3	6.2	21	17	11	15	9.7	663
12	7.3	5.7	5.3	6.6	5.0	5.6	12	346	135	12	8.1	236
13	8.1	5.7	6.0	6.7	6.8	5.8	9.9	23	23	11	12	27
14	7.6	5.3	16	6.0	7.8	5.8	9.2	14	48	12	8.2	176
15	7.5	5.1	27	5.9	7.1	7.3	8.3	12	18	9.1	7.7	26
16	25	5.3	9.9	5.0	12	6.1	7.4	18	12	7.8	7.3	17
17	7.4	5.5	6.1	5.0	5.9	6.5	8.9	145	9.4	8.1	408	14
18	6.8	5.8	5.5	6.1	6.3	5.1	7.6	871	8.5	7.8	65	12
19	7.1	7.5	5.2	e4.8	7.9	31	98	119	8.5	7.6	19	12
20	6.3	5.2	e5.0	e4.8	8.7	85	358	37	38	8.0	14	55
21	6.1	4.8	e4.8	e4.7	19	19	168	23	10	7.8	13	13
22	6.0	5.0	e4.5	e4.5	90	11	29	21	8.6	6.8	27	153
23	5.4	36	e4.5	e4.3	65	8.9	68	16	8.0	6.3	18	307
24	5.6	8.6	e4.5	e4.3	95	25	21	13	8.7	6.8	13	30
25	5.7	5.2	e4.5	e4.2	29	9.6	16	11	6.9	7.4	12	18
26	6.1	5.0	e5.0	e4.1	23	8.9	13	10	7.2	7.4	66	15
27	6.4	5.1	e4.9	e4.2	14	11	11	82	7.1	60	12	12
28	5.9	4.6	e4.8	e4.2	10	14	10	124	33	156	11	11
29	5.7	4.8	e4.7	e4.3	9.9	8.2	9.5	20	15	22	11	9.7
30	5.7	5.0	e4.6	e4.4	---	6.8	8.8	23	7.6	9.2	11	9.1
31	5.3	---	4.6	e4.6	---	6.6	---	108	---	53	11	---
TOTAL	312.0	236.1	304.3	204.4	493.0	427.9	1108.3	2454.6	1066.5	2070.7	1536.6	2086.4
MEAN	10.1	7.87	9.82	6.59	17.0	13.8	36.9	79.2	35.5	66.8	49.6	69.5
MAX	58	36	73	30	95	85	358	871	373	844	603	663
MIN	5.3	4.6	4.5	4.1	5.0	5.1	5.7	6.9	6.9	6.3	7.3	7.4
CFSM	.54	.42	.52	.35	.90	.73	1.97	4.21	1.89	3.55	2.64	3.70
IN.	.62	.47	.60	.40	.98	.85	2.19	4.86	2.11	4.10	3.04	4.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2000, BY WATER YEAR (WY)

	MEAN	19.9	25.2	18.3	15.4	20.5	25.2	36.1	26.7	30.5	30.0	35.1	26.4
MAX	60.5	67.8	48.9	43.7	41.9	44.9	104	79.2	81.6	66.8	82.3	69.5	
(WY)	1992	1986	1983	1988	1994	1993	1993	2000	1999	2000	1986	2000	
MIN	6.81	7.87	3.96	4.72	5.27	8.87	14.1	9.07	11.4	12.6	11.8	8.41	
(WY)	1995	2000	1990	1994	1995	1996	1989	1992	1985	1996	1999	1995	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1983 - 2000

ANNUAL TOTAL	11997.5	12300.8	
ANNUAL MEAN	32.9	33.6	25.8
HIGHEST ANNUAL MEAN			39.8
LOWEST ANNUAL MEAN			18.9
HIGHEST DAILY MEAN	1210	Jun 13	1630
LOWEST DAILY MEAN	(a)3.0	Jan 2	(a)2.9
ANNUAL SEVEN-DAY MINIMUM	(a)3.7	Jan 1	(a)3.0
INSTANTANEOUS PEAK FLOW			(b)10600
INSTANTANEOUS PEAK STAGE			(c)14.41
ANNUAL RUNOFF (CFSM)	1.75	1.79	1.37
ANNUAL RUNOFF (INCHES)	23.74	24.34	18.62
10 PERCENT EXCEEDS	54	65	49
50 PERCENT EXCEEDS	10	9.0	9.6
90 PERCENT EXCEEDS	5.1	5.1	5.8

(a) Ice affected

(b) From rating curve extended above 600 ft³/s on basis of step-backwater analysis at peak gage height

(c) From inside gage, 16.01 ft, from floodmarks

(e) Estimated due to ice effect or missing record

04087204 OAK CREEK AT SOUTH MILWAUKEE, WI

LOCATION.--Lat 42°55'30", long 87°52'12", in SW ¼ NW ¼ sec.2, T.5 N., R.22 E., Milwaukee County, Hydrologic Unit 04040002, on left bank 25 ft downstream from 15th Avenue bridge in South Milwaukee and 2.8 mi upstream from mouth.

DRAINAGE AREA.--25.0 mi².

PERIOD OF RECORD.--October 1963 to current year.

REVISED RECORDS.--WDR WI-80-1: 1979 (average discharge).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 631.40 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges and periods of flow less than 4.0 ft³/s, which are poor (see page 12). Low flows may occasionally be affected by construction and activity at gravel pit upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	2.1	2.2	e2.2	e2.7	16	6.0	16	395	5.5	15	4.5
2	8.7	2.2	2.2	3.1	e2.7	13	6.0	14	266	145	23	16
3	17	2.2	3.0	3.9	2.7	10	5.9	12	90	827	23	11
4	41	2.3	5.1	5.3	2.7	9.1	5.5	11	51	517	9.0	7.4
5	14	2.5	47	5.1	2.6	8.5	5.2	11	75	131	129	5.1
6	8.6	2.5	17	5.0	2.5	7.8	4.9	10	41	61	304	4.2
7	6.4	2.3	7.0	4.8	2.2	7.4	15	9.6	27	35	65	3.6
8	5.3	2.2	4.8	4.7	6.3	7.3	47	24	20	89	30	3.6
9	4.7	2.2	4.7	5.7	4.7	7.4	70	203	16	54	18	3.5
10	4.2	4.4	5.4	14	e4.7	7.2	62	223	13	49	13	17
11	3.7	11	4.5	13	e4.8	6.2	31	71	14	29	11	81
12	3.4	5.5	3.5	7.5	e4.9	5.6	25	183	65	18	8.9	307
13	3.0	3.3	3.1	6.5	e5.0	5.2	19	65	74	14	7.9	66
14	2.9	2.7	4.4	6.3	e5.2	5.2	16	36	38	27	7.2	159
15	3.4	2.4	12	5.2	e4.1	5.2	14	25	36	16	6.3	75
16	4.7	2.1	13	4.9	e4.0	4.9	11	23	18	11	5.6	29
17	6.3	2.0	6.4	e4.5	e4.0	4.6	11	37	13	9.1	136	18
18	4.2	2.0	4.2	e4.4	e4.0	4.6	11	586	11	7.8	76	13
19	3.2	2.3	e3.3	e4.2	e4.0	7.2	40	549	10	7.2	23	11
20	2.8	2.1	e3.0	e4.1	e4.3	58	381	210	17	6.9	14	24
21	3.2	2.1	e2.6	e3.8	5.6	32	409	83	14	6.5	11	21
22	2.5	2.0	e2.1	e3.3	45	16	122	54	9.2	6.1	13	62
23	2.3	6.0	e1.9	e3.1	106	12	88	37	8.2	5.3	22	439
24	2.2	11	e1.8	e2.9	132	12	56	26	8.3	5.1	10	170
25	2.3	4.7	e1.7	e2.8	78	14	34	20	7.9	4.9	8.1	70
26	2.3	3.1	e1.8	e2.7	43	10	24	16	6.7	4.9	15	39
27	2.1	2.6	e1.8	e2.7	29	9.9	20	68	6.0	15	13	26
28	2.1	2.3	e1.9	e2.7	18	8.8	17	143	9.0	16	7.2	19
29	2.3	2.1	e2.0	e2.7	14	8.5	14	85	13	17	6.0	16
30	2.2	2.2	e2.0	e2.7	---	7.7	13	48	7.0	8.6	5.7	14
31	1.9	---	e2.1	e2.7	---	6.7	---	98	---	45	5.0	---
TOTAL	182.4	98.4	177.5	146.5	548.7	338.0	1583.5	2996.6	1379.3	2193.9	1040.9	1734.9
MEAN	5.88	3.28	5.73	4.73	18.9	10.9	52.8	96.7	46.0	70.8	33.6	57.8
MAX	41	11	47	14	132	58	409	586	395	827	304	439
MIN	1.9	2.0	1.7	2.2	2.2	4.6	4.9	9.6	6.0	4.9	5.0	3.5
CFSM	.24	.13	.23	.19	.76	.44	2.11	3.87	1.84	2.83	1.34	2.31
IN.	.27	.15	.26	.22	.82	.50	2.36	4.46	2.05	3.26	1.55	2.58

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2000, BY WATER YEAR (WY)

	MEAN	11.4	17.7	19.2	15.0	24.5	48.1	50.0	26.0	23.4	16.1	14.3	17.7
MAX	48.4	85.3	65.3	77.3	84.4	149	151	96.7	85.8	95.8	52.7	110	
(WY)	1992	1986	1983	1974	1971	1979	1993	2000	1968	1969	1986	1972	
MIN	1.86	1.83	.79	.021	1.91	2.24	9.14	2.15	2.15	3.34	1.89	1.78	
(WY)	1976	1977	1977	1977	1964	1968	1968	1977	1988	1988	1970	1982	

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1964 - 2000

ANNUAL TOTAL	10280.88	12420.6	
ANNUAL MEAN	28.2	33.9	23.6
HIGHEST ANNUAL MEAN			41.7
LOWEST ANNUAL MEAN			6.67
HIGHEST DAILY MEAN	778	Apr 23	855
LOWEST DAILY MEAN	.69	Sep 18	.00
ANNUAL SEVEN-DAY MINIMUM	.88	Sep 5	.00
INSTANTANEOUS PEAK FLOW			1140
INSTANTANEOUS PEAK STAGE			9.38
INSTANTANEOUS LOW FLOW			.00
ANNUAL RUNOFF (CFSM)	1.13	1.36	.94
ANNUAL RUNOFF (INCHES)	15.30	18.48	12.82
10 PERCENT EXCEEDS	63	74	50
50 PERCENT EXCEEDS	7.7	8.2	7.8
90 PERCENT EXCEEDS	1.5	2.3	1.9

(a) Ice affected

(b) Several days during 1977

(e) Estimated due to ice effect or missing record

STREAMS TRIBUTARY TO LAKE MICHIGAN

04087220 ROOT RIVER NEAR FRANKLIN, WI

LOCATION.--Lat 42°52'25", long 87°59'45", in SW ¼ SE ¼ sec.22, T.5 N., R.21 E., Milwaukee County, Hydrologic Unit 04040002, on right bank 400 ft upstream from State Highway 100, 2.1 mi upstream from Root River Canal, 2.4 mi southeast of Franklin, 5.5 mi southeast of Hales Corners, and about 24 mi upstream from mouth.

DRAINAGE AREA.--49.2 mi².

PERIOD OF RECORD.--October 1963 to current year.

REVISED RECORD.--WDR WI-81-1: Drainage area. WDR WI-83-1: 1981.

GAGE.--Water-stage recorder. Datum of gage is 674.5 ft above sea level.

REMARKS.--Records fair except those for estimated daily discharges, which are poor (see page 12). Flow affected by urbanization in the drainage basin. Gage-height telemeter at station.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--Flood of Mar. 30, 1960, reached a stage of 9.57 ft, discharge, 5,130 ft³/s, from rating curve extended above 2,000 ft³/s on basis of contracted-opening measurement of peak flow.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	3.6	4.6	e5.2	e5.4	32	11	22	560	8.6	27	10
2	16	3.5	4.6	e5.6	e5.4	25	10	25	681	93	20	13
3	15	3.4	5.4	e9.0	e5.4	18	10	18	278	2130	22	25
4	83	3.5	7.3	e8.0	e5.6	15	10	16	113	846	13	18
5	33	4.1	47	e7.0	e5.6	15	9.3	15	112	204	53	10
6	13	4.3	46	e6.2	e5.6	13	8.4	14	100	95	679	7.3
7	11	3.9	16	e6.0	e5.6	13	13	14	56	60	296	6.7
8	8.5	3.8	13	e5.8	e5.4	13	48	15	38	81	67	7.7
9	7.2	4.0	8.1	e5.4	e5.4	48	70	145	29	124	38	12
10	6.4	5.6	9.6	e8.0	e5.4	25	72	388	22	66	28	14
11	5.2	25	9.3	e15	e5.4	15	42	125	19	67	18	94
12	5.2	12	7.0	e13	e5.4	13	35	229	44	36	14	746
13	5.2	5.4	6.9	e11	5.4	12	24	256	123	24	13	399
14	5.0	5.2	6.6	e9.0	e5.6	12	21	79	67	58	12	227
15	6.2	5.2	11	e6.4	e6.2	10	19	43	99	49	11	271
16	6.8	4.8	20	e6.2	e6.0	10	16	33	47	23	9.5	95
17	14	4.3	e10	e6.0	e6.0	10	15	33	29	16	103	49
18	6.0	4.9	e8.4	e5.8	e6.2	9.3	15	594	21	13	276	33
19	4.9	4.6	e6.0	e5.6	e6.6	9.6	29	997	15	12	57	26
20	4.0	4.5	e5.6	e5.4	e7.4	51	398	446	22	10	27	33
21	4.1	4.4	e5.2	e5.4	e13	65	563	149	26	9.8	19	59
22	5.3	4.3	e5.0	e5.4	e25	32	271	100	14	10	16	57
23	4.5	4.9	e4.9	e5.4	e100	22	135	76	12	8.1	31	550
24	4.0	19	e4.9	e5.4	e220	19	119	48	11	7.9	17	387
25	3.7	7.4	e4.8	e5.4	e210	28	75	31	11	7.0	13	116
26	3.5	5.3	e4.8	e5.4	115	17	50	25	10	6.7	15	74
27	3.6	4.9	e4.8	e5.4	83	17	34	83	10	29	39	47
28	4.9	4.8	e4.9	e5.4	50	16	28	194	9.3	31	16	38
29	5.0	4.6	e4.9	e5.4	34	15	24	166	18	82	12	27
30	4.2	4.6	e4.9	e5.4	---	12	21	92	11	25	11	22
31	3.7	---	e4.9	e5.4	---	11	---	130	---	30	11	---
TOTAL	337.1	179.8	306.4	209.0	965.0	622.9	2195.7	4601	2607.3	4262.1	1983.5	3473.7
MEAN	10.9	5.99	9.88	6.74	33.3	20.1	73.2	148	86.9	137	64.0	116
MAX	83	25	47	15	220	65	563	997	681	2130	679	746
MIN	3.5	3.4	4.6	5.2	5.4	9.3	8.4	14	9.3	6.7	9.5	6.7
CFSM	.22	.12	.20	.14	.68	.41	1.49	3.02	1.77	2.79	1.30	2.35
IN.	.25	.14	.23	.16	.73	.47	1.66	3.48	1.97	3.22	1.50	2.63

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2000, BY WATER YEAR (WY)

	MEAN	23.3	31.3	36.0	32.1	47.3	93.3	90.1	46.5	45.3	29.1	25.9	32.2
MAX	95.5	151	118	190	161	315	316	148	164	142	72.3	214	
(WY)	1992	1986	1983	1974	1971	1979	1973	2000	1999	1969	1987	1972	
MIN	2.38	4.26	2.02	2.47	2.75	13.6	21.5	5.32	3.55	3.09	3.82	3.05	
(WY)	1964	1964	1964	1977	1977	1968	1977	1977	1988	1988	1971	1971	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1964 - 2000

ANNUAL TOTAL	22846.1	21743.5	
ANNUAL MEAN	62.6	59.4	44.3
HIGHEST ANNUAL MEAN			84.0
LOWEST ANNUAL MEAN			12.7
HIGHEST DAILY MEAN	1540	2130	2390
LOWEST DAILY MEAN	1.8	3.4	.44
ANNUAL SEVEN-DAY MINIMUM	2.2	3.7	1.1
INSTANTANEOUS PEAK FLOW		2420	(a)3700
INSTANTANEOUS PEAK STAGE		9.43	9.43
INSTANTANEOUS LOW FLOW		3.3	.38
ANNUAL RUNOFF (CFSM)	1.27	1.21	.90
ANNUAL RUNOFF (INCHES)	17.27	16.44	12.23
10 PERCENT EXCEEDS	132	117	95
50 PERCENT EXCEEDS	18	13	16
90 PERCENT EXCEEDS	4.0	4.9	4.5

(a) Gage height, 9.31 ft

(e) Estimated due to ice effect or missing record

04087233 ROOT RIVER CANAL NEAR FRANKLIN, WI

LOCATION.--Lat 42°48'55", long 87°59'40", in SE ¼ sec.10, T.4 N., R.21 E., Racine County, Hydrologic Unit 04040002, on right bank 10 ft downstream from highway bridge 3.5 mi upstream from mouth, 5.5 mi southeast of intersection U.S. 45 and State Highway 100 in Franklin, and 8.7 mi southeast of Hales Corners.

DRAINAGE AREA.--57.0 mi².

PERIOD OF RECORD.--October 1963 to current year.

REVISED RECORD.--WDR WI-80-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 670 ft above sea level, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	2.1	2.5	e2.2	e1.9	54	6.3	72	729	14	21	2.5
2	4.0	2.1	2.4	e2.2	e1.9	41	6.2	63	747	137	12	2.8
3	3.3	2.2	2.7	2.7	e2.0	33	5.9	52	401	1040	8.7	2.8
4	11	2.2	3.4	2.4	e2.0	28	5.1	46	212	421	5.7	2.8
5	7.9	1.9	9.4	2.4	e2.1	23	4.1	41	179	189	11	2.6
6	3.7	1.8	11	2.3	e2.1	19	4.1	36	151	135	81	2.7
7	3.1	1.7	e4.5	2.4	e2.1	17	4.6	33	125	105	38	2.9
8	4.2	1.8	e3.5	2.0	e2.1	15	13	31	107	89	20	2.9
9	6.8	1.8	e3.2	2.6	e2.1	14	42	146	89	78	13	3.1
10	6.6	1.6	e3.1	4.9	e2.1	11	133	404	74	80	8.1	3.5
11	14	2.3	e3.1	13	e2.2	8.5	98	269	71	80	5.3	5.7
12	18	2.2	e3.0	9.0	e2.3	7.2	84	201	146	59	4.1	158
13	18	1.9	e2.6	6.6	e2.3	6.2	75	160	325	48	3.6	75
14	17	2.0	e2.4	e3.7	e2.3	5.6	60	123	275	138	3.1	63
15	16	1.9	2.3	e3.4	e2.4	5.0	45	96	215	117	2.9	63
16	17	1.9	5.5	e3.0	e2.4	5.4	34	82	146	71	2.6	31
17	16	1.9	4.2	e2.7	e2.5	4.2	32	78	111	51	9.7	20
18	15	1.9	e2.7	e2.6	e2.5	3.7	27	524	87	38	17	13
19	12	2.1	e2.6	e2.5	e2.6	4.1	38	986	72	32	8.2	8.2
20	11	2.0	e2.3	e2.3	e2.7	24	401	820	63	27	4.5	8.6
21	10	2.1	e1.7	e2.2	e3.0	50	694	440	57	24	3.3	22
22	8.5	2.2	e1.6	e2.1	e8.0	37	597	239	44	19	3.1	44
23	7.9	2.3	e1.5	e2.0	e8.0	29	353	177	38	16	3.5	549
24	6.0	2.7	e1.5	e2.0	e160	25	243	144	35	13	3.0	377
25	4.9	2.6	e1.5	e1.9	e200	23	176	119	34	10	2.7	180
26	4.3	2.1	e1.6	e1.9	178	17	145	101	27	8.0	2.6	126
27	4.0	2.2	e1.6	e1.9	133	17	125	185	22	6.8	2.5	92
28	3.3	2.3	e1.7	e1.9	96	15	104	344	20	7.6	2.4	67
29	2.9	2.3	e2.0	e1.9	70	11	91	357	22	6.4	2.5	51
30	2.7	2.4	e2.5	e1.9	---	9.0	80	292	17	5.3	2.7	40
31	2.4	---	e2.4	e1.9	---	7.3	---	451	---	16	2.8	---
TOTAL	268.3	62.5	96.0	96.5	972.6	569.2	3726.3	7112	4641	3081.1	310.6	2022.1
MEAN	8.65	2.08	3.10	3.11	33.5	18.4	124	229	155	99.4	10.0	67.4
MAX	18	2.7	11	13	200	54	694	986	747	1040	81	549
MIN	2.4	1.6	1.5	1.9	1.9	3.7	4.1	31	17	5.3	2.4	2.5
CFSM	.15	.04	.05	.05	.59	.32	2.18	4.02	2.71	1.74	.18	1.18
IN.	.18	.04	.06	.06	.63	.37	2.43	4.64	3.03	2.01	.20	1.32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2000, BY WATER YEAR (WY)

	MEAN	21.2	35.0	42.9	35.1	60.3	108	109	56.2	46.2	25.5	20.7	31.7
MAX	113	154	200	219	190	352	312	229	156	141	138	212	
(WY)	1973	1993	1983	1974	1971	1979	1993	2000	1996	1978	1978	1972	
MIN	1.05	1.27	.86	.56	.69	6.03	10.9	2.47	2.51	2.18	2.16	1.28	
(WY)	1964	1964	1964	1977	1977	1968	1977	1977	1977	1991	1999	1971	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1964 - 2000

ANNUAL TOTAL	19327.2	22958.2	
ANNUAL MEAN	53.0	62.7	49.2
HIGHEST ANNUAL MEAN			98.4
LOWEST ANNUAL MEAN			4.57
HIGHEST DAILY MEAN	778	Apr 24	1040 Jul 3
LOWEST DAILY MEAN	1.1	Sep 10	(a)1.5 Dec 23-25
ANNUAL SEVEN-DAY MINIMUM	(a)1.6	Dec 21	(a)1.6 Dec 21
INSTANTANEOUS PEAK FLOW			1300 Jul 3
INSTANTANEOUS PEAK STAGE			10.64 Jul 3
ANNUAL RUNOFF (CFSM)	.93		1.10
ANNUAL RUNOFF (INCHES)	12.61		14.98
10 PERCENT EXCEEDS	162		123
50 PERCENT EXCEEDS	11		15
90 PERCENT EXCEEDS	2.0		2.3

- (a) Ice affected
 (b) Result of freezeup
 (c) Gage height, 9.88 ft
 (d) Backwater from ice
 (e) Estimated due to ice effect or missing record

STREAMS TRIBUTARY TO LAKE MICHIGAN

04087240 ROOT RIVER AT RACINE, WI

LOCATION.--Lat 42°45'05", long 87°49'25", in NE 1/4 sec.6, T.3 N., R.23 E., Racine County, Hydrologic Unit 04040002, on left bank 30 ft downstream from State Highway 38 bridge in Racine, 350 ft downstream from Horlick Dam, and 5.2 mi upstream from mouth.

DRAINAGE AREA.--190 mi², of which 1.24 mi² is probably noncontributing.

PERIOD OF RECORD.--August 1963 to current year.

REVISED RECORD.--WDR WI-80-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 610 ft above sea level, from topographic map. Prior to Feb. 5, 1964, nonrecording gage on bridge 30 ft upstream.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	163	7.3	9.5	11	9.4	173	50	142	1420	57	78	32
2	64	7.9	10	12	10	145	47	131	1650	188	82	32
3	36	6.3	9.9	12	10	122	47	119	1750	1800	59	31
4	38	5.8	9.1	13	10	99	45	103	1290	2320	53	38
5	61	5.8	15	13	11	86	42	95	757	2170	63	42
6	49	5.0	41	13	11	76	41	90	512	1210	251	40
7	31	5.2	62	13	11	69	45	84	401	555	401	33
8	23	6.4	36	12	11	65	60	83	285	336	534	24
9	19	6.7	26	11	10	61	139	226	215	296	225	22
10	18	7.8	23	13	10	79	280	721	171	286	106	23
11	15	8.3	21	16	11	69	312	943	156	222	76	35
12	14	8.9	20	23	12	54	255	903	227	198	57	250
13	14	17	20	32	13	48	211	635	437	148	44	483
14	13	17	19	24	14	43	179	578	585	137	37	743
15	11	14	19	22	13	44	149	369	574	240	33	479
16	10	12	19	20	13	38	119	223	475	241	29	351
17	10	11	21	17	13	36	101	181	315	150	35	222
18	13	10	23	16	15	35	93	986	208	107	111	114
19	18	9.1	24	15	15	34	102	1850	165	85	220	78
20	17	8.3	22	15	15	66	702	2370	139	73	138	69
21	15	8.2	17	14	15	148	1480	1980	131	66	75	74
22	11	8.6	e15	12	18	168	1720	1280	121	57	54	118
23	9.3	9.1	14	11	111	125	1500	787	94	51	46	1130
24	8.0	9.3	12	e10	430	103	1060	504	83	45	52	1290
25	8.5	8.8	10	9.3	683	94	743	322	79	39	47	1200
26	8.0	12	10	8.8	896	92	484	244	73	35	37	755
27	7.3	14	10	8.2	595	82	321	270	63	33	33	378
28	6.4	13	10	8.2	368	73	244	607	62	41	46	224
29	6.3	11	10	8.6	233	70	182	847	59	65	43	156
30	6.1	10	10	8.9	---	63	157	987	67	90	35	122
31	6.6	---	10	9.1	---	57	---	861	---	95	32	---
TOTAL	729.5	283.8	577.5	431.1	3586.4	2517	10910	19521	12564	11436	3132	8588
MEAN	23.5	9.46	18.6	13.9	124	81.2	364	630	419	369	101	286
MAX	163	17	62	32	896	173	1720	2370	1750	2320	534	1290
MIN	6.1	5.0	9.1	8.2	9.4	34	41	83	59	33	29	22
CFSM	.12	.05	.10	.07	.66	.43	1.93	3.34	2.22	1.95	.54	1.52
IN.	.14	.06	.11	.08	.71	.50	2.15	3.85	2.48	2.25	.62	1.69

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2000, BY WATER YEAR (WY)

	MEAN	64.4	105	127	100	170	338	358	188	144	90.2	66.1	91.4
MAX	335	454	568	401	457	1149	1071	649	493	485	237	683	
(WY)	1987	1986	1983	1974	1971	1979	1993	1990	1996	1987	1972		
MIN	2.79	8.90	3.08	2.21	3.98	30.6	61.8	8.73	7.75	5.18	6.60	2.58	
(WY)	1964	1964	1964	1977	1977	1968	1977	1977	1988	1988	1971	1963	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1963 - 2000

ANNUAL TOTAL	64108.6	74276.3	
ANNUAL MEAN	176	203	153
HIGHEST ANNUAL MEAN			268
LOWEST ANNUAL MEAN			23.3
HIGHEST DAILY MEAN	2510	Apr 25	4010
LOWEST DAILY MEAN	1.6	Sep 21	.00
ANNUAL SEVEN-DAY MINIMUM	2.2	Sep 9	.00
INSTANTANEOUS PEAK FLOW			4500
INSTANTANEOUS PEAK STAGE			8.54
INSTANTANEOUS LOW FLOW			.00
ANNUAL RUNOFF (CFSM)	.93		.81
ANNUAL RUNOFF (INCHES)	12.63		11.03
10 PERCENT EXCEEDS	510	599	400
50 PERCENT EXCEEDS	37	50	54
90 PERCENT EXCEEDS	6.6	9.4	9.3

(e) Estimated due to ice effect or missing record

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04087257 PIKE RIVER NEAR RACINE, WI

LOCATION.--Lat 42°38'49", long 87°51'38", in SE ¼ NE ¼ sec.11, T.2 N., R.22 E., Kenosha County, Hydrologic Unit 04040002, on right bank just downstream from unnamed tributary, 1.7 mi downstream from Pike Creek, 6.8 mi southwest of Racine Post Office and 9.0 mi upstream from mouth.

DRAINAGE AREA.--38.5 mi².

PERIOD OF RECORD.--October 1971 to current year.

REVISED RECORDS.--WDR WI-76-1: 1975. WDR WI-80-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 620.09 ft above sea level (Southeastern Wisconsin Regional Planning Commission).

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Low flows considerably affected by effluent discharge in upper portion of basin, and by occasional regulation of small recreation dam 1.1 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	7.5	7.6	3.2	e6.4	38	16	31	558	15	30	11
2	13	8.8	7.8	3.8	e6.4	29	16	26	331	21	19	11
3	21	8.0	8.3	4.6	e6.4	25	16	24	167	327	15	11
4	34	8.2	8.1	5.4	e6.4	22	15	23	109	87	14	11
5	18	8.3	62	6.6	e6.4	20	15	20	143	50	24	11
6	14	7.3	27	6.9	6.4	20	15	19	105	39	48	11
7	11	6.4	15	7.3	7.3	19	23	18	70	30	20	12
8	10	6.7	12	7.3	7.5	20	49	22	56	44	17	12
9	9.3	8.3	10	8.6	8.2	22	79	214	45	32	15	12
10	9.1	8.4	10	17	9.0	17	84	238	35	42	14	17
11	9.9	12	8.6	15	e8.4	15	56	108	87	34	12	48
12	9.2	7.3	7.7	12	e7.6	14	45	110	716	25	11	213
13	9.2	6.9	7.8	11	e7.0	15	39	65	748	21	11	47
14	9.1	6.3	9.2	e10	e7.6	16	34	46	461	61	11	53
15	9.0	7.3	17	8.8	e8.2	16	28	37	259	37	11	36
16	12	7.0	16	8.3	9.7	17	23	37	135	23	11	21
17	9.9	6.7	11	7.7	9.6	15	23	58	86	20	31	17
18	8.8	7.0	8.8	e7.6	10	14	20	1140	62	17	23	16
19	8.4	6.6	8.0	e7.6	9.9	16	64	755	50	16	15	16
20	8.6	5.6	e7.2	e7.6	9.7	73	502	317	44	15	12	27
21	8.4	5.4	e6.2	e7.4	10	61	595	165	37	16	12	23
22	8.7	6.0	e4.0	e7.2	33	43	202	118	29	14	13	117
23	8.4	9.3	e3.4	e7.2	144	37	154	88	24	13	16	357
24	7.3	10	e3.1	e7.0	236	33	114	63	23	13	14	126
25	7.3	6.3	e3.1	e7.0	184	32	78	49	25	13	13	63
26	9.2	5.6	e3.2	e6.8	122	23	57	39	22	13	12	44
27	8.5	5.8	e3.2	e6.6	84	25	47	207	20	13	11	31
28	8.0	6.0	e3.2	e6.4	56	22	39	295	21	14	12	24
29	7.9	6.6	e3.2	e6.4	47	19	34	181	23	12	13	20
30	7.1	7.0	e3.2	e6.4	---	17	28	149	18	12	12	18
31	6.4	---	e3.2	e6.4	---	16	---	200	---	47	13	---
TOTAL	338.7	218.6	308.1	241.1	1074.1	771	2510	4862	4509	1136	505	1436
MEAN	10.9	7.29	9.94	7.78	37.0	24.9	83.7	157	150	36.6	16.3	47.9
MAX	34	12	62	17	236	73	595	1140	748	327	48	357
MIN	6.4	5.4	3.1	3.2	6.4	14	15	18	18	12	11	11
CFSM	.28	.19	.26	.20	.96	.65	2.17	4.07	3.90	.95	.42	1.24
IN.	.33	.21	.30	.23	1.04	.74	2.43	4.70	4.36	1.10	.49	1.39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2000, BY WATER YEAR (WY)

	MEAN	17.7	29.8	33.8	27.4	38.0	71.5	74.9	45.4	37.2	21.5	20.4	26.9
MAX	61.2	126	101	97.1	100	258	185	157	150	129	92.5	131	
(WY)	1987	1986	1983	1974	1998	1979	1993	2000	2000	1978	1978	1986	
MIN	4.40	3.62	2.35	2.05	3.74	14.3	12.1	4.57	8.32	4.93	4.35	3.25	
(WY)	1972	1972	1977	1977	1977	1996	1977	1977	1988	1976	1976	1976	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

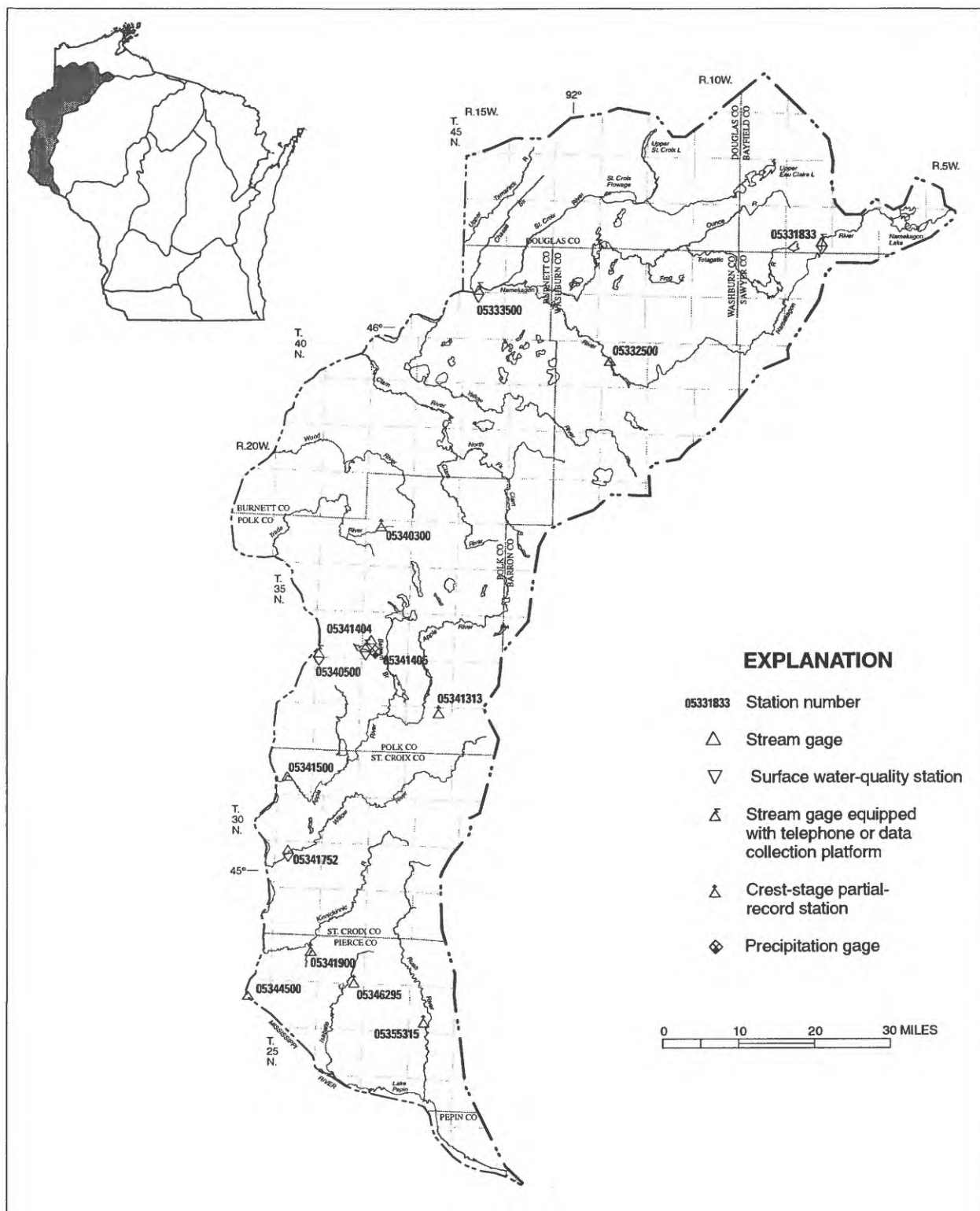
FOR 2000 WATER YEAR

WATER YEARS 1972 - 2000

ANNUAL TOTAL	13304.4	17909.6	
ANNUAL MEAN	36.5	48.9	37.0
HIGHEST ANNUAL MEAN			59.0
LOWEST ANNUAL MEAN			8.10
HIGHEST DAILY MEAN	902	Apr 23	1140
LOWEST DAILY MEAN	(a) 3.1	Dec 24, 25	(a) 3.1
ANNUAL SEVEN-DAY MINIMUM	(a) 3.2	Dec 24	(a) 3.2
INSTANTANEOUS PEAK FLOW			1580
INSTANTANEOUS PEAK STAGE			7.96
ANNUAL RUNOFF (CFSM)	.95		1.27
ANNUAL RUNOFF (INCHES)	12.86		17.30
10 PERCENT EXCEEDS	74		109
50 PERCENT EXCEEDS	14		15
90 PERCENT EXCEEDS	7.2		6.6

- (a) Ice affected
(b) Backwater from ice
(c) Estimated due to ice effect or missing record

UPPER MISSISSIPPI RIVER BASIN RECORDS



Base from U.S. Geological Survey 1:100,000 digital data; modified by Wisconsin Department of Natural Resources. Wisconsin Transverse Mercator projection.

ST. CROIX RIVER BASIN

05331833 NAMEKAGON RIVER AT LEONARDS, WI

LOCATION.--Lat 46°10'17", long 91°19'45", in SW ¼ SE ¼ sec.26, T.43 N., R.8 W., Bayfield County, Hydrologic Unit 07030002, on left bank 15 ft upstream from Squaw Bend Road, and 0.4 mi west of U.S. Highway 63 at Leonards.

DRAINAGE AREA.--126 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1996 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,275 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	116	111	94	e86	162	142	111	118	103	112	95
2	124	106	109	93	e86	146	139	109	120	103	112	95
3	121	109	108	93	86	141	142	108	117	107	106	95
4	121	109	108	92	87	137	138	106	115	105	102	93
5	120	108	107	e92	e88	136	138	107	115	102	98	90
6	122	104	103	e92	e88	137	139	103	111	99	99	90
7	125	105	104	e92	e86	140	136	101	106	100	100	89
8	130	106	104	e92	e86	145	133	210	104	113	101	88
9	124	106	103	93	86	148	127	224	99	138	108	93
10	120	105	102	95	86	141	124	191	98	131	101	93
11	117	104	99	95	e84	140	124	188	97	124	96	90
12	117	102	102	e94	e82	138	122	186	96	122	99	91
13	114	100	100	e94	e84	132	122	170	93	121	103	76
14	114	98	99	e94	e84	128	120	160	100	115	122	72
15	118	97	98	94	e82	131	121	151	102	110	197	71
16	119	98	94	94	e82	134	120	151	116	108	152	71
17	114	98	e94	94	e82	134	123	149	117	101	135	70
18	113	97	e94	93	e84	128	123	144	115	96	128	69
19	112	98	e94	e92	e88	124	123	139	118	95	119	68
20	114	97	e94	e90	e90	123	132	133	127	91	111	69
21	113	97	e92	e88	90	124	139	130	134	88	108	67
22	108	98	e92	e86	90	129	138	142	130	86	109	68
23	104	103	e94	e88	92	133	135	141	128	84	108	69
24	105	111	e94	e90	96	140	130	133	125	80	103	68
25	106	112	e96	e90	110	155	125	129	118	87	101	67
26	104	114	e98	e90	154	149	125	128	133	169	100	66
27	103	115	100	e86	166	166	126	199	128	155	100	65
28	104	112	102	e86	149	162	120	178	119	144	97	65
29	104	107	100	e86	153	157	118	174	113	132	97	64
30	120	107	98	e86	---	153	114	126	110	122	94	64
31	124	---	95	e86	---	149	---	121	---	114	96	---
TOTAL	3582	3139	3088	2824	2807	4362	3858	4542	3422	3445	3414	2331
MEAN	116	105	99.6	91.1	96.8	141	129	147	114	111	110	77.7
MAX	130	116	111	95	166	166	142	224	134	169	197	95
MIN	103	97	92	86	82	123	114	101	93	80	94	64
CFSM	.92	.83	.79	.72	.77	1.12	1.02	1.16	.91	.88	.87	.62
IN.	1.06	.93	.91	.83	.83	1.29	1.14	1.34	1.01	1.02	1.01	.69

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2000, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000	1996	1997	1998	1999	2000	1996	1997	1998	1999	2000
MEAN	116	132	116	105	110	133	220	171	139	155	119	109	158	158	158
MAX	158	210	158	141	128	174	281	265	161	226	178	158	1996	1996	1996
(WY)	1997	1997	1997	1997	1997	1998	1997	1996	1998	1996	1999	1996	1996	1996	1996
MIN	84.7	102	93.9	89.1	96.8	104	129	110	114	95.2	66.3	52.9	1996	1996	1996
(WY)	1999	1998	1998	1998	2000	1996	2000	1998	2000	1998	1998	1998	1998	1998	1998

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1996 - 2000

ANNUAL TOTAL	52316	40814	130
ANNUAL MEAN	143	112	152
HIGHEST ANNUAL MEAN			1997
LOWEST ANNUAL MEAN			2000
HIGHEST DAILY MEAN	384	Jul 9	502
LOWEST DAILY MEAN	(a)92 (b)Jan 1,2	64	48
ANNUAL SEVEN-DAY MINIMUM	(a)93 Dec 16	66	50
INSTANTANEOUS PEAK FLOW		259	517
INSTANTANEOUS PEAK STAGE		2.51	3.46
INSTANTANEOUS LOW FLOW		64	47
ANNUAL RUNOFF (CFSM)	1.14	.89	1.04
ANNUAL RUNOFF (INCHES)	15.45	12.05	14.06
10 PERCENT EXCEEDS	203	142	205
50 PERCENT EXCEEDS	124	107	120
90 PERCENT EXCEEDS	100	86	89

(a) Ice affected

(b) Also occurred Dec. 21, 22

(e) Estimated due to ice effect or missing record

ST. CROIX RIVER BASIN

05331833 NAMEKAGON RIVER AT LEONARDS, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1996 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: June 1996 to current year.

SPECIFIC CONDUCTANCE: June 1996 to current year.

INSTRUMENTATION.--Water temperature and specific conductance recorder since June 1, 1996, provides hourly readings.

REMARKS.--Records represent water temperature and specific conductance at sensor located near the orifice.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum, 26.5°C, July 23, 1999; minimum, 0.0°C, on many days.

SPECIFIC CONDUCTANCE: Maximum, 173 microsiemens, Feb. 22, 1998; minimum, 55 microsiemens, Apr. 6, 7, 1997.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 24.5°C, July 10, 13, and 14; minimum, 0.0°C, on many days.

SPECIFIC CONDUCTANCE: Maximum, 168 microsiemens, Jan. 21 and Feb. 6; minimum, 93 microsiemens, May 8, 9.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	10.5	9.0	9.5	8.5	6.5	7.5	3.0	1.0	2.0	1.5	.5	1.0
2	9.5	7.0	8.0	6.5	4.0	5.5	3.0	1.5	2.5	1.5	1.0	1.0
3	9.0	5.5	7.0	5.0	2.5	3.5	4.5	3.0	3.5	1.5	.5	1.0
4	9.0	6.0	7.5	5.0	2.0	4.0	4.5	3.5	4.0	1.0	.0	.5
5	9.5	7.5	8.5	6.5	4.0	5.0	3.5	1.0	2.5	.0	.0	.0
6	9.5	6.0	7.5	6.0	3.5	4.5	1.5	.5	1.0	.0	.0	.0
7	9.0	7.0	8.0	6.0	3.0	4.5	2.0	1.0	1.5	.0	.0	.0
8	11.5	9.0	10.0	8.0	5.0	6.5	3.0	1.5	2.0	.5	.0	.0
9	12.5	8.0	10.0	10.0	7.0	8.5	2.5	1.5	2.0	.5	.0	.5
10	12.5	9.5	11.0	8.5	5.5	6.5	2.5	.5	1.5	1.5	.5	1.0
11	11.0	7.5	9.5	6.0	5.0	5.5	1.5	.5	1.0	1.5	.0	.5
12	12.0	9.5	10.5	7.5	5.5	6.0	2.5	1.0	2.0	.0	.0	.0
13	11.0	8.5	9.5	8.5	5.5	6.5	2.5	1.0	1.5	.5	.0	.0
14	8.5	7.5	8.0	6.5	4.0	5.5	2.5	1.0	1.5	.0	.0	.0
15	10.5	7.5	8.5	4.5	3.0	4.0	1.5	.0	1.5	1.0	.0	.5
16	11.0	8.5	9.5	4.0	2.0	3.0	.0	.0	.0	.5	.0	.0
17	8.5	7.5	8.0	5.0	3.0	4.0	.0	.0	.0	.0	.0	.0
18	7.5	6.5	7.0	6.0	3.5	4.5	.0	.0	.0	1.0	.0	.0
19	7.5	6.5	7.0	6.0	5.0	5.5	.0	.0	.0	.0	.0	.0
20	7.5	4.5	6.0	5.0	3.5	4.5	.0	.0	.0	.0	.0	.0
21	9.0	6.0	7.5	6.0	4.0	5.0	.0	.0	.0	.0	.0	.0
22	8.0	5.0	6.5	6.5	5.5	6.0	.0	.0	.0	.0	.0	.0
23	7.0	4.5	5.5	5.5	2.0	3.5	.0	.0	.0	.0	.0	.0
24	6.5	3.0	5.0	3.5	2.0	2.5	.0	.0	.0	.0	.0	.0
25	8.0	4.5	6.0	4.0	2.5	3.0	.0	.0	.0	.5	.0	.0
26	7.5	4.5	6.0	5.0	3.5	4.0	.0	.0	.0	.5	.0	.0
27	8.0	4.5	6.5	3.5	2.5	3.5	.0	.0	.0	.0	.0	.0
28	8.0	5.5	6.5	3.0	1.5	2.0	.0	.0	.0	.0	.0	.0
29	9.0	5.5	7.0	2.0	.5	1.0	1.0	.0	.5	.5	.0	.0
30	10.5	8.0	9.5	1.5	.5	1.0	1.5	.5	.5	.5	.0	.0
31	9.5	6.5	8.0	---	---	---	1.0	.5	1.0	.5	.0	.0
MONTH	12.5	3.0	7.9	10.0	.5	4.6	4.5	.0	1.0	1.5	.0	.2

05331833 NAMEKAGON RIVER AT LEONARDS, WI--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	1.0	.0	.5	3.0	1.0	2.0	9.5	6.0	7.5	15.5	11.0	13.0
2	.5	.0	.0	4.0	.0	2.0	8.5	5.5	7.0	17.0	9.0	13.0
3	1.0	.5	.5	5.5	.5	3.0	8.0	5.5	6.5	19.0	11.0	15.0
4	2.0	.0	.5	7.0	2.5	4.5	8.5	3.0	5.5	20.5	14.5	17.0
5	1.5	.0	.5	7.5	3.0	5.0	6.5	5.0	6.0	21.5	14.5	18.0
6	1.0	.0	.0	7.5	4.5	6.0	9.5	5.0	6.5	22.0	16.0	19.0
7	1.5	.0	.5	10.0	5.5	7.5	6.5	4.0	5.0	22.0	16.5	19.0
8	1.0	.0	.5	8.5	5.0	7.5	8.0	2.0	4.5	18.5	15.5	16.5
9	2.0	.5	1.5	5.0	1.0	2.5	9.5	5.0	6.5	16.5	13.0	15.0
10	1.0	.0	.5	4.5	.0	2.0	9.0	3.5	6.0	14.5	11.5	13.0
11	.5	.0	.0	5.0	.0	2.5	7.0	4.5	5.5	14.5	12.0	13.5
12	.0	.0	.0	5.0	1.5	3.0	8.5	3.5	6.0	16.5	13.5	14.5
13	.5	.0	.0	3.5	1.5	2.5	12.0	5.5	8.0	14.0	10.5	12.0
14	.5	.0	.0	5.0	2.5	3.5	9.5	5.5	8.0	15.0	8.5	11.5
15	.0	.0	.0	3.5	.5	2.0	5.5	4.0	4.5	15.0	10.0	12.5
16	.5	.0	.0	2.0	.0	.5	5.0	3.5	4.0	17.5	12.5	14.5
17	.0	.0	.0	2.0	.0	.5	4.5	3.0	4.0	16.0	12.5	14.0
18	1.0	.0	.5	3.5	1.0	2.5	7.0	4.0	5.5	16.0	11.0	13.0
19	1.5	.0	.5	7.0	3.0	4.5	6.0	4.5	5.5	17.0	9.0	15.0
20	2.0	.0	.5	6.5	4.0	5.0	5.0	3.0	4.0	18.5	10.5	14.5
21	3.0	.0	1.5	7.0	5.0	6.0	10.5	1.5	5.5	17.0	13.5	15.0
22	5.0	1.5	3.0	9.0	6.0	7.0	9.5	5.5	7.5	17.5	13.5	15.5
23	3.0	1.5	2.5	10.5	5.0	7.5	14.0	6.0	9.5	19.5	15.0	17.0
24	4.5	2.5	3.5	9.0	8.0	8.5	15.5	8.0	11.5	17.5	14.0	15.5
25	3.5	3.0	3.5	8.5	6.5	7.5	16.5	8.5	12.0	19.5	12.0	15.5
26	3.5	2.0	3.0	8.5	4.5	6.5	17.0	9.5	13.5	19.0	12.5	16.0
27	4.0	1.5	2.5	7.0	4.5	5.5	17.0	11.0	14.0	15.5	12.5	14.0
28	3.5	.0	2.0	5.0	3.5	4.0	14.0	10.0	12.0	18.5	12.0	14.5
29	6.0	2.0	3.5	7.5	3.0	5.0	15.5	7.5	11.0	18.0	12.5	15.5
30	---	---	---	9.0	2.5	5.5	15.5	9.0	12.5	16.0	14.5	15.0
31	---	---	---	10.0	5.0	7.0	---	---	---	20.0	13.0	16.0
MONTH	6.0	.0	1.1	10.5	.0	4.5	17.0	1.5	7.5	22.0	8.5	11.9
JUNE				JULY			AUGUST			SEPTEMBER		
1	17.5	13.5	15.0	24.0	17.0	20.5	22.0	19.0	20.5	16.5	13.5	15.0
2	15.5	12.0	13.5	21.5	17.0	19.0	23.0	17.5	20.0	14.5	13.0	14.0
3	16.5	11.0	14.0	23.0	15.5	18.5	21.5	16.0	19.0	15.0	13.5	14.0
4	14.5	12.0	13.0	22.5	16.5	19.5	23.0	16.5	19.5	17.0	11.0	14.0
5	19.0	9.5	14.0	21.0	17.5	19.5	20.0	17.0	18.0	17.0	11.0	14.0
6	20.5	12.5	16.5	20.0	16.5	18.0	21.0	16.5	18.5	15.0	12.0	13.5
7	17.5	14.5	16.0	17.5	15.0	16.0	22.0	16.5	19.0	17.5	12.5	14.5
8	22.0	13.5	17.5	18.0	15.5	16.5	20.5	17.0	19.0	17.0	11.0	14.0
9	24.0	15.5	19.5	23.5	16.5	20.0	21.5	17.5	19.0	19.5	13.5	16.0
10	20.0	16.0	18.5	24.5	19.0	21.5	23.0	16.0	19.0	19.0	15.0	17.0
11	19.5	13.5	16.0	23.0	17.0	20.0	23.0	16.5	19.5	16.5	14.5	15.5
12	19.0	13.0	15.5	21.0	18.0	19.5	20.0	18.0	19.0	16.5	11.5	14.0
13	18.5	13.5	16.0	24.5	17.5	20.5	23.5	17.0	19.5	15.0	12.0	13.5
14	19.5	16.0	17.5	24.5	18.5	21.0	19.5	16.5	18.0	15.5	11.5	13.0
15	17.0	14.5	16.0	24.0	17.5	21.0	21.5	17.0	19.0	14.5	9.5	12.0
16	15.5	13.5	14.5	23.5	17.5	20.5	19.0	15.5	17.5	15.0	9.0	12.0
17	18.5	11.0	14.5	22.5	17.0	19.5	17.0	15.5	16.0	15.5	10.0	12.5
18	18.0	14.0	16.0	18.5	14.5	15.5	19.5	14.0	16.5	17.0	12.0	14.0
19	20.0	13.5	17.0	20.5	12.0	16.0	18.5	14.0	16.5	15.0	12.5	14.0
20	20.5	16.5	18.0	20.0	16.0	18.0	19.0	14.5	16.5	12.5	10.0	11.0
21	18.0	15.5	16.5	17.5	15.0	16.0	17.0	15.0	16.0	13.0	8.0	10.5
22	19.0	14.5	16.5	21.5	13.5	17.0	19.0	14.5	16.5	11.0	9.5	10.0
23	18.5	15.0	16.5	22.0	14.0	18.0	20.5	14.5	17.0	10.0	8.0	9.0
24	21.5	16.0	18.5	21.5	15.5	18.5	20.5	14.5	17.5	11.0	5.5	8.0
25	20.5	15.5	18.0	22.0	17.0	19.0	18.5	16.5	17.5	12.0	6.0	8.5
26	22.0	16.5	19.0	19.0	17.0	18.0	21.0	15.5	18.0	13.5	7.5	10.0
27	20.5	15.0	17.5	18.0	17.0	17.5	20.5	15.5	18.0	11.5	9.0	10.5
28	20.5	15.0	17.5	18.5	16.5	17.5	19.5	16.5	18.0	13.5	8.0	10.5
29	20.5	14.0	17.5	22.5	16.5	19.0	20.5	15.0	18.0	15.0	10.5	12.5
30	22.5	15.0	18.5	23.5	16.5	20.0	19.0	14.5	17.0	15.5	10.5	13.0
31	---	---	---	24.0	17.5	20.5	19.0	16.5	18.0	---	---	---
MONTH	24.0	9.5	16.5	24.5	12.0	18.8	23.5	14.0	18.1	19.5	5.5	12.7

ST. CROIX RIVER BASIN

05331833 NAMEKAGON RIVER AT LEONARDS, WI--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	138	136	137	138	135	136	147	142	145	156	155	155
2	139	137	138	141	138	140	147	145	146	157	155	156
3	140	138	139	142	139	141	147	145	146	157	155	156
4	140	138	139	142	139	141	147	145	146	161	156	157
5	140	138	139	142	139	141	149	146	147	164	157	160
6	141	138	140	143	140	142	151	147	149	158	156	157
7	140	136	138	143	140	142	151	147	149	161	156	158
8	137	135	136	143	139	141	152	147	150	158	155	157
9	137	136	137	143	139	141	153	151	152	160	154	157
10	139	137	138	143	141	143	155	151	153	155	154	154
11	140	138	139	143	140	142	158	151	156	160	155	157
12	141	138	140	144	141	143	155	151	153	162	157	160
13	143	140	141	145	141	143	156	154	155	160	157	158
14	142	141	141	147	143	145	157	154	156	161	157	159
15	142	139	141	147	143	146	158	155	156	160	156	158
16	141	139	140	147	144	146	166	158	162	161	157	160
17	142	141	141	146	143	145	163	159	161	162	159	161
18	142	140	141	146	144	145	160	154	157	161	159	160
19	141	140	141	146	144	145	155	152	154	162	159	161
20	142	140	141	147	145	146	158	152	155	165	160	164
21	142	139	141	147	144	146	160	158	159	168	163	166
22	145	142	143	146	144	145	161	159	160	164	161	163
23	146	143	145	146	140	143	160	155	158	164	161	163
24	146	142	144	141	137	139	156	152	154	165	161	163
25	144	141	143	140	138	139	153	151	152	162	161	162
26	144	142	144	139	136	138	156	152	155	163	160	162
27	145	141	143	139	138	139	157	155	156	166	162	163
28	145	142	143	141	138	140	157	153	155	167	163	164
29	145	141	144	148	139	143	154	151	153	166	163	164
30	144	135	138	151	139	147	153	152	153	167	163	165
31	136	133	135	---	---	---	155	153	154	165	161	163
MONTH	146	133	140	151	135	142	166	142	153	168	154	160
FEBRUARY			MARCH			APRIL			MAY			
1	163	161	162	119	113	116	131	127	129	133	131	132
2	164	162	163	125	119	122	133	131	132	134	131	133
3	163	162	163	127	120	124	132	130	131	134	132	133
4	162	161	162	128	126	127	133	131	132	135	132	134
5	164	160	162	128	126	127	133	132	132	136	133	134
6	168	161	164	127	125	126	133	132	133	138	136	137
7	164	161	163	125	123	124	134	133	134	139	136	137
8	165	157	161	123	120	122	136	134	135	137	93	108
9	159	157	158	122	117	119	139	136	137	100	93	96
10	159	157	157	126	121	123	139	132	134	105	100	103
11	166	158	162	128	123	126	133	132	132	107	104	105
12	167	158	162	130	127	128	135	132	133	112	105	107
13	161	157	159	131	130	130	134	132	133	115	112	113
14	163	156	160	133	131	132	134	132	133	115	113	114
15	161	157	159	132	130	131	133	132	133	116	113	115
16	162	158	160	142	130	136	133	132	133	118	116	117
17	162	154	158	142	131	136	133	132	132	120	117	119
18	156	153	154	136	133	135	133	130	131	121	120	121
19	156	153	155	136	134	135	132	130	130	124	121	122
20	157	153	155	135	134	134	130	124	127	126	124	124
21	157	153	155	135	133	134	125	122	124	126	125	126
22	156	152	154	133	131	132	123	122	122	126	121	123
23	155	152	153	131	129	130	125	123	124	124	122	122
24	153	149	151	129	124	128	127	124	125	126	124	125
25	149	138	145	124	119	121	129	127	128	127	125	126
26	138	121	129	123	118	121	130	126	128	128	126	127
27	121	119	120	118	114	116	128	125	127	128	127	128
28	124	119	122	118	114	117	130	128	129	127	123	126
29	123	115	121	120	117	118	131	129	130	127	124	126
30	---	---	---	124	120	122	132	130	131	128	126	127
31	---	---	---	127	124	125	---	---	---	128	125	127
MONTH	168	115	153	142	113	126	139	122	130	139	93	122

05331833 NAMEKAGON RIVER AT LEONARDS, WI--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	129	127	128	135	132	133	134	132	133	146	143	145
2	127	125	126	136	132	134	135	131	133	146	144	145
3	128	125	127	135	131	133	135	131	133	146	143	145
4	128	126	127	136	133	135	135	133	134	147	142	145
5	129	126	127	137	134	136	137	135	136	146	143	145
6	131	128	129	139	136	137	138	135	137	147	143	145
7	133	131	132	139	135	137	137	134	136	147	143	145
8	134	130	132	137	131	134	139	133	137	148	144	145
9	137	132	135	131	122	125	138	134	136	146	139	142
10	139	135	137	127	124	125	140	134	137	145	141	143
11	137	134	136	129	126	127	141	134	138	146	143	144
12	138	133	137	130	127	128	141	135	138	147	140	143
13	139	136	138	130	128	129	139	134	137	152	147	150
14	139	133	135	133	130	132	141	106	132	154	150	152
15	136	133	134	134	132	133	108	104	106	155	151	153
16	133	127	130	135	132	134	122	108	116	154	151	153
17	127	125	126	137	135	136	129	122	126	155	151	153
18	129	121	126	139	136	138	131	127	128	157	151	154
19	126	124	125	140	136	138	134	130	132	156	153	155
20	126	120	122	140	138	139	136	132	134	159	152	155
21	120	118	119	142	139	141	138	135	136	157	153	155
22	121	118	119	143	141	142	138	135	137	158	155	156
23	122	119	120	145	143	144	140	136	138	159	153	155
24	125	122	123	147	144	145	140	135	139	157	152	155
25	129	125	127	148	123	144	143	140	141	157	152	155
26	127	121	123	123	108	114	143	139	141	158	152	155
27	125	121	123	117	115	116	144	139	142	156	152	154
28	130	125	126	122	117	119	145	141	144	158	152	155
29	131	127	129	127	122	123	145	141	144	157	153	156
30	133	130	131	131	127	128	146	141	144	159	153	156
31	---	---	---	134	130	132	146	143	145	---	---	---
MONTH	139	118	128	148	108	133	146	104	135	159	139	150

ST. CROIX RIVER BASIN

05332500 NAMEKAGON RIVER NEAR TREGO, WI

LOCATION.--Lat 45°56'53", long 91°53'17", in SW $\frac{1}{4}$ sec.17, T.40 N., R.12 W., Washburn County, Hydrologic Unit 07030002, at powerplant of Northern States Power Co., 4.0 mi downstream from Potato Creek, and 4.4 mi northwest of Trego.

DRAINAGE AREA.--488 mi².

PERIOD OF RECORD.--October 1927 to September 1970. October 1987 to current year.

REVISED RECORD.--WDR WI-88-1: Drainage area.

GAGE.--Headwater and tailwater read hourly.

REMARKS.--Diurnal fluctuation caused by Trego powerplant.

COOPERATION.--Records of daily discharge furnished by Northern States Power Company and reviewed by Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	400	472	359	356	323	612	512	455	396	472	566	465
2	400	472	359	356	323	612	512	455	396	472	566	465
3	400	472	359	382	323	437	448	455	396	472	566	465
4	400	400	359	382	323	437	448	382	396	472	566	465
5	400	400	359	323	323	437	448	382	396	472	566	465
6	400	400	359	323	323	437	448	382	396	400	566	465
7	512	400	359	356	323	437	448	382	396	400	465	465
8	512	400	359	356	323	437	448	562	288	400	465	361
9	512	400	359	356	323	472	448	994	356	400	465	361
10	512	400	359	356	323	472	448	821	356	1020	465	361
11	400	359	359	362	323	472	448	821	356	1020	465	361
12	400	359	359	362	323	472	431	821	356	1020	465	361
13	400	359	359	382	323	472	431	821	356	1020	465	361
14	437	359	382	382	323	472	431	821	356	1020	465	361
15	400	359	382	382	323	472	431	821	356	1020	851	361
16	400	410	382	382	323	472	431	821	356	1020	936	361
17	400	410	251	356	323	472	431	821	356	883	759	361
18	400	410	251	356	323	472	431	412	356	472	759	361
19	400	410	251	356	323	472	512	412	472	472	759	361
20	400	410	370	356	323	431	512	412	472	472	759	361
21	400	410	370	356	323	431	512	412	472	372	667	361
22	400	410	370	356	323	431	512	412	472	372	667	361
23	400	410	370	356	323	472	512	412	472	372	667	361
24	400	410	370	356	323	472	512	412	472	372	465	361
25	400	410	370	356	521	472	512	431	472	372	465	361
26	400	410	370	356	521	472	512	431	472	482	465	361
27	400	410	370	323	717	472	455	431	472	612	465	361
28	400	410	370	323	717	472	455	431	472	612	465	361
29	400	410	370	323	612	472	455	431	472	622	465	361
30	400	410	370	323	---	472	455	396	472	612	465	361
31	400	---	356	323	---	512	---	396	---	566	465	---
TOTAL	12885	12161	10992	10973	10840	14619	13989	16848	12284	18765	17660	11558
MEAN	416	405	355	354	374	472	466	543	409	605	570	385
MAX	512	472	382	382	717	612	512	994	472	1020	936	465
MIN	400	359	251	323	323	431	431	382	288	372	465	361
CFSM	.85	.83	.73	.73	.77	.97	.96	1.11	.84	1.24	1.17	.79
IN.	.98	.93	.84	.84	.83	1.11	1.07	1.28	.94	1.43	1.35	.88

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2000, BY WATER YEAR (WY)

MEAN	442	441	386	352	348	445	703	634	553	489	416	476
MAX	893	814	580	531	512	778	1118	1156	1093	1026	728	1834
(WY)	1969	1997	1992	1969	1969	1945	1997	1950	1944	1958	1999	1941
MIN	252	288	251	245	241	282	408	389	276	235	195	214
(WY)	1949	1934	1933	1933	1933	1934	1931	1934	1934	1934	1933	1933

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1928 - 2000
ANNUAL TOTAL	180581	163574	
ANNUAL MEAN	495	447	474
HIGHEST ANNUAL MEAN			607
LOWEST ANNUAL MEAN			300
HIGHEST DAILY MEAN	1120	May 9	5200
LOWEST DAILY MEAN	251	Dec 17-19	113
ANNUAL SEVEN-DAY MINIMUM	319	Dec 17	159
ANNUAL RUNOFF (CFSM)	1.01	.92	.97
ANNUAL RUNOFF (INCHES)	13.77	12.47	13.19
10 PERCENT EXCEEDS	808	566	717
50 PERCENT EXCEEDS	431	410	416
90 PERCENT EXCEEDS	323	356	288

(a) Also occurred Sept. 7, 1930

05333500 ST. CROIX RIVER NEAR DANBURY, WI
(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

LOCATION.--Lat 46°04'28", long 92°14'50", in SW ¼ sec.33, T.42 N., R.15 W., Burnett County, Hydrologic Unit 07030001, St. Croix National Scenic Waterway, on left bank at downstream side of bridge on State Highway 35, 3.5 mi downstream from Namekagon River, 10 mi northeast of Danbury, and at mile 129.2.

DRAINAGE AREA.--1,580 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1914 to September 1981, October 1984 to current year. Prior to October 1933, published as "at Swiss".

REVISED RECORDS.--WSP 1438: 1915(M), 1919-20, 1923-24(M), 1927(M), 1931(M), 1934, 1935-37(M). WSP 1628: 1918. WDR WI-85-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 882.21 ft above sea level. Prior to Apr. 23, 1937, nonrecording gage 40 ft downstream at same datum. Apr. 23, 1937, to Jan. 5, 1939, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1120	1120	1160	e980	e1000	e2300	1440	1080	984	895	1350	824
2	1140	1190	1040	e980	e1100	e1700	1340	1160	1080	781	1160	904
3	1000	1180	1160	e1000	e1200	e1500	1280	1100	1010	774	1130	785
4	1010	1130	1100	e1000	e1100	e1400	1430	1130	988	873	1080	817
5	1040	1180	951	e940	e1100	e1300	1300	1120	1010	735	1070	736
6	1050	1160	943	e940	e1000	e1400	1300	1090	1050	866	834	824
7	961	988	1190	e1000	e1000	e1400	1280	971	1070	873	855	863
8	1080	985	1050	e1000	e1000	e1500	1310	1200	894	1030	1040	772
9	1210	1070	1070	e1000	e1000	1700	1140	1650	798	1360	1050	725
10	1020	1050	1040	e1100	e1000	1760	1190	1620	897	1620	982	811
11	1020	1120	1070	e1100	e1000	1650	1340	1740	965	1910	882	779
12	1100	1040	914	e1100	e980	1440	1260	1730	772	2060	838	771
13	1050	1140	937	e1100	e960	1370	1170	1580	831	1980	794	735
14	1070	942	1010	e1100	e960	1460	1170	1530	800	1610	852	737
15	1200	888	890	e1200	e980	1460	1200	1310	809	1450	1820	724
16	1170	1020	e880	e1100	e1000	e1400	1200	1460	1030	1260	2050	827
17	959	945	e740	e1000	e1000	e1300	1210	1420	1130	1100	1680	699
18	960	885	e740	e1100	e1000	1320	1260	1300	1070	1110	1530	638
19	1130	1120	e800	e1000	e1000	1130	1140	1300	1060	1070	1360	650
20	1080	1070	e840	e1000	e1000	1220	1340	1090	1190	987	1190	659
21	1140	929	e900	e1000	e1000	1350	1560	1000	1260	909	1240	680
22	971	915	e900	e980	e1000	1390	1570	1130	1230	940	1270	703
23	1140	1110	e900	e1000	e1200	1360	1450	1190	1240	769	1110	747
24	969	1030	e900	e1000	e1500	1470	1560	1120	1170	720	1050	651
25	935	1200	e940	e1100	e1700	1650	1500	1080	1050	878	966	601
26	940	1070	e1000	e1100	e1800	1590	1290	1070	1140	1420	969	674
27	1020	1210	e1000	e1000	e1900	1650	1280	1090	1080	1470	891	697
28	985	1030	e1000	e1000	e2000	1700	1330	962	1050	1530	833	699
29	955	1080	e1000	e1000	e2200	1630	1270	1090	1020	1710	966	714
30	1220	1220	e1000	e1000	---	1570	1070	981	984	1690	935	726
31	1250	---	e980	e1000	---	1530	---	946	---	1540	881	---
TOTAL	32895	32017	30045	31920	34680	46600	39180	38240	30662	37920	34658	22172
MEAN	1061	1067	969	1030	1196	1503	1306	1234	1022	1223	1118	739
MAX	1250	1220	1190	1200	2200	2300	1570	1740	1260	2060	2050	904
MIN	935	885	740	940	960	1130	1070	946	772	720	794	601
CFSM	.67	.68	.61	.65	.76	.95	.83	.78	.65	.77	.71	.47
IN.	.77	.75	.71	.75	.82	1.10	.92	.90	.72	.89	.82	.52

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2000, BY WATER YEAR (WY)

MEAN	1188	1210	1021	910	905	1342	2339	1824	1510	1300	1074	1209
MAX	2489	2216	1910	1555	1518	2930	4614	4023	3797	3230	2223	4759
(WY)	1969	1997	1992	1997	1997	1973	1916	1950	1944	1958	1955	1941
MIN	590	631	551	600	535	703	939	889	626	514	432	564
(WY)	1933	1926	1933	1924	1936	1934	1931	1931	1934	1934	1934	1933

ST. CROIX RIVER BASIN

05333500 ST. CROIX RIVER NEAR DANBURY, WI--Continued
(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1914 - 2000	
ANNUAL TOTAL	499989		410989		1318	
ANNUAL MEAN	1370		1123		1982	
HIGHEST ANNUAL MEAN					795	
LOWEST ANNUAL MEAN					8740	
HIGHEST DAILY MEAN	6340	Jul 27	(a)2300	Mar 1	405	May 2 1954
LOWEST DAILY MEAN	(a)740	Dec 17,18	601	Sep 25	417	(b)Aug 6 1934
ANNUAL SEVEN-DAY MINIMUM	(a)827	Dec 15	670	Sep 19	10200	Aug 12 1934
INSTANTANEOUS PEAK FLOW			(a)		8.22	May 6 1950
INSTANTANEOUS PEAK STAGE			(a)4.25	Mar 1	393	May 6 1950
INSTANTANEOUS LOW FLOW			588	Sep 18	.83	Aug 6,13 1934
ANNUAL RUNOFF (CFSM)	.87		.71		11.34	
ANNUAL RUNOFF (INCHES)	11.77		9.68		2190	
10 PERCENT EXCEEDS	2110		1530		1090	
50 PERCENT EXCEEDS	1140		1070		728	
90 PERCENT EXCEEDS	900		810			

(a) Ice affected

(b) Also occurred Aug. 13, 16, 17, 1934

(e) Estimated due to ice effect or missing record

05333500 ST. CROIX RIVER NEAR DANBURY, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1995 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: April to September 1997, December 1999 to September 2000.

INSTRUMENTATION.--Continuous water temperature recorder April to September 1997 and December 1999 to September 2000.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Record was faulty July 1, 2.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum temperature, 27.5°C, July 17, 1997; minimum, 0.0°C on many days.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum temperature, 27.0°C, July 15; minimum 0.0° on many days.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	---	---	---	.0	.0	.0
2	---	---	---	---	---	---	---	---	---	.0	.0	.0
3	---	---	---	---	---	---	---	---	---	.0	.0	.0
4	---	---	---	---	---	---	---	---	---	.0	.0	.0
5	---	---	---	---	---	---	---	---	---	.0	.0	.0
6	---	---	---	---	---	---	---	---	---	.0	.0	.0
7	---	---	---	---	---	---	---	---	---	.0	.0	.0
8	---	---	---	---	---	---	---	---	---	.0	.0	.0
9	---	---	---	---	---	---	---	---	---	.0	.0	.0
10	---	---	---	---	---	---	---	---	---	.0	.0	.0
11	---	---	---	---	---	---	---	---	---	.0	.0	.0
12	---	---	---	---	---	---	---	---	---	.0	.0	.0
13	---	---	---	---	---	---	---	---	---	.0	.0	.0
14	---	---	---	---	---	---	---	---	---	.0	.0	.0
15	---	---	---	---	---	---	---	---	---	.0	.0	.0
16	---	---	---	---	---	---	---	---	---	.0	.0	.0
17	---	---	---	---	---	---	---	---	---	.0	.0	.0
18	---	---	---	---	---	---	---	---	---	.0	.0	.0
19	---	---	---	---	---	---	---	---	---	.0	.0	.0
20	---	---	---	---	---	---	---	---	---	.0	.0	.0
21	---	---	---	---	---	---	---	---	---	.0	.0	.0
22	---	---	---	---	---	---	---	---	---	.0	.0	.0
23	---	---	---	---	---	---	.0	.0	.0	.0	.0	.0
24	---	---	---	---	---	---	.0	.0	.0	.0	.0	.0
25	---	---	---	---	---	---	.0	.0	.0	.0	.0	.0
26	---	---	---	---	---	---	.0	.0	.0	.0	.0	.0
27	---	---	---	---	---	---	.0	.0	.0	.0	.0	.0
28	---	---	---	---	---	---	.0	.0	.0	.0	.0	.0
29	---	---	---	---	---	---	.0	.0	.0	.0	.0	.0
30	---	---	---	---	---	---	.0	.0	.0	.0	.0	.0
31	---	---	---	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	---	---	---	---	---	---	.0	.0	.0	.0	.0	.0

ST. CROIX RIVER BASIN

05333500 ST. CROIX RIVER NEAR DANBURY, WI--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	.0	.0	.0	.5	.0	.0	9.5	6.0	7.5	17.5	13.0	15.0
2	.0	.0	.0	2.0	.0	.5	9.0	6.5	7.5	18.5	12.5	15.0
3	.0	.0	.0	3.0	.0	1.0	8.0	6.0	7.0	20.0	13.5	16.5
4	.0	.0	.0	3.5	1.0	2.0	8.5	4.5	6.5	22.0	16.5	19.0
5	.0	.0	.0	5.5	1.0	3.0	7.5	6.0	6.5	22.5	17.0	19.5
6	.0	.0	.0	5.5	3.0	4.5	9.5	5.0	7.0	23.5	18.5	20.5
7	.0	.0	.0	8.0	4.5	6.0	7.5	5.0	6.0	23.5	19.0	21.0
8	.0	.0	.0	7.0	5.0	6.5	7.5	3.0	5.0	20.0	17.0	18.5
9	.0	.0	.0	5.0	2.0	3.0	10.0	4.5	7.0	18.5	15.5	17.0
10	.0	.0	.0	4.0	1.5	2.5	9.0	5.0	7.0	17.0	15.0	16.0
11	.0	.0	.0	4.5	1.5	3.0	8.0	5.0	6.5	16.5	14.5	15.5
12	.0	.0	.0	4.5	1.5	3.0	7.5	4.5	6.0	18.0	15.5	16.5
13	.0	.0	.0	3.0	1.5	2.0	11.0	5.0	8.0	15.5	12.0	14.0
14	.0	.0	.0	4.0	2.0	3.0	9.5	7.0	8.5	15.5	11.0	13.0
15	.0	.0	.0	3.0	1.0	2.0	7.0	4.5	5.5	16.5	12.0	14.5
16	.0	.0	.0	2.0	.0	.5	5.0	3.5	4.5	18.5	14.0	16.0
17	.0	.0	.0	2.5	.0	1.0	5.0	3.5	4.5	16.5	14.0	15.5
18	.0	.0	.0	3.5	1.0	2.0	7.5	5.0	6.0	16.0	12.0	14.0
19	.0	.0	.0	5.0	2.5	3.0	6.5	5.0	6.0	17.0	11.5	14.0
20	.0	.0	.0	4.5	3.0	3.5	5.0	3.0	4.0	19.0	12.0	15.5
21	.0	.0	.0	5.5	3.5	4.5	8.5	2.0	5.0	18.5	15.5	17.0
22	.0	.0	.0	6.5	4.5	5.5	9.5	6.0	8.0	19.0	15.5	17.0
23	.0	.0	.0	8.5	4.5	6.5	12.0	6.5	9.0	20.0	16.0	18.0
24	.0	.0	.0	8.0	6.5	7.5	13.0	8.5	10.5	18.5	16.0	17.0
25	.0	.0	.0	7.5	5.0	6.5	14.5	9.0	11.5	20.0	14.0	17.0
26	.0	.0	.0	8.0	5.0	6.0	16.0	10.0	13.0	20.0	15.0	17.5
27	.5	.0	.0	7.0	5.0	5.5	16.0	12.0	13.5	17.0	14.0	15.5
28	.5	.0	.0	7.0	4.0	5.5	15.5	11.5	13.0	18.5	13.0	15.5
29	.5	.0	.5	8.0	4.0	6.0	16.0	10.5	13.0	19.5	15.0	17.0
30	---	---	---	9.0	4.5	6.5	16.5	11.0	14.0	18.5	16.5	17.5
31	---	---	---	9.0	6.0	7.5	---	---	---	20.0	15.0	17.5
MONTH	.5	.0	.0	9.0	.0	3.9	16.5	2.0	7.9	23.5	11.0	16.5
JUNE				JULY			AUGUST			SEPTEMBER		
1	18.5	15.5	16.5	---	---	---	26.5	22.5	24.5	19.5	16.5	17.5
2	18.0	14.5	16.0	---	---	---	26.0	22.0	24.0	17.5	16.0	16.5
3	17.5	14.0	16.0	26.0	19.5	22.0	25.5	21.0	23.0	17.5	16.0	16.5
4	16.0	14.0	15.0	25.0	20.5	22.5	26.0	21.5	23.5	19.0	14.5	16.5
5	19.0	12.0	15.5	24.0	20.5	22.0	24.0	21.5	22.5	18.5	14.0	16.0
6	21.0	15.0	17.5	23.5	20.0	21.5	24.5	21.0	22.5	17.5	15.0	16.0
7	19.0	16.5	17.5	21.0	19.5	20.0	26.0	20.5	23.0	19.0	15.5	17.0
8	23.0	15.5	19.0	23.0	19.5	21.0	24.0	22.0	23.0	18.5	14.0	16.5
9	25.0	16.5	21.0	25.5	21.0	23.0	25.0	20.5	22.5	20.5	16.0	18.0
10	23.0	18.5	21.0	26.5	23.0	24.5	26.0	20.5	23.0	21.0	17.5	19.0
11	22.5	17.0	19.5	24.5	22.0	23.5	26.0	21.0	23.5	18.5	16.0	17.5
12	21.0	16.0	18.5	25.0	23.0	23.5	24.5	22.0	23.0	17.5	14.0	16.0
13	20.0	16.5	18.0	26.0	22.5	24.0	26.5	21.0	23.5	17.0	14.0	16.0
14	22.0	18.0	19.5	26.5	23.0	24.5	23.5	21.0	22.0	17.0	14.0	15.5
15	19.0	17.0	18.0	27.0	22.5	24.5	23.5	20.0	21.5	16.5	12.5	14.5
16	17.5	16.0	17.0	26.5	22.5	24.5	22.5	20.5	21.5	17.0	13.0	15.0
17	19.5	14.0	16.5	25.0	21.5	23.0	21.5	20.0	20.5	17.5	13.0	15.5
18	21.5	16.5	18.5	22.0	19.0	20.0	22.5	18.5	20.5	18.5	13.0	16.5
19	22.0	17.0	19.5	23.0	17.5	20.0	22.0	18.5	20.5	18.0	15.5	17.0
20	22.5	19.0	20.5	24.0	20.0	21.5	21.5	18.5	20.0	15.5	13.0	14.5
21	20.0	17.0	18.5	21.0	18.5	20.0	20.0	19.0	19.5	14.5	10.5	13.0
22	19.5	16.5	18.0	24.0	18.0	20.5	22.0	18.5	20.0	13.5	12.5	12.5
23	21.0	17.5	19.0	23.5	18.0	21.0	23.5	19.0	21.0	13.0	11.0	12.5
24	24.0	19.0	21.0	24.0	18.5	21.5	23.5	18.5	21.0	12.5	8.5	10.5
25	21.5	19.0	20.5	24.0	20.5	22.0	21.5	20.0	20.5	13.5	8.0	10.5
26	22.5	18.5	20.0	23.0	21.0	21.5	23.0	18.5	20.5	14.5	9.5	12.0
27	22.0	18.0	20.0	23.5	20.0	21.5	23.0	19.5	21.0	13.5	10.5	12.5
28	22.5	18.0	20.0	23.0	21.0	22.0	21.0	19.0	20.0	14.5	10.0	12.0
29	24.0	18.0	20.5	24.5	20.5	22.5	22.0	17.5	20.0	16.5	12.5	14.5
30	25.0	18.5	21.5	25.5	21.0	23.0	21.5	18.0	19.5	17.0	13.0	15.0
31	---	---	---	26.0	22.0	23.5	21.0	19.5	20.5	---	---	---
MONTH	25.0	12.0	18.6	27.0	17.5	22.2	26.5	17.5	21.7	21.0	8.0	15.1

05333500 ST. CROIX RIVER NEAR DANBURY, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)
OCT												
12...	1120	--	1130	10.4	7.9	119	10.4	16.4	4.79	.9	2.6	59
NOV												
18...	1030	--	861	14.2	7.9	121	3.4	18.0	5.13	.7	2.6	64
DEC												
22...	1210	900	--	12.2	6.9	142	.0	21.9	5.79	.8	2.8	69
JAN												
20...	1300	1000	--	10.8	7.2	146	.0	19.7	5.46	.8	2.9	68
FEB												
22...	1040	--	1010	10.1	7.0	134	.0	--	--	--	--	64
28...	1010	2000	--	11.1	7.2	126	-.1	16.1	4.67	1.2	2.5	56
MAR												
21...	0940	--	1400	12.2	7.6	99	3.8	14.2	4.11	.9	2.3	48
APR												
20...	0920	--	1360	--	6.7	112	3.3	15.5	4.58	.6	2.6	59
MAY												
09...	1020	--	--	8.3	7.6	110	15.6	15.3	4.37	.5	2.5	52
17...	0900	--	1380	9.8	7.3	105	14.6	14.7	4.17	.5	2.3	53
JUN												
14...	1030	--	815	9.2	7.8	129	20.7	17.4	5.05	.5	2.7	61
JUL												
10...	1100	--	1510	7.6	7.3	105	23.5	16.7	4.87	.4	2.4	58
19...	1100	--	1080	8.9	7.8	114	19.3	15.2	4.58	.5	2.3	56
AUG												
16...	1110	--	2030	7.6	7.2	88	19.8	13.2	3.87	.5	2.0	47
21...	0910	--	1190	8.1	7.6	112	19.0	15.3	4.51	.5	2.3	56
SEP												
08...	1000	--	738	9.9	8.1	136	16.5	18.4	5.29	.7	2.7	60

DATE	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)
OCT											
12...	72	59	2.6	<.1	10.0	3.4	.24	.30	<.020	<.050	<.010
NOV											
18...	79	--	2.8	<.1	11.7	3.4	.21	.22	<.020	.069	<.010
DEC											
22...	84	--	3.0	<.1	15.5	3.2	.20	.35	<.020	.127	<.010
JAN											
20...	83	--	3.5	<.1	15.3	3.6	.16	.24	.034	.167	<.010
FEB											
22...	78	78	2.7	<.1	--	4.2	.16	.40	.046	.229	<.010
28...	68	--	3.4	<.1	13.1	3.7	.32	.52	.085	.247	<.010
MAR											
21...	59	--	2.7	<.1	11.1	3.7	.27	.37	<.020	.106	<.010
APR											
20...	72	--	2.4	<.1	9.6	3.3	.22	.29	<.020	.067	<.010
MAY											
09...	63	--	2.5	<.1	7.8	3.0	.33	.64	<.020	<.050	<.010
17...	65	--	2.0	<.1	7.7	2.7	.31	.44	<.020	.052	<.010
JUN											
14...	75	--	2.7	<.1	8.3	2.9	.28	.38	<.020	.100	<.010
JUL											
10...	71	--	2.4	<.1	9.8	1.6	.35	.57	<.020	.073	<.010
19...	68	--	2.1	<.1	9.9	2.5	.33	.47	<.020	.064	<.010
AUG											
16...	58	--	2.0	<.1	9.4	2.2	.47	.76	<.020	<.050	<.010
21...	69	--	2.3	<.1	10.5	2.6	.36	.43	<.020	<.050	<.010
SEP											
08...	73	--	5.7	<.1	11.2	3.3	.24	.36	<.020	<.050	<.010

ST. CROIX RIVER BASIN

05333500 ST. CROIX RIVER NEAR DANBURY, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SAM- PLING METHOD, CODES (82398)
OCT											
12...	E.004	<.010	.014	6.7	.2	83	160	10	3	85	10
NOV											
18...	E.004	<.010	.010	4.7	.3	92	120	12	4	65	10
DEC											
22...	.007	<.010	.017	4.1	.3	103	140	20	5	72	10
JAN											
20...	.006	.020	.019	3.2	.4	110	130	8	2	86	60
FEB											
22...	.006	<.010	.018	2.4	.2	100	--	--	2	100	10
28...	.010	<.010	.034	4.6	1.1	86	150	34	10	82	70
MAR											
21...	.007	<.010	.014	5.5	.3	77	220	9	6	82	10
APR											
20...	E.005	<.010	.016	6.0	.4	77	130	9	3	89	10
MAY											
09...	.015	<.010	.030	7.1	.5	85	140	22	10	90	10
17...	.009	<.010	.019	8.8	.8	81	160	14	3	100	10
JUN											
14...	.011	<.010	.018	5.0	.6	85	110	18	4	87	10
JUL											
10...	.011	<.010	.038	12	.6	93	150	21	10	87	10
19...	.012	<.010	.028	9.0	.2	94	200	12	13	98	10
AUG											
16...	.010	<.010	.023	14	.6	83	190	14	9	80	10
21...	.010	<.010	.015	9.5	.3	85	150	10	3	93	10
SEP											
08...	E.005	<.010	.008	4.6	<.2	102	80	10	2	100	10

05340500 ST. CROIX RIVER AT ST. CROIX FALLS, WI
(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

LOCATION.--Lat 45°24'25", long 92°38'49", in SW ¼ NW ¼ sec.30, T.34 N., R.18 W., Polk County, Hydrologic Unit 07030005, St. Croix National Scenic Riverway, on left bank, 1,500 ft downstream from powerplant of Northern States Power Co., in St. Croix Falls, and at mile 52.2.

DRAINAGE AREA.--6,240 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1902 to current year. Prior to January 1910, monthly discharge only, published in WSP 1308. Prior to October 1939, published as "near St. Croix Falls."

REVISED RECORDS.--WSP 1115: 1929. WDR WI-82-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 689.94 ft above sea level. Prior to July 1905, gage heights and discharge measurements were used by Loweth and Wolff, consulting engineers of St. Paul, Minn., to determine the flow. July 1905 to February 1940, records were computed from power generation at the St. Croix Falls Powerplant. February 1940 to Sept. 30, 1979, water-stage recorder at site 300 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Diurnal fluctuation caused by St. Croix Falls Powerplant 1,500 ft upstream. Gage-height telemeter and data-collection platform at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3600	4730	3070	2480	1860	7980	5670	4080	2920	2500	3830	2740
2	3460	4680	3380	2290	e1800	7880	5400	3910	2910	2520	2970	1820
3	3040	4610	2940	2400	e1700	7820	5020	3890	3070	2560	3000	2010
4	3220	4470	2930	2290	e1800	8160	4920	3530	3080	2500	3070	1860
5	2940	4460	3100	2390	2070	7470	4620	3350	3440	2270	2460	1900
6	3050	3990	2830	2220	2010	6970	4870	3650	3000	2280	2910	2140
7	2800	4070	2570	e2200	2040	6180	4800	3320	2960	1730	2390	2330
8	2910	3690	2890	1970	1990	5600	4580	3390	3060	2360	2320	1980
9	2930	3590	2960	2610	1850	6370	4300	3780	3010	3900	2330	1750
10	3110	3550	2830	1970	2070	7190	4250	5340	2670	6530	2690	2130
11	3090	3360	2560	2390	e1900	7980	4020	5950	2190	7960	2590	2410
12	3030	3530	2720	2160	e1800	7710	4090	6100	2360	8230	2280	2210
13	2980	3300	2530	2090	1890	6890	4010	6160	2410	7620	2260	2180
14	3010	3210	2370	2010	2140	6440	3810	6060	2260	7420	2010	1990
15	2990	3280	2980	2140	e1800	6240	3740	5570	2460	7080	2080	1780
16	3060	2950	1840	2220	e1900	6060	3870	5110	2550	6320	3640	1790
17	2870	2950	1080	2130	e1900	5560	3810	5060	2670	5990	5690	1790
18	3170	3140	1460	e2000	2010	4610	4100	5150	3060	5130	5590	1790
19	2640	3150	1710	e2000	1910	4640	3880	4680	3490	4580	4890	1790
20	2910	3190	1940	e2000	2080	4160	4180	4090	3490	4440	4610	1780
21	3290	2840	1900	e1900	2080	4040	4330	3770	3760	3940	3920	1640
22	2530	3140	e1700	e1800	2080	4270	5410	3750	4110	3370	3920	1680
23	2710	3060	e1800	e1900	2120	4290	5850	3370	4600	3080	3850	1760
24	2720	3390	e1900	e1800	2450	4620	6030	3650	4290	2760	3670	1740
25	2660	3340	e2000	1860	3030	4880	5780	3240	4080	2860	3220	1750
26	2900	3100	e2100	e1800	4660	6490	5770	2800	3830	3050	3400	1730
27	2790	3600	e2100	e1800	6140	6760	5310	3320	3550	3440	2700	1680
28	2610	3320	2240	e1900	6320	6770	4930	3400	3590	4050	3040	1710
29	2680	3280	2520	2090	7140	6670	4620	2800	3230	3580	2850	1730
30	2870	3090	2370	1600	---	6570	4500	3020	2980	4110	2490	1750
31	3350	---	2180	2030	---	6010	---	3170	---	3590	2490	---
TOTAL	91920	106060	73500	64440	74540	193280	140470	128460	95080	131750	99160	57340
MEAN	2965	3535	2371	2079	2570	6235	4682	4144	3169	4250	3199	1911
MAX	3600	4730	3380	2610	7140	8160	6030	6160	4600	8230	5690	2740
MIN	2530	2840	1080	1600	1700	4040	3740	2800	2190	1730	2010	1640
CFSM	.48	.57	.38	.33	.41	1.00	.75	.66	.51	.68	.51	.31
IN.	.55	.63	.44	.38	.44	1.15	.84	.77	.57	.79	.59	.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1902 - 2000, BY WATER YEAR (WY)

	MEAN	3764	3486	2590	2191	2165	4269	10109	7434	5696	4153	2924	3500
MAX	14270	11910	5821	4279	6021	14420	22320	21840	19510	17260	9777	14590	
(WY)	1969	1972	1984	1984	1984	1945	1952	1950	1944	1952	1955	1941	
MIN	1380	1342	1288	1157	1257	1538	2212	2430	1481	1014	839	1152	
(WY)	1933	1911	1911	1911	1913	1912	1902	1934	1934	1934	1934	1933	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1902 - 2000

ANNUAL TOTAL	1625940	1256000	
ANNUAL MEAN	4455	3432	4369
HIGHEST ANNUAL MEAN			8569
LOWEST ANNUAL MEAN			1754
HIGHEST DAILY MEAN	14300	Apr 9	53900
LOWEST DAILY MEAN	1080	Dec 17	75
ANNUAL SEVEN-DAY MINIMUM	1660	Dec 17	754
INSTANTANEOUS PEAK FLOW		13300	Mar 6
INSTANTANEOUS PEAK STAGE		7.37	Mar 6
ANNUAL RUNOFF (CFSM)	.71	.55	25.19
ANNUAL RUNOFF (INCHES)	9.69	7.49	.70
10 PERCENT EXCEEDS	8250	5960	8990
50 PERCENT EXCEEDS	3590	3040	2800
90 PERCENT EXCEEDS	2190	1860	1570

(e) Estimated due to ice effect or missing record

ST. CROIX RIVER BASIN

05340500 ST. CROIX RIVER AT ST. CROIX FALLS, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1996 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: January to September 2000.

INSTRUMENTATION.--Water temperature recorder since January 21, 2000, provides 15-minute readings.

REMARKS.--Records represent water temperature at sensor, within 0.5°C, located near the orifice.

EXTREMES FOR CURRENT PERIOD.--

WATER TEMPERATURE: Maximum, 26.5°C, July 16 and Aug. 1, 2; minimum 0.0°C on many days.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

		DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	
OCT												
26...	1300	2550	13.7	8.2	169	6.7	23.4	7.78	.9	3.9	96	
NOV												
03...	1120	5320	10.1	7.8	147	6.3	18.6	6.39	1.4	3.2	65	
DEC												
23...	1130	2530	12.2	7.5	217	-.1	30.8	9.72	1.1	3.9	97	
JAN												
20...	0910	3660	10.4	7.0	214	.0	25.7	8.33	1.0	3.9	96	
FEB												
22...	1430	1670	9.7	7.2	215	.2	--	--	--	--	98	
28...	1450	6460	10.5	7.2	174	.1	18.3	6.22	5.2	4.1	64	
MAR												
21...	1330	4020	12.5	7.4	143	3.2	17.2	5.84	2.0	3.1	61	
APR												
20...	1240	4590	--	6.2	162	5.6	18.8	6.40	1.2	3.7	64	
MAY												
17...	1300	5400	8.7	7.8	143	16.2	17.4	5.87	.8	3.0	66	
JUN												
14...	1430	1810	8.3	7.8	177	21.5	21.5	7.26	.9	3.9	81	
JUL												
10...	1530	7640	7.9	7.7	153	24.7	18.8	6.29	.9	3.0	80	
19...	1500	5370	7.3	7.5	154	22.2	18.7	6.28	1.1	3.4	58	
AUG												
21...	1430	4780	7.9	7.8	137	20.9	16.5	5.57	.8	2.6	63	
SEP												
14...	0850	1750	8.0	7.5	140	18.4	22.8	7.38	1.0	3.9	84	
DATE		BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)
OCT												
26...	117	4.2	<.1	10.5	3.6	.30	.45	<.020	.087	<.010	E.005	
NOV												
03...	80	4.5	<.1	9.7	3.0	.44	.58	.029	.123	<.010	.013	
DEC												
23...	119	5.3	<.1	15.1	3.5	.27	.37	<.020	.333	<.010	.007	
JAN												
20...	117	5.1	<.1	15.3	4.1	.24	.33	.067	.375	<.010	.010	
FEB												
22...	120	6.1	<.1	--	4.8	.30	.35	.091	.471	<.010	.009	
28...	78	8.8	<.1	10.8	4.5	1.1	1.3	.371	.691	.010	.130	
MAR												
21...	74	5.3	<.1	10.4	4.4	.44	.64	.030	.268	<.010	.018	
APR												
20...	78	5.2	<.1	8.3	3.9	.38	.46	<.020	.138	<.010	.011	
MAY												
17...	80	3.8	<.1	7.3	2.8	.49	.58	<.020	.067	<.010	.014	
JUN												
14...	98	4.5	<.1	7.3	3.1	.41	.60	.034	.110	<.010	.017	
JUL												
10...	98	3.8	<.1	8.9	1.6	.42	.60	.024	.269	<.010	.021	
19...	71	8.4	<.1	11.7	2.1	.56	.87	<.020	.098	<.010	.025	
AUG												
21...	77	3.2	<.1	11.7	2.4	.53	.78	.024	.126	<.010	.018	
SEP												
14...	102	4.4	<.1	11.2	2.9	.33	.56	.022	.061	<.010	.011	

05340500 ST. CROIX RIVER AT ST. CROIX FALLS, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SAM- PLING METHOD, CODES (82398)
OCT 26...	<.010	.018	7.4	--	116	240	21	6	76	70
NOV 03...	.257	.035	9.9	.7	124	320	15	11	82	70
DEC 23...	<.010	.019	6.4	.2	140	200	33	2	100	10
JAN 20...	.018	.020	4.3	.2	139	130	20	2	88	10
FEB 22...	.012	.019	3.3	.2	138	--	--	1	88	70
28...	.103	.194	11	1.3	125	230	65	21	90	10
MAR 21...	.010	.033	8.8	.4	99	280	23	7	82	70
APR 20...	<.010	.029	7.9	.6	103	230	27	5	97	10
MAY 17...	<.010	.034	11	.8	102	190	51	7	100	10
JUN 14...	<.010	.041	7.5	.6	114	110	36	8	100	70
JUL 10...	.013	.058	8.5	1.2	106	90	42	8	96	70
19...	.014	.067	13	.6	125	220	63	9	98	10
AUG 21...	<.010	.041	12	.9	103	190	51	9	100	10
SEP 14...	<.010	.032	6.2	.5	122	120	31	6	<100	70

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	1.0	.0	.0
22	---	---	---	---	---	---	---	---	---	1.5	.0	.5
23	---	---	---	---	---	---	---	---	---	1.0	.0	.5
24	---	---	---	---	---	---	---	---	---	1.0	.0	.5
25	---	---	---	---	---	---	---	---	---	1.0	.0	.0
26	---	---	---	---	---	---	---	---	---	1.0	.0	.0
27	---	---	---	---	---	---	---	---	---	1.0	.0	.0
28	---	---	---	---	---	---	---	---	---	1.0	.0	.0
29	---	---	---	---	---	---	---	---	---	1.0	.0	.0
30	---	---	---	---	---	---	---	---	---	1.0	.0	.0
31	---	---	---	---	---	---	---	---	---	1.0	.0	.0
MONTH	---	---	---	---	---	---	---	---	---	1.5	.0	.1

ST. CROIX RIVER BASIN

05340500 ST. CROIX RIVER AT ST. CROIX FALLS, WI--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	.5	.0	.0	1.0	.0	.0	9.5	7.5	8.5	16.5	13.5	15.0
2	.5	.0	.0	1.0	.0	.0	10.0	7.5	9.0	17.5	14.0	15.5
3	.5	.0	.0	1.0	.0	.0	9.5	6.5	8.5	18.0	15.0	16.5
4	.5	.0	.0	1.5	.0	.0	8.0	6.0	7.0	19.5	16.0	17.5
5	1.0	.0	.0	2.5	.0	1.0	8.5	6.0	7.0	21.0	17.5	19.0
6	1.0	.0	.0	3.5	.5	2.0	8.5	6.5	7.5	22.0	19.0	20.5
7	1.0	.0	.0	4.5	2.0	3.0	8.5	6.0	7.0	22.5	20.0	21.0
8	1.0	.0	.0	6.5	3.0	5.0	8.5	5.5	6.5	22.5	20.5	21.5
9	.5	.0	.0	6.5	3.5	5.5	8.5	5.0	6.5	21.5	18.0	20.0
10	.5	.0	.0	5.0	2.0	4.0	9.0	6.0	7.5	19.0	15.5	17.5
11	.5	.0	.0	4.0	1.5	2.5	8.5	6.5	7.5	16.5	14.0	15.5
12	.5	.0	.0	3.5	1.0	2.5	8.0	6.0	7.0	16.0	14.5	15.0
13	.5	.0	.0	3.0	1.0	2.0	8.0	5.5	7.0	16.0	13.0	15.0
14	.5	.0	.0	3.0	1.0	2.0	9.5	6.0	7.5	14.5	12.5	13.5
15	.5	.0	.0	4.0	1.5	3.0	9.0	6.5	8.0	15.0	12.5	14.0
16	.5	.0	.0	3.5	1.0	2.5	7.0	4.5	6.0	16.5	13.5	15.5
17	.5	.0	.0	3.0	.5	1.5	5.0	3.5	4.5	17.5	15.0	16.0
18	.5	.0	.0	2.5	.5	1.5	6.0	4.0	5.0	17.0	15.0	16.0
19	.5	.0	.0	3.0	1.0	2.0	7.0	4.5	5.5	16.5	14.0	15.5
20	.5	.0	.0	3.5	1.5	2.5	6.5	4.5	5.5	18.0	14.0	16.0
21	1.0	.0	.0	4.5	2.0	3.0	7.0	4.0	5.5	18.5	15.5	17.0
22	1.0	.0	.0	6.0	3.5	4.5	9.0	4.5	7.0	20.0	16.5	18.0
23	1.0	.0	.0	7.0	4.5	5.5	10.5	7.0	9.0	21.0	18.0	19.5
24	1.0	.0	.0	8.5	6.0	7.0	12.0	8.5	10.5	21.5	18.5	20.0
25	1.0	.0	.0	9.0	6.5	7.5	13.5	10.5	12.0	20.5	18.0	19.0
26	.5	.0	.0	9.0	6.5	7.5	14.5	11.5	13.0	20.5	18.0	19.0
27	1.0	.0	.0	7.5	5.5	6.5	15.5	12.5	14.0	19.5	17.5	18.5
28	1.0	.0	.0	7.0	5.0	6.0	16.0	13.5	14.5	19.0	15.5	17.5
29	1.5	.0	.0	7.0	5.0	6.0	16.5	13.5	14.5	17.0	15.0	16.0
30	---	---	---	8.0	6.0	7.0	16.5	13.5	14.5	17.5	15.5	16.5
31	---	---	---	8.5	6.5	7.5	---	---	---	19.0	16.5	17.5
MONTH	1.5	.0	.0	9.0	.0	3.6	16.5	3.5	8.4	22.5	12.5	17.2
	JUNE			JULY			AUGUST			SEPTEMBER		
1	19.5	16.5	18.0	24.0	21.0	22.5	26.5	24.5	25.0	21.5	21.0	21.0
2	19.5	17.0	18.5	24.5	22.5	23.5	26.5	25.0	25.5	21.0	19.0	20.5
3	19.0	17.0	18.0	25.0	22.5	23.5	25.5	24.5	25.0	20.0	18.0	19.0
4	18.5	16.0	17.5	25.0	22.5	23.5	25.0	24.0	24.5	19.5	18.0	18.5
5	17.5	15.0	16.5	25.0	22.5	23.5	24.5	23.5	24.0	19.5	17.5	18.0
6	18.5	15.0	16.0	25.5	22.5	24.0	24.0	22.0	23.5	18.5	17.5	18.0
7	20.0	16.5	18.0	24.0	21.0	23.0	23.5	22.0	22.5	18.5	17.0	17.5
8	21.0	18.0	19.5	24.0	21.0	22.5	24.0	22.5	23.0	18.5	17.0	17.5
9	24.0	19.5	21.5	25.0	19.5	22.5	25.5	23.5	24.5	19.5	17.5	18.5
10	25.0	22.5	23.5	25.0	22.0	23.0	25.5	24.0	24.5	20.0	18.0	19.0
11	25.5	23.0	24.0	24.5	21.5	23.0	25.0	24.0	24.5	20.5	19.5	20.0
12	24.5	22.0	23.5	24.5	21.5	23.0	25.0	24.5	24.5	20.5	18.5	19.5
13	24.0	21.0	22.5	25.5	22.5	23.5	26.0	24.5	25.0	19.5	17.5	18.5
14	23.0	20.0	21.5	26.0	22.5	24.5	25.5	24.5	25.0	18.5	17.0	17.5
15	22.0	19.5	21.0	26.0	23.0	24.5	26.0	24.5	25.0	18.0	16.5	17.0
16	21.0	18.0	20.0	26.5	23.5	25.0	25.5	22.5	24.0	18.0	16.0	17.0
17	19.5	17.0	18.0	25.5	23.0	24.5	22.5	20.5	21.5	18.0	16.0	16.5
18	19.5	17.0	18.0	24.5	21.0	23.0	21.5	20.0	20.5	17.5	16.0	16.5
19	21.0	18.0	19.0	22.5	19.5	21.5	21.5	20.0	21.0	17.5	16.5	17.0
20	23.0	19.0	20.5	22.0	20.0	21.0	21.5	20.0	20.5	17.0	16.5	16.5
21	23.0	19.5	21.0	22.5	20.5	21.5	21.0	19.5	20.0	17.5	15.5	16.5
22	21.5	18.0	20.0	22.0	20.5	21.0	21.0	19.5	20.5	15.5	14.0	15.0
23	21.5	17.5	19.5	22.5	21.0	21.5	21.5	20.0	20.5	14.5	12.5	13.5
24	23.5	19.0	21.0	22.5	21.5	22.0	23.0	20.5	21.5	13.5	12.0	12.5
25	23.5	20.0	22.0	23.0	21.5	22.0	23.0	21.5	22.0	13.5	11.5	12.0
26	23.5	20.5	22.0	23.0	21.0	22.5	23.0	21.5	22.5	13.0	11.0	12.0
27	23.0	20.0	21.5	23.0	22.0	22.5	23.0	22.0	22.5	13.0	11.5	12.0
28	23.0	20.0	21.5	23.5	21.5	22.5	23.0	22.0	22.5	13.5	12.0	12.5
29	23.0	20.0	21.5	24.5	22.0	23.5	22.5	21.0	22.0	14.0	12.5	13.0
30	23.5	20.0	21.5	24.5	22.5	23.5	21.5	21.0	21.0	14.5	13.0	13.5
31	---	---	---	26.0	23.0	24.5	22.0	21.0	21.5	---	---	---
MONTH	25.5	15.0	20.2	26.5	19.5	23.0	26.5	19.5	22.9	21.5	11.0	16.5

05341404 DEER LAKE TRIBUTARY #1, UPSTREAM SITE, NEAR CENTURIA, WI

LOCATION.--Lat 45°24'38", long 92°30'21", in NW ¼ NW ¼ sec.29, T.34 N., R.17 W., Polk County, Hydrologic Unit 07030005, in ditch on south side of 170th Street, 150 ft south of the intersection of 170th Street and 138th Avenue, 3.5 mi southeast of Centuria.

DRAINAGE AREA.--0.04 mi².

PERIOD OF RECORD.--August to December 1998, April to September 1999, July to September 2000.

GAGE.--Water-stage recorder. Elevation of gage is 1,140 ft above sea level, from topographic map.

REMARKS.--Gage operated from July 1 to Sept. 30. Records good (see page 12).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	.000	.000	.000
2	---	---	---	---	---	---	---	---	---	.000	.000	.009
3	---	---	---	---	---	---	---	---	---	.000	.000	.001
4	---	---	---	---	---	---	---	---	---	.000	.000	.000
5	---	---	---	---	---	---	---	---	---	.003	.000	.000
6	---	---	---	---	---	---	---	---	---	.000	.000	.000
7	---	---	---	---	---	---	---	---	---	.001	.000	.000
8	---	---	---	---	---	---	---	---	---	.000	.006	.000
9	---	---	---	---	---	---	---	---	---	.071	.000	.000
10	---	---	---	---	---	---	---	---	---	.000	.000	.001
11	---	---	---	---	---	---	---	---	---	.000	.000	.000
12	---	---	---	---	---	---	---	---	---	.000	.002	.000
13	---	---	---	---	---	---	---	---	---	.000	.000	.000
14	---	---	---	---	---	---	---	---	---	.000	.000	.000
15	---	---	---	---	---	---	---	---	---	.000	.000	.000
16	---	---	---	---	---	---	---	---	---	.000	.004	.000
17	---	---	---	---	---	---	---	---	---	.000	.002	.000
18	---	---	---	---	---	---	---	---	---	.000	.000	.000
19	---	---	---	---	---	---	---	---	---	.000	.000	.000
20	---	---	---	---	---	---	---	---	---	.000	.000	.000
21	---	---	---	---	---	---	---	---	---	.000	.000	.000
22	---	---	---	---	---	---	---	---	---	.000	.000	.000
23	---	---	---	---	---	---	---	---	---	.000	.000	.000
24	---	---	---	---	---	---	---	---	---	.000	.000	.000
25	---	---	---	---	---	---	---	---	---	.000	.000	.000
26	---	---	---	---	---	---	---	---	---	.000	.000	.000
27	---	---	---	---	---	---	---	---	---	.000	.000	.000
28	---	---	---	---	---	---	---	---	---	.000	.000	.000
29	---	---	---	---	---	---	---	---	---	.000	.000	.000
30	---	---	---	---	---	---	---	---	---	.000	.000	.000
31	---	---	---	---	---	---	---	---	---	.000	.000	---
TOTAL	---	---	---	---	---	---	---	---	---	0.075	0.014	0.011
MEAN	---	---	---	---	---	---	---	---	---	.002	.000	.000
MAX	---	---	---	---	---	---	---	---	---	.071	.006	.009
MIN	---	---	---	---	---	---	---	---	---	.000	.000	.000
CFSM	---	---	---	---	---	---	---	---	---	.06	.01	.01
IN.	---	---	---	---	---	---	---	---	---	.07	.01	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2000, BY WATER YEAR (WY)

	1998	1999	2000	1998	1999	2000	1998	1999	2000	1998	1999	2000
MEAN	.005	.004	.001	---	---	---	.003	.004	.003	.004	.003	.001
MAX	.005	.004	.001	---	---	---	.003	.004	.003	.006	.009	.003
(WY)	1999	1999	1999	---	---	---	1999	1999	1999	1999	1998	1998
MIN	.005	.004	.001	---	---	---	.003	.004	.003	.002	.000	.000
(WY)	1999	1999	1999	---	---	---	1999	1999	1999	2000	2000	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1998 - 2000
HIGHEST DAILY MEAN	.073 Jul 30	.071 Jul 9	.103 Aug 22 1998
LOWEST DAILY MEAN	.000 Many days	.000 Many days	.000 Many days
ANNUAL SEVEN-DAY MINIMUM	.00 Many days	.00 Many days	.00 Many days
INSTANTANEOUS PEAK FLOW		1.03 Jul 9	2.04 Sep 26 1998
INSTANTANEOUS PEAK STAGE		1.87 Jul 9	2.08 Sep 26 1998
INSTANTANEOUS LOW FLOW			.00 Many days
10 PERCENT EXCEEDS	.01	.00	.00
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

ST. CROIX RIVER BASIN

05341405 DEER LAKE TRIBUTARY #1, DOWNSTREAM SITE, NEAR CENTURIA, WI
(Formerly published as Deer Lake Tributary #2, Downstream Site, near Centuria)

LOCATION.--Lat 45°24'36", long 92°30'27", in NW ¼ NW ¼ sec.29, T.34 N., R.17 W., Polk County, Hydrologic Unit 07030005, at downstream side of culvert passing under private drive. Private drive is 500 ft east of the centerline of 170th Street and 140th Avenue, 3.5 mi southeast of Centuria.

DRAINAGE AREA.--0.38 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1998 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,120 ft above sea level, from topographic map.

REMARKS.--Records good (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.000	.015	.000	.000	.000	.107	.004	.001	.225	.000	.000	.000
2	e.000	.000	.000	.000	.000	.064	.003	.001	.098	.001	.000	.000
3	e.000	.000	.000	.000	.000	.045	.003	.001	.049	.001	.000	.000
4	e.000	.000	.000	.000	.000	.036	.002	.001	.117	.000	.000	.000
5	e.000	.016	.000	.000	.000	.027	.002	.000	.104	.006	.000	.000
6	e.000	.000	.000	.000	.000	.021	.002	.000	.053	.003	.000	.000
7	e.000	.000	.000	.000	.000	.018	.001	.003	.029	.005	.000	.000
8	e.000	.000	.000	.000	.000	.037	.001	.095	.009	.005	.000	.000
9	e.000	.000	.000	.000	.000	.129	.001	.070	.003	.252	.000	.000
10	e.000	.000	.000	.000	.000	.065	.001	.034	.001	.090	.000	.000
11	e.000	.000	.000	.000	.000	.038	.001	.034	.000	.049	.000	.000
12	e.000	.000	.000	.000	.000	.024	.001	.025	.000	.029	.000	.000
13	e.000	.000	.000	.000	.000	.017	.001	.015	.001	.015	.000	.000
14	e.000	.000	.000	.000	.000	.014	.001	.010	.003	.007	.000	.000
15	e.000	.000	.000	.000	.000	.011	.001	.005	.003	.004	.000	.000
16	e.000	.000	.000	.000	.000	.007	.008	.020	.004	.003	.000	.000
17	e.000	.000	.000	.000	.000	.004	.012	.016	.001	.001	.000	.000
18	e.000	.000	.000	.000	.000	.003	.009	.012	.001	.001	.000	.000
19	e.000	.000	.000	.000	.000	.003	.013	.008	.007	.000	.000	.000
20	e.000	.000	.000	.000	.000	.003	.083	.005	.023	.000	.000	.000
21	e.000	.000	.000	.000	.000	.003	.084	.002	.008	.000	.000	.000
22	e.000	.000	.000	.000	.000	.004	.047	.002	.006	.000	.000	.000
23	e.000	.000	.000	.000	.000	.004	.028	.001	.006	.000	.000	.000
24	e.000	.000	.000	.000	.000	.013	.017	.000	.004	.000	.000	.000
25	e.000	.000	.000	.000	1.05	.018	.009	.000	.003	.000	.000	.000
26	e.000	.000	.000	.000	2.03	.012	.003	.000	.005	.000	.000	.000
27	.000	.000	.000	.000	1.34	.013	.002	.001	.001	.000	.000	.000
28	.000	.000	.000	.000	.521	.010	.001	.003	.002	.000	.000	.000
29	.000	.000	.000	.000	.168	.009	.001	.001	.001	.000	.000	.000
30	.015	.000	.000	.000	---	.007	.001	.001	.000	.000	.000	.000
31	.000	---	.000	.000	---	.005	---	.001	---	.000	.000	---
TOTAL	0.015	0.031	0.000	0.000	5.109	0.771	0.343	0.368	0.767	0.472	0.000	0.000
MEAN	.000	.001	.000	.000	.18	.025	.011	.012	.026	.015	.000	.000
MAX	.015	.016	.000	.000	2.03	.129	.084	.095	.225	.252	.000	.000
MIN	.000	.000	.000	.000	.000	.003	.001	.000	.000	.000	.000	.000
CFSM	.00	.00	.00	.00	.46	.07	.03	.03	.07	.04	.00	.00
IN.	.00	.00	.00	.00	.50	.08	.03	.04	.08	.05	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2000, BY WATER YEAR (WY)

	MEAN	.017	.013	.001	.000	.18	.024	.049	.029	.026	.013	.014	.003
MAX	.034	.024	.002	.000	.18	.024	.087	.047	.028	.015	.022	.006	
(WY)	1999	1999	1999	2000	2000	2000	1999	1999	1999	2000	1998	1998	
MIN	.000	.001	.000	.000	.18	.024	.010	.011	.025	.012	.000	.000	
(WY)	2000	2000	2000	2000	2000	2000	2000	2000	2000	1999	2000	2000	

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1998 - 2000

ANNUAL TOTAL		7.876		
ANNUAL MEAN		.021		.021
HIGHEST ANNUAL MEAN				.021
LOWEST ANNUAL MEAN				.021
HIGHEST DAILY MEAN	.476	Apr 6	2.03	Feb 26
LOWEST DAILY MEAN	.000	Many days	.000	Many days
ANNUAL SEVEN-DAY MINIMUM	.00	Many days	.00	Many days
INSTANTANEOUS PEAK FLOW			3.92	Feb 26
INSTANTANEOUS PEAK STAGE			2.06	Feb 26
INSTANTANEOUS LOW FLOW			.00	Many days
ANNUAL RUNOFF (CFSM)			.057	
ANNUAL RUNOFF (INCHES)			.77	
10 PERCENT EXCEEDS	.07		.02	
50 PERCENT EXCEEDS	.00		.00	
90 PERCENT EXCEEDS	.00		.00	

(e) Estimated due to missing record

05341405 DEER LAKE TRIBUTARY #1, DOWNSTREAM SITE, NEAR CENTURIA, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1998 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: August 1998 to current year.

INSTRUMENTATION.--Continuous water-temperature recorder since August 1998.

REMARKS.--Records represent water temperature at sensor within 0.5°C.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum observed, 28.0°C, July 10, 2000; minimum observed, 0.0°C, many days.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum observed, 28.0°C, July 10; minimum observed, 0.0°C, many days.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	8.5	5.5	7.0	7.5	5.0	6.5	.0	.0	.0	.0	.0	.0
2	7.0	5.0	6.0	5.0	2.0	3.5	.5	.0	.5	.0	.0	.0
3	7.0	5.0	5.5	4.5	1.0	2.5	1.0	.5	.5	.0	.0	.0
4	8.0	4.5	6.0	5.0	1.0	3.0	1.5	.0	.5	.0	.0	.0
5	8.5	5.5	7.0	6.0	2.0	4.0	.5	.0	.0	.0	.0	.0
6	7.5	4.5	6.5	5.0	1.5	3.0	.0	.0	.0	.0	.0	.0
7	11.0	6.5	8.5	6.0	1.5	4.0	.5	.0	.0	.0	.0	.0
8	12.5	10.0	11.0	8.5	3.5	6.0	1.0	.0	.0	.0	.0	.0
9	13.0	8.0	10.5	10.0	6.5	8.0	.5	.0	.0	.0	.0	.0
10	12.5	9.0	10.5	7.5	4.5	6.0	.0	.0	.0	.0	.0	.0
11	11.0	6.5	9.0	5.5	4.0	4.5	.0	.0	.0	.0	.0	.0
12	12.5	9.5	10.5	6.5	3.5	5.0	.5	.0	.0	.0	.0	.0
13	11.5	6.0	8.5	8.5	3.5	6.0	.5	.0	.0	.0	.0	.0
14	11.0	5.5	8.0	6.0	2.5	4.0	.5	.0	.0	.0	.0	.0
15	10.5	8.0	9.0	4.5	1.5	3.0	.5	.0	.0	.0	.0	.0
16	12.0	6.0	9.0	4.0	1.5	2.5	.0	.0	.0	.0	.0	.0
17	7.5	4.5	6.0	4.0	.5	2.0	.0	.0	.0	.0	.0	.0
18	6.5	5.0	6.0	6.0	1.5	3.5	.0	.0	.0	.0	.0	.0
19	7.0	4.5	6.0	6.0	2.0	4.5	.0	.0	.0	.0	.0	.0
20	7.0	2.0	4.5	3.0	.5	2.0	.0	.0	.0	.0	.0	.0
21	11.0	5.0	7.5	6.0	2.0	4.0	.0	.0	.0	.0	.0	.0
22	7.5	4.5	6.0	6.0	3.5	5.0	.0	.0	.0	.0	.0	.0
23	7.5	3.0	4.5	3.5	2.0	3.0	.0	.0	.0	.0	.0	.0
24	7.5	1.0	3.5	2.0	1.0	1.5	.0	.0	.0	.0	.0	.0
25	10.0	3.0	5.5	2.5	.5	1.5	.0	.0	.0	.0	.0	.0
26	9.0	2.5	4.5	4.0	1.0	3.0	.0	.0	.0	.0	.0	.0
27	11.5	2.5	6.0	1.5	.5	1.0	.0	.0	.0	.0	.0	.0
28	9.5	3.5	5.5	.5	.0	.5	.0	.0	.0	.0	.0	.0
29	12.0	3.5	7.5	.5	.0	.0	.5	.0	.0	.0	.0	.0
30	11.5	7.5	10.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
31	10.5	5.0	7.5	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	13.0	1.0	7.2	10.0	.0	3.4	1.5	.0	.0	.0	.0	.0

ST. CROIX RIVER BASIN

05341405 DEER LAKE TRIBUTARY #1, DOWNSTREAM SITE, NEAR CENTURIA, WI--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	.0	.0	.0	2.0	1.0	1.5	9.5	5.0	7.0	14.5	10.5	12.0
2	.0	.0	.0	2.0	.5	1.0	8.0	5.0	6.5	13.5	9.0	11.0
3	.0	.0	.0	2.0	.5	1.0	7.0	4.0	5.5	14.0	10.0	12.0
4	.0	.0	.0	2.5	.5	1.0	7.5	3.0	4.5	14.5	12.0	13.0
5	.0	.0	.0	3.0	.5	1.5	6.5	3.5	5.0	15.0	12.0	13.5
6	.0	.0	.0	3.5	.5	1.5	19.5	1.5	5.5	14.5	12.5	13.5
7	.0	.0	.0	4.5	.5	2.5	5.5	.0	2.0	23.0	12.5	13.5
8	.0	.0	.0	4.0	2.0	2.5	6.0	.0	2.5	23.0	20.0	21.5
9	1.0	.0	.0	2.0	.5	.5	6.0	2.5	3.5	20.0	18.0	19.0
10	.0	.0	.0	1.5	.5	.5	5.5	2.0	3.0	18.0	15.5	16.5
11	.0	.0	.0	2.0	.5	1.0	5.5	2.5	3.0	17.5	15.0	16.0
12	.0	.0	.0	1.5	.5	.5	3.5	1.5	2.5	18.5	15.5	16.5
13	.0	.0	.0	1.5	.5	1.0	7.0	3.0	4.5	16.0	12.0	13.5
14	.0	.0	.0	2.5	.5	1.0	7.0	4.0	5.0	16.5	11.0	13.5
15	.0	.0	.0	1.5	.0	.5	4.0	2.5	3.0	17.0	11.5	14.5
16	.0	.0	.0	1.0	.0	.5	4.0	2.5	3.5	18.0	14.0	16.0
17	.0	.0	.0	1.0	.0	.5	5.0	3.5	4.0	18.0	14.5	16.5
18	.0	.0	.0	1.0	.5	.5	7.5	4.5	5.5	16.0	12.5	13.5
19	.0	.0	.0	1.0	.5	.5	7.0	5.5	6.5	17.0	11.5	14.0
20	1.0	.0	.0	1.5	.5	1.0	6.0	4.5	5.5	18.0	12.5	15.0
21	1.5	.0	.0	2.0	1.0	1.5	14.0	4.0	8.0	16.5	14.5	15.5
22	3.0	.0	.5	3.0	1.0	2.0	17.0	7.5	11.5	16.5	15.0	15.5
23	.5	.0	.0	5.5	2.0	3.5	16.0	10.0	13.5	15.5	14.0	14.5
24	1.5	.0	.5	6.5	4.0	5.5	18.0	11.0	14.5	14.0	11.5	13.0
25	1.0	.0	.5	8.0	4.0	6.0	17.5	12.0	15.0	14.0	10.0	12.0
26	.5	.0	.5	8.0	4.0	6.0	16.0	11.0	13.5	13.5	10.0	12.0
27	1.0	.0	.5	7.5	4.0	5.0	15.0	11.5	13.0	13.5	11.0	12.0
28	1.5	.0	.5	7.5	3.5	5.0	13.5	9.0	11.5	14.0	12.5	13.5
29	3.0	.5	1.0	9.5	3.5	6.0	12.0	7.5	9.5	14.0	12.0	13.0
30	---	---	---	9.5	4.0	6.5	13.0	8.5	10.5	14.5	13.0	13.5
31	---	---	---	9.0	5.5	7.0	---	---	---	14.0	13.0	13.5
MONTH	3.0	.0	.1	9.5	.0	2.4	19.5	.0	6.9	23.0	9.0	14.3
JUNE				JULY			AUGUST			SEPTEMBER		
1	19.0	13.5	16.0	18.5	15.5	16.5	21.0	18.0	19.5	17.0	14.5	15.5
2	20.0	15.0	17.5	18.5	16.0	17.5	19.0	17.0	18.0	17.5	14.5	15.5
3	20.0	15.5	17.5	17.0	16.0	16.5	18.5	15.5	17.0	17.0	14.0	16.0
4	17.0	14.0	15.5	19.0	16.0	17.0	19.0	15.5	17.5	15.5	12.0	13.5
5	21.5	13.5	16.5	22.0	16.5	19.0	18.0	17.0	17.5	16.5	10.5	13.0
6	21.5	15.0	18.0	21.5	18.0	19.0	19.5	17.0	18.0	16.0	11.5	14.0
7	20.0	16.5	18.0	20.0	16.5	18.5	20.0	16.5	18.0	18.5	13.0	15.5
8	23.0	17.5	20.0	22.5	19.0	20.5	20.5	17.5	19.0	18.5	10.5	14.0
9	22.5	18.5	20.5	26.0	20.0	23.0	19.0	16.5	18.0	21.5	15.0	18.0
10	20.5	18.0	19.5	28.0	22.5	25.0	19.5	15.5	17.5	18.5	13.0	15.5
11	21.5	13.0	15.5	25.5	22.0	24.0	20.5	16.5	18.5	17.5	12.0	15.5
12	18.0	12.5	15.0	25.0	22.0	23.5	20.5	18.0	19.0	17.5	9.0	13.0
13	16.0	13.5	14.5	24.0	21.0	22.5	19.5	18.0	19.0	18.0	12.0	14.5
14	18.5	16.0	17.5	22.5	20.0	21.0	21.5	17.0	19.0	15.5	11.5	13.5
15	17.5	15.5	16.0	20.0	18.0	19.0	20.0	16.0	18.5	15.0	8.5	11.5
16	17.0	13.5	15.5	20.5	17.5	18.5	17.5	12.5	15.5	17.0	8.0	12.0
17	14.0	12.0	13.0	18.5	15.5	17.0	16.5	15.5	16.0	18.5	11.5	14.0
18	15.5	13.5	14.5	15.5	12.0	13.0	18.0	14.0	15.5	19.5	13.5	16.0
19	20.0	15.0	18.0	16.5	13.0	14.5	19.0	13.0	15.5	17.0	13.0	15.5
20	22.5	19.0	20.5	16.5	15.0	16.0	17.5	14.0	16.0	13.0	7.5	11.5
21	20.5	18.0	18.5	16.5	13.0	15.0	17.5	15.0	16.0	12.0	5.0	9.0
22	19.0	17.0	18.0	17.0	14.0	15.5	19.0	16.0	17.0	10.5	9.0	10.0
23	20.5	17.0	18.5	17.5	14.0	16.0	20.0	14.5	17.0	10.0	7.0	9.5
24	20.5	19.0	19.5	18.0	14.5	16.5	20.0	14.0	17.0	13.0	3.0	7.0
25	19.0	17.5	18.5	19.5	16.5	18.0	20.5	16.5	18.0	16.0	4.0	8.5
26	19.5	17.0	18.0	18.5	16.5	17.5	19.5	17.0	18.0	20.5	6.5	10.5
27	17.0	14.5	15.5	19.0	16.0	17.5	19.5	16.5	18.0	11.5	7.0	9.5
28	16.5	14.0	15.5	18.5	16.5	17.5	19.5	16.5	18.0	18.5	6.0	10.5
29	15.5	13.0	14.5	19.0	16.5	18.0	18.0	13.5	15.5	20.0	11.5	14.0
30	16.5	14.0	15.0	20.0	16.5	18.0	20.5	12.5	16.5	20.5	11.0	14.0
31	---	---	---	21.0	16.5	18.5	22.0	17.0	19.0	---	---	---
MONTH	23.0	12.0	17.0	28.0	12.0	18.4	22.0	12.5	17.5	21.5	3.0	13.0

05341405 DEER LAKE TRIBUTARY #1, DOWNSTREAM SITE, NEAR CENTURIA, WI--Continued

PRECIPITATION QUANTITY

PERIOD OF RECORD.--July 1998 to current year.

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established July 23, 1998. Rainfall estimated to be 0.00 for Dec. 28-30, Jan. 10, Feb. 6, 9, 18, and 20-24, because recorded precipitation interpreted as snowmelt.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 2.14 in., July 30, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 1.77 in., July 9.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.00	.00	.00	.00	.00	.00	.00	1.45	.00	.03	.00
2	.00	.00	.00	.00	.00	.00	.06	.00	.00	.47	.00	1.19
3	.00	.00	.00	.00	.00	.00	.02	.00	.05	.00	.00	.01
4	.00	.00	.00	.00	.00	.00	.00	.00	1.27	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.67	.00	.00
6	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.02	.00
7	.04	.00	.00	.00	.00	.00	.00	1.22	.00	.42	.00	.01
8	.12	.00	.00	.00	.00	.71	.05	.29	.00	.00	.86	.00
9	.00	.00	.00	.00	e.00	.03	.03	.00	.00	1.77	.00	.04
10	.00	.00	.00	e.00	.00	.01	.00	.08	.00	.02	.00	.36
11	.00	.00	.00	.00	.00	.04	.15	.28	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.01	.00	.00	.18	.46	.00
13	.00	.00	.00	.00	.00	.07	.01	.00	.32	.00	.00	.07
14	.00	.00	.00	.00	.00	.04	.03	.00	.16	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.01	.19	.44	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.42	.02	.00	.83	.00
17	.00	.00	.00	.00	.00	.00	.00	.19	.01	.00	.20	.00
18	.05	.00	.00	.00	e.00	.02	.00	.01	.11	.34	.00	.00
19	.01	.00	.00	.00	.00	.00	.19	.00	.59	.00	.00	.01
20	.00	.00	.00	.00	e.00	.00	.59	.00	.77	.00	.00	.02
21	.00	.01	.00	.00	e.00	.00	.00	.00	.30	.00	.03	.00
22	.00	.06	.00	.00	e.00	.02	.00	.01	.00	.00	.01	.21
23	.00	.37	.00	.00	e.00	.01	.00	.01	.29	.00	.00	.00
24	.00	.11	.00	.00	e.00	.23	.00	.00	.00	.00	.00	.00
25	.00	.07	.00	.00	.47	.00	.00	.00	.00	.51	.06	.00
26	.00	.02	.00	.00	.05	.04	.00	.00	.34	.07	.02	.00
27	.00	.00	.00	.00	.00	.01	.00	1.25	.09	.00	.00	.00
28	.00	.00	e.00	.00	.00	.00	.00	.03	.13	.00	.00	.00
29	.27	.00	e.00	.00	.00	.02	.00	.01	.00	.00	.00	.00
30	.31	.00	e.00	.00	---	.00	.10	.12	.00	.00	.01	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.82	0.64	0.00	0.00	0.52	1.25	1.25	4.11	6.34	4.45	2.53	1.92

e Estimated

05344500 MISSISSIPPI RIVER AT PRESCOTT, WI

LOCATION.--Lat 44°44'45", long 92°48'00", in sec. 9, T.26 N., R.20 W., Pierce County, Hydrologic Unit 07040001, on left bank at Prescott, 200 ft downstream from St. Croix River, 300 ft south of Chicago, Burlington & Quincy Railroad bridge, 800 ft south of bridge on U.S. Highway 10, and at mile 811.4 upstream from Ohio River.

DRAINAGE AREA.--44,800 mi² (approximately).

PERIOD OF RECORD.--June 1928 to current year.

REVISED RECORDS.--WSP 1508: 1941. WRD MN-74: 1973.

GAGE.--Water-stage recorder. Datum of gage is 649.50 ft above sea level (NGVD of 1929). Prior to Aug. 2, 1932, nonrecording gage at railroad bridge 300 ft upstream at following datums: June 3, 1928 to Sept. 30, 1929, 19.27 ft higher; Oct. 1, 1929 to Sept. 30, 1930, 17.68 ft higher; Oct. 1, 1930 to Aug. 1, 1932, 19.28 ft higher. Aug. 2, 1932 to Oct. 30, 1938, water-stage recorder at present site at datum 19.28 ft higher; Nov. 1, 1938 to Sept. 7, 1971, water-stage recorder at present site at datum 50.00 ft lower. Auxiliary water-stage recorder 10.7 mi downstream from base gage.

REMARKS.--Records fair except those for estimated daily discharge, which are fair to poor (see page 12). Some regulation by reservoirs, navigation dams, and power plants at low and medium stages. Discharges below a stage of about 27 ft are computed by routing flows from the Mississippi River at St. Paul (05331000) and St. Croix River at St. Croix Falls, WI (05340500).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15900	14300	12600	e9440	e7870	e21800	18800	15300	17800	18600	13300	7820
2	15700	15800	12300	e9500	e7680	27100	17500	e14300	18200	18000	13000	7510
3	16100	15400	12300	e9600	e7590	28200	17000	13200	18900	17500	11700	7350
4	15700	15500	11600	e9750	e7470	29500	16800	12900	e23000	16800	11600	7020
5	16100	15000	12100	e9510	e7540	29400	16900	12000	26800	16000	11300	6880
6	15100	15100	12600	e9600	e7800	28300	16700	12600	27700	16000	10000	6590
7	e15200	14500	12200	e9160	e7750	26800	16700	e12300	28200	e16000	10200	7150
8	e15000	14500	11700	e9210	e7760	26200	15800	e11900	28500	e15500	9390	7160
9	14800	14000	11900	e8790	e7660	25400	16000	e12200	28100	16000	9250	6990
10	14500	13600	11900	e9460	e7570	25300	15900	13000	28100	18200	8980	6760
11	15000	13600	11600	e8730	e7810	24700	16000	15000	26800	27000	9180	7170
12	15000	13400	10900	e9040	e7560	25800	15800	17000	23600	28800	8710	7350
13	15200	13600	11000	e8620	e7370	26500	15200	18900	20800	30400	8400	7920
14	15000	13200	11200	e8310	e7550	26000	14600	20400	19800	30900	8140	7260
15	15100	12800	10500	e8250	e7870	24300	14200	20600	18200	31600	8160	6040
16	14600	13000	11000	e8470	e7470	21700	14300	21400	17200	31800	8410	6590
17	14600	12600	10100	e8580	e7600	21800	14700	21000	17700	31400	9920	6350
18	14400	12200	8450	e8340	e7670	20500	14400	21300	18300	30600	11700	6490
19	14200	12300	e8240	e8180	e7780	18800	13900	21200	19400	29000	11500	6410
20	13800	12300	e7650	e8010	e7730	17400	13900	20700	22200	26200	12000	6160
21	14100	12800	e7020	e7950	e7920	16600	13800	e22000	23800	23600	11400	6090
22	14500	12100	e6390	e7910	e8040	16300	14800	26700	24100	21900	10500	e6000
23	13800	12400	e5980	e7730	e8050	16400	15800	28000	25100	19200	10600	e5830
24	13500	12600	e6130	e7820	e8260	16000	16500	27500	24700	16700	10500	e6050
25	13600	13000	e6400	e7660	e8830	15900	16700	26600	23600	15900	10300	e5670
26	13800	13100	e6960	e7710	e9690	16400	16500	25600	23400	14700	9990	6240
27	13900	12400	e7430	e7640	e12000	18400	16600	23500	22700	14100	9720	5890
28	14100	13000	e7920	e7610	e14800	19000	16900	21800	21300	14500	8830	5730
29	13300	12900	e8670	e7740	e16800	19800	16200	19900	20600	14900	9240	5830
30	13600	13000	e9330	e7920	---	19600	15900	18600	19700	14100	8390	6040
31	13600	---	e9580	e7410	---	20300	---	17900	---	14200	7540	---
TOTAL	452800	404000	303650	263650	247490	690200	474800	585300	678300	650100	311850	198340
MEAN	14610	13470	9795	8505	8534	22260	15830	18880	22610	20970	10060	6611
MAX	16100	15800	12600	9750	16800	29500	18800	28000	28500	31800	13300	7920
MIN	13300	12100	5980	7410	7370	15900	13800	11900	17200	14100	7540	5670
AC-FT	898100	801300	602300	522900	490900	1369000	941800	1161000	1345000	1289000	618600	393400
CFSM	.33	.30	.22	.19	.19	.50	.35	.42	.50	.47	.22	.15
IN.	.38	.34	.25	.22	.21	.57	.39	.49	.56	.54	.26	.16

UPPER MISSISSIPPI RIVER MAIN STEM

05344500 MISSISSIPPI RIVER AT PRESCOTT, WI--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2000, BY WATER YEAR (WY)

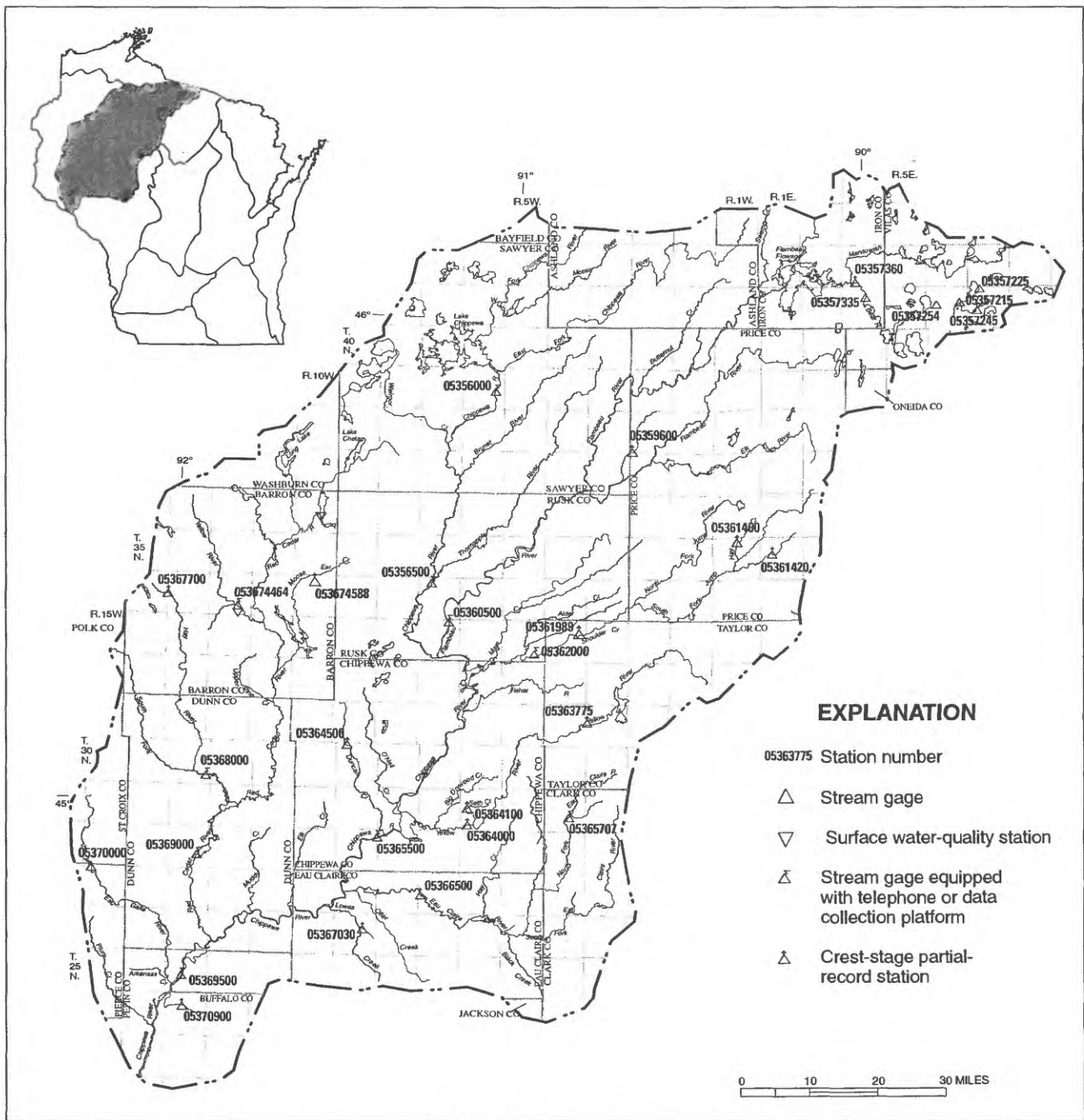
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	13550	13380	10070	8337	8259	17470	41160	32060	25810	20630	13480	12830
MAX	49740	40360	21460	16060	21390	55010	117600	90100	69890	87420	48350	45950
(WY)	1987	1972	1983	1983	1966	1983	1965	1986	1993	1993	1993	1986
MIN	3526	3874	3379	3153	3519	4369	7215	6304	4185	3197	2366	3002
(WY)	1933	1977	1934	1935	1934	1934	1931	1931	1934	1934	1934	1976

SUMMARY STATISTICS

	FOR 1999 CALENDAR YEAR				FOR 2000 WATER YEAR				WATER YEARS 1928 - 2000			
ANNUAL TOTAL	8262590				5260480							
ANNUAL MEAN	22640				14370							
HIGHEST ANNUAL MEAN									(a) 18130			
LOWEST ANNUAL MEAN									38540			
HIGHEST DAILY MEAN	72100				May 21				4367			
LOWEST DAILY MEAN	5980				Dec 23				226000			
ANNUAL SEVEN-DAY MINIMUM	6620				Dec 21				1380			
INSTANTANEOUS PEAK FLOW									2190			
INSTANTANEOUS PEAK STAGE									228000			
ANNUAL RUNOFF (AC-FT)	16390000				27.89				Jul 16			
ANNUAL RUNOFF (CFSM)	.51				10430000				43.11			
ANNUAL RUNOFF (INCHES)	6.86				.32				13130000			
10 PERCENT EXCEEDS	41300				4.37				.40			
50 PERCENT EXCEEDS	18300				24700				5.50			
90 PERCENT EXCEEDS	10700				13600				39100			
					7460				12000			
									5150			

(a) Median of annual mean discharges is 18,000 ft³/s

(e) Estimated due to ice effect or missing record



Base from U.S. Geological Survey 1:100,000 digital data; modified by Wisconsin Department of Natural Resources. Wisconsin Transverse Mercator projection.

CHIPPEWA RIVER BASIN

05356000 CHIPPEWA RIVER AT BISHOPS BRIDGE, NEAR WINTER, WI

LOCATION.--Lat 45°50'57", long 91°04'44", in SW ¼ NE ¼ sec.23, T.39 N., R.6 W., Sawyer County, Hydrologic Unit 07050001, on right bank 15 ft upstream from highway bridge on County Trunk Highway G, 3.2 mi downstream from Lake Chippewa Dam, and 3.7 mi northwest of Winter.

DRAINAGE AREA.--790 mi².

PERIOD OF RECORD.--February 1912 to current year. March, April, 1912, and December to April 1913, monthly discharge only published in WSP 1308.

REVISED RECORDS.--WSP 1438: 1913(M), 1915-18(M), 1919, 1920-23(M), 1924, 1925(M), 1927(M), 1928, 1929-30(M), 1939(M). WDR WI-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,256.78 ft above sea level (levels by Wilhelm Engineering Co.). See WSP 1708 or 1728 for history of changes prior to July 23, 1930.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Flow regulated by Moose Lake and Lake Chippewa. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	510	430	222	708	515	463	503	1420	507	551	676	496
2	509	425	222	709	515	381	504	1020	484	549	681	497
3	509	423	222	615	512	377	629	725	482	545	683	529
4	509	425	222	550	510	375	767	723	483	542	692	515
5	506	423	222	861	509	376	767	710	481	540	526	508
6	503	421	222	804	509	380	977	509	479	539	526	507
7	509	423	222	528	506	380	1210	506	479	528	691	510
8	506	424	206	528	509	387	1210	498	479	687	710	515
9	501	423	190	528	505	392	1210	492	479	2430	697	516
10	498	421	188	528	505	383	1080	492	480	2120	525	511
11	497	329	188	527	504	381	998	499	478	2060	524	510
12	495	261	185	527	504	380	997	633	479	1490	525	519
13	489	261	184	526	504	379	997	724	479	1030	520	519
14	491	261	183	527	504	376	842	720	479	1260	541	517
15	487	261	182	525	505	374	516	719	480	1260	547	282
16	486	261	184	524	503	371	515	722	929	1270	528	274
17	486	261	e180	526	503	370	641	721	1260	1640	527	270
18	406	259	182	524	500	371	744	718	1250	1960	526	270
19	326	260	182	522	502	370	751	716	1250	1960	521	270
20	389	261	e180	522	499	371	784	716	914	1950	520	270
21	389	261	e180	522	496	377	783	713	597	1570	520	269
22	387	261	e180	522	493	384	758	737	572	1290	517	270
23	385	265	e180	521	496	390	751	740	564	1290	515	269
24	389	262	e180	520	498	396	895	721	561	986	515	269
25	409	261	e180	517	503	398	1080	635	555	785	516	271
26	424	261	184	516	526	394	1220	631	559	806	514	273
27	426	261	182	516	534	398	1350	506	552	803	514	277
28	424	261	181	516	527	392	1430	511	552	780	514	277
29	426	261	429	516	537	385	1420	504	551	526	507	277
30	429	242	713	516	---	380	1420	503	552	525	502	275
31	427	---	710	516	---	464	---	503	---	666	499	---
TOTAL	14127	9509	7267	17307	14733	11995	27749	20687	18446	34938	17319	11532
MEAN	456	317	234	558	508	387	925	667	615	1127	559	384
MAX	510	430	713	861	537	464	1430	1420	1260	2430	710	529
MIN	326	242	180	516	493	370	503	492	478	525	499	269

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 2000, BY WATER YEAR (WY)

	MEAN	672	841	975	905	769	442	534	767	794	683	621	700
MAX	2896	1884	1910	1770	1550	1097	3453	2823	2950	2122	2235	3769	
(WY)	1986	1992	1992	1983	1928	1920	1922	1954	1939	1996	1972	1941	
MIN	43.6	143	234	201	194	117	20.0	24.2	39.8	40.3	146	140	
(WY)	1925	1925	2000	1922	1918	1923	1925	1923	1925	1925	1970	1970	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1912 - 2000

ANNUAL TOTAL	241237	205609	
ANNUAL MEAN	661	562	724
HIGHEST ANNUAL MEAN			1174
LOWEST ANNUAL MEAN			258
HIGHEST DAILY MEAN	2970	May 13	2430
LOWEST DAILY MEAN	(a)180	(b)Dec 17	(a)180
ANNUAL SEVEN-DAY MINIMUM	(a)180	Dec 19	(a)180
INSTANTANEOUS PEAK FLOW			3750
INSTANTANEOUS PEAK STAGE			8.21
INSTANTANEOUS LOW FLOW			(d)163
10 PERCENT EXCEEDS	1000		918
50 PERCENT EXCEEDS	681		508
90 PERCENT EXCEEDS	250		261

(a) Ice affected

(b) Also occurred Dec. 20-25

(c) Also occurred May 1-5, 1925

(d) Result of regulation

(e) Estimated due to ice effect or missing record

05356500 CHIPPEWA RIVER NEAR BRUCE, WI

LOCATION.--Lat 45°27'08", long 91°15'39", in SE ¼ sec.5, T.34 N., R.7 W., Rusk County, Hydrologic Unit 07050001, on right bank 1.0 mi east of Bruce and 1.0 mi downstream from Thornapple River.

DRAINAGE AREA.--1,650 mi².

PERIOD OF RECORD.--December 1913 to current year.

REVISED RECORDS.--WSP 875: 1936-38. WSP 1308: 1922, 1937(M). WSP 1508: 1914-26(M), 1927, 1928-31(M), 1932, 1933(M), 1934-36, 1938. WDR WI-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,059.62 ft above sea level. Prior to May 28, 1935, nonrecording gage at railroad bridge 0.8 mi upstream at datum 2.30 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Flow from 48 percent of the drainage area regulated by Moose Lake and Lake Chippewa. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	822	805	e640	e1100	e780	e5400	1270	1960	1030	1020	1110	742
2	824	781	e640	e1100	e780	e4900	1200	1920	1360	1050	1110	800
3	808	772	617	e1100	e800	e4200	1190	1340	1230	905	1120	908
4	805	759	587	e960	e820	2680	1360	1160	1160	971	1050	1120
5	811	761	583	e740	e840	1890	1390	1150	1550	879	1040	1040
6	823	757	e520	e1200	e820	1740	1370	1080	1420	887	862	899
7	838	760	e540	e1100	e820	1760	1620	847	1190	899	858	863
8	914	757	e600	e700	e820	1740	1710	1030	993	1210	1060	843
9	913	748	e600	e840	e820	2570	1690	1280	957	7120	1260	819
10	878	740	e500	e860	e840	2500	1690	1140	1050	11900	1130	802
11	853	734	e420	e900	e900	2000	1500	1120	772	8110	868	836
12	843	673	e450	e880	e900	1730	1470	1420	815	5270	853	956
13	824	611	e450	e900	e860	e1500	1430	1640	842	3310	842	954
14	837	550	e420	e940	e980	e1400	1410	1500	850	2260	986	894
15	853	542	e420	e920	e980	e1200	1180	1300	979	2220	3000	837
16	853	574	e420	e960	e1000	e1100	1200	1340	1560	2050	3410	729
17	849	567	e430	e940	e1000	e1000	1260	1440	2450	1930	2280	515
18	839	561	e420	e960	e1000	e980	1660	1390	2340	2380	2010	666
19	778	553	e420	e900	e1100	954	1810	1310	2080	2450	1600	497
20	705	554	e420	e840	e1100	937	2240	1240	2740	2390	1340	694
21	740	557	e410	e760	e1100	951	4360	1190	5170	2320	1190	463
22	738	572	e410	e760	e1200	1010	4040	1180	4740	1750	1110	660
23	730	635	e410	e780	e1300	1250	3080	1190	3780	1630	1030	536
24	730	873	e420	e780	e1400	1470	2440	1170	3000	1600	973	571
25	716	866	e400	e780	e1500	1870	2090	1110	2100	1230	919	669
26	743	800	e430	e800	e2200	1700	2060	981	1710	1300	864	438
27	758	788	e440	e780	e3200	1890	2010	989	1570	1700	914	625
28	700	765	e460	e760	e4500	2070	2090	931	1350	1580	835	506
29	783	e640	e490	e760	e5000	1710	2050	996	1340	1300	843	516
30	778	e600	e760	e760	---	1450	2000	937	1200	1010	812	542
31	812	---	e1100	e780	---	1260	---	917	---	999	794	---
TOTAL	24898	20655	15827	27340	39360	58812	55870	38198	53328	75630	38073	21940
MEAN	803	688	511	882	1357	1897	1862	1232	1778	2440	1228	731
MAX	914	873	1100	1200	5000	5400	4360	1960	5170	11900	3410	1120
MIN	700	542	400	700	780	937	1180	847	772	879	794	438

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2000, BY WATER YEAR (WY)

	MEAN	1271	1423	1376	1195	1066	1459	2673	1934	1732	1274	1052	1358
MAX	5666	3662	2842	2200	2100	3964	8007	5971	7483	3990	2915	7423	
(WY)	1986	1992	1992	1942	1971	1973	1916	1954	1943	1968	1972	1941	
MIN	296	459	442	356	338	404	590	390	411	317	364	338	
(WY)	1934	1990	1990	1922	1918	1923	1987	1925	1949	1925	1964	1976	

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1914 - 2000
ANNUAL TOTAL	517856	469931	
ANNUAL MEAN	1419	1284	1482
HIGHEST ANNUAL MEAN			2290
LOWEST ANNUAL MEAN			666
HIGHEST DAILY MEAN	7990	Jul 27	24900
LOWEST DAILY MEAN	(a)400	Dec 25	155
ANNUAL SEVEN-DAY MINIMUM	(a)413	Dec 19	218
INSTANTANEOUS PEAK FLOW			(b)29000
INSTANTANEOUS PEAK STAGE		12.55	(c)20.46
INSTANTANEOUS LOW FLOW		(a)	155
10 PERCENT EXCEEDS	2470	2130	2700
50 PERCENT EXCEEDS	1110	958	1110
90 PERCENT EXCEEDS	541	565	500

(a) Ice affected

(b) From rating curve extended above 25,100 ft³/s, gage height 18.12 ft

(c) From floodmarks

(e) Estimated due to ice effect or missing record

05357215 ALLEQUASH CREEK AT CTH M, NEAR BOULDER JUNCTION, WI

LOCATION.--Lat 46°01'25", long 89°39'10", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.20, T.41 N., R.7 E., Vilas County, Hydrologic Unit 07050002, on right bank approximately 400 ft downstream from County Trunk Highway M, 6.1 mi south of Boulder Junction.

DRAINAGE AREA.--8.43 mi².

PERIOD OF RECORD.--May 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,620 ft above sea level, from topographic map.

REMARKS.--Records good except those for Dec. 11-18, Mar. 1-16, Aug. 1-9, and estimated daily discharges, which are fair (see page 12).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	10	11	10	e8.4	6.9	16	10	6.1	12	9.5	9.1
2	2.0	12	11	e10	e8.4	7.0	15	9.6	6.5	17	9.1	8.7
3	2.4	12	11	e10	e8.4	5.7	14	8.9	6.2	17	8.5	9.6
4	2.2	11	11	10	e8.4	4.3	14	8.5	6.2	18	8.3	9.4
5	2.0	10	10	10	8.5	3.8	13	8.3	6.0	24	7.8	9.0
6	2.0	9.9	10	e10	e8.4	3.1	12	7.7	5.8	21	7.0	8.6
7	2.6	10	9.6	9.7	8.3	2.7	12	7.7	5.7	19	5.7	8.3
8	3.2	9.9	9.2	9.5	e8.2	2.9	11	7.6	6.0	32	7.6	8.0
9	3.3	9.8	9.1	9.2	8.2	4.5	10	7.4	5.9	34	11	8.0
10	3.5	11	8.8	9.9	8.4	5.1	9.8	7.0	5.9	30	11	8.2
11	3.1	11	8.5	10	8.6	5.7	9.6	7.3	8.4	26	11	11
12	3.2	9.9	6.2	10	e8.6	5.6	9.2	7.3	8.0	24	10	11
13	3.7	9.6	4.6	9.8	8.6	5.3	9.4	6.8	7.9	22	10	10
14	3.2	9.6	5.1	9.5	8.5	5.2	9.5	6.7	8.3	20	11	10
15	3.7	9.4	5.8	e9.2	e8.8	7.0	9.3	6.5	8.3	18	13	9.6
16	4.1	9.2	6.1	8.9	e9.0	7.6	9.8	6.5	9.6	17	13	9.0
17	4.7	9.0	6.7	e9.0	e9.0	7.5	9.6	6.4	9.6	14	13	8.8
18	5.4	8.9	7.9	e9.0	e9.0	7.3	9.4	6.6	9.2	13	12	8.0
19	5.9	9.1	8.0	8.8	e8.8	7.4	9.6	5.9	9.4	12	12	8.1
20	6.0	8.7	8.4	8.8	8.8	7.6	11	5.6	13	12	11	8.5
21	5.9	8.9	8.2	e9.0	8.8	8.0	11	5.6	14	11	11	8.3
22	6.9	8.8	8.1	e9.0	8.7	8.3	11	5.6	15	10	10	8.2
23	8.0	11	7.7	e8.8	9.2	22	11	5.6	15	10	10	8.1
24	7.1	13	7.6	e8.6	e9.6	34	11	5.6	14	9.4	10	7.9
25	6.8	12	7.6	e8.4	9.7	28	10	5.7	15	8.7	9.9	7.6
26	6.5	12	7.5	8.4	10	26	9.8	5.6	16	9.3	9.9	7.4
27	7.2	12	7.2	8.4	9.4	25	9.7	5.5	15	9.4	9.7	7.3
28	7.7	13	7.9	8.2	9.7	23	9.7	5.8	14	9.3	9.3	6.9
29	7.9	12	8.5	8.1	9.0	21	10	5.4	13	9.1	8.9	6.8
30	8.7	12	11	8.3	---	19	11	5.4	13	8.7	8.7	6.9
31	9.4	---	10	8.2	---	17	---	5.3	---	8.4	8.6	---
TOTAL	150.0	314.7	259.3	284.7	255.4	343.5	327.4	209.4	296.0	505.3	307.5	256.3
MEAN	4.84	10.5	8.36	9.18	8.81	11.1	10.9	6.75	9.87	16.3	9.92	8.54
MAX	9.4	13	11	10	10	34	16	10	16	34	13	11
MIN	1.7	8.7	4.6	8.1	8.2	2.7	9.2	5.3	5.7	8.4	5.7	6.8

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2000, BY WATER YEAR (WY)

	MEAN	11.9	12.9	11.4	10.5	10.0	11.1	13.9	12.6	11.4	12.9	9.46	9.69
MAX	22.7	20.2	14.5	14.9	12.8	15.8	18.3	19.3	14.9	17.1	12.4	14.8	
(WY)	1992	1992	1998	1998	1998	1997	1992	1996	1993	1997	1997	1994	
MIN	4.84	8.55	8.36	9.02	8.80	8.53	9.50	6.75	8.88	8.34	6.91	4.53	
(WY)	2000	1999	2000	1995	1992	1999	1999	2000	1992	1998	1998	1999	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1991 - 2000

ANNUAL TOTAL	3370.8	3509.5	
ANNUAL MEAN	9.24	9.59	11.5
HIGHEST ANNUAL MEAN			14.4
LOWEST ANNUAL MEAN			9.40
HIGHEST DAILY MEAN	18	Jul 9	34
LOWEST DAILY MEAN	1.7	Sep 26,30	1.7
ANNUAL SEVEN-DAY MINIMUM	1.8	Sep 25	2.1
INSTANTANEOUS PEAK FLOW			39
INSTANTANEOUS PEAK STAGE			1.88
INSTANTANEOUS LOW FLOW			1.6
10 PERCENT EXCEEDS	13		14
50 PERCENT EXCEEDS	9.6		8.9
90 PERCENT EXCEEDS	5.2		5.6
			7.2

(a) Gage height, 2.36 ft

(b) Ice jam

(e) Estimated due to ice effect or missing record

05357225 STEVENSON CREEK, AT COUNTY HIGHWAY M, NEAR BOULDER JUNCTION, WI

LOCATION.--Lat 46°03'41", long 89°38'47", in NW ¼ SE ¼ sec.5, T.41 N., R.7 E., Vilas County, Hydrologic Unit 07050002, at County Highway M, 3.6 mi south of Boulder Junction.

DRAINAGE AREA.--7.96 mi².

PERIOD OF RECORD.--May 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,620 ft above sea level, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor (see page 12).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.8	1.2	e1.3	e2.6	e2.9	e3.8	e1.6	1.2	e1.9	e2.5	e7.0	5.9
2	e1.6	1.2	e1.3	e2.6	e3.0	e4.1	e1.5	1.1	e2.1	e4.4	e6.0	6.6
3	e1.4	1.2	1.3	e2.6	e3.0	e4.1	e1.5	1.0	e1.8	e4.7	e5.0	7.8
4	e1.3	1.2	1.2	e2.7	e3.0	e4.0	e1.5	1.1	e1.7	e4.5	e4.7	9.1
5	e1.2	1.2	1.3	e2.7	e2.9	e3.9	e1.5	1.1	e1.6	e4.0	e4.4	9.9
6	e1.2	1.2	1.3	e2.8	e2.9	e3.9	e1.3	1.1	e1.6	e3.5	e4.0	7.9
7	e1.3	1.2	e1.3	e2.9	e2.9	e4.3	e1.3	1.1	e1.5	e3.7	e3.5	3.8
8	e1.4	1.2	e1.3	e2.9	e2.9	e4.9	e1.3	1.3	e1.5	e5.6	e3.2	3.7
9	e1.5	1.2	e1.4	e2.9	e2.9	e6.0	e1.2	1.2	e1.5	e9.0	e3.0	3.7
10	e1.6	1.2	e1.4	e2.9	e2.8	e5.2	e1.2	1.1	e1.6	e8.4	2.9	3.9
11	e1.6	1.2	e1.4	e2.9	e2.8	e4.5	e1.2	1.3	e3.0	e4.6	3.0	4.5
12	e1.5	1.2	e1.4	e2.9	e2.9	e3.7	e1.3	1.2	e2.8	e4.0	2.9	4.5
13	e1.4	1.2	e1.5	e2.8	e3.0	e3.6	e1.5	1.2	e2.5	e3.5	2.8	4.0
14	e1.3	1.2	e1.5	e2.8	e3.0	e3.6	e1.5	1.2	e2.4	e3.0	4.8	4.0
15	1.3	1.2	e1.5	e2.8	e3.0	e3.8	e1.9	e1.4	e2.4	e2.9	4.9	3.9
16	1.3	1.2	e1.6	e2.8	e3.1	e4.5	e2.2	e1.7	e2.8	e2.7	e4.4	3.9
17	1.2	1.2	e1.7	e2.7	e3.2	e3.8	e2.1	e1.9	e2.5	e2.7	e4.0	4.0
18	1.3	1.2	e1.7	e2.7	e3.1	e3.2	e2.0	e1.7	e2.4	e2.7	e4.7	3.9
19	1.3	1.2	e1.7	e2.7	e3.0	e3.0	e2.0	e1.5	e2.5	e2.7	e7.0	3.8
20	1.3	1.2	e1.7	e2.7	e3.0	e2.8	e1.7	e1.4	e2.7	e2.6	e7.0	3.9
21	1.2	1.2	e1.7	e2.7	e3.0	e2.6	e1.4	e1.3	e2.9	e2.6	e6.0	3.5
22	e1.3	1.2	e1.7	e2.7	e3.0	e2.5	e1.3	e1.3	e2.9	e2.6	e5.4	3.0
23	e1.4	1.5	e1.7	e2.7	e3.0	e2.3	e1.2	e1.3	e2.7	e2.6	e5.0	3.6
24	e1.4	1.6	e1.9	e2.7	e3.2	e2.2	e1.1	e1.4	e2.9	e2.7	e5.4	3.6
25	e1.3	1.3	e2.0	e2.7	e3.4	e2.1	e1.1	e1.6	e2.7	e3.5	e3.7	3.7
26	e1.3	1.3	e2.2	e2.7	e3.5	e2.4	e1.1	e1.5	e2.6	e5.4	3.3	4.1
27	1.2	1.3	e2.3	e2.8	e3.5	e2.6	1.1	e1.4	e3.1	e7.0	3.1	5.2
28	1.2	1.2	e2.4	e2.8	e3.6	e2.4	1.1	e1.4	e2.7	e7.6	3.2	5.3
29	1.2	1.4	e2.4	e2.9	e3.6	e2.2	1.1	e1.4	e2.5	e6.4	e4.0	4.8
30	1.4	1.3	e2.5	e2.9	---	e1.9	1.1	e1.5	e2.2	e5.6	e6.0	5.1
31	1.3	---	e2.6	e2.9	---	e1.7	---	e1.7	---	e6.4	e5.4	---
TOTAL	42.0	37.3	52.2	85.9	89.1	105.6	42.9	41.6	70.0	134.1	139.7	144.6
MEAN	1.35	1.24	1.68	2.77	3.07	3.41	1.43	1.34	2.33	4.33	4.51	4.82
MAX	1.8	1.6	2.6	2.9	3.6	6.0	2.2	1.9	3.1	9.0	7.0	9.9
MIN	1.2	1.2	1.2	2.6	2.8	1.7	1.1	1.0	1.5	2.5	2.8	3.0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2000, BY WATER YEAR (WY)

	MEAN	3.15	3.56	2.82	2.65	2.78	2.92	2.96	3.32	3.16	3.33	3.22	4.19
MAX	4.02	6.28	3.54	3.53	3.87	4.34	4.85	6.18	6.73	4.89	4.84	6.85	
(WY)	1996	1994	1998	1998	1998	1992	1996	1997	1991	1996	1997	1992	
MIN	1.35	1.24	1.68	1.93	1.70	1.58	1.29	1.34	1.47	2.27	1.62	2.53	
(WY)	2000	2000	2000	1999	1997	1995	1995	2000	1992	1998	1994	1995	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1991 - 2000

ANNUAL TOTAL	877.6	985.0	
ANNUAL MEAN	2.40	2.69	3.11
HIGHEST ANNUAL MEAN			3.68
LOWEST ANNUAL MEAN			2.61
HIGHEST DAILY MEAN	13	Sep 3	9.9
LOWEST DAILY MEAN	1.1	Jun 26,27	1.0
ANNUAL SEVEN-DAY MINIMUM	1.2	(a)Nov 1	(e)1.1
INSTANTANEOUS PEAK FLOW			(b)11
INSTANTANEOUS PEAK FLOW			(d)9.24
INSTANTANEOUS LOW FLOW			.96
10 PERCENT EXCEEDS	3.8		4.7
50 PERCENT EXCEEDS	2.1		2.6
90 PERCENT EXCEEDS	1.2		1.2

(a) Also occurred June 24

(b) Gage height, 8.65 ft, recorded, may have been higher July 8-10

(c) Gage height, 9.62 ft

(d) Beaver dam

(e) Estimated due to ice effect or missing record

(f) Also occurred May 3

CHIPPEWA RIVER BASIN

05357245 TROUT RIVER AT TROUT LAKE NEAR BOULDER JUNCTION, WI

LOCATION.--Lat 46°02'08", long 89°42'20", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.14, T.41 N., R.6 E., Vilas County, Hydrologic Unit 07050002, on right bank 20 ft upstream from U.S. Highway 51 bridge, approximately 500 ft downstream from outlet of Trout Lake, 6.0 mi southwest of Boulder Junction.

DRAINAGE AREA.--46.2 mi².

PERIOD OF RECORD.--May 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,620 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	14	20	26	30	32	37	32	25	34	44	30
2	14	14	20	28	e30	32	36	31	25	44	42	29
3	13	14	20	28	31	31	37	30	24	45	40	32
4	12	14	20	29	31	30	37	30	24	44	39	31
5	11	14	20	e30	31	30	36	30	22	43	38	29
6	10	14	20	31	e30	29	36	30	21	43	36	28
7	12	14	20	31	30	29	35	30	20	41	35	27
8	14	14	21	31	e30	29	34	31	20	63	36	26
9	14	15	21	31	30	32	33	30	21	74	38	25
10	14	15	21	32	30	32	32	30	21	74	37	27
11	14	15	20	32	e31	32	32	31	26	71	36	31
12	13	15	20	e32	e30	32	32	31	25	71	35	32
13	13	15	20	32	30	31	32	30	24	71	35	30
14	13	15	21	32	e30	31	32	29	25	68	36	30
15	13	15	22	32	31	32	33	28	25	66	42	28
16	13	14	23	32	32	e32	35	27	28	63	40	27
17	13	14	23	32	e32	e31	35	28	26	59	40	26
18	12	15	23	32	32	31	35	28	26	55	39	25
19	12	15	23	e32	31	31	35	26	27	53	38	25
20	12	15	24	e32	31	31	36	25	32	52	36	26
21	12	15	e24	e32	31	30	36	25	35	50	35	24
22	11	15	e24	e31	30	31	36	26	37	48	34	25
23	11	19	e24	e31	31	30	35	25	37	47	34	25
24	10	22	24	e31	32	32	35	25	38	46	33	24
25	9.9	21	24	31	33	33	34	25	37	44	32	23
26	9.9	21	25	31	34	34	33	24	38	46	34	22
27	10	21	25	e30	34	37	33	24	37	46	33	22
28	10	21	26	e30	33	38	33	25	36	46	32	20
29	11	21	26	e30	33	38	32	24	36	45	32	20
30	13	21	26	e30	---	38	31	24	35	42	31	20
31	14	---	26	30	---	37	---	23	---	42	30	---
TOTAL	378.8	487	696	954	904	998	1028	857	853	1636	1122	789
MEAN	12.2	16.2	22.5	30.8	31.2	32.2	34.3	27.6	28.4	52.8	36.2	26.3
MAX	15	22	26	32	34	38	37	32	38	74	44	32
MIN	9.9	14	20	26	30	29	31	23	20	34	30	20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2000, BY WATER YEAR (WY)

	MEAN	32.6	37.4	39.7	40.5	38.2	37.0	43.3	48.5	44.1	46.3	34.5	30.3
MAX	45.2	55.4	58.1	60.1	47.9	44.9	53.5	70.5	59.6	57.0	49.7	44.4	
(WY)	1996	1997	1992	1997	1997	1992	1996	1996	1996	1996	1996	1997	
MIN	12.2	16.2	22.5	25.8	28.1	23.8	31.9	27.6	28.4	32.9	20.3	14.4	
(WY)	2000	2000	2000	1999	1999	1999	1999	2000	2000	1994	1998	1998	

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1991 - 2000
ANNUAL TOTAL	10833.8	10702.8	
ANNUAL MEAN	29.7	29.2	39.1
HIGHEST ANNUAL MEAN			49.8
LOWEST ANNUAL MEAN			29.2
HIGHEST DAILY MEAN	58 Jul 9	74 Jul 9,10	85 May 20 1996
LOWEST DAILY MEAN	9.9 Oct 25,26	9.9 Oct 25,26	9.9 Oct 25,26 1999
ANNUAL SEVEN-DAY MINIMUM	10 Oct 22	10 Oct 22	10 Oct 22 1999
INSTANTANEOUS PEAK FLOW		80 Jul 9	89 May 19 1996
INSTANTANEOUS PEAK STAGE		1.92 Jul 9	1.99 May 19 1996
INSTANTANEOUS LOW FLOW		8.3 Oct 7,25	8.3 Oct 7,25 1999
10 PERCENT EXCEEDS	48	39	55
50 PERCENT EXCEEDS	27	30	39
90 PERCENT EXCEEDS	14	14	24

(e) Estimated due to ice effect or missing record

05357254 TROUT RIVER AT CTH H NEAR BOULDER JUNCTION, WI

LOCATION.--Lat 46°02'02", long 89°46'21", in SE ¼ NW ¼ sec.17, T.41 N., R.6 E., Vilas County, Hydrologic Unit 07050002, on left bank 18 ft upstream from County Trunk Highway H, 8.3 mi southwest of Boulder Junction.

DRAINAGE AREA.--58.9 mi².

PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,610 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges and period of variable backwater, Oct. 1 to Nov. 3 and June 13 to Sept. 30, which are poor (see page 12).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	20	e34	e30	e39	e58	54	46	42	63	78	42
2	23	21	33	e30	e39	e56	53	45	44	69	79	41
3	22	20	30	e30	e39	e52	53	43	43	74	77	45
4	21	19	29	e31	e40	e52	53	43	44	74	75	46
5	21	19	28	e30	e41	e50	51	42	44	73	73	42
6	20	19	27	e29	e43	e50	51	42	42	72	71	38
7	21	19	e25	e30	e43	e49	51	42	42	72	70	38
8	23	19	e25	e32	e42	50	48	43	42	87	68	37
9	24	19	e24	e34	e41	53	47	44	41	104	70	36
10	24	20	e23	e35	e40	e54	45	43	42	103	68	37
11	22	19	e22	e34	e40	51	46	46	52	101	66	50
12	22	20	e22	e33	e40	50	46	46	49	97	64	61
13	21	20	e23	e33	e41	48	46	45	46	95	62	58
14	20	20	e24	e34	e43	49	45	44	45	94	62	53
15	21	20	e25	e35	e44	50	46	42	45	92	82	48
16	20	21	e27	e36	e42	e50	50	41	47	90	85	44
17	20	21	e29	e36	e42	e48	52	39	46	89	83	40
18	19	22	e30	e36	e43	46	53	40	45	88	82	38
19	19	21	e30	e36	e46	45	53	39	45	86	77	37
20	18	21	e30	e36	e50	45	56	39	55	85	71	38
21	18	21	e29	e36	e52	45	59	38	64	85	66	38
22	18	21	e28	e35	e56	44	57	39	62	84	61	39
23	18	26	e27	e35	e60	44	55	38	62	81	55	41
24	19	35	e27	e35	e66	46	52	38	62	80	53	40
25	17	34	e28	e35	e70	48	51	38	61	78	52	38
26	17	33	e28	e36	e70	51	48	38	64	80	53	37
27	16	32	e28	e37	e66	58	46	39	65	82	50	37
28	16	31	e28	e39	e64	60	46	40	65	82	48	36
29	16	31	e28	e40	e62	58	46	39	65	81	46	37
30	18	e32	e29	e40	---	56	44	40	64	79	45	35
31	21	---	e29	e39	---	54	---	40	---	77	43	---
TOTAL	619	696	849	1067	1404	1570	1503	1281	1535	2597	2035	1247
MEAN	20.0	23.2	27.4	34.4	48.4	50.6	50.1	41.3	51.2	83.8	65.6	41.6
MAX	24	35	34	40	70	60	59	46	65	104	85	61
MIN	16	19	22	29	39	44	44	38	41	63	43	35
CFSM	.34	.39	.46	.58	.82	.86	.85	.70	.87	1.42	1.11	.71
IN.	.39	.44	.54	.67	.89	.99	.95	.81	.97	1.64	1.29	.79

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2000, BY WATER YEAR (WY)

	1999	2000	1999	2000	1999	2000	1999	2000	1999	2000	1999	2000
MEAN	20.4	26.0	27.3	33.7	46.5	45.6	49.6	49.5	50.3	72.6	60.6	38.5
MAX	20.8	28.9	27.4	34.4	48.4	50.6	50.1	57.7	51.2	83.8	65.6	41.6
(WY)	1999	1999	2000	2000	2000	2000	2000	1999	2000	2000	2000	2000
MIN	20.0	23.2	27.2	32.9	44.5	40.5	49.1	41.3	49.4	61.5	55.5	35.5
(WY)	2000	2000	1999	1999	1999	1999	1999	2000	1999	1999	1999	1999

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1999 - 2000

ANNUAL TOTAL	15121	16403		
ANNUAL MEAN	41.4	44.8		43.4
HIGHEST ANNUAL MEAN				44.8
LOWEST ANNUAL MEAN				41.9
HIGHEST DAILY MEAN	85	May 8	104	Jul 9
LOWEST DAILY MEAN	16	Oct 27-29	16	Oct 27-29
ANNUAL SEVEN-DAY MINIMUM	17	Oct 23	17	Oct 23
INSTANTANEOUS PEAK FLOW			(b)106	Jul 9
INSTANTANEOUS PEAK STAGE			(c)6.98	Jul 9
INSTANTANEOUS LOW FLOW			15	Oct 28,29
ANNUAL RUNOFF (CFSM)	.70	.76		.74
ANNUAL RUNOFF (INCHES)	9.55	10.36		10.01
10 PERCENT EXCEEDS	62	73		64
50 PERCENT EXCEEDS	42	42		42
90 PERCENT EXCEEDS	21	21		22

(a) Also occurred Oct. 27-29, 1999; these days were not estimated

(b) Gage height, 6.97 ft

(c) Backwater affects from Wild Rice Lake

(d) Also occurred Oct. 28, 29, 1999; may have been less during estimated period from Oct. 1-23, 1998

(e) Estimated due to ice effect or missing record

CHIPPEWA RIVER BASIN

05357335 BEAR RIVER NEAR MANITOWISH WATERS, WI

LOCATION.--Lat 46°02'56", long 89°59'04", in SE ¼ NW ¼ sec.10, T.41 N., R.4 E., Iron County, Hydrologic Unit 07050002, on right bank 10 ft upstream from East River Trail bridge, 2.3 mi upstream from Little Bear Creek, 7.7 mi southwest of Manitowish Waters, and 5.3 mi upstream from mouth.

DRAINAGE AREA.--81.3 mi².

PERIOD OF RECORD.--May 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,580 ft above sea level, from topographic map.

REMARKS.--Records good except those for period of backwater, July 3 to Sept. 30, which are fair, and those for estimated daily discharges, which are poor (see page 12).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	19	19	e27	e38	e100	70	56	e50	e54	75	39
2	22	18	20	e27	e38	e100	67	55	e54	e52	75	38
3	21	18	20	e26	e38	e96	64	54	e52	e56	75	52
4	20	17	19	e26	e38	e88	63	50	e50	56	75	57
5	20	17	21	e26	e38	e80	64	50	e47	55	72	53
6	19	16	22	e26	e39	71	59	e49	e45	53	70	48
7	20	16	20	e26	e40	61	57	e48	e45	52	68	46
8	23	15	21	e28	e40	61	55	e50	e50	94	70	43
9	24	15	20	e30	e40	e62	51	e54	e54	171	80	39
10	23	15	19	e30	e39	e64	49	e58	e58	181	77	41
11	22	15	19	e30	e39	e64	47	e62	e60	182	72	43
12	21	14	20	e30	e39	62	47	e58	e50	160	69	57
13	20	14	19	e31	e39	58	49	e56	e52	146	66	63
14	20	14	18	e31	e40	55	49	e52	e56	131	70	63
15	21	14	19	e32	e40	54	49	e50	e62	125	140	61
16	21	14	19	e33	e41	e54	54	e47	e74	115	158	57
17	20	14	e19	e34	e42	e52	59	e45	e78	104	162	53
18	20	14	e19	e35	e43	e52	66	e42	e72	98	119	50
19	20	14	e19	e35	e44	51	70	e41	e76	92	111	48
20	20	14	e20	e35	e48	49	76	e41	e82	86	102	46
21	19	14	e20	e35	e56	49	88	e42	e88	80	100	44
22	19	14	e20	e35	e68	51	90	e43	e98	74	94	44
23	19	15	e21	e35	e78	54	85	e46	e100	69	80	45
24	19	19	e21	e35	e90	59	80	e46	e94	64	71	46
25	20	21	e22	e35	e110	63	75	e45	e82	59	65	45
26	22	21	e22	e35	e120	66	70	e45	e72	70	62	43
27	24	21	e23	e35	e120	77	66	e46	e62	96	55	39
28	21	20	e24	e36	e110	82	62	e46	e66	92	51	36
29	19	19	e25	e37	e110	80	60	e47	e62	85	47	33
30	19	19	e25	e37	---	76	58	e48	e56	78	44	30
31	19	---	e26	e38	---	73	---	e47	---	71	41	---
TOTAL	640	490	641	991	1665	2064	1899	1519	1947	2901	2516	1402
MEAN	20.6	16.3	20.7	32.0	57.4	66.6	63.3	49.0	64.9	93.6	81.2	46.7
MAX	24	21	26	38	120	100	90	62	100	182	162	63
MIN	19	14	18	26	38	49	47	41	45	52	41	30
CFSM	.25	.20	.25	.39	.71	.82	.78	.60	.80	1.15	1.00	.57
IN.	.29	.22	.29	.45	.76	.94	.87	.70	.89	1.33	1.15	.64

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2000, BY WATER YEAR (WY)

MEAN	57.3	63.4	55.3	51.4	60.0	80.6	118	101	75.2	77.1	56.9	52.7
MAX	130	151	117	105	110	187	234	184	129	108	89.5	159
(WY)	1995	1992	1992	1992	1992	1992	1996	1996	1993	1996	1996	1994
MIN	6.13	8.52	8.20	7.92	12.2	26.6	44.1	36.9	54.4	46.6	8.08	4.60
(WY)	1999	1999	1999	1999	1999	1999	1999	1998	1992	1998	1998	1998

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1992 - 2000

ANNUAL TOTAL	13598.6	18675	
ANNUAL MEAN	37.3	51.0	70.7
HIGHEST ANNUAL MEAN			104
LOWEST ANNUAL MEAN			34.3
HIGHEST DAILY MEAN	(e)160	Jul 10	570
LOWEST DAILY MEAN	(e)7.2	Jan 12,13	4.0
ANNUAL SEVEN-DAY MINIMUM	(e)7.3	Jan 7	4.0
INSTANTANEOUS PEAK FLOW		(b)189	589
INSTANTANEOUS PEAK STAGE		(c)2.18	3.47
INSTANTANEOUS LOW FLOW		14	(d)3.9
ANNUAL RUNOFF (CFSM)	.46	.63	.87
ANNUAL RUNOFF (INCHES)	6.22	8.55	11.82
10 PERCENT EXCEEDS	73	88	126
50 PERCENT EXCEEDS	25	48	60
90 PERCENT EXCEEDS	9.3	19	21

(a) Also occurred Sept. 19-23

(b) Gage height, 2.08 ft

(c) Backwater from beaver activity and vegetation

(d) May have been less during period Sept. 21-23, 25, 1998

(e) Estimated due to ice effect or missing record

05360500 FLAMBEAU RIVER NEAR BRUCE, WI

LOCATION.--Lat 45°22'21", long 91°12'34", in Lot 7 of NW ¼ sec.2, T.33 N., R.7 W., Rusk County, Hydrologic Unit 07050002, on right bank 2.5 mi downstream from Thornapple Powerplant, 6.0 mi upstream from mouth, and 7.0 mi southeast of Bruce.

DRAINAGE AREA.--1,860 mi².

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

REVISED RECORDS.--WDR WI-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,056.34 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Flow regulated by several powerplants above station and by Rest Lake and Flambeau Flowage Reservoirs. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	861	802	521	e740	e820	3280	1930	1530	969	1420	1190	974
2	842	777	883	e720	e800	3370	1680	1540	1010	1050	1580	865
3	603	727	850	e740	e800	2840	1520	1350	1080	1180	1320	1260
4	680	564	898	e700	e800	2780	1610	1310	1220	906	1230	1050
5	669	609	714	e640	e780	1860	1690	1150	1250	1120	1140	1460
6	596	668	764	e620	e780	1640	1660	1040	1250	917	1270	1050
7	771	528	673	e600	e760	1620	1480	1110	751	1010	1000	1140
8	806	615	586	e620	e780	1960	1270	1240	899	1230	1240	880
9	677	770	618	e660	e780	2810	1440	1190	810	4570	1240	1250
10	714	619	960	e700	e780	3070	1480	1240	733	6350	1300	1020
11	757	484	625	e680	e780	2740	1370	1270	719	6030	1270	1010
12	706	563	536	e660	e780	2450	1260	1320	650	4290	969	952
13	740	659	766	e660	e780	1880	1200	1380	698	4100	1240	1330
14	683	529	640	e680	e780	2000	1290	1450	683	2760	1360	1170
15	500	652	559	e640	e780	1600	1320	1110	748	2430	3150	1420
16	626	689	594	e600	e740	1580	1470	1200	868	2210	2260	1100
17	769	605	576	e640	e740	1620	1600	1520	1380	2250	2210	861
18	617	587	442	e720	e760	1610	1580	1390	1900	2050	2360	1170
19	627	532	e390	e720	e760	1520	2150	1070	1770	1660	2020	914
20	618	651	e500	e740	e780	1360	2460	1020	2730	1540	1600	1040
21	630	625	e560	e740	e820	1180	4000	1070	6050	1140	1440	823
22	620	661	e520	e720	e880	1090	4490	777	7850	1160	1310	1060
23	681	860	e480	e760	e980	1360	4220	973	6150	1020	1380	1080
24	680	1000	e500	e820	e980	1610	3170	747	5120	1270	1090	1000
25	626	882	e580	e720	e1000	2350	2710	1050	2920	1050	1120	1120
26	622	994	e620	e720	e1800	2360	2440	781	3380	1110	1190	864
27	646	977	e600	e700	e4000	2360	1840	632	2150	1210	1020	809
28	592	1020	e700	e700	e3800	2420	1770	713	2170	1660	1030	720
29	593	745	e660	e720	3270	3390	1640	720	1810	1590	1180	588
30	590	789	e700	e760	---	2370	1460	962	1430	1440	1090	477
31	714	---	e720	e740	---	2120	---	872	---	1310	950	---
TOTAL	20856	21183	19735	21580	33090	66200	59200	34727	61148	63033	43749	30457
MEAN	673	706	637	696	1141	2135	1973	1120	2038	2033	1411	1015
MAX	861	1020	960	820	4000	3390	4490	1540	7850	6350	3150	1460
MIN	500	484	390	600	740	1090	1200	632	650	906	950	477

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2000, BY WATER YEAR (WY)

	MEAN	1753	1654	1282	1136	1154	1718	3554	2569	2041	1652	1466	1808
	MAX	5616	4404	2542	2006	2411	5490	6782	6082	6066	4339	3765	5089
	(WY)	1986	1992	1992	1973	1969	1973	1967	1954	1968	1968	1972	1994
	MIN	363	430	382	451	474	971	1013	758	572	596	553	420
	(WY)	1977	1977	1977	1977	1977	1959	1990	1987	1988	1988	1998	1998

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1951 - 2000
ANNUAL TOTAL	464883	474958	
ANNUAL MEAN	1274	1298	1813
HIGHEST ANNUAL MEAN			2900
LOWEST ANNUAL MEAN			993
HIGHEST DAILY MEAN	6050	May 9	7850 Jun 22
LOWEST DAILY MEAN	(a)390	Dec 19	(a)190 Dec 19
ANNUAL SEVEN-DAY MINIMUM	(a)469	Jan 20	(a)485 Dec 18
INSTANTANEOUS PEAK FLOW			8690 Jun 22
INSTANTANEOUS PEAK STAGE			7.46 Jun 22
10 PERCENT EXCEEDS	2490	2360	3370
50 PERCENT EXCEEDS	880	1000	1350
90 PERCENT EXCEEDS	525	618	755

(a) Ice affected

(e) Estimated due to ice effect or missing record

CHIPPEWA RIVER BASIN

05362000 JUMP RIVER AT SHELDON, WI

LOCATION.--Lat 45°18'29", long 90°57'23", in sec.26, T.33 N., R.5 W., Rusk County, Hydrologic Unit 07050004, on right bank just downstream from highway bridge in Sheldon, 1,500 ft upstream from Shoulder Creek and 11 mi upstream from mouth.

DRAINAGE AREA.--576 mi².

PERIOD OF RECORD.--July 1915 to current year.

REVISED RECORDS.--WSP 975: 1938. WSP 1438: 1916-17(M), 1919(M), 1920, 1921(M), 1922, 1923-26(M), 1927, 1928-31(M), 1932, 1933-37(M), 1945-46(M), 1948-50(M). WDR WI-81-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,092.75 ft above sea level. Prior to Feb. 9, 1939, Sept. 1, 1941, to Apr. 1, 1953, and Feb. 18, 1954, to Sept. 27, 1964, nonrecording gage at same site and datum. Apr. 2, 1953, to Feb. 18, 1954, nonrecording gage in creamery wellhouse 400 ft upstream at same datum. Feb. 9, 1939, to Aug. 31, 1941, and from Sept. 27, 1964, water-stage recorder at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	129	e230	e72	e66	3030	509	367	179	601	232	108
2	79	132	244	e72	e68	2270	450	345	256	461	585	130
3	76	126	199	e70	e72	1810	413	320	369	376	460	251
4	80	118	e150	e70	e74	1470	405	284	363	324	317	521
5	109	112	e140	e70	e74	1130	387	253	512	272	232	513
6	105	110	e130	e70	e80	986	357	226	649	236	183	385
7	106	108	e120	e72	e86	935	321	202	513	211	157	297
8	125	105	e130	e72	e96	943	291	186	390	233	148	242
9	181	103	e120	e72	e98	1380	271	178	325	1540	223	206
10	223	102	e110	e70	e96	1570	248	177	274	2180	351	182
11	212	100	e100	e66	e90	1280	237	169	217	1550	313	298
12	191	99	e110	e64	e86	1030	227	164	182	1000	247	915
13	178	101	e100	e62	e84	832	220	178	160	758	210	1040
14	166	101	e94	e62	e86	702	221	180	153	587	243	760
15	158	99	e80	e62	e88	e620	224	160	166	435	1570	558
16	154	96	e72	e62	e94	e540	282	164	267	341	2580	410
17	158	96	e62	e62	e98	e450	433	212	441	258	1890	321
18	166	96	e68	e62	e110	e400	514	310	432	209	1350	261
19	172	96	e76	e62	e120	379	562	369	349	174	916	226
20	170	97	e70	e62	e130	339	1270	365	1600	147	616	209
21	170	100	e64	e60	e150	332	3440	297	6780	133	443	207
22	168	102	e62	e62	e200	347	3330	250	6200	121	345	198
23	168	120	e64	e64	e260	383	2530	223	4260	107	284	189
24	163	180	e66	e64	e340	433	1800	202	2940	97	236	187
25	141	329	e70	e66	e700	558	1240	177	2870	92	202	182
26	132	336	e74	e66	e1500	634	868	152	2560	122	181	169
27	128	306	e72	e64	e2600	741	680	137	2050	301	164	157
28	114	e250	e74	e64	e2700	919	557	137	1560	412	149	148
29	106	e190	e76	e64	e2900	838	467	142	1110	341	137	144
30	109	e150	e74	e66	---	703	404	163	810	295	124	134
31	115	---	e74	e66	---	592	---	155	---	250	109	---
TOTAL	4405	4189	3175	2042	13146	28576	23158	6844	38937	14164	15197	9548
MEAN	142	140	102	65.9	453	922	772	221	1298	457	490	318
MAX	223	336	244	72	2900	3030	3440	369	6780	2180	2580	1040
MIN	76	96	62	60	66	332	220	137	153	92	109	108
CFSM	.25	.24	.18	.11	.79	1.60	1.34	.38	2.25	.79	.85	.55
IN.	.28	.27	.21	.13	.85	1.85	1.50	.44	2.51	.91	.98	.62

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 2000, BY WATER YEAR (WY)

	416	435	179	103	105	739	1803	849	656	270	239	448
MEAN	416	435	179	103	105	739	1803	849	656	270	239	448
MAX	1881	2022	1092	392	620	3184	4126	2514	3442	1293	1916	4145
(WY)	1986	1992	1992	1946	1984	1973	1982	1973	1943	1968	1941	1941
MIN	27.5	35.3	34.7	25.6	21.4	61.2	360	134	54.6	17.5	21.9	25.4
(WY)	1949	1977	1934	1917	1924	1940	1946	1987	1934	1936	1933	1976

CHIPPEWA RIVER BASIN

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05362000 JUMP RIVER AT SHELDON, WI--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1915 - 2000	
ANNUAL TOTAL	157241		163381		519	
ANNUAL MEAN	431		446		923	1942
HIGHEST ANNUAL MEAN					214	1948
LOWEST ANNUAL MEAN					40800	Aug 31 1941
HIGHEST DAILY MEAN	4690	May 8	6780	Jun 21	(b)11	Dec 18 1943
LOWEST DAILY MEAN	(a)50	Jan 1	(a)60	Jan 21	14	(c)Jan 25 1924
ANNUAL SEVEN-DAY MINIMUM	(a)51	Jan 4	(a)62	Jan 15	(d)46000	Aug 31 1941
INSTANTANEOUS PEAK FLOW			7200	Jun 21	(f)18.80	Aug 31 1941
INSTANTANEOUS PEAK STAGE			9.94	Jun 21	(b)11	Dec 18 1943
INSTANTANEOUS LOW FLOW			(a)		.90	
ANNUAL RUNOFF (CFSM)	.75		.77		12.24	
ANNUAL RUNOFF (INCHES)	10.16		10.55		1290	
10 PERCENT EXCEEDS	1290		1030		158	
50 PERCENT EXCEEDS	160		190		47	
90 PERCENT EXCEEDS	76		71			

(a) Ice affected

(b) Result of freezeup

(c) Jan. 25, 1924, ice-affected, also occurred July 11, 1936

(d) From rating curve extended above 13,000 ft³/s on basis of contracted-opening measurement of peak flow

(e) Estimated due to ice effect or missing record

(f) From floodmark

CHIPPEWA RIVER BASIN

05365500 CHIPPEWA RIVER AT CHIPPEWA FALLS, WI

LOCATION.--Lat 44°55'37", long 91°24'33", in Lot 1, sec.12, T.28 N., R.9 W., Chippewa County, Hydrologic Unit 07050005, on right bank at Chippewa Falls, 1.0 mi downstream from Duncan Creek.

DRAINAGE AREA.--5,650 mi².

PERIOD OF RECORD.--June 1888 to September 1983, October 1986 to current year. Monthly discharge for some periods published in WSP 1308.

REVISED RECORDS.--WSP 785: 1934(M). WSP 1508: 1897, 1905, 1918(M), 1924(M). WDR WI-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 798.46 ft above sea level. Prior to January 1914, nonrecording gage, and January 1914 to June 19, 1932, water-stage recorder at site 1 mi upstream at different datum. June 19, 1932, to current year, water-stage recorder at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Considerable regulation by Moose Lake, Lake Chippewa, Rest Lake, Flambeau Flowage, and Lake Wissota Reservoirs. Diurnal fluctuation caused by hydroelectric plant 1.1 mi upstream. Gage-height telemeter at station.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--A stage of 26.94 ft occurred Sept. 10, 1884, site and datum in use June 1932.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1980	2460	1790	2660	1940	15500	4430	4810	4760	4250	2820	1950
2	1260	2220	1750	2310	2190	15300	3970	4990	4510	3320	3230	2410
3	1020	2070	2350	2740	2200	12500	5450	4270	4750	4270	3980	3220
4	2690	2320	2200	1900	2420	9510	4340	3540	5330	2630	3350	4710
5	1660	1980	2280	1950	1080	8970	3660	3780	5810	3220	2190	4430
6	2530	1950	2390	1880	1040	5600	4220	3820	7040	3710	3870	3990
7	2030	1300	1440	1780	1720	7150	3810	3240	5020	2910	2440	3060
8	1990	1570	1970	1910	2160	6190	4340	2600	3920	4440	2200	2420
9	1520	1480	1670	1620	2810	7110	3650	3080	3490	17400	3920	2920
10	1010	2090	1520	2210	2500	9570	4170	3290	2520	28100	2890	2610
11	2680	1600	1520	2180	1480	9530	3820	3100	2520	26400	3930	13400
12	2590	2310	1590	1800	1150	9060	3950	3430	2030	20900	3160	15500
13	2000	1540	1670	1840	1010	5890	3070	3550	2590	15100	2260	13400
14	2230	1630	1790	2360	2070	6320	3810	3120	2470	7540	2230	8280
15	2490	1620	2130	1400	2230	5760	4160	4310	3310	6500	11000	4080
16	1490	1490	1440	1790	2430	5010	2670	3080	4710	6150	15500	3980
17	1590	1560	1250	1750	2170	3720	3610	3710	4960	6700	15000	2960
18	2050	2130	1030	1840	1270	3320	5500	5190	4710	4660	10500	2860
19	2720	1710	1230	1950	1130	3960	5320	4640	8990	5090	8280	3480
20	1950	1560	1060	1750	1050	3900	8150	2640	7970	4930	5990	2630
21	1570	1560	e960	2400	1540	3670	13100	2370	23700	5510	4800	2690
22	1970	1420	e920	1690	1550	3740	19800	4980	30000	3830	3320	2520
23	1010	2330	e1000	1420	3170	3630	18400	2700	25700	3050	3960	1770
24	1230	2850	e1100	2240	3800	3550	12200	3200	18000	4090	3710	2270
25	2170	1910	e1200	2450	3650	5760	7420	3190	11900	3120	2840	2150
26	2090	4100	1360	2400	6390	7950	8010	2850	9850	2250	3430	2380
27	2040	2360	966	3110	12700	6140	6710	1910	10400	3260	2530	1810
28	2060	3060	965	1230	15500	8040	5000	2500	7310	5350	3500	2810
29	1670	2490	1590	1020	15600	6540	6250	1980	6900	4110	2070	2010
30	1510	2030	1450	1020	---	7510	5190	3220	5430	4380	3430	1760
31	1480	---	1350	1730	---	5430	---	2670	---	3500	2200	---
TOTAL	58280	60700	46931	60330	99950	215830	188180	105760	240600	220670	144530	124460
MEAN	1880	2023	1514	1946	3447	6962	6273	3412	8020	7118	4662	4149
MAX	2720	4100	2390	3110	15600	15500	19800	5190	30000	28100	15500	15500
MIN	1010	1300	920	1020	1010	3320	2670	1910	2030	2250	2070	1760

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1888 - 2000, BY WATER YEAR (WY)

	MEAN	4223	4200	2984	2584	2651	5379	11591	8506	6848	4322	3405	4437
MAX	15570	15990	7897	5305	6569	17630	28900	22700	30570	13620	9805	23030	
(WY)	1901	1992	1992	1973	1969	1973	1916	1903	1943	1968	1900	1941	
MIN	798	800	950	831	800	1210	2210	1688	1162	1172	1124	929	
(WY)	1977	1890	1893	1917	1895	1890	1895	1987	1988	1988	1894	1976	

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1888 - 2000
ANNUAL TOTAL	1508413	1566221	
ANNUAL MEAN	4133	4279	5092
HIGHEST ANNUAL MEAN			8833
LOWEST ANNUAL MEAN			2453
HIGHEST DAILY MEAN	24100	May 9	30000
LOWEST DAILY MEAN	(a)920	Dec 22	(a)920
ANNUAL SEVEN-DAY MINIMUM	1040	Dec 18	1040
INSTANTANEOUS PEAK FLOW			32900
INSTANTANEOUS PEAK STAGE			14.23
10 PERCENT EXCEEDS	8410		8280
50 PERCENT EXCEEDS	2750		2850
90 PERCENT EXCEEDS	1220		1480

(a) Ice affected

(e) Estimated due to ice effect or missing record

05365707 NORTH FORK EAU CLAIRE RIVER NEAR THORP, WI

LOCATION.--Lat 44°58'25", long 90°50'57", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.27, T.29 N., R.4 W., Clark County, Hydrologic Unit 07050006, on left bank 15 ft downstream from town road, 0.3 mi downstream from Goggle-Eye Creek, and 2.6 mi northwest of Thorp.

DRAINAGE AREA.--51.0 mi².

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

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,115 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	6.0	5.2	e3.9	e2.8	161	17	12	92	20	6.9	5.5
2	1.7	5.7	4.8	e3.8	e2.9	96	17	11	118	15	6.3	24
3	3.6	5.5	4.8	e3.7	e2.9	70	16	12	61	13	5.1	e42
4	2.1	5.5	5.1	e3.5	e2.9	55	15	9.3	76	11	4.3	e60
5	2.0	5.5	5.4	e3.2	e2.9	46	14	8.1	262	9.6	3.8	e64
6	2.2	5.5	5.3	e3.1	e2.8	43	13	7.1	128	7.9	3.9	37
7	2.4	5.5	4.6	e3.0	e2.8	40	12	6.9	62	7.4	3.3	23
8	3.1	5.6	4.5	e3.0	e2.8	e40	11	7.5	36	12	5.3	17
9	4.3	5.7	4.1	e3.1	e2.8	e45	10	8.8	24	499	43	14
10	3.6	7.5	e4.0	e3.1	e2.7	e40	9.8	8.6	16	386	81	11
11	3.5	9.9	3.7	e3.2	e2.7	36	9.8	8.1	13	221	37	895
12	3.3	7.7	3.5	e3.2	e2.5	29	9.8	10	10	70	19	849
13	3.0	7.0	3.5	e3.1	e2.3	23	9.8	12	8.2	41	13	488
14	2.9	6.9	3.4	e3.1	e2.3	21	9.8	8.6	10	28	11	179
15	2.9	6.5	e3.3	e3.0	e2.3	e19	9.8	7.0	19	20	311	72
16	3.9	6.2	e3.0	e2.9	e2.4	e16	11	11	25	15	444	42
17	4.2	5.9	e2.4	e2.8	e2.2	e14	12	23	24	11	255	29
18	4.3	6.1	e2.2	e2.7	e2.3	14	12	108	18	8.7	97	22
19	4.4	6.3	e2.5	e2.6	e2.5	13	12	130	85	7.6	54	18
20	4.1	6.3	e2.3	e2.5	e2.5	13	90	74	810	6.3	34	21
21	4.0	6.1	e2.2	e2.4	e3.5	13	234	41	743	5.3	23	21
22	3.7	5.6	e2.1	e2.5	e4.0	16	141	30	487	4.5	18	19
23	3.3	14	e2.0	e2.5	e5.0	19	80	23	186	4.0	15	27
24	4.2	24	e2.1	e2.6	e8.0	24	51	16	72	3.2	12	26
25	5.6	19	e2.3	e2.6	e50	46	36	12	45	2.9	9.8	20
26	6.1	14	e2.6	e2.7	e400	41	27	9.1	56	5.5	9.7	16
27	6.1	12	e3.0	e2.7	e380	34	22	7.7	66	25	8.7	14
28	6.0	e8.6	e3.5	e2.8	341	28	18	7.7	49	27	7.6	12
29	5.9	e7.2	e4.0	e2.7	209	24	15	7.6	35	18	6.5	10
30	6.0	e6.0	e4.1	e2.7	---	20	13	8.3	25	11	5.7	9.2
31	6.0	---	e4.0	e2.8	---	18	---	11	---	8.0	4.9	---
TOTAL	120.2	243.3	109.5	91.5	1452.8	1117	957.8	656.4	3661.2	1523.9	1558.8	3086.7
MEAN	3.88	8.11	3.53	2.95	50.1	36.0	31.9	21.2	122	49.2	50.3	103
MAX	6.1	24	5.4	3.9	400	161	234	130	810	499	444	895
MIN	1.7	5.5	2.0	2.4	2.2	13	9.8	6.9	8.2	2.9	3.3	5.5
CFSM	.08	.16	.07	.06	.98	.71	.63	.42	2.39	.96	.99	2.02
IN.	.09	.18	.08	.07	1.06	.81	.70	.48	2.67	1.11	1.14	2.25

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2000, BY WATER YEAR (WY)

	MEAN	25.2	44.8	13.6	5.33	14.2	105	111	51.3	66.0	21.5	33.5	49.0
MAX	123	262	79.7	31.4	86.6	181	267	184	338	49.4	143	420	
(WY)	1987	1992	1992	1997	1998	1989	1996	1993	1993	1986	1986	1986	
MIN	2.17	3.57	.56	.28	.45	9.95	25.9	5.29	1.34	.31	.37	.81	
(WY)	1990	1990	1990	1990	1990	1996	1987	1987	1988	1988	1988	1988	

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1986 - 2000

ANNUAL TOTAL	8184.0	14579.1	
ANNUAL MEAN	22.4	39.8	42.7
HIGHEST ANNUAL MEAN			93.0
LOWEST ANNUAL MEAN			23.0
HIGHEST DAILY MEAN	457	May 18	895 Sep 11
LOWEST DAILY MEAN	(a)1.2	Jan 5	1.7 Oct 2
ANNUAL SEVEN-DAY MINIMUM	(a)1.4	Jan 1	(a)2.2 Dec 18
INSTANTANEOUS PEAK FLOW			1520 Jun 20
INSTANTANEOUS PEAK STAGE			7.07 Jun 20
INSTANTANEOUS LOW FLOW			1.6 Oct 1,2
ANNUAL RUNOFF (CFSM)	.44	.78	.84
ANNUAL RUNOFF (INCHES)	5.97	10.63	11.38
10 PERCENT EXCEEDS	70	72	91
50 PERCENT EXCEEDS	5.5	9.2	9.0
90 PERCENT EXCEEDS	1.9	2.7	1.6

(a) Ice affected

(b) From rating curve extended above 2,500 ft³/s on basis of step-backwater measurement of peak flow

(c) Estimated due to ice effect or missing record

CHIPPEWA RIVER BASIN

053674464 YELLOW RIVER AT BARRON, WI

LOCATION.--Lat 45°23'43", long 91°49'48", in SE ¼ SE ¼ sec.27, T.34 N., R.12 W., Barron County, Hydrologic Unit 07050007, on left bank 1.0 mi southeast of intersection of U.S. Highway 8 and State Highway 25 in Barron, 0.5 mi downstream from Quaderer Creek, in Becker Park, and 7.3 mi upstream from mouth.

DRAINAGE AREA.--153 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,090 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Flow is regulated occasionally at small dam upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	e82	80	74	69	171	89	89	120	79	113	89
2	80	75	80	74	69	185	88	86	148	79	108	85
3	79	75	80	75	68	161	91	83	114	79	107	109
4	77	62	80	74	70	148	88	81	113	77	100	126
5	79	66	80	63	69	140	86	79	137	76	90	114
6	78	73	79	74	66	136	87	77	124	82	88	103
7	91	74	78	73	69	132	86	76	102	71	85	86
8	88	74	77	72	66	133	85	111	97	78	94	91
9	88	63	77	71	70	157	85	127	88	138	113	85
10	85	71	76	75	72	170	76	133	86	423	161	88
11	72	77	76	76	e70	147	81	138	82	633	143	83
12	74	65	76	69	e70	130	85	128	78	396	102	88
13	78	62	65	71	e70	120	79	116	77	205	96	74
14	69	65	61	73	e68	109	81	105	98	172	90	75
15	85	71	70	72	e68	103	82	95	111	144	172	74
16	73	73	66	72	e66	102	95	111	125	120	828	73
17	74	73	66	71	e64	87	109	119	113	103	395	74
18	75	74	67	71	e66	90	111	114	104	98	240	73
19	78	77	69	70	e68	92	104	99	92	96	201	73
20	80	76	70	e70	e68	95	130	92	120	90	168	73
21	96	74	67	e70	70	94	170	88	183	91	143	72
22	114	77	65	e68	74	92	164	91	181	89	127	73
23	86	102	65	e68	81	88	141	86	156	85	123	74
24	80	114	65	e70	92	99	125	83	138	81	118	73
25	80	102	66	e70	173	106	110	75	119	80	109	71
26	79	81	69	e68	1190	102	104	75	106	107	113	70
27	59	83	68	e66	1220	103	99	78	101	135	114	70
28	75	82	70	e64	560	99	88	91	86	173	111	68
29	78	84	73	e64	373	96	90	90	85	180	99	66
30	e80	81	75	e66	---	93	89	85	82	154	94	69
31	e90	---	75	e66	---	90	---	82	---	126	93	---
TOTAL	2499	2308	2231	2180	5199	3670	2998	2983	3366	4540	4738	2442
MEAN	80.6	76.9	72.0	70.3	179	118	99.9	96.2	112	146	153	81.4
MAX	114	114	80	76	1220	185	170	138	183	633	828	126
MIN	59	62	61	63	64	87	76	75	77	71	85	66
CFSM	.53	.50	.47	.46	1.17	.77	.65	.63	.73	.96	1.00	.53
IN.	.61	.56	.54	.53	1.26	.89	.73	.73	.82	1.10	1.15	.59

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2000, BY WATER YEAR (WY)

MEAN	98.6	107	81.7	75.7	94.9	146	200	111	117	106	104	99.3
MAX	204	178	101	88.2	179	226	342	184	222	146	170	177
(WY)	1996	1997	1992	1997	2000	1995	1996	1996	1993	2000	1995	1991
MIN	74.4	74.2	72.0	63.2	64.0	117	99.9	85.7	73.9	80.6	67.5	75.1
(WY)	1992	1995	2000	1995	1995	1997	2000	1998	1994	1994	1994	1998

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1991 - 2000

	1999	2000	1991-2000
ANNUAL TOTAL	37260	39154	
ANNUAL MEAN	102	107	111
HIGHEST ANNUAL MEAN			137
LOWEST ANNUAL MEAN			93.5
HIGHEST DAILY MEAN	377	1220	1220
LOWEST DAILY MEAN	59	59	23
ANNUAL SEVEN-DAY MINIMUM	66	(a)66	55
INSTANTANEOUS PEAK FLOW		1590	1590
INSTANTANEOUS PEAK STAGE		6.66	6.66
INSTANTANEOUS LOW FLOW		(b)16	(b)7.3
ANNUAL RUNOFF (CFSM)	.67	.70	.72
ANNUAL RUNOFF (INCHES)	9.06	9.52	9.85
10 PERCENT EXCEEDS	160	142	162
50 PERCENT EXCEEDS	84	85	86
90 PERCENT EXCEEDS	70	68	68

(a) Ice affected

(b) Result of regulation

(c) Estimated due to ice effect or missing record

053674464 YELLOW RIVER AT BARRON, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: August 1991 to current year.

INSTRUMENTATION.--Continuous water temperature recorder since Aug. 30, 1991.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Record was missing Oct. 29 to Nov. 1.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum temperature, 29.0°C, July 25, 30, 1999; minimum, 0.0°C, for many days.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum temperature, 25.5°C, July 15; minimum, 0.0°C, on many days.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	12.5	10.5	11.5	---	---	---	2.5	2.0	2.0	1.0	.0	.5
2	12.0	9.5	10.5	7.5	5.5	6.5	2.5	2.0	2.0	1.0	.0	.5
3	11.5	8.5	9.5	6.5	4.5	5.5	3.0	2.0	2.5	1.0	.0	.5
4	11.0	8.0	9.0	5.5	4.0	5.0	3.0	2.0	2.5	.5	.0	.0
5	11.5	8.0	9.5	5.5	4.5	5.0	2.5	2.0	2.5	.5	.0	.0
6	11.0	7.5	9.0	5.5	4.0	4.5	3.0	2.0	2.5	.5	.0	.0
7	11.0	8.5	9.5	5.5	4.0	5.0	2.5	2.0	2.5	.5	.0	.0
8	12.0	10.0	11.0	6.5	4.5	5.5	2.5	1.5	2.0	1.0	.0	.5
9	13.5	10.0	11.5	8.0	6.0	7.0	2.5	1.5	2.0	1.0	.0	.5
10	14.0	11.5	12.5	7.5	7.0	7.5	2.0	1.0	1.5	1.0	.5	.5
11	13.0	10.5	12.0	7.0	6.0	6.5	2.0	1.5	1.5	.5	.0	.0
12	13.0	11.0	12.0	7.0	5.5	6.0	2.0	1.5	1.5	.0	.0	.0
13	12.0	10.0	11.0	7.0	5.5	6.0	1.5	1.5	1.5	.5	.0	.0
14	11.0	9.5	10.0	6.5	5.0	6.0	1.5	1.0	1.5	.5	.0	.0
15	11.0	9.5	10.0	6.0	4.5	5.0	1.5	.5	1.0	1.0	.0	.5
16	11.0	10.0	10.5	5.0	4.0	4.5	1.0	.0	.5	.5	.0	.0
17	10.0	9.0	9.5	5.0	4.0	4.0	1.0	.5	.5	.5	.0	.0
18	9.0	8.5	8.5	5.0	3.5	4.5	1.0	.5	1.0	.5	.0	.0
19	8.5	7.5	8.0	5.0	4.0	4.5	1.0	.5	1.0	.0	.0	.0
20	8.0	6.5	7.0	4.5	3.5	4.0	.5	.0	.0	.5	.0	.0
21	8.5	6.5	7.5	4.5	3.5	4.0	.5	.0	.0	.5	.0	.0
22	8.0	5.5	7.0	5.0	4.5	5.0	.5	.0	.0	.5	.0	.0
23	7.0	5.0	5.5	5.0	3.5	4.0	.5	.0	.0	.5	.0	.0
24	7.5	4.5	5.5	3.5	3.0	3.5	.5	.0	.0	.5	.0	.0
25	8.5	5.0	6.0	3.5	2.5	3.0	1.0	.0	.5	.5	.0	.0
26	8.0	5.0	6.5	4.0	3.0	3.0	.5	.0	.0	.5	.0	.0
27	9.5	5.5	7.0	3.0	2.0	2.5	.5	.0	.0	.5	.0	.0
28	9.0	6.0	7.0	2.5	2.0	2.5	1.0	.0	.5	.5	.0	.0
29	---	---	---	2.5	2.0	2.0	1.0	.5	.5	.5	.0	.0
30	---	---	---	2.5	2.0	2.0	1.0	.0	.5	1.0	.0	.0
31	---	---	---	---	---	---	1.0	.5	.5	.5	.0	.0
MONTH	14.0	4.5	9.1	8.0	2.0	4.6	3.0	.0	1.1	1.0	.0	.1

CHIPPEWA RIVER BASIN

053674464 YELLOW RIVER AT BARRON, WI--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	1.0	.0	.0	2.0	.5	1.0	10.5	8.5	9.0	17.5	14.5	15.5
2	.5	.0	.0	2.0	.5	1.0	10.5	9.0	9.5	17.5	15.0	16.0
3	.5	.0	.5	2.5	1.0	1.5	9.5	8.0	9.0	18.0	15.5	16.5
4	1.0	.0	.5	3.5	1.5	2.5	9.0	7.0	7.5	19.5	17.0	18.0
5	1.0	.0	.0	4.5	2.5	3.5	8.5	7.0	7.5	21.0	18.5	19.5
6	1.0	.0	.5	5.0	3.5	4.5	8.5	6.5	7.5	21.5	19.5	20.5
7	1.0	.0	.0	6.0	4.5	5.0	7.5	6.0	7.0	22.5	20.0	21.5
8	1.0	.0	.5	6.5	5.5	6.0	8.0	5.5	6.5	21.5	20.0	21.0
9	1.0	.0	.5	6.0	4.5	5.0	9.0	6.5	7.5	20.0	18.0	19.0
10	.5	.0	.0	5.0	4.0	4.5	9.0	7.0	7.5	18.0	15.5	17.0
11	.5	.0	.0	4.0	3.0	3.5	8.0	7.0	7.5	15.5	14.5	15.0
12	.5	.0	.0	4.0	3.0	3.5	8.5	6.5	7.5	15.5	14.0	14.5
13	1.0	.0	.5	4.0	3.0	3.5	9.0	6.5	7.5	14.5	12.5	13.5
14	1.0	.0	.5	5.0	3.5	4.0	10.0	8.0	9.0	13.5	11.5	12.5
15	.5	.0	.0	4.0	3.0	4.0	8.5	6.5	8.0	14.5	12.5	13.5
16	1.0	.0	.0	3.5	2.5	3.0	6.5	6.0	6.0	15.5	14.0	14.5
17	.5	.0	.5	4.5	2.5	3.5	6.0	5.0	5.5	16.0	15.0	15.5
18	1.0	.5	.5	3.5	3.0	3.5	5.5	5.0	5.5	15.5	14.0	15.0
19	1.0	.0	.5	3.5	3.0	3.0	6.0	5.5	5.5	16.0	13.5	14.5
20	1.5	.0	.5	3.5	3.0	3.0	6.0	5.0	5.5	16.5	14.0	15.0
21	1.5	.0	.5	4.5	3.5	4.0	7.5	4.5	6.0	16.5	15.0	16.0
22	1.5	.0	.5	6.0	4.5	5.5	9.0	6.5	7.5	18.0	16.0	17.0
23	1.0	.5	.5	8.5	6.0	7.5	11.5	8.5	10.0	19.5	17.0	18.0
24	1.5	.5	1.0	9.0	8.5	9.0	13.5	10.5	11.5	19.0	17.5	18.5
25	1.0	.5	.5	9.5	8.0	8.5	15.0	12.0	13.5	19.5	17.0	18.0
26	.5	.0	.0	9.5	8.0	8.5	16.0	13.5	14.5	19.0	17.5	18.5
27	.5	.0	.0	8.0	6.5	7.5	16.5	14.5	15.5	18.5	16.5	17.5
28	.5	.0	.5	7.5	6.0	6.5	16.5	14.5	15.5	17.0	16.0	16.5
29	1.0	.5	.5	8.0	5.5	6.5	16.0	13.5	14.5	17.5	16.0	16.5
30	---	---	---	9.0	6.0	7.5	16.0	13.5	14.5	17.0	16.5	16.5
31	---	---	---	9.5	7.5	8.5	---	---	---	18.5	16.0	17.0
MONTH	1.5	.0	.3	9.5	.5	4.8	16.5	4.5	9.0	22.5	11.5	16.7
	JUNE			JULY			AUGUST			SEPTEMBER		
1	18.0	16.5	17.5	23.5	21.0	22.0	24.0	23.0	23.5	21.0	20.0	20.5
2	17.0	16.5	17.0	23.5	22.5	22.5	24.5	23.0	23.5	20.0	19.5	19.5
3	17.5	16.0	16.5	23.5	22.0	22.5	24.0	23.0	23.5	20.0	19.0	19.5
4	17.0	15.0	16.0	24.0	22.0	23.0	23.5	22.5	23.0	19.5	18.0	19.0
5	17.5	14.5	15.5	23.5	23.0	23.0	23.0	21.5	22.5	19.0	18.0	18.5
6	17.5	16.0	16.5	23.5	22.0	23.0	22.5	21.5	22.0	18.0	17.5	17.5
7	18.0	17.0	17.5	22.5	21.0	22.0	23.0	21.5	22.0	18.0	17.0	17.5
8	19.5	17.0	18.5	23.0	21.0	22.0	23.0	22.0	22.5	18.0	17.0	17.5
9	21.5	19.5	20.5	23.5	21.5	22.5	23.5	22.0	22.5	19.0	17.0	18.0
10	23.5	21.5	22.0	23.5	22.5	23.0	23.5	22.5	23.0	20.0	18.5	19.0
11	24.0	21.5	22.5	23.5	21.5	22.5	23.0	22.0	22.0	19.5	18.5	19.5
12	23.0	21.5	22.0	23.5	22.0	22.5	22.0	21.5	21.5	19.0	18.0	18.5
13	21.5	20.5	21.0	24.5	22.0	23.0	23.5	21.5	22.5	19.0	17.5	18.0
14	21.0	20.0	20.5	25.0	23.0	24.0	23.0	22.0	22.5	18.5	17.0	17.5
15	20.0	18.5	19.5	25.5	23.5	24.5	23.5	22.0	22.5	17.5	16.0	16.5
16	18.5	17.0	18.0	25.0	24.0	24.5	22.5	20.5	21.0	17.0	15.5	16.0
17	18.0	16.5	17.0	24.5	23.0	24.0	20.5	19.5	19.5	17.0	15.5	16.0
18	18.0	17.0	17.5	23.0	21.0	22.0	20.0	19.0	19.5	17.0	16.0	16.5
19	20.0	18.0	19.0	22.0	20.5	21.0	20.0	19.0	19.5	17.0	16.0	16.5
20	21.0	19.5	20.5	21.5	20.5	21.0	20.0	19.0	19.5	16.0	14.5	15.5
21	21.0	20.0	20.5	21.0	20.0	20.5	20.0	19.0	19.5	14.5	14.0	14.0
22	20.0	19.0	19.5	22.0	20.0	20.5	20.0	19.0	19.5	14.0	13.0	13.5
23	19.5	18.5	19.0	22.0	20.5	21.0	20.5	19.0	20.0	13.0	11.5	12.5
24	20.5	19.0	20.0	22.0	21.0	21.5	21.0	20.0	20.5	12.0	10.5	11.5
25	20.5	19.5	20.5	22.5	20.5	21.5	21.0	20.5	21.0	12.5	10.5	11.5
26	21.5	20.0	20.5	22.0	20.5	21.5	22.0	20.5	21.0	12.5	11.0	11.5
27	21.5	20.0	20.5	22.5	21.0	21.5	21.5	21.0	21.5	12.5	11.5	12.0
28	22.0	20.0	21.0	22.0	21.0	21.5	21.0	20.5	21.0	13.0	11.0	12.0
29	22.5	20.0	21.0	22.5	20.5	21.0	21.5	20.0	20.5	13.5	12.0	13.0
30	23.0	20.5	21.5	23.0	21.0	22.0	21.0	20.0	20.5	14.5	13.5	14.0
31	---	---	---	23.5	22.0	23.0	21.5	20.5	21.0	---	---	---
MONTH	24.0	14.5	19.3	25.5	20.0	22.3	24.5	19.0	21.4	21.0	10.5	16.1

05368000 HAY RIVER AT WHEELER, WI

LOCATION.--Lat 45°02'52", long 91°54'39", in SW ¼ sec.25, T.30 N., R.13 W., Dunn County, Hydrologic Unit 07050007, on right bank 25 ft downstream from highway bridge in Wheeler, 1.8 mi upstream from Otter Creek, and 2.4 mi downstream from South Fork Hay River.

DRAINAGE AREA.--418 mi².

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

REVISED RECORDS.--WDR WI-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 889.30 ft above sea level. Prior to Mar. 25, 1951, nonrecording gage.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--Maximum stage since 1915, 16.6 ft April 1934, from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	217	224	230	e180	e180	823	257	276	299	305	251	210
2	218	222	224	e180	e180	640	256	271	833	295	259	209
3	217	219	219	e170	e180	538	255	260	699	292	242	244
4	216	217	220	e170	e190	485	252	255	419	284	236	257
5	216	215	219	e160	e190	454	258	251	640	277	233	242
6	216	214	217	e170	e190	429	253	244	669	272	231	225
7	216	213	e210	e160	e180	416	247	240	441	267	230	218
8	222	212	e210	e160	e180	411	244	256	370	272	263	212
9	226	212	e210	e170	e180	436	243	312	343	302	263	205
10	219	211	e200	e180	e190	444	241	316	322	344	247	201
11	214	210	e200	e180	e180	387	241	295	303	337	233	219
12	213	211	e200	e170	e170	369	241	291	288	337	232	215
13	212	211	e200	e170	e180	355	241	280	280	312	237	200
14	211	210	e200	e180	e180	344	241	268	304	297	232	195
15	211	211	e200	e180	e180	338	241	258	319	284	227	191
16	210	211	e180	e180	e180	329	257	266	319	276	228	189
17	210	211	e180	e170	e170	312	262	274	327	269	287	189
18	210	211	e180	e170	e180	304	281	287	303	262	291	186
19	211	211	e180	e170	e190	301	282	327	312	264	248	185
20	212	211	e180	e160	e190	293	305	281	422	260	232	185
21	212	209	e170	e150	e190	284	595	254	1160	253	231	184
22	211	211	e160	e160	e200	279	485	271	1010	248	232	186
23	210	228	e160	e160	e210	277	381	262	546	244	229	190
24	211	277	e160	e160	e250	282	350	244	465	240	224	189
25	209	265	e160	e160	e410	295	331	233	420	238	221	187
26	209	252	e170	e160	2450	299	316	210	390	261	222	184
27	208	241	e170	e160	3470	290	297	203	367	307	223	184
28	207	233	e170	e160	2220	281	287	242	343	303	226	182
29	208	224	e170	e160	1190	282	280	243	323	313	221	181
30	220	212	e180	e170	---	280	274	241	314	281	214	179
31	233	---	e180	e180	---	265	---	254	---	258	211	---
TOTAL	6635	6619	5909	5210	14230	11522	8694	8165	13550	8754	7356	6023
MEAN	214	221	191	168	491	372	290	263	452	282	237	201
MAX	233	277	230	180	3470	823	595	327	1160	344	291	257
MIN	207	209	160	150	170	265	241	203	280	238	211	179
CFSM	.51	.53	.46	.40	1.17	.89	.69	.63	1.08	.68	.57	.48
IN.	.59	.59	.53	.46	1.27	1.03	.77	.73	1.21	.78	.65	.54

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2000, BY WATER YEAR (WY)

	MEAN	263	261	226	201	230	486	625	358	344	272	263	280
MAX	579	704	470	412	657	1021	2054	767	778	667	513	762	
(WY)	1986	1971	1966	1981	1981	1983	1965	1954	1993	1979	1980	1986	
MIN	139	138	122	97.2	85.2	155	166	153	153	135	126	141	
(WY)	1959	1959	1959	1959	1959	1956	1959	1958	1959	1964	1964	1958	

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1951 - 2000

	ANNUAL TOTAL	108432	102667	
ANNUAL MEAN	297	281	317	
HIGHEST ANNUAL MEAN			424	1986
LOWEST ANNUAL MEAN			152	1959
HIGHEST DAILY MEAN	1280	Aug 25	3470	Feb 27
LOWEST DAILY MEAN	(a)160	Dec 22-25	(a)150	Jan 21
ANNUAL SEVEN-DAY MINIMUM	(a)164	Dec 21	(a)159	Jan 20
INSTANTANEOUS PEAK FLOW			3960	Feb 26
INSTANTANEOUS PEAK STAGE			11.23	Feb 26
INSTANTANEOUS LOW FLOW			(a)	(c)55
ANNUAL RUNOFF (CFSM)	.71		.67	.76
ANNUAL RUNOFF (INCHES)	9.65		9.14	10.32
10 PERCENT EXCEEDS	464		352	485
50 PERCENT EXCEEDS	251		232	240
90 PERCENT EXCEEDS	209		180	151

- (a) Ice affected
 (b) From rating curve extended above 9,000 ft³/s
 (c) Result of freezeup
 (e) Estimated due to ice effect or missing record

CHIPPEWA RIVER BASIN

05369000 RED CEDAR RIVER AT MENOMONIE, WI

LOCATION.--Lat 44°53'02", long 91°55'57", in NW ¼ NW ¼ sec.26, T.28 N., R.13 W., Dunn County, Hydrologic Unit 07050007, on right bank at Menomonie, 900 ft downstream from powerplant of Northern States Power Co., and 1,000 ft downstream from Wilson Creek.

DRAINAGE AREA.--1,770 mi².

PERIOD OF RECORD.--June 1907 to September 1908, May 1913 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WDR WI-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 780 ft above sea level (Northern States Power Co. bench mark). Prior to Sept. 3, 1908, nonrecording gage at site 1 mi downstream at different datum. May 9, 1913, to Sept. 30, 1923, water-stage recorder at same site at datum 0.42 ft lower than present datum.

REMARKS.--Records good (see page 12). Flow regulated by powerplants at Menomonie and Cedar Falls. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	925	1150	1210	931	754	4340	1140	1160	1560	988	1690	1030
2	1070	1050	1180	1130	881	3350	961	1160	2080	1190	1460	1120
3	859	936	943	1040	818	2780	1150	1100	2250	1020	1220	1590
4	1070	1090	1010	1080	881	2490	988	1120	1930	1020	1260	1240
5	866	1010	1060	873	793	2200	1000	984	1950	1010	1290	1260
6	1010	1050	1050	805	855	1980	1010	1010	2380	916	1130	1190
7	1040	974	931	972	860	1490	1050	974	1880	1210	1000	1130
8	1020	1010	1030	778	846	731	943	1100	1440	1040	1210	1120
9	1010	1100	1100	927	898	756	958	1280	1190	1390	1220	1120
10	1060	1240	946	1090	916	1110	995	1570	1200	2020	1390	1270
11	998	988	850	955	847	1980	962	1480	1150	3300	1330	2130
12	1090	991	1110	961	819	1690	1010	1440	967	3660	1070	1490
13	986	1090	1200	818	774	1540	804	1340	986	3760	1100	1270
14	997	1070	887	822	863	1520	958	1430	1240	3490	1290	1180
15	1040	913	984	892	873	1530	911	1270	1170	2540	1280	1230
16	1000	1020	756	966	855	1380	989	1390	1300	2190	1890	1230
17	1090	1040	542	946	834	1370	1050	1550	1280	2020	2990	1230
18	1180	961	561	887	831	1370	1020	1440	1440	1660	3720	1020
19	897	959	729	931	885	1320	1300	1610	1500	1700	3120	990
20	907	967	864	829	875	1230	1600	1470	1920	976	2350	1010
21	989	958	703	724	894	1340	1930	1340	2950	1190	1980	979
22	982	1080	529	897	925	1300	2370	1010	3590	1110	1500	1110
23	971	1090	633	762	1070	1290	2090	1170	2880	1050	1560	1010
24	792	1310	792	846	1180	1410	1810	1080	2530	1200	1470	1010
25	1050	1380	928	862	2380	1300	1850	946	2120	1120	1370	1010
26	892	1350	918	892	3770	1350	1570	936	1820	1320	1360	1100
27	847	1140	979	862	7150	1390	1590	941	1610	1500	1200	1120
28	964	1050	897	772	8880	1250	1250	1030	1520	2010	1330	1060
29	924	1070	1070	899	6160	1050	1300	1060	1420	2170	1270	891
30	1030	962	1080	786	---	1100	1180	1280	1340	1710	1240	1120
31	1100	---	1030	910	---	1030	---	1100	---	1370	1240	---
TOTAL	30656	31999	28502	27845	49367	49967	37739	37771	52593	52850	48530	35260
MEAN	989	1067	919	898	1702	1612	1258	1218	1753	1705	1565	1175
MAX	1180	1380	1210	1130	8880	4340	2370	1610	3590	3760	3720	2130
MIN	792	913	529	724	754	731	804	936	967	916	1000	891

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1907 - 2000, BY WATER YEAR (WY)

MEAN	1141	1159	979	898	968	1923	2296	1484	1468	1128	980	1192
MAX	2806	2521	2316	1317	2047	4142	6819	2947	3702	2926	2237	3091
(WY)	1969	1992	1966	1973	1966	1973	1965	1938	1943	1968	1995	1938
MIN	528	566	541	532	536	921	664	612	425	421	383	493
(WY)	1933	1937	1933	1959	1959	1956	1930	1934	1934	1934	1934	1933

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1907 - 2000

ANNUAL TOTAL	472779	483079	1301	
ANNUAL MEAN	1295	1320	1842	(a) 1973
HIGHEST ANNUAL MEAN			711	1931
LOWEST ANNUAL MEAN			29000	Apr 4 1934
HIGHEST DAILY MEAN	3330	Aug 25	529	Dec 22
LOWEST DAILY MEAN	529	Dec 22	652	Dec 17
ANNUAL SEVEN-DAY MINIMUM	652	Dec 17	10000	Feb 27
INSTANTANEOUS PEAK FLOW			7.06	Feb 27
INSTANTANEOUS PEAK STAGE			(b) 40000	Apr 4 1934
10 PERCENT EXCEEDS	2060	1980	(c) 16.00	Apr 4 1934
50 PERCENT EXCEEDS	1090	1100	2170	
90 PERCENT EXCEEDS	896	860	1060	
			638	

(a) Also occurred in 1983

(b) From rating curve extended above 27,000 ft³/s on basis of computed flow over Cedar Falls Dam, 6 mi upstream

(c) From floodmarks

05369500 CHIPPEWA RIVER AT DURAND, WI

LOCATION.--Lat 44°37'42", long 91°58'07" (revised), in SW $\frac{1}{4}$ sec.21, T.25 N., R.13 W., Pepin County, Hydrologic Unit 07050005, on left bank in Durand, 75 ft downstream from bridge on U.S. Highway 10, and 9.5 mi downstream from Red Cedar River.

DRAINAGE AREA.--9,010 mi².

PERIOD OF RECORD.--July 1928 to current year.

REVISED RECORDS.--WSP 785: 1930, 1934(M). WSP 875: 1930 (monthly and yearly runoff). WSP 925: 1938. WSP 1508: 1929(M), 1932. WDR WI-82-1: Drainage area. WDR WI-99-1: 1995(m).

GAGE.--Water-stage recorder. Datum of gage is 694.59 ft above sea level. Prior to Dec. 9, 1930, nonrecording gage at bridge 400 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Flow regulated by powerplants, Moose Lake, Lake Chippewa, Rest Lake, Flambeau Flowage, and Lake Wissota on Chippewa and Flambeau Rivers. Gage-height telemeter and data-collection platform at station.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--A stage of 18.4 ft, from flood marks (levels by U.S. Army Corps of Engineers) occurred Sept. 12, 1884, and has not been exceeded since.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3130	3510	3800	e3200	e3500	22200	7170	7500	6280	8490	6480	4920
2	3770	4510	4080	e4700	e3600	20000	6650	6920	11000	6940	6000	4230
3	3270	3910	3810	e4500	e4000	18600	6380	7210	11800	6690	5960	5580
4	3120	3850	3920	e5000	e4100	15100	7100	6420	12600	6790	6410	5780
5	4020	4240	4320	e4000	e4300	13300	6460	5710	12200	5850	5740	7070
6	3600	3810	4350	e3700	e2500	10800	5500	5830	12900	5870	5110	6630
7	3980	3480	3980	e3500	e2500	9980	5900	5730	13300	6100	6000	6470
8	3520	3650	3440	e3600	e3600	8760	6020	5340	10300	5600	5600	5590
9	4150	3660	3970	e3500	e4300	8410	5800	4800	8470	9480	4630	4740
10	3320	3520	3600	e3400	e4800	10500	5710	5280	7340	22300	6060	5520
11	3210	3530	3250	e4300	e4500	12000	5860	5950	6330	29300	5920	10600
12	4380	3500	3180	e4100	e3000	12100	5550	5450	5080	29900	6050	17500
13	4220	4190	3450	e3600	e2500	10000	5690	5250	5160	24300	5410	17700
14	3990	3470	3600	e3500	e2400	8980	5070	5750	5490	18600	5060	16600
15	4010	3260	3550	e4100	e3900	8580	5480	5490	5700	12100	6270	11500
16	4020	3600	3980	e3100	e4100	7890	5780	6390	6080	11300	13400	8780
17	3640	3490	e2700	e3600	e4300	7500	5110	5570	7060	9970	17100	7830
18	3190	3540	e2300	e3500	e4000	6340	5960	6710	8000	9610	17300	6200
19	3930	3500	e2100	e3600	e2700	5900	6940	7650	9030	8310	12900	5920
20	4300	3460	e2500	e3700	e2600	6160	8190	8420	11100	7930	11900	6000
21	3810	3500	e2500	e3500	e2500	6250	12100	6850	15100	7350	8440	5440
22	3320	3500	e2200	e4000	e3200	5930	18300	5760	27900	7720	8140	5270
23	3610	3740	e1900	e3100	e4000	6070	21200	7300	33600	6480	6570	5130
24	2900	4140	e2300	e2900	e6000	5980	19600	5160	29200	5840	6740	4290
25	2870	4930	e2500	e4200	e10000	6430	12400	5600	22100	6290	6300	4890
26	3900	4200	e2900	e4300	e12000	8240	11300	5080	15500	5830	5710	4670
27	3930	6290	e3000	e4400	15800	9730	11400	4630	14200	5170	6020	4680
28	3880	4530	e2600	e5000	24600	8070	8800	4060	13000	6550	5460	4250
29	3260	4970	e2500	e2600	24700	9380	8170	4270	10600	8380	5910	4830
30	3590	4420	e3500	e2500	---	8620	8280	4560	9980	7030	4850	3970
31	3460	---	e3300	e2400	---	8530	---	5490	---	7220	5500	---
TOTAL	113300	117900	99080	115100	174000	306330	253870	182130	366400	319290	228940	212580
MEAN	3655	3930	3196	3713	6000	9882	8462	5875	12210	10300	7385	7086
MAX	4380	6290	4350	5000	24700	22200	21200	8420	33600	29900	17300	17700
MIN	2870	3260	1900	2400	2400	5900	5070	4060	5080	5170	4630	3970

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2000, BY WATER YEAR (WY)

	MEAN	6513	6843	5358	4792	5100	9696	15730	10400	9330	6376	5151	7023
MAX	20360	20190	11600	8181	11160	25120	34170	28220	37730	19070	12180	27950	
(WY)	1986	1992	1966	1984	1984	1973	1967	1954	1943	1968	1995	1941	
MIN	2103	2209	2335	2289	2404	3645	4718	3336	2699	2271	2026	1954	
(WY)	1977	1977	1934	1934	1990	1931	1931	1931	1934	1934	1934	1948	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1928 - 2000

ANNUAL TOTAL	2377160	2488920	
ANNUAL MEAN	6513	6800	7684
HIGHEST ANNUAL MEAN			11550
LOWEST ANNUAL MEAN			3992
HIGHEST DAILY MEAN	24000	May 10	33600 Jun 23
LOWEST DAILY MEAN	(a) 1900	Dec 23	(a) 1900 Dec 23
ANNUAL SEVEN-DAY MINIMUM	(a) 2260	Dec 18	(a) 2260 Dec 18
INSTANTANEOUS PEAK FLOW			34300 Jun 23
INSTANTANEOUS PEAK STAGE		10.54	Jun 23
INSTANTANEOUS LOW FLOW			16.93
10 PERCENT EXCEEDS	11800	12100	1020
50 PERCENT EXCEEDS	4980	5490	5600
90 PERCENT EXCEEDS	3190	3240	2990

(a) Ice affected

(e) Estimated due to ice effect or missing record

CHIPPEWA RIVER BASIN

05370000 EAU GALLE RIVER AT SPRING VALLEY, WI

LOCATION.--Lat 44°51'10", long 92°14'17", in SE ¼ NE ¼ sec.6, T.27 N., R.15 W., Pierce County, Hydrologic Unit 07050005, on right bank 770 ft downstream from flood control dam, 1,500 ft upstream from Mines Creek, at Spring Valley.

DRAINAGE AREA.--64.1 mi².

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

REVISED RECORDS.--WDR WI-67-1: 1966. WDR WI-81-1: Drainage area. WDR WI-92-1: 1975-79(M), 1977, 1978.

GAGE.--Water-stage recorder, crest-stage gage, and v-notch sharp-crested weir. Datum of gage is 900.00 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to July 31, 1957, nonrecording gage at site 850 ft downstream at datum of 912.45 ft above sea level. Aug. 1, 1957, to June 6, 1966, nonrecording gage at downstream site at datum of 910.45 ft above sea level. June 7, 1966, to Oct. 31, 1968, nonrecording gage at downstream site at datum of 909.45 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor(see page 12). Low flow slightly regulated and high flow completely regulated by flood-control dam 770 ft upstream. Data-collection platform at station.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--Maximum stage since at least 1894, that of Sept. 18, 1942, 19.98 ft, with datum at 909.45 ft above sea level, from floodmarks, discharge, 33,000 ft³/s estimated by U.S. Army Corps of Engineers on basis of slope-area measurement by Geological Survey of peak discharge of 39,000 ft³/s at Elmwood, drainage area, 91.9 mi².

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	16	15	14	14	32	14	15	70	18	11	8.3
2	15	15	15	15	14	28	15	15	137	19	6.8	11
3	14	15	15	15	14	23	16	14	62	19	7.1	18
4	14	15	15	14	14	21	15	14	44	18	12	17
5	15	15	15	15	14	21	15	14	192	18	16	15
6	15	15	15	15	14	20	14	14	96	18	15	15
7	15	15	15	14	14	19	13	13	54	23	14	25
8	16	15	15	14	13	20	14	14	33	33	16	37
9	16	16	15	14	14	21	13	14	25	297	18	37
10	15	16	14	16	14	24	13	14	22	161	17	37
11	15	16	14	15	14	21	14	15	20	50	16	37
12	15	15	15	15	14	19	14	15	22	20	16	14
13	40	15	14	15	14	18	14	17	23	21	16	2.1
14	24	15	14	15	14	17	14	18	24	21	16	4.4
15	2.9	15	14	14	14	17	14	16	24	20	14	5.2
16	4.5	15	14	14	14	17	15	16	23	20	11	7.0
17	8.7	15	14	14	14	16	14	15	23	21	12	7.1
18	12	15	14	14	14	16	15	21	23	22	15	9.4
19	14	15	15	15	14	17	16	31	e23	23	17	13
20	15	15	15	15	13	16	20	25	e400	23	16	15
21	15	15	14	14	14	16	41	20	e310	22	16	14
22	14	16	14	14	14	16	35	25	e66	22	16	15
23	13	19	14	14	17	16	25	37	e40	22	16	15
24	14	19	14	14	60	17	20	27	31	21	17	15
25	15	17	14	14	587	19	18	20	26	22	17	15
26	15	16	14	14	477	18	14	22	25	21	17	15
27	15	16	15	13	110	18	12	29	21	18	17	15
28	15	15	15	13	52	16	13	20	15	16	17	15
29	15	14	15	13	39	16	14	19	18	16	17	15
30	18	15	15	13	---	15	14	28	18	16	17	15
31	17	---	15	14	---	14	---	32	---	16	12	---
TOTAL	467.1	466	451	442	1648	584	498	609	1910	1077	460.9	483.5
MEAN	15.1	15.5	14.5	14.3	56.8	18.8	16.6	19.6	63.7	34.7	14.9	16.1
MAX	40	19	15	16	587	32	41	37	400	297	18	37
MIN	2.9	14	14	13	13	14	12	13	15	16	6.8	2.1

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2000, BY WATER YEAR (WY)

	MEAN	25.6	27.2	18.5	15.4	22.6	75.2	63.4	36.2	41.5	27.6	28.3	30.3
MAX	81.3	86.2	39.7	23.0	71.6	164	128	94.9	148	94.1	90.1	153	
(WY)	1971	1971	1978	1997	1981	1989	1969	1973	1980	1978	1995	1986	
MIN	10.4	7.24	4.22	5.21	5.77	10.1	16.6	12.4	11.6	12.5	5.95	9.81	
(WY)	1970	1969	1969	1969	1969	1970	2000	1977	1969	1988	1969	1969	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1969 - 2000

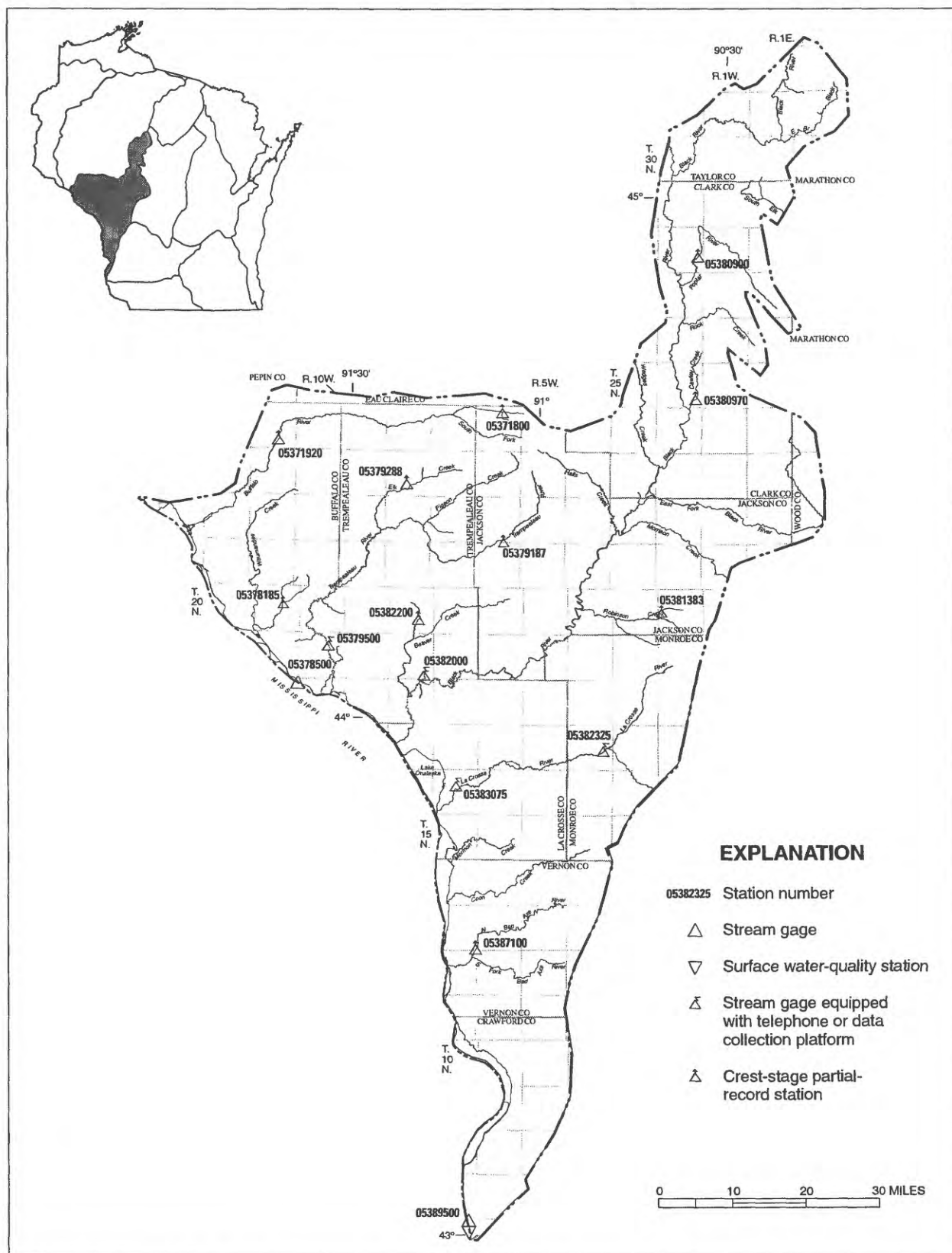
ANNUAL TOTAL	8862.1	9096.5	
ANNUAL MEAN	24.3	24.9	34.3
HIGHEST ANNUAL MEAN			55.8
LOWEST ANNUAL MEAN			21.2
HIGHEST DAILY MEAN			2190
LOWEST DAILY MEAN	(a)2.9	(a)2.1	(b).00
ANNUAL SEVEN-DAY MINIMUM	(a)10	(a)6.9	.91
INSTANTANEOUS PEAK FLOW		1180	(c)3030
INSTANTANEOUS PEAK STAGE		16.89	(c)19.90
INSTANTANEOUS LOW FLOW		(a)1.2	(b).00
10 PERCENT EXCEEDS	33	28	47
50 PERCENT EXCEEDS	18	15	18
90 PERCENT EXCEEDS	15	14	12

(a) Result of work at dam

(b) Flow shut off at flood-control dam upstream due to request by Wisconsin Department of Natural Resources for eradication of rough fish to improve sport fishing

(c) Peak discharge and stage prior to construction of flood-control reservoir occurred Apr. 15, 1954, and was 7,000 ft³/s and 12.50 ft (datum then in use), respectively

(e) Estimated due to missing record



Base from U.S. Geological Survey 1:100,000 digital data;
modified by Wisconsin Department of Natural Resources.
Wisconsin Transverse Mercator projection.

TREMPEALEAU-BLACK RIVER BASIN

UPPER MISSISSIPPI RIVER MAIN STEM

05378500 MISSISSIPPI RIVER AT WINONA, MN

LOCATION.--Lat 44°03'21", long 91°38'16", in sec. 23, T.107 N., R.7 W., Winona County, Hydrologic Unit 07040003, on right bank at Winona pumping station in Winona, 9.5 mi upstream from Trempealeau River, and at mile 725.7 upstream from the Ohio River.

DRAINAGE AREA.--59,200 mi² (approximately).

PERIOD OF RECORD.--June 1928 to current year. Gage-height records collected in this vicinity since 1878 are contained in reports of Mississippi River Commission.

GAGE.--Water-stage recorder. Datum of gage is 639.64 ft above sea level (NGVD of 1929). June 10, 1928 to Apr. 15, 1931, nonrecording gage at site 800 ft upstream. Prior to Oct. 1, 1929, at datum 0.20 ft higher and Oct. 1, 1929 to Apr. 15, 1931, at datum 0.12 ft lower. Apr. 16, 1931 to Nov. 12, 1934, nonrecording gage at present site and datum. Since Mar. 31, 1937, auxiliary water-stage recorder 2.7 mi upstream at tailwater of navigation dam 5A.

REMARKS.-- Records good except those for estimated daily discharges, which are fair to poor (see page 12). Some regulation by reservoirs, navigation dams and power plants at low and medium stages. Daily discharges for some estimated days provided by the U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Minimum gage height, -3.38 ft, Aug. 31, 1934 (prior to dam construction in 1936); minimum gage height since 1938, after completion of dam, 1.95 ft, Jan. 27, 1944.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21200	21000	20700	e16200	e14600	50100	31300	23600	31900	35500	20400	12700
2	21300	20900	19000	e16200	e14400	49700	28900	22100	35800	31900	19000	12300
3	21400	20200	17900	e16200	e14200	49500	26800	19900	37700	30500	18900	13600
4	21400	19700	18100	e16200	e14200	49300	26200	e20200	42200	29300	18800	15000
5	21200	20800	18300	e16200	e14200	48700	24700	e19900	45500	28200	17800	16700
6	21600	21800	19300	e16000	e14100	46800	22800	e19700	45700	26200	16000	16100
7	21300	21600	19500	e16000	e14100	45100	22500	e19300	47400	22700	15700	13700
8	20800	21200	19400	e16000	e14100	43600	22400	e18700	49100	22400	15200	15300
9	21600	21600	19200	e15800	e14100	42000	22800	17900	48100	27300	15800	16400
10	21700	21400	19500	e15900	e14100	39200	23600	18700	46300	35700	16700	15500
11	21800	21300	19000	e16200	e14200	37700	23200	19300	43000	41700	16800	15800
12	22000	20700	18600	e16200	e14200	38200	23200	22400	41200	51400	16500	17400
13	21700	20000	18100	e16100	e14100	38800	22500	24200	37600	61200	16200	23000
14	21200	19500	17300	e16100	e14100	38900	21500	24900	36500	62500	16600	26100
15	19700	19000	e14000	e16100	e14100	37500	21000	25300	34100	62200	16100	23900
16	18600	18400	e12200	e16000	e13300	36100	21000	26500	32400	57600	16200	18800
17	19100	18500	e10300	e15900	e12900	35400	21000	29200	30700	52900	19300	17000
18	19500	18700	e9500	e14700	e12900	32200	21000	32200	28400	49400	26200	15600
19	19400	17500	e8800	e15000	e13000	31000	21200	33200	27700	45900	29100	12300
20	19500	17500	e8000	e14900	e13100	29900	22000	31500	32600	44800	28000	10000
21	19600	17600	e7600	e13400	e13100	26700	25000	33600	39200	42500	26500	10500
22	19100	17900	e7600	e13000	e13200	25400	27100	36200	42500	38600	22700	11000
23	19500	19900	e7600	e13100	e14000	25500	30400	35800	46200	34600	21000	11600
24	19900	20900	e7800	e13200	17000	25100	35000	35900	51000	30200	19400	12300
25	19500	20900	e8100	e13300	22800	24300	37500	36000	56800	26100	17600	12300
26	19200	20200	e8800	e13500	28100	24100	36700	35100	54700	24400	16900	12400
27	20200	20200	e9600	e13500	29200	25300	32700	33600	50500	24400	17700	12300
28	19700	21300	e10900	e13600	36300	27200	31000	32600	45700	24000	18000	11900
29	20200	22200	e12000	e13700	45900	29100	28900	29800	42100	23200	18200	11700
30	20100	22200	e13800	e15100	---	31200	25100	27200	39500	22700	17800	10900
31	21400	---	e15700	e15300	---	31900	---	26700	---	22000	15400	---
TOTAL	634400	604600	436200	468600	497600	1115500	779000	831200	1242100	1132000	586500	444100
MEAN	20460	20150	14070	15120	17160	35980	25970	26810	41400	36520	18920	14800
MAX	22000	22200	20700	16200	45900	50100	37500	36200	56800	62500	29100	26100
MIN	18600	17500	7600	13000	12900	24100	21000	17900	27700	22000	15200	10000
AC-FT	1258000	1199000	865200	929500	987000	2213000	1545000	1649000	2464000	2245000	1163000	880900
CFSM	.35	.34	.24	.26	.29	.61	.44	.45	.70	.62	.32	.25

05378500 MISSISSIPPI RIVER AT WINONA, MN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	22570	22980	17750	15300	15620	30680	61280	48530	39340	31930	21610	22390
MAX	85950	50040	40440	30480	35900	86420	152600	111500	100200	118800	67560	69490
(WY)	1987	1972	1992	1983	1984	1983	1965	1986	1993	1993	1993	1986
MIN	6774	7367	6286	6742	7874	9023	12810	11930	8450	7063	5391	6790
(WY)	1934	1934	1934	1940	1977	1934	1931	1931	1934	1934	1934	1933

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR				FOR 2000 WATER YEAR				WATER YEARS 1928 - 2000			
ANNUAL TOTAL	12562500				8771800							
ANNUAL MEAN	34420				23970				29200			
HIGHEST ANNUAL MEAN									56850			1986
LOWEST ANNUAL MEAN									9742			1934
HIGHEST DAILY MEAN	109000				May 24	62500	Jul 14	264000	Apr 20	1965		
LOWEST DAILY MEAN	7600				Dec 21	7600	Dec 21	2250	Dec 29	1933		
ANNUAL SEVEN-DAY MINIMUM	7930				Dec 19	7930	Dec 19	3210	Dec 27	1933		
INSTANTANEOUS PEAK FLOW						62700	Jul 14	268000	Apr 19	1965		
INSTANTANEOUS PEAK STAGE						8.31	Jul 14	(a)20.77	Apr 19	1965		
INSTANTANEOUS LOW FLOW								(b)1940	Dec 12	1980		
ANNUAL RUNOFF (AC-FT)	24920000					17400000		21150000				
ANNUAL RUNOFF (CFSM)	.58					.40		.49				
10 PERCENT EXCEEDS	67100					41800		60100				
50 PERCENT EXCEEDS	27100					20900		21100				
90 PERCENT EXCEEDS	16700					13200		10000				

(a) From highwater mark

(b) Result of ice jam upstream

(c) Estimated due to ice effect or missing record

TREMPEALEAU RIVER BASIN

05379500 TREMPEALEAU RIVER AT DODGE, WI

LOCATION.--Lat 44°07'55", long 91°33'12"(revised), in SE ¼ sec.10, T.19 N., R.10 W., Trempealeau County, Hydrologic Unit 07040005, near left bank on downstream side of highway bridge in Dodge, 9.0 mi upstream from mouth.

DRAINAGE AREA.--643 mi².

PERIOD OF RECORD.--December 1913 to September 1919, April 1934 to current year.

REVISED RECORDS.--WSP 1238: Drainage area. WSP 1388: 1919(M). WSP 1438: 1914, 1915-18(M), 1934-44(M), 1946-49(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 661.42 ft above sea level. Prior to July 14, 1977, nonrecording gage at same site and datum. Prior to Oct. 1, 1966, datum 2.00 ft higher.

REMARKS.--Records fair except those for estimated daily discharges, which are fair to poor (see page 12). Gage-height telemeter and data-collection platform at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	359	352	370	e270	e300	665	391	390	919	554	513	384
2	385	349	377	e280	e300	608	391	383	1600	537	659	473
3	387	347	381	e300	e300	543	388	375	1710	547	516	617
4	382	350	384	e310	e290	506	386	369	1630	548	464	635
5	373	350	385	e320	e290	490	385	364	1600	529	452	535
6	366	349	379	e330	e310	480	379	358	1630	519	461	453
7	362	350	373	e350	e320	474	378	353	1510	514	449	418
8	371	352	370	e360	e310	485	383	352	1060	504	448	400
9	370	351	369	e350	e320	504	378	358	757	618	437	388
10	366	353	369	e330	e320	496	374	355	655	1120	422	381
11	358	356	370	e350	e320	474	377	372	642	1260	413	401
12	353	356	365	e360	e310	450	378	414	719	1010	404	410
13	353	346	360	e360	e310	438	378	413	699	1280	430	416
14	349	341	360	e360	e300	432	377	387	841	1380	411	404
15	349	348	359	e360	e300	427	376	362	965	879	403	375
16	353	348	351	e350	e310	420	383	353	1100	702	392	366
17	361	349	e330	e360	e310	412	401	358	1010	628	510	358
18	358	352	e310	e370	e320	407	406	527	819	576	606	351
19	356	352	e330	e370	e320	411	412	773	675	551	518	347
20	353	352	e340	e370	e320	416	463	646	770	536	466	353
21	351	351	e340	e350	e380	416	627	521	1250	520	428	349
22	344	350	e320	e320	e480	412	617	464	1470	507	417	349
23	343	414	e270	e320	e620	411	534	438	1170	492	412	357
24	342	562	e280	e320	e1100	426	506	417	803	481	405	357
25	345	557	e300	e330	e1500	464	485	394	712	474	397	352
26	345	478	e290	e320	2000	476	447	380	663	493	482	346
27	345	431	e290	e320	1950	451	422	378	622	487	482	341
28	344	408	e280	e310	1120	429	411	388	593	475	479	337
29	343	392	e270	e290	724	414	399	389	602	468	443	335
30	353	388	e260	e290	---	404	391	390	589	463	403	332
31	356	---	e250	e300	---	395	---	393	---	454	383	---
TOTAL	11075	11334	10382	10280	16054	14236	12623	12814	29785	20106	14105	11920
MEAN	357	378	335	332	554	459	421	413	993	649	455	397
MAX	387	562	385	370	2000	665	627	773	1710	1380	659	635
MIN	342	341	250	270	290	395	374	352	589	454	383	332
CFSM	.56	.59	.52	.52	.86	.71	.65	.64	1.54	1.01	.71	.62
IN.	.64	.66	.60	.59	.93	.82	.73	.74	1.72	1.16	.82	.69

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2000, BY WATER YEAR (WY)

MEAN	377	391	325	282	339	812	681	488	504	426	370	411
MAX	1314	856	953	679	878	2325	2146	1320	1516	1332	1050	1239
(WY)	1955	1992	1983	1973	1981	1936	1965	1973	1993	1993	1975	1992
MIN	169	180	139	117	119	289	301	195	183	163	138	153
(WY)	1951	1950	1959	1959	1959	1968	1964	1934	1964	1964	1964	1948

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1914 - 2000

ANNUAL TOTAL	196194	174714	
ANNUAL MEAN	538	477	452
HIGHEST ANNUAL MEAN			813
LOWEST ANNUAL MEAN			237
HIGHEST DAILY MEAN	1850	Jul 23	12900
LOWEST DAILY MEAN	(a)250	Dec 31	(a)98
ANNUAL SEVEN-DAY MINIMUM	(a)277	Dec 25	(a)106
INSTANTANEOUS PEAK FLOW			17400
INSTANTANEOUS PEAK STAGE			9.10
ANNUAL RUNOFF (CFSM)	.84	.74	(b)10.35
ANNUAL RUNOFF (INCHES)	11.35	10.11	.70
10 PERCENT EXCEEDS	867	682	735
50 PERCENT EXCEEDS	456	387	347
90 PERCENT EXCEEDS	330	320	200

(a) Ice affected

(b) Datum then in use

(c) Estimated due to ice effect or missing record

05382000 BLACK RIVER NEAR GALESVILLE, WI

LOCATION.--Lat 44°03'37", long 91°17'14" (revised), in SW ¼ sec.1, T.18 N., R.8 W., LaCrosse County, Hydrologic Unit 07040007, on left bank 1,000 ft upstream from bridge on U.S. Highway 53, 4.5 mi southeast of Galesville, and 4.8 mi downstream from Fleming Creek.

DRAINAGE AREA.--2,080 mi².

PERIOD OF RECORD.--December 1931 to current year.

REVISED RECORDS.--WSP 1438: 1932-34, 1935-36(M). WDR WI-81-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 658.43 ft above sea level. Prior to Apr. 2, 1941, nonrecording gage on bridge 1,000 ft downstream at same datum. Apr. 3, 1941, to Oct. 1, 1971, water-stage recorder at site 1,100 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Flow partly regulated by Hatfield Dam Powerplant where drainage area is 1,290 mi² and storage capacity is 272,000,000 ft³. Water diverted periodically from basin into Lemonweir River basin for cranberry culture. Gage-height telemeter and data-collection platform at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	633	597	786	e480	e540	6070	1080	1180	1510	2110	951	786
2	657	592	727	e500	e520	5390	1030	1110	3510	1750	930	778
3	645	588	748	e520	e520	4620	974	1020	6940	1690	893	804
4	637	594	737	e540	e500	3430	925	904	13800	1580	854	835
5	642	591	732	e560	e520	2800	837	882	12000	1470	1010	1220
6	627	579	729	e580	e540	2440	777	848	9640	1500	1020	1740
7	610	578	732	e640	e560	2110	793	752	10400	1330	926	1870
8	615	584	721	e640	e560	1940	802	741	9730	1290	871	1560
9	619	582	701	e620	e560	1780	778	757	6790	e1300	820	1150
10	612	580	692	e580	e540	2000	732	733	4470	e3700	1130	965
11	599	577	665	e620	e540	2000	730	712	3110	5040	863	854
12	596	615	666	e640	e540	2140	727	729	2690	4810	851	1040
13	600	600	657	e640	e540	1970	694	755	2330	3740	916	3770
14	593	588	651	e640	e520	1710	711	800	2230	2840	896	5140
15	589	579	644	e620	e520	1510	701	792	2450	2240	956	5050
16	608	580	646	e600	e540	1410	691	738	3750	1810	919	3830
17	621	578	651	e640	e560	1230	685	758	3820	1540	1310	2570
18	627	580	518	e640	e560	1190	671	1010	4140	1380	3380	1820
19	637	584	e560	e660	e560	1160	705	1670	3660	1260	3670	1420
20	643	580	e600	e640	e540	1100	837	3740	3260	1180	2600	1180
21	640	578	e600	e580	e540	1060	893	3620	3530	1130	1860	1050
22	634	576	e520	e560	e540	1070	2040	3010	5860	1050	1480	964
23	624	657	e480	e560	e560	1030	3030	2550	9140	1010	1230	949
24	621	755	e500	e560	e680	1040	3250	1970	10900	981	1020	886
25	621	860	e520	e580	e900	1050	3330	1560	8750	943	914	850
26	625	988	e520	e580	e2100	1130	2720	1250	5660	921	952	844
27	613	947	e520	e560	3710	1250	2270	1130	3820	927	1000	817
28	606	869	e500	e540	5210	1240	1780	1050	2860	931	913	812
29	599	867	e470	e520	6300	1300	1520	878	2530	917	821	804
30	598	857	e450	e500	---	1180	1360	832	2370	887	809	741
31	595	---	e450	e520	---	1110	---	882	---	883	843	---
TOTAL	19186	19680	19093	18060	31320	60460	38073	39363	165650	54140	37608	47099
MEAN	619	656	616	583	1080	1950	1269	1270	5522	1746	1213	1570
MAX	657	988	786	660	6300	6070	3330	3740	13800	5040	3670	5140
MIN	589	576	450	480	500	1030	671	712	1510	883	809	741
CFSM	.30	.32	.30	.28	.52	.94	.61	.61	2.65	.84	.58	.75
IN.	.34	.35	.34	.32	.56	1.08	.68	.70	2.96	.97	.67	.84

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2000, BY WATER YEAR (WY)

	MEAN	1276	1419	982	733	772	3014	4613	2508	2286	1282	937	1519
MAX	5231	4401	3468	2661	3664	9521	12210	7993	11880	4361	4421	9373	
(WY)	1987	1935	1992	1932	1984	1973	1967	1960	1993	1978	1995	1938	
MIN	277	337	320	268	263	406	1269	591	427	322	293	306	
(WY)	1959	1949	1959	1959	1959	1934	2000	1934	1988	1933	1964	1948	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1932 - 2000

ANNUAL TOTAL	549570	549732	
ANNUAL MEAN	1506	1502	1778
HIGHEST ANNUAL MEAN			3456
LOWEST ANNUAL MEAN			699
HIGHEST DAILY MEAN	9910	Jul 23	13800
LOWEST DAILY MEAN	(a)420	Jan 4	(a)450
ANNUAL SEVEN-DAY MINIMUM	(a)420	Jan 4	(a)481
INSTANTANEOUS PEAK FLOW			15600
INSTANTANEOUS PEAK STAGE		12.06	Jun 4
INSTANTANEOUS LOW FLOW			180
ANNUAL RUNOFF (CFSM)	.72	.72	.85
ANNUAL RUNOFF (INCHES)	9.83	9.83	11.61
10 PERCENT EXCEEDS	3470	3520	3920
50 PERCENT EXCEEDS	829	849	885
90 PERCENT EXCEEDS	577	560	388

(a) Ice affected

(b) Gage height, 14.63 ft, at location 1,000 ft downstream

(c) Estimated due to ice effect or missing record

LA CROSSE RIVER BASIN

05382325 LA CROSSE RIVER AT SPARTA, WI

LOCATION.--Lat 43°56'15", long 90°48'38", in SE ¼ NE ¼ sec.23, T.17 N., R.4 W., Monroe County, Hydrologic Unit 07040006, on left bank, 800 ft downstream from bridge on South Water Street, in Sparta, 0.35 mi downstream from Beaver Creek.

DRAINAGE AREA.--167 mi².

PERIOD OF RECORD.--July 1992 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 760.73 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Gage-height telemeter at station. Occasional regulation from two dams upstream from gage.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	135	135	139	132	125	181	116	92	318	183	144	128
2	155	134	141	135	123	152	118	88	696	184	145	132
3	147	132	147	134	125	142	100	91	404	201	139	166
4	141	132	155	133	127	139	116	86	311	186	136	151
5	139	139	147	130	125	137	115	89	492	182	143	135
6	136	132	140	131	124	133	115	87	347	177	151	130
7	136	133	140	130	125	135	116	84	247	177	141	129
8	145	141	139	131	122	141	115	84	215	184	135	131
9	146	140	138	132	123	156	114	87	205	240	132	127
10	139	142	135	150	125	141	110	72	196	262	129	125
11	135	141	134	144	122	132	111	92	190	222	127	132
12	135	142	137	136	116	130	112	100	183	198	129	136
13	135	137	135	130	127	134	111	93	194	196	142	124
14	133	136	136	125	121	135	109	86	255	182	141	136
15	135	140	138	e120	122	131	110	83	231	172	132	126
16	141	133	133	e130	120	126	118	84	430	166	129	124
17	137	133	127	130	118	122	119	190	354	159	201	121
18	135	136	121	130	120	125	116	678	265	158	171	119
19	136	134	135	126	120	127	129	358	208	160	146	120
20	135	132	e130	e120	120	126	199	235	344	160	139	126
21	135	133	e130	e120	121	126	197	201	352	157	135	122
22	134	134	e120	e120	164	129	159	197	273	155	136	123
23	136	210	e120	e120	224	129	156	185	221	153	139	125
24	134	201	e120	e110	192	139	140	175	208	151	134	122
25	135	161	129	e100	175	139	131	167	206	152	131	120
26	137	153	132	e98	178	132	125	159	206	191	178	120
27	135	148	132	e96	167	132	123	160	203	198	185	118
28	134	143	e130	e110	148	128	123	162	204	165	152	118
29	138	139	135	e120	138	128	127	160	202	164	141	117
30	140	136	135	127	---	108	116	161	192	157	135	117
31	137	---	132	126	---	85	---	165	---	148	131	---
TOTAL	4271	4282	4162	3876	3957	4120	3766	4751	8352	5540	4449	3820
MEAN	138	143	134	125	136	133	126	153	278	179	144	127
MAX	155	210	155	150	224	181	199	678	696	262	201	166
MIN	133	132	120	96	116	85	100	72	183	148	127	117
CFSM	.82	.85	.80	.75	.82	.80	.75	.92	1.67	1.07	.86	.76
IN.	.95	.95	.93	.86	.88	.92	.84	1.06	1.86	1.23	.99	.85

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2000, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	154	154	139	131	145	174	199	183	209
MAX	184	179	160	142	168	213	324	279	323
(WY)	1996	1996	1995	1995	1994	1996	1993	1993	1993
MIN	123	124	118	113	133	133	126	153	140
(WY)	1997	1998	1998	1998	1993	2000	2000	2000	1997

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1992 - 2000

	1999	2000	1992-2000
ANNUAL TOTAL	57045	55346	
ANNUAL MEAN	156	151	166
HIGHEST ANNUAL MEAN			211
LOWEST ANNUAL MEAN			142
HIGHEST DAILY MEAN	526	696	1050
LOWEST DAILY MEAN	(a)110	(b)72	(b)72
ANNUAL SEVEN-DAY MINIMUM	(a)119	(b)84	(b)84
INSTANTANEOUS PEAK FLOW		915	1270
INSTANTANEOUS PEAK STAGE		7.34	8.94
ANNUAL RUNOFF (CFSM)	.94	.91	.99
ANNUAL RUNOFF (INCHES)	12.71	12.33	13.51
10 PERCENT EXCEEDS	192	201	216
50 PERCENT EXCEEDS	144	135	151
90 PERCENT EXCEEDS	131	116	120

- (a) Ice affected
(b) Regulation at dam upstream
(e) Estimated due to ice effect or missing record

05383075 LA CROSSE RIVER AT LA CROSSE WI

LOCATION.--Lat 43°51'39", long 91°12'37", in NE 1/4 SE 1/4 sec.16, T.16 N., R.7 W., La Crosse County, Hydrologic Unit 07040006, on left bank just downstream from Great River State Trail, 3.9 mi northeast of post office in La Crosse.

DRAINAGE AREA.--471 mi².

PERIOD OF RECORD.--October 1999 to September 2000.

GAGE.--Water-stage recorder. Elevation of gage is 650 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	336	328	327	300	e280	393	260	303	556	488	329	340
2	361	320	299	e300	e280	500	255	307	536	437	352	317
3	334	271	293	319	e290	488	310	297	666	532	444	409
4	356	340	313	290	e280	324	294	270	884	471	289	322
5	350	269	379	e300	e280	337	295	280	939	546	366	354
6	396	287	358	285	e280	368	250	253	889	602	423	372
7	328	288	332	311	e280	379	311	231	842	505	314	320
8	325	340	325	307	e280	485	270	281	707	490	433	296
9	345	318	371	269	e280	326	252	277	642	595	325	290
10	315	313	304	e270	e290	357	307	277	506	632	330	289
11	343	316	277	267	e320	351	319	245	492	657	283	344
12	359	322	286	e270	e300	351	289	285	378	685	288	365
13	350	325	316	276	e290	358	274	255	391	419	292	279
14	322	309	315	269	e300	336	310	242	569	505	333	295
15	315	301	307	283	e340	361	273	296	518	500	331	331
16	316	301	303	234	e310	338	269	311	970	376	313	295
17	331	294	244	286	e280	354	316	353	821	487	398	284
18	325	305	237	284	e270	300	318	790	873	347	383	311
19	315	297	224	e280	e260	289	314	844	777	340	484	323
20	348	295	302	e280	e250	324	344	1180	829	360	429	326
21	309	304	e290	e280	e260	347	376	833	692	338	305	256
22	306	294	e280	e270	e300	344	462	574	767	e340	364	290
23	316	404	e270	e270	e430	323	337	518	773	e330	358	303
24	314	491	e270	e250	743	331	457	502	590	e330	334	283
25	326	471	e300	e230	584	353	344	373	582	e330	325	330
26	314	471	e300	e230	537	347	333	388	515	e360	368	316
27	243	328	e300	e230	511	341	321	357	414	e420	318	286
28	316	403	e300	e260	491	327	288	355	515	488	359	283
29	443	295	e300	e270	489	342	274	364	508	490	383	274
30	313	308	299	e290	---	338	275	349	402	477	359	253
31	318	---	301	e290	---	327	---	363	---	471	362	---
TOTAL	10288	9908	9322	8550	10085	11039	9297	12553	19543	14348	10974	9336
MEAN	332	330	301	276	348	356	310	405	651	463	354	311
MAX	443	491	379	319	743	500	462	1180	970	685	484	409
MIN	243	269	224	230	250	289	250	231	378	330	283	253

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2000, BY WATER YEAR (WY)

	MEAN	330	301	276	348	356	310	405	651	463	354	311
MAX	332	330	301	276	348	356	310	405	651	463	354	311
(WY)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
MIN	332	330	301	276	348	356	310	405	651	463	354	311
(WY)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000

SUMMARY STATISTICS

FOR 2000 WATER YEAR

ANNUAL TOTAL	135243	
ANNUAL MEAN	370	
HIGHEST DAILY MEAN	1180	May 20
LOWEST DAILY MEAN	224	Dec 19
ANNUAL SEVEN-DAY MINIMUM	(a) 249	Jan 22
INSTANTANEOUS PEAK FLOW	(b) 1410	Jun 18
INSTANTANEOUS PEAK STAGE	7.70	May 20
INSTANTANEOUS LOW FLOW	124	Oct 28
10 PERCENT EXCEEDS	518	
50 PERCENT EXCEEDS	324	
90 PERCENT EXCEEDS	270	

(a) Ice affected

(b) Gage height, 7.51 ft

(e) Estimated due to ice effect or missing record

MISSISSIPPI RIVER MAIN STEM

05389500 MISSISSIPPI RIVER AT MCGREGOR, IA

LOCATION.--Lat 43°01'29", long 91°10'21", in SE 1/4 SE 1/4 sec.22, T.95 N., R.3 W., Clayton County, Hydrologic Unit 07060001, on right bank in city park at east end of Main Street in McGregor, 2.6 mi upstream from Wisconsin River, 4.3 mi downstream from Yellow River, and at mile 633.4 upstream from Ohio River.

DRAINAGE AREA.--67,500 mi², approximately.

PERIOD OF RECORD.--August 1936 to current year.

REVISED RECORDS.--WDR IA-75-1: 1974.

GAGE.--Water-stage recorder. Datum of gage is 604.84 ft above sea level. Prior to June 1, 1937, and since June 2, 1939, auxiliary water-stage recorder; June 1, 1937 to June 1, 1939, auxiliary nonrecording gage 14.1 mi upstream in tailwater of dam 9, at datum 5.30 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Minor flow regulation caused by navigation dams. U.S. Geological Survey satellite and telephone modem data collection platform at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1828, that of Apr. 24, 1965.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25200	24800	24600	e21000	e20400	58000	39800	32700	46300	58300	29500	21900
2	26200	26300	23100	e20000	e21400	63000	40000	29800	65800	51800	27000	16100
3	26500	27700	22900	e21000	e21200	64300	37800	27400	69000	48300	26100	e11500
4	26700	25800	23100	e18000	e21200	64100	34000	26100	72100	44100	26200	e17100
5	26700	22600	23100	e17000	e21000	63700	31500	25700	74900	42300	26100	20700
6	28000	22400	22700	e19000	e20900	61100	30200	25800	75900	39800	26700	25900
7	29000	22800	20500	e18000	e20700	58600	29300	25700	77100	36500	26500	21700
8	29000	23900	19300	e19000	e19500	56600	30400	25500	78000	32700	24500	19900
9	28800	25600	19900	e20000	e19600	55500	31700	24900	77100	33000	20100	20400
10	28400	26400	23000	e19000	e19800	52700	30500	24800	76500	39000	18400	19900
11	28300	26700	23500	e18000	e19900	49600	28700	23600	75100	51100	19000	19600
12	28300	26700	21800	e17000	e19900	45700	27500	26600	71600	61500	20500	22100
13	27800	27000	20800	e18000	e19900	45000	27800	30400	67200	69500	21300	26000
14	27100	26700	19600	e19000	e20000	45500	29900	30200	62300	74100	23500	31800
15	23800	23600	19800	e20000	e20000	46000	30200	30800	56600	75800	24400	36500
16	21500	19300	14100	e19000	e20100	46100	29700	33200	56200	76100	24500	36400
17	21600	17900	e11000	e19000	e20100	45800	28300	35400	57700	75600	26200	30600
18	21800	18400	e10000	e19500	e19900	44400	27800	43700	57600	73000	28800	27600
19	22800	19900	e10000	e19600	e19700	42100	27600	47900	54500	68300	32900	19500
20	23400	21200	e9500	e19400	e19300	38800	29600	49500	49500	62300	39900	e13700
21	23300	21100	e9000	e18400	e19000	36900	31500	50700	51400	57900	40300	e13100
22	23300	21400	e9500	e18400	e18700	35300	32700	51400	55600	54200	38800	e12400
23	23000	23800	e10000	e18200	e18900	32600	35500	51000	59800	49600	34400	e16300
24	22800	28000	e11000	e17900	e19900	30400	40400	50400	62700	43700	27000	11500
25	22600	28700	e10000	e17800	e25600	30500	45600	49400	66200	36300	24500	14100
26	23200	26600	e11000	e17200	37700	30700	47600	47800	69000	31800	24400	13400
27	24700	25500	e13000	e17300	41000	32200	47700	45300	71600	31500	24400	13400
28	24600	25500	e15000	e17400	45800	33800	46500	43000	72100	32400	25000	12500
29	24500	26300	e19000	e17500	50400	35800	43600	39300	70600	33200	26000	e14700
30	24600	27000	e17000	e17600	---	38300	37400	37000	65900	33300	26600	e14000
31	23600	---	e19000	e17800	---	39600	---	35900	---	32100	25500	---
TOTAL	781100	729600	525800	576000	681500	1422700	1030800	1120900	1965900	1549100	829000	594300
MEAN	25200	24320	16960	18580	23500	45890	34360	36160	65530	49970	26740	19810
MAX	29000	28700	24600	21000	50400	64300	47700	51400	78000	76100	40300	36500
MIN	21500	17900	9000	17000	18700	30400	27500	23600	46300	31500	18400	11500
AC-FT	1549000	1447000	1043000	1142000	1352000	2822000	2045000	2223000	3899000	3073000	1644000	1179000
CFSM	.37	.36	.25	.28	.35	.68	.51	.54	.97	.74	.40	.29
IN.	.43	.40	.29	.32	.38	.78	.57	.62	1.08	.85	.46	.33

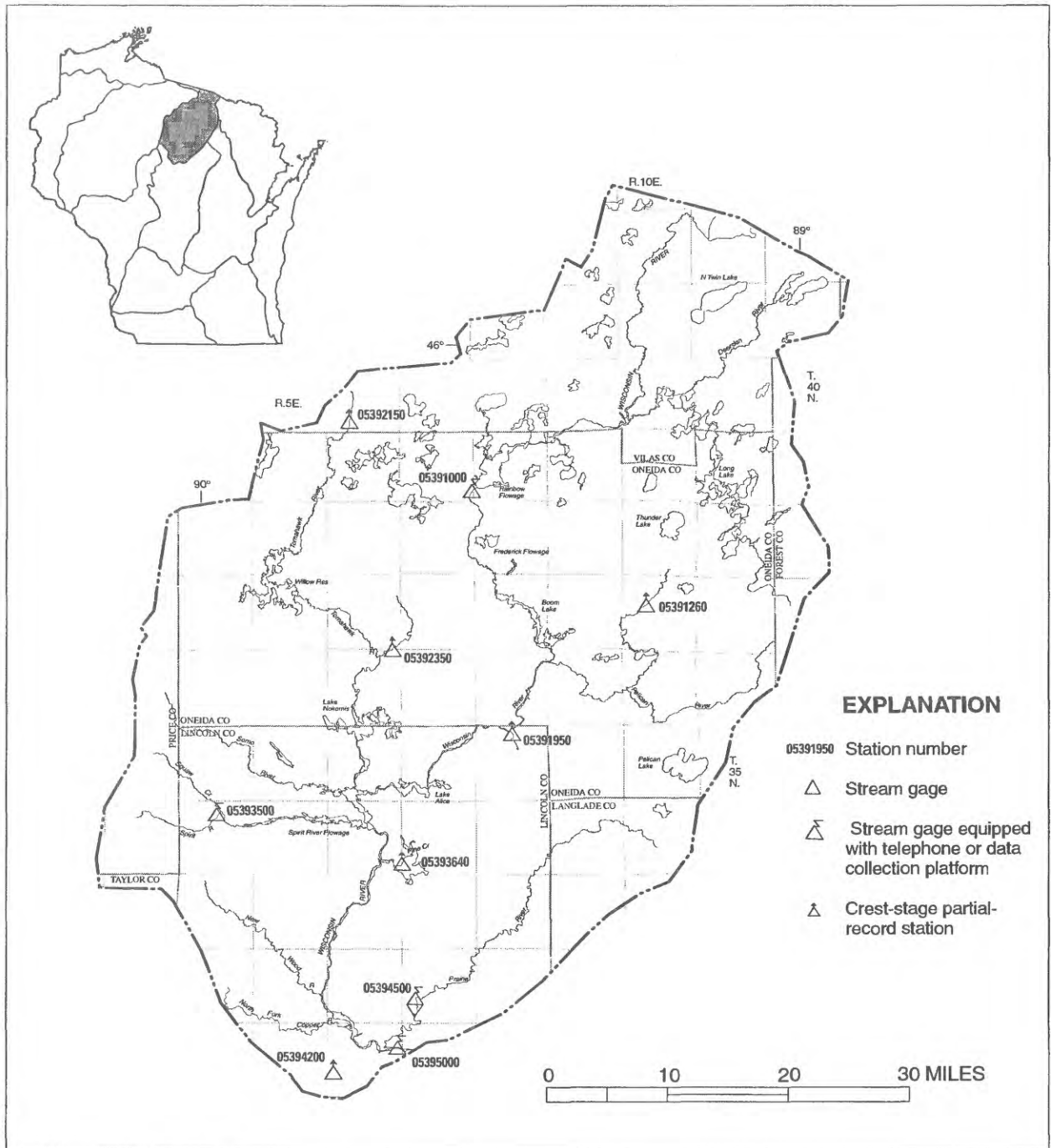
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 2000, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1936	28780	114600	1987	9874	1937
1937	29350	64840	1983	10870	1938
1938	22280	59200	1992	9506	1937
1939	19260	35700	1983	7665	1940
1940	20080	48540	1984	9934	1940
1941	39660	103800	1983	13190	1940
1942	75010	164800	1965	27780	1990
1943	60990	119200	1975	18240	1977
1944	49370	112600	1993	13420	1988
1945	41170	142200	1993	11220	1988
1946	28240	84430	1993	10330	1964
1947	28760	72890	1986	10650	1940

05389500 MISSISSIPPI RIVER AT MCGREGOR, IA--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1936 - 2000	
ANNUAL TOTAL	15485700		11806700		36970	
ANNUAL MEAN	42430		32260		64720	1993
HIGHEST ANNUAL MEAN					17400	1977
LOWEST ANNUAL MEAN					276000	Apr 24 1965
HIGHEST DAILY MEAN	110000	May 26	78000	Jun 8	6200	Dec 9 1936
LOWEST DAILY MEAN	9000	Dec 21	9000	Dec 21	6490	Dec 7 1936
ANNUAL SEVEN-DAY MINIMUM	9860	Dec 17	9860	Dec 17		
INSTANTANEOUS PEAK FLOW			78400	Jun 8		
INSTANTANEOUS PEAK STAGE			13.25	Jun 8,9	25.38	Apr 24 1965
ANNUAL RUNOFF (AC-FT)	30720000		23420000		26780000	
ANNUAL RUNOFF (CFSM)	.63		.48		.55	
ANNUAL RUNOFF (INCHES)	8.53		6.51		7.44	
10 PERCENT EXCEEDS	80500		58400		75500	
50 PERCENT EXCEEDS	35100		26600		27600	
90 PERCENT EXCEEDS	21500		17800		13200	

(e) Estimated due to ice effect or missing record



Base from U.S. Geological Survey 1:100,000 digital data;
modified by Wisconsin Department of Natural Resources.
Wisconsin Transverse Mercator projection.

UPPER WISCONSIN RIVER BASIN

05391000 WISCONSIN RIVER AT RAINBOW LAKE, NEAR LAKE TOMAHAWK, WI

LOCATION.--Lat 45°49'50", long 89°33'08", in NE ¼ NE ¼ sec.36, T.39 N., R.7 E., Oneida County, Hydrologic Unit 07070001, on right bank 500 ft downstream from Gilmore Creek, 0.4 mi downstream from Rainbow Lake, and 2.3 mi northeast of Lake Tomahawk.

DRAINAGE AREA.--757 mi².

PERIOD OF RECORD.--July 1936 to current year. Prior to October 1955, published as "at Rainbow Reservoir, near Lake Tomahawk."

REVISED RECORDS.--WSP 895: 1937(M). WSP 1508: 1944. WDR WI-83-1: Drainage area. WDR WI-80-1: Datum.

GAGE.--Water-stage recorder. Datum of gage is 1,569.05 ft above sea level (levels by Wisconsin Valley Improvement Co.).

REMARKS.--Records good (see page 12). Flow regulated by Rainbow Lake and 12 smaller reservoirs upstream from station.
Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	513	455	561	556	583	259	315	342	412	386	530	550
2	508	476	560	556	575	283	315	434	412	378	473	589
3	499	476	561	557	576	304	346	495	415	503	471	624
4	495	483	563	560	578	299	366	502	414	693	468	628
5	490	488	564	563	577	287	366	507	413	887	469	570
6	486	489	564	565	578	287	366	508	410	979	470	552
7	484	493	564	565	576	287	366	508	407	975	470	557
8	486	497	564	565	577	295	372	507	405	1470	469	518
9	485	502	566	569	572	319	380	464	364	2090	467	494
10	481	500	567	569	562	320	373	437	338	1860	464	494
11	477	503	567	569	558	294	371	475	338	1650	464	440
12	475	503	567	568	558	288	367	447	336	1460	464	362
13	466	503	567	569	560	282	367	409	320	1310	521	338
14	464	506	568	568	561	277	367	401	302	1240	566	336
15	462	506	567	560	554	321	369	452	314	1220	550	383
16	458	507	567	557	548	351	378	484	327	1220	582	412
17	454	512	567	557	548	354	378	477	326	1200	624	414
18	469	513	565	557	549	355	347	409	317	941	623	458
19	484	517	567	560	549	355	322	404	307	730	626	487
20	492	517	568	578	545	355	316	424	299	674	625	496
21	498	517	567	598	540	355	326	424	283	665	625	503
22	483	517	566	597	534	358	339	457	301	653	595	504
23	451	518	565	598	534	361	357	479	296	642	572	506
24	429	404	563	601	481	330	372	478	304	625	574	505
25	433	330	566	597	402	310	359	477	304	606	576	498
26	430	330	562	590	392	313	334	477	303	606	580	491
27	429	461	562	591	392	319	313	477	301	606	581	490
28	427	546	562	591	325	318	317	479	301	606	585	488
29	428	552	563	593	268	318	337	482	298	611	558	489
30	430	559	566	594	---	318	348	451	356	612	537	489
31	430	---	561	591	---	318	---	419	---	612	537	---
TOTAL	14496	14680	17507	17809	15152	9790	10549	14186	10223	28710	16716	14665
MEAN	468	489	565	574	522	316	352	458	341	926	539	489
MAX	513	559	568	601	583	361	380	508	415	2090	626	628
MIN	427	330	560	556	268	259	313	342	283	378	464	336

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 2000, BY WATER YEAR (WY)

	MEAN	654	695	777	828	820	647	409	706	730	675	589	601
MAX	1445	1250	1178	1108	1161	1044	1330	1798	1863	1387	1472	1282	
(WY)	1952	1939	1955	1943	1952	1939	1973	1973	1939	1968	1938	1980	
MIN	263	170	330	371	417	316	138	173	228	237	243	268	
(WY)	1988	1949	1949	1990	1977	2000	1949	1949	1987	1988	1988	1948	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1936 - 2000

ANNUAL TOTAL	188840	184483	
ANNUAL MEAN	517	504	678
HIGHEST ANNUAL MEAN			1062
LOWEST ANNUAL MEAN			359
HIGHEST DAILY MEAN	918	Jul 16	2090
LOWEST DAILY MEAN	245	Apr 3	259
ANNUAL SEVEN-DAY MINIMUM	253	Apr 13	284
INSTANTANEOUS PEAK FLOW			2250
INSTANTANEOUS PEAK STAGE			5.34
10 PERCENT EXCEEDS	632		599
50 PERCENT EXCEEDS	541		490
90 PERCENT EXCEEDS	308		318
			7.59
			1040
			652
			309

WISCONSIN RIVER BASIN

05393500 SPIRIT RIVER AT SPIRIT FALLS, WI

LOCATION.--Lat 45°26'58", long 89°58'47", in NW $\frac{1}{4}$ sec.10, T.34 N., R.4 E., Lincoln County, Hydrologic Unit 07070001, on right bank 40 ft downstream of bridge 0.2 mi south of Spirit Falls, 0.6 mi upstream from Squaw Creek, and 2.0 mi downstream from Richie Creek.

DRAINAGE AREA.--81.6 mi².

PERIOD OF RECORD.--April 1942 to current year.

REVISED RECORDS.--WSP 1308: 1943(M), 1948-50(M). WDR WI-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,461.63 ft above sea level. Prior to Oct. 4, 1982, nonrecording gage 40 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	16	e25	e13	e14	e400	65	60	47	104	55	26
2	9.6	15	e23	e14	e13	e330	59	57	114	82	52	36
3	9.1	14	e24	e14	e14	e280	59	51	82	70	39	107
4	8.5	13	e25	e13	e14	e240	60	45	68	57	32	117
5	8.8	13	e24	e13	e14	e200	55	39	145	48	26	70
6	8.8	12	e21	e13	e14	e190	54	34	117	41	25	46
7	10	12	e19	e13	e14	e190	48	31	78	37	22	34
8	21	12	e20	e13	e14	e190	41	32	68	77	85	31
9	27	11	e19	e14	e14	e210	39	34	59	224	116	26
10	23	10	e17	e14	e15	e160	36	30	47	242	69	24
11	18	10	e16	e13	e14	e130	35	29	39	140	46	78
12	16	10	e16	e13	e13	e110	34	37	33	90	37	258
13	14	11	e15	e13	e14	e94	35	35	29	71	42	195
14	13	11	e16	e12	e14	e80	37	31	31	56	40	117
15	13	10	e16	e13	e14	e78	38	27	57	44	464	82
16	15	9.9	e15	e13	e15	e58	58	51	77	35	398	59
17	18	10	e14	e13	e14	e54	73	75	76	30	220	45
18	18	10	e13	e13	e15	e56	83	87	54	26	172	36
19	23	11	e14	e13	e15	e52	99	92	41	23	119	32
20	18	11	e14	e12	e16	51	233	65	302	21	85	39
21	18	12	e13	e12	e17	52	640	48	1210	20	64	39
22	17	11	e13	e12	e18	57	541	43	695	18	52	34
23	16	22	e12	e12	e21	66	338	42	363	16	44	40
24	15	87	e13	e12	e28	72	212	36	400	15	37	39
25	14	72	e13	e13	e37	88	150	31	685	13	31	34
26	14	56	e13	e13	e58	83	117	26	581	54	29	30
27	14	47	e12	e13	e240	119	95	23	528	82	26	26
28	13	e36	e13	e13	e380	130	80	32	285	57	23	24
29	12	e29	e13	e13	e450	106	70	33	185	46	22	22
30	14	e27	e13	e13	---	88	60	32	136	48	20	20
31	16	---	e14	e14	---	74	---	36	---	34	19	---
TOTAL	464.4	630.9	508	402	1533	4088	3544	1324	6632	1921	2511	1766
MEAN	15.0	21.0	16.4	13.0	52.9	132	118	42.7	221	62.0	81.0	58.9
MAX	27	87	25	14	450	400	640	92	1210	242	464	258
MIN	8.5	9.9	12	12	13	51	34	23	29	13	19	20
CFSM	.18	.26	.20	.16	.65	1.62	1.45	.52	2.71	.76	.99	.72
IN.	.21	.29	.23	.18	.70	1.86	1.62	.60	3.02	.88	1.14	.81

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2000, BY WATER YEAR (WY)

	MEAN	73.3	74.9	38.0	20.5	20.1	111	318	148	97.7	48.1	37.2	75.9
MAX	306	338	293	71.8	69.8	467	697	408	398	209	359	396	
(WY)	1986	1992	1976	1960	1984	1946	1951	1973	1943	1968	1995	1942	
MIN	4.05	5.31	4.07	3.00	3.61	14.6	55.6	23.0	6.01	4.09	3.13	3.05	
(WY)	1977	1977	1977	1977	1977	1956	1946	1987	1988	1964	1944	1976	

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1942 - 2000
ANNUAL TOTAL	25126.4	25324.3	
ANNUAL MEAN	68.8	69.2	87.9
HIGHEST ANNUAL MEAN			140
LOWEST ANNUAL MEAN			36.3
HIGHEST DAILY MEAN	991	May 8	1210
LOWEST DAILY MEAN	8.5	Oct 4	3290
ANNUAL SEVEN-DAY MINIMUM	9.2	Sep 30	1.0
INSTANTANEOUS PEAK FLOW			1.4
INSTANTANEOUS PEAK STAGE			Aug 5 1964
INSTANTANEOUS LOW FLOW			1370
ANNUAL RUNOFF (CFSM)	.84		5.68
ANNUAL RUNOFF (INCHES)	11.45		(a) 4180
10 PERCENT EXCEEDS	166		10.00
50 PERCENT EXCEEDS	24		1.0
90 PERCENT EXCEEDS	11		1.08
			14.63
			216
			28
			8.3

(a) From rating curve extended above 2,500 ft³/s

(b) Result of freezeup

(c) Estimated due to ice effect or missing record

05394500 PRAIRIE RIVER NEAR MERRILL, WI

LOCATION.--Lat 45°14'09", long 89°38'59", in SW ¼ SW ¼ sec. 20, T.32 N., R.7 E., Lincoln County, Hydrologic Unit 07070002, on left bank 40 ft upstream from bridge on County Trunk Highway C, 1.5 mi upstream from Meadow Creek, 4.5 mi northeast of Merrill, and 8.0 mi upstream from mouth.

DRAINAGE AREA.--184 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1914 to September 1931, August 1939 to current year. Monthly discharge for some periods published in WSP 1308.

REVISED RECORDS.--WSP 1308: 1915-17(M), 1919-21(M), 1923-31(M), 1942-43(M), 1945(M), 1948-50(M). WDR WI-77-1: Drainage area. WDR WI-79-1: 1972.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,297.22 ft above sea level. Prior to Oct. 9, 1968, nonrecording gage 40 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	100	e98	e80	e80	e350	130	117	153	188	94	100
2	92	97	e98	e78	e76	e310	124	119	272	148	97	139
3	90	94	99	e76	e78	e280	120	110	196	177	88	178
4	90	92	99	e74	e80	e250	119	104	154	186	84	205
5	90	93	e96	e72	e78	e230	113	108	230	151	83	167
6	89	93	e88	e74	e76	e230	110	110	185	133	83	128
7	99	91	e82	e72	e78	243	105	100	136	122	82	110
8	111	92	e88	e76	e76	264	100	99	134	213	95	101
9	122	93	e82	e78	e80	492	98	102	117	632	104	96
10	117	93	e78	e80	e80	e450	98	96	102	891	97	97
11	108	92	e74	e78	e76	e320	95	99	106	693	87	472
12	102	91	e80	e76	e74	e240	93	117	115	402	84	788
13	98	91	e82	e78	e78	e180	94	119	106	245	83	651
14	97	91	e84	e76	e74	170	102	108	105	180	88	433
15	99	89	e82	e78	e78	158	104	99	130	148	165	280
16	109	89	e80	e78	e76	e130	120	125	154	129	156	201
17	112	88	e76	e76	e74	e120	139	157	157	116	136	166
18	110	90	e74	e78	e76	e110	160	201	128	105	126	147
19	105	90	e78	e78	e78	e110	171	222	117	100	112	135
20	103	91	e76	e74	e80	110	231	173	208	97	100	135
21	101	90	e74	e72	e80	112	456	137	515	94	93	132
22	99	90	e72	e74	e82	116	430	121	447	90	90	132
23	97	126	e70	e76	e88	126	319	112	313	87	87	158
24	96	211	e72	e78	e94	140	237	104	227	86	84	153
25	100	189	e74	e78	e100	180	193	98	187	86	82	135
26	115	151	e76	e78	e190	186	162	93	213	84	83	124
27	105	135	e74	e76	e330	213	141	88	282	89	84	117
28	100	e110	e74	e74	e320	221	129	95	221	94	83	111
29	98	e98	e78	e78	e300	186	121	97	235	94	80	107
30	99	e92	e80	e80	---	160	114	98	245	92	78	104
31	101	---	e80	e76	---	141	---	101	---	87	77	---
TOTAL	3146	3132	2518	2370	3130	6528	4728	3629	5890	6039	2965	6002
MEAN	101	104	81.2	76.5	108	211	158	117	196	195	95.6	200
MAX	122	211	99	80	330	492	456	222	515	891	165	788
MIN	89	88	70	72	74	110	93	88	102	84	77	96
CFSM	.55	.57	.44	.42	.59	1.14	.86	.64	1.07	1.06	.52	1.09
IN.	.64	.63	.51	.48	.63	1.32	.96	.73	1.19	1.22	.60	1.21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2000, BY WATER YEAR (WY)

MEAN	167	169	112	92.5	90.6	189	430	256	210	138	132	172
MAX	527	388	199	169	158	676	899	723	598	401	494	656
(WY)	1942	1920	1992	1960	1930	1973	1916	1960	1993	1978	1926	1941
MIN	70.8	76.7	66.1	60.5	65.6	68.2	106	98.8	70.6	68.3	68.1	65.1
(WY)	1990	1951	1990	1925	1959	1956	1990	1931	1988	1989	1957	1989

WISCONSIN RIVER BASIN

05394500 PRAIRIE RIVER NEAR MERRILL, WI--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1914 - 2000	
ANNUAL TOTAL	53912		50077			
ANNUAL MEAN	148		137		180	
HIGHEST ANNUAL MEAN					272	
LOWEST ANNUAL MEAN					108	
HIGHEST DAILY MEAN	964	May 8	891	Jul 10	4200	Aug 31 1941
LOWEST DAILY MEAN	(a) 70	Dec 23	(a) 70	Dec 23	35	Oct 26 1947
ANNUAL SEVEN-DAY MINIMUM	(a) 72	Jan 6	(a) 73	Dec 21	52	Dec 28 1948
INSTANTANEOUS PEAK FLOW			930	Jul 10	(b) 5800	Aug 31 1941
INSTANTANEOUS PEAK STAGE			4.76	Jul 10	(c) 9.45	Aug 31 1941
INSTANTANEOUS LOW FLOW			(d) 59	Dec 11	34	Oct 26 1947
ANNUAL RUNOFF (CFSM)	.80		.74		.98	
ANNUAL RUNOFF (INCHES)	10.90		10.12		13.28	
10 PERCENT EXCEEDS	276		230		345	
50 PERCENT EXCEEDS	99		100		116	
90 PERCENT EXCEEDS	76		76		76	

- (a) Ice affected
 (b) Based on rating curve extended above 2,200 ft³/s
 (c) From floodmarks
 (d) Result of freezeup
 (e) Estimated due to ice effect or missing record

05394500 PRAIRIE RIVER NEAR MERRILL, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

WATER TEMPERATURE: October 1998 to current year.

GAGE.--Tipping bucket rain gage with electronic datalogger.

INSTRUMENTATION.--Continuous water temperature recorder since October 1998. Sensor located near midstream.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Record was faulty Nov. 29 to Dec. 1, Dec. 10-12, Dec. 16 to Feb. 28, Mar. 2, 3, May 26 to June 2, July 4-22, Aug. 30, and Sept. 1-3.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum temperature, 27.0°C, June 26, 1999; minimum, 0.0°C on many days.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum temperature, 25.5°C, June 9 and July 31; minimum 0.5°C, Mar. 10-12, 16-18, and probably reached 0.0°C many days in winter when record was faulty.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	10.5	8.0	9.5	9.5	6.5	8.0	---	---	---	---	---	---
2	11.0	7.5	9.0	7.0	3.5	5.5	3.0	1.0	2.0	---	---	---
3	8.0	5.5	7.0	4.5	2.0	3.0	5.0	3.0	4.0	---	---	---
4	8.0	3.5	6.0	4.5	1.0	3.0	4.5	3.0	3.5	---	---	---
5	11.0	5.5	8.0	6.5	3.5	4.5	4.0	2.0	3.0	---	---	---
6	9.5	5.5	7.5	5.5	3.0	4.0	2.5	1.0	2.0	---	---	---
7	9.0	6.5	7.5	5.0	2.0	3.5	1.5	1.0	1.5	---	---	---
8	10.5	8.5	9.5	7.0	3.0	5.0	2.5	1.0	1.5	---	---	---
9	12.0	7.5	10.0	9.5	5.5	7.5	2.5	1.0	1.5	---	---	---
10	12.5	9.0	10.5	8.5	6.0	7.5	---	---	---	---	---	---
11	11.5	7.5	9.5	6.0	4.5	5.0	---	---	---	---	---	---
12	12.0	9.5	10.5	7.0	5.0	5.5	---	---	---	---	---	---
13	11.5	8.0	10.0	8.0	4.0	6.0	2.5	1.5	2.0	---	---	---
14	8.0	7.0	7.5	6.5	4.0	5.5	3.0	1.5	2.0	---	---	---
15	10.0	6.5	8.5	4.5	2.5	3.5	2.0	1.5	2.0	---	---	---
16	11.0	8.0	9.5	4.0	2.0	3.0	---	---	---	---	---	---
17	8.5	6.5	7.5	4.5	2.0	3.0	---	---	---	---	---	---
18	7.5	5.5	6.5	5.0	2.0	3.5	---	---	---	---	---	---
19	8.0	6.5	7.0	7.5	5.0	6.0	---	---	---	---	---	---
20	7.5	5.0	6.0	7.0	5.5	6.0	---	---	---	---	---	---
21	9.0	5.5	7.0	7.0	5.0	6.0	---	---	---	---	---	---
22	8.0	5.0	6.5	8.0	5.5	7.0	---	---	---	---	---	---
23	5.5	3.5	4.5	5.5	5.0	5.5	---	---	---	---	---	---
24	6.0	2.0	3.5	5.0	3.5	4.5	---	---	---	---	---	---
25	7.0	3.0	5.0	3.5	2.0	2.5	---	---	---	---	---	---
26	7.0	4.5	5.5	3.0	2.5	3.0	---	---	---	---	---	---
27	7.0	3.5	5.5	3.0	2.0	2.5	---	---	---	---	---	---
28	8.0	5.0	6.5	2.5	1.0	1.5	---	---	---	---	---	---
29	8.5	6.0	7.0	---	---	---	---	---	---	---	---	---
30	11.0	8.5	9.5	---	---	---	---	---	---	---	---	---
31	10.5	7.5	8.5	---	---	---	---	---	---	---	---	---
MONTH	12.5	2.0	7.6	9.5	1.0	4.7	5.0	1.0	2.3	---	---	---

WISCONSIN RIVER BASIN

05394500 PRAIRIE RIVER NEAR MERRILL, WI--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	---	---	---	2.0	1.0	1.5	10.0	6.5	8.0	17.5	13.0	15.0
2	---	---	---	---	---	---	9.5	5.5	7.5	17.5	11.0	14.5
3	---	---	---	---	---	---	9.5	7.0	8.0	20.0	12.0	16.0
4	---	---	---	4.5	1.0	2.5	8.0	4.5	6.0	21.5	14.5	18.0
5	---	---	---	6.0	1.5	3.5	6.5	4.0	5.5	23.0	16.0	19.5
6	---	---	---	6.5	2.5	4.5	10.0	5.0	7.0	23.0	17.5	20.0
7	---	---	---	9.0	4.0	6.5	7.5	4.0	6.0	24.0	18.0	21.0
8	---	---	---	9.5	6.5	8.0	8.5	2.0	5.0	21.5	17.5	19.5
9	---	---	---	8.5	2.0	5.0	10.0	4.5	7.0	17.5	14.0	16.0
10	---	---	---	3.0	.5	2.0	10.0	4.0	7.0	15.0	11.0	13.5
11	---	---	---	3.5	.5	2.0	7.5	4.5	6.0	13.0	12.0	12.5
12	---	---	---	4.0	.5	2.0	9.0	2.5	5.5	15.0	12.0	13.5
13	---	---	---	4.5	1.0	2.5	9.5	4.5	7.0	13.0	10.0	11.5
14	---	---	---	5.5	2.5	4.0	13.0	6.5	10.0	13.5	8.0	10.5
15	---	---	---	4.0	1.5	3.5	11.5	5.5	8.0	15.0	8.0	11.5
16	---	---	---	4.5	.5	2.0	5.5	3.5	4.5	16.0	11.5	13.5
17	---	---	---	4.0	.5	2.0	4.0	3.0	3.5	15.0	12.0	13.5
18	---	---	---	2.5	.5	2.0	5.5	3.5	4.5	13.5	11.0	12.5
19	---	---	---	4.0	1.5	3.0	6.5	5.0	5.5	15.0	8.5	11.5
20	---	---	---	4.0	3.0	3.5	6.0	4.0	5.0	17.0	10.0	13.5
21	---	---	---	5.5	4.0	4.5	8.0	2.5	5.0	15.0	12.0	13.5
22	---	---	---	9.5	5.0	7.5	9.0	5.5	7.5	17.0	13.0	15.0
23	---	---	---	13.0	7.5	10.0	13.0	7.0	10.0	20.0	13.5	16.5
24	---	---	---	10.5	8.5	9.5	14.5	9.0	11.5	16.5	13.5	15.5
25	---	---	---	9.5	7.0	8.0	15.5	9.5	12.5	19.0	11.5	15.0
26	---	---	---	8.0	5.0	6.5	16.5	10.0	13.5	---	---	---
27	---	---	---	7.0	4.5	6.0	17.5	12.0	15.0	---	---	---
28	---	---	---	6.0	4.0	5.0	15.0	11.5	13.0	---	---	---
29	4.0	1.0	2.0	7.0	3.5	5.0	16.5	9.0	12.5	---	---	---
30	---	---	---	9.0	3.0	6.0	17.0	10.0	14.0	---	---	---
31	---	---	---	10.5	4.5	7.5	---	---	---	---	---	---
MONTH	4.0	1.0	2.0	13.0	.5	4.7	17.5	2.0	8.0	24.0	8.0	14.9
JUNE				JULY			AUGUST			SEPTEMBER		
1	---	---	---	23.0	17.0	20.0	23.5	20.0	22.0	---	---	---
2	---	---	---	21.0	18.5	19.5	24.5	19.5	21.5	---	---	---
3	16.5	11.5	14.5	23.0	17.0	20.0	22.5	17.5	20.0	---	---	---
4	15.0	13.0	14.0	---	---	---	23.5	17.5	20.0	19.0	15.5	17.0
5	17.0	11.5	14.0	---	---	---	20.0	17.0	17.5	18.0	13.5	15.5
6	19.0	12.0	16.0	---	---	---	21.5	16.5	18.5	17.5	12.5	15.0
7	17.0	14.5	15.5	---	---	---	23.5	17.0	20.0	16.5	14.0	15.0
8	22.5	13.5	17.5	---	---	---	22.5	18.5	20.0	18.0	12.0	15.0
9	25.5	18.0	21.5	---	---	---	23.5	18.5	20.5	20.0	14.0	16.5
10	22.0	20.0	21.0	---	---	---	23.5	17.5	20.5	21.0	17.5	19.0
11	24.0	18.0	20.5	---	---	---	24.0	17.0	20.5	19.5	17.5	18.5
12	21.5	17.0	19.5	---	---	---	21.5	18.0	19.5	17.5	16.0	16.5
13	19.5	17.0	18.0	---	---	---	24.0	18.0	20.5	17.0	14.5	16.0
14	19.5	17.0	18.0	---	---	---	23.5	19.5	21.5	16.0	14.5	15.0
15	19.0	16.0	17.5	---	---	---	23.5	18.5	21.0	14.5	12.5	13.5
16	17.5	16.0	17.0	---	---	---	21.0	17.0	19.0	13.5	10.0	12.0
17	19.5	13.5	16.5	---	---	---	19.0	17.0	18.0	14.5	10.5	12.5
18	19.5	15.0	17.5	---	---	---	21.0	15.5	18.0	16.5	12.0	14.5
19	23.5	16.5	19.5	---	---	---	20.0	14.5	17.0	16.0	15.0	15.5
20	20.5	18.0	18.5	---	---	---	19.5	14.0	17.0	15.0	12.0	14.0
21	19.0	16.5	17.5	---	---	---	20.5	14.5	17.5	14.0	10.5	12.0
22	18.5	16.5	17.5	---	---	---	20.5	17.5	19.0	12.0	10.0	11.0
23	18.0	16.5	17.0	21.5	14.5	18.0	22.5	16.5	19.0	12.0	10.0	11.0
24	18.5	16.5	17.5	22.5	15.5	19.0	22.5	15.5	19.0	11.5	8.0	9.5
25	21.5	16.0	19.0	22.0	17.5	19.5	19.5	16.5	18.5	11.5	7.0	9.5
26	21.5	18.0	19.5	19.5	18.0	18.5	22.0	17.0	19.5	12.5	7.5	10.0
27	19.5	16.5	18.0	20.5	17.0	18.5	22.0	17.0	19.5	13.0	9.0	11.0
28	19.0	15.5	17.5	20.0	17.5	18.5	22.0	18.0	19.5	13.0	9.0	10.5
29	19.5	15.0	17.0	22.5	17.5	19.5	23.0	18.5	20.5	14.5	9.5	12.0
30	20.5	15.0	18.0	24.5	18.0	21.0	---	---	---	16.0	12.5	14.0
31	---	---	---	25.5	18.5	22.0	25.0	19.0	21.5	---	---	---
MONTH	25.5	11.5	17.7	25.5	14.5	19.5	25.0	14.0	19.5	21.0	7.0	13.8

05395000 WISCONSIN RIVER AT MERRILL, WI

LOCATION.--Lat 45°10'41", long 89°40'52", on line between secs.12 and 13, T.31 N., R.6 E., Lincoln County, Hydrologic Unit 07070002, on left bank 300 ft downstream from U.S. Highway 51 bridge at east end of Merrill, and 0.5 mi downstream from Prairie River.

DRAINAGE AREA.--2,760 mi².

PERIOD OF RECORD.--November 1902 to current year.

REVISED RECORDS.--WSP 1308: 1904-7, 1909-11, 1913. WSP 1508: 1908, 1915-16(M), 1917, 1920-21(M), 1925(M), 1930, 1935-36. WDR WI-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,228.85 ft above sea level. Prior to June 18, 1903, nonrecording gage at different datum. June 18, 1903, to Sept. 10, 1914, non recording gage at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Flow regulated by 20 reservoirs and 9 powerplants upstream from station. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1650	1560	1810	e1700	e1500	4050	1440	1790	1990	1840	2140	1850
2	1710	1420	1680	e2000	e1400	3740	1460	1730	2670	2050	2210	1960
3	1560	1720	1630	e1700	e1500	3320	1510	1450	1690	1730	1660	2790
4	1470	1480	1630	e1400	e1900	3100	1530	1440	1640	1810	1860	2220
5	1810	1430	1430	e1300	e1700	2690	1660	1630	2030	1810	1860	2280
6	1870	1390	1530	e1300	e1500	2570	1460	1680	2100	1840	1860	1850
7	1650	1780	1610	e1500	e1400	2370	1640	1880	1790	1860	1920	1660
8	1690	1370	1510	e1500	e1500	2620	1170	1860	1370	3010	2130	2060
9	1540	1710	1550	e1500	e1300	3790	1540	1610	1630	8280	2310	1870
10	1610	1740	1660	e1400	e1600	3870	1130	1460	1480	9200	1960	2080
11	1590	1380	1710	e1500	e1600	2510	1280	1700	1320	9880	1930	4020
12	1530	1210	1570	e1600	e1400	2590	1600	1880	1520	7160	1860	5290
13	1690	1740	1540	e1600	e1400	2080	1450	1440	1370	5900	2060	5430
14	1490	1630	1730	e1500	e1400	1990	1590	1550	1440	4460	2040	3890
15	1600	1840	1620	e1300	e1400	1940	1570	1440	1580	4290	3190	2800
16	1870	1400	1490	e1500	e1400	1770	1630	2030	1540	3400	2710	2200
17	1840	1380	1270	e1500	e1400	1440	1630	1810	1620	3010	2370	1950
18	1800	1550	1490	e1600	e1600	1220	1710	2140	1520	3140	1960	1750
19	1360	1550	1360	e1400	e1300	1350	1780	2030	1470	2900	1920	2640
20	1580	1510	1490	e1400	e1300	1820	2390	1770	2330	2350	1600	2030
21	1690	1280	e1500	e1900	e1400	1430	3780	1600	5670	1830	1930	1960
22	1740	1660	e1500	e1800	e1600	1420	4620	1570	5970	1750	2000	1820
23	1420	1910	e1500	e1800	e1500	1550	4080	1620	5250	1960	1950	2160
24	1440	2740	e1600	e1500	e1500	1660	3300	1770	3600	1790	2140	2030
25	1520	1900	e1500	e1500	e1600	1780	2680	1580	3010	2050	1860	1820
26	1630	1640	e1600	e1600	2120	1970	2340	1300	4080	2230	1940	2060
27	1710	1400	e1500	e1500	3520	2130	2040	1580	3770	2360	1890	1810
28	1500	1260	e1400	e1500	3500	2580	1850	1620	3320	2400	1740	1720
29	1410	1170	e1400	e1500	3560	2070	1500	1530	2790	1730	2080	1500
30	1510	1450	e2100	e1500	---	1860	1480	1650	2170	1920	1810	1860
31	1620	---	e1700	e1500	---	1730	---	1640	---	2230	1860	---
TOTAL	50100	47200	48610	47800	49800	71010	58840	51780	73730	102170	62750	71360
MEAN	1616	1573	1568	1542	1717	2291	1961	1670	2458	3296	2024	2379
MAX	1870	2740	2100	2000	3560	4050	4620	2140	5970	9880	3190	5430
MIN	1360	1170	1270	1300	1300	1220	1130	1300	1320	1730	1600	1500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 2000, BY WATER YEAR (WY)

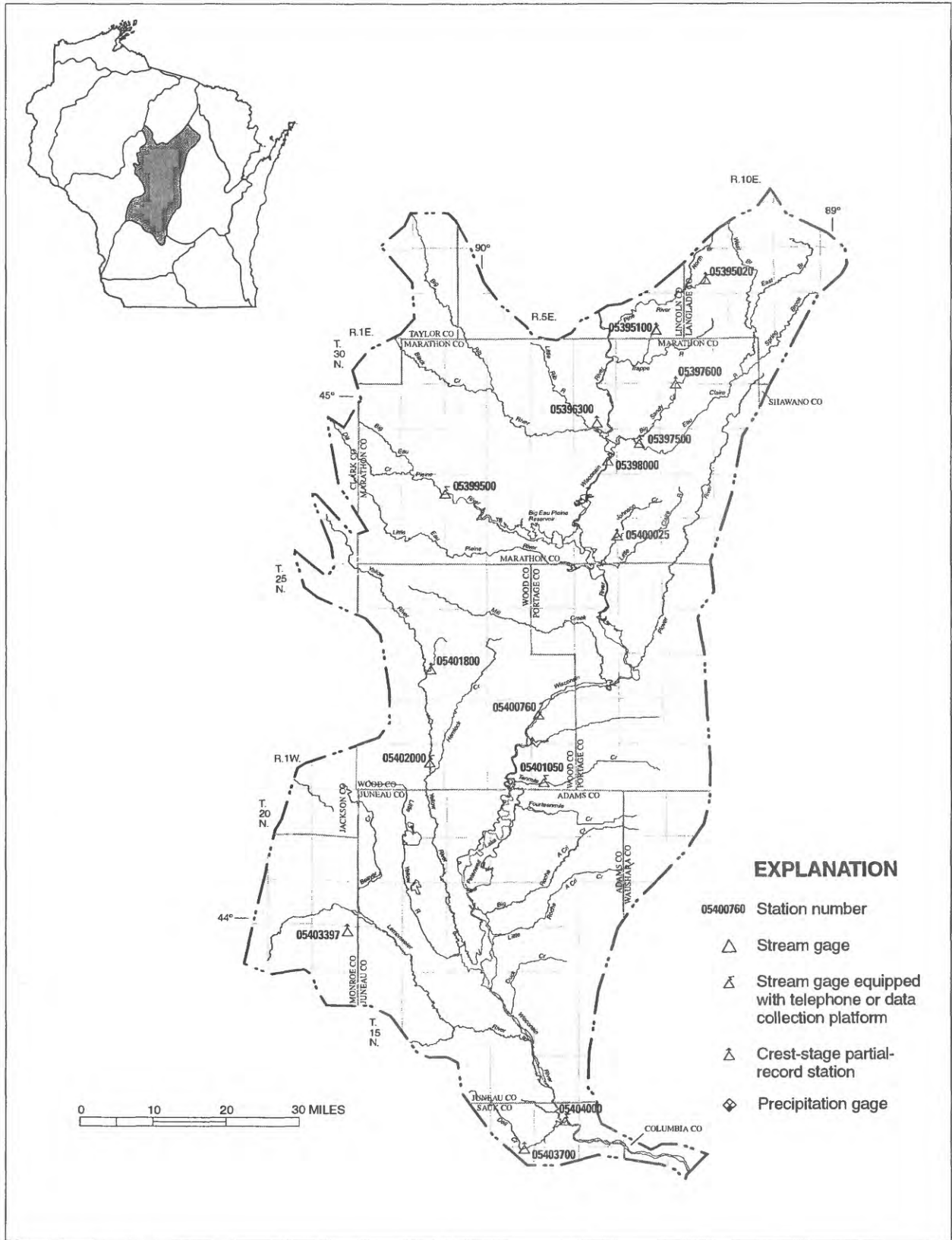
	MEAN	2541	2400	2085	1986	1935	2599	4699	3652	3098	2356	2087	2543
MAX	8654	4632	3887	3138	3063	6275	11500	8931	9923	5862	5451	9069	
(WY)	1912	1939	1992	1939	1932	1935	1916	1904	1905	1968	1912	1903	
MIN	760	775	830	820	820	980	1348	1082	810	724	719	873	
(WY)	1977	1977	1911	1911	1911	1909	1990	1987	1988	1988	1934	1987	

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1903 - 2000

ANNUAL TOTAL	744170	735150	
ANNUAL MEAN	2039	2009	2651
HIGHEST ANNUAL MEAN			4558
LOWEST ANNUAL MEAN			1348
HIGHEST DAILY MEAN	8470	May 8	9880
LOWEST DAILY MEAN	1090	May 4	1130
ANNUAL SEVEN-DAY MINIMUM	1220	Apr 28	1390
INSTANTANEOUS PEAK FLOW			11100
INSTANTANEOUS PEAK STAGE			9.38
10 PERCENT EXCEEDS	2930		3010
50 PERCENT EXCEEDS	1760		1700
90 PERCENT EXCEEDS	1380		1400

(a) From rating curve extended above 20,000 ft³/s

(e) Estimated due to ice effect or missing record



Base from U.S. Geological Survey 1:100,000 digital data; modified by Wisconsin Department of Natural Resources. Wisconsin Transverse Mercator projection.

CENTRAL WISCONSIN RIVER BASIN

05397500 EAU CLAIRE RIVER AT KELLY, WI

LOCATION.--Lat 44°55'06", long 89°33'00", on line between secs.9 and 10, T.28 N., R.8 E., Marathon County, Hydrologic Unit 07070002, on right bank 50 ft downstream from County Highway SS bridge, 0.7 mi northeast of Kelly, 1.3 mi upstream from Big Sandy Creek, 4.5 mi upstream from mouth, and 5.0 mi southeast of Wausau.

DRAINAGE AREA.--375 mi².

PERIOD OF RECORD.--January 1914 to November 1926, August 1939 to current year.

REVISED RECORDS.--WSP 1508: 1915, 1916-17(M), 1919-26(M), 1940(M), 1945(M), 1950(M). WDR WI-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,177.88 ft above sea level. Prior to Sept. 17, 1953, nonrecording gage at site 50 ft upstream at datum 1.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	88	e110	e56	e52	e880	172	166	238	226	95	104
2	72	87	e120	e54	e52	e720	159	158	1340	188	93	231
3	72	76	e100	e54	e54	e600	152	147	786	162	86	338
4	70	82	e94	e52	e54	e490	148	134	563	149	82	364
5	71	87	92	e52	e54	e420	140	124	802	139	78	283
6	70	79	e90	e54	e52	e370	131	116	680	126	79	199
7	72	78	e88	e52	e54	e370	124	110	435	116	79	154
8	77	78	e96	e54	e52	e370	117	118	332	125	89	132
9	86	77	e92	e54	e54	e390	112	142	290	577	97	116
10	89	78	e88	e54	e54	e420	109	122	231	1170	99	120
11	87	78	e84	e52	e52	e370	110	111	247	1490	88	1040
12	82	77	e86	e50	e50	e320	108	126	217	784	78	1250
13	81	77	e82	e52	e52	e290	110	154	183	358	81	817
14	79	77	e82	e50	e52	e260	116	152	181	256	82	581
15	78	76	e76	e52	e54	e230	122	131	238	212	360	383
16	86	78	e72	e52	e54	e210	129	152	296	179	285	280
17	96	74	e68	e50	e52	e200	166	239	306	154	183	224
18	98	75	e64	e50	e54	e180	203	535	240	137	145	184
19	94	74	e64	e49	e56	e170	228	683	310	126	126	159
20	89	74	e62	e48	e60	e150	407	469	485	117	108	150
21	87	74	e60	e47	e64	e150	898	324	978	112	96	140
22	86	75	e58	e48	e72	e150	709	249	780	107	89	134
23	83	91	e54	e50	e82	159	545	210	566	101	85	152
24	82	156	e54	e52	e92	174	403	171	465	95	83	154
25	80	190	e56	e52	e110	201	307	136	329	92	78	146
26	78	155	e56	e52	e320	221	248	129	260	93	81	134
27	77	e130	e54	e50	e800	230	208	115	230	115	78	124
28	78	e110	e56	e50	e920	251	183	108	227	112	75	116
29	79	e110	e58	e50	e960	245	191	109	223	104	73	111
30	82	e100	e56	e52	---	218	178	114	224	101	70	107
31	82	---	e54	e54	---	192	---	120	---	95	69	---
TOTAL	2518	2761	2326	1598	4488	9601	6933	5874	12682	7918	3290	8427
MEAN	81.2	92.0	75.0	51.5	155	310	231	189	423	255	106	281
MAX	98	190	120	56	960	880	898	683	1340	1490	360	1250
MIN	70	74	54	47	50	150	108	108	181	92	69	104
CFSM	.22	.25	.20	.14	.41	.83	.62	.51	1.13	.68	.28	.75
IN.	.25	.27	.23	.16	.45	.95	.69	.58	1.26	.79	.33	.84

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2000, BY WATER YEAR (WY)

	MEAN	207	233	138	90.4	89.2	351	739	361	299	163	152	208
MAX	900	784	650	217	227	1456	1672	1146	1119	691	789	1095	
(WY)	1942	1920	1966	1946	1981	1973	1922	1960	1943	1978	1926	1941	
MIN	46.9	68.6	48.2	31.5	41.0	51.1	149	94.4	52.8	64.6	51.9	48.5	
(WY)	1949	1977	1926	1926	1957	1956	1990	1977	1988	1989	1948	1989	

WISCONSIN RIVER BASIN

05397500 EAU CLAIRE RIVER AT KELLY, WI--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1914 - 2000	
ANNUAL TOTAL	67561		68416		252	
ANNUAL MEAN	185		187		440	
HIGHEST ANNUAL MEAN					131	
LOWEST ANNUAL MEAN					1942	
HIGHEST DAILY MEAN	1500	Jul 11	1490	Jul 11	7180	Aug 21 1926
LOWEST DAILY MEAN	(a)50	Jan 7-11	(a)47	Jan 21	(a)25	(b)Jan 6 1926
ANNUAL SEVEN-DAY MINIMUM	(a)51	Jan 6	(a)49	Jan 17	(a)26	Jan 10 1926
INSTANTANEOUS PEAK FLOW			(c)1850	Sep 11	(d)8300	Aug 21 1926
INSTANTANEOUS PEAK STAGE			(f)		(g)10.14	Mar 24 1991
INSTANTANEOUS LOW FLOW					(h)8.0	Jul 17 1944
ANNUAL RUNOFF (CFSM)	.49		.50		.67	
ANNUAL RUNOFF (INCHES)	6.70		6.79		9.13	
10 PERCENT EXCEEDS	362		394		533	
50 PERCENT EXCEEDS	104		110		130	
90 PERCENT EXCEEDS	57		54		60	

(a) Ice affected

(b) Also occurred Jan. 10-15, 17, 18, 1926, ice affected, and Oct. 3, 1948

(c) Gage height, 4.58 ft

(d) From rating curve extended above 6,000 ft³/s, gage height, 8.4 ft, from graph based on gage readings

(e) Estimated due to ice effect or missing record

(f) Peak stage unknown

(g) Ice jam

(h) Probably result of temporary regulation

05398000 WISCONSIN RIVER AT ROTHSCILD, WI

LOCATION.--Lat 44°53'09", long 89°38'05", in sec.26, T.28 N., R.7 E., Marathon County, Hydrologic Unit 07070002, on left bank at Rothschild, 0.5 mi downstream from Rothschild Dam, 1.7 mi north of bridge on U.S. Highway 51, 2.0 mi downstream from Eau Claire River, and 5.0 mi upstream from Black Creek.

DRAINAGE AREA.--4,020 mi².

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

REVISED RECORDS.--WDR WI-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,125.86 ft above sea level. Prior to Oct. 1, 1975, at datum 10.00 ft higher. Auxiliary water-stage recorder in Mosinee Pond 8 mi downstream. Prior to July 23, 1964, nonrecording auxiliary gage at same site and datum, read hourly.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Flow regulated by 20 reservoirs and 12 powerplants upstream from station. Gage-height telemeter at station.

EXTREMES OUTSIDE THE PERIOD OF RECORD.--Flood of Sept. 1, 1941, reached stage of 22.3 ft, datum then in use, from tailwater data at Rothschild dam, discharge, 75,000 ft³/s from rating curve extended above 45,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1780	1800	2160	e1800	e1600	9210	2230	2180	3790	2990	2560	2410
2	1960	1580	1930	e1900	e1600	8560	1980	2420	10400	2760	2500	2830
3	1820	1770	1880	e2000	e1400	6950	1890	2100	6260	2760	2180	4050
4	1650	1800	1960	e1800	e1700	6210	2110	1810	4290	2490	2090	4590
5	1940	1690	1670	e1500	e1900	5620	2240	1980	6600	2300	1910	3640
6	2090	1560	1660	1400	e1700	4920	1800	2060	6240	2340	2170	3020
7	1930	1780	1840	e1400	e1700	4450	1950	2340	4470	2330	2180	2380
8	1960	1680	1600	e1600	e1500	4840	1830	2220	3160	3140	2520	2510
9	2060	1880	1880	e1600	e1600	6370	1770	2150	3130	8330	3000	2390
10	1790	1940	1760	e1600	e1500	6700	1610	1820	2720	11600	2530	2560
11	1940	1630	1810	e1500	e1700	4930	1620	1870	2550	12300	2420	9170
12	1720	1590	1810	e1700	e1700	4170	2000	2360	2390	9410	2310	16300
13	1820	1650	1640	e1700	e1500	3700	1940	2300	2100	7530	2690	11900
14	1860	2010	1780	e1700	e1500	3280	1930	1970	2400	5310	2400	7420
15	1600	1860	2030	e1600	e1500	2960	1830	1930	2790	4940	6700	5360
16	2270	1740	1590	e1500	e1500	2760	2090	2330	3170	4400	6260	3890
17	2180	1470	1370	e1600	e1500	2320	2560	3010	2880	3520	4100	3270
18	2210	1640	1430	e1600	e1500	1860	2670	4050	2710	3500	3400	2570
19	1670	1780	1440	e1600	e1600	1870	2680	5110	3270	3490	2860	3140
20	1750	1690	1370	e1500	e1400	2430	3520	4090	4830	2930	2390	3010
21	1930	1510	1370	e1700	e1400	2290	7980	2940	11300	2300	2260	2660
22	1910	1660	1490	e2000	e1600	1940	7710	2600	11500	2140	2450	2570
23	1840	2240	e1500	e1800	1650	2290	6810	2420	8640	2190	2250	2780
24	1540	3650	e1600	e1800	1650	2420	5340	2460	7420	2130	2630	3020
25	1860	3000	e1700	e1700	1820	2780	4300	2170	5390	2210	2050	2470
26	1790	2440	e1600	e1700	4100	3100	3590	1750	5490	2460	2310	2810
27	1860	1920	e1700	e1700	9350	3090	3060	1750	5470	2640	2310	2270
28	1630	1620	e1600	e1700	9530	3480	2920	2030	4810	3020	2090	2330
29	1730	1420	1600	e1600	8600	3330	2320	1920	4630	2260	2330	1950
30	1710	1360	e1700	e1600	---	2790	2130	2070	3490	2090	2120	2130
31	1790	---	e2200	e1700	---	2720	---	2310	---	2510	2120	---
TOTAL	57590	55360	52670	51600	71300	124340	88410	74520	148290	124320	84090	121400
MEAN	1858	1845	1699	1665	2459	4011	2947	2404	4943	4010	2713	4047
MAX	2270	3650	2200	2000	9530	9210	7980	5110	11500	12300	6700	16300
MIN	1540	1360	1370	1400	1400	1860	1610	1750	2100	2090	1910	1950

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2000, BY WATER YEAR (WY)

	MEAN	3238	3285	2710	2454	2393	4207	7397	4589	3826	2839	2465	3170
MAX	10020	7262	5484	3787	4051	13300	14640	13930	11920	7219	6973	9079	
(WY)	1986	1986	1992	1973	1984	1973	1967	1960	1993	1978	1995	1980	
MIN	837	863	973	1025	1024	1613	2081	1515	924	933	932	1000	
(WY)	1949	1977	1977	1990	1977	1956	1990	1987	1988	1988	1988	1989	

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1945 - 2000

ANNUAL TOTAL	987630	1053890	
ANNUAL MEAN	2706	2879	3547
HIGHEST ANNUAL MEAN			5953
LOWEST ANNUAL MEAN			1686
HIGHEST DAILY MEAN	16400	May 8	44500
LOWEST DAILY MEAN	(a)1000	Jan 17	575
ANNUAL SEVEN-DAY MINIMUM	(a)1290	Jan 14	757
INSTANTANEOUS PEAK FLOW			18000
INSTANTANEOUS PEAK STAGE			20.86
10 PERCENT EXCEEDS	4570	5350	6530
50 PERCENT EXCEEDS	2000	2160	2600
90 PERCENT EXCEEDS	1440	1600	1490

- (a) Ice affected
 (b) Also occurred Mar. 31, 1967
 (c) Datum then in use
 (e) Estimated due to ice effect or missing record

WISCONSIN RIVER BASIN

05399500 BIG EAU PLEINE RIVER NEAR STRATFORD, WI

LOCATION.--Lat 44°49'19", long 90°04'46", on line between sec.13, T.27 N., R.3 E., and sec.18, T.27 N., R.4 E., Marathon County, Hydrologic Unit 07070002, on left bank 15 ft upstream from bridge on State Highway 97, 1.0 mi north of Stratford, and 1.4 mi downstream from small tributary.

DRAINAGE AREA.--224 mi².

PERIOD OF RECORD.--July 1914 to December 1925, April 1937 to current year. Monthly discharge for some periods published in WSP 1308.

REVISED RECORDS.--WSP 1308: 1917, 1920-22, 1926, 1946, 1948, 1950. WSP 1508: 1915-25(M), 1937, 1946(M), 1948(M).

GAGE.--Water-stage recorder. Datum of gage is 1,154.24 ft above sea level. July 24, 1914, to Dec. 31, 1925, nonrecording gage at site 0.5 mi upstream at different datum. Apr. 30, 1937, to Sept. 15, 1938, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--Flood of June 5, 1914, reached a stage of 20.7 ft, from floodmarks; discharge, 40,000 ft³/s, former site and datum.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	10	e22	e11	e12	e700	46	34	2000	38	9.3	12
2	5.2	10	e22	e11	e12	e380	45	31	2350	33	9.2	20
3	4.5	11	23	e11	e12	e310	43	29	502	35	9.2	52
4	4.4	10	23	e10	e12	250	38	27	453	30	8.9	196
5	5.0	14	22	e10	e12	216	36	24	2350	26	7.4	177
6	5.1	8.5	21	e11	e12	184	34	23	768	22	7.0	119
7	8.0	8.4	e19	e10	e13	163	31	21	332	22	6.7	70
8	11	8.4	e18	e11	e13	168	30	23	208	29	13	48
9	12	8.4	e17	e11	e13	437	29	22	135	41	26	35
10	15	13	e16	e12	e13	276	26	21	93	51	20	28
11	16	14	e15	e11	e13	184	25	22	73	45	15	4640
12	13	15	e15	e11	e12	140	25	25	57	63	12	2760
13	17	13	e14	e11	e13	110	25	26	45	53	12	853
14	13	12	e14	e11	e13	93	25	25	57	36	14	392
15	10	11	e14	e12	e13	87	25	22	105	24	160	205
16	15	10	e13	e11	e13	73	26	34	110	19	284	120
17	18	9.9	e13	e11	e13	61	37	71	87	16	210	80
18	23	9.8	e12	e12	e13	54	54	395	63	14	132	58
19	18	9.5	e13	e11	e14	51	56	334	513	22	74	46
20	15	9.5	e12	e11	e15	51	76	171	1380	15	50	41
21	14	9.3	e12	e11	e16	53	397	106	2490	13	36	35
22	13	9.3	e11	e11	e18	55	271	80	847	11	27	32
23	12	48	e11	e11	e24	57	175	64	381	9.0	23	37
24	11	141	e11	e11	e41	65	137	50	215	5.6	19	41
25	10	97	e12	e11	e170	90	105	38	140	7.6	16	40
26	11	61	e12	e11	e2000	94	82	31	113	7.9	16	33
27	11	44	e12	e11	e1700	81	66	26	91	8.8	14	27
28	10	35	e12	e11	e1000	75	55	29	68	9.5	13	24
29	9.7	e29	e12	e12	e760	68	47	28	55	12	12	21
30	10	e26	e12	e12	---	58	38	34	46	10	9.4	18
31	11	---	e11	e12	---	51	---	60	---	8.9	8.5	---
TOTAL	357.0	715.0	466	344	5985	4735	2105	1926	16127	737.3	1273.6	10260
MEAN	11.5	23.8	15.0	11.1	206	153	70.2	62.1	538	23.8	41.1	342
MAX	23	141	23	12	2000	700	397	395	2490	63	284	4640
MIN	4.4	8.4	11	10	12	51	25	21	45	5.6	6.7	12
CFSM	.05	.11	.07	.05	.92	.68	.31	.28	2.40	.11	.18	1.53
IN.	.06	.12	.08	.06	.99	.79	.35	.32	2.68	.12	.21	1.70

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2000, BY WATER YEAR (WY)

	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925
MEAN	108	130	46.8	19.9	34.4	413	584	230	212	77.3	71.5	163
MAX	728	695	446	138	372	1202	1551	1016	1203	642	371	1572
(WY)	1942	1992	1966	1973	1984	1976	1951	1973	1980	1978	1978	1938
MIN	2.26	4.34	2.50	.40	.51	8.77	51.7	15.8	5.16	2.71	2.58	1.50
(WY)	1954	1954	1990	1977	1977	1956	1946	1977	1988	1988	1937	1953

05399500 BIG EAU PLEINE RIVER NEAR STRATFORD, WI--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1914 - 2000	
ANNUAL TOTAL	37394.6		45030.9			
ANNUAL MEAN	102		123		175	
HIGHEST ANNUAL MEAN					355 1980	
LOWEST ANNUAL MEAN					47.6 1977	
HIGHEST DAILY MEAN	2220	Apr 6	4640	Sep 11	26100	Sep 9 1938
LOWEST DAILY MEAN	4.4	Oct 4	4.4	Oct 4	(a) .00	(b) Jan 22 1961
ANNUAL SEVEN-DAY MINIMUM	5.5	Oct 1	5.5	Oct 1	(a) .00	Jan 22 1961
INSTANTANEOUS PEAK FLOW			8710	Sep 11	(c) 41000	Sep 9 1938
INSTANTANEOUS PEAK STAGE			15.04	Sep 11	(d) 24.50	Sep 9 1938
INSTANTANEOUS LOW FLOW			2.9	Jul 24	.00	(f) Aug 17 1947
ANNUAL RUNOFF (CFSM)	.46		.55		.78	
ANNUAL RUNOFF (INCHES)	6.21		7.48		10.60	
10 PERCENT EXCEEDS	264		199		368	
50 PERCENT EXCEEDS	25		23		25	
90 PERCENT EXCEEDS	10		10		4.8	

- (a) Occurred during ice-affected period
 (b) Also occurred Jan. 23 to Feb. 5, 1961
 (c) Based on rating curve extended above 24,000 ft³/s
 (d) From floodmarks
 (e) Estimated due to ice effect or missing record
 (f) Also occurred Jan. 22 to Feb. 5, 1961, ice-affected period

WISCONSIN RIVER BASIN

05400760 WISCONSIN RIVER AT WISCONSIN RAPIDS, WI

LOCATION.--Lat 44°23'41", long 89°49'31", in SW $\frac{1}{4}$ sec.8, T.22 N., R.6 E., Wood County, Hydrologic Unit 07070003, at Consolidated Water Power Company, 0.2 mi upstream from U.S. Highway 13 bridge in Wisconsin Rapids.

DRAINAGE AREA.--5,420 mi².

PERIOD OF RECORD.--May 1914 to March 1950 published as Wisconsin River near Nekoosa (05400980), October 1957 to current year. October 1957 to September 1981, published under station number 05400800 with same name.

REVISED RECORDS.--WSP 1308: 1915(M).

GAGE.--Water-stage recorders on headwater and tailwater. Elevation of powerplant pond is 1,010 ft and datum of powerplant gages is 0.00 ft above sea level (levels by Wisconsin Valley Improvement Co.). May 1914 to March 1950, at site 9.6 mi downstream at different datum. March 1950 to Sept. 30, 1981, at Centralia Powerplant at Nekoosa Papers, Inc., 2.6 mi downstream. March 1950 to Dec. 31, 1973, datum was 887.83 ft above sea level. Jan. 1, 1974, changed to present datum.

REMARKS.--Discharge computed from powerplant records on basis of load-discharge rating of hydroelectric units as developed by manufacturer and tainter-gate ratings based on theoretical formulas. Flow regulated by 22 reservoirs and many powerplants upstream from station. Water diverted periodically from pond on Wisconsin Rapids powerplant into Cranberry Creek, a tributary of Yellow River, for cranberry culture. Mean monthly diversions, in cubic feet per second, for water year October 1999 to September 2000 were as follows: October, 99.1; November, 0.7, and January, 67.0.

COOPERATION.--Figures of daily discharges were provided by Consolidated Water Power Company and Wisconsin Valley Improvement Company. Records were reviewed by the Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2590	2240	1490	2520	2040	9410	2690	2620	6980	3520	3930	2820
2	2330	2220	2580	3000	1980	9860	2610	2560	14100	3150	2930	2760
3	2020	1950	2620	2290	2280	8200	2590	3010	11800	3120	2560	3390
4	2040	2100	2450	2220	2240	7800	2900	2790	8670	2840	2510	4220
5	2150	2120	1940	2270	2240	7340	1960	2060	8590	2550	2590	3760
6	2270	2050	1710	2270	2020	5500	2700	2200	11500	2990	2320	3300
7	2240	1850	1900	1250	2130	4860	2530	2540	6970	3020	2530	2600
8	2920	1830	2280	1270	1940	5320	1710	2780	5670	4210	4010	2850
9	2660	1820	2310	1940	1720	5830	1730	2850	5170	8240	3020	2810
10	2010	2770	2070	2590	1800	7420	1850	1860	3600	11700	2320	3250
11	1920	2360	2100	1760	1910	7040	2360	2770	3500	12100	2070	10700
12	1940	2180	2180	1470	1840	4520	2120	2550	3910	11000	2390	17100
13	2470	1870	2460	2290	1840	3810	2330	2550	3670	6740	3530	15600
14	2310	2150	1860	1860	1730	3900	2600	2320	3110	5540	3980	9850
15	2000	2170	2040	1790	1700	3410	2310	2240	3510	4310	7430	6650
16	2790	2090	2480	1720	1840	3200	2250	2500	5260	4460	7260	4340
17	2590	2040	1480	1500	1780	3130	2380	3070	5140	3590	4550	4230
18	2500	1970	1260	2070	1720	2220	2970	5930	3990	3400	3290	3340
19	2230	1720	1310	1730	1860	1960	3000	2780	4720	3490	3670	3480
20	2190	1760	1740	1740	2090	2140	4200	6800	8870	3430	2930	2590
21	1980	1830	1860	1700	1890	2770	9330	5060	16900	3080	2640	2480
22	3750	1800	1320	2080	2180	2690	10400	4230	17300	2590	2640	3860
23	2420	2310	1400	2670	2220	2600	10500	3930	13400	2300	3010	3420
24	1850	3100	1630	1710	2530	2380	7030	3160	9460	2210	3250	3240
25	1900	2600	1520	1770	2690	2250	5410	3220	8480	2290	2820	3260
26	2220	3030	1630	2010	4230	2590	4680	3060	6610	2900	2930	3020
27	1880	3030	2530	2270	11400	2610	4360	2360	5480	3220	2940	2840
28	1930	2900	2360	2000	11100	3050	4200	2580	6250	3180	2560	2940
29	1940	2370	1430	1840	8370	3360	3360	2290	5070	2940	2890	2540
30	2020	1580	1390	1870	---	3350	2810	2270	3900	2080	2970	2730
31	2370	---	2200	1990	---	3300	---	2910	---	2150	2910	---
TOTAL	70430	65810	59530	61460	85310	137820	111870	93850	221580	132340	101380	139970
MEAN	2272	2194	1920	1983	2942	4446	3729	3027	7386	4269	3270	4666
MAX	3750	3100	2620	3000	11400	9860	10500	6800	17300	12100	7430	17100
MIN	1850	1580	1260	1250	1700	1960	1710	1860	3110	2080	2070	2480

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2000, BY WATER YEAR (WY)

MEAN	4110	4374	3301	3039	3160	6382	10920	6862	6061	3568	3143	4333
MAX	13070	10270	7928	5589	6368	19180	25940	19730	19560	10820	9199	17670
(WY)	1987	1920	1966	1964	1973	1973	1922	1960	1943	1978	1926	1938
MIN	1075	1072	1141	1272	1333	1547	2579	1669	1308	1123	1173	1227
(WY)	1977	1977	1990	1990	1977	1924	1990	1987	1988	1988	1934	1976

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1914 - 2000

ANNUAL TOTAL	1253750	1281350	
ANNUAL MEAN	3435	3501	4930
HIGHEST ANNUAL MEAN			8499
LOWEST ANNUAL MEAN			2107
HIGHEST DAILY MEAN	21300	May 9	63600
LOWEST DAILY MEAN	1130	Jan 6	165
ANNUAL SEVEN-DAY MINIMUM	1360	Jan 11	790
INSTANTANEOUS PEAK FLOW			17600
10 PERCENT EXCEEDS	6400		(a) Jun 21
50 PERCENT EXCEEDS	2640		(b) 70400
90 PERCENT EXCEEDS	1830		Sep 12 1938

(a) Also occurred Sept. 13.

(b) From rating curve extended above 58,000 ft³/s

05401050 TENMILE CREEK NEAR NEKOOSA, WI

LOCATION.--Lat 44°15'45", long 89°48'37" (revised), in NE ¼ sec.32, T.21 N., R.6 E., Wood County, Hydrologic Unit 07070003, on left bank upstream from bridge on State Highway 13, 5.8 mi southeast of Nekoosa.

DRAINAGE AREA.--73.3 mi².

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1962-63. October 1963 to September 1979, October 1987 to September 1994, February 1998 to current year.

REVISED RECORDS.--WDR WI-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 967.39 ft above sea level. Prior to May 13, 1964, and June 2, 1988 to May 2, 1989, non-recording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Approximately 40 mi of drainage ditches and 22 check dams are used to control the water table in the basin. Sprinkler irrigation from ground-water sources affects natural flow of creek.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	38	45	33	22	68	51	63	78	101	57	38
2	40	36	43	34	23	66	50	61	95	97	53	37
3	38	36	41	34	23	65	49	57	98	95	51	42
4	35	35	40	33	25	63	49	57	99	91	50	41
5	36	35	41	32	27	62	51	57	107	86	50	40
6	37	32	41	33	26	61	50	55	112	80	50	39
7	35	33	42	30	26	53	49	54	108	78	49	38
8	37	35	40	e30	27	61	46	54	101	81	47	38
9	37	35	37	e30	26	52	45	54	96	86	45	37
10	35	36	34	e29	25	44	44	50	89	84	44	38
11	33	39	35	e29	25	45	44	50	85	79	43	51
12	33	43	38	e28	e25	42	44	53	81	74	43	65
13	34	43	34	e27	25	48	44	55	78	70	43	73
14	33	41	36	27	24	57	44	51	88	66	42	71
15	32	40	42	e27	24	53	42	48	97	65	42	68
16	34	39	40	e26	24	43	42	51	117	64	41	63
17	36	38	30	e26	24	44	41	56	128	62	47	61
18	36	37	31	e25	24	62	41	75	125	60	44	61
19	38	36	e30	e25	24	69	41	92	116	59	43	62
20	43	37	e30	25	24	64	53	87	112	60	43	61
21	37	37	e30	e25	24	58	62	84	108	57	42	60
22	36	36	30	e24	25	56	74	82	102	55	41	64
23	33	43	30	e24	28	55	78	79	99	54	41	62
24	30	44	30	e24	34	55	76	75	96	51	39	60
25	37	45	28	e24	44	54	71	70	102	51	38	56
26	36	46	28	e23	61	54	68	65	111	55	39	54
27	36	46	29	e23	70	54	67	64	117	58	40	55
28	35	45	31	e23	69	57	66	65	113	59	39	54
29	38	44	32	22	72	58	64	61	112	57	39	52
30	37	38	32	22	---	54	62	61	107	55	38	54
31	37	---	33	22	---	52	---	62	---	51	38	---
TOTAL	1110	1168	1083	839	920	1729	1608	1948	3077	2141	1361	1595
MEAN	35.8	38.9	34.9	27.1	31.7	55.8	53.6	62.8	103	69.1	43.9	53.2
MAX	43	46	45	34	72	69	78	92	128	101	57	73
MIN	30	32	28	22	22	42	41	48	78	51	38	37

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2000, BY WATER YEAR (WY)

MEAN	51.7	52.9	48.7	35.7	34.9	66.8	102	88.7	77.0	61.7	48.0	52.4
MAX	129	100	107	79.8	90.5	192	170	205	156	139	98.1	100
(WY)	1973	1973	1966	1973	1966	1973	1979	1973	1993	1993	1990	1965
MIN	21.5	19.5	14.6	12.6	11.2	16.1	47.3	44.7	37.4	23.6	17.4	23.0
(WY)	1977	1977	1965	1965	1965	1964	1964	1977	1964	1988	1964	1976

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1964 - 2000

ANNUAL TOTAL	18842	18579	
ANNUAL MEAN	51.6	50.8	60.2
HIGHEST ANNUAL MEAN			113
LOWEST ANNUAL MEAN			30.2
HIGHEST DAILY MEAN	151	Jul 21	427
LOWEST DAILY MEAN	(a) 20	(b) Jan 3	10
ANNUAL SEVEN-DAY MINIMUM	(a) 20	(d) Jan 3	10
INSTANTANEOUS PEAK FLOW			129
INSTANTANEOUS PEAK STAGE		5.50	Jun 17
INSTANTANEOUS LOW FLOW		18	Feb 17
10 PERCENT EXCEEDS	80		106
50 PERCENT EXCEEDS	47		52
90 PERCENT EXCEEDS	22		24

(a) Ice affected

(b) Also occurred Jan. 3-15 and 19-24; ice affected Jan. 3-15

(c) Also occurred Feb. 14, 15, Feb. 22 to Mar. 2, 1964, and Feb. 2-4, 11, 12, 1965

(d) Also occurred Jan. 19

(e) Estimated due to ice effect or missing record

05402000 YELLOW RIVER AT BABCOCK, WI

LOCATION.--Lat 44°18'08", long 90°07'19"(revised), in SE ¼ NE ¼ sec.15, T.21 N., R.3 E., Wood County, Hydrologic Unit 07070003, on right bank, 600 ft upstream of bridge on State Highway 80 at Babcock, 2.0 mi upstream from Hemlock Creek.

DRAINAGE AREA.--215 mi².

PERIOD OF RECORD.--March 1944 to September 1996, September 1997 to current year.

REVISED RECORDS.--WSP 1308: 1944(M), 1946-47(M), 1949(M). WDR WI-77-1: Drainage area. WDR WI-82-1: 1981 (P).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 954.75 ft above sea level. Prior to Oct. 28, 1948, nonrecording gage at site 600 ft downstream at same datum. Oct. 28, 1948 to Apr. 9, 1996, water-stage recorder at site 600 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). There is a large recreation dam about 5.0 mi upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	16	34	17	e11	513	60	60	86	73	24	23
2	20	19	31	e17	e11	388	55	53	3340	62	22	e30
3	19	19	29	e17	e11	274	51	45	2790	57	21	e40
4	14	14	28	e17	e12	202	50	42	1530	53	e19	e120
5	11	14	28	e16	e13	140	43	38	1800	53	e19	e180
6	10	15	27	e16	e13	126	42	35	1650	40	e19	e64
7	9.5	14	24	e15	e13	114	39	32	1160	36	e19	e45
8	8.7	14	24	e16	e13	105	39	29	704	36	e21	e32
9	8.9	15	26	e16	e13	125	36	27	307	57	e38	e29
10	13	16	25	e16	e12	276	36	24	216	171	e52	e25
11	14	17	27	e16	e12	271	33	23	138	211	e47	e520
12	12	16	22	e15	e11	166	33	31	110	126	e42	e1600
13	8.2	16	20	e14	e12	138	32	33	84	119	e39	e1100
14	8.6	17	20	e14	e12	116	32	30	109	98	e36	e700
15	9.8	19	20	e15	e12	91	32	29	141	73	e150	e440
16	8.5	15	21	e15	e12	76	33	30	374	55	e680	e300
17	13	16	21	e14	e12	70	35	34	729	43	e1000	e140
18	15	17	13	e14	e12	64	36	97	620	36	e640	e76
19	13	18	11	e13	e12	61	41	554	302	30	e390	e48
20	17	18	12	e13	e12	57	80	632	212	28	e250	e37
21	20	18	15	e13	e12	54	392	435	1920	26	e140	e30
22	20	17	15	e13	e13	55	688	290	1220	23	e90	e29
23	26	23	e15	e13	e16	58	475	173	828	21	e60	e27
24	19	40	e15	e13	e27	66	399	116	398	19	e47	e26
25	12	72	e14	e13	e60	73	245	89	256	18	e35	e26
26	9.1	85	e14	e13	e170	90	157	67	168	20	e34	26
27	12	72	e15	e12	1510	103	123	52	127	30	80	24
28	12	58	e16	e11	1510	100	102	46	109	36	47	23
29	14	47	e16	e11	791	89	83	41	101	36	37	21
30	15	40	e16	e11	---	79	68	34	87	32	28	20
31	16	---	e17	e11	---	69	---	35	---	27	28	---
TOTAL	428.3	797	631	440	4350	4209	3570	3256	21616	1745	4154	5801
MEAN	13.8	26.6	20.4	14.2	150	136	119	105	721	56.3	134	193
MAX	26	85	34	17	1510	513	688	632	3340	211	1000	1600
MIN	8.2	14	11	11	11	54	32	23	84	18	19	20
CFSM	.06	.12	.09	.07	.70	.63	.55	.49	3.35	.26	.62	.90
IN.	.07	.14	.11	.08	.75	.73	.62	.56	3.74	.30	.72	1.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2000, BY WATER YEAR (WY)

MEAN	107	115	63.0	26.7	46.2	385	542	234	180	69.2	53.4	127
MAX	561	508	374	132	373	1353	1319	1183	1516	453	371	1169
(WY)	1987	1983	1966	1973	1966	1973	1952	1973	1993	1978	1980	1986
MIN	3.68	4.62	7.35	5.03	4.79	8.13	85.9	28.0	8.56	4.68	4.01	2.23
(WY)	1949	1977	1951	1945	1945	1956	1946	1977	1988	1988	1988	1948

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1944 - 2000

ANNUAL TOTAL	41000.5	50997.3	
ANNUAL MEAN	112	139	162
HIGHEST ANNUAL MEAN			376
LOWEST ANNUAL MEAN			37.4
HIGHEST DAILY MEAN	1680	Apr 12	10300
LOWEST DAILY MEAN	8.2	Oct 13	1.4
ANNUAL SEVEN-DAY MINIMUM	(b)10	Jan 9	1.4
INSTANTANEOUS PEAK FLOW			11600
INSTANTANEOUS PEAK STAGE			17.38
INSTANTANEOUS LOW FLOW			.94
ANNUAL RUNOFF (CFSM)	.52	.65	.75
ANNUAL RUNOFF (INCHES)	7.09	8.82	10.24
10 PERCENT EXCEEDS	241	304	367
50 PERCENT EXCEEDS	33	32	32
90 PERCENT EXCEEDS	12	12	8.0

(a) Also occurred Sept. 15-19, 25, 26, 1948

(b) Ice affected

(c) Gage height, 13.41 ft

(e) Estimated due to ice effect or missing record

05404000 WISCONSIN RIVER NEAR WISCONSIN DELLS, WI

LOCATION.--Lat 43°36'22", long 89°45'25" in NW ¼ sec.14, T.13 N., R.6 E., Sauk County, Hydrologic Unit 07070003, on right bank 0.5 mi downstream from Dell Creek and 1.8 mi southeast of Wisconsin Dells.

DRAINAGE AREA.--8,090 mi².

PERIOD OF RECORD.--October 1934 to current year.

REVISED RECORDS.--WSP 1728: 1936(M). WSP 1914: 1951, 1953-55. WDR WI-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 801.48 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1963, water-stage recorder at same site at datum 5.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Flow regulated by 24 reservoirs above station. In 1938, when the maximum of record occurred, there were 21 reservoirs above station, the two large reservoirs, Petenwell and Castle Rock, were not in existence. Diurnal fluctuation is caused by powerplant of Wisconsin Power and Light Company at Wisconsin Dells. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3600	3280	4350	e3200	e3600	6500	3630	4220	6180	6670	3800	4440
2	3750	3450	3790	e3400	e3800	6480	3820	4200	14300	5450	4560	4660
3	3900	3710	3990	3860	e4700	6470	3720	4170	20100	5310	5030	5040
4	3520	3390	3970	4190	e4900	6430	3250	4160	22400	5480	4480	5280
5	3220	3400	3900	3680	e4500	6300	3480	4140	22200	5530	4130	5480
6	3230	3540	4230	3390	e4800	5840	3390	4100	19200	5460	3770	5400
7	3270	3080	4150	3430	5190	5700	3230	4100	19600	5550	4360	4830
8	3260	3100	4010	3160	5830	5570	3730	4110	17100	5660	4240	4370
9	3080	3650	3850	2730	5850	5950	3420	4130	12300	6670	5350	4030
10	3120	3350	3800	3270	5890	6030	3220	4150	10600	11400	5190	3690
11	3070	3310	3640	3660	6040	6030	3130	4220	8220	12900	4110	5120
12	3040	3310	3380	3490	6020	6000	2980	4290	8350	13800	3840	14900
13	2950	3380	3540	2940	5740	5970	3060	4250	9020	14000	3570	19800
14	3060	3370	3760	2980	3600	5920	3020	4270	9970	12900	4100	15000
15	3470	3390	3700	3180	3480	5290	3050	4260	9000	9560	5470	12100
16	3100	3370	3710	e3100	3390	5020	3030	4200	9130	7400	7920	8150
17	3160	3240	4010	e3000	3140	4620	3210	4280	8940	6800	8290	7600
18	3410	3000	3850	e3000	3490	4120	3580	6010	8600	5480	8220	6180
19	3710	2990	e2500	e3400	3190	3910	4000	8950	8770	4580	6010	5500
20	3680	2640	e2100	e3200	3260	3960	4380	8580	9770	4410	4060	5240
21	3640	2750	e1700	e3300	3740	3630	4470	8040	16000	4230	4010	4980
22	3460	2680	e2400	e3500	3800	3490	4390	8350	22700	4200	3900	4250
23	4160	2900	e2200	e3800	3500	3280	4350	6370	23400	4000	4510	4940
24	3970	3080	e2700	e3700	3800	3270	4320	6300	22500	3850	4560	4790
25	3350	3770	e3200	e3400	3830	3340	4250	5770	17200	3560	4690	4320
26	3540	4040	e3100	e3000	4190	3220	4220	5910	14100	3530	4750	4220
27	3410	4080	e3100	e3000	4630	2900	4210	5940	13200	4000	4750	3870
28	3500	4140	e3300	e3000	6570	3180	4190	5560	9310	4070	4770	4290
29	3420	4700	e3400	e2700	6620	4200	4200	5190	7350	4360	4810	4190
30	3170	4490	e3200	e3100	---	3860	4220	5240	7840	4180	3480	3870
31	3050	---	e3100	e3200	---	3830	---	4750	---	3710	4240	---
TOTAL	105270	102580	105630	101960	131090	150310	111150	162210	407350	198700	148970	190530
MEAN	3396	3419	3407	3289	4520	4849	3705	5233	13580	6410	4805	6351
MAX	4160	4700	4350	4190	6620	6500	4470	8950	23400	14000	8290	19800
MIN	2950	2640	1700	2700	3140	2900	2980	4100	6180	3530	3480	3690

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2000, BY WATER YEAR (WY)

MEAN	5883	6260	5088	4769	5052	8174	12860	9404	8578	5426	4369	5919
MAX	19120	13900	10740	7831	9614	25620	25050	26990	27090	13350	10700	25900
(WY)	1987	1983	1966	1992	1984	1973	1951	1960	1993	1978	1995	1938
MIN	1683	1688	1746	2434	2432	2945	2939	3361	1826	1713	1634	1754
(WY)	1977	1977	1990	1945	1945	1940	1964	1977	1988	1988	1988	1976

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

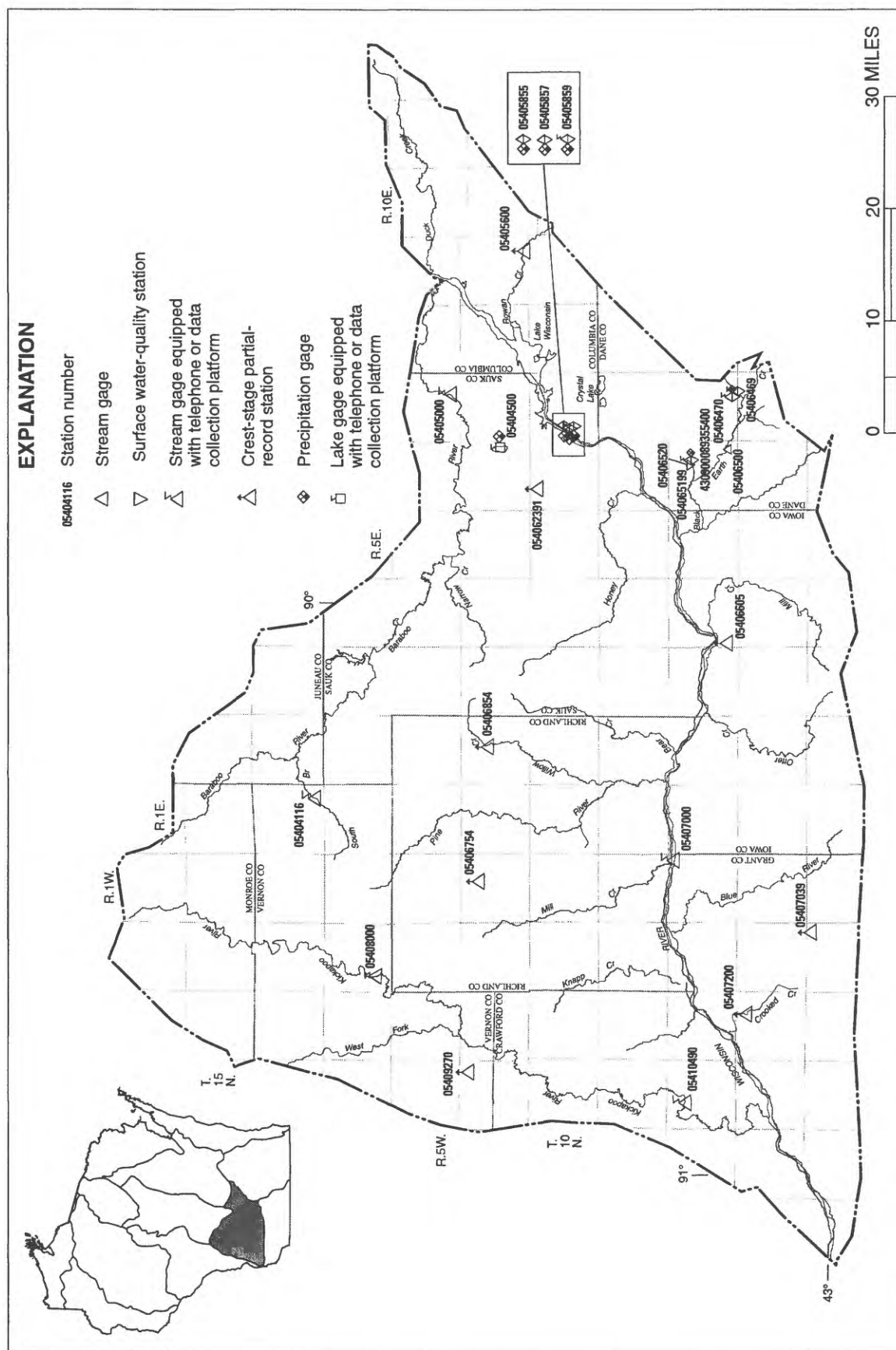
WATER YEARS 1935 - 2000

ANNUAL TOTAL	1962390	1915750	
ANNUAL MEAN	5376	5234	6811
HIGHEST ANNUAL MEAN			12420
LOWEST ANNUAL MEAN			2993
HIGHEST DAILY MEAN	23100	May 9	71200
LOWEST DAILY MEAN	(a) 1700	Dec 21	1060
ANNUAL SEVEN-DAY MINIMUM	(a) 2400	Dec 19	1210
INSTANTANEOUS PEAK FLOW		23900	72200
INSTANTANEOUS PEAK STAGE		10.65	(b) 23.83
10 PERCENT EXCEEDS	8050	8590	12100
50 PERCENT EXCEEDS	4450	4110	5200
90 PERCENT EXCEEDS	3220	3100	2900

(a) Ice affected

(b) Present datum

(c) Estimated due to ice effect or missing record



LOWER WISCONSIN RIVER BASIN

Base from U.S. Geological Survey 1:100,000 digital data;
modified by Wisconsin Department of Natural Resources.
Wisconsin Transverse Mercator projection.

05404116 SOUTH BRANCH BARABOO RIVER AT HILLSBORO, WI

LOCATION.--Lat 43°39'10", long 90°20'09", in NE ¼ NE ¼ sec.35, T.14 N., R.1 E., Vernon County, Hydrologic Unit 07070004, on left bank 220 ft upstream from County Highway FF at Hillsboro, and 6.3 mi upstream from mouth.

DRAINAGE AREA.--39.1 mi².

PERIOD OF RECORD.--July 1988 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 927.28 ft above sea level (levels by Mid-State Associates, Baraboo, WI).

REMARKS.--Records good (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	13	12	12	10	17	12	12	440	13	15	15
2	21	12	13	13	9.9	15	12	11	258	47	13	16
3	14	12	15	13	10	13	12	10	37	71	12	36
4	12	12	17	13	10	14	11	10	64	20	11	18
5	11	13	14	11	10	14	11	9.9	163	18	18	14
6	11	12	13	12	9.9	14	10	9.7	40	17	23	13
7	11	12	13	11	10	15	11	12	26	15	13	13
8	13	13	13	11	9.9	18	12	11	21	15	12	13
9	14	13	12	12	11	20	13	11	16	42	11	13
10	12	13	12	18	12	15	11	10	11	37	9.8	13
11	11	13	11	16	11	13	11	13	12	19	9.2	65
12	12	13	12	11	9.1	12	11	18	11	19	9.7	22
13	12	13	12	11	11	14	11	14	14	18	56	15
14	12	12	12	10	11	15	11	11	64	16	20	25
15	12	12	12	11	11	16	10	10	20	15	14	17
16	12	12	12	11	11	14	10	11	48	14	12	14
17	12	12	10	9.8	10	12	11	78	15	14	45	13
18	11	12	10	11	11	12	11	353	15	13	18	13
19	12	13	11	10	11	14	16	68	13	13	14	17
20	12	12	11	10	11	14	75	32	31	13	13	24
21	12	12	9.1	8.8	11	16	36	28	18	13	12	17
22	11	12	8.9	9.9	51	15	21	45	14	13	28	17
23	11	55	8.4	10	125	14	25	25	13	12	27	21
24	11	30	8.5	9.3	62	16	19	20	18	12	15	17
25	12	16	10	9.7	28	18	15	17	20	12	14	15
26	12	15	11	9.3	35	14	14	16	17	17	21	14
27	12	14	11	8.7	22	15	13	19	15	15	19	14
28	12	13	11	8.4	16	13	12	21	15	13	14	13
29	18	12	12	8.7	16	13	12	19	16	14	14	13
30	17	11	13	9.6	---	12	11	20	14	16	13	13
31	13	---	13	10	---	12	---	34	---	13	13	---
TOTAL	389	439	362.9	339.2	575.8	449	470	978.6	1479	599	538.7	543
MEAN	12.5	14.6	11.7	10.9	19.9	14.5	15.7	31.6	49.3	19.3	17.4	18.1
MAX	21	55	17	18	125	20	75	353	440	71	56	65
MIN	11	11	8.4	8.4	9.1	12	10	9.7	11	12	9.2	13
CFSM	.32	.37	.30	.28	.51	.37	.40	.81	1.26	.49	.44	.46
IN.	.37	.42	.35	.32	.55	.43	.45	.93	1.41	.57	.51	.52

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2000, BY WATER YEAR (WY)

	MEAN	14.9	17.3	13.8	13.8	19.3	35.3	33.4	25.0	33.9	19.2	15.3	21.6
MAX	26.1	28.6	22.9	26.8	31.5	50.8	70.9	52.5	75.3	52.3	28.2	95.3	
(WY)	1994	1993	1993	1996	1999	1989	1993	1993	1990	1993	1993	1992	
MIN	6.79	8.14	4.42	8.95	6.91	14.5	8.47	13.2	8.38	5.83	6.69	6.12	
(WY)	1990	1991	1990	1991	1989	2000	1990	1989	1989	1989	1988	1990	

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1988 - 2000

ANNUAL TOTAL	7818.1	7163.2	
ANNUAL MEAN	21.4	19.6	22.1
HIGHEST ANNUAL MEAN			35.1
LOWEST ANNUAL MEAN			13.0
HIGHEST DAILY MEAN	391	440	1190
LOWEST DAILY MEAN	(a)8.4	(a)8.4 (b)Dec 23	(c)1.2 Jul 24-27 1994
ANNUAL SEVEN-DAY MINIMUM	(a)9.6	(a)9.1 Jan 24	(c)1.4 Jul 22 1994
INSTANTANEOUS PEAK FLOW		1480 Jun 1	(d)4010 Jun 29 1990
INSTANTANEOUS PEAK STAGE		12.85 Jun 1	(f)15.60 Jun 29 1990
ANNUAL RUNOFF (CFSM)	.55	.50	.56
ANNUAL RUNOFF (INCHES)	7.44	6.82	7.67
10 PERCENT EXCEEDS	32	25	34
50 PERCENT EXCEEDS	15	13	15
90 PERCENT EXCEEDS	11	10	7.4

(a) Ice affected

(b) Also occurred Jan. 28

(c) Result of closing dam gates to fill lake 0.35 mi upstream

(d) From rating curve extended above 1,100 ft³/s, on basis of contracted-area measurement

(f) From floodmark on gage house

WISCONSIN RIVER BASIN

05404500 DEVILS LAKE NEAR BARABOO, WI

LOCATION.--Lat 43°25'35", long 89°43'40", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.13, T.11 N., R.6 E., Sauk County, Hydrologic Unit 07070004, in Devils Lake State Park, 3.5 mi south of Baraboo; prior to Nov. 19, 1996, at lat 43°25'18", long 89°43'38".

DRAINAGE AREA.--4.79 mi². Area of Devils Lake, 361 acres.

GAGE-HEIGHT RECORD

PERIOD OF RECORD.--June 1922 to August 1930, June to August 1932, June 1934 to September 1981 (fragmentary). October 1981 to September 1984, data unpublished in district files. October 1984 to current year.

REVISED RECORDS.--WDR WI-78-1: Drainage area.

GAGE.--Water-stage recorder installed July 17, 1991. Datum of gage is 955.00 ft, above sea level.

REMARKS.--Lake has no surface outlet.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height observed, 14.13 ft, July 18, 1993; minimum observed, 1.49 ft Feb. 8, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum recorded gage height, 12.04 ft, July 11 and 12; minimum recorded, 8.31 ft, Feb. 9.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.40	8.99	8.70	8.50	8.44	8.58	8.48	9.03	10.18	11.38	11.56	11.13
2	9.41	8.97	8.68	8.51	8.43	8.58	8.48	9.03	11.15	11.38	11.54	11.12
3	9.40	8.95	8.69	8.51	8.43	8.57	8.46	9.02	11.24	11.43	11.51	11.11
4	9.38	8.93	8.70	8.52	8.43	8.57	8.45	9.02	11.29	11.41	11.48	11.08
5	9.36	8.91	8.69	8.52	8.42	8.56	8.44	9.01	11.38	11.38	11.49	11.04
6	9.34	8.90	8.68	8.51	8.42	8.56	8.41	9.00	11.41	11.36	11.51	11.01
7	9.33	8.89	8.67	8.50	8.41	8.55	8.42	8.99	11.41	11.33	11.49	10.97
8	9.31	8.87	8.66	8.50	8.41	8.56	8.44	8.98	11.40	11.30	11.46	10.95
9	9.31	8.86	8.65	8.49	8.40	8.57	8.42	8.96	11.39	11.32	11.44	10.93
10	9.30	8.85	8.64	8.51	8.40	8.56	8.42	8.94	11.38	11.82	11.41	10.92
11	9.28	8.84	8.64	8.51	8.39	8.55	8.41	8.93	11.37	12.03	11.38	10.96
12	9.26	8.83	8.63	8.50	8.39	8.54	8.40	8.94	11.35	12.03	11.36	10.95
13	9.25	8.82	8.62	8.50	8.41	8.54	8.40	8.94	11.35	12.01	11.35	10.92
14	9.23	8.80	8.61	8.49	8.42	8.53	8.39	8.91	11.53	11.99	11.33	10.93
15	9.21	8.79	8.61	8.49	8.42	8.53	8.38	8.89	11.59	11.96	11.31	10.90
16	9.23	8.77	8.61	8.48	8.41	8.52	8.37	8.88	11.59	11.93	11.28	10.87
17	9.21	8.76	8.60	8.47	8.41	8.51	8.37	8.91	11.57	11.90	11.31	10.84
18	9.19	8.75	8.60	8.47	8.42	8.50	8.36	9.25	11.56	11.85	11.30	10.82
19	9.18	8.74	8.60	8.47	8.43	8.50	8.38	9.39	11.54	11.81	11.27	10.80
20	9.16	8.73	8.59	8.47	8.42	8.50	8.59	9.43	11.58	11.78	11.24	10.81
21	9.14	8.72	8.57	8.47	8.42	8.50	8.75	9.44	11.59	11.74	11.21	10.78
22	9.10	8.70	8.56	8.47	8.41	8.50	8.80	9.45	11.55	11.71	11.20	10.78
23	9.07	8.78	8.56	8.46	8.42	8.50	8.92	9.45	11.53	11.68	11.20	10.80
24	9.05	8.79	8.55	8.46	8.45	8.51	8.98	9.44	11.52	11.65	11.18	10.78
25	9.04	8.78	8.55	8.45	8.48	8.51	9.01	9.42	11.52	11.62	11.16	10.75
26	9.01	8.76	8.53	8.44	8.57	8.51	9.02	9.41	11.50	11.61	11.21	10.73
27	9.01	8.75	8.53	8.44	8.58	8.52	9.03	9.41	11.47	11.60	11.23	10.70
28	8.98	8.74	8.53	8.43	8.58	8.51	9.04	9.44	11.46	11.59	11.21	10.69
29	9.01	8.72	8.52	8.43	8.58	8.50	9.04	9.43	11.44	11.60	11.19	10.66
30	9.02	8.71	8.51	8.45	---	8.49	9.04	9.44	11.41	11.59	11.17	10.64
31	9.01	---	8.51	8.45	---	8.49	---	9.51	---	11.57	11.15	---
MEAN	9.20	8.81	8.61	8.48	8.44	8.53	8.60	9.17	11.41	11.66	11.33	10.88
MAX	9.41	8.99	8.70	8.52	8.58	8.58	9.04	9.51	11.59	12.03	11.56	11.13
MIN	8.98	8.70	8.51	8.43	8.39	8.49	8.36	8.88	10.18	11.30	11.15	10.64

05404500 DEVILS LAKE NEAR BARABOO, WI--Continued

PRECIPITATION QUANTITY

PERIOD OF RECORD.--October 1996 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established on July 17, 1991. Prior to Oct. 1, 1996, record was not published. Missing record Nov. 16 to Mar. 14.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 5.01 in., June 1, 2000.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 5.01 in., June 1.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.27	.00	---	---	---	---	.00	.04	5.01	.00	.31	.15
2	.26	.00	---	---	---	---	.01	.00	.00	.05	.00	.03
3	.20	.00	---	---	---	---	.00	.00	.09	.02	.00	.06
4	.02	.00	---	---	---	---	.00	.00	.66	.00	.00	.00
5	.00	.00	---	---	---	---	.00	.00	.18	.00	.87	.00
6	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
7	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
8	.22	.00	---	---	---	---	.19	.04	.00	.00	.00	.00
9	.00	.00	---	---	---	---	.00	.00	.00	.89	.00	.00
10	.00	.00	---	---	---	---	.00	.00	.00	3.80	.00	.01
11	.00	.00	---	---	---	---	.06	.21	.15	.00	.00	1.21
12	.00	.00	---	---	---	---	.00	.27	.00	.01	.33	.00
13	.15	.00	---	---	---	---	.01	.00	.08	.00	.07	.00
14	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.53
15	.03	.00	---	---	---	.04	.00	.00	.00	.00	.00	.00
16	.34	---	---	---	---	.00	.00	.03	.00	.00	.01	.00
17	.00	---	---	---	---	.00	.05	1.17	.00	.00	.95	.00
18	.00	---	---	---	---	.00	.00	.59	.00	.00	.01	.00
19	.00	---	---	---	---	.00	.65	1.49	.00	.00	.00	.42
20	.00	---	---	---	---	.36	2.04	.00	.00	.00	.00	.03
21	.00	---	---	---	---	.01	.09	.00	.00	.00	.00	.00
22	.00	---	---	---	---	.00	.01	.03	.00	.00	.32	.76
23	.00	---	---	---	---	.00	.79	.00	.00	.00	.01	.01
24	.00	---	---	---	---	.25	.00	.00	.00	.00	.00	.00
25	.00	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
26	.00	---	---	---	---	.13	.00	.03	.00	.35	1.11	.00
27	.00	---	---	---	---	.01	.00	.20	.00	.01	.00	.00
28	.00	---	---	---	---	.00	.03	.45	.00	.44	.00	.00
29	.62	---	---	---	---	.00	.00	.00	.00	.28	.00	.00
30	.00	---	---	---	---	.00	.00	.23	.00	.00	.00	.00
31	.00	---	---	---	---	.00	---	1.59	---	.00	.00	---
TOTAL	2.11	0.00	---	---	---	0.80	3.93	6.37	6.17	5.85	3.99	3.21

WISCONSIN RIVER BASIN

05405000 BARABOO RIVER NEAR BARABOO, WI

LOCATION.--Lat 43°28'51", long 89°38'09", in NW ¼ NW ¼ sec.35, T.12 N., R.7 E., Sauk County, Hydrologic Unit 07070004, on left bank 50 ft downstream from highway bridge, 0.3 mi downstream from Rowley Creek and 5.3 mi east of Baraboo.

DRAINAGE AREA.--609 mi².

PERIOD OF RECORD.--December 1913 to March 1922. September 1942 to current year.

REVISED RECORDS.--WSP 455: 1915. WSP 505: 1917(M). WSP 1438: 1914, 1915(M), 1916-17, 1918-20(M), 1944(M), 1949(M). WSP 1914: 1948, 1950, 1956. WDR WI-75-1: 1968. WDR WI-77-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 788.21 ft above sea level. Dec. 18, 1913, to Mar. 31, 1922, nonrecording gage at bridge 2.3 mi upstream at datum 7.6 ft higher. Sept. 24, 1942, to June 10, 1963, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Apparent occasional regulation at low flow by dams upstream. Gage-height telemeter at station.

EXTREMES OUTSIDE THE PERIOD OF RECORD.--Flood of Aug. 6, 1935, reached a stage of 15.8 ft from floodmarks, site and datum in use in 1922, discharge, 5,100 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	255	392	271	249	e210	495	279	317	2050	346	300	279
2	253	339	264	255	e210	426	269	300	4970	354	281	273
3	251	301	279	256	e220	399	267	289	5150	615	262	288
4	277	282	309	260	e220	373	262	277	4260	961	253	307
5	281	273	362	250	e220	349	256	263	3620	745	278	393
6	266	267	365	248	e220	339	253	252	3110	595	307	431
7	279	265	332	239	e220	341	251	242	2560	447	350	354
8	260	265	305	239	224	349	256	236	2040	370	357	281
9	239	257	290	231	223	371	265	235	1660	378	322	260
10	238	256	282	261	226	401	274	233	1290	1630	275	255
11	243	264	275	279	e220	399	276	231	835	2230	252	315
12	248	272	267	280	e220	366	266	238	545	1850	243	326
13	243	269	260	e260	221	334	257	265	457	1200	268	405
14	235	265	259	e220	224	315	251	310	898	689	270	517
15	241	261	264	e210	225	322	244	303	1260	469	302	453
16	264	267	268	e210	232	327	240	267	1190	397	342	377
17	256	265	261	e210	237	327	243	274	1000	353	350	342
18	260	283	184	e210	227	313	244	911	818	325	343	294
19	259	278	e210	e210	233	304	259	1480	669	303	388	271
20	254	258	e230	e210	233	303	566	1520	601	288	397	281
21	243	253	e230	e210	236	321	1070	1380	592	281	329	288
22	216	253	e220	e210	267	348	1050	1310	560	276	284	341
23	247	340	e220	e210	438	351	1020	1190	507	271	303	365
24	258	399	e220	e210	865	349	967	867	433	263	365	347
25	246	448	e220	e210	1250	356	720	538	444	255	368	332
26	236	477	223	e210	1300	360	549	394	495	256	395	312
27	235	440	221	e210	1170	365	449	340	451	262	452	282
28	240	354	230	e210	918	358	394	338	422	296	426	262
29	270	308	237	e210	657	335	359	332	390	317	392	250
30	322	286	239	e210	---	312	334	335	368	300	352	240
31	415	---	246	e210	---	293	---	533	---	291	297	---
TOTAL	8030	9137	8043	7097	11566	10901	12390	16000	43645	17613	10103	9721
MEAN	259	305	259	229	399	352	413	516	1455	568	326	324
MAX	415	477	365	280	1300	495	1070	1520	5150	2230	452	517
MIN	216	253	184	210	210	293	240	231	368	255	243	240
CFSM	.43	.50	.43	.38	.65	.58	.68	.85	2.39	.93	.54	.53
IN.	.49	.56	.49	.43	.71	.67	.76	.98	2.67	1.08	.62	.59

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2000, BY WATER YEAR (WY)

MEAN	282	328	245	248	336	805	712	437	440	326	259	314
MAX	842	942	519	945	1135	1759	2588	1518	1455	1495	1018	1285
(WY)	1973	1986	1993	1946	1966	1948	1993	1973	2000	1993	1980	1965
MIN	117	116	76.2	78.3	89.3	170	253	138	112	112	95.8	100
(WY)	1959	1959	1959	1959	1959	1964	1946	1958	1958	1965	1958	1958

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1914 - 2000
ANNUAL TOTAL	153410	164246	
ANNUAL MEAN	420	449	394
HIGHEST ANNUAL MEAN			824
LOWEST ANNUAL MEAN			158
HIGHEST DAILY MEAN	2230	5150	7540
LOWEST DAILY MEAN	184	184	26
ANNUAL SEVEN-DAY MINIMUM	192	(a)210	(a)72
INSTANTANEOUS PEAK FLOW		5540	(b)7900
INSTANTANEOUS PEAK STAGE		22.04	22.78
ANNUAL RUNOFF (CFSM)	.69	.74	.65
ANNUAL RUNOFF (INCHES)	9.37	10.03	8.79
10 PERCENT EXCEEDS	752	823	780
50 PERCENT EXCEEDS	300	282	246
90 PERCENT EXCEEDS	216	222	140

(a) Ice affected

(b) Gage height, 17.50 ft, estimated, site and datum then in use, from rating curve extended above 6,000 ft³/s

(c) Estimated due to ice effect or missing record

05405855 LAKE WISCONSIN TRIBUTARY #3 NEAR PRAIRIE DU SAC, WI

LOCATION.--Lat 43°20'10", long 89°42'23", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.19, T.10 N., R.7 E., Sauk County, Hydrologic Unit 07070005, on
USDA Dairy Forage Research station, 2.7 mi northeast of Prairie du Sac.

DRAINAGE AREA.--0.0028 mi² (1.78 acres).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1997 to current year.

GAGE.--Water-stage recorder and a 3-inch Parshall flume. Elevation of gage is 835 ft above sea level, from topographic map.

REMARKS.--Records are good (see page 12). Periods of flow are reported; for all other periods, there was no flow.

START DATE	START TIME	END DATE	END TIME	VOLUME (cubic feet)	PEAK DISCHARGE (ft ³ /s)
02/22/00	1500	02/22/00	2200	691	0.053
02/23/00	0540	02/23/00	1820	2,186	0.131
02/24/00	0330	02/24/00	0500	34.6	0.010
02/24/00	0545	02/24/00	1315	812	0.082
06/01/00	0145	06/01/00	0345	3,015	1.09
06/01/00	1750	06/01/00	1920	2,359	1.15
07/02/00	1920	07/02/00	1940	25.9	0.047
07/10/00	0550	07/10/00	0630	51.8	0.037

WISCONSIN RIVER BASIN

05405855 LAKE WISCONSIN TRIBUTARY #3 NEAR PRAIRIE DU SAC, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1997 to current year.

INSTRUMENTATION.--Water-quality sampler November 1997 to current year.

REMARKS.-- Chemical analyses by the Wisconsin State Laboratory of Hygiene. Samples are storm-composite samples collected by an automatic point sampler.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

BEGIN- NING DATE	BEGIN- NING TIME	ENDING DATE	ENDING TIME	RUNOFF VOLUME MILLIONS OF CUBIC FEET (99905)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L) (00535)
FEB											
22...	1510	000223	0947	1.24X10-3	2.8	.671	1.18	.292	.494	13	7
24...	0610	000224	0930	0.803X10-3	2.1	.200	.283	.144	.354	10	7
JUN											
01...	0145	000601	0220	0.570X10-3	4.3	.359	.270	.606	1.63	355	90

05405855 LAKE WISCONSIN TRIBUTARY #3 NEAR PRAIRIE DU SAC, WI--Continued

PRECIPITATION QUANTITY

PERIOD OF RECORD.--November 1997 to current year.

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established Nov. 1, 1997. Rainfall estimated to be 0.00 for Dec. 15-16, 18, 25-28, Jan. 1-2, 4, 6, 9, 13, 15, 20, 23, 25-26, 30, Feb. 3-4, 13-15, Mar. 9-10, 13, 18, 27, and Apr. 7-8 because recorded precipitation interpreted as collector snowmelt. Missing record June 2-30.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 3.97 in., June 1, 2000.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 3.97 in., June 1.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	.00	.00	.00	.00	.00	.00	.06	3.97	.00	.03	.54
2	.30	.00	.02	.00	.00	.00	.00	.00	---	.65	.00	.00
3	.20	.00	.48	.00	.00	.00	.00	.00	---	.01	.00	.17
4	.00	.00	.06	.00	.00	.00	.00	.00	---	.01	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	---	.00	1.24	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	---	.00	.01	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	---	.00	.00	.01
8	.10	.00	.00	.00	.00	.30	.00	.05	---	.00	.00	.00
9	.00	.00	.11	.00	.00	.00	.00	.04	---	.55	.00	.00
10	.00	.00	.01	.20	.00	.00	.00	.00	---	1.61	.00	.02
11	.00	.00	.00	.00	.00	.00	.00	.73	---	.00	.00	1.55
12	.00	.00	.00	.00	.00	.00	.00	.04	---	.00	.31	.00
13	.20	.00	.01	.00	.00	.00	.00	.00	---	.00	.11	.00
14	.00	.00	.00	.00	.00	.03	.00	.00	---	.00	.01	.60
15	.00	.00	.00	.00	.00	.12	.00	.00	---	.00	.00	.00
16	.10	.00	.00	.00	.00	.01	.00	.02	---	.00	.01	.01
17	.00	.00	.00	.00	.00	.00	.01	1.71	---	.00	.92	.00
18	.00	.00	.00	.00	.00	.00	.01	1.95	---	.00	.00	.00
19	.00	.10	.00	.00	.00	.45	.55	.00	---	.00	.01	.50
20	.00	.00	.00	.00	.00	.02	1.19	.00	---	.00	.00	.25
21	.00	.00	.00	.00	.00	.00	.03	.00	---	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.06	.01	---	.00	.39	.73
23	.00	1.00	.00	.00	.01	.00	1.02	.00	---	.00	.01	.01
24	.00	.00	.00	.00	.41	.11	.00	.00	---	.00	.01	.00
25	.00	.00	.00	.00	.46	.00	.00	.00	---	.00	.01	.00
26	.00	.00	.00	.00	.13	.21	.00	.04	---	.10	1.07	.00
27	.00	.00	.00	.00	.00	.00	.00	.42	---	.08	.00	.00
28	.00	.00	.00	.00	.00	.00	.02	.48	---	.10	.00	.00
29	.30	.00	.00	.00	.03	.00	.00	.00	---	.01	.00	.01
30	.00	.00	.00	.00	---	.00	.00	.26	---	.01	.01	.00
31	.00	---	.00	.00	---	.00	---	1.96	---	.00	.00	---
TOTAL	1.50	1.10	0.69	0.20	1.04	1.25	2.89	7.77	3.97	3.13	4.15	4.40

WISCONSIN RIVER BASIN

05405857 LAKE WISCONSIN TRIBUTARY #2 NEAR PRAIRIE DU SAC, WI

LOCATION.--Lat 43°20'06", long 89°42'20", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.19, T.10 N., R.7 E., Sauk County, Hydrologic Unit 07070005, on
USDA Dairy Forage Research station, 2.6 mi northeast of Prairie du Sac.

DRAINAGE AREA.--0.0089 mi² (5.71 acres).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1997 to current year.

GAGE.--Water-stage recorder and a 3-inch Parshall flume. Elevation of gage is 840 ft above sea level, from topographic map.

REMARKS.--Records are good (see page 12). Periods of flow are reported; for all other periods, there was no flow.

START DATE	START TIME	END DATE	END TIME	VOLUME (cubic feet)	PEAK DISCHARGE (ft ³ /s)
01/10/00	0445	01/10/00	1745	276	0.013
02/22/00	1230	02/22/00	2000	4,579	0.340
02/23/00	0500	02/23/00	1810	4,355	0.213
02/24/00	0545	02/24/00	1330	2,100	0.204
06/01/00	0125	06/01/00	0350	8,796	3.46
06/01/00	0650	06/01/00	0745	51.8	0.042
06/01/00	1745	06/01/00	1930	6,013	3.81
07/02/00	1920	07/02/00	1945	34.6	0.047
07/10/00	0550	07/10/00	0630	51.8	0.037
08/26/00	0755	08/26/00	0820	69.1	0.095
09/11/00	0745	09/11/00	0830	156	0.240

05405857 LAKE WISCONSIN TRIBUTARY #2 NEAR PRAIRIE DU SAC, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1997 to current year.

INSTRUMENTATION.--Water-quality sampler November 1997 to current year.

REMARKS.-- Chemical analyses by the Wisconsin State Laboratory of Hygiene. Samples are storm-composite samples collected by an automatic point sampler.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

BEGIN- NING DATE	BEGIN- NING TIME	ENDING DATE	ENDING TIME	RUNOFF VOLUME MILLIONS OF CUBIC FEET (99905)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	RESIDUE VOLATILE, SUS- PENDED (MG/L) (00535)
FEB											
22...	1245	000222	1427	1.01X10-3	2.3	.451	1.13	.193	.362	9	<5
24...	0600	000224	0920	1.05X10-3	3.1	.334	.473	.369	.680	40	7
JUN											
01...	0145	000601	0220	2.53X10-3	9.4	.489	.266	.722	2.39	880	170
01...	1745	000601	1840	5.89X10-3	7.6	.286	.206	.294	1.77	1210	170

WISCONSIN RIVER BASIN

05405857 LAKE WISCONSIN TRIBUTARY #2 NEAR PRAIRIE DU SAC, WI--Continued

PRECIPITATION QUANTITY

PERIOD OF RECORD.--November 1997 to current year.

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established Nov. 6, 1997. Rainfall estimated to be 0.00 for Jan. 13, 15, 27-28, 30, Feb. 3, 7, 9, 13-15, 18-20, and Mar. 9-10, 13, 18, 27-28 because recorded precipitation interpreted as collector snowmelt. Rain gage was plugged with debris from June 6-29.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 3.30 in., Apr. 3, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 3.10 in., June 1.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.27	.00	.00	.00	.00	.00	.00	.05	3.10	.00	.03	.46
2	.29	.00	.00	.00	.00	.00	.00	.00	.38	.65	.00	.00
3	.18	.00	.50	.00	.00	.00	.00	.00	.11	.01	.00	.18
4	.00	.00	.10	.00	.00	.00	.00	.00	.62	.01	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.16	.00	1.34	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	---	.00	.01	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	---	.00	.00	.00
8	.13	.00	.00	.00	.00	.31	.00	.06	---	.00	.00	.00
9	.00	.00	.10	.00	.00	.00	.00	.03	---	.55	.00	.00
10	.00	.02	.00	.20	.00	.00	.00	.00	---	1.61	.00	.02
11	.00	.00	.00	.00	.00	.00	.00	.79	---	.00	.00	1.58
12	.00	.00	.00	.00	.00	.00	.00	.02	---	.00	.31	.00
13	.18	.01	.00	.00	.00	.00	.00	.00	---	.00	.12	.00
14	.00	.00	.00	.00	.00	.03	.00	.00	---	.00	.00	.58
15	.00	.00	.00	.00	.00	.13	.00	.00	---	.00	.00	.00
16	.13	.00	.00	.00	.00	.00	.00	.02	---	.00	.01	.00
17	.00	.00	.00	.00	.00	.00	.01	1.65	---	.00	.87	.00
18	.00	.00	.00	.00	.00	.00	.00	1.90	---	.00	.00	.01
19	.00	.03	.00	.00	.00	.30	.45	.00	---	.00	.00	.50
20	.00	.00	.00	.00	.00	.01	1.12	.00	---	.00	.00	.22
21	.00	.00	.00	.00	.14	.00	.04	.00	---	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.06	.01	---	.00	.34	.70
23	.00	.98	.00	.00	.00	.00	.94	.00	---	.00	.00	.01
24	.00	.00	.00	.00	.38	.11	.00	.00	---	.00	.01	.00
25	.00	.00	.00	.00	.50	.00	.00	.00	---	.00	.00	.00
26	.00	.00	.00	.00	.15	.22	.00	.03	---	.09	1.18	.00
27	.00	.00	.00	.00	.00	.00	.00	.43	---	.07	.00	.00
28	.00	.00	.00	.00	.00	.00	.02	.44	---	.09	.00	.00
29	.20	.00	.00	.00	.03	.00	.00	.00	---	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.01	.26	.00	.00	.00	.00
31	.01	---	.00	.00	---	.00	---	1.98	---	.00	.00	---
TOTAL	1.39	1.04	0.70	0.20	1.20	1.11	2.65	7.67	4.37	3.08	4.22	4.26

05405859 LAKE WISCONSIN TRIBUTARY #1 NEAR PRAIRIE DU SAC, WI

LOCATION.--Lat 43°19'59", long 89°42'23", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.19, T.10 N., R.7 E., Sauk County, Hydrologic Unit 07070005, on USDA Dairy Forage Research station, 2.5 mi northeast of Prairie du Sac.

DRAINAGE AREA.--0.0037 mi² (2.38 acres).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1997 to current year.

GAGE.--Water-stage recorder and a 3-inch Parshall flume. Elevation of gage is 830 ft above sea level, from topographic map.

REMARKS.--Records are good (see page 12). Periods of flow are reported; for all other periods, there was no flow. Gage-height telemeter at station.

START DATE	START TIME	END DATE	END TIME	VOLUME (cubic feet)	PEAK DISCHARGE (ft ³ /s)
06/01/00	0130	06/01/00	0400	3,732	1.75
06/01/00	0645	06/01/00	0815	104	0.042
06/01/00	1745	06/01/00	1945	2,376	2.13
07/10/00	0540	07/10/00	0635	562	0.485
09/11/00	0750	09/11/00	0830	43.2	0.070

WISCONSIN RIVER BASIN

05405859 LAKE WISCONSIN TRIBUTARY #1 NEAR PRAIRIE DU SAC, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1997 to current year.

INSTRUMENTATION.--Water-quality sampler November 1997 to current year.

REMARKS.-- Chemical analyses by the Wisconsin State Laboratory of Hygiene. Samples are storm-composite samples collected by an automatic point sampler.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

BEGIN- NING DATE	BEGIN- NING TIME	ENDING DATE	ENDING TIME	RUNOFF VOLUME OF CUBIC FEET (99905)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	RESIDUE VOLATILE, SUS- PENDE (MG/L) (00535)
FEB											
23...	1100	000224	1004	--	2.1	.528	.466	.298	.475	10	<5
JUN											
01...	0145	000601	0220	1.02X10-3	99	7.24	.285	1.60	16.3	7020	1040
01...	1745	000601	1945	2.38X10-3	13	.663	.243	.439	3.15	2550	424
JUL											
10...	0550	000710	0618	0.432X10-3	3.8	.448	.343	.683	1.41	402	50

05405859 LAKE WISCONSIN TRIBUTARY #1 NEAR PRAIRIE DU SAC, WI--Continued

PRECIPITATION QUANTITY

PERIOD OF RECORD.--November 1997 to current year.

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established Nov. 1, 1997. Rainfall estimated to be 0.00 for Dec. 15, 20, 28, Jan. 1, 9, 13, 15, 24, 27, 30, Feb. 3, 8, 13-15, 20, and Mar. 10, 13 because recorded precipitation interpreted as collector snowmelt. Rain gage was plugged with debris from May 19 to June 12.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 3.37 in., Apr. 3, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 1.67 in., May 18.

 PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
 DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.26	.00	.00	.00	.00	.00	.00	.07	---	.00	.02	.45
2	.31	.00	.02	.02	.00	.00	.00	.00	---	.77	.00	.00
3	.19	.00	.52	.00	.00	.00	.00	.00	---	.02	.00	.18
4	.00	.00	.07	.00	.00	.00	.00	.00	---	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	---	.00	1.29	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	---	.00	.01	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	---	.00	.00	.00
8	.13	.00	.00	.00	.00	.31	.00	.06	---	.00	.00	.00
9	.01	.00	.11	.00	.00	.23	.00	.04	---	.58	.00	.00
10	.00	.02	.00	.20	.00	.00	.00	.00	---	1.03	.00	.02
11	.00	.00	.00	.00	.00	.00	.00	.84	---	.00	.00	1.74
12	.00	.00	.00	.00	.00	.00	.00	.03	---	.00	.31	.00
13	.16	.01	.01	.00	.00	.00	.00	.00	.70	.00	.12	.00
14	.00	.00	.00	.00	.00	.03	.00	.00	.62	.00	.00	.56
15	.00	.00	.00	.00	.00	.13	.00	.00	.09	.00	.00	.00
16	.14	.00	.00	.00	.00	.00	.00	.02	.10	.00	.01	.00
17	.00	.00	.00	.00	.00	.00	.00	1.60	.00	.00	.89	.00
18	.00	.00	.00	.00	.00	.04	.00	1.67	.01	.00	.00	.00
19	.00	.04	.00	.00	.00	.29	.45	---	.00	.00	.00	.55
20	.00	.00	.00	.00	.00	.01	1.10	---	.95	.00	.00	.22
21	.00	.00	.00	.00	.00	.00	.03	---	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.06	---	.00	.00	.37	.68
23	.00	.93	.00	.00	.01	.00	.96	---	.00	.00	.01	.00
24	.00	.00	.00	.00	.39	.10	.00	---	.37	.00	.00	.00
25	.00	.00	.00	.00	.50	.01	.00	---	.10	.00	.00	.00
26	.00	.00	.00	.00	.15	.26	.00	---	.06	.08	1.24	.00
27	.00	.00	.00	.00	.00	.02	.00	---	.00	.06	.00	.00
28	.00	.00	.00	.00	.00	.00	.02	---	.30	.07	.00	.00
29	.19	.00	.01	.00	.03	.00	.00	---	.01	.01	.00	.00
30	.00	.00	.00	.00	---	.00	.00	---	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	---	---	.00	.00	---
TOTAL	1.39	1.00	0.74	0.22	1.08	1.43	2.62	4.33	3.31	2.62	4.27	4.40

WISCONSIN RIVER BASIN

05406469 BREWERY CREEK, UPSTREAM SITE, AT CROSS PLAINS, WI

LOCATION.--Lat 43°07'31", long 89°38'06", in NE ¼ SW ¼ sec.35, T.8 N., R.7 E., Dane County, Hydrologic Unit 07070005, on left bank in field, 1.3 mi upstream from Black Earth Creek.

DRAINAGE AREA.--10.1 mi², of which 2.80 mi² is noncontributing.

PERIOD OF RECORD.--October 1999 to September 2000.

GAGE.--Water-stage recorder. Elevation of gage is 900 ft above sea level, from topographic map.

REMARKS.--Records poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2.2	e2.2	e1.9	e1.8	e1.8	e2.6	e2.4	e2.1	e86	e2.1	2.2	2.5
2	e2.5	e2.1	e2.0	e2.0	e1.8	e2.3	e2.4	e1.9	e51	e3.9	2.2	2.4
3	e2.3	e2.1	e2.1	e2.0	e1.9	e2.1	e2.4	e1.9	e6.7	e7.5	2.0	2.5
4	e2.5	e2.1	e2.2	e1.9	e1.9	e2.1	e2.4	e2.0	e5.4	e2.8	2.0	2.4
5	e2.4	e2.1	e2.2	e1.9	e1.8	e2.1	e2.3	e1.9	e8.4	e2.7	4.6	2.3
6	e2.3	e2.0	e2.0	e1.9	e1.8	e2.1	e2.2	e1.8	e4.1	2.5	4.6	2.3
7	e2.2	e2.0	e2.0	e1.9	e1.8	e2.1	e2.1	e1.8	e3.2	2.3	2.6	2.3
8	e2.3	e2.0	e1.9	e1.9	e1.9	e2.4	e2.2	e1.9	e3.0	2.3	2.4	2.3
9	e2.3	e2.1	e2.0	e1.9	e2.0	e2.7	e2.4	e1.9	e2.8	2.6	2.3	2.3
10	e2.3	e2.4	e2.0	e2.4	e2.0	e2.3	e2.4	e1.9	e2.7	5.2	2.1	2.3
11	e2.3	e2.2	e1.9	e2.2	e2.0	e2.2	e2.2	e1.9	e2.6	3.0	2.1	4.8
12	e2.3	e2.0	e1.9	e2.0	e2.0	e2.1	e2.1	e2.0	e2.6	2.6	2.1	4.5
13	e2.3	e2.0	e1.9	e1.9	e2.0	e2.2	e2.1	e1.9	e19	2.4	2.2	2.9
14	e2.3	e2.0	e1.9	e1.9	e1.9	e2.2	e2.1	e1.8	e39	2.3	2.2	3.0
15	e2.3	e2.0	e1.9	e1.9	e1.9	e2.3	e2.1	e1.8	e5.5	2.2	2.2	2.7
16	e2.5	e2.0	e1.9	e1.9	e2.0	e2.4	e2.1	e1.8	e3.9	2.1	2.0	2.6
17	e2.3	e2.0	e1.9	e1.9	e2.0	e2.2	e2.1	e2.4	e3.2	2.1	3.1	2.6
18	e2.3	e2.0	e1.9	e1.8	e2.1	e2.2	e2.1	e66	e2.9	2.0	2.6	2.5
19	e2.2	e2.0	e1.9	e1.8	e2.1	e2.3	e2.5	e12	e2.8	2.0	2.4	2.5
20	e2.2	e1.9	e1.8	e1.8	e2.1	e2.5	e5.9	e4.2	e4.2	2.0	2.3	3.4
21	e2.2	e1.9	e1.8	e1.7	e2.1	e2.7	e4.8	e2.9	e3.1	2.1	2.2	2.9
22	e2.2	e1.9	e1.8	e1.8	e3.4	e2.5	e2.9	e2.7	e2.8	2.1	2.2	3.5
23	e2.2	e3.1	e1.8	e1.8	e15	e2.4	e3.8	e2.5	e2.6	2.0	2.3	4.3
24	e2.2	e2.5	e1.8	e1.8	e7.6	e2.5	e2.9	e2.3	e2.7	2.0	2.3	3.2
25	e2.2	e2.1	e1.8	e1.8	e5.4	e2.5	e2.6	e2.2	e2.8	2.0	2.2	3.0
26	e2.2	e2.0	e1.8	e1.8	e9.5	e2.6	e2.4	e2.1	e2.6	2.0	4.7	2.7
27	e2.2	e2.0	e1.9	e1.8	e4.3	e2.7	e2.3	e2.5	e2.5	2.0	3.3	2.6
28	e2.2	e1.9	e1.9	e1.8	e2.8	e2.6	e2.3	e7.0	e2.5	2.0	2.7	2.6
29	e2.2	e1.9	e1.9	e1.8	e2.7	e2.5	e2.2	e3.5	e2.4	2.1	2.7	2.5
30	e2.2	e1.9	e1.9	e1.8	---	e2.5	e2.2	e3.8	e2.2	2.1	2.6	3.2
31	e2.2	---	e1.8	e1.8	---	e2.3	---	e57	---	2.2	2.5	---
TOTAL	70.5	62.4	59.4	58.4	91.6	73.2	76.9	203.4	285.2	79.2	79.9	85.6
MEAN	2.27	2.08	1.92	1.88	3.16	2.36	2.56	6.56	9.51	2.55	2.58	2.85
MAX	2.5	3.1	2.2	2.4	15	2.7	5.9	66	86	7.5	4.7	4.8
MIN	2.2	1.9	1.8	1.7	1.8	2.1	2.1	1.8	2.2	2.0	2.0	2.3
CFSM	.31	.28	.26	.26	.43	.32	.35	.90	1.30	.35	.35	.39
IN.	.36	.32	.30	.30	.47	.37	.39	1.04	1.45	.40	.41	.44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2000, BY WATER YEAR (WY)

	MEAN	2.27	2.08	1.92	1.88	3.16	2.36	2.56	6.56	9.51	2.55	2.58	2.85
MAX	2.27	2.08	1.92	1.88	3.16	2.36	2.56	6.56	9.51	2.55	2.58	2.85	
(WY)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
MIN	2.27	2.08	1.92	1.88	3.16	2.36	2.56	6.56	9.51	2.55	2.58	2.85	
(WY)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000

SUMMARY STATISTICS

FOR 2000 WATER YEAR

ANNUAL TOTAL	1225.7
ANNUAL MEAN	3.35
HIGHEST DAILY MEAN	86 Jun 1
LOWEST DAILY MEAN	1.7 Jan 21
ANNUAL SEVEN-DAY MINIMUM	1.8 Jan 18
INSTANTANEOUS PEAK FLOW	177 Jun 1
INSTANTANEOUS PEAK STAGE	7.32 Jun 1
ANNUAL RUNOFF (CFSM)	.46
ANNUAL RUNOFF (INCHES)	6.25
10 PERCENT EXCEEDS	3.4
50 PERCENT EXCEEDS	2.2
90 PERCENT EXCEEDS	1.9

(e) Estimated based on station 05406470 adjusted for drainage area

05406469 BREWERY CREEK, UPSTREAM SITE, AT CROSS PLAINS, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1999 to September 2000.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1999 to September 2000.

SUSPENDED-SOLIDS DISCHARGE: October 1999 to September 2000.

INSTRUMENTATION.--Water-quality sampler October 1999 to September 2000; continuous water temperature recorder October 1999 to September 2000.

REMARKS.-- Chemical analyses by the Wisconsin State Laboratory of Hygiene. Samples are point samples unless otherwise indicated.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum observed, 23.5°C, May 5; minimum observed, 0.0°C, Dec. 17-18, 20-25, 27-28, Jan. 5, 7, 12-14, 16-17, 19-29, 31, and Feb. 2, 5-6, 8, 11-13, 17-18.

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 371 tons, June 1; minimum daily, 0.05 ton, Aug. 16.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	10.5	8.5	9.5	11.5	8.0	9.5	5.0	2.5	4.0	4.5	2.0	3.5
2	10.0	8.5	9.5	8.5	5.5	7.0	7.5	4.5	6.0	6.5	4.0	5.0
3	8.5	7.5	8.0	6.5	4.0	5.0	8.5	7.5	8.0	4.0	1.0	2.5
4	10.0	7.0	8.5	7.5	3.5	6.0	8.5	7.0	8.0	3.0	1.0	2.0
5	11.0	8.0	9.5	9.0	6.5	7.5	7.0	4.0	5.5	1.5	.0	.5
6	10.0	7.5	9.0	7.5	4.5	6.0	4.5	3.5	4.0	3.0	.5	2.0
7	11.5	9.0	10.0	7.5	4.0	6.0	5.0	3.0	4.0	2.0	.0	.5
8	12.0	10.5	11.0	10.0	6.0	8.0	6.0	3.5	5.0	3.5	.5	2.0
9	12.5	9.5	11.0	12.0	9.0	10.5	6.0	4.5	5.5	5.0	3.0	4.0
10	13.5	11.0	12.0	11.0	8.0	9.5	4.5	2.5	3.5	5.0	3.0	4.5
11	11.0	8.5	10.0	8.0	7.0	7.5	3.5	1.5	2.5	3.5	1.5	2.5
12	12.5	9.5	11.0	9.0	6.5	8.0	5.0	3.0	4.0	1.5	.0	1.0
13	12.5	8.5	10.5	9.5	6.0	8.0	4.5	2.5	3.5	1.5	.0	.5
14	10.5	7.5	9.0	9.0	6.0	7.5	4.5	3.0	4.0	1.0	.0	.0
15	12.0	8.5	10.5	6.5	4.0	5.5	5.0	3.5	4.5	3.5	.5	2.0
16	12.0	10.0	11.5	9.0	4.0	5.5	3.5	1.0	2.0	2.5	.0	1.5
17	10.0	8.0	9.0	6.5	4.0	5.5	2.0	.0	1.0	1.0	.0	.5
18	9.0	6.5	8.0	9.0	5.5	7.5	.5	.0	.5	3.5	1.0	2.0
19	10.0	7.5	8.5	9.5	7.5	8.5	3.0	.5	2.0	1.5	.0	.5
20	9.0	6.5	8.0	8.0	6.5	7.0	3.0	.0	.5	.0	.0	.0
21	10.0	7.0	8.5	8.0	5.0	6.5	.0	.0	.0	.0	.0	.0
22	9.5	7.0	8.5	9.0	6.5	7.5	.0	.0	.0	.0	.0	.0
23	8.0	6.0	7.0	9.5	7.5	8.5	.5	.0	.0	.0	.0	.0
24	7.5	4.0	6.0	7.5	5.0	6.5	.0	.0	.0	.0	.0	.0
25	9.0	5.5	7.5	5.5	3.5	5.0	.5	.0	.0	.0	.0	.0
26	9.0	6.5	7.5	6.0	4.5	5.0	1.5	.5	1.0	.0	.0	.0
27	9.5	6.5	8.0	6.5	4.5	5.5	1.5	.0	1.0	.5	.0	.0
28	10.5	8.0	9.0	5.0	3.0	4.0	3.0	.0	1.0	.5	.0	.0
29	11.5	8.5	10.0	3.5	2.5	3.0	4.5	2.5	3.5	2.0	.0	1.0
30	12.0	10.0	11.0	3.5	1.0	2.5	4.5	2.0	3.5	3.5	1.0	2.0
31	11.5	9.0	10.0	---	---	---	3.5	1.5	3.0	2.5	.0	1.5
MONTH	13.5	4.0	9.3	12.0	1.0	6.7	8.5	.0	2.9	6.5	.0	1.3

WISCONSIN RIVER BASIN

05406469 BREWERY CREEK, UPSTREAM SITE, AT CROSS PLAINS, WI--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	3.5	1.0	2.0	9.0	3.0	5.5	11.5	6.0	8.0	20.5	9.0	13.0
2	1.5	.0	.5	9.0	1.5	4.5	16.0	3.5	9.0	20.5	7.0	13.0
3	3.0	1.0	2.0	9.5	1.0	4.5	14.5	6.0	9.0	21.5	8.0	14.0
4	3.5	1.0	2.5	11.5	2.5	6.0	12.5	3.0	7.0	22.0	9.5	15.0
5	3.0	.0	1.5	12.5	3.0	7.0	12.5	2.0	6.5	23.5	10.0	16.0
6	3.0	.0	1.5	12.5	3.0	7.0	16.0	5.0	9.5	22.0	10.0	16.0
7	4.0	.5	2.5	16.5	5.5	10.0	7.5	.5	3.5	23.0	13.5	17.5
8	2.5	.0	1.0	14.0	6.5	9.5	13.5	.5	6.0	19.5	13.0	15.5
9	6.0	1.5	3.5	8.0	2.5	5.5	15.0	4.0	8.0	14.0	10.5	12.5
10	4.0	1.5	3.0	6.0	1.5	3.5	7.0	3.5	5.0	15.5	7.5	11.5
11	3.0	.0	1.5	9.5	1.0	4.5	8.5	3.0	5.0	15.0	10.5	12.5
12	2.5	.0	1.0	9.5	1.0	5.0	15.0	2.0	7.5	14.0	11.0	13.0
13	2.0	.0	1.0	7.5	3.0	5.0	12.0	4.5	8.0	14.5	7.5	10.5
14	5.0	.5	2.5	9.5	2.0	5.5	19.0	5.0	11.0	18.0	6.0	11.0
15	5.5	2.0	3.5	8.0	3.5	6.0	14.0	6.5	10.0	18.5	6.0	12.0
16	4.5	1.0	3.0	10.0	1.5	4.5	7.0	5.0	6.0	18.5	10.5	13.5
17	4.0	.0	2.0	10.5	.5	4.5	6.5	4.5	5.5	14.0	9.5	11.5
18	2.0	.0	1.0	5.0	2.0	3.5	12.5	6.0	8.5	12.5	9.0	11.0
19	4.0	.5	2.0	4.0	2.5	3.5	8.5	7.0	7.5	16.0	8.0	11.5
20	6.0	1.0	3.0	6.0	3.5	4.5	7.5	5.5	7.0	17.5	8.0	12.5
21	6.5	.5	3.5	9.0	5.0	6.5	14.5	5.0	8.5	16.5	8.5	12.0
22	8.0	2.0	4.0	9.5	5.5	7.5	17.0	4.5	10.0	19.5	10.5	14.0
23	2.5	1.0	2.0	13.5	5.0	8.5	14.0	7.5	10.0	21.0	11.5	15.0
24	3.5	2.5	3.0	10.5	7.0	8.0	17.0	5.5	10.5	19.5	11.0	14.5
25	6.5	3.0	5.0	13.5	4.5	8.0	17.5	5.0	10.5	20.5	9.0	14.0
26	7.0	3.5	5.0	11.0	3.0	6.5	19.0	4.5	11.0	15.5	10.0	12.5
27	8.0	3.0	5.0	11.0	4.0	6.5	18.0	5.5	11.0	12.5	11.0	11.5
28	9.0	2.0	5.0	8.0	3.5	5.5	15.5	6.0	10.5	12.5	11.5	12.0
29	9.5	4.0	6.5	14.0	3.5	7.5	16.5	7.0	10.5	17.0	10.0	13.0
30	---	---	---	15.5	2.5	7.5	18.5	5.0	11.5	16.0	11.0	13.0
31	---	---	---	15.5	3.0	8.5	---	---	---	17.0	13.5	16.0
MONTH	9.5	.0	2.7	16.5	.5	6.1	19.0	.5	8.4	23.5	6.0	13.2
JUNE				JULY			AUGUST			SEPTEMBER		
1	22.0	15.5	18.0	21.0	12.5	16.5	17.0	14.0	15.5	17.5	15.5	17.0
2	19.5	15.0	18.0	19.0	13.0	15.0	17.5	14.5	16.0	17.5	16.0	16.5
3	18.0	12.5	15.0	19.5	16.0	17.5	16.5	14.0	15.0	17.0	15.5	16.5
4	14.0	12.0	13.0	18.0	14.0	16.0	17.0	13.5	15.5	16.5	13.5	15.0
5	16.5	11.5	13.0	19.5	14.0	16.5	16.5	13.5	14.5	14.5	12.0	13.5
6	19.0	10.0	14.0	20.5	14.0	17.0	18.5	15.5	17.0	14.5	12.0	13.5
7	18.0	11.0	14.0	18.0	13.5	16.0	17.5	14.5	16.0	15.5	12.5	14.0
8	22.5	12.0	16.5	19.5	14.0	16.5	18.0	14.5	16.5	15.5	14.0	14.5
9	23.0	13.5	17.5	19.5	15.5	17.5	18.0	15.0	16.5	16.0	14.0	15.0
10	22.5	14.5	18.0	21.0	15.5	18.0	17.5	14.0	15.5	17.0	15.0	16.0
11	22.0	15.5	18.0	19.5	15.0	17.0	17.0	13.5	15.5	18.0	15.5	16.5
12	16.0	13.0	14.0	18.5	14.5	16.5	17.0	13.5	15.5	17.0	14.5	15.5
13	18.0	12.5	14.5	20.0	14.0	17.0	17.0	14.5	15.5	15.5	13.0	14.0
14	18.0	15.5	17.0	19.5	14.5	17.5	17.5	14.5	16.0	15.5	13.5	14.5
15	19.5	14.0	16.0	19.0	14.0	16.5	18.0	15.0	16.5	14.0	12.0	13.0
16	19.0	14.0	16.0	18.5	14.0	16.0	16.0	13.5	15.0	13.5	10.5	12.0
17	19.0	11.5	14.5	19.5	14.5	17.0	15.5	14.0	14.5	14.5	12.0	13.0
18	20.0	12.0	15.5	17.5	13.0	15.0	16.0	13.5	14.5	15.5	12.5	14.0
19	21.5	12.0	16.0	16.0	13.5	15.0	15.0	13.0	14.5	15.0	13.5	14.0
20	20.0	14.0	16.5	16.0	13.0	14.5	16.0	13.5	14.5	13.5	12.0	13.0
21	20.5	13.5	16.5	15.5	12.0	14.0	15.5	13.5	14.5	13.0	10.5	12.0
22	19.5	13.5	16.0	16.0	12.5	14.0	15.0	14.0	14.5	12.0	11.0	11.5
23	16.5	12.0	14.5	16.5	12.0	14.5	16.0	13.5	14.5	12.5	11.5	12.0
24	15.0	12.5	14.0	17.0	12.0	14.5	16.0	14.0	15.0	12.0	11.0	11.5
25	21.5	13.5	17.0	16.0	13.0	14.5	16.0	13.5	15.0	12.0	9.5	10.5
26	20.0	14.0	16.5	16.5	14.0	15.5	18.5	14.5	16.0	12.5	9.0	11.0
27	20.0	12.5	16.0	17.5	14.0	16.0	17.5	15.0	16.0	12.5	9.5	11.5
28	18.0	12.5	14.5	16.5	14.0	15.0	16.5	14.5	15.5	12.5	9.5	11.0
29	19.0	11.5	15.0	16.5	14.5	15.5	16.5	14.5	15.5	13.0	10.0	12.0
30	20.0	11.5	15.5	16.5	14.5	15.5	15.5	14.0	15.0	13.5	12.0	12.5
31	---	---	---	17.5	14.0	15.5	18.5	15.0	16.5	---	---	---
MONTH	23.0	10.0	15.7	21.0	12.0	15.9	18.5	13.0	15.4	18.0	9.0	13.6

05406469 BREWERY CREEK, UPSTREAM SITE, AT CROSS PLAINS, WI--Continued

SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED(TONS PER DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.32	.30	.41	.44	.31	.35	.24	.17	371	.17	.10	.069
2	.36	.28	.49	.49	.31	.28	.25	.15	59.0	1.41	.098	.069
3	.34	.27	.59	.48	.32	.23	.26	.14	1.92	6.75	.088	.072
4	.36	.26	.70	.45	.32	.21	.26	.15	1.00	1.02	.082	.071
5	.35	.26	.80	.45	.30	.19	.26	.15	4.73	.69	.18	.069
6	.34	.24	.83	.44	.30	.13	.25	.16	.83	.44	.17	.071
7	.32	.23	.92	.44	.29	.10	.25	.17	.44	.29	.095	.099
8	.34	.23	.86	.43	.31	.12	.26	.20	.53	.20	.083	.14
9	.34	.23	.88	.43	.32	.14	.29	.23	.63	.15	.076	.19
10	.34	.27	.85	.54	.31	.12	.30	.26	.78	.68	.069	.28
11	.34	.34	.78	.49	.31	.12	.28	.30	.97	.38	.065	.69
12	.34	.34	.75	.44	.31	.12	.27	.36	1.24	.29	.061	.30
13	.34	.35	.73	.41	.31	.12	.27	.38	29.7	.26	.062	.18
14	.34	.37	.70	.41	.29	.13	.28	.41	41.6	.23	.060	.20
15	.34	.39	.68	.40	.28	.14	.28	.47	2.58	.21	.056	.20
16	.37	.41	.66	.40	.29	.14	.29	.53	1.64	.20	.051	.20
17	.34	.44	.63	.39	.29	.13	.29	1.02	1.20	.19	.076	.22
18	.34	.46	.61	.37	.30	.14	.30	338	.98	.17	.065	.23
19	.32	.49	.59	.36	.30	.15	.51	5.23	.85	.17	.059	.25
20	.33	.49	.54	.36	.30	.16	3.97	1.21	1.14	.16	.057	.37
21	.33	.51	.52	.34	.29	.18	1.08	.81	.75	.16	.057	.35
22	.33	.54	.51	.35	1.04	.17	.51	.73	.61	.15	.056	.43
23	.33	.67	.49	.35	16.2	.17	1.01	.65	.51	.14	.060	.28
24	.33	.22	.49	.34	2.46	.19	.34	.58	.47	.13	.059	.14
25	.33	.21	.48	.34	1.70	.19	.27	.54	.44	.12	.058	.13
26	.33	.23	.47	.34	3.58	.21	.24	.50	.37	.12	e.20	.12
27	.33	.25	.50	.33	.54	.23	.22	.57	.31	.12	.088	.11
28	.33	.27	.49	.33	.44	.23	.21	e3.42	.28	.11	.074	.11
29	.32	.31	.49	.32	.40	.23	.19	.75	.24	.11	.074	.11
30	.31	.36	.48	.32	---	.23	.19	2.21	.20	.11	.073	.14
31	.30	---	.45	.32	---	.22	---	202	---	.11	.071	---
TOTAL	10.38	10.22	19.37	12.30	32.72	5.47	13.62	562.45	526.94	15.44	2.523	5.890

e Estimated

WISCONSIN RIVER BASIN

05406469 BREWERY CREEK, UPSTREAM SITE, AT CROSS PLAINS, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	SAM- PLING METHOD, CODES (82398)
OCT							
13...	2045	2.3	--	--	54	450	10
27...	2050	2.2	--	--	56	490	10
NOV							
10...	1505	2.4	--	--	40	448	10
11...	0625	2.2	--	--	58	496	50
23...	0730	3.1	--	--	110	518	50
23...	1430	3.1	--	--	64	498	50
24...	0930	2.5	--	--	28	454	10
25...	0930	2.1	--	--	37	464	50
27...	0930	2.0	--	--	46	472	50
DEC							
07...	1050	2.0	--	--	174	456	10
23...	1200	1.8	--	--	101	--	10
FEB							
22...	1450	3.4	--	--	51	480	50
22...	1635	3.4	--	--	121	514	50
22...	1850	3.4	--	--	294	608	50
23...	1040	15	--	--	165	444	50
23...	1210	15	--	--	602	820	50
23...	1310	15	--	--	954	1140	50
23...	1615	15	--	--	1210	1360	50
23...	1805	15	--	--	520	700	50
23...	1850	15	--	--	414	604	50
23...	2015	15	--	--	222	428	50
23...	2330	15	--	--	98	378	50
24...	1035	7.6	--	--	266	592	50
24...	1515	7.6	--	--	102	438	50
24...	2100	7.6	--	--	74	448	50
25...	2100	5.4	--	--	444	828	50
25...	2235	5.4	--	--	464	822	50
26...	0310	9.5	--	--	306	668	50
26...	0750	9.5	--	--	106	496	50
26...	1910	9.5	--	--	65	492	50
27...	1005	4.3	--	--	40	484	50
28...	0750	2.8	--	--	61	536	50
MAR							
06...	0925	2.1	--	--	31	474	10
06...	1010	2.1	--	--	18	464	10
20...	0935	2.5	3.23	.212	24	482	10
APR							
03...	0935	2.4	3.36	.119	40	468	50
19...	0944	2.5	3.26	.180	54	470	50
20...	0019	5.9	--	--	131	572	50
20...	0339	5.9	3.53	1.76	358	780	50
20...	1219	5.9	--	--	77	544	50
20...	1609	5.9	3.50	1.26	228	638	50
20...	1709	5.9	--	--	486	864	50
21...	0324	4.8	4.10	.481	113	526	50
21...	1119	4.8	--	--	66	540	50
22...	1119	2.9	4.09	.159	54	498	50
23...	0814	3.8	--	--	127	558	50
24...	0814	2.9	4.07	--	40	483	50
MAY							
04...	1635	2.0	3.25	.197	27	476	50
08...	0729	1.9	3.38	.127	39	516	50
17...	2106	2.4	2.78	.345	129	488	50
17...	2345	2.4	6.29	2.84	644	1020	50
18...	0105	66	9.15	2.02	720	1050	50
18...	0815	66	3.48	7.67	6520	6740	50
18...	0910	66	2.72	5.43	3790	3940	50
18...	0915	66	2.97	.224	72	462	50
18...	1245	66	1.75	3.85	2190	2410	50
18...	1350	66	2.14	3.09	1630	1790	50
18...	1610	66	3.39	2.35	920	1130	50
19...	0145	12	4.90	1.08	258	514	50
19...	1415	12	5.23	.498	110	453	50
30...	0836	3.8	4.58	.224	77	506	50
31...	0125	57	3.65	1.53	604	944	50
31...	0200	57	2.11	5.74	2190	2520	50
31...	0240	57	2.26	2.89	1550	1820	50
31...	0340	57	1.73	2.95	1450	1710	50
31...	0630	57	2.68	1.40	420	670	50
31...	0935	57	3.68	1.21	192	520	50
31...	1355	57	1.42	3.69	1560	1790	50
31...	1425	57	1.04	5.43	4390	4630	50
31...	1505	57	.357	7.84	5950	6650	50
31...	1555	57	.525	5.84	3590	3820	50
31...	1910	57	<.010	2.60	1020	1240	50
31...	2355	57	2.05	1.45	384	606	50

05406469 BREWERY CREEK, UPSTREAM SITE, AT CROSS PLAINS, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEED (MG/L) (00530)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	SAM- PLING METHOD, CODES (82398)
JUN									
01...	0305	86	--	--	2.55	1.48	676	888	50
01...	0400	86	--	--	.842	5.97	4040	4200	50
01...	0425	86	--	--	1.09	3.49	1960	2120	50
01...	0525	86	--	--	.692	5.26	3900	4140	50
01...	1000	86	--	--	1.03	1.97	630	864	50
01...	1420	86	--	--	2.64	.942	236	484	50
01...	1830	86	--	--	2.75	1.55	1180	1390	50
01...	1915	86	--	--	.374	7.43	5080	5360	50
01...	1925	86	--	--	.301	6.81	5110	5460	50
01...	2000	86	--	--	.498	4.55	3260	3340	50
02...	0315	51	--	--	.722	2.09	780	1040	50
02...	0625	51	--	--	<.010	1.52	488	682	50
02...	1545	51	--	--	2.84	.754	196	448	50
04...	1935	5.4	--	--	3.98	.171	33	456	50
04...	2050	5.4	--	--	3.56	.579	133	550	50
04...	2240	5.4	--	--	3.04	1.08	204	572	50
05...	1645	8.4	--	--	2.96	.904	232	574	50
06...	1645	4.1	--	--	4.25	.287	41	456	50
13...	1710	19	--	--	3.65	.442	238	628	50
13...	1815	19	--	--	2.57	3.00	1620	1870	50
13...	1910	19	--	--	2.09	2.16	1130	1360	50
13...	2120	19	--	--	2.05	2.15	1200	1420	50
13...	2230	19	--	--	.816	4.51	2570	2710	50
13...	2305	19	--	--	1.52	1.29	2190	2370	50
14...	0550	39	--	--	1.78	1.22	316	518	50
14...	0900	39	--	--	3.57	.601	196	438	50
JUL									
02...	2005	3.9	--	--	3.71	.116	26	488	50
02...	2230	3.9	--	--	3.18	1.96	724	1050	50
02...	2305	3.9	--	--	1.72	2.21	1590	1780	50
02...	2345	3.9	--	--	1.24	3.14	1840	2040	50
03...	0240	7.5	--	--	1.26	2.05	704	934	50
03...	0555	7.5	--	--	2.44	1.16	208	554	50
10...	0855	--	7.8	--	3.66	.124	16	422	50
10...	1430	--	6.9	--	3.01	1.02	91	480	50
11...	0920	--	3.1	--	1.97	.638	43	352	50
AUG									
17...	0250	--	2.1	--	3.60	.086	9	478	50
SEP									
06...	1018	--	2.3	--	3.37	.080	11	452	50
12...	0910	--	4.8	.142	2.07	.375	21	468	50
22...	1710	--	3.7	.422	3.14	.809	49	526	50
22...	2000	--	5.7	.252	2.78	.424	43	478	50
23...	2000	--	3.7	.039	2.75	.155	16	458	50

	BEGIN- NING DATE	BEGIN- NING TIME	ENDING DATE	ENDING TIME	RUNOFF VOLUME MILLIONS OF CUBIC FEET (99905)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
MAY								
17...		2105	000522	0740	7.15	--	4.19	2.47
30...		0835	000604	1610	18.5	--	1.28	3.05
JUN								
04...		1630	000607	0305	1.32	--	3.49	.767
13...		1655	000615	1030	5.32	--	1.64	2.12
JUL								
02...		1940	000704	1930	1.80	--	2.37	1.44
10...		0410	000711	1300	.563	--	2.92	.700
AUG								
05...		1435	000807	0055	.697	--	2.57	.681
17...		0310	000818	0310	.280	--	3.22	.152
SEP								
11...		0745	000913	0020	.737	.202	2.69	.615
22...		1035	000924	1420	.747	.238	2.89	.457

WISCONSIN RIVER BASIN

05406469 BREWERY CREEK, UPSTREAM SITE, AT CROSS PLAINS, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEDED (MG/L) (00530)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	CADMIUM TOTAL RECOVER -ABLE (UG/L) (01113)	CHRO- MIUM, TOTAL RECOVER -ABLE (UG/L) (01118)	LEAD, TOTAL RECOVER -ABLE (UG/L) (01114)	ZINC, TOTAL RECOVER -ABLE (UG/L) (01094)	SAM- PLING METHOD, CODES (82398)
MAY							
17...	1380	1610	--	--	--	--	50
30...	1630	1890	1	27	33	190	50
JUN							
04...	156	548	--	--	--	--	50
13...	970	1220	--	--	--	--	50
JUL							
02...	664	960	--	--	--	--	50
10...	75	438	--	--	--	--	50
AUG							
05...	56	438	--	--	--	--	50
17...	18	496	--	--	--	--	50
SEP							
11...	54	484	--	--	--	--	50
22...	35	496	--	--	--	--	50

05406470 BREWERY CREEK AT CROSS PLAINS, WI

LOCATION.--Lat 43°07'09", long 89°38'25", in SW ¼ SW ¼ sec.35, T.8 N., R.7 E., Dane County, Hydrologic Unit 07070005, on right bank 60 ft upstream of culvert on Brewery Road, 0.75 mi upstream from Black Earth Creek.

DRAINAGE AREA.--10.5 mi², of which 2.80 mi² is noncontributing.

PERIOD OF RECORD.--October 1984 to September 1986, October 1989 to September 1998, May 1999 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 900 ft above sea level, from topographic map.

REMARKS.--Records fair (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	e2.3	2.0	1.9	1.9	2.7	2.5	2.2	91	2.2	2.3	2.5
2	2.6	e2.2	2.1	2.1	1.9	2.4	2.5	2.0	54	4.1	2.3	2.4
3	2.4	e2.2	2.2	2.1	2.0	2.2	2.5	2.0	7.0	7.9	2.3	2.6
4	2.6	e2.2	2.3	2.0	2.0	2.2	2.5	2.1	5.7	3.0	2.3	2.6
5	2.5	e2.2	2.3	e2.0	1.9	2.2	2.4	2.0	8.8	2.8	4.9	2.5
6	2.4	e2.1	2.1	2.0	1.9	2.2	2.3	1.9	4.3	2.7	5.1	2.5
7	2.3	e2.1	2.1	e2.0	1.9	2.2	2.2	1.9	3.4	2.6	2.9	2.4
8	2.4	e2.1	2.0	2.0	e2.0	2.5	2.3	2.0	3.2	2.6	2.7	2.5
9	2.4	e2.2	2.1	2.0	2.1	2.8	2.5	2.0	3.0	2.7	2.7	2.5
10	2.4	e2.5	2.1	2.5	2.1	2.4	2.5	2.0	2.8	5.2	2.5	2.7
11	2.4	e2.3	2.0	2.3	2.1	2.3	2.3	2.0	2.7	3.2	2.4	5.5
12	e2.4	e2.1	2.0	2.1	e2.1	2.2	2.2	2.1	2.7	2.8	2.4	5.5
13	e2.4	e2.1	2.0	e2.0	2.1	2.3	2.2	2.0	20	2.7	2.6	3.3
14	e2.4	e2.1	2.0	e2.0	2.0	2.3	2.2	1.9	41	2.5	2.6	3.0
15	e2.4	2.1	2.0	e2.0	2.0	2.4	2.2	1.9	5.8	2.4	2.5	2.8
16	e2.6	2.1	2.0	2.0	2.1	2.5	2.2	1.9	4.1	2.4	2.4	2.7
17	e2.4	2.1	2.0	e2.0	2.1	2.3	2.2	2.5	3.4	2.3	3.4	2.7
18	e2.4	2.1	e2.0	1.9	2.2	2.3	2.2	69	3.1	2.3	3.1	2.6
19	e2.3	2.1	2.0	1.9	2.2	2.4	2.6	13	3.0	2.3	2.8	2.7
20	e2.3	2.0	1.9	e1.9	2.2	2.6	6.2	4.4	4.4	2.3	2.8	3.3
21	e2.3	2.0	e1.9	e1.8	2.2	2.8	5.1	3.1	3.3	2.3	2.6	3.1
22	e2.3	2.0	e1.9	e1.9	3.6	2.6	3.1	2.8	2.9	2.3	2.6	4.0
23	e2.3	3.3	e1.9	e1.9	16	2.5	4.0	2.6	2.7	2.3	2.6	4.7
24	e2.3	2.6	e1.9	e1.9	8.0	2.6	3.1	2.4	2.8	2.3	2.2	3.5
25	e2.3	2.2	e1.9	e1.9	5.7	2.6	2.7	2.3	2.9	2.2	2.1	3.2
26	e2.3	2.1	e1.9	e1.9	10	2.7	2.5	2.2	2.7	2.1	4.6	3.1
27	e2.3	2.1	e2.0	e1.9	4.5	2.8	2.4	2.6	2.6	2.1	3.3	2.9
28	e2.3	2.0	2.0	e1.9	3.0	2.7	2.4	7.4	2.6	2.2	2.7	2.7
29	e2.3	2.0	2.0	e1.9	2.8	2.6	2.3	3.7	2.5	2.2	2.5	2.7
30	e2.3	2.0	2.0	e1.9	---	2.6	2.3	4.0	2.3	2.3	2.5	2.8
31	e2.3	---	1.9	e1.9	---	2.4	---	60	---	2.3	2.5	---
TOTAL	73.6	65.5	62.5	61.5	96.6	76.3	80.6	213.9	300.7	85.6	87.2	92.0
MEAN	2.37	2.18	2.02	1.98	3.33	2.46	2.69	6.90	10.0	2.76	2.81	3.07
MAX	2.6	3.3	2.3	2.5	16	2.8	6.2	69	91	7.9	5.1	5.5
MIN	2.3	2.0	1.9	1.8	1.9	2.2	2.2	1.9	2.3	2.1	2.1	2.4
CFSM	.31	.28	.26	.26	.43	.32	.35	.90	1.30	.36	.37	.40
IN.	.36	.32	.30	.30	.47	.37	.39	1.03	1.45	.41	.42	.44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2000, BY WATER YEAR (WY)

	MEAN	1.95	2.16	1.64	1.72	2.83	3.93	2.48	2.50	3.30	3.52	2.16	2.23
MAX	4.10	4.73	3.82	3.22	5.43	10.5	3.66	6.90	10.0	13.4	6.83	5.15	
(WY)	1994	1986	1994	1994	1985	1993	1993	2000	2000	1993	1993	1993	
MIN	.25	.16	.12	.011	.15	1.08	.64	.47	.40	.22	.22	.11	
(WY)	1991	1991	1991	1991	1991	1992	1990	1992	1991	1990	1990	1990	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR
(MAY - SEPTEMBER)

FOR 2000 WATER YEAR

WATER YEARS 1985 - 2000

ANNUAL TOTAL						1296.0							
ANNUAL MEAN						3.54				2.52			
HIGHEST ANNUAL MEAN										4.30		1993	
LOWEST ANNUAL MEAN										.58		1991	
HIGHEST DAILY MEAN				26	Jun 6		91	Jun 1		142		Jul 25	1985
LOWEST DAILY MEAN				1.7	Jul 11		(b)1.8	Jan 21		.00	(c)	Jul 18	1991
ANNUAL SEVEN-DAY MINIMUM				1.8	(a)Jul 10		(b)1.9	Jan 18		.00		Jul 31	1991
INSTANTANEOUS PEAK FLOW							177	Jun 1		420		Jul 6	1993
INSTANTANEOUS PEAK STAGE							12.81	Jun 1		15.05		Jul 6	1993
INSTANTANEOUS LOW FLOW							1.3	Jun 23		.00	(d)	Aug 9	1990
ANNUAL RUNOFF (CFSM)							.46			.33			
ANNUAL RUNOFF (INCHES)							6.26			4.45			
10 PERCENT EXCEEDS				3.0			3.6			3.9			
50 PERCENT EXCEEDS				2.3			2.3			2.0			
90 PERCENT EXCEEDS				1.9			2.0			.33			

(a) Also occurred Sept. 9

(b) Ice affected

(c) Occurred on many days July to September 1991

(d) Also occurred many days during 1991 water year

(e) Estimated due to ice effect or missing record

WISCONSIN RIVER BASIN

05406470 BREWERY CREEK AT CROSS PLAINS, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1984 to September 1986, October 1989 to September 1998, October 1999 to September 2000.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: November 1984 to September 1986, October 1989 to September 1998, October 1999 to September 2000.

DISSOLVED OXYGEN: April 1990 to June 30, 1991.

SUSPENDED-SOLIDS DISCHARGE: October 1989 to September 1991, October 1999 to September 2000.

TOTAL-NITROGEN DISCHARGE: October 1984 to June 1986.

SUSPENDED-SEDIMENT DISCHARGE: October 1984 to June 1986, October 1989 to September 1998.

TOTAL-PHOSPHORUS DISCHARGE: October 1984 to June 1986, October 1989 to September 1998.

INSTRUMENTATION.--Water-quality sampler December 1984 to June 1986, October 1989 to September 1998, October 1999 to September 2000; continuous water temperature recorder November 1984 to September 1986, October 1989 to September 1998, October 1999 to September 2000; dissolved oxygen recorder April 1990 to June 1991.

REMARKS.-- Chemical analyses by the Wisconsin State Laboratory of Hygiene. Suspended-sediment analyses by U.S. Geological Survey Laboratory. Samples are point samples unless otherwise indicated. The 1997 water year total phosphorus discharge records published in the 1997 water year data report were incorrectly labeled as 1996 water year records.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum observed, 33.0°C, May 28 and July 22, 1991; minimum observed, 0.0°C, on many days during 1985, 1986, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, and 2000 winter periods.

DISSOLVED OXYGEN: Maximum observed, 21.8 mg/L, Apr. 5, 1990; minimum observed, 0.0 mg/L, Aug. 19, 1990.

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 457 tons, June 1, 2000; minimum daily, 0.00 ton, Aug. 23 to Sept. 9, 1990;

Dec. 25-31, 1990, Jan. 1-31, Feb. 1-8, 10-20, May 20, 22-23, June 12-13, 28-30, July 12-20, 23-27, 30-31, Aug. 1-6, Aug. 18 to Sept. 11, Sept. 13, 21-22, and 24-30, 1991.

TOTAL-NITROGEN DISCHARGE: Maximum daily, 4,550 lb, July 25, 1985; minimum daily, 10 lb, May 24-25, 1985.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 917 tons, July 5, 1993; minimum daily, 0.0 ton Oct. 1-2, 1991, and Dec. 6, 1992.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 2,450 lb, July 5, 1993; minimum daily, 0.00 lb, July 20, 24-27, 31, Aug. 1-6, 22-29, 31, Sept. 1-2, and 4-10, 1991.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum observed, 24.0°C, May 5, 7; minimum observed, 0.0°C, Dec. 17-28, Jan. 5, 7, 12-14, 17, 19-30, and Feb. 2, 5, 8, 12, 17.

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 457 tons, June 1; minimum observed, 0.11 ton, May 4, Aug. 16.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	11.0	8.5	10.0	12.0	8.5	9.5	5.0	2.5	4.0	4.5	2.0	3.5
2	11.0	9.0	9.5	8.5	6.0	7.5	7.0	4.5	6.0	6.0	4.0	4.5
3	9.0	8.0	8.0	7.5	4.0	5.5	9.0	7.0	8.0	4.5	1.0	3.0
4	10.5	7.0	8.5	8.0	3.5	6.0	8.5	7.5	8.0	3.5	1.0	2.0
5	12.0	8.5	10.0	9.5	6.5	7.5	7.5	4.5	6.0	2.0	.00	1.0
6	11.0	8.0	9.5	8.0	5.0	6.0	5.5	3.5	4.0	3.5	1.0	2.0
7	12.5	9.0	10.0	8.0	4.5	6.0	5.0	3.0	4.0	2.0	.00	.50
8	12.5	10.5	11.5	11.0	6.0	8.0	6.5	3.5	5.0	3.5	.50	2.0
9	13.5	10.0	11.5	13.0	9.5	10.5	6.5	5.0	5.5	5.0	3.0	4.0
10	14.5	11.0	12.0	11.0	8.5	9.5	5.0	2.5	3.5	5.5	3.5	4.5
11	12.5	8.5	10.5	8.5	7.5	8.0	4.0	1.0	2.5	4.0	1.5	3.0
12	13.0	9.5	11.0	10.0	6.5	8.0	5.5	3.0	4.0	1.5	.00	1.0
13	12.5	8.5	11.0	10.5	6.5	8.5	5.0	2.5	4.0	1.0	.00	.50
14	11.5	7.5	9.0	9.0	6.5	8.0	5.0	3.0	4.0	.50	.00	.00
15	13.5	9.0	10.5	6.5	4.5	6.0	5.0	3.5	4.5	3.0	.50	1.5
16	13.0	10.0	11.5	7.0	4.5	5.5	4.0	1.0	2.0	2.5	.50	1.5
17	10.0	8.0	9.0	7.0	4.5	5.5	2.0	.00	1.0	1.5	.00	.50
18	9.5	6.5	8.0	9.5	5.5	7.5	.50	.00	.00	3.5	1.0	2.0
19	10.5	7.5	9.0	9.5	8.0	8.5	3.5	.00	1.5	1.5	.00	.50
20	10.0	7.0	8.0	8.5	6.5	7.5	3.0	.00	1.0	.50	.00	.00
21	11.0	7.0	8.5	8.0	5.5	6.5	1.0	.00	.00	.50	.00	.00
22	9.5	7.0	8.5	9.5	7.0	8.0	.50	.00	.00	.50	.00	.00
23	8.5	6.0	7.0	10.0	7.0	8.5	.50	.00	.00	.50	.00	.00
24	8.5	4.5	6.5	7.5	5.5	6.5	.50	.00	.00	.50	.00	.00
25	10.0	6.0	7.5	6.0	3.5	5.0	.50	.00	.00	.00	.00	.00
26	9.5	7.0	8.0	6.5	4.5	5.5	.50	.00	.00	.00	.00	.00
27	10.5	6.5	8.0	7.0	4.5	5.5	1.0	.00	.50	.50	.00	.00
28	11.0	8.0	9.5	5.5	3.0	4.0	2.5	.00	1.0	.50	.00	.00
29	12.0	9.0	10.0	4.5	2.0	3.0	4.0	2.0	3.0	.00	.00	.00
30	12.5	10.5	11.5	4.0	1.0	2.5	4.0	2.5	3.5	1.0	.00	.00
31	12.5	9.0	10.5	---	---	---	4.0	2.0	3.0	2.5	.50	1.5
MONTH	14.5	4.5	9.5	13.0	1.0	6.8	9.0	.00	2.9	6.0	.00	1.3

05406470 BREWERY CREEK AT CROSS PLAINS, WI--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	3.5	1.5	2.5	9.0	3.5	6.0	11.5	6.5	8.5	21.0	10.0	14.0
2	2.0	.00	1.0	9.5	1.5	4.5	16.0	4.5	9.5	21.0	8.0	13.5
3	3.0	1.0	2.0	10.0	1.0	4.5	14.5	6.5	9.5	22.0	8.5	14.5
4	3.5	2.0	2.5	11.5	2.5	6.0	13.0	3.5	7.5	23.0	10.0	16.0
5	3.0	.00	1.5	13.0	3.0	7.0	12.0	2.0	6.5	24.0	11.0	17.0
6	3.0	.50	2.0	13.0	3.5	7.5	16.0	5.0	9.5	23.0	11.0	17.0
7	4.0	2.0	3.0	17.0	5.5	10.5	9.0	.50	4.5	24.0	14.5	18.5
8	2.5	.00	1.0	14.0	6.5	10.0	13.5	.50	6.0	20.0	14.0	16.5
9	5.5	2.0	3.5	9.0	3.0	6.5	15.5	4.0	8.5	16.0	11.5	13.5
10	4.5	2.5	3.5	6.0	1.5	4.0	7.0	3.5	5.5	15.5	8.5	12.0
11	3.0	.50	2.0	10.0	1.0	4.5	8.5	3.5	5.5	15.0	11.0	12.5
12	3.0	.00	1.0	9.5	1.0	5.0	15.0	2.0	7.5	15.0	12.0	13.5
13	2.5	1.0	1.5	7.5	4.0	5.5	12.0	5.0	8.0	14.5	8.5	11.0
14	4.0	1.0	2.5	9.5	2.0	5.5	19.5	5.0	11.5	17.5	6.5	11.5
15	5.0	2.0	3.5	8.0	4.0	6.5	14.0	8.0	11.0	18.5	6.5	12.5
16	4.5	1.5	3.5	10.0	1.0	5.0	8.0	5.5	6.5	18.5	11.0	14.0
17	3.5	.00	2.0	10.5	.50	4.5	7.0	5.0	6.0	14.0	10.0	12.5
18	2.5	.50	1.5	5.0	2.0	3.5	12.5	6.0	8.5	13.0	9.5	11.5
19	4.0	1.0	2.0	4.5	2.5	3.5	9.5	7.0	8.0	16.0	8.5	11.5
20	5.0	1.0	3.0	6.0	3.5	5.0	9.0	6.0	7.5	17.5	8.5	12.5
21	6.0	.50	3.0	9.5	5.5	7.0	15.5	5.5	9.0	17.0	9.0	12.5
22	7.0	2.5	4.0	10.0	6.0	8.0	18.0	4.5	10.5	19.5	11.0	14.5
23	3.0	1.0	2.0	14.0	5.0	8.5	14.5	8.0	10.5	21.0	12.0	16.0
24	3.5	2.5	3.0	10.5	7.0	8.5	18.5	6.0	11.0	20.0	11.5	15.5
25	7.0	3.5	5.0	14.0	5.5	9.0	18.5	5.5	11.0	20.0	10.0	14.5
26	7.5	3.5	5.5	11.0	3.0	7.0	20.0	5.5	12.0	16.0	11.0	13.5
27	8.5	3.5	5.5	11.0	4.0	7.0	19.0	6.5	12.0	13.5	11.5	12.0
28	9.0	2.0	5.0	8.0	4.0	5.5	15.0	7.5	11.0	12.5	11.5	12.0
29	9.5	4.5	6.5	14.0	3.5	7.5	17.0	8.0	11.5	17.0	10.5	13.5
30	---	---	---	15.5	2.5	8.0	19.5	6.5	12.0	16.5	11.5	13.5
31	---	---	---	15.5	3.5	9.0	---	---	---	17.0	14.5	16.0
MONTH	9.5	.00	2.9	17.0	.50	6.5	20.0	.50	8.9	24.0	6.5	13.8
JUNE				JULY			AUGUST			SEPTEMBER		
1	22.0	15.5	18.0	21.0	13.5	17.5	18.0	15.0	16.5	19.5	16.5	17.5
2	19.5	15.5	18.0	19.0	14.5	16.5	19.0	15.5	17.0	19.0	16.5	17.5
3	18.5	13.0	15.5	20.0	16.5	18.5	17.5	14.5	16.0	18.5	16.0	17.0
4	15.0	12.5	13.0	18.5	14.5	16.5	18.5	14.5	16.0	16.5	13.5	15.5
5	16.5	11.5	13.5	20.0	14.5	17.5	17.5	14.5	15.0	16.0	12.5	14.0
6	19.5	10.5	14.5	20.5	15.0	18.0	19.5	16.0	17.5	16.0	12.0	13.5
7	18.5	11.0	14.5	19.0	14.5	16.5	18.5	15.0	17.0	16.5	13.0	14.5
8	23.0	12.5	17.5	20.5	14.5	17.5	19.5	15.5	17.0	16.5	14.5	15.5
9	23.0	14.0	18.5	20.0	16.5	18.5	19.5	15.5	17.0	17.0	14.0	15.5
10	22.5	15.5	19.0	21.5	16.0	19.0	18.5	14.5	16.5	18.5	15.5	16.5
11	22.5	16.0	19.0	20.0	15.5	18.0	18.5	14.5	16.0	19.0	16.0	17.0
12	18.5	14.0	14.5	19.5	15.5	17.5	18.5	14.5	16.0	17.5	14.5	16.0
13	18.0	13.0	15.0	20.5	15.0	18.0	18.0	15.5	16.5	16.5	13.5	14.5
14	18.0	16.0	17.0	21.0	15.5	18.5	19.0	15.5	17.0	16.5	14.0	15.0
15	19.5	14.0	16.5	20.5	15.0	17.5	19.5	16.0	17.5	14.5	12.0	13.0
16	19.0	14.5	16.5	19.5	15.0	17.0	17.5	14.5	15.5	14.0	10.5	12.5
17	19.0	12.0	15.0	20.5	15.5	18.0	16.5	14.5	15.0	15.5	12.0	13.5
18	20.0	12.5	16.0	18.0	14.0	16.0	17.0	14.0	15.0	16.0	12.5	14.0
19	21.5	12.5	17.0	17.5	14.0	15.5	16.0	13.5	14.5	15.0	14.0	14.5
20	20.5	15.0	17.5	17.0	13.5	15.0	17.0	14.0	15.0	14.0	12.0	13.5
21	21.0	14.0	17.5	16.5	13.0	14.5	16.5	14.0	15.0	14.0	11.0	12.0
22	20.0	14.0	17.0	16.5	13.0	15.0	15.5	14.5	15.0	12.0	11.5	11.5
23	17.0	13.0	15.0	17.0	12.5	15.0	16.5	14.0	15.0	13.0	12.0	12.5
24	16.0	13.0	14.5	18.0	13.0	15.5	17.5	14.5	15.5	12.5	11.0	12.0
25	22.0	14.0	17.5	17.0	14.0	15.5	17.5	14.5	15.5	12.5	9.5	11.0
26	20.0	15.0	17.5	17.5	14.5	16.0	19.0	15.0	16.5	13.0	9.0	11.0
27	20.5	13.0	16.5	18.5	15.0	16.5	18.0	15.5	16.5	13.5	10.0	11.5
28	17.5	13.0	15.5	17.5	15.0	16.0	17.5	15.0	16.0	13.5	10.0	11.5
29	19.5	12.5	15.5	18.0	15.0	16.0	17.5	15.5	16.0	14.0	10.5	12.0
30	20.0	12.5	16.0	18.5	15.0	16.0	16.0	14.5	15.5	13.5	12.0	13.0
31	---	---	---	18.5	15.0	16.5	20.0	15.5	17.5	---	---	---
MONTH	23.0	10.5	16.3	21.5	12.5	16.8	20.0	13.5	16.0	19.5	9.0	13.9

WISCONSIN RIVER BASIN

05406470 BREWERY CREEK AT CROSS PLAINS, WI--Continued

SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED(TONS PER DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.18	.45	.19	.14	.18	.27	.19	.16	457	1.3	.24	.18
2	.19	.45	.19	.16	.18	.21	.18	.13	110	8.8	.23	.18
3	.18	.48	.20	.16	.19	.18	.19	.12	2.4	19	.22	.21
4	.20	.50	.21	.16	.19	.16	.19	.11	1.5	2.7	.20	.21
5	.19	.53	.20	.16	.19	.14	.21	.12	5.7	1.5	.40	.21
6	.18	.53	.19	.16	.19	.14	.21	.14	2.3	.82	.40	.22
7	.18	.56	.19	.16	.19	.14	.22	.17	1.8	.47	.22	.26
8	.18	.59	.18	.16	.20	.16	.25	.21	1.8	.27	.19	.33
9	.18	.65	.18	.16	.21	.18	.30	.26	1.8	.17	.18	.42
10	.18	.73	.18	.20	.21	.16	.32	.32	1.7	.52	.16	.55
11	.18	.41	.17	.19	.21	.16	.32	.39	1.8	1.0	.14	1.6
12	.18	.38	.17	.17	.22	.16	.34	.50	1.9	.90	.14	.60
13	.18	.41	.16	.16	.22	.17	.36	.60	40	.82	.14	.29
14	.19	.43	.16	.17	.21	.17	.39	.71	26	.73	.13	.27
15	.20	.46	.16	.17	.21	.18	.42	.86	2.0	.66	.12	.26
16	.22	.48	.15	.17	.22	.19	.46	1.1	1.5	.62	.11	.25
17	.22	.51	.16	.17	.23	.19	.50	3.1	1.2	.57	.15	.26
18	.23	.54	.15	.16	.24	.19	.54	258	1.2	.53	.14	.26
19	.23	.57	.15	.16	.24	.19	.92	13	1.2	.51	.13	e.30
20	.24	.60	.14	.16	.24	.22	4.6	3.7	1.8	.48	.14	e.45
21	.26	.63	.14	.16	.25	.23	1.7	2.3	1.4	.45	.13	.32
22	.27	.68	.14	.17	1.9	.22	.53	1.8	1.2	.43	.14	.55
23	.28	.92	.13	.17	37	.20	1.2	1.5	1.2	.40	.14	.77
24	.30	.32	.13	.17	3.5	.21	.50	1.2	1.3	.38	.12	.48
25	.31	.23	.14	.17	2.5	.21	.36	1.0	1.4	.34	.12	.44
26	.33	.22	.14	.17	5.2	.21	.30	.88	1.3	.32	e1.1	.42
27	.35	.21	.14	.17	.68	.22	.26	.93	1.3	.30	.20	.40
28	.37	.20	.14	.17	.37	.21	.23	2.3	1.4	.29	.17	.38
29	.38	.19	.15	.18	.31	.20	.21	1.0	1.4	.28	.17	.38
30	.41	.19	.14	.18	---	.19	.18	1.1	1.3	.27	.17	.38
31	.43	---	.14	.18	---	.18	---	275	---	.26	.18	---
TOTAL	7.60	14.05	5.01	5.19	55.88	5.84	16.58	572.71	677.8	46.09	6.42	11.83

WTR YR 2000 TOTAL 1425.00

e Estimate

05406470 BREWERY CREEK AT CROSS PLAINS, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEED (MG/L) (00530)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	SAM- PLING METHOD, CODES (82398)
OCT								
13...	2045	2.4	--	--	--	28	450	10
27...	2045	2.3	--	--	--	57	480	10
NOV								
10...	1505	2.5	--	--	--	116	508	10
11...	0625	2.3	--	--	--	63	508	50
23...	0730	--	3.3	--	--	129	510	50
23...	1430	--	4.1	--	--	105	562	50
24...	0930	--	2.7	--	--	41	470	10
26...	0930	--	2.1	--	--	37	472	50
DEC								
07...	1050	--	2.1	--	--	33	486	10
23...	1215	1.9	--	--	--	26	480	10
FEB								
22...	1450	--	3.0	--	--	41	462	50
22...	1635	--	4.8	--	--	126	524	50
22...	1850	--	6.9	--	--	360	706	50
23...	1040	--	9.4	--	--	306	592	50
23...	1210	--	16	--	--	878	1080	50
23...	1310	--	24	--	--	1420	1490	50
23...	1410	--	32	--	--	1580	1750	50
23...	1615	--	40	--	--	1620	1740	50
23...	1850	--	28	--	--	516	692	50
23...	2015	--	17	--	--	310	518	50
23...	2330	--	8.5	--	--	135	404	50
24...	1035	--	11	--	--	253	570	50
24...	2100	--	6.7	--	--	73	434	50
25...	2100	--	7.6	--	--	125	504	50
25...	2235	--	13	--	--	442	816	50
26...	0310	--	16	--	--	292	646	50
26...	1910	--	7.8	--	--	65	470	50
28...	0750	--	3.0	--	--	46	468	50
MAR								
06...	0920	--	2.1	--	--	22	482	10
06...	0925	--	2.1	--	--	23	482	50
20...	0905	--	2.4	3.28	.211	31	482	10
APR								
03...	0905	--	2.5	3.31	.101	27	456	10
19...	0947	--	2.6	2.73	.217	96	492	50
20...	0022	--	2.8	--	--	223	560	50
20...	0342	--	5.0	2.89	2.93	534	976	50
20...	1222	--	5.0	--	--	115	560	50
20...	1612	--	5.2	3.19	.680	185	612	50
20...	1712	--	6.4	--	--	408	818	50
21...	0327	--	6.9	3.97	.501	125	550	50
21...	1122	--	4.8	--	--	127	586	50
22...	1122	--	3.1	4.14	.141	47	486	50
23...	0817	--	3.6	--	--	140	616	50
24...	0817	--	3.2	4.08	.153	57	504	50
MAY								
04...	1400	--	2.1	3.27	.093	19	450	50
08...	0732	--	1.8	3.28	.124	37	508	50
17...	2105	--	3.6	1.80	.420	272	506	50
17...	2345	--	9.0	3.17	4.32	1610	1560	50
18...	0105	--	18	7.45	1.93	966	1280	50
18...	0400	--	29	9.56	1.92	822	1110	50
18...	0750	--	61	6.19	1.50	782	964	50
18...	0810	--	86	6.53	>8.00	1420	1620	50
18...	0855	--	99	4.10	>23.0	4330	4460	50
18...	0915	--	139	2.74	.279	150	488	50
18...	0930	--	158	1.76	>15.0	2340	2490	50
18...	1000	--	174	1.92	>12.0	1950	2170	50
18...	1135	--	166	1.94	>3.00	1900	2160	50
18...	1245	--	149	2.20	3.08	1590	1830	50
18...	1350	--	109	3.05	2.49	2080	1320	50
18...	1610	--	63	4.66	>3.00	922	1220	50
19...	0145	--	28	4.90	.670	364	788	50
30...	1825	--	4.4	4.68	.308	87	552	50
31...	0125	--	9.7	3.64	.556	295	650	50
31...	0200	--	21	3.49	1.90	1050	1400	50
31...	0240	--	35	2.30	3.75	1650	1890	50
31...	0340	--	46	1.72	3.10	1790	1990	50
31...	0630	--	28	2.49	1.67	556	776	50
31...	0935	--	14	3.50	1.41	320	628	50
31...	1355	--	47	1.13	4.02	1680	1830	50
31...	1425	--	88	1.37	3.46	1890	2030	50
31...	1525	--	136	.390	7.47	5450	6150	50
31...	1815	--	145	.615	3.11	1450	1680	50
31...	1910	--	130	.782	2.56	940	1250	50
31...	2355	--	61	1.98	1.46	408	618	50

WISCONSIN RIVER BASIN

05406470 BREWERY CREEK AT CROSS PLAINS, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	SAM- PLING METHOD, CODES (82398)
JUN								
01...	0305	53	--	2.14	1.05	368	574	50
01...	0400	85	--	1.90	2.79	1610	1780	50
01...	0425	112	--	.890	4.82	3140	3370	50
01...	0525	141	--	.836	4.39	3480	3760	50
01...	0910	114	--	.777	2.37	1020	1200	50
01...	1240	50	--	1.87	1.23	288	518	50
01...	1510	28	--	2.69	.903	198	446	50
01...	1840	66	--	1.03	3.21	4380	4450	50
01...	1925	106	--	.926	4.26	3150	3350	50
01...	2000	171	--	.259	5.52	3380	3950	50
02...	0450	88	--	.950	1.62	595	768	50
02...	1545	17	--	2.84	.772	228	480	50
04...	1935	6.4	--	4.11	.188	44	470	50
04...	2050	8.7	--	3.28	.333	104	478	50
04...	2240	12	--	3.24	.902	246	650	50
05...	1645	6.7	--	3.08	1.01	234	598	50
06...	1645	4.0	--	4.30	.309	185	582	50
13...	1710	9.2	--	2.38	.517	282	532	50
13...	1815	20	--	2.51	2.53	736	1700	50
13...	1910	34	--	2.10	2.14	1180	1370	50
13...	2120	49	--	1.69	2.83	1140	1380	50
13...	2230	92	--	1.50	2.54	1210	1390	50
13...	2305	137	--	.918	3.77	372	588	50
14...	0550	65	--	3.00	.866	204	452	50
14...	0900	29	--	3.08	.842	124	404	50
JUL								
02...	2005	6.4	--	3.23	.272	218	538	50
02...	2230	11	--	3.32	.531	580	802	50
02...	2305	25	--	3.23	2.37	1480	1780	50
02...	2345	33	--	1.41	2.91	2080	2260	50
03...	0240	19	--	1.35	1.98	756	966	50
03...	0555	7.6	--	2.17	1.38	644	634	50
10...	0855	6.0	--	3.54	.080	14	448	50
10...	1425	7.3	--	3.53	.140	18	430	50
10...	1430	7.3	--	1.84	.544	61	404	50
11...	0920	3.2	--	3.21	.416	128	514	50
AUG								
17...	0240	2.2	--	3.47	.097	16	472	10
SEP								
06...	1000	2.4	--	3.31	.112	32	470	10
11...	1655	10	.096	2.42	.599	141	500	50
12...	0910	5.8	.136	2.00	.410	32	476	50
22...	1710	4.0	<.013	3.02	.208	40	484	50
22...	2000	5.8	.529	2.94	.748	77	552	50
23...	2000	4.0	.025	2.68	.196	51	510	50

DATE	TIME	ENDING DATE	ENDING TIME	RUNOFF VOLUME OF CUBIC FEET (99905)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
MAY							
17...	2105	000522	0740	7.91	--	4.40	1.94
30...	0640	000604	0855	18.7	--	1.24	2.93
JUN							
04...	1640	000607	0305	1.39	--	3.46	.748
13...	1555	000615	1040	5.40	--	1.38	2.25
JUL							
02...	1940	000704	1930	1.10	--	2.41	1.51
10...	0410	000711	1255	.565	--	2.91	.334
AUG							
05...	1150	000807	0045	.767	--	2.76	1.06
17...	0310	000818	0310	.308	--	3.10	.172
SEP							
11...	0805	000913	0010	.866	.168	2.75	.561
22...	1035	000924	1540	.843	.197	2.90	.382

05406470 BREWERY CREEK AT CROSS PLAINS, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEED (MG/L) (00530)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	CADMIUM TOTAL RECOVER -ABLE (UG/L) (01113)	CHRO- MIUM, TOTAL RECOVER -ABLE (UG/L) (01118)	LEAD, TOTAL RECOVER -ABLE (UG/L) (01114)	ZINC, TOTAL RECOVER -ABLE (UG/L) (01094)	SAM- PLING METHOD, CODES (82398)
MAY							
17...	1040	1320	--	--	--	--	50
30...	1610	1860	1	27	33	180	50
JUN							
04...	48	458	--	--	--	--	50
13...	990	1190	--	--	--	--	50
JUL							
02...	736	1000	--	--	--	--	50
10...	62	476	--	--	--	--	50
AUG							
05...	130	490	--	--	--	--	50
17...	24	486	--	--	--	--	50
SEP							
11...	82	498	--	--	--	--	50
22...	42	506	--	--	--	--	50

WISCONSIN RIVER BASIN

05406470 BREWERY CREEK AT CROSS PLAINS, WI--Continued

PRECIPITATION QUANTITY

PERIOD OF RECORD.--October 1999 TO September 2000.

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established October 1999.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.86 in., May 18.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	.00	.00	.00	.00	.00	.00	.02	2.00	.00	.03	.00
2	.25	.00	.00	.02	.00	.00	.00	.00	.00	1.02	.00	.00
3	.21	.00	.31	.00	.00	.00	.00	.00	.08	.00	.00	.28
4	.00	.00	.12	.00	.01	.00	.00	.00	.72	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.16	.00	1.81	.00
6	.00	.00	.00	.06	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00
8	.07	.00	.00	.00	.00	.20	.28	.16	.00	.00	.00	.00
9	.00	.00	.15	.03	.00	.13	.00	.10	.00	.42	.00	.00
10	.00	.80	.00	.10	.00	.01	.00	.00	.00	.73	.00	.02
11	.00	.00	.00	.00	.00	.00	.03	.14	.00	.00	.00	1.08
12	.00	.00	.00	.00	.00	.00	.00	.09	.24	.00	.13	.00
13	.05	.01	.01	.00	.00	.07	.00	.00	2.57	.00	.14	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.25	.00	.00	.22
15	.00	.00	.03	.04	.16	.13	.00	.00	.00	.00	.00	.00
16	.25	.00	.00	.00	.00	.00	.01	.02	.11	.00	.04	.00
17	.00	.00	.00	.00	.00	.00	.01	1.82	.00	.00	.96	.00
18	.00	.00	.00	.01	.00	.06	.00	2.86	.01	e.00	.00	.00
19	.00	.04	.00	.00	.00	.28	.56	.31	.00	.00	.00	.54
20	.00	.00	.00	.00	.09	.07	1.09	.05	.70	.14	.00	.01
21	.00	.00	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.10	.64
23	.00	.99	.00	.00	.00	.00	.46	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.31	.08	.00	.00	.29	.00	.01	.00
25	.00	.00	.00	.00	.48	.00	.00	.00	.05	.00	.00	.00
26	.00	.04	.00	.00	.23	.11	.00	.03	.11	.04	1.14	.00
27	.00	.00	.00	.00	.00	.02	.00	.21	.00	.01	.00	.00
28	.00	.00	.00	.01	.00	.00	.08	.11	.28	.20	.00	.00
29	.00	.00	.02	.00	.03	.00	.00	.07	.00	.05	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.04	.00	.14	.00	.00
31	.00	---	.00	.00	---	.00	---	2.61	---	.00	.00	---
TOTAL	0.95	1.88	0.64	0.27	1.31	1.16	2.57	8.65	7.57	2.75	4.36	2.79

e Estimated

05406500 BLACK EARTH CREEK AT BLACK EARTH, WI

LOCATION.--Lat 43°08'03", long 89°43'56" in SW $\frac{1}{4}$ sec.25, T.8 N., R.6 E., Dane County, Hydrologic Unit 07070005, on right bank, 0.8 mi east of Black Earth and 2.1 mi upstream from Vermont Creek.

DRAINAGE AREA.--45.6 mi², of which 2.8 mi² probably is noncontributing.

PERIOD OF RECORD.--February 1954 to current year.

REVISED RECORDS.--WDR WI-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 812.95 ft above sea level.

REMARKS.--Records fair (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	36	33	32	27	48	30	37	553	55	44	42
2	38	37	33	32	27	44	29	36	488	56	43	42
3	38	36	34	32	27	43	29	36	143	77	41	42
4	39	36	35	33	27	41	28	35	118	59	40	39
5	39	36	35	32	27	37	28	35	144	57	61	39
6	37	35	35	31	27	34	27	34	102	55	67	38
7	36	36	34	31	26	33	28	32	89	54	51	38
8	37	36	33	32	26	33	29	32	82	52	46	37
9	37	35	34	32	27	37	30	32	75	55	44	36
10	35	38	35	37	27	36	29	32	69	69	42	36
11	34	39	35	37	26	35	29	32	65	60	42	47
12	34	37	35	35	26	33	29	33	65	56	40	48
13	36	36	35	33	25	33	28	33	104	53	41	42
14	36	35	36	32	25	34	27	33	326	52	41	41
15	35	35	36	32	25	34	25	33	109	51	41	39
16	37	35	36	32	25	34	25	32	89	50	40	38
17	37	35	35	32	25	33	26	34	78	50	52	37
18	37	35	33	32	26	34	26	374	74	48	47	37
19	37	35	34	32	25	34	30	230	70	48	45	37
20	36	35	33	32	25	35	58	92	83	48	45	44
21	36	34	32	e31	25	36	66	74	74	49	45	40
22	36	34	32	31	32	35	48	67	68	48	44	43
23	37	49	31	30	80	35	44	60	66	47	43	50
24	37	44	31	e30	87	35	41	55	67	46	43	45
25	37	38	31	30	66	34	38	51	68	46	43	42
26	36	37	30	29	101	34	37	49	65	45	53	40
27	36	37	31	28	67	34	36	50	61	45	50	39
28	37	35	31	27	54	33	38	70	60	44	46	37
29	37	34	31	27	50	32	39	58	59	45	45	36
30	36	34	31	27	---	31	38	60	57	45	44	36
31	36	---	32	27	---	29	---	176	---	45	44	---
TOTAL	1132	1094	1032	970	1083	1093	1015	2037	3571	1610	1413	1207
MEAN	36.5	36.5	33.3	31.3	37.3	35.3	33.8	65.7	119	51.9	45.6	40.2
MAX	39	49	36	37	101	48	66	374	553	77	67	50
MIN	34	34	30	27	25	29	25	32	57	44	40	36
CFSM	.85	.85	.78	.73	.87	.82	.79	1.54	2.78	1.21	1.06	.94
IN.	.98	.95	.90	.84	.94	.95	.88	1.77	3.10	1.40	1.23	1.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2000, BY WATER YEAR (WY)

	MEAN	31.4	32.6	29.9	29.0	33.2	48.0	42.6	38.3	38.4	37.0	31.7	32.5
MAX	51.5	70.2	48.0	51.6	64.9	85.3	86.5	91.2	119	140	73.2	66.0	
(WY)	1999	1986	1988	1974	1994	1961	1993	1973	2000	1993	1993	1980	
MIN	15.9	16.1	14.8	15.1	16.0	16.9	22.5	18.7	14.4	14.0	15.5	15.3	
(WY)	1967	1967	1965	1959	1959	1968	1957	1965	1965	1965	1958	1958	

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1954 - 2000	
ANNUAL TOTAL	16785		17257		35.4	
ANNUAL MEAN	46.0		47.2		61.0	
HIGHEST ANNUAL MEAN					19.8	
LOWEST ANNUAL MEAN					1993	
HIGHEST DAILY MEAN	356	Apr 23	553	Jun 1	733	Jul 6 1993
LOWEST DAILY MEAN	30	Dec 26	25	(a) Feb 13	12	(b) Feb 16-18 1958
ANNUAL SEVEN-DAY MINIMUM	31	Dec 23	25	Feb 13	13	Jul 24 1965
INSTANTANEOUS PEAK FLOW			808	Jun 2	1750	Jul 3 1954
INSTANTANEOUS PEAK STAGE			5.34	Jun 2	6.58	Jul 3 1954
INSTANTANEOUS LOW FLOW			24	Feb 14,18	(c) 4.8	Nov 29 1958
ANNUAL RUNOFF (CFSM)	1.07		1.10		.83	
ANNUAL RUNOFF (INCHES)	14.59		15.00		11.25	
10 PERCENT EXCEEDS	59		66		51	
50 PERCENT EXCEEDS	40		36		30	
90 PERCENT EXCEEDS	34		29		19	

(a) Also occurred Feb. 14-17, 19-21, and Apr. 15, 16

(b) Also occurred July 26, 29, 1965

(c) Result of freezeup

(e) Estimated due to ice effect or missing record

WISCONSIN RIVER BASIN

05407000 WISCONSIN RIVER AT MUSCODA, WI

LOCATION.--Lat 43°11'53", long 90°26'36", in NW ¼ sec.1, T.8 N., R.1 W., Grant County, Hydrologic Unit 07070005, on left bank at bridge on State Highway 80, 0.5 mi upstream from Eagle Mill Creek and 1.0 mi north of Muscoda.

DRAINAGE AREA.--10,400 mi².

PERIOD OF RECORD.--December 1902 to December 1903, gage height and discharge measurements only, October 1913 to current year. Monthly discharge for October and November 1913 published in WSP 1308. Gage-height records collected at same site November 1908 to December 1912 are contained in reports of U. S. Weather Bureau.

REVISED RECORDS.--WSP 785: 1921(M). WSP 875: 1921. WSP 1308: 1915(M), 1917-18(M), 1920-21(M), 1924(M). WDR WI-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 666.77 ft above sea level. Prior to Nov. 22, 1929, nonrecording gage on bridge 200 ft upstream at same datum. Nov. 22, 1929, to Mar. 15, 1930, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Flow regulated by 24 reservoirs and many powerplants upstream from station. In 1938 when the maximum of record occurred, there were 21 reservoirs upstream from station, the two large reservoirs, Petenwell and Castle Rock were not yet in existence. Usually flows less than 20 ft³/s were diverted out of the basin through Portage Canal to the Fox River throughout the year. Gage-height telemeter and data-collection platform at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5150	5140	6100	e5800	e4700	10400	5690	8750	15500	10400	6240	6260
2	5810	4320	6220	e5400	e4700	9860	5410	8770	20900	9820	5840	6380
3	5630	5200	6330	e5200	e6000	10200	5660	7340	23500	11500	5730	6620
4	5840	4790	5770	e5800	e6400	9770	5130	8080	24700	8610	6360	5580
5	5130	5190	6060	e6200	e7200	9770	5390	7300	26000	9470	6860	7230
6	5420	4750	5990	e7000	e7800	9870	5020	7630	28200	8840	7230	6080
7	5040	4990	5810	e4400	e6800	8250	5080	8100	28400	8520	6550	8130
8	4580	5000	5690	e6000	e7200	8160	5600	7250	27300	8120	5660	6740
9	5200	4380	6170	e4200	e7600	8140	4350	7450	24600	8680	6270	6800
10	4790	4700	6160	e5400	e9200	8390	5530	6930	22600	9380	6210	5700
11	4800	5600	5560	e4100	e9000	8600	5040	6640	18200	13900	7260	5980
12	4640	4450	5670	e6000	e9000	9070	4750	7140	16200	15500	6680	5620
13	4540	4800	5470	e5600	e9800	10000	4430	6220	13400	16800	5900	8650
14	4850	4990	5090	e5000	e8200	10100	4600	5780	14600	16800	5680	14300
15	4290	4820	5250	e3800	e8400	9240	4310	6920	15800	16500	5290	18300
16	5020	4830	5560	e3600	e6000	8410	5050	5600	15700	14800	5860	16000
17	4590	5070	5380	e5200	e5400	7250	4430	6510	14800	11600	8270	14000
18	4910	4720	5500	e4000	e5600	7160	4210	8220	14100	9600	10400	10700
19	4880	5010	e5200	e3600	e5200	6570	4550	12000	12100	9900	10200	9350
20	4840	4280	e4200	e5200	e4800	6700	6280	12800	12500	7510	9930	8620
21	5340	5030	e3300	e5400	e5200	5920	7420	14400	13500	6810	7500	7760
22	5030	3980	e3000	e4900	e5600	6100	6920	12400	13100	6830	5730	7720
23	5530	4650	e2600	e5400	e5800	5850	7780	12100	17800	6470	5990	7370
24	4600	5060	e3700	e6000	e7400	5440	11100	11100	21200	5990	6110	6570
25	5670	5210	e4300	e6600	e7000	5790	11900	8670	22900	5990	6150	7030
26	5010	4830	e4400	e5600	e7800	5120	11700	9750	24200	5660	6490	6670
27	5220	6020	e6000	e6200	e8000	6160	11000	9190	20500	5530	7680	5760
28	5110	5870	e5200	e5000	8680	4790	11000	8730	17100	6220	6660	6340
29	4910	5720	e5200	e4800	8390	5360	10100	8490	15300	6370	6860	5420
30	5240	6380	e5800	e5000	---	5100	9870	7910	13500	6950	6280	5560
31	4790	---	e5800	e4700	---	6040	---	8640	---	5450	6970	---
TOTAL	156400	149780	162480	161100	202870	237580	199300	266810	568200	294520	210840	243240
MEAN	5045	4993	5241	5197	6996	7664	6643	8607	18940	9501	6801	8108
MAX	5840	6380	6330	7000	9800	10400	11900	14400	28400	16800	10400	18300
MIN	4290	3980	2600	3600	4700	4790	4210	5600	12100	5450	5290	5420

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2000, BY WATER YEAR (WY)

MEAN	7370	7746	6538	6084	6651	10790	16740	11840	10550	7387	5952	7207
MAX	25460	17130	13100	11400	12020	30400	37650	32270	28840	17780	11610	31280
(WY)	1987	1986	1966	1973	1966	1973	1922	1960	1993	1978	1924	1938
MIN	2638	2662	2616	3209	3113	3501	4788	4621	3091	2754	2567	2651
(WY)	1977	1977	1977	1924	1924	1934	1964	1977	1988	1988	1988	1976

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1914 - 2000

ANNUAL TOTAL	2786770	2853120	
ANNUAL MEAN	7635	7795	8733
HIGHEST ANNUAL MEAN			16030
LOWEST ANNUAL MEAN			4145
HIGHEST DAILY MEAN	22100	Apr 12	28400
LOWEST DAILY MEAN	(a) 2600	Dec 23	(a) 2600
ANNUAL SEVEN-DAY MINIMUM	(a) 3640	Dec 20	(a) 3640
INSTANTANEOUS PEAK FLOW			28600
INSTANTANEOUS PEAK STAGE		6.56	Jun 7
10 PERCENT EXCEEDS	11600		15200
50 PERCENT EXCEEDS	6700		6940
90 PERCENT EXCEEDS	4840		3940

(a) Ice affected

(e) Estimated due to ice effect or missing record

05408000 KICKAPOO RIVER AT LA FARGE, WI

LOCATION.--Lat 43°34'27", long 90°38'35", on east-west quarter section line in W½ sec.29, T.13 N., R.2 W., Vernon County, Hydrologic Unit 07070006, on left bank 10 ft upstream from bridge on State Highway 82, in La Farge, 0.3 mi upstream from Otter Creek, and 1.3 mi downstream from powerplant.

DRAINAGE AREA.--266 mi².

PERIOD OF RECORD.--October 1938 to current year.

REVISED RECORDS.--WSP 1388: 1951(M), 1954(M). WSP 1438: 1944-45(M), 1946, 1948, 1950(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 781.54 ft above sea level. Prior to Dec. 4, 1939, nonrecording gage on highway bridge at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	123	130	144	e120	e120	167	136	133	946	164	145	138
2	152	130	141	e120	e120	158	135	130	1060	162	147	135
3	156	129	146	e120	e120	150	135	126	363	650	141	201
4	134	128	153	e120	e120	148	133	124	314	255	132	234
5	132	128	147	e120	e120	148	131	122	898	207	146	153
6	130	128	140	e120	e120	149	132	120	484	265	239	143
7	129	129	138	e120	e120	149	130	121	319	191	166	138
8	134	130	137	e120	e120	153	133	121	262	178	147	138
9	151	135	137	e120	e120	157	132	123	235	240	141	135
10	135	136	135	e120	e120	151	128	122	213	361	134	135
11	128	142	128	e120	e120	143	126	127	197	255	130	166
12	127	134	135	e120	e120	140	127	151	184	198	128	156
13	126	135	130	e120	e120	144	126	149	211	217	180	134
14	128	134	131	e120	e120	147	127	131	851	190	236	148
15	126	129	132	e120	e120	152	126	125	458	175	157	143
16	129	129	130	e120	e120	150	124	125	708	165	144	130
17	131	131	116	e120	e120	140	125	188	477	161	235	128
18	127	132	e130	e120	e120	138	125	1540	313	154	266	125
19	128	135	e130	e120	e120	143	131	611	270	152	170	128
20	128	135	e130	e110	e120	148	272	311	281	149	157	158
21	129	133	e130	e110	e120	149	283	246	322	145	151	141
22	130	134	e120	e110	e140	146	200	231	237	141	156	133
23	128	236	e120	e110	e400	145	190	206	212	138	194	141
24	126	349	e110	e110	e500	151	176	184	200	134	179	135
25	126	176	e110	e110	267	176	155	166	208	134	177	128
26	127	160	e110	e110	236	157	147	158	201	151	216	125
27	129	154	e110	e110	205	156	142	161	193	179	252	124
28	128	145	e120	e110	173	152	138	171	178	152	166	120
29	137	138	e120	e110	164	146	135	165	189	154	153	120
30	148	135	e120	e120	---	141	131	166	174	149	144	120
31	134	---	e120	e120	---	137	---	187	---	141	141	---
TOTAL	4096	4399	4000	3620	4605	4631	4431	6741	11158	6107	5270	4253
MEAN	132	147	129	117	159	149	148	217	372	197	170	142
MAX	156	349	153	120	500	176	283	1540	1060	650	266	234
MIN	123	128	110	110	120	137	124	120	174	134	128	120
CFSM	.50	.55	.49	.44	.60	.56	.56	.82	1.40	.74	.64	.53
IN.	.57	.62	.56	.51	.64	.65	.62	.94	1.56	.85	.74	.59

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2000, BY WATER YEAR (WY)

	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
MEAN	145	154	133	127	160	302	274	194	196	164	144	159
MAX	317	337	336	421	499	761	723	580	445	838	446	539
(WY)	1960	1983	1985	1946	1966	1961	1965	1973	1947	1978	1980	1965
MIN	73.4	78.5	62.0	61.3	62.2	114	126	80.4	80.9	77.8	60.4	72.7
(WY)	1959	1940	1959	1959	1959	1957	1942	1958	1958	1958	1958	1940

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1939 - 2000

ANNUAL TOTAL	64078	63311	
ANNUAL MEAN	176	173	179
HIGHEST ANNUAL MEAN			282
LOWEST ANNUAL MEAN			97.1
HIGHEST DAILY MEAN	1040	Apr 9	7730
LOWEST DAILY MEAN	(a)110	Dec 24-27	(a)110 (b)Dec 24-27
ANNUAL SEVEN-DAY MINIMUM	(a)114	Dec 22	(a)110 Jan 20
INSTANTANEOUS PEAK FLOW			1860 Jun 1
INSTANTANEOUS PEAK STAGE			10.28 Jun 1
INSTANTANEOUS LOW FLOW			107 Dec 17
ANNUAL RUNOFF (CFSM)	.66	.65	.67
ANNUAL RUNOFF (INCHES)	8.96	8.85	9.16
10 PERCENT EXCEEDS	247	236	261
50 PERCENT EXCEEDS	150	138	134
90 PERCENT EXCEEDS	123	120	87

(a) Ice affected

(b) Also occurred Jan. 20-29

(e) Estimated due to ice effect or missing record

WISCONSIN RIVER BASIN

05410490 KICKAPOO RIVER AT STEUBEN, WI

LOCATION.--Lat 43°10'58", long 90°51'30", in NE ¼ SW ¼ sec.9, T.8 N., R.4 W., Crawford County, Hydrologic Unit 07070006, on right bank at upstream corner of town road bridge at Steuben and 18.6 mi upstream from mouth.

DRAINAGE AREA.--687 mi².

PERIOD OF RECORD.--May 1933 to current year. Prior to October 1982, all records published under station number 05410500.

REVISED RECORDS.--WSP 855: Drainage area. WSP 1438: 1933-38. WDR WI-79-1: 1978(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 657.00 ft above sea level. May 1933 to Oct. 19, 1938, nonrecording gage at same site at datum 1.7 ft higher. Oct. 20, 1938 to September 1982, recording gage at site 1.2 mi downstream at datum 0.36 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Data-collection platform and gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	420	436	461	e390	e390	537	452	450	2110	703	615	535
2	434	426	467	e390	e390	524	450	443	4100	697	603	528
3	450	421	484	e390	e390	514	450	439	3630	811	597	537
4	465	420	509	e380	e390	498	447	432	3140	830	579	553
5	444	421	510	e380	e390	490	443	427	2760	951	583	613
6	426	421	497	e380	e380	487	442	423	2400	757	654	562
7	420	420	483	e380	e380	479	444	421	2070	718	671	521
8	420	420	475	e380	e380	483	445	420	1780	718	648	514
9	425	422	473	e380	e380	491	442	421	1250	691	585	510
10	431	427	469	e390	e380	493	438	419	966	1040	560	510
11	430	431	464	e400	e380	484	436	426	868	1510	543	525
12	414	435	459	e400	e380	471	432	457	813	1990	529	529
13	410	433	455	e390	e380	465	429	470	814	1630	526	546
14	410	429	462	e390	e380	464	431	472	1190	941	544	517
15	414	428	460	e400	e380	472	432	446	1390	804	606	505
16	419	427	463	e410	e380	476	432	429	1550	735	572	507
17	418	425	461	e410	e380	472	427	429	1640	698	591	492
18	417	428	399	e410	e370	462	425	1000	1610	671	643	482
19	416	432	369	e410	e370	460	435	1470	1290	652	696	483
20	413	436	e450	e400	e370	466	522	1620	993	641	613	501
21	414	436	e430	e400	e370	470	624	1770	938	634	558	515
22	416	434	e430	e400	e370	470	692	1660	919	623	545	520
23	415	518	e430	e400	e450	468	624	995	842	612	609	515
24	412	662	e420	e400	949	475	776	795	795	598	616	508
25	410	742	e410	e400	1080	491	553	675	783	589	577	497
26	412	632	e400	e400	844	504	514	625	782	589	551	483
27	414	536	e400	e400	668	509	489	631	763	659	621	474
28	415	508	e400	e400	614	492	476	621	738	1020	694	467
29	423	490	e400	e400	562	483	467	610	755	735	614	460
30	428	474	e390	e400	---	470	457	604	732	658	562	457
31	442	---	e390	e400	---	459	---	624	---	641	544	---
TOTAL	13097	13970	13770	12260	13527	14979	14317	21105	44411	25546	18449	15366
MEAN	422	466	444	395	466	483	477	681	1480	824	595	512
MAX	465	742	510	410	1080	537	692	1770	4100	1990	696	613
MIN	410	420	369	380	370	459	425	419	732	589	526	457
CFSM	.61	.68	.65	.58	.68	.70	.69	.99	2.15	1.20	.87	.75
IN.	.71	.76	.75	.66	.73	.81	.78	1.14	2.40	1.38	1.00	.83

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 2000, BY WATER YEAR (WY)

	MEAN	419	436	382	361	426	772	702	525	521	492	428	452
MAX	798	858	781	846	1276	1856	1748	1415	1480	1901	1180	1331	
(WY)	1973	1983	1985	1946	1966	1946	1959	1973	2000	1978	1935	1938	
MIN	206	222	172	172	184	252	351	228	223	189	188	199	
(WY)	1959	1938	1959	1959	1959	1934	1942	1934	1934	1936	1936	1937	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1933 - 2000

ANNUAL TOTAL	198187	220797	
ANNUAL MEAN	543	603	494
HIGHEST ANNUAL MEAN			792
LOWEST ANNUAL MEAN			273
HIGHEST DAILY MEAN	1340	Apr 25	4100 Jun 2
LOWEST DAILY MEAN	(a)369	Dec 19	(a)369 Dec 19
ANNUAL SEVEN-DAY MINIMUM	(b)390	Jan 8	(b)373 Feb 16
INSTANTANEOUS PEAK FLOW			4280 Jun 2
INSTANTANEOUS PEAK STAGE			13.99 Jun 2
INSTANTANEOUS LOW FLOW			(a)342 Dec 18,19
ANNUAL RUNOFF (CFSM)	.79	.88	.72
ANNUAL RUNOFF (INCHES)	10.73	11.96	9.77
10 PERCENT EXCEEDS	721	843	747
50 PERCENT EXCEEDS	488	472	406
90 PERCENT EXCEEDS	410	390	260

(a) Result of freezeup

(b) Ice affected

(c) Also occurred Jan. 4-9, Feb. 5-7, 1959, ice affected

(d) Site and datum then in use

(e) Estimated due to ice effect or missing record

RESERVOIRS IN WISCONSIN RIVER BASIN

The 24 reservoirs listed below are used to stabilize the flow of the Wisconsin and Tomahawk Rivers for power generation and are also used for recreational purposes. The first 21 reservoirs are owned and operated by the Wisconsin Valley Improvement Co., which furnishes the gage heights and capacity tables. Revised capacity tables for all 21 reservoirs were received from the Company in April 1957 and were used to compute month-end usable contents beginning Sept. 30, 1955. Another revised capacity table for Burnt Rollways Reservoir was used to compute month-end usable contents beginning Sept. 30, 1964. Lake Dubay is owned by the Consolidated Water Power Co. Petenwell and Castle Rock are owned and operated by the Wisconsin River Power Co., which furnished the gage heights and capacity tables for those two reservoirs. Month-end contents are computed by the U.S. Geological Survey. The usable capacity of these reservoirs is usually less in summer than in winter because the allowable summer drawdown is limited by the Department of Natural Resources in the interest of riparian property owners. There are occasionally formal or informal changes in capacity and in minimum drawdown levels. Usable capacity figures listed below are for winter regulation.

- 05390100 Lac Vieux Desert on Wisconsin River, lat 46°07'18", long 89°09'07", in SE 1/4 NW 1/4 sec.17, T.42 N., R.11 E., Vilas County, 4.8 mi northwest of Phelps, used as a reservoir since 1908, has a usable capacity of 652,000,000 ft³. Drainage area, 34.4 mi².
- 05390150 Twin Lakes on Twin River, lat 46°01'20", long 89°10'05", in SW 1/4 NE 1/4 sec.19, T.41 N., R.11 E., Vilas County, 5.0 mi southwest of Phelps, used as a reservoir since 1908, has a usable capacity of 313,000,000 ft³. Drainage area, 26 mi².
- 05390200 Buckatabon Lakes on Buckatabon Creek, lat 46°01'18", long 89°18'40", in SE 1/4 NE 1/4 sec.24, T.41 N., R.9 E., Vilas County, 3.3 mi southwest of Conover, used as a reservoir since 1908, has a usable capacity of 130,000,000 ft³. Drainage area, 16.9 mi².
- 05390250 Sevenmile Lake on Sevenmile Creek, lat 45°52'30", long 89°04'07", in SE 1/4 NE 1/4 sec.11, T.39 N., R.11 E., Oneida County, 9.1 mi southeast of town of Eagle River, used as a reservoir since 1908, has a usable capacity of 93,000,000 ft³. Drainage area, 12.1 mi².
- 05390300 Lower Ninemile Lake on Ninemile Creek, lat 45°53'37", long 89°07'15", in NE 1/4 NW 1/4 sec.4, T.39 N., R.11 E., Oneida County, 6.6 mi southeast of town of Eagle River, used as a reservoir since 1908, has a usable capacity of 121,000,000 ft³. Drainage area, 28.8 mi².
- 05390350 Burnt Rollways Reservoir on Eagle River, lat 45°53'40", long 89°08'28", in NE 1/4 NW 1/4 sec.5, T.39 N., R.11 E., Oneida County, 5.3 mi southeast of town of Eagle River, used as a reservoir since 1908, has a usable capacity of 779,000,000 ft³. This reservoir includes 18 lakes controlled by the same dam. Drainage area, 142 mi².
- 05390400 Long Lake on Deerskin River, lat 46°02'37", long 89°02'44", in NW 1/4 SE 1/4 sec.7, T.41 N., R.12 E., Vilas County, 2.5 mi southeast of Phelps, used as a reservoir since 1908, has a usable capacity of 400,000,000 ft³. Drainage area, 22.9 mi².
- 05390600 Deerskin Lake on Little Deerskin River, lat 45°59'07", long 89°09'40", in SE 1/4 sec.31, T.41 N., R.11 E., Vilas County, 6.3 mi northeast of town of Eagle River, used as a reservoir since 1908, has a usable capacity of 22,000,000 ft³. Drainage area, 2.47 mi².
- 05390650 Sugar Camp Reservoir on Sugar Camp Creek, lat 45°52'19", long 89°23'40", in NE 1/4 sec.17, T.39 N., R.9 E., Oneida County, 7.6 mi southwest of town of Eagle River, used as a reservoir since 1908, has a usable capacity of 471,000,000 ft³. Drainage area, 48.4 mi².
- 05390700 Little St. Germain Lake on Little St. Germain Creek, lat 45°53'55", long 89°27'10", in SE 1/4 sec.35, T.40 N., R.8 E., Vilas County, 9.6 mi west of town of Eagle River, used as a reservoir since 1908, has a usable capacity of 79,000,000 ft³. Drainage area, 19 mi².
- 05390750 Big St. Germain Lake on St. Germain River, lat 45°55'06", long 89°31'55", in SE 1/4 sec.30, T.40 N., R.8 E., Vilas County, 5.0 mi south of Sayner, used as a reservoir since 1908, has a usable capacity of 202,000,000 ft³. Drainage area, 73.1 mi².
- 05390800 Pickerel Lake on St. Germain River, lat 45°52'22", long 89°31'47", in NE 1/4 sec.18, T.39 N., R.8 E., Oneida County, 5.0 mi northeast of town of Lake Tomahawk, used as a reservoir since 1935, has a usable capacity of 338,000,000 ft³. Drainage area, 86.2 mi².
- 05390900 Rainbow Lake on Wisconsin River, lat 45°50'02", long 89°32'42", in SW 1/4 sec.30, T.39 N., R.8 E., Oneida County, 800 ft upstream from U.S. Geological Survey river gaging station, 2.7 mi northeast of town of Lake Tomahawk, used as a reservoir since 1935, has a usable capacity of 2,181,000,000 ft³. Drainage area, 744 mi².
- 05391100 South Pelican Lake on Pelican River, lat 45°31'37", long 89°12'24", in S 1/2 sec.11, T.35 N., R.10 E., Oneida County, 2.8 mi northwest of town of Pelican Lake, used as a reservoir since 1909, has a usable capacity of 305,000,000 ft³. Drainage area, 19.8 mi².
- 05391300 North Pelican Lake (includes Moen Lakes) on North Branch Pelican River, lat 45°38'05", long 89°14'38", in SE 1/4 sec.4, T.36 N., R.10 E., Oneida County, 0.2 mi below Twin Lakes Creek and 8.0 mi east of Rhinelander city limits, used as a reservoir since 1908, has a usable capacity of 218,000,000 ft³. Drainage area, 95 mi².
- 05392100 Minocqua Lake on Tomahawk River, lat 45°52'35", long 89°43'38", on line between secs.10 and 15, T.39 N., R.6 E., Oneida County, 1.0 mi west of Minocqua, used as a reservoir since 1910, has a usable capacity of 628,000,000 ft³. Drainage area, 72.5 mi².
- 05392200 Squirrel Lake on Squirrel River, lat 45°50'37", long 89°54'13", in NE 1/4 sec.30, T.39 N., R.5 E., Oneida County, 9.4 mi west of Minocqua, used as a reservoir since 1908, has a usable capacity of 182,000,000 ft³. Drainage area, 15.2 mi².
- 05392300 Willow Reservoir on Tomahawk River, lat 45°42'45", long 89°50'38", in NE 1/4 sec.10, T.37 N., R.5 E., Oneida County, 8.8 mi southwest of Hazelhurst, used as a reservoir since 1927, has a usable capacity of 3,302,000,000 ft³. Drainage area, 310 mi².

RESERVOIRS IN WISCONSIN RIVER BASIN--Continued

- 05392500 Lake Nokomis on Tomahawk River, lat 45°32'20", long 89°44'48", in NW 1/4 sec.9, T.35 N., R.6 E., Lincoln County, at U.S. Geological Survey river gaging station, 0.5 mi east of Bradley, used as a reservoir since 1912, has a usable capacity of 1,808,000,000 ft³. Drainage area, 544 mi².
- 05393600 Spirit River Flowage on Spirit River, lat 45°26'18", long 89°44'30", in NE 1/4 sec.16, T.34 N., R.6 E., Lincoln County, 2.0 mi south of Tomahawk, used as a reservoir since 1923, has a usable capacity of 756,000,000 ft³. Drainage area, 158 mi².
- 05399600 Big Eau Pleine Reservoir on Big Eau Pleine River, lat 44°43'52", long 89°45'35", in SW 1/4 sec.14, T.26 N., R.6 E., Marathon County, 3.0 mi northeast of Dancy, used as a reservoir since 1937, has a capacity of 4,457,000,000 ft³. Drainage area, 363 mi².
- 05400295 Lake Dubay on Wisconsin River, lat 44°39'54", long 89°39'03", in sec.10, T.25 N., R.7 E., Wood County, 1.5 mi downstream of Little Eau Pleine River and 10.5 mi northwest of Stevens Point, has a usable capacity of 2,117,000,000 ft³. Drainage area, 4,900 mi².
- 05401400 Petenwell Flowage on Wisconsin River, lat 44°03'26", long 90°01'18", in SE 1/4 sec.4, T.18 N., R.4 E., Adams County, 5.2 mi upstream from Roche a Cri Creek, 2.4 mi west of Strongs Prairie, and 3.5 mi northeast of Necedah, used as a reservoir since 1950, has a total capacity of 19,880,000,000 ft³. Drainage area, 5,970 mi².
- 05403200 Castle Rock Flowage on Wisconsin River, lat 43°51'48", long 89°57'38", in sec.13, T.16 N., R.4 E., Adams County, 4.5 mi upstream from Duck Creek, and 2.0 mi south of Germantown, and 7.0 mi northeast of Mauston, used as a reservoir since 1950, has a total capacity of 7,630,000,000 ft³. Drainage area, 7,056 mi².

MONTH-END CONTENTS, IN MILLIONS OF CUBIC FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

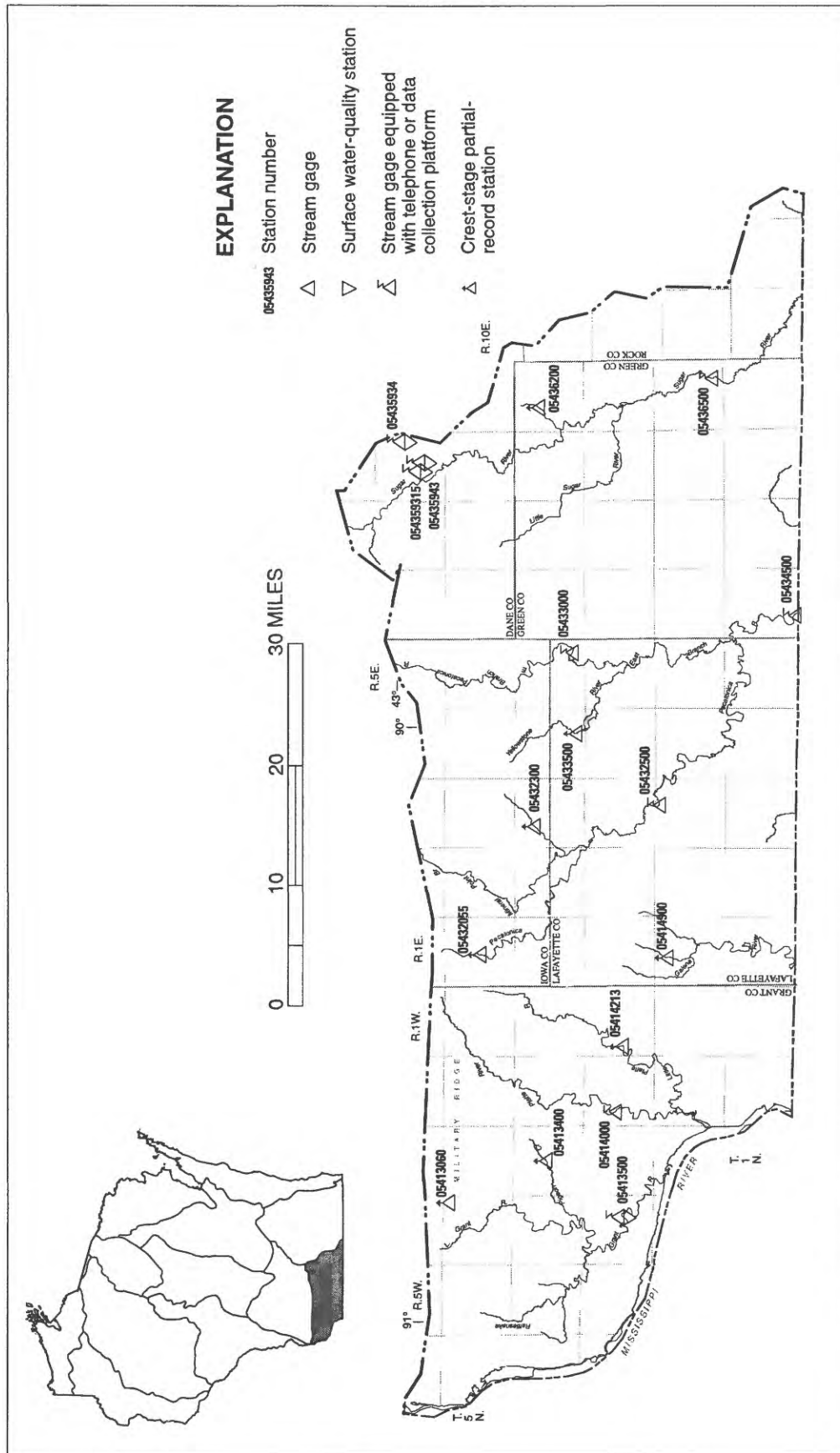
	LAC VIEUX DESERT	TWIN LAKES	BUCKATABON LAKE	SEVENMILE LAKE	LOWER NINEMILE LAKE	BURNT ROLLWAYS RESERVOIR	LONG LAKE	DEERSKIN LAKE
Sept. 30	268	245	112	45	101	517	168	17
Oct. 31	268	236	111	46	102	584	139	17
Nov. 30	147	197	94	21	54	366	122	16
Dec. 31	73	80	68	8	16	167	59	19
Jan. 31	29	11	56	0	0	0	16	21
Feb. 29	77	16	45	7	49	40	44	13
Mar. 31	179	95	80	14	105	414	115	14
Apr. 30	228	133	106	49	94	575	126	12
May 31	201	142	113	49	94	536	109	10
June 30	246	209	113	67	94	588	129	16
July 31	301	255	113	59	96	581	156	18
Aug. 31	262	251	114	51	91	555	129	17
Sept. 30	244	239	114	52	96	514	105	17

	SUGAR CAMP RESERVOIR	LITTLE ST. GERMAIN LAKE	BIG ST. GERMAIN LAKE	PICKEREL LAKE	RAINBOW LAKE	SOUTH PELICAN LAKE	NORTH PELICAN LAKE	MINOCQUA LAKE
Sept. 30	399	65	163	274	1,086	401	123	471
Oct. 31	336	66	156	269	649	243	126	465
Nov. 30	62	48	103	242	1,116	179	106	329
Dec. 31	20	36	67	224	1,095	289	28	188
Jan. 31	81	16	48	187	1,004	109	4	102
Feb. 29	153	16	36	194	870	121	45	100
Mar. 31	320	36	114	262	1,333	186	139	224
Apr. 30	414	50	162	277	1,744	231	140	315
May 31	404	50	164	272	1,542	240	137	362
June 30	420	61	168	272	1,975	292	137	477
July 31	416	73	162	279	1,956	308	138	491
Aug. 31	405	67	158	276	1,612	278	134	482
Sept. 30	415	62	162	276	1,500	289	134	497

RESERVOIRS IN WISCONSIN RIVER BASIN--Continued

MONTH-END CONTENTS, IN MILLIONS OF CUBIC FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

	SQUIRREL LAKE	WILLOW RESERVOIR	LAKE NOKOMIS	SPIRIT RIVER FLOWAGE	BIG EAU PLEINE RESERVOIR	LAKE DUBAY	PETENWELL FLOWAGE	CASTLE ROCK FLOWAGE
Sept. 30	164	1,770	1,016	274	2,702	4,163	17,509	5,812
Oct. 31	169	1,195	718	206	1,499	4,156	17,562	5,903
Nov. 30	118	1,232	637	225	1,196	4,107	17,659	5,903
Dec. 31	60	1,156	707	153	1,038	3,897	17,201	5,499
Jan. 31	6	996	367	108	839	3,551	16,679	5,369
Feb. 29	49	958	476	193	1,892	3,562	15,722	4,874
Mar. 31	98	1,518	1,138	717	2,443	4,358	17,615	5,480
Apr. 30	135	2,000	1,522	693	2,655	4,188	18,178	6,432
May 31	142	2,159	1,250	559	2,880	4,169	17,817	6,127
June 30	167	2,527	1,706	720	4,358	4,194	17,580	5,799
July 31	171	3,050	1,703	699	4,034	4,178	17,756	5,949
Aug. 31	164	2,666	1,394	620	3,382	4,132	17,632	5,876
Sept. 30	159	2,305	1,295	595	3,939	4,160	17,597	5,896



PECATONICA-SUGAR BASIN

LOCATION.--Lat 42°43'13", long 90°49'09", in NW ¼ sec.23, T.3 N., R.4 W., Grant County, Hydrologic Unit 07060003, on right bank at downstream side of highway bridge at Burton, 5.9 mi northwest of Potosi and 9.5 mi upstream from mouth.

PERIOD OF RECORD.--October 1934 to current year. Published as "near Burton" October 1934 to September 1947. Records published for both sites March to September 1947. October 1934, monthly discharge published in WSP 1308.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 606.43 ft above sea level. Oct. 17, 1934, to Sept. 30, 1947, non-recording gage at site 6 mi upstream at datum 33.18 ft higher. Mar. 18, 1947, to July 27, 1949, nonrecording gage at present site and datum.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	177	165	158	e140	e140	198	137	142	4390	222	186	165
2	181	162	161	e140	e140	184	137	139	965	282	194	163
3	182	161	167	e130	e140	178	136	135	529	529	185	180
4	187	162	178	e120	e140	176	134	133	420	288	179	183
5	181	163	161	e120	e140	172	133	132	571	264	185	162
6	176	159	156	e120	e140	167	133	129	427	251	202	159
7	172	157	155	e120	e130	163	145	129	355	235	188	158
8	173	159	155	e130	e130	163	166	136	322	225	182	159
9	174	162	154	e140	e130	166	148	137	290	259	179	157
10	171	161	153	e140	e130	160	142	129	265	360	173	159
11	167	157	148	e140	e130	155	143	139	250	299	171	162
12	165	155	152	e130	e130	152	138	142	246	247	170	174
13	168	157	152	e120	e130	152	135	135	307	237	172	155
14	166	157	150	e120	e130	150	135	126	1350	227	173	159
15	168	153	152	e130	e130	152	134	123	623	219	171	152
16	173	154	149	e120	e120	154	132	127	444	214	166	147
17	165	154	e140	e120	e120	144	134	137	361	211	298	148
18	162	156	e150	e130	e120	144	133	272	320	204	247	147
19	165	158	e150	e120	e120	153	158	507	294	202	187	150
20	164	155	e140	e110	e120	159	349	220	352	201	179	173
21	165	155	e120	e130	e120	153	260	191	333	199	174	160
22	166	156	e140	e140	e150	147	207	178	273	196	175	167
23	163	e180	e140	e130	e400	145	192	167	254	193	180	221
24	161	e240	e140	e130	e1200	153	180	157	269	191	175	169
25	164	182	e140	e130	488	166	168	145	327	191	171	156
26	165	175	e140	e130	346	148	160	144	280	193	177	153
27	163	172	e140	e130	262	151	156	270	259	194	184	150
28	162	162	e140	e130	219	148	152	228	244	189	172	147
29	185	157	e140	e130	205	142	146	187	247	190	170	146
30	197	152	e140	e140	---	139	142	202	231	191	166	146
31	168	---	e140	e140	---	138	---	303	---	189	167	---
TOTAL	5296	4898	4601	4000	6000	4872	4765	5441	15798	7292	5698	4827
MEAN	171	163	148	129	207	157	159	176	527	235	184	161
MAX	197	240	178	140	1200	198	349	507	4390	529	298	221
MIN	161	152	120	110	120	138	132	123	231	189	166	146
CFSM	.64	.61	.55	.48	.77	.58	.59	.65	1.96	.87	.68	.60
IN.	.73	.68	.64	.55	.83	.67	.66	.75	2.18	1.01	.79	.67

MEAN	120	130	111	134	204	322	185	169	208	177	150	133
MAX	276	626	350	467	668	1057	505	489	920	808	502	330
(WY)	1994	1962	1973	1974	1948	1959	1973	1973	1947	1993	1943	1993
MIN	45.8	41.3	37.7	33.4	36.1	55.3	66.0	46.8	50.6	35.8	41.6	42.2
(WY)	1935	1938	1959	1959	1959	1958	1957	1958	1936	1936	1937	1958

GRANT RIVER BASIN

05413500 GRANT RIVER AT BURTON, WI--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1935 - 2000	
ANNUAL TOTAL	87805		73488		170	
ANNUAL MEAN	241		201		351	1993
HIGHEST ANNUAL MEAN					59.3	1958
LOWEST ANNUAL MEAN					10700	Jun 13 1947
HIGHEST DAILY MEAN	2860	May 17	4390	Jun 1	30	(b) Aug 5 1936
LOWEST DAILY MEAN	(a)120	Dec 21	(a)110	Jan 20	31	(c) Aug 3 1936
ANNUAL SEVEN-DAY MINIMUM	(a)137	Dec 20	(a)121	Jan 14	(d)25000	Jul 16 1950
INSTANTANEOUS PEAK FLOW			8810	Jun 1	24.82	Jul 16 1950
INSTANTANEOUS PEAK STAGE			22.05	Jun 1	(f)21	Mar 4 1954
INSTANTANEOUS LOW FLOW					.63	
ANNUAL RUNOFF (CFSM)	.89		.75		8.58	
ANNUAL RUNOFF (INCHES)	12.14		10.16		258	
10 PERCENT EXCEEDS	363		269		117	
50 PERCENT EXCEEDS	195		161		60	
90 PERCENT EXCEEDS	152		130			

(a) Ice affected

(b) Also occurred Aug. 8, 9, 1936, Sept. 22, 1937, and Feb. 19, 20, 1959, ice affected

(c) also occurred Jan. 4, 1959, ice affected

(d) From rating curve extended above 18,000 ft³/s on basis of slope-area measurement of peak flow

(e) Estimated due to ice effect or missing record

(f) Result of freezeup

05413500 GRANT RIVER AT BURTON, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-67, 1978 to current year. National Stream-Quality Accounting Network data collection October 1986 to September 1994.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: Water years 1978 to current year, April-September monthly totals only published for 1983 water year, but daily load estimates are available for the entire year.

INSTRUMENTATION.--Automatic pumping sampler since June 21, 1999.

REMARKS.--Sediment records for periods of no ice cover are fair to good. Records for high-flow periods during ice cover are poor. Monthly and annual load values are fair. Samples are point samples.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 13,600 mg/L, July 13, 1979; minimum observed, 6 mg/L, Dec. 8, 1997.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 95,300 tons, June 17, 1978; minimum daily, 1.5 tons, Mar. 1, 2, 1978.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 6,950 mg/L, June 1; minimum observed, 14 mg/L, Apr. 28.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 43,900 tons, June 1; minimum daily, 5.4 tons, Apr. 5, 6, 16, 18.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	57	58	20	7.8	28	5.6	20	43900	172	52	33
2	44	56	59	19	7.8	26	5.6	20	7780	458	53	35
3	44	55	62	17	7.8	25	5.6	19	3800	1920	47	42
4	45	54	66	15	7.8	25	5.5	19	2530	492	41	45
5	44	54	59	15	7.8	24	5.4	19	3260	324	39	43
6	42	52	57	14	7.8	23	5.4	18	1490	272	40	43
7	41	51	55	14	7.2	22	13	18	805	225	34	41
8	41	51	53	14	7.2	21	17	19	555	192	30	39
9	42	51	51	15	7.2	20	6.1	19	383	313	28	37
10	41	51	49	14	7.2	19	5.8	18	266	1250	29	36
11	40	49	45	14	7.2	17	5.8	20	191	941	30	35
12	39	48	45	12	7.2	16	5.7	20	143	210	32	35
13	40	48	43	11	7.2	15	5.6	19	169	107	34	31
14	43	47	41	10	7.2	14	5.6	18	7280	71	36	32
15	52	46	40	11	7.2	14	5.5	17	2820	62	38	31
16	63	46	38	9.7	6.7	13	5.4	18	1720	57	38	30
17	72	46	34	9.3	6.7	12	5.5	19	1140	53	307	31
18	81	47	36	9.7	6.7	11	5.4	242	769	49	200	31
19	79	47	34	8.7	6.7	11	15	819	381	47	77	32
20	72	46	31	7.7	6.7	11	368	108	325	47	62	37
21	68	46	25	8.7	6.7	10	125	77	368	48	54	31
22	64	44	29	9.0	8.3	9.4	52	58	247	48	62	30
23	58	124	28	8.1	143	8.8	44	45	212	48	144	36
24	53	151	27	7.8	2240	8.8	37	34	225	48	111	26
25	51	88	26	7.5	144	9.1	31	26	360	48	83	22
26	47	67	25	7.3	49	7.8	27	26	275	49	65	19
27	43	64	24	7.2	37	7.5	24	194	222	50	52	18
28	40	60	23	7.2	31	7.0	22	99	189	50	37	18
29	88	58	22	7.2	29	6.4	21	46	191	51	29	19
30	97	56	21	7.8	---	5.9	20	56	178	52	29	19
31	60	---	20	7.8	---	5.6	---	688	---	52	31	---
TOTAL	1677	1760	1226	345.7	2833.1	453.3	905.5	2838	82174	7806	1944	957

WTR YR 2000 TOTAL 104,919.6

GRANT RIVER BASIN

05413500 GRANT RIVER AT BURTON, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT, SUS- PENDED (MG/L) (80154)
OCT				
13...	1305	--	171	26
13...	2400	--	167	88
18...	1035	--	162	190
NOV				
15...	0500	--	153	111
24...	1345	240	--	230
DEC				
06...	1328	--	156	32
06...	1337	--	156	137
JAN				
26...	1230	130	--	21
MAR				
06...	1345	--	167	52
31...	1230	--	137	15
APR				
16...	1700	--	131	15
28...	0905	--	153	52
28...	0913	--	153	14
MAY				
03...	0500	--	135	52
31...	0500	--	228	837
JUN				
01...	0230	--	2040	199
01...	0345	--	3480	2620
01...	0945	--	8350	4990
01...	1554	--	4680	1900
01...	1615	--	4080	6950
01...	1800	--	2400	5590
03...	1545	--	499	2640
14...	0500	--	1460	1840
14...	1212	--	1760	2520
14...	1435	--	1430	1520
15...	1130	--	594	518
15...	1139	--	592	1750
18...	0915	--	322	979
21...	0500	--	381	455
25...	0715	--	368	431
28...	0500	--	239	286
JUL				
02...	2345	--	668	2000
05...	0500	--	268	5330
11...	1315	--	278	1280
14...	1135	--	226	110
14...	1145	--	226	80
19...	0500	--	202	86
26...	0500	--	191	340
AUG				
02...	0500	--	194	104
09...	0500	--	179	58
16...	0500	--	167	85
23...	0500	--	181	334
29...	1100	--	168	36
29...	1110	--	169	61
SEP				
06...	0500	--	159	102
13...	0500	--	158	73
20...	0500	--	168	81
27...	0500	--	152	44

05414000 PLATTE RIVER NEAR ROCKVILLE, WI

LOCATION.--Lat 42°43'52", long 90°38'25", in SW $\frac{1}{4}$ sec.17, T.3 N., R.2 W., Grant County, Hydrologic Unit 07060003, on right bank just downstream from bridge on County Trunk Highway B, 0.8 mi upstream from Blakely Branch, 2.2 mi east of Rockville, 4.5 mi northeast of Potosi, and 15.2 mi upstream from mouth.

DRAINAGE AREA.--142 mi².

PERIOD OF RECORD.--October 1934 to current year. Monthly discharge for October and November 1934 published in WSP 1308.

REVISED RECORDS.--WSP 1438: 1935-36, 1937(M), 1939(M), 1941-43(M), 1946(M). WDR WI-76-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 642.50 ft above sea level. Prior to Oct. 1, 1941, nonrecording gage at site 1.3 mi upstream at datum 12.55 ft higher. Oct. 1, 1941, to June 29, 1949, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	74	69	68	e64	83	57	65	1910	136	98	82
2	81	73	70	70	e62	76	58	63	498	193	107	81
3	81	72	75	69	e68	73	58	63	294	258	107	83
4	83	72	78	65	e66	72	56	62	241	177	104	82
5	81	73	72	53	e64	71	56	61	271	166	109	78
6	79	71	69	70	e62	68	56	60	216	157	114	77
7	78	71	69	55	e62	67	64	60	193	147	106	78
8	79	72	69	64	e60	67	67	69	179	142	102	79
9	80	73	70	64	e66	67	64	69	167	160	98	78
10	78	73	69	75	e64	65	61	62	157	211	95	80
11	76	71	65	75	e60	64	62	71	149	170	94	93
12	76	71	68	65	e58	62	60	66	144	155	93	102
13	76	72	67	54	e62	62	58	63	181	147	92	83
14	75	72	68	62	e60	61	58	59	963	139	93	86
15	76	70	69	69	e60	62	58	58	405	133	91	80
16	85	70	67	62	e58	63	56	59	288	128	89	79
17	78	70	63	53	e56	60	57	95	235	125	159	80
18	74	71	e64	65	e60	60	57	188	210	120	119	79
19	75	72	e64	53	e58	64	73	264	193	118	99	83
20	74	71	e54	51	e56	65	158	156	212	116	94	97
21	74	70	e50	e52	e56	64	119	129	189	114	90	85
22	74	70	e62	e54	e58	62	96	114	171	112	92	95
23	72	80	e60	e56	e250	61	88	102	161	109	95	135
24	73	80	e60	e56	e370	66	81	92	169	105	91	91
25	74	70	e60	e56	181	69	75	84	175	105	87	84
26	74	71	e62	e56	153	63	71	83	169	106	91	80
27	73	71	e64	e56	115	65	70	122	153	105	95	78
28	74	69	e66	e58	94	62	67	104	150	103	87	76
29	86	68	73	e60	87	60	65	92	151	109	85	75
30	91	66	72	e68	---	59	64	93	141	106	83	74
31	76	---	68	e66	---	58	---	295	---	103	83	---
TOTAL	2405	2149	2056	1900	2590	2021	2090	3023	8735	4275	3042	2533
MEAN	77.6	71.6	66.3	61.3	89.3	65.2	69.7	97.5	291	138	98.1	84.4
MAX	91	80	78	75	370	83	158	295	1910	258	159	135
MIN	72	66	50	51	56	58	56	58	141	103	83	74
CFSM	.55	.50	.47	.43	.63	.46	.49	.69	2.05	.97	.69	.59
IN.	.63	.56	.54	.50	.68	.53	.55	.79	2.29	1.12	.80	.66

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2000, BY WATER YEAR (WY)

	MEAN	70.1	76.6	63.7	77.1	107	176	114	105	132	107	89.3	78.4
MAX	146	372	155	315	379	483	291	328	586	660	348	202	
(WY)	1962	1962	1973	1946	1938	1959	1993	1960	1947	1993	1943	1942	
MIN	25.3	29.2	23.7	22.1	24.3	33.4	42.0	36.1	34.3	24.0	30.3	33.7	
(WY)	1951	1938	1959	1959	1959	1957	1990	1958	1936	1936	1937	1989	

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1935 - 2000

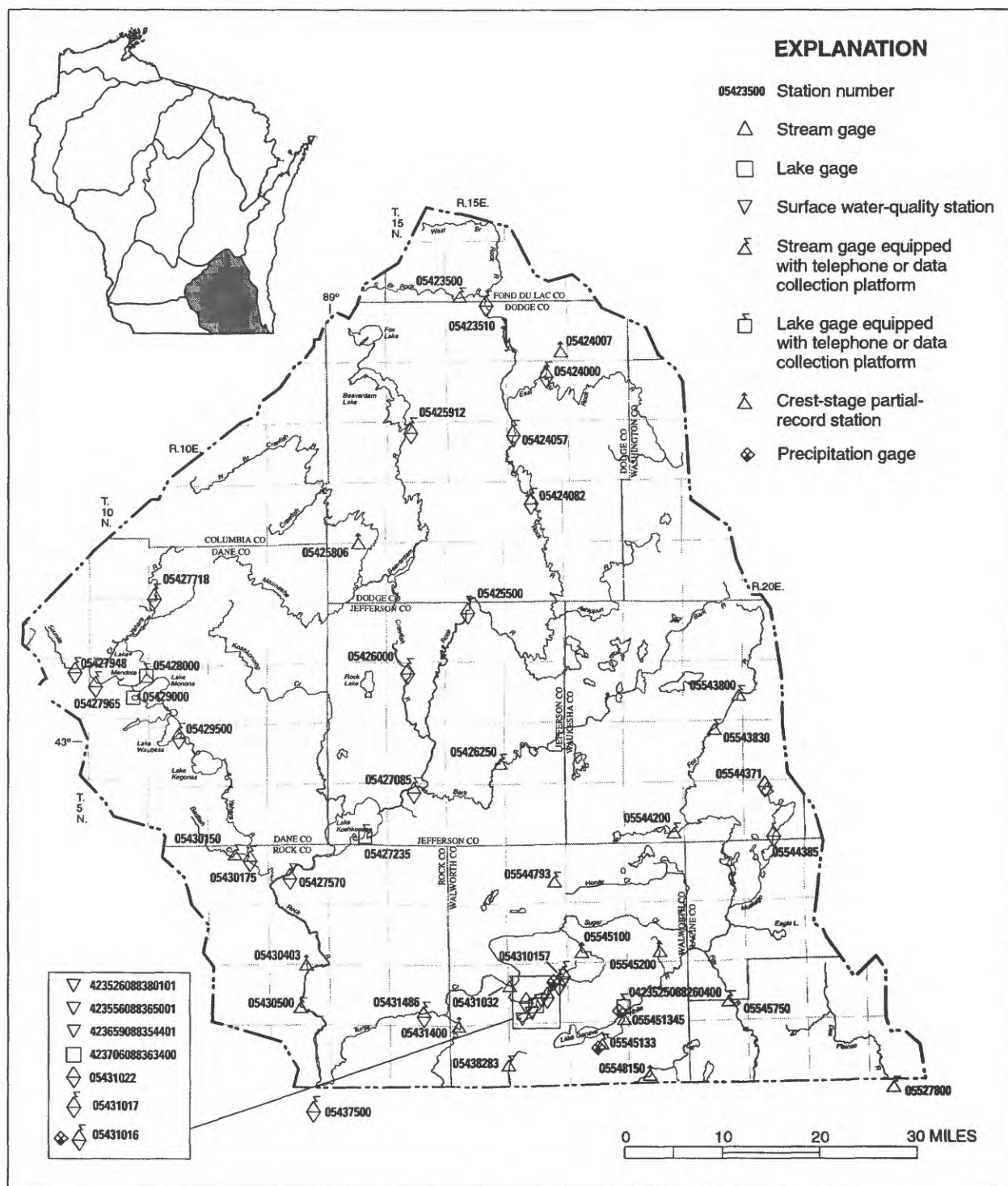
ANNUAL TOTAL	41579	36819	
ANNUAL MEAN	114	101	99.6
HIGHEST ANNUAL MEAN			234
LOWEST ANNUAL MEAN			40.8
HIGHEST DAILY MEAN	557	Apr 23	7830
LOWEST DAILY MEAN	(a)50 (b)Dec 21	(a)50 (b)Dec 21	(b)7.0
ANNUAL SEVEN-DAY MINIMUM	(a)58	Dec 20	18
INSTANTANEOUS PEAK FLOW		(a)54 Jan 19	18
INSTANTANEOUS PEAK STAGE		3290 Jun 1	(c)43500
INSTANTANEOUS LOW FLOW		10.66 Jun 1	17.26
ANNUAL RUNOFF (CFSM)	.80	(b)34 Dec 21	(b).00
ANNUAL RUNOFF (INCHES)	10.89	.71	.70
10 PERCENT EXCEEDS	184	9.65	9.53
50 PERCENT EXCEEDS	90	159	157
90 PERCENT EXCEEDS	70	74	68
		58	36

(a) Ice affected

(b) Result of freezeup

(c) From rating curve extended above 7,000 ft³/s on basis of slope-area measurement of peak flow

(e) Estimated due to ice effect or missing record



Base from U.S. Geological Survey 1:100,000 digital data;
modified by Wisconsin Department of Natural Resources.
Wisconsin Transverse Mercator projection.

ROCK-FOX RIVER BASIN

05423500 SOUTH BRANCH ROCK RIVER AT WAUPUN, WI

LOCATION.--Lat 43°38'30", long 88°43'14", in SW ¼ NW ¼ sec.33, T.14 N., R.15 E., Fond du Lac County, Hydrologic Unit 07090001, on left bank 260 ft upstream from U.S. Business Route 151 at Waupun, and 2.8 mi upstream from mouth.

DRAINAGE AREA.--63.6 mi².

PERIOD OF RECORD.--October 1948 to September 1969. March 1987 to current year. Monthly discharge for October 1948 published in WSP 1308.

REVISED RECORDS.--WDR WI-88-1: Drainage area.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 863.46 ft above sea level. October 1948 to September 1969, recording gage at site 150 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	8.6	8.9	6.1	5.4	65	20	33	164	27	12	11
2	18	7.7	9.8	6.8	5.3	51	19	31	239	41	12	10
3	16	7.4	12	6.8	5.3	44	18	28	169	74	11	17
4	16	8.0	14	6.7	5.3	41	16	26	126	65	10	16
5	16	8.7	15	6.5	5.2	37	16	24	189	59	19	15
6	15	8.1	14	6.5	5.1	34	16	21	164	49	17	13
7	15	7.9	14	6.3	5.2	35	17	18	119	41	16	11
8	15	8.4	13	6.3	5.0	36	16	18	91	37	15	10
9	15	9.2	12	6.1	5.3	34	21	17	75	43	12	9.7
10	13	9.1	12	9.4	5.3	30	22	16	61	41	11	11
11	12	9.4	10	8.9	5.1	25	23	15	61	37	9.6	28
12	13	12	11	e8.0	4.9	24	20	16	54	33	9.0	45
13	14	11	9.5	e7.6	5.2	23	16	17	55	31	16	47
14	14	10	9.3	7.4	5.0	24	16	15	73	28	15	75
15	15	10	10	7.2	5.0	25	14	14	66	25	16	59
16	19	9.4	9.5	6.8	5.2	24	14	15	61	23	14	49
17	19	8.6	8.4	6.7	4.9	22	14	20	55	20	22	39
18	18	8.3	7.4	6.7	5.2	20	15	66	49	18	16	30
19	15	8.4	7.0	6.5	5.0	21	19	73	44	17	16	26
20	12	8.0	e6.6	e6.4	4.9	25	61	57	46	17	13	25
21	11	7.8	e6.2	e6.0	5.3	29	82	43	44	17	11	24
22	10	8.0	e5.6	e5.8	7.5	29	68	35	39	16	18	30
23	10	21	e5.2	e5.6	19	28	71	30	36	15	20	43
24	10	17	e5.0	e5.6	72	27	61	24	33	15	21	40
25	10	16	e4.8	e5.6	95	26	51	18	32	28	19	37
26	11	14	e4.8	e5.4	168	26	42	15	31	14	20	31
27	10	12	e5.0	e5.4	147	26	36	16	29	2.8	14	26
28	10	11	5.2	e5.4	96	25	31	20	30	19	13	23
29	11	9.8	5.3	5.4	72	24	30	19	29	14	12	20
30	9.3	8.8	5.4	5.6	---	22	28	19	29	13	11	18
31	8.5	---	5.9	5.6	---	21	---	50	---	14	10	---
TOTAL	415.8	303.6	271.8	201.1	784.6	923	893	829	2293	893.8	450.6	838.7
MEAN	13.4	10.1	8.77	6.49	27.1	29.8	29.8	26.7	76.4	28.8	14.5	28.0
MAX	19	21	15	9.4	168	65	82	73	239	74	22	75
MIN	8.5	7.4	4.8	5.4	4.9	20	14	14	29	2.8	9.0	9.7
CFSM	.21	.16	.14	.10	.43	.47	.47	.42	1.20	.45	.23	.44
IN.	.24	.18	.16	.12	.46	.54	.52	.48	1.34	.52	.26	.49

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2000, BY WATER YEAR (WY)

	MEAN	17.8	21.1	16.2	11.8	17.9	66.1	72.9	33.9	29.0	29.4	16.8	14.7
MAX	90.9	106	80.0	64.6	105	176	266	107	132	246	115	76.2	
(WY)	1996	1962	1966	1966	1966	1952	1993	1960	1996	1993	1960	1960	
MIN	.63	.53	.16	.094	.079	5.40	7.80	3.54	1.36	.95	.56	.55	
(WY)	1965	1965	1959	1959	1959	1964	1964	1958	1964	1964	1964	1963	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1949 - 2000

ANNUAL TOTAL	17157.8	9098.0	
ANNUAL MEAN	47.0	24.9	29.2
HIGHEST ANNUAL MEAN			94.1
LOWEST ANNUAL MEAN			2.47
HIGHEST DAILY MEAN	720	Jul 21	1280
LOWEST DAILY MEAN	4.5	Jan 3	.00
ANNUAL SEVEN-DAY MINIMUM	5.0	Dec 23	5.0
INSTANTANEOUS PEAK FLOW			264
INSTANTANEOUS PEAK STAGE			4.42
INSTANTANEOUS LOW FLOW			1.6
ANNUAL RUNOFF (CFSM)	.74		.39
ANNUAL RUNOFF (INCHES)	10.04		5.32
10 PERCENT EXCEEDS	104		54
50 PERCENT EXCEEDS	24		16
90 PERCENT EXCEEDS	7.8		5.6

(a) Many days in 1958-59, 1963-64

(b) Also occurred in 1959

(c) From rating curve extended above 650 ft³/s

(d) No flow at times in 1949, 1953-54, 1958-59, 1963-64

(e) Estimated due to ice effect or missing record

ROCK RIVER BASIN

05423510 WEST BRANCH ROCK RIVER AT STATE HIGHWAY 49 NEAR WAUPUN, WI

LOCATION.--Lat 43°38'04", long 88°41'08", in SW ¼ NW ¼ sec.35, T.14 N., R.15 E., Fond du Lac County, Hydrologic Unit 07090001, on right bank 250 ft upstream of Highway 49 bridge, 2.3 mi east of Waupun.

DRAINAGE AREA.--113 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1997 to December 2000 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 800 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	16	19	e11	e14	124	38	63	228	47	24	22
2	32	15	20	e13	e13	98	37	61	424	51	22	24
3	31	14	23	e13	e12	84	35	56	337	126	21	e34
4	29	14	30	e13	e12	76	33	52	259	107	19	e35
5	27	15	32	e14	e12	71	32	48	351	91	22	e34
6	24	14	30	e12	e12	66	31	44	339	78	31	e30
7	24	14	28	e12	e12	65	32	40	261	67	27	e26
8	23	14	26	12	e12	67	32	37	197	63	25	e24
9	23	15	25	12	e12	67	36	36	157	71	22	e22
10	23	16	26	e13	e12	60	36	34	125	69	18	e21
11	21	19	23	e14	e12	52	38	32	117	62	17	e54
12	20	22	23	e15	e12	47	35	35	105	55	16	78
13	21	21	22	e15	e11	46	32	37	98	49	23	77
14	22	19	21	e14	e12	47	31	34	134	44	25	89
15	26	20	26	e13	e12	49	29	31	123	40	26	88
16	30	16	25	13	e12	49	28	32	112	37	24	81
17	31	16	22	13	e11	44	28	33	101	35	33	75
18	29	15	21	e12	e12	41	28	116	90	32	30	e72
19	25	16	17	e12	e13	41	32	154	82	30	28	61
20	22	16	18	13	e15	47	93	118	81	29	24	61
21	21	15	e16	e12	16	55	163	89	81	29	21	58
22	20	16	14	e14	20	55	132	75	73	28	27	63
23	19	29	13	e14	37	53	145	65	68	26	57	91
24	18	33	e12	e15	114	52	135	53	64	25	57	90
25	18	29	e12	e14	171	51	106	43	61	32	46	81
26	19	26	12	e15	273	48	86	38	58	25	43	71
27	18	24	12	e14	254	52	74	36	53	16	36	62
28	18	22	e11	e14	182	49	65	42	52	25	31	55
29	19	21	e12	e14	140	46	62	42	56	24	28	50
30	18	19	e11	e14	---	43	58	41	52	22	26	45
31	16	---	e11	e13	---	40	---	71	---	23	24	---
TOTAL	715	561	613	412	1452	1785	1742	1688	4339	1458	873	1674
MEAN	23.1	18.7	19.8	13.3	50.1	57.6	58.1	54.5	145	47.0	28.2	55.8
MAX	32	33	32	15	273	124	163	154	424	126	57	91
MIN	16	14	11	11	11	40	28	31	52	16	16	21
CFSM	.20	.17	.17	.12	.44	.51	.51	.48	1.28	.42	.25	.49
IN.	.24	.18	.20	.14	.48	.59	.57	.56	1.43	.48	.29	.55

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2000, BY WATER YEAR (WY)

	1998	1999	2000	1998	1999	2000	1998	1999	2000	1998	1999	2000
MEAN	16.3	15.0	12.9	14.7	56.2	66.5	187	92.9	101	93.5	40.0	28.9
MAX	23.1	18.7	19.8	16.7	73.6	101	289	149	145	206	77.0	55.8
(WY)	2000	2000	2000	1999	1999	1998	1998	1999	2000	1999	1999	2000
MIN	9.48	8.60	7.63	13.3	45.1	41.4	58.1	54.5	45.9	27.8	14.7	7.84
(WY)	1999	1998	1998	2000	1998	1999	2000	2000	1998	1998	1998	1998

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1998 - 2000

ANNUAL TOTAL	29547.8	17312	
ANNUAL MEAN	81.0	47.3	61.4
HIGHEST ANNUAL MEAN			79.0
LOWEST ANNUAL MEAN			47.3
HIGHEST DAILY MEAN	912	Jul 21	912
LOWEST DAILY MEAN	4.0	Jan 13	3.9
ANNUAL SEVEN-DAY MINIMUM	(b) 4.3	Jan 7	4.3
INSTANTANEOUS PEAK FLOW			1010
INSTANTANEOUS PEAK STAGE			10.63
ANNUAL RUNOFF (CFSM)	.72		.54
ANNUAL RUNOFF (INCHES)	9.73		7.38
10 PERCENT EXCEEDS	192		138
50 PERCENT EXCEEDS	41		32
90 PERCENT EXCEEDS	15		8.5

(a) Also occurred Dec. 30, 31, Jan. 1, and Feb. 13, 17

(b) Ice affected

(c) Estimated due to ice effect or missing record

05423510 WEST BRANCH ROCK RIVER AT STATE HIGHWAY 49 NEAR WAUPUN, WI--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	27	e21	---	---	---	---	---	---	---	---	---
2	39	27	e21	---	---	---	---	---	---	---	---	---
3	37	26	e21	---	---	---	---	---	---	---	---	---
4	36	25	e20	---	---	---	---	---	---	---	---	---
5	36	25	e20	---	---	---	---	---	---	---	---	---
6	37	25	e19	---	---	---	---	---	---	---	---	---
7	35	47	e19	---	---	---	---	---	---	---	---	---
8	34	47	e18	---	---	---	---	---	---	---	---	---
9	33	47	e16	---	---	---	---	---	---	---	---	---
10	33	46	e17	---	---	---	---	---	---	---	---	---
11	32	41	e16	---	---	---	---	---	---	---	---	---
12	31	37	e17	---	---	---	---	---	---	---	---	---
13	31	36	e17	---	---	---	---	---	---	---	---	---
14	31	36	e17	---	---	---	---	---	---	---	---	---
15	30	36	e17	---	---	---	---	---	---	---	---	---
16	28	37	e18	---	---	---	---	---	---	---	---	---
17	28	38	e18	---	---	---	---	---	---	---	---	---
18	28	35	e18	---	---	---	---	---	---	---	---	---
19	27	32	e17	---	---	---	---	---	---	---	---	---
20	26	32	e17	---	---	---	---	---	---	---	---	---
21	25	e31	e18	---	---	---	---	---	---	---	---	---
22	26	28	e18	---	---	---	---	---	---	---	---	---
23	30	26	e18	---	---	---	---	---	---	---	---	---
24	33	25	e17	---	---	---	---	---	---	---	---	---
25	33	24	e17	---	---	---	---	---	---	---	---	---
26	33	e24	e17	---	---	---	---	---	---	---	---	---
27	32	e24	e17	---	---	---	---	---	---	---	---	---
28	30	e23	e18	---	---	---	---	---	---	---	---	---
29	29	e23	e17	---	---	---	---	---	---	---	---	---
30	28	e22	e18	---	---	---	---	---	---	---	---	---
31	27	---	e17	---	---	---	---	---	---	---	---	---
TOTAL	979	952	556	---	---	---	---	---	---	---	---	---
MEAN	31.6	31.7	17.9	---	---	---	---	---	---	---	---	---
MAX	41	47	21	---	---	---	---	---	---	---	---	---
MIN	25	22	16	---	---	---	---	---	---	---	---	---
CFSM	.28	.28	.16	---	---	---	---	---	---	---	---	---
IN.	.32	.31	.18	---	---	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2001, BY WATER YEAR (WY)

MEAN	21.4	19.2	14.1	14.7	56.2	66.5	187	92.9	101	93.5	40.0	28.9
MAX	31.6	31.7	19.8	16.7	73.6	101	289	149	145	206	77.0	55.8
(WY)	2001	2001	2000	1999	1999	1998	1998	1999	2000	1999	1999	2000
MIN	9.48	8.60	7.63	13.3	45.1	41.4	58.1	54.5	45.9	27.8	14.7	7.84
(WY)	1999	1998	1998	2000	1998	1999	2000	2000	1998	1998	1998	1998

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR
(OCTOBER-DECEMBER)

WATER YEARS 1998 - 2001

ANNUAL TOTAL	17910	2487	
ANNUAL MEAN	48.9	27.0	58.7
HIGHEST ANNUAL MEAN			79.0
LOWEST ANNUAL MEAN			27.0
HIGHEST DAILY MEAN	424	Jun 2	47
LOWEST DAILY MEAN	11	Jan 1	16
ANNUAL SEVEN-DAY MINIMUM	(a)12	Feb 11	17
INSTANTANEOUS PEAK FLOW			51
INSTANTANEOUS PEAK STAGE		(b) 6.69	Nov 7
ANNUAL RUNOFF (CFSM)	.43	.24	Nov 21
ANNUAL RUNOFF (INCHES)	5.90	.82	10.63
10 PERCENT EXCEEDS	92	37	132
50 PERCENT EXCEEDS	33	26	31
90 PERCENT EXCEEDS	14	17	9.0

(a) Ice affected

(b) Backwater from ice

(c) Estimated due to ice effect or missing record

05423510 WEST BRANCH ROCK RIVER AT STATE HIGHWAY 49 NEAR WAUPUN, WI--Ccontinued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1997 to December 2000 (discontinued).

PERIOD OF DAILY RECORD.--

SUSPENDED-SOLIDS DISCHARGE: December 1997 to December 2000 (discontinued).

TOTAL-PHOSPHORUS DISCHARGE: December 1997 to December 2000 (discontinued).

INSTRUMENTATION.--Water-quality sampler December 1997 to December 2000 (discontinued).

REMARKS.--Chemical analyses by the Wisconsin State Laboratory of Hygiene. Samples are point samples unless otherwise indicated.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 471 tons, Mar. 31, 1998; minimum daily, 0.054 ton, Jan. 13, 1999.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 4,690 lb, July 21, 1999; minimum daily, 43.2 lb, Sept. 13, 1998.

EXTREMES FOR CURRENT PERIOD.--

2000 WATER YEAR.--

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 76.3 tons, June 2; minimum daily, 0.18 ton, Dec. 28, 30-31, Jan. 1.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 1,390 lb, Feb. 24; minimum daily, 96.1 lb, Sept. 30.

OCTOBER-DECEMBER 2000.--

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 3.11 tons, Nov. 7; minimum daily, 0.22 ton, Dec. 11.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 269 lb, Nov. 7; minimum daily, 85.7 lb, Oct. 3.

SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED(TONS PER DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.58	.42	.26	.18	.30	5.21	.51	6.51	65.1	.91	3.96	2.90
2	1.79	.39	.28	.21	.28	2.29	.49	6.19	76.3	2.00	3.70	3.15
3	1.77	.37	.32	.21	.26	1.19	.47	5.54	23.3	11.0	3.46	4.70
4	1.69	.36	.43	.21	.26	1.02	.45	4.98	17.2	8.53	3.20	4.99
5	1.56	.38	.47	.23	.27	.96	.43	4.49	27.2	5.32	3.67	5.00
6	1.43	.35	.44	.19	.27	.89	.42	3.93	24.0	3.34	5.23	4.56
7	1.40	.34	.42	.19	.28	.88	.43	3.44	14.2	2.11	4.45	4.08
8	1.35	.34	.39	.20	.28	.90	.43	3.06	8.59	1.47	4.11	3.88
9	1.31	.36	.38	.20	.28	.90	.48	2.81	5.59	1.72	3.58	3.67
10	1.26	.36	.40	.21	.29	.80	.49	2.54	4.04	1.99	3.06	3.62
11	1.10	.42	.36	.23	.29	.70	.51	2.31	3.45	2.15	2.81	9.49
12	.98	.48	.37	.24	.29	.63	.47	2.39	2.86	2.28	2.63	12.8
13	.97	.44	.35	.25	.27	.62	.43	2.46	2.45	2.42	3.76	11.4
14	.95	.38	.34	.23	.30	.63	.41	2.15	3.06	2.63	4.14	12.1
15	1.09	.39	.42	.22	.31	.66	.39	1.85	2.59	2.86	4.23	10.8
16	1.20	.32	.41	.23	.31	.66	.38	1.83	2.17	3.16	3.98	9.08
17	1.18	.30	.35	.22	.29	.60	.41	2.29	1.79	3.49	5.30	7.68
18	1.04	.28	.33	.21	.32	.56	.73	16.3	1.47	3.40	4.78	6.72
19	.85	.28	.28	.21	.35	.55	1.59	16.9	1.29	3.26	4.30	5.23
20	.72	.28	.29	.23	.41	.63	3.43	7.93	1.33	3.30	3.67	4.75
21	.64	.26	.26	.22	.43	.74	14.9	4.28	1.34	3.37	3.12	4.09
22	.59	.26	.22	.26	.98	.75	11.8	2.73	1.23	3.37	3.88	4.07
23	.55	.48	.20	.26	5.54	.72	13.0	2.30	1.16	3.27	8.08	5.34
24	.52	.52	.19	.28	20.9	.70	15.8	1.91	1.11	3.26	7.83	4.80
25	.51	.44	.19	.27	17.4	.69	12.6	1.56	1.08	4.40	6.16	3.95
26	.53	.39	.19	.29	50.8	.65	9.98	1.39	1.03	3.49	5.69	3.16
27	.50	.35	.19	.28	41.0	.69	8.35	1.33	.97	2.38	4.65	2.53
28	.50	.32	.18	.28	25.1	.66	7.24	1.58	.95	3.74	3.98	2.04
29	.52	.29	.19	.28	10.6	.62	6.67	1.62	1.04	3.74	3.47	1.71
30	.48	.26	.18	.29	---	.57	6.12	1.58	.98	3.57	3.13	1.44
31	.41	---	.18	.27	---	.54	---	6.39	---	3.86	2.96	---
TOTAL	30.97	10.81	9.46	7.28	178.66	28.61	119.81	126.57	298.87	105.79	130.97	163.73

WTR YR 2000 TOTAL 1211.53

05423510 WEST BRANCH ROCK RIVER AT STATE HIGHWAY 49 NEAR WAUPUN, WI--Continued

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	206	142	153	129	154	376	271	237	1010	110	197	122
2	231	138	165	154	142	294	267	244	1320	130	185	134
3	229	134	185	156	129	247	258	236	768	403	173	201
4	217	135	250	158	128	229	246	230	538	344	161	215
5	200	146	271	173	127	223	233	223	732	274	185	217
6	182	138	252	150	125	217	232	205	698	219	264	199
7	177	137	241	152	124	222	232	188	509	177	226	179
8	172	140	224	158	123	238	233	175	380	160	209	172
9	175	154	218	160	122	247	263	168	300	191	183	164
10	176	155	228	172	120	230	267	159	243	197	157	162
11	161	186	202	187	119	209	275	152	231	189	144	428
12	151	212	208	203	118	196	256	164	213	178	135	579
13	159	200	195	201	107	200	232	177	203	168	194	518
14	162	177	194	186	115	213	224	162	281	162	214	552
15	196	184	242	171	114	231	213	146	263	157	220	496
16	228	151	239	175	113	239	204	151	245	154	207	417
17	235	146	207	163	103	227	203	161	224	154	271	354
18	217	139	198	153	111	219	205	600	205	149	241	311
19	187	140	169	151	119	227	238	499	189	145	213	243
20	165	143	179	159	136	270	640	343	188	148	179	221
21	156	136	161	148	140	328	563	253	187	152	150	191
22	150	138	138	171	176	337	368	209	169	154	183	191
23	143	254	131	169	448	330	371	180	157	150	376	251
24	140	283	126	179	1390	327	343	148	148	151	358	227
25	141	244	128	166	1230	328	283	121	143	206	278	187
26	153	217	126	176	1320	312	243	106	134	165	252	150
27	147	200	129	162	870	341	221	101	124	114	203	122
28	153	182	122	161	565	329	207	120	120	181	171	109
29	162	170	135	159	429	315	207	122	130	182	147	102
30	156	153	125	157	---	295	205	118	120	176	130	96.1
31	137	---	127	145	---	280	---	272	---	192	124	---
TOTAL	5464	5074	5668	5104	9017	8276	8203	6370	10172	5632	6330	7510.1

WTR YR 2000 TOTAL 82820.1

ROCK RIVER BASIN

05423510 WEST BRANCH ROCK RIVER AT STATE HIGHWAY 49 NEAR WAUPUN, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	SAM- PLING METHOD, CODES (82398)
OCT							
08...	1025	--	22	1.16	1.39	22	10
22...	1100	--	18	1.28	1.40	11	10
NOV							
08...	0955	--	13	1.75	1.88	9	10
30...	1005	--	18	1.38	1.48	<5	10
DEC							
13...	1040	--	21	1.52	1.67	6	10
JAN							
12...	0950	15	--	2.26	2.51	6	10
FEB							
24...	0300	--	86	--	3.19	91	50
24...	1815	--	139	--	2.31	58	50
24...	2300	--	172	--	1.91	56	50
25...	1240	--	164	--	1.35	31	50
25...	1245	--	164	.728	1.24	32	10
25...	2315	--	197	--	1.30	34	50
26...	0700	--	265	--	1.06	64	50
26...	1900	--	294	--	.896	86	50
27...	0915	--	263	--	.705	46	50
27...	1930	--	232	--	.643	74	50
MAR							
03...	0915	--	82	--	.610	<5	50
03...	0916	--	82	--	.536	5	10
21...	1015	--	55	.964	1.11	<5	10
APR							
03...	1040	--	34	1.27	1.37	5	10
17...	1205	--	27	1.38	1.35	<5	10
20...	0730	--	91	--	1.79	29	50
21...	0145	--	148	--	.971	31	50
21...	1145	--	180	--	.634	36	50
22...	1145	--	131	--	.569	33	50
23...	0715	--	143	--	.528	30	50
24...	1002	--	137	.356	.517	45	50
MAY							
05...	1000	--	47	.686	.870	35	10
18...	1100	--	110	1.02	1.21	40	50
18...	2230	--	165	--	.907	78	50
19...	1030	--	159	--	.614	35	50
22...	0942	--	74	.841	.512	13	10
JUN							
01...	0700	--	188	--	1.12	94	50
01...	1024	--	227	--	.905	69	50
01...	1044	--	230	.530	.809	68	10
01...	1045	--	230	--	.868	68	50
01...	1845	--	275	--	.732	58	50
01...	2000	--	318	--	.896	218	50
01...	2100	--	360	--	.892	144	50
01...	2215	--	399	--	1.04	214	50
02...	0200	--	439	--	.846	131	50
02...	0944	--	441	.365	.647	65	50
02...	1400	--	427	--	.553	39	50
03...	0200	--	370	--	.480	26	50
04...	0200	--	286	--	.453	25	50
05...	0200	--	261	--	.393	24	50
05...	0445	--	296	--	.406	27	50
05...	1045	--	372	--	.411	25	50
05...	1135	--	382	.289	.402	28	50
05...	2300	--	379	--	.490	34	50
06...	1100	--	341	--	.406	25	50
09...	1100	--	160	.294	.352	13	10
19...	1126	--	82	.357	.430	6	10
JUL							
03...	1325	--	131	.506	.628	39	10
17...	1203	--	34	.644	.826	38	10
31...	1231	--	22	1.34	1.54	62	10
AUG							
16...	0915	--	25	1.38	1.59	61	10
30...	1015	--	25	.581	.937	45	10
SEP							
11...	1330	54	--	1.27	1.49	66	10
27...	1040	--	62	.304	.358	15	10

SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED(TONS PER DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

[illegible]

ROCK RIVER BASIN

05423510 WEST BRANCH ROCK RIVER AT STATE HIGHWAY 49 NEAR WAUPUN, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	SAM- PLING METHOD, CODES (82398)
OCT							
11...	0950	--	32	.525	.560	5	10
26...	0845	--	31	.947	1.02	24	10
NOV							
07...	1030	--	44	.944	1.07	25	10
21...	1045	31	--	.691	.713	<7	10
DEC							
12...	0940	17	--	.970	1.23	<5	10

05424000 EAST BRANCH ROCK RIVER NEAR MAYVILLE, WI

LOCATION.--Lat 43°31'46", long 88°34'00", in NW ¼ NE ¼ sec.10, T.12 N., R.16 E., Dodge County, Hydrologic Unit 07090001, on left bank 500 ft downstream from Kekoskee dam, 0.5 mi upstream from Gill Creek, and 2.0 mi northwest of railroad bridge in Mayville.

DRAINAGE AREA.--179 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1949 to September 1970, December 1997 to December 2000 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 857.20 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Minor regulation by recreation dams. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	38	46	30	e30	321	85	111	286	53	69	19
2	39	36	48	32	e30	278	80	104	379	67	61	19
3	35	33	53	37	e30	255	77	107	327	111	50	20
4	35	33	61	39	e30	228	72	98	283	51	29	21
5	35	33	72	39	e30	196	68	87	307	89	53	24
6	36	33	72	39	e29	165	63	77	313	76	98	24
7	39	33	70	39	e29	145	68	70	307	69	56	24
8	37	33	69	38	e29	116	69	65	275	70	60	23
9	35	34	72	39	e28	101	68	65	195	70	47	22
10	35	34	75	49	e27	109	73	64	186	77	46	22
11	34	37	75	58	e28	108	77	61	163	111	43	23
12	34	39	74	61	e29	106	79	62	138	98	42	27
13	33	41	71	57	e30	106	80	99	120	71	45	32
14	33	41	69	53	e30	104	81	65	123	60	41	49
15	30	41	70	48	e29	114	78	74	136	58	41	35
16	34	42	68	44	e29	115	75	97	124	52	39	43
17	36	44	54	39	e30	110	71	95	91	46	45	36
18	37	45	54	36	e30	92	68	226	97	44	39	33
19	39	44	55	35	30	84	71	387	103	36	40	23
20	39	44	51	34	30	89	123	302	103	34	37	22
21	41	43	38	e34	31	98	190	254	50	37	35	22
22	73	43	41	e34	57	105	183	246	88	40	35	31
23	45	56	36	e33	173	106	173	206	76	37	39	59
24	35	60	32	e33	225	108	156	169	69	34	40	50
25	34	59	29	e33	236	109	160	185	34	32	32	24
26	36	55	28	e32	287	110	171	210	79	31	31	20
27	37	53	27	e32	282	110	206	212	62	31	27	19
28	38	52	26	e32	253	108	173	191	46	65	25	21
29	40	51	27	e32	294	104	162	144	57	63	24	22
30	37	49	29	e31	---	100	143	141	55	26	22	21
31	37	---	29	e31	---	92	---	115	---	58	20	---
TOTAL	1161	1279	1621	1203	2425	4092	3243	4389	4672	1797	1311	830
MEAN	37.5	42.6	52.3	38.8	83.6	132	108	142	156	58.0	42.3	27.7
MAX	73	60	75	61	294	321	206	387	379	111	98	59
MIN	30	33	26	30	27	84	63	61	34	26	20	19
CFSM	.21	.24	.29	.22	.47	.74	.60	.79	.87	.32	.24	.15
IN.	.24	.27	.34	.25	.50	.85	.67	.91	.97	.37	.27	.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2000, BY WATER YEAR (WY)

	MEAN	49.0	56.8	39.6	33.2	58.6	199	247	101	65.3	80.2	32.5	42.8
MAX	290	199	187	125	239	567	907	442	210	365	166	391	
(WY)	1955	1962	1966	1960	1966	1952	1959	1960	1969	1999	1960	1965	
MIN	4.69	9.94	4.98	3.85	4.57	38.9	51.4	15.3	7.89	4.93	2.22	4.08	
(WY)	1964	1950	1959	1959	1959	1954	1970	1958	1964	1970	1970	1958	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1949 - 2000

ANNUAL TOTAL	42409.6	28023	
ANNUAL MEAN	116	76.6	83.4
HIGHEST ANNUAL MEAN			167
LOWEST ANNUAL MEAN			18.4
HIGHEST DAILY MEAN	2790	Jul 21	3300
LOWEST DAILY MEAN	5.4	Sep 22	.20
ANNUAL SEVEN-DAY MINIMUM	14	Sep 18	.56
INSTANTANEOUS PEAK FLOW		471	3600
INSTANTANEOUS PEAK STAGE		5.99	11.49
ANNUAL RUNOFF (CFSM)	.65	.43	.47
ANNUAL RUNOFF (INCHES)	8.81	5.82	6.33
10 PERCENT EXCEEDS	222	173	188
50 PERCENT EXCEEDS	71	50	33
90 PERCENT EXCEEDS	25	29	7.6

(e) Estimated due to ice effect or missing record

ROCK RIVER BASIN

05424000 EAST BRANCH ROCK RIVER NEAR MAYVILLE, WI--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	34	74	---	---	---	---	---	---	---	---	---
2	20	34	68	---	---	---	---	---	---	---	---	---
3	21	34	56	---	---	---	---	---	---	---	---	---
4	22	34	e54	---	---	---	---	---	---	---	---	---
5	22	33	52	---	---	---	---	---	---	---	---	---
6	23	35	45	---	---	---	---	---	---	---	---	---
7	25	56	e43	---	---	---	---	---	---	---	---	---
8	26	78	42	---	---	---	---	---	---	---	---	---
9	26	55	40	---	---	---	---	---	---	---	---	---
10	27	56	e37	---	---	---	---	---	---	---	---	---
11	29	56	e40	---	---	---	---	---	---	---	---	---
12	30	56	e41	---	---	---	---	---	---	---	---	---
13	31	58	e42	---	---	---	---	---	---	---	---	---
14	30	215	e42	---	---	---	---	---	---	---	---	---
15	30	288	e41	---	---	---	---	---	---	---	---	---
16	30	259	e40	---	---	---	---	---	---	---	---	---
17	29	179	e38	---	---	---	---	---	---	---	---	---
18	29	124	e39	---	---	---	---	---	---	---	---	---
19	29	86	e40	---	---	---	1959	1960	1969	1999	1960	1965
20	29	73	e41	---	---	---	---	---	---	---	---	---
21	29	51	e42	---	---	---	---	---	---	---	---	---
22	30	54	e43	---	---	---	---	---	---	---	---	---
23	32	54	e44	---	---	---	---	---	---	---	---	---
24	34	48	e43	---	---	---	---	---	---	---	---	---
25	37	46	e42	---	---	---	---	---	---	---	---	---
26	38	49	e43	---	---	---	---	---	---	---	---	---
27	36	58	e44	---	---	---	---	---	---	---	---	---
28	36	69	e44	---	---	---	---	---	---	---	---	---
29	34	72	e44	---	---	---	---	---	---	---	---	---
30	34	73	e44	---	---	---	---	---	---	---	---	---
31	34	---	e44	---	---	---	---	---	---	---	---	---
TOTAL	902	2417	1392	---	---	---	---	---	---	---	---	---
MEAN	29.1	80.6	44.9	---	---	---	---	---	---	---	---	---
MAX	38	288	74	---	---	---	---	---	---	---	---	---
MIN	20	33	37	---	---	---	---	---	---	---	---	---
CFSM	.16	.45	.25	---	---	---	---	---	---	---	---	---
IN.	.19	.50	.29	---	---	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2001, BY WATER YEAR (WY)

MEAN	48.2	57.8	39.8	33.2	58.6	199	247	101	65.3	80.2	32.5	42.8
MAX	290	199	187	125	239	567	907	442	210	365	166	391
(WY)	1955	1962	1966	1960	1966	1952	1959	1960	1969	1999	1960	1965
MIN	4.69	9.94	4.98	3.85	4.57	38.9	51.4	15.3	7.89	4.93	2.22	4.08
(WY)	1964	1950	1959	1959	1959	1954	1970	1958	1964	1970	1970	1958

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR
(OCTOBER-DECEMBER)

WATER YEARS 1949 - 2001

ANNUAL TOTAL	28673	4711	
ANNUAL MEAN	78.3	51.2	83.1
HIGHEST ANNUAL MEAN			167
LOWEST ANNUAL MEAN			18.4
HIGHEST DAILY MEAN	387	May 19	3300
LOWEST DAILY MEAN	19	Sep 1, 2, 27	.20
ANNUAL SEVEN-DAY MINIMUM	20	Sep 26	.56
INSTANTANEOUS PEAK FLOW		296	Nov 15
INSTANTANEOUS PEAK STAGE		5.15	Nov 15
ANNUAL RUNOFF (CFSM)	.44	.29	11.49
ANNUAL RUNOFF (INCHES)	5.96	.98	.46
10 PERCENT EXCEEDS	184	73	6.31
50 PERCENT EXCEEDS	50	41	186
90 PERCENT EXCEEDS	27	26	34
			7.6

(e) Estimated due to ice effect or missing record

05424000 EAST BRANCH ROCK RIVER NEAR MAYVILLE, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1997 to December 2000 (discontinued).

PERIOD OF DAILY RECORD.--

SUSPENDED-SOLIDS DISCHARGE: December 1997 to December 2000 (discontinued).

TOTAL-PHOSPHORUS DISCHARGE: December 1997 to December 2000 (discontinued).

INSTRUMENTATION.--Water-quality sampler December 1997 to December 2000 (discontinued).

REMARKS.--Chemical analyses by the Wisconsin State Laboratory of Hygiene. Samples are point samples unless otherwise indicated.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 2,340 tons, July 21, 1999; minimum daily, 0.18 ton, Jan. 6, 1999.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 14,400 lb, July 21, 1999; minimum daily, 13.5 lb, Sept. 22, 1999.

EXTREMES FOR CURRENT PERIOD.--

2000 WATER YEAR.--

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 52.4 tons, May 19; minimum daily, 0.36 ton, Dec. 28.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 765 lb, Feb. 24; minimum daily, 46.1 lb, Sept. 27.

OCTOBER-DECEMBER 2000.--

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 10.2 tons, Nov. 8; minimum daily, 0.50 ton, Dec. 10.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 687 lb, Nov. 15; minimum daily, 49.6 lb, Oct. 1.

SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED(TONS PER DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.93	2.23	.63	.40	.42	8.33	4.64	8.23	35.3	4.35	10.1	3.25
2	2.28	2.07	.65	.44	.43	6.22	4.99	7.00	47.0	5.42	8.99	3.29
3	2.02	1.87	.71	.50	.43	4.14	5.32	7.16	34.6	9.00	7.44	3.48
4	1.98	1.77	.82	.53	.43	3.08	4.97	6.52	30.6	4.28	4.30	3.69
5	2.01	1.72	.97	.53	.43	2.64	4.60	5.72	35.6	7.80	7.89	4.24
6	2.03	1.71	.98	.53	.41	2.23	4.24	5.04	37.9	6.90	14.6	4.30
7	2.19	1.64	.95	.52	.42	1.95	4.50	4.54	33.8	6.55	8.30	4.31
8	2.07	1.61	.93	.52	.42	1.57	4.51	4.16	27.3	6.92	8.93	4.22
9	1.97	1.56	.98	.52	.40	1.36	4.35	4.12	18.1	7.19	7.02	3.89
10	1.99	1.48	1.02	.65	.39	1.48	4.60	4.04	17.2	8.30	6.82	3.94
11	1.90	1.49	1.02	.79	.41	1.46	4.77	3.79	15.0	12.4	6.52	4.24
12	1.91	1.50	1.00	.82	.42	1.43	4.82	3.85	12.6	11.4	6.29	4.85
13	1.89	1.50	.96	.78	.44	1.43	4.85	6.04	10.8	8.58	6.74	5.51
14	1.86	1.41	.93	.71	.44	1.40	4.83	3.97	11.1	7.63	6.24	8.22
15	1.71	1.32	.94	.66	.42	1.54	4.55	4.46	12.2	7.67	6.23	5.72
16	1.92	1.27	.92	.59	.43	1.56	4.34	5.77	11.0	7.19	5.90	6.87
17	2.06	1.26	.73	.54	.44	1.49	4.06	6.58	8.06	6.49	6.79	5.52
18	2.12	1.22	.73	.50	.44	1.24	3.87	31.0	8.56	6.25	5.93	4.92
19	2.20	1.13	.74	.47	.45	1.13	4.04	52.4	9.05	5.16	6.11	3.40
20	2.21	1.07	.68	.47	.45	1.21	16.6	38.1	8.97	4.91	5.79	3.18
21	2.34	.99	.51	.47	.46	1.35	23.5	29.7	4.37	5.32	5.49	3.09
22	6.36	.92	.55	.47	3.61	1.62	19.1	29.9	7.56	5.78	5.51	4.11
23	3.47	1.13	.49	.46	9.35	1.87	21.9	18.8	6.52	5.29	6.15	7.69
24	2.59	1.15	.44	.46	10.5	2.15	19.1	15.2	5.90	4.97	6.41	6.40
25	2.48	1.05	.39	.46	7.64	2.47	12.6	18.8	2.92	4.59	5.19	3.01
26	2.52	.94	.38	.45	12.0	2.81	15.4	23.8	6.65	4.44	5.12	2.37
27	2.49	.85	.37	.45	10.2	3.19	25.7	22.6	5.22	4.55	4.50	2.26
28	2.51	.79	.36	.45	5.69	3.56	19.8	18.5	3.87	9.50	4.19	2.33
29	2.55	.73	.37	.45	7.13	3.88	15.9	12.5	4.69	9.21	3.95	2.37
30	2.34	.66	.38	.44	---	4.27	12.2	11.2	4.56	3.77	3.76	2.22
31	2.27	---	.39	.44	---	4.44	---	8.72	---	8.48	3.39	---
TOTAL	72.17	40.04	21.92	16.47	75.10	78.50	288.65	422.21	477.00	210.29	200.59	126.89

WTR YR 2000 TOTAL 2029.83

ROCK RIVER BASIN

05424000 EAST BRANCH ROCK RIVER NEAR MAYVILLE, WI--Continued

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65.1	102	94.9	59.8	62.0	353	132	170	562	90.0	235	64.9
2	78.2	97.6	97.7	65.4	61.9	271	127	157	755	116	208	65.4
3	70.7	90.8	107	75.1	61.8	224	124	161	571	195	172	68.8
4	70.4	89.0	124	79.0	61.7	199	116	146	423	93.9	98.9	72.5
5	72.7	89.6	147	79.8	61.7	175	108	128	433	172	181	82.9
6	74.7	91.7	147	79.8	59.5	151	101	113	451	152	335	83.5
7	81.8	90.9	142	78.4	59.5	135	109	102	428	145	190	83.1
8	78.6	92.2	139	77.8	59.4	111	110	92.8	369	153	204	80.9
9	74.6	93.5	146	78.7	57.2	98.5	108	91.8	254	160	160	74.3
10	75.3	92.4	152	103	55.1	110	116	90.0	243	185	155	74.6
11	72.1	97.4	152	135	57.1	111	122	84.2	213	278	148	80.1
12	72.5	103	149	150	59.0	111	125	85.5	180	255	143	91.8
13	71.6	107	143	137	61.0	113	127	134	156	193	152	105
14	70.3	105	139	120	60.9	114	128	87.9	160	172	141	157
15	64.9	103	140	105	58.8	128	122	98.8	178	173	141	110
16	72.9	104	137	92.1	58.7	132	118	128	162	163	133	133
17	78.2	108	108	82.6	60.7	129	112	138	119	147	152	107
18	80.4	109	109	76.2	60.6	110	108	434	127	142	131	95.8
19	83.4	106	110	72.8	61.2	103	114	763	136	117	134	66.6
20	83.8	104	102	72.4	61.3	112	246	548	138	112	126	62.6
21	88.8	100	76.3	71.3	62.5	126	388	369	69.4	121	119	61.0
22	180	98.1	81.7	71.2	186	137	379	321	123	132	118	81.7
23	118	126	73.2	69.0	660	141	311	278	109	121	131	153
24	91.4	134	65.0	68.9	765	146	258	242	101	114	136	128
25	90.5	128	58.9	68.8	619	150	260	281	51.5	105	109	60.7
26	94.7	120	56.6	66.7	660	154	275	338	120	102	107	48.1
27	96.8	114	54.9	66.6	650	156	329	328	96.9	105	93.2	46.1
28	101	109	53.3	66.5	352	157	274	273	74.0	220	86.1	49.2
29	106	106	54.8	66.4	352	153	253	189	92.1	213	80.4	51.7
30	100	100	57.6	64.2	---	151	221	172	91.9	87.2	76.1	50.1
31	100	---	59.0	64.1	---	141	---	135	---	197	68.3	---
TOTAL	2659.4	3111.2	3276.9	2563.6	5505.6	4602.5	5421	6679.0	6986.8	4731.1	4464.0	2489.4

WTR YR 2000 TOTAL 52490

05424000 EAST BRANCH ROCK RIVER NEAR MAYVILLE, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	SAM- PLING METHOD, CODES (82398)
OCT						
08...	1105	38	.288	.398	21	10
22...	1145	130	.024	.482	41	10
NOV						
08...	1050	34	.373	.514	18	10
30...	1045	49	.328	.379	<5	10
DEC						
13...	1125	71	.327	.372	<5	10
JAN						
12...	1038	61	.381	.463	<5	10
FEB						
22...	1800	100	--	.753	52	50
22...	2100	116	--	.770	29	50
23...	1030	152	--	.698	13	50
23...	1400	198	--	.672	20	50
23...	1830	219	--	.725	24	50
25...	0630	228	--	.539	12	50
25...	1140	232	.326	.554	11	10
25...	1210	233	--	.550	11	50
25...	2015	253	--	.361	12	50
26...	1545	289	--	.444	17	50
27...	0948	286	--	.489	15	50
28...	0400	256	--	.267	8	50
29...	1430	302	--	.217	9	50
MAR						
01...	0930	370	--	.207	10	50
02...	1645	257	--	.176	8	50
03...	1020	257	--	.164	7	50
03...	1040	256	--	.158	<5	50
21...	1045	97	.144	.237	<5	10
APR						
03...	1115	79	.124	.298	26	10
17...	1245	71	.114	.290	21	10
20...	0430	140	--	.352	45	50
21...	0015	160	--	.403	62	50
21...	1315	200	--	.364	41	50
22...	1315	183	--	.396	37	50
23...	1330	174	--	.324	49	50
24...	1035	155	--	.305	49	50
MAY						
05...	1105	89	.119	.463	54	10
15...	1105	80	--	.407	55	50
18...	1120	237	--	.378	47	50
18...	1130	237	.187	.379	41	10
18...	1830	262	--	.337	53	50
19...	0100	345	--	.384	56	50
19...	0830	432	--	.362	49	50
20...	0545	315	--	.358	48	50
21...	1745	248	--	.263	42	50
22...	1050	249	.098	.236	48	50
22...	1051	249	.164	.333	29	10
JUN						
01...	1117	215	.208	.387	55	50
01...	1126	218	--	.375	50	50
01...	1245	305	--	.405	58	50
01...	1315	363	--	.403	44	50
01...	1430	408	--	.345	47	50
02...	0230	399	--	.438	47	50
02...	1021	374	.181	.348	40	50
02...	1430	376	--	.352	52	50
03...	1430	330	--	.321	36	50
04...	0830	283	--	.281	40	50
05...	0830	311	--	.250	42	50
05...	1050	310	.128	.265	43	50
06...	0830	311	--	.269	46	50
09...	1008	207	.138	.241	30	10
19...	1042	95	.091	.322	51	10
JUL						
03...	1240	59	.185	.328	30	10
17...	1128	48	.329	.601	53	10
31...	1154	57	.382	.631	64	10
AUG						
16...	0935	40	.396	.630	56	10
30...	1035	23	.028	.629	94	10
SEP						
11...	1235	24	.332	.641	68	10
27...	1115	20	.249	.439	--	10

SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED(TONS PER DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

[illegible]

05424000 EAST BRANCH ROCK RIVER NEAR MAYVILLE, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	SAM- PLING METHOD, CODES (82398)
OCT							
11...	1020	--	28	.257	.435	29	10
26...	0935	--	38	.309	.519	47	10
NOV							
07...	1050	--	54	.322	.571	40	10
08...	1330	--	69	--	.572	53	50
08...	1430	--	136	--	.587	66	50
08...	1515	--	155	--	.483	--	50
08...	1930	--	96	--	.496	38	50
14...	0500	--	158	--	.423	13	50
15...	1215	--	293	--	.453	13	50
17...	0900	--	193	--	.342	11	10
21...	1110	--	49	.190	.321	<5	10
DEC							
12...	1010	41	--	.185	.257	<5	10

ROCK RIVER AT HORICON

05424057 ROCK RIVER AT HORICON, WI

LOCATION.--Lat 43°27'01", long 88°37'56", in NW ¼ SE ¼ sec.6, T.11 N., R.16 E., Dodge County, Hydrologic Unit 07090001, on left bank downstream side of State Highway 33, 1,700 ft upstream of dam, at Horicon.

DRAINAGE AREA.--456 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1997 to December 2000 (discontinued).

GAGE.--Acoustical Velocity Meter (AVM) system. Single-path transducer installation. Elevation of gage is 860 ft, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	184	118	94	70	26	e540	258	353	466	52	80	50
2	174	147	171	80	25	e500	213	281	686	105	98	24
3	187	41	246	82	27	e460	351	251	673	236	67	13
4	137	37	319	80	27	e380	315	231	701	162	70	18
5	150	137	373	79	30	e340	76	232	787	193	32	28
6	132	109	191	83	29	e350	320	154	755	260	137	35
7	41	59	137	82	29	e370	326	228	708	103	124	22
8	143	77	261	80	30	e360	116	169	696	77	111	28
9	85	40	285	84	30	e360	224	170	698	156	116	28
10	123	254	257	101	32	e350	123	125	623	105	74	22
11	76	49	210	119	32	e360	262	205	704	181	68	26
12	8.6	139	226	134	34	e360	168	301	676	240	53	25
13	166	95	224	112	33	e360	66	310	607	294	93	42
14	-2.5	177	223	100	35	e360	78	310	544	294	51	114
15	92	142	212	97	35	e350	272	232	555	331	106	203
16	120	128	176	97	37	e350	247	272	536	269	40	219
17	110	68	136	88	37	e340	222	190	555	286	120	217
18	92	62	124	84	39	348	150	476	473	81	44	184
19	97	112	128	78	41	374	149	627	424	81	66	175
20	71	125	114	62	43	356	411	618	287	67	66	214
21	37	100	69	60	46	340	473	598	342	66	54	294
22	254	160	61	60	47	309	394	596	385	53	81	317
23	77	39	65	61	416	297	452	583	295	50	65	385
24	5.9	154	58	58	490	274	484	593	241	50	51	404
25	46	82	50	50	477	346	446	566	151	53	45	349
26	102	102	54	39	519	257	391	505	152	41	72	258
27	-16	137	54	25	554	339	399	497	118	70	55	254
28	142	101	47	25	551	393	424	508	77	98	14	231
29	16	100	50	24	587	294	424	437	106	120	86	178
30	47	106	64	27	---	294	348	356	75	49	34	138
31	87	---	67	27	---	270	---	424	---	55	11	---
TOTAL	2984.0	3197	4746	2248	4338	10981	8582	11398	14096	4278	2184	4495
MEAN	96.3	107	153	72.5	150	354	286	368	470	138	70.5	150
MAX	254	254	373	134	587	540	484	627	787	331	137	404
MIN	-16	37	47	24	25	257	66	125	75	41	11	13
CFSM	.21	.23	.34	.16	.33	.78	.63	.81	1.03	.30	.15	.33
IN.	.24	.26	.39	.18	.35	.90	.70	.93	1.15	.35	.18	.37

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2000, BY WATER YEAR (WY)

	1998	1999	2000	1998	1999	2000	1998	1999	2000	1998	1999	2000
MEAN	101	141	114	83.5	269	373	709	405	309	267	189	117
MAX	106	175	153	91.8	437	517	1194	538	470	573	448	166
(WY)	1999	1999	2000	1999	1999	1998	1998	1999	2000	1999	1999	1999
MIN	96.3	107	67.0	72.5	150	246	286	310	110	89.3	48.6	35.4
(WY)	2000	2000	1998	2000	2000	1999	2000	1998	1998	1998	1998	1998

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1998 - 2000

ANNUAL TOTAL	116712.8	73527.0	
ANNUAL MEAN	320	201	262
HIGHEST ANNUAL MEAN			324
LOWEST ANNUAL MEAN			201
HIGHEST DAILY MEAN	1420	787	1470
LOWEST DAILY MEAN	-16	-16	-27
ANNUAL SEVEN-DAY MINIMUM	32	24	24
ANNUAL RUNOFF (CFSM)	.70	.44	.57
ANNUAL RUNOFF (INCHES)	9.52	6.00	7.81
10 PERCENT EXCEEDS	682	474	609
50 PERCENT EXCEEDS	225	133	153
90 PERCENT EXCEEDS	52	34	39

(e) Estimated due to ice effect or missing record

05424057 ROCK RIVER AT HORICON, WI--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	96	e140	---	---	---	---	---	---	---	---	---
2	57	92	e130	---	---	---	---	---	---	---	---	---
3	24	100	e130	---	---	---	---	---	---	---	---	---
4	25	104	e120	---	---	---	---	---	---	---	---	---
5	29	96	e110	---	---	---	---	---	---	---	---	---
6	28	74	96	---	---	---	---	---	---	---	---	---
7	22	72	91	---	---	---	---	---	---	---	---	---
8	23	91	100	---	---	---	---	---	---	---	---	---
9	69	135	105	---	---	---	---	---	---	---	---	---
10	79	154	107	---	---	---	---	---	---	---	---	---
11	68	153	114	---	---	---	---	---	---	---	---	---
12	64	151	115	---	---	---	---	---	---	---	---	---
13	49	155	112	---	---	---	---	---	---	---	---	---
14	37	173	108	---	---	---	---	---	---	---	---	---
15	44	268	e100	---	---	---	---	---	---	---	---	---
16	47	401	e90	---	---	---	---	---	---	---	---	---
17	50	422	e80	---	---	---	---	---	---	---	---	---
18	45	357	71	---	---	---	---	---	---	---	---	---
19	43	e300	27	---	---	---	---	---	---	---	---	---
20	35	e270	47	---	---	---	---	---	---	---	---	---
21	35	e150	51	---	---	---	---	---	---	---	---	---
22	27	e140	58	---	---	---	---	---	---	---	---	---
23	41	e130	64	---	---	---	---	---	---	---	---	---
24	87	e120	54	---	---	---	---	---	---	---	---	---
25	109	e120	67	---	---	---	---	---	---	---	---	---
26	109	e110	52	---	---	---	---	---	---	---	---	---
27	122	e100	57	---	---	---	---	---	---	---	---	---
28	119	e70	60	---	---	---	---	---	---	---	---	---
29	109	e90	35	---	---	---	---	---	---	---	---	---
30	100	e140	23	---	---	---	---	---	---	---	---	---
31	106	---	29	---	---	---	---	---	---	---	---	---
TOTAL	1930	4834	2543	---	---	---	---	---	---	---	---	---
MEAN	62.3	161	82.0	---	---	---	---	---	---	---	---	---
MAX	128	422	140	---	---	---	---	---	---	---	---	---
MIN	22	70	23	---	---	---	---	---	---	---	---	---
CFSM	.14	.35	.18	---	---	---	---	---	---	---	---	---
IN.	.16	.39	.21	---	---	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2001, BY WATER YEAR (WY)

MEAN	88.2	148	106	83.5	269	373	709	405	309	267	189	117
MAX	106	175	153	91.8	437	517	1194	538	470	573	448	166
(WY)	1999	1999	2000	1999	1999	1998	1998	1999	2000	1999	1999	1999
MIN	62.3	107	67.0	72.5	150	246	286	310	110	89.3	48.6	35.4
(WY)	2001	2000	1998	2000	2000	1999	2000	1998	1998	1998	1998	1998

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR
(OCTOBER-DECEMBER)

WATER YEARS 1998 - 2001

ANNUAL TOTAL	71907											
ANNUAL MEAN	196									262		
HIGHEST ANNUAL MEAN										324		1999
LOWEST ANNUAL MEAN										201		2000
HIGHEST DAILY MEAN	787	Jun 5				422	Nov 17			1470	Apr 9	1998
LOWEST DAILY MEAN	11	Aug 31				22	Oct 7			-27	Nov 10	1998
ANNUAL SEVEN-DAY MINIMUM	24	Sep 2				30	Oct 2			24	Sep 2	2000
ANNUAL RUNOFF (CFSM)	.43									.57		
ANNUAL RUNOFF (INCHES)	5.87									7.81		
10 PERCENT EXCEEDS	474					154				593		
50 PERCENT EXCEEDS	116					94				137		
90 PERCENT EXCEEDS	31					29				38		

(e) Estimated due to ice effect or missing record

ROCK RIVER BASIN

05424057 ROCK RIVER AT HORICON, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1997 to December 2000 (discontinued).

PERIOD OF DAILY RECORD.--

SUSPENDED-SOLIDS DISCHARGE: December 1997 to December 2000 (discontinued).

TOTAL-PHOSPHORUS DISCHARGE: December 1997 to December 2000 (discontinued).

REMARKS.--Chemical analyses by the Madison Metropolitan Sewage District and the Wisconsin State Laboratory of Hygiene. Samples are equal-width increment samples collected by U.S. Geological Survey personnel and cooperators.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 459 tons, Apr. 13, 1998; minimum daily, 0.00 ton, Nov. 10, 1998, Mar. 31, and Oct. 14, 27, 1999, result of reverse streamflow from wind setup.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 4,600 lb, July 31, 1999; minimum daily, 0.00 lb, Nov. 10, 1998, result of reverse streamflow from wind setup.

EXTREMES FOR CURRENT PERIOD.--

2000 WATER YEAR.--

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 161 tons, Apr. 21; minimum daily, 0.00 ton, Oct. 14 and 27, result of reverse streamflow from wind setup.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 1,720 lb, Feb. 23; minimum daily, 0.00 lb, Oct. 14, 27, result of reverse streamflow from wind setup.

OCTOBER-DECEMBER 2000:

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 27.4 tons, Nov. 16; minimum daily, 1.01 ton, Dec. 30.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 758 lb, Nov. 17; minimum daily, 31.0 lb, Dec. 30.

SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED(TONS PER DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.6	23.5	7.42	1.21	.48	25.0	14.2	53.4	44.4	3.79	14.5	6.40
2	15.2	28.1	13.7	1.27	.47	25.8	12.7	39.9	100	7.55	17.3	2.85
3	18.4	7.84	19.8	1.19	.50	11.6	52.4	32.6	79.2	16.7	11.4	1.48
4	15.1	6.92	26.0	1.11	.50	10.9	68.9	27.4	73.7	12.0	11.5	1.95
5	18.6	25.9	30.6	1.19	.54	12.7	16.7	25.5	160	15.1	5.06	2.86
6	17.9	20.5	15.8	1.37	.52	17.1	66.5	16.9	127	21.4	21.0	3.43
7	6.26	11.1	11.0	1.49	.52	22.9	63.5	25.2	83.9	9.00	18.4	2.08
8	24.1	14.7	18.7	1.60	.53	24.9	21.9	19.0	54.5	7.14	16.0	2.49
9	14.6	7.70	18.2	1.86	.54	24.8	39.1	19.2	38.5	15.1	16.9	2.39
10	21.6	49.0	14.8	2.49	.56	23.6	20.4	14.4	31.6	10.8	11.0	1.74
11	13.6	9.64	10.7	3.22	.55	24.1	41.1	23.9	33.7	19.9	10.4	2.06
12	1.64	27.5	10.3	3.87	.58	23.9	25.1	35.6	30.6	29.3	8.34	2.08
13	30.5	18.9	9.22	3.01	.56	23.7	9.77	37.0	25.9	40.1	14.9	3.51
14	.000	35.5	9.09	2.43	.58	23.6	11.7	37.6	21.9	44.9	8.25	9.77
15	17.6	28.9	8.74	2.11	.58	22.7	43.2	28.5	21.1	56.3	17.6	17.8
16	23.3	26.1	7.31	1.91	.61	22.6	40.9	33.8	20.4	51.1	6.77	19.7
17	21.6	13.1	5.70	1.57	.60	21.8	37.8	23.8	22.6	59.1	19.5	20.0
18	18.3	11.4	5.25	1.38	.63	22.1	25.8	70.3	20.8	16.2	6.92	17.4
19	19.5	18.4	5.43	1.28	.65	23.5	33.3	103	22.5	15.4	9.94	17.0
20	13.8	19.6	4.87	1.03	.68	22.2	127	75.5	25.5	12.1	9.60	21.6
21	9.01	14.4	2.93	1.01	.73	21.6	161	59.2	32.4	11.3	7.44	32.0
22	93.7	21.6	2.39	1.01	.74	19.7	95.9	51.4	35.6	8.57	10.9	37.3
23	33.3	4.73	2.36	1.04	41.8	18.7	99.6	62.9	26.6	7.65	8.86	48.7
24	1.78	18.4	1.96	1.00	24.8	17.0	97.2	85.9	21.2	7.25	6.93	54.1
25	15.5	8.93	1.53	.88	19.5	21.1	85.8	102	12.9	7.71	6.10	46.0
26	33.8	10.5	1.53	.68	20.2	15.5	72.2	80.5	12.7	6.24	9.89	33.1
27	.000	13.2	1.41	.45	20.6	20.1	70.0	66.1	9.66	11.1	7.59	31.9
28	39.6	9.05	1.14	.45	18.2	23.0	70.9	56.0	6.09	16.3	1.92	28.3
29	4.40	8.45	1.11	.44	17.0	16.9	68.5	40.2	8.24	20.6	12.0	21.4
30	10.4	8.36	1.30	.49	---	16.6	54.3	27.2	5.67	8.71	4.76	16.1
31	19.1	---	1.26	.50	---	15.1	---	29.3	---	10.4	1.41	---
TOTAL	586.790	521.92	271.55	44.54	174.75	634.8	1647.37	1403.2	1208.86	578.81	333.08	507.49

WTR YR 2000 TOTAL 7913.16

05424057 ROCK RIVER AT HORICON, WI--Continued

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	757	234	139	197	88.6	838	376	645	933	107	234	126
2	653	287	261	230	86.0	782	316	525	1520	218	277	60.3
3	633	80.4	385	240	90.7	699	721	484	1320	495	181	32.8
4	423	71.0	513	241	89.6	613	768	459	1230	340	180	45.8
5	412	266	615	242	97.6	589	187	473	1480	409	77.8	71.3
6	338	211	323	258	94.2	651	774	317	1400	552	322	90.3
7	93.1	114	234	259	94.1	736	773	470	1130	220	278	57.8
8	302	150	434	256	95.9	761	273	351	1030	165	240	73.5
9	178	78.3	462	275	96.0	839	514	352	990	336	251	74.2
10	262	495	407	338	100	881	278	261	907	227	162	57.5
11	163	96.6	324	404	98.5	880	581	430	1060	398	151	68.0
12	19.3	274	339	462	103	843	368	633	1050	559	120	54.0
13	363	187	330	399	99.3	808	144	653	970	728	213	88.4
14	.00	350	341	367	103	774	172	657	897	776	117	239
15	206	281	343	364	104	721	621	494	945	929	246	424
16	271	254	299	374	109	691	577	645	944	803	93.8	456
17	251	133	244	352	107	643	524	434	1010	891	281	451
18	211	119	234	343	112	630	318	1070	886	241	102	381
19	222	207	253	315	116	649	296	1330	815	227	152	361
20	153	227	236	249	120	591	991	1130	556	176	152	441
21	76.0	176	150	237	129	554	1290	980	667	164	123	604
22	672	277	136	232	129	505	958	905	756	124	184	650
23	226	64.5	148	234	1720	479	962	971	581	109	150	785
24	14.6	256	137	220	1590	437	890	1120	478	103	119	823
25	119	132	119	190	1230	546	684	1190	301	110	105	710
26	262	161	133	144	1190	401	527	1060	305	92.0	171	522
27	.00	211	135	92.4	1140	523	605	1020	238	164	132	511
28	335	152	121	90.7	962	600	720	1030	156	250	33.9	455
29	37.7	148	132	85.6	807	442	741	868	216	322	211	344
30	98.0	153	172	94.7	---	438	622	696	154	138	85.4	258
31	182	---	185	93.0	---	398	---	814	---	169	29.0	---
TOTAL	7932.70	5845.8	8284	7878.4	10901.5	19942	17571	22467	24925	10542.0	5173.9	9314.9

WTR YR 2000 TOTAL 150778.2

ROCK RIVER BASIN

05424057 ROCK RIVER AT HORICON, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEED (MG/L) (00530)
OCT						
08...	1215	--	165	.013	.386	63
22...	1300	--	362	.006	.550	164
NOV						
08...	1140	--	-78	.004	.359	70
30...	1130	--	102	.011	.267	29
DEC						
13...	1225	--	209	.014	.270	15
JAN						
12...	1130	--	133	.476	.638	11
FEB						
23...	1030	--	763	.522	.879	49
25...	1045	--	474	.261	.475	15
27...	1015	--	546	--	.388	14
29...	0800	--	529	.151	.280	11
MAR						
02...	0825	500	--	.143	.293	23
03...	1105	460	--	--	.277	8
08...	1000	360	--	.227	.386	26
10...	1020	350	--	.288	.474	25
21...	1115	--	346	.012	.306	24
APR						
03...	1145	--	242	.012	.381	56
17...	1340	--	227	.004	.443	64
21...	0955	--	558	.007	.525	144
24...	1100	--	481	.007	.345	74
26...	0845	--	384	.078	.240	69
28...	0915	--	419	.067	.316	62
MAY						
05...	1230	--	195	.037	.379	40
18...	1245	--	535	.089	.435	58
19...	0955	--	651	.150	.402	65
20...	1020	--	624	.133	.339	45
22...	1230	--	574	.120	.273	30
31...	0920	--	468	.111	.356	24
JUN						
01...	1230	--	492	.221	.372	34
02...	1056	--	731	.196	.425	60
04...	1135	--	684	--	.314	32
05...	0930	--	798	.183	.354	86
06...	1120	--	791	.168	.361	64
07...	0855	--	745	.185	.295	46
09...	0914	--	730	.155	.260	20
19...	0950	--	424	.231	.357	18
JUL						
03...	1217	--	265	.218	.388	26
17...	1003	--	318	.240	.586	78
31...	1029	--	62	.087	.570	70
AUG						
16...	1100	--	165	.057	.437	63
30...	1105	--	-4.3	.076	.462	52
SEP						
11...	1215	--	23	.098	.487	28
27...	1150	--	273	.062	.374	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

PHOSPHORUS, ORTHO, WATER, FILTERED, POUNDS PER DAY
DAILY MEAN VALUES

2000	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TOTAL	1025.72	73.43	2301.64	6370.5	7133.1	5424.92	900.36	6355.8	14096.2	4036.3	595.34	2834.35
WTR YR 2000	TOTAL 51147.66											

05424057 ROCK RIVER AT HORICON, WI--Continued

SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED(TONS PER DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

[illegible]

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

[illegible]

05424057 ROCK RIVER AT HORICON, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEED (MG/L) (00530)	SAM- PLING METHOD, CODES (82398)
OCT							
11...	1120	--	69	.003	.265	38	10
26...	1030	--	106	.029	.473	63	10
NOV							
07...	1130	--	67	.003	.380	58	10
21...	1220	150	--	.134	.316	16	10
DEC							
12...	1100	--	115	.152	.246	6	10

ROCK RIVER BASIN

05424082 ROCK RIVER AT HUSTISFORD, WI

LOCATION.--Lat 43°20'44", long 88°35'52", in NE ¼ sec.9, T.10 N., R.16 E., Dodge County, Hydrologic Unit 07090001, on left bank 600 ft downstream from bridge on State Highway 109 and 150 ft downstream of the Hustisford dam, at Hustisford.

DRAINAGE AREA.--511 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1978 to September 1985, and December 1998 to December 2000 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 845.67 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Flow partly regulated by dam at Hustisford. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	208	71	176	11	11	575	298	370	703	58	54	21
2	213	101	178	9.1	11	568	285	360	967	71	62	16
3	204	118	182	37	11	608	295	303	996	241	57	17
4	196	122	208	62	11	639	313	241	986	324	49	16
5	147	118	244	70	9.9	638	200	203	1000	303	45	6.0
6	128	115	292	75	10	596	175	179	1000	300	76	2.9
7	51	105	293	77	5.0	522	182	183	958	153	171	1.9
8	25	99	288	77	1.1	414	200	180	943	37	198	2.0
9	39	92	290	78	1.2	375	189	236	823	58	113	.64
10	50	115	293	79	1.2	389	202	209	769	71	51	1.1
11	50	133	284	78	3.0	389	224	167	773	e180	45	2.2
12	30	148	278	77	3.3	387	229	316	775	192	37	14
13	68	148	275	79	3.5	385	208	367	776	285	39	7.6
14	43	158	275	81	3.1	405	169	356	718	488	37	29
15	40	142	274	82	12	395	151	293	681	389	45	60
16	58	137	273	84	19	393	165	271	687	318	42	67
17	68	127	273	83	17	381	177	201	697	235	47	74
18	61	123	264	83	14	365	178	681	573	177	59	137
19	59	118	262	82	14	370	178	1030	513	82	45	160
20	59	124	220	66	13	374	366	1040	e320	39	40	174
21	50	120	158	44	12	310	681	1000	e260	41	32	270
22	95	124	92	43	35	288	688	972	e210	37	36	313
23	108	125	72	43	103	292	623	846	e170	32	40	436
24	86	135	70	41	251	290	588	708	e130	27	38	469
25	77	130	70	39	346	314	471	666	e110	21	30	450
26	98	128	71	22	401	300	403	576	e90	16	35	380
27	77	135	39	12	403	312	404	552	65	25	33	293
28	85	134	18	12	443	331	379	559	60	31	21	262
29	88	171	16	12	535	316	366	557	69	44	28	190
30	61	181	18	11	---	306	364	444	62	50	21	159
31	73	---	17	11	---	301	---	440	---	61	14	---
TOTAL	2695	3797	5763	1660.1	2703.3	12528	9351	14506	16884	4386	1640	4031.34
MEAN	86.9	127	186	53.6	93.2	404	312	468	563	141	52.9	134
MAX	213	181	293	84	535	639	688	1040	1000	488	198	469
MIN	25	71	16	9.1	1.1	288	151	167	60	16	14	.64
CFSM	.17	.25	.36	.10	.18	.79	.61	.92	1.10	.28	.10	.26
IN.	.20	.28	.42	.12	.20	.91	.68	1.06	1.23	.32	.12	.29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2000, BY WATER YEAR (WY)

	MEAN	323	358	277	164	290	639	966	488	355	250	165	258
MAX	752	824	642	375	500	1439	2377	1100	1101	716	446	667	
(WY)	1981	1985	1983	1985	1984	1985	1979	1979	1984	1984	1979	1978	
MIN	14.5	127	164	53.6	93.2	110	312	123	20.5	14.8	27.1	4.17	
(WY)	1983	2000	1981	2000	2000	1980	2000	1981	1985	1985	1985	1982	

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1978 - 2000

	ANNUAL TOTAL	122831	79944.74	
ANNUAL MEAN	337	218	370	
HIGHEST ANNUAL MEAN			590	1979
LOWEST ANNUAL MEAN			218	2000
HIGHEST DAILY MEAN	1850	Jul 23	1040	May 20
LOWEST DAILY MEAN	10	Jan 19	.64	Sep 9
ANNUAL SEVEN-DAY MINIMUM	36	Dec 25	2.3	Feb 8
INSTANTANEOUS PEAK FLOW			1080	May 19
INSTANTANEOUS PEAK STAGE			5.11	May 19
ANNUAL RUNOFF (CFSM)	.66		.43	
ANNUAL RUNOFF (INCHES)	8.94		5.82	
10 PERCENT EXCEEDS	776		570	976
50 PERCENT EXCEEDS	207		135	223
90 PERCENT EXCEEDS	50		15	19

(a) Also occurred June 21 to July 11, 1985

(e) Estimated due to missing record

05424082 ROCK RIVER AT HUSTISFORD, WI--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	131	132	---	---	---	---	---	---	---	---	---
2	65	136	133	---	---	---	---	---	---	---	---	---
3	13	135	133	---	---	---	---	---	---	---	---	---
4	14	128	133	---	---	---	---	---	---	---	---	---
5	13	119	131	---	---	---	---	---	---	---	---	---
6	23	104	124	---	---	---	---	---	---	---	---	---
7	21	121	125	---	---	---	---	---	---	---	---	---
8	14	123	125	---	---	---	---	---	---	---	---	---
9	10	137	123	---	---	---	---	---	---	---	---	---
10	12	178	123	---	---	---	---	---	---	---	---	---
11	15	191	123	---	---	---	---	---	---	---	---	---
12	16	183	121	---	---	---	---	---	---	---	---	---
13	17	182	121	---	---	---	---	---	---	---	---	---
14	21	185	109	---	---	---	---	---	---	---	---	---
15	22	198	81	---	---	---	---	---	---	---	---	---
16	21	246	62	---	---	---	---	---	---	---	---	---
17	22	312	60	---	---	---	---	---	---	---	---	---
18	22	335	58	---	---	---	---	---	---	---	---	---
19	20	335	59	---	---	---	---	---	---	---	---	---
20	18	332	60	---	---	---	---	---	---	---	---	---
21	19	314	59	---	---	---	---	---	---	---	---	---
22	14	274	59	---	---	---	---	---	---	---	---	---
23	20	246	58	---	---	---	---	---	---	---	---	---
24	29	241	54	---	---	---	---	---	---	---	---	---
25	35	238	50	---	---	---	---	---	---	---	---	---
26	41	235	40	---	---	---	---	---	---	---	---	---
27	61	232	35	---	---	---	---	---	---	---	---	---
28	64	227	32	---	---	---	---	---	---	---	---	---
29	64	218	28	---	---	---	---	---	---	---	---	---
30	64	164	27	---	---	---	---	---	---	---	---	---
31	108	---	20	---	---	---	---	---	---	---	---	---
TOTAL	1051	6200	2598	---	---	---	---	---	---	---	---	---
MEAN	33.9	207	83.8	---	---	---	---	---	---	---	---	---
MAX	153	335	133	---	---	---	---	---	---	---	---	---
MIN	10	104	20	---	---	---	---	---	---	---	---	---
CFSM	.07	.40	.16	---	---	---	---	---	---	---	---	---
IN.	.08	.45	.19	---	---	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2001, BY WATER YEAR (WY)

MEAN	291	341	258	164	290	639	966	488	355	250	165	258
MAX	752	824	642	375	500	1439	2377	1100	1101	716	446	667
(WY)	1981	1985	1983	1985	1984	1985	1979	1979	1984	1984	1979	1978
MIN	14.5	127	83.8	53.6	93.2	110	309	123	20.5	14.8	27.1	4.17
(WY)	1983	2000	2001	2000	2000	1980	2000	1981	1985	1985	1985	1982

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR
(OCTOBER-DECEMBER)

WATER YEARS 1978 - 2001

ANNUAL TOTAL	77538.74											
ANNUAL MEAN	212									370		
HIGHEST ANNUAL MEAN										590		1979
LOWEST ANNUAL MEAN										218		2000
HIGHEST DAILY MEAN	1040	May 20				335	Nov 18-19			3340	Apr 4	1979
LOWEST DAILY MEAN	.64	Sep 9				10	Oct 9			.00	(a) Aug 24-26	1984
ANNUAL SEVEN-DAY MINIMUM	2.3	Feb 8				15	Oct 7			.00	Jun 21	1985
INSTANTANEOUS PEAK FLOW						348	Nov 17-18			3550	Apr 4	1979
INSTANTANEOUS PEAK STAGE						3.98	Nov 17-18			6.80	Apr 4	1979
ANNUAL RUNOFF (CFSM)	.41									.72		
ANNUAL RUNOFF (INCHES)	5.64									9.84		
10 PERCENT EXCEEDS	570					240				964		
50 PERCENT EXCEEDS	125					92				217		
90 PERCENT EXCEEDS	14					16				19		

(a) Also occurred June 21 to July 11, 1985

05424082 ROCK RIVER AT HUSTISFORD, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1998 to December 2000 (discontinued).

PERIOD OF DAILY RECORD.--

SUSPENDED-SOLIDS DISCHARGE: December 1998 to December 2000 (discontinued).

TOTAL-PHOSPHORUS DISCHARGE: December 1998 to December 2000 (discontinued).

REMARKS.--Chemical analyses by the Wisconsin State Laboratory of Hygiene. Samples are equal-width increment samples collected by U.S. Geological Survey personnel.

EXTREMES FOR PERIOD OF RECORD.--

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 447 tons, Apr. 28, 1999; minimum daily, 0.047 ton, Feb. 8, 2000.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 6,430 lb, Apr. 6, 1999; minimum daily, 1.55 lb, Feb. 8, 2000.

EXTREMES FOR CURRENT PERIOD.--

2000 WATER YEAR.--

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 307 tons, June 2; minimum daily, 0.047 ton, Feb. 8.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 2,790 lb, May 19; minimum daily, 1.55 lb, Feb. 8.

OCTOBER-DECEMBER 2000.--

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 32.4 tons, Nov. 18; minimum daily, 0.84 ton, Dec. 31.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 650 lb, Nov. 18; minimum daily, 22.0 lb, Dec. 31.

SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED(TONS PER DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.5	16.5	22.6	.64	.49	17.8	51.0	89.0	174	12.8	10.8	2.78
2	29.5	22.9	22.1	.54	.47	18.5	49.4	77.5	307	15.3	12.4	2.11
3	28.7	26.3	22.0	2.15	.45	34.5	51.6	58.6	234	50.7	11.2	2.17
4	27.8	26.6	24.4	3.53	.45	110	53.9	41.5	170	67.8	9.64	2.02
5	21.0	25.3	27.8	3.89	.42	153	33.9	31.8	211	63.2	8.71	.76
6	18.6	24.2	32.2	4.10	.42	129	29.1	27.7	227	62.1	14.7	.36
7	7.40	21.6	31.4	4.14	.21	101	29.7	28.5	234	31.5	32.8	.24
8	3.80	20.0	30.0	4.05	.047	74.9	32.0	28.1	271	7.48	37.5	.24
9	5.99	18.2	29.2	4.03	.048	76.3	29.7	37.2	270	11.8	21.3	.079
10	8.12	22.5	28.6	3.98	.048	88.5	31.1	33.1	244	14.4	9.49	.13
11	8.56	25.5	26.9	3.89	.12	86.5	33.8	28.2	231	36.2	8.41	.27
12	5.32	27.7	25.5	3.77	.14	82.7	34.0	63.7	219	38.3	6.83	1.71
13	12.6	27.2	24.6	3.83	.14	79.0	30.2	76.4	207	56.7	7.12	.92
14	8.31	28.4	24.0	3.91	.12	79.7	24.2	68.2	182	96.5	6.72	3.54
15	8.17	25.1	23.4	3.91	.47	74.7	21.2	51.7	177	76.6	8.09	7.32
16	12.4	23.8	22.9	3.96	.77	71.4	22.7	46.0	187	62.2	7.54	8.21
17	15.1	21.7	22.5	3.90	.67	66.6	24.0	46.1	199	45.8	8.14	9.07
18	14.2	20.5	21.2	3.87	.54	61.1	23.6	207	170	34.5	10.1	16.9
19	14.3	19.3	20.7	3.83	.52	59.6	24.0	208	158	16.1	7.46	19.8
20	15.1	19.9	17.0	3.08	.50	57.8	93.3	179	96.5	7.62	6.55	21.5
21	13.3	18.9	12.0	2.01	.48	46.4	289	204	76.2	8.11	5.08	33.6
22	26.4	19.1	6.82	1.97	1.33	43.3	249	234	59.9	7.33	5.62	38.9
23	29.8	19.0	5.27	1.97	4.13	44.5	176	200	47.2	6.31	6.15	54.4
24	23.2	20.1	5.02	1.85	12.0	44.7	135	159	35.1	5.44	5.65	58.6
25	20.4	18.9	4.93	1.76	19.4	49.0	109	141	28.9	4.15	4.42	56.4
26	25.6	18.3	4.85	.97	18.4	47.5	99.6	116	23.0	3.27	5.10	47.7
27	19.6	19.0	2.61	.53	14.5	50.0	118	107	16.5	5.09	4.68	36.9
28	21.3	18.4	1.18	.52	14.9	53.7	125	107	14.5	6.21	2.97	33.0
29	21.7	23.1	1.00	.51	17.2	52.0	110	106	16.2	8.76	3.72	24.0
30	14.7	23.9	1.17	.50	---	51.0	98.1	88.3	14.2	10.1	2.81	20.1
31	17.3	---	1.07	.48	---	50.8	---	106	---	12.4	1.84	---
TOTAL	526.77	661.9	544.92	82.07	109.383	2055.5	2231.1	2995.6	4500.2	884.77	293.54	503.729

WTR YR 2000 TOTAL 15389.482

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

WTR YR 2000 TOTAL 187116.14

ROCK RIVER BASIN

05424082 ROCK RIVER AT HUSTISFORD, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)
OCT					
08...	1330	27	.207	.521	55
22...	1420	112	.189	.596	104
NOV					
08...	1220	97	.039	.389	75
30...	1235	182	.021	.389	49
DEC					
13...	1325	276	.182	.320	33
JAN					
12...	1220	77	.003	.172	18
FEB					
23...	1110	45	.115	.314	14
25...	1345	399	.158	.427	22
27...	1045	409	--	.511	13
29...	0845	486	.198	.446	12
MAR					
02...	0910	566	.138	.354	11
03...	1130	588	--	.331	18
08...	1050	424	.032	.345	65
10...	1110	391	.022	.452	86
21...	1145	273	.003	.333	55
APR					
03...	1245	289	.022	.361	65
17...	1315	182	.088	.375	50
21...	1035	769	.105	.582	180
24...	1125	580	.082	.403	82
26...	0935	403	.114	.412	89
28...	0955	411	.153	.502	126
MAY					
05...	1150	187	.167	.375	57
18...	1215	931	.064	.522	127
19...	1035	1060	.068	.507	72
20...	1100	1050	.036	.461	61
22...	1149	964	.018	.439	92
31...	0955	459	.030	.424	92
JUN					
01...	1230	790	.032	.532	86
02...	1120	1040	.034	.454	130
04...	1210	994	--	.336	58
05...	1005	1000	.038	.419	80
06...	1340	999	.031	.509	84
07...	0940	981	.013	.374	88
09...	1100	769	.011	.442	125
19...	1008	533	.028	.412	115
JUL					
03...	1143	258	.231	.532	78
17...	1039	194	.147	.516	72
31...	1122	65	.477	.724	75
AUG					
16...	1030	49	.638	.970	66
30...	1145	22	.540	.866	49
SEP					
11...	1135	1.3	.357	.647	45
27...	1245	269	.210	.571	--

SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (TONS PER DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

[illegible]

ROCK RIVER BASIN

05424082 ROCK RIVER AT HUSTISFORD, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEED (MG/L) (00530)
OCT					
11...	1200	18	.136	.470	48
26...	1115	35	.145	.577	62
NOV					
07...	1225	118	.078	.513	77
21...	1250	314	.043	.326	29
DEC					
12...	1200	121	.050	.207	16

05425500 ROCK RIVER AT WATERTOWN, WI

LOCATION.--Lat 43°11'17", long 88°43'34", in SW ¼ sec.4, T.8 N., R.15 E., Jefferson County, Hydrologic Unit 07090001, on left bank, 700 ft downstream from Milwaukee Street bridge, 1.1 mi downstream from Silver Creek, at Watertown.

DRAINAGE AREA.--969 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1931 to September 1970, October 1976 to current year.

REVISED RECORDS.--WSP 1438: 1933,1935(M), 1937(M), 1938-39, 1945(M); WDR WI-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 792.58 ft above sea level. Prior to Sept. 26, 1933, nonrecording gage at site 700 ft upstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Flow partly regulated by powerplant at Watertown. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	528	136	301	164	e110	1110	462	828	2890	305	255	200
2	519	145	313	161	e120	1090	456	751	3110	339	313	183
3	497	179	330	e160	e110	1080	441	681	2590	1140	341	179
4	499	208	347	e160	e120	1070	412	642	2240	1210	348	180
5	474	229	372	e160	e120	1060	437	557	2160	1030	348	180
6	417	236	422	e170	e110	1050	418	517	2090	919	478	178
7	355	230	462	e170	e110	1050	381	433	2010	826	581	161
8	308	235	497	e180	e120	1060	338	376	1960	758	572	147
9	218	224	530	222	e110	1060	361	367	1910	656	566	128
10	205	224	521	229	e100	1060	384	413	1860	530	513	119
11	186	245	611	261	e100	1000	413	475	1840	490	422	119
12	169	166	567	263	e110	959	450	806	1810	487	322	285
13	185	248	554	e250	e110	872	455	998	1840	485	251	348
14	161	271	540	e220	e120	824	442	955	1940	494	220	334
15	146	269	531	e220	e110	773	384	889	1830	539	211	329
16	175	264	535	e220	e110	709	334	836	1730	603	188	326
17	172	256	502	e210	e120	654	313	873	1640	621	233	326
18	188	247	394	e210	e120	596	313	2730	1530	574	278	303
19	200	239	e330	e190	e120	591	340	3250	1400	473	304	294
20	191	228	e360	e170	e130	584	479	2490	1350	386	293	310
21	185	238	351	e230	e140	604	767	2140	1220	282	260	331
22	156	237	330	e200	e160	602	924	2060	1120	206	243	369
23	150	267	e290	e180	348	583	983	2030	1010	150	222	511
24	173	281	e230	e200	543	550	1020	1990	919	158	214	613
25	191	302	202	e160	680	510	1020	1970	819	149	223	634
26	181	310	184	e170	881	512	1020	1930	713	137	234	639
27	164	310	e160	e150	1080	452	1020	1920	620	123	250	632
28	149	293	151	e130	1150	491	996	1950	467	96	239	640
29	150	303	159	e120	1160	499	955	1870	380	126	227	589
30	140	296	146	e110	---	475	891	1840	339	141	214	533
31	138	---	163	e110	---	466	---	2120	---	193	217	---
TOTAL	7570	7316	11385	5750	8422	23996	17609	41687	47337	14626	9580	10120
MEAN	244	244	367	185	290	774	587	1345	1578	472	309	337
MAX	528	310	611	263	1160	1110	1020	3250	3110	1210	581	640
MIN	138	136	146	110	100	452	313	367	339	96	188	119
CFSM	.25	.25	.38	.19	.30	.80	.61	1.39	1.63	.49	.32	.35
IN.	.29	.28	.44	.22	.32	.92	.68	1.60	1.82	.56	.37	.39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2000, BY WATER YEAR (WY)

	MEAN	341	413	336	286	362	955	1292	724	451	354	259	256
MAX	2981	2034	1148	1055	1627	2448	3875	2634	1785	1625	1540	1552	
(WY)	1987	1986	1986	1946	1938	1985	1979	1993	1996	1993	1960	1986	
MIN	11.6	27.2	22.3	20.4	29.8	114	192	58.2	23.6	19.4	8.42	3.60	
(WY)	1964	1964	1938	1940	1936	1964	1964	1958	1931	1936	1934	1932	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1931 - 2000

ANNUAL TOTAL	252162	205398										
ANNUAL MEAN	691	561								504		
HIGHEST ANNUAL MEAN										1186		1993
LOWEST ANNUAL MEAN										64.5		1964
HIGHEST DAILY MEAN	2210	Apr 23	3250	May 19	4970	Apr 4	1959					
LOWEST DAILY MEAN	(b)80	Jan 5	96	Jul 28	.90	(a)Oct 15	1939					
ANNUAL SEVEN-DAY MINIMUM	(b)86	Jan 1	109	Feb 6	1.1	Sep 15	1932					
INSTANTANEOUS PEAK FLOW			3570	May 19	(c)5080	Mar 31	1979					
INSTANTANEOUS PEAK STAGE			5.37	May 19	(d)6.96	Jan 17	1997					
ANNUAL RUNOFF (CFSM)	.71		.58							.52		
ANNUAL RUNOFF (INCHES)	9.68		7.89							7.07		
10 PERCENT EXCEEDS	1590		1180							1330		
50 PERCENT EXCEEDS	459		344							264		
90 PERCENT EXCEEDS	165		144							39		

(a) Also occurred Sept. 9, 1944

(b) Ice affected

(c) Gage height, 6.19 ft

(d) Backwater from ice

(e) Estimated due to ice effect or missing record

05425500 ROCK RIVER AT WATERTOWN, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1998 to September 2000 (discontinued).

REMARKS.--Chemical analyses by the Wisconsin State Laboratory of Hygiene. Samples are composites of 3-5 verticals, collected by cooperators.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE,	DIS-CHARGE,	OXYGEN,	PH	TEMPER-	NITRO-	PHOS-	PHOS-	OXYGEN	RESIDUE	RESIDUE
		IN CUBIC FEET PER SECOND (00060)	INST. CUBIC FEET PER SECOND (00061)		(STAND- ARD UNITS) (00400)		WATER WHOLE FIELD (00400)	ATURE WATER (DEG C) (00010)		GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	
OCT												
05...	0845	--	499	11.3	8.2	10.4	.476	.040	.245	4.4	41	16
19...	0730	--	198	13.8	8.7	10.1	.083	.022	.209	4.2	36	15
NOV												
02...	0730	--	137	12.2	8.5	10.2	.110	.007	.248	6.5	64	24
16...	0740	--	268	14.9	8.5	5.8	.293	.003	.242	7.3	49	23
DEC												
07...	0745	--	450	14.9	8.3	2.4	.495	.003	.186	5.3	31	13
21...	0800	--	111	16.9	8.9	.1	.492	<.002	.150	4.2	16	13
JAN												
04...	0730	160	--	18.5	8.2	.2	.941	<.002	.134	4.2	14	13
18...	0730	210	--	18.8	7.8	.1	1.38	.015	.059	2.2	10	6
FEB												
01...	0730	110	--	16.2	7.9	.1	1.88	.065	.157	2.9	9	<5
15...	0800	110	--	15.0	8.5	.1	1.90	.094	.172	2.1	6	<5
25...	0755	--	657	14.2	8.3	.1	2.21	.179	.320	5.4	10	<5
MAR												
21...	0730	--	606	16.0	8.5	4.7	.232	.002	.277	9.8	49	24
APR												
04...	0800	--	428	10.1	8.3	8.9	.087	.008	.299	7.4	57	20
18...	0720	--	313	8.5	8.1	7.9	.504	.049	.202	4.2	24	9
MAY												
02...	0825	--	767	6.4	7.6	15.7	.489	.065	.253	4.6	47	15
16...	0730	--	826	8.5	7.8	15.4	1.43	.052	.252	4.2	54	16
19...	0530	--	3490	9.7	8.3	10.6	3.26	.172	.592	4.7	215	40
25...	0730	--	2000	9.5	7.8	18.3	.619	.004	.266	7.7	76	26
JUN												
01...	0600	--	2740	--	7.4	16.1	1.08	.081	.332	4.4	78	18
06...	0740	--	2100	8.3	7.3	15.6	.865	.076	.241	3.5	51	13
20...	0815	--	1370	6.7	7.5	21.5	.294	.093	.349	4.7	69	18
JUL												
11...	0500	--	483	5.7	7.6	23.5	1.01	.092	.282	4.1	48	18
25...	0800	--	146	9.8	8.2	22.7	<.010	.015	.278	7.5	50	20
AUG												
08...	0730	--	599	7.0	7.9	24.2	.649	.045	.289	4.5	65	19
22...	0745	--	244	9.6	8.2	21.6	<.010	.003	.297	6.0	70	22
SEP												
12...	0800	--	241	5.2	7.9	20.8	.101	.058	.285	4.3	54	18

PHOSPHORUS, ORTHO, WATER, FILTERED, POUNDS PER DAY
DAILY MEAN VALUES

[illegible]

PHOSPHORUS TOTAL, POUNDS PER DAY
DAILY MEAN VALUES

2000	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TOTAL	10046	9145	10360	2941.3	12077.3	40243	22805	75548	75989	22844	14955	15604
WTR YR 2000	TOTAL 312557.6											

SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (TONS PER DAY)
DAILY MEAN VALUES

2000	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TOTAL	962.1	953.1	722.92	172.34	217.49	1525.6	1763.3	11050.8	7897.8	2007.2	1642.4	1496.5
WTR YR 2000	TOTAL 30411.55											

05425912 BEAVERDAM RIVER AT BEAVER DAM, WI

LOCATION.--Lat 43°26'57", long 88°50'21", in NE ¼ SW ¼ sec.4, T.11 N., R.14 E., Dodge County, Hydrologic Unit 07090002, on left bank 5 ft upstream from bridge on Davis Street, 0.8 mi downstream from outlet of Beaverdam Lake, at Beaver Dam.

DRAINAGE AREA.--157 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1985 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 839.42 ft above sea level.

REMARKS.--Records good (see page 12). Flow regulated by dam 0.8 mi upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	29	17	51	98	203	3.9	16	353	31	23	20
2	36	33	19	52	95	197	3.4	14	426	41	24	20
3	31	25	23	52	92	192	3.8	13	412	47	22	25
4	30	21	23	56	90	187	3.6	14	429	50	22	23
5	29	22	29	53	89	181	2.7	14	465	58	27	20
6	29	22	23	51	87	173	4.0	13	467	62	28	19
7	25	21	19	49	84	134	1.6	13	461	55	28	21
8	28	22	23	48	82	104	1.2	14	462	50	26	21
9	28	24	21	47	112	114	.68	16	443	64	28	19
10	30	29	29	50	130	103	.90	15	419	110	25	20
11	29	28	29	49	126	98	1.4	17	412	127	23	22
12	26	29	30	47	121	95	1.4	17	391	117	22	26
13	36	29	32	48	122	93	1.6	19	380	117	25	24
14	26	36	37	46	133	82	1.8	17	390	118	22	36
15	27	31	41	46	139	81	1.3	13	386	107	24	31
16	33	30	41	47	140	80	1.3	14	372	100	22	25
17	34	26	41	47	181	61	1.5	27	353	101	27	26
18	29	25	40	47	196	51	1.4	60	337	86	24	24
19	29	27	39	46	186	57	3.4	106	320	82	21	26
20	29	28	39	49	176	38	7.0	126	305	81	21	29
21	28	24	38	49	167	26	2.5	133	320	62	19	29
22	49	26	38	48	186	26	1.3	180	161	32	22	28
23	40	36	38	48	193	21	4.0	243	63	30	22	33
24	25	37	38	48	197	15	2.1	273	65	27	22	31
25	24	30	38	47	198	34	2.1	241	66	24	21	28
26	26	30	37	47	211	23	2.3	255	70	23	24	28
27	21	34	37	47	211	30	8.8	267	64	25	22	26
28	23	34	36	46	208	33	19	260	43	30	19	25
29	22	34	36	46	206	12	15	246	36	26	21	23
30	23	28	46	46	---	4.4	14	236	34	26	20	22
31	23	---	53	81	---	4.1	---	256	---	27	19	---
TOTAL	880	850	1030	1534	4256	2552.5	118.98	3148	8905	1936	715	750
MEAN	28.4	28.3	33.2	49.5	147	82.3	3.97	102	297	62.5	23.1	25.0
MAX	49	37	53	81	211	203	19	273	467	127	28	36
MIN	12	21	17	46	82	4.1	.68	13	34	23	19	19
CFSM	.18	.18	.21	.32	.93	.52	.03	.65	1.89	.40	.15	.16
IN.	.21	.20	.24	.36	1.01	.60	.03	.75	2.11	.46	.17	.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2000, BY WATER YEAR (WY)

	MEAN	78.2	104	83.8	82.8	78.1	160	186	104	109	103	72.6	58.0
MAX	446	350	289	281	182	312	527	449	369	561	287	282	
(WY)	1987	1986	1986	1986	1986	1994	1993	1993	1993	1993	1999	1986	
MIN	2.89	6.66	14.2	21.3	20.8	10.9	3.97	4.55	4.86	2.86	3.05	5.13	
(WY)	1989	1989	1995	1995	1988	1988	2000	1989	1985	1988	1988	1988	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1985 - 2000

ANNUAL TOTAL	42289.3	26675.48	
ANNUAL MEAN	116	72.9	102
HIGHEST ANNUAL MEAN			244
LOWEST ANNUAL MEAN			39.0
HIGHEST DAILY MEAN	510	Jul 26, 28	657
LOWEST DAILY MEAN	4.1	Sep 25	.64
ANNUAL SEVEN-DAY MINIMUM	5.9	Sep 19	.77
INSTANTANEOUS PEAK FLOW			540
INSTANTANEOUS PEAK STAGE			8.62
ANNUAL RUNOFF (CFSM)	.74		.46
ANNUAL RUNOFF (INCHES)	10.02		6.32
10 PERCENT EXCEEDS	299		197
50 PERCENT EXCEEDS	53		31
90 PERCENT EXCEEDS	19		14

(a) Gage height, 9.32 ft

05425912 BEAVERDAM RIVER AT BEAVER DAM, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1998 to September 2000 (discontinued).

REMARKS.--Chemical analyses by the Wisconsin State Laboratory of Hygiene. Samples are composites of 3-5 verticals, collected by cooperators.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

		DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS- PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L) (00535)
OCT											
05...	0900	27	11.1	8.0	10.0	.153	.117	.335	6.9	29	19
19...	0900	27	10.7	8.0	10.0	.301	.098	.149	1.1	15	6
NOV											
02...	1100	30	10.8	8.2	9.0	.409	.067	.145	1.0	34	10
16...	1015	30	9.9	8.1	7.0	.452	.053	.098	.3	12	<5
DEC											
07...	1115	18	13.9	8.3	3.0	.628	.050	.091	.8	8	<5
21...	1015	38	14.1	8.2	1.0	.664	.050	.098	.8	8	7
JAN											
04...	1030	56	13.5	8.1	2.0	.704	.049	.088	1.8	8	7
18...	1001	46	13.0	8.0	2.0	.766	.052	.087	.8	<5	<5
FEB											
02...	1250	95	12.8	8.0	2.0	.850	.056	.086	<2.0	<5	<5
15...	0900	140	11.8	7.8	2.0	.944	.058	.099	.5	<5	<5
24...	1000	210	11.0	7.8	4.0	.866	.062	.127	1.0	13	6
MAR											
07...	0915	167	10.6	7.8	8.0	.623	.026	.069	1.4	<5	<5
21...	0930	26	13.7	8.4	5.0	.334	<.002	.083	3.6	8	5
APR											
04...	1130	3.7	14.0	8.3	7.0	.174	<.002	.050	1.9	<5	<5
18...	0915	1.4	12.0	8.0	7.0	.367	.013	.089	2.0	6	<5
MAY											
02...	1100	15	10.6	8.2	17.0	.284	.040	.110	2.4	17	6
16...	0930	14	9.6	7.9	15.0	.481	.078	.146	2.0	18	6
18...	1130	70	10.0	8.1	15.0	.362	.066	.191	3.2	59	15
25...	1130	254	9.7	8.6	17.5	.311	.044	.150	2.6	30	11
JUN											
01...	1030	341	9.6	8.8	17.0	.181	.033	.123	2.6	34	12
06...	1015	473	9.6	8.8	17.0	.115	.036	.097	1.8	14	6
20...	0945	296	8.9	9.0	21.0	<.010	.064	.173	3.6	31	12
JUL											
11...	0915	126	8.1	8.7	23.0	.034	.066	.266	5.3	42	18
25...	0845	24	8.1	8.3	21.0	.105	.182	.369	4.8	32	17
AUG											
08...	0845	23	7.1	8.6	23.0	.141	.270	.427	5.6	29	14
22...	1000	21	7.8	8.1	22.0	.319	.375	.468	2.9	10	<5
SEP											
12...	0945	27	8.4	8.0	20.0	.181	.270	.398	7.1	44	16

PHOSPHORUS, ORTHO, WATER, FILTERED, POUNDS PER DAY
DAILY MEAN VALUES

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TOTAL	471.00	256.24	276.81	430.1	1298.0	285.83	12.74	774.34	2229.7	1025.0	1184.0	1127.7
WTR YR 2000	TOTAL 9371.46											

PHOSPHORUS TOTAL, POUNDS PER DAY
DAILY MEAN VALUES

2000	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TOTAL	996.9	494.7	521.60	723.9	2410.0	1071.70	57.15	2510.83	6228.0	2846.3	1687.6	1637.0
WTR YR 2000	TOTAL 21185.68											

SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (TONS PER DAY)
DAILY MEAN VALUES

2000	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TOTAL	52.86	36.47	22.34	24.79	89.57	44.143	3.135	288.92	544.21	186.13	38.43	80.27
WTR YR 2000	TOTAL 1411.268											

05426000 CRAWFISH RIVER AT MILFORD, WI

LOCATION.--Lat 43°06'00", long 88°50'58", in NW ¼ SW ¼ (revised) sec.4, T.7 N., R.14 E., Jefferson County, Hydrologic Unit 07090002, on left bank near upstream side of highway bridge in Milford, 1.4 mi downstream from Rock Creek and 9.8 mi upstream from mouth.

DRAINAGE AREA.--762 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1931 to current year.

REVISED RECORDS.--WSP 975: 1937-38. WSP 1438: 1932-33(M), 1935(M), 1937, 1938-41(M), 1943-44(M), 1947-48(M). WDR WI-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 779.40 ft above sea level. Prior to July 28, 1966, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Some diurnal fluctuation at lower flows, due to manipulation of gates on small dams upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	221	133	159	128	e120	1270	328	476	1980	682	186	159
2	230	157	178	141	e120	1210	296	421	2290	638	196	145
3	215	130	169	147	e120	1140	296	370	2650	801	196	150
4	211	112	194	131	e130	1070	304	334	3040	895	181	161
5	200	124	237	e120	e130	989	219	316	3380	979	175	135
6	213	136	218	e130	e130	901	256	284	3490	989	240	126
7	181	122	204	e140	e130	833	261	278	3490	923	274	119
8	181	107	232	e140	e130	775	253	259	3440	829	280	137
9	190	91	244	e130	e130	761	225	279	3300	763	285	115
10	188	136	256	e140	e130	729	237	258	3110	727	265	124
11	176	138	226	e150	e130	681	265	235	2990	682	239	117
12	137	126	236	e170	e130	631	275	335	2880	640	208	195
13	179	124	230	e160	e130	588	241	456	2740	629	197	178
14	132	160	230	e180	e140	528	249	537	2670	620	192	240
15	136	142	220	e170	e140	494	283	536	2550	577	194	233
16	162	144	212	e160	e140	490	288	508	2450	521	189	190
17	172	128	e180	e150	e150	437	272	486	2390	475	187	182
18	160	127	e170	e140	e150	407	242	1050	2240	433	202	156
19	156	112	165	e120	e160	413	242	1570	2100	392	199	145
20	154	152	158	e120	e160	406	337	1850	1940	353	197	158
21	135	139	e150	e140	e170	399	558	2060	1810	332	180	173
22	184	143	138	e130	e180	398	627	2150	1680	313	184	169
23	180	138	e130	e120	e250	400	715	2190	1560	295	186	224
24	131	181	e120	e120	e350	397	761	2150	1450	270	176	234
25	118	196	115	e120	638	400	761	2050	1340	238	161	232
26	145	215	114	e120	880	378	726	1950	1220	223	186	227
27	122	235	115	e120	1030	392	690	1860	1090	232	192	237
28	133	227	118	e110	1180	411	637	1760	973	215	173	218
29	127	224	118	e110	1230	381	596	1640	879	207	187	186
30	101	190	120	e110	---	366	515	1550	771	201	175	186
31	135	---	122	e120	---	346	---	1660	---	194	152	---
TOTAL	5105	4489	5478	4187	8608	19021	11955	31858	67893	16268	6234	5251
MEAN	165	150	177	135	297	614	398	1028	2263	525	201	175
MAX	230	235	256	180	1230	1270	761	2190	3490	989	285	240
MIN	101	91	114	110	120	346	219	235	771	194	152	115
CFSM	.22	.20	.23	.18	.39	.81	.52	1.35	2.97	.69	.26	.23
IN.	.25	.22	.27	.20	.42	.93	.58	1.56	3.31	.79	.30	.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2000, BY WATER YEAR (WY)

	MEAN	270	301	251	240	312	1026	986	513	373	296	204	241
MAX	2565	1958	1065	1278	1576	2473	3206	2337	2263	2189	899	1881	
(WY)	1987	1986	1983	1946	1938	1948	1959	1973	2000	1993	1993	1986	
MIN	16.8	25.9	18.0	15.2	16.2	56.2	193	73.8	34.4	17.9	18.0	8.11	
(WY)	1964	1950	1959	1940	1959	1940	1964	1958	1934	1965	1964	1958	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1931 - 2000

ANNUAL TOTAL	188690	186347											
ANNUAL MEAN	517	509								419			
HIGHEST ANNUAL MEAN										1117		1993	
LOWEST ANNUAL MEAN										61.8		1964	
HIGHEST DAILY MEAN	2320	Apr 27				3490	Jun 6			6130	Apr 6	1959	
LOWEST DAILY MEAN	55	Sep 26				91	Nov 9			.30	Sep 15	1958	
ANNUAL SEVEN-DAY MINIMUM	81	Sep 20				116	Jan 24			1.5	Sep 11	1958	
INSTANTANEOUS PEAK FLOW						3510	Jun 7			6140	Apr 6	1959	
INSTANTANEOUS PEAK STAGE						8.38	Jun 7			11.15	Apr 6	1959	
ANNUAL RUNOFF (CFSM)	.68					.67				.55			
ANNUAL RUNOFF (INCHES)	9.21					9.10				7.47			
10 PERCENT EXCEEDS	1110					1480				1100			
50 PERCENT EXCEEDS	330					218				194			
90 PERCENT EXCEEDS	125					124				39			

(e) Estimated due to ice effect or missing record

05426000 CRAWFISH RIVER AT MILFORD, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1998 to September 2000 (discontinued).

REMARKS.--Chemical analyses by the Wisconsin State Laboratory of Hygiene. Samples are composites of 3-5 verticals, collected by cooperators.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDE (MG/L) (00535)
OCT												
05...	0800	--	194	12.7	7.7	9.1	1.28	.056	.298	5.5	51	17
20...	0845	--	157	11.8	7.7	8.3	.944	.078	.318	6.1	61	16
NOV												
02...	1300	--	170	13.6	--	9.1	.883	.051	.366	6.6	99	24
16...	1030	--	147	13.9	7.8	4.6	1.10	.021	.234	4.3	44	14
DEC												
07...	1030	--	194	14.3	8.1	1.6	1.95	.082	.213	2.5	20	7
21...	1030	150	--	18.5	7.6	.2	2.77	.142	.224	1.8	6	7
JAN												
05...	1030	120	--	15.0	7.7	.4	3.25	.166	.207	1.4	<5	<5
18...	1030	140	--	15.2	7.0	.3	3.24	.157	.206	1.2	5	<5
FEB												
02...	1100	120	--	13.2	7.0	.2	3.79	.205	.237	<2.0	<5	<5
15...	1100	140	--	14.1	7.2	.3	2.86	.163	.203	.4	<5	<5
25...	0900	--	609	12.2	--	.9	2.89	.274	.429	6.3	13	<5
MAR												
07...	1030	--	841	10.8	7.0	8.3	2.66	.086	.190	2.8	21	6
21...	0900	--	399	5.1	7.5	--	1.63	.004	.158	3.8	16	8
APR												
04...	1040	--	316	13.1	--	8.1	.888	.011	.301	5.9	85	21
18...	0900	--	247	16.1	8.2	7.7	.459	<.002	.214	6.8	61	17
MAY												
03...	0900	--	381	12.0	7.3	17.5	.577	.020	.346	7.0	120	26
17...	0930	--	475	14.5	7.9	15.9	2.53	.005	.367	8.5	123	30
18...	1330	--	1120	8.7	6.8	12.5	4.45	.188	1.09	5.3	590	80
JUN												
06...	1100	--	3490	4.5	6.7	17.5	2.27	.220	.356	2.3	33	6
20...	1045	--	1940	4.6	6.5	22.0	.995	.215	.391	3.0	77	13
JUL												
11...	1030	--	685	10.5	7.1	25.2	1.13	.184	.494	5.5	105	25
25...	1330	--	223	17.2	8.4	24.9	<.010	.065	.486	11	100	37
AUG												
08...	1120	--	275	12.7	8.1	26.0	.323	.059	.480	>11	128	38
23...	1045	--	187	8.6	7.7	21.8	.117	.086	.507	8.5	115	30
SEP												
12...	1000	--	209	9.4	7.4	19.3	.588	.128	.427	5.9	94	26

PHOSPHORUS, ORTHO, WATER, FILTERED, POUNDS PER DAY
DAILY MEAN VALUES

[illegible]

PHOSPHORUS TOTAL, POUNDS PER DAY
DAILY MEAN VALUES

2000	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TOTAL	8681	6286	6433	4789	14890	21329	20436	116698	138370	41051	16456	12300
WTR YR 2000		TOTAL 407719										

SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (TONS PER DAY)
DAILY MEAN VALUES

2000	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TOTAL	839.1	600.6	191.07	56.78	261.39	1094.8	3267.7	19648.3	10022	4488.8	1997.7	1357.8
WTR YR 2000	TOTAL 43826.04											

05426250 BARK RIVER NEAR ROME, WI

LOCATION.--Lat 42°57'37" long 88°40'14", in SE ¼ SW ¼ sec.24, T.6 N., R.15 E., Jefferson County, Hydrologic Unit 07090001, on left bank just upstream from bridge on Cushman Road, 2.8 mi southwest of Rome.

DRAINAGE AREA.--122 mi².

PERIOD OF RECORD.--November 1979 to September 1982. October 1982 to September 1983 (fragmentary). October 1983 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 810 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	43	55	48	e35	114	60	75	330	77	102	74
2	76	40	54	49	e35	98	58	44	322	80	110	55
3	73	54	55	51	e35	101	55	41	310	126	95	70
4	73	71	59	e45	e35	109	48	84	308	155	92	70
5	72	55	67	e41	e35	100	53	86	308	157	85	51
6	71	47	71	e40	e35	89	46	55	297	170	96	43
7	70	44	75	e39	e35	78	56	53	280	172	97	43
8	63	40	76	e38	e35	86	57	54	269	156	100	50
9	56	37	76	41	e35	89	62	62	248	160	142	67
10	56	39	78	46	e35	93	63	86	231	194	142	61
11	46	43	79	49	e35	93	68	102	214	181	146	71
12	37	41	79	e45	e35	89	67	118	201	181	136	151
13	37	40	75	e40	35	82	72	143	198	144	125	174
14	37	34	75	e40	37	78	63	142	198	121	111	177
15	37	36	74	e39	37	77	64	147	174	117	79	204
16	40	36	72	e38	37	76	67	156	141	109	70	194
17	38	36	e66	e37	e37	76	61	128	152	107	79	171
18	39	37	e60	e35	e38	75	55	204	148	108	96	175
19	40	39	e58	e34	e40	73	76	305	133	87	90	185
20	37	40	e56	e34	e40	78	116	302	121	109	91	174
21	37	46	e54	e33	e40	79	116	293	114	86	84	151
22	34	48	e48	e32	50	79	120	297	93	83	80	145
23	31	59	e47	e32	67	67	126	295	88	75	77	154
24	33	61	e48	e32	98	53	126	273	99	73	66	149
25	35	66	e47	e32	121	53	132	262	118	78	75	161
26	34	66	e46	e31	134	62	141	257	113	69	70	165
27	35	62	e45	e31	153	62	111	252	69	55	64	142
28	36	58	e45	e32	159	64	85	254	35	54	62	113
29	37	56	e45	e33	145	67	82	244	43	52	67	113
30	39	55	e47	e33	---	67	80	237	66	46	71	112
31	39	---	48	e34	---	63	---	259	---	72	85	---
TOTAL	1468	1429	1880	1184	1688	2470	2386	5310	5421	3454	2885	3665
MEAN	47.4	47.6	60.6	38.2	58.2	79.7	79.5	171	181	111	93.1	122
MAX	80	71	79	51	159	114	141	305	330	194	146	204
MIN	31	34	45	31	35	53	46	41	35	46	62	43
CFSM	.39	.39	.50	.31	.48	.65	.65	1.40	1.48	.91	.76	1.00
IN.	.45	.44	.57	.36	.51	.75	.73	1.62	1.65	1.05	.88	1.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2000, BY WATER YEAR (WY)

	MEAN	70.3	91.5	81.3	67.4	82.7	126	148	109	79.5	67.9	67.5	70.5
MAX	214	214	138	105	137	248	327	180	200	176	127	212	
(WY)	1987	1986	1986	1985	1999	1986	1993	1993	1996	1993	1995	1986	
MIN	23.6	47.6	34.2	38.2	34.5	59.8	79.5	48.1	13.3	7.66	6.04	15.4	
(WY)	1989	2000	1990	2000	1989	1980	2000	1989	1988	1988	1988	1988	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1980 - 2000

ANNUAL TOTAL	32641	33240	
ANNUAL MEAN	89.4	90.8	89.0
HIGHEST ANNUAL MEAN			139
LOWEST ANNUAL MEAN			52.9
HIGHEST DAILY MEAN	316	Apr 27	459
LOWEST DAILY MEAN	22	Sep 3, 23-26	31
ANNUAL SEVEN-DAY MINIMUM	23	Sep 21	(b) 32
INSTANTANEOUS PEAK FLOW			344
INSTANTANEOUS PEAK STAGE			2.17
ANNUAL RUNOFF (CFSM)	.73		.74
ANNUAL RUNOFF (INCHES)	9.95	10.14	9.92
10 PERCENT EXCEEDS	160	174	159
50 PERCENT EXCEEDS	73	70	76
90 PERCENT EXCEEDS	37	36	33

(a) Also occurred Jan. 26, 27, ice affected

(b) Ice affected

(c) Estimated due to ice effect or missing record

ROCK RIVER BASIN

05427085 ROCK RIVER AT ROBERT STREET AT FORT ATKINSON, WI

LOCATION.--Lat 42°55'39", long 88°50'34", in SW ¼ NE ¼ sec.4, T.5 N., R.14 E., Jefferson County, Hydrologic Unit 07090001, on upstream center of Robert Street bridge at Fort Atkinson.

DRAINAGE AREA.--2,240 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Acoustical Velocity Meter (AVM) system. Single-path transducer installation. Datum of gage is 775.09 ft above sea level (levels by the City of Fort Atkinson).

REMARKS.--Records good (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	980	403	669	e490	e440	3270	1050	1750	6220	1400	824	570
2	1010	449	664	e500	e400	3160	1020	1620	7470	1320	939	517
3	1000	448	690	e510	e420	2930	974	1440	7740	2050	934	515
4	974	447	774	e490	e440	2750	987	1260	7670	2610	862	512
5	935	488	892	e510	e460	2610	861	1170	7550	2780	871	473
6	951	525	905	e510	e450	2470	887	1110	7350	2750	1150	439
7	840	511	909	e520	e450	2310	958	1050	7060	2570	1310	414
8	754	482	962	e510	e450	2210	890	942	6780	2340	1370	430
9	708	516	1020	e540	e450	2220	849	961	6430	2130	1340	394
10	619	538	1120	e580	e470	2170	917	1050	6050	2050	1250	389
11	564	542	1100	e630	e470	2090	933	1100	5830	1880	1150	438
12	477	516	1120	e640	e470	1990	974	1320	5570	1730	979	815
13	496	471	1110	e680	e470	1880	955	1630	5330	1630	861	958
14	469	543	1090	e850	e480	1750	962	1900	5330	1520	756	1070
15	428	582	1060	e730	e480	1700	1000	1970	5290	1430	681	1100
16	478	584	1090	e690	e510	1590	938	1930	5030	1410	624	1020
17	504	563	955	e620	e510	1430	831	1840	4860	1380	632	978
18	499	522	850	e580	e550	1370	767	3320	4540	1350	698	903
19	481	521	e850	e530	e550	1370	817	5780	4270	1250	738	831
20	506	573	e860	e730	e570	1360	1080	6570	3960	1110	736	798
21	462	537	e910	e760	e590	1370	1670	6580	3610	1020	693	868
22	508	541	e780	e670	e650	1380	2030	6320	3450	870	650	902
23	508	528	e710	e650	e1000	1390	2300	6030	3270	732	644	1150
24	438	705	e700	e610	1660	1330	2500	5560	3040	635	599	1340
25	428	712	e570	e540	1910	1260	2540	5200	2830	581	567	1410
26	461	709	e530	e500	2380	1230	2400	4990	2450	536	622	1400
27	454	762	e500	e460	2790	1190	2290	4870	2200	540	677	1420
28	428	747	e460	e410	3080	1220	2160	4750	2050	506	634	1350
29	424	756	e460	e410	3200	1140	2050	4620	1810	484	611	1270
30	411	718	e460	e400	---	1070	1870	4580	1580	466	585	1190
31	410	---	e460	e430	---	1070	---	4930	---	572	555	---
TOTAL	18605	16939	25230	17680	26750	56280	40460	98143	146620	43632	25542	25864
MEAN	600	565	814	570	922	1815	1349	3166	4887	1407	824	862
MAX	1010	762	1120	850	3200	3270	2540	6580	7740	2780	1370	1420
MIN	410	403	460	400	400	1070	767	942	1580	466	555	389
CFSM	.27	.25	.36	.25	.41	.81	.60	1.41	2.18	.63	.37	.38
IN.	.31	.28	.42	.29	.44	.93	.67	1.63	2.43	.72	.42	.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2000, BY WATER YEAR (WY)

	1999	2000	1999	2000	1999	2000	1999	2000	1999	2000	1999	2000
MEAN	727	785	826	801	1682	1527	2283	3297	3662	1477	1392	688
MAX	855	1005	838	1032	2469	1815	3218	3428	4887	1547	1960	862
(WY)	1999	1999	1999	1999	1999	2000	1999	1999	2000	1999	1999	2000
MIN	600	565	814	570	922	1238	1349	3166	2436	1407	824	515
(WY)	2000	2000	2000	2000	2000	1999	2000	2000	1999	2000	2000	1999

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1999 - 2000

ANNUAL TOTAL	600287	541745		
ANNUAL MEAN	1645	1480		
HIGHEST ANNUAL MEAN			1592	
LOWEST ANNUAL MEAN			1704	1999
HIGHEST DAILY MEAN	6420	Apr 25	1480	2000
LOWEST DAILY MEAN	281	Sep 26	7740	Jun 3 2000
ANNUAL SEVEN-DAY MINIMUM	381	Sep 21	389	Sep 10 1999
ANNUAL RUNOFF (CFSM)	.73		(e) 416	Jan 28
ANNUAL RUNOFF (INCHES)	9.97		.66	
10 PERCENT EXCEEDS	3210		9.00	
50 PERCENT EXCEEDS	1110		3230	
90 PERCENT EXCEEDS	470		1030	
			478	

(e) Estimated due to ice effect or missing record

WATER-QUALITY RECORDS

REMARKS.--Chemical analyses by the Wisconsin State Laboratory of Hygiene. Samples are composites of 3-5 verticals, collected by cooperators.

DATE	TIME	DIS-CHARGE, IN CUBIC FEET PER SECOND	DIS-CHARGE, INST. CUBIC FEET PER SECOND	OXYGEN, DIS-SOLVED (MG/L)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	NITRO-GEN, NO2+NO3 SOLVED (MG/L AS N)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS P)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L)
		(00060)	(00061)	(00300)	(00400)	(00010)	(00631)	(00671)	(00665)	(00310)	(00530)	(00535)
OCT 05...	0730	--	890	11.8	8.7	10.0	.799	.061	.276	4.8	52	17
19...	0755	--	491	14.4	9.0	10.6	.425	.074	.305	4.8	51	16
NOV 02...	0720	--	409	12.5	8.9	10.4	.493	.052	.328	3.8	78	20
16...	0800	--	597	16.8	8.9	6.5	.483	.061	.322	5.7	54	19
DEC 07...	0730	--	972	14.4	8.7	2.6	1.21	.053	.204	3.2	21	9
21...	0745	910	--	17.1	8.8	.0	1.81	.062	.144	2.0	8	8
JAN 04...	0745	490	--	16.6	8.5	.1	1.93	.086	.212	3.6	12	11
18...	0730	580	--	11.4	8.5	.1	2.09	.123	.220	2.0	8	<5
FEB 01...	0800	440	--	14.3	8.4	.1	2.61	.215	.307	2.0	8	<5
15...	0725	480	--	14.6	8.4	.1	2.71	.219	.283	1.4	6	<5
24...	1055	--	1560	12.5	8.2	.2	2.65	.234	.386	4.6	20	7
MAR 07...	0800	--	2350	11.5	8.4	8.3	2.61	.065	.251	5.0	47	12
21...	0730	--	1370	14.6	8.9	4.8	.937	.002	.228	6.4	41	19
APR 05...	0740	--	918	13.2	8.7	8.0	.456	.010	.283	5.8	57	17
18...	0815	--	790	16.0	8.6	8.3	.792	.023	.217	5.4	38	11
MAY 02...	0730	--	1620	12.1	8.4	16.8	1.02	.033	.255	5.7	70	16
16...	0730	--	1930	9.7	8.4	15.8	2.87	.053	.289	4.4	74	19
18...	0830	--	2790	11.7	8.3	15.1	2.10	.056	.293	4.8	95	22
26...	0815	--	4960	5.9	8.1	19.0	2.78	.067	.260	5.7	63	15
JUN 01...	0745	--	6050	7.5	7.9	16.6	2.23	.121	.377	3.7	108	18
06...	0950	--	7320	6.3	7.8	16.9	2.63	.151	.274	2.1	34	7
20...	0800	--	3890	5.6	8.1	22.1	.950	.137	.332	3.6	65	13
JUL 10...	0930	--	2130	6.1	8.1	23.9	1.16	.130	.312	3.4	58	16
25...	0730	--	608	10.3	8.7	23.9	.085	.055	.316	7.4	62	20
AUG 08...	0730	--	1360	5.8	8.3	23.9	.971	.082	.349	5.4	80	19
21...	0800	--	680	10.2	8.8	21.9	.088	.062	.371	7.0	84	22
SEP 12...	0745	--	750	4.2	8.3	20.7	.425	.143	.413	4.2	80	20

2000	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TOTAL	6459	5231	8120	12046	27900	12341.4	6372.2	34089	105171	20136	10097	19170
WTR YR 2000	TOTAL 267132.6											

2000	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TOTAL	29775	27096	24463	22165	46952	77710	53214	144250	244700	72400	49360	57353
WTR YR 2000	TOTAL 849438											

2000	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TOTAL	2759.8	2324.9	990.7	437.09	1240.86	6445	5554.5	19321	21456	6810.2	5482	5601.7
WTR YR 2000	TOTAL 78423.75											

ROCK RIVER BASIN

05427235 LAKE KOSHKONONG NEAR NEWVILLE, WI

LOCATION.--Lat 42°51'27", long 88°56'27", in NW ¼ NE ¼ sec.34, T.5 N., R.13 E., Jefferson County, Hydrologic Unit 07090001, 80 ft east of Pottawatom Trail Bridge at Bingham Point Estates, and 4.5 mi northeast of Newville.

DRAINAGE AREA.--2,560 mi², at lake outlet. Area of Lake Koshkonong, 16.3 mi².

PERIOD OF RECORD.--July 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is 770.00 ft above sea level.

REMARKS.--Lake level regulated by dam at Indianford. Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum recorded gage height, 12.23 ft, Apr. 25, 1993; minimum recorded, 5.10 ft, Dec. 28, 29, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum recorded gage height, 10.99 ft, June 8; minimum recorded, 5.10 ft, Dec. 28, 29.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.37	5.61	6.27	5.19	5.23	7.20	5.98	6.96	9.77	7.53	6.22	6.23
2	6.37	5.60	6.29	5.23	5.24	7.35	5.93	6.88	10.14	7.35	6.25	6.21
3	6.35	5.53	6.31	5.26	5.26	7.44	5.91	6.80	10.42	7.32	6.27	6.22
4	6.34	5.49	6.29	5.31	5.28	7.50	5.88	6.73	10.66	7.32	6.28	6.21
5	6.33	5.49	6.30	5.34	5.31	7.53	5.77	6.63	10.84	7.38	6.30	6.16
6	6.32	5.53	6.24	5.37	5.33	7.53	5.78	6.53	10.92	7.43	6.41	6.14
7	6.28	5.57	6.21	5.38	5.36	7.53	5.69	6.43	10.95	7.43	6.48	6.14
8	6.26	5.62	6.20	5.39	5.36	7.50	5.73	6.35	10.97	7.40	6.48	6.15
9	6.28	5.67	6.21	5.39	5.35	7.49	5.73	6.33	10.92	7.38	6.45	6.13
10	6.29	5.72	6.23	5.41	5.35	7.43	5.70	6.28	10.83	7.39	6.39	6.13
11	6.26	5.76	6.20	5.43	5.34	7.38	5.75	6.24	10.74	7.35	6.31	6.15
12	6.23	5.79	6.21	5.44	5.33	7.32	5.81	6.28	10.62	7.25	6.28	6.36
13	6.25	5.82	6.20	5.44	5.36	7.27	5.87	6.39	10.53	7.17	6.27	6.35
14	6.18	5.88	6.14	5.44	5.37	7.22	5.95	6.46	10.44	7.10	6.24	6.38
15	6.16	5.88	6.08	5.44	5.38	7.16	6.01	6.54	10.35	6.99	6.21	6.37
16	6.16	5.91	6.02	5.43	5.38	7.06	6.01	6.61	10.24	6.88	6.15	6.33
17	6.11	5.93	5.92	5.43	5.38	6.91	6.03	6.63	10.12	6.81	6.16	6.30
18	6.04	5.94	5.82	5.42	5.41	6.78	6.04	6.86	9.97	6.71	6.15	6.27
19	5.99	5.98	5.75	5.40	5.42	6.68	6.05	7.42	9.80	6.63	6.16	6.25
20	5.95	6.01	5.67	5.39	5.41	6.61	6.17	7.99	9.62	6.55	6.18	6.29
21	5.92	6.01	5.62	5.36	5.39	6.53	6.33	8.56	9.48	6.47	6.19	6.35
22	5.96	6.03	5.58	5.34	5.39	6.48	6.45	8.92	9.29	6.39	6.22	6.37
23	5.89	6.09	5.51	5.31	5.43	6.42	6.66	9.24	9.10	6.32	6.25	6.52
24	5.80	6.16	5.43	5.29	5.58	6.37	6.87	9.41	8.92	6.23	6.25	6.59
25	5.77	6.17	5.36	5.27	5.77	6.38	6.99	9.46	8.76	6.15	6.24	6.65
26	5.74	6.21	5.27	5.25	6.05	6.30	7.05	9.47	8.57	6.12	6.24	6.64
27	5.70	6.26	5.18	5.23	6.37	6.28	7.07	9.51	8.34	6.12	6.24	6.62
28	5.68	6.27	5.11	5.22	6.67	6.23	7.07	9.53	8.12	6.11	6.23	6.60
29	5.65	6.29	5.11	5.21	6.98	6.15	7.05	9.50	7.93	6.11	6.24	6.56
30	5.62	6.28	5.13	5.22	---	6.09	7.00	9.47	7.71	6.13	6.23	6.54
31	5.60	---	5.16	5.22	---	6.04	---	9.51	---	6.20	6.23	---
MEAN	6.06	5.88	5.84	5.34	5.53	6.91	6.21	7.61	9.84	6.83	6.26	6.34
MAX	6.37	6.29	6.31	5.44	6.98	7.53	7.07	9.53	10.97	7.53	6.48	6.65
MIN	5.60	5.49	5.11	5.19	5.23	6.04	5.69	6.24	7.71	6.11	6.15	6.13

05427570 ROCK RIVER AT INDIANFORD, WI

LOCATION.--Lat 42°48'15", long 89°05'25", in SW ¼ SW ¼ sec.16, T.4 N., R.12 E., Rock County, Hydrologic Unit 07090001, on right bank 50 ft upstream from bridge on County Trunk Highways P and M, 250 ft upstream from dam in Indianford, and 1.8 mi upstream from Yahara River.

DRAINAGE AREA.--2,630 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1975 to current year.

REVISED RECORDS.--WDR WI-79-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 763.84 ft above sea level (Rock County Surveyor bench mark). Prior to Oct. 1, 1990, at datum 0.10 ft lower.

REMARKS.--Records fair (see page 12). Natural flow of stream affected by dam in Indianford. Discharge is adjusted for flow through wicket gates. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1230	619	790	434	431	2490	1470	2260	6160	2820	854	873
2	1260	657	848	454	350	2790	1410	2180	6930	2740	920	848
3	1290	622	938	528	307	2840	1310	2070	7380	2790	958	836
4	1220	595	1160	514	351	2620	1310	1930	7800	2550	931	939
5	1130	463	1240	528	336	2470	1220	1820	8070	2580	991	838
6	1230	412	1130	572	367	2470	1030	1710	8010	2690	1180	762
7	1160	434	1040	641	425	2430	1330	1670	7980	2690	1350	672
8	931	421	1020	607	444	2390	1120	1590	7960	2610	1740	769
9	839	406	1040	686	473	2410	1040	1720	7820	2560	1800	692
10	828	560	1060	627	513	2410	1180	1540	7570	2710	1790	667
11	840	562	1050	677	483	2350	1000	1360	7590	2700	1510	691
12	723	533	1050	923	469	2270	707	1330	7720	2560	1230	1070
13	808	538	1140	857	528	2420	717	1120	7520	2430	1230	1340
14	713	617	1240	820	508	2400	741	1260	7300	2360	1200	1480
15	800	608	1100	829	481	2170	922	1560	7160	2270	1140	1510
16	1020	653	975	887	509	2720	1060	1840	6740	2130	1050	1420
17	978	618	914	863	527	2700	992	1780	6570	2020	878	1390
18	937	606	783	779	631	2460	895	2160	6260	2000	850	1360
19	856	574	774	806	615	2430	1010	2530	5980	1860	886	1100
20	833	666	583	738	607	2270	1210	3160	5660	1720	909	933
21	775	682	483	696	614	2110	1310	3840	5320	1600	893	1020
22	814	690	515	685	617	2010	1320	4380	5110	1330	895	1130
23	817	632	479	634	778	1970	1600	4880	4900	1250	905	1230
24	750	707	450	572	956	1870	1700	5000	4630	1170	909	1340
25	686	771	389	531	1050	1580	1890	5130	4410	994	860	1550
26	724	774	358	523	1360	1720	2310	5190	4150	891	896	1630
27	717	832	352	505	1770	1620	2330	5500	3890	939	924	1720
28	708	854	352	476	1990	1780	2320	5700	3600	787	889	1700
29	680	882	368	443	2180	1700	2370	5720	3350	655	902	1580
30	635	863	403	441	---	1640	2250	5480	3070	635	893	1600
31	664	---	403	410	---	1530	---	5440	---	714	825	---
TOTAL	27596	18851	24427	19686	20670	69040	41074	92850	186610	59755	33188	34690
MEAN	890	628	788	635	713	2227	1369	2995	6220	1928	1071	1156
MAX	1290	882	1240	923	2180	2840	2370	5720	8070	2820	1800	1720
MIN	635	406	352	410	307	1530	707	1120	3070	635	825	667
CFSM	.34	.24	.30	.24	.27	.85	.52	1.14	2.37	.73	.41	.44
IN.	.39	.27	.35	.28	.29	.98	.58	1.31	2.64	.85	.47	.49

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2000, BY WATER YEAR (WY)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	1399	1620	1570	1121	1334	2909	3730	2515	1764	1445	1099	1101														
MAX	7729	5047	3745	2622	2751	6113	9466	6028	6220	4549	3377	3911														
(WY)	1987	1986	1986	1985	1999	1985	1979	1993	2000	1993	1993	1986														
MIN	216	297	262	254	283	795	1369	317	185	158	130	182														
(WY)	1977	1977	1977	1977	1977	1977	2000	1977	1988	1988	1988	1988														

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1975 - 2000
ANNUAL TOTAL	688944	628437	
ANNUAL MEAN	1888	1717	1804
HIGHEST ANNUAL MEAN			3252
LOWEST ANNUAL MEAN			509
HIGHEST DAILY MEAN	5870	Apr 28	11700
LOWEST DAILY MEAN	155	Sep 9	39
ANNUAL SEVEN-DAY MINIMUM	230	Sep 8	85
INSTANTANEOUS PEAK FLOW		(a) 8230	11900
INSTANTANEOUS PEAK STAGE		(b) 14.87	(c) 16.23
ANNUAL RUNOFF (CFSM)	.72	.65	.69
ANNUAL RUNOFF (INCHES)	9.74	8.89	9.32
10 PERCENT EXCEEDS	3620	3970	3820
50 PERCENT EXCEEDS	1480	1050	1300
90 PERCENT EXCEEDS	519	512	375

(a) Gage height, 14.85 ft

(b) Discharge, 8,110 ft³/s, due to shifting control

(c) Datum then in use

05427570 ROCK RIVER AT INDIANFORD, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1998 to September 2000 (discontinued).

REMARKS.--Chemical analyses by the Wisconsin State Laboratory of Hygiene. Samples are composites of 3-5 verticals, collected by cooperators.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDE (MG/L) (00535)
OCT											
05...	1000	1020	10.8	7.3	13.1	.268	.038	.216	5.0	33	16
19...	0930	841	12.2	7.4	13.3	.070	.009	.184	5.1	34	17
NOV											
02...	0930	678	9.6	7.5	12.8	.171	.015	.194	4.0	47	16
16...	1015	756	10.8	7.4	10.1	.203	.011	.139	4.6	16	7
DEC											
07...	0930	1050	13.2	7.6	6.1	.059	.003	.155	5.4	28	12
21...	0930	464	17.7	7.5	4.4	<.010	<.002	.134	7.2	37	--
JAN											
05...	1000	538	11.9	7.6	4.6	.728	.006	.091	3.7	13	11
18...	0930	776	9.8	7.5	5.1	.274	.005	.127	3.2	19	6
FEB											
01...	0945	445	8.1	7.5	4.7	.805	.003	.115	3.4	18	8
15...	0945	505	14.4	7.6	5.7	1.45	.013	.147	5.0	17	10
24...	1000	1020	12.4	7.4	9.4	1.70	.090	.215	4.0	18	8
MAR											
07...	0930	2370	17.2	7.2	14.6	1.77	<.002	.247	8.4	49	17
21...	0930	2130	14.5	7.3	8.2	.492	<.002	.232	9.7	65	26
APR											
04...	0900	1350	11.2	7.3	12.2	<.010	<.002	.284	>9.2	65	19
18...	0930	892	9.7	7.3	10.4	.234	.028	.202	5.1	36	12
MAY											
02...	0930	2230	9.4	7.3	18.8	.544	.004	.202	10	63	20
16...	1000	1830	7.2	7.4	17.6	.111	.055	.160	2.9	28	9
25...	1300	5110	8.2	7.2	20.6	2.61	.052	.219	4.2	49	14
JUN											
01...	1000	6180	8.8	7.3	19.4	2.01	.075	.148	1.8	30	7
06...	1320	8020	7.8	7.4	20.7	1.60	.090	.194	2.4	49	11
20...	0900	5750	9.7	7.2	22.5	.686	.099	.197	3.0	19	7
JUL											
11...	1030	2700	7.8	7.4	25.2	.156	.143	.257	3.5	23	11
25...	0930	1090	8.8	7.2	24.5	.082	.175	.346	6.6	29	15
AUG											
08...	1020	1790	8.8	7.3	25.4	.020	.205	.393	5.3	39	16
22...	0920	885	7.9	7.3	23.7	.124	.180	.359	4.8	39	13
SEP											
12...	1000	955	9.9	7.5	21.7	.224	.214	.365	2.8	34	11

PHOSPHORUS, ORTHO, WATER, FILTERED, POUNDS PER DAY
DAILY MEAN VALUES

2000	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TOTAL	3136.6	985.4	380.68	516.49	3286.08	1156.9	2120.5	23212.9	95630	47247	34625	39607
WTR YR 2000	TOTAL 251904.55											

PHOSPHORUS TOTAL, POUNDS PER DAY
DAILY MEAN VALUES

2000	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TOTAL	29703	15767	18780	12013	20586	90160	49897	93780	194710	88430	67110	68300
WTR YR 2000	TOTAL 749236											

SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (TONS PER DAY)
DAILY MEAN VALUES

[illegible]

ROCK RIVER BASIN

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05427718 YAHARA RIVER AT WINDSOR, WI

LOCATION.--Lat 43°12'32", long 89°21'09", in NW ¼ NE ¼ sec.31, T.9 N., R.10 E., Dane County, Hydrologic Unit 07090001, at bridge on road to Lake Windsor Country Club.

DRAINAGE AREA.--73.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1976 to December 1981, October 1989 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 870 ft above sea level, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	16	15	15	e14	23	15	16	444	21	19	17
2	20	16	16	15	e14	21	15	15	466	31	19	18
3	19	16	17	15	e14	19	15	14	343	64	18	18
4	19	15	19	15	e14	19	15	14	113	27	18	18
5	18	15	19	15	e14	19	14	14	95	24	24	17
6	18	15	17	15	e14	18	15	14	51	22	27	17
7	17	15	17	15	14	18	15	14	38	21	21	17
8	17	15	16	e15	e14	19	15	15	32	21	20	17
9	17	16	17	15	e14	19	16	15	29	22	19	17
10	17	16	17	19	e14	18	15	14	26	65	18	18
11	17	18	16	18	14	17	15	14	25	40	18	20
12	16	16	16	16	e14	17	15	36	24	25	18	21
13	16	16	16	e15	e14	17	15	21	44	22	18	19
14	17	16	16	e15	14	17	15	17	102	21	18	21
15	17	15	16	e14	14	17	15	16	47	20	18	20
16	17	15	16	14	14	17	15	15	31	20	17	19
17	17	15	15	e14	14	16	15	17	26	20	24	18
18	16	15	e16	14	e14	16	15	311	24	19	21	18
19	16	15	16	e14	14	17	16	160	23	19	19	18
20	16	15	16	e14	14	18	30	50	41	19	18	20
21	16	15	e16	e14	14	18	28	36	29	19	18	19
22	16	15	16	e14	24	17	20	28	24	18	18	22
23	16	23	e16	e14	87	17	41	23	22	18	18	25
24	16	21	e16	e14	72	17	27	20	24	18	18	21
25	16	17	e15	e14	39	17	21	19	27	18	17	19
26	16	16	e15	e14	73	17	18	18	24	18	21	19
27	16	16	e15	e14	40	17	17	18	22	18	20	18
28	16	15	e15	e14	27	16	16	19	22	18	18	18
29	16	15	e15	e14	24	16	16	19	22	19	18	18
30	16	15	15	e14	---	15	15	21	21	19	18	17
31	16	---	15	e14	---	15	---	124	---	20	18	---
TOTAL	520	479	498	456	680	544	535	1147	2261	746	594	564
MEAN	16.8	16.0	16.1	14.7	23.4	17.5	17.8	37.0	75.4	24.1	19.2	18.8
MAX	20	23	19	19	87	23	41	311	466	65	27	25
MIN	16	15	15	14	14	15	14	14	21	18	17	17
CFSM	.23	.22	.22	.20	.32	.24	.24	.50	1.02	.33	.26	.26
IN.	.26	.24	.25	.23	.34	.27	.27	.58	1.14	.38	.30	.29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2000, BY WATER YEAR (WY)

	MEAN	16.4	17.5	15.3	16.7	26.4	40.2	24.9	20.7	26.1	22.6	18.3	18.5
MAX	29.2	30.4	27.0	32.5	74.2	135	47.8	37.0	75.4	95.3	40.3	50.1	
(WY)	1994	1994	1994	1996	1994	1976	1993	2000	2000	1993	1993	1980	
MIN	7.75	8.78	8.54	6.50	4.76	11.8	14.1	7.71	7.48	7.12	7.29	7.12	
(WY)	1978	1978	1978	1978	1978	1978	1978	1977	1977	1977	1991	1977	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1976 - 2000

ANNUAL TOTAL	7882	9024	
ANNUAL MEAN	21.6	24.7	21.6
HIGHEST ANNUAL MEAN			39.1
LOWEST ANNUAL MEAN			10.9
HIGHEST DAILY MEAN	203	466	519
LOWEST DAILY MEAN	15 (a) Jul 14, 16	14 (b) Jan 16, 18	(c) 4.6
ANNUAL SEVEN-DAY MINIMUM	(c) 15 Jan 1	(c) 14 Jan 15	(c) 4.6
INSTANTANEOUS PEAK FLOW		752	2050
INSTANTANEOUS PEAK STAGE		6.08	6.58
INSTANTANEOUS LOW FLOW		(d) 7.3 Feb 8	(d) 2.9 Feb 25 1991
ANNUAL RUNOFF (CFSM)	.29	.33	.29
ANNUAL RUNOFF (INCHES)	3.98	4.56	3.99
10 PERCENT EXCEEDS	28	27	32
50 PERCENT EXCEEDS	19	17	16
90 PERCENT EXCEEDS	15	14	8.8

(a) Also occurred Nov. 4-8, 15-22, 28-30, Dec. 1, 17, 30, 31, and ice-affected period, Jan. 1-13, Dec. 25-29

(b) Also occurred Feb. 7, 11, 14-17, 19-21, Apr. 5, May 3-7, 10, 11, and ice-affected period, Jan. 15, 17, 19-31, Feb. 1-6, 8-10, 12, 13, 18

(c) Ice affected

(d) Result of freezeup

(e) Estimated due to ice effect or missing record

ROCK RIVER BASIN

05427718 YAHARA RIVER AT WINDSOR, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1975 to September 1980, October 1989 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: March 1990 to current year.

TOTAL-PHOSPHORUS DISCHARGE: March 1990 to current year.

TOTAL ORTHO-PHOSPHORUS DISCHARGE: October 1990 to September 1992.

INSTRUMENTATION.--Water-quality sampler since March 1990.

REMARKS.--Records good. Samples are point samples unless otherwise indicated.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 7,070 mg/L, June 29, 1990; minimum observed, 4.0 mg/L, Aug. 24, 1994, and Mar. 1, 1999.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 1,280 tons, July 5, 1993; minimum daily, 0.16 ton, Jan. 6-7, 1991.

TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 5.10 mg/L, June 7, 1993; minimum observed, 0.01 mg/L, Jan. 31, 1991, and Oct. 29, 1997.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 3,240 lb, Feb. 20, 1994; minimum daily, 0.70 lb, Nov. 13-15, 1997.

TOTAL ORTHO-PHOSPHORUS CONCENTRATIONS: Maximum observed, 1.10 mg/L, Mar. 2, 3, 1991; minimum observed, <0.01 mg/L, Nov. 13, 1990 and June 26, 1994.

TOTAL ORTHO-PHOSPHORUS DISCHARGE: Maximum daily, 1,260 lb, Mar. 2, 1991; minimum daily, 0.49 lb, Nov. 26, 1990.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 2,470 mg/L, May 18; minimum observed, 6 mg/L, Nov. 16.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 880 tons, June 1; minimum daily, 0.24 ton, Nov. 17-22.

TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 3.04 mg/L, May 18; minimum observed, 0.04 mg/L, Nov. 16.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 3,630 lb, June 1; minimum daily, 3.18 lb, Nov. 18 and 21.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.78	.69	1.3	.32	.38	2.5	1.8	.74	880	4.6	1.1	.80
2	1.3	.67	1.4	.32	.38	2.2	1.8	.68	538	34	1.1	.87
3	1.0	.66	1.5	.32	.38	2.0	1.8	.64	197	80	1.0	.96
4	.99	.65	1.5	.32	.38	1.9	1.8	.62	47	9.5	.99	1.0
5	.96	.65	1.1	.32	.38	1.8	1.8	.59	32	7.0	3.9	1.0
6	.93	.64	.75	.32	.38	1.7	1.8	.57	10	5.5	3.5	1.1
7	.91	.63	.52	.32	.39	1.7	1.9	.55	5.8	4.5	1.0	1.2
8	.90	.64	.38	.32	.38	1.6	1.9	.54	4.9	3.7	.84	1.3
9	.89	.64	.36	.32	.38	1.5	2.0	.53	3.9	3.3	.80	1.4
10	.87	.77	.37	.65	.38	1.3	2.0	.49	3.1	32	.76	1.5
11	.85	.98	.35	1.0	.38	1.2	1.9	.50	2.6	6.4	.74	4.2
12	.82	.60	.35	.50	.38	1.1	1.9	44	2.2	2.5	.73	12
13	.82	.49	.34	.48	.38	.97	1.9	5.5	37	2.2	.76	3.5
14	.82	.39	.34	.47	.38	.89	1.9	1.2	76	2.0	.74	1.6
15	.81	.31	.34	.44	.38	.83	2.0	.88	19	1.9	.73	1.5
16	.85	.25	.34	.44	.39	.77	2.0	.68	8.4	1.8	.71	1.1
17	.81	.24	.33	.43	.38	.68	2.0	3.1	2.7	1.7	2.4	.93
18	.79	.24	.35	.43	.38	.62	2.0	800	2.3	1.6	1.1	.75
19	.78	.24	.34	.42	.39	.59	3.1	83	2.3	1.6	.89	.61
20	.77	.24	.34	.41	.39	.59	18	5.7	22	1.5	.85	.57
21	.76	.24	.35	.41	.39	.67	4.9	4.6	11	1.5	.81	.44
22	.75	.24	.34	.40	11	.73	1.4	3.9	8.5	1.4	.80	.87
23	.74	14	.35	.40	64	.82	17	3.3	7.6	1.4	.77	2.0
24	.72	2.1	.35	.40	25	.98	3.4	3.0	9.2	1.3	.75	1.5
25	.73	1.5	.32	.39	7.0	1.1	1.2	2.9	13	1.3	.72	1.2
26	.71	1.4	.32	.39	23	1.2	1.0	2.9	9.2	1.3	1.3	1.1
27	.70	1.4	.32	.38	5.9	1.5	.95	3.1	7.6	1.2	1.3	.94
28	.70	1.4	.32	.38	3.2	1.6	.87	3.3	6.8	1.2	.94	.85
29	.70	1.3	.32	.38	2.7	1.8	.83	3.3	6.1	1.2	.71	.76
30	.70	1.3	.32	.38	---	1.8	.77	4.2	5.2	1.2	.70	.68
31	.69	---	.32	.38	---	1.8	---	182	---	1.2	.76	---
TOTAL	25.55	35.50	16.23	12.84	149.83	40.44	87.62	1167.01	1980.4	221.5	34.20	48.23

WTR YR 2000 TOTAL 3819.35

05427718 YAHARA RIVER AT WINDSOR, WI--Continued

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.70	3.93	9.63	4.19	3.48	25.3	5.68	10.7	3630	29.0	6.44	7.95
2	8.93	3.81	9.13	4.26	3.48	20.0	5.78	9.93	2790	99.1	6.23	8.71
3	6.97	3.72	9.19	4.20	3.48	16.6	5.87	9.54	1560	336	5.98	9.58
4	6.86	3.63	9.97	4.14	3.48	14.2	5.93	9.25	332	58.5	5.84	9.95
5	6.56	3.61	9.67	4.18	3.48	12.4	5.92	9.03	249	44.1	20.7	10.4
6	6.32	3.52	7.83	4.09	3.48	10.6	6.13	8.79	107	35.5	28.8	11.0
7	6.13	3.45	6.47	4.02	3.59	9.35	6.33	8.57	65.6	29.8	16.4	11.8
8	6.03	3.46	5.54	4.09	3.48	8.44	6.69	8.57	51.0	25.6	14.4	12.7
9	5.94	3.42	5.43	3.99	3.48	8.32	7.09	8.54	40.3	23.3	13.7	13.6
10	5.79	3.82	5.52	9.19	3.48	7.90	7.00	8.02	31.5	164	12.9	14.6
11	5.57	8.06	5.18	15.6	3.46	7.56	6.93	7.99	26.4	117	12.5	24.0
12	5.37	5.90	5.15	5.83	3.48	7.27	7.00	139	21.9	41.3	12.2	40.4
13	5.30	5.14	5.03	5.45	3.48	7.23	7.06	31.2	128	33.7	12.6	22.2
14	5.27	4.44	4.95	5.31	3.52	7.17	7.23	14.1	355	29.0	12.2	16.5
15	5.22	3.83	5.02	4.84	3.54	7.27	7.40	11.6	97.9	25.4	11.8	13.8
16	5.39	3.36	5.00	4.80	3.57	7.23	7.50	9.84	46.8	22.5	11.4	12.1
17	5.13	3.21	4.77	4.60	3.50	6.88	7.68	15.9	25.7	20.1	22.5	11.2
18	4.93	3.18	4.96	4.60	3.48	6.79	7.81	2690	21.3	17.6	18.4	10.4
19	4.84	3.21	4.79	4.38	3.55	7.03	11.4	546	19.4	15.9	15.8	9.70
20	4.74	3.20	4.84	4.27	3.55	7.45	49.6	102	79.6	14.4	14.9	10.4
21	4.68	3.18	4.87	4.16	3.58	7.57	33.1	54.8	44.1	13.0	13.9	9.30
22	4.57	3.19	4.80	4.06	54.5	7.04	13.2	34.0	31.8	11.7	13.5	13.3
23	4.46	43.0	4.81	3.96	820	6.72	73.4	28.2	27.1	10.6	12.9	20.9
24	4.34	22.5	4.78	3.86	487	6.77	29.8	25.8	32.8	9.57	12.3	16.1
25	4.34	16.9	4.46	3.77	129	6.71	16.5	24.6	51.1	8.76	11.7	13.6
26	4.22	15.0	4.43	3.67	241	6.31	14.1	24.2	38.1	7.94	15.6	11.8
27	4.12	13.7	4.40	3.58	86.9	6.34	12.9	25.5	34.5	7.21	13.5	10.3
28	4.09	12.3	4.38	3.50	39.6	5.95	12.0	27.1	33.4	6.63	9.43	9.18
29	4.06	11.1	4.35	3.44	30.5	5.64	11.6	27.0	32.8	6.57	7.07	8.25
30	4.05	10.2	4.31	3.48	---	5.53	10.9	32.5	30.5	6.68	7.04	7.37
31	3.97	---	4.23	3.48	---	5.58	---	744	---	6.97	7.60	---
TOTAL	163.89	230.97	177.89	147.03	1962.12	275.15	409.53	4706.27	10034.6	1277.43	400.23	401.09

WTR YR 2000 TOTAL 20186.20

ROCK RIVER BASIN

05427718 YAHARA RIVER AT WINDSOR, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST, CUBIC FEET PER SECOND (00061)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
OCT							
01...	1636	--	17	--	.062	17	10
NOV							
11...	0115	--	21	--	.135	40	50
16...	1305	--	15	--	.040	6	10
23...	0815	--	18	--	.098	20	50
23...	1000	--	26	--	.144	42	50
23...	1100	--	37	--	1.24	1270	50
23...	1900	--	27	--	.212	74	50
24...	1115	--	19	--	.201	32	50
DEC							
04...	0215	--	20	--	.096	33	50
05...	0500	--	20	--	.101	24	50
08...	1540	--	16	--	.061	8	10
JAN							
11...	0900	--	18	--	.263	31	50
28...	1624	14	--	--	.046	10	50
FEB							
22...	1730	--	25	--	.481	135	50
22...	2000	--	42	--	.639	280	50
23...	0015	--	62	.460	.967	408	50
23...	0815	--	61	--	1.71	154	50
23...	1300	--	96	--	1.86	379	50
23...	1445	--	118	.996	2.01	338	50
23...	2230	--	102	--	1.85	214	50
24...	1137	--	76	--	1.18	113	10
24...	1140	--	77	.784	1.16	119	50
25...	0115	--	49	--	.801	74	50
25...	1715	--	33	--	.463	42	50
26...	0030	--	62	--	.554	148	50
26...	0400	--	92	.332	.653	171	50
26...	1045	--	78	--	.654	105	50
27...	0030	--	52	--	.508	64	50
28...	0030	--	32	--	.284	44	50
MAR							
08...	1050	--	19	--	.083	33	10
20...	1515	--	18	--	.078	12	50
29...	1700	--	16	--	.066	44	10
APR							
19...	0815	--	14	--	.100	50	50
20...	0230	--	21	--	.219	137	50
20...	0700	--	36	--	.425	374	50
20...	0800	--	44	--	.479	472	50
20...	1215	--	32	--	.267	211	50
21...	0415	--	31	--	.271	88	50
22...	1215	--	20	--	.102	17	50
23...	0700	--	28	--	.154	60	50
23...	0900	--	44	--	.281	111	50
23...	1130	--	64	--	.425	250	50
23...	2345	--	39	--	.326	113	50
24...	1406	--	25	--	.150	23	50

05427718 YAHARA RIVER AT WINDSOR, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
MAY						
12...	0115	19	--	.255	96	50
12...	0315	27	--	.401	337	50
12...	0345	41	--	.744	638	50
12...	0415	49	--	.750	623	50
12...	1130	45	--	.987	587	50
12...	1745	34	--	.624	315	50
13...	0145	24	--	.445	233	50
13...	1745	19	--	.173	31	50
17...	1230	15	--	.104	13	50
17...	2200	23	--	.225	122	50
17...	2345	49	.138	.444	308	50
18...	0115	96	--	.772	516	50
18...	0300	152	.159	.705	512	50
18...	0430	190	--	.675	407	50
18...	0815	263	.240	.792	379	50
18...	0915	370	--	1.61	1350	50
18...	1029	425	--	1.98	1650	10
18...	1030	426	--	2.89	2470	50
18...	1215	495	.326	3.04	2070	50
18...	1700	394	--	1.41	615	50
19...	0315	263	.364	.738	233	50
19...	0845	183	--	.584	182	50
19...	1411	123	--	.526	174	50
19...	1413	122	--	.513	172	10
20...	0015	67	.183	.421	40	50
22...	0730	29	--	.223	52	50
30...	1400	27	--	.277	68	50
31...	0630	25	--	.312	106	50
31...	1200	32	--	.243	59	50
31...	1315	88	.177	.464	199	50
31...	1345	123	--	.994	417	50
31...	1430	163	--	1.01	712	50
31...	1615	244	--	1.19	634	50
31...	1715	274	.321	1.59	930	50
JUN						
01...	0030	228	--	.898	288	50
01...	0330	312	--	.805	240	50
01...	0415	435	--	1.34	954	50
01...	0530	512	.332	1.57	1080	50
01...	0830	574	--	1.94	447	50
01...	1228	440	--	.873	266	10
01...	1229	440	--	.874	269	50
01...	1830	312	.309	.789	245	50
01...	1930	505	--	1.63	1350	50
01...	2215	622	--	2.98	1890	50
01...	2315	752	.449	2.35	1310	50
02...	0445	510	--	1.13	434	50
02...	0956	419	--	.924	317	50
02...	0957	419	--	.851	313	10
02...	1800	407	--	.872	265	50
03...	1000	385	--	.916	220	50
03...	2245	206	.333	.656	169	50
04...	1330	90	--	.489	147	50
04...	2400	108	--	.494	149	50
05...	1530	91	--	.494	120	50
06...	2115	43	--	.335	56	50
08...	1605	31	--	.287	56	50
13...	1300	24	--	.145	29	50
13...	1730	34	--	.258	81	50
13...	1915	73	.180	.742	508	50
13...	2100	101	.168	.957	666	50
13...	2215	132	--	.800	494	50
14...	0030	146	.205	.815	437	50
14...	0515	124	.192	.649	286	50
14...	0815	104	--	.709	286	50
14...	1600	88	.213	.571	209	50
15...	0345	55	--	.408	156	50
16...	0345	33	--	.320	137	50
17...	1145	26	--	.171	32	50
20...	0745	31	--	.220	69	50
20...	1030	53	--	.443	335	50
20...	1115	68	--	.559	444	50
20...	1600	50	--	.375	184	50
21...	0800	30	--	.275	138	50
24...	2100	34	--	--	206	50
25...	0615	28	--	--	192	50

ROCK RIVER BASIN

05427718 YAHARA RIVER AT WINDSOR, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
JUL						
02...	2045	46	--	--	227	50
02...	2145	77	.179	.835	734	50
02...	2330	125	.170	1.45	1210	50
03...	0045	152	.255	1.40	975	50
03...	0345	128	.367	1.27	541	50
03...	0545	87	.321	.826	335	50
03...	0900	52	--	--	233	50
04...	0715	28	--	--	131	50
10...	0600	28	--	.207	74	50
10...	0730	39	--	.303	117	50
10...	0945	80	--	.486	345	50
10...	1130	108	--	.614	365	50
10...	1430	89	--	.430	182	50
11...	0345	57	--	.677	66	50
12...	0030	27	--	.322	38	50
28...	1134	18	--	.066	24	10
AUG						
05...	1600	24	--	.170	42	50
05...	1945	35	--	.255	88	50
05...	2030	45	--	.301	145	50
06...	0145	31	--	.226	68	50
07...	1058	21	--	.139	16	50
17...	0545	21	--	.175	42	50
17...	0945	29	--	.209	54	50
17...	1745	24	--	.169	34	50
18...	0945	21	--	.162	18	50
26...	1430	23	--	.162	32	50
29...	1451	18	--	.070	14	10
SEP						
11...	1130	20	--	.165	33	50
12...	0115	24	--	.434	316	50
14...	1045	25	--	.139	23	50
14...	2145	21	--	.132	31	50
22...	1300	20	--	.085	7	50
22...	1815	29	--	.143	23	50
23...	0215	27	--	.157	32	50
24...	0215	22	--	.149	27	50

05427948 PHEASANT BRANCH AT MIDDLETON, WI

LOCATION.--Lat 43°06'12", long 89°30'42", in NE ¼ NW ¼ sec.11, T.7 N., R.8 E., Dane County, Hydrologic Unit 07090001, on left bank at bridge on U.S. Highway 12, 2.5 mi upstream from Lake Mendota, at Middleton.

DRAINAGE AREA.--18.3 mi², of which 1.22 mi² is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1974 to current year.

GAGE.--Water-stage recorder, crest-stage gage, parshall flume, and concrete control. Datum of gage is 901.5 ft above sea level.

REMARKS.--Records good (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	1.7	1.7	1.6	1.4	3.3	1.9	2.3	352	3.0	7.4	2.3
2	2.9	1.7	1.7	2.0	1.5	3.0	1.9	2.1	323	6.7	3.8	2.1
3	2.7	1.7	2.6	1.8	1.5	2.9	1.9	2.0	56	14	2.5	3.4
4	2.7	1.7	2.5	1.7	1.5	2.8	1.7	1.9	36	3.0	2.1	2.2
5	2.3	1.7	2.6	1.5	1.5	2.7	1.6	1.9	58	2.8	46	2.0
6	2.1	1.7	2.1	1.6	1.5	2.6	1.6	1.9	21	2.9	26	1.9
7	1.9	1.7	1.9	1.6	1.5	2.5	2.5	1.9	10	2.8	4.4	1.9
8	2.0	1.7	1.8	1.6	1.5	2.5	2.7	3.5	5.4	2.8	3.3	1.9
9	1.9	1.7	2.3	1.7	1.5	3.0	3.1	3.1	4.2	3.4	2.9	1.8
10	1.8	2.3	2.1	2.7	1.6	2.4	2.8	2.3	3.6	21	2.6	1.8
11	1.8	2.0	1.8	2.2	1.5	2.3	2.4	2.5	3.4	6.9	2.5	19
12	1.7	1.8	1.8	1.8	1.4	2.1	2.1	6.9	3.3	3.6	2.5	7.3
13	1.8	1.7	1.8	1.8	1.5	2.2	2.0	3.3	130	3.1	2.6	3.6
14	1.8	1.7	1.8	1.6	1.5	2.1	1.9	2.4	97	2.9	2.4	3.9
15	2.3	1.6	1.8	1.6	1.6	2.4	1.8	2.0	30	2.7	2.2	3.3
16	3.3	1.6	1.8	1.6	1.9	2.1	1.8	1.8	18	2.6	2.1	2.8
17	1.8	1.6	1.6	1.5	1.7	1.9	1.7	11	8.2	2.5	11	2.5
18	1.8	1.7	1.6	1.5	1.6	2.0	1.7	224	4.7	2.5	3.3	2.3
19	1.9	1.7	1.6	1.5	1.6	2.6	5.4	81	3.8	2.4	2.7	2.5
20	1.8	1.8	1.6	1.5	1.6	3.2	30	24	28	2.6	2.4	3.5
21	1.8	1.8	1.4	1.3	1.7	3.2	15	13	12	2.5	2.2	2.6
22	1.7	1.8	1.4	1.4	7.0	2.8	5.4	6.8	4.6	2.4	2.2	8.5
23	1.7	7.1	1.4	1.4	54	2.6	12	4.1	3.7	2.4	2.3	15
24	1.7	3.7	1.4	1.2	34	2.7	6.4	3.3	9.6	2.3	2.2	4.4
25	1.7	2.4	1.5	1.3	20	2.4	3.8	3.1	7.4	2.1	2.1	3.4
26	1.7	2.2	1.5	1.3	41	2.4	3.2	2.9	4.3	2.3	17	3.1
27	1.7	2.0	1.6	1.2	17	2.4	3.0	7.5	3.6	2.1	4.7	2.8
28	1.7	1.9	1.6	1.2	7.6	2.2	2.9	21	3.8	2.0	3.2	2.6
29	1.7	1.8	1.7	1.3	4.7	2.0	2.6	8.6	3.5	2.0	2.9	2.4
30	1.8	1.7	1.7	1.3	---	1.9	2.3	9.6	3.2	2.3	2.6	2.3
31	1.8	---	1.6	1.4	---	1.9	---	118	---	2.3	2.5	---
TOTAL	61.3	61.2	55.3	48.7	217.9	77.1	129.1	579.7	1251.3	118.9	178.6	119.1
MEAN	1.98	2.04	1.78	1.57	7.51	2.49	4.30	18.7	41.7	3.84	5.76	3.97
MAX	3.3	7.1	2.6	2.7	54	3.3	30	224	352	21	46	19
MIN	1.7	1.6	1.4	1.2	1.4	1.9	1.6	1.8	3.2	2.0	2.1	1.8
CFSM	.12	.12	.10	.09	.44	.15	.25	1.09	2.44	.22	.34	.23
IN.	.13	.13	.12	.11	.47	.17	.28	1.26	2.73	.26	.39	.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2000, BY WATER YEAR (WY)

	MEAN	2.55	3.16	2.31	2.60	6.52	10.6	5.65	4.01	6.90	5.62	3.31	3.62
MAX	6.42	12.3	6.11	7.75	20.4	34.6	16.8	18.7	41.7	32.5	8.78	13.0	
(WY)	1987	1986	1985	1997	1994	1993	1999	2000	2000	1993	1993	1980	
MIN	.86	.67	.34	.36	.46	1.63	.95	.96	.92	.94	1.07	.74	
(WY)	1977	1991	1990	1991	1978	1981	1990	1977	1989	1976	1976	1976	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1974 - 2000

ANNUAL TOTAL	2042.15	2898.2	
ANNUAL MEAN	5.59	7.92	4.75
HIGHEST ANNUAL MEAN			11.0
LOWEST ANNUAL MEAN			2.78
HIGHEST DAILY MEAN	193	352	352
LOWEST DAILY MEAN	(a).85	(a)1.2	.17
ANNUAL SEVEN-DAY MINIMUM	(a)1.3	1.3	.18
INSTANTANEOUS PEAK FLOW		902	902
INSTANTANEOUS PEAK STAGE		9.44	9.44
INSTANTANEOUS LOW FLOW		(a)1.2	.15
ANNUAL RUNOFF (CFSM)	.33	.46	.28
ANNUAL RUNOFF (INCHES)	4.45	6.31	3.78
10 PERCENT EXCEEDS	9.3	9.7	6.4
50 PERCENT EXCEEDS	2.8	2.3	1.9
90 PERCENT EXCEEDS	1.7	1.6	.82

(a) Result of freezeup

(b) Also occurred Jan. 24 and 27-29

05427948 PHEASANT BRANCH AT MIDDLETON, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: October 1977 to current year.

TOTAL-PHOSPHORUS DISCHARGE: January 1992 to December 1993, and October 1994 to current year.

TOTAL ORTHO-PHOSPHORUS DISCHARGE: January to September 1992.

INSTRUMENTATION.--Automatic pumping sampler since December 1977.

REMARKS.--Records good. Samples are point samples unless otherwise indicated.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 15,400 mg/L, Apr. 30, 1984; minimum observed, 4 mg/L, Mar. 12, 1979, and May 11, 1995.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 2,870 tons, June 10, 1984; minimum daily, 0.01 ton, on many days in 1990 and 1991 water years.

TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 15.1 mg/L, July 4, 1994; minimum observed, 0.03 mg/L, Jan. 28, 1998.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 4,310 lb, May 18, 2000; minimum daily, 0.19 lb, Jan. 14, 31, 1998.

TOTAL ORTHO-PHOSPHORUS CONCENTRATIONS: Maximum observed, 2.40 mg/L, Feb. 29, 1992; minimum observed, 0.03 mg/L, May 22, 1992 and Aug. 5, 2000.

TOTAL ORTHO-PHOSPHORUS DISCHARGE: Maximum daily, 966 lb, Feb. 28, 1992; minimum daily, 0.13 lb, Sept. 13, 1992.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 2,170 mg/L, Aug. 5; minimum observed, 10 mg/L, June 17.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 885 tons, June 1; minimum daily, 0.04 ton, Jan. 21 to Feb. 2.

TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 12.1 mg/L, May 18; minimum observed, 0.06 mg/L, Jan. 26 and Feb. 21.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 4,310 lb, May 18; minimum daily, 0.41 lb, Jan. 27, 28.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.22	.14	.12	.06	.04	.11	.16	.14	885	.13	1.7	.20
2	.28	.13	.12	.07	.04	.11	.16	.13	608	1.6	.28	.19
3	.22	.13	.17	.06	.05	.12	.16	.12	36	3.9	.14	.31
4	.21	.13	.16	.06	.05	.13	.14	.11	16	.53	.10	.20
5	.18	.13	.16	.05	.05	.14	.13	.11	30	.25	48	.18
6	.16	.13	.13	.06	.05	.14	.13	.11	4.7	.22	8.9	.17
7	.15	.13	.11	.05	.05	.15	.19	.11	.78	.20	.36	.17
8	.15	.13	.10	.05	.05	.17	.21	1.4	.17	.19	.19	.16
9	.15	.14	.13	.06	.05	.22	.23	.60	.14	.23	.12	.16
10	.14	.18	.11	.09	.05	.19	.20	.29	.12	3.6	.10	.16
11	.13	.16	.10	.08	.05	.20	.17	.22	.11	.58	.10	9.5
12	.13	.14	.09	.06	.05	.21	.15	2.1	.11	.25	.09	.76
13	.13	.14	.09	.06	.05	.23	.14	.39	253	.20	.10	.20
14	.13	.13	.09	.05	.05	.25	.13	.25	78	.18	.09	.21
15	.17	.13	.09	.05	.05	.28	.12	.18	8.9	.17	.08	.16
16	.31	.13	.08	.05	.06	.24	.12	.14	2.1	.15	.08	.12
17	.16	.13	.07	.05	.05	.22	.11	1.1	.34	.14	1.8	.10
18	.14	.13	.07	.05	.05	.22	.11	297	.23	.13	.23	.09
19	.14	.13	.07	.05	.05	.28	2.0	52	.40	.12	.19	.09
20	.14	.14	.07	.05	.05	.34	22	6.7	16	.13	.16	.11
21	.13	.14	.06	.04	.05	.34	2.0	3.1	1.6	.12	.15	.08
22	.13	.14	.06	.04	.57	.29	.43	1.5	.20	.11	.14	.86
23	.13	.85	.05	.04	23	.26	1.3	.80	.14	.10	.14	1.4
24	.13	.44	.06	.04	12	.26	.40	.59	3.2	.09	.14	.32
25	.13	.25	.06	.04	3.3	.24	.23	.50	1.9	.08	.12	.27
26	.13	.20	.06	.04	17	.23	.19	.43	.31	.09	10	.26
27	.13	.17	.06	.04	2.4	.22	.18	1.2	.15	.08	.35	.25
28	.13	.14	.06	.04	.38	.20	.17	7.2	.16	.08	.24	.25
29	.13	.13	.06	.04	.15	.18	.16	2.0	.15	.08	.22	.25
30	.14	.12	.06	.04	---	.17	.14	3.2	.14	.09	.21	.24
31	.14	---	.06	.04	---	.17	---	256	---	.09	.21	---
TOTAL	4.89	5.31	2.78	1.60	59.84	6.51	31.96	639.72	1948.05	13.91	74.73	17.42

WTR YR 2000 TOTAL 2806.72

05427948 PHEASANT BRANCH AT MIDDLETON, WI--Continued

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.05	.73	1.22	.70	.49	3.70	.79	2.87	2850	3.39	11.8	3.16
2	2.33	.70	1.22	.84	.50	3.16	.79	2.69	2480	8.51	4.18	2.81
3	1.56	.69	1.80	.75	.50	2.84	.78	2.54	305	50.0	2.55	4.32
4	1.32	.69	1.69	.70	.51	2.60	.71	2.44	162	6.90	2.16	2.73
5	.98	.69	1.74	.63	.50	2.35	.67	2.37	224	4.70	228	2.38
6	.82	.68	1.38	.65	.50	2.12	.66	2.38	50.8	4.29	97.4	2.20
7	.76	.67	1.21	.63	.50	1.94	.99	2.38	20.1	3.85	9.29	2.11
8	.78	.68	1.14	.63	.51	1.80	1.09	4.47	9.49	3.47	5.26	2.04
9	.77	.69	1.41	.66	.52	2.01	1.22	3.82	7.43	3.98	3.54	1.99
10	.73	.92	1.25	1.06	.54	1.53	1.08	2.68	6.34	32.9	3.03	1.99
11	.71	.79	1.08	.86	.52	1.34	.94	2.72	5.94	21.4	2.94	42.8
12	.69	.69	1.04	.70	.49	1.19	.83	7.40	5.76	9.03	2.87	17.6
13	.71	.68	1.00	.67	.50	1.13	.77	3.55	690	5.83	2.97	6.67
14	.71	.67	.97	.60	.50	1.05	.73	2.64	537	5.07	2.68	5.30
15	.92	.64	.97	.61	.53	1.18	.69	2.10	74.9	4.53	2.45	4.24
16	2.21	.64	.93	.60	.63	1.02	.66	1.95	30.6	4.08	2.23	3.56
17	1.11	.63	.84	.56	.57	.92	.65	35.9	10.8	3.77	12.9	3.11
18	.86	.64	.78	.56	.56	.94	.63	4310	5.61	3.43	4.01	2.78
19	.83	.65	.78	.55	.54	1.21	5.95	379	4.57	3.21	3.31	2.90
20	.80	.68	.77	.53	.53	1.46	87.5	56.1	58.4	3.21	2.93	3.93
21	.78	.68	.66	.47	.56	1.48	32.8	21.2	18.5	3.00	2.67	2.82
22	.75	.67	.67	.48	16.2	1.28	5.47	8.40	5.89	2.71	2.59	11.4
23	.73	6.87	.63	.49	537	1.16	12.6	4.59	4.45	2.48	2.67	31.6
24	.72	4.04	.66	.43	216	1.20	7.71	3.65	13.7	2.27	2.58	9.96
25	.72	2.42	.67	.45	68.0	1.09	4.73	3.36	16.0	1.96	2.39	5.55
26	.73	2.00	.70	.44	210	1.06	3.98	3.12	6.03	2.09	85.3	4.25
27	.72	1.73	.69	.41	52.0	1.05	3.76	11.8	4.03	1.83	13.8	3.48
28	.73	1.46	.69	.41	12.7	.96	3.66	40.4	4.28	1.79	5.26	2.85
29	.73	1.36	.74	.43	5.66	.87	3.26	11.4	3.96	1.75	4.41	2.40
30	.75	1.28	.75	.46	---	.82	2.92	15.9	3.61	1.98	3.90	2.24
31	.74	---	.71	.49	---	.80	---	1170	---	1.96	3.59	---
TOTAL	29.75	36.36	30.79	18.45	1128.56	47.26	189.02	6123.82	7619.19	209.37	535.66	195.17

WTR YR 2000 TOTAL 16,163.23

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDEED (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
OCT						
01...	1130	2.0	--	.194	41	10
16...	0630	10	--	.144	38	50
NOV						
08...	1145	1.7	--	.074	29	10
23...	1110	12	--	.222	50	50
JAN						
26...	1315	1.3	--	.063	11	10
FEB						
21...	0905	1.6	--	.063	12	10
22...	2020	13	--	.366	27	50
23...	0245	31	--	1.54	74	50
23...	1045	46	--	1.70	108	50
23...	1930	77	--	2.29	273	50
23...	2125	57	--	1.82	180	50
24...	0610	31	--	1.11	112	50
24...	0927	38	--	.902	179	10
24...	0928	38	--	.855	189	50
24...	1410	43	--	1.36	145	50
25...	0010	26	--	.947	79	50
25...	1810	12	--	.441	22	50
25...	2325	43	--	.514	132	50
26...	0325	53	--	1.20	225	50
26...	2125	31	--	.773	88	50
28...	2125	5.9	--	.231	11	50
MAR						
14...	1500	2.1	--	.090	44	10
APR						
19...	0555	1.7	--	.068	23	10
19...	1210	22	--	.274	231	50
20...	0135	10	--	.164	38	50
20...	0215	25	--	.067	558	50
20...	0240	70	--	.186	852	1270
20...	0415	47	--	.114	211	50
20...	1324	29	--	.821	280	50
20...	1325	29	--	---	195	10
22...	0815	5.3	--	.170	28	50
23...	0720	22	--	.191	65	50
24...	0720	7.2	--	.227	22	50
MAY						
08...	1030	8.3	--	.238	260	50
12...	0100	19	--	.199	190	50

ROCK RIVER BASIN

05427948 PHEASANT BRANCH AT MIDDLETON, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
MAY						
18...	0755	130	.237	.855	284	50
18...	0845	203	.352	1.34	522	50
18...	0945	275	.274	1.37	503	50
18...	1100	313	.381	12.1	1020	50
18...	1445	255	.703	3.31	921	50
18...	2215	185	.524	1.39	274	50
19...	0200	141	--	--	360	50
19...	0645	102	.431	.902	--	50
19...	1435	62	--	.621	127	50
19...	1436	61	--	.605	182	10
20...	0700	27	--	.455	101	50
22...	1345	6.5	--	.213	80	50
27...	0600	17	--	.195	50	50
28...	0015	6.5	--	.526	86	50
28...	0355	33	--	.412	204	50
29...	1630	6.4	--	.214	--	50
30...	2215	12	--	.830	465	50
31...	0640	52	--	1.92	300	50
31...	0641	52	--	1.94	435	10
31...	1300	104	.626	1.59	627	50
31...	1805	220	.559	2.12	1070	50
JUN						
01...	0345	276	--	1.48	696	50
01...	0730	388	.369	2.01	1250	50
01...	1345	270	.699	1.66	547	50
01...	1815	129	.541	1.09	276	50
01...	1850	254	.294	1.94	1930	50
01...	1905	407	.268	1.98	1910	50
01...	2000	568	.089	.684	827	50
01...	2230	749	.193	1.42	1210	50
01...	2330	821	--	1.40	1160	50
02...	0030	875	.198	1.22	940	50
02...	0400	776	--	1.50	734	50
02...	0545	590	.631	1.80	723	50
02...	0945	203	--	1.44	493	50
02...	1500	123	.462	1.20	406	50
03...	1445	52	--	.966	208	50
04...	1500	30	--	.800	152	50
05...	0745	80	--	.784	229	50
08...	0245	6.3	--	.328	12	50
13...	1615	26	--	.488	461	50
13...	1640	136	.058	1.25	1360	50
13...	1740	289	.109	.756	648	50
13...	1855	370	--	1.03	1060	50
13...	1940	424	.100	.996	940	50
13...	2015	472	--	.973	833	50
13...	2100	515	.205	.939	698	50
14...	0015	360	--	1.19	454	50
14...	0215	193	.658	1.36	395	50
14...	1115	73	--	.816	202	50
15...	1730	25	--	.384	92	50
17...	1815	6.6	--	.220	10	50
20...	0625	20	--	.223	69	50
20...	0725	56	--	.437	346	50
21...	2000	6.9	--	.248	18	50
24...	1515	19	--	.208	48	50
24...	1530	35	--	.250	190	50
25...	0945	7.0	--	.477	98	50
JUL						
02...	2110	36	--	.279	238	50
03...	0015	15	--	.204	33	50
03...	0200	29	--	.195	18	50
03...	0800	20	--	1.22	226	50
03...	1415	9.8	--	.817	126	50
09...	1215	8.1	--	.212	24	50
10...	0730	36	--	.219	73	50
10...	1345	30	--	.264	72	50
11...	0800	6.6	--	.677	27	50
26...	1300	2.2	--	.164	14	10
AUG						
01...	0845	33	--	.330	159	50
01...	0900	41	--	.376	142	50
02...	0245	5.6	--	.201	28	50
05...	1500	20	--	.331	526	50
05...	1530	86	--	.832	684	50
05...	1535	122	.031	1.73	1410	50
05...	1540	154	.036	2.56	2170	50
05...	1550	178	--	2.22	1950	50
05...	1645	131	.120	.477	257	50
06...	0115	61	--	.824	184	50
07...	0115	5.7	--	.434	35	50
17...	0420	20	--	.229	93	50
26...	0845	20	--	.211	56	50
26...	0905	59	--	.609	248	50
26...	0915	83	--	1.19	468	50
27...	0015	8.8	--	.713	27	50

05427948 PHEASANT BRANCH AT MIDDLETON, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
SEP					
03...	1030	12	.233	33	50
08...	1040	1.9	.199	32	10
11...	0940	35	.321	251	50
11...	1015	83	.885	678	50
11...	1030	97	.789	528	50
11...	1215	33	.332	69	50
11...	1815	28	.305	118	50
12...	1230	6.2	.528	23	50
20...	0100	8.1	.210	12	50
22...	1340	20	.285	69	50
22...	1945	12	.237	21	50
22...	2330	29	.246	49	50
23...	0530	20	.363	34	50
23...	2345	6.4	.493	26	50
29...	1345	2.5	.179	38	10

ROCK RIVER BASIN

05427965 SPRING HARBOR STORM SEWER AT MADISON, WI

LOCATION.--Lat 43°04'45", long 89°28'15", in NW 1/4 SE 1/4 sec.18, T.7 N., R.9 E., Dane County, Hydrologic Unit 07090001, in city park near the junction of Spring Harbor Drive and University Avenue in Madison.

DRAINAGE AREA.--3.29 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1976 to current year.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 855.3 ft above sea level.

REMARKS.--Records good except those for periods of flow between 0.00 ft³/s and 0.3 ft³/s and flow greater than 100 ft³/s, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.22	.00	.02	.01	.06	.33	.13	.17	63	.17	17	.00
2	1.1	.00	.00	.37	.06	.20	.02	.10	28	5.7	1.4	.00
3	1.5	.00	1.2	.13	.05	.12	.00	.31	2.1	4.3	.43	3.8
4	1.2	.00	1.2	.13	.09	.09	.00	.22	4.7	.39	.26	.59
5	.29	.00	1.3	.12	.03	.01	.00	.11	28	.18	32	.26
6	.14	.00	.38	.08	.03	.00	.00	.00	1.6	.19	12	.19
7	.12	.00	.23	.08	.04	.00	2.4	.00	.27	.18	1.1	.11
8	.13	.00	.13	.06	.06	.00	2.7	2.2	.09	.11	.26	.02
9	.09	.00	1.1	.10	.15	.37	1.5	3.0	.00	1.4	.15	.00
10	.09	2.7	.67	1.4	.22	.13	.83	.91	.00	17	.02	.00
11	.05	.84	.35	.22	.03	.09	.45	3.0	.00	1.3	.00	19
12	.04	.27	.26	.09	.03	.05	.35	9.8	.04	.34	.11	3.6
13	.08	.15	.07	.06	.03	.10	.50	.56	38	.22	.24	.52
14	.08	.06	.00	.14	.07	.07	2.5	.18	23	.16	.05	2.1
15	.02	.00	.01	.13	.14	1.6	.11	.01	3.1	.04	.00	.45
16	3.2	.00	.01	.10	.13	.57	.05	.00	.67	.00	.03	.37
17	.79	.00	.00	.08	.09	.35	.00	22	.28	.00	15	.25
18	.26	.00	.00	.10	.09	.25	.00	69	.13	.00	1.5	.15
19	.27	.00	.00	.24	.09	1.6	8.6	15	.01	.00	.37	.93
20	.29	.00	.00	.05	.11	2.1	18	.86	14	.16	.14	1.5
21	.13	.00	.00	.07	.22	.80	5.4	.24	1.5	.07	.01	.84
22	.09	.00	.01	.04	4.7	.38	.42	.10	.30	.02	.03	13
23	.00	9.5	.00	.04	10	.25	6.6	.00	.13	.00	.00	9.3
24	.00	.99	.00	.05	15	.46	.78	.00	2.2	.16	.00	.75
25	.00	.20	.00	.04	9.7	.16	.22	.00	1.4	.02	.03	.38
26	.00	.16	.00	.05	20	.73	.16	.01	.58	.54	9.3	.25
27	.00	.15	.00	.07	1.6	.36	.02	10	.31	.08	1.3	.13
28	.03	.08	.00	.10	.52	.24	.52	11	1.5	.20	.39	.11
29	.00	.09	.09	.05	.38	.17	.32	.90	.80	.12	.18	.18
30	.00	.12	.03	.07	---	.22	.17	12	.33	1.5	.06	.06
31	.00	---	.00	.08	---	.21	---	42	---	1.1	.00	---
TOTAL	10.21	15.31	7.06	4.35	63.72	12.01	52.75	203.68	216.04	35.65	93.36	58.84
MEAN	.33	.51	.23	.14	2.20	.39	1.76	6.57	7.20	1.15	3.01	1.96
MAX	3.2	9.5	1.3	1.4	20	2.1	18	69	63	17	32	19
MIN	.00	.00	.00	.01	.03	.00	.00	.00	.00	.00	.00	.00
CFSM	.10	.16	.07	.04	.67	.12	.53	2.00	2.19	.35	.92	.60
IN.	.12	.17	.08	.05	.72	.14	.60	2.30	2.44	.40	1.06	.67

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2000, BY WATER YEAR (WY)

	MEAN	1.10	1.22	.53	.54	1.34	2.12	1.94	1.62	2.58	2.20	1.91	1.68
MAX	3.19	3.64	1.99	1.73	3.60	6.97	6.26	6.57	7.20	6.51	4.24	4.97	
(WY)	1985	1993	1985	1990	1994	1993	1999	2000	2000	1993	1981	1980	
MIN	.11	.027	.000	.000	.050	.19	.54	.25	.33	.30	.36	.11	
(WY)	1995	1977	1990	1977	1978	1999	1985	1994	1987	1976	1988	1976	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1976 - 2000

ANNUAL TOTAL	587.15	772.98	
ANNUAL MEAN	1.61	2.11	1.58
HIGHEST ANNUAL MEAN			3.09
LOWEST ANNUAL MEAN			.97
HIGHEST DAILY MEAN	60	Apr 23	69
LOWEST DAILY MEAN	.00	Many days	.00
ANNUAL SEVEN-DAY MINIMUM	.00	(a)Jan 1	.00
INSTANTANEOUS PEAK FLOW			648
INSTANTANEOUS PEAK STAGE			3.89
ANNUAL RUNOFF (CFSM)	.49		.64
ANNUAL RUNOFF (INCHES)	6.64		8.74
10 PERCENT EXCEEDS	3.8		4.0
50 PERCENT EXCEEDS	.18		.14
90 PERCENT EXCEEDS	.00		.00

(a) Also occurred Aug. 29, Oct. 29, and Nov. 15

(b) Also occurred Nov. 15

(c) Annual seven-day minimum flows are 0.00 for most years

05427965 SPRING HARBOR STORM SEWER AT MADISON, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1976 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: October 1991 to current year.

INSTRUMENTATION.--Automatic pumping sampler.

REMARKS.--Records good. Samples are point samples unless otherwise indicated.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 3,870 mg/L, July 4, 1994; minimum observed, 1 mg/L, Aug. 6, 1993, Sept. 15, 1998, and July 26, 1999.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 137 tons, June 17, 1996; minimum daily, 0.00 ton, on many days.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 2,350 mg/L, June 1; minimum observed, 1 mg/L, May 31.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 84 tons, June 1; minimum daily, 0.00 ton, on many days.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.01	.00	.00	84	.00	15	.00
2	.02	.00	.00	.00	.00	.00	.00	.00	6.1	5.1	.01	.00
3	.03	.00	.07	.00	.00	.00	.00	.00	.17	.15	.00	.76
4	.01	.00	.05	.00	.00	.00	.00	.00	.55	.00	.00	.02
5	.00	.00	.03	.00	.00	.00	.00	.00	8.3	.00	32	.01
6	.00	.00	.01	.00	.00	.00	.00	.00	.04	.00	.59	.00
7	.00	.00	.00	.00	.00	.00	.16	.00	.01	.00	.03	.00
8	.00	.00	.00	.00	.00	.00	.14	.29	.00	.00	.01	.00
9	.00	.00	.04	.00	.00	.01	.05	.12	.00	.19	.00	.00
10	.00	.60	.01	.03	.00	.00	.02	.01	.00	3.0	.00	.00
11	.00	.03	.00	.00	.00	.00	.01	3.6	.00	.01	.00	5.7
12	.00	.01	.00	.00	.00	.00	.01	2.7	.00	.00	.00	.22
13	.00	.00	.00	.00	.00	.00	.02	.01	38	.00	.00	.01
14	.00	.00	.00	.00	.00	.00	.46	.00	2.0	.00	.00	.20
15	.00	.00	.00	.00	.00	.46	.00	.00	.06	.00	.00	.01
16	.18	.00	.00	.00	.00	.03	.00	.00	.01	.00	.00	.01
17	.01	.00	.00	.00	.00	.01	.00	33	.00	.00	3.7	.00
18	.00	.00	.00	.00	.00	.01	.00	18	.00	.00	.05	.00
19	.00	.00	.00	.00	.00	.09	1.7	1.4	.00	.00	.01	.05
20	.00	.00	.00	.00	.00	.05	6.5	.06	2.3	.00	.00	.05
21	.00	.00	.00	.00	.00	.02	.24	.01	.01	.00	.00	.01
22	.00	.00	.00	.00	.96	.01	.01	.00	.00	.00	.00	4.1
23	.00	.91	.00	.00	2.1	.01	.38	.00	.00	.00	.00	.61
24	.00	.02	.00	.00	6.1	.02	.01	.00	.19	.00	.00	.00
25	.00	.00	.00	.00	7.9	.00	.00	.00	.01	.00	.00	.00
26	.00	.00	.00	.00	12	.07	.00	.00	.01	.01	4.9	.00
27	.00	.00	.00	.00	.06	.01	.00	.99	.00	.00	.01	.00
28	.00	.00	.00	.00	.01	.01	.01	.23	.52	.00	.00	.00
29	.00	.00	.00	.00	.01	.00	.01	.01	.02	.00	.00	.00
30	.00	.00	.00	.00	---	.01	.00	2.8	.01	.44	.00	.00
31	.00	---	.00	.00	---	.01	---	4.2	---	.01	.00	---
TOTAL	0.25	1.57	0.21	0.03	29.14	0.84	9.73	67.43	142.31	8.91	56.31	11.76

WTR YR 2000 TOTAL 328.49

ROCK RIVER BASIN

05427965 SPRING HARBOR STORM SEWER AT MADISON, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
OCT				
03...	1705	5.3	15	50
16...	0555	14	34	50
NOV				
10...	1655	17	41	50
10...	2000	6.7	234	50
23...	0735	4.1	10	50
23...	0910	22	66	50
23...	1520	10	8	50
23...	2130	4.2	8	50
DEC				
03...	1720	4.0	30	50
09...	1650	4.4	25	50
FEB				
22...	1420	15	172	50
22...	2030	5.3	28	50
23...	0240	7.4	22	50
23...	0850	6.8	35	50
23...	1500	18	146	50
24...	0320	4.4	282	50
24...	0515	21	362	50
24...	0820	36	292	50
24...	1217	20	52	50
24...	1218	20	48	10
24...	2040	7.8	28	50
24...	2345	5.3	22	50
25...	1940	40	2040	50
25...	2245	38	166	50
26...	0005	85	1270	50
26...	0215	43	192	50
26...	1130	14	52	50
26...	1435	22	104	50
26...	2045	5.7	33	50
MAR				
15...	1355	8.3	260	50
19...	1425	5.0	43	50
26...	2020	4.6	72	50
APR				
07...	1325	4.7	26	50
08...	1325	4.7	27	50
14...	0035	14	93	50
14...	0340	7.5	69	50
19...	1045	28	213	50
19...	1655	11	14	50
19...	2305	5.7	9	50
20...	0130	46	658	50
20...	0155	80	568	50
20...	0335	43	118	50
20...	0600	19	31	50
20...	1820	6.0	20	50
20...	2125	18	39	50
21...	0945	4.6	9	50
23...	0730	24	41	50
23...	1645	4.1	7	50

05427965 SPRING HARBOR STORM SEWER AT MADISON, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
MAY				
08...	1820	9.8	165	50
09...	1450	12	51	50
09...	1755	4.3	4	50
11...	2325	47	1530	50
11...	2330	86	621	50
12...	0020	47	438	50
12...	0125	24	90	50
12...	0430	15	18	50
12...	1345	5.2	8	50
17...	2030	29	162	50
17...	2105	131	237	50
17...	2125	328	748	50
17...	2145	171	1020	50
17...	2300	111	430	50
17...	2400	163	286	50
18...	0350	93	93	50
18...	0810	111	200	50
18...	1515	27	42	50
18...	1730	99	78	50
18...	1935	61	57	50
18...	2240	68	46	50
19...	0145	37	37	50
19...	2015	5.6	26	50
27...	0205	23	108	50
27...	0355	5.6	14	50
27...	0500	32	85	50
27...	1720	4.9	5	50
28...	0240	24	24	50
28...	1155	13	3	50
28...	2110	3.9	4	50
30...	0740	22	112	50
30...	0855	80	226	50
30...	0940	43	184	50
30...	1035	21	33	50
30...	2255	5.2	2	50
30...	2320	45	222	50
31...	0225	41	13	50
31...	1035	3.9	1	50
31...	1300	89	83	50
31...	1800	29	18	50
31...	1920	67	54	50

ROCK RIVER BASIN

05427965 SPRING HARBOR STORM SEWER AT MADISON, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
JUN				
01...	0130	44	14	50
01...	0315	247	482	50
01...	0325	175	362	50
01...	0330	276	824	50
01...	0345	208	830	50
01...	0520	67	141	50
01...	1740	15	26	50
01...	1835	77	240	50
01...	1845	262	431	50
01...	1910	285	2350	50
01...	1950	68	1410	50
01...	2005	412	1070	50
01...	2140	101	423	50
02...	0915	36	80	50
03...	0345	4.2	30	50
04...	1915	21	72	50
05...	0115	68	211	50
05...	0725	33	44	50
05...	1335	18	20	50
06...	0155	3.9	10	50
13...	1555	35	284	50
13...	1615	369	812	50
13...	1705	136	445	50
13...	1730	275	585	50
13...	1740	291	1000	50
13...	1835	118	270	50
13...	2015	76	116	50
13...	2100	110	131	50
14...	0350	41	33	50
14...	1305	13	22	50
14...	1515	38	54	50
14...	2325	9.7	14	50
15...	0535	4.8	6	50
20...	0525	45	124	50
20...	0705	102	163	50
20...	0815	32	62	50
20...	1120	17	9	50
20...	2340	4.2	3	50
24...	1640	9.7	60	50
28...	2215	10	1410	50
JUL				
02...	2020	73	864	50
02...	2220	29	109	50
03...	0735	5.3	2	50
09...	1035	13	231	50
10...	0440	35	159	50
10...	0630	75	89	50
10...	0810	41	89	50
10...	1045	19	14	50
10...	2305	5.0	4	50
30...	1635	24	373	50
30...	1735	5.5	88	50

05427965 SPRING HARBOR STORM SEWER AT MADISON, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
AUG				
01...	0725	32	392	50
01...	0815	417	775	50
01...	0825	214	1090	50
01...	0855	51	293	50
01...	1040	25	47	50
01...	1345	15	13	50
01...	2300	4.6	4	50
05...	1345	6.6	46	50
05...	1500	110	661	50
05...	1505	347	517	50
05...	1515	496	990	50
05...	1525	125	1090	50
05...	1540	407	583	50
05...	1640	105	298	50
05...	2055	43	46	50
06...	0915	13	12	50
06...	1830	5.1	13	50
17...	0315	34	185	50
17...	0340	65	324	50
17...	0645	36	47	50
17...	0950	14	16	50
17...	2210	5.3	12	50
26...	0835	60	340	50
26...	0840	98	310	50
26...	0900	80	808	50
26...	1120	22	36	50
26...	2035	4.7	6	50
SEP				
03...	0755	65	334	50
03...	0815	20	103	50
03...	1030	4.9	21	50
11...	0905	33	235	50
11...	0940	148	233	50
11...	1040	54	164	50
11...	1215	30	42	50
11...	1825	18	28	50
12...	0645	4.3	25	50
14...	0300	22	91	50
14...	0445	5.0	40	50
20...	0055	4.3	16	50
22...	1155	22	74	50
22...	1500	24	32	50
22...	2110	11	18	50
22...	2235	79	185	50
22...	2320	48	261	50
23...	0100	23	35	50
23...	0710	13	14	50
23...	1320	5.8	10	50

ROCK RIVER BASIN

05428000 LAKE MENDOTA AT MADISON, WI

LOCATION.--Lat 43°05'42", long 89°22'12", in SE ¼ sec.12, T.7 N., R.9 E., Dane County, Hydrologic Unit 07090001, in city boat house at dam at outlet, in Madison.

DRAINAGE AREA.--233 mi². Area of Lake Mendota, 15.2 mi².

PERIOD OF RECORD.--December 1902 to May 1903, January 1916 to current year (incomplete).

REVISED RECORDS.--WDR WI-73-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 840.00 ft above sea level, or 5.60 ft below City of Madison datum. Prior to Oct. 1, 1979, at datum 7.82 ft higher; prior to Nov. 15, 1971, nonrecording gage at same site.

REMARKS.--Lake level regulated by concrete dam with two 12-foot gates and 20-foot lock at outlet. Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height observed, 12.75 ft, June 5, 2000; minimum observed, 8.02 ft, Feb. 24 to Mar. 10, 1920, current datum.

EXTREMES FOR CURRENT YEAR.--Maximum recorded gage height, 12.75 ft, June 5; minimum recorded, 9.15 ft, Jan. 1, 19.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.73	9.66	9.32	9.20	9.26	9.67	9.65	10.23	11.55	11.90	10.89	10.47
2	9.75	9.64	9.32	9.21	9.26	9.65	9.66	10.22	12.14	11.86	10.88	10.45
3	9.75	9.60	9.33	9.21	9.26	9.63	9.68	10.20	12.48	11.94	10.84	10.46
4	9.75	9.57	9.35	9.24	9.26	9.60	9.69	10.19	12.62	11.94	10.79	10.44
5	9.75	9.56	9.37	9.22	9.26	9.58	9.68	10.17	12.73	11.92	10.81	10.39
6	9.76	9.54	9.34	9.23	9.26	9.56	9.69	10.15	12.73	11.89	10.93	10.35
7	9.74	9.52	9.32	9.22	9.27	9.53	9.71	10.14	12.68	11.84	10.92	10.33
8	9.76	9.51	9.32	9.22	9.26	9.52	9.76	10.14	12.63	11.79	10.89	10.32
9	9.76	9.50	9.33	9.22	9.27	9.52	9.76	10.16	12.57	11.79	10.87	10.29
10	9.77	9.51	9.33	9.24	9.27	9.50	9.76	10.14	12.50	11.84	10.83	10.28
11	9.77	9.52	9.31	9.25	9.27	9.47	9.78	10.12	12.44	11.85	10.79	10.33
12	9.76	9.51	9.31	9.23	9.27	9.44	9.78	10.16	12.37	11.82	10.75	10.41
13	9.77	9.50	9.30	9.23	9.30	9.42	9.78	10.17	12.38	11.79	10.73	10.39
14	9.75	9.50	9.30	9.23	9.30	9.42	9.79	10.12	12.58	11.76	10.70	10.40
15	9.75	9.47	9.30	9.23	9.31	9.44	9.80	10.08	12.59	11.71	10.67	10.37
16	9.79	9.45	9.30	9.23	9.30	9.45	9.82	10.06	12.57	11.66	10.62	10.34
17	9.79	9.44	9.28	9.23	9.31	9.44	9.82	10.09	12.50	11.61	10.63	10.31
18	9.77	9.42	9.27	9.22	9.33	9.44	9.82	10.50	12.45	11.52	10.63	10.29
19	9.77	9.42	9.26	9.23	9.34	9.48	9.87	10.79	12.37	11.44	10.60	10.27
20	9.77	9.41	9.30	9.24	9.34	9.50	10.00	10.91	12.35	11.39	10.57	10.28
21	9.76	9.39	9.25	9.24	9.34	9.52	10.06	10.95	12.34	11.32	10.54	10.25
22	9.78	9.38	9.24	9.25	9.35	9.53	10.07	10.97	12.27	11.25	10.52	10.25
23	9.74	9.44	9.23	9.25	9.38	9.53	10.15	10.99	12.20	11.19	10.51	10.30
24	9.71	9.45	9.23	9.25	9.47	9.55	10.21	11.00	12.16	11.12	10.50	10.29
25	9.70	9.42	9.22	9.24	9.53	9.59	10.22	10.96	12.14	11.07	10.48	10.26
26	9.71	9.42	9.22	9.24	9.64	9.59	10.22	10.93	12.10	11.03	10.52	10.24
27	9.69	9.42	9.21	9.24	9.68	9.62	10.22	10.95	12.07	11.00	10.54	10.22
28	9.69	9.40	9.20	9.24	9.69	9.64	10.23	10.97	12.02	10.98	10.52	10.20
29	9.68	9.38	9.20	9.24	9.68	9.63	10.23	10.95	11.99	10.94	10.51	10.17
30	9.67	9.35	9.20	9.26	---	9.64	10.24	10.95	11.95	10.91	10.49	10.15
31	9.66	---	9.20	9.26	---	9.65	---	11.12	---	10.89	10.48	---
MEAN	9.74	9.48	9.28	9.23	9.36	9.54	9.90	10.50	12.35	11.51	10.68	10.32
MAX	9.79	9.66	9.37	9.26	9.69	9.67	10.24	11.12	12.73	11.94	10.93	10.47
MIN	9.66	9.35	9.20	9.20	9.26	9.42	9.65	10.06	11.55	10.89	10.48	10.15

05429000 LAKE MONONA AT MADISON, WI

LOCATION.--Lat 43°03'48", long 89°23'49', in SW 1/4 sec.23, T.7 N., R.9 E., Dane County, Hydrologic Unit 07090001, in Brittingham Park, in Madison.

DRAINAGE AREA.--279 mi². Area of Lake Monona, 5.3 mi².

PERIOD OF RECORD.--September 1915 to current year (fragmentary) in reports of the Geological Survey. For 1856 to March 1917 in reports of Wisconsin Railroad Commission, volume 19.

REVISED RECORDS.--WSP 1338: Lake area. WDR WI-73-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 840.00 ft above sea level, or 5.60 ft below City of Madison datum. Prior to Oct. 1, 1979, datum 3.61 ft higher; prior to Nov. 15, 1971, nonrecording gage at same site.

REMARKS.--Lake level regulated by concrete dam with four 12-foot stop-log sections and 12-foot lock at outlet of Lake Waubesa. Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height observed, 7.48 ft, June 14, 15, 2000; minimum observed, 3.22 ft, Jan. 20, 1965, current datum.

EXTREMES FOR CURRENT YEAR.--Maximum recorded gage height, 7.48 ft, June 14, 15; minimum recorded, 3.78 ft, Feb. 11-13.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.99	4.73	4.28	3.92	3.83	4.57	4.46	5.20	6.21	7.19	6.15	5.88
2	4.96	4.73	4.27	3.92	3.83	4.59	4.48	5.19	6.67	7.19	6.14	5.86
3	4.91	4.77	4.27	3.92	3.82	4.60	4.46	5.19	6.86	7.33	6.11	5.88
4	4.87	4.81	4.28	3.93	3.81	4.62	4.43	5.18	6.94	7.31	6.08	5.87
5	4.82	4.80	4.28	3.92	3.81	4.63	4.48	5.18	7.06	7.26	6.15	5.83
6	4.79	4.76	4.27	3.91	3.81	4.64	4.44	5.17	7.10	7.21	6.32	5.80
7	4.74	4.72	4.27	3.90	3.80	4.64	4.51	5.17	7.11	7.15	6.30	5.77
8	4.70	4.67	4.26	3.90	3.80	4.65	4.53	5.17	7.12	7.08	6.27	5.76
9	4.68	4.63	4.26	3.89	3.80	4.66	4.55	5.17	7.11	7.02	6.24	5.75
10	4.65	4.62	4.25	3.90	3.79	4.66	4.58	5.18	7.09	7.08	6.20	5.74
11	4.61	4.61	4.25	3.89	3.79	4.66	4.57	5.18	7.09	7.07	6.17	5.86
12	4.59	4.57	4.24	3.89	3.78	4.66	4.58	5.23	7.08	7.01	6.14	5.97
13	4.58	4.54	4.24	3.88	3.81	4.65	4.61	5.17	7.15	6.94	6.13	5.95
14	4.58	4.50	4.23	3.87	3.81	4.57	4.60	5.14	7.44	6.89	6.11	5.94
15	4.58	4.46	4.22	3.87	3.82	4.52	4.61	5.14	7.47	6.83	6.08	5.90
16	4.61	4.44	4.18	3.86	3.81	4.47	4.62	5.14	7.45	6.77	6.05	5.86
17	4.60	4.41	4.16	3.86	3.81	4.43	4.61	5.17	7.42	6.71	6.12	5.82
18	4.61	4.40	4.13	3.85	3.83	4.42	4.61	5.69	7.40	6.67	6.09	5.79
19	4.60	4.37	4.11	3.85	3.84	4.43	4.68	5.94	7.38	6.63	6.05	5.77
20	4.59	4.35	4.07	3.86	3.83	4.44	4.84	5.93	7.43	6.59	6.02	5.74
21	4.59	4.34	4.05	3.85	3.83	4.44	4.89	5.87	7.41	6.56	5.98	5.70
22	4.55	4.32	4.04	3.86	3.83	4.44	4.96	5.81	7.38	6.53	5.95	5.72
23	4.52	4.39	4.02	3.86	3.86	4.45	5.09	5.72	7.37	6.50	5.92	5.79
24	4.55	4.40	4.01	3.85	3.98	4.46	5.14	5.61	7.37	6.47	5.91	5.76
25	4.55	4.39	4.00	3.85	4.12	4.41	5.15	5.53	7.38	6.39	5.89	5.73
26	4.55	4.37	3.98	3.84	4.35	4.44	5.16	5.50	7.37	6.33	5.93	5.69
27	4.57	4.35	3.97	3.84	4.45	4.43	5.17	5.55	7.31	6.28	5.96	5.66
28	4.59	4.33	3.96	3.83	4.50	4.42	5.18	5.54	7.28	6.24	5.93	5.63
29	4.63	4.30	3.95	3.83	4.55	4.43	5.20	5.51	7.25	6.20	5.91	5.59
30	4.67	4.29	3.94	3.83	---	4.44	5.19	5.57	7.21	6.17	5.90	5.56
31	4.71	---	3.93	3.84	---	4.45	---	5.78	---	6.15	5.88	---
MEAN	4.66	4.51	4.14	3.87	3.92	4.53	4.75	5.40	7.20	6.77	6.07	5.79
MAX	4.99	4.81	4.28	3.93	4.55	4.66	5.20	5.94	7.47	7.33	6.32	5.97
MIN	4.52	4.29	3.93	3.83	3.78	4.41	4.43	5.14	6.21	6.15	5.88	5.56

ROCK RIVER BASIN

05429500 YAHARA RIVER NEAR MCFARLAND, WI

LOCATION.--Lat 43°00'32", long 89°18'18", in SW 1/4 sec.3, T.6 N., R.10 E., Dane County, Hydrologic Unit 07090001, on left bank just upstream from bridge on U.S. Highway 51, at dam at outlet of Lake Waubesa and 1.0 mi southwest of McFarland.

DRAINAGE AREA.--327 mi².

PERIOD OF RECORD.--September 1930 to current year.

REVISED RECORDS.--WSP 805, WDR WI-73-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 840.00 ft above sea level (levels by Wisconsin Department of Natural Resources). September 1930 to Dec. 22, 1934, nonrecording gage at same site at datum 0.40 ft higher. Dec. 23, 1934 to Sept. 30, 1982, recording gage at same site at datum 0.40 ft higher.

REMARKS.--Records fair (see page 12). Flow regulated by dams at outlets of Lake Mendota and Lake Waubesa. The Madison Metropolitan Sewerage District diverted an average of 64 ft³/s of effluent into the Badfish Creek basin during 2000 water year. The data were provided by the Madison Metropolitan Sewerage District. Prior to 1958 the effluent was discharged into the Yahara River above McFarland. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	25	179	125	109	238	35	189	480	514	338	209
2	151	24	175	125	109	241	37	215	619	526	334	210
3	147	23	176	126	110	241	34	210	637	573	324	216
4	145	207	180	131	109	244	31	207	639	584	314	221
5	141	309	184	128	109	246	41	201	674	582	321	219
6	137	290	181	125	109	247	31	196	672	568	362	217
7	132	275	175	124	109	248	38	192	657	556	363	216
8	129	264	173	121	107	252	39	189	641	545	356	218
9	129	257	175	120	107	258	41	191	624	546	349	218
10	129	252	180	122	108	258	46	193	604	579	340	220
11	87	250	176	123	108	258	46	191	591	580	329	242
12	41	243	174	121	108	259	46	196	577	561	316	278
13	32	238	173	120	111	260	54	195	582	546	308	281
14	29	234	171	118	113	255	51	190	640	533	299	286
15	29	225	170	117	113	248	50	185	651	520	291	282
16	32	219	170	115	113	185	53	127	644	509	280	274
17	34	212	164	114	112	102	53	79	629	499	286	269
18	33	206	159	114	117	99	55	299	610	486	285	263
19	34	201	155	114	118	104	67	507	588	479	274	258
20	35	198	154	115	118	109	74	497	577	476	260	260
21	37	194	150	112	117	110	76	478	576	470	247	256
22	37	191	145	112	119	111	89	458	558	455	238	258
23	38	203	142	111	123	112	103	436	539	441	231	285
24	38	208	140	110	143	100	127	414	527	427	223	284
25	38	204	137	109	162	79	142	386	519	412	213	279
26	31	200	136	108	201	74	147	362	505	397	209	273
27	27	199	133	107	218	71	150	358	491	384	208	267
28	26	195	131	106	224	67	151	353	497	371	202	261
29	25	191	129	106	229	45	155	342	506	359	204	255
30	25	186	128	109	---	32	157	336	510	349	206	252
31	25	---	127	109	---	33	---	368	---	345	207	---
TOTAL	2126	6123	4942	3617	3753	5186	2219	8740	17564	15172	8717	7527
MEAN	68.6	204	159	117	129	167	74.0	282	585	489	281	251
MAX	153	309	184	131	229	260	157	507	674	584	363	286
MIN	25	23	127	106	107	32	31	79	480	345	202	209
CFSM	.21	.62	.49	.36	.40	.51	.23	.86	1.79	1.50	.86	.77
IN.	.24	.70	.56	.41	.43	.59	.25	.99	2.00	1.73	.99	.86

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2000, BY WATER YEAR (WY)

	MEAN	125	158	148	139	158	247	261	185	153	149	120	117
MAX	401	355	375	376	363	599	719	520	585	511	478	422	
(WY)	1981	1986	1986	1986	1938	1937	1959	1933	2000	1993	1993	1993	
MIN	4.09	27.4	36.5	34.0	31.6	67.4	25.5	42.1	15.6	16.0	15.9	13.8	
(WY)	1965	1940	1940	1977	1991	1934	1966	1958	1936	1965	1988	1964	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1930 - 2000

ANNUAL TOTAL	70883	85686	
ANNUAL MEAN	194	234	163
HIGHEST ANNUAL MEAN			336
LOWEST ANNUAL MEAN			63.8
HIGHEST DAILY MEAN	545	Apr 24	853
LOWEST DAILY MEAN	23	Nov 3	1.2
ANNUAL SEVEN-DAY MINIMUM	25	Oct 28	2.0
INSTANTANEOUS PEAK FLOW		(a) 681	(b) 867
INSTANTANEOUS PEAK STAGE		(c) 7.03	(c) 7.03
ANNUAL RUNOFF (CFSM)	.59	.72	.50
ANNUAL RUNOFF (INCHES)	8.06	9.75	6.79
10 PERCENT EXCEEDS	304	522	324
50 PERCENT EXCEEDS	183	196	138
90 PERCENT EXCEEDS	86	46	40

(a) Gage height, 6.57 ft

(b) Gage height, 5.82 ft, datum then in use

(c) Backwater from vegetation and channel slope

05430150 BADFISH CREEK NEAR COOKSVILLE, WI

LOCATION.--Lat 42°50'00", long 89°11'48", in SW ¼ SE ¼ sec.4, T.4 N., R.11 E., Rock County, Hydrologic Unit 07090001, on right bank, 20 ft upstream from bridge on State Highway 59, 2.2 mi east of Cooksville, and 2.2 mi above the mouth.

DRAINAGE AREA.--82.6 mi².

PERIOD OF RECORD.--July 1977 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 807.06 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Approximately 54 percent of flow is effluent from Nine Springs treatment plant (data provided by Madison Metropolitan Sewerage District). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	98	96	89	92	135	99	104	1110	117	147	104
2	100	99	98	87	91	125	99	103	741	118	126	96
3	100	97	102	94	93	119	100	101	296	147	111	98
4	109	98	102	94	94	115	101	101	222	124	107	93
5	104	98	112	91	90	111	99	101	262	120	132	96
6	102	93	105	92	90	112	98	99	208	120	195	95
7	100	93	101	92	93	114	105	98	177	116	129	94
8	100	98	100	90	93	117	107	107	164	111	120	96
9	101	99	104	92	94	122	107	113	156	111	116	94
10	97	100	112	108	95	115	108	117	140	196	110	94
11	97	104	98	105	93	108	104	109	136	148	107	152
12	100	100	96	99	89	105	102	113	139	129	101	209
13	100	98	98	98	93	105	101	105	147	121	102	124
14	99	97	98	94	94	104	100	100	228	119	103	127
15	101	98	100	93	94	106	100	101	181	113	106	113
16	111	97	98	91	96	105	94	107	160	107	103	105
17	102	96	97	90	95	102	96	108	146	109	128	101
18	103	92	92	95	97	100	98	239	136	108	114	102
19	102	95	91	93	92	104	112	313	134	108	106	102
20	100	91	93	89	93	122	149	169	141	108	100	106
21	102	90	e94	e90	97	121	211	143	137	109	100	107
22	102	95	93	88	115	114	140	138	129	104	106	112
23	98	131	91	88	235	110	131	128	127	102	107	142
24	97	121	89	e88	287	111	125	121	144	102	106	118
25	101	101	83	e90	197	107	119	117	147	104	104	114
26	100	91	77	90	313	102	114	117	134	105	102	110
27	98	90	85	90	195	105	109	135	128	105	101	106
28	100	89	91	90	151	104	106	167	126	105	100	104
29	100	96	93	88	137	103	105	139	125	102	102	101
30	98	96	92	89	---	102	102	150	121	100	102	98
31	95	---	90	92	---	102	---	474	---	107	103	---
TOTAL	3123	2941	2971	2859	3588	3427	3341	4337	6342	3595	3496	3313
MEAN	101	98.0	95.8	92.2	124	111	111	140	211	116	113	110
MAX	111	131	112	108	313	135	211	474	1110	196	195	209
MIN	95	89	77	87	89	100	94	98	121	100	100	93

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2000, BY WATER YEAR (WY)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	95.8	101	95.5	91.0	107	125	124	110	121	105	96.6	96.8												
MAX	139	162	129	122	163	190	193	205	252	171	133	139												
(WY)	1987	1986	1983	1988	1994	1993	1993	1999	1996	1993	1996	1993												
MIN	66.9	69.5	69.7	65.3	73.1	80.4	88.7	78.3	76.4	70.4	59.2	67.6												
(WY)	1978	1978	1979	1991	1979	1981	1990	1981	1991	1977	1977	1991												

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1977 - 2000
ANNUAL TOTAL	46510	43333	
ANNUAL MEAN	127	118	106
HIGHEST ANNUAL MEAN			136
LOWEST ANNUAL MEAN			80.4
HIGHEST DAILY MEAN	1110	1110	1450
LOWEST DAILY MEAN	77	77	35
ANNUAL SEVEN-DAY MINIMUM	87	87	48
INSTANTANEOUS PEAK FLOW		1430	2210
INSTANTANEOUS PEAK STAGE		9.08	10.18
10 PERCENT EXCEEDS	159	145	138
50 PERCENT EXCEEDS	109	102	96
90 PERCENT EXCEEDS	93	92	74

(e) Estimated due to ice effect or missing record

ROCK RIVER BASIN

05430175 YAHARA RIVER NEAR FULTON, WI

LOCATION.--Lat 42°49'35", long 89°10'19", in SE ¼ NE ¼ sec.10, T.4 N., R.11 E., Rock County, Hydrologic Unit 07090001, on left bank, 20 ft upstream from bridge on State Highway 59, 0.5 mi downstream from Badfish Creek, and 2.6 mi northwest of Fulton.

DRAINAGE AREA.--518 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1977 to current year.

REVISED RECORDS.--WDR WI-96-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 789.85 ft above sea level. July 1977 to April 1996, recording gage at site about 2,000 ft upstream at datum 2.85 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Diurnal fluctuation caused by powerplant at Stebbensville 1.5 mi upstream, and additional regulation from other dams and powerplants upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	323	217	380	255	e280	428	152	332	2060	650	704	353
2	335	216	375	237	e280	527	162	358	1810	658	676	391
3	351	213	348	280	e270	491	168	434	1250	722	646	392
4	333	207	335	299	269	495	172	387	1100	691	609	378
5	322	204	370	283	264	483	171	393	1180	693	634	373
6	341	202	372	289	261	475	175	437	1130	693	715	369
7	334	271	381	281	255	481	195	416	1080	692	635	364
8	324	450	380	287	250	481	196	426	1040	693	622	354
9	320	422	369	282	254	484	201	439	1030	698	612	337
10	327	415	385	294	244	479	202	459	1010	899	602	339
11	331	420	380	274	238	475	198	448	982	853	594	419
12	332	409	370	253	234	450	194	411	943	814	570	556
13	326	411	360	272	229	450	191	415	945	806	546	447
14	324	407	350	284	226	453	189	410	1060	806	544	445
15	318	408	363	289	219	441	186	403	1020	796	529	419
16	308	407	370	278	195	440	182	395	976	784	369	405
17	288	405	358	279	187	383	185	395	924	777	279	394
18	275	393	349	290	194	202	188	458	905	768	292	405
19	242	394	346	287	190	130	209	903	891	759	335	501
20	214	392	341	289	187	205	289	852	886	751	358	490
21	245	391	e340	e290	212	321	451	776	872	746	373	492
22	247	397	e320	e280	281	272	348	772	833	698	399	504
23	240	447	e310	e280	431	271	317	761	812	617	421	546
24	234	441	e310	e290	527	298	296	729	808	654	415	510
25	221	402	e300	e300	491	294	275	739	821	679	408	499
26	232	399	e290	e290	704	278	275	703	784	671	404	481
27	235	398	e280	e290	514	282	274	731	736	668	400	459
28	229	394	e290	e290	445	283	280	773	738	661	397	459
29	224	390	e310	e290	425	281	297	658	732	658	396	456
30	219	388	293	e290	---	223	394	705	691	652	394	450
31	216	---	258	e290	---	151	---	1160	---	653	401	---
TOTAL	8810	10910	10583	8762	8756	11407	7012	17678	30049	22360	15279	12987
MEAN	284	364	341	283	302	368	234	570	1002	721	493	433
MAX	351	450	385	300	704	527	451	1160	2060	899	715	556
MIN	214	202	258	237	187	130	152	332	691	617	279	337
CFSM	.55	.70	.66	.55	.58	.71	.45	1.10	1.93	1.39	.95	.84
IN.	.63	.78	.76	.63	.63	.82	.50	1.27	2.16	1.61	1.10	.93

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2000, BY WATER YEAR (WY)

	MEAN	349	409	387	334	368	460	469	410	383	346	306	325
MAX	596	711	558	542	585	760	1043	858	1002	862	760	696	
(WY)	1987	1986	1983	1986	1986	1994	1993	1993	2000	1993	1993	1993	
MIN	171	181	167	192	168	229	204	155	136	121	117	109	
(WY)	1991	1990	1990	1978	1991	1978	1978	1981	1988	1988	1988	1988	

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1977 - 2000
ANNUAL TOTAL	153387	164593	
ANNUAL MEAN	420	450	380
HIGHEST ANNUAL MEAN			629
LOWEST ANNUAL MEAN			262
HIGHEST DAILY MEAN	1940	2060	2880
LOWEST DAILY MEAN	149 (a) Mar 28	130	60
ANNUAL SEVEN-DAY MINIMUM	192	164	104
INSTANTANEOUS PEAK FLOW		2260	3230
INSTANTANEOUS PEAK STAGE		9.13	11.16
ANNUAL RUNOFF (CFSM)	.81	.87	.73
ANNUAL RUNOFF (INCHES)	11.02	11.82	9.98
10 PERCENT EXCEEDS	607	779	615
50 PERCENT EXCEEDS	380	389	346
90 PERCENT EXCEEDS	240	217	159

(a) Also occurred Apr. 2

(e) Estimated due to ice effect or missing record

WATER-QUALITY RECORDS

REMARKS.--Chemical analyses by the Wisconsin State Laboratory of Hygiene. Samples are composites of 3-5 verticals, collected by cooperators.

		DIS-CHARGE, IN CUBIC FEET PER SECOND (000060)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (000061)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDE (MG/L) (00535)
OCT												
05...	0930	--	316	10.8	7.3	14.0	4.24	.047	.131	1.4	17	7
19...	0930	--	265	13.5	7.3	13.5	4.66	.054	.126	.6	16	6
NOV												
02...	0930	--	221	10.4	7.2	12.0	6.40	.073	.163	1.8	23	7
16...	1030	--	414	11.4	7.4	10.8	3.32	.021	.092	1.0	19	7
DEC												
07...	0915	--	381	12.4	7.5	6.5	3.29	.049	.112	1.7	13	6
21...	0930	340	--	13.6	7.6	4.9	4.95	.073	.134	3.2	20	--
JAN												
05...	0930	--	284	11.3	7.6	4.4	4.41	.070	.125	1.7	16	9
18...	0900	--	284	9.5	7.4	5.1	3.71	.044	.093	1.3	10	<5
FEB												
01...	0915	280	--	7.9	7.5	5.5	5.66	.059	.135	2.1	18	<5
15...	0916	--	221	13.1	7.5	4.6	2.39	.024	.081	1.8	17	6
24...	0930	--	484	11.9	7.5	9.4	3.50	.182	.406	6.0	77	15
MAR												
07...	1005	--	491	10.7	7.3	15.4	4.14	.029	.145	3.2	55	12
21...	0900	--	342	12.1	7.3	10.3	2.46	<.002	.095	4.0	23	9
APR												
04...	0930	--	178	12.3	7.4	10.5	7.28	.011	.152	3.2	13	5
18...	0915	--	191	10.8	7.2	10.9	7.99	.064	.156	2.4	12	5
20...	0930	--	270	--	--	11.1	5.73	.077	.366	5.6	116	23
MAY												
02...	0900	--	354	8.9	7.3	17.8	4.21	.046	.196	2.7	70	15
16...	0930	--	414	6.8	7.4	17.8	2.02	.019	.104	2.5	34	9
25...	1330	--	739	8.5	7.2	21.4	1.33	.008	.135	3.6	50	13
JUN												
01...	0930	--	2260	8.8	7.3	19.3	2.74	.157	.446	3.5	152	26
06...	1245	--	1130	7.2	7.4	19.7	2.26	.115	.232	2.5	42	<10
20...	0915	--	892	9.8	7.2	22.9	.931	.030	.204	5.3	79	25
JUL												
11...	1000	--	853	8.1	7.4	24.8	.639	.063	.223	3.5	63	23
25...	1000	--	685	8.4	7.2	24.7	.532	.059	.206	3.5	55	18
AUG												
08...	1000	--	626	9.1	7.2	25.2	1.43	.170	.405	4.8	67	24
22...	0930	--	396	8.3	7.3	23.7	4.08	.066	.324	3.8	94	26
SEP												
12...	1015	--	556	11.0	7.5	20.7	2.69	.074	.307	3.5	75	21

2000	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TOTAL	2549.0	1997.6	3421.0	2634.8	2861.0	1053.11	1659.00	3840.4	12494	7023	5291.4	5140
WTR YR 2000	TOTAL 49964.31											

[illegible]

2000	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TOTAL	413.41	547.7	467.4	321.92	871.10	1200.48	958.66	3264.0	6044	3711.2	3246.9	2684.2
WTR YR 2000	TOTAL 23730.97											

ROCK RIVER BASIN

05430500 ROCK RIVER AT AFTON, WI

LOCATION.--Lat 42°36'33", long 89°04'14", in NE $\frac{1}{4}$ 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 mi².

PERIOD OF RECORD.--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. Datum of gage is 742.36 ft above sea level. 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.--Records good except those for estimated daily discharges, which are fair (see page 12), and periods of discharge below 800 ft³/s, which are poor (see page 12). Diurnal fluctuation caused by powerplants above station. Data-collection platform at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1670	1140	1370	e900	e860	3050	1750	2670	8690	3680	1700	1270
2	1720	1130	1310	e960	e840	3230	1730	2570	9450	3470	1750	1290
3	1760	1130	1480	960	e760	3380	1700	2510	9050	3540	1760	1290
4	1780	1110	1670	1020	e720	3310	1660	2450	8910	3440	1720	1320
5	1650	1070	1830	1020	e720	3360	1580	2290	9190	3450	1690	1310
6	1660	761	1770	1050	e800	3300	1680	2290	9290	3490	2060	1240
7	1710	773	1710	1150	e840	3230	1750	2190	9190	3510	1910	1180
8	1610	1010	1810	1160	e920	3190	1500	2160	9080	3450	2420	1150
9	1380	1070	1810	1170	1030	3090	1310	2240	8970	3400	2540	1170
10	1370	1050	1830	1180	1020	3210	1330	2180	8770	3670	2440	1080
11	1370	1130	1890	1180	1030	3110	1360	1950	8690	3700	2520	1170
12	1340	1120	1820	1230	999	3020	1190	1860	8800	3480	1980	1750
13	1290	1110	1820	1260	980	2940	1160	1820	8600	3320	1810	1980
14	1320	1120	e1800	1230	981	2860	1150	1820	8410	3180	1750	2070
15	1270	1270	e1800	1280	982	2990	1160	1930	8100	3080	1670	2000
16	1480	1150	e1700	1290	964	2970	1310	2290	7820	2970	1640	1940
17	1500	1060	e1600	1290	939	2970	1340	2360	7780	2830	1470	1860
18	1450	1190	e1500	1280	961	2690	1260	2720	7540	2790	1260	1840
19	1400	1150	e1400	e1200	1030	2530	1220	3450	7230	2740	1210	1780
20	1310	1070	e1300	e1200	1100	2440	1660	4070	6950	2620	1260	1520
21	1270	1230	e1200	e1200	1110	2410	1830	4680	6570	2500	1280	1460
22	1290	1220	e1100	e1100	1150	2360	1780	5250	6150	2280	1300	1620
23	1280	1300	e1000	e1100	1370	2280	1860	5680	6050	2080	1350	1940
24	1270	1270	e960	e1100	1650	2260	2110	5880	5780	2040	1360	1900
25	1220	1300	e960	e1000	1980	2160	2550	5960	5580	1960	1340	1960
26	1210	1320	e900	e980	2370	2050	2730	6150	5240	1660	1320	2390
27	1210	1330	e860	e980	2440	2000	2750	6370	4870	1490	1340	2350
28	1200	1360	e800	e980	2510	1970	2740	6620	4550	1610	1280	2330
29	1200	1380	e840	e900	2690	1990	2750	6390	4280	1440	1310	2220
30	1180	1400	e860	e860	---	1940	2680	6300	3990	1440	1410	2130
31	1150	---	e860	e860	---	1820	---	6790	---	1460	1310	---
TOTAL	43520	34724	43560	34070	35746	84110	52580	113890	223570	85770	51160	50510
MEAN	1404	1157	1405	1099	1233	2713	1753	3674	7452	2767	1650	1684
MAX	1780	1400	1890	1290	2690	3380	2750	6790	9450	3700	2540	2390
MIN	1150	761	800	860	720	1820	1150	1820	3990	1440	1210	1080
CFSM	.42	.35	.42	.33	.37	.81	.52	1.10	2.23	.83	.49	.50
IN.	.48	.39	.49	.38	.40	.94	.59	1.27	2.49	.96	.57	.56

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2000, BY WATER YEAR (WY)

	MEAN	1384	1568	1469	1309	1556	3336	4106	2585	1819	1438	1141	1191
MAX	8219	5884	4395	3558	5647	8958	10010	7911	7452	5443	5376	5088	
(WY)	1987	1986	1986	1960	1938	1918	1979	1973	2000	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 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1914 - 2000

ANNUAL TOTAL	886460	853210	
ANNUAL MEAN	2429	2331	1912
HIGHEST ANNUAL MEAN			3925
LOWEST ANNUAL MEAN			557
HIGHEST DAILY MEAN	6980	Apr 28	13000
LOWEST DAILY MEAN	568	Sep 9	42
ANNUAL SEVEN-DAY MINIMUM	757	Sep 8	115
INSTANTANEOUS PEAK FLOW			(a) 9540
INSTANTANEOUS PEAK STAGE			10.73
ANNUAL RUNOFF (CFSM)	.73		Jun 2
ANNUAL RUNOFF (INCHES)	9.87		(c) 13.05
10 PERCENT EXCEEDS	4170	4980	4050
50 PERCENT EXCEEDS	1930	1680	1340
90 PERCENT EXCEEDS	1010	1010	480

(a) Ice affected

(b) Gage height, 11.81 ft, present datum

(c) Present datum, backwater from ice

(e) Estimated due to ice effect or missing record

054310157 JACKSON CREEK TRIBUTARY NEAR ELKHORN, WI

LOCATION.--Lat 42°39'03", long 88°33'03", in NW ¼ NE ¼ sec.12, T.2 N., R.16 E., Walworth County, Hydrologic Unit 07090001, on left bank 20 ft downstream from Interstate Highway 43, 1.1 mi upstream from Delavan Lake inlet at Mound Road, and 1.5 mi south of Elkhorn.

DRAINAGE AREA.--4.34 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1983 to current year.

REVISED RECORDS.--WDR WI-89-1: 1988.

GAGE.--Water-stage recorder. Datum of gage is 924.70 ft above sea level (Wisconsin Department of Transportation bench mark). Prior to Dec. 4, 1992, at site 180 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.86	.56	.54	.45	.46	e1.6	.94	2.7	55	1.2	1.1	.13
2	.65	.53	.61	1.1	.45	e1.5	1.0	1.9	21	6.8	.47	.09
3	3.4	.49	.97	.64	.52	e1.4	1.0	1.7	6.8	14	.38	.24
4	1.8	.50	1.5	.68	.51	e1.5	.97	1.7	5.5	2.9	.34	e.10
5	.84	.54	4.8	e.60	.44	e1.4	.94	1.6	9.7	4.4	10	e.13
6	.64	.45	1.2	e.54	.40	e1.3	.93	1.4	5.0	3.7	3.1	e.14
7	.58	.41	.87	e.50	e.38	1.3	3.2	1.4	3.8	2.0	.78	e.12
8	.57	.53	.77	e.48	e.37	1.3	2.8	1.7	3.2	1.7	.49	e.12
9	.52	.56	1.2	.83	e.45	1.3	2.9	24	2.7	1.6	.39	e.12
10	.50	.92	1.0	2.6	.64	1.2	2.5	12	2.2	32	.31	e1.0
11	.52	.73	.70	1.2	.56	1.1	1.9	6.4	10	6.2	.26	18
12	.53	.60	.59	.77	.46	.99	1.6	5.3	42	3.2	.19	22
13	.47	.54	.63	e.62	.47	1.1	1.6	4.2	36	2.5	.77	1.6
14	.50	.41	.68	e.52	.54	1.1	1.6	3.5	26	2.1	.25	15
15	.55	.55	.84	e.48	.61	1.4	1.4	3.4	10	1.5	.22	2.6
16	1.6	.52	.64	e.45	.79	1.1	1.2	4.5	5.5	1.1	.19	1.2
17	.47	.55	.59	e.52	.63	1.0	1.1	7.8	3.7	1.2	4.4	.86
18	.48	.58	.52	.62	.79	.98	1.1	51	3.0	.96	.60	.75
19	.50	.65	.49	.57	.75	2.0	11	33	2.6	.89	.27	.69
20	.54	.63	e.45	e.52	.66	2.7	70	8.4	2.9	.72	.17	4.5
21	.57	.53	e.43	e.48	1.0	1.6	24	5.2	2.4	.62	.17	1.5
22	.64	.61	e.42	e.45	8.5	1.4	8.1	9.5	1.9	.52	.26	12
23	.51	1.4	e.41	e.43	9.7	1.3	8.0	4.9	2.0	.41	.29	45
24	.50	.63	e.40	e.42	18	2.1	5.3	3.5	2.4	.36	.21	7.5
25	.56	.70	e.39	e.40	6.6	1.5	3.8	2.8	1.7	.35	.20	3.2
26	.55	.63	e.38	e.45	6.7	1.3	3.2	2.6	1.5	.33	.19	2.2
27	.57	.51	e.37	1.1	4.5	1.5	2.8	6.3	1.4	4.0	.13	1.8
28	.59	.47	e.36	.47	2.7	1.1	2.5	7.7	1.7	.69	.17	1.5
29	.61	.50	.59	.44	e1.9	.93	2.3	4.5	1.6	.36	.18	1.3
30	.53	.49	.52	.43	---	.98	1.9	7.5	1.4	.28	.16	1.1
31	.49	---	.51	.47	---	.97	---	16	---	2.7	.14	---
TOTAL	22.64	17.72	24.37	20.23	70.48	41.95	171.58	248.1	274.6	101.29	26.78	146.49
MEAN	.73	.59	.79	.65	2.43	1.35	5.72	8.00	9.15	3.27	.86	4.88
MAX	3.4	1.4	4.8	2.6	18	2.7	70	51	55	32	10	45
MIN	.47	.41	.36	.40	.37	.93	.93	1.4	1.4	.28	.13	.09
CFSM	.17	.14	.18	.15	.56	.31	1.32	1.84	2.11	.75	.20	1.13
IN.	.19	.15	.21	.17	.60	.36	1.47	2.13	2.35	.87	.23	1.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2000, BY WATER YEAR (WY)

	MEAN	2.15	3.70	2.52	1.97	3.61	4.70	5.07	3.63	3.44	2.20	1.57	2.51
MAX	7.23	13.3	6.55	4.62	8.81	10.7	14.4	8.00	9.42	5.39	5.59	10.8	
(WY)	1986	1986	1985	1999	1985	1986	1993	2000	1996	1992	1995	1986	
MIN	.30	.58	.49	.45	.33	1.13	1.28	.79	.54	.44	.30	.27	
(WY)	1995	1990	1990	1994	1989	1996	1989	1989	1988	1988	1988	1987	

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1984 - 2000

ANNUAL TOTAL	995.04	1166.23	
ANNUAL MEAN	2.73	3.19	
HIGHEST ANNUAL MEAN			3.08
LOWEST ANNUAL MEAN			5.74
HIGHEST DAILY MEAN	102	Jun 13	70
LOWEST DAILY MEAN	.25	Sep 6	.09
ANNUAL SEVEN-DAY MINIMUM	.36	Sep 4	.13
INSTANTANEOUS PEAK FLOW			124
INSTANTANEOUS PEAK STAGE			9.05
ANNUAL RUNOFF (CFSM)	.63		.73
ANNUAL RUNOFF (INCHES)	8.53		10.00
10 PERCENT EXCEEDS	4.8		6.8
50 PERCENT EXCEEDS	1.1		.95
90 PERCENT EXCEEDS	.43		.37

(e) Estimated due to ice effect or missing record

ROCK RIVER BASIN

054310157 JACKSON CREEK TRIBUTARY NEAR ELKHORN, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1983 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: October 1983 to current year.

DISSOLVED AMMONIA NITROGEN DISCHARGE: February 1993 to September 1995.

TOTAL AMMONIA PLUS ORGANIC NITROGEN DISCHARGE: Water years 1984-85 and February 1993 to September 1995.

DISSOLVED NITRITE PLUS NITRATE DISCHARGE: February 1993 to September 1995.

TOTAL NITRITE PLUS NITRATE DISCHARGE: Water years 1984-85.

TOTAL-PHOSPHORUS DISCHARGE: October 1983 to current year.

DISSOLVED ORTHO-PHOSPHORUS DISCHARGE: February 1993 to September 1995.

INSTRUMENTATION.--Automatic pumping sampler since October 1983.

REMARKS.--Records good.

COOPERATION.--Observer furnished by Delavan Lake Sanitary District.

EXTREMES FOR PERIOD OF RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 5,520 mg/L, Aug. 7, 1984; minimum observed, 1 mg/L, on several days during 1984, May 12, 1990, and May 11, 1995.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 136 tons, June 17, 1996; minimum daily, 0.00 ton, on several days in 1994, 1995, 1997 and 2000 water years.

DISSOLVED AMMONIA NITROGEN CONCENTRATIONS: Maximum observed, 1.00 mg/L, Jan. 24, 1994; minimum observed, <0.015 mg/L, on many days in 1995 water year.

DISSOLVED AMMONIA NITROGEN DISCHARGE: Maximum daily, 298 lb, Mar. 23, 1993; minimum daily, 0.02 lb, Jan. 8-11 and July 1-2, 1995.

TOTAL AMMONIA PLUS ORGANIC NITROGEN CONCENTRATIONS: Maximum observed, 16 mg/L, Nov. 19, 1983; minimum observed, 0.10 mg/L, Oct. 12, 1984.

TOTAL AMMONIA PLUS ORGANIC NITROGEN DISCHARGE: Maximum daily, 1,710 lb, Feb. 19, 1994; minimum daily, 0.09 lb, Jan. 9-11, 1995.

DISSOLVED NITRITE PLUS NITRATE CONCENTRATIONS: Maximum observed, 7.6 mg/L, Apr. 28, 1995; minimum observed, 0.30 mg/L, Aug. 7, 1995.

DISSOLVED NITRITE PLUS NITRATE DISCHARGE: Maximum daily, 1,080 lb, June 8, 1993; minimum daily, 0.43 lb, Aug. 6, 1995.

TOTAL NITRITE PLUS NITRATE CONCENTRATIONS: Maximum observed, 6.10 mg/L, Oct. 19, 1984; minimum observed, <0.10 mg/L, Oct. 12 and July 23, 1985.

TOTAL NITRITE PLUS NITRATE DISCHARGE: Maximum daily, 1,489 lb, May 28, 1984; minimum daily, 0.17 lb, July 23, 1985.

TOTAL PHOSPHORUS CONCENTRATIONS: Maximum observed, 8.20 mg/L, Aug. 7, 1984; minimum observed, 0.01 mg/L, Jan. 16, Mar. 14, 1990, and Dec. 27, 1994.

TOTAL PHOSPHORUS DISCHARGE: Maximum daily, 584 lb, Feb. 19, 1994; minimum daily, 0.01 lb, Aug. 2, 1994.

DISSOLVED ORTHO-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.81 mg/L, Mar. 4, 1993; minimum observed, <0.01 mg/L, on many days during 1995.

DISSOLVED ORTHO-PHOSPHORUS DISCHARGE: Maximum daily, 126 lb, Mar. 23, 1993; minimum daily, 0.00 lb, Aug. 2, 1994, and Jan. 8-11, Aug. 6, 1995.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 1,710 mg/L, Apr. 20; minimum observed, 3 mg/L, May 29.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 57 tons, Apr. 20; minimum daily, 0.00 ton, on many days.

TOTAL PHOSPHORUS CONCENTRATIONS: Maximum observed, 2.08 mg/L, Apr. 20; minimum observed, <0.050 mg/L, Jan. 3, Feb. 7, Mar. 6, and Apr. 4.

TOTAL PHOSPHORUS DISCHARGE: Maximum daily, 210 lb, Apr. 20; minimum daily, 0.04 lb, Sept. 2, 4, 7-9.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
OCT						
03...	1545	--	6.0	.207	56	50
03...	1745	--	10	.170	32	50
03...	1945	--	8.9	.159	24	50
03...	2345	--	4.9	.139	25	50
04...	0740	--	1.8	.097	19	10
07...	1125	--	.55	.099	14	70
16...	0315	--	5.9	.629	342	50
16...	0845	--	3.7	.359	76	50
18...	1330	--	.54	--	35	10
NOV						
01...	0950	--	.52	.094	106	10
16...	1125	--	.63	.072	4	10
DEC						
04...	2200	--	7.4	.547	340	50
04...	2400	--	7.1	.311	77	50
05...	0200	--	9.1	.266	80	50
05...	0400	--	5.8	.181	32	50
05...	0600	--	5.2	.194	22	50
05...	0800	--	6.8	.137	26	50
05...	0930	--	7.0	--	28	10
05...	1000	--	6.4	.138	15	50
05...	1200	--	4.5	.156	12	50
06...	0735	--	1.1	.081	5	10
16...	1205	--	.70	.082	8	70
JAN						
03...	0810	--	.58	E.044	17	10
27...	1310	--	.82	.119	9	10

054310157 JACKSON CREEK TRIBUTARY NEAR ELKHORN, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
FEB						
07...	0800	.38	--	<.050	24	10
22...	1315	--	7.0	.858	242	50
22...	1500	--	13	.485	217	50
22...	1645	--	20	.418	144	50
22...	1845	--	20	.249	60	50
22...	2245	--	14	.239	19	50
23...	0245	--	11	.173	17	50
23...	0845	--	7.8	.140	12	50
23...	1445	--	11	.200	38	50
23...	1645	--	11	.909	39	50
23...	2045	--	9.4	.288	18	50
24...	0245	--	7.0	.164	13	50
24...	0645	--	8.3	.208	30	50
24...	0815	--	20	1.05	541	50
24...	0915	--	31	1.08	598	50
24...	1030	--	39	.821	389	50
24...	1430	--	26	.262	36	50
24...	2030	--	15	.183	11	50
25...	0230	--	8.7	.126	12	50
25...	1055	--	6.4	.110	12	10
25...	2230	--	5.4	.084	7	50
26...	1430	--	5.5	.142	26	50
26...	1615	--	11	.468	220	50
26...	1815	--	11	.246	74	50
26...	2215	--	7.5	.139	14	50
27...	1230	--	4.4	.072	4	50
MAR						
06...	0820	1.3	--	<.050	18	10
28...	1230	--	1.3	.061	13	10

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
APR					
04...	0745	.94	E.041	33	10
07...	1400	7.1	.242	82	50
07...	1600	6.4	.268	89	50
07...	2000	4.5	.205	60	50
08...	0840	1.8	.054	15	10
19...	1145	8.9	1.16	678	50
19...	1430	26	.942	564	50
19...	1500	34	1.30	895	50
19...	1700	27	.489	260	50
20...	0100	9.5	.180	38	50
20...	0145	19	.695	517	50
20...	0300	90	2.08	1710	50
20...	0330	109	1.72	1350	50
20...	0530	106	.601	306	50
20...	0645	85	.433	198	50
20...	0830	98	.521	322	50
20...	0900	110	.578	400	50
20...	1100	112	.546	214	50
20...	1101	112	.394	209	10
20...	1400	71	.360	68	50
20...	1745	50	.316	62	50
21...	0345	39	.249	23	50
21...	0945	25	.205	28	50
21...	0950	25	.206	12	10
22...	0945	8.3	.106	7	50
23...	0545	5.5	.083	9	50
23...	0930	11	.127	48	10
23...	0945	12	.194	52	50
23...	1145	12	.264	33	50
23...	1545	8.7	.128	8	50
24...	0745	5.6	.084	8	50
24...	0800	5.6	.080	7	10
25...	0745	3.9	.075	5	50
25...	0800	3.9	.074	6	10
27...	1120	3.0	.082	21	10

ROCK RIVER BASIN

054310157 JACKSON CREEK TRIBUTARY NEAR ELKHORN, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
MAY					
01...	0730	5.4	.223	42	10
09...	1315	12	.443	123	50
09...	1500	33	.513	267	50
09...	1600	56	.588	267	50
09...	1645	70	.597	205	50
09...	1845	71	.335	76	50
09...	2215	40	.240	24	50
10...	0215	23	.179	10	50
10...	1015	9.6	.108	5	50
11...	0735	5.6	.062	4	10
11...	1235	9.0	.142	15	50
11...	1236	9.0	.146	10	10
16...	1000	11	.239	85	50
17...	1315	17	.793	429	50
17...	1515	16	.412	140	50
17...	1915	9.2	.210	76	50
17...	2330	14	.263	128	50
18...	0030	27	.451	245	50
18...	0230	25	.310	109	50
18...	0500	58	1.22	628	50
18...	0900	42	.258	30	50
18...	1700	29	.286	102	50
18...	1701	29	.287	53	10
18...	1815	59	.473	225	50
18...	1845	83	.699	387	50
18...	1930	116	1.10	606	50
18...	2130	102	.743	342	50
19...	0100	71	.311	83	50
19...	0500	49	.255	20	50
19...	1500	23	.166	7	50
20...	0300	10	.126	6	50
20...	1900	6.9	.094	4	50
22...	0430	11	.300	190	50
22...	0445	20	.660	379	50
22...	0735	15	.261	56	10
22...	1245	10	.160	13	50
22...	2245	6.2	.097	7	50
27...	0030	11	.297	77	50
27...	0230	7.5	.171	15	50
27...	0645	9.5	.156	20	50
27...	0845	10	.150	21	50
27...	1045	7.2	.116	7	50
28...	0900	9.1	.144	34	50
28...	1000	15	.206	52	50
28...	1200	14	.154	24	50
28...	1600	9.5	.144	13	50
28...	2200	6.4	.094	4	50
29...	0645	4.8	.078	3	10
30...	1030	12	.279	119	50
30...	1130	20	.380	241	50
30...	1530	11	.204	90	50
30...	2130	7.3	.114	11	50
31...	0735	5.1	.086	60	10
31...	1215	8.0	.151	26	50
31...	1500	21	.385	201	50
31...	1600	37	.445	239	50
31...	2400	26	.200	20	50

054310157 JACKSON CREEK TRIBUTARY NEAR ELKHORN, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
JUN					
01...	0230	43	.279	129	50
01...	0500	68	.422	174	50
01...	0545	110	1.56	922	50
01...	0745	111	.799	389	50
01...	1130	65	.330	65	50
01...	1640	34	.223	16	50
01...	1641	34	.209	18	10
01...	1930	31	.184	7	50
01...	2130	33	.302	76	50
02...	0130	32	.340	68	50
02...	0745	27	.148	18	10
02...	1330	18	.152	8	50
02...	2330	9.3	.121	9	50
03...	1530	6.1	.093	6	50
04...	2200	9.4	.178	32	50
05...	0200	14	.176	36	50
05...	0800	12	.143	16	50
05...	2200	6.4	.106	11	50
11...	0315	6.1	.259	40	50
11...	1530	21	1.26	891	50
11...	1615	34	1.30	788	50
11...	1815	32	1.14	596	50
11...	2015	21	1.04	564	50
11...	2215	15	.383	180	50
12...	0615	6.0	.150	20	50
12...	0900	16	.151	28	50
12...	1100	41	.309	114	50
12...	1330	68	.441	194	50
12...	1530	97	.481	234	50
12...	1730	87	.552	257	50
12...	1900	68	.684	368	50
12...	2100	55	.370	142	50
13...	0500	26	.192	17	50
13...	1700	21	.193	18	50
13...	1915	48	.596	415	50
13...	2030	75	1.34	734	50
14...	0030	49	.717	367	50
14...	0730	25	.176	19	10
14...	1715	26	.271	144	50
14...	1915	25	.118	304	50
15...	0115	16	.170	20	50
15...	0730	12	--	10	10
15...	1315	9.2	.132	10	50
16...	0810	5.9	.106	9	10
JUL					
02...	2200	45	1.33	1140	50
02...	2245	69	.743	420	50
03...	0045	57	.367	80	50
03...	0400	26	.269	36	50
03...	1200	8.0	.146	8	50
05...	0740	2.1	.077	15	10
05...	2015	11	.281	156	50
05...	2030	26	1.03	500	50
06...	0030	8.0	.248	65	50
06...	0730	3.8	.124	12	10
10...	0515	19	1.04	745	50
10...	0615	47	.500	240	50
10...	0830	74	.366	165	50
10...	0915	85	.437	179	50
10...	1115	68	.376	97	50
10...	1340	41	.286	20	50
10...	1341	41	.303	28	10
10...	1830	25	.194	9	50
11...	0430	8.1	.126	6	50
11...	0740	6.4	--	8	10
17...	0810	1.0	.053	8	10
27...	0430	15	1.49	1250	50
27...	0445	28	.976	549	50
27...	0645	14	.402	78	50
31...	1730	8.3	.177	108	50
31...	1930	6.7	.179	61	50

ROCK RIVER BASIN

054310157 JACKSON CREEK TRIBUTARY NEAR ELKHORN, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
AUG						
05...	1700	--	18	.964	564	50
05...	1715	--	44	.939	629	50
05...	1745	--	59	.550	291	50
05...	1915	--	41	.401	103	50
05...	2215	--	17	.362	78	50
06...	0850	--	2.5	.159	9	10
17...	0600	--	8.1	.424	163	50
17...	0630	--	14	.350	117	50
17...	0700	--	21	.417	152	50
17...	1100	--	7.2	.201	22	50
23...	1255	--	.30	.079	24	70
SEP						
05...	0755	.13	--	.079	63	10
10...	0915	1.0	--	.270	36	50
10...	1115	1.0	--	.255	31	50
11...	1315	--	6.3	.217	39	50
11...	1515	--	8.9	.215	24	50
11...	1745	--	14	.188	16	50
11...	1830	--	43	.345	116	50
12...	0745	--	23	.224	--	10
14...	0740	--	15	.173	36	10
14...	0745	--	14	.282	29	50
14...	0900	--	33	.417	172	50
14...	0945	--	43	.360	92	50
14...	1345	--	22	.269	24	50
14...	1945	--	9.8	.286	59	50
15...	0835	--	2.7	.101	21	10
20...	1115	--	8.8	.341	132	50
20...	1315	--	11	.302	95	50
20...	1715	--	6.8	.206	49	50
21...	0740	--	1.5	.116	46	10
22...	1300	--	9.1	.405	216	50
22...	1330	--	18	.643	377	50
22...	1415	--	28	.620	218	50
22...	1615	--	29	.421	97	50
22...	2215	--	16	.203	29	50
22...	2315	--	29	.466	321	50
23...	0015	--	54	.880	595	50
23...	0130	--	78	.453	134	50
23...	0245	--	104	.560	305	50
23...	0615	--	74	.349	38	50
23...	1200	--	33	.235	18	50
23...	2200	--	15	.154	16	50
24...	1600	--	5.7	.114	22	50

ROCK RIVER BASIN

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054310157 JACKSON CREEK TRIBUTARY NEAR ELKHORN, WI--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	.04	.00	.02	.02	.03	.06	.18	32	.02	.05	.02
2	.03	.04	.00	.05	.02	.04	.07	.09	1.5	6.6	.02	.01
3	.28	.03	.01	.03	.02	.04	.08	.08	.13	1.7	.01	.04
4	.10	.03	.41	.03	.03	.05	.08	.07	.17	.09	.01	.02
5	.04	.03	.37	.03	.02	.06	.05	.06	.50	2.0	4.8	.02
6	.03	.02	.02	.02	.02	.06	.04	.05	.15	.24	.21	.02
7	.02	.01	.01	.02	.02	.06	.48	.04	.11	.06	.02	.01
8	.02	.02	.01	.02	.02	.06	.14	.07	.09	.05	.01	.01
9	.02	.01	.02	.03	.03	.06	.11	6.9	.08	.05	.01	.00
10	.02	.02	.02	.10	.03	.05	.09	.24	.06	8.5	.01	.05
11	.02	.01	.01	.04	.03	.05	.07	.16	13	.12	.01	18
12	.02	.01	.01	.03	.02	.04	.06	.10	21	.07	.01	6.8
13	.01	.01	.01	.02	.02	.05	.05	.07	22	.05	.11	.07
14	.01	.01	.01	.02	.02	.05	.05	.05	8.0	.04	.02	2.3
15	.01	.01	.02	.02	.02	.06	.04	.05	.37	.03	.01	.18
16	.41	.01	.01	.01	.03	.05	.04	.41	.13	.02	.01	.06
17	.05	.01	.01	.02	.02	.04	.03	2.5	.09	.03	.85	.04
18	.05	.01	.01	.02	.03	.04	.03	33	.07	.02	.04	.03
19	.05	.01	.01	.02	.02	.08	10	2.7	.06	.02	.02	.02
20	.05	.01	.01	.01	.02	.10	57	.11	.06	.01	.01	.81
21	.05	.00	.01	.01	.08	.06	1.3	.05	.05	.01	.01	.17
22	.06	.01	.01	.01	2.0	.05	.17	1.6	.04	.01	.02	4.3
23	.05	.01	.01	.01	.57	.05	.38	.09	.04	.01	.02	13
24	.04	.01	.01	.01	7.3	.08	.10	.06	.04	.01	.01	.39
25	.05	.01	.01	.01	.19	.06	.07	.04	.03	.00	.01	.17
26	.05	.01	.01	.01	.75	.05	.10	.04	.03	.00	.01	.11
27	.05	.00	.01	.03	.08	.05	.15	.27	.02	2.2	.01	.08
28	.05	.00	.01	.01	.04	.04	.13	.36	.03	.03	.02	.06
29	.05	.00	.02	.01	.03	.04	.11	.04	.03	.01	.02	.04
30	.04	.00	.02	.01	---	.05	.08	1.7	.02	.01	.02	.03
31	.04	---	.02	.02	---	.05	---	4.2	---	.36	.02	---
TOTAL	1.81	0.40	1.12	0.70	11.50	1.65	71.16	55.38	99.90	22.37	6.41	46.86

WTR YR 2000 TOTAL 319.26

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.46	.28	.16	.11	.20	.54	.25	1.73	159	.34	.55	.06
2	.35	.27	.17	.27	.18	.49	.26	.92	21.9	23.2	.20	.04
3	2.96	.24	.27	.15	.19	.43	.24	.76	3.78	20.8	.14	.10
4	1.06	.24	2.06	.17	.17	.44	.21	.68	3.46	1.64	.11	.04
5	.44	.26	4.46	.16	.14	.39	.19	.59	7.36	10.0	24.4	.05
6	.34	.21	.54	.15	.12	.35	.17	.49	2.63	3.05	3.74	.05
7	.31	.19	.38	.14	.10	.36	3.01	.43	1.72	1.02	.56	.04
8	.28	.24	.34	.14	.10	.37	.97	.62	1.26	.67	.29	.04
9	.24	.25	.51	.25	.12	.36	.80	47.7	.91	.51	.20	.04
10	.21	.40	.45	.84	.17	.33	.64	8.55	.65	57.5	.13	.59
11	.20	.31	.31	.39	.15	.32	.46	3.25	47.2	4.25	.09	53.4
12	.19	.25	.26	.27	.12	.28	.38	2.51	98.4	1.84	.06	36.3
13	.16	.22	.28	.22	.13	.32	.36	1.73	99.1	1.22	.61	.71
14	.15	.17	.30	.19	.15	.32	.34	1.25	38.6	.88	.11	22.7
15	.16	.22	.37	.19	.16	.42	.28	1.04	8.11	.54	.08	1.76
16	2.18	.20	.28	.18	.21	.32	.22	3.48	3.19	.35	.06	.55
17	.25	.21	.25	.22	.17	.30	.21	13.2	1.99	.33	6.53	.35
18	.26	.22	.21	.28	.21	.29	.19	162	1.54	.27	.31	.26
19	.26	.24	.20	.26	.20	.60	36.3	42.2	1.29	.25	.13	.21
20	.29	.23	.17	.25	.18	.82	210	4.99	1.37	.20	.08	5.43
21	.30	.19	.16	.24	.32	.50	28.5	1.96	1.07	.17	.08	.88
22	.34	.21	.15	.23	14.6	.44	4.78	11.8	.84	.14	.11	24.7
23	.27	.47	.14	.23	14.6	.42	6.08	2.35	.83	.11	.13	91.1
24	.26	.21	.13	.24	42.8	.67	2.41	1.43	.93	.10	.09	5.19
25	.29	.23	.13	.24	3.95	.49	1.56	.96	.63	.10	.09	1.93
26	.29	.20	.12	.28	6.04	.44	1.34	.78	.55	.09	.08	1.28
27	.30	.16	.11	.70	2.16	.48	1.21	4.59	.47	11.0	.06	.99
28	.30	.14	.10	.28	1.01	.37	.97	5.32	.56	.52	.07	.82
29	.31	.15	.17	.24	.67	.29	.77	1.77	.52	.19	.08	.65
30	.27	.14	.14	.22	---	.29	.57	7.80	.42	.10	.07	.56
31	.25	---	.14	.22	---	.27	---	24.8	---	2.08	.06	---
TOTAL	13.93	6.95	13.46	7.95	89.32	12.71	303.67	361.68	510.28	143.46	39.30	250.82

WTR YR 2000 TOTAL 1753.53

ROCK RIVER BASIN

05431016 JACKSON CREEK AT MOUND ROAD NEAR ELKHORN, WI

LOCATION.--Lat 42°38'27", long 88°33'39", in SE ¼ SE ¼ sec.11, T.2 N., R.16 E., Walworth County, Hydrologic Unit 07090001, on left bank at bridge on Mound Road, 2.3 mi south of Elkhorn.

DRAINAGE AREA.--16.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1993 to current year.

GAGE.--Water-stage recorder. Datum of gage is 920.00 ft above sea level (Wisconsin Department of Transportation benchmark).

REMARKS.--Records fair except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	1.3	1.3	e1.5	e.80	11	3.1	9.7	260	4.8	5.9	1.3
2	2.4	1.3	1.4	2.7	e.80	8.4	3.3	8.4	150	5.0	4.0	1.2
3	3.3	1.2	1.9	2.2	e.70	7.4	3.2	7.3	59	50	2.8	1.2
4	6.5	1.2	2.2	1.9	e.70	7.0	3.2	6.8	36	21	2.3	1.2
5	3.8	1.4	8.3	1.7	e.70	6.4	2.5	6.2	46	14	6.5	1.1
6	3.0	1.5	5.0	e1.5	e.70	5.5	2.8	5.5	32	17	17	1.0
7	2.3	1.5	3.1	e1.4	e.70	5.3	5.2	5.0	23	10	6.3	.96
8	2.0	1.3	2.7	1.6	e.80	5.1	7.3	5.0	18	8.1	3.9	1.0
9	2.0	1.4	2.7	1.9	e.90	5.5	7.7	27	14	7.1	3.1	.98
10	1.8	1.6	3.2	4.4	e1.3	5.0	11	70	11	91	2.5	2.3
11	1.7	2.0	2.5	4.5	e1.2	4.5	8.2	33	17	58	2.1	7.0
12	1.5	1.6	2.4	3.1	e1.1	4.5	6.8	25	109	22	1.6	60
13	1.6	1.5	2.2	e2.3	e1.1	4.4	5.9	17	173	14	2.0	12
14	1.3	1.4	2.2	e1.9	e1.0	4.3	5.6	13	142	10	1.8	21
15	1.3	1.3	2.4	e1.8	e1.0	4.6	5.3	10	77	8.0	1.6	15
16	2.6	1.4	2.4	e1.7	e1.3	4.8	4.5	11	40	6.6	1.3	7.4
17	2.1	1.4	2.1	e1.5	e1.2	4.1	4.3	13	25	5.3	5.3	4.9
18	1.5	1.3	1.8	e1.5	e1.2	3.7	4.1	72	20	4.6	4.0	3.5
19	1.5	1.4	e1.6	e1.4	e1.4	4.9	15	158	16	4.1	2.4	2.9
20	1.5	1.6	e1.4	e1.4	e1.4	7.5	196	59	14	3.7	1.8	5.6
21	1.4	1.4	e1.2	e1.2	e1.7	7.0	143	34	12	3.4	1.5	6.3
22	1.6	1.5	e1.1	e1.1	17	5.9	61	45	9.4	3.0	1.6	11
23	1.4	1.7	e1.0	e1.1	42	4.7	43	33	8.4	2.6	1.8	118
24	1.2	2.4	e.96	e1.0	55	5.1	35	21	9.1	2.3	1.6	50
25	1.3	1.8	e.90	e1.0	41	5.3	24	14	8.6	2.1	1.5	25
26	1.4	1.7	e1.0	e.90	29	4.3	18	12	7.2	1.9	1.4	17
27	1.3	1.7	e.94	e.90	25	4.4	15	19	6.1	5.2	1.3	12
28	1.4	1.4	e.90	e.80	17	4.3	12	28	5.8	3.6	1.2	9.8
29	1.3	1.4	e.90	e.80	13	3.8	11	30	6.7	2.6	1.2	8.2
30	1.3	1.3	e1.3	e.80	---	3.4	9.1	33	5.3	2.1	1.3	7.0
31	1.3	---	e1.2	e.80	---	3.1	---	52	---	3.8	1.3	---
TOTAL	61.9	44.9	64.20	52.30	260.70	165.2	676.1	882.9	1360.6	396.9	93.9	415.84
MEAN	2.00	1.50	2.07	1.69	8.99	5.33	22.5	28.5	45.4	12.8	3.03	13.9
MAX	6.5	2.4	8.3	4.5	55	11	196	158	260	91	17	118
MIN	1.2	1.2	.90	.80	.70	3.1	2.5	5.0	5.3	1.9	1.2	.96
CFSM	.12	.09	.12	.10	.54	.32	1.34	1.70	2.70	.76	.18	.83
IN.	.14	.10	.14	.12	.58	.37	1.50	1.95	3.01	.88	.21	.92

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2000, BY WATER YEAR (WY)

	MEAN	4.87	7.56	4.92	8.71	16.0	15.6	26.0	16.4	28.5	7.58	5.61	4.90
MAX	10.8	22.4	10.5	21.6	33.9	48.2	77.4	28.5	66.2	22.6	23.8	13.9	
(WY)	1996	1996	1996	1999	1994	1993	1993	2000	1996	1993	1995	2000	
MIN	1.45	1.50	2.07	1.18	3.83	4.16	8.32	4.18	3.78	1.94	.82	1.05	
(WY)	1998	2000	2000	1994	1995	1996	1994	1994	1994	1995	1999	1996	

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1993 - 2000

ANNUAL TOTAL	4059.32	4475.44	
ANNUAL MEAN	11.1	12.2	11.0
HIGHEST ANNUAL MEAN			15.8
LOWEST ANNUAL MEAN			7.87
HIGHEST DAILY MEAN	(e)460	Jun 13	260 Jun 1
LOWEST DAILY MEAN	.28	Sep 26	.70 Feb 3-7
ANNUAL SEVEN-DAY MINIMUM	.36	Sep 5	.73 Feb 1
INSTANTANEOUS PEAK FLOW			420 Jun 1
INSTANTANEOUS PEAK STAGE			10.38 Jun 1
ANNUAL RUNOFF (CFSM)	.66		.73
ANNUAL RUNOFF (INCHES)	8.99		9.91
10 PERCENT EXCEEDS	25		29
50 PERCENT EXCEEDS	2.5		3.2
90 PERCENT EXCEEDS	.62		1.2
			1.0

(e) Estimated due to ice effect or missing record

05431016 JACKSON CREEK AT MOUND ROAD NEAR ELKHORN, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1983 to September 1985, February 1993 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1999 to September 2000.
SUSPENDED-SEDIMENT DISCHARGE: February 1993 to current year.
DISSOLVED AMMONIA NITROGEN DISCHARGE: February 1993 to September 1995.
TOTAL AMMONIA PLUS ORGANIC NITROGEN DISCHARGE: February 1993 to September 1995.
DISSOLVED NITRITE PLUS NITRATE DISCHARGE: February 1993 to September 1995.
TOTAL PHOSPHORUS DISCHARGE: February 1993 to current year.
DISSOLVED ORTHO-PHOSPHORUS DISCHARGE: February 1993 to current year.

INSTRUMENTATION.--Automatic pumping sampler since February 1993. Continuous water temperature recorder since October 1999.

REMARKS.--Records good. Records represent water temperature at sensor within 0.5°C.

COOPERATION.--Observer furnished by Delavan Lake Sanitary District.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD.--

TOTAL AMMONIA PLUS ORGANIC NITROGEN CONCENTRATIONS: Maximum observed, 2.1 mg/L, July 10, 1985; minimum observed, 0.30 mg/L, Jan. 24, 1985.
TOTAL PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.55 mg/L, July 10, 1985; minimum observed, 0.03 mg/L, Apr. 2, 1985.
DISSOLVED ORTHO-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.20 mg/L, Nov. 20, 1984 and May 22, 1985; minimum observed,

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 1,420 mg/L, June 17, 1996; minimum observed, 2 mg/L, Sept. 16, 1993, July 25, 1995, July 18, 1996, and June 4, 2000.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 1,030 tons, June 17, 1996; minimum daily, 0.01 ton, Aug. 25-28 and Sept. 11, 1993, July 19, 22, 1995, and many days in 1994, 1996, 1997, 1998, and 1999 water years.
DISSOLVED AMMONIA NITROGEN CONCENTRATIONS: Maximum observed, 1.70 mg/L, Mar. 5, 1993; minimum observed, 0.01 mg/L, Aug. 1, 29, and Sept. 25, 1994.
DISSOLVED AMMONIA NITROGEN DISCHARGE: Maximum daily, 1,410 lb, Feb. 20, 1994; minimum daily, 0.07 lb, July 31, 1995.
TOTAL AMMONIA PLUS ORGANIC NITROGEN CONCENTRATIONS: Maximum observed, 4.6 mg/L, Mar. 5, 1993; minimum observed, 0.40 mg/L, Oct. 6 and Dec. 15, 1993, and Jan. 14, Mar. 28-29, 1995.
TOTAL AMMONIA PLUS ORGANIC NITROGEN DISCHARGE: Maximum daily, 4,900 lb, Apr. 20, 1993; minimum daily, 1.5 lb, June 19, 1994.
DISSOLVED NITRITE PLUS NITRATE CONCENTRATIONS: Maximum observed, 13.0 mg/L, Apr. 30, 1995; minimum observed, <0.05 mg/L, Sept. 2, 1993, and many days in 1994 and 1995 water years.
DISSOLVED NITRITE PLUS NITRATE DISCHARGE: Maximum daily, 5,310 lb, Apr. 20, 1993; minimum daily, 0.16 lb, July 19, 1995.
TOTAL PHOSPHORUS CONCENTRATIONS: Maximum observed, 1.6 mg/L, June 17, 1996; minimum observed, <0.01 mg/L, Mar. 19, 1997.
TOTAL PHOSPHORUS DISCHARGE: Maximum daily, 2,630 lb, Apr. 20, 1993; minimum daily, 0.13 lb, Feb. 6-7, 2000.
DISSOLVED ORTHO-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.63 mg/L, Feb. 19, 1997; minimum observed, <0.01 mg/L, May 13, 1993 and Mar. 21, Apr. 14, 18, 1994, many days during 1995-96 water years, May 22, 1997, and several days during 1998, 1999, and 2000 water years.
DISSOLVED ORTHO-PHOSPHORUS DISCHARGE: Maximum daily, 614 lb, Feb. 21, 1997; minimum daily, 0.03 lb, Sept. 15-19, 23, 26, 1999.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 32.0°C, July 16; minimum, 0.0°C on many days.
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 372 mg/L, Sept. 12; minimum observed, 2 mg/L, June 4.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 83 tons, June 1; minimum daily, 0.04 ton, Nov. 30, Dec. 1, and Jan. 28.
TOTAL PHOSPHORUS CONCENTRATIONS: Maximum observed, 1.36 mg/L, Sept. 11; minimum observed, <0.05 mg/L, Dec. 16, Jan. 27, Feb. 7, and Mar. 2, 6.
TOTAL PHOSPHORUS DISCHARGE: Maximum daily, 585 lb, June 1; minimum daily, 0.13 lb, Feb. 6-7.
DISSOLVED ORTHO-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.556 mg/L, Sept. 11; minimum observed, <0.01 mg/L, on several days.
DISSOLVED ORTHO-PHOSPHORUS DISCHARGE: Maximum daily, 212 lb, June 1; minimum daily, 0.04 lb, Jan. 28 to Feb. 8.

ROCK RIVER BASIN

05431016 JACKSON CREEK AT MOUND ROAD NEAR ELKHORN, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
OCT							
07...	1150	--	2.2	.013	.099	22	70
NOV							
01...	1010	--	1.2	--	.319	31	10
16...	1230	--	1.4	<.010	.111	16	10
DEC							
05...	0715	--	8.9	<.010	.205	60	50
05...	0905	--	9.4	--	--	125	10
05...	1015	--	9.4	<.010	.205	89	50
05...	1315	--	9.9	.010	.217	67	50
05...	1615	--	9.4	.015	.182	59	50
06...	0755	--	5.1	.011	.163	18	10
16...	1100	--	2.4	<.010	E.046	43	70
JAN							
03...	0820	--	2.2	--	.075	36	70
27...	1230	.90	--	<.010	<.050	17	70
FEB							
07...	0835	.70	--	<.010	E.036	39	70
22...	1415	--	9.4	.184	.460	34	50
22...	1700	--	24	<.010	.183	31	50
22...	2000	--	43	.016	.193	37	50
22...	2300	--	48	.166	.464	50	50
23...	0500	--	43	.507	.990	32	50
23...	1400	--	39	.280	.569	28	50
23...	2300	--	44	.169	.495	115	50
24...	0500	--	40	.151	.510	134	50
24...	1100	--	54	.174	.341	49	50
24...	1400	--	67	.152	.396	96	50
24...	1700	--	71	.194	.401	44	50
24...	2300	--	61	.169	.449	91	50
25...	0800	--	44	.145	.375	53	50
25...	0801	--	44	.136	.319	55	70
25...	2300	--	33	.101	.312	80	50
26...	1400	--	25	.088	.190	15	50
26...	2300	--	33	.075	.188	22	50
27...	0500	--	29	.066	.143	19	50
27...	2300	--	20	.065	.166	12	50
29...	0500	--	13	.031	.104	26	50
MAR							
01...	0500	--	12	.024	.074	13	50
02...	0840	--	8.4	.033	<.050	24	10
06...	0855	--	5.8	.014	<.050	27	10
28...	1300	--	4.5	.010	.077	42	10
APR							
04...	0800	--	3.1	<.010	.095	52	10
08...	0855	--	9.9	<.010	.086	30	10
19...	1515	--	15	<.010	.110	43	50
20...	0115	--	43	.029	.151	47	50
20...	0545	--	123	.049	.531	322	50
20...	0945	--	234	.106	.480	192	50
20...	1230	--	296	.120	.202	143	50
20...	1830	--	240	.173	.411	68	50
21...	0630	--	170	.085	.161	38	50
21...	1830	--	111	.190	.305	25	50
22...	1230	--	57	.121	.450	10	50
23...	0630	--	40	.197	.352	8	50
24...	0030	--	43	.079	.141	11	50
25...	0820	--	25	.054	.095	7	10
26...	0825	--	19	.037	.077	8	10
27...	1240	--	14	.028	.063	6	70

05431016 JACKSON CREEK AT MOUND ROAD NEAR ELKHORN, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDEED (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
MAY						
01...	0750	9.4	<.010	.071	5	10
09...	1730	35	<.010	.148	22	50
09...	1945	66	<.010	.167	40	50
10...	0145	100	.094	.265	36	50
10...	0745	87	.109	.273	26	50
10...	0800	85	.163	.198	20	10
10...	1945	48	.074	.318	113	50
11...	0745	33	.040	.250	87	50
11...	0750	33	.071	.095	4	10
18...	0830	57	<.010	.317	198	50
18...	1630	75	.041	.201	34	50
18...	2130	138	.092	.333	207	50
19...	0230	220	.128	.295	149	50
19...	0530	209	.165	.342	147	50
19...	0825	183	--	.406	71	10
19...	0830	183	--	.337	95	50
19...	1130	158	.177	.293	119	50
19...	2030	104	.091	.186	23	50
20...	0830	62	.124	.164	10	50
20...	2030	45	.153	.246	37	50
21...	1130	34	.068	.100	5	50
22...	0645	37	.054	.137	27	50
22...	1245	54	.045	.126	16	50
22...	1845	53	.065	.141	14	50
23...	0045	43	.011	.157	23	50
23...	0805	36	.012	.103	9	10
30...	1345	35	.013	.112	30	50
30...	1945	48	.037	.131	34	50
31...	0145	45	.053	.147	26	50
31...	0755	39	--	--	22	10
31...	1345	36	.050	.147	30	50
31...	1945	75	.062	.149	24	50
JUN						
01...	0445	156	.146	.367	63	50
01...	0800	267	.140	.347	65	50
01...	0840	305	--	--	170	10
01...	1200	420	.112	.521	165	50
01...	1201	420	.110	.636	208	10
01...	1515	355	--	.439	--	50
01...	1815	274	.203	.405	74	50
02...	0315	201	.208	.363	36	50
02...	0810	178	.324	.298	52	10
02...	1815	114	.220	.306	7	50
03...	0850	61	.165	.221	15	10
04...	0850	37	.107	.151	2	10
04...	2115	34	.112	.155	7	50
05...	0850	50	.116	.151	9	10
05...	1815	47	.134	.202	9	50
06...	0820	34	.104	.117	8	10
11...	2030	36	.040	.194	69	50
11...	2330	43	.014	.123	42	50
12...	1100	37	.080	.183	33	50
12...	1730	165	.135	.283	56	50
12...	2045	280	.221	.452	75	50
13...	0015	274	.244	.464	68	50
13...	0615	183	.210	.346	36	50
13...	1815	138	.195	.306	23	50
14...	0315	185	.183	.296	30	50
14...	0755	161	.175	.296	28	10
14...	0915	154	.139	.216	26	50
14...	2115	107	.168	.254	20	50
15...	0800	89	.173	.245	11	10
16...	0840	42	.080	.185	14	10
19...	0945	16	.112	.376	14	10
JUL						
03...	0415	59	.053	.139	27	50
03...	0715	67	.067	.143	22	50
03...	1615	45	.130	.221	12	50
05...	0750	14	.024	.116	141	10
10...	1100	77	.104	.198	91	10
10...	1430	161	.091	.509	308	50
10...	1730	178	.226	.458	143	50
10...	2030	158	.188	.569	201	50
11...	0230	95	.221	.338	88	50
11...	0810	62	.203	.303	18	10
11...	2030	34	.112	.400	224	50
12...	0745	24	.086	.158	17	10
17...	0825	5.8	.020	.074	21	10

ROCK RIVER BASIN

05431016 JACKSON CREEK AT MOUND ROAD NEAR ELKHORN, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS ORTHOPHOS- P (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
AUG						
07...	0805	7.0	.087	.190	23	10
14...	0840	2.0	<.010	.300	22	10
17...	1050	7.2	.033	.239	39	10
23...	1200	1.8	.032	.172	33	70
28...	0755	1.2	.046	.162	17	10
SEP						
05...	0800	1.1	.032	.129	41	10
11...	2245	31	.556	1.36	254	50
12...	0100	61	.158	.810	372	50
12...	0400	95	.202	.544	212	50
12...	1000	79	.293	.508	42	50
12...	1900	31	.323	.521	48	50
13...	0905	12	.276	.423	25	10
14...	1230	25	.170	.463	117	50
14...	1530	33	--	.360	57	50
14...	2130	30	--	.272	45	50
15...	0330	22	--	.337	48	50
15...	0905	17	.153	.261	6	10
22...	2045	25	.139	.733	336	50
23...	0230	61	.174	.364	84	50
23...	0645	154	.196	.578	177	50
23...	0940	168	.278	.530	92	10
23...	0945	168	.250	.402	69	50
23...	1245	154	.302	.442	36	50
23...	2145	93	.295	.398	22	50
24...	1545	41	.170	.226	15	50
25...	0820	26	.142	.197	21	10

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.33	.11	.04	.16	.06	.49	.40	.13	83	.14	.20	.09
2	.23	.11	.05	.29	.06	.53	.44	.12	13	.16	.13	.09
3	.28	.09	.06	.23	.06	.49	.43	.10	1.6	2.6	.09	.11
4	.52	.09	.07	.19	.06	.48	.43	.09	.40	1.3	.07	.12
5	.28	.10	1.4	.17	.07	.45	.30	.09	1.1	1.5	.53	.12
6	.21	.10	.29	.14	.08	.40	.29	.08	.70	1.7	2.0	.11
7	.15	.09	.17	.13	.08	.39	.46	.07	.45	.90	.41	.10
8	.13	.08	.16	.15	.09	.39	.60	.07	.33	.61	.24	.10
9	.13	.08	.17	.17	.09	.43	.60	2.3	.24	.46	.19	.09
10	.12	.09	.23	.37	.12	.39	.81	11	.17	.45	.15	.21
11	.12	.11	.20	.37	.11	.37	.61	8.0	1.4	13	.12	3.3
12	.10	.08	.21	.25	.09	.37	.49	3.9	19	1.8	.10	21
13	.11	.07	.21	.18	.09	.37	.41	2.1	19	.68	.12	.92
14	.09	.07	.23	.14	.07	.37	.38	1.3	10	.51	.11	3.5
15	.09	.06	.28	.13	.07	.40	.35	.86	2.7	.42	.11	.87
16	.19	.06	.30	.12	.08	.43	.29	.75	1.5	.36	.12	.13
17	.15	.06	.26	.10	.07	.38	.26	1.4	.96	.30	.56	.09
18	.11	.05	.22	.10	.07	.35	.25	27	.74	.25	.41	.07
19	.11	.06	.20	.09	.07	.47	1.9	47	.59	.22	.25	.07
20	.11	.06	.17	.09	.07	.72	73	3.2	.51	.19	.18	.14
21	.11	.05	.14	.07	.08	.69	15	.88	.42	.17	.15	.17
22	.12	.06	.13	.06	1.8	.59	2.2	2.1	.34	.14	.16	4.7
23	.10	.06	.12	.06	5.9	.48	1.2	1.1	.29	.12	.17	24
24	.10	.09	.11	.05	13	.54	.95	.43	.31	.10	.13	2.6
25	.10	.06	.10	.05	8.1	.57	.48	.26	.29	.09	.10	1.4
26	.11	.06	.12	.05	2.5	.47	.38	.19	.24	.08	.09	.98
27	.11	.06	.11	.05	1.2	.49	.27	1.3	.20	.21	.07	.71
28	.11	.05	.10	.04	.82	.48	.20	2.6	.19	.14	.06	.57
29	.11	.05	.10	.05	.79	.44	.16	2.6	.21	.10	.06	.48
30	.11	.04	.14	.05	---	.41	.13	2.7	.16	.08	.07	.41
31	.11	---	.13	.05	---	.38	---	4.1	---	.13	.08	---
TOTAL	4.75	2.20	6.22	4.15	35.75	14.21	103.67	127.82	160.04	73.46	7.23	67.25

WTR YR 2000 TOTAL 606.75

05431016 JACKSON CREEK AT MOUND ROAD NEAR ELKHORN, WI--Continued

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.96	2.18	.69	.54	.17	3.82	1.47	3.66	585	1.51	1.65	.97
2	2.51	2.13	.75	1.02	.17	2.31	1.60	3.04	249	1.43	1.09	.88
3	2.84	1.85	.95	.84	.14	1.99	1.58	2.50	69.4	42.4	.75	.87
4	5.04	1.70	1.13	.70	.14	1.89	1.62	2.21	30.2	17.8	.60	.87
5	2.55	1.79	7.96	.62	.14	1.72	1.24	1.94	40.3	8.59	5.17	.76
6	1.74	1.83	4.28	.54	.13	1.50	1.36	1.62	21.0	10.3	22.9	.68
7	1.19	1.64	2.37	.50	.13	1.45	2.45	1.41	11.8	5.89	6.73	.60
8	1.07	1.37	1.81	.57	.14	1.43	3.39	1.33	7.91	4.45	4.31	.59
9	1.13	1.36	1.55	.65	.16	1.58	3.46	21.7	5.13	3.72	3.65	.55
10	1.06	1.49	1.64	1.48	.23	1.46	4.71	101	3.34	199	3.17	1.23
11	1.07	1.69	1.12	1.50	.21	1.35	3.52	39.7	9.13	103	2.76	25.4
12	.93	1.27	.96	1.03	.19	1.36	2.86	20.0	185	21.1	2.32	170
13	1.05	1.12	.76	.74	.19	1.37	2.43	10.7	308	10.1	3.04	27.0
14	.95	.98	.67	.60	.17	1.37	2.26	6.25	209	6.31	2.91	37.2
15	.98	.85	.64	.56	.17	1.49	2.08	4.02	96.9	4.25	2.32	22.9
16	2.08	.85	.57	.52	.21	1.57	1.71	3.35	42.1	3.00	1.86	9.46
17	1.69	.81	.49	.45	.19	1.39	1.59	5.24	32.8	2.13	6.79	5.79
18	1.33	.76	.44	.44	.19	1.27	1.48	99.5	32.1	1.78	4.79	3.81
19	1.32	.83	.41	.41	.22	1.73	11.6	226	30.4	1.57	2.75	2.91
20	1.46	.90	.37	.40	.22	2.66	339	56.7	23.5	1.37	1.90	5.04
21	1.42	.80	.32	.34	.26	2.55	169	20.5	17.2	1.22	1.52	5.25
22	1.64	.84	.30	.30	22.4	2.18	124	28.8	11.9	1.06	1.47	24.9
23	1.52	.98	.28	.30	139	1.76	58.5	19.5	9.11	.89	1.56	280
24	1.45	1.31	.28	.27	119	1.96	22.3	9.06	8.42	.77	1.38	71.8
25	1.60	.99	.27	.26	77.0	2.10	12.0	5.08	6.82	.69	1.28	24.7
26	1.81	.91	.31	.23	32.3	1.72	7.32	3.31	4.92	.61	1.22	10.0
27	1.81	.90	.30	.23	19.9	1.79	4.94	8.25	3.59	1.64	1.17	4.22
28	1.94	.76	.29	.20	11.7	1.77	4.12	16.8	2.88	1.09	1.08	1.96
29	2.00	.74	.30	.19	6.12	1.62	3.75	19.1	2.87	.77	1.05	.95
30	2.03	.70	.45	.19	---	1.50	3.36	19.8	1.96	.63	1.03	.48
31	2.13	---	.42	.18	---	1.41	---	42.4	---	1.08	1.01	---
TOTAL	55.30	36.33	33.08	16.80	431.19	55.07	800.70	804.47	2061.68	460.15	95.23	741.77

WTR YR 2000 TOTAL 5591.77

PHOSPHORUS, ORTHO, WATER, FILTERED, POUNDS PER DAY, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.82	.08	.07	.08	.04	1.55	.17	.53	212	.61	.64	.26
2	.49	.08	.08	.15	.04	1.40	.18	.45	201	.59	.43	.23
3	.51	.07	.10	.12	.04	1.03	.17	.39	51.7	22.6	.30	.22
4	.86	.07	.12	.10	.04	.79	.17	.37	22.1	6.91	.25	.22
5	.41	.08	.52	.09	.04	.58	.13	.34	30.0	1.86	2.59	.19
6	.26	.09	.31	.08	.04	.42	.15	.29	17.7	2.14	11.7	.18
7	.17	.08	.18	.08	.04	.39	.28	.27	9.02	1.23	2.92	.16
8	.14	.07	.16	.09	.04	.37	.40	.27	5.25	.94	1.30	.17
9	.14	.08	.15	.10	.05	.40	.41	2.74	2.97	.79	.76	.16
10	.12	.09	.18	.24	.07	.35	.58	34.5	1.68	75.3	.45	.38
11	.12	.11	.14	.24	.06	.32	.44	12.0	2.31	56.6	.27	9.88
12	.10	.09	.14	.17	.06	.31	.37	6.85	93.8	10.1	.16	83.3
13	.10	.08	.12	.12	.06	.30	.32	3.44	196	4.73	.14	16.7
14	.09	.08	.12	.10	.05	.29	.31	1.81	135	2.55	.11	18.4
15	.09	.07	.13	.10	.05	.30	.29	1.05	63.5	1.50	.13	12.9
16	.17	.08	.13	.09	.07	.31	.24	.79	18.5	.92	.17	5.71
17	.14	.07	.11	.08	.06	.26	.23	.73	12.4	.58	.94	3.59
18	.10	.07	.10	.08	.06	.23	.22	20.0	10.7	.50	.70	2.42
19	.09	.08	.09	.08	.08	.31	1.70	120	9.21	.45	.43	1.91
20	.10	.08	.08	.08	.08	.46	128	39.9	7.20	.40	.31	3.40
21	.09	.08	.06	.06	.09	.42	98.0	13.7	5.41	.36	.27	3.62
22	.10	.08	.06	.06	5.37	.35	46.9	10.8	3.83	.32	.27	7.62
23	.09	.09	.05	.06	67.5	.27	33.2	2.12	3.01	.28	.31	167
24	.08	.13	.05	.05	50.7	.29	13.1	1.29	2.85	.25	.29	56.9
25	.08	.10	.05	.05	30.1	.30	6.66	.87	2.37	.23	.29	19.4
26	.09	.09	.05	.05	13.8	.24	3.55	.68	1.75	.20	.30	11.4
27	.08	.09	.05	.05	9.04	.24	2.27	1.68	1.31	.56	.31	7.24
28	.08	.08	.05	.04	4.38	.23	1.44	3.21	1.08	.38	.31	5.10
29	.08	.08	.05	.04	2.00	.20	.95	3.01	1.10	.28	.29	3.76
30	.08	.07	.07	.04	---	.18	.62	4.15	.77	.23	.28	2.84
31	.08	---	.06	.04	---	.17	---	17.1	---	.41	.27	---
TOTAL	5.95	2.49	3.63	2.81	184.05	13.26	341.45	305.33	1125.52	194.80	27.89	445.26

WTR YR 2000 TOTAL 2652.44

ROCK RIVER BASIN

05431016 JACKSON CREEK AT MOUND ROAD NEAR ELKHORN, WI--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	13.5	10.0	12.0	6.0	4.0	4.5	1.5	.5	1.0
2	---	---	---	10.5	4.0	7.0	6.0	3.5	4.5	1.5	.5	1.0
3	---	---	---	5.5	1.0	3.5	9.5	3.5	7.5	1.0	.5	1.0
4	---	---	---	7.5	4.0	5.5	9.0	7.5	8.0	1.0	.5	.5
5	---	---	---	9.0	5.0	7.0	8.0	2.0	4.5	1.0	.5	.5
6	---	---	---	8.0	4.5	6.5	5.0	1.0	2.5	1.0	.5	.5
7	---	---	---	8.0	5.0	7.0	4.0	1.5	2.5	1.0	.5	.5
8	---	---	---	11.5	5.5	8.5	5.5	.5	3.0	1.0	.5	.5
9	---	---	---	14.0	10.0	12.0	5.5	4.0	4.5	1.0	.5	1.0
10	---	---	---	13.5	9.0	12.0	4.0	.0	2.0	1.5	.5	1.0
11	---	---	---	9.5	7.0	8.5	3.5	2.0	3.0	1.5	.0	.5
12	---	---	---	10.0	6.0	8.0	4.5	3.0	3.5	1.5	.5	1.0
13	---	---	---	11.5	6.5	9.0	4.5	4.0	4.0	1.0	.5	.5
14	---	---	---	11.0	6.5	8.5	4.5	3.0	3.5	1.0	.5	.5
15	16.0	8.0	12.0	7.0	5.0	6.0	3.5	2.0	3.0	.5	.5	.5
16	15.5	12.5	14.5	6.5	4.0	6.0	3.0	1.5	2.5	1.0	.5	.5
17	12.5	8.5	9.5	6.5	3.5	5.5	4.0	1.5	3.0	.5	.5	.5
18	11.0	5.5	8.0	10.0	3.5	6.5	4.0	2.0	3.0	.5	.5	.5
19	12.0	7.5	10.0	9.5	7.0	8.5	3.5	2.0	3.0	.5	.5	.5
20	10.5	6.0	8.5	7.0	5.5	6.5	3.5	2.0	2.5	.5	.0	.5
21	12.0	5.0	8.5	8.0	4.0	6.0	3.5	2.0	2.5	.5	.0	.5
22	11.5	5.0	8.0	10.0	7.0	8.5	2.5	1.5	2.0	.5	.0	.5
23	7.0	3.0	5.0	12.0	8.0	10.0	2.0	1.0	1.5	.5	.0	.5
24	7.5	3.5	5.5	8.0	4.5	6.0	1.5	1.0	1.0	.5	.0	.5
25	10.0	3.5	6.5	6.5	4.5	5.5	1.0	.5	.5	.5	.0	.5
26	11.0	6.5	9.0	6.0	4.0	4.5	1.0	.5	.5	.5	.0	.5
27	11.5	7.5	9.5	6.0	3.0	4.5	.5	.0	.5	.5	.0	.5
28	14.5	8.0	10.5	6.0	4.0	4.5	.5	.0	.5	.5	.0	.0
29	14.5	9.5	12.0	5.5	4.0	5.0	.5	.0	.5	.5	.0	.0
30	15.5	11.5	13.5	5.5	4.0	5.0	1.5	.5	1.0	.5	.0	.0
31	15.0	11.5	13.5	---	---	---	2.0	.5	1.0	.5	.0	.0
MONTH	16.0	3.0	9.6	14.0	1.0	7.1	9.5	.0	2.8	1.5	.0	.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	.5	.0	.0	10.0	4.5	7.0	13.5	9.0	10.5	23.0	14.0	17.0
2	.5	.0	.0	11.5	2.0	6.0	17.0	8.0	11.5	24.5	12.0	17.5
3	.5	.0	.0	12.0	2.5	6.0	14.5	9.0	11.5	25.5	13.0	18.5
4	.5	.0	.0	14.0	2.5	7.5	9.5	3.0	6.0	25.5	16.0	20.0
5	.5	.0	.0	16.5	4.5	9.5	11.0	4.0	7.0	27.5	16.5	21.5
6	.0	.0	.0	16.5	5.5	10.0	15.5	5.0	10.0	26.0	18.0	22.0
7	.0	.0	.0	20.0	7.5	13.0	13.0	.0	5.5	27.5	18.5	22.5
8	.5	.0	.0	19.5	11.0	15.0	12.0	.0	4.0	25.5	19.5	22.0
9	.5	.0	.0	14.0	3.5	8.5	15.0	3.0	8.0	22.0	14.5	18.0
10	.0	.0	.0	6.0	1.5	4.0	8.0	3.5	6.0	16.0	12.5	14.0
11	.5	.0	.0	9.5	2.0	5.0	5.5	3.0	4.0	16.0	13.0	14.0
12	.5	.0	.0	9.5	4.0	6.5	15.5	2.5	8.0	19.5	15.5	17.0
13	.0	.0	.0	7.5	4.5	5.5	11.0	4.5	7.5	16.0	10.5	13.0
14	.5	.0	.0	9.0	3.0	6.0	20.0	6.0	12.0	17.5	8.0	12.5
15	.5	.0	.0	11.0	4.5	7.0	21.5	10.5	14.5	21.5	10.0	15.0
16	.5	.0	.5	11.0	1.0	6.0	11.0	7.5	8.5	20.5	13.5	16.0
17	.5	.0	.0	8.5	2.5	5.0	8.0	5.5	6.5	16.5	13.0	14.5
18	.5	.0	.0	5.5	3.0	4.5	14.5	6.5	9.5	13.5	10.5	12.5
19	.0	.0	.0	4.0	1.5	2.5	13.0	8.5	9.5	11.0	9.0	10.0
20	.0	.0	.0	6.5	3.0	4.5	9.5	8.0	9.0	17.0	9.5	12.5
21	.0	.0	.0	10.0	5.5	7.5	12.0	6.0	9.0	17.0	11.5	14.5
22	1.5	.0	.5	13.0	7.0	9.5	14.0	7.5	11.0	18.5	13.0	15.5
23	1.5	.0	1.0	15.0	6.5	10.0	12.0	9.5	10.5	21.5	15.0	18.0
24	2.5	1.5	2.0	15.0	8.0	11.0	15.5	8.0	11.5	21.5	15.0	17.5
25	6.0	2.0	4.0	14.0	7.5	11.0	16.5	9.0	12.5	22.0	13.0	17.0
26	9.5	5.5	7.5	15.0	5.5	9.5	21.0	9.5	14.0	20.5	14.5	17.0
27	9.5	5.0	6.5	12.5	4.5	8.5	22.5	11.0	15.5	14.5	13.5	14.0
28	10.0	2.5	5.5	8.0	3.0	5.5	21.5	10.5	15.0	13.5	12.0	12.5
29	10.5	4.5	7.0	13.5	3.5	7.5	22.0	10.5	15.0	17.5	10.5	14.5
30	---	---	---	17.5	4.5	10.0	23.5	10.5	16.0	18.0	13.0	15.5
31	---	---	---	16.5	6.0	11.0	---	---	---	17.5	15.5	16.5
MONTH	10.5	.0	1.2	20.0	1.0	7.7	23.5	.0	10.0	27.5	8.0	16.2

05431016 JACKSON CREEK AT MOUND ROAD NEAR ELKHORN, WI--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	21.0	15.5	17.5	29.5	17.0	22.5	27.5	19.0	22.5	28.5	23.5	25.5
2	20.5	17.0	18.5	27.0	19.5	23.5	28.5	20.0	23.5	27.5	23.0	25.0
3	19.5	14.5	17.0	22.0	19.5	21.0	26.5	18.0	22.0	25.5	22.5	24.0
4	16.5	13.5	15.0	26.0	17.5	21.0	27.5	19.0	22.5	24.5	17.5	20.0
5	16.5	12.5	14.0	29.0	19.0	23.0	25.0	19.0	20.5	20.5	15.0	17.5
6	21.0	12.0	16.5	28.0	20.0	23.0	27.5	19.5	22.5	19.5	15.0	17.0
7	21.5	14.5	17.5	27.5	18.0	22.0	30.0	19.0	24.0	23.0	16.5	19.0
8	26.5	15.5	20.5	29.0	18.5	22.0	29.5	21.5	25.0	23.0	21.0	22.0
9	27.5	18.0	22.0	29.5	21.0	24.0	29.5	22.0	25.5	23.5	20.5	22.0
10	29.0	19.0	23.5	24.5	21.0	22.0	29.0	21.5	25.0	27.0	22.0	23.5
11	28.5	20.5	23.5	24.0	19.0	21.5	29.0	21.0	25.0	24.0	19.0	21.0
12	20.5	14.5	16.5	26.0	19.0	22.0	27.0	19.5	23.0	20.5	17.5	19.0
13	17.5	14.5	16.0	29.5	19.5	24.0	28.0	21.5	24.5	23.5	15.0	19.0
14	19.0	17.0	18.0	29.5	21.5	25.0	28.5	22.0	25.0	21.0	17.0	18.5
15	21.0	17.0	18.5	30.0	20.0	24.5	29.5	24.0	26.5	19.5	14.0	16.5
16	21.0	17.0	18.5	32.0	19.0	25.0	26.5	21.0	23.5	22.5	11.5	16.0
17	22.0	15.5	18.5	31.5	21.5	25.5	23.5	17.5	20.0	23.5	12.5	17.0
18	23.5	15.5	19.5	29.0	18.5	23.0	24.5	17.5	20.5	24.0	14.5	18.5
19	26.0	16.5	20.5	26.5	17.5	21.5	24.5	18.0	20.5	21.5	17.0	19.0
20	24.5	18.5	20.5	26.0	17.5	21.5	24.5	17.5	20.0	18.5	13.0	16.0
21	25.5	18.5	21.5	25.5	16.5	21.0	23.0	17.0	19.5	20.0	10.0	14.5
22	24.5	16.5	20.5	26.5	18.0	21.5	23.5	19.5	21.5	15.0	12.0	13.0
23	28.5	17.5	22.0	26.5	17.0	21.5	25.5	21.0	23.0	14.5	13.5	14.0
24	22.5	19.0	21.0	27.0	17.0	22.0	26.0	20.5	23.0	15.5	13.0	14.0
25	30.5	18.5	23.5	25.5	19.0	22.5	26.0	20.0	23.0	14.5	12.0	13.0
26	26.5	20.5	23.0	26.5	20.0	23.0	25.5	21.0	23.5	18.0	10.5	13.5
27	29.0	17.5	22.5	28.0	20.5	24.5	26.5	20.5	23.5	19.5	12.0	15.0
28	22.5	17.0	19.0	30.0	20.5	24.5	24.5	20.5	22.5	20.5	11.5	15.0
29	27.0	15.5	21.0	26.0	21.0	23.5	24.5	22.0	23.0	20.5	11.5	15.0
30	28.5	16.0	21.0	24.0	21.0	22.5	23.0	20.0	21.5	19.0	12.5	15.0
31	---	---	---	23.0	20.0	21.5	27.0	21.0	23.5	---	---	---
MONTH	30.5	12.0	19.6	32.0	16.5	22.8	30.0	17.0	22.9	28.5	10.0	17.9

ROCK RIVER BASIN

05431017 DELAVAN LAKE INLET AT STATE HIGHWAY 50 AT LAKE LAWN, WI

LOCATION.--Lat 42°37'16", long 88°34'57", in NE ¼ sec.22, T.2 N., R.16 E., Walworth County, Hydrologic Unit 07090001, on downstream headwall of State Highway 50 bridge, and 1.0 mi east of Lake Lawn.

DRAINAGE AREA.--21.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--1984 and 1985 water years (unpublished) to current year. Published as "at U.S. Highway 50" prior to October 1988.

GAGE.--Nonrecording gage. Datum of gage is 922.94 ft above sea level (Wisconsin Department of Transportation bench mark). Previously published datum of 914.48 ft in 1989-91 annual data reports was in error.

REMARKS.--Daily mean discharges were estimated based on discharges upstream at Jackson Creek near Elkhorn (05431014) and Jackson Creek Tributary near Elkhorn (054310157) for Oct. 1, 1983 to Jan. 31, 1993. Also during this period, an acoustical velocitiy meter was used to measure discharges equal to or greater than 20 ft³/s from Oct. 1, 1985 to May 7, 1987. Daily mean discharges were estimated based on discharges upstream at Jackson Creek at Mound Road near Elkhorn (05431016) from Feb. 1, 1993 to present. Records poor (see page 12).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e4.3	e1.7	e1.7	e1.9	e1.0	e14	e4.0	e13	e338	e6.2	e7.7	e1.7
2	e3.1	e1.7	e1.8	e3.5	e1.0	e11	e4.3	e11	e195	e6.5	e5.2	e1.6
3	e4.3	e1.6	e2.5	e2.9	e.91	e9.6	e4.2	e9.5	e77	e65	e3.6	e1.6
4	e8.4	e1.6	e2.9	e2.5	e.91	e9.1	e4.2	e8.8	e47	e27	e3.0	e1.6
5	e4.9	e1.8	e11	e2.2	e.91	e8.3	e3.2	e8.1	e60	e18	e8.4	e1.4
6	e3.9	e1.9	e6.5	e1.9	e.91	e7.1	e3.6	e7.1	e42	e22	e22	e1.3
7	e3.0	e1.9	e4.0	e1.8	e.91	e6.9	e6.8	e6.5	e30	e13	e8.2	e1.2
8	e2.6	e1.7	e3.5	e2.1	e1.0	e6.6	e9.5	e6.5	e23	e11	e5.1	e1.3
9	e2.6	e1.8	e3.5	e2.5	e1.2	e7.1	e10	e35	e18	e9.2	e4.0	e1.3
10	e2.3	e2.1	e4.2	e5.7	e1.7	e6.5	e14	e91	e14	e118	e3.2	e3.0
11	e2.2	e2.6	e3.2	e5.8	e1.6	e5.8	e11	e43	e22	e75	e2.7	e9.1
12	e1.9	e2.1	e3.1	e4.0	e1.4	e5.8	e8.8	e32	e142	e29	e2.1	e78
13	e2.1	e1.9	e2.9	e3.0	e1.4	e5.7	e7.7	e22	e225	e18	e2.6	e16
14	e1.7	e1.8	e2.9	e2.5	e1.3	e5.6	e7.3	e17	e185	e13	e2.3	e27
15	e1.7	e1.7	e3.1	e2.3	e1.3	e6.0	e6.9	e13	e100	e10	e2.1	e20
16	e3.4	e1.8	e3.1	e2.2	e1.7	e6.2	e5.8	e14	e52	e8.6	e1.7	e9.6
17	e2.7	e1.8	e2.7	e1.9	e1.6	e5.3	e5.6	e17	e32	e6.9	e6.9	e6.4
18	e1.9	e1.7	e2.3	e1.9	e1.6	e4.8	e5.3	e94	e26	e6.0	e5.2	e4.5
19	e1.9	e1.8	e2.1	e1.8	e1.8	e6.4	e20	e205	e21	e5.3	e3.1	e3.8
20	e1.9	e2.1	e1.8	e1.8	e1.8	e9.8	e255	e77	e18	e4.8	e2.3	e7.3
21	e1.8	e1.8	e1.6	e1.6	e2.2	e9.1	e186	e44	e16	e4.4	e1.9	e8.2
22	e2.1	e1.9	e1.4	e1.4	e22	e7.7	e79	e58	e12	e3.9	e2.1	e14
23	e1.8	e2.2	e1.3	e1.4	e55	e6.1	e56	e43	e11	e3.4	e2.3	e153
24	e1.6	e3.1	e1.2	e1.3	e72	e6.6	e46	e27	e12	e3.0	e2.1	e65
25	e1.7	e2.3	e1.2	e1.3	e53	e6.9	e31	e18	e11	e2.7	e1.9	e32
26	e1.8	e2.2	e1.3	e1.2	e38	e5.6	e23	e16	e9.4	e2.5	e1.8	e22
27	e1.7	e2.2	e1.2	e1.2	e32	e5.7	e20	e25	e7.9	e6.8	e1.7	e16
28	e1.8	e1.8	e1.2	e1.0	e22	e5.6	e16	e36	e7.5	e4.7	e1.6	e13
29	e1.7	e1.8	e1.2	e1.0	e17	e4.9	e14	e39	e8.7	e3.4	e1.6	e11
30	e1.7	e1.7	e1.7	e1.0	---	e4.4	e12	e43	e6.9	e2.7	e1.7	e9.1
31	e1.7	---	e1.6	e1.0	---	e4.0	---	e68	---	e4.9	e1.7	---
TOTAL	80.2	58.1	83.7	67.6	339.15	214.2	880.2	1147.5	1769.4	514.9	121.8	541.0
MEAN	2.59	1.94	2.70	2.18	11.7	6.91	29.3	37.0	59.0	16.6	3.93	18.0
MAX	8.4	3.1	11	5.8	72	14	255	205	338	118	22	153
MIN	1.6	1.6	1.2	1.0	.91	4.0	3.2	6.5	6.9	2.5	1.6	1.2
CFSM	.12	.09	.12	.10	.54	.32	1.35	1.70	2.71	.76	.18	.83
IN.	.14	.10	.14	.12	.58	.37	1.50	1.96	3.02	.88	.21	.92

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2000, BY WATER YEAR (WY)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	7.21	13.8	10.7	8.87	17.8	23.5	25.0	16.3	20.6	8.33	5.08	7.70					
MAX	25.9	54.5	30.3	28.0	44.1	68.3	100	37.0	86.0	29.3	30.5	37.4					
(WY)	1987	1986	1992	1999	1994	1986	1993	2000	1996	1993	1995	1986					
MIN	.67	1.14	1.12	1.11	1.31	5.41	3.28	1.44	.76	.61	.50	.61					
(WY)	1989	1990	1990	1991	1989	1996	1989	1989	1988	1988	1988	1988					

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1984 - 2000

ANNUAL TOTAL	5275.57	5817.75	
ANNUAL MEAN	14.5	15.9	
HIGHEST ANNUAL MEAN			13.7
LOWEST ANNUAL MEAN			30.3
HIGHEST DAILY MEAN	598	338	751
LOWEST DAILY MEAN	.36	.91	.22
ANNUAL SEVEN-DAY MINIMUM	.47	.94	.25
ANNUAL RUNOFF (CFSM)	.66	.73	.63
ANNUAL RUNOFF (INCHES)	9.00	9.93	8.53
10 PERCENT EXCEEDS	32	38	31
50 PERCENT EXCEEDS	3.2	4.2	4.8
90 PERCENT EXCEEDS	.80	1.5	.88

(e) Estimated

05431017 DELAVAN LAKE INLET AT STATE HIGHWAY 50 AT LAKE LAWN, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: 1984 and 1985 water years (unpublished), October 1989 to September 1995.

TOTAL-PHOSPHORUS DISCHARGE: 1984 and 1985 water years (unpublished) to current year.

DISSOLVED ORTHO-PHOSPHORUS DISCHARGE: April 1994 to current year.

REMARKS.--Records poor. Daily mean discharges are estimated based on discharges from upstream stations 05431014 and 054310157 from Oct. 1, 1992 to Jan. 31, 1993, and from station 05431016 from Feb. 1, 1993 to Sept. 30, 1994.

COOPERATION.--Observer furnished by Delavan Lake Sanitary District.

EXTREMES FOR PERIOD OF RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 345 mg/L, Apr. 16, 1984; minimum observed, 0 mg/L, Sept. 23, 1991, July 17, Sept. 26, 1992, and Nov. 16, 1994.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 468 tons, Apr. 20, 1993; minimum daily, 0.00 ton, Sept. 26, 1990, many days during 1992 to 1994 water years, and July 14, 15, 18, 19, 1995.

TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 3.8 mg/L, May 27, 1985; minimum observed, 0.01 mg/L, Mar. 7, 1990, Dec. 15, 1994, Apr. 17, 1995, Oct. 6, 1995, Feb. 5, 1997, and Mar. 19, 1998.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 1,910 lb, Apr. 20, 1993; minimum daily, 0.10 lb, Dec. 28, 1989.

DISSOLVED ORTHO-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.851 mg/L, Aug. 3, 2000; minimum observed, <0.01 mg/L, Apr. 14, 1994, many days during 1995 water year, Nov. 22, 1995, several days in 1997-1999 water years, and many days in 2000 water year.

DISSOLVED ORTHO-PHOSPHORUS DISCHARGE: Maximum daily, 503 lb, June 26, 1998; minimum daily, 0.02 lb, Sept. 26, 1999.

DISSOLVED CHLORIDE CONCENTRATIONS: Maximum observed, 130 mg/L, Aug. 8, 1995; minimum observed, 18 mg/L, June 1, 1995.

EXTREMES FOR CURRENT YEAR.--

TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.975 mg/L, Aug. 3; minimum observed, <0.05 mg/L, on several days.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 442 lb, June 1; minimum daily, 0.31 lb, Dec. 24.

DISSOLVED ORTHO-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.851 mg/L, Aug. 3; minimum observed, <0.010 mg/L, on many days.

DISSOLVED ORTHO-PHOSPHORUS DISCHARGE: Maximum daily, 202 lb, June 2; minimum daily, 0.10 lb, Dec. 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SAM- PLING METHOD, CODES (82398)
OCT					
01...	0945	4.3	.093	.212	10
04...	0820	8.4	.062	.129	10
05...	0930	4.9	--	.118	10
06...	0900	3.9	--	.131	10
07...	0850	3.0	--	.127	10
08...	0850	2.6	--	.094	10
NOV					
16...	1045	1.8	.018	.103	10
DEC					
05...	0955	11	<.010	.060	10
05...	1550	11	<.010	E.038	10
06...	0910	6.5	<.010	E.038	50
06...	1440	6.5	<.010	.060	10
07...	0825	4.0	<.010	E.038	10
07...	1440	4.0	<.010	.060	10
08...	0815	3.5	<.010	.054	10
09...	0900	3.5	<.010	.057	10
16...	1415	3.1	.015	E.042	10
JAN					
27...	1145	1.2	.027	.087	30
FEB					
25...	1150	53	.074	.162	30
26...	1005	38	.031	.122	10
26...	1505	38	.034	.114	10
27...	1020	32	.016	.099	10
27...	1355	32	<.010	.089	10
29...	0850	17	.012	.059	10
MAR					
06...	1015	7.1	<.010	<.050	10
28...	1500	5.6	<.010	.141	10
APR					
04...	0840	4.2	.013	.133	10
08...	1030	9.5	<.010	.251	10
08...	1655	9.5	<.010	.129	10
09...	0955	10	<.010	.222	10
09...	1800	10	<.010	.210	10
10...	0840	14	<.010	.194	10
11...	0825	11	<.010	.170	10
12...	0810	8.8	<.010	.145	10
20...	1220	255	.030	.147	10
20...	1445	255	.057	.291	10
21...	1040	186	.111	.313	10
21...	1440	186	.125	.279	10
22...	1050	79	.119	.241	10
22...	1355	79	.116	.230	10
23...	0845	56	.099	.194	10
24...	0930	46	.047	.127	10
25...	0900	31	.038	.102	10
26...	0910	23	.026	.095	10

ROCK RIVER BASIN

05431017 DELAVAN LAKE INLET AT STATE HIGHWAY 50 AT LAKE LAWN, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SAM- PLING METHOD, CODES (82398)
MAY					
01...	0850	13	.020	.131	10
10...	0900	91	.397	.432	10
10...	1415	91	.272	.298	10
11...	0840	43	.177	.208	10
11...	1410	43	.163	.172	10
12...	0840	32	.142	.152	10
12...	1330	32	.146	.161	10
13...	0930	22	.089	.102	10
14...	0920	17	.086	.088	10
18...	0900	94	.029	.104	10
18...	1405	94	.020	.080	10
19...	0945	205	.162	.321	10
19...	1315	205	.107	.262	10
20...	0900	77	.036	.086	10
20...	1050	77	.056	.125	10
20...	1110	77	.100	.201	10
20...	1440	77	.102	.201	10
24...	0915	27	<.010	.084	10
25...	1000	18	<.010	.061	10
26...	0805	16	.010	.067	10
27...	0930	25	.019	.080	10
27...	1355	25	<.010	.075	10
28...	0915	36	<.010	.063	10
28...	1400	36	.037	.107	10
29...	0840	39	<.010	.069	10
29...	1325	39	.011	.061	10
30...	0910	43	.023	<.050	10
30...	1440	43	<.010	E.033	10
31...	0830	68	<.010	.057	10
31...	1450	68	<.010	.068	10
JUN					
01...	1520	338	.081	.315	10
02...	0900	195	.203	.206	10
02...	1340	195	.213	.222	10
03...	1030	77	.194	.300	10
03...	1650	77	.188	.289	10
04...	1010	47	.147	.217	10
04...	1635	47	.149	.214	10
05...	0940	60	.123	.187	10
06...	0855	42	.087	.098	10
08...	0855	23	.039	.100	10
12...	0900	142	.109	.188	10
12...	1145	142	.117	.208	10
13...	0900	225	.105	.189	10
13...	1325	225	.154	.318	10
14...	1350	185	.103	.261	10
15...	0915	100	.189	.300	10
16...	1040	52	<.010	.124	10
26...	0955	9.4	.118	.221	10
JUL					
03...	1010	65	.398	.490	10
03...	1315	65	.441	.536	10
04...	0910	27	.302	.403	10
04...	1600	27	.250	.380	10
05...	0845	18	.041	.338	10
06...	0850	22	.299	.354	10
10...	1145	118	.305	.350	10
10...	1445	118	.245	.317	10
11...	1430	75	.163	.240	10
12...	0825	29	.142	.177	10
12...	1440	29	.128	.186	10
13...	0820	18	.109	.159	10
17...	0910	6.9	.157	.233	10
24...	0840	3.0	.333	.527	10
31...	0855	4.9	.512	.620	10
AUG					
01...	0910	7.7	.697	.819	10
02...	0815	5.2	.579	.700	10
03...	0805	3.6	.851	.975	10
04...	0850	3.0	.803	.922	10
06...	0940	22	.694	.873	10
07...	0855	8.2	.679	.813	10
08...	0855	5.1	.554	.681	10
09...	0850	4.0	.600	.757	10
14...	1120	2.3	.508	.624	10
17...	1120	6.9	.487	.636	10
18...	0905	5.2	.574	.701	10
28...	0845	1.6	.389	.527	10

05431017 DELAVAN LAKE INLET AT STATE HIGHWAY 50 AT LAKE LAWN, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	PHOS- PHORUS ORTHOS, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SAM- PLING METHOD, CODES (82398)
SEP					
05...	0900	1.4	.339	.500	10
11...	0840	9.1	.308	.423	10
12...	0935	78	.345	.465	10
13...	1040	16	.244	.335	10
13...	1440	16	.244	.328	10
14...	0920	27	.217	.294	10
14...	1500	27	.177	.286	10
15...	1030	20	.201	.284	10
16...	0920	9.6	.170	.218	10
17...	0940	6.4	.150	.212	10
18...	1125	4.5	.126	.199	10
21...	0825	8.2	.190	.256	10
22...	0810	14	<.010	<.050	10
22...	1400	14	.178	.236	10
23...	0900	153	.127	.162	10
23...	1440	153	.112	.171	10
24...	0855	65	.201	.262	10
24...	1345	65	.174	.236	10
25...	1020	32	.153	.207	10
26...	0805	22	.112	.164	10

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.82	.91	.34	.57	.42	4.32	2.94	9.14	442	6.81	32.4	4.71
2	2.96	.92	.33	1.07	.41	3.31	3.14	7.69	244	8.13	21.4	4.40
3	3.47	.86	.43	.90	.37	2.81	3.04	6.57	117	162	18.4	4.37
4	5.81	.87	.53	.79	.36	2.59	2.99	6.02	56.4	58.2	14.9	4.34
5	3.21	.98	2.76	.70	.35	2.30	2.18	5.48	55.6	33.5	40.6	3.76
6	2.72	1.03	1.64	.62	.34	1.94	2.47	4.75	23.4	40.5	103	3.40
7	1.95	1.03	1.09	.60	.34	1.96	6.57	4.30	16.1	20.3	35.0	3.05
8	1.35	.93	1.04	.71	.36	1.96	10.0	4.26	11.9	14.3	19.4	3.22
9	1.32	.99	1.06	.86	.43	2.21	11.0	28.8	7.62	11.0	16.1	3.13
10	1.17	1.15	1.23	1.99	.59	2.12	14.4	156	4.75	196	12.5	7.02
11	1.12	1.43	.90	2.06	.55	1.99	9.86	45.0	7.79	99.8	10.2	21.2
12	.97	1.16	.84	1.45	.47	2.08	6.96	26.1	139	28.8	7.63	184
13	1.08	1.05	.75	1.11	.46	2.14	6.04	12.4	308	16.0	9.09	29.3
14	.88	1.00	.72	.94	.42	2.21	5.74	8.24	274	12.5	7.79	42.7
15	.88	.94	.74	.88	.41	2.48	5.43	6.47	140	10.5	7.12	29.5
16	1.76	.99	.71	.85	.52	2.68	4.57	7.27	38.6	9.96	5.80	11.5
17	1.40	.93	.62	.75	.48	2.40	4.42	9.21	22.8	8.82	24.0	7.27
18	.99	.82	.54	.76	.47	2.28	4.19	54.8	19.6	8.62	19.4	4.93
19	.99	.81	.50	.74	.52	3.18	15.9	256	16.8	8.56	11.4	4.47
20	.99	.89	.44	.75	.51	5.11	291	65.4	15.2	8.71	8.20	9.38
21	.94	.71	.40	.68	.61	4.97	292	39.2	14.4	8.98	6.58	8.86
22	1.10	.70	.35	.60	7.44	4.41	101	41.0	11.4	8.94	7.07	11.2
23	.95	.76	.33	.61	51.2	3.66	55.3	24.1	11.1	8.76	7.52	149
24	.84	1.00	.31	.58	70.1	4.15	31.4	11.8	12.8	8.51	6.67	82.8
25	.90	.69	.32	.59	45.3	4.54	17.1	6.21	12.5	7.89	5.87	34.9
26	.95	.62	.35	.55	24.7	3.86	12.0	5.98	11.1	7.48	5.40	19.3
27	.90	.57	.33	.56	16.2	4.12	11.0	10.1	9.26	20.8	4.96	12.5
28	.96	.44	.34	.46	8.61	4.22	9.41	16.0	8.65	14.7	4.56	9.16
29	.91	.41	.34	.45	5.47	3.70	8.78	13.9	9.87	10.9	4.52	6.97
30	.91	.36	.49	.44	---	3.30	8.03	10.3	7.70	8.86	4.77	5.19
31	.91	---	.47	.43	---	2.97	---	25.9	---	17.4	4.74	---
TOTAL	50.11	25.95	21.24	25.05	238.41	95.97	958.86	928.39	2069.34	886.23	486.99	725.53

WTR YR 2000 TOTAL 6512.07

ROCK RIVER BASIN

05431017 DELAVAN LAKE INLET AT STATE HIGHWAY 50 AT LAKE LAWN, WI--Continued

PHOSPHORUS, ORTHO, WATER, FILTERED, POUNDS PER DAY, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.14	.25	.10	.19	.14	.88	.25	1.41	129	3.44	27.4	3.33
2	1.34	.25	.11	.36	.14	.67	.28	1.19	202	4.50	18.0	3.08
3	1.62	.23	.14	.30	.12	.57	.28	1.03	79.3	127	16.0	3.02
4	2.82	.22	.16	.26	.12	.52	.29	.95	38.3	38.5	12.9	2.97
5	1.59	.24	.60	.24	.12	.46	.21	.88	38.5	8.32	33.6	2.56
6	1.23	.25	.35	.21	.12	.38	.22	.77	18.9	29.9	82.6	2.34
7	.92	.24	.22	.20	.12	.37	.39	.70	9.14	14.3	29.0	2.12
8	.77	.21	.19	.23	.13	.36	.52	.70	4.80	8.56	15.7	2.26
9	.75	.21	.19	.28	.15	.38	.54	8.05	3.00	6.15	12.8	2.23
10	.64	.24	.24	.65	.21	.35	.76	131	1.88	153	9.99	5.06
11	.60	.29	.19	.68	.20	.31	.59	40.5	3.41	70.7	8.16	15.5
12	.50	.23	.20	.47	.17	.31	.49	23.9	77.6	21.0	6.14	136
13	.54	.20	.20	.36	.17	.31	.49	11.1	154	10.9	7.36	21.6
14	.43	.19	.21	.30	.15	.30	.53	7.55	119	8.50	6.32	29.4
15	.41	.17	.24	.28	.15	.32	.57	4.50	71.5	7.16	5.68	20.8
16	.80	.17	.25	.28	.20	.34	.55	3.69	4.44	6.74	4.53	8.74
17	.62	.17	.22	.24	.18	.29	.61	3.41	2.26	5.94	18.7	5.09
18	.42	.16	.19	.24	.18	.26	.66	16.6	2.35	5.75	15.8	3.18
19	.41	.16	.18	.23	.20	.35	2.83	112	2.43	5.65	9.20	3.00
20	.40	.18	.15	.24	.20	.53	62.3	30.2	2.67	5.70	6.56	6.65
21	.37	.15	.14	.21	.24	.49	110	14.7	3.04	5.82	5.22	6.01
22	.42	.15	.12	.19	3.11	.42	49.6	10.5	2.92	5.75	5.54	7.36
23	.35	.17	.12	.19	25.1	.33	26.9	4.19	3.43	5.58	5.84	108
24	.30	.23	.11	.18	33.5	.36	12.0	1.53	4.80	5.43	5.13	61.5
25	.31	.17	.11	.18	19.5	.37	6.05	.97	5.63	5.21	4.46	25.5
26	.32	.16	.12	.17	6.92	.30	3.29	1.01	5.84	5.13	4.07	13.1
27	.29	.15	.11	.17	2.56	.31	2.65	1.83	4.89	14.8	3.69	7.94
28	.30	.12	.12	.14	1.31	.30	2.01	3.90	4.52	10.9	3.36	5.43
29	.28	.12	.12	.14	1.09	.27	1.67	2.79	5.10	8.38	3.30	3.86
30	.27	.11	.17	.14	---	.26	1.36	3.53	3.93	7.08	3.44	2.69
31	.26	---	.16	.14	---	.24	---	4.50	---	14.4	3.38	---
TOTAL	22.42	5.79	5.73	8.09	96.50	11.91	288.89	449.58	1008.58	630.19	393.87	520.32

WTR YR 2000 TOTAL 3441.87

423556088365001 DELAVAN LAKE AT CENTER NEAR DELAVAN LAKE, WI

LOCATION.--Lat 42°35'56", long 88°36'50", in SE 1/4 SW 1/4, sec.28, T.2 N., R.16 E., Walworth County, Hydrologic Unit 07090001, 2.6 mi southeast of Delavan.

DRAINAGE AREA.--41.4 mi², of which 2.3 mi² is non-contributing.

PERIOD OF RECORD.--October 1983 to current year.

REMARKS.--Lake ice-covered during February measurements. Water-quality analyses done by the U.S. Geological Survey National Water Quality Laboratory. Samples for determination of chlorophyll-a concentration are collected from the top 1.5 ft of the lake.

WATER-QUALITY DATA, NOVEMBER 15, 1999 TO APRIL 05, 2000
(Milligrams per liter unless otherwise indicated)

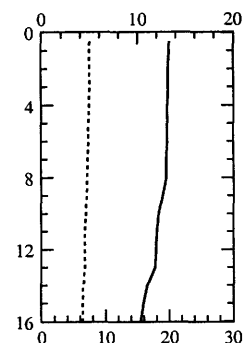
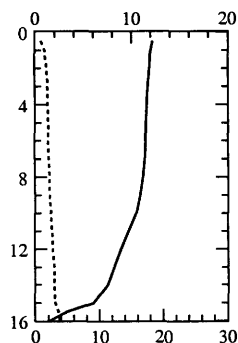
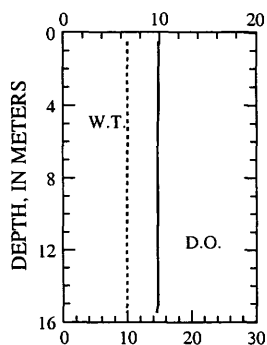
	Nov-15		Feb-8		Apr-5	
Lake stage (ft)	4.89		4.87		4.93	
Secchi-depth (m)	4.0		4.3		2.6	
Chlorophyll a, phytoplankton (µg/L)	3.7		0.6		6.6	
Depth of sample (m)	0.5	15.5	0.5	15.5	0.5	16.0
Water temperature (°C)	10.0	9.9	0.8	3.6	7.5	6.4
Specific conductance (µS/cm)	534	535	604	677	571	575
pH (units)	7.9	8.0	7.5	7.6	8.4	8.2
Dissolved oxygen (mg/L)	9.9	9.7	12.2	3.2	13.3	10.3
Phosphorus, total (as P)	0.069	0.068	0.068	0.116	0.051	0.069
Phosphorus, ortho, dissolved (as P)	<0.001	0.010	0.047	0.090	0.003	0.004
Nitrogen, NO ₂ + NO ₃ , diss. (as N)	0.04	---	0.248	---	0.137	0.171
Nitrogen, ammonia, dissolved (as N)	0.047	---	0.124	---	<0.002	<0.002
Nitrogen, amm. + org., total (as N)	0.68	---	0.74	---	0.68	0.68
Nitrogen, total (as N)	0.72	---	0.99	---	0.81	0.85
Color (Pt-Co. scale)	---	---	---	---	20	20
Turbidity (NTU)	---	---	---	---	0.6	0.7
Hardness, (as CaCO ₃)	---	---	---	---	230	230
Calcium, dissolved (Ca)	---	---	---	---	39.6	39.5
Magnesium, dissolved (Mg)	---	---	---	---	31.3	31.2
Sodium, dissolved (Na)	---	---	---	---	23.7	23.5
Potassium, dissolved (K)	---	---	---	---	2.9	2.9
Alkalinity, (as CaCO ₃)	---	---	---	---	189	189
Sulfate, dissolved (SO ₄)	---	---	---	---	29.1	28.9
Chloride, dissolved (Cl)	---	---	---	---	55.7	55
Silica, dissolved (SiO ₂)	---	---	---	---	0.1	0.1
Solids, dissolved, at 180°C	---	---	---	---	310	310
Iron, dissolved (Fe) µg/L	---	---	---	---	<10	<10
Manganese, dissolved (Mn) µg/L	---	---	---	---	<2	2

11-15-99

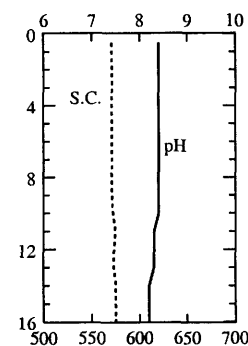
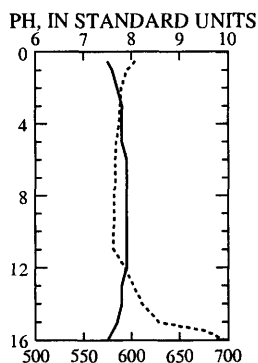
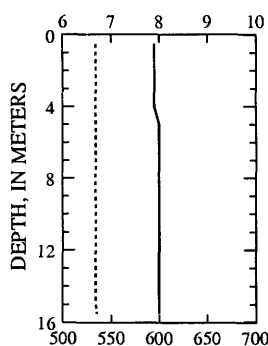
2-08-00

4-05-00

DISSOLVED OXYGEN (D.O.), IN MILLIGRAMS PER LITER



WATER TEMPERATURE (W.T.), IN DEGREES CELSIUS



SPECIFIC CONDUCTANCE (S.C.), IN MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS

WATER-QUALITY DATA, MAY 17 TO JULY 12, 2000
(Milligrams per liter unless otherwise indicated)

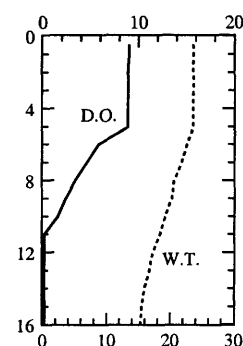
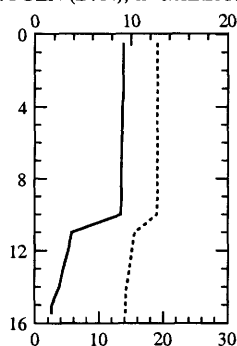
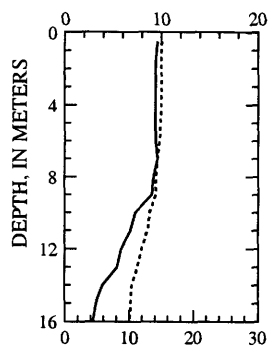
	May-17				Jun-15				Jul-12			
Lake stage (ft)	4.99				5.34				5.12			
Secchi-depth (m)	5.3				3.0				3.1			
Chlorophyll a, phytoplankton (µg/L)	1.9				15				12.4			
Depth of sample (m)	0.5	7.0	14.0	16.0	0.5	10.0	14.0	15.5	0.5	5.0	11.0	16.0
Water temperature (°C)	15.1	14.4	10.4	10.1	19.1	19.0	14.3	14.1	23.6	23.6	18.4	15.3
Specific conductance (µS/cm)	563	564	578	581	551	554	581	583	524	524	561	585
pH (units)	8.2	8.2	7.8	7.7	8.1	8.3	7.8	7.7	8.2	8.3	7.6	7.6
Dissolved oxygen (mg/L)	9.6	9.6	3.9	2.9	9.2	8.9	2.5	1.7	9.0	8.9	0.2	0.2
Phosphorus, total (as P)	0.037	0.037	0.066	0.119	0.043	0.040	0.115	0.119	0.033	0.024	0.173	0.486
Phosphorus, ortho, dissolved (as P)	0.019	0.017	0.046	0.092	<0.001	<0.001	0.026	0.058	0.001	0.001	0.084	0.376
Nitrogen, NO ₂ + NO ₃ , diss. (as N)	0.203	---	---	---	0.196	---	---	---	0.021	---	---	---
Nitrogen, ammonia, dissolved (as N)	0.067	---	---	---	0.004	---	---	---	0.048	---	---	---
Nitrogen, amm. + org., total (as N)	0.62	---	---	---	0.61	---	---	---	0.76	---	---	---
Nitrogen, total (as N)	0.82	---	---	---	0.81	---	---	---	0.78	---	---	---

5-17-00

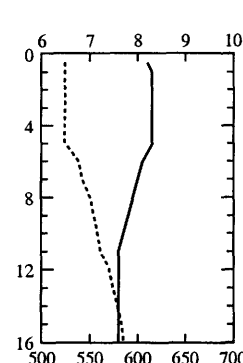
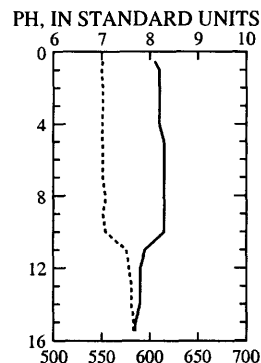
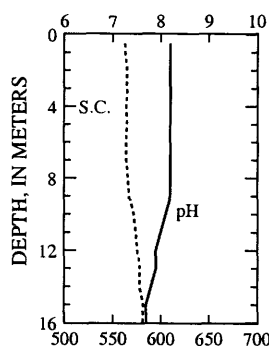
6-15-00

7-12-00

DISSOLVED OXYGEN (D.O.), IN MILLIGRAMS PER LITER



WATER TEMPERATURE (W.T.), IN DEGREES CELSIUS



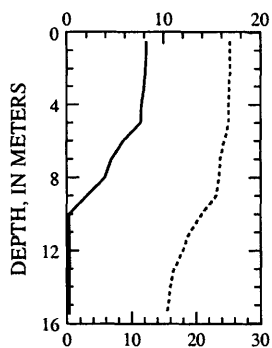
SPECIFIC CONDUCTANCE (S.C.), IN MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS

423556088365001 DELAVAN LAKE AT CENTER NEAR DELAVAN LAKE, WI--Continued

WATER-QUALITY DATA, AUGUST 15 TO SEPTEMBER 14, 2000
(Milligrams per liter unless otherwise indicated)

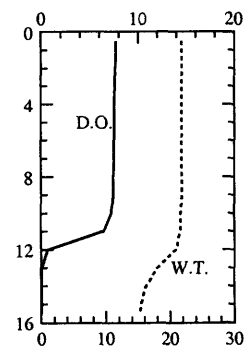
	Aug-15								Sep-14			
Lake stage (ft)	5.01								5.12			
Secchi-depth (m)	2.6								2.9			
Chlorophyll a, phytoplankton (µg/L)	5.2								4.5			
Depth of sample (m)	0.5	3.0	5.0	7.0	9.0	11.0	14.0	15.5	0.5	11.0	14.0	15.5
Water temperature (°C)	25.3	25.2	25.1	23.8	23.1	19.0	16.0	15.4	21.8	21.6	16.2	15.3
Specific conductance (µS/cm)	518	520	520	528	532	571	595	603	527.0	532.0	609.0	629.0
pH (units)	8.4	8.4	8.3	8.1	7.8	7.6	7.5	7.4	8.3	8.1	7.4	7.3
Dissolved oxygen (mg/L)	8.2	8.0	7.6	4.6	2.0	0.2	0.2	0.2	7.700	6.400	0.000	0.000
Phosphorus, total (as P)	0.028	0.027	0.027	0.028	0.066	0.278	0.621	---	0.076	0.082	0.82	1.06
Phosphorus, ortho, dissolved (as P)	<0.001	---	0.001	---	---	---	0.487	---	0.015	0.02	0.721	0.964
Nitrogen, NO ₂ + NO ₃ , diss. (as N)	<0.005	---	---	---	---	---	---	---	0.118	---	---	---
Nitrogen, ammonia, dissolved (as N)	0.038	---	---	---	---	---	---	---	0.087	---	---	---
Nitrogen, amm. + org., total (as N)	0.66	---	---	---	---	---	---	---	0.64	---	---	---
Nitrogen, total (as N)	---	---	---	---	---	---	---	---	0.76	---	---	---

8-15-00



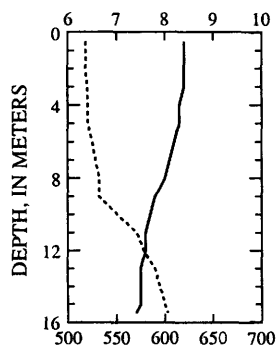
DISSOLVED OXYGEN (D.O.), IN MILLIGRAMS PER LITER

9-14-00

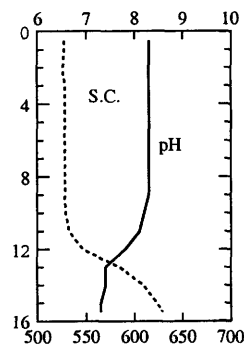


WATER TEMPERATURE (W.T.), IN DEGREES CELSIUS

PH, IN STANDARD UNITS



SPECIFIC CONDUCTANCE (S.C.), IN MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS



ROCK RIVER BASIN

423556088365001 DELAVAN LAKE AT CENTER NEAR DELAVAN LAKE, WI--Continued

ADDITIONAL WATER-QUALITY DATA, OCTOBER 1, 1999 TO SEPTEMBER 27, 2000
(Milligrams per liter unless otherwise indicated)

	<u>Oct. 1</u>	<u>Oct. 6</u>	<u>Oct. 27</u>	<u>Mar. 22</u>	<u>Mar. 30</u>	<u>Apr. 18</u>
Lake stage (ft)	4.96	5.00	4.91	4.99	4.93	4.93
Secchi-depth (meters)	2.3	4.1	4.7	4.9	3.8	6.7
Depth of sample (meters)	0.5	0.5	0.5	0.5	0.5	0.5
Water temperature (°C)	17.2	15.0	12.2	6.2	6.5	7.8
Phosphorus, total (as P)	0.095	0.097	0.075	0.059	0.043	0.035

	<u>Apr. 26</u>	<u>May 2</u>	<u>May 10</u>	<u>May 26</u>	<u>June 21</u>	<u>June 28</u>
Lake stage (ft)	4.96	4.99	5.24	4.96	4.97	4.98
Secchi-depth (meters)	10.8	10.1	8.9	7.9	3.5	4.3
Depth of sample (meters)	0.5	0.5	0.5	0.5	0.5	0.5
Water temperature (°C)	10.5	13.0	16.7	16.0	20.5	22.8
Phosphorus, total (as P)	0.043	0.035	0.018	0.053	0.031	0.031

	<u>July 6</u>	<u>July 21</u>	<u>July 27</u>	<u>Aug. 3</u>	<u>Aug. 8</u>	<u>Aug. 23</u>
Lake stage (ft)	4.99	4.96	4.93	5.01	5.09	5.01
Secchi-depth (meters)	4.3	3.5	3.0	1.8	1.8	4.4
Depth of sample (meters)	0.5	0.5	0.5	0.5	0.5	0.5
Water temperature (°C)	25.0	23.9	25.0	22.8	23.9	23.3
Phosphorus, total (as P)	<0.050	0.035	0.036	0.037	0.032	0.030

	<u>Aug. 29</u>	<u>Sept. 8</u>	<u>Sept. 27</u>
Lake stage (ft)	4.98	4.90	5.03
Secchi-depth (meters)	4.9	4.3	3.7
Depth of sample (meters)	0.5	0.5	0.5
Water temperature (°C)	22.8	22.8	17.2
Phosphorus, total (as P)	0.029	0.049	0.141

423526088380101 DELAVAN LAKE, AT SW END, NEAR DELAVAN LAKE, WI

LOCATION.--Lat 42°35'26", long 88°38'01", in SE 1/4 NW 1/4, sec.32, T.2 N., R.16 E., Walworth County, Hydrologic Unit 07090001, 2.6 mi southeast of Delavan.

DRAINAGE AREA.--41.4 mi², of which 2.3 mi² is non-contributing.

PERIOD OF RECORD.--October 1983 to current year.

WATER-QUALITY DATA, MAY 17 TO AUGUST 15, 2000

	May 17 -----	June 15 -----	July 12 -----	Aug. 15 -----
Secchi-depth (meters)	5.8	3.2	2.0	3.8

423659088354401 DELAVAN LAKE, AT NORTH END, NEAR LAKE LAWN, WI

LOCATION.--Lat 42°36'59", long 88°35'44", in NW 1/4 SW 1/4, sec.22, T.2 N., R.16 E., Walworth County, Hydrologic Unit 07090001, 2.6 mi southeast of Delavan.

DRAINAGE AREA.--41.4 mi², of which 2.3 mi² is non-contributing.

PERIOD OF RECORD.--October 1983 to current year.

WATER-QUALITY DATA, MAY 17 TO AUGUST 15, 2000

	May 17 -----	June 15 -----	July 12 -----	Aug. 15 -----
Secchi-depth (meters)	5.5	2.9	3.7	2.4

ROCK RIVER BASIN

423706088363400 DELAVAN LAKE NEAR DELAVAN, WI

LOCATION.--Lat 42°36'27", long 88°36'19", in SW ¼ NE ¼ sec.28, T.2 N., R.16 E., Walworth County, Hydrologic Unit 07090001, at Delavan Lake Sanitary District Lift Station No. 2 at Delavan Lake Yacht Club, 1.0 mi southeast of outlet, and 2.7 mi southeast of Delavan.

DRAINAGE AREA.--41.4 mi², of which 2.3 mi² is non-contributing. Area of Delavan Lake, 2,072 acres.

PERIOD OF RECORD.--October 1983 to current year. October 1983 to September 1985 data published in Water Resources Investigation series report "Water Quality and Hydrology of Delavan Lake in Southeastern Wisconsin" by Stephen J. Field and Marvin D. Duerk.

GAGE.--Water-stage recorder. Datum of gage is 922.92 ft above sea level. Prior to Sept. 5, 1989, staff gage at bridge on North Shore Drive at same datum.

REMARKS.--Lake was ice covered from Jan. 20 to Feb. 27. Lake levels controlled by Delavan Lake Sanitary District.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height observed, 6.19 ft, Feb. 21, 1994; minimum daily, -4.44 ft Nov. 6, 1989 (lake drawn down for lake rehabilitation program).

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 5.47 ft, June 2; minimum, 4.83 ft, Feb. 12, 17, 18.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.96	4.92	4.94	4.97	4.95	4.96	4.93	4.98	5.28	5.00	5.02	4.96
2	4.96	4.91	4.93	4.98	4.94	4.95	4.94	4.99	5.46	5.01	5.02	4.96
3	4.98	4.90	4.94	4.99	4.92	4.94	4.94	4.99	5.38	5.17	5.01	4.96
4	5.01	4.90	4.96	5.01	4.92	4.94	4.94	4.99	5.26	5.12	5.00	4.95
5	5.01	4.88	5.04	5.02	4.90	4.95	4.93	4.99	5.19	5.05	5.02	4.93
6	5.00	4.88	5.04	5.01	4.89	4.96	4.92	5.00	5.09	4.99	5.10	4.91
7	5.00	4.88	5.02	5.01	4.88	4.96	4.96	5.00	5.02	4.99	5.10	4.90
8	4.99	4.88	5.00	5.01	4.87	4.96	5.00	5.01	4.98	4.99	5.09	4.90
9	5.00	4.88	4.99	5.00	4.86	4.97	4.97	5.11	4.99	4.99	5.07	4.89
10	5.00	4.88	4.99	5.01	4.85	4.96	4.96	5.24	4.99	5.15	5.05	4.91
11	5.00	4.89	4.98	5.01	4.84	4.95	4.95	5.22	5.02	5.19	5.03	4.96
12	4.99	4.89	4.96	5.00	4.84	4.94	4.94	5.17	5.12	5.12	5.01	5.12
13	4.99	4.89	4.95	5.00	4.86	4.93	4.93	5.10	5.31	5.05	5.01	5.11
14	4.98	4.90	4.95	5.00	4.87	4.93	4.93	5.02	5.38	5.02	5.01	5.12
15	4.97	4.89	4.95	4.99	4.86	4.94	4.93	4.96	5.34	5.01	5.01	5.08
16	4.99	4.89	4.95	4.97	4.85	4.96	4.93	4.97	5.25	5.01	5.00	5.02
17	4.99	4.89	4.94	4.96	4.84	4.96	4.94	4.99	5.12	5.00	5.03	4.98
18	4.99	4.89	4.93	4.96	4.86	4.95	4.93	5.09	5.02	4.99	5.04	4.96
19	4.98	4.88	4.93	4.97	4.88	4.96	4.97	5.24	4.98	4.98	5.04	4.94
20	4.97	4.89	4.93	4.99	4.87	4.99	5.27	5.21	4.97	4.97	5.02	4.96
21	4.97	4.89	4.93	5.00	4.86	4.99	5.41	5.10	4.97	4.96	5.01	4.97
22	4.96	4.89	4.93	5.01	4.86	4.99	5.29	5.05	4.95	4.96	5.01	5.00
23	4.94	4.91	4.93	5.01	4.92	4.97	5.15	5.00	4.96	4.95	5.01	5.13
24	4.93	4.93	4.94	5.01	5.03	4.97	5.03	4.95	4.98	4.94	5.02	5.10
25	4.92	4.93	4.94	5.00	5.06	4.96	4.97	4.95	5.00	4.93	5.01	5.05
26	4.91	4.93	4.94	4.99	5.05	4.94	4.96	4.96	5.00	4.92	5.00	5.04
27	4.91	4.94	4.95	4.97	5.03	4.94	4.94	5.01	4.99	4.93	5.00	5.03
28	4.91	4.94	4.95	4.97	4.98	4.94	4.95	5.06	4.98	4.94	4.99	5.02
29	4.91	4.94	4.96	4.96	4.95	4.93	4.96	5.07	5.00	4.93	4.98	5.01
30	4.91	4.94	4.96	4.97	---	4.93	4.97	5.07	5.00	4.93	4.98	5.00
31	4.91	---	4.96	4.96	---	4.93	---	5.09	---	4.97	4.97	---
MEAN	4.97	4.90	4.96	4.99	4.91	4.95	4.99	5.05	5.10	5.01	5.02	5.00
MAX	5.01	4.94	5.04	5.02	5.06	4.99	5.41	5.24	5.46	5.19	5.10	5.13
MIN	4.91	4.88	4.93	4.96	4.84	4.93	4.92	4.95	4.95	4.92	4.97	4.89

05431022 DELAVAN LAKE OUTLET AT BORG ROAD NEAR DELAVAN, WI

LOCATION.--Lat 42°36'53", long 88°37'29", in SW ¼ SE ¼ sec.20, T.2 N., R.16 E., Walworth County, Hydrologic Unit 07090001, on right bank 50 ft upstream from bridge on Borg Road, 1.4 mi southeast of Delavan, and 0.2 mi downstream from Delavan Lake dam outlet.

DRAINAGE AREA.--42.1 mi², of which 2.3 mi² is non-contributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1983 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 914.50 ft above sea level (Public Service Commission bench mark).

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	1.3	1.1	4.8	16	26	1.3	11	170	5.9	2.5	3.4
2	2.7	1.2	1.1	8.4	16	26	1.2	13	199	6.2	8.6	3.2
3	2.8	1.1	1.0	9.1	15	17	5.1	17	196	68	14	3.1
4	2.4	1.5	.94	8.9	14	9.3	7.0	14	184	91	5.7	3.0
5	2.5	1.6	16	6.6	14	7.5	3.5	9.1	166	86	.99	2.8
6	2.6	2.5	23	6.3	14	7.7	1.2	5.8	144	37	8.9	1.4
7	2.3	2.6	22	5.5	14	12	12	3.3	97	5.1	18	2.5
8	2.2	2.0	22	10	14	14	27	6.1	34	4.9	18	3.4
9	2.0	1.7	22	13	13	14	27	22	9.5	4.4	18	2.6
10	3.7	1.6	22	14	12	14	26	81	10	72	17	2.2
11	4.2	1.4	21	14	11	14	26	107	14	130	13	1.6
12	3.7	1.3	21	14	10	13	14	111	82	109	5.7	32
13	3.7	1.4	14	14	9.8	8.6	8.8	101	167	65	3.6	48
14	3.8	1.4	9.4	14	9.9	2.9	8.8	88	188	24	3.3	65
15	3.8	1.4	12	13	9.9	2.2	9.1	31	175	8.5	3.1	71
16	3.4	1.4	12	13	9.8	5.6	9.3	3.3	169	8.6	3.0	53
17	3.2	1.2	10	13	9.8	7.7	8.9	3.7	169	5.2	3.1	23
18	3.0	1.1	9.0	5.6	10	7.7	8.9	58	84	2.9	3.0	8.7
19	2.7	1.1	4.2	1.5	10	7.8	29	136	55	2.7	3.1	5.8
20	2.7	.96	4.3	1.5	10	12	137	169	37	2.6	3.1	5.6
21	2.7	1.1	1.6	1.5	10	14	222	143	30	2.3	2.9	5.1
22	2.6	1.2	1.1	2.9	e10	20	207	124	21	2.6	2.7	16
23	2.6	1.2	1.0	4.3	e12	25	200	115	13	3.0	2.9	117
24	2.1	1.0	.96	10	60	25	137	42	13	3.4	3.1	130
25	1.9	.89	.95	14	99	21	62	5.3	16	3.8	3.1	44
26	2.0	.84	.89	14	99	14	41	5.2	16	2.5	3.2	19
27	1.9	.82	.94	7.8	96	11	22	11	17	7.8	3.3	18
28	1.7	1.0	1.0	4.7	71	6.2	8.2	36	9.4	6.5	3.3	15
29	1.6	1.1	1.0	13	34	8.9	8.1	56	3.5	3.0	3.2	12
30	1.4	1.1	.99	16	---	5.7	9.2	72	4.7	2.2	3.3	11
31	1.3	---	.93	16	---	1.3	---	111	---	.94	3.4	---
TOTAL	91.2	40.01	259.40	294.4	733.2	381.1	1287.6	1710.8	2493.1	777.04	190.09	728.4
MEAN	2.94	1.33	8.37	9.50	25.3	12.3	42.9	55.2	83.1	25.1	6.13	24.3
MAX	12	2.6	23	16	99	26	222	169	199	130	18	130
MIN	1.3	.82	.89	1.5	9.8	1.3	1.2	3.3	3.5	.94	.99	1.4
AC-FT	181	79	515	584	1450	756	2550	3390	4950	1540	377	1440
CFSM	.07	.03	.21	.24	.64	.31	1.08	1.39	2.09	.63	.15	.61
IN.	.09	.04	.24	.28	.69	.36	1.20	1.60	2.33	.73	.18	.68

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2000, BY WATER YEAR (WY)

	MEAN	22.1	19.5	19.4	19.4	29.8	28.7	37.9	22.0	28.3	11.8	5.70	15.8
MAX	127	93.1	51.1	44.7	97.8	71.2	145	56.0	105	53.7	32.6	110	
(WY)	1990	1986	1986	1993	1994	1986	1993	1996	1996	1993	1995	1989	
MIN	.000	.003	.000	.31	.71	.41	.000	.006	.014	.025	.011	.020	
(WY)	1991	1991	1990	1990	1990	1990	1990	1990	1990	1990	1991	1990	

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1984 - 2000

	ANNUAL TOTAL	8741.31	ANNUAL MEAN	23.9	8986.34	24.6	21.6	42.6	11.0	1993	1991
HIGHEST ANNUAL MEAN											
LOWEST ANNUAL MEAN											
HIGHEST DAILY MEAN	248	Jun 15	222	Apr 21	406	Feb 22	1994				
LOWEST DAILY MEAN	.73	Sep 13	.82	Nov 27	.00	(a) Jun 21, 22	1989				
ANNUAL SEVEN-DAY MINIMUM	.96	Dec 25	.96	Dec 25	.00	(b) Nov 14	1989				
INSTANTANEOUS PEAK FLOW			225	Apr 20, 21	473	Feb 22	1994				
INSTANTANEOUS PEAK STAGE			7.84	Apr 20, 21	8.35	Aug 5	1998				
ANNUAL RUNOFF (AC-FT)	17340		17820		15650						
ANNUAL RUNOFF (CFSM)		.60	.62		.54						
ANNUAL RUNOFF (INCHES)		8.17	8.40		7.37						
10 PERCENT EXCEEDS	68		85		59						
50 PERCENT EXCEEDS	6.6		8.9		7.7						
90 PERCENT EXCEEDS	1.1		1.3		.07						

(a) Also occurred many days during 1990 and 1991 water years (lake drawn down for lake rehabilitation program)

(b) Also occurred in 1990 and 1991 water years

(c) Estimated due to ice effect or missing record

ROCK RIVER BASIN

05431022 DELAVAN LAKE OUTLET AT BORG ROAD NEAR DELAVAN, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1983 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: Water years 1984-85, 1990-91.

TOTAL-PHOSPHORUS DISCHARGE: October 1983 to current year.

INSTRUMENTATION.--Automatic pumping sampler from October to December 1983. Manual samples collected from January 1984 to present.

REMARKS.--Records good.

COOPERATION.--Observer furnished by Delavan Lake Sanitary District.

EXTREMES FOR PERIOD OF RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 238 mg/L, Feb. 22, 1985; minimum observed, 1 mg/L, on many days.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 29 tons, Feb. 25, 1985; minimum daily, 0.00 ton, on many days during 1990 and 1991 water years.

DISSOLVED CHLORIDE CONCENTRATIONS: Maximum observed, 71 mg/L, June 5, 1995; minimum observed, 40 mg/L, July 5, 1995.

TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 6.00 mg/L, Jan. 5, 1990; minimum observed, <0.01 mg/L, Mar. 9-10, 1990, several days during 1992, 1994, and 1995 water years, and Oct. 2, 1995.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 585 lb, Feb. 22, 1994; minimum daily, 0.00 lb, Aug. 9, 13, 1987, and many days during 1990, 1991, and 1994 water years, Dec. 4, 1994, July 10-11, 1995, Oct. 1-5, 1995, and Sept. 27, 1996.

EXTREMES FOR CURRENT YEAR.--

TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.110 mg/L, Aug. 2; minimum observed, <0.05 mg/L, on many days.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 65.2 lb, Apr. 23; minimum daily, 0.22 lb, Nov. 27.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SAM- PLING METHOD, CODES (82398)
OCT				
04...	0820	2.8	E.039	10
07...	0940	2.2	E.034	70
NOV				
01...	1035	1.3	<.050	10
16...	0950	1.2	<.050	70
DEC				
05...	1540	23	<.050	10
06...	0825	23	<.050	10
06...	1420	23	<.050	10
07...	0810	22	<.050	10
07...	1420	22	.062	10
08...	0750	22	<.050	10
09...	0840	22	.072	10
16...	1030	11	.070	70
JAN				
03...	0850	9.1	<.050	10
27...	1055	4.8	.057	70
FEB				
07...	0845	14	.065	10
24...	0825	15	.056	10
24...	1340	60	.052	10
25...	0835	99	.064	10
25...	1305	98	.055	10
25...	1450	100	E.043	10
26...	0945	99	E.046	10
26...	1510	99	.057	10
27...	1005	96	.072	10
27...	1410	95	E.041	10
28...	1120	65	.084	10
29...	0830	48	E.039	10
MAR				
06...	1000	7.6	<.050	10
28...	1615	2.5	E.035	70
APR				
04...	0820	7.1	E.043	10
08...	1005	27	<.050	10
08...	1620	27	<.050	10
09...	0930	27	E.032	10
10...	0825	27	<.050	10
11...	0805	26	<.050	10
12...	0735	25	<.050	10
20...	1205	179	.056	10
20...	1430	219	.053	10
21...	1025	224	.055	10
21...	1455	222	.056	10
22...	1035	207	E.032	10
22...	1415	204	E.034	10
23...	1000	189	.067	10
24...	0900	195	.054	10
25...	0835	94	E.038	10
26...	0900	42	E.048	10
27...	1405	9.3	.059	10

05431022 DELAVAN LAKE OUTLET AT BORG ROAD NEAR DELAVAN, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SAM- PLING METHOD, CODES (82398)
MAY				
01...	0830	9.3	.040	10
10...	0830	36	E.037	10
10...	1400	108	<.050	10
11...	0815	103	<.050	10
11...	1400	78	E.039	10
12...	0850	112	<.050	10
12...	1330	110	<.050	10
13...	0905	102	<.050	10
14...	0855	91	<.050	10
18...	0830	3.7	<.050	10
18...	1345	89	E.043	10
19...	0925	108	E.042	10
19...	1405	170	.069	10
20...	0835	162	.059	10
20...	1450	174	E.041	10
21...	0950	150	E.030	10
22...	0850	121	E.035	10
23...	1345	108	E.043	10
24...	0940	6.0	<.050	10
27...	0920	13	E.047	10
27...	1335	14	E.037	10
29...	0825	56	E.034	10
30...	0900	56	<.050	10
30...	1505	73	E.034	10
31...	0820	92	<.050	10
31...	1350	103	E.031	10
JUN				
01...	0900	173	<.050	10
01...	1450	183	E.035	10
02...	0850	201	<.050	10
02...	1330	208	<.050	10
03...	0935	199	E.030	10
04...	0945	185	E.033	10
05...	0915	153	E.047	10
06...	0840	160	E.039	10
12...	0845	16	.089	10
12...	1130	36	.081	10
13...	0835	150	E.047	10
13...	1350	179	.051	10
14...	1340	184	E.039	10
15...	0825	183	E.036	10
JUL				
03...	0940	5.3	.094	10
03...	1300	111	.086	10
04...	1545	80	E.041	10
06...	0835	22	.102	10
10...	1120	5.1	.077	10
11...	0850	136	E.040	10
12...	0810	113	.054	10
13...	0750	97	.060	10
17...	0850	9.0	E.046	10
31...	0930	.87	.051	10
AUG				
01...	1445	4.3	.108	10
02...	1400	16	.110	10
04...	0935	2.9	.052	10
06...	0930	.80	.064	10
06...	1425	7.2	.056	10
07...	0840	19	E.048	10
09...	0830	18	E.039	10
17...	1100	3.1	.050	10
23...	1010	2.8	E.047	70
SEP				
05...	0825	3.0	E.032	10
12...	0920	28	E.044	10
13...	1025	48	E.032	10
14...	0905	57	E.030	10
15...	1020	71	<.050	10
16...	0905	45	<.050	10
18...	1035	9.8	<.050	10
22...	0800	4.4	<.050	10
23...	0830	36	<.050	10
24...	0750	160	.057	10
25...	0850	85	E.049	1

ROCK RIVER BASIN

05431022 DELAVAN LAKE OUTLET AT BORG ROAD NEAR DELAVAN, WI--Continued

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.49	.36	.30	1.34	5.36	5.63	.28	2.34	37.8	2.55	1.40	.65
2	.57	.33	.28	2.30	5.30	5.87	.25	2.77	49.1	2.91	4.84	.60
3	.59	.31	.28	2.46	5.00	4.12	1.15	3.57	33.9	28.5	5.54	.56
4	.49	.39	.25	2.41	4.90	2.32	1.61	2.86	34.8	24.7	1.73	.54
5	.50	.44	4.43	1.81	4.95	1.96	.79	1.89	39.5	30.7	.31	.49
6	.50	.68	6.08	1.73	4.97	2.06	.27	1.19	30.0	18.8	2.65	.26
7	.42	.71	6.56	1.51	4.90	3.12	2.70	.67	17.8	2.62	4.62	.48
8	.40	.55	6.54	2.91	4.71	3.59	6.92	1.23	5.74	2.35	4.04	.68
9	.38	.47	8.31	3.73	4.54	3.52	5.29	4.36	2.12	1.94	3.75	.55
10	.71	.42	8.41	3.81	4.09	3.43	6.96	20.2	2.97	25.0	3.81	.47
11	.82	.38	8.28	3.83	3.76	3.39	7.04	26.1	5.26	31.5	2.92	.36
12	.74	.36	8.19	3.97	3.42	3.27	3.85	29.2	31.2	31.9	1.31	6.90
13	.75	.38	5.26	3.87	3.27	2.07	2.41	27.3	44.9	20.7	.87	8.50
14	.79	.39	3.60	3.89	3.26	.70	2.46	23.8	41.0	7.32	.82	11.8
15	.80	.37	4.40	3.85	3.24	.51	2.57	8.27	34.1	2.40	.80	18.3
16	.72	.37	4.39	3.81	3.19	1.28	2.65	.89	31.5	2.27	.79	14.4
17	.68	.34	3.72	3.80	3.15	1.74	2.60	1.00	30.4	1.30	.84	6.28
18	.66	.31	3.26	1.65	3.18	1.71	2.61	13.9	14.6	.72	.81	2.36
19	.59	.30	1.52	.45	3.15	1.71	8.67	41.7	9.23	.69	.81	1.57
20	.60	.26	1.50	.44	3.12	2.48	39.9	44.9	6.09	.67	.81	1.52
21	.61	.30	.55	.44	3.10	2.92	63.3	24.6	5.32	.60	.74	1.37
22	.61	.33	.35	.88	3.07	4.25	42.3	24.0	4.01	.66	.70	4.40
23	.62	.31	.34	1.29	3.66	5.14	65.2	26.4	2.69	.77	.73	32.8
24	.51	.27	.31	3.12	17.8	5.02	39.1	10.8	3.04	.89	.76	38.6
25	.46	.24	.30	4.20	28.5	4.16	13.5	1.40	4.17	1.00	.75	11.8
26	.49	.23	.28	4.19	27.9	2.74	10.9	1.33	4.30	.66	.73	4.85
27	.47	.22	.29	2.41	30.1	2.15	6.68	2.35	5.08	2.08	.75	4.54
28	.44	.28	.30	1.45	26.2	1.18	2.37	6.82	3.05	1.75	.71	3.46
29	.42	.30	.30	4.07	7.79	1.73	2.13	11.2	1.26	.81	.68	2.82
30	.37	.30	.29	5.23	---	1.13	2.16	16.0	1.87	.60	.68	2.42
31	.36	---	.27	5.31	---	.28	---	23.3	---	.29	.69	---
TOTAL	19.56	10.90	89.14	86.16	229.58	85.18	348.62	406.34	536.80	249.65	51.39	184.33

WTR YR 2000 TOTAL 2297.65

05431032 TURTLE CREEK AT DELAVAN, WI

LOCATION.--Lat 42°38'13", long 88°39'27", in NW ¼ NW ¼ sec.18, T.2 N., R.16 E., Walworth County, Hydrologic Unit 07090001, on left bank 0.1 mi downstream from bridge on County Highway P, 0.7 mi northwest of Post Office at Delavan.

DRAINAGE AREA.--83.3 mi², of which 2.33 mi² is noncontributing.

PERIOD OF RECORD.--June 1996 to current year.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 873.00 ft above sea level (levels by U.S. Geological Survey).

REMARKS.--Records good (see page 12). Some seasonal regulation caused by dams used to maintain levels of Comus and Delavan Lakes and Delavan Millpond. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	20	20	20	36	71	22	32	262	39	33	22
2	32	21	20	27	35	68	22	31	330	46	35	21
3	35	20	22	28	35	61	23	31	311	103	43	21
4	32	20	23	28	34	48	26	31	224	140	39	21
5	30	22	44	26	33	43	24	28	222	154	45	21
6	30	22	52	25	33	33	21	26	202	146	46	20
7	23	23	49	24	33	31	29	24	161	69	57	18
8	21	22	48	28	32	36	51	24	108	43	54	20
9	22	21	48	34	33	37	51	57	52	39	51	19
10	24	22	48	38	32	38	50	98	44	106	47	21
11	26	21	46	38	30	38	50	131	48	152	43	38
12	24	21	45	37	29	38	41	138	108	164	33	98
13	24	21	40	35	30	35	29	135	189	148	28	98
14	24	21	31	35	30	25	28	129	259	109	27	104
15	24	22	32	34	30	25	28	90	232	60	23	105
16	28	22	34	34	30	26	27	24	200	48	21	102
17	26	21	31	34	29	30	27	31	202	34	31	85
18	30	20	28	29	30	30	26	111	182	23	26	45
19	32	20	26	21	30	32	46	192	125	23	25	27
20	28	21	20	21	29	37	192	228	93	23	25	32
21	25	20	19	20	30	41	318	218	66	24	24	29
22	25	21	19	21	47	46	312	177	51	24	23	46
23	24	22	18	23	95	55	251	163	34	25	24	162
24	24	21	18	23	139	55	235	132	36	22	24	203
25	22	21	18	31	167	50	164	59	37	22	23	160
26	20	21	18	33	171	43	89	44	39	22	23	97
27	20	21	18	29	148	37	54	57	38	23	23	74
28	20	20	18	23	130	34	32	75	40	26	23	52
29	21	21	18	27	92	29	32	93	30	24	23	37
30	20	20	18	36	---	30	30	100	35	24	22	37
31	21	---	18	36	---	23	---	136	---	37	22	---
TOTAL	828	631	907	898	1652	1225	2330	2845	3960	1942	986	1835
MEAN	26.7	21.0	29.3	29.0	57.0	39.5	77.7	91.8	132	62.6	31.8	61.2
MAX	71	23	52	38	171	71	318	228	330	164	57	203
MIN	20	20	18	20	29	23	21	24	30	22	21	18
CFSM	.32	.25	.35	.35	.68	.47	.93	1.10	1.58	.75	.38	.73
IN.	.37	.28	.41	.40	.74	.55	1.04	1.27	1.77	.87	.44	.82

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2000, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
MEAN	30.8	28.0	30.9	48.2	78.4	54.7	79.4	67.5	106	37.3	31.5	32.3
MAX	56.9	51.9	36.4	72.4	104	83.2	106	91.8	171	62.6	68.3	61.2
(WY)	1999	1999	1999	1999	1997	1997	1999	2000	1996	2000	1998	2000
MIN	16.2	17.2	21.9	29.0	57.0	39.5	51.1	42.4	38.5	20.2	16.6	17.0
(WY)	1998	1998	1998	2000	2000	2000	1997	1997	1997	1997	1997	1996

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1996 - 2000

	19839	20039	
ANNUAL TOTAL	54.4	54.8	51.1
ANNUAL MEAN			60.1
HIGHEST ANNUAL MEAN			41.8
LOWEST ANNUAL MEAN			1999
HIGHEST DAILY MEAN	404	330	404
LOWEST DAILY MEAN	16	18	7.7
ANNUAL SEVEN-DAY MINIMUM	16	18	12
INSTANTANEOUS PEAK FLOW		360	493
INSTANTANEOUS PEAK STAGE		3.38	3.78
INSTANTANEOUS LOW FLOW		16	6.6
ANNUAL RUNOFF (CFSM)	.65	.66	.61
ANNUAL RUNOFF (INCHES)	8.86	8.95	8.34
10 PERCENT EXCEEDS	118	139	113
50 PERCENT EXCEEDS	33	32	32
90 PERCENT EXCEEDS	18	21	17

(a) Also occurred Sept. 10, 11, 18-21, 23, 25

(b) Also occurred Sept. 7

ROCK RIVER BASIN

05431486 TURTLE CREEK AT CARVERS ROCK ROAD NEAR CLINTON, WI

LOCATION.--Lat 42°35'50", long 88°49'45", in SW $\frac{1}{4}$ sec.27, T.2 N., R.14 E., Rock County, Hydrologic Unit 07090001, on left bank 25 ft downstream from bridge on Carvers Rock Road, 3.3 mi northeast of Clinton, 13 mi northeast of Beloit, and 17.8 mi upstream from mouth.

DRAINAGE AREA.--199 mi², of which 2.33 mi² is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1939 to current year. Prior to January 1980, all records published as "Turtle Creek near Clinton" (05431500).

REVISED RECORDS.--WSP 955: 1940. WSP 1308: 1950(M). WDR WI-71-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 823 ft above sea level, from topographic map. Prior to January 17, 1940, non-recording gage, and January 17, 1940 to December 31, 1979, water-stage recorder at site 1.8 mi downstream at a different datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Some seasonal regulation caused by dams used to maintain levels of Comus and Delavan Lakes and Delavan Millpond. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	202	81	74	e70	e92	181	76	113	962	169	211	85
2	131	77	75	e76	e90	156	77	110	1140	141	139	82
3	112	76	79	84	e90	147	75	104	700	348	124	84
4	138	76	83	82	e88	134	76	103	505	265	122	85
5	123	76	112	e76	e88	123	77	100	477	264	163	82
6	110	78	128	e74	e86	115	73	94	417	263	260	80
7	105	78	119	e72	e84	102	77	92	358	220	173	79
8	94	79	114	e74	e84	105	95	91	281	149	148	78
9	91	80	113	81	e84	109	113	134	208	137	135	80
10	91	79	116	95	e82	105	114	318	164	320	127	82
11	90	77	113	106	79	103	108	266	158	311	120	95
12	90	76	109	96	77	99	104	280	394	281	114	243
13	89	76	107	90	80	98	91	252	1410	265	109	200
14	87	78	99	e90	75	92	85	231	943	231	103	199
15	86	77	95	e88	73	86	81	209	635	180	99	202
16	90	78	94	e86	74	86	77	150	452	142	91	178
17	92	78	89	e86	74	85	76	122	387	132	109	166
18	89	78	e80	e80	76	85	76	280	366	115	114	140
19	92	78	e74	e70	76	86	89	792	312	110	103	102
20	93	78	e64	e70	75	97	599	494	244	109	98	105
21	89	78	e68	e70	74	100	892	415	211	109	95	115
22	86	78	e66	e70	96	101	584	375	180	107	94	130
23	84	83	e66	e72	337	105	492	312	158	104	96	465
24	82	86	e66	e78	428	109	424	269	153	102	94	381
25	81	81	e66	e84	382	110	355	203	162	100	91	342
26	81	79	e66	e88	359	105	247	142	150	96	90	244
27	78	80	e66	e84	331	98	172	175	146	98	89	179
28	78	79	e66	e76	255	93	139	305	144	96	88	154
29	78	77	e66	e80	222	87	121	319	146	95	87	128
30	79	76	e66	e92	---	86	114	242	132	98	87	117
31	79	---	e66	e92	---	85	---	268	---	196	88	---
TOTAL	2990	2351	2665	2532	4111	3273	5779	7360	12095	5353	3661	4702
MEAN	96.5	78.4	86.0	81.7	142	106	193	237	403	173	118	157
MAX	202	86	128	106	428	181	892	792	1410	348	260	465
MIN	78	76	64	70	73	85	73	91	132	95	87	78
CFSM	.49	.40	.44	.42	.72	.54	.98	1.21	2.05	.88	.60	.80
IN.	.57	.44	.50	.48	.78	.62	1.09	1.39	2.29	1.01	.69	.89

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2000, BY WATER YEAR (WY)

	MEAN	101	109	104	108	143	225	177	130	125	98.7	87.7	96.2
MAX	312	388	343	315	518	664	758	486	407	458	278	482	
(WY)	1974	1986	1983	1946	1949	1959	1973	1973	1993	1978	1972	1972	
MIN	30.1	37.9	34.5	24.5	30.4	55.4	52.7	31.6	35.2	24.8	21.5	19.6	
(WY)	1958	1950	1965	1959	1959	1954	1958	1958	1965	1958	1958	1958	

05431486 TURTLE CREEK AT CARVERS ROCK ROAD NEAR CLINTON, WI--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1939 - 2000	
ANNUAL TOTAL	57569		56872		125	
ANNUAL MEAN	158		155		289	1973
HIGHEST ANNUAL MEAN					43.0	1958
LOWEST ANNUAL MEAN					6400	Apr 21 1973
HIGHEST DAILY MEAN	1350	Jun 14	1410	Jun 13	16	Sep 13 1958
LOWEST DAILY MEAN	(a) 64	Dec 20	(a) 64	Dec 20	17	Sep 9 1958
ANNUAL SEVEN-DAY MINIMUM	(a) 66	Dec 20	(a) 66	Dec 20	(b) 16500	Apr 21 1973
INSTANTANEOUS PEAK FLOW			1670	Jun 13	(c) 12.85	Apr 21 1973
INSTANTANEOUS PEAK STAGE			7.97	Jun 13	(d) 8.0	Dec 29 1956
INSTANTANEOUS LOW FLOW			(d) 23	Dec 20, 21	.64	
ANNUAL RUNOFF (CFSM)	.80		.79		8.66	
ANNUAL RUNOFF (INCHES)	10.89		10.76			
10 PERCENT EXCEEDS	282		314		231	
50 PERCENT EXCEEDS	111		98		85	
90 PERCENT EXCEEDS	75		76		43	

(a) Ice affected

(b) From rating curve extended above 6,500 ft³/s on basis of slope-area measurement of peak flow

(c) Site and datum then in use

(d) Result of freezeup

(e) Estimated due to ice effect or missing record

WATER-QUALITY RECORDS

REMARKS.--Chemical analyses by the Wisconsin State Laboratory of Hygiene. Samples are composites of 3-5 verticals, collected by cooperators.

		DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L) (00535)
OCT												
05...	1255	--	123	6.5	8.1	12.2	7.09	.072	.115	1.0	9	<5
19...	1255	--	95	7.2	7.9	11.1	7.78	.043	.094	.3	<5	<5
NOV												
02...	1340	--	76	7.9	8.4	8.7	8.50	.040	.063	1.2	<5	<5
16...	1357	--	79	8.1	8.0	6.9	8.58	.038	.069	.7	15	<5
DEC												
07...	1250	--	120	3.5	7.4	4.7	6.45	.069	.112	.9	13	<5
JAN												
05...	0900	76	--	5.5	7.3	.8	8.75	.064	.138	1.6	27	13
18...	1320	80	--	8.5	7.1	.5	7.37	.058	.191	2.2	72	16
FEB												
16...	1205	--	74	10.7	8.0	2.9	8.34	.085	.154	1.4	29	8
24...	1145	--	429	10.7	7.6	5.4	5.55	.250	.558	6.0	138	24
MAR												
07...	1300	--	102	9.8	7.8	14.0	8.58	.053	.102	1.1	13	<5
21...	1424	--	101	9.1	8.1	9.9	6.89	.053	.116	1.3	24	8
APR												
04...	1300	--	76	9.2	8.1	7.6	7.82	.053	.094	1.2	7	<5
18...	1325	--	76	10.0	8.1	10.2	7.37	.073	.117	1.2	6	<5
20...	1154	--	598	10.5	7.0	10.0	5.63	.148	1.05	7.6	655	100
MAY												
02...	1300	--	111	13.0	8.1	19.0	7.14	.037	.106	1.5	15	5
16...	1240	--	147	7.7	7.9	16.8	6.13	.049	.143	1.3	38	10
JUN												
01...	1256	--	1050	8.8	7.4	20.2	3.86	.234	.781	5.2	364	56
06...	1255	--	416	10.1	7.8	17.7	5.67	.061	.179	2.2	67	16
14...	1300	--	986	10.4	7.4	20.8	3.70	.206	.409	3.0	75	13
20...	1255	--	241	9.7	8.0	20.8	6.44	.032	.153	2.0	55	13
JUL												
12...	1300	--	288	7.2	7.8	22.8	5.31	.096	.291	3.0	84	16
25...	1345	--	104	8.1	8.5	21.6	9.05	.009	.090	2.1	25	8
AUG												
08...	1345	--	148	6.5	8.2	25.2	6.59	.047	.201	2.1	59	15
23...	1300	--	95	7.8	8.4	21.6	9.10	.039	.085	1.0	11	<5
SEP												
12...	1330	--	287	8.1	8.0	20.5	4.18	.153	.365	3.9	107	22

2000	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TOTAL	39306	18753	9897.3	23465	32423	16500.0	21381.5	103205	395520	125940	88210	96640
WTR YR 2000	TOTAL 971240.8											

[illegible][illegible]

05432500 PECATONICA RIVER AT DARLINGTON, WI

LOCATION.--Lat 42°40'40", long 90°07'07", in NE ¼ sec.3, T.2 N., R.3 E., Lafayette County, Hydrologic Unit 07090003, on right bank in Darlington, 0.3 mi downstream from Vinegar Branch, and 3.6 mi upstream from Otter Creek.

DRAINAGE AREA.--273 mi².

PERIOD OF RECORD.--September 1939 to current year.

REVISED RECORDS.--WDR WI-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 802.42 ft above sea level. Prior to Dec. 19, 1939, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	156	138	127	e110	e96	205	111	126	4490	298	196	158
2	155	137	135	e110	e96	186	112	123	2840	322	199	153
3	157	134	136	e110	e94	172	111	119	1530	573	193	153
4	163	135	148	e110	e94	166	108	117	758	414	181	161
5	160	136	144	e110	e94	160	106	115	939	343	182	150
6	154	134	134	e110	e94	154	105	113	818	320	209	144
7	151	132	129	e110	e94	150	112	112	591	297	200	143
8	151	133	129	e110	e94	149	132	116	525	279	182	145
9	152	135	129	e110	e94	150	124	132	467	287	177	143
10	151	135	133	e120	e92	144	120	124	417	487	170	144
11	148	133	121	e130	e92	138	117	124	386	510	165	198
12	144	131	130	e100	e92	133	114	135	371	338	162	735
13	146	132	127	e96	e92	132	110	122	455	301	180	259
14	146	132	125	e120	e92	131	109	113	1000	280	176	199
15	146	128	126	e110	e92	131	108	109	1570	264	167	184
16	167	128	125	e110	e92	132	107	111	938	253	160	166
17	177	128	e94	e100	e90	126	109	118	596	246	256	160
18	152	129	e110	e100	e90	122	108	222	509	235	310	156
19	149	131	e120	e100	e90	127	126	648	466	230	197	154
20	147	131	e110	e100	e90	138	251	335	502	227	179	178
21	145	129	e110	e98	e90	134	295	224	576	223	171	184
22	145	129	e110	e98	e100	130	193	198	433	217	169	172
23	142	155	e110	e96	e220	126	171	182	386	212	176	268
24	139	180	e110	e96	e700	126	160	167	488	206	173	243
25	140	144	e110	e96	e600	128	147	152	449	203	165	185
26	141	136	e110	e96	469	121	138	146	411	203	165	170
27	141	139	e110	e96	368	122	134	242	371	206	184	162
28	140	133	e110	e96	254	122	132	297	339	201	169	156
29	141	128	e110	e96	219	117	132	213	345	198	163	152
30	144	117	e110	e96	---	114	128	195	320	205	160	151
31	141	---	e110	e96	---	113	---	390	---	201	159	---
TOTAL	4631	4042	3742	3236	4874	4299	4030	5640	24286	8779	5695	5726
MEAN	149	135	121	104	168	139	134	182	810	283	184	191
MAX	177	180	148	130	700	205	295	648	4490	573	310	735
MIN	139	117	94	96	90	113	105	109	320	198	159	143
CFSM	.55	.49	.44	.38	.62	.51	.49	.67	2.97	1.04	.67	.70
IN.	.63	.55	.51	.44	.66	.59	.55	.77	3.31	1.20	.78	.78

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2000, BY WATER YEAR (WY)

	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
MEAN	130	141	123	157	218	371	246	203	246	205	152	142
MAX	302	674	338	546	738	951	731	780	810	1796	610	487
(WY)	1985	1962	1983	1960	1953	1959	1959	1960	2000	1993	1993	1942
MIN	39.9	43.8	34.6	31.6	38.3	60.9	69.8	51.1	42.2	32.7	42.1	38.3
(WY)	1965	1965	1959	1959	1959	1957	1957	1958	1965	1965	1958	1958

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1939 - 2000
ANNUAL TOTAL	96286	78980	
ANNUAL MEAN	264	216	194
HIGHEST ANNUAL MEAN			534
LOWEST ANNUAL MEAN			66.5
HIGHEST DAILY MEAN	1620	4490	11200
LOWEST DAILY MEAN	(a) 94	(a) 90	24
ANNUAL SEVEN-DAY MINIMUM	(a) 109	(a) 91	25
INSTANTANEOUS PEAK FLOW		5750	(c) 22000
INSTANTANEOUS PEAK STAGE		15.77	20.71
INSTANTANEOUS LOW FLOW		(d) 84	(d) 17
ANNUAL RUNOFF (CFSM)	.97	.79	.71
ANNUAL RUNOFF (INCHES)	13.12	10.76	9.66
10 PERCENT EXCEEDS	470	371	337
50 PERCENT EXCEEDS	185	144	125
90 PERCENT EXCEEDS	130	100	57

(a) Ice affected

(b) Also occurred July 26, 27, 30, 1965

(c) From rating curve extended above 11,000 ft³/s on basis of slope-area determination of peak flow

(d) Result of freezeup

(e) Estimated due to ice effect or missing record

ROCK RIVER BASIN

05433000 EAST BRANCH PECATONICA RIVER NEAR BLANCHARDVILLE, WI

LOCATION.--Lat 42°47'08" long 89°51'40", in SE ¼ SE ¼ sec. 26, T.4 N., R.5 E., Lafayette County, Hydrologic Unit 07090003, on left bank at downstream side of bridge on State Highway 78, 1.8 mi south of Blanchardville and 4.5 mi upstream from Sawmill Creek.

DRAINAGE AREA.--221 mi².

PERIOD OF RECORD.--September 1939 to September 1986, October 1987 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 796.8 ft above sea level. Prior to Dec. 20, 1939, nonrecording gage at bridge 50 ft upstream at same datum.

REMARKS.--Records good except those for periods of discharge over 500 ft³/s, which are fair, and estimated daily discharges, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	134	126	123	e110	e88	177	122	128	1360	202	149	131
2	133	125	124	e110	e88	162	122	126	1800	200	147	129
3	135	124	127	e110	e88	152	122	124	1140	271	145	130
4	138	125	134	e100	e88	149	120	123	639	223	142	133
5	136	126	130	e100	e88	147	119	122	607	205	142	127
6	133	125	126	e100	e86	144	120	121	498	199	224	127
7	131	124	123	e100	e86	142	123	120	377	192	158	127
8	132	125	123	e100	e86	143	131	122	343	187	147	127
9	134	126	123	e100	e86	148	130	129	317	189	144	127
10	132	126	126	e100	e86	140	127	125	291	301	141	132
11	129	125	120	e100	e84	136	124	124	274	301	138	171
12	128	123	121	e100	e84	133	122	127	260	208	137	328
13	130	124	121	e100	e84	133	121	123	273	194	141	165
14	129	124	120	e100	e84	132	121	119	582	187	142	143
15	130	121	122	e100	e84	132	120	117	622	180	137	137
16	145	122	123	e98	e84	134	119	119	403	176	135	131
17	146	122	e110	e98	e84	128	129	123	343	173	169	129
18	132	123	e130	e96	e84	127	124	268	307	168	191	127
19	131	124	e120	e96	e84	131	135	550	284	166	147	126
20	129	123	e120	e96	e84	138	260	264	310	165	142	136
21	129	122	e120	e94	e84	138	240	194	333	163	139	137
22	130	123	e120	e94	e96	133	173	175	267	160	138	135
23	128	144	e120	e90	e180	131	159	163	248	155	142	208
24	127	163	e120	e88	e540	132	156	152	246	153	139	161
25	128	129	e120	e88	e410	135	143	142	259	152	136	136
26	129	127	e110	e88	472	128	138	138	244	153	137	130
27	128	128	e110	e88	303	131	135	188	229	152	143	126
28	128	124	e110	e88	202	129	133	198	218	150	136	122
29	128	122	e110	e88	181	125	133	174	223	151	134	120
30	128	118	e110	e88	---	123	129	168	211	154	133	119
31	127	---	e110	e88	---	123	---	330	---	154	132	---
TOTAL	4077	3783	3726	2996	4178	4256	4150	5196	13508	5784	4527	4277
MEAN	132	126	120	96.6	144	137	138	168	450	187	146	143
MAX	146	163	134	110	540	177	260	550	1800	301	224	328
MIN	127	118	110	88	84	123	119	117	211	150	132	119
CFSM	.60	.57	.54	.44	.65	.62	.63	.76	2.04	.84	.66	.65
IN.	.69	.64	.63	.50	.70	.72	.70	.87	2.27	.97	.76	.72

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2000, BY WATER YEAR (WY)

	MEAN	113	119	110	127	167	261	199	166	175	155	122	119
MAX	252	311	278	354	597	574	547	584	450	885	303	332	
(WY)	1985	1962	1983	1960	1948	1950	1959	1973	2000	1993	1993	1981	
MIN	54.9	55.8	47.6	46.4	52.1	62.7	71.5	54.5	59.6	48.2	43.7	44.6	
(WY)	1965	1965	1959	1959	1959	1957	1957	1958	1958	1958	1958	1958	

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1939 - 2000

ANNUAL TOTAL	72298	60458	153	
ANNUAL MEAN	198	165	338	1993
HIGHEST ANNUAL MEAN			70.4	1958
LOWEST ANNUAL MEAN				
HIGHEST DAILY MEAN	1580	Apr 24	1800	Jun 2
LOWEST DAILY MEAN	(a)110	(b)Dec 17	(a)84	Feb 11-21
ANNUAL SEVEN-DAY MINIMUM	(a)111	Dec 25	(a)84	Feb 11
INSTANTANEOUS PEAK FLOW			1840	Jun 2
INSTANTANEOUS PEAK STAGE			13.08	Jun 2
INSTANTANEOUS LOW FLOW				(d)11700
ANNUAL RUNOFF (CFSM)	.90	.75		16.54
ANNUAL RUNOFF (INCHES)	12.17	10.18		(f)18
10 PERCENT EXCEEDS	310	251		.69
50 PERCENT EXCEEDS	151	130		9.38
90 PERCENT EXCEEDS	123	97		240
				112
				66

(a) Ice affected

(b) Also occurred Dec. 26-31

(c) Also occurred Sept. 1, 22, 23, 29, Oct. 2, 6, 1958, and Dec. 19, 20, 1964

(d) Gage height, 15.74 ft

(e) Estimated due to ice effect or missing record

(f) Result of freezeup

05434500 PECATONICA RIVER AT MARTINTOWN, WI

LOCATION.--Lat 42°30'34", long 89°47'58", in SE ¼ 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 mi².

PERIOD OF RECORD.--October 1939 to current year.

REVISED RECORDS.--WSP 1308: 1949-50(M). WDR WI-71-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 757.83 ft above sea level. Prior to Jan. 6, 1940, nonrecording gage at same site and datum. Auxiliary wire-weight gage 1.2 mi downstream, at same datum.

REMARKS.--Records good except those for periods of discharge above 2,000 ft³/s, which are fair, and estimated daily discharges, which are poor (see page 12). Diurnal fluctuation at low flow caused by powerplant in Argyle, 28.2 mi upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	691	585	531	e500	e420	1070	512	584	3910	1070	753	622
2	644	574	540	e500	e420	921	500	578	5490	1030	745	613
3	639	568	565	e490	e410	829	499	558	7780	1190	734	604
4	650	565	592	e480	e410	764	496	541	7880	1420	721	600
5	656	556	617	e470	e410	725	491	531	7020	1330	704	604
6	656	563	615	e470	e410	697	483	520	5910	1170	707	596
7	631	563	582	e470	e410	672	488	510	4750	1080	754	583
8	620	561	558	e470	e410	644	513	513	3740	1020	760	580
9	621	562	564	e470	e410	622	544	564	2940	987	707	583
10	611	565	576	e480	e400	614	548	618	2300	1170	679	576
11	607	566	571	e490	e400	596	536	656	1840	1480	660	619
12	599	565	556	e500	e400	574	523	714	1660	1470	645	858
13	591	559	546	e460	e400	561	513	661	1840	1250	637	1280
14	592	548	549	e440	e400	555	506	601	1930	1090	644	1120
15	598	542	545	e480	e400	552	498	561	2000	1010	651	826
16	624	533	544	e470	e400	550	492	541	2080	959	639	718
17	678	535	538	e460	e400	544	501	571	2160	923	688	667
18	692	539	e440	e450	e390	532	517	657	2160	893	800	638
19	664	542	e470	e440	e390	527	563	1040	1950	868	865	622
20	628	542	e540	e440	e390	550	880	1390	1670	850	765	620
21	615	542	e520	e440	e390	574	1130	1350	1550	840	688	629
22	606	539	e520	e430	e400	569	1120	1030	1520	825	667	677
23	601	563	e520	e430	e450	552	927	865	1410	809	657	797
24	596	611	e520	e420	e900	543	802	782	1300	791	657	835
25	588	666	e520	e420	e1500	545	740	716	1330	778	651	837
26	581	620	e520	e420	e1800	544	682	668	1310	768	638	733
27	586	575	e500	e420	e1900	537	641	689	1260	764	635	667
28	585	565	e500	e420	1810	525	618	792	1190	760	643	638
29	590	556	e500	e420	1380	543	610	904	1140	752	642	616
30	585	541	e500	e420	---	527	593	831	1110	743	622	598
31	577	---	e500	e420	---	519	---	1000	---	752	628	---
TOTAL	19202	16911	16659	14090	18610	19077	18466	22536	84130	30842	21386	20956
MEAN	619	564	537	455	642	615	616	727	2804	995	690	699
MAX	692	666	617	500	1900	1070	1130	1390	7880	1480	865	1280
MIN	577	533	440	420	390	519	483	510	1110	743	622	576
CFSM	.60	.55	.52	.44	.62	.60	.60	.70	2.71	.96	.67	.68
IN.	.69	.61	.60	.51	.67	.69	.66	.81	3.03	1.11	.77	.75

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2000, BY WATER YEAR (WY)

MEAN	534	587	515	586	811	1379	973	817	855	799	586	574
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 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1940 - 2000

ANNUAL TOTAL	369290	302865	
ANNUAL MEAN	1012	828	751
HIGHEST ANNUAL MEAN			1720
LOWEST ANNUAL MEAN			292
HIGHEST DAILY MEAN	5530	May 20	14600
LOWEST DAILY MEAN	(a)440	Dec 18	132
ANNUAL SEVEN-DAY MINIMUM	(a)504	Dec 18	(a)140
INSTANTANEOUS PEAK FLOW			15100
INSTANTANEOUS PEAK STAGE		18.51	Jun 4
INSTANTANEOUS LOW FLOW			21.46
ANNUAL RUNOFF (CFSM)	.98	.80	(b).00
ANNUAL RUNOFF (INCHES)	13.29	10.90	.73
10 PERCENT EXCEEDS	1700	1300	1350
50 PERCENT EXCEEDS	779	601	528
90 PERCENT EXCEEDS	560	440	257

(a) Ice affected

(b) Result of regulation

(c) Estimated due to ice effect or missing record

ROCK RIVER BASIN

054359315 BADGER MILL CREEK AT CANTERBURY ROAD AT MADISON, WI

LOCATION.--Lat 43°01'24", long 89°30'04", in SW ¼ NW ¼ sec.1, T.6 N., R.8 E., Dane County, Hydrologic Unit 07090004, at culverts on Canterbury Road at Madison.

DRAINAGE AREA.--1.5 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1998 to September 1999 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 1,010 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	.14	.85	.17	.00	.00	.00	.00
2	---	---	---	---	---	.00	.07	2.4	.00	.00	.00	.00
3	---	---	---	---	---	.00	.00	.00	.00	5.0	1.2	.00
4	---	---	---	---	---	.00	.00	.00	.00	.09	3.5	.00
5	---	---	---	---	---	.00	.00	1.0	.00	.00	.74	.00
6	---	---	---	---	---	e.00	.00	2.4	.00	.00	.15	.00
7	---	---	---	---	---	e.00	1.7	6.0	.00	.46	.00	.00
8	---	---	---	---	---	e.00	4.5	.39	.00	.00	.00	.00
9	---	---	---	---	---	e.00	1.3	.00	.47	.00	.00	.00
10	---	---	---	---	---	e.00	.00	.00	.00	.00	.00	.00
11	---	---	---	---	---	e.30	.00	.00	15	.00	.00	.00
12	---	---	---	---	---	e.10	.29	.00	.16	.00	.00	.00
13	---	---	---	---	---	e.00	3.9	.00	.00	.00	.00	.27
14	---	---	---	---	---	e.00	.79	.00	.00	.00	1.6	11
15	---	---	---	---	---	e.00	7.6	.00	.00	.00	.14	.53
16	---	---	---	---	---	e.00	3.1	.00	.00	.00	.00	.00
17	---	---	---	---	---	e.00	.09	.00	.00	.00	1.4	.00
18	---	---	---	---	---	e6.0	.00	.00	18	.00	.00	.00
19	---	---	---	---	---	2.5	.01	.86	.17	4.7	.00	.00
20	---	---	---	---	---	e.00	1.4	.00	.02	2.7	.00	.00
21	---	---	---	---	---	e.00	2.0	.00	.33	.09	1.8	.00
22	---	---	---	---	---	e.00	.00	.00	.00	.00	.05	.00
23	---	---	---	---	---	e.00	.00	.07	.00	.00	3.7	.00
24	---	---	---	---	---	e.00	.00	6.3	2.0	.00	1.1	.86
25	---	---	---	---	---	e.00	.02	.00	.60	.00	.30	.00
26	---	---	---	---	---	e.00	3.0	.00	.01	.00	.00	.00
27	---	---	---	---	---	.00	.00	.00	9.3	.00	.57	.00
28	---	---	---	---	---	.00	.00	4.6	14	.00	1.6	.00
29	---	---	---	---	---	.03	.00	.13	.00	.00	.00	.00
30	---	---	---	---	---	21	.00	.00	.00	.00	.00	1.6
31	---	---	---	---	---	8.9	---	2.1	---	.00	.00	---
TOTAL	---	---	---	---	---	38.97	30.62	26.42	60.06	13.04	17.85	14.26
MEAN	---	---	---	---	---	1.26	1.02	.85	2.00	.42	.58	.48
MAX	---	---	---	---	---	21	7.6	6.3	18	5.0	3.7	11
MIN	---	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
CFSM	---	---	---	---	---	.84	.68	.57	1.33	.28	.38	.32
IN.	---	---	---	---	---	.97	.76	.66	1.49	.32	.44	.35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 1998, BY WATER YEAR (WY)

MEAN	---	---	---	---	---	1.26	1.02	.85	2.00	.42	.58	.48
MAX	---	---	---	---	---	1.26	1.02	.85	2.00	.42	.58	.48
(WY)	---	---	---	---	---	1998	1998	1998	1998	1998	1998	1998
MIN	---	---	---	---	---	1.26	1.02	.85	2.00	.42	.58	.48
(WY)	---	---	---	---	---	1998	1998	1998	1998	1998	1998	1998

SUMMARY STATISTICS

FOR 1998 WATER YEAR
(MARCH-SEPTEMBER)

HIGHEST DAILY MEAN	21	Mar 30
LOWEST DAILY MEAN	.00	Many days
ANNUAL SEVEN-DAY MINIMUM	.00	Many periods
INSTANTANEOUS PEAK FLOW	214	Jun 27
INSTANTANEOUS PEAK STAGE	3.89	Jun 27
INSTANTANEOUS LOW FLOW	.00	Many days
10 PERCENT EXCEEDS	2.6	
50 PERCENT EXCEEDS	.00	
90 PERCENT EXCEEDS	.00	

(e) Estimated due to ice effect or missing record

054359315 BADGER MILL CREEK AT CANTERBURY ROAD AT MADISON, WI--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	e.20	.00	.00	.00	3.0	3.2	.00	.00
2	.07	.00	.00	.00	e1.0	.00	.00	.00	.60	.00	.00	.00
3	1.6	.00	.00	.00	e2.0	.01	5.3	.00	.00	.85	.00	.00
4	.13	.00	.00	.00	e3.0	.00	.55	.14	2.0	.00	.00	.00
5	7.8	.00	.00	.00	e.80	.04	1.8	.39	.00	.00	.00	.00
6	.58	.00	.74	.00	e.50	.00	.53	3.3	2.8	.19	.01	.00
7	.00	.00	.36	.00	e.30	.00	.35	.00	.13	.00	1.4	.00
8	.00	.00	.00	.00	e.00	e.00	6.2	.00	.42	.00	.00	.19
9	.00	1.6	.00	.00	e.20	e.30	5.3	.00	.07	.00	1.1	.00
10	.00	9.1	.00	.00	.61	e.00	.00	.00	.69	.00	.02	.00
11	.00	.46	.00	.00	7.1	e.00	.23	.01	.32	.00	.00	.00
12	.01	.00	.00	.00	1.6	e.00	.32	.26	.36	.00	1.4	.00
13	.00	.00	.00	.00	e.00	e.00	.80	.00	6.3	.00	.00	.00
14	.00	.00	.00	.00	e.00	e.00	.00	.02	.00	.00	.00	.00
15	.00	.00	.00	.00	e.00	e.20	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	e.40	.00	8.8	.00	.85	.25	.00
17	6.6	.00	.00	e.00	.00	e.60	.00	e12	.00	4.9	.00	.00
18	.47	.00	.00	e.00	.00	.00	.00	1.4	.00	.00	.55	.00
19	.00	.00	.00	e.00	.00	e.00	.00	.00	.00	.26	.09	.00
20	.00	.00	.01	e.00	.00	e.00	1.9	.00	.00	1.4	.00	.00
21	.00	.00	.00	e.50	.00	.00	1.4	.27	.00	.56	.00	.00
22	.00	.00	.00	e3.0	.00	.00	12	.01	.64	.00	.00	.00
23	.00	.00	.00	e1.0	.00	.00	15	1.6	1.5	.50	4.2	.00
24	.00	.00	.00	e.60	.00	e.00	.00	.00	.05	.00	.00	.00
25	.00	.00	.00	e.40	.20	e.00	.00	.00	.00	.00	.00	.00
26	.00	.00	e.00	e.20	.46	e.00	.00	.00	.00	1.5	.00	.00
27	1.5	.00	e.00	e.00	e.00	e.00	1.6	.00	.00	.00	.00	2.8
28	.13	.00	.00	e.00	e.00	e.00	.09	.00	2.1	.00	.00	2.9
29	.00	.00	.00	.37	---	e.00	.00	.00	.00	.00	.00	.14
30	.00	.30	.00	.00	---	.00	.00	.00	.12	.00	.00	.23
31	.00	---	.00	.00	---	.00	---	.17	---	e5.0	.00	---
TOTAL	18.89	11.46	1.11	6.07	17.97	1.55	53.37	28.37	21.10	19.21	9.02	6.26
MEAN	.61	.38	.036	.20	.64	.050	1.78	.92	.70	.62	.29	.21
MAX	7.8	9.1	.74	3.0	7.1	.60	15	12	6.3	5.0	4.2	2.9
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
CFSM	.41	.25	.02	.13	.43	.03	1.19	.61	.47	.41	.19	.14
IN.	.47	.28	.03	.15	.45	.04	1.32	.70	.52	.48	.22	.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 1999, BY WATER YEAR (WY)

	MEAN	.61	.38	.036	.20	.64	.65	1.40	.88	1.35	.52	.43	.34
MAX	.61	.38	.036	.20	.64	1.26	1.78	.92	2.00	.62	.58	.48	
(WY)	1999	1999	1999	1999	1999	1998	1999	1999	1998	1999	1998	1998	1998
MIN	.61	.38	.036	.20	.64	.050	1.02	.85	.70	.42	.29	.21	
(WY)	1999	1999	1999	1999	1999	1999	1998	1998	1999	1998	1999	1999	

SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR
(MARCH-DECEMBER)

FOR 1999 WATER YEAR

WATER YEARS 1998 - 1999

ANNUAL TOTAL		194.38		
ANNUAL MEAN		.53		
HIGHEST ANNUAL MEAN			.53	1999
LOWEST ANNUAL MEAN			.53	1999
HIGHEST DAILY MEAN	21	Mar 30	15	Apr 23
LOWEST DAILY MEAN	.00	Many days	.00	Many days
ANNUAL SEVEN-DAY MINIMUM	.00	Many periods	.00	Many periods
INSTANTANEOUS PEAK FLOW			228	May 16
INSTANTANEOUS PEAK STAGE			4.07	May 16
INSTANTANEOUS LOW FLOW			.00	Many days
ANNUAL RUNOFF (CFSM)			.36	
ANNUAL RUNOFF (INCHES)			4.82	
10 PERCENT EXCEEDS	1.9		1.4	1.6
50 PERCENT EXCEEDS	.00		.00	.00
90 PERCENT EXCEEDS	.00		.00	.00

(e) Estimated due to ice effect or missing record

ROCK RIVER BASIN

054359315 BADGER MILL CREEK AT CANTERBURY ROAD AT MADISON, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1998 to September 1999 (discontinued).

INSTRUMENTATION.--Stage-activated water-quality sampler

REMARKS.--Chemical analyses are by the Wisconsin Department of Public Health. Samples are point samples unless otherwise indicated.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

BEGIN NING DATE	BEGIN- NING TIME	ENDING DATE	ENDING TIME	RUNOFF VOLUME OF CUBIC FEET (99904)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	MAGNE- SIUM, TOTAL RECOVER- ABLE (MG/L) (00921)	ANC WATER UNFLTRD FET LAB MG/L AS CACO3 (00417)
MAY									
24-24	0136	980524	1153	490	6.5	44	10.0	4.5	27
MAY									
28-28	0708	980528	0922	360	--	110	23.0	12	32
MAY									
31-31	0223	980531	0504	170	--	98	21.0	11	30
JUN									
18-18	1229	980618	1427	630	6.4	60	9.40	8.9	20
JUN									
27-27	0415	980627	0606	310	6.9	100	21.0	12	25
JUL									
03-03	0911	980703	1208	85	6.6	52	12.0	5.3	23
JUL									
03-03	1552	980703	2137	330	6.8	51	11.0	5.7	19
JUL									
19-19	0325	980719	0538	380	6.6	55	12.2	6.0	24
JUL									
20-20	1816	980720	2122	210	6.1	43	10.0	1.4	20
AUG									
03-04	2117	980804	1241	360	6.8	57	12.9	6.0	20
AUG									
21-21	1859	980821	2039	130	6.8	98	22.0	10	16
AUG									
23-23	0549	980823	0927	300	7.0	39	8.80	4.1	14
AUG									
23-23	0550	980823	0927	300	6.9	38	7.30	3.9	15
SEP									
14-15	0436	980915	0114	920	7.2	46	11.0	4.6	33
SEP									
24-24	0101	980924	0301	59	6.2	44	10.0	4.3	27
SEP									
30-30	1208	980930	1533	120	6.3	68	15.5	7.1	21

054359315 BADGER MILL CREEK AT CANTERBURY ROAD AT MADISON, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
MAY 24-24	--	<.023	.850	--	.627	13	--	94	104
MAY 28-28	2.6	<.023	.852	.150	.575	17	42	184	52
MAY 31-31	2.7	<.023	.635	.130	.656	16	37	210	88
JUN 18-18	2.5	.040	1.69	.410	1.40	33	55	416	50
JUN 27-27	1.9	<.023	.510	--	.473	11	75	460	54
JUL 03-03	2.5	<.023	.560	.006	.313	67	120	164	60
JUL 03-03	1.8	<.023	.360	.075	.254	57	38	136	40
JUL 19-19	2.2	<.023	.500	.240	.504	11	180	224	60
JUL 20-20	2.2	<.023	.730	.100	.261	6.2	54	104	68
AUG 03-04	2.1	.480	.900	.101	<.008	19	76	--	20
AUG 21-21	2.3	.050	.740	.120	.467	9.8	22	248	44
AUG 23-23	1.8	.190	.860	.090	.228	5.6	18	112	34
AUG 23-23	1.7	<.023	.490	.090	.229	5.7	18	114	35
SEP 14-15	1.8	<.023	.280	.133	.214	--	31	34	54
SEP 24-24	3.4	.030	.680	.402	.579	9.8	95	111	82
SEP 30-30	2.5	.090	.790	.392	.609	--	110	148	48

DATE	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CADMIUM TOTAL RECOVER -ABLE (UG/L) (01113)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	COPPER, TOTAL RECOVER -ABLE (UG/L) (01119)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOVER -ABLE (UG/L) (01114)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOVER -ABLE (UG/L) (01094)	SAM- PLING METHOD, CODES (82398)
MAY 24-24	--	<1	12	12	--	7	--	70	50
MAY 28-28	--	<1	3	18	<1	17	10	100	50
MAY 31-31	.1	1	2	18	<1	21	8	100	50
JUN 18-18	.1	<1	<2	27	1	26	2	100	50
JUN 27-27	<.3	<1	<2	17	<1	25	2	70	50
JUL 03-03	.1	<1	4	11	<1	13	15	80	50
JUL 03-03	<.3	<1	2	10	<1	9	3	40	50
JUL 19-19	<.3	<1	6	12	<1	9	7	50	50
JUL 20-20	<.3	<1	4	8	<1	8	9	40	50
AUG 03-04	<.3	<1	2	8	<1	8	6	60	50
AUG 21-21	--	<1	--	13	--	19	--	100	50
AUG 23-23	<.3	<1	--	5	--	6	--	30	50
AUG 23-23	--	<1	--	2	--	7	--	30	50
SEP 14-15	<.3	<1	<2	3	<1	3	8	30	50
SEP 24-24	<.3	<1	5	10	<1	8	16	60	50
SEP 30-30	<.3	5	6	16	4	14	15	100	50

ROCK RIVER BASIN

054359315 BADGER MILL CREEK AT CANTERBURY ROAD AT MADISON, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

BEGIN- NING DATE	BEGIN- NING TIME	ENDING DATE	ENDING TIME	RUNOFF VOLUME THOUSANDS OF CUBIC FEET (99904)	PH WATER WHOLE LAB TOTAL (STAND- ARD UNITS) (00403)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	MAGNE- SIUM, TOTAL RECOVER -ABLE (MG/L) (00921)	ANC WATER UNFLTRD FET LAB MG/L AS CACO3 (00417)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
OCT										
05-05	0245	981005	0708	330	6.5	37	8.48	3.8	13	2.0
OCT										
05-05	1741	981005	2103	290	6.6	38	9.80	4.4	16	1.6
OCT										
17-18	0442	981018	0120	580	6.3	55	12.8	5.6	19	2.5
NOV										
09-10	1631	981110	0747	840	6.6	35	8.01	3.7	24	2.0
FEB										
11-11	1339	990211	1836	470	6.9	1400	301	150	60	32.5
APR										
08-09	1839	990409	0924	920	6.3	1600	368	160	28	5.2
APR										
23-23	0344	990423	0912	340	7.3	23	5.50	2.3	24	4.5
MAY										
16-16	1655	990516	2331	440	7.3	240	53.0	27	38	2.4
MAY										
16-17	2331	990517	0005	380	7.3	140	30.0	15	21	1.8
MAY										
17-17	0005	990517	0102	380	7.4	1200	284	120	20	2.1
JUN										
06-06	1539	990606	1738	200	7.1	1500	344	160	24	2.0
JUN										
13-13	0153	990613	1133	530	7.2	44	10.5	4.3	21	2.1
JUL										
16-17	2058	990717	0531	200	7.1	2900	652	310	32	3.2
JUL										
17-17	0531	990717	0724	180	7.2	1100	253	120	22	1.5
JUL										
17-17	0724	990717	0952	95	7.3	2900	656	310	23	1.5
JUL										
31-31	0333	990731	0952	160	7.3	2900	623	320	28	1.4
AUG										
23-23	0915	990823	1206	180	7.0	70	15.6	7.4	20	1.6
SEP										
26-28	2243	990928	1221	460	7.0	34	8.60	3.1	54	2.3

054359315 BADGER MILL CREEK AT CANTERBURY ROAD AT MADISON, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)
OCT									
05-05	<.023	.440	.151	.277	5.0	28	74	34	--
OCT									
05-05	<.023	.510	.132	.259	6.0	40	90	38	--
OCT									
17-18	.040	.225	.379	.534	14	65	108	52	--
NOV									
09-10	.393	.364	.350	.497	5.0	--	80	68	--
FEB									
11-11	.870	.341	.136	1.32	18	230	754	1790	17900
APR									
08-09	.103	.277	.112	1.78	14	140	292	--	536
APR									
23-23	<.023	.278	.090	.177	<2.0	49	39	58	110
MAY									
16-16	<.023	.464	.080	.885	14	120	872	68	1170
MAY									
16-17	<.023	.349	.080	1.53	8.0	51	346	56	378
MAY									
17-17	<.023	.330	.090	6.05	4.0	47	226	57	268
JUN									
06-06	.336	.309	.140	1.18	16	140	476	38	394
JUN									
13-13	<.023	<.202	.102	.228	--	30	92	54	158
JUL									
16-17	.258	.639	.210	1.34	--	120	250	57	338
JUL									
17-17	.247	<.202	.100	.480	--	29	72	24	137
JUL									
17-17	.084	<.202	.100	1.79	--	21	57	26	214
JUL									
31-31	.133	.338	.280	1.51	5.0	46	102	42	342
AUG									
23-23	.244	.330	.130	.329	7.0	57	160	38	292
SEP									
26-28	1.44	.389	.240	.365	8.0	56	29	36	84

DATE	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CADMIUM TOTAL RECOVER- -ABLE (UG/L) (01113)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	COPPER, TOTAL RECOVER- -ABLE (UG/L) (01119)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOVER- -ABLE (UG/L) (01114)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOVER- -ABLE (UG/L) (01094)	SAM- PLING METHOD, CODES (82398)
OCT									
05-05	<.3	<1	3	8	2	12	6	40	50
OCT									
05-05	<.3	<1	3	8	2	9	9	40	50
OCT									
17-18	<.3	<1	5	10	<1	10	12	50	50
NOV									
09-10	<.3	<1	2	7	<1	7	8	40	50
FEB									
11-11	<.3	2	4	61	3	130	9	340	50
APR									
08-09	<.3	1	<2	36	<1	27	4	170	50
APR									
23-23	<.3	<1	<2	3	<1	3	5	20	50
MAY									
16-16	<.3	1	4	34	<1	36	15	140	50
MAY									
16-17	<.3	2	2	16	<1	16	12	90	50
MAY									
17-17	<.3	1	6	28	1	120	4	180	50
JUN									
06-06	<.3	1	4	37	<1	54	7	210	50
JUN									
13-13	<.3	<1	4	8	2	3	5	20	50
JUL									
16-17	<.3	2	6	180	2	92	12	340	50
JUL									
17-17	<.3	1	2	18	<1	88	4	70	50
JUL									
17-17	<.3	2	2	60	<1	39	3	240	50
JUL									
31-31	<.3	1	2	46	<1	35	4	170	50
AUG									
23-23	<.3	<1	2	12	2	14	6	70	50
SEP									
26-28	.3	<1	5	9	<1	9	21	40	50

ROCK RIVER BASIN

05435934 BADGER MILL CREEK AT NESBITT ROAD AT MADISON, WI

LOCATION.--Lat 43°00'05", long 89°29'56", in SE 1/4 SW 1/4 sec.12, T.6 N., R.8 E., Dane County, Hydrologic Unit 07090004, on left bank 30 ft north of Nesbitt Road Bridge, at Madison.

DRAINAGE AREA.--10.7 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1998 to September 2000 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 965 ft above sea level, from topographic map.

REMARKS.--Records poor (see page 12).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	.00	4.6	.00	.01	.00	.00	.00
2	---	---	---	---	---	.00	.24	1.7	.00	.00	.00	.00
3	---	---	---	---	---	.00	.00	2.0	.00	17	.00	.00
4	---	---	---	---	---	.00	.00	.00	.00	4.9	9.3	.00
5	---	---	---	---	---	.00	.00	.00	.00	.22	1.3	.00
6	---	---	---	---	---	.00	.00	3.0	.00	.00	.81	.00
7	---	---	---	---	---	.00	1.1	15	.00	.82	.15	.00
8	---	---	---	---	---	.00	12	1.7	.00	.65	.00	.00
9	---	---	---	---	---	e.00	5.2	.00	.03	.00	.00	.00
10	---	---	---	---	---	e.00	.22	.00	.14	.00	.00	.00
11	---	---	---	---	---	e.40	.00	.00	31	.00	.00	.00
12	---	---	---	---	---	e.20	.00	.00	5.3	.00	.00	.00
13	---	---	---	---	---	e.00	6.3	.00	.97	.00	.00	.00
14	---	---	---	---	---	e.00	1.8	.00	.01	.00	.98	20
15	---	---	---	---	---	e.00	18	.00	.00	.00	1.9	4.2
16	---	---	---	---	---	e.00	9.4	.00	.00	.00	.01	.00
17	---	---	---	---	---	e.00	.55	.00	.00	.00	1.8	.00
18	---	---	---	---	---	e7.0	.00	.00	53	.00	.12	.00
19	---	---	---	---	---	5.4	.00	e1.0	35	8.3	.00	.00
20	---	---	---	---	---	e.80	.97	.00	.70	3.8	.00	.00
21	---	---	---	---	---	e.40	3.9	.00	.48	2.6	2.0	.00
22	---	---	---	---	---	e.10	.16	.00	.00	.00	1.3	.00
23	---	---	---	---	---	e.05	.00	.00	.00	.00	7.2	.00
24	---	---	---	---	---	.00	.00	5.9	4.1	.00	.38	.64
25	---	---	---	---	---	.00	.00	.12	.30	.00	2.4	.00
26	---	---	---	---	---	.00	3.6	.00	.59	.00	.00	.00
27	---	---	---	---	---	.00	.11	.00	9.8	.00	.37	.00
28	---	---	---	---	---	.00	.00	5.5	117	.00	3.9	.00
29	---	---	---	---	---	.00	.00	.95	5.6	.00	.04	.00
30	---	---	---	---	---	23	.00	.00	.00	.00	.00	.00
31	---	---	---	---	---	53	---	3.3	---	.00	.00	---
TOTAL	---	---	---	---	---	90.35	68.15	40.17	264.03	38.29	33.96	25.80
MEAN	---	---	---	---	---	2.91	2.27	1.30	8.80	1.24	1.10	.86
MAX	---	---	---	---	---	53	18	15	117	17	9.3	20
MIN	---	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
CFSM	---	---	---	---	---	.27	.21	.12	.82	.12	.10	.08
IN.	---	---	---	---	---	.31	.24	.14	.92	.13	.12	.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 1998, BY WATER YEAR (WY)

MEAN	---	---	---	---	---	2.91	2.27	1.30	8.80	1.24	1.10	.86
MAX	---	---	---	---	---	2.91	2.27	1.30	8.80	1.24	1.10	.86
(WY)	---	---	---	---	---	1998	1998	1998	1998	1998	1998	1998
MIN	---	---	---	---	---	2.91	2.27	1.30	8.80	1.24	1.10	.86
(WY)	---	---	---	---	---	1998	1998	1998	1998	1998	1998	1998

SUMMARY STATISTICS

FOR 1998 WATER YEAR
(MARCH-SEPTEMBER)

HIGHEST DAILY MEAN	117	Jun 28
LOWEST DAILY MEAN	.00	Many days
ANNUAL SEVEN-DAY MINIMUM	.00	Many periods
INSTANTANEOUS PEAK FLOW	295	Jun 28
INSTANTANEOUS PEAK STAGE	5.91	Jun 28
INSTANTANEOUS LOW FLOW	.00	Many days
10 PERCENT EXCEEDS	5.4	
50 PERCENT EXCEEDS	.00	
90 PERCENT EXCEEDS	.00	

(e) Estimated due to ice effect or missing record

05435934 BADGER MILL CREEK AT NESBITT ROAD AT MADISON, WI--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.45	.00	.00	.00	e.50	.00	.00	.00	1.1	5.7	.06	.01
2	.00	.00	.00	.00	e1.5	.00	.00	.00	3.8	.00	.00	.00
3	.00	.00	.00	.00	e4.0	.00	6.4	.00	.02	.73	.00	.00
4	.87	.00	.00	.00	8.3	.00	1.2	.00	2.9	.10	.00	.00
5	14	.00	.00	.00	.98	.00	.03	.00	.18	.00	.00	.00
6	3.4	.00	.00	.00	.84	.00	1.9	5.4	5.3	.00	.00	.00
7	.31	.00	.43	.00	.65	.00	.00	.23	1.3	.00	1.1	.00
8	.00	.00	.07	.00	.38	.00	2.6	.00	.00	.00	.05	.00
9	.00	e3.0	.00	.00	1.8	e.50	30	.00	.52	.00	.07	.00
10	.00	35	.00	.00	.98	.00	2.7	.00	.01	.00	.95	.00
11	.00	5.1	.00	.00	14	.00	.19	.00	.45	.00	.00	.00
12	.07	1.5	.00	.00	1.9	.00	1.1	.00	.23	.00	1.6	.00
13	.43	.20	.00	.00	.69	.00	1.0	.00	24	.00	.01	.00
14	.08	.00	.00	.00	.05	.15	.04	.00	.55	.00	.00	.00
15	.00	.00	.00	.00	.00	.27	.00	.00	.08	.00	.00	.00
16	.00	.00	.00	.00	.00	.80	.00	3.5	.00	.00	.00	.00
17	8.8	.00	.00	.00	.00	1.0	.00	59	.00	12	.00	.00
18	3.2	.00	.00	.00	.00	.49	.00	3.6	.00	.14	.00	.00
19	.01	.00	.00	.00	.00	.00	.00	.11	.00	.07	.36	.00
20	.00	.00	.00	.00	.00	.00	1.7	.00	.00	1.3	.00	.00
21	.00	.00	.00	.00	.00	.00	.79	.00	.00	1.2	.00	.00
22	.00	.00	.00	e8.0	.00	.00	28	.20	.00	.00	.00	.00
23	.00	.00	.00	e3.5	.00	.00	70	2.5	2.2	.29	9.1	.00
24	.00	.00	.00	e2.0	.00	.00	4.8	.14	.36	.35	2.7	.00
25	.00	.00	.00	e1.0	.00	.00	.26	.00	.00	.00	.00	.00
26	.00	.00	.00	e.40	.00	.00	.00	.00	.00	2.3	.00	.00
27	e2.5	.00	.00	e.00	.00	.00	1.1	.00	.00	.05	.00	3.5
28	e.30	.00	.00	e.00	.00	.00	1.9	.00	1.1	.00	.26	9.6
29	.00	.00	.00	e.50	---	.00	.20	.00	.42	.00	.00	.48
30	.00	.00	.00	e.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	e.00	---	.00	---	.00	---	13	.00	---
TOTAL	34.42	44.80	0.50	15.40	36.57	3.21	155.91	74.68	44.52	37.23	16.26	13.59
MEAN	1.11	1.49	.016	.50	1.31	.10	5.20	2.41	1.48	1.20	.52	.45
MAX	14	35	.43	8.0	14	1.0	70	59	24	13	9.1	9.6
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
CFSM	.10	.14	.00	.05	.12	.01	.49	.23	.14	.11	.05	.04
IN.	.12	.16	.00	.05	.13	.01	.54	.26	.15	.13	.06	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 1999, BY WATER YEAR (WY)

	1998	1999	1998	1999	1998	1999	1998	1999	1998	1999	1998	1999
MEAN	1.11	1.49	.016	.50	1.31	1.51	3.73	1.85	5.14	1.22	.81	.66
MAX	1.11	1.49	.016	.50	1.31	2.91	5.20	2.41	8.80	1.24	1.10	.86
(WY)	1999	1999	1999	1999	1999	1998	1999	1999	1998	1998	1998	1998
MIN	1.11	1.49	.016	.50	1.31	.10	2.27	1.30	1.48	1.20	.52	.45
(WY)	1999	1999	1999	1999	1999	1999	1998	1998	1999	1999	1999	1999

SUMMARY STATISTICS

FOR 1998 CALENDAR YEAR
(MARCH-DECEMBER)

FOR 1999 WATER YEAR

WATER YEARS 1998 - 1999

ANNUAL TOTAL	859.73	477.09		
ANNUAL MEAN	2.35	1.31		
HIGHEST ANNUAL MEAN		1.31		1999
LOWEST ANNUAL MEAN		1.31		1999
HIGHEST DAILY MEAN	117	70	Apr 23	117 Jun 28 1998
LOWEST DAILY MEAN	.00	.00	Many days	.00 Many days
ANNUAL SEVEN-DAY MINIMUM	.00	.00	Many periods	.00 Many periods
INSTANTANEOUS PEAK FLOW		246	May 17	591 Jun 28 1998
INSTANTANEOUS PEAK STAGE		5.69	May 17	5.91 Jun 28 1998
INSTANTANEOUS LOW FLOW		.00	Many days	.00 Many days
ANNUAL RUNOFF (CFSM)	.22	.12		
ANNUAL RUNOFF (INCHES)	2.99	1.66		
10 PERCENT EXCEEDS	4.3	2.4		3.5
50 PERCENT EXCEEDS	.00	.00		.00
90 PERCENT EXCEEDS	.00	.00		.00

(e) Estimated due to ice effect or missing record

ROCK RIVER BASIN

05435934 BADGER MILL CREEK AT NESBITT ROAD AT MADISON, WI--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	128	.00	7.0	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	65	2.2	.00	.00
3	.02	.00	e1.0	.00	.00	.00	.00	.00	4.9	3.7	.00	e.50
4	.65	.00	e.80	.00	.00	.00	.00	.00	4.3	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	47	.00	30	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	4.7	.00	12	.00
7	.00	.00	.00	.00	.00	.00	.39	.00	.29	.00	.40	.00
8	.00	.00	.00	.00	.00	.00	1.9	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.32	.22	.00	.00	.00	.00
10	.00	e1.5	.21	.45	.00	.00	.76	.00	.00	8.8	.00	.00
11	.00	.00	.00	.14	.00	.00	.16	.00	.00	.10	.00	9.8
12	.00	.00	.00	.00	.00	.00	.00	.20	.00	.00	.00	4.4
13	.00	.00	.00	.00	.00	.00	.00	.00	36	.01	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	35	.00	.00	.02
15	.00	.00	.00	.00	.00	.00	.00	.00	4.3	.00	.00	.00
16	1.5	.00	.00	.00	.00	.00	.00	.00	.44	.00	.00	.00
17	.07	.00	.00	e.20	.00	.00	.00	11	.00	.00	8.7	.00
18	.00	.00	.00	.00	.00	.00	.00	95	.00	.00	.00	.06
19	.00	.00	.00	.00	.00	.02	4.7	23	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.43	13	.65	7.3	.00	.00	.49
21	.00	.00	.00	.00	.00	.02	7.7	.00	.06	.00	.00	.04
22	.00	.00	.00	.00	.24	.00	.00	.00	.00	.00	.00	e19
23	.00	e4.0	.00	.00	19	.00	3.1	.00	.00	.00	.00	e7.0
24	.00	.00	.00	.00	31	.00	.01	.00	2.2	.00	.00	e.20
25	.00	.00	.00	.00	9.8	.00	.00	.00	.22	.00	.00	.00
26	.00	.00	.00	.00	27	.00	.00	.00	.00	.00	3.9	.00
27	.00	.00	.00	.00	1.3	.00	.00	4.0	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	13	.14	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.13	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	14	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	38	---	.00	.00	---
TOTAL	2.24	5.50	2.01	0.79	88.34	0.47	32.04	199.20	339.85	14.81	62.00	42.51
MEAN	.072	.18	.065	.025	3.05	.015	1.07	6.43	11.3	.48	2.00	1.42
MAX	1.5	4.0	1.0	.45	31	.43	13	95	128	8.8	30	20
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
CFSM	.01	.02	.01	.00	.28	.00	.10	.60	1.06	.04	.19	.13
IN.	.01	.02	.01	.00	.31	.00	.11	.69	1.18	.05	.22	.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2000, BY WATER YEAR (WY)

	MEAN	.59	.84	.040	.26	2.19	1.49	2.85	3.38	7.20	.97	1.21	.91
MAX	1.11	1.49	.065	.50	3.05	4.35	5.20	6.43	11.3	1.24	2.00	1.42	
(WY)	1999	1999	2000	1999	2000	1998	1999	2000	2000	1998	2000	2000	
MIN	.072	.18	.016	.025	1.31	.015	1.07	1.30	1.48	.48	.52	.45	
(WY)	2000	2000	1999	2000	1999	2000	2000	1998	1999	2000	1999	1999	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1998 - 2000

ANNUAL TOTAL	407.12	789.76	
ANNUAL MEAN	1.12	2.16	1.73
HIGHEST ANNUAL MEAN			2.16
LOWEST ANNUAL MEAN			1.31
HIGHEST DAILY MEAN	70	Apr 23	128
LOWEST DAILY MEAN	.00	Many days	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Many periods	.00
INSTANTANEOUS PEAK FLOW		774	774
INSTANTANEOUS PEAK STAGE		8.57	8.57
INSTANTANEOUS LOW FLOW		.00	.00
ANNUAL RUNOFF (CFSM)	.10	.20	.16
ANNUAL RUNOFF (INCHES)	1.42	2.75	2.20
10 PERCENT EXCEEDS	1.7	3.3	3.5
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

(e) Estimated due to ice effect or missing record

05435934 BADGER MILL CREEK AT NESBITT ROAD AT MADISON, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1998 to June 2000 (discontinued).

INSTRUMENTATION.--Stage-activated water-quality sampler. Samples are point samples unless otherwise indicated.

REMARKS.--Chemical analyses are by the Madison Department of Public Health.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

BEGIN- NING DATE	BEGIN- NING TIME	ENDING DATE	ENDING TIME	RUNOFF VOLUME THOUSANDS OF CUBIC FEET (99904)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	MAGNE- SIUM, TOTAL RECOVER- ABLE (MG/L) (00921)	ANC WATER UNFLTRD FET LAB MG/L AS CACO3 (00417)
MAY 24-24	0418	980524	1532	450	6.6	29	6.60	3.0	33
MAY 28-28	0849	980528	1711	440	--	39	8.20	4.6	26
MAY 31-31	0421	980531	1001	240	--	31	7.10	3.2	26
JUL 03-04	1234	980704	0657	1700	7.2	32	7.20	3.5	30
JUL 19-19	0525	980719	1145	650	6.8	27	6.11	2.8	27
JUL 20-21	2041	980721	0833	510	6.5	41	9.67	4.1	40
AUG 04-04	0207	980804	1912	750	7.2	40	4.00	4.0	34
AUG 21-22	2108	980822	0738	270	7.1	39	8.70	4.2	27
AUG 23-23	0817	980823	2035	600	7.2	40	8.70	4.5	33
SEP 14-15	0603	980915	0721	2000	7.3	43	10.0	4.4	41
SEP 24-24	0511	980924	1206	50	6.8	49	11.0	5.3	45
SEP 30- OCT 01	1547	981001	0214	87	6.7	40	8.97	4.3	30
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	OXYGEN DEMAND, CHEM- ICAL, (LOW LEVEL) (MG/L) (00335)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
MAY 24-24	--	<.023	.400	--	.332	7.6	--	68	74
MAY 28-28	2.2	<.023	.596	.150	.415	11	92	336	70
MAY 31-31	2.2	.060	.525	.070	.246	8.5	91	58	41
JUL 03-04	3.2	<.023	.310	.111	.244	56	47	88	80
JUL 19-19	3.3	<.023	.530	.310	.427	6.0	46	36	80
JUL 20-21	3.1	<.023	.600	.130	.203	4.5	35	12	87
AUG 04-04	2.6	.055	.640	.148	.213	9.8	31	--	58
AUG 21-22	3.6	<.023	.340	.330	.504	9.7	25	52	80
AUG 23-23	2.2	<.023	.460	.200	.409	4.6	26	90	96
SEP 14-15	3.4	.030	.360	.256	.249	--	28	6	82
SEP 24-24	4.6	<.023	1.19	.397	.451	2.8	51	17	116
SEP 30- OCT 01	3.2	.100	1.06	.589	.418	--	41	50	98

ROCK RIVER BASIN

05435934 BADGER MILL CREEK AT NESBITT ROAD AT MADISON, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CADMIUM TOTAL RECOVER -ABLE (UG/L) (01113)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	COPPER, TOTAL RECOVER -ABLE (UG/L) (01119)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOVER -ABLE (UG/L) (01114)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOVER -ABLE (UG/L) (01094)	SAM- PLING METHOD, CODES (82398)
MAY									
24-24	--	<1	--	5	--	1	--	20	50
MAY									
28-28	<.1	<1	2	11	<1	4	4	40	50
MAY									
31-31	.1	<1	3	6	<1	2	9	20	50
JUL									
03-04	.1	<1	2	6	<1	1	8	30	50
JUL									
19-19	<.3	<1	6	6	<1	2	6	20	50
JUL									
20-21	<.3	<1	4	6	<1	2	9	10	50
AUG									
04-04	<.3	<1	3	6	3	3	4	50	50
AUG									
21-22	<.3	<1	--	3	--	<1	--	10	50
AUG									
23-23	<.3	<1	<2	4	<1	1	<1	20	50
SEP									
14-15	<.3	<1	2	2	<1	2	4	<10	50
SEP									
24-24	<.3	<1	4	5	<1	<1	5	10	50
SEP 30-									
OCT 01	<.3	<1	6	9	2	6	15	30	50

05435934 BADGER MILL CREEK AT NESBITT ROAD AT MADISON, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

BEGIN- NING DATE	BEGIN- NING TIME	ENDING DATE	ENDING TIME	RUNOFF VOLUME THOUSANDS OF CUBIC FEET (99904)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	MAGNE- SIUM, TOTAL RECOVER -ABLE (MG/L) (00921)	ANC WATER UNFLTRD FET LAB MG/L AS CACO3 (00417)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
OCT										
05-07	0455	981007	0452	1500	6.8	36	7.91	4.0	29	2.4
OCT										
17-18	1412	981018	1634	1000	6.7	38	8.42	4.0	34	3.3
NOV										
10-10	0122	981110	1151	2500	6.7	41	8.36	5.0	28	2.8
FEB										
11-12	1106	990212	0707	1200	6.9	100	22.0	11	42	111
APR										
08-09	2155	990409	1337	2300	6.8	39	8.40	4.3	30	19.9
APR										
22-22	0051	990422	0902	1200	7.2	42	9.00	4.7	31	16.5
APR										
22-23	0902	990423	0032	1400	7.2	38	8.70	4.0	34	16.3
APR										
23-24	0607	990424	0415	3400	7.3	39	8.80	4.1	36	51.0
JUN										
06-07	1618	990607	0745	550	7.3	32	7.20	3.3	32	3.4
JUN										
13-13	0304	990613	2225	2100	7.2	44	8.90	5.1	36	3.0
JUL										
31-31	0515	990731	0726	380	7.2	31	6.80	3.4	30	2.9
JUL										
31-31	0726	990731	0950	410	7.3	45	9.70	5.1	40	2.7
JUL										
31-31	0950	990731	1807	320	7.5	46	10.2	5.0	46	3.1
AUG										
23-23	1211	990823	2142	590	7.2	27	6.29	2.7	31	2.6
AUG										
23-24	2142	990824	1006	410	7.4	39	9.07	4.1	43	2.9
SEP										
27-29	1125	990929	0748	1200	7.3	52	11.4	5.7	28	3.2

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)
OCT									
05-07	.266	.420	.206	.315	3.0	26	68	102	--
OCT									
17-18	.198	.215	.329	.416	7.2	39	56	86	--
NOV									
10-10	.338	.447	.380	.613	2.0	--	192	122	--
FEB									
11-12	.800	.440	.121	.773	11	72	688	--	1240
APR									
08-09	.050	.436	--	.395	--	39	304	--	519
APR									
22-22	.730	.420	.110	.339	4.0	36	318	122	376
APR									
22-23	.280	.629	.090	.264	3.0	28	183	140	318
APR									
23-24	<.023	.291	.150	.310	3.0	26	137	178	304
JUN									
06-07	<.023	.351	.100	.298	8.0	37	136	69	226
JUN									
13-13	<.023	<.202	.114	.463	--	41	296	138	441
JUL									
31-31	.446	.378	.140	.303	6.0	30	136	164	182
JUL									
31-31	.599	.400	.180	.415	4.0	24	114	129	288
JUL									
31-31	.358	.281	.180	.358	4.0	28	68	140	220
AUG									
23-23	.312	.262	.140	.198	4.0	27	24	78	108
AUG									
23-24	.285	.297	.120	.184	4.0	23	15	89	128
SEP									
27-29	.582	.256	.240	.302	15	31	10	74	94

ROCK RIVER BASIN

05435934 BADGER MILL CREEK AT NESBITT ROAD AT MADISON, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CADMIUM TOTAL RECOVER -ABLE (UG/L) (01113)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	COPPER, TOTAL RECOVER -ABLE (UG/L) (01119)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOVER -ABLE (UG/L) (01114)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOVER -ABLE (UG/L) (01094)	SAM- PLING METHOD, CODES (82398)
OCT 05-07	.5	<1	2	7	2	4	7	20	50
OCT 17-18	<.3	<1	3	6	3	4	17	40	50
NOV 10-10	<.3	<1	4	7	<1	7	5	40	50
FEB 11-12	<.3	1	6	24	2	28	7	250	50
APR 08-09	<.3	<1	<2	10	2	9	4	40	50
APR 22-22	<.3	<1	<2	7	<1	9	4	40	50
APR 22-23	.3	<1	<2	6	<1	6	4	30	50
APR 23-24	<.3	<1	<2	5	<1	5	3	20	50
JUN 06-07	<.3	<1	4	8	2	4	5	30	50
JUN 13-13	<.3	<1	2	14	3	10	2	40	50
JUL 31-31	<.3	<1	<2	6	2	5	3	20	50
JUL 31-31	<.3	10	2	10	2	6	2	30	50
JUL 31-31	.7	<1	2	8	<1	13	2	20	50
AUG 23-23	<.3	<1	2	4	<1	1	3	10	50
AUG 23-24	<.3	<1	2	3	<1	3	3	10	50
SEP 27-29	<.2	<1	6	6	<1	<1	9	30	50

05435934 BADGER MILL CREEK AT NESBITT ROAD AT MADISON, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

BEGIN- NING DATE	BEGIN- NING TIME	ENDING DATE	ENDING TIME	RUNOFF VOLUME THOUSANDS OF CUBIC FEET (99904)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	MAGNE- SIUM, TOTAL RECOVER- ABLE (MG/L) (00921)	ALKA- LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	ANC WATER FET LAB MG/L AS CACO3 (00417)
FEB 23-23	0702	000223	1537	450	7.6	51	12.3	5.0	--	34
FEB 23-24	1537	000224	0338	1400	7.5	43	10.1	4.4	--	32
FEB 24-24	0338	000224	1143	1300	7.5	53	11.7	5.7	--	24
FEB 24-25	1143	000225	1953	1300	7.5	50	11.3	5.3	--	33
FEB 25-25	2000	000225	2358	640	7.6	1200	268	140	--	17
FEB 25-26	2358	000226	0158	570	7.7	56	12.4	6.2	--	18
FEB 26-26	0158	000226	0341	530	7.7	51	11.4	5.5	--	29
APR 19-19	1313	000419	1850	360	7.1	46	10.5	4.7	16	16
APR 19-21	1850	000421	1402	1800	7.3	<47	10.6	4.9	50	5
MAY 17-17	2211	000517	2331	690	7.5	140	28.1	16	50	--
MAY 17-18	2331	000518	0048	730	7.6	86	16.0	11	65	65
MAY 18-18	0048	000518	1128	3700	7.6	55	11.2	6.6	17	--
MAY 18-18	1128	000518	2059	3100	7.6	67	14.2	7.7	8	--
MAY 18-20	2059	000520	0019	2800	7.5	42	9.40	4.6	14	--
MAY 31- JUN 01	0806	000601	0201	3500	7.4	58	12.2	6.6	6	6
JUN 01-01	0201	000601	0616	2200	7.3	72	13.8	9.1	18	18
JUN 01-01	0616	000601	2024	5500	7.5	200	37.0	26	--	50

ROCK RIVER BASIN

05435934 BADGER MILL CREEK AT NESBITT ROAD AT MADISON, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
FEB										
23-23	225	--	.613	--	--	.436	--	44	58	496
FEB										
23-24	112	--	.508	--	--	.460	--	40	67	286
FEB										
24-24	71.7	--	.668	--	--	.493	--	57	159	232
FEB										
24-25	58.4	--	.707	--	--	.408	--	38	70	204
FEB										
25-25	45.5	--	.533	--	--	7.76	--	73	323	178
FEB										
25-26	35.0	--	.422	--	--	.427	--	44	278	160
FEB										
26-26	36.7	--	.420	--	--	.375	--	38	201	158
APR										
19-19	101	--	.484	<.082	--	.254	--	32	69	256
APR										
19-21	44.7	.437	.648	<.082	--	.286	--	33	128	186
MAY										
17-17	3.4	.627	.648	<.082	--	1.65	--	130	1400	190
MAY										
17-18	12.3	.476	.682	<.082	--	1.06	--	84	1200	260
MAY										
18-18	13.7	.315	.574	<.082	--	.615	--	50	414	150
MAY										
18-18	39.2	.148	.375	<.082	--	.659	--	48	316	190
MAY										
18-20	33.0	<.020	.370	<.082	--	.315	--	25	57	150
MAY 31-										
JUN 01	4.7	--	.340	<.082	--	.522	--	41	320	140
JUN										
01-01	6.2	--	.376	<.082	--	.798	--	57	710	170
JUN										
01-01	3.3	--	.340	<.082	--	1.94	--	160	2990	180

05435934 BADGER MILL CREEK AT NESBITT ROAD AT MADISON, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CADMIUM TOTAL RECOVER -ABLE (UG/L) (01113)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	COPPER, TOTAL RECOVER -ABLE (UG/L) (01119)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOVER -ABLE (UG/L) (01114)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOVER -ABLE (UG/L) (01094)	SAM- PLING METHOD, CODES (82398)
FEB										
23-23	568	--	<1	--	9	--	4	--	30	50
FEB										
23-24	356	--	<1	--	7	--	4	--	30	50
FEB										
24-24	384	--	<1	--	12	--	9	--	50	50
FEB										
24-25	266	--	<1	--	8	--	5	--	30	50
FEB										
25-25	498	--	7	--	360	--	220	--	1400	50
FEB										
25-26	433	--	<1	--	14	--	12	--	60	50
FEB										
26-26	354	--	<1	--	13	--	8	--	40	50
APR										
19-19	334	<.2	<1	5	7	<1	4	5	20	50
APR										
19-21	332	<.2	<1	4	10	<1	7	4	30	50
MAY										
17-17	1720	<.2	1	2	57	<1	61	5	190	50
MAY										
17-18	1500	.2	1	2	38	<1	29	4	120	50
MAY										
18-18	670	<.2	<1	<1	18	<1	15	3	60	50
MAY										
18-18	E620	<.2	<1	3	24	<1	20	5	80	50
MAY										
18-20	240	<.2	<1	2	7	<1	4	6	20	50
MAY 31-										
JUN 01	490	.2	<1	2	15	<1	11	3	50	50
JUN										
01-01	920	.3	<1	3	24	<1	18	3	80	50
JUN										
01-01	3270	.6	1	42	68	31	52	133	230	50

ROCK RIVER BASIN

05435943 BADGER MILL CREEK AT VERONA, WI

LOCATION.--Lat 42°58'37", long 89°32'22", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.22, T.6 N., R.8 E., Dane County, Hydrologic Unit 07090004, on left bank 60 ft downstream of Bruce Street, 0.8 mi southwest of intersection of State Highway 69 and County Trunk Highway M, at Verona.

DRAINAGE AREA.--20.3 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1996 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 930 ft above sea level, from topographic map.

REMARKS.--Records good (see page 12). Gage-height and water-quality telemeter at station. Effluent discharged into creek continuously at an average rate of 3.4 ft³/s (data provided by Madison Metropolitan Sewerage District).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	7.6	7.1	7.1	6.6	7.8	7.1	6.8	212	10	12	9.0
2	7.2	7.6	7.1	7.3	6.7	7.4	7.2	6.6	218	11	9.2	9.2
3	7.4	7.7	7.7	7.1	6.7	7.3	7.3	6.6	17	14	9.3	10
4	7.6	7.7	7.5	7.2	6.5	7.2	7.2	6.6	12	10	9.3	8.9
5	7.4	7.7	7.7	7.0	6.3	7.1	7.2	6.5	74	9.9	32	8.7
6	7.2	7.5	7.1	6.8	6.2	7.1	7.3	6.4	16	9.8	35	8.8
7	7.2	7.4	6.9	6.7	6.2	7.2	8.0	6.5	11	9.5	10	8.9
8	7.7	7.6	6.9	6.8	6.1	7.4	8.2	6.9	10	9.3	8.6	9.0
9	7.5	7.8	7.4	7.0	6.3	7.4	8.5	7.3	10	9.8	8.3	9.2
10	7.5	8.1	7.1	8.4	6.3	7.2	8.2	7.2	9.9	23	8.2	9.4
11	7.5	7.7	7.0	7.9	6.3	7.1	7.7	7.1	9.8	11	8.2	17
12	7.9	7.8	7.0	7.4	6.2	7.1	7.5	7.5	9.7	9.3	8.2	15
13	8.0	7.6	7.0	7.4	6.3	7.2	7.4	7.0	37	8.9	8.3	9.2
14	8.0	7.7	6.8	7.1	6.3	7.2	7.4	6.8	67	8.6	8.0	9.4
15	8.0	7.8	6.8	6.8	6.3	7.2	7.1	6.8	16	8.4	7.9	9.0
16	9.0	7.8	6.7	6.8	6.3	7.1	6.9	7.1	11	8.3	7.9	8.8
17	7.9	7.7	6.5	6.9	6.2	7.1	7.0	12	11	8.0	16	8.9
18	7.6	7.8	6.4	6.9	6.3	7.1	7.0	123	10	8.0	8.9	9.2
19	7.7	7.7	6.4	7.0	6.2	7.5	10	52	10	7.8	8.2	9.4
20	7.7	7.6	6.5	6.9	6.2	7.5	18	11	16	7.8	8.3	10
21	7.9	7.4	6.4	7.0	6.3	7.3	15	8.7	11	7.7	8.1	9.6
22	8.4	7.5	6.3	7.1	8.1	7.2	8.1	8.3	10	7.5	8.0	20
23	7.9	11	6.3	7.1	28	7.4	9.7	8.0	10	7.5	8.1	32
24	7.8	8.5	6.3	7.2	36	7.6	8.0	7.9	11	7.3	8.2	10
25	8.0	7.5	6.4	7.0	14	7.3	7.4	8.0	11	7.4	8.4	9.1
26	7.8	7.6	6.6	6.8	39	7.5	7.2	8.0	11	8.2	11	8.9
27	7.7	7.5	6.5	6.8	11	7.5	7.1	12	10	8.4	9.0	8.7
28	7.6	7.2	6.7	6.8	8.4	7.4	7.2	18	11	8.4	8.5	8.7
29	7.6	7.1	6.7	6.8	7.9	7.3	6.9	9.6	11	8.5	8.7	8.9
30	7.7	7.2	7.0	6.9	---	7.3	6.7	17	10	8.6	8.8	9.0
31	7.6	---	7.0	6.7	---	7.2	---	59	---	8.3	9.0	---
TOTAL	239.3	232.4	211.8	218.7	285.2	226.2	245.5	472.2	893.4	290.2	327.6	321.9
MEAN	7.72	7.75	6.83	7.05	9.83	7.30	8.18	15.2	29.8	9.36	10.6	10.7
MAX	9.0	11	7.7	8.4	39	7.8	18	123	218	23	35	32
MIN	7.2	7.1	6.3	6.7	6.1	7.1	6.7	6.4	9.7	7.3	7.9	8.7
CFSM	.38	.38	.34	.35	.48	.36	.40	.75	1.47	.46	.52	.53
IN.	.44	.43	.39	.40	.52	.41	.45	.87	1.64	.53	.60	.59

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2000, BY WATER YEAR (WY)

	MEAN	7.53	7.09	5.91	6.94	10.8	9.80	11.3	11.4	15.5	9.89	8.92	8.75
MAX	11.7	12.0	8.55	9.14	17.7	13.6	19.3	15.2	29.8	14.0	11.4	12.0	
(WY)	1999	1999	1999	1999	1997	1997	1999	2000	2000	1999	1999	1998	
MIN	3.55	3.28	3.25	3.67	4.74	7.30	6.34	6.39	6.93	7.94	4.53	3.76	
(WY)	1998	1998	1998	1998	1998	2000	1997	1997	1997	1997	1997	1997	

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1997 - 2000

ANNUAL TOTAL	3917.7	3964.4	
ANNUAL MEAN	10.7	10.8	9.46
HIGHEST ANNUAL MEAN			11.6
LOWEST ANNUAL MEAN			7.66
HIGHEST DAILY MEAN	176	218	218
LOWEST DAILY MEAN	6.3	6.1	2.9
ANNUAL SEVEN-DAY MINIMUM	6.4	6.2	3.1
INSTANTANEOUS PEAK FLOW		466	466
INSTANTANEOUS PEAK STAGE		8.86	8.86
ANNUAL RUNOFF (CFSM)	.53	.53	.47
ANNUAL RUNOFF (INCHES)	7.18	7.26	6.33
10 PERCENT EXCEEDS	12	11	12
50 PERCENT EXCEEDS	8.6	7.7	7.4
90 PERCENT EXCEEDS	7.3	6.7	3.7

05435943 BADGER MILL CREEK AT VERONA, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: November 1996 to current year.

DISSOLVED OXYGEN: May 1998 to current year.

INSTRUMENTATION.--Continuous water temperature recorder since November 1996. Dissolved-oxygen recorder since May 1998.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Effluent discharged continuously into creek after Aug. 28, 1998.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum, 25.5°C, June 28, 1998 and July 23, 1999; minimum 0.0°C on many days during winter periods of 1996-98 water years.

DISSOLVED OXYGEN: Maximum, 24.9 mg/L, Mar. 29, 1999; minimum, 1.3 mg/L, Oct. 5, 1998.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 23.0°C, July 10; minimum 1.5°C, Dec. 21, Jan. 21, 24, 27, and Feb. 23.

DISSOLVED OXYGEN: Maximum, 21.9 mg/L, Mar. 29; minimum, 1.6 mg/L, Sept. 11.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	13.5	10.5	13.5	14.5	10.5	14.5	8.5	6.5	8.5	9.0	6.5	9.0
2	13.0	11.5	13.0	11.0	9.0	11.0	11.0	8.5	11.0	10.0	7.5	10.0
3	11.5	10.5	11.5	10.5	8.0	10.5	11.5	11.0	11.5	7.5	5.0	7.5
4	13.5	10.0	13.5	11.5	7.5	11.5	11.5	10.0	11.5	7.5	5.0	7.5
5	14.5	11.0	14.5	12.5	9.5	12.5	10.0	7.5	10.0	6.0	4.0	6.0
6	14.0	10.5	14.0	11.5	8.5	11.5	8.5	7.0	8.5	7.5	5.0	7.5
7	15.0	11.0	15.0	11.5	8.0	11.5	9.0	6.5	9.0	6.0	4.0	6.0
8	15.0	12.5	15.0	13.5	9.5	13.5	9.5	7.5	9.5	8.0	4.5	8.0
9	16.0	12.0	16.0	14.5	11.0	14.5	10.0	8.0	10.0	9.0	7.0	9.0
10	16.5	13.5	16.5	13.0	10.5	13.0	8.0	7.0	8.0	8.5	6.5	8.5
11	15.0	11.0	15.0	11.5	10.0	11.5	8.0	6.0	8.0	7.0	5.5	7.0
12	16.0	12.0	16.0	12.5	9.5	12.5	9.5	7.5	9.5	6.0	5.0	6.0
13	14.5	11.0	14.5	13.0	9.5	13.0	9.0	7.0	9.0	6.0	3.5	6.0
14	14.0	10.0	14.0	11.5	9.5	11.5	9.0	7.5	9.0	6.0	3.0	6.0
15	15.5	11.0	15.5	10.5	8.0	10.5	9.0	7.5	9.0	8.0	5.0	8.0
16	14.5	12.0	14.5	10.5	8.0	10.5	7.5	5.5	7.5	6.5	4.5	6.5
17	12.5	10.5	12.5	10.5	8.0	10.5	7.0	5.0	7.0	5.5	4.5	5.5
18	13.0	9.5	13.0	12.0	9.0	12.0	6.5	4.0	6.5	8.0	5.0	8.0
19	13.5	10.5	13.5	12.0	10.5	12.0	7.5	5.0	7.5	6.0	4.0	6.0
20	12.5	10.0	12.5	11.0	9.5	11.0	7.5	2.0	7.5	4.5	2.0	4.5
21	14.0	9.5	14.0	11.0	8.5	11.0	4.0	1.5	4.0	5.0	1.5	5.0
22	12.5	9.5	12.5	12.0	10.0	12.0	5.5	3.5	5.5	6.0	3.0	6.0
23	11.0	9.0	11.0	12.5	9.5	12.5	4.5	2.5	4.5	5.0	2.0	5.0
24	11.5	7.5	11.5	10.0	8.5	10.0	5.5	3.0	5.5	5.0	1.5	5.0
25	13.0	9.0	13.0	9.5	7.5	9.5	6.0	4.0	6.0	6.0	3.0	6.0
26	13.0	10.5	13.0	9.5	7.5	9.5	6.0	4.5	6.0	6.0	2.0	6.0
27	13.0	9.5	13.0	10.0	8.0	10.0	6.0	4.0	6.0	7.0	1.5	7.0
28	14.0	11.0	14.0	9.0	7.0	9.0	7.0	3.5	7.0	7.5	2.5	7.5
29	15.0	11.0	15.0	8.0	6.5	8.0	8.5	6.5	8.5	7.5	4.0	7.5
30	14.0	12.0	14.0	8.0	5.5	8.0	9.0	6.5	9.0	8.0	4.5	8.0
31	14.0	11.0	14.0	---	---	---	8.0	6.0	8.0	7.0	3.5	7.0
MONTH	16.5	7.5	13.8	14.5	5.5	11.3	11.5	1.5	8.0	10.0	1.5	6.9

ROCK RIVER BASIN

05435943 BADGER MILL CREEK AT VERONA, WI--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	8.5	4.0	8.5	11.5	7.0	11.5	12.0	9.5	12.0	20.0	11.5	20.0
2	6.5	3.0	6.5	11.5	6.0	11.5	17.0	8.0	17.0	20.0	10.0	20.0
3	8.0	5.0	8.0	12.0	5.5	12.0	15.5	9.0	15.5	21.5	10.5	21.5
4	8.0	4.0	8.0	13.5	6.5	13.5	14.0	6.5	14.0	21.5	12.5	21.5
5	8.0	3.5	8.0	15.0	7.0	15.0	13.5	6.0	13.5	22.0	12.5	22.0
6	8.0	4.0	8.0	15.0	7.5	15.0	17.0	7.5	17.0	21.5	13.0	21.5
7	9.0	4.0	9.0	17.0	9.0	17.0	10.5	4.0	10.5	21.5	14.5	21.5
8	7.5	3.0	7.5	16.0	10.0	16.0	14.0	4.5	14.0	18.0	15.0	18.0
9	10.5	5.5	10.5	11.0	7.0	11.0	16.0	6.5	16.0	15.0	12.5	15.0
10	7.5	5.5	7.5	10.0	6.0	10.0	9.5	7.0	9.5	16.0	11.0	16.0
11	8.0	3.5	8.0	12.5	5.5	12.5	10.5	7.0	10.5	15.0	12.5	15.0
12	7.5	3.0	7.5	12.5	5.5	12.5	16.5	6.0	16.5	15.0	13.0	15.0
13	7.0	4.5	7.0	10.5	7.0	10.5	12.5	8.0	12.5	15.5	10.5	15.5
14	9.0	4.5	9.0	12.0	6.5	12.0	19.0	8.5	19.0	18.0	9.0	18.0
15	9.5	6.0	9.5	11.0	7.5	11.0	16.5	10.0	16.5	19.0	9.5	19.0
16	9.0	4.5	9.0	12.5	5.5	12.5	10.0	8.5	10.0	18.0	12.5	18.0
17	8.0	4.0	8.0	12.5	5.0	12.5	9.5	8.0	9.5	14.0	12.0	14.0
18	6.0	4.5	6.0	8.5	6.0	8.5	14.5	9.0	14.5	14.5	10.5	14.5
19	8.5	4.0	8.5	7.5	6.5	7.5	11.0	9.0	11.0	14.5	9.5	14.5
20	9.5	5.0	9.5	9.0	7.0	9.0	9.5	7.0	9.5	18.0	10.5	18.0
21	10.5	4.5	10.5	12.0	8.5	12.0	15.0	6.0	15.0	16.5	10.5	16.5
22	11.5	5.0	11.5	12.0	9.0	12.0	18.5	7.5	18.5	19.5	12.0	19.5
23	5.5	1.5	5.5	14.5	8.0	14.5	15.5	10.0	15.5	21.0	13.0	21.0
24	4.0	2.0	4.0	12.5	10.0	12.5	18.5	8.5	18.5	20.5	12.5	20.5
25	9.5	4.0	9.5	15.0	8.0	15.0	19.0	8.0	19.0	20.0	11.0	20.0
26	8.0	5.5	8.0	14.0	7.0	14.0	20.0	8.5	20.0	16.5	12.0	16.5
27	10.5	6.0	10.5	12.5	7.5	12.5	20.0	9.5	20.0	14.0	13.0	14.0
28	11.5	5.5	11.5	10.0	7.0	10.0	15.5	9.5	15.5	14.0	12.5	14.0
29	12.0	7.5	12.0	15.5	6.5	15.5	17.0	10.0	17.0	17.5	11.5	17.5
30	---	---	---	16.5	6.5	16.5	19.0	9.0	19.0	17.0	12.5	17.0
31	---	---	---	16.5	7.0	16.5	---	---	---	17.5	15.0	17.5
MONTH	12.0	1.5	8.5	17.0	5.0	12.6	20.0	4.0	14.9	22.0	9.0	17.8
JUNE				JULY			AUGUST			SEPTEMBER		
1	21.0	16.5	21.0	20.5	14.0	20.5	21.0	15.5	21.0	21.0	17.0	21.0
2	20.0	17.5	20.0	21.0	14.5	21.0	20.0	16.5	20.0	20.5	17.0	20.5
3	18.5	15.0	18.5	20.5	16.0	20.5	18.5	15.0	18.5	19.5	16.5	19.5
4	15.5	13.0	15.5	19.0	15.0	19.0	19.0	15.0	19.0	18.5	15.0	18.5
5	16.5	12.0	16.5	20.0	15.0	20.0	19.0	15.0	19.0	17.0	13.5	17.0
6	18.5	13.0	18.5	20.0	15.5	20.0	21.5	18.5	21.5	17.0	13.0	17.0
7	18.5	13.0	18.5	18.0	14.5	18.0	21.0	17.5	21.0	18.5	14.0	18.5
8	21.0	13.5	21.0	19.5	15.0	19.5	20.5	16.5	20.5	18.0	15.5	18.0
9	21.5	14.5	21.5	20.0	16.0	20.0	20.5	16.0	20.5	18.5	15.5	18.5
10	21.0	15.0	21.0	23.0	16.5	23.0	20.0	15.5	20.0	19.0	16.5	19.0
11	21.0	16.0	21.0	20.5	17.0	20.5	19.5	15.5	19.5	20.5	17.0	20.5
12	16.5	14.0	16.5	20.0	15.5	20.0	19.5	15.0	19.5	19.0	16.0	19.0
13	20.0	13.5	20.0	21.0	15.5	21.0	19.5	16.0	19.5	17.5	14.0	17.5
14	19.0	17.5	19.0	21.0	16.0	21.0	20.5	16.0	20.5	17.5	15.0	17.5
15	19.5	16.0	19.5	20.5	15.0	20.5	20.5	16.5	20.5	16.0	13.0	16.0
16	18.5	15.5	18.5	20.0	15.0	20.0	18.5	15.0	18.5	16.0	12.0	16.0
17	18.5	13.0	18.5	20.5	15.5	20.5	18.0	16.0	18.0	17.0	13.5	17.0
18	19.5	13.5	19.5	18.5	14.5	18.5	18.0	15.5	18.0	17.5	14.0	17.5
19	20.5	13.0	20.5	18.0	14.5	18.0	17.5	14.0	17.5	17.0	15.5	17.0
20	20.5	15.0	20.5	17.5	14.0	17.5	18.5	14.5	18.5	15.5	13.5	15.5
21	20.5	15.5	20.5	17.5	13.5	17.5	18.0	14.5	18.0	15.0	12.0	15.0
22	19.0	14.0	19.0	17.5	14.0	17.5	17.5	15.5	17.5	14.0	12.5	14.0
23	17.5	13.5	17.5	19.0	13.5	19.0	18.5	15.0	18.5	14.0	13.0	14.0
24	16.0	14.0	16.0	19.0	13.5	19.0	19.0	15.0	19.0	13.5	12.5	13.5
25	21.0	15.5	21.0	17.5	14.5	17.5	19.0	15.0	19.0	14.5	11.5	14.5
26	19.5	15.0	19.5	18.5	15.0	18.5	20.0	15.5	20.0	15.0	11.0	15.0
27	20.0	14.0	20.0	19.5	15.5	19.5	19.0	16.5	19.0	15.5	12.0	15.5
28	17.0	13.5	17.0	18.5	15.5	18.5	19.0	15.5	19.0	15.0	11.5	15.0
29	19.5	13.5	19.5	19.0	15.5	19.0	18.5	16.0	18.5	16.0	12.0	16.0
30	19.5	13.5	19.5	18.0	15.5	18.0	17.5	15.5	17.5	15.5	13.5	15.5
31	---	---	---	19.0	15.5	19.0	21.0	16.5	21.0	---	---	---
MONTH	21.5	12.0	19.2	23.0	13.5	19.4	21.5	14.0	19.3	21.0	11.0	17.0

05435943 BADGER MILL CREEK AT VERONA, WI--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER				NOVEMBER			DECEMBER			JANUARY		
1	11.3	7.3	8.8	13.4	7.5	9.5	12.8	8.8	10.1	11.6	8.6	9.6
2	12.1	7.3	9.1	13.9	7.9	10.2	10.8	7.8	9.0	10.1	8.3	8.9
3	9.7	8.0	8.7	14.1	7.9	10.0	8.7	7.4	7.8	10.1	8.7	9.5
4	12.4	8.0	9.6	12.9	7.3	9.3	9.7	7.5	8.3	12.4	9.5	10.4
5	12.2	7.8	9.4	12.7	7.2	9.0	11.6	7.8	9.4	11.9	9.5	10.3
6	11.6	7.1	8.9	12.7	7.6	9.4	12.1	7.9	9.5	11.7	9.3	10.1
7	10.9	6.9	8.2	13.0	7.5	9.5	10.9	7.8	8.9	11.3	9.4	10.2
8	10.4	6.5	7.8	12.4	7.2	8.9	10.7	7.5	8.6	11.4	9.1	10.1
9	11.0	6.5	8.1	12.3	6.8	8.7	8.0	7.1	7.6	11.4	8.6	9.5
10	10.9	6.4	8.0	11.7	6.4	8.2	11.3	7.6	9.1	11.8	8.5	9.6
11	11.3	6.9	8.4	12.2	6.5	8.8	11.4	8.3	9.4	12.3	9.1	10.2
12	11.8	6.1	8.3	13.2	7.4	9.4	11.2	8.0	9.1	11.9	9.6	10.3
13	10.3	6.0	7.7	12.5	7.2	9.0	10.7	8.2	9.1	12.1	10.0	10.8
14	11.8	7.1	8.9	12.9	7.2	9.4	10.4	8.0	8.9	11.9	10.0	10.8
15	11.7	6.4	8.5	13.0	7.6	9.7	10.1	8.0	8.7	12.5	9.4	10.5
16	9.3	5.2	6.9	---	---	---	11.7	8.4	9.7	12.7	9.3	10.7
17	11.5	6.5	8.7	---	---	---	12.1	8.9	10.1	11.5	10.1	10.7
18	13.0	7.7	9.7	---	---	---	11.7	9.2	10.1	12.9	10.0	10.8
19	12.8	7.5	9.4	---	---	---	10.9	8.6	9.6	12.1	10.1	10.7
20	12.9	7.5	9.5	---	---	---	12.4	8.5	10.5	11.8	10.1	10.8
21	12.1	6.9	8.9	---	---	---	12.0	10.1	11.0	11.0	10.1	10.6
22	11.4	6.8	8.8	---	---	---	11.5	10.0	10.5	11.3	9.8	10.4
23	12.9	7.7	9.6	---	---	---	11.8	9.9	10.7	11.4	9.8	10.6
24	12.8	7.8	9.5	---	---	---	11.4	9.7	10.4	11.1	10.2	10.7
25	12.9	7.4	9.4	11.9	7.7	9.1	11.1	9.6	10.2	11.6	10.2	10.6
26	13.2	7.2	9.4	12.2	8.1	9.2	11.5	9.6	10.3	11.3	10.3	10.7
27	13.1	7.5	9.5	12.1	8.2	9.5	11.2	9.7	10.3	11.1	10.1	10.7
28	13.6	7.3	9.4	12.8	8.8	9.9	10.6	9.1	10.1	11.5	10.2	10.8
29	12.9	6.9	9.0	12.2	8.6	9.9	10.8	8.8	9.5	12.8	10.2	10.9
30	12.2	6.8	8.5	12.5	9.0	10.3	11.2	8.7	9.5	12.3	9.9	10.7
31	13.5	7.0	9.4	---	---	---	11.0	8.7	9.5	11.8	9.9	10.6
MONTH	13.6	5.2	8.8	14.1	6.4	9.4	12.8	7.1	9.5	12.9	8.3	10.4
FEBRUARY				MARCH			APRIL			MAY		
1	12.6	10.0	10.8	12.2	8.6	10.1	---	---	---	13.6	8.8	10.4
2	12.2	10.0	10.9	---	---	---	---	---	---	13.3	8.3	10.4
3	12.7	9.8	10.6	---	---	---	---	---	---	11.5	6.1	8.7
4	13.4	9.9	11.0	---	---	---	---	---	---	8.9	4.9	6.8
5	13.4	10.1	11.2	---	---	---	---	---	---	10.8	4.7	7.2
6	14.1	9.7	11.3	---	---	---	19.7	6.9	11.6	12.0	7.6	9.4
7	14.1	9.8	11.2	---	---	---	14.9	6.7	10.1	12.6	7.5	9.3
8	14.6	9.9	11.5	---	---	---	19.3	8.2	12.3	9.9	6.8	8.1
9	14.7	8.7	11.0	13.9	7.9	10.1	19.1	7.9	11.8	10.7	7.6	8.8
10	13.5	8.7	10.2	16.8	8.9	11.5	16.9	7.9	11.3	12.9	8.2	9.9
11	13.8	9.1	10.7	16.4	8.9	11.4	18.3	8.0	11.6	10.2	7.2	8.8
12	13.8	9.1	10.6	16.9	8.4	11.4	20.7	7.9	12.5	9.7	6.9	8.4
13	13.8	9.1	10.7	14.6	8.4	10.6	18.4	7.7	11.5	13.4	8.0	10.4
14	13.3	9.3	10.6	16.0	8.3	10.9	20.1	6.9	11.7	13.2	8.7	10.6
15	14.8	8.9	10.8	13.8	8.3	10.0	18.9	6.6	11.0	13.4	8.4	10.4
16	15.1	9.0	11.1	16.6	8.7	11.5	13.6	7.6	9.7	13.3	8.0	9.9
17	15.3	9.3	11.3	15.9	9.0	11.3	14.5	8.2	10.3	11.4	7.8	9.1
18	15.3	9.3	11.3	14.0	8.8	10.7	17.2	7.7	11.0	8.9	6.8	7.9
19	15.2	9.7	11.2	14.5	8.7	10.5	9.6	7.5	8.4	9.6	8.1	9.0
20	13.7	9.4	10.7	13.2	8.8	10.4	10.0	8.1	9.2	11.1	7.8	9.3
21	14.8	8.9	11.1	15.1	8.3	10.7	11.1	7.8	10.0	11.5	7.6	9.5
22	14.7	8.8	10.8	15.5	8.3	10.9	13.1	7.2	9.5	11.3	7.0	8.7
23	12.5	10.3	11.6	18.8	8.1	11.9	11.6	7.2	8.4	10.8	7.0	8.4
24	12.1	11.0	11.7	14.5	7.9	10.2	14.2	7.8	10.0	11.1	7.0	8.6
25	11.0	9.3	10.1	19.2	7.8	11.8	14.6	8.2	10.5	11.7	7.1	8.9
26	10.1	9.4	9.8	19.2	7.6	11.5	15.1	8.2	10.8	11.9	7.1	9.1
27	10.9	9.6	10.1	17.9	7.7	11.8	15.4	8.3	10.9	7.7	6.6	7.1
28	11.3	9.4	10.3	19.0	8.1	12.3	15.2	8.6	10.7	7.9	7.1	7.5
29	11.7	8.8	10.0	21.9	8.0	12.9	16.5	8.8	11.6	11.9	7.4	9.3
30	---	---	---	21.5	7.7	12.6	15.2	9.0	11.6	8.9	6.4	7.2
31	---	---	---	---	---	---	---	---	---	7.7	5.4	6.6
MONTH	15.3	8.7	10.8	21.9	7.6	11.2	20.7	6.6	10.7	13.6	4.7	8.8

ROCK RIVER BASIN

05435943 BADGER MILL CREEK AT VERONA, WI--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.3	4.2	5.6	15.5	7.1	10.4	12.5	4.7	7.6	14.2	5.8	9.3
2	6.1	4.3	5.2	13.5	6.0	9.0	14.2	4.9	9.2	14.4	5.8	9.3
3	8.1	6.1	7.3	13.3	5.4	8.4	14.4	6.8	9.9	11.6	5.9	7.9
4	9.0	6.8	8.0	14.7	6.8	9.5	14.9	7.0	10.0	13.0	5.3	8.9
5	8.7	7.3	7.8	15.4	6.8	10.1	11.3	5.0	7.8	14.3	7.1	10.1
6	9.2	7.4	8.3	14.8	6.7	9.9	7.4	4.6	5.9	14.4	7.2	10.0
7	9.3	7.4	8.4	14.2	6.8	9.9	12.7	5.6	8.5	14.7	6.9	9.9
8	9.3	7.0	8.0	15.4	6.7	10.0	13.2	6.4	9.0	14.6	5.9	9.4
9	9.9	6.9	8.1	15.0	6.2	9.2	13.2	6.6	9.1	13.6	5.6	8.8
10	10.5	7.0	8.3	7.3	5.1	6.1	13.5	6.6	9.3	13.9	5.7	8.5
11	11.4	7.0	8.7	13.0	5.5	8.8	15.7	6.6	10.1	6.4	1.6	3.9
12	11.6	7.4	9.0	12.5	6.9	9.0	15.9	7.5	11.0	11.2	4.2	7.0
13	12.9	5.3	8.6	12.0	6.7	8.8	16.3	5.6	10.0	13.9	6.4	9.4
14	11.9	4.6	6.2	12.6	6.5	8.9	16.3	7.2	10.8	14.2	6.4	9.4
15	6.9	4.6	5.6	12.7	6.8	9.2	16.3	7.0	10.8	15.0	7.2	10.3
16	8.6	5.3	6.7	13.2	7.0	9.4	16.3	7.4	11.0	15.4	7.7	10.6
17	9.7	6.0	7.6	13.2	6.8	9.2	8.6	6.7	7.4	14.9	7.2	10.2
18	10.2	5.9	7.6	13.6	7.1	9.7	14.6	6.7	9.9	15.4	7.0	10.2
19	11.1	6.0	8.0	13.7	7.2	9.8	15.0	7.3	10.6	12.3	6.3	8.6
20	6.8	5.3	5.8	13.2	7.3	9.7	14.9	7.1	10.2	11.2	5.8	8.0
21	11.1	5.5	7.9	13.5	7.3	9.8	14.9	6.7	10.1	14.0	7.0	9.6
22	11.2	6.1	8.3	13.9	7.3	9.9	10.9	6.5	8.4	8.3	6.8	7.4
23	12.3	6.5	8.6	13.8	7.4	9.9	13.6	6.3	9.4	7.7	6.8	7.2
24	10.3	6.7	8.3	13.9	7.3	9.9	13.5	6.3	9.4	12.2	6.8	8.7
25	13.1	6.0	8.9	13.9	7.2	9.9	13.7	6.3	9.6	14.0	7.2	9.8
26	13.2	6.6	9.1	13.5	7.1	9.8	12.7	4.6	7.9	14.1	7.3	9.9
27	13.7	7.0	9.9	13.7	6.8	9.8	13.5	4.5	8.4	15.0	7.7	10.4
28	14.0	7.4	9.6	14.9	6.9	10.1	14.1	6.2	9.3	15.5	7.8	10.8
29	14.5	7.6	10.2	14.7	6.9	9.9	12.9	6.1	8.9	15.3	7.8	10.5
30	14.9	7.4	10.4	15.1	6.9	9.6	13.3	6.5	9.1	14.5	7.4	10.1
31	---	---	---	14.9	7.0	10.1	13.9	6.3	9.3	---	---	---
MONTH	14.9	4.2	8.0	15.5	5.1	9.5	16.3	4.5	9.3	15.5	1.6	9.1

05436500 SUGAR RIVER NEAR BRODHEAD, WI

LOCATION.--Lat 42°36'42", long 89°23'53", in SW $\frac{1}{4}$ 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 mi².

PERIOD OF RECORD.--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. Datum of gage is 768.14 ft above sea level. Prior to Oct. 17, 1938, nonrecording gage 20 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor (see page 12). Some regulation from dam and non-operational powerplant upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	394	292	297	e280	e250	755	328	359	3040	462	342	276
2	353	296	299	e280	e250	595	326	353	5730	441	347	268
3	339	294	306	e280	e250	522	325	344	5030	485	342	269
4	343	292	319	e270	e250	477	321	337	3540	508	325	278
5	352	294	347	e260	e250	451	300	330	2500	494	317	280
6	346	295	355	e260	e250	433	310	324	1940	464	350	271
7	332	294	341	e260	e250	420	317	320	1610	442	466	266
8	326	293	325	e260	e250	415	337	323	1360	430	455	267
9	318	295	322	e270	e250	418	354	352	1040	426	378	265
10	316	298	335	e280	e240	409	354	388	818	527	339	265
11	312	296	344	e280	e240	396	355	400	713	627	323	292
12	305	297	331	e270	e240	383	348	399	695	659	309	578
13	302	295	319	e250	e230	374	337	391	770	580	304	764
14	297	295	313	e250	e230	370	329	361	783	471	302	732
15	303	293	313	e260	e240	367	323	340	827	430	289	562
16	321	288	313	e280	e240	367	316	332	902	409	311	419
17	331	287	307	e280	e240	362	315	342	887	396	323	354
18	362	288	e260	e270	e240	355	312	399	788	381	327	313
19	341	291	e250	e270	e240	359	316	729	674	363	361	307
20	319	291	e290	e270	e240	377	415	935	597	361	333	312
21	314	289	e280	e270	e240	406	624	1010	583	363	309	326
22	312	289	e270	e270	e250	411	704	858	588	359	303	332
23	309	325	e270	e270	e400	392	650	558	566	354	306	387
24	304	382	e270	e270	e799	379	519	461	538	348	304	444
25	302	389	e270	e270	1250	376	454	415	551	342	296	459
26	303	351	e270	e260	1660	368	416	388	559	338	288	394
27	302	328	e270	e260	1670	358	390	412	523	337	286	353
28	302	319	e270	e250	1470	354	376	473	485	333	287	333
29	301	311	e270	e250	1090	346	368	547	490	326	283	321
30	302	302	e280	e250	---	339	361	530	481	327	278	312
31	296	---	e280	e250	---	334	---	592	---	337	282	---
TOTAL	9959	9149	9286	8250	13879	12668	11500	14302	39608	13120	10065	10999
MEAN	321	305	300	266	479	409	383	461	1320	423	325	367
MAX	394	389	355	280	1670	755	704	1010	5730	659	466	764
MIN	296	287	250	250	230	334	300	320	481	326	278	265
CFSM	.61	.58	.57	.51	.92	.78	.73	.88	2.52	.81	.62	.70
IN.	.71	.65	.66	.59	.99	.90	.82	1.02	2.82	.93	.72	.78

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2000, BY WATER YEAR (WY)

MEAN	284	307	271	294	430	660	463	372	372	304	260	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 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1914 - 2000

ANNUAL TOTAL	181759	162785	
ANNUAL MEAN	498	445	359
HIGHEST ANNUAL MEAN			694
LOWEST ANNUAL MEAN			172
HIGHEST DAILY MEAN	3940	May 19	5730 Jun 2 10800 Mar 14 1929
LOWEST DAILY MEAN	(a)250	Dec 19	(a)230 Feb 13,14 51 Jun 13 1934
ANNUAL SEVEN-DAY MINIMUM	(a)270	Dec 18	(a)237 Feb 10 71 Jun 28 1934
INSTANTANEOUS PEAK FLOW			6240 Jun 2 (b)14800 Sep 13 1915
INSTANTANEOUS PEAK STAGE			9.10 Jun 2 (c)11.40 Sep 13 1915
INSTANTANEOUS LOW FLOW			35 Sep 19 1959
ANNUAL RUNOFF (CFSM)	.95	.85	.69
ANNUAL RUNOFF (INCHES)	12.93	11.58	9.34
10 PERCENT EXCEEDS	731	625	584
50 PERCENT EXCEEDS	376	330	262
90 PERCENT EXCEEDS	294	260	150

- (a) Ice affected
 (b) From rating curve extended above 7,500 ft³/s
 (c) From floodmarks
 (e) Estimated due to ice effect or missing record

ILLINOIS RIVER BASIN

05437500 ROCK RIVER AT ROCKTON, IL

LOCATION.--Lat 42°26'55", long 89°04'11", in SW ¼ NE ¼ 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 mi².

PERIOD OF RECORD.--June 1903 to July 1906, October 1906 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, published in WSP 1308.

REVISED RECORD.--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 and crest-stage gage. Datum of gage is 707.94 ft above sea level (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.--Records fair except those for estimated daily discharges, which are poor (see page 12). Low flow regulated by powerplant upstream from station. Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,500 ft³/s, Mar. 30, 1916, gage height, 13.06 ft, site and datum then in use; minimum daily, 501 ft³/s, Sept. 14, 1958.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in February 1937 reached a stage of 14.6 ft (backwater from ice), from floodmark.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4550	2960	2800	e2400	e2200	8920	3770	4750	14000	8440	4850	3350
2	4370	2920	2720	e2500	e2100	8820	3710	4560	18200	8110	4670	3320
3	4240	2920	2980	e2600	e2050	8450	3700	4410	19900	10100	4530	3300
4	4230	2880	3160	e2650	e2000	7610	3550	4360	20600	9620	4450	3280
5	4100	2860	3660	e2700	e2050	6930	3460	4050	20900	9240	4360	3270
6	3950	2740	3710	2740	e2100	6490	3570	4050	20800	8960	4870	3160
7	4010	2520	3620	2920	e2300	6260	3690	3910	20400	8650	4720	3080
8	3880	2550	3660	2880	2560	6100	3440	3820	20200	8170	5120	3040
9	3530	2930	3670	2890	2630	5900	3250	4100	20000	7790	5430	2990
10	3460	2870	3760	2990	2660	5870	3270	4590	19600	8450	5230	3000
11	3370	2910	3700	3110	2680	5730	3360	4810	18800	8840	5130	3100
12	3260	2880	3720	3220	2650	5560	3210	4860	19400	8430	4620	4630
13	3250	2860	3640	3230	2600	5380	2970	4660	21500	8270	4270	5320
14	3300	2900	3880	2930	2610	5270	3000	4400	22200	8010	4170	5480
15	3130	2970	3990	2900	2600	5280	2980	4240	22000	7610	4050	5700
16	3490	3050	3860	3100	2580	5260	3130	4450	21400	7150	3940	5400
17	3450	2930	3770	3120	2590	5200	3190	4450	20200	6760	3830	4910
18	3480	2510	3440	3050	2600	4920	3070	5200	18900	6410	3720	4490
19	3510	2510	3340	3070	2620	4700	3250	7900	17500	6190	3710	4190
20	3400	2310	3150	2840	2730	4660	4770	9430	16200	5980	3750	3870
21	3300	2570	2570	2800	2760	4570	7110	9980	14900	5770	3760	3750
22	3290	2580	e2600	3100	2830	4550	6750	10600	13600	5420	3690	4080
23	3200	2700	e2500	e2900	3500	4480	6700	10900	12900	5180	3650	6150
24	3170	2790	e2400	e2800	5150	4590	6570	10900	12300	4990	3660	7110
25	3100	2910	e2300	e2700	6470	4540	6560	10100	11800	4910	3600	6930
26	3070	2960	e2250	e2600	7480	4290	6140	9770	11200	4510	3560	6990
27	3050	2980	e2200	e2500	8150	4280	5570	9820	10600	4230	3560	6100
28	3040	2970	e2200	e2450	8440	4190	5210	10200	10100	4350	3490	5290
29	3010	2930	e2200	e2400	8770	4140	5120	10200	9570	4230	3310	4750
30	2990	2890	e2300	e2300	---	4110	4840	9850	9020	4210	3430	4400
31	3000	---	e2350	e2250	---	3970	---	10100	---	4310	3400	---
TOTAL	108180	84260	96100	86640	102460	171020	128910	209420	508690	213290	128530	134430
MEAN	3490	2809	3100	2795	3533	5517	4297	6755	16960	6880	4146	4481
MAX	4550	3050	3990	3230	8770	8920	7110	10900	22200	10100	5430	7110
MIN	2990	2310	2200	2250	2000	3970	2970	3820	9020	4210	3310	2990
CFSM	.55	.44	.49	.44	.56	.87	.68	1.06	2.66	1.08	.65	.70
IN.	.63	.49	.56	.51	.60	1.00	.75	1.22	2.97	1.25	.75	.79

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2000, BY WATER YEAR (WY)

	MEAN	3081	3491	3262	3210	3844	7256	7344	5331	4469	3701	2884	2870
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	

05437500 ROCK RIVER AT ROCKTON, IL--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1940 - 2000	
ANNUAL TOTAL	2067230		1971930			
ANNUAL MEAN	5664		5388		4228	
HIGHEST ANNUAL MEAN					9484 1993	
LOWEST ANNUAL MEAN					1568 1958	
HIGHEST DAILY MEAN	15600	Apr 29	22200	Jun 14	29700	Mar 25 1975
LOWEST DAILY MEAN	(e)1900	Jan 17-19	(e)2000	Feb 4	501	Sep 14 1958
ANNUAL SEVEN-DAY MINIMUM	(e)1970	Jan 13	(e)2110	Jan 31	622	Oct 2 1958
INSTANTANEOUS PEAK FLOW			22500	Jun 14	30000	Mar 25 1975
INSTANTANEOUS PEAK STAGE			12.66	Jun 14	15.54	Mar 25 1975
INSTANTANEOUS LOW FLOW			1860	Nov 18		
ANNUAL RUNOFF (CFSM)	.89		.85		.66	
ANNUAL RUNOFF (INCHES)	12.09		11.53		9.03	
10 PERCENT EXCEEDS	10400		10000		8400	
50 PERCENT EXCEEDS	4910		3860		3180	
90 PERCENT EXCEEDS	2500		2600		1300	

(e) Estimated due to ice effect or missing record

05437500 ROCK RIVER AT ROCKTON, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1998 to September 2000 (discontinued).

REMARKS.--Chemical analyses by the Wisconsin State Laboratory of Hygiene. Samples are composites of 3-5 verticals, collected by cooperators.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L) (00535)
OCT											
05...	1155	4050	6.4	8.4	11.6	3.76	.087	.190	2.4	32	10
19...	1155	3490	6.1	8.1	11.6	4.01	.064	.163	4.5	30	9
NOV											
02...	1245	2930	6.2	8.3	10.8	4.55	.031	.123	3.2	25	8
16...	1310	3000	8.2	8.0	6.7	4.85	.049	.108	1.3	15	5
DEC											
07...	1155	3560	3.8	7.7	7.4	4.25	.036	.110	1.9	13	6
21...	0849	2350	4.9	7.2	1.0	4.41	.003	.104	3.2	14	9
JAN											
05...	1200	2860	3.0	7.7	1.1	4.12	.050	.105	2.0	8	8
18...	1230	3070	7.6	7.5	.8	4.80	.049	.154	1.6	68	7
FEB											
02...	1200	2950	10.4	7.4	1.2	4.47	.037	.104	2.0	6	<5
16...	1115	2580	10.0	7.8	2.5	4.90	.041	.106	2.2	9	<5
MAR											
07...	1200	6180	10.8	8.3	9.9	4.01	.017	.236	5.9	50	13
21...	1330	4500	10.3	8.5	8.2	3.89	.002	.154	4.7	37	14
APR											
04...	1200	3690	9.1	8.3	10.4	2.64	.002	.180	5.2	40	14
18...	1230	3170	9.1	8.4	11.6	4.00	.027	.155	3.8	28	8
MAY											
02...	1150	4490	9.1	7.5	18.4	4.01	.011	.213	5.4	75	15
16...	1145	4440	8.0	7.9	16.9	4.53	.105	.251	2.3	74	14
JUN											
01...	1200	13900	6.5	7.7	20.4	3.72	.118	.430	4.7	221	32
06...	1136	20800	9.1	7.6	19.1	3.20	.164	.312	2.8	62	12
20...	1150	16100	7.9	7.8	22.0	4.03	.137	.251	2.7	48	9
JUL											
12...	1200	8370	6.6	7.9	23.5	3.13	.134	.315	3.4	95	16
25...	1240	4850	6.5	8.3	22.9	4.87	.089	.293	4.2	100	20
AUG											
08...	1200	5760	6.4	8.3	25.1	4.22	.130	.320	3.7	75	16
23...	1200	3770	8.1	8.1	22.2	5.08	.131	.282	3.0	86	16
SEP											
12...	1230	5050	8.1	8.2	21.8	4.86	.132	.322	2.7	141	22

PHOSPHORUS, ORTHO, WATER, FILTERED, POUNDS PER DAY
DAILY MEAN VALUES

[illegible]

PHOSPHORUS TOTAL, POUNDS PER DAY
DAILY MEAN VALUES

[illegible]

SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (TONS PER DAY)
DAILY MEAN VALUES

2000	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TOTAL	41.47	72.33	117.85	331.63	736.25	177.39	3505.52	2240.34	3648.9	883.76	512.89	933.44
WTR YR 2000	TOTAL 13201.77											

05438283 PISCASAW CREEK NEAR WALWORTH, WI

LOCATION.--Lat 42°31'18", long 88°39'39", in NE ¼ NE ¼ 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 mi².

PERIOD OF RECORD.--September 1992 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 935 ft above sea level, from topographic map.

REMARKS.--Records fair (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	2.4	2.3	2.2	1.8	2.6	1.8	2.9	71	4.2	3.9	2.5
2	3.3	2.3	2.3	2.2	1.8	2.4	1.8	2.9	34	4.8	3.6	2.5
3	3.2	2.3	2.2	2.3	1.8	2.3	1.8	2.9	8.4	9.5	3.3	2.5
4	3.2	2.3	2.1	2.3	1.8	2.3	1.8	2.9	7.1	5.3	3.3	2.5
5	3.1	2.3	2.6	2.1	1.8	2.2	1.8	2.7	14	4.6	4.2	2.5
6	2.9	2.3	2.7	1.9	1.8	2.0	2.1	2.7	7.1	4.3	7.1	2.4
7	2.7	2.3	2.5	1.8	1.8	2.0	2.4	2.7	6.0	3.9	4.1	2.4
8	2.8	2.3	2.3	1.8	1.8	2.0	2.5	2.7	5.3	3.8	3.8	2.4
9	2.7	2.3	2.4	1.8	1.8	2.0	3.0	6.2	4.8	3.7	3.6	2.4
10	2.7	2.2	2.5	2.5	1.8	2.0	3.3	11	4.5	18	3.3	2.5
11	2.7	2.3	2.4	2.2	1.8	2.0	3.2	5.9	4.5	6.5	3.2	3.3
12	2.7	2.4	2.3	2.0	1.9	2.0	3.4	5.3	131	5.3	3.2	6.5
13	2.7	2.5	2.3	1.9	1.9	2.0	3.6	4.2	36	4.9	3.2	3.2
14	2.7	2.4	2.3	1.8	1.8	2.0	3.6	3.6	26	4.5	3.1	3.6
15	2.7	2.5	2.3	1.8	2.0	2.0	3.6	3.5	11	4.1	3.1	3.3
16	2.7	2.3	2.3	1.8	1.9	2.0	3.7	3.4	8.1	4.1	3.0	2.9
17	2.7	2.3	2.3	1.8	1.8	1.9	3.5	3.3	7.0	3.9	3.5	2.7
18	2.5	2.3	2.3	2.0	1.8	2.0	3.3	45	6.5	3.9	3.3	2.7
19	2.5	2.3	2.3	1.9	1.8	1.9	6.1	29	6.1	3.9	3.2	2.7
20	2.5	2.3	2.3	2.0	1.7	1.8	67	8.5	6.1	3.9	3.1	2.8
21	2.5	2.3	2.1	1.9	1.7	1.7	16	6.5	5.8	3.7	3.0	2.9
22	2.5	2.3	2.0	1.8	7.2	1.7	6.9	6.2	5.6	3.7	3.0	8.1
23	2.5	2.3	2.0	1.8	30	1.7	5.4	5.5	5.2	3.6	3.0	13
24	2.5	2.3	2.0	1.8	11	1.7	4.8	4.9	5.2	3.6	2.9	5.8
25	2.5	2.3	2.0	1.8	5.6	1.8	4.0	4.4	5.1	3.5	2.8	4.5
26	2.5	2.3	2.0	1.8	4.7	1.8	3.7	4.2	4.7	3.4	2.7	4.1
27	2.5	2.3	2.0	1.7	4.3	1.8	3.5	4.5	4.6	3.5	2.6	3.8
28	2.5	2.3	2.0	1.7	3.2	1.8	3.2	8.6	4.5	3.4	2.6	3.5
29	2.5	2.3	2.1	1.7	2.8	1.8	3.1	6.8	4.4	3.5	2.6	3.3
30	2.5	2.3	2.1	1.7	---	1.8	2.9	5.4	4.2	3.5	2.7	3.1
31	2.3	---	2.2	1.9	---	1.8	---	6.3	---	4.2	2.6	---
TOTAL	83.9	69.6	69.5	59.7	106.9	60.8	176.8	214.6	453.8	146.7	102.6	110.4
MEAN	2.71	2.32	2.24	1.93	3.69	1.96	5.89	6.92	15.1	4.73	3.31	3.68
MAX	3.6	2.5	2.7	2.5	30	2.6	67	45	131	18	7.1	13
MIN	2.3	2.2	2.0	1.7	1.7	1.7	1.8	2.7	4.2	3.4	2.6	2.4
CFSM	.28	.24	.23	.20	.38	.20	.62	.72	1.58	.49	.35	.38
IN.	.33	.27	.27	.23	.42	.24	.69	.83	1.76	.57	.40	.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2000, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	1.95	1.89	1.88	2.47	4.94	3.89	3.95	3.43	9.66	3.09	2.16	2.14						
MAX	3.68	3.29	4.54	5.85	13.1	12.0	12.4	6.92	17.2	6.22	4.27	4.48						
(WY)	1994	1993	1993	1993	1993	1993	1993	1993	1999	1993	1993	1993						
MIN	1.24	1.08	.99	1.16	1.23	.69	1.00	1.95	1.38	1.07	1.02	.89						
(WY)	1996	1997	1998	1996	1995	1996	1996	1995	1995	1995	1995	1995						

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1992 - 2000
ANNUAL TOTAL	1570.4	1655.3	
ANNUAL MEAN	4.30	4.52	3.43
HIGHEST ANNUAL MEAN			6.41
LOWEST ANNUAL MEAN			1.32
HIGHEST DAILY MEAN	196	Jun 13	251
LOWEST DAILY MEAN	1.1	Jan 12	.58
ANNUAL SEVEN-DAY MINIMUM	1.2	Jan 10	.62
INSTANTANEOUS PEAK FLOW		478	(b) 571
INSTANTANEOUS PEAK STAGE		9.23	(c) 10.05
INSTANTANEOUS LOW FLOW		1.2	.58
ANNUAL RUNOFF (CFSM)	.45	.47	.36
ANNUAL RUNOFF (INCHES)	6.10	6.43	4.86
10 PERCENT EXCEEDS	5.5	6.1	4.7
50 PERCENT EXCEEDS	2.5	2.7	1.9
90 PERCENT EXCEEDS	1.7	1.8	.99

(a) Also occurred Feb. 20, 21, and Mar. 21-24

(b) Gage height, 9.69 ft

(c) Discharge, 322 ft³/s

(d) Also occurred Mar. 10-12, 1996

ILLINOIS RIVER BASIN

05527800 DES PLAINES RIVER AT RUSSELL, IL

LOCATION.--Lat 42°29'22", long 87°55'32", in SE ¼ 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 mi².

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

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

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

REMARKS.--Records good except those for Nov. 15 to Mar. 15, which are fair, and those for estimated daily discharges, which are poor (see page 12). Recording rain gage and gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	e.62	2.1	4.8	e11	231	60	262	401	70	59	9.4
2	8.9	e.66	2.2	5.8	e10	199	58	220	573	65	49	8.6
3	1.5	e1.0	2.4	8.2	e9.6	160	56	177	747	152	33	8.4
4	2.5	e1.0	3.0	8.9	e9.4	117	54	137	813	165	25	8.1
5	4.9	e.84	13	8.0	e9.2	81	52	109	824	171	22	7.5
6	e2.9	e.90	21	7.4	e9.2	61	49	93	754	154	50	8.0
7	e2.5	e1.1	19	7.1	e9.2	51	49	81	648	120	54	8.6
8	e2.4	e1.3	15	6.7	e9.0	46	65	73	535	84	41	8.6
9	e2.4	e1.5	12	7.6	e8.8	47	89	87	431	64	27	8.1
10	e2.3	e1.8	9.6	10	e9.0	45	106	142	354	68	19	6.0
11	e1.8	e1.6	7.2	15	e9.2	40	121	192	303	94	16	7.4
12	e1.6	e1.4	6.2	16	e9.4	37	126	233	502	97	13	53
13	e1.0	e1.2	5.7	15	e9.8	35	119	251	1490	82	11	90
14	e1.0	e1.1	5.4	13	e9.8	34	107	254	2060	125	9.4	97
15	e1.0	1.2	5.9	9.9	e10	41	95	248	1970	175	12	87
16	e1.0	1.1	8.2	9.7	e10	63	85	235	1560	164	9.0	67
17	e.98	1.1	8.4	9.4	e11	55	79	216	1160	128	12	48
18	e.98	1.2	7.1	9.5	e16	53	75	243	872	78	19	34
19	e.96	1.4	6.0	9.6	e18	51	83	598	673	53	18	23
20	e.94	1.5	e4.5	9.9	e19	71	208	1120	526	44	15	18
21	e.86	1.5	e3.7	9.5	e19	115	390	1310	414	37	12	24
22	e.84	1.6	e3.2	9.3	44	129	525	1170	341	30	10	33
23	e.78	2.0	e3.0	9.5	81	123	681	962	287	23	11	127
24	e.68	3.3	3.0	9.4	132	112	793	768	243	21	12	190
25	e.58	3.1	3.0	9.5	196	108	780	602	206	19	11	214
26	e.62	2.6	3.0	9.5	233	101	679	473	167	18	9.0	226
27	e.70	2.6	3.2	9.6	256	92	558	399	135	18	8.8	221
28	e1.1	2.7	3.3	10	262	83	447	368	105	14	9.6	206
29	e1.1	2.7	3.6	11	251	76	366	363	86	13	10	180
30	e1.4	2.5	3.9	e11	---	71	310	359	76	14	11	137
31	e1.0	---	4.4	e11	---	64	---	359	---	36	11	---
TOTAL	91.22	48.12	201.2	300.8	1690.6	2592	7265	12104	19256	2396	628.8	2163.7
MEAN	2.94	1.60	6.49	9.70	58.3	83.6	242	390	642	77.3	20.3	72.1
MAX	40	3.3	21	16	262	231	793	1310	2060	175	59	226
MIN	.58	.62	2.1	4.8	8.8	34	49	73	76	13	8.8	6.0
CFSM	.02	.01	.05	.08	.47	.68	1.97	3.17	5.22	.63	.16	.59
IN.	.03	.01	.06	.09	.51	.78	2.20	3.66	5.82	.72	.19	.65

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2000, BY WATER YEAR (WY)

	MEAN	40.2	67.9	89.7	71.4	109	213	230	128	101	55.8	41.7	54.6
	MAX	364	390	382	279	327	673	718	410	642	363	417	410
	(WY)	1987	1986	1983	1993	1974	1979	1993	1996	2000	1978	1978	1972
	MIN	.056	1.60	3.06	1.46	2.35	14.9	33.4	6.15	1.90	.78	.23	.060
	(WY)	1995	2000	1977	1977	1977	1968	1977	1977	1988	1988	1999	1994

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1967 - 2000

ANNUAL TOTAL	40264.48	48737.44	
ANNUAL MEAN	110	133	100
HIGHEST ANNUAL MEAN			206
LOWEST ANNUAL MEAN			9.24
HIGHEST DAILY MEAN	1210	Apr 25	2100
LOWEST DAILY MEAN	.00	Many days	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 1	.00
INSTANTANEOUS PEAK FLOW		2130	(b)2130
INSTANTANEOUS PEAK STAGE		9.95	10.75
INSTANTANEOUS LOW FLOW		(e).58	
ANNUAL RUNOFF (CFSM)	.90	1.08	.81
ANNUAL RUNOFF (INCHES)	12.18	14.74	11.07
10 PERCENT EXCEEDS	317	375	278
50 PERCENT EXCEEDS	21	21	33
90 PERCENT EXCEEDS	.02	1.5	2.8

(a) At times in most years

(b) Gage height, 9.95 ft

(c) Mar. 6, 1976 and Sept. 27, 1986

(e) Estimated due to ice effect or missing record

05543800 FOX RIVER, AT WATERTOWN ROAD, NEAR WAUKESHA, WI

LOCATION.--Lat 43°03'12", long 88°11'41", in NW ¼ SE ¼ sec.24, T.7 N., R.19 E., Waukesha County, Hydrologic Unit 07120006, on left bank at upstream side of Watertown Road bridge, 3.5 mi northeast of Waukesha.

DRAINAGE AREA.--77.4 mi².

PERIOD OF RECORD.--December 1992 to September 2000 (discontinued).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 820 ft above sea level, from topographic map.

REMARKS.--Records good (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	24	30	27	23	82	40	60	316	43	63	46
2	51	26	29	30	23	74	39	59	439	73	62	50
3	47	25	30	35	24	66	40	55	423	507	80	54
4	53	23	34	32	24	62	39	50	359	601	65	54
5	44	23	57	29	24	61	36	48	317	452	83	46
6	38	23	58	29	24	57	36	46	281	300	268	44
7	35	23	68	29	24	56	37	43	240	204	280	42
8	34	24	48	28	24	57	54	42	202	155	234	63
9	32	25	43	29	24	63	62	75	163	138	187	49
10	32	26	52	35	25	66	68	140	122	117	140	64
11	31	33	48	45	26	61	65	99	93	125	91	121
12	28	33	42	41	25	56	62	285	93	123	66	452
13	32	30	39	34	25	52	58	379	125	119	58	497
14	32	29	37	31	25	50	52	292	123	144	55	420
15	29	28	39	31	26	50	47	215	142	121	51	357
16	35	27	42	30	26	52	45	163	121	94	47	272
17	37	26	38	27	27	48	44	113	101	73	136	210
18	33	27	34	27	27	45	43	410	83	63	216	158
19	31	29	33	26	27	47	55	949	71	57	134	106
20	29	29	32	26	27	65	162	1160	68	53	86	94
21	29	28	28	24	28	74	231	834	69	50	68	99
22	29	28	27	23	40	70	227	574	63	48	60	108
23	27	30	25	24	99	64	201	425	54	43	59	248
24	27	35	25	22	143	63	183	336	51	40	53	303
25	27	34	24	22	174	70	152	273	48	41	50	264
26	26	31	24	22	177	62	118	223	47	40	77	205
27	25	31	24	21	144	56	89	199	44	59	84	164
28	25	29	25	21	112	51	75	198	45	66	66	120
29	25	29	25	22	92	47	68	186	50	73	57	93
30	24	29	26	22	---	44	62	175	49	59	54	81
31	25	---	28	23	---	42	---	195	---	60	51	---
TOTAL	1036	837	1114	867	1509	1813	2490	8301	4402	4141	3081	4884
MEAN	33.4	27.9	35.9	28.0	52.0	58.5	83.0	268	147	134	99.4	163
MAX	64	35	68	45	177	82	231	1160	439	601	280	497
MIN	24	23	24	21	23	42	36	42	44	40	47	42

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2000, BY WATER YEAR (WY)

	MEAN	42.6	48.6	46.7	57.6	93.4	104	162	121	135	103	72.4	58.6
MAX	57.4	77.6	84.6	86.0	161	163	418	268	250	178	186	163	
(WY)	1994	1996	1993	1993	1999	1994	1993	2000	1996	1993	1998	2000	
MIN	30.2	27.9	31.4	23.4	29.7	58.5	72.3	41.7	28.5	25.2	31.2	25.4	
(WY)	1998	2000	1998	1994	1995	2000	1994	1994	1994	1995	1996	1995	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1993 - 2000

ANNUAL TOTAL	33947	34475	
ANNUAL MEAN	93.0	94.2	81.8
HIGHEST ANNUAL MEAN			96.7
LOWEST ANNUAL MEAN			53.5
HIGHEST DAILY MEAN	703	Apr 24	1320
LOWEST DAILY MEAN	23	Jan 1	16
ANNUAL SEVEN-DAY MINIMUM	24	Nov 3	18
INSTANTANEOUS PEAK FLOW			1430
INSTANTANEOUS PEAK STAGE			11.72
INSTANTANEOUS LOW FLOW			17
10 PERCENT EXCEEDS	217	218	190
50 PERCENT EXCEEDS	53	50	52
90 PERCENT EXCEEDS	25	25	25

ROCK RIVER BASIN

05543830 FOX RIVER AT WAUKESHA, WI

LOCATION.--Lat 43°00'17", long 88°14'37", in NE ¼ SW ¼ sec.3, T.6 N., R.19 E. (revised), Waukesha County, Hydrologic Unit 07120006, on left bank 20 ft downstream from Prairie Street bridge in Waukesha, 1.0 mi downstream from dam and 3.2 mi downstream from Pewaukee River.

DRAINAGE AREA.--126 mi².

PERIOD OF RECORD.--January 1963 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 793.04 ft above sea level (levels by City of Waukesha).

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). There is occasional regulation from mill dam 1.0 mi upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	37	32	31	31	116	57	96	538	52	89	85
2	70	32	31	37	31	102	53	96	654	327	121	87
3	64	33	37	42	29	89	53	90	622	805	125	100
4	71	29	43	41	30	79	51	84	522	870	98	93
5	77	28	79	37	29	77	47	82	453	684	210	80
6	72	26	75	35	29	73	47	71	404	459	370	73
7	68	26	84	36	31	72	62	60	357	327	391	68
8	66	28	61	37	31	78	82	73	315	288	327	115
9	60	30	66	38	33	88	95	139	262	257	257	78
10	55	41	73	49	31	90	102	201	212	239	196	100
11	55	38	63	60	33	79	99	151	175	244	135	292
12	50	37	54	53	33	71	94	446	174	234	92	601
13	53	33	51	46	34	66	86	496	204	231	80	660
14	51	30	51	40	35	65	78	387	224	311	79	588
15	49	31	53	42	36	66	73	279	249	251	94	475
16	49	30	56	39	40	65	65	231	215	204	107	377
17	44	29	48	37	37	58	65	214	186	169	290	317
18	41	30	40	38	38	53	59	688	159	148	348	260
19	37	32	39	37	38	63	89	1310	142	133	258	198
20	35	31	39	32	38	93	253	1590	142	125	180	181
21	37	31	33	29	42	110	324	1130	139	121	146	179
22	42	32	e32	28	67	101	304	751	128	113	132	216
23	36	35	e29	e27	140	89	265	557	108	104	128	335
24	32	40	e27	e27	214	88	229	441	104	97	107	373
25	32	41	e27	e27	236	99	190	360	102	76	75	333
26	32	36	28	e26	233	86	156	295	98	54	128	262
27	28	33	29	26	195	80	128	299	78	96	138	210
28	28	31	30	27	157	78	110	316	60	92	101	165
29	28	32	31	27	132	71	103	303	61	96	84	131
30	28	31	30	28	---	67	94	313	60	80	75	133
31	30	---	32	29	---	62	---	351	---	88	85	---
TOTAL	1519	973	1403	1108	2083	2474	3513	11900	7147	7375	5046	7165
MEAN	49.0	32.4	45.3	35.7	71.8	79.8	117	384	238	238	163	239
MAX	99	41	84	60	236	116	324	1590	654	870	391	660
MIN	28	26	27	26	29	53	47	60	60	52	75	68
CFSM	.39	.26	.36	.28	.57	.63	.93	3.05	1.89	1.89	1.29	1.90
IN.	.45	.29	.41	.33	.61	.73	1.04	3.51	2.11	2.18	1.49	2.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2000, BY WATER YEAR (WY)

	MEAN	74.4	81.7	81.8	65.8	94.1	189	210	132	101	83.0	65.9	77.9
MAX	346	303	207	188	231	451	598	384	370	271	217	385	
(WY)	1987	1986	1992	1973	1999	1974	1993	2000	1996	1993	1998	1986	
MIN	6.44	8.14	4.80	6.35	6.26	22.5	53.4	26.6	19.0	9.33	8.23	6.44	
(WY)	1964	1964	1964	1964	1964	1968	1963	1977	1964	1963	1963	1963	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1963 - 2000

ANNUAL TOTAL	47106	51706	
ANNUAL MEAN	129	141	106
HIGHEST ANNUAL MEAN			193
LOWEST ANNUAL MEAN			31.6
HIGHEST DAILY MEAN	970	Apr 24	2160
LOWEST DAILY MEAN	25	(a) Jan 1	(c) 3.2
ANNUAL SEVEN-DAY MINIMUM	29	Nov 3	(c) 3.3
INSTANTANEOUS PEAK FLOW			2260
INSTANTANEOUS PEAK STAGE			7.42
ANNUAL RUNOFF (CFSM)	1.02		.84
ANNUAL RUNOFF (INCHES)	13.91		11.47
10 PERCENT EXCEEDS	296	327	233
50 PERCENT EXCEEDS	77	78	65
90 PERCENT EXCEEDS	30	30	19

(a) Also occurred Sept. 24, 25

(b) Also occurred Jan. 26, 27

(c) Ice affected

(d) Also occurred Jan. 1, 1964

(e) Estimated due to ice effect or missing record

05544200 MUKWONAGO RIVER AT MUKWONAGO, WI

LOCATION.--Lat 42°51'24", long 88°19'40", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.35, T.5 N., R.18 E., Waukesha County, Hydrologic Unit 07120006, on left bank 100 ft upstream from bridge on State Highway 83 in Mukwonago, 100 ft downstream from railroad bridge, and 800 ft downstream from dam.

DRAINAGE AREA.--74.1 mi².

PERIOD OF RECORD.--July 1973 to current year.

REVISED RECORDS.--WDR WI-79-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 779.23 ft above sea level (Southeastern Wisconsin Regional Planning Commission bench mark). Prior to Oct. 19, 1981, at datum 0.85 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Discharge affected by manipulation of gates at dams 800 ft and 11.4 mi upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	168	30	26	28	30	70	18	60	163	25	34	27
2	183	31	27	29	29	66	19	75	176	30	39	26
3	128	29	30	29	29	62	21	35	117	76	43	26
4	45	27	32	32	29	59	22	19	97	91	44	24
5	22	27	67	32	28	28	21	21	98	87	50	24
6	25	26	77	32	28	16	24	22	96	46	121	23
7	31	28	73	32	27	21	21	23	74	27	99	22
8	38	31	71	33	26	24	28	55	62	28	85	20
9	52	33	57	32	26	56	68	72	60	55	89	20
10	57	31	52	36	26	66	49	97	57	63	84	21
11	53	33	49	41	26	62	38	101	54	60	46	26
12	51	35	47	43	25	31	40	85	57	58	34	61
13	48	36	39	42	28	21	39	87	83	33	37	72
14	45	36	39	41	29	42	40	65	112	27	38	104
15	43	35	42	40	29	47	39	26	122	29	37	108
16	56	34	44	39	28	44	36	11	117	39	33	54
17	45	34	44	37	28	43	36	12	108	39	39	38
18	39	35	45	36	29	41	35	102	69	37	39	40
19	25	36	44	36	31	41	47	163	52	37	37	40
20	21	33	44	35	31	43	79	169	30	38	35	63
21	25	32	e41	34	31	45	150	153	22	36	34	70
22	28	33	e40	e34	33	44	158	76	23	33	35	73
23	25	35	39	e33	51	43	143	27	23	34	35	122
24	22	65	38	e33	86	42	112	53	55	32	34	125
25	23	72	37	e33	97	46	82	61	63	30	33	121
26	23	35	e35	33	98	42	73	53	34	27	31	123
27	21	20	e34	32	98	43	34	66	19	29	30	82
28	22	22	e34	31	78	44	22	75	23	26	27	62
29	23	24	34	30	71	45	26	70	27	25	26	45
30	25	24	31	30	---	24	30	83	26	26	28	38
31	26	---	29	30	---	16	---	120	---	30	29	---
TOTAL	1438	1002	1341	1058	1205	1317	1550	2137	2119	1253	1405	1700
MEAN	46.4	33.4	43.3	34.1	41.6	42.5	51.7	68.9	70.6	40.4	45.3	56.7
MAX	183	72	77	43	98	70	158	169	176	91	121	125
MIN	21	20	26	28	25	16	18	11	19	25	26	20
CFSM	.63	.45	.58	.46	.56	.57	.70	.93	.95	.55	.61	.76
IN.	.72	.50	.67	.53	.60	.66	.78	1.07	1.06	.63	.71	.85

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2000, BY WATER YEAR (WY)

	MEAN	48.0	55.7	53.9	46.8	54.0	74.6	77.1	62.9	53.0	43.0	45.0	46.9
MAX	98.7	110	83.7	77.8	83.8	151	150	155	138	80.8	83.5	88.7	
(WY)	1987	1986	1983	1974	1974	1974	1993	1975	1975	1993	1979	1986	
MIN	19.0	29.2	26.2	22.8	31.1	42.5	43.3	16.9	14.4	13.3	18.5	23.4	
(WY)	1998	1977	1990	1977	1978	2000	1977	1977	1988	1988	1991	1995	

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1973 - 2000
ANNUAL TOTAL	18913	17525	
ANNUAL MEAN	51.8	47.9	54.9
HIGHEST ANNUAL MEAN			90.3
LOWEST ANNUAL MEAN			30.8
HIGHEST DAILY MEAN	229	Apr 24	275
LOWEST DAILY MEAN	12	Jul 15	1.8
ANNUAL SEVEN-DAY MINIMUM	16	Jul 10	20
INSTANTANEOUS PEAK FLOW			200
INSTANTANEOUS PEAK STAGE			3.23
ANNUAL RUNOFF (CFSM)	.70		.65
ANNUAL RUNOFF (INCHES)	9.49		8.80
10 PERCENT EXCEEDS	94		90
50 PERCENT EXCEEDS	41		36
90 PERCENT EXCEEDS	22		23

(a) Gage height, 2.50 ft, datum then in use

(e) Estimated due to ice effect or missing record

ILLINOIS RIVER BASIN

05544371 JEWEL CREEK AT MUSKEGO, WI

LOCATION.--Lat 42°55'37", long 88°08'45", in NW ¼ NW ¼ sec.4, T.5 N., R.20 E., Waukesha County, Hydrologic Unit 07120006, on right bank 0.4 mi downstream from County Trunk Highway HH, and 0.3 mi upstream from Little Muskego Lake.

DRAINAGE AREA.--8.16 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1999 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 800 ft, from topographic map.

REMARKS.--Records fair (see page 12).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	.99	1.8	1.9	2.3	5.4	2.7	1.9	101	2.0	5.4	1.1
2	4.7	1.2	2.0	3.2	2.1	4.5	2.5	1.6	37	51	7.7	2.5
3	5.5	1.0	2.8	3.1	2.1	4.2	2.0	1.4	14	187	9.2	3.9
4	9.0	1.2	3.1	2.8	2.2	3.9	1.5	1.5	10	25	4.7	1.4
5	5.4	1.3	7.0	2.4	2.3	3.7	1.5	3.1	13	13	37	1.1
6	4.6	1.3	4.7	2.5	2.2	3.6	1.1	3.1	8.8	11	90	.89
7	3.8	1.4	3.8	2.1	2.2	3.6	3.5	2.8	7.2	9.4	15	.88
8	3.5	1.4	3.4	2.3	2.0	3.9	8.2	3.3	6.0	10	8.5	1.0
9	3.4	1.4	3.3	2.5	1.5	4.8	12	18	5.2	10	6.5	.93
10	2.7	1.7	3.6	5.7	1.6	3.6	11	23	4.5	11	5.3	4.5
11	2.4	12	3.1	5.6	1.4	2.1	8.3	10	4.5	9.0	4.2	28
12	2.0	9.5	3.0	4.3	1.3	1.4	7.6	46	10	7.6	3.2	90
13	1.8	2.7	2.9	3.3	1.5	1.2	7.0	15	14	5.9	3.0	14
14	2.3	2.6	3.0	3.4	1.3	1.2	6.1	9.4	13	20	2.6	34
15	2.0	2.2	3.9	3.3	1.3	1.2	5.7	7.1	14	9.1	2.1	16
16	2.8	1.6	4.1	2.8	1.4	1.5	5.2	7.2	7.5	6.6	1.6	9.8
17	3.0	2.1	3.0	2.6	1.4	1.7	5.1	7.4	6.4	5.6	18	7.6
18	1.7	1.8	2.4	3.6	1.6	1.7	5.1	114	5.3	4.6	12	6.5
19	1.6	2.0	2.3	3.2	1.5	2.9	9.7	80	4.7	4.2	6.6	5.5
20	1.1	1.8	2.1	3.0	1.6	8.4	61	20	4.9	3.9	5.3	7.1
21	1.1	2.1	1.6	2.6	2.3	8.2	40	12	4.7	4.0	4.2	7.9
22	.95	1.7	1.5	e2.5	10	6.2	18	11	3.5	4.0	4.1	14
23	.80	2.4	1.5	e2.5	29	4.9	18	9.6	3.2	3.2	4.5	58
24	1.0	2.7	1.5	e2.4	34	6.1	14	6.8	4.3	2.5	3.4	15
25	1.0	2.4	1.5	e2.4	20	7.9	11	5.5	3.5	2.2	2.3	9.3
26	.90	2.0	1.7	e2.3	15	5.6	10	4.8	2.3	1.9	4.1	8.4
27	1.4	1.9	1.6	e2.3	11	5.2	7.4	13	3.3	5.5	5.0	7.5
28	1.7	1.8	1.7	e2.2	6.9	4.0	1.8	18	3.4	4.9	3.1	7.3
29	1.3	1.5	1.9	2.2	5.8	3.1	2.0	12	2.8	8.2	2.0	7.3
30	1.1	1.6	1.8	2.6	---	2.9	1.9	8.3	2.2	5.2	1.8	7.3
31	1.1	---	1.8	2.5	---	2.7	---	22	---	6.1	1.4	---
TOTAL	81.15	71.29	83.4	90.1	168.8	121.3	290.9	498.8	324.2	453.6	283.8	378.70
MEAN	2.62	2.38	2.69	2.91	5.82	3.91	9.70	16.1	10.8	14.6	9.15	12.6
MAX	9.0	12	7.0	5.7	34	8.4	61	114	101	187	90	90
MIN	.80	.99	1.5	1.9	1.3	1.2	1.1	1.4	2.2	1.9	1.4	.88

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2000, BY WATER YEAR (WY)

	1999	2000	1999	2000	1999	2000	1999	2000	1999	2000	1999	2000
MEAN	2.62	2.38	2.69	2.91	5.82	3.91	9.70	16.1	15.2	10.1	6.25	8.48
MAX	2.62	2.38	2.69	2.91	5.82	3.91	9.70	16.1	19.7	14.6	9.15	12.6
(WY)	2000	2000	2000	2000	2000	2000	2000	2000	1999	2000	2000	2000
MIN	2.62	2.38	2.69	2.91	5.82	3.91	9.70	16.1	10.8	5.67	3.34	4.34
(WY)	2000	2000	2000	2000	2000	2000	2000	2000	2000	1999	1999	1999

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR
(JUNE-DECEMBER)

FOR 2000 WATER YEAR

WATER YEARS 1999 - 2000

ANNUAL TOTAL						2846.04						
ANNUAL MEAN						7.78				7.78		
HIGHEST ANNUAL MEAN										7.78		2000
LOWEST ANNUAL MEAN										7.78		2000
HIGHEST DAILY MEAN				175	Jun 13		187	Jul 3		187	Jul 3	2000
LOWEST DAILY MEAN				.80	Oct 23		.80	Oct 23		.80	Oct 23	1999
ANNUAL SEVEN-DAY MINIMUM				.98	Oct 20		.98	Oct 20		.98	Oct 20	1999
INSTANTANEOUS PEAK FLOW							372	Jul 2		372	Jul 2	2000
INSTANTANEOUS PEAK STAGE							5.59	Jul 2		5.59	Jul 2	2000
INSTANTANEOUS LOW FLOW							.00	(a) Jan 18		.00	(a) Jan 18	2000
10 PERCENT EXCEEDS				9.1			14			14		
50 PERCENT EXCEEDS				2.7			3.5			3.6		
90 PERCENT EXCEEDS				1.4			1.4			1.4		

(a) Also occurred Apr. 7, 8, result of dam construction upstream

(e) Estimated due to ice effect or missing record

05544371 JEWEL CREEK AT MUSKEGO, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1999 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: June 1999 to current year.

TOTAL-PHOSPHORUS DISCHARGE: June 1999 to current year.

INSTRUMENTATION.--Stage-activated water-quality sampler.

REMARKS.--Chemical analyses are done by the Wisconsin State Laboratory of Hygiene. Samples are point samples unless otherwise indicated.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 171 tons, June 13, 1999; minimum daily, 0.03 ton, Apr. 30, May 1, 2, 3, 2000.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 428 lb, July 3, 2000; minimum daily, 0.14 lb, Oct. 23, 1999.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 107 tons, July 3; minimum daily, 0.03 ton, Apr. 30, May 1, 2, 3.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 428 lb, July 3; minimum daily, 0.14 lb, Oct. 23.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.68	.16	.25	.13	.78	.75	.24	.03	25	.30	.47	.04
2	.58	.20	.28	.21	.73	.58	.22	.03	4.8	41	.95	.10
3	1.1	.21	.40	.20	.70	.52	.19	.03	1.2	107	1.0	.17
4	2.6	.29	.79	.18	.73	.48	.15	.04	.70	3.7	.43	.07
5	1.2	.37	3.9	.15	.71	.44	.15	.09	1.4	1.0	14	.06
6	.81	.30	2.1	.16	.65	.41	.11	.11	.63	.81	24	.05
7	.62	.24	1.4	.14	.62	.40	.38	.12	.43	.67	1.7	.06
8	.57	.23	1.0	.15	.54	.42	3.5	.17	.34	1.1	.82	.08
9	.54	.22	.60	.18	.39	.50	2.3	3.5	.28	1.0	.56	.07
10	.44	.44	.45	.95	.41	.36	1.7	2.7	.23	.98	.45	.53
11	.39	9.3	.33	1.7	.34	.21	1.3	.83	.21	.67	.35	8.0
12	.33	3.0	.26	1.2	.30	.13	1.1	16	1.7	.49	.25	18
13	.30	.49	.22	.75	.32	.11	1.0	2.7	3.5	.36	.23	1.9
14	.37	.36	.21	.68	.27	.11	.85	1.2	2.6	3.8	.19	4.7
15	.33	.31	.27	.68	.25	.10	.76	.61	1.7	1.3	.16	2.1
16	.45	.23	.28	.60	.27	.13	.68	.46	.98	.80	.12	.95
17	.49	.29	.21	.56	.25	.14	.65	.60	1.0	.59	1.9	.62
18	.28	.25	.17	.82	.27	.13	.63	46	.99	.44	.87	.53
19	.26	.29	.16	.74	.25	.34	5.9	18	1.0	.37	.30	.46
20	.18	.26	.14	.72	.25	1.8	51	1.8	1.0	.31	.16	.59
21	.18	.29	.11	.64	.35	1.6	10	1.2	1.0	.34	.09	.66
22	.16	.24	.10	.64	2.5	.98	2.2	.95	.72	.32	.06	1.7
23	.13	.34	.10	.66	12	.64	2.4	.74	.64	.21	.07	9.1
24	.16	.38	.10	.65	18	1.1	1.4	.43	.85	.15	.06	1.5
25	.17	.34	.10	.67	10	1.3	.84	.29	.67	.12	.04	1.0
26	.15	.29	.11	.66	6.8	.66	.56	.21	.44	.10	.08	.93
27	.22	.27	.10	.68	4.0	.54	.32	.50	.61	.50	.11	.87
28	.27	.25	.11	.67	1.8	.40	.06	.97	.59	.43	.08	.87
29	.22	.21	.13	.71	1.1	.29	.05	.66	.47	.71	.05	.89
30	.18	.23	.12	.84	---	.26	.03	.56	.35	.45	.05	.90
31	.18	---	.12	.86	---	.23	---	3.7	---	.53	.05	---
TOTAL	14.54	20.28	14.62	18.58	65.58	16.06	90.67	105.23	56.03	170.55	49.65	57.50

WTR YR 2000 TOTAL 679.29

ILLINOIS RIVER BASIN

05544371 JEWEL CREEK AT MUSKEGO, WI--Continued

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.90	.18	.29	.24	.68	1.24	.33	.34	106	.61	1.51	.29
2	.78	.21	.32	.40	.62	.95	.31	.29	26.3	119	2.49	.67
3	1.14	.18	.46	.39	.62	.87	.25	.26	6.59	428	2.66	1.02
4	3.20	.20	.91	.36	.67	.80	.20	.28	3.13	26.6	1.27	.38
5	1.60	.22	3.64	.30	.68	.75	.20	.59	3.36	9.43	51.2	.29
6	.96	.23	1.48	.32	.65	.70	.15	.60	2.26	5.62	126	.23
7	.74	.25	1.03	.28	.64	.69	.49	.55	1.77	3.19	10.1	.23
8	.64	.24	.81	.32	.58	.74	7.35	.65	1.45	2.88	3.35	.28
9	.57	.23	.65	.38	.44	.89	5.86	10.7	1.21	2.84	1.79	.25
10	.44	.32	.58	1.65	.48	.64	2.73	14.3	1.02	2.95	1.45	1.38
11	.39	6.56	.41	1.81	.42	.38	1.41	5.71	.98	2.48	1.14	20.5
12	.33	4.34	.34	1.37	.39	.24	1.28	52.5	3.19	2.09	.85	100
13	.30	.76	.33	1.06	.43	.21	1.19	13.1	4.35	1.90	.80	12.1
14	.38	.53	.34	1.09	.38	.20	1.04	4.86	4.21	8.89	.68	25.7
15	.34	.42	.44	1.05	.36	.20	.96	2.93	5.32	2.94	.57	12.6
16	.46	.28	.48	.89	.41	.24	.88	2.88	2.53	1.74	.42	5.80
17	.50	.34	.35	.81	.40	.26	.87	3.41	1.95	1.47	7.90	3.47
18	.28	.29	.28	1.15	.45	.26	.87	150	1.45	1.22	5.87	2.43
19	.27	.33	.27	1.00	.43	.44	7.76	84.1	1.18	1.13	2.69	1.88
20	.19	.30	.25	.94	.45	1.24	102	13.4	1.25	1.03	1.85	2.20
21	.19	.34	.19	.81	.65	1.19	30.8	5.97	1.25	1.08	1.27	2.70
22	.16	.28	.17	.78	7.03	.88	8.88	3.99	.94	1.07	1.08	5.62
23	.14	.39	.17	.78	22.3	.69	8.75	3.31	.89	.88	1.16	51.8
24	.17	.45	.18	.75	26.6	.83	5.27	2.19	1.23	.68	.89	10.4
25	.17	.39	.19	.74	13.9	1.06	3.12	1.68	1.03	.61	.60	4.43
26	.16	.33	.20	.71	9.56	.74	2.32	1.36	.71	.53	1.08	3.26
27	.24	.31	.19	.71	6.85	.67	1.65	5.05	1.03	1.52	1.30	2.51
28	.29	.30	.20	.68	3.36	.51	.37	6.90	1.06	1.34	.82	2.11
29	.23	.25	.24	.69	1.89	.38	.39	4.18	.88	2.27	.53	2.01
30	.19	.26	.23	.79	---	.35	.35	2.20	.67	1.44	.47	1.94
31	.20	---	.22	.78	---	.32	---	12.9	---	1.69	.37	---
TOTAL	16.55	19.71	15.84	24.03	102.32	19.56	198.03	411.18	189.19	639.12	234.16	278.48

WTR YR 2000 TOTAL 2148.17

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
NOV					
02...	1130	1.1	.033	61	50
05...	1400	3.9	--	114	50
11...	0945	14	--	417	50
11...	1400	17	--	559	50
11...	1815	18	--	144	50
11...	2230	18	--	132	50
12...	0245	17	--	147	50
12...	0700	17	--	111	50
DEC					
05...	0315	5.8	.126	238	50
05...	0730	6.1	.093	--	50
05...	1145	8.3	.105	--	50
05...	1600	8.3	.095	--	50
05...	2015	7.5	.083	--	50
06...	0030	6.1	.071	--	50
06...	0445	5.5	.060	--	50
06...	0900	4.9	.057	165	50
08...	1155	3.5	.045	118	50
JAN					
06...	1300	11	.024	24	70
FEB					
02...	1225	2.2	.056	132	70
MAR					
01...	1250	5.5	.040	49	50
31...	1400	2.5	.022	32	50

05544371 JEWEL CREEK AT MUSKEGO, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDEDED (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
APR					
08...	1300	17	.181	--	50
20...	0100	20	.361	--	50
20...	0330	31	--	751	50
20...	0415	51	.666	--	50
20...	0515	74	--	321	50
20...	0930	76	.336	--	50
20...	1800	63	.178	--	50
20...	2215	45	--	248	50
21...	0230	45	.149	--	50
21...	1100	47	.148	60	50
21...	1115	46	.133	--	50
21...	1120	46	.127	60	70
21...	1530	37	.142	70	50
21...	2400	23	.129	87	50
22...	1245	17	.074	29	50
23...	1245	20	.099	51	50
23...	1700	20	.100	77	50
23...	2115	19	.082	44	50
MAY					
01...	1135	1.9	.033	5	70
09...	1430	12	.087	51	50
09...	1615	23	.137	47	50
09...	1745	37	.156	122	50
09...	2200	45	.104	69	50
10...	0215	42	.125	50	50
10...	0630	29	.119	48	50
10...	1500	17	.101	33	50
10...	2330	12	.105	31	50
11...	1215	9.6	.100	21	50
12...	0115	22	.121	66	50
12...	0230	37	.141	94	50
12...	0430	54	.103	54	50
12...	0845	65	.295	231	50
12...	1300	63	.246	150	50
12...	1715	38	.225	91	50
12...	2130	27	.200	84	50
13...	0600	18	.162	63	50
13...	1430	13	.157	64	50
16...	1125	7.1	.071	22	50
18...	0045	18	.094	48	50
18...	0200	30	.109	103	50
18...	0330	44	.089	96	50
18...	0500	65	.144	128	50
18...	0530	96	.254	228	50
18...	0615	129	.279	--	50
18...	1030	134	.268	--	50
18...	1445	131	.260	136	50
18...	1900	143	.235	126	50
18...	2315	135	.239	137	50
19...	0330	134	.223	--	50
19...	0745	106	.195	78	50
19...	1615	50	.158	54	50
20...	0500	24	.130	30	50
20...	1745	17	.111	36	50
22...	1135	11	.068	34	50
27...	1615	20	.076	13	50
28...	1045	19	.081	23	50
28...	1500	21	.066	19	50
28...	1915	22	.065	24	50
28...	2330	19	.075	18	50
31...	1600	31	.127	77	50
31...	1700	48	.098	73	50
31...	2115	49	.123	62	50
JUN					
01...	0130	61	.153	69	50
01...	0315	83	.172	88	50
01...	0515	110	.262	176	50
01...	0630	144	.220	128	50
01...	1045	126	.227	--	50
01...	1125	124	.214	104	50
01...	1530	112	.179	75	50
01...	2400	65	.146	49	50
02...	1245	32	.131	52	50
03...	0130	19	.101	33	50
12...	2300	21	.071	96	50
13...	0315	19	.063	104	50
15...	0015	20	.075	69	50
15...	0430	20	.072	39	50
19...	1105	4.9	.046	82	50
27...	1210	3.7	.058	68	50

ILLINOIS RIVER BASIN

05544371 JEWEL CREEK AT MUSKEGO, WI--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDEDED (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
JUL					
03...	0445	321	.514	258	50
03...	1000	237	.366	137	50
03...	1230	160	.319	145	50
03...	2000	63	.243	68	50
04...	0430	31	.209	62	50
04...	1715	20	.173	45	50
05...	1130	13	.131	26	50
14...	0200	25	.115	109	50
14...	0315	38	.096	105	50
14...	0530	29	.079	71	50
14...	1215	21	.084	64	50
AUG					
02...	1100	3.7	.052	52	50
05...	1715	20	.143	109	50
05...	1745	34	.163	115	50
05...	1800	50	.212	158	50
06...	0745	124	.232	102	50
06...	1015	83	.217	79	50
06...	1700	37	.188	67	50
07...	0200	21	.146	45	50
17...	1400	26	.095	26	50
17...	1615	32	.072	64	50
17...	2300	24	.094	31	50
22...	1055	3.9	.048	5	50
SEP					
11...	1630	19	.067	104	50
11...	1845	29	.072	90	50
11...	2045	47	.110	120	50
11...	2145	114	.180	146	50
11...	2215	152	.178	112	50
12...	1045	106	.227	61	50
12...	1730	40	.205	57	50
13...	0445	18	.159	46	50
14...	0800	28	.137	56	50
14...	1115	54	.101	38	50
14...	1800	47	.168	61	50
14...	2230	31	.161	54	50
20...	1500	8.3	.056	--	70
22...	1645	22	.075	39	50
22...	2115	30	.067	47	50
22...	2330	37	.084	74	50
23...	0315	73	.138	43	50
23...	0530	74	.189	69	50
23...	2130	26	.157	48	50
24...	0415	18	.144	38	50
28...	1115	7.5	.053	44	50

05544385 MUSKEGO LAKE OUTLET NEAR WIND LAKE, WI

LOCATION.--Lat 42°51'09", long 88°07'50", in SE ¼ NE ¼ sec.33, T.5 N., R.20 E., Waukesha County, Hydrologic Unit 07120006, on right bank at dam outlet of Muskego Lake, 700 ft north of Muskego Dam Drive, 2 mi northeast of Wind Lake.

DRAINAGE AREA.--28.3 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1987 to September 1989, October 1995 to current year.

GAGE.--Water-stage recorder. Datum of gage is 760.00 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 18, 1987, nonrecording gage at same site and datum, October 1989 to September 1995, nonrecording gage at same datum.

REMARKS.--Flows for the water year were based on upstream-stage/downstream-stage-discharge ratings for flow through the variably-opened gate or upstream-stage-discharge rating for the dam crest or combination of gate and crest overflow. Records good (see page 12).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	.00	.00	1.2	3.5	30	7.4	27	109	20	2.0	.00
2	.18	.00	.00	1.7	3.4	31	6.8	24	136	20	2.0	.00
3	.47	.00	.00	1.8	3.5	29	6.8	20	135	43	2.0	.00
4	.64	.00	.00	2.6	3.3	27	6.7	15	128	71	2.0	.00
5	.40	.00	.39	2.5	3.1	28	3.7	14	128	85	2.0	.00
6	.87	.00	.14	2.6	3.0	25	2.9	10	113	84	2.0	.00
7	.57	.00	.05	2.5	2.9	22	20	10	101	74	17	.00
8	.44	.00	.13	2.5	2.8	21	11	9.9	82	68	35	.00
9	.70	.00	.26	2.6	2.7	29	7.7	31	68	63	35	.00
10	.81	.04	.49	3.6	2.6	26	9.6	65	32	63	35	.00
11	.76	.00	.37	3.5	2.4	24	9.6	85	32	59	24	.01
12	.36	.00	.40	3.4	2.3	18	8.1	92	66	54	18	18
13	1.2	.00	.44	3.4	3.7	16	6.4	80	81	52	18	40
14	.37	.00	.54	3.1	4.2	13	5.3	77	72	55	18	50
15	23	.00	.89	3.2	4.0	15	11	66	69	55	7.4	59
16	35	.00	1.1	3.0	3.6	17	13	57	63	53	.00	46
17	35	.00	1.2	2.8	3.4	13	9.7	55	63	52	.00	43
18	34	.00	1.1	3.1	4.8	9.1	5.0	98	56	51	.00	40
19	34	.00	1.1	3.2	5.7	15	9.4	125	53	50	.00	38
20	34	.00	1.3	3.8	5.0	17	45	129	50	49	.00	37
21	33	.00	1.2	3.7	4.7	15	60	124	49	34	.00	38
22	33	.00	1.2	3.8	5.4	14	50	116	49	24	.00	37
23	33	.00	1.2	3.8	8.3	14	53	110	48	24	.00	48
24	32	.00	1.3	3.6	16	13	55	98	47	11	.00	61
25	31	.00	1.3	3.6	24	10	49	97	46	2.0	.00	59
26	31	.00	1.2	3.5	27	10	42	89	46	2.0	.00	70
27	31	.00	1.2	3.4	29	10	38	90	29	2.0	.00	83
28	10	.00	1.3	3.3	28	13	37	94	20	2.0	.00	77
29	.00	.00	1.4	3.2	28	10	35	86	20	2.0	.00	65
30	.00	.00	1.3	3.6	---	9.5	27	82	20	2.0	.00	52
31	.00	---	1.2	3.8	---	7.6	---	85	---	2.0	.00	---
TOTAL	436.81	0.04	23.70	95.4	240.3	551.2	651.1	2160.9	2011	1228.0	219.40	961.01
MEAN	14.1	.001	.76	3.08	8.29	17.8	21.7	69.7	67.0	39.6	7.08	32.0
MAX	35	.04	1.4	3.8	29	31	60	129	136	85	35	83
MIN	.00	.00	.00	1.2	2.3	7.6	2.9	9.9	20	2.0	.00	.00
CFSM	.42	.00	.02	.09	.24	.52	.64	2.06	1.98	1.17	.21	.94
IN.	.48	.00	.03	.10	.26	.60	.71	2.37	2.21	1.35	.24	1.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2000, BY WATER YEAR (WY)

	MEAN	14.4	12.7	16.1	21.7	37.1	24.0	29.7	24.2	29.7	10.4	5.29	9.70
MAX	44.2	45.6	44.2	43.9	63.8	33.1	55.6	69.7	69.7	39.6	14.8	32.0	
(WY)	1996	1996	1988	1988	1999	1996	1999	2000	1999	2000	1998	2000	
MIN	.000	.001	.76	3.08	8.29	9.83	.000	.008	.003	.000	.000	.000	.000
(WY)	1989	2000	2000	2000	2000	1997	1997	1997	1989	1988	1988	1988	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1988 - 2000

ANNUAL TOTAL	9223.92	8578.86	
ANNUAL MEAN	25.3	23.4	19.5
HIGHEST ANNUAL MEAN			28.3
LOWEST ANNUAL MEAN			9.42
HIGHEST DAILY MEAN	198	Jun 15	136
LOWEST DAILY MEAN	.00	Many days	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Many period	.00
ANNUAL RUNOFF (CFSM)	.75		.69
ANNUAL RUNOFF (INCHES)	10.12		9.41
10 PERCENT EXCEEDS	86		68
50 PERCENT EXCEEDS	8.2		7.9
90 PERCENT EXCEEDS	.00		.00

(a) Also occurred Nov. 1-9, Nov. 11 to Dec. 4, and Aug. 16 to Sept. 10

(b) Also occurred Nov. 11 and Aug. 16

ILLINOIS RIVER BASIN

05544385 MUSKEGO LAKE OUTLET NEAR WIND LAKE, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1987 to September 1989, October 1995 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: October 1995 to current year.

TOTAL-PHOSPHORUS DISCHARGE: October 1987 to September 1989, October 1995 to current year.

REMARKS.--Suspended-sediment and total-phosphorus discharge records are fair. Samples to define the temporal fluctuation in total-phosphorus and suspended-sediment concentrations were collected by a local observer and U.S. Geological Survey personnel. Phosphorus analyses by the Wisconsin State Laboratory of Hygiene.

EXTREMES FOR PERIOD OF RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 44 tons, June 14, 1996; minimum daily, 0 ton, many days.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 359 lb, Sept. 10, 1989; minimum daily, 0.00 lb, many days.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 0.87 tons, July 5; minimum daily, 0 ton, many days.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 19.1 lb, June 2; minimum daily, 0.00 lb, many days.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.02	.11	.65	.09	.07	.58	.24	.03	.00
2	.00	.00	.00	.04	.10	.66	.08	.07	.63	.23	.04	.00
3	.00	.00	.00	.04	.11	.61	.07	.06	.55	.49	.03	.00
4	.00	.00	.00	.07	.10	.56	.07	.05	.46	.79	.02	.00
5	.00	.00	.01	.07	.09	.57	.03	.05	.40	.87	.01	.00
6	.00	.00	.00	.08	.09	.50	.03	.03	.32	.82	.01	.00
7	.00	.00	.00	.08	.08	.43	.16	.04	.38	.64	.05	.00
8	.00	.00	.00	.08	.08	.41	.08	.04	.42	.52	.09	.00
9	.00	.00	.00	.08	.08	.55	.05	.12	.35	.43	.09	.00
10	.00	.00	.01	.12	.07	.49	.06	.27	.15	.38	.09	.00
11	.00	.00	.01	.11	.07	.44	.06	.37	.14	.32	.06	.00
12	.00	.00	.01	.11	.06	.33	.04	.41	.28	.26	.05	.05
13	.00	.00	.01	.11	.10	.29	.03	.38	.32	.23	.05	.11
14	.00	.00	.01	.10	.11	.23	.02	.38	.27	.21	.05	.13
15	.43	.00	.01	.10	.10	.26	.05	.34	.24	.19	.02	.16
16	.75	.00	.01	.09	.09	.29	.05	.30	.20	.16	.00	.13
17	.75	.00	.02	.09	.09	.22	.04	.26	.19	.14	.00	.13
18	.72	.00	.01	.10	.12	.15	.02	.42	.16	.16	.00	.13
19	.72	.00	.01	.10	.14	.24	.03	.48	.23	.17	.00	.13
20	.71	.00	.02	.12	.12	.27	.13	.44	.31	.19	.00	.13
21	.69	.00	.01	.12	.11	.24	.16	.38	.34	.15	.00	.14
22	.69	.00	.01	.12	.13	.22	.14	.65	.37	.12	.00	.14
23	.68	.00	.01	.12	.20	.21	.14	.86	.41	.13	.00	.20
24	.66	.00	.01	.11	.37	.20	.15	.73	.46	.07	.00	.27
25	.63	.00	.01	.11	.55	.15	.13	.69	.50	.01	.00	.27
26	.63	.00	.01	.11	.61	.15	.11	.61	.55	.02	.00	.34
27	.63	.00	.01	.10	.65	.14	.10	.59	.38	.02	.00	.43
28	.20	.00	.02	.10	.62	.18	.10	.60	.27	.02	.00	.42
29	.00	.00	.02	.10	.61	.14	.09	.52	.26	.02	.00	.36
30	.00	.00	.02	.11	---	.13	.07	.48	.25	.03	.00	.30
31	.00	---	.02	.12	---	.10	---	.47	---	.03	.00	---
TOTAL	8.89	0.00	0.29	2.93	5.76	10.01	2.38	11.16	10.37	8.06	0.69	3.97

WTR YR 2000 TOTAL 64.51

05544385 MUSKEGO LAKE OUTLET NEAR WIND LAKE, WI--Continued

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.18	.80	6.63	1.20	5.80	15.8	3.87	.41	.00
2	.02	.00	.00	.25	.79	6.79	1.11	5.07	19.1	3.63	.42	.00
3	.06	.00	.00	.26	.81	6.29	1.11	4.13	18.9	7.53	.42	.00
4	.08	.00	.00	.36	.76	5.79	1.10	3.03	18.0	11.7	.41	.00
5	.05	.00	.09	.34	.72	5.94	.61	2.77	18.0	13.9	.41	.00
6	.11	.00	.03	.35	.69	5.25	.48	1.94	15.9	14.1	.40	.00
7	.07	.00	.01	.34	.67	4.57	3.31	1.90	15.1	12.3	3.42	.00
8	.05	.00	.03	.35	.64	4.32	1.83	1.84	13.1	11.2	6.87	.00
9	.09	.00	.06	.37	.62	5.91	1.28	5.63	11.0	10.4	6.82	.00
10	.10	.01	.11	.53	.60	5.24	1.60	11.6	5.07	10.4	6.68	.00
11	.09	.00	.08	.52	.55	4.79	1.61	14.9	5.09	9.70	4.57	.00
12	.05	.00	.09	.52	.52	3.55	1.36	15.7	10.5	8.93	3.45	2.41
13	.15	.00	.09	.53	.84	3.13	1.08	13.3	12.7	8.58	3.37	5.29
14	.05	.00	.11	.49	.95	2.51	.90	12.6	11.3	8.92	3.34	6.49
15	3.76	.00	.18	.52	.91	2.87	1.87	10.6	10.8	8.89	1.35	7.65
16	7.11	.00	.22	.50	.82	3.22	2.21	8.97	9.72	8.59	.00	5.63
17	7.57	.00	.23	.47	.77	2.44	1.66	8.45	9.66	8.36	.00	5.07
18	7.36	.00	.21	.53	1.08	1.69	.86	14.7	8.58	8.42	.00	4.51
19	7.37	.00	.21	.56	1.29	2.75	1.61	18.5	7.75	8.36	.00	4.05
20	7.38	.00	.24	.68	1.13	3.09	7.75	18.8	7.62	8.31	.00	3.86
21	7.18	.00	.22	.68	1.06	2.70	10.4	17.7	8.06	5.95	.00	3.82
22	7.18	.00	.21	.71	1.21	2.49	8.85	16.1	8.65	4.19	.00	3.66
23	7.19	.00	.21	.72	1.86	2.46	9.59	15.1	9.24	4.22	.00	4.75
24	6.99	.00	.22	.70	3.58	2.26	10.2	13.6	9.78	2.07	.00	5.96
25	6.78	.00	.22	.71	5.36	1.72	9.27	13.6	10.4	.37	.00	5.64
26	6.79	.00	.20	.71	6.02	1.71	8.13	12.6	11.0	.38	.00	6.63
27	6.80	.00	.19	.70	6.45	1.69	7.52	12.8	7.08	.38	.00	7.71
28	2.20	.00	.21	.69	6.22	2.17	7.49	13.6	4.69	.39	.00	7.35
29	.00	.00	.22	.69	6.21	1.65	7.24	12.5	4.44	.40	.00	6.26
30	.00	.00	.20	.79	---	1.55	5.71	12.1	4.16	.40	.00	4.99
31	.00	---	.18	.85	---	1.23	---	12.7	---	.41	.00	---
TOTAL	92.63	0.01	4.27	16.60	53.93	108.40	118.94	332.63	321.19	205.25	42.34	101.73

WTR YR 2000 TOTAL 1397.92

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
OCT					
06...	1100	.87	.023	1	70
DEC					
08...	1050	.13	.043	6	70
27...	0930	1.2	--	4	70
JAN					
06...	1200	2.6	.025	12	70
FEB					
02...	1050	3.4	.043	34	70
MAR					
01...	1110	30	.041	8	70
31...	1050	7.6	.030	5	70
APR					
21...	1005	60	.032	<1	70
MAY					
01...	1035	27	.040	1	70
16...	1040	57	.029	2	70
22...	1055	116	.026	<1	70
22...	1100	116	.025	3	70
JUN					
01...	0940	109	.028	2	70
01...	0945	109	.026	2	70
06...	1300	113	.026	<1	70
08...	1330	82	.030	2	70
19...	1000	53	.028	1	70
19...	1010	53	.026	2	70
27...	1130	29	.048	5	70
27...	1135	29	.045	16	70
JUL					
05...	1010	85	.029	3	70
05...	1015	85	.029	2	70
05...	1430	85	.031	4	70
17...	1145	52	.030	1	70
AUG					
02...	0955	2.0	.039	7	70
07...	2000	17	--	1	70
SEP					
15...	0940	59	.024	1	70
20...	1600	37	.019	--	70
28...	1025	77	.017	2	70
28...	1030	77	.018	--	70

ILLINOIS RIVER BASIN

05544793 UNNAMED LAUDERDALE LAKES TRIBUTARY NO. 2 NEAR LAUDERDALE, WI

LOCATION.--Lat 42°47'10", long 88°33'52", in SE ¼ SE ¼ sec.23, T.4 N., R.16 E., Walworth County, Hydrologic Unit 07120006, on left bank at south end of Russell Court, about 500 ft upstream from Green Lake, and approximately 1.5 mi NNE of Lauderdale.

DRAINAGE AREA.--0.19 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1999 to September 2000.

GAGE.--Water-stage recorder.

REMARKS.--

MAY-SEPTEMBER 1999.--Records good (see page 12).

2000 WATER YEAR.--Records good (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	e.00	.00	.00	.00	e.00
2	---	---	---	---	---	---	---	e.00	.00	.00	.00	e.00
3	---	---	---	---	---	---	---	e.00	.00	.00	.00	.00
4	---	---	---	---	---	---	---	e.00	.00	.00	.00	.00
5	---	---	---	---	---	---	---	e.00	.00	.00	.00	.00
6	---	---	---	---	---	---	---	e.00	.00	.00	.00	.00
7	---	---	---	---	---	---	---	e.00	.00	.00	.00	.00
8	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
9	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
10	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
11	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
12	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
13	---	---	---	---	---	---	---	.00	.00	.00	e.00	.00
14	---	---	---	---	---	---	---	.00	.00	.00	e.00	.00
15	---	---	---	---	---	---	---	.00	.00	.00	e.00	.00
16	---	---	---	---	---	---	---	.00	.00	.00	e.00	.00
17	---	---	---	---	---	---	---	.00	.00	.00	e.00	.00
18	---	---	---	---	---	---	---	.00	.00	.00	e.00	.00
19	---	---	---	---	---	---	---	.00	.00	.00	e.00	.00
20	---	---	---	---	---	---	---	.00	.00	.00	e.00	.00
21	---	---	---	---	---	---	---	.00	.00	.00	e.00	.00
22	---	---	---	---	---	---	---	.00	.00	.00	e.00	.00
23	---	---	---	---	---	---	---	.00	.00	.00	e.00	.00
24	---	---	---	---	---	---	---	.00	.00	.00	e.00	.00
25	---	---	---	---	---	---	---	.00	.00	.00	e.00	.00
26	---	---	---	---	---	---	---	.00	.00	.00	e.00	.00
27	---	---	---	---	---	---	---	.00	.00	.00	e.00	.00
28	---	---	---	---	---	---	---	.00	.00	.00	e.00	.00
29	---	---	---	---	---	---	---	.00	.00	.00	e.00	.00
30	---	---	---	---	---	---	---	.00	.00	.00	e.00	.00
31	---	---	---	---	---	---	---	.00	---	.00	e.00	---
TOTAL	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
MEAN	---	---	---	---	---	---	---	.000	.000	.000	.000	.000
MAX	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
MIN	---	---	---	---	---	---	---	.00	.00	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 1999, BY WATER YEAR (WY)

	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999
MEAN	---	---	---	---	---	---	---	.000	.000	.000	.000
MAX	---	---	---	---	---	---	---	.000	.000	.000	.000
(WY)	---	---	---	---	---	---	---	1999	1999	1999	1999
MIN	---	---	---	---	---	---	---	.000	.000	.000	.000
(WY)	---	---	---	---	---	---	---	1999	1999	1999	1999

SUMMARY STATISTICS

FOR 1999 WATER YEAR

LOWEST DAILY MEAN	.00
ANNUAL SEVEN-DAY MINIMUM	.00
10 PERCENT EXCEEDS	.00
50 PERCENT EXCEEDS	.00
90 PERCENT EXCEEDS	.00

(e) Estimated

05544793 UNNAMED LAUDERDALE LAKES TRIBUTARY NO. 2 NEAR LAUDERDALE, WI

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2000, BY WATER YEAR (WY)

MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
MAX	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	2000	2000	2000	2000	2000	2000	2000	1999	1999	1999	1999	1999
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	2000	2000	2000	2000	2000	2000	2000	1999	1999	1999	1999	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1999 - 2000
HIGHEST ANNUAL MEAN			.000 2000
LOWEST ANNUAL MEAN			.000 2000
HIGHEST DAILY MEAN			.00
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
10 PERCENT EXCEEDS	.00	.00	.00
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

ILLINOIS RIVER BASIN

05545133 BIRCHES CREEK AT LACKEY LANE NEAR LAKE GENEVA, WI

LOCATION.--Lat 42°33'36", long 88°29'15", in NW 1/4 SE 1/4 sec.9, T.1 N., R.17 E., Walworth County, Hydrologic Unit 07120006, on left bank at bridge on Lackey Lane, about 700 ft upstream from Lake Geneva, 2 mi northeast of Linton, and about 3.5 mi southwest of Lake Geneva.

DRAINAGE AREA.--2.07 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 870 ft above sea level, from topographic map.

REMARKS.--Records fair except those for the periods of Oct. 6 to Mar. 27 and June 13 to Sept. 30, which are poor (see page 12).
Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	.49	.30	.34	e.15	.86	.51	1.6	68	.46	.09	.40
2	.33	.48	.32	.37	e.14	.72	.49	1.4	15	1.5	.07	.35
3	.31	.44	.33	.36	e.14	.67	.48	1.3	5.1	2.7	e.05	.37
4	.29	.47	.32	.33	e.13	.64	.40	1.2	4.2	1.5	e.05	.30
5	.22	.49	.77	.30	e.13	.59	.39	1.2	4.9	1.2	e1.7	.19
6	.18	.44	.69	.32	e.13	.53	.43	1.0	3.7	1.1	1.1	e.12
7	.17	.46	.60	.29	e.12	.52	.46	.98	3.0	.84	1.0	e.10
8	.21	.46	.56	.30	e.12	.54	.52	1.1	2.3	.73	.96	e.09
9	.23	.47	.52	.35	e.12	.51	.71	4.9	1.9	.70	.87	e.12
10	.26	.45	.51	.57	e.16	.44	.67	4.3	1.6	13	.78	e.20
11	.29	.44	.47	.43	e.14	.45	.59	3.3	1.7	4.2	.68	e.35
12	.31	.47	.48	.33	e.13	.45	.57	3.1	133	3.1	.62	.87
13	.35	.49	.44	.28	e.13	.47	.52	2.5	28	2.7	.64	.63
14	.37	.47	.47	e.21	e.13	.47	.51	1.8	27	2.8	.60	.85
15	.49	.44	.51	e.20	e.14	.48	.50	1.2	13	2.2	.61	.79
16	.65	.43	.49	e.19	e.13	.45	.41	1.3	9.6	1.9	.49	.58
17	.65	.41	.42	e.18	e.13	.40	.40	1.4	7.0	1.7	.68	.51
18	.64	.34	.35	e.19	e.15	.41	.41	58	5.4	1.1	.68	.46
19	.61	.31	.39	e.17	e.14	.50	1.9	20	4.3	.70	.60	.43
20	.42	.31	.40	e.16	e.13	.71	25	5.5	3.8	.46	.51	.53
21	.38	.31	.35	e.15	e.16	.66	9.7	4.1	3.2	.33	.40	.52
22	.38	.31	.32	e.14	e.40	.61	4.7	3.6	2.2	.21	.44	1.2
23	.42	.34	.32	e.14	2.2	.58	4.4	2.9	1.8	.14	.52	3.3
24	.42	.33	.31	e.13	4.2	.72	3.9	2.5	2.0	.12	.42	1.6
25	.45	.32	.31	e.13	2.3	.68	3.2	1.7	1.9	.10	.28	1.4
26	.44	.33	.32	e.13	1.8	.59	2.7	1.2	1.7	.07	.26	1.3
27	.45	.33	.30	e.13	1.4	.59	2.4	1.7	1.4	.07	.30	1.2
28	.49	.31	.31	e.13	1.1	.50	1.9	2.0	1.3	e.06	.28	1.1
29	.51	.29	.33	e.13	.98	.50	1.8	1.8	1.0	e.05	.28	1.0
30	.49	.28	.33	e.14	---	.49	1.6	1.7	.63	e.05	.26	.98
31	.49	---	.33	e.15	---	.52	---	2.3	---	.08	.30	---
TOTAL	12.30	11.91	12.87	7.37	17.23	17.25	72.17	142.58	359.63	45.87	16.52	21.84
MEAN	.40	.40	.42	.24	.59	.56	2.41	4.60	12.0	1.48	.53	.73
MAX	.65	.49	.77	.57	4.2	.86	25	58	133	13	1.7	3.3
MIN	.17	.28	.30	.13	.12	.40	.39	.98	.63	.05	.05	.09
CFSM	.19	.19	.20	.11	.29	.27	1.16	2.22	5.79	.71	.26	.35
IN.	.22	.21	.23	.13	.31	.31	1.30	2.56	6.46	.82	.30	.39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2000, BY WATER YEAR (WY)

	MEAN	.29	.53	.49	1.10	1.61	1.30	2.91	4.20	8.44	1.22	.32	.35
MAX	.40	.86	.59	1.61	2.56	2.18	3.50	5.29	12.0	1.81	.53	.73	
(WY)	2000	1999	1998	1998	1998	1998	1999	1999	2000	1998	2000	2000	
MIN	.17	.34	.42	.24	.59	.56	2.41	2.70	2.94	.36	.13	.14	
(WY)	1998	1998	2000	2000	2000	2000	2000	1998	1998	1999	1999	1998	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1997 - 2000

ANNUAL TOTAL	767.21	737.54	
ANNUAL MEAN	2.10	2.02	1.89
HIGHEST ANNUAL MEAN			2.14
LOWEST ANNUAL MEAN			1.50
HIGHEST DAILY MEAN	155	133	155
LOWEST DAILY MEAN	.07 (a) Aug 21	.05 (b) Jul 29, 30	.05 (b) Jul 29 2000
ANNUAL SEVEN-DAY MINIMUM	.08 Aug 27	.06 Jul 29	.06 Jul 29 2000
INSTANTANEOUS PEAK FLOW		779	816
INSTANTANEOUS PEAK STAGE		9.07 Jun 12	9.26 Jun 13 1999
ANNUAL RUNOFF (CFSM)	1.02	.97	.91
ANNUAL RUNOFF (INCHES)	13.79	13.25	12.38
10 PERCENT EXCEEDS	3.7	3.0	3.7
50 PERCENT EXCEEDS	.49	.49	.62
90 PERCENT EXCEEDS	.14	.14	.14

(a) Also occurred Aug. 22, 28-30, 1999

(b) Also occurred Aug. 3-4, 2000

(c) Estimated due to ice effect or missing record

05545133 BIRCHES CREEK AT LACKEY LANE NEAR LAKE GENEVA, WI--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1997 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: May 1998 to current year.

SUSPENDED-SEDIMENT DISCHARGE: October 1997 to September 1999 (discontinued).

TOTAL-PHOSPHORUS DISCHARGE: October 1997 to September 1999 (discontinued).

INSTRUMENTATION.--Continuous water temperature recorder since June 1998.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum observed, 22.0°C, July 30, 1999; minimum observed, 0.0°C, on many days.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 17,700 mg/L, June 11, 1999; minimum observed, 1 mg/L, Sept. 25, 1999.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 600 tons, June 13, 1999; minimum daily, 0.00 ton, on many days.

TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 9.34 mg/L, June 11, 1999; minimum observed, <0.005 mg/L, Nov. 14, 1997.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 912 lb, June 13, 1999; minimum daily, 0.01 lb, on many days.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum observed, 20.0°C, July 14, Aug. 15, and Sept. 1-2; minimum observed, 0.0°C, on many days.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	12.0	10.5	11.0	12.5	8.5	9.5	5.5	3.0	4.0	5.0	3.0	4.0
2	11.0	10.0	10.5	9.5	6.5	8.0	7.5	5.0	6.0	6.0	4.0	5.0
3	10.0	9.0	9.5	7.0	5.0	6.0	8.5	7.5	8.0	4.0	2.0	3.5
4	10.5	8.0	9.0	8.0	4.5	6.0	9.0	8.0	8.0	2.5	1.5	2.0
5	11.5	8.5	10.0	9.0	7.5	8.0	8.0	4.5	6.0	2.0	1.0	2.0
6	11.5	9.0	10.0	8.0	6.0	7.0	5.0	3.5	4.0	3.5	1.5	2.5
7	12.5	9.5	10.5	7.5	4.5	6.0	5.0	3.0	4.0	2.5	1.5	2.0
8	13.5	11.0	12.0	9.0	6.5	7.5	5.5	3.5	4.5	4.0	1.5	2.5
9	13.5	11.0	12.5	10.5	9.0	10.0	7.0	5.0	6.0	5.0	3.5	4.5
10	15.0	13.0	13.5	11.0	9.5	10.5	5.5	3.0	4.0	4.5	2.0	3.5
11	13.5	11.0	12.0	9.5	8.0	8.5	4.5	2.5	3.5	3.0	1.5	2.0
12	13.5	11.0	12.0	9.0	6.5	7.5	6.0	4.0	5.0	2.5	1.5	2.0
13	13.5	10.0	12.0	9.5	6.5	7.5	5.5	3.5	4.5	2.0	.5	1.0
14	11.0	8.5	9.5	9.5	6.5	8.0	5.0	4.0	4.5	1.5	.0	1.0
15	13.0	9.5	11.0	8.0	5.0	6.5	5.0	4.5	5.0	3.5	1.0	2.5
16	13.0	11.5	12.5	7.0	5.0	6.0	4.5	1.5	3.0	3.0	1.0	2.0
17	11.5	9.5	10.0	7.0	5.0	5.5	3.0	1.5	2.0	2.0	1.0	1.5
18	10.5	8.0	9.0	8.0	6.0	7.0	2.5	1.0	2.0	3.0	1.5	2.0
19	10.5	9.0	9.5	9.5	7.5	8.5	4.0	1.5	3.0	2.0	.5	1.0
20	9.5	8.0	8.5	8.0	6.5	7.5	4.0	1.5	2.5	.5	.0	.5
21	10.5	7.0	8.0	8.0	5.5	6.5	2.0	1.5	1.5	.5	.0	.0
22	10.0	7.5	9.0	9.0	7.5	8.0	1.5	.5	1.0	1.0	.0	.5
23	8.5	7.0	7.5	10.5	8.0	8.5	1.0	.5	.5	1.0	.0	.5
24	8.0	5.5	6.5	8.5	5.5	7.0	1.0	.5	.5	.0	.0	.0
25	9.5	6.5	7.5	6.5	4.0	5.0	1.5	.5	1.0	1.0	.0	.5
26	10.0	8.0	9.0	6.5	4.0	5.0	2.5	1.5	2.0	.5	.0	.0
27	9.0	6.5	7.5	7.5	5.0	6.5	2.0	.5	1.5	1.0	.0	.5
28	10.5	8.5	9.5	6.0	4.0	5.0	2.5	.0	1.0	1.5	.0	1.0
29	11.0	8.5	9.5	5.0	3.5	4.0	4.0	2.5	3.5	2.5	1.0	1.5
30	12.0	10.0	11.0	4.5	2.5	3.5	4.5	3.0	4.0	3.0	1.0	2.0
31	11.5	9.0	10.0	---	---	---	4.0	2.5	3.5	2.0	.0	1.0
MONTH	15.0	5.5	10.0	12.5	2.5	7.0	9.0	.0	3.5	6.0	.0	1.8

ILLINOIS RIVER BASIN

05545133 BIRCHES CREEK AT LACKEY LANE NEAR LAKE GENEVA, WI--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	3.0	.5	1.5	7.0	4.5	6.0	8.5	7.5	8.0	15.0	10.5	12.5
2	1.5	.0	1.0	6.0	2.5	4.0	11.5	6.5	9.0	16.0	9.5	12.5
3	3.5	1.5	2.5	5.0	1.0	3.0	11.5	7.5	9.0	17.0	10.0	13.5
4	3.5	.5	2.0	7.0	2.0	4.5	8.0	5.0	6.5	17.5	13.0	15.0
5	2.5	.0	1.0	9.0	3.5	6.0	8.0	3.5	5.5	18.0	13.5	16.0
6	3.0	.0	1.5	9.0	4.0	7.0	12.5	6.0	8.5	18.5	14.0	16.5
7	4.0	1.0	2.5	12.5	7.0	9.5	8.5	2.0	5.5	17.5	15.0	16.5
8	2.5	.0	1.0	13.0	9.0	11.0	7.5	1.5	4.0	18.5	15.5	17.0
9	5.0	2.0	3.5	11.5	4.5	8.0	10.5	4.0	7.0	17.0	12.0	14.5
10	4.5	2.5	3.5	4.5	3.0	4.0	7.0	4.0	5.0	13.5	10.5	12.0
11	3.0	1.0	2.0	6.0	2.5	3.5	4.5	3.5	4.0	14.0	11.5	12.5
12	2.5	.5	1.5	6.0	1.0	3.5	9.0	3.0	5.5	16.0	13.5	14.5
13	3.0	1.0	2.0	5.0	3.5	4.5	9.0	5.5	7.0	14.0	10.0	11.5
14	4.0	1.5	2.5	6.5	3.0	5.0	14.0	6.0	10.0	12.5	8.5	10.5
15	4.5	.5	3.0	8.5	4.5	6.5	14.5	10.0	12.0	14.0	8.5	11.0
16	4.0	1.5	2.5	7.5	3.5	5.5	10.0	7.5	8.0	13.5	11.5	12.5
17	4.0	1.0	2.5	5.5	2.5	3.5	7.5	6.0	6.5	12.5	11.0	12.0
18	2.5	1.0	2.0	4.5	2.0	3.5	9.5	6.0	7.5	12.5	10.0	11.5
19	4.5	1.5	2.5	4.0	2.5	3.5	8.5	7.5	8.0	11.0	9.0	10.0
20	4.5	1.5	2.5	5.5	3.5	4.5	9.5	7.0	8.0	13.5	9.5	11.0
21	5.5	1.0	3.5	7.5	5.5	6.5	11.5	6.0	8.0	13.5	9.5	11.5
22	7.0	1.0	4.0	8.5	6.0	7.5	13.0	5.5	9.0	15.0	11.5	13.0
23	1.0	.5	.5	9.0	5.5	7.5	10.0	7.5	8.5	16.0	12.0	14.0
24	3.0	.5	2.0	10.0	7.0	8.5	13.5	6.5	9.5	16.0	12.0	14.0
25	6.5	2.5	4.5	11.0	7.5	9.0	13.5	6.0	9.5	15.5	11.5	13.5
26	8.0	5.5	7.0	10.0	5.0	8.0	14.0	6.0	10.0	13.5	11.5	12.5
27	7.0	4.0	5.5	10.0	6.0	8.0	14.5	7.5	11.0	12.5	12.0	12.0
28	6.0	1.5	4.0	7.5	5.0	6.0	14.0	7.0	10.5	12.0	11.0	11.5
29	7.5	3.5	6.0	9.0	4.0	6.0	14.0	8.5	11.0	13.5	10.0	12.0
30	---	---	---	10.0	4.0	7.0	15.0	7.5	11.5	14.5	11.0	12.5
31	---	---	---	11.5	4.5	8.0	---	---	---	14.5	13.5	14.0
MONTH	8.0	.0	2.8	13.0	1.0	6.1	15.0	1.5	8.1	18.5	8.5	13.0
JUNE				JULY			AUGUST			SEPTEMBER		
1	18.0	13.0	16.0	17.5	14.5	16.0	17.5	15.5	16.5	20.0	17.5	18.5
2	17.0	13.5	15.0	19.5	15.5	17.0	18.0	16.0	16.5	20.0	17.5	18.5
3	15.0	11.5	13.5	18.5	16.0	17.0	17.5	15.0	16.0	19.0	17.0	18.0
4	13.5	12.0	12.5	17.5	14.5	16.0	17.0	14.5	16.0	18.0	15.0	16.5
5	14.0	11.5	12.5	18.5	15.5	17.0	18.0	14.5	16.0	16.0	14.0	15.0
6	15.0	10.5	12.5	18.5	16.0	17.0	19.5	16.5	17.5	15.0	12.5	13.5
7	15.5	11.5	13.5	17.5	15.0	16.5	19.5	16.5	18.0	16.0	12.5	14.0
8	18.0	13.5	15.5	17.5	15.0	16.5	19.0	16.5	18.0	15.0	14.0	14.5
9	18.5	14.5	16.5	18.5	16.5	17.5	19.0	17.0	18.0	17.5	14.0	16.0
10	19.5	15.5	17.5	19.5	17.0	18.5	18.5	16.0	17.0	18.0	17.0	17.5
11	18.0	15.5	17.5	19.0	16.0	17.5	18.0	15.5	16.5	17.5	15.5	17.0
12	15.5	13.0	14.0	19.0	16.0	17.0	17.5	14.5	16.0	17.5	15.0	16.5
13	17.5	13.5	15.0	19.5	16.0	17.5	17.5	15.5	16.0	16.0	13.5	14.5
14	18.5	15.0	16.5	20.0	17.0	18.5	18.0	15.5	16.5	16.5	14.5	15.5
15	17.0	14.5	16.0	18.5	16.0	17.5	20.0	16.0	17.5	15.0	12.5	14.0
16	16.0	15.0	15.5	18.5	15.5	17.0	17.0	14.5	16.0	14.0	11.5	12.5
17	15.5	13.0	14.5	19.0	16.5	17.5	16.5	14.0	15.5	15.5	12.5	13.5
18	16.5	13.0	14.5	17.5	15.0	16.0	17.5	16.0	16.5	16.0	13.0	14.5
19	17.0	13.0	15.0	16.0	14.5	15.0	17.0	15.0	16.0	16.0	14.5	15.5
20	17.5	15.0	16.0	16.0	14.0	15.0	17.0	14.5	15.5	15.5	13.0	14.0
21	18.0	15.5	17.0	16.0	14.0	15.0	17.0	14.0	15.5	13.5	11.5	12.5
22	17.5	14.5	16.0	15.5	14.0	14.5	17.5	15.5	16.0	13.5	11.5	12.0
23	17.5	14.5	16.0	16.0	13.0	14.5	18.0	16.0	17.0	14.5	13.5	14.0
24	16.5	15.5	16.0	16.0	12.5	14.5	18.0	16.0	17.0	14.0	12.5	13.0
25	18.5	15.5	16.5	16.0	13.5	14.5	18.0	15.0	16.5	12.5	11.5	12.0
26	17.5	16.0	16.5	17.0	14.0	15.5	18.0	15.0	17.0	13.0	10.5	11.5
27	17.5	15.0	16.0	17.0	15.0	15.5	18.5	16.0	17.0	13.5	11.5	12.5
28	15.5	14.0	14.5	17.5	14.5	16.0	18.5	16.5	17.0	13.0	11.0	12.0
29	16.5	13.5	15.0	17.0	15.0	15.5	18.0	16.5	17.0	14.0	11.0	12.5
30	16.5	13.0	15.0	16.0	15.0	15.5	17.0	16.0	16.5	14.0	12.5	13.0
31	---	---	---	17.0	15.5	16.5	19.5	16.5	17.5	---	---	---
MONTH	19.5	10.5	15.3	20.0	12.5	16.3	20.0	14.0	16.6	20.0	10.5	14.5

05545133 BIRCHES CREEK AT LACKEY LANE NEAR LAKE GENEVA, WI--Continued

PRECIPITATION QUANTITY

PERIOD OF RECORD.--June 1998 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Rainfall estimated to be 0.00 for Dec. 5, 7, 19, 20, 29, Jan. 1, 2, 6, 8-10, 15, 30, Feb. 3, 7-10, 13-17, 19-21, 24-26, and Apr. 7-9 because recorded precipitation interpreted as collector snowmelt.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 3.04 in., June 12, 2000.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 3.04 in., June 12.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	e.00	.00	.03	.03	.11	1.89	.00	.10	.00
2	.04	.00	.00	e.00	.00	.00	.01	.00	.08	2.02	.00	.00
3	.58	.00	.13	.00	e.00	.00	.00	.00	.00	.00	.00	.27
4	.00	.00	.47	.00	.00	.00	.00	.00	.52	.00	.00	.00
5	.00	.00	e.00	.00	.00	.00	.00	.00	.12	.00	1.41	.00
6	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.17	.00
7	.00	.00	e.00	.00	e.00	.00	e.00	.00	.00	.00	.00	.00
8	.00	.00	.00	e.00	e.00	.20	e.00	.39	.00	.00	.00	.00
9	.00	.00	.14	e.00	e.00	.00	e.00	1.56	.00	.00	.00	.00
10	.00	.05	.00	e.00	e.00	.00	.00	.00	.00	2.18	.00	.22
11	.00	.00	.00	.00	.00	.00	.10	.16	.49	.00	.00	1.83
12	.00	.00	.00	.00	.00	.00	.00	.00	3.04	.00	.00	.05
13	.01	.00	.00	.00	e.00	.00	.00	.00	.76	.00	.00	.00
14	.00	.00	.06	.00	e.00	.00	.00	.00	.45	.05	.00	.74
15	.00	.00	.07	e.00	e.00	.18	.00	.00	.01	.00	.00	.00
16	.43	.00	.00	.00	e.00	.00	.09	.22	.05	.00	.00	.00
17	.00	.00	.00	.00	e.00	.00	.02	.62	.00	.00	.69	.00
18	.00	.00	.00	.00	.00	.00	.00	2.10	.00	.00	.02	.00
19	.00	.05	e.00	.00	e.00	.33	1.36	.01	.00	.00	.00	.01
20	.00	.00	e.00	.00	e.00	.24	1.90	.00	.18	.05	.00	.69
21	.00	.01	.00	.00	e.00	.01	.02	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.13	.00	.00	.20	2.07
23	.00	.29	.00	.00	.00	.00	.30	.00	.14	.00	.00	.27
24	.00	.00	.00	.00	e.00	.28	.00	.00	.31	.00	.00	.00
25	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.07	.00	.00	e.00	.08	.00	.36	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.27	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.02	.07	.37	.26	.00	.00	.00
29	.00	.00	e.00	.00	.05	.00	.00	.00	.01	.00	.00	.00
30	.00	.00	.00	e.00	---	.00	.00	.06	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.83	---	1.09	.00	---
TOTAL	1.06	0.47	0.87	0.00	0.05	1.37	3.90	7.19	8.31	5.39	2.59	6.15

e Estimated

ILLINOIS RIVER BASIN

423525088260400 LAKE GENEVA AT LAKE GENEVA, WI

LOCATION.--Lat 42°35'25", long 88°26'04" in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.36, T.2 N., R.17 E., Walworth County, Hydrologic Unit 07120006, at Lake Geneva dam at Center Street at Lake Geneva.

DRAINAGE AREA.--28.7 mi². Area of Lake Geneva, 5,262 acres.

GAGE-HEIGHT RECORD

PERIOD OF RECORD.--October 1997 to current year.

GAGE.--Water-stage recorder. Datum of gage is 862.08 ft above sea level.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 3.29 ft, June 13, 2000; minimum gage height, 1.84 ft, Sept. 27 and Nov. 19, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 3.29 ft, June 13; minimum gage height, 1.84 ft, Nov. 19.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.31	2.18	2.10	2.18	2.23	2.30	2.43	2.68	2.90	2.66	2.47	2.36
2	2.29	2.16	2.09	2.19	2.22	2.29	2.43	2.66	2.95	2.66	2.46	2.35
3	2.29	2.14	2.10	2.19	2.21	2.28	2.44	2.65	2.91	2.80	2.43	2.36
4	2.32	2.14	2.11	2.23	2.19	2.29	2.43	2.65	2.88	2.78	2.43	2.34
5	2.32	2.12	2.18	2.23	2.19	2.29	2.42	2.63	2.88	2.76	2.45	2.31
6	2.30	2.11	2.19	2.24	2.17	2.29	2.44	2.63	2.87	2.74	2.54	2.29
7	2.29	2.11	2.19	2.23	2.16	2.30	2.43	2.62	2.84	2.71	2.54	2.30
8	2.30	2.11	2.19	2.24	2.16	2.31	2.48	2.63	2.82	2.69	2.53	2.28
9	2.29	2.13	2.19	2.23	2.15	2.32	2.48	2.68	2.80	2.69	2.51	2.29
10	2.30	2.11	2.20	2.26	2.14	2.31	2.46	2.76	2.78	2.80	2.50	2.29
11	2.30	2.11	2.19	2.26	2.13	2.31	2.47	2.75	2.76	2.83	2.48	2.33
12	2.30	2.12	2.20	2.23	2.12	2.31	2.47	2.75	2.88	2.82	2.47	2.45
13	2.29	2.12	2.20	2.24	2.14	2.32	2.47	2.74	3.07	2.81	2.47	2.44
14	2.28	2.11	2.20	2.24	2.15	2.33	2.47	2.69	3.10	2.79	2.45	2.46
15	2.28	2.10	2.21	2.23	2.14	2.33	2.46	2.66	3.08	2.75	2.45	2.45
16	2.30	2.09	2.22	2.23	2.13	2.34	2.46	2.65	3.04	2.73	2.43	2.43
17	2.29	2.09	2.20	2.22	2.12	2.34	2.47	2.64	2.98	2.71	2.44	2.42
18	2.28	2.10	2.20	2.23	2.15	2.34	2.47	2.77	2.93	2.66	2.44	2.40
19	2.28	2.11	2.20	2.23	2.17	2.35	2.52	2.89	2.90	2.62	2.42	2.39
20	2.26	2.09	2.24	2.24	2.16	2.38	2.71	2.88	2.89	2.60	2.40	2.41
21	2.26	2.09	2.20	2.24	2.15	2.40	2.79	2.86	2.87	2.57	2.39	2.39
22	2.24	2.10	2.20	2.23	2.15	2.40	2.78	2.85	2.82	2.54	2.39	2.41
23	2.21	2.13	2.21	2.24	2.16	2.40	2.78	2.83	2.78	2.52	2.40	2.55
24	2.20	2.13	2.21	2.23	2.21	2.42	2.77	2.81	2.77	2.50	2.40	2.53
25	2.20	2.12	2.22	2.23	2.24	2.45	2.75	2.77	2.77	2.49	2.40	2.52
26	2.17	2.12	2.22	2.22	2.27	2.44	2.74	2.73	2.76	2.47	2.38	2.52
27	2.16	2.12	2.21	2.22	2.30	2.45	2.72	2.74	2.73	2.45	2.37	2.49
28	2.16	2.11	2.22	2.22	2.29	2.43	2.71	2.75	2.71	2.44	2.36	2.47
29	2.16	2.10	2.22	2.21	2.29	2.42	2.69	2.75	2.70	2.42	2.36	2.47
30	2.18	2.10	2.20	2.23	---	2.42	2.68	2.74	2.68	2.41	2.35	2.45
31	2.17	---	2.19	2.24	---	2.43	---	2.76	---	2.45	2.36	---
MEAN	2.26	2.12	2.19	2.23	2.18	2.35	2.56	2.73	2.86	2.64	2.43	2.40
MAX	2.32	2.18	2.24	2.26	2.30	2.45	2.79	2.89	3.10	2.83	2.54	2.55
MIN	2.16	2.09	2.09	2.18	2.12	2.28	2.42	2.62	2.68	2.41	2.35	2.28

423525088260400 LAKE GENEVA AT LAKE GENEVA, WI--Continued

PRECIPITATION QUANTITY

PERIOD OF RECORD.--October 1997 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Rainfall estimated to be 0.00 for Dec. 5, 6, 19, 20, Jan. 2, 3, 6, 8-10, 15, 18, 27, 29, Feb. 3, 7, 13-15, 19-21, 24, 26, and Apr. 7, 8, because recorded precipitation interpreted as collector snowmelt.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 2.78 in., June 13, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.73 in., June 12.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.02	.02	.01	1.79	.00	.08	.00
2	.04	.00	.00	.08	.00	.00	.01	.00	.02	1.77	.00	.00
3	.47	.00	.00	.02	.01	.00	.00	.00	.00	.01	.00	.01
4	.00	.00	.46	.00	.00	.00	.00	.00	.46	.00	.00	.00
5	.00	.00	.40	.00	.00	.00	.00	.00	.08	.25	1.24	.00
6	.00	.00	.01	.15	.00	.00	.00	.00	.00	.00	.05	.00
7	.00	.00	.00	.00	.01	.00	.29	.00	.00	.00	.00	.00
8	.00	.00	.00	.01	.00	.22	.17	.51	.00	.08	.00	.00
9	.00	.00	.13	.11	.00	.00	.00	1.71	.00	.00	.00	.00
10	.00	.06	.00	.09	.00	.00	.00	.00	.00	1.87	.00	.29
11	.00	.00	.00	.00	.00	.00	.09	.14	.44	.00	.00	1.89
12	.00	.00	.00	.00	.00	.00	.00	.07	2.73	.00	.00	.04
13	.02	.00	.01	.00	.02	.00	.00	.00	.73	.00	.25	.00
14	.00	.00	.05	.00	.11	.00	.00	.00	.34	.00	.00	.63
15	.00	.00	.09	.02	.20	.20	.00	.00	.01	.00	.00	.00
16	.31	.00	.02	.00	.00	.00	.03	.17	.04	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.04	.84	.00	.00	.74	.00
18	.00	.00	.00	.03	.00	.00	.00	2.16	.00	.01	.07	.00
19	.00	.05	.01	.00	.01	.29	1.26	.01	.00	.00	.00	.00
20	.00	.00	.04	.00	.05	.24	2.04	.00	.17	.07	.00	.63
21	.00	.00	.00	.00	.06	.00	.04	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.52	.00	.00	.03	1.69
23	.00	.23	.00	.00	.00	.00	.25	.00	.15	.00	.00	.21
24	.00	.00	.00	.00	.49	.24	.00	.00	.25	.00	.00	.01
25	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00
26	.00	.06	.00	.00	.09	.07	.00	.37	.00	.00	.00	.00
27	.00	.00	.00	.01	.00	.00	.00	.35	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.01	.37	.23	.00	.00	.00
29	.00	.00	.00	.01	.06	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.12	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.88	---	.97	.00	---
TOTAL	0.84	0.40	1.22	0.53	1.11	1.28	4.25	8.23	7.45	5.03	2.46	5.40

ILLINOIS RIVER BASIN

055451345 WHITE RIVER AT CENTER STREET AT LAKE GENEVA, WI

LOCATION.--Lat 42°35'26", long 88°26'01", in SE ¼ NW ¼ sec.36, T.2 N., R.17 E., Walworth County, Hydrologic Unit 07120006, on left bank at Lake Geneva dam at Center Street at Lake Geneva.

DRAINAGE AREA.--28.7 mi².

PERIOD OF RECORD.--October 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 848.22 ft above sea level.

REMARKS.--Records fair except those for Oct. 6 to Mar. 27, which are poor (see page 12). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.48	.92	.60	.24	e14	38	13	53	137	52	21	2.3
2	.54	.91	.64	.28	40	36	13	49	165	53	19	2.2
3	.66	.96	.68	.24	63	37	15	46	145	87	12	2.8
4	.90	.82	.81	.24	65	38	13	46	129	81	6.5	1.6
5	1.1	.82	1.0	.24	55	37	13	43	135	74	12	1.2
6	.31	.73	.52	.25	48	28	13	42	127	69	25	1.1
7	.41	.74	.55	.23	46	27	13	40	114	60	25	1.1
8	.71	.78	.56	.24	45	27	23	41	104	57	22	1.1
9	.53	.81	.63	.31	44	22	21	54	99	57	18	1.2
10	.78	.88	.47	22	45	7.3	17	71	98	90	16	1.2
11	.76	.87	.47	20	44	1.9	19	68	98	87	12	4.7
12	1.4	.88	.49	18	43	1.8	19	69	147	77	9.5	10
13	1.3	.96	.51	17	44	1.9	19	67	228	73	10	7.7
14	.50	.92	.52	e16	44	3.6	20	55	276	71	8.6	11
15	.64	.92	.55	e15	40	4.1	18	48	249	63	8.3	8.5
16	1.4	.93	.50	e15	36	4.3	16	49	209	58	4.9	6.6
17	.93	.98	.44	e15	36	3.9	18	48	164	57	8.7	5.3
18	.81	.97	.43	e15	36	5.1	19	88	136	47	8.1	4.0
19	.96	.63	.43	e15	36	6.8	34	136	119	41	5.4	3.9
20	.83	.41	.91	e15	37	13	86	130	115	39	3.5	5.9
21	.87	.44	.27	e14	39	16	91	116	112	41	2.7	4.6
22	.74	.47	.25	e14	39	16	86	112	87	39	3.1	8.5
23	.77	.72	.22	e14	40	16	84	102	75	33	3.4	27
24	.79	.53	.21	e14	34	18	80	97	75	30	3.1	24
25	.81	.54	.21	e14	35	22	73	80	76	28	3.2	21
26	.81	.61	.22	e14	40	18	68	68	71	25	2.8	20
27	.86	.56	.21	e14	40	20	63	72	64	22	2.2	16
28	.82	.56	.21	e14	36	15	59	76	61	20	1.9	13
29	.88	.56	.23	e14	37	14	57	76	60	16	2.0	12
30	.90	.57	.24	e14	---	14	54	74	55	14	1.9	10
31	.90	---	.24	e14	---	14	---	86	---	19	2.4	---
TOTAL	25.10	22.40	14.22	339.27	1201	526.7	1137	2202	3730	1580	284.2	239.5
MEAN	.81	.75	.46	10.9	41.4	17.0	37.9	71.0	124	51.0	9.17	7.98
MAX	1.4	.98	1.0	22	65	38	91	136	276	90	25	27
MIN	.31	.41	.21	.23	14	1.8	13	40	55	14	1.9	1.1
CFSM	.03	.03	.02	.38	1.44	.59	1.32	2.47	4.33	1.78	.32	.28
IN.	.03	.03	.02	.44	1.56	.68	1.47	2.85	4.83	2.05	.37	.31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2000, BY WATER YEAR (WY)

	MEAN	2.45	3.43	14.0	28.5	50.1	15.3	37.4	70.2	98.6	33.4	3.36	2.94
MAX	4.77	9.37	24.3	39.4	64.2	26.8	41.7	79.8	127	51.0	9.17	7.98	
(WY)	1999	1999	1998	1999	1999	1999	1998	1999	1999	2000	2000	2000	
MIN	.81	.17	.46	10.9	41.4	2.23	32.5	59.9	44.3	15.9	.40	.23	
(WY)	2000	1998	2000	2000	2000	1998	1999	1998	1998	1999	1998	1999	

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1998 - 2000

ANNUAL TOTAL	11695.80	11301.39	
ANNUAL MEAN	32.0	30.9	29.8
HIGHEST ANNUAL MEAN			34.5
LOWEST ANNUAL MEAN			23.9
HIGHEST DAILY MEAN	342	276	342
LOWEST DAILY MEAN	.04	.21	(e).02
ANNUAL SEVEN-DAY MINIMUM	.08	.22	(e).06
INSTANTANEOUS PEAK FLOW		304	561
INSTANTANEOUS PEAK STAGE		10.47	11.13
ANNUAL RUNOFF (CFSM)	1.12	1.08	1.04
ANNUAL RUNOFF (INCHES)	15.16	14.65	14.09
10 PERCENT EXCEEDS	90	85	75
50 PERCENT EXCEEDS	7.4	14	15
90 PERCENT EXCEEDS	.15	.52	.17

(a) Also occurred Aug. 12, 21, 1998

(e) Estimated due to ice effect or missing record

05545750 FOX RIVER NEAR NEW MUNSTER, WI

LOCATION.--Lat 42°36'39", long 88°13'33", in NW ¼ NW ¼ 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 mi².

PERIOD OF RECORD.--October 1939 to current year. Prior to October 1993, published as "at Wilmot" under station number 05546500.

REVISED RECORDS.--WSP 1308: 1943(M), 1945(M). WDR WI-67-1: Drainage area. WDR WI-92-1: 1991.

GAGE.--Water-stage recorder. Datum of gage is 735.72 ft above sea level (Racine County Surveyor bench mark). Prior to Sept. 1, 1965, nonrecording gage at bridge in Wilmot 11 mi downstream at datum 0.50 ft lower, and recording gage Sept. 1, 1965 to Sept. 30, 1993.

REMARKS.--Records good except those for estimated daily discharges, which are fair (see page 12). Gage-height telemeter and data-collection platform at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	616	249	233	e240	e220	850	342	549	2600	456	448	247
2	690	213	241	e250	e220	826	339	535	3290	432	431	284
3	561	259	273	e280	e220	612	321	515	3330	1070	419	287
4	491	247	301	265	e230	627	327	490	3130	1490	405	304
5	439	206	362	e260	e230	562	336	451	2910	1390	422	309
6	333	212	411	e250	e230	508	271	387	2660	1180	569	295
7	367	237	394	e250	e230	395	323	376	2390	1120	672	274
8	339	244	380	e260	e230	417	399	385	2120	1150	606	249
9	315	239	396	262	e230	448	351	552	1880	1280	675	265
10	334	235	410	271	e230	472	404	1360	1620	1420	705	288
11	320	233	474	317	e240	449	487	1530	1360	1600	672	348
12	314	242	368	318	e240	434	441	1440	1590	1490	618	932
13	302	275	e260	317	e240	422	445	1330	2310	1200	593	1040
14	291	276	e260	e310	e250	402	392	1170	2510	1140	538	928
15	285	271	e270	e300	e250	379	391	1030	2530	1260	307	1080
16	283	256	e280	e290	e260	396	387	862	2380	1050	371	1030
17	307	250	e270	e280	e260	396	372	934	2040	861	394	974
18	313	244	e260	e270	e260	381	340	1640	1780	765	433	1010
19	305	240	e250	e260	e260	379	354	2680	1540	725	459	899
20	295	240	e240	e250	e260	413	946	3010	1340	632	471	921
21	288	258	e250	e240	e280	450	1900	2860	1140	569	503	950
22	284	250	e240	e240	e360	459	2030	2700	969	536	487	928
23	294	244	e230	e230	e500	463	1850	2560	799	426	470	1520
24	253	245	e230	e230	e900	464	1770	2400	722	377	436	2030
25	254	255	e220	e220	1300	470	1660	2130	653	389	378	1880
26	251	268	e220	e210	1320	479	1450	1930	624	372	329	1620
27	297	277	e220	e210	1230	436	1130	1900	616	372	330	1370
28	283	272	e230	e220	1130	424	939	2030	578	371	329	1180
29	282	263	e230	e220	959	436	821	2110	530	370	329	1030
30	281	253	e230	e220	---	384	685	1990	509	367	336	876
31	274	---	e240	e220	---	314	---	2090	---	402	314	---
TOTAL	10541	7453	8873	7960	12769	14547	22203	45926	52450	26262	14449	25348
MEAN	340	248	286	257	440	469	740	1481	1748	847	466	845
MAX	690	277	474	318	1320	850	2030	3010	3330	1600	705	2030
MIN	251	206	220	210	220	314	271	376	509	367	307	247
CFSM	.42	.31	.35	.32	.54	.58	.91	1.83	2.16	1.04	.57	1.04
IN.	.48	.34	.41	.37	.59	.67	1.02	2.11	2.41	1.20	.66	1.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1999, BY WATER YEAR (WY)

	MEAN	384	481	454	428	536	1118	1081	701	532	388	332	337
MAX	1931	1536	1755	1818	1354	2434	3591	2078	1711	1382	902	1763	
(WY)	1987	1986	1983	1960	1974	1979	1993	1973	1996	1969	1952	1972	
MIN	79.5	113	91.4	87.7	105	252	256	108	124	69.2	57.2	62.7	
(WY)	1957	1950	1964	1940	1940	1968	1958	1958	1988	1958	1958	1946	

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1940 - 1999

ANNUAL TOTAL	253917	248781	
ANNUAL MEAN	696	680	564
HIGHEST ANNUAL MEAN			1240
LOWEST ANNUAL MEAN			174
HIGHEST DAILY MEAN	4510 Jun 15	3330 Jun 3	7100 Apr 1 1960
LOWEST DAILY MEAN	176 Sep 6, 11, 12	206 Nov 5	35 Sep 9 1958
ANNUAL SEVEN-DAY MINIMUM	180 Sep 6	(a) 217 Jan 25	41 Sep 7 1958
INSTANTANEOUS PEAK FLOW		3410 Jun 2	(b) 7520 Mar 31 1960
INSTANTANEOUS PEAK STAGE		12.76 Jun 2	(a) 14.10 Feb 21 1994
INSTANTANEOUS LOW FLOW		198 Nov 2	.00 (c) Oct 26 1945
ANNUAL RUNOFF (CFSM)	.86	.84	.70
ANNUAL RUNOFF (INCHES)	11.65	11.41	9.45
10 PERCENT EXCEEDS	1590	1630	1270
50 PERCENT EXCEEDS	416	392	365
90 PERCENT EXCEEDS	228	240	125

(a) Ice affected

(b) Gage height, 9.25 ft, from graph based on gage readings, site and datum then in use

(c) Also occurred Aug. 10, 1990

(e) Estimated due to ice effect or missing record

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or flood-flow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at crest-stage partial-record stations are presented in the following table. Discharge measurements made at miscellaneous sites for both low flows and high flows are given in separate tables.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Maximum discharge at crest-stage partial-record stations

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 2000 Maximum			Period of Record Maximum		
			Date	Gage height (feet)	Dis- charge (ft ³ /s)	Date	Gage height (feet)	Dis- charge (ft ³ /s)
STREAMS TRIBUTARY TO LAKE SUPERIOR								
04024400 Stony Brook near Superior	Lat 46°35'01", long 92°07'10" in SE 1/4 sec. 4, T.47 N., R.14 W., Douglas County, Hydrologic Unit 04010301, at box culvert on State Highway 35, 12.5 mi south of toll bridge on U.S. Highways 2 and 35 at St. Louis River at Superior; drainage ares, 1.86 mi ² .	1959-00	06-16-00	12.80	85.6	09-02-85	35.23	595
04025200 Pearson Creek near Maple	Lat 46°38'51", long 91°42'55" on com- mon boundary of secs. 11 and 14, T.48 N., R.11 W., Douglas County, Hydrologic Unit 04010301, at box culvert on State Highway 13, 4.0 mi north of Maple; drainage area, 4.07 mi ²	1957-00	02-29-00	G12.23	186	09-02-85	31.83	1,440
04026200 Sand River Tributary near Red Cliff	Lat 46°53'53", long 90°56'47" in NE 1/4 section 14, T.51 N., R.5 W., Bay- field County, Hydrologic Unit 04010301, at box culvert on State Highway 13, 8.0 mi northwest of Red Cliff; drainage area, 1.09 mi ² .	1959-00	02-27-00	G10.41	24	05-23-64	16.86	624
04026300 Sioux River near Washburn	Lat 46°41'20", long 90°57'02" in NE 1/4 sec. 35, T.49 N., R.5 W., Bayfield County, Hydrologic Unit 04010301, on County Trunk Highway C, 2.5 mi west of Washburn; drainage area, 33.9 mi ²	1959-65 1966# 1967-00	05-08-00	C	<187	09-02-85	29.45	2,200
04026450 Bad River near Mellen	Lat 46°16'14", long 90°42'26" in NE 1/4 NW 1/4 sec.26, T.44 N., R.3 W., Ashland County, Hydrologic Unit 04010302, on left bank 150 ft down- stream from bridge on U.S. Forest Service Road, 4.4 mi southwest of Mellen; drainage area, 82.0 mi ² .	1971-75# 1976-00	07-09-00	6.39	1,340	07-02-92	8.65	2,450

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 2000 Maximum			Period of Record Maximum		
			Date	Gage height (feet)	Dis- charge (ft ³ /s)	Date	Gage height (feet)	Dis- charge (ft ³ /s)
STREAMS TRIBUTARY TO LAKE SUPERIOR--CONTINUED								
04027200 Pearl Creek at Grandview	Lat 46°22'05", long 91°05'27" in NE 1/4 sec.22, T.45 N., R.6 W., Bayfield County, Hydrologic Unit 04010302, at bbox culvert on U.S. Highway 63, 0.8 mi east of Grandview; drainage area, 16.9 mi ² .	1960-00	05-08-00	12.50	223	07-02-92	28.47	1,920
STREAMS TRIBUTARY TO LAKE MICHIGAN								
04059900 Allen Creek Tributary near Alvin	Lat 45°58'05", long 88°47'24" on north boundary sec. 7, T.40 N., R.14 E., Forest County, Hydrologic Unit 04030106, at culvert on State High- way 70, 2.2 mi southeast of Alvin; drainage area, 1.22 mi	1960-00	07-09-00	9.33	8.0	05-22-83	11.38	40
04063640 North Branch Pine River at Windsor Dam near Alvin	Lat 45°55'43", long 88°51'38" in SE 1/4 sec.21,T.40 Nl, R.13 E., Forest County, Hydrologic Unit 04030108, at bridge on country road, at Windsor Dam, 3.8 mi upstream from conflu- ence of North and South Forks, 4.0 mi southwest of Alvin; drainage area, 27.8 mi ² .	1967-68# 1970-00	04-21-00	D3.53	E55	04-09-80	3.89	165
04067760 Peshtigo River near Cavour	Lat 45°39'20", long 88°38'52" in SW 1/4 sec.29, T.37 N., R.15 E., Forest County, Hydrologic Unit 04040105, at bridge on U.S. Highway 8, 0.7 mi northwest of Cavour; drainage area, 150 mi ² .	1970-00	07-11-00	12.50	687	04-21-96	15.78	1,600
04069700 North Branch Oconto River near Wabeno	Lat 45°26'19", long 88°37'40" in SW 1/4 sec.9, T.34 N., R.15 E., Forest County, Hydrologic Unit 04030104, at pipe arch culvert on County Trunk Highway C, 0.6 mi east of intersec- tion with State Highway 32 at Wabeno; drainage area, 34.1 mi ² .	1970-00	07-09-00	11.96	132	04-20-96	14.21	621
04071700 North Branch Little River near Coleman	Lat 45°00'37", long 88°02'43" on com- mon boundary of secs. 2 and 3, T.29 N., R.20 E., Oconto County, Hydro- logic Unit 04030104, at bridge on U.S. Highway 141, 3.8 mi south of Coleman; drainage area, 21.4 mi ² .	1958-00	03-01-00	10.91	48.5	03-30-67	14.50	640
04071800 Pensaukee River near Pulaski	Lat 44°45'48" long 88°15'07" in NE 1/4 sec.1, T.26 N., R.18 E., Shawano County, Hydrologic Unit 04030103, at bridge on State Highway 32, 6.1 mi north of Pulaski; drainage area, 48.80 mi ² .	1961-00	07-09-00	12.11	509	06-18-96	16.96	1,810
04072792 Tagatz Creek near Westfield	Lat 43°57'22" long 89°29'38" in SE 1/4 sec.12, T.17 N., R.8 E., Marquette County, Hydrologic Unit 04030201, at culvert on County Trunk Highway H, 5.2 mi north of Westfield.	1996-00	06-02-00	15.94	46	06-02-00	15.94	46

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 2000 Maximum			Period of Record Maximum		
			Date	Gage height (feet)	Dis- charge (ft ³ /s)	Date	Gage height (feet)	Dis- charge (ft ³ /s)
STREAMS TRIBUTARY TO LAKE MICHIGAN--CONTINUED								
04073400 Bird Creek at Wautoma	Lat 44°04'06", long 89°18'08" in S 1/2 section 34, T.19 N., R.10 E., Waush- ara County, Hydrologic Unit 04030201, at concrete culvert on State Highway 21, 0.2 mi west of Wautoma; drainage area, 4.14 mi ² .	1959-00	06-01-00	11.78	62	03-07-73	13.07	190
04074850 Lily River near Lily	Lat 45°20'59", long 88°49'52" in SE 1/4 sec.11, T.33 N., R.13 E., Langlade County, Hydrologic Unit 04030202, at culvert on County Trunk Highway A, 3.2 mi north from junction of State Highways 55 and 52 at Lily; drainage area, 45.6 mi ² .	1970-00	07-09-00	9.62	112	04-20-96	10.25	167
*04075200 Evergreen Creek near Langlade	Lat 45°10'11", long 88°48'12" in NW 1/4 sec.18, T.31 N., R.14 E., Lang- lade County, Hydrologic Unit 04030202, on culvert on State High- way 64, 3.5 mi southeast of Langlade; drainage area, 8.09 mi ² .	1959-65 1966-72# 1973-00	07-09-00	11.07	54	07-11-82	11.66	80
04078891 Maple Creek near Sugar Bush	Lat 44°27'54", long 88°43'20" in NW 1/4 SE 1/4 sec.18, T.23 N., R.15 E., Outagamie County, Hydrologic Unit 04030202, at bridge on County Trunk Highway D, 1.3 mi southeast of Sugar Bush; drainage area, 22.1 mi ² .	1996-00	06-03-00	11.99	77	1996	13.65	360
04079700 Spaulding Creek near Big Falls	Lat 44°38'13", long 89°01'20" on com- mon boundary of secs. 14 and 15, T.25 N., R.12 E., Waupaca County, Hydrologic Unit 04030202, at culvert on County Trunk Highway E, 1.5 mi north of Big Falls; drainage area, 5.57 mi ² .	1959-65 1966# 1967-00	2000	C	<55	05-07-60	11.64	101
04081900 Sawyer Creek at Oshkosh	Lat 44°02'00", long 88°35'00" in SW 1/4 sec.15, T.18 N., R.16 E., Win- nebago County, Hydrologic Unit 04030201, at bridge on U.S. High- way 41, 1.0 mi southwest of bridge on Algoma Street at Fox River, at Oshkosh; drainage area, 12.10 mi ² .	1961-00	2000	C	B	09-11-86	17.47	2,350
04085145 Red River near Dykesville	Lt 44°38'59", long 87°42'47" in SW 1/4 SE 1/4 sec.9, T.25 N., R.23 E., Kewaunee County, Hydrologic Unit 04030102, at upstream crossing of County Highway A, 2.5 mi east of Dykesville; drainage area, 11.8 mi ² .	1996-00	05-18-00	10.17	26	04-01-98	12.49	215
04085400 Killsnake River near Chilton	Lat 44°03'33", long 88°08'36" in E 1/2 sec.6, T.18 N., R.20 E., Calumet County, Hydrologic Unit 04030101, at bridge on country road, 2.4 mi northeast of Cilton; drainage area, 29.4 mi ²	1961-00	2000	C	<100	03-30-79	14.37	1,840

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 2000 Maximum			Period of Record Maximum		
			Date	Gage height (feet)	Dis- charge (ft ³ /s)	Date	Gage height (feet)	Dis- charge (ft ³ /s)
STREAMS TRIBUTARY TO LAKE MICHIGAN--CONTINUED								
040854105 Mud Creek near Valders	Lat 44°02'20", long 87°54'07" in SW 1/4 SW 1/4 sec.8, T.18 N., R.22 E., Manitowoc County, Hydrologic Unit 04030101, at culvert on Marken Road, 0.8 mi south of intersection with State Highway 151, and 1.7 mi southeast of Valders.	1996-00	02-27-00	12.96	67	06-17-96	13.94	145
04086310 Mink Creek near Beechwood	Lat 43°36'15", long 88°06'01" in SE 1/4 SE 1/4 sec.9, T.13 N., R.20 E., She- boygan County, Hydrologic Unit 04040003, at bridge on County Trunk Highway S, 1.2 mi northeast of Beechwood; drainage area, 9.84 mi ² .	1996-00	02-26-00	17.10	41	06-17-96	18.33	61
04087100 Honey Creek at Milwaukee	Lat 42°58'44", long 87°59'56"(revised) in NE 1/4 SW 1/4 (revised), sec.15, T.6 N., R.21 E., Milwaukee County, Hydrologic Unit 04040003, 400 ft upstream from bridge on S. 68th Street, 6.0 mi southwest of mouth of Milwaukee River, at Milwaukee; drainage area, 3.26 mi ² .	1959-00	07-02-00	24.34	1,850	07-02-00	24.34	1,850
04087200 Oak Creek near South Milwaukee	Lat 42°52'58", long 87°53'31" on com- mon boundary of sec. 21 and 22, T.5 N., R.22 E., Milwaukee County, Hydrologic Unit 04040002, at bridge on West Nicholson Road, 3.0 mi southeast of South Milwaukee; drain- age area, 13.8 mi ² .	1958-00	07-02-00	17.74	1,360	07-02-00	17.74	1,360
04087250 Pike Creek near Kenosha	Lat 42°36'12", long 87°53'41" in W 1/2 sec.27, T.2 N., R.22 E., Kenosha County, Hydrologic Unit 04040002, at box culvert on State Highway 43, 3.0 mi northeast of Kenosha; drainage area, 7.25 mi ² .	1960-00	06-12-00	18.07	235	06-12-00	18.07	235
ST. CROIX RIVER BASIN								
05340300 Trade River near Frederic	Lat 45°37'41", long 92°29'19" in SW 1/4 sec.4, T.36 N., R.17 W., Polk County, Hydrologic Unit 07030005, at box culvert on State Highways 35 and 48, 2.5 mi southwest of Frederic; drainage area, 6.34 mi ² .	1958-00	02-26-00	10.39	95.5	06-12-84	18.89	1,050
05341313 Bull Brook near Amery	Lat 45°17'03", long 92°19'00" in SW 1/4 SE 1/4, sec.2, T.32 N., R.16 W., Polk County, Hydrologic Unit 07030005, on right bank just upstream from 32-ft concrete box culvert on County Trunk Highway F, 1.8 mi south of junction of County Trunk Highway J, and about 2.5 mi southeast of Amery; drainage area, 9.62 mi ² .	1995-00	02-26-00	11.89	201	11-17-96	12.76	228

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 2000 Maximum			Period of Record Maximum		
			Date	Gage height (feet)	Dis- charge (ft ³ /s)	Date	Gage height (feet)	Dis- charge (ft ³ /s)
ST. CROIX RIVER BASIN--CONTINUED								
05341900 Kinnickin- nic River Tributary at River Falls	Lat 44°49'57", long 92°38'23" in NE 1/4 sec.14, T.27 N., R.19 W., Pierce County, Hydrologic Unit 07030005, at bridge on County Trunk Highway FF, 1.6 mi southwest of River Falls; drainage area, 7.26 mi ² .	1959-00	07-09-00	12.56	278	08-09-88	15.99	5,200
05346294 Goose Creek at Beldenville	Lat 44°46'27", long 92°31'29" in NW 1/4 NE 1/4 sec.2, T.26 N., R.18 W., Pierce County, Hydrologic Unit 07040001, at bridge on 790th Street, 1.0 mi west of Beldenville; drainage area, 10.8 mi ² .	2000	06-20-00	<9.99	B	06-20-00	<9.99	B
05355315 Lost Creek near Waverly	Lat 44°42'10", long 92°20'16" in SE 1/4 SE 1/4 sec.29, T.26 N., R.16 W., Pierce County, Hydrologic Unit 07040001, at bridge on 465th Ave., 4.4 mi southwest of Waverly; drain- age area, 25.2 mi ² .	2000	02-25-00	11.80	683	02-25-00	11.80	683
CHIPPEWA RIVER BASIN								
05357360 Bear River near Powell	Lat 46°04'40", long 90°00'52" in NE 1/4 sec.32, T.42 N., R.4 E., Iron County, Hydrologic Unit 07050002, at bridge on State Highway 182, 3.0 mi west of Powell; drainage area, 120 mi ² .	1970-00	07-11-00	11.36	253	04-26-96 04-21-96	13.06 G13.18	730
05359600 Price Creek near Phillips	Lat 45°43'33", long 90°40'12" in SW 1/4 sec.31, T.38 N., R.2 W., Price County, Hydrologic Unit 07050002, at culvert on County Trunk Highway W, 13.0 mi west of Phillips; drainage area, 16.9 mi ² .	1958-65 1966# 1967-00	2000	C	<59	09-15-94	17.43	552
05361400 Hay Creek near Prentice	Lat 45°32'32", long 90°21'37" in SE 1/4 sec.4, T.35 N., R.1 E., Price County, Hydrologic Unit 07050004, at culvert on U.S. Highway 8, 3.5 mi west of Prentice; drainage area, 22.6 mi ² .	1961-00	06-20-00	12.54	474	09-16-94	15.39	1,650
05361420 Douglas Creek near Prentice	Lat 45°31'06", long 90°15'28" in NE 1/4 sec.17, T.35 N., R.2 E., Price County, Hydrologic Unit 07050004, at culvert on County Trunk Highway C, 2.3 mi southeast of intersection with State Highway 13 at Prentice; drainage area, 25.2 mi ² .	1970-00	06-20-00	12.40	352	09-15-94	17.66	1,620
05361989 Jump River Tributary near Jump River	Lat 45°21'08", long 90°49'23" in SW 1/4 SW 1/4 sec.12, T.33 N., R.4 W., Taylor County, Hydrologic Unit 07050004, on left bank just upstream from a 23-ft concrete box culvert at a cut-off road at Junction of Hwys 73 and I-94, 1 mi west of Jump River and 7.5 mi northeast of Sheldon; drainage area, 6.77 mi ² .	1995-00	06-20-00	11.13	113	03-29-97	11.35	139

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 2000 Maximum			Period of Record Maximum		
			Date	Gage height (feet)	Dis-charge (ft ³ /s)	Date	Gage height (feet)	Dis-charge (ft ³ /s)
CHIPPEWA RIVER BASIN--CONTINUED								
05363775 Babit Creek at Gilman	Lat 45°10'00", long 90°47'49" in NW 1/4 SW 1/4 sec.18, T.31 N., R.3 W., Taylor County, Hydrologic Unit 07050005, on right bank just upstream from a 30 ft concrete culvert on State Highway 64 at east side of Gilman; drainage area, 8.49 mi ² .	1995-00	08-15-00	12.68	332	03-28-98	12.87	367
05364000 Yellow River at Cadott	Lat 44°57'21", long 91°08'48" in NE 1/4 sec.31, T.29 N., R.6 W., Chippewa County, Hydrologic Unit 07050005, at bridge on State Highway 27, at Cadott; drainage area, 364 mi ² .	1943-61# 1962-00	09-11-00	12.08	7,000	09-22-86	15.82	16,600
05364100 Seth Creek near Cadott	Lat 44°59'24", long 91°08'48" in SW 1/4 sec.17, T.29 N., R.6 W., Chippewa County, Hydrologic Unit 07050005, at culvert on State Highway 27, 3.1 mi north of Cadott; drainage area, 3.25 mi ² .	1962-00	09-11-00	16.41	774	09-22-86	18.00	785
05364500 Duncan Creek at Bloomer	Lat 45°07'00", long 91°30'00" in sec.8, T.30 N., R.9 W., Chippewa County, Hydrologic Unit 07070005, 0.2 mi below Bloomer dam, at Bloomer; drainage area, 50.3 mi ² .	1945-51# 1958-00	07-09-00	5.84	539	06-29-79	11.81	5,400
05366500 Eau Claire River near Fall Creek	Lat 44°48'35", long 91°16'50" in NW 1/4 sec.19, T.27 N., R.7 W., Eau Claire County, Hydrologic Unit 07050006, 500 ft east of County Trunk Highway K, 3.2 mi north of Fall Creek; drainage area, 760 mi ² .	1943-55# 1958-00	06-23-00	11.52	8,860	06-20-93	19.38	24,500
05367030 Willow Creek near Eau Claire	Lat 44°44'11", long 91°26'48" on common boundary of secs. 14 and 15, T.26 N., R.9 W., Eau Claire County, Hydrologic Unit 07050005, at box culvert on State Highway 93, 4.0 mi south of Eau Claire; drainage area, 3.83 mi ² .	1958-00	07-09-00	11.05	101	07-08-59	14.12	400
053674588 Rock Creek Tributary near Canton	Lat 45°27'06", long 90°36'08" in SW 1/4 SW 1/4 sec.3, T.34 N., R.10 W., Barron County, Hydrologic Unit 07050007, 3 mi north of U.S. Hwy 8 on 27th Street, about 40 ft north of intersection of 27th Street and 17th Avenue, and 2.5 mi east and 1.7 mi north of Canton; drainage area, 6.34 mi ² .	1995-00	07-09-00	14.34	669	03-28-98	12.12	249
05367700 Lightning Creek at Almena	Lat 45°25'17", long 92°01'57" in NW 1/4 sec.19, T.34 N., R.13 W., Barron County, Hydrologic Unit 07050007, at bridge on County Trunk Highway P, at Almena; drainage area, 19.0 mi ² .	1958-00	02-26-00	12.33	447	03-30-67	12.39	1,550

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 2000 Maximum			Period of Record Maximum		
			Date	Gage height (feet)	Dis- charge (ft ³ /s)	Date	Gage height (feet)	Dis- charge (ft ³ /s)
CHIPPEWA RIVER BASIN--CONTINUED								
05370900 Spring Creek near Durand	Lat 44°34'13", long 91°57'48" in S 1/2 sec.9, T.24 N., R.13 W., Buffalo County, Hydrologic Unit 07050005, at bridge on country road, 4.0 mi south of bridge on Chippewa River at Durand; drainage area, 6.45 mi ² .	1962-00	C	<12.62	<200	08-23-75	15.71	860
BUFFALO RIVER BASIN								
05371800 Buffalo River Tributary near Osseo	Lat 44°35'01" long 91°05'40" in S 1/2 sec.3, T.24 N., R.6 W., Jackson County, Hydrologic Unit 07040003, at culvert on U.S. Highway 10, 6.5 mi east of Osseo; drainage area, 1.44 mi ² .	1960-00	07-08-00	12.24	136	09-12-78	12.85	188
05371920 Buffalo River near Mondovi	Lat 44°31'36" long 91°41'46" in SW 1/4 SE 1/4 sec.27, T.24 N., R.11 W., Buffalo County, Hydrologic Unit 07040003, at bridge on State High- way 88, 4.0 mi south of Mondovi; drainage area, 279 mi ² .	1974-00	06-01-00	12.76	1,100	09-10-75	15.39	5,180
WAUMANDEE CREEK BASIN								
05378185 Eagle Creek near Fountain City	Lat 44°12'34" long 91°40'42" in SW 1/4 NE 1/4 sec.15, T.20 N., R 11 W., Buffalo County, Hydrologic Unit 07040003, on right bank, at CTH "G" and 5.7 mi north of Fountain City; drainage area, 14.3 mi ² .	1997-00	06-01-00	7.03	334	06-27-98	9.78	623
TREMPEALEAU RIVER BASIN								
05379187 Pine Creek near Taylor	Lat 44°20'07", long 91°05'17" in NE 1/4 NE 1/4 sec.3, T.21 N., R.6 W., Jackson County, Hydrologic Unit 07040005, at bridge on Taylor Road, about 2 mi northeast of Taylor; drain- age area, 10.9 mi ² .	1996-00	06-01-00	10.22	100	06-27-98	13.69	405
05379288 Bruce Valley Creek near Pleasantville	Lat 44°26'45", long 91°21'40" in SE 1/4 NW 1/4 sec.28, T.23 N., R.8 W., Trempealeau County, Hydrologic Unit 07040005, on left bank, 100 ft upstream from bridge on CTH D, 0.9 mi upstream from Elk Creek, and 2.9 mi west of Pleasantville; drainage area, 10.1 mi ² .	1996-00	07-07-00	7.13	200	06-27-98	8.18	225
BLACK RIVER BASIN								
05380900 Poplar River near Owen	Lat 44°53'10", long 90°34'17" in NW 1/4 sec.25, T.28 N., R.2 W., Clark County, Hydrologic Unit 07040007, at bridge on County Trunk Highway N, 4.2 mi south of Owen; drainage area, 157 mi ² .	1958-65 1966# 1967-00	07-08-00	16.39	4,120	06-06-80	20.12	12,500

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 2000 Maximum			Period of Record Maximum		
			Date	Gage height (feet)	Dis- charge (ft ³ /s)	Date	Gage height (feet)	Dis- charge (ft ³ /s)
BLACK RIVER BASIN--CONTINUED								
05380970 Cawley Creek near Neillsville	Lat 44°35'42", long 90°34'31" in SW 1/4 sec.25, T.25 N., R.2 W., Clark County, Hydrologic Unit 07040007, at bridge on State Highway 73, 3.7 mi north of Neillsville; drainage area, 38.6 mi ² .	1961-00	06-01-00	17.47	3,830	09-22-86	20.62	7,880
05382200 French Creek near Ettrick	Lat 44°11'04", long 91°18'45"(revised) in NW 1/4 NW 1/4 sec.26 (revised), T.20 N., R.8 W., Trempealeau County, Hydrologic Unit 07040007, at bridge on County Trunk Highways D and T, 2.5 mi west of Ettrick; drainage area, 14.7 mi ² .	1960-00	06-01-00	12.14	2,450	06-27-98 06-01-00	12.14 12.14	2,450 2,450
BAD AXE RIVER BASIN								
05387100 North Fork Bad Axe River near Genoa	Lat 43°33'10", long 91°08'58" in SW 1/4 sec.36, T.13 N., R.7 W., Vernon County, Hydrologic Unit 07060001, at bridge on State Highway 56, 4.1 mi southeast of Genoa; drainage area, 80.8 mi ² .	1959-65 1966# 1967-00	06-01-00	15.14	1,900	08-27-59	19.59	10,000
WISCONSIN RIVER BASIN								
05391260 Gudegast Creek near Starks	Lat 45°41'41", long 89°15'42" in NW 1/4 sec.16, T.37 N., R.10 E., Oneida County, Hydrologic Unit 07070001, at corrugated culvert on country road, 3.0 mi northwest of Starks; drainage area, 14.0 mi ² .	1970-00	07-09-00	11.95	80	05-09-90	13.33	130
05391950 Squaw Creek near Harrison	Lat 45°32'47" long 89°29'16" in SW 1/4 sec.3, T.35 N., R.8 E., Lincoln County, Hydrologic Unit 07070001, at culvert on County Trunk Highway A, 5.0 mi northeast of Harrison.; drainage area, 3.23 mi ² .	1970-00	04-21-00	10.61	21.4	03-03-87	11.35	F51
05392150 Mishonagon Creek near Woodruff	Lat 45°54'41", long 89°45'30" in NE 1/4 sec.32, T.40 N., R.6 E., Vilas County, Hydrologic Unit 07070001, at Twin culverts on Site Highway 47, 3.0 mi northwest of Woodruff; drain- age area, 17.6 mi ² .	1958-00	02-27-00	10.18	69.4	08-17-72	11.33	117
05392350 Bearskin Creek near Harshaw	Lat 45°38'43", long 89°41'12" in SW 1/4 sec.36, T.37 N., R.6 E., Oneida County, Hydrologic Unit 07070001, at culvert on County Trunk Highway K, 2.1 mi southwest of Harshaw; drainage area, 31.1 mi ² .	1958-65 1966# 1967-00	07-10-00	10.78	165	06-14-81	10.97	180
05393640 Little Pine Creek near Irma	Lat 45°23'37", long 89°40'20" in NW 1/4 sec.31, T.34 N., R.7 E., Lincoln County, Hydrologic Unit 07070002, at box culvert on U.S. Highway 51, 3.0 mi north of Irma; drainage area, 22.0 mi ² .	1970-00	09-12-00	12.07	B	06-14-81	14.38	310

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 2000 Maximum			Period of Record Maximum		
			Date	Gage height (feet)	Dis-charge (ft ³ /s)	Date	Gage height (feet)	Dis-charge (ft ³ /s)
WISCONSIN RIVER BASIN--CONTINUED								
05394200 Devil Creek near Merrill	Lat 45°08'56", long 89°47'13" in N 1/2 sec.30, T.31 N., R.6 E., Lincoln County, Hydrologic Unit 07070002, at culvert on County Trunk Highway F, 5.8 mi southwest of Merrill; drainage area, 9.58 mi ² .	1961-00	02-29-00	12.51	225	06-13-90	17.98	1,600
05395020 Lloyd Creek near Doering	Lat 45°13'57", long 89°22'04" in SE 1/4, T.32 N., R.9 E., Langlade County, Hydrologic Unit 07070002, at bridge on County Trunk Highway C, 4.5 mi east of Doering; drainage area, 7.80 mi ² .	1970-00	07-10-00	13.52	480	06-13-90	>16.00	>1,000
05395100 Trappe River Tributary near Merrill	Lat 45°08'07" long 89°30'08" in SW 1/4 sec.28, T.31 N., R.8 E., Lincoln County, Hydrologic Unit 07070002, at culvert on County Trunk Highway P, 9.5 mi southeast of Merrill; drainage area, 1.58 mi ² .	1959-00	02-29-00	11.30	30	08-15-95	17.79	396
05396300 Wisconsin River Tributary at Wausau	Lat 44°57'28", long 89°39'52" in NE 1/4 NW 1/4 sec.34, T.29 N., R.7 E., Marathon County, Hydrologic Unit 07070002, on road right-of-way of 24th Avenue opposite the Ace Motel, 300 ft east of U.S. Highway 51, at Wausau; drainage area, 1.10 mi ² .	1982-00	06-21-00	7.12	322	06-12 or 13-90	9.11	740
05397600 Big Sandy Creek near Wausau	Lat 45°01'55", long 89°27'00" in SE 1/4 sec.31, T.30 N., R.9 E., Marathon County, Hydrologic Unit 07070002, at bridge on State Highway 52, 10.0 mi northeast of Wausau; drainage area, 11.5 mi ² .	1959-00	07-10-00	12.55	540	09-27-59	15.18	2,120
05400025 Johnson Creek near Knowlton	Lat 44°44'19", long 89°36'39" in SE 1/4 NE 1/4 sec.13, T.26 N., R.7 E., Marathon County, Hydrologic Unit 07070002, at bridge on County Trunk Highway X, 2.7 mi east of Knowlton; drainage area, 25.1 mi ² .	1973-00	06-02-00	13.63	370	06-06-80	21.78	3,700
05401800 Yellow River Tributary near Pittsville	Lat 44°28'58", long 90°07'05" on common boundary of secs.11 and 14, T.23 N., R.3 E., Wood County, Hydrologic Unit 07070003, at bridge on County Trunk Highway C, 2.0 mi north of Pittsville; drainage area, 7.23 mi ² .	1959-00	09-11-00	12.44	430	05-02-73	13.82	810
05403700 Dell Creek near Lake Delton	Lat 43°33'05" long 89°51'55" in NW 1/4 sec.2, T.12 N., R.5 E., Sauk County, Hydrologic Unit 07070003, on right bank 50 ft upstream from highway bridge, 6.0 mi southwest of Lake Delton, and 7.0 mi upstream from mouth; drainage area, 44.9 mi ² .	1957-65# 1966-70 1971-80# 1983-00	06-01-00	8.07	588	09-14-92	9.80	1,200
05405600 Rowan Creek at Poynette	Lat 43°23'13", long 89°23'25" in S 1/2 sec.35, T.11 N., R.9 E., Columbia County, Hydrologic Unit 07070005, at bridge on U.S. Highway 51, at Poynette; drainage area, 10.4 mi ² .	1961-00	06-01-00 02-11-99	15.65 11.06	975 F90	09-09-65	17.90	2,260

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 2000 Maximum			Period of Record Maximum		
			Date	Gage height (feet)	Dis- charge (ft ³ /s)	Date	Gage height (feet)	Dis- charge (ft ³ /s)
WISCONSIN RIVER BASIN--CONTINUED								
054062391 Otter Creek near Prairie du Sac	Lat 43°22'22", long 89°47'47" in SW 1/4 NW 1/4 sec.4, T.10 N., R.6 E., Sauk County, Hydrologic Unit 07070005, at bridge on Kings Corner Road, 6.0 mi north, northwest of Prairie du Sac; drainage area, 4.75 mi ² .	1996-00	06-01-00	19.90	3,680	06-01-00	19.90	3,680
			04-09-99	15.62	200			
			03-31-98	16.40	356			
			05-01-97	13.28	112			
			06-17-96	16.45	371			
05406605 Lowery Creek near Spring Green	Lat 43°08'00", long 90°03'52" in SE 1/4 SE 1/4 SW 1/4 sec.30, T.8 N., R.4 E., Iowa County, Hydrologic Unit 07070005, on CTH T, 3.0 mi south of Spring Green; drainage area, 8.76 mi ² .	1996-00	06-01-00	16.42	780	06-01-00	16.42	780
			04-23-99	12.08	135			
			06-28-98	13.14	251			
			02-18-97	11.35	73			
			06-17-96	11.74	104			
05407039 Fennimore Fork near Fennimore	Lat 43°01'40", long 90°33'47" in NE 1/4 SW 1/4 NW 1/4 sec.1, T.6 N., R.2 W., Grant County, Hydrologic Unit 07070005, on Blue School Road, 5.6 mi northeast of Fennimore; drainage area, 15.3 mi ² .	1996-00	06-01-00	16.70	1,160	06-01-00	16.70	1,160
			05-17-99	13.12	380			
			03-31-98	11.81	210			
			02-19-97	H13.85	E440			
			--	<10.03	<67			
05407200 Crooked Creek near Boscobel	Lat 43°06'27", long 90°42'18" in SW 1/4 SW 1/4 sec.2, T.7 N., R.3 W., Grant County, Hydrologic Unit 07070005, at bridge on U.S. High- way 61, 1.6 mi south of Boscobel; drainage area, 12.9 mi ² .	1959-00	06-01-00	15.58	1,440	07-27-64	18.21	2,460
GRANT RIVER BASIN								
05413400 Pigeon Creek near Lancaster	Lat 42°49'00", long 90°43'20" in SW 1/4 sec.15, T.4 N., R.3 W., Grant County, Hydrologic Unit 07060003, at culvert on country road, 2.0 mi south of Lancaster; drainage area, 6.93 mi ² .	1960-65 1966# 1967-00	06-01-00	13.10	1,000	01-24-67	20.85	2,800
PLATTE RIVER BASIN								
05414213 Little Platte River near Platteville	Lat 42°43'23", long 90°31'41" in NE 1/4 NE 1/4 sec.19, T.3 N., R.1 W., Grant County, Hydrologic Unit 07060003, on left bank 150 ft upstream from Stumptown Road, 2.6 mi southwest of Post Office in Plat- teville; drainage area, 79.7 mi ² .	1987-90# 1991-00	06-01-00	17.60	9,200	06-01-00	17.60	9,200
GALENA RIVER BASIN								
05414900 Pats Creek near Elk Grove	Lat 42°40'03", long 90°22'40" in SW 1/4 sec.4, T.2 N., R.1 E., Lafayette County, Hydrologic Unit 07060005, at bridge on State Highway 81, 7.0 mi southeast of Platteville; drainage area, 8.50 mi ² .	1960-00	06-01-00	17.17	6,600	06-29-69	17.32	7,040

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 2000 Maximum			Period of Record Maximum		
			Date	Gage height (feet)	Dis- charge (ft ³ /s)	Date	Gage height (feet)	Dis- charge (ft ³ /s)
ROCK RIVER BASIN								
05425806 Mud Creek near Danville	Lat 43°17'06", long 88°56'54" in NW 1/4 NW 1/4 NW 1/4 sec.3, T.9 N., R.13 E., Dodge County, Hydrologic Unit 07090002, at bridge on Burr Oak Road, 2.5 mi south of Danville; drainage area, 12.3 mi ² .	1995-00	06-02-00 04-23-99 03-31-98 02-21-97 06-17-96 08-10-95	16.33 15.92 15.51 15.54 16.29 16.45	396 342 294 297 390 265	06-02-00	16.33	396
05430403 Fisher Creek Tributary at Janesville	Lat 42°40'18", long 89°03'31" in SW 1/4 SE 1/4 sec.34, T.3 N., R.12 E., Rock County, Hydrologic Unit 07090001, at culvert on Rockport Road, 0.4 mi west of South Crosby Avenue and 0.6 mi upstream from County Trunk Highway D, at Janes- ville; drainage area, 1.42 mi ² .	1982-00	06-01-00	7.00	279	06-25-98	8.23	419
05431400 Little Turtle Creek at Allens Grove	Lat 42°34'46", long 88°45'33" in NE 1/4 sec.6, T.1 N., R.15 E., Walworth County, Hydrologic Unit 07090001, at bridge on country road, 0.2 mi south of Allens Grove; drainage area, 42.4 mi ² .	1962-00	06-12-00	13.24	1,800	04-21-73	18.28	8,400
05432055 Livingston Branch Pecatonica River near Livingston	Lat 42°54'01", long 90°22'23", in SW 1/4 SE 1/4 sec.16, T.5 N., R.1 E., Iowa County, Hydrologic Unit 07090003, on the left bank 75 ft upstream from Enloe Road and 2.7 mi east of Livingston; drainage area, 16.4 mi ² .	1987-91# 1996-00	06-14-00	9.74	1,890	06-29-90	13.49	6,260
05432300 Rock Branch near Mineral Point	Lat 42°50'02", long 90°09'15" in SE 1/4 sec.8, T.4 N., R.3 E., Iowa County, Hydrologic Unit 07090003, at box culvert on State Highway 23, 2.5 mi south of Mineral Point; drainage area, 4.83 mi ² .	1959-00	06-01-00	H11.03	78	07-05-93	22.63	3,100
05433500 Yellowstone River near Blanchard- ville	Lat 42°46'55", long 89°59'50" in NE 1/4 sec.34, T.4 N., R.4 E., Lafayette County, Hydrologic Unit 07090003, 0.6 mi upstream from bridge on County Trunk Highway F, 7.0 mi west-southwest of Blanchardville; drainage area, 28.5 mi ² .	1954-65# 1966-00	06-01-00	9.73	2,920	06-29-90	11.40	8,500
05436200 Gill Creek near Brooklyn	Lat 42°49'38", long 89°26'43" in NW 1/4 sec.16, T.4 N., R.9 E., Green County, Hydrologic Unit 07090004, at culvert on State Highway 92, 4.3 mi west of Brooklyn; drainage area, 3.33 mi ² .	1961-00	06-01-00	14.55	204	05-17-99	17.85	960
ILLINOIS RIVER BASIN								
05545100 Sugar Creek at Elkhorn	Lat 42°41'05", long 88°30'50" in SW 1/4 sec.29, T.3 N., R.17 E., Walworth County, Hydrologic Unit 07120006, at culvert on State Highway 11, 2.0 mi northeast of Elkhorn; drainage area, 6.63 mi ² .	1962-00	06-01-00	12.36	153	04-21-73	17.47	900

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 2000 Maximum			Period of Record Maximum		
			Date	Gage height (feet)	Dis- charge (ft ³ /s)	Date	Gage height (feet)	Dis- charge (ft ³ /s)
ILLINOIS RIVER BASIN--CONTINUED								
05545200 White River Tributary near Burl- ington	Lat 42°41'01", long 88°21'41"(revised) in SW 1/4 SW 1/4, sec. 27 (revised), T.3 N., R.18 E., Walworth County, Hydrologic Unit 07120006, at box culvert on State Highway 11, 4.5 mi west of Burlington; drainage area, 2.42 mi ² .	1958-00	06-01-00	12.39	150	06-13-99	14.77	354
05548150 North Branch Nippersink Creek near Genoa City	Lat 42°30'15", long 88°23'01" in SW 1/4 NW 1/4 sec.33, T.1 N., R.18 E., Walworth County, Hydrologic Unit 07120006, at bridge on County Trunk Highway B, 3.0 mi west of Genoa City; drainage area, 13.6 mi ² .	1962-00	06-12-00	14.18	563	06-12-00	14.18	563

Operated as a continuous-record station

B Discharge not determined

C Peak not recorded

D Backwater

E Estimated

F Revised

G Backwater from ice

H Downstream gage

Discharge at Miscellaneous sites

Measurements of streamflow at points other than gaging stations or partial-record stations are given in the following table.

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Dis- charge (ft ³ /s)
STREAMS TRIBUTARY TO LAKE SUPERIOR						
Sioux River	Lake Superior	Lat 46°39'16", long 91°00'36", in SE 1/4 NE 1/4 sec.8, T.48 N., R.5 W., Bayfield County, Hydrologic Unit 04010301, at Paulson Road, 5.2 mi west of Washburn.	2.51	1999	04/05/00 08/03/00	1.34 0.0123
Boyd Creek	Lake Superior	Lat 46°29'14", long 90°58'09", in NE 1/4 SE 1/4 sec.22, T.48 N., R.5 W., Bayfield County, Hydrologic Unit 04010301, at town road 4.5 mi northwest of Courthouse in Ashland.	3.13	1975-77 1999	04/05/00 08/03/00	1.08 0.00188
Boyd Creek	Lake Superior	Lat 46°36'51", long 90°56'24", in NE 1/4 NW 1/4 sec.25, T.48 N., R.5 W., Bayfield County, Hydrologic Unit 04010301, at Hwy 13, 3.0 mi northwest of Ashland.	3.85	1999	04/05/00 08/03/00	1.94 0.138
Whittlesey Creek	Lake Superior	Lat 46°36'24", long 91°03'15", in NW 1/4 SW 1/4 sec.30, T.48 N., R.5 W., Bayfield County, Hydrologic Unit 04010301, 2.8 mi northeast of Moquah.	--	--	08/03/00	0.0262
Whittlesey Creek	Lake Superior	Lat 46°36'18", long 91°02'40", in SE 1/4 SW 1/4 sec.30, T.48 N., R.5 W., Bayfield County, Hydrologic Unit 04010301, 2.95 mi northeast of Moquah.	1.20	1999	08/03/00	0.0687
Whittlesey Creek	Lake Superior	Lat 46°36'14", long 91°02'36", in SE 1/4 SW 1/4 sec.30, T.48 N., R.5 W., Bayfield County, Hydrologic Unit 04010301, 3.0 mi northeast of Moquah.	1.68	--	04/05/00 08/03/00	0.749 0.0957
Whittlesey Creek	Lake Superior	Lat 46°36'07", long 91°00'03", in SE 1/4 SW 1/4 sec.28, T.48 N., R.5 W., Bayfield County, Hydrologic Unit 04010301, 4.45 mi northeast of Moquah.	3.47	1999	08/02/00	0.0233
Whittlesey Creek	Lake Superior	Lat 46°35'55", long 90°59'43", in NE 1/4 NE 1/4 sec.33, T.48 N., R.5 W., Bayfield County, Hydrologic Unit 04010301, 5.3 mi west of Ashland.	3.70	1999	04/05/00 08/02/00	2.16 1.09
Whittlesey Creek Tributary	Whittlesey Creek	Lat 46°35'54", long 90°59'39", in NE 1/4 NE 1/4 sec.33, T.48 N., R.5 W., Bayfield County, Hydrologic Unit 04010301, 5.25 mi west of Ashland.	0.505	1999	04/05/00 08/02/00	0.107 0.0995

STREAMS TRIBUTARY TO LAKE SUPERIOR--CONTINUED

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Dis- charge (ft ³ /s)
STREAMS TRIBUTARY TO LAKE SUPERIOR--CONTINUED						
Whittlesey Creek	Lake Superior	Lat 46°35'41", long 90°57'17", in SE 1/4 NE 1/4 sec.35, T.48 N., R.5 W., Bayfield County, Hydrologic Unit 04010301, at State Highway 13, 3.6 mi west of Ashland.	7.47	1950	04/05/00	19.8
				1970	08/02/00	18.4
				1999		
Whittlesey Creek Tributary	Whittlesey Creek	Lat 46°35'49", long 90°58'07", in SW 1/4 NW 1/4 sec.35, T.48 N., R.5 W., Bayfield County, Hydrologic Unit 04010301, at town road, 4.0 mi east of Ashland.	0.930	1972-77	04/05/00	0.888
				1988	08/03/00	0.542
				1999		
Whittlesey Creek Tributary	Whittlesey Creek	Lat 46°35'51", long 90°57'17", in SW 1/4 NE 1/4 sec.35, T.48 N., R.5 W., Bayfield County, Hydrologic Unit 04010301, at State Highway 13, 3.6 mi west of Ashland.	1.29	1999	04/05/00	1.08
					08/03/00	0.776
North Fish Creek Tributary	North Fish Creek	Lat 46°34'44", long 91°00'44", in NE 1/4 SE 1/4 sec.5, T.47 N., R.5 W., Bayfield County, Hydrologic Unit 04010301, at County Highway G, 3.4 mi east of Moquah.	1.77	1999	04/05/00	0.0609
					08/03/00	0.0
North Fish Creek	Fish Creek	Lat 46°34'45", long 90°57'55", in NW 1/4 SW 1/4 sec.2, T.47 N., R.5 W., Bayfield County, Hydrologic Unit 04010301, at U.S. Highway 2, 3.9 mi west of Ashland.	47.4	1967	04/05/00	94.1
				1969-71999	08/02/00	75.9
Unnamed Tribu- tary to Lake Superior	Lake Superior	Lat 46°35'24", long 90°57'56", in SW 1/4 SW 1/4 sec.35, T.48 N., R.5 W., Bayfield County, Hydrologic Unit 04010301, at Terwilliger Road, 3.8 mi west of Ashland.	2.00	1999	04/05/00	0.428
					08/03/00	0.0512
STREAMS TRIBUTARY TO LAKE MICHIGAN						
Peshtigo River	Lake Michigan	Lat 45°21'28", long 88°13'14", in NW 1/4 NW 1/4 sec.11, T.33 N., R.18 E., Marinette County, Hydrologic Cunit 04030105, at bridge on Parkway Road, 0.5 mi downstream from Caldron Falls Dam, 7.7 mi southwest of Athelstane.	466	1999	08/09/00	71.9
					08/09/00	43.0
					08/09/00	49.1
Trout Creek	Duck Creek	Lat 44°32'10", long 88°07'48", in NE 1/4 SE 1/4 sec.24, T.24 N., R.19 E., Brown County, Hydrologic Unit 04030103, at culvert on County Highway FF, 2.2 mi southwest of Howard.	15.4	1969	08/25/99	0.92
				1976	12/20/99	1.38
				1997-98	01/20/00	1.45
					04/12/00	2.15
					04/21/00	14.1
					09/21/00	1.73
Lancaster Brook	Duck Creek	Lat 44°33'29", long 88°06'10", in NE 1/4 NW 1/4 sec.17, T.24 N., R.20 E., Brown County, Hydrologic Unit 04030103, at Shawano Avenue at Howard.	--	1997-98	03/10/99	2.69
					08/25/99	0.68
					12/20/99	1.38
					04/12/00	1.93
					04/21/00	19.1
					08/11/00	1.45
	09/21/00	2.08				

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Dis- charge (ft ³ /s)
CHIPPEWA RIVER BASIN						
Sugarbush Creek	Little Bear Creek	Lat 45°02'24", long 89°54'57", in SW 1/4 SW 1/4 SE 1/4 sec.7, T.41 N., R.5 E., Vilas County, Hydrologic Unit 07050002, at Lower Sugarbush Road, about 4 mi north of Lac du Flambeau.	--	--	06/14/00 07/21/00	2.99 4.7
Little Bear Creek	Bear River	Lat 46°04'46", long 89°57'16", in NE 1/4 SW 1/4 NE 1/4 sec.35, T.42 N., R.4 E., Vilas County, Hydrologic Unit 07050002, at outlet to small impoundment about 1 mi southeast of Powell.	--	--	06/14/00 07/21/00	0.96 1.03
Outlet of pool just south of Vista Pool	Unnamed Tributary to Dead Pike Lake	Lat 46°05'20", long 89°53'59", in SE 1/4 SE 1/4 SW 1/4 sec.29, T.42 N., R.5 E., Vilas County, Hydrologic Unit 07050002, about 0.5 mi south of Powell Road, about 3.5 mi south of Manitowish Waters.	--	--	07/20/00	1.46
Vista Pool Outlet	Unnamed Tributary to Dead Pike Lake	Lat 46°05'34", long 89°54'54", in NE 1/4 SE 1/4 NW 1/4 sec.29, T.42 N., R.5 E., Vilas County, Hydrologic Unit 07050002, about 1.0 mi south of Powell Road, about 3 mi south of Manitowish Waters.	--	--	07/20/00	1.07
Unnamed Stream from Powell Marsh	Dead Pike Lake	Lat 46°05'37", long 89°54'18", in NE 1/4 SW 1/4 NW 1/4 sec.29, T.42 N., R.5 E., Vilas County, Hydrologic Unit 07050002, at Powell Road, about 3 mi south of Manitowish Waters.	--	--	06/15/00 07/20/00	0.92 3.35
Lost Creek	Little Bear Creek	Lat 46°06'27", long 89°55'14", in SW 1/4 SE 1/4 NW 1/4 sec.19, T.42 N., R.5 E., Vilas County, Hydrologic Unit 07050002, at trail crossing about 0.5 mi north of Powell Road, and about 0.6 mi downstream of Dead Pike Lake.	--	--	06/15/00 07/21/00	2.35 8.12
Lost Creek	Little Bear Creek	Lat 46°05'38", long 89°57'56", in NE 1/4 SW 1/4 NW 1/4 sec.26, T.42 N., R.4 E., Vilas County, Hydrologic Unit 07050002, at abandon railroad crossing about 0.6 mi northwest of Powell.	--	--	06/14/00 07/21/00	14.2 7.04
Lost Creek	Little Bear Creek	Lat 46°04'59", long 89°58'36", in NE 1/4 NW 1/4 NE 1/4 sec.34, T.42 N., R.4 E., Vilas County, Hydrologic Unit 07050002, at abandon railroad crossing about 1.2 mi southwest of Powell.	--	--	06/14/00 07/21/00	8.84 7.69

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Dis- charge (ft ³ /s)
CHIPPEWA RIVER BASIN--CONTINUED						
Allequash Creek, Site 3	Trout River	Lat 46°01'58", long 89°36'28", in NE 1/4 SW 1/4 sec.15, T.41 N., R.7 E., Vilas County, Hydrologic Unit 07050002, upstream of bridge on unnamed road, near Boulder Junction.	--	1992-1999	05/05/00	2.95
					07/05/00	2.48
					09/07/00	2.95
Little John Lake Tributary	Allequash Creek	Lat 46°01'29", long 89°39'00", in NE 1/4 NW 1/4 sec.20, T.41 N., R.7 E., Vilas County, Hydrologic Unit 07050002, at confluence with Allequash Creek, near Boulder Junction.	--	1992-1999	05/04/00	0.90
					07/06/00	9.57
					09/07/00	0.29
North Creek	Trout River	Lat 46°04'43", long 89°40'02", in SW 1/4 NE 1/4 sec.31, T.42 N., R.7 E., Vilas County, Hydrologic Unit 07050002, at inlet to Trout Lake, 2.6 mi southwest of Boulder Junction.	3.58	1992-96 1999-1999	05/02/00	1.07
					06/29/00	4.77
					09/06/00	3.41
Mann Creek	Trout River	Lat 46°00'41", long 89°40'33", in NW 1/4 NW 1/4 sec.30, T.41 N., R.7 E., Vilas County, Hydrologic Unit 07050002, at County Trunk Highway N, near Boulder Junction.	--	1991-96 1999-1999	05/04/00	0.60
					06/29/00	2.09
					09/07/00	1.65
Red Cedar River	Chippewa River	Lat 45°39'33", long 91°33'36", in NW 1/4 NW 1/4 SW 1/4 sec. 25, T.37 N., R.10 W., Washburn County, Hydrologic Unit 07050007, at culvert on County Trunk D at Birchwood.	70.8	1972-74 1976-77	09/29/00	16.1
Sucker Creek	Red Cedar Lake	Lat 45°37'30", long 91°33'47", in SE 1/4 SE 1/4 SE 1/4 sec. 22, T.36 N., R.10 W., Barron County, Hydrologic Unit 07050007, about 1/4 mi upstream from mouth of Red Cedar Lake and 2.2 mi south of Birchwood.	--	--	9/29/00	0.70
Hemlock Creek	Red Cedar River	Lat 45°34'27", long 91°30'46", in SE 1/4 SE 1/4 NW 1/4 sec. 29, T.36 N., R.9 W., Rusk County, Hydrologic Unit 07050007, at Murphy Dam and 4.5 mi east of Mikana.	20.4	1988	9/29/00	7.20
Red Cedar River	Chippewa River	Lat 45°35'21", long 91°36'06", in SE 1/4 SE 1/4 NE 1/4 sec. 21, T.36 N., R.10 W., Barron County, Hydrologic Unit 07050007, outlet Red Cedar Lake at Mikana.	151	1967 1972 1977	9/29/00	44.3

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Dis-charge (ft ³ /s)
WISCONSIN RIVER BASIN						
Muskellunge Creek	Wisconsin River	Lat 45°57'06", long 89°23'24", in NE 1/4 NE 1/4 sec. 17, T.40 N., R.9 E., Vilas County, Hydrologic Unit 07070001, at Muskellunge Lake Outlet about 5.7 mi northeast of St. Germain.	4.49	--	12/28/99	2.31
					01/27/00	2.05
					03/07/00	3.09
					05/03/00	2.85
					06/06/00	1.93
					07/20/00	3.51
					08/17/00	3.01
Muskellunge Creek	Wisconsin River	Lat 45°56'52", long 89°24'10", in NW 1/4 SW 1/4 sec. 17, T.40 N., R.9 E., Vilas County, Hydrologic Unit 07070001, at trail crossing about 0.6 mi southwest of Muskellunge Lake and about 5.1 mi northeast of St. Germain.	--	--	12/28/99	3.02
					01/27/00	3.83
					03/07/00	4.18
					05/03/00	3.78
					06/06/00	2.34
					07/20/00	4.45
Muskellunge Creek	Wisconsin River	Lat 45°56'00", long 89°25'28", in NW 1/4 SW 1/4 sec. 19, T.40 N., R.9 E., Vilas County, Hydrologic Unit 07050002, on town road, 3.7 mi northeast of St. Germain.	--	1979	12/28/99	3.06
					01/27/00	5.06
					03/07/00	
				1996	12/28/99	4.81
					01/27/00	4.89
					03/01/00	7.88
					03/07/00	6.42
					05/03/00	5.24
					06/06/00	4.37
					07/20/00	7.62
					08/17/00	7.67
Little St. Germain Creek	Wisconsin River	Lat 45°53'55", long 89°27'10", in SW 1/4 SE 1/4 sec. 35, T.40 N., R.8 E., Vilas County, Hydrologic Unit 07050001, just upstream of State Highway 70 about 1 1/4 mi east of St. Germain.	--	1999	10/06/99	8.84
					12/02/99	14.8
					12/28/99	14.34
					01/27/00	21.8
					03/07/00	6.16
					05/03/00	8.71
					07/20/00	10.7
					08/17/00	18.14
Baraboo River	Wisconsin River	Lat 43°28'47", long 89°54'49", in SW 1/4 NW 1/4 sec. 33, T.12 N., R.5 E., Sauk County, Hydrologic Unit 07050001, at bridge on State Highway 136, at Rock Springs.	484	--	03/30/99	265
					05/19/00	1,190

[illegible]

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Dis- charge (ft ³ /s)
ROCK RIVER BASIN--CONTINUED						
Thompson Branch	Token Creek	Lat 43°11'42", long 89°18'11", in SW 1/4 SW 1/4 sec.34, T.9 N., R.10 E., Dane County, Hydrologic Unit 07090001, at State Highway 19, 0.5 mi west of Token Creek.	4.97	--	06/12/00 06/14/00 06/23/00 07/10/00 07/21/00 08/04/00 08/18/00 09/01/00 09/17/00 09/29/00	0.20 0.74 0.22 2.22 0.07 0.08 0.07 0.08 0.10 0.14
Token Creek	Yahara River	Lat 43°10'52", long 89°19'28", in SW 1/4 SW 1/4 sec.4, T.8 N., R.10 E., Dane County, Hydrologic Unit 07090001, at U.S. Highway 51, 8.0 mi northeast of Madison.	24.3	(a)	06/08/00 06/14/00 06/26/00 07/10/00 07/21/00 08/04/00 08/18/00 09/01/00 09/17/00 09/29/00	33.6 169 27.1 48.6 22.4 21.7 25.3 22.5 22.7 21.6

(a) Continuous-record station 1975-80

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

STREAMS TRIBUTARY TO LAKE MICHIGAN

BED MATERIAL ANALYSES

DATE	TIME	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB
		CONGENR	CONGENR	CONGENR	CONGENR	CONGENR	CONGENR	CONGENR	CONGENR	CONGENR	CONGENR
		101,	105,	118,	123,	126,	128,	136,	141,	146,	151,
		BM <2MM	BM <2MM	BM <2MM	BM <2MM	BM <2MM	BM <2MM	BM <2MM	BM <2MM	BM <2MM	BM <2MM
		REC	REC	REC	REC	REC	REC	REC	REC	REC	REC
		(NG/G)	(NG/G)	(NG/G)	(NG/G)	(NG/G)	(NG/G)	(NG/G)	(NG/G)	(NG/G)	(NG/G)
		(62413)	(62414)	(62415)	(62416)	(62418)	(62419)	(62422)	(62424)	(62425)	(62426)
		04072031	DUCK CREEK NEAR FREEDOM, WI (LAT 44 24 04N LONG 088 16 43W)								
AUG 1999											
27...	1000	<.25	<.20	<.30	<.20	<.20	<.20	<.45	<.15	<.30	<.20
		04072070	SILVER CREEK AT CNTY TRNK HIGHWAY U NEAR ONEIDA,W(LAT 44 28 41N LONG 088 11 25W)								
AUG 1999											
26...	1045	<.25	<.20	<.30	<.20	<.20	<.20	<1.10	<.15	<.30	<.20
		04072076	SILVER CREEK AT FLORIST DRIVE AT ONEIDA, WI (LAT 44 29 24N LONG 088 10 52W)								
AUG 1999											
27...	0800	<.25	<.20	<.30	<.20	<.20	<.20	<.45	<.15	<.30	<.20
		04072078	SILVER CREEK AT VALLEY ROAD CULVERT AT ONEIDA, W(LAT 44 29 34N LONG 088 10 43W)								
AUG 1999											
26...	1645	<.25	<.20	<.30	<.20	<.20	<.20	<.45	<.15	<.30	<.20
		04072100	SILVER CREEK AT HIGHWAY 54 NEAR ASHWAUBENON, WI (LAT 44 30 42N LONG 088 09 04W)								
AUG 1999											
26...	1300	<.25	<.20	<.30	<.20	<.20	<.20	<.45	<.15	<.30	<.20
		04072150	DUCK CREEK NEAR HOWARD, WI (LAT 44 32 01N LONG 088 07 46W)								
AUG 1999											
27...	1400	<.25	<.20	<.30	<.20	<.20	<.20	<.45	<.15	<.30	<.20
		04072217	DUCK CREEK SITE NO. 1 NEAR PAMPERIN PARK (LAT 44 32 41N LONG 088 06 09W)								
AUG 1999											
27...	1600	<.25	<.20	<.30	<.20	<.20	<.20	<1.00	<.15	<.30	<.20
DATE		PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB
		CONGENR	CONGENR	CONGENR	CONGENR	CONGENR	CONGENR	CONGENR	CONGENR	CONGENR	CONGENR
		156,	157,	158,	167,	169,	172,	174,	177,	178,	18,
		BM <2MM	BM <2MM	BM <2MM	BM <2MM	BM <2MM	BM <2MM	BM <2MM	BM <2MM	BM <2MM	BM <2MM
		REC	REC	REC	REC	REC	REC	REC	REC	REC	REC
		(NG/G)	(NG/G)	(NG/G)	(NG/G)	(NG/G)	(NG/G)	(NG/G)	(NG/G)	(NG/G)	(NG/G)
		(62427)	(62428)	(62429)	(62431)	(62432)	(62434)	(62435)	(62436)	(62437)	(62376)
		04072031	DUCK CREEK NEAR FREEDOM, WI (LAT 44 24 04N LONG 088 16 43W)								
AUG 1999											
27...	<.20	<.20	<.30	<.30	<.20	<.20	<.20	<.20	<.20	<.20	<.20
		04072070	SILVER CREEK AT CNTY TRNK HIGHWAY U NEAR ONEIDA,W(LAT 44 28 41N LONG 088 11 25W)								
AUG 1999											
26...	<.20	<.20	<.30	<.30	<.20	<.20	<.20	<.20	<.20	<.20	<.20
		04072076	SILVER CREEK AT FLORIST DRIVE AT ONEIDA, WI (LAT 44 29 24N LONG 08								

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued

BED MATERIAL ANALYSES

DATE	PCB CONGENR 183, BM <2MM REC (NG/G) (62439)	PCB CONGENR 185, BM <2MM REC (NG/G) (62440)	PCB CONGENR 19, BM <2MM REC (NG/G) (62377)	PCB CONGENR 193, BM <2MM REC (NG/G) (62442)	PCB CONGENR 194, BM <2MM REC (NG/G) (62443)	PCB CONGENR 198, BM <2MM REC (NG/G) (62444)	PCB CONGENR 199, BM <2MM REC (NG/G) (62445)	PCB CONGENR 201, BM <2MM REC (NG/G) (62446)	PCB CONGENR 206, BM <2MM REC (NG/G) (62449)	PCB CONGENR 207, BM <2MM REC (NG/G) (62450)	PCB CONGENR 22, BM <2MM REC (NG/G) (62380)
04072031 DUCK CREEK NEAR FREEDOM, WI (LAT 44 24 04N LONG 088 16 43W)											
AUG 1999 27...	<.20	<.20	<.20	<.20	<.15	<.15	<.20	<.20	<.15	<.20	<.30
04072070 SILVER CREEK AT CNTY TRNK HIGHWAY U NEAR ONEIDA,W(LAT 44 28 41N LONG 088 11 25W)											
AUG 1999 26...	<.20	<.20	<.20	<.20	<.15	<.15	<.20	<.20	<.15	<.20	<.30
04072076 SILVER CREEK AT FLORIST DRIVE AT ONEIDA, WI (LAT 44 29 24N LONG 088 10 52W)											
AUG 1999 27...	<.20	<.20	<.20	<.20	<.15	<.15	<.20	<.20	<.15	<.20	<.30
04072078 SILVER CREEK AT VALLEY ROAD CULVERT AT ONEIDA, W(LAT 44 29 34N LONG 088 10 43W)											
AUG 1999 26...	<.20	<.20	<.20	<.20	<.15	<.15	<.20	<.20	<.15	<.20	<.30
04072100 SILVER CREEK AT HIGHWAY 54 NEAR ASHWAUBENON, WI (LAT 44 30 42N LONG 088 09 04W)											
AUG 1999 26...	<.20	<.20	<.20	<.20	<.15	<.15	<.20	<.20	<.15	<.20	<.30
04072150 DUCK CREEK NEAR HOWARD, WI (LAT 44 32 01N LONG 088 07 46W)											
AUG 1999 27...	<.20	<.20	<.20	<.20	<.15	<.15	<.20	<.20	<.15	<.20	<.30
04072217 DUCK CREEK SITE NO. 1 NEAR PAMPERIN PARK (LAT 44 32 41N LONG 088 06 09W)											
AUG 1999 27...	<.20	<.20	<.20	<.20	<.15	<.15	<.20	<.20	<.15	<.20	<.30
DATE	PCB CONGENR 25, BM <2MM REC (NG/G) (62381)	PCB CONGENR 26, BM <2MM REC (NG/G) (62382)	PCB CONGENR 3, BM <2MM REC (NG/G) (62370)	PCB CONGENR 33, BM <2MM REC (NG/G) (62384)	PCB CONGENR 40, BM <2MM REC (NG/G) (62385)	PCB CONGENR 44, BM <2MM REC (NG/G) (62388)	PCB CONGENR 45, BM <2MM REC (NG/G) (62389)	PCB CONGENR 46, BM <2MM REC (NG/G) (62390)	PCB CONGENR 49, BM <2MM REC (NG/G) (62392)	PCB CONGENR 51, BM <2MM REC (NG/G) (62393)	PCB CONGENR 52, BM <2MM REC (NG/G) (62394)
04072031 DUCK CREEK NEAR FREEDOM, WI (LAT 44 24 04N LONG 088 16 43W)											
AUG 1999 27...	<.40	<.30	<6.00	<.40	<.20	<.20	<.20	<.20	<.15	<.20	<.20
04072070 SILVER CREEK AT CNTY TRNK HIGHWAY U NEAR ONEIDA,W(LAT 44 28 41N LONG 088 11 25W)											
AUG 1999 26...	<.40	<.30	<6.00	<.40	<.20	<.20	<.20	<.20	<.15	<.20	<.20
04072076 SILVER CREEK AT FLORIST DRIVE AT ONEIDA, WI (LAT 44 29 24N LONG 088 10 52W)											
AUG 1999 27...	<.40	<.30	<6.00	<.40	<.20	<.20	<.20	<.20	<.15	<.20	<.20
04072078 SILVER CREEK AT VALLEY ROAD CULVERT AT ONEIDA, W(LAT 44 29 34N LONG 088 10 43W)											
AUG 1999 26...	<.40	<.30	<6.00	<.40	<.20	<.20	<.20	<.20	<.15	<.20	<.20
04072100 SILVER CREEK AT HIGHWAY 54 NEAR ASHWAUBENON, WI (LAT 44 30 42N LONG 088 09 04W)											
AUG 1999 26...	<.40	<.30	<6.00	<.40	<.20	<.20	<.20	<.20	<.15	<.20	<.20
04072150 DUCK CREEK NEAR HOWARD, WI (LAT 44 32 01N LONG 088 07 46W)											
AUG 1999 27...	<.40	<.30	<6.00	<.40	<.20	<.20	<.20	<.20	<.15	<.20	.77
04072217 DUCK CREEK SITE NO. 1 NEAR PAMPERIN PARK (LAT 44 32 41N LONG 088 06 09W)											
AUG 1999 27...	<.40	<.30	<6.00	<.40	<.20	<.20	<.20	<.20	<.15	<.20	7.30

WATER-QUALITY ANALYSES AT MISCELLANEOUS SITES

ISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued

BED MATERIAL ANALYSES

DATE	PCB CONGENR 53, BM <2MM REC (NG/G) (62395)	PCB CONGENR 6, BM <2MM REC (NG/G) (62372)	PCB CONGENR 63, BM <2MM REC (NG/G) (62397)	PCB CONGENR 66, BM <2MM REC (NG/G) (62398)	PCB CONGENR 74, BM <2MM REC (NG/G) (62400)	PCB CONGENR 77, BM <2MM REC (NG/G) (62401)	PCB CONGENR 82, BM <2MM REC (NG/G) (62403)	PCB CONGENR 83, BM <2MM REC (NG/G) (62404)	PCB CONGENR 85, BM <2MM REC (NG/G) (62405)	PCB CONGENR 87, BM <2MM REC (NG/G) (62406)	PCB CONGENR 89, BM <2MM REC (NG/G) (62407)
04072031 DUCK CREEK NEAR FREEDOM, WI (LAT 44 24 04N LONG 088 16 43W)											
AUG 1999 27...	<.30	<.30	<.20	<.55	<.20	<.20	<.20	<.20	<.20	<.20	<.30
04072070 SILVER CREEK AT CNTY TRNK HIGHWAY U NEAR ONEIDA,W(LAT 44 28 41N LONG 088 11 25W)											
AUG 1999 26...	<.30	<.30	<.20	<.50	<.20	<.20	<.20	<.20	<.20	<.20	<.30
04072076 SILVER CREEK AT FLORIST DRIVE AT ONEIDA, WI (LAT 44 29 24N LONG 088 10 52W)											
AUG 1999 27...	<.30	<.30	<.20	<.45	<.20	<.20	<.20	<.20	<.20	<.20	<.30
04072078 SILVER CREEK AT VALLEY ROAD CULVERT AT ONEIDA, W(LAT 44 29 34N LONG 088 10 43W)											
AUG 1999 26...	<.30	<.30	<.20	<.45	<.20	<.20	<.20	<.20	<.20	<.20	<.30
04072100 SILVER CREEK AT HIGHWAY 54 NEAR ASHWAUBENON, WI (LAT 44 30 42N LONG 088 09 04W)											
AUG 1999 26...	<.30	<.30	<.20	<.31	<.20	<.20	<.20	<.20	<.20	<.20	<.30
04072150 DUCK CREEK NEAR HOWARD, WI (LAT 44 32 01N LONG 088 07 46W)											
AUG 1999 27...	<.30	<.30	<.20	<.30	<.20	<.20	<.20	<.20	<.20	<.20	<.30
04072217 DUCK CREEK SITE NO. 1 NEAR PAMPERIN PARK (LAT 44 32 41N LONG 088 06 09W)											
AUG 1999 27...	<.30	<.30	<.20	<.65	<.20	<.20	<.20	<.20	<.20	<.20	<.30
DATE	PCB CONGENR 91, BM <2MM REC (NG/G) (62408)	PCB CONGENR 95, BM <2MM REC (NG/G) (62410)	PCB CONGENR 97, BM <2MM REC (NG/G) (62411)	PCB CONGENR 99, BM <2MM REC (NG/G) (62412)	PCB CONGENR 123+149 BM <2MM REC (NG/G) (62417)	PCB COG132+ 153+105 BM <2MM REC (NG/G) (62420)	PCB CONGENR 135+144 BM <2MM REC (NG/G) (62421)	PCB CONGENR 137+176 BM <2MM REC (NG/G) (62423)	PCB CONGENR 15+17, BM <2MM REC (NG/G) (62375)	PCB CONGENR 16+32, BM <2MM REC (NG/G) (62379)	PCB CONGENR 163+138 BM <2MM REC (NG/G) (62430)
04072031 DUCK CREEK NEAR FREEDOM, WI (LAT 44 24 04N LONG 088 16 43W)											
AUG 1999 27...	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.35	<.70	<.30
04072070 SILVER CREEK AT CNTY TRNK HIGHWAY U NEAR ONEIDA,W(LAT 44 28 41N LONG 088 11 25W)											
AUG 1999 26...	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.35	<.70	<.30
04072076 SILVER CREEK AT FLORIST DRIVE AT ONEIDA, WI (LAT 44 29 24N LONG 088 10 52W)											
AUG 1999 27...	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.35	<.70	<.30
04072078 SILVER CREEK AT VALLEY ROAD CULVERT AT ONEIDA, W(LAT 44 29 34N LONG 088 10 43W)											
AUG 1999 26...	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.35	<.70	<.30
04072100 SILVER CREEK AT HIGHWAY 54 NEAR ASHWAUBENON, WI (LAT 44 30 42N LONG 088 09 04W)											
AUG 1999 26...	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.35	<.70	<.30
04072150 DUCK CREEK NEAR HOWARD, WI (LAT 44 32 01N LONG 088 07 46W)											
AUG 1999 27...	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.20	<.35	<.70	<.30
04072217 DUCK CREEK SITE NO. 1 NEAR PAMPERIN PARK (LAT 44 32 41N LONG 088 06 09W)											
AUG 1999 27...	<.20	<.20	<.20	<.20	<.20	.24	<.20	<.20	<.35	<.70	<.30

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued

BED MATERIAL ANALYSES

DATE	PCB CONGENR 170+190 BM <2MM REC (NG/G) (62433)	PCB CONGENR 187+182 BM <2MM REC (NG/G) (62441)	PCB CONGENR 202+171 BM <2MM REC (NG/G) (62447)	PCB CONGENR 203+196 BM <2MM REC (NG/G) (62448)	PCB CONGENR 208+195 BM <2MM REC (NG/G) (62451)	PCB CONGENR 24+27, BM <2MM REC (NG/G) (62378)	PCB CONGENR 28+31, BM <2MM REC (NG/G) (62383)	PCB CONGENR 37+42, BM <2MM REC (NG/G) (62387)	PCB CONGENR 4+10, BM <2MM REC (NG/G) (62371)	PCB COG 41+ 71+64, BM <2MM REC (NG/G) (62386)
04072031	DUCK CREEK NEAR FREEDOM, WI (LAT 44 24 04N LONG 088 16 43W)									
AUG 1999 27...	<.20	<.20	<.20	<.25	<.15	<.30	<.40	<.30	<.90	<.30
04072070	SILVER CREEK AT CNTY TRNK HIGHWAY U NEAR ONEIDA,W(LAT 44 28 41N LONG 088 11 25W)									
AUG 1999 26...	<.20	<.20	<.20	<.25	<.15	<.30	<.40	<.30	<.90	<.30
04072076	SILVER CREEK AT FLORIST DRIVE AT ONEIDA, WI (LAT 44 29 24N LONG 088 10 52W)									
AUG 1999 27...	<.20	<.20	<.20	<.25	<.15	<.30	<.40	<.30	<.90	<.30
04072078	SILVER CREEK AT VALLEY ROAD CULVERT AT ONEIDA, W(LAT 44 29 34N LONG 088 10 43W)									
AUG 1999 26...	<.20	<.20	<.20	<.25	<.15	<.30	<.40	<.30	<.90	<.30
04072100	SILVER CREEK AT HIGHWAY 54 NEAR ASHWAUBENON, WI (LAT 44 30 42N LONG 088 09 04W)									
AUG 1999 26...	<.20	<.20	<.20	<.25	<.15	<.30	<.40	<.30	<.90	<.30
04072150	DUCK CREEK NEAR HOWARD, WI (LAT 44 32 01N LONG 088 07 46W)									
AUG 1999 27...	<.20	<.20	<.20	<.25	<.15	<.30	<.40	<.30	<.90	<.30
04072217	DUCK CREEK SITE NO. 1 NEAR PAMPERIN PARK (LAT 44 32 41N LONG 088 06 09W)									
AUG 1999 27...	<.20	<.20	<.20	<.25	<.15	<.30	<.40	<.30	<.90	<.30
DATE	PCB CONGENR 47+48, BM <2MM REC (NG/G) (62391)	PCB CONGENR 56+60, BM <2MM REC (NG/G) (62396)	PCB CONGENR 7+9, BM <2MM REC (NG/G) (62373)	PCB CONGENR 70+76, BM <2MM REC (NG/G) (62399)	PCB CONGENR 77+110, BM <2MM REC (NG/G) (62402)	PCB CONGENR 8+5, BM <2MM REC (NG/G) (62374)	PCB CONGENR 92+84, BM <2MM REC (NG/G) (62409)	BED MAT. FALL DIAM. % FINER THAN .004 MM (80157)	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)
04072031	DUCK CREEK NEAR FREEDOM, WI (LAT 44 24 04N LONG 088 16 43W)									
AUG 1999 27...	<.30	<.30	<.20	<.35	<.30	<.60	<.40	14	27	100
04072070	SILVER CREEK AT CNTY TRNK HIGHWAY U NEAR ONEIDA,W(LAT 44 28 41N LONG 088 11 25W)									
AUG 1999 26...	<.30	<.30	<.20	<.30	<.30	<.60	<.40	11	28	100
04072076	SILVER CREEK AT FLORIST DRIVE AT ONEIDA, WI (LAT 44 29 24N LONG 088 10 52W)									
AUG 1999 27...	<.30	<.30	<.20	<.23	<.30	<.60	<.40	11	27	100
04072078	SILVER CREEK AT VALLEY ROAD CULVERT AT ONEIDA, W(LAT 44 29 34N LONG 088 10 43W)									
AUG 1999 26...	<.30	<.30	<.20	<.20	<.30	<.60	<.40	13	32	100
04072100	SILVER CREEK AT HIGHWAY 54 NEAR ASHWAUBENON, WI (LAT 44 30 42N LONG 088 09 04W)									
AUG 1999 26...	<.30	<.30	<.20	<.20	<.30	<.60	<.40	11	27	100
04072150	DUCK CREEK NEAR HOWARD, WI (LAT 44 32 01N LONG 088 07 46W)									
AUG 1999 27...	<.30	<.30	<.20	<.20	<.30	<.60	<.40	2	7	100
04072217	DUCK CREEK SITE NO. 1 NEAR PAMPERIN PARK (LAT 44 32 41N LONG 088 06 09W)									
AUG 1999 27...	<.30	<.30	<.20	<.30	<.30	<.60	<.40	16	38	100

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3 (00419)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ANC BICAR- BONATE IT FIELD MG/L AS HCO3 (00450)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)
04072185 TROUT CREEK NEAR HOWARD, WI (LAT 44 32 10N LONG 088 07 48W)												
OCT 1999												
21...	0945	.97	738	9.8	8.2	772	6.6	312	--	381	--	--
NOV												
18...	0940	E1.0	742	13.7	8.3	764	1.8	216	--	259	--	2
DEC												
20...	1050	1.4	740	11.4	8.0	1010	.2	369	--	450	--	--
JAN 2000												
20...	1130	1.5	747	8.8	7.8	800	.2	290	--	354	--	--
FEB												
17...	0955	E1.0	749	7.6	7.9	658	.2	318	--	324	--	--
MAR												
09...	1150	6.1	742	13.0	7.9	709	2.0	208	--	254	--	--
APR												
12...	1150	2.2	745	13.9	8.3	774	5.8	--	--	--	--	--
21...	1500	14	742	11.2	7.7	609	5.8	--	--	--	--	--
MAY												
04...	1145	1.8	743	12.8	8.4	771	20.9	229	--	279	--	5
JUN												
16...	1250	E5.0	735	8.9	8.1	693	18.7	--	--	--	--	--
27...	1100	E2.4	747	8.3	7.9	810	19.2	--	--	--	--	--
JUL												
28...	1020	E.60	741	7.6	8.1	702	20.2	--	--	--	--	--
AUG												
11...	1130	E.50	749	8.6	8.1	719	20.8	--	--	--	--	--
SEP												
21...	1340	1.7	741	11.2	8.4	735	12.9	--	282	--	450	--
04072233 LANCASTER BROOK AT SHAWANO AVENUE AT HOWARD, WI (LAT 44 33 29N LONG 088 06 10W)												
OCT 1999												
21...	1120	1.5	739	10.0	8.0	747	7.3	--	--	--	--	--
NOV												
18...	1040	E1.0	742	12.7	8.3	736	2.4	277	--	342	--	--
DEC												
20...	1215	1.4	740	12.1	8.1	1090	.3	388	--	473	--	--
JAN 2000												
20...	1250	E1.0	17	2.8	7.7	640	.1	247	--	302	--	--
FEB												
17...	1025	E.70	749	3.2	7.9	590	.1	288	--	293	--	--
MAR												
09...	1035	7.2	739	11.3	7.8	859	5.2	204	--	249	--	--
APR												
12...	1050	1.9	739	14.3	8.2	800	3.7	--	--	--	--	--
21...	1350	19	742	10.4	7.7	606	5.1	--	--	--	--	--
MAY												
04...	1015	2.3	744	11.2	8.0	803	16.1	230	--	277	--	--
JUN												
16...	1035	E3.0	732	8.1	7.9	680	17.2	--	--	--	--	--
27...	1030	E1.6	747	8.3	7.7	797	17.7	--	--	--	--	--
JUL												
28...	0945	E.50	741	6.8	7.5	474	19.7	--	--	--	--	--
AUG												
11...	0945	1.5	749	7.8	7.9	678	18.9	--	--	--	--	--
SEP												
21...	1120	2.1	741	10.2	8.1	749	12.4	--	260	--	317	--

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued

DATE	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)
04072185 TROUT CREEK NEAR HOWARD, WI (LAT 44 32 10N LONG 088 07 48W)												
OCT 1999												
21...	.40	.38	<.020	<.050	<.010	.075	.058	.079	<.003	<.002	<.002	<.002
NOV												
18...	.33	.31	<.020	1.38	<.010	.011	<.010	.015	<.003	<.002	<.002	<.002
DEC												
20...	.41	.41	.025	3.14	.015	.010	<.010	.018	<.003	<.002	<.002	<.002
JAN 2000												
20...	.37	.38	.153	2.90	.027	.024	.019	.029	<.003	<.002	<.002	<.002
FEB												
17...	.16	.26	.042	1.44	<.010	.013	.012	.038	<.003	<.002	<.002	<.002
MAR												
09...	.54	.62	.090	2.38	.019	.041	.031	.070	<.003	<.002	<.002	<.002
APR												
12...	.43	.50	<.020	1.06	<.010	.011	<.010	.022	<.003	<.002	<.002	<.002
21...	2.1	3.0	.739	1.07	.025	.161	.088	.373	<.003	<.002	<.002	<.002
MAY												
04...	.62	.85	.026	.523	.017	.044	.022	.084	<.003	<.010	<.002	<.002
JUN												
16...	.79	1.1	.024	.667	.017	.117	.099	.192	<.003	<.002	<.002	<.002
27...	.82	1.2	.026	.577	.013	.235	.223	.282	<.003	<.002	.008	<.002
JUL												
28...	.58	.76	<.020	.754	.013	.089	.066	.104	--	--	--	--
AUG												
11...	.54	.54	.026	.958	<.010	.137	.120	.064	<.003	<.002	<.002	<.002
SEP												
21...	.64	.74	<.020	1.06	<.010	.186	.159	.192	<.003	<.002	<.002	<.002
04072233 LANCASTER BROOK AT SHAWANO AVENUE AT HOWARD, WI (LAT 44 33 29N LONG 088 06 10W)												
OCT 1999												
21...	.39	.37	<.020	.981	<.010	.012	<.010	.015	<.003	<.002	<.002	<.002
NOV												
18...	.37	.32	<.020	2.54	<.010	.006	<.010	.012	<.003	<.002	<.002	<.002
DEC												
20...	.44	.69	.073	4.03	.032	.014	.015	.033	<.003	<.002	<.002	<.002
JAN 2000												
20...	.35	.67	.157	3.03	.032	.017	.012	.022	<.003	<.002	<.002	<.002
FEB												
17...	.20	.25	.070	2.16	.016	.015	.013	.027	<.003	<.002	<.002	<.002
MAR												
09...	.57	.70	.109	1.44	.018	.031	.027	.066	<.003	<.002	<.002	<.002
APR												
12...	.32	.44	<.020	1.48	<.010	.007	<.010	.015	<.003	<.002	<.002	<.002
21...	.61	1.1	.031	.974	<.010	.025	.012	.104	<.003	<.002	<.002	<.002
MAY												
04...	.51	.33	.056	.517	.016	.020	<.010	.027	<.003	<.002	<.002	<.002
JUN												
16...	.51	1.2	.050	.951	.032	.057	.041	.191	<.003	<.002	<.002	<.002
27...	.50	.52	.020	1.44	.020	.068	.056	.095	<.003	<.002	<.002	<.002
JUL												
28...	.43	.65	.020	1.38	.010	.039	.024	.066	<.003	<.002	<.002	<.002
AUG												
11...	.42	.60	.037	1.01	<.010	.053	.045	.132	<.003	<.002	<.002	<.002
SEP												
21...	.50	.58	<.020	1.25	<.010	.043	.030	.056	<.003	<.002	<.002	<.002

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued

DATE	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ- INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)
04072185 TROUT CREEK NEAR HOWARD, WI (LAT 44 32 10N LONG 088 07 48W)												
OCT 1999												
21...	.063	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.045	115	<.002	<.001
NOV												
18...	.075	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.071	102	<.002	<.001
DEC												
20...	.078	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.070	78	<.002	<.001
JAN 2000												
20...	.058	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.054	98	<.002	<.001
FEB												
17...	.050	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.038	97	<.002	<.001
MAR												
09...	.032	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.016	90	<.002	<.001
APR												
12...	.049	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.039	100	<.002	<.001
21...	.036	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.019	95	<.002	<.001
MAY												
04...	.080	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.039	82	<.002	<.001
JUN												
16...	.120	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.044	81	<.002	<.001
27...	.294	<.002	<.002	<.003	<.003	<.004	.007	<.002	E.069	82	<.002	<.001
JUL												
28...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
11...	.057	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.040	93	E.003	<.001
SEP												
21...	.017	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.020	117	<.010	<.001
04072233 LANCASTER BROOK AT SHAWANO AVENUE AT HOWARD, WI (LAT 44 33 29N LONG 088 06 10W)												
OCT 1999												
21...	.020	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.036	120	<.002	<.001
NOV												
18...	.022	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.048	93	<.002	<.001
DEC												
20...	.025	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.065	85	<.002	<.001
JAN 2000												
20...	.017	<.002	<.002	<.003	<.010	<.004	<.004	<.002	E.028	113	<.002	<.001
FEB												
17...	.015	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.035	98	<.002	<.001
MAR												
09...	.013	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.014	94	<.002	<.001
APR												
12...	.017	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.020	100	<.002	<.001
21...	.038	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.013	97	<.002	<.001
MAY												
04...	.035	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.028	104	<.002	<.001
JUN												
16...	.095	<.002	<.002	<.003	<.010	<.004	<.004	<.002	E.036	100	<.010	<.001
27...	.081	<.002	<.002	<.003	<.003	<.004	.007	<.002	E.034	79	E.002	<.001
JUL												
28...	.037	<.002	<.002	E.21	<.003	<.004	.008	<.002	E.039	122	.095	<.001
AUG												
11...	.023	<.002	<.002	<.003	<.003	<.004	.008	<.002	E.030	102	.007	<.001
SEP												
21...	.077	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.049	113	<.002	<.001

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued

DATE	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (91065)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)
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04072185

TROUT CREEK NEAR HOWARD, WI (LAT 44 32 10N LONG 088 07 48W)

OCT 1999												
21...	<.017	<.002	<.004	<.003	<.003	76	<.004	<.002	<.010	<.001	<.006	<.002
NOV												
18...	<.017	<.002	<.004	<.003	<.003	92	<.004	<.002	<.005	<.001	<.006	E.004
DEC												
20...	<.017	<.002	<.004	<.003	<.003	81	<.004	<.002	<.005	<.001	<.006	<.002
JAN 2000												
20...	<.017	<.002	<.004	<.003	<.003	72	<.004	<.002	<.005	<.001	<.006	<.002
FEB												
17...	<.017	<.002	<.004	<.003	<.003	95	<.004	<.002	<.005	<.001	<.006	.005
MAR												
09...	<.017	<.002	<.004	<.003	<.003	86	<.004	<.002	<.005	<.001	<.006	.005
APR												
12...	<.017	<.002	<.004	<.003	<.003	80	<.004	<.002	<.005	<.001	<.006	E.003
21...	<.017	<.002	<.004	<.003	<.003	69	<.004	<.002	<.005	<.001	<.006	.010
MAY												
04...	<.017	<.002	<.004	<.003	<.003	61	<.004	<.002	<.005	<.001	<.006	.010
JUN												
16...	<.017	<.002	<.004	<.003	<.003	78	<.004	<.002	<.005	<.001	<.006	.045
27...	<.017	E.003	<.004	<.003	<.003	95	<.004	<.002	<.005	<.001	<.006	.120
JUL												
28...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
11...	<.017	<.002	<.004	<.003	<.003	87	<.004	<.002	<.005	<.001	<.006	.015
SEP												
21...	<.017	<.002	<.004	<.003	<.003	95	<.004	<.002	<.020	<.001	<.006	.010

04072233

LANCASTER BROOK AT SHAWANO AVENUE AT HOWARD, WI (LAT 44 33 29N LONG 088 06 10W)

OCT 1999												
21...	<.017	<.002	<.004	<.003	<.003	87	<.004	<.002	<.010	<.001	<.006	.005
NOV												
18...	<.017	<.002	<.004	<.003	<.003	91	<.004	<.002	<.005	<.001	<.006	.005
DEC												
20...	<.017	<.002	<.004	<.003	<.003	85	<.004	<.002	<.005	<.001	<.006	.006
JAN 2000												
20...	<.017	<.002	<.004	<.003	<.003	80	<.004	<.002	<.005	<.001	<.006	.005
FEB												
17...	<.017	<.002	<.004	<.003	<.003	88	<.004	<.002	<.005	<.001	<.006	.005
MAR												
09...	<.017	<.002	<.004	<.003	<.003	88	<.004	<.002	<.005	<.001	<.006	.006
APR												
12...	<.017	<.002	<.004	<.003	<.003	81	<.004	<.002	<.005	<.001	<.006	E.003
21...	<.017	<.002	<.004	<.003	<.003	72	<.004	<.002	<.005	<.001	<.006	.019
MAY												
04...	<.017	<.002	<.004	<.003	<.003	73	<.004	<.002	<.005	<.001	<.006	.010
JUN												
16...	<.017	<.002	<.004	<.003	<.003	88	<.004	<.002	<.005	<.001	<.006	.018
27...	<.017	E.004	<.004	<.003	<.003	88	<.004	<.002	<.005	<.001	<.006	.012
JUL												
28...	<.017	<.002	<.004	<.003	<.003	97	<.004	<.002	<.005	<.001	<.006	.019
AUG												
11...	<.017	<.002	<.004	<.003	<.003	93	<.004	<.002	<.005	<.001	<.006	.011
SEP												
21...	<.017	<.002	<.004	<.003	<.003	97	<.004	<.002	<.005	<.001	<.006	.044

WATER-QUALITY ANALYSES AT MISCELLANEOUS SITES

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued

DATE	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)
04072185 TROUT CREEK NEAR HOWARD, WI (LAT 44 32 10N LONG 088 07 48W)												
OCT 1999												
21...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.011	<.003	<.007
NOV												
18...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.009	<.003	<.007
DEC												
20...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.008	<.003	<.007
JAN 2000												
20...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.006	<.003	<.007
FEB												
17...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.006	<.003	<.007
MAR												
09...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.011	<.003	<.007
APR												
12...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.016	<.003	<.007
21...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.012	<.003	<.007
MAY												
04...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	.019	<.003	<.007
JUN												
16...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	.021	<.003	<.007
27...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.017	<.003	<.007
JUL												
28...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
11...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.008	<.003	<.007
SEP												
21...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018	<.003	<.007
04072233 LANCASTER BROOK AT SHAWANO AVENUE AT HOWARD, WI (LAT 44 33 29N LONG 088 06 10W)												
OCT 1999												
21...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.012	<.003	<.007
NOV												
18...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.009	<.003	<.007
DEC												
20...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.009	<.003	<.007
JAN 2000												
20...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.007	<.003	<.007
FEB												
17...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.007	<.003	<.007
MAR												
09...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.017	<.003	<.007
APR												
12...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.011	<.003	<.007
21...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.012	<.003	<.007
MAY												
04...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.013	<.003	<.007
JUN												
16...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.013	<.003	<.007
27...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.010	<.003	<.007
JUL												
28...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.013	<.003	<.007
AUG												
11...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.006	<.003	<.007
SEP												
21...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	E.009	<.003	<.007

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued

DATE	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SAM- PLING METHOD, CODES (82398)
04072185 TROUT CREEK NEAR HOWARD, WI (LAT 44 32 10N LONG 088 07 48W)											
OCT 1999											
21...	<.013	.033	<.010	<.007	<.013	<.002	<.001	<.002	79	96	10
NOV											
18...	<.013	.033	<.010	<.007	<.013	<.002	<.001	<.002	175	69	10
DEC											
20...	<.013	.026	<.010	<.007	<.013	<.002	<.001	<.002	--	--	70
JAN 2000											
20...	<.013	.018	<.010	<.007	<.013	<.002	<.001	<.002	175	69	10
FEB											
17...	<.013	.016	<.010	<.007	<.013	<.002	<.001	<.002	104	95	70
MAR											
09...	<.013	.022	<.010	<.007	<.013	<.002	<.001	<.002	91	96	10
APR											
12...	<.013	.024	<.010	<.007	<.013	<.002	<.001	<.002	126	95	10
21...	<.013	.065	<.010	<.007	<.013	<.002	<.001	<.002	108	95	10
MAY											
04...	<.013	.047	<.010	<.007	<.013	<.002	<.001	<.002	123	87	70
JUN											
16...	<.013	.027	<.010	<.007	<.013	<.002	<.001	<.002	170	80	10
27...	<.013	.012	<.010	<.007	<.013	<.002	<.001	<.002	143	64	70
JUL											
28...	--	--	--	--	--	--	--	--	84	93	10
AUG											
11...	<.013	.014	<.010	<.007	<.013	<.002	<.001	<.002	153	86	70
SEP											
21...	<.013	<.005	<.010	<.007	<.013	<.002	<.001	<.002	78	93	70
04072233 LANCASTER BROOK AT SHAWANO AVENUE AT HOWARD, WI (LAT 44 33 29N LONG 088 06 10W)											
OCT 1999											
21...	<.013	.010	<.010	<.007	<.013	<.002	<.001	<.002	65	97	10
NOV											
18...	<.013	<.005	<.010	<.007	<.013	<.002	<.001	<.002	168	65	10
DEC											
20...	<.013	.020	<.010	<.007	<.013	<.002	<.001	<.002	--	--	10
JAN 2000											
20...	<.013	.010	<.010	<.007	<.013	<.002	<.001	<.002	54	97	70
FEB											
17...	<.013	<.005	<.010	<.007	<.013	<.002	<.001	<.002	65	96	70
MAR											
09...	<.013	.008	<.010	<.007	<.013	<.002	<.001	<.002	105	99	10
APR											
12...	<.013	.190	<.010	<.007	<.013	<.002	<.001	<.002	137	94	10
21...	<.013	1.89	<.010	<.007	<.013	<.002	<.001	<.002	148	95	10
MAY											
04...	<.013	.099	<.010	<.007	<.013	<.002	<.001	<.002	95	89	10
JUN											
16...	<.013	.022	<.010	<.007	<.013	<.002	<.001	<.002	162	97	10
27...	<.013	.012	<.010	<.007	<.013	<.002	<.001	<.002	169	80	70
JUL											
28...	<.013	.006	<.010	<.007	<.013	<.002	<.001	<.002	74	89	10
AUG											
11...	<.013	.008	<.010	<.007	<.013	<.002	<.001	<.002	96	87	70
SEP											
21...	<.013	.015	<.010	<.007	<.013	<.002	<.001	<.002	93	83	10

WATER-QUALITY ANALYSES AT MISCELLANEOUS SITES

ISCALLENEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued

				DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SAM- PLING METHOD, CODES (82398)			
04073470		PUCHYAN RIVER AT GREEN LAKE, WI (LAT 43 50 48N LONG 088 57 36W)								
OCT 1999										
	01...	1416	--		14	.021	10			
NOV										
	17...	1510	--		11	.017	10			
DEC										
	29...	1045	--		11	.021	10			
JAN 2000										
	28...	1222	12	--		.023	10			
FEB										
	29...	1350	--		31	.028	10			
MAR										
	29...	1007	--		51	.025	10			
APR										
	24...	1040	--		89	.026	10			
MAY										
	02...	1230	--		131	.038	10			
	23...	1157	--		95	.027	10			
JUN										
	08...	1350	--		279	.042	10			
	21...	1125	--		148	.051	10			
JUL										
	13...	1015	--		52	.038	10			
AUG										
	02...	1432	--		25	.042	10			
	16...	1205	--		25	.041	10			
	30...	1430	--		52	.026	10			
SEP										
	15...	1050	--		158	.044	10			
		DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	SAM- PLING METHOD, CODES (82398)	
04085454		MEEME RIVER AT CT HIGHWAY XX NEAR CLEVELAND, WI (LAT 43 55 20N LONG 087 48 45W)								
OCT 1999										
	06...	0802	3.9	8.2	.041	.110	1.8	18	210	10
	12...	1124	3.8	8.1	.025	.089	3.3	5	290	10
	19...	0944	E4.1	8.2	.027	.075	1.4	9	200	10
	26...	0928	E3.5	8.3	.017	.051	3.2	10	310	10
NOV										
	02...	0834	3.5	8.4	.010	.058	3.0	7	560	10
	16...	0756	4.0	8.5	<.013	.043	1.0	6	110	10
DEC										
	02...	0804	4.0	8.4	.074	.066	.8	11	400	10
FEB 2000										
	09...	0952	2.6	8.1	.150	.086	1.2	12	220	10
MAR										
	30...	0846	E6.2	8.4	.040	.089	<6.0	12	210	10
APR										
	06...	1616	E5.0	8.9	.049	.069	<6.0	10	<10	10
	13...	1012	6.5	8.4	.034	.049	1.7	6	230	10
	20...	1602	E60	7.8	.175	.637	4.1	93	5400	10
	27...	0926	6.8	8.4	.078	.102	1.2	10	80	10
MAY										
	04...	1136	5.8	8.7	.045	.088	2.6	9	10	10
	11...	0958	4.5	8.3	.111	.127	2.3	6	1400	10
	18...	1200	E60	7.8	.257	.573	4.3	74	21000	10
	25...	1632	6.0	8.5	.081	.131	2.4	12	160	10
JUN										
	01...	1402	35	8.0	.067	.258	3.3	53	2200	10
	15...	1330	E10	--	.047	.310	--	143	1000	10
	22...	1205	E5.8	--	.048	.147	--	14	--	10
	28...	1130	E3.1	--	.036	.142	--	10	--	10
JUL										
	06...	1350	2.6	--	.041	.186	--	17	100	10
	12...	1908	6.5	--	.045	.182	--	13	250	10
	20...	1340	E2.4	--	<.013	.138	1.4	17	530	10
	27...	1208	3.0	--	.019	.177	1.1	6	730	10
AUG										
	03...	1326	3.1	--	.020	.201	--	17	410	10
	10...	1250	3.8	--	.037	.229	--	14	230	10
	16...	1338	3.4	--	.018	.237	5.7	24	500	10
	23...	1200	23	--	.081	.308	2.3	20	--	10
	31...	1434	3.4	--	.052	.150	1.4	8	180	10
SEP										
	07...	1128	6.5	--	.034	.184	1.1	9	470	10
	14...	1334	E30	--	.081	.396	2.0	48	3000	10
	21...	1502	6.0	--	.036	.170	.8	12	180	10
	28...	0958	E6.4	--	.028	.126	.8	10	170	10

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH WATER WHOLE LAB (STAND-ARD UNITS) (00403)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA) (00916)	MAGNE-SIUM, TOTAL RECOVERABLE (MG/L) (00921)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	OXYGEN DEMAND, CHEM-ICAL (LOW LEVEL) (MG/L) (00335)
040871478 WILSON PARK CREEK AT 6TH ST. AT MILWAUKEE, WI (LAT 42 57 46N LONG 087 55 07W)										
DEC 1999										
23...	1015	E3.0	--	--	--	--	--	--	--	--
040872015 OAK CREEK TRIBUTARY @ COLLEGE AVE AT MILWAUKEE, W (LAT 42 55 48N LONG 087 53 23W)										
JAN 2000										
03...	2140	--	7.6	87.0	44	3.9	1.66	.098	<120	130
19...	2015	--	7.3	140	66	3.8	1.97	.178	<200	110
FEB										
23...	1630	--	7.7	53.0	19	1.5	.305	.144	>43	150

DATE	TIME	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	CADMIUM TOTAL RECOVERABLE (UG/L) (01113)	COPPER, TOTAL RECOVERABLE (UG/L) (01119)	LEAD, TOTAL RECOVERABLE (UG/L) (01114)	ZINC, TOTAL RECOVERABLE (UG/L) (01094)	1,2,-ETHANE-DIOL, WATER, UNFLTRD REC (MG/L) (91075)	1,2,-PROP-ANEDIOL, WATER, UNFLTRD REC (MG/L) (91080)	OIL AND GREASE, TOTAL RECOVER. GRAVI-METRIC (MG/L) (00556)	SAM-PLING METHOD, CODES (82398)
040871478 WILSON PARK CREEK AT 6TH ST. AT MILWAUKEE, WI (LAT 42 57 46N LONG 087 55 07W)										
DEC 1999										
23...	--	--	--	--	--	--	<18.0	<18.0	--	70
040872015 OAK CREEK TRIBUTARY @ COLLEGE AVE AT MILWAUKEE, W (LAT 42 55 48N LONG 087 53 23W)										
JAN 2000										
03...	18	<1	3	2	80	30.0	48.0	<1	70	
19...	23	--	1	<1	40	<18.0	<18.0	2	10	
FEB										
23...	24	--	6	3	50	<18.0	77.0	4	10	

CHIPPEWA RIVER BASIN

DATE	TIME	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE LAB (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	SAM-PLING METHOD, CODES (82398)
454657091300600 BIG SISSABAGAMA TRIBUTARY NEAR STONE LAKE, WI (LAT 45 46 57N LONG 091 30 06W)							
MAR 2000							
03...	1105	10.8	6.7	42	1.6	.028	70
APR							
11...	1050	11.9	7.5	64	6.1	.029	70
JUN							
08...	0925	7.3	7.3	63	17.7	.129	70
JUL							
12...	1000	6.5	7.3	54	22.2	.052	70
AUG							
11...	1000	--	--	--	--	.036	70

WATER-QUALITY ANALYSES AT MISCELLANEOUS SITES

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

WISCONSIN RIVER BASIN

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SAM- PLING METHOD, CODES (82398)
05390680 MUSKELLUNGE CK-MUSKELLUNGE L OTL-NR EAGLE RIVER,W(LAT 45 57 06N LONG 089 23 24W)					
DEC 1999					
28...	1410	2.3	.024	.049	70
JAN 2000					
27...	1540	2.0	.014	.021	70
MAR					
07...	1000	3.1	.021	.030	70
MAY					
03...	1415	2.8	.008	.025	70
JUN					
06...	1350	1.9	.016	.038	70
JUL					
20...	1115	3.5	.027	.045	70
AUG					
17...	1240	3.0	.007	.029	70
05390681 MUSKELLUNGE CK AT TRAIL CROSSING NR EAGLE RIVER,W(LAT 45 56 52N LONG 089 24 10W)					
DEC 1999					
28...	1200	3.0	.030	.062	70
JAN 2000					
27...	1555	3.8	.021	.034	70
MAR					
07...	0905	4.2	.026	.035	70
MAY					
03...	1455	3.8	.012	.053	70
JUN					
06...	1445	2.3	.018	.033	70
JUL					
20...	1210	4.4	.020	.033	70
AUG					
17...	1340	5.1	.016	.027	70
05390685 MUSKELLUNGE CREEK NEAR ST. GERMAIN, WI (LAT 45 56 01N LONG 089 25 29W)					
OCT 1999					
06...	1905	4.7	.008	.027	70
DEC					
02...	1515	4.8	--	.043	70
28...	1000	4.5	.031	.055	70
JAN 2000					
27...	1300	4.9	.025	.035	70
MAR					
01...	1515	7.9	.027	.042	70
07...	0820	6.4	.035	.044	70
APR					
05...	1715	7.3	.020	.047	70
MAY					
03...	1550	5.2	.025	.068	70
JUN					
06...	1545	4.4	.032	.069	70
JUL					
20...	1345	7.6	.033	.063	70
AUG					
17...	1050	7.7	.025	.042	70
05390701 LITTLE SAINT GERMAIN CREEK NEAR EAGLE RIVER, WI (LAT 45 53 55N LONG 089 27 10W)					
OCT 1999					
06...	1800	8.8	.013	.013	70
DEC					
02...	1440	15	--	.015	70
28...	1515	14	--	.022	70
JAN 2000					
27...	1120	22	--	.016	70
MAY					
03...	1630	8.7	--	.017	70
JUN					
06...	1651	--	.011	.022	70
JUL					
20...	1620	11	.023	.026	70
AUG					
17...	0950	18	--	.032	70

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

WISCONSIN RIVER BASIN--Continued

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
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054064509 BLACK EARTH CREEK LOW FLOW #3 NR CROSS PLAINS, WI (LAT 43 05 49N LONG 089 37 32W)

OCT 1999	25...	1025	1.9	741	11.9	7.9	657	5.5	240	21.4	<.1	15.3	.20
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ROCK RIVER BASIN

05427270 KOSHKONONG CREEK NEAR SUN PRAIRIE, WI (LAT 43 08 58N LONG 089 14 13W)

OCT 1999	27...	1200	4.7	744	7.7	7.6	1530	13.5	320	264	.7	31.2	1.2
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05427507 KOSHKONONG CREEK NEAR ROCKDALE, WI (LAT 42 57 05N LONG 089 01 37W)

OCT 1999	25...	1335	40	744	15.7	8.4	820	7.0	324	56.8	.2	43.0	.47
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DATE	NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	TUR-BID-ITY (NTU) (00076)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SAM-PLING METHOD, CODES (82398)
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054064509 BLACK EARTH CREEK LOW FLOW #3 NR CROSS PLAINS, WI (LAT 43 05 49N LONG 089 37 32W)

OCT 1999	25...	.044	3.87	.021	E.035	.032	.101	<10	22	200	83	10
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05427270 KOSHKONONG CREEK NEAR SUN PRAIRIE, WI (LAT 43 08 58N LONG 089 14 13W)

OCT 1999	27...	.267	10.9	.136	2.51	2.06	2.73	19	2.1	600	4	10
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05427507 KOSHKONONG CREEK NEAR ROCKDALE, WI (LAT 42 57 05N LONG 089 01 37W)

OCT 1999	25...	.063	3.80	.037	.128	.145	.176	<10	.6	80	5	10
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DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
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05427900 SIXMILE CREEK NEAR WAUNAKEE, WI (LAT 43 10 29N LONG 089 25 58W)

APR 2000	06...	1410	8.9	729	15.4	8.3	620	11.0	--	--	--	--
JUL 24...	1350	14	740	10.5	8.1	683	21.0	--	--	--	--	--
AUG 22...	0625	14	748	7.5	7.7	699	18.5	72.8	38.9	2.8	10.8	--
SEP 20...	1205	18	733	8.6	7.9	688	15.5	--	--	--	--	--

DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
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05427900 SIXMILE CREEK NEAR WAUNAKEE, WI (LAT 43 10 29N LONG 089 25 58W)

APR 2000	06...	277	32.2	.1	--	24.4	.29	<.020	2.94	.015	.060	.046
JUL 24...	307	29.3	.1	--	13.1	.46	<.020	3.09	.023	.157	.120	--
AUG 22...	--	30.4	.1	17.4	11.1	.47	.025	2.47	.017	.145	.130	--
SEP 20...	305	32.9	.1	--	11.1	.50	.045	2.70	.023	.136	.117	--

WATER-QUALITY ANALYSES AT MISCELLANEOUS SITES

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

ROCK RIVER BASIN--Continued

DATE	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	TUR- BID- ITY (NTU) (00076)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCT KF AGAR (COLS. PER 100 ML) (31673)	ARSENIC TOTAL (UG/L AS AS) (01002)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO) (01037)
	05427900 SIXMILE CREEK NEAR WAUNAKEE, WI (LAT 43 10 29N LONG 089 25 58W)										
	APR 2000										
	06...	.081	<10	--	1.9	<5	--	--	--	--	--
JUL											
24...	.183	<10	--	3.1	930	--	--	--	--	--	--
AUG											
22...	.210	13	423	8.4	1600	780	<3	E18	<.1	E1	E1
SEP											
20...	.188	11	--	2.0	5800	--	--	--	--	--	--
DATE	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
	05427900 SIXMILE CREEK NEAR WAUNAKEE, WI (LAT 43 10 29N LONG 089 25 58W)										
	APR 2000										
	06...	--	--	--	--	--	--	--	--	--	9
JUL											
24...	--	--	--	--	--	--	--	--	--	8	10
AUG											
22...	2	E10	580	<1	70	132	<.3	<2	<31	27	10
SEP											
20...	--	--	--	--	--	--	--	--	--	7	10
DATE	TIME	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)						
						05427900 SIXMILE CREEK NEAR WAUNAKEE, WI (LAT 43 10 29N LONG 089 25 58W)					
						AUG 2000					
						22...	0540	7.5	7.6	698	18.5
22...	0610	7.5	7.7	698	18.5						
22...	0626	7.5	7.7	699	18.5						
22...	0640	7.5	7.8	699	18.5						
22...	0715	7.6	7.8	698	18.5						
22...	0740	7.7	7.8	697	18.5						
22...	0810	7.9	7.8	697	19.0						
22...	0840	8.3	7.8	697	19.0						
22...	0910	8.6	7.8	696	19.0						
22...	0940	8.7	7.8	695	19.5						
22...	1010	9.2	7.8	694	19.5						
22...	1040	9.6	7.9	694	19.5						

ROCK RIVER BASIN--Continued

[illegible]

ROCK RIVER BASIN--Continued

						PH							
				OXYGEN,		WATER		SPE-		TEMPER-			
				DIS-		WHOLE		CIFIC		ATURE			
DATE		TIME		SOLVED		FIELD		CON-		WATER			
				(MG/L)		(STAND-		DUCT-		(DEG C)			
				(00300)		ARD		ANCE		(US/CM)		(00010)	
05429580 DOOR CREEK NEAR COTTAGE GROVE, WI (LAT 43 02 54N LONG 089 13 54W)													
AUG 2000													
		15...	0530	4.8	7.5	804	19.5						
		15...	0600	4.7	7.5	804	19.5						
		15...	0630	4.3	7.6	804	19.0						
		15...	0700	4.3	7.6	804	19.0						
		15...	0730	4.3	7.6	804	19.0						
		15...	0745	4.4	7.6	804	19.0						
		15...	0800	4.5	7.6	804	19.0						
		15...	0830	4.8	7.6	803	19.0						
		15...	0900	5.4	7.6	803	19.0						
		15...	0930	5.9	7.7	802	19.5						
		15...	1000	6.6	7.7	802	19.5						
		15...	1030	7.7	7.7	804	20.0						
		DIS-	BARO-	PH		SPE-				MAGNE-	POTAS-	SODIUM,	
		CHARGE,	METRIC	WATER		WHOLE				SIUM,	SIUM,	DIS-	
		INST.	PRES-	FIELD		CON-				DIS-	DIS-	DIS-	
		CUBIC	SURE	OXYGEN,	(STAND-	DUCT-	TEMPER-			SOLVED	SOLVED	SOLVED	
DATE		FEET	(MM	DIS-	ARD	ANCE	ATURE			(MG/L	(MG/L	(MG/L	
		PER	OF	SOLVED	UNITS)	(US/CM)	WATER			AS CA)	AS MG)	(AS NA)	
		SECOND	HG)	(MG/L)	(00400)	(00095)	(DEG C)			(00915)	(00925)	(00935)	
		(00061)	(00025)	(00300)	(00400)	(00095)	(00010)			(00915)	(00925)	(00935)	
05429720 YAHARA RIVER NEAR STOUGHTON, WI (LAT 42 52 52N LONG 089 12 39W)													
APR 2000	07...	0810	52	739	11.5	8.5	610	10.0	--	--	--	--	--
JUL	24...	1130	540	747	9.4	8.4	505	24.0	--	--	--	--	--
AUG	16...	0910	226	751	7.1	8.5	474	23.5	28.8	29.1	3.1	18.6	
SEP	19...	1000	394	733	9.6	8.8	459	20.0	--	--	--	--	--
		ANC	CHLO-	FLUO-	SILICA,	NITRO-		NITRO-	NITRO-	NITRO-	PHOS-	PHOS-	
		UNFLTRD	RIDE,	RIDE,	DIS-	GEN,AM-		GEN,	GEN,	GEN,	PHOS-	PHORUS	
		TIT 4.5	DIS-	DIS-	SOLVED	MONIA +		DIS-	NO2+NO3	NITRITE	PHORUS	ORTHO,	
		LAB	SOLVED	SOLVED	(MG/L	DIS.		SOLVED	SOLVED	DIS-	DIS-	DIS-	
DATE		(MG/L	(MG/L	(MG/L	AS	(MG/L		(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	
		AS CACO3)	AS CL)	AS F)	SIO2)	AS SO4)		AS N)	AS N)	AS N)	AS N)	AS P)	
		(90410)	(00940)	(00950)	(00955)	(00945)		(00623)	(00608)	(00631)	(00613)	(00666)	
05429720 YAHARA RIVER NEAR STOUGHTON, WI (LAT 42 52 52N LONG 089 12 39W)													
APR 2000	07...	223	51.2	.2	--	22.0	.65	.055	1.69	.060	<.050	<.010	
JUL	24...	194	37.8	.1	--	16.3	.60	<.020	.137	<.010	.077	.040	
AUG	16...	--	38.6	.1	10.5	17.4	.99	.324	.377	.020	E.035	<.010	
SEP	19...	164	40.1	.2	--	17.7	.56	<.020	.161	<.010	<.050	<.010	
		PHOS-	OXYGEN	SOLIDS,	COLI-		STREP-			BORON,	CADMIUM	CHRO-	COBALT,
		PHORUS	DEMAND,	RESIDUE	FORM,		TOCOCCEI			TOTAL	WATER	MIUM,	TOTAL
		TOTAL	CHEM-	AT 180	FECAL,		FECAL,			RECOV-	UNFLTRD	TOTAL	TOTAL
		(MG/L	ICAL	DEG. C	0.7		KF AGAR	ARSENIC	ERABLE		TOTAL	RECOV-	RECOV-
DATE		AS P)	(HIGH	DIS-	UM-MF		(COLS. /	TOTAL	(UG/L		(UG/L	(UG/L	(UG/L
		(00665)	LEVEL)	SOLVED	(NTU)		100 ML)	AS AS)	AS B)		AS CD)	AS CR)	AS CO)
		(00340)	(MG/L)	(70300)	(00076)		(31625)	(31673)	(01002)		(01022)	(01027)	(01034)
05429720 YAHARA RIVER NEAR STOUGHTON, WI (LAT 42 52 52N LONG 089 12 39W)													
APR 2000	07...	.159	26	--	5.0	--	--	--	--	--	--	--	--
JUL	24...	.147	33	--	6.6	120	--	--	--	--	--	--	--
AUG	16...	.220	54	275	19	110	77	E2	26	<.1	E1	<2	
SEP	19...	.115	38	--	8.0	110	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

ROCK RIVER BASIN--Continued

DATE	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
05429720	YAHARA RIVER NEAR STOUGHTON, WI (LAT 42 52 52N LONG 089 12 39W)										
APR 2000											
07...	--	--	--	--	--	--	--	--	--	18	10
JUL											
24...	--	--	--	--	--	--	--	--	--	26	10
AUG											
16...	2	10	440	3	E2	70	<.3	<2	<31	30	10
SEP											
19...	--	--	--	--	--	--	--	--	--	5	10

DATE	TIME	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
05429720	YAHARA RIVER NEAR STOUGHTON, WI (LAT 42 52 52N LONG 089 12 39W)				

AUG 2000					
16...	0530	6.7	8.6	468	24.5
16...	0600	6.7	8.6	468	24.5
16...	0630	6.6	8.6	468	24.0
16...	0700	6.6	8.6	468	24.0
16...	0730	6.6	8.6	469	24.0
16...	0800	6.7	8.6	471	23.5
16...	0830	6.8	8.5	472	23.5
16...	0900	7.0	8.5	473	23.5
16...	0911	7.1	8.5	474	23.5
16...	0930	7.2	8.5	475	23.5
16...	1000	7.4	8.5	478	24.0
16...	1030	7.6	8.5	480	24.0

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
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05431018 DELAVAN LAKE TRB @ S SHORE DR @ DELAVAN LAKE, WI (LAT 42 35 08N LONG 088 37 19W)

OCT 1999					
07...	1025	.45	.112	13	70
NOV					
16...	1010	.25	.102	11	70
DEC					
16...	1505	.72	.099	12	10
FEB 2000					
25...	1355	8.6	.618	25	10
MAR					
28...	1640	.77	.331	113	70
APR					
27...	1050	3.3	.307	15	10
MAY					
11...	1355	2.6	.522	13	10
18...	1600	E2.6	.405	21	10
JUN					
01...	1430	8.2	1.52	139	10
JUL					
10...	1500	10	.919	69	10
AUG					
23...	1105	.56	.201	12	70

WATER-QUALITY ANALYSES AT MISCELLANEOUS SITES

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

ROCK RIVER BASIN--Continued

		DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
05435980 WEST BRANCH SUGAR RIVER NEAR MT. VERNON, WI (LAT 42 54 47N LONG 089 37 19W)												
OCT 1999 27...	0900	14	749	11.1	7.9	681	5.5	284	32.5	<.1	22.1	.22
DATE		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	TUR-BID-ITY (NTU) (00076)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SAM-PLING METHOD, CODES (82398)
05435980 WEST BRANCH SUGAR RIVER NEAR MT. VERNON, WI (LAT 42 54 47N LONG 089 37 19W)												
OCT 1999 27...	<.020	5.78	.019	E.048	.042	.113	<10	6.5	220	35	10	
DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	
05436000 MOUNT VERNON CREEK NEAR MOUNT VERNON, WI (LAT 42 55 15N LONG 089 37 13W)												
APR 2000 06...	0745	15	731	10.7	7.9	577	7.0	--	--	--	--	--
JUL 25...	0930	20	743	9.6	8.0	591	12.5	--	--	--	--	--
AUG 21...	0700	19	749	10.2	7.8	569	12.5	60.3	34.8	1.2	5.6	
SEP 19...	1315	18	728	9.8	8.0	587	13.5	--	--	--	--	--
DATE		ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SiO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
05436000 MOUNT VERNON CREEK NEAR MOUNT VERNON, WI (LAT 42 55 15N LONG 089 37 13W)												
APR 2000 06...	268	12.0	<.1	--	13.6	.11	.022	4.78	<.010	<.050	.015	
JUL 25...	272	12.2	<.1	--	13.9	E.10	<.020	4.77	.010	E.037	.014	
AUG 21...	--	11.8	<.1	9.4	14.4	.13	<.020	4.62	<.010	<.050	.029	
SEP 19...	271	12.6	.1	--	14.2	.13	<.020	4.63	<.010	E.040	.027	
DATE		PHOS-PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	TUR-BID-ITY (NTU) (00076)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	STREP-TOCOCOCI, KF AGAR (COLS./PER 100 ML) (31673)	ARSENIC TOTAL (UG/L AS AS) (01002)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	CADMIUM WATER UNFLTRD TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)
05436000 MOUNT VERNON CREEK NEAR MOUNT VERNON, WI (LAT 42 55 15N LONG 089 37 13W)												
APR 2000 06...	E.036	<10	--	2.1	33	--	--	--	--	--	--	--
JUL 25...	<.050	<10	--	1.6	320	--	--	--	--	--	--	--
AUG 21...	.056	<10	337	6.4	670	300	<3	<18	<.1	E1	E2	
SEP 19...	E.046	<10	--	1.0	510	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

ROCK RIVER BASIN--Continued

DATE	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
05436000	MOUNT VERNON CREEK NEAR MOUNT VERNON, WI (LAT 42 55 15N LONG 089 37 13W)										
APR 2000											
06...	--	--	--	--	--	--	--	--	--	16	10
JUL											
25...	--	--	--	--	--	--	--	--	--	22	10
AUG											
21...	2	<10	450	E1	19	48	<.3	<2	<31	46	10
SEP											
19...	--	--	--	--	--	--	--	--	--	18	10

DATE	TIME	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
05436000	MOUNT VERNON CREEK NEAR MOUNT VERNON, WI (LAT 42 55 15N LONG 089 37 13W)				
AUG 2000					
21...	0545	10.2	7.6	575	13.0
21...	0615	10.1	7.8	572	12.5
21...	0645	10.1	7.8	570	12.5
21...	0701	10.2	7.8	569	12.5
21...	0715	10.2	7.8	569	12.5
21...	0745	10.3	7.8	566	12.5
21...	0815	10.4	7.9	565	12.5
21...	0845	10.5	7.9	564	12.5
21...	0915	10.6	7.9	562	12.5
21...	0945	10.8	7.9	561	12.5
21...	1015	11.0	7.9	549	13.0

ILLINOIS RIVER BASIN

BEGIN- NING DATE	BEGIN- NING TIME	ENDING DATE	ENDING TIME	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
05544793	UNNAMED LAUDERDALE LAKES TRIB. #2 NR LAUDERDALE,W(LAT 42 47 10N LONG 088 33 52W)								
AUG 2000									
05...	1215	000805	1700	--	--	--	--	--	.231

WATER-QUALITY ANALYSES AT MISCELLANEOUS SITES

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

ILLINOIS RIVER BASIN--Continued

BEGIN- NING DATE	BEGIN- NING TIME	ENDING DATE	ENDING TIME	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
424514088334001 DRAINAGE UPHILL SAMPLER AT LAUDERDALE, WI (LAT 42 45 14N LONG 088 33 40W)									
MAY 2000									
09...	1030	000509	1730	38	14.7	.014	--	--	5.06
17...	1200	000518	1900	2.0	.655	.165	--	.181	1.52
31...	1200	000601	2200	36	3.96	<.010	--	.256	6.37
JUN									
12...	1200	000613	1900	10	.857	.040	--	.202	1.93
JUL									
02...	2045	000702	2359	34	6.12	.013	--	.411	4.75
10...	0415	000710	0845	--	--	--	--	--	8.34
AUG									
05...	1215	000805	1700	3.0	.557	.351	--	.224	2.66
SEP									
11...	1045	000914	0845	--	--	--	--	--	3.60
22...	1000	000923	0200	--	--	--	--	--	.868

424518088334301 DRAINAGE DOWNHILL SAMPLER AT LAUDERDALE, WI (LAT 42 45 18N LONG 088 33 43W)									
MAY 2000									
09...	1030	000509	1730	160	88.1	.041	--	--	9.07
31...	1200	000601	2200	32	7.05	.025	--	2.58	3.87
JUN									
12...	1200	000613	1900	19	6.18	.012	--	3.33	5.58
JUL									
02...	2045	000702	2359	7.1	1.54	.283	--	.562	1.85
10...	0415	000710	0845	--	--	--	--	--	1.66
31...	0245	000731	1715	--	--	--	--	--	7.47
AUG									
05...	1215	000805	1700	3.1	1.38	.595	--	.414	.708
17...	0415	000817	0730	--	--	--	--	--	.370
SEP									
11...	1045	000914	0845	--	--	--	--	--	1.31
22...	1000	000923	0200	--	--	--	--	--	.568

424518088334302 DRAINAGE DOWNHILL PIEZOMETER AT LAUDERDALE, WI (LAT 42 45 18N LONG 088 33 43W)									
AUG 2000									
04...	1600	--	--	--	--	--	.387	--	--
09...	1515	--	--	--	--	--	<.002	--	--
29...	1405	--	--	--	--	--	--	1.97	--
SEP									
25...	1700	--	--	--	--	--	.088	--	--

BEGIN- NING DATE	BEGIN- NING TIME	ENDING DATE	ENDING TIME	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
424541088334601 LAUD CC #5 DOWNHILL LAWN SAMPLER AT LAUDERDALE, W(LAT 42 45 41N LONG 088 33 46W)									
MAY 2000									
31...	1200	000601	2200	28	9.34	.053	1.62		4.75
JUL									
31...	0245	000805	1700	3.2	1.07	.016	.842		1.33
AUG									
17...	0415	000817	0730	--	--	--	--		5.33
424541088334602 LAUD CC #5 UPHILL LAWN SAMPLER AT LAUDERDALE, WI (LAT 42 45 41N LONG 088 33 46W)									
MAY 2000									
31...	1200	000601	2200	20	7.45	.029	1.50		2.84
JUN									
12...	1200	000613	1900	17	4.57	.124	1.40		2.87
JUL									
02...	2045	000702	2359	4.3	1.08	.049	.710		1.27
10...	0415	000710	0845	--	--	--	--		4.31
31...	0245	000805	1700	7.7	1.98	.084	3.32		4.79
AUG									
17...	0415	000817	0730	--	--	--	--		2.86
SEP									
11...	1045	000914	0845	--	--	--	--		2.70
22...	1000	000923	0200	--	--	--	--		1.23

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

ILLINOIS RIVER BASIN--Continued

	BEGIN- NING DATE	BEGIN- NING- TIME	ENDING DATE	ENDING TIME	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	
424543088334001 ZIELINSKI LAWN SAMPLER AT LAUDERDALE, WI (LAT 42 45 43N LONG 088 33 40W)										
	FEB 2000									
	22...	0800	000223	1330	4.2	.220	.405	.711	.359	
	MAY									
	09...	1030	000509	1730	27	7.72	.031	5.27	7.17	
	17...	1200	000518	1900	--	--	--	--	6.69	
	31...	1200	000601	2200	11	2.16	.263	.429	.811	
	JUL									
	02...	2045	000702	2359	5.1	2.07	.094	.440	.846	
	31...	0245	000731	1715	--	--	--	--	3.79	
	AUG									
	05...	1215	000805	1700	1.7	.630	.245	.253	.508	
	17...	0415	000817	0730	--	--	--	--	1.81	
	SEP									
	11...	1045	000914	0845	--	--	--	--	.783	
424603088340201 HENDERSON LAWN SAMPLER AT LAUDERDALE, WI (LAT 42 46 03N LONG 088 34 02W)										
	FEB 2000									
	22...	0800	000223	1430	2.6	.231	.044	.458	.536	
	MAY									
	17...	1200	000518	1900	15	5.35	.014	.904	1.70	
	31...	1200	000601	2200	29	6.03	.033	.874	3.97	
	JUN									
	12...	1200	000613	1900	5.7	.437	.091	.133	1.08	
	JUL									
	02...	2045	000702	2359	55	36.2	.025	1.29	2.92	
	BEGIN- NING DATE	BEGIN- NING TIME	ENDING DATE	ENDING TIME	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
424603088340201 HENDERSON LAWN SAMPLER AT LAUDERDALE, WI (LAT 42 46 03N LONG 088 34 02W)										
	AUG 2000									
	05...	1215	000805	1700	1.8	.566	.171	--	.333	.970
	SEP									
	11...	1045	000914	0845	--	--	--	--	--	1.29
	22...	1000	000923	0200	--	--	--	--	--	.910
424603088340202 HENDERSON PIEZOMETER AT LAUDERDALE, WI (LAT 42 46 03N LONG 088 34 02W)										
	AUG 2000									
	09...	1315	--	--	--	--	--	<.002	--	--
	29...	1430	--	--	--	--	--	--	.009	--
	SEP									
	25...	1630	--	--	--	--	--	.010	--	--
424611088334001 PETERSEN LAWN SAMPLER AT LAUDERDALE, WI (LAT 42 46 11N LONG 088 33 40W)										
	FEB 2000									
	22...	0800	000223	1315	3.1	.976	5.22	--	--	.135
	APR									
	20...	0300	000420	2300	22	1.34	.340	--	.296	3.33
	MAY									
	09...	1030	000509	1730	--	--	--	--	--	12.8
	17...	1200	000518	1900	--	--	--	--	.183	.784
	31...	1200	000601	2200	16	1.18	.131	--	.170	4.34
	JUN									
	12...	1200	000613	1900	10	.888	.148	--	.117	1.47
	JUL									
	02...	2045	000702	2359	4.7	.572	.141	--	.153	.961
	10...	0415	000710	0845	--	--	--	--	--	1.04
	AUG									
	05...	1215	000805	1700	1.6	.435	.400	--	.159	.716
	SEP									
	11...	1045	000914	0845	--	--	--	--	--	.876
	22...	1000	000923	0200	--	--	--	--	--	1.72

WATER-QUALITY ANALYSES AT MISCELLANEOUS SITES

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

ILLINOIS RIVER BASIN--Continued

BEGIN- NING DATE	BEGIN- NING TIME	ENDING DATE	ENDING TIME	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
424616088334201 MASON LAWN SAMPLER AT LAUDERDALE, WI (LAT 42 46 16N LONG 088 33 42W)									
FEB 2000									
22...	0800	000223	1245	2.1	.314	.214	--	.340	.398
MAY									
31...	1200	000601	2200	7.6	1.49	.189	--	.200	.958
JUN									
12...	1200	000613	1900	--	--	--	--	--	6.61
JUL									
02...	2045	000702	2359	5.9	2.79	.010	--	.230	.564
AUG									
05...	1215	000805	1700	1.9	.727	.168	--	.166	.566
SEP									
11...	1045	000914	0845	--	--	--	--	--	.933
22...	1000	000923	0200	--	--	--	--	--	.842

BEGIN- NING DATE	BEGIN- NING TIME	ENDING DATE	ENDING TIME	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
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424623088345101 CSANDA LAWN SAMPLER NEAR LAUDERDALE, WI (LAT 42 46 23N LONG 088 34 51W)

FEB 2000								
22...	0800	000223	1500	1.5	.043	.074	.579	.636
MAY								
31...	1200	000601	2200	--	--	--	--	5.66
AUG								
05...	1215	000805	1700	2.9	1.07	1.20	.570	1.47
SEP								
11...	1045	000914	0845	--	--	--	--	2.37

424643088333601 LUTHERDALE LAWN SAMPLER AT LAUDERDALE, WI (LAT 42 46 43N LONG 088 33 36W)

MAY 2000								
31...	1200	000601	2200	7.9	.563	.098	.235	1.81
JUN								
12...	1200	000613	1900	9.4	.579	.221	.334	1.71
JUL								
02...	2045	000702	2359	11	2.98	<.010	.742	1.89
AUG								
05...	1215	000805	1700	1.8	.648	.145	.309	.992
SEP								
11...	1045	000914	0845	--	--	--	--	2.52
22...	1000	000923	0200	--	--	--	--	3.16

424650088333501 CONDO NUMBER 88 LAWN SAMPLER AT LAUDERDALE, WI (LAT 42 46 50N LONG 088 33 35W)

MAY 2000								
31...	1200	000601	2200	4.0	.757	.060	.345	1.05
JUN								
12...	1200	000613	1900	8.4	2.77	.135	.807	1.51
JUL								
02...	2045	000702	2359	6.0	2.52	.044	.769	1.08
10...	0415	000710	0845	--	--	--	--	1.96
31...	0245	000731	1715	--	--	--	--	13.6
AUG								
05...	1215	000805	1700	3.6	1.82	.011	.869	1.42
SEP								
11...	1045	000914	0845	--	--	--	--	1.46
22...	1000	000923	0200	--	--	--	--	5.33

424652088333901 CONDO NUMBER 54 LAWN SAMPLER AT LAUDERDALE, WI (LAT 42 46 52N LONG 088 33 39W)

FEB 2000								
22...	0800	000223	1130	4.8	.054	.473	--	.790
APR								
20...	0300	000420	2300	9.8	.582	.365	.433	1.93
MAY								
09...	1030	000509	1730	--	--	--	1.86	2.25
17...	1200	000518	1900	34	.378	.058	.641	4.90
31...	1200	000601	2200	1.9	.584	.272	.905	4.25
JUN								
12...	1200	000613	1900	7.6	.428	.299	.453	1.72
JUL								
02...	2045	000702	2359	12	.863	.370	.855	2.20

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

ILLINOIS RIVER BASIN--Continued

BEGIN- NING DATE	BEGIN- NING- TIME	ENDING DATE	ENDING TIME	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
424652088333901 CONDO NUMBER 54 LAWN SAMPLER AT LAUDERDALE, WI (LAT 42 46 52N LONG 088 33 39W)								
AUG 2000								
05...	1215	000805	1700	1.5	.240	.560	.501	1.77
SEP								
11...	1045	000914	0845	--	--	--	--	3.08
22...	1000	000923	0200	--	--	--	--	1.23
424652088334401 CONDO FIELD LAWN SAMPLER AT LAUDERDALE, WI (LAT 42 46 52N LONG 088 33 44W)								
FEB 2000								
22...	0800	000223	1200	.53	.228	.072	--	1.30
SEP								
11...	1045	000914	0845	--	--	--	--	7.71
424654088343101 YANDEL UPHILL LAWN SAMPLER NEAR LAUDERDALE, WI (LAT 42 46 54N LONG 088 34 31W)								
FEB 2000								
22...	0800	000223	1515	4.1	1.17	2.24	.334	.426
JUL								
31...	0245	000805	1700	11	11.6	.244	2.04	2.70
SEP								
11...	1045	000914	0845	--	--	--	--	1.32
424654088343102 YANDEL DOWNHILL LAWN SAMPLER NEAR LAUDERDALE, WI (LAT 42 46 54N LONG 088 34 31W)								
FEB 2000								
22...	0800	000223	1530	4.8	.415	1.99	.404	.486
MAY								
09...	1030	000509	1730	17	9.09	.010	2.26	4.06
31...	1200	000601	2200	130	--	--	--	14.3
JUL								
02...	2045	000702	2359	--	--	--	--	24.3
31...	0245	000805	1700	8.7	4.38	<.010	1.99	2.58
AUG								
17...	0415	000817	0730	--	--	--	--	4.87
SEP								
11...	1045	000914	0845	--	--	--	--	1.31
424654088343103 YANDEL OPEN AREA LAWN SAMPLER NEAR LAUDERDALE, W(LAT 42 46 54N LONG 088 34 31W)								
FEB 2000								
22...	0800	000223	1545	2.5	.694	.262	.706	.787
JUL								
02...	2045	000702	2359	27	14.5	.067	2.67	4.10
AUG								
05...	1215	000805	1700	5.0	2.47	<.010	.892	2.07
SEP								
11...	1045	000914	0845	--	--	--	--	.784
424654088343104 YANDEL NEAR STAIRS LAWN SAMPLER NEAR LAUDERDALE,W(LAT 42 46 54N LONG 088 34 31W)								
	BEGIN- NING DATE	BEGIN- NING TIME	ENDING DATE	ENDING TIME	PHOS- PHORUS TOTAL (MG/L AS P) (00665)			
MAY 2000								
31...		1200	000601	2200	7.50			
AUG								
05...		1215	000805	1700	17.7			
SEP								
11...		1045	000914	0845	.783			

WATER-QUALITY ANALYSES AT MISCELLANEOUS SITES

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

ILLINOIS RIVER BASIN--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)	
055451295 FONTANA CREEK TRIBUTARY SITE D1 AT FONTANA, WI (LAT 42 32 43N LONG 088 34 34W)						
JUL 2000 19...	1315	1.6	.021	--	70	
055451302 LAKE GENEVA TRIBUTARY SITE C AT FONTANA, WI (LAT 42 33 08N LONG 088 34 22W)						
JUL 2000 20...	1250	.26	.029	--	70	
055451303 LAKE GENEVA TRIBUTARY SITE E AT FONTANA, WI (LAT 42 32 43N LONG 088 34 07W)						
JUL 2000 20...	1230	--	.073	--	70	
055451305 LAKE GENEVA TRIBUTARY SITE G AT FONTANA, WI (LAT 42 32 46N LONG 088 33 38W)						
JUL 2000 20...	1115	--	.031	--	70	
055451306 LAKE GENEVA TRIBUTARY SITE B AT FONTANA, WI (LAT 42 33 29N LONG 088 34 10W)						
JUL 2000 20...	1345	.33	.017	--	70	
055451307 LAKE GENEVA TRIBUTARY SITE A AT FONTANA, WI (LAT 42 33 35N LONG 088 33 58W)						
JUL 2000 19...	1243	1.2	.022	--	70	
0554513075 LAKE GENEVA TRIBUTARY-SITE C1-NEAR FONTANA, WI (LAT 42 32 50N LONG 088 32 43W)						
JUL 2000 20...	1030	--	.098	--	70	
055451308 LAKE GENEVA TRIBUTARY SITE H NEAR FONTANA, WI (LAT 42 32 57N LONG 088 32 09W)						
JUL 2000 20...	0950	--	.045	--	70	
05545131 SOUTHWICK CREEK AT WILLIAMS BAY, WI (LAT 42 34 45N LONG 088 32 19W)						
OCT 1999 05...	1350	1.4	.028	5	50	
JUL 2000 19...	1120	1.4	.046	--	70	
05545132 LAKE GENEVA TRIBUTARY SITE Q AT WILLIAMS BAY, WI (LAT 42 34 46N LONG 088 32 00W)						
JUL 2000 19...	1550	.25	.019	--	70	
DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
055451321 LAKE GENEVA TRIBUTARY SITE I NEAR FONTANA, WI (LAT 42 33 00N LONG 088 31 45W)						
JUL 2000 20...	1015	--	--	.072	--	70
05545132 LAKE GENEVA TRIBUTARY SITE Q AT WILLIAMS BAY, WI (LAT 42 34 46N LONG 088 32 00W)						
JUL 2000 19...	1550	.25	--	.019	--	70
55451322 LAKE GENEVA TRIBUTARY SITE J NEAR FONTANA, WI (LAT 42 33 01N LONG 088 31 27W)						
JUL 2000 20...	0915	.29	--	.024	--	70
05545132 LAKE GENEVA TRIBUTARY SITE Q AT WILLIAMS BAY, WI (LAT 42 34 46N LONG 088 32 00W)						
JUL 2000 19...	1550	.25	--	.019	--	70

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

ILLINOIS RIVER BASIN--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
055451323	LAKE GENEVA TRIBUTARY SITE K NEAR LAKE GENEVA, W(LAT 42 33 03N LONG 088 31 02W)					
JUL 2000						
20...	1010	--	--	.063	--	70
05545132	LAKE GENEVA TRIBUTARY SITE Q AT WILLIAMS BAY, WI (LAT 42 34 46N LONG 088 32 00W)					
JUL 2000						
19...	1550	.25	--	.019	--	70
055451325	LAKE GENEVA TRIBUTARY-SITE P3-NEAR WILLIAMS BAY,W(LAT 42 34 30N LONG 088 30 02W)					
JUL 2000						
20...	1425	--	--	.064	--	70
05545133	BIRCHES CREEK AT LACKEY LANE NEAR LAKE GENEVA, W(LAT 42 33 36N LONG 088 29 15W)					
OCT 1999						
05...	1605	.22	--	.029	<1	70
JUL 2000						
10...	1050	56	--	1.07	893	10
19...	2055	.55	--	.043	--	70
AUG						
02...	1024	.08	21.5	.049	20	70
16...	1505	.56	19.0	.039	13	70
30...	0956	.30	16.5	.033	54	70
SEP						
13...	1342	.67	--	.065	49	70
OCT 1999						
05...	1605	.22	--	.029	<1	70
JUL 2000						
10...	1050	56	--	1.07	893	10
19...	2055	.55	--	.043	--	70
AUG						
02...	1024	.08	21.5	.049	20	70
16...	1505	.56	19.0	.039	13	70
30...	0956	.30	16.5	.033	54	70
SEP						
13...	1342	.67	--	.065	49	70
055451332	LAKE GENEVA TRIBUTARY SITE P NEAR LAKE GENEVA, W(LAT 42 34 23N LONG 088 28 28W)					
JUL 2000						
19...	1700	.09	--	.063	--	70
05545133	BIRCHES CREEK AT LACKEY LANE NEAR LAKE GENEVA, W(LAT 42 33 36N LONG 088 29 15W)					
OCT 1999						
05...	1605	.22	--	.029	<1	70
JUL 2000						
10...	1050	56	--	1.07	893	10
19...	2055	.55	--	.043	--	70
AUG						
02...	1024	.08	21.5	.049	20	70
16...	1505	.56	19.0	.039	13	70
30...	0956	.30	16.5	.033	54	70
SEP						
13...	1342	.67	--	.065	49	70
055451333	LAKE GENEVA TRIBUTARY SITE L NEAR LAKE GENEVA, W(LAT 42 33 33N LONG 088 28 07W)					
JUL 2000						
20...	0820	.20	--	.045	--	70
05545133	BIRCHES CREEK AT LACKEY LANE NEAR LAKE GENEVA, W(LAT 42 33 36N LONG 088 29 15W)					
OCT 1999						
05...	1605	.22	--	.029	<1	70
JUL 2000						
10...	1050	56	--	1.07	893	10
19...	2055	.55	--	.043	--	70
AUG						
02...	1024	.08	21.5	.049	20	70
16...	1505	.56	19.0	.039	13	70
30...	0956	.30	16.5	.033	54	70
SEP						
13...	1342	.67	--	.065	49	70

WATER-QUALITY ANALYSES AT MISCELLANEOUS SITES

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

ILLINOIS RIVER BASIN--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
055451334	LAKE GENEVA TRIBUTARY SITE M NEAR LAKE GENEVA, W(LAT 42 33 27N LONG 088 27 56W)					
JUL 2000						
19...	1940	.56	--	.150	--	70
05545133	BIRCHES CREEK AT LACKEY LANE NEAR LAKE GENEVA, W(LAT 42 33 36N LONG 088 29 15W)					
OCT 1999						
05...	1605	.22	--	.029	<1	70
JUL 2000						
10...	1050	56	--	1.07	893	10
19...	2055	.55	--	.043	--	70
AUG						
02...	1024	.08	21.5	.049	20	70
16...	1505	.56	19.0	.039	13	70
30...	0956	.30	16.5	.033	54	70
05545133	BIRCHES CREEK AT LACKEY LANE NEAR LAKE GENEVA, W(LAT 42 33 36N LONG 088 29 15W)					
SEP 2000						
13...	1342	.67	--	.065	49	70
055451335	LAKE GENEVA TRIBUTARY SITE N NEAR LAKE GENEVA, W(LAT 42 33 28N LONG 088 27 48W)					
JUL 2000						
19...	1910	.18	--	.035	--	70
05545133	BIRCHES CREEK AT LACKEY LANE NEAR LAKE GENEVA, W(LAT 42 33 36N LONG 088 29 15W)					
OCT 1999						
05...	1605	.22	--	.029	<1	70
JUL 2000						
10...	1050	56	--	1.07	893	10
19...	2055	.55	--	.043	--	70
AUG						
02...	1024	.08	21.5	.049	20	70
16...	1505	.56	19.0	.039	13	70
30...	0956	.30	16.5	.033	54	70
SEP						
13...	1342	.67	--	.065	49	70
055451337	LAKE GENEVA TRIBUTARY SITE O NEAR LAKE GENEVA, W(LAT 42 33 59N LONG 088 26 15W)					
OCT 1999						
05...	1620	--	--	.085	3	70
JUL 2000						
19...	1815	.76	--	1.44	--	70
05545133	BIRCHES CREEK AT LACKEY LANE NEAR LAKE GENEVA, W(LAT 42 33 36N LONG 088 29 15W)					
OCT 1999						
05...	1605	.22	--	.029	<1	70
JUL 2000						
10...	1050	56	--	1.07	893	10
19...	2055	.55	--	.043	--	70
AUG						
02...	1024	.08	21.5	.049	20	70
16...	1505	.56	19.0	.039	13	70
30...	0956	.30	16.5	.033	54	70
SEP						
13...	1342	.67	--	.065	49	70
055451339	LAKE GENEVA TRIBUTARY-SITE O1-AT LAKE GENEVA, WI (LAT 42 35 11N LONG 088 26 55W)					
JUL 2000						
20...	1455	1.6	--	.057	--	70

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

ILLINOIS RIVER BASIN--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	PHOS- PHORUS TOTAL (MG/L) AS P (00665)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
055451345 WHITE RIVER AT CENTER STREET AT LAKE GENEVA, WI (LAT 42 35 26N LONG 088 26 01W)						
OCT 1999						
05...	1450	1.8	--	.018	3	70
JUL 2000						
10...	1230	125	--	.012	1	10
AUG						
02...	1200	21	--	.011	2	10
16...	1425	4.1	27.5	.015	1	10
30...	1145	1.5	24.0	.012	6	70
SEP						
13...	1429	11	21.0	.014	6	10

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

ROCK RIVER BASIN

		DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	
		05427900 SIXMILE CREEK NEAR WAUNAKEE, WI (LAT 43 10 29N LONG 089 25 58W)											
OCT 2000													
12...	0900	13	750	11.4	7.4	725	8.0	314	34.2	<.2	18.2	.33	
NOV													
01...	1000	14	743	11.6	8.0	728	11.0	327	35.2	E.1	15.8	.32	
		05429580 DOOR CREEK NEAR COTTAGE GROVE, WI (LAT 43 02 54N LONG 089 13 54W)											
OCT 2000													
13...	0705	7.4	745	7.0	7.4	827	10.5	349	35.1	E.1	30.9	.49	
NOV													
02...	1340	7.3	742	14.7	7.8	808	14.0	351	37.0	.2	29.9	.51	
		05429720 YAHARA RIVER NEAR STOUGHTON, WI (LAT 42 52 52N LONG 089 12 39W)											
OCT 2000													
11...	0800	312	755	11.2	8.7	493	9.5	182	39.0	<.2	18.5	.65	
NOV													
02...	1000	302	744	11.1	8.5	502	14.5	187	39.3	E.1	17.8	.81	
		05436000 MOUNT VERNON CREEK NEAR MOUNT VERNON, WI (LAT 42 55 15N LONG 089 37 13W)											
OCT 2000													
12...	0635	17	750	11.2	7.9	588	7.5	274	11.5	<.2	14.8	.17	
NOV													
01...	0730	17	744	10.1	7.8	582	10.0	276	12.6	<.2	14.6	.14	
DATE		NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHOPHOS- PHORUS TOTAL (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	TUR- BID- ITY (NTU) (00076)	TURBID- ITY LAB HACH 2100AN (100 ML) (99872)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SAM- PLING METHOD, CODES (82398)
		05427900 SIXMILE CREEK NEAR WAUNAKEE, WI (LAT 43 10 29N LONG 089 25 58W)											
OCT 2000													
12...	<.041	3.22	.011	.064	.055	.097	<10	2.5	5.6	120	24	10	
NOV													
01...	<.041	3.01	.020	.079	.069	.110	11	1.5	5.1	100	14	10	
		05429580 DOOR CREEK NEAR COTTAGE GROVE, WI (LAT 43 02 54N LONG 089 13 54W)											
OCT 2000													
13...	.104	5.16	.054	E.038	.036	.082	13	4.0	7.0	160	75	10	
NOV													
02...	.079	4.72	.061	E.046	.041	.073	12	3.0	14	130	18	10	

WATER-QUALITY ANALYSES AT MISCELLANEOUS SITES

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

ROCK RIVER BASIN--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)
		05429720			YAHARA RIVER NEAR STOUGHTON, WI (LAT 42 52 52N LONG 089 12 39W)							
OCT 2000												
11...	.072	.431	.016	<.060	<.018	.069	23	3.0	7.9	E27	8	10
NOV												
02...	.204	.393	.028	<.060	<.018	E.051	26	3.0	7.1	90	9	10
		05436000			MOUNT VERNON CREEK NEAR MOUNT VERNON, WI (LAT 42 55 15N LONG 089 37 13W)							
OCT 2000												
12...	<.041	4.80	.007	<.060	.022	E.056	<10	5.1	8.3	250	32	10
NOV												
01...	<.041	4.62	.010	<.060	E.017	E.051	<10	4.0	13	210	42	10

QUALITY OF GROUND WATER

ASHLAND COUNTY

STATION	NUMBER	LOCAL IDENT- I- FIER	GEO- LOGIC UNIT	DATE	DEPTH OF WELL, TOTAL (FEET)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	
					(72008)	(00915)	(00925)	(00935)	
463635090481101	AS-48/04W/25-0380		4201kss	12-07-99	217.00	27.8	10.9	4.3	
DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
	12-07-99	28.8	18.7	.4	16.2	28.2	219	.21	50

GROUND-WATER RECORDS

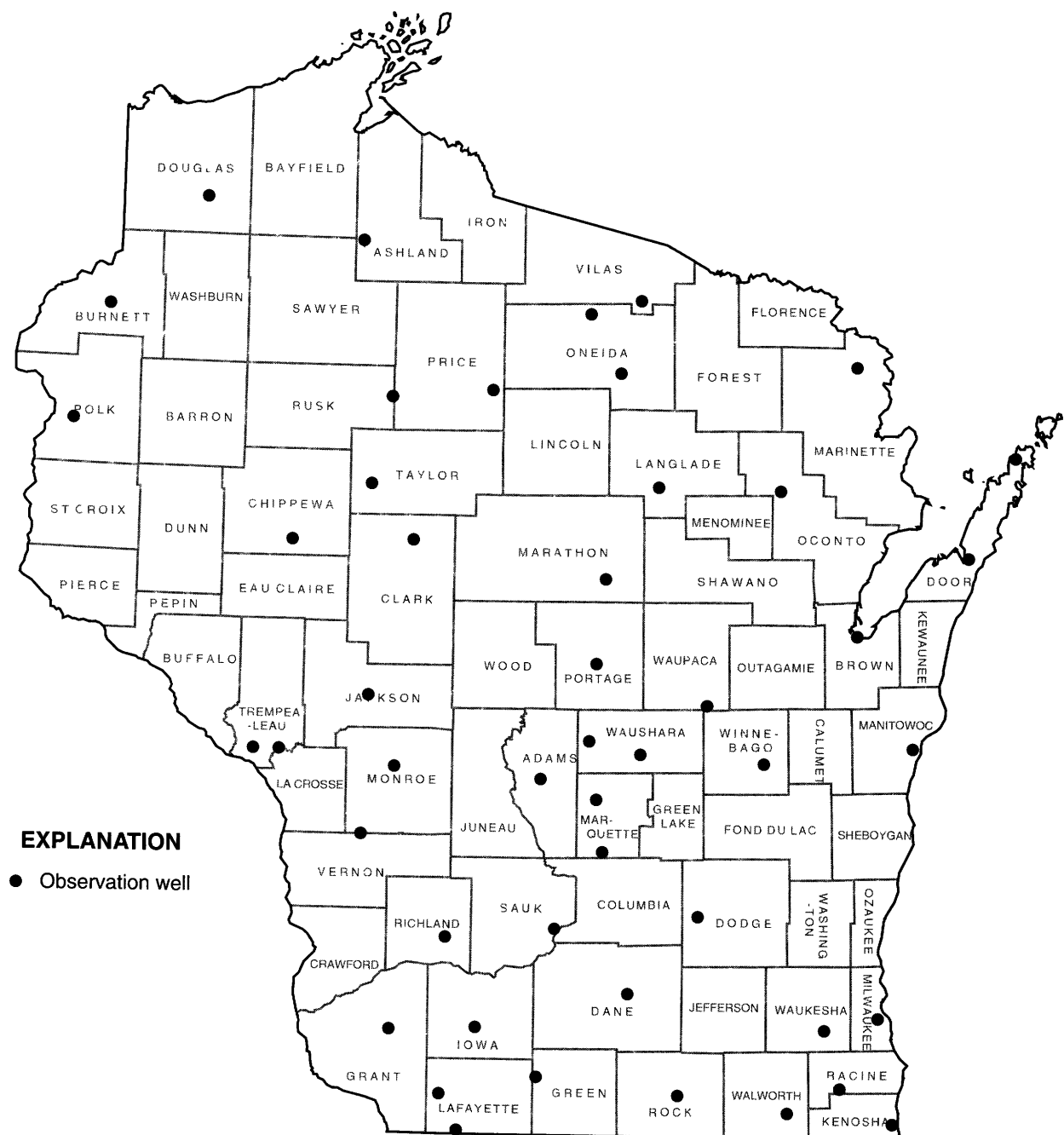


Figure 5. Location of observation wells in Wisconsin.

GROUND-WATER LEVELS

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ADAMS COUNTY

435759089490001. Local number, AD-17/06E/08-0076.

LOCATION.--Lat 43°57'59", long 89°49'00", Hydrologic Unit 07070003. Owner: Wis. Dept. of Natural Resources.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1.25 in., depth 21 ft, cased to 19 ft, well point 19-21 ft.

INSTRUMENTATION.--Water level measured weekly by observer.

DATUM.--Elevation of land-surface datum is 955 ft above sea level. Measuring point: top of casing, 1.50 ft above land-surface datum.

PERIOD OF RECORD.--September 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.69 ft below land-surface datum. May 29, 1973; lowest water level measured, 18.14 ft below land-surface datum, Mar. 7, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	14.67	DEC 06	15.50	FEB 07	16.38	APR 03	15.94	JUN 19	13.53	AUG 14	14.74
11	14.80	20	15.60	14	16.49	10	16.20	26	13.51	21	14.62
18	14.90	27	15.54	21	16.80	17	16.19	JUL 03	14.00	28	14.65
25	14.93	JAN 03	15.85	28	16.31	24	15.86	10	13.73	SEP 05	14.58
NOV 01	14.95	10	15.78	MAR 06	16.30	MAY 08	15.89	17	13.97	11	14.54
08	15.05	18	15.99	13	16.10	15	15.78	24	14.87	18	14.64
22	15.37	24	16.21	20	16.11	JUN 05	13.85	31	14.83	25	14.75
29	14.82	31	16.19	27	16.01	12	13.92	AUG 07	14.60		
WATER YEAR 2000		HIGHEST	13.51	JUN 26	LOWEST	16.80	FEB 21				

ASHLAND COUNTY

460936090531701. Local number, AS-43/04W/32-0006.

LOCATION.--Lat 46°09'36", long 90°53'17", Hydrologic Unit 07050001. Owner: U.S. Forest Service.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 5 in., depth 89 ft.

INSTRUMENTATION.--Water level measured monthly by observer.

DATUM.--Elevation of land-surface datum is 1,470 ft above sea level. Measuring point: top of hole in pump base, at land-surface datum.

PERIOD OF RECORD.--August 1957 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.40 ft below land-surface datum, Mar. 25, 1985; lowest water level measured, 32.35 ft below land-surface datum, Apr. 1, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 15	27.10	DEC 15	27.10	JAN 15	26.50	FEB 15	28.40	MAR 15	28.70	APR 17	28.40
WATER YEAR 2000		HIGHEST	26.50	JAN 15	LOWEST	28.70	MAR 15				

BROWN COUNTY

443228088003101. Local number, BN-24/20E/24-0076.

LOCATION.--Lat 44°32'28", long 88°00'31", Hydrologic Unit 04030204. Owner: Wisconsin Public Service Corp.

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 5 in., depth 500 ft, cased to 150 ft, open end.

INSTRUMENTATION.--Water level measured monthly by observer.

DATUM.--Elevation of land-surface datum is 590 ft above sea level. Measuring point: top of 3-in. pipe, 4.00 ft above land-surface datum.

PERIOD OF RECORD.--April 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 41.24 ft below land-surface datum, May 3, 1961; lowest water level measured, 248.97 ft below land-surface datum, Aug. 30, 1955.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05	152.80	DEC 29	142.70	APR 27	133.60	JUN 30	136.20	JUL 27	141.20	SEP 12	145.20
NOV 04	150.50	MAR 01	136.65	JUN 01	135.15						
WATER YEAR 2000		HIGHEST	133.60	APR 27	LOWEST	152.80	OCT 05				

GROUND-WATER LEVELS

BURNETT COUNTY

455224092215601. Local number, BT-39/16W/17-0002.

LOCATION.--Lat 45°52'24", long 92°21'56", Hydrologic Unit 07030001. Owner: Wis. Dept. of Natural Resources.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 8 in., depth 46 ft, cased to 46 ft, perforated 44.5-46 ft.

INSTRUMENTATION.--Water level measured weekly by observer.

DATUM.--Elevation of land-surface datum is 981 ft above sea level. Measuring point: pointer on float gage, 4.87 ft above land-surface datum.

PERIOD OF RECORD.--May 1937 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.33 ft below land-surface datum, June 28, 1968; lowest water level measured, 37.90 ft below land-surface datum, Aug. 21, 1992.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	32.29	DEC 03	32.39	FEB 04	32.60	APR 07	32.79	JUN 09	32.92	AUG 11	33.11
08	32.23	10	32.42	11	32.63	14	32.79	16	32.78	18	33.03
15	32.38	17	32.44	18	32.70	21	32.85	23	32.92	25	33.02
22	32.27	24	32.54	25	32.62	28	32.89	30	33.03	SEP 01	33.01
29	32.34	31	32.38	MAR 03	32.65	MAY 05	32.82	JUL 07	32.95	08	33.07
NOV 05	32.35	JAN 07	32.56	10	32.78	12	32.86	14	32.94	15	33.00
12	32.33	14	32.65	17	32.78	19	32.92	21	32.94	22	33.50
19	32.33	21	32.60	24	32.80	26	32.87	28	33.06	29	33.52
26	32.36	28	32.70	31	32.81	JUN 02	32.89	AUG 04	33.09		
WATER YEAR 2000			HIGHEST 32.23	OCT 08	LOWEST 33.52	SEP 29					

CHIPPEWA COUNTY

445544091155701. Local number, CH-28/07W/17-0142.

LOCATION.--Lat 44°55'44", long 91°15'57", Hydrologic Unit 07050005. Owner: Wis. Dept. of Transportation.

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled domestic artesian well, diameter 6 in., depth 60 ft, cased to 39 ft, open end.

INSTRUMENTATION.--Water level measured weekly by observer.

DATUM.--Elevation of land-surface datum is 965 ft above sea level. Measuring point: 0.25-in. hole in top of casing, 2.20 ft above land-surface datum.

PERIOD OF RECORD.--January 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.97 ft below land-surface datum, Oct. 28, 1986; lowest water level measured, 33.46 ft below land-surface datum, Jan. 10, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	29.85	DEC 15	30.15	FEB 14	30.57	APR 16	30.99	JUN 17	31.03	AUG 11	30.44
NOV 14	30.42	JAN 15	30.25	MAR 09	30.68	MAY 14	31.20	JUL 15	30.46	SEP 13	30.26
WATER YEAR 2000			HIGHEST 29.85	OCT 14	LOWEST 31.20	MAY 14					

CLARK COUNTY

445619090335201. Local number, CK-28/02W/01-0509.

LOCATION.--Lat 44°56'19", long 90°33'52", Hydrologic Unit 07050006. Owner: Richard Laube.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Drilled domestic artesian well, diameter 5 in., depth 40 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--Elevation of land-surface datum is 1,265 ft above sea level. Measuring point: casing cap, 5 ft below land-surface datum.

PERIOD OF RECORD.--July 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.33 ft below land-surface datum, Oct. 27, 1986; lowest water level measured, 24.98 ft below land-surface datum, Feb. 28, 1990.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	24.30	APR 20	24.05	MAY 15	24.00	JUN 14	23.90
WATER YEAR 2000			HIGHEST 23.90	JUN 14	LOWEST 24.30	OCT 08	

GROUND-WATER LEVELS

489

DANE COUNTY

430456089190601. Local number, DN-07/10E/09-0105.

LOCATION.--Lat 43°04'56", long 89°19'06", Hydrologic Unit 07070005. Owner: City of Madison.

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in., depth 380 ft, cased to 85 ft, open end.

INSTRUMENTATION.--Continuous water-level recorder.

DATUM.--Elevation of land-surface datum is 870 ft above sea level. Measuring point: top of casing, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.91 ft below land-surface datum, July 11, 1993; lowest water level measured, 32.35 ft below land-surface datum, May 27, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.60	27.35	27.80	26.82	27.35	27.79	27.79	28.48	23.99	23.59	25.02	25.40
10	26.88	27.62	27.17	26.96	28.23	28.07	27.40	28.67	24.01	23.99	25.57	25.19
15	27.74	27.64	26.70	26.91	27.30	28.12	27.35	27.59	23.25	24.98	25.59	26.09
20	27.85	27.43	26.86	27.00	27.89	28.21	27.31	26.76	23.40	25.17	24.90	25.11
25	26.95	27.54	26.55	27.07	28.34	28.19	27.43	27.61	23.35	24.69	25.97	25.14
EOM	27.02	27.78	26.85	27.39	27.96	27.72	27.15	26.97	23.91	24.84	25.96	25.11

WATER YEAR 2000 HIGHEST 23.06 JUN 18 LOWEST 28.71 MAY 09

DODGE COUNTY

432407088552701. Local number, DG-11/13E/23-0081.

LOCATION.--Lat 43°24'15", long 88°55'26", Hydrologic Unit 07090002. Owner: Wis. Dept. of Transportation.

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in., depth 125 ft, cased to 57 ft, open end.

INSTRUMENTATION.--Water level measured bi-monthly by observer.

DATUM.--Elevation of land-surface datum is 880 ft above sea level. Measuring point: 0.25-in. hole in side of casing, 1.30 ft above land-surface datum.

PERIOD OF RECORD.--November 1964 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.00 ft below land-surface datum, Dec. 4, 1991; lowest water level measured, 26.67 ft below land-surface datum, Feb. 3, 1965.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	21.14	DEC 01	20.91	MAY 02	19.49	JUL 18	19.04	AUG 07	19.46	SEP 28	19.89
WATER YEAR 2000		HIGHEST	19.04	JUL 18	LOWEST	21.14	OCT 21				

DOOR COUNTY

451518087042601. Local number, DR-32/28E/15-0317.

LOCATION.--Lat 44°15'18", long 87°04'26", Hydrologic Unit 04030102. Owner: Town of Liberty.

AQUIFER.--Silurian dolomite.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 4 in., depth 155 ft, cased to 153 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--Elevation of land-surface datum is 580 ft above sea level. Measuring point: top of casing, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--June 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.70 ft below land-surface datum, Mar. 27, 1986; lowest water level measured, 45.17 ft below land-surface datum, Feb. 1, 2000.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	43.33	JAN 05	44.75	MAR 04	41.41	MAY 10	41.51	JUL 01	42.72	SEP 05	42.76
NOV 03	44.15	FEB 01	45.17	APR 03	42.42	JUN 05	40.65	AUG 03	45.46		
WATER YEAR 2000		HIGHEST	40.65	JUN 05	LOWEST	45.46	AUG 03				

GROUND-WATER LEVELS

DOOR COUNTY--Continued

445055087213801. Local number, DR-27/26E/05-0265

LOCATION.--Lat 44°50'55", long 87°21'38", Hydrologic Unit 04030102. Owner: U.S. Geological Survey.

AQUIFER.--Silurian dolomite.

WELL CHARACTERISTICS.--Drilled observation, diameter 6 in., depth 442 ft, cased to 170 ft, open end.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--Elevation of land-surface datum is 616 ft above sea level. Measuring point: top of casing, 1.57 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby wells.

PERIOD OF RECORD.--September 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, -3.49 ft above land-surface datum, Apr. 20, 1972; lowest water level, 35.33 ft below land-surface datum, Feb. 1, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	27.52	NOV 06	31.65	DEC 05	31.58	JAN 05	32.10	FEB 13	34.85	AUG 08	27.09
WATER YEAR 2000		HIGHEST	27.09	AUG 08		LOWEST	34.85	FEB 13			

DOUGLAS COUNTY

461921091484201. Local number, DS-44/12W/01-0327.

LOCATION.--Lat 46°19'21", long 91°48'42", Hydrologic Unit 04010301. Owner: Wis. Dept. of Natural Resources.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in., depth 148 ft, cased to 145 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--Elevation of land-surface datum is 1,090 ft above sea level. Measuring point: hole in pump base, 4.33 ft above land-surface datum.

PERIOD OF RECORD.--June 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 72.16 ft above land-surface datum, Dec. 28, 1972; lowest water level measured, 81.05 ft below land-surface datum, July 7, 1971.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06	77.55	NOV 30	77.91	MAR 01	78.12	MAY 03	78.49	JUL 03	78.38	SEP 06	78.08
NOV 02	77.67	JAN 03	78.09	APR 03	78.29	JUN 06	78.55	AUG 01	78.13		
WATER YEAR 2000		HIGHEST	77.55	OCT 06		LOWEST	78.55	JUN 06			

GRANT COUNTY

425551090391301. Local number, GR-05/02W/06-000

LOCATION.--Lat 42°55'51", long 90°39'13", Hydrologic Unit 07060003. Owner: Homer Yelinek.

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 5 in., depth 35 ft, cased to 5 ft, open end.

INSTRUMENTATION.--Water level measured monthly by observer.

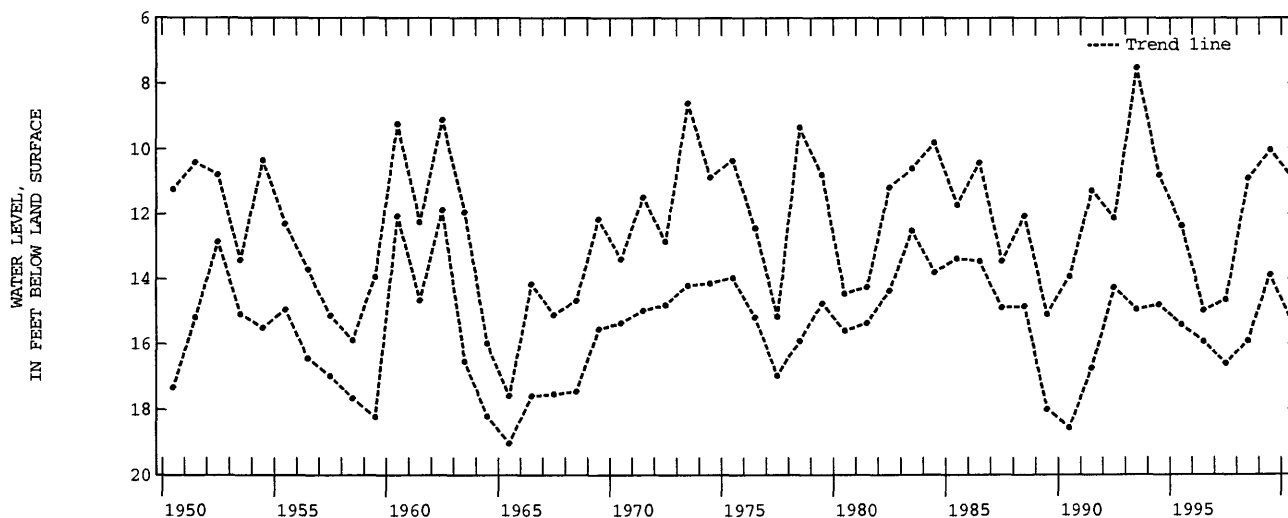
DATUM.--Elevation of land-surface datum is 980 ft above sea level. Measuring point: edge of pump base, 0.50 ft above land-surface datum.

PERIOD OF RECORD.--July 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.52 ft below land-surface datum, July 22, 1993; lowest water level measured, 19.03 ft below land-surface datum, Aug. 17, 1965.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	13.51	DEC 20	14.62	FEB 11	15.25	MAY 22	14.60	JUL 06	10.93	SEP 13	12.38
NOV 19	14.15	JAN 25	14.94	APR 14	15.35	JUN 06	12.10	AUG 25	11.92		
WATER YEAR 2000		HIGHEST	10.93	JUL 06	LOWEST	15.35	APR 14				



GREEN COUNTY

424427089494701. Local number, GN-03/06E/18-0002.

LOCATION.--Lat 42°44'27", long 89°49'47", Hydrologic Unit 07090003. Owner: Earl Waddington.

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled domestic water-table well, diameter 6 in., depth 150 ft.

INSTRUMENTATION.--Water level measured monthly by observer.

DATUM.--Elevation of land-surface datum is 1,020 ft above sea level. Measuring point: hole in pump base, 0.50 ft above land-surface datum.

PERIOD OF RECORD.--July 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 118.96 ft below land-surface datum, June 1, 1999; lowest water level measured, 143.94 ft below land-surface datum, Feb. 18, 1960.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	123.41	JAN 14	124.51	MAY 11	124.41	JUN 27	125.79	JUL 27	126.41	SEP 21	126.61
DEC 16	123.91	MAR 15	125.88								
WATER YEAR 2000		HIGHEST	123.41	OCT 13	LOWEST	126.61	SEP 21				

GROUND-WATER LEVELS

IOWA COUNTY

425644090101901. Local number, IW-06/03E/32-0032.

LOCATION.--Lat 42°56'44", long 90°10'19", Hydrologic Unit 07090003. Owner: Archie Lee.

AQUIFER.--Galena-Platteville.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in., depth 92 ft.

INSTRUMENTATION.--Water level measured bi-monthly by observer.

DATUM.--Elevation of land-surface datum is 1,200 ft above sea level. Measuring point: 0.25-in. hole in top of casing, at land-surface datum.

PERIOD OF RECORD.--August 1957 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 36.02 ft below land-surface datum, July 22, 1993; lowest water level measured, 68.81 ft below land-surface datum, Aug. 18, 1965.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	55.90	JAN 13	56.96	MAY 11	55.92	JUN 27	51.02	JUL 28	51.72	SEP 21	49.42
DEC 15	56.47	MAR 16	56.09								
WATER YEAR 2000		HIGHEST	49.42	SEP 21	LOWEST	56.96	JAN 13				

JACKSON COUNTY

441810090484001. Local number, JA-21/04W/13-0038.

LOCATION.--Lat 44°18'10", long 90°48'40", Hydrologic Unit 07040007. Owner: Brockway Sanitation District.

AQUIFER.--Alluvium.

WELL CHARACTERISTICS.--Drilled municipal well, diameter 18 in., depth 80 ft, cased to 80 ft, open end.

INSTRUMENTATION.--Water level measured weekly by observer.

DATUM.--Elevation of land-surface datum is 856 ft above sea level. Measuring point: top of vent pipe, 2.5 ft above land-surface datum.

PERIOD OF RECORD.--October 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.64 ft below land-surface datum, Sept. 10, 1993; lowest water level measured, 58.50 ft below land-surface datum, June 9, 16, 2000.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	54.70	DEC 03	54.74	FEB 04	55.00	APR 28	57.30	JUN 30	57.30	SEP 01	57.40
08	54.70	10	54.55	11	54.70	MAY 05	57.30	JUL 07	57.30	08	57.30
15	55.15	17	54.75	18	54.90	12	57.20	14	57.00	15	57.20
22	55.25	24	55.05	25	54.90	19	56.90	21	57.40	22	57.30
29	55.25	31	54.88	MAR 03	56.40	26	56.70	28	57.20	29	57.10
NOV 05	55.35	JAN 07	54.65	10	56.40	JUN 02	56.70	AUG 04	57.40		
12	55.35	14	54.55	17	55.70	09	58.50	11	57.20		
19	55.35	21	54.60	APR 07	56.50	16	58.50	18	57.10		
26	55.15	28	54.70	21	57.20	23	57.90	25	56.90		
WATER YEAR 2000		HIGHEST	54.55	DEC 10, JAN 14	LOWEST	58.50	JUN 09, 16				

KENOSHA COUNTY

423214087503801. Local number, KE-01 /22E/13-0046.

LOCATION.--Lat 42°32'14", long 87°50'38", Hydrologic Unit 04040002. Owner: St. Joseph Home.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Drilled well, diameter 6 in., depth 135 ft, cased to 82 ft, open end.

INSTRUMENTATION.--Water level measured by observer.

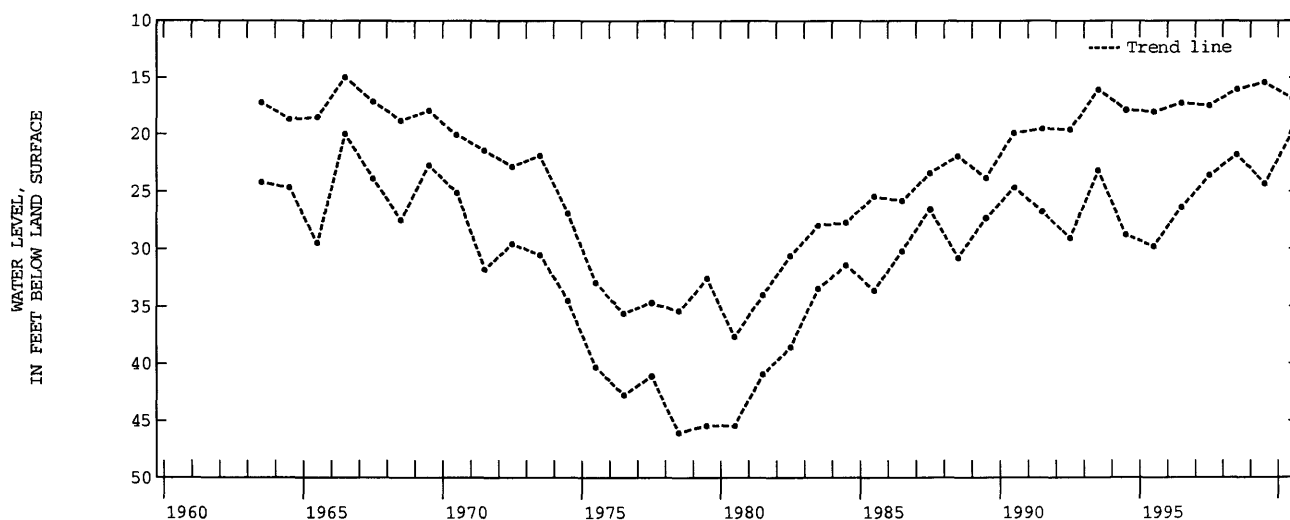
DATUM.--Elevation of land-surface datum is 645 ft above sea level. Measuring point: top of casing, 1.60 ft above land-surface datum.

PERIOD OF RECORD.--January 1961 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.00 ft below land-surface datum, Mar. 16, 1961; lowest water level measured, 46.02 ft below land-surface datum, June 6, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 11	19.85	FEB 21	19.63	MAY 18	17.68	JUL 17	17.45	AUG 14	18.35	SEP 25	17.09
NOV 16	19.36	MAR 14	18.99	JUN 19	16.86						
WATER YEAR 2000		HIGHEST	16.86	JUN 19	LOWEST	19.85	OCT 11				



GROUND-WATER LEVELS

LAFAYETTE COUNTY

423114090161101. Local number, LF-01/02E/33-0057.

LOCATION.--Lat 42°31'13", long 90°16'11", Hydrologic Unit 07060005. Owner: Coulthard Estate.

AQUIFER.--Galena-Platteville.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in., depth 265 ft, cased to 16 ft, open end.

INSTRUMENTATION.--Continuous water-level recorder.

DATUM.--Elevation of land-surface datum is 1,000 ft above sea level. Measuring point: top of casing, 3.00 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.00 ft below land-surface datum, June 26, 1996; lowest water level, 130.99 ft below land-surface datum, Oct. 27, 1959.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	34.55	34.57	35.28	35.50	32.20	---	30.64	32.20
10	---	---	---	---	34.41	34.91	35.74	35.37	30.80	---	30.94	31.91
15	---	---	---	33.77	34.57	35.04	35.62	35.60	30.85	---	31.20	32.39
20	---	---	---	33.90	35.04	35.08	35.46	35.48	---	---	31.43	32.20
25	---	---	---	34.12	34.73	35.07	35.71	35.27	---	30.30	31.48	32.96
EOM	---	---	---	34.11	34.50	35.43	35.71	35.00	---	30.37	31.54	32.59

WATER YEAR 2000 HIGHEST 30.25 JUL 27 LOWEST 36.01 APR 12

424004090220601. Local number, LF-02/01E/04-0011.

LOCATION.--Lat 42°40'04", long 90°22'06", Hydrologic Unit 07060005. Owner: Ed Wiegel.

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in., depth 64 ft.

INSTRUMENTATION.--Water level measured monthly by observer.

DATUM.--Elevation of land-surface datum is 1,010 ft above sea level. Measuring point: top of casing, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--March 1947 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.58 ft below land-surface datum, July 22, 1993; lowest water level measured, 38.81 ft below land-surface datum, Aug. 1, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	26.29	JAN 14	27.24	MAY 11	23.74	JUN 27	22.19	JUL 27	22.82	SEP 21	23.41
DEC 16	26.49	MAR 15	25.81								

WATER YEAR 2000 HIGHEST 22.19 JUN 27 LOWEST 27.24 JAN 14

LANGLADE COUNTY

450933089084801. Local number, LA-31/11E/20-0064.

LOCATION.--Lat 45°09'33", long 89°08'48", Hydrologic Unit 07070002. Owner: Wis. Dept. of Natural Resources.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Driven observation water-table well, diameter 2 in., depth 20 ft, cased to 18 ft, well point 18-20 ft.

INSTRUMENTATION.--Water level measured weekly by observer.

DATUM.--Elevation of land-surface datum is 1,508 ft above sea level. Measuring point: top of collar on casing, 0.30 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.40 ft below land-surface datum, June 21, 1993; lowest water level measured, 16.46 ft below land-surface datum, Jan. 31, 1949.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	13.95	NOV 07	14.45	NOV 28	14.50	DEC 19	14.95	JAN 18	15.25	FEB 14	15.63
14	14.20	14	14.53	DEC 05	14.75	JAN 03	15.03	31	14.95	21	15.68
21	14.19	21	14.65	12	14.73	10	15.15	FEB 07	15.55	28	15.60
28	14.36										

WATER YEAR 2000 HIGHEST 13.95 OCT 07 LOWEST 15.68 FEB 21

MANITOWOC COUNTY

440430087420401. Local number, MN-19/23E/35-0028.

LOCATION.--Lat 44°04'30", long 87°42'04", Hydrologic Unit 04030101. Owner: Wis. Dept. of Transportation.

AQUIFER.--Silurian dolomite.

WELL CHARACTERISTICS.--Drilled domestic artesian well, diameter 6 in., depth 147 ft, cased to 133 ft, open end.

INSTRUMENTATION.--Water level measured weekly by observer.

DATUM.--Elevation of land-surface datum is 670 ft above sea level. Measuring point: 0.25-in. hole in pump base, 1.00 ft above land-surface datum.

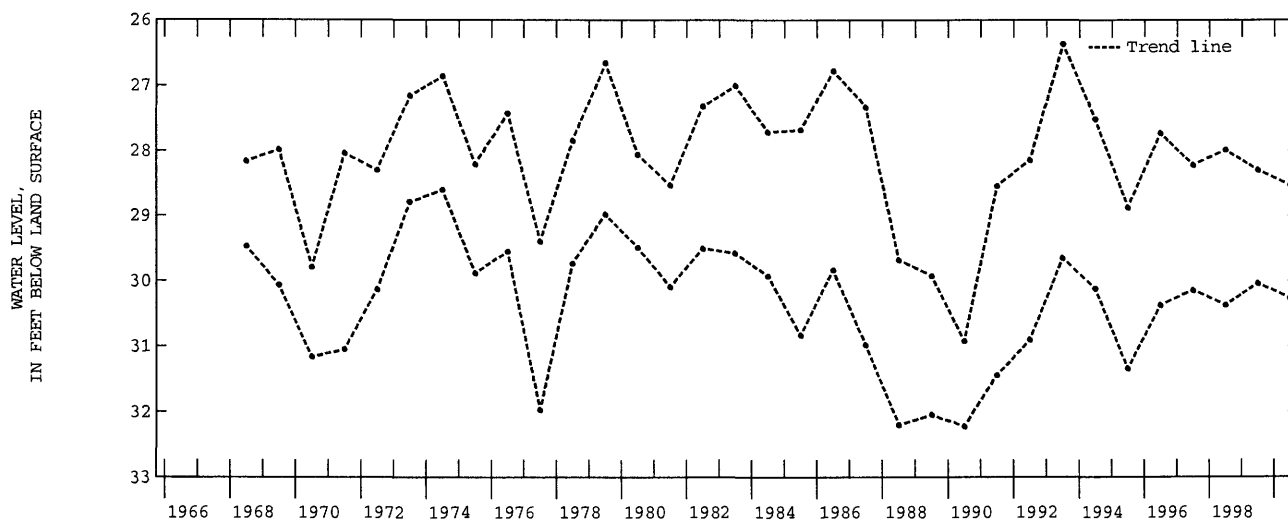
PERIOD OF RECORD.--June 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.37 ft below land-surface datum, May 4, 1993; lowest water level measured, 32.22 ft below land-surface datum, Dec. 28, 1989.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	29.79	MAR 01	29.76	APR 12	29.65	MAY 16	29.31	JUN 27	29.50	AUG 22	28.72
12	29.86	07	29.57	18	29.62	24	28.89	JUL 11	28.80	30	28.95
26	29.79	16	29.59	25	29.60	JUN 06	28.53	17	28.73	SEP 06	28.85
FEB 08	29.96	21	29.60	MAY 02	29.57	14	28.64	26	28.80	12	28.64
16	30.26	28	29.42	10	29.89	19	28.77	AUG 08	28.63	20	28.64
23	30.26										

WATER YEAR 2000 HIGHEST 28.53 JUN 06 LOWEST 30.26 FEB 16, 23



MARATHON COUNTY

444709089265301. Local number, MR-27/09E/31-0028.

LOCATION.--Lat 44°47'09", long 89°26'53", Hydrologic Unit 07070002. Owner: U.S. Geol. Survey.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Driven observation water-table well, diameter 1.25 in., depth 27 ft, cased to 25 ft, well point 25-27 ft.

INSTRUMENTATION.--Water level measured weekly by observer.

DATUM.--Elevation of land-surface datum is 1,229 ft above sea level. Measuring point: top of pipe, 0.80 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.18 ft below land-surface datum, Aug. 1, 1993; lowest water level measured, 26.09 ft below land-surface datum, Mar. 30, 1959.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	21.20	JAN 24	22.40	MAR 30	21.30	MAY 27	22.80	JUL 22	22.00	SEP 25	21.40
NOV 16	21.80	FEB 29	21.30	APR 25	22.00	JUN 23	22.20	AUG 22	21.70		
WATER YEAR 2000		HIGHEST	21.20	OCT 19		LOWEST	22.80	MAY 27			

GROUND-WATER LEVELS

MARINETTE COUNTY

453816087590101. Local number, MT-37/20E/34-0007.

LOCATION.--Lat 45°38'16", long 87°59'01", Hydrologic Unit 04030108. Owner: Wis. Dept. of Natural Resources.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 8 in., depth 33 ft, cased to 33 ft, open end.

INSTRUMENTATION.--Water level measured weekly by observer.

DATUM.--Elevation of land-surface datum is 980 ft above sea level. Measuring point: pointer on float gage, 4.00 ft above land-surface datum.

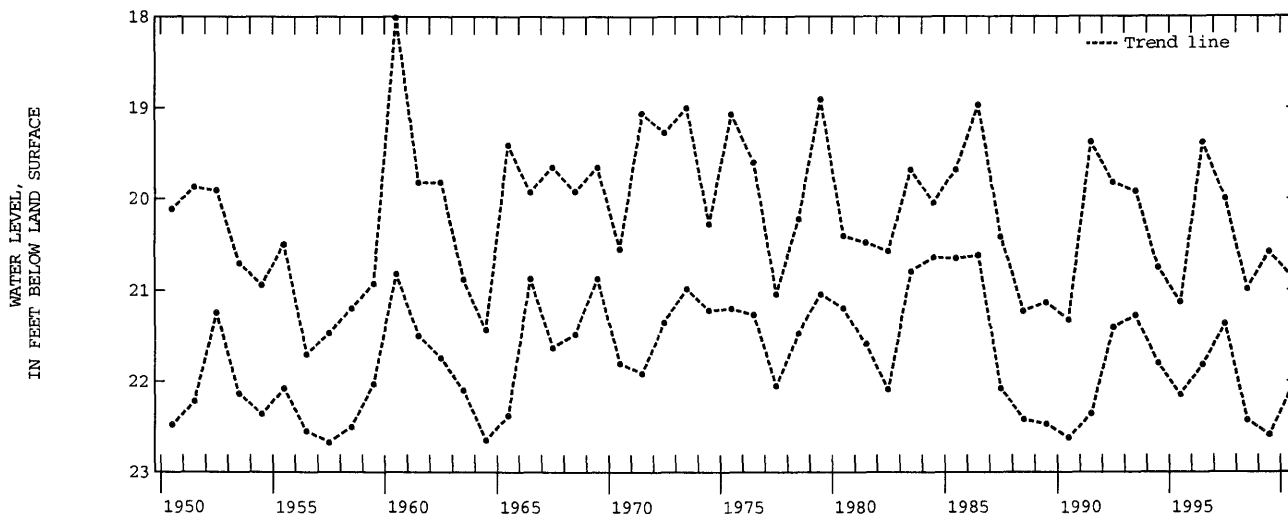
PERIOD OF RECORD.--March 1939 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.01 ft below land-surface datum, May 17, 1960; lowest water level measured, 23.26 ft below land-surface datum, Nov. 2, 1948.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05	21.32	NOV 30	21.60	JAN 25	21.90	MAR 28	21.32	MAY 23	21.38	SEP 05	21.31
13	21.35	DEC 07	21.65	FEB 01	21.94	APR 05	21.31	30	21.50	12	21.13
21	21.38	14	21.72	08	21.98	11	21.37	JUN 06	21.59	19	20.86
26	21.40	21	21.75	15	22.05	18	21.40	AUG 07	21.45	26	20.88
NOV 02	21.47	28	21.81	23	22.08	25	21.26	08	21.63		
09	21.53	JAN 04	21.84	29	21.86	MAY 02	21.28	15	21.58		
16	21.59	11	21.85	MAR 14	21.40	09	21.36	21	21.48		
23	21.65	18	21.85	21	21.40	16	21.36	29	21.59		

WATER YEAR 2000 HIGHEST 20.86 SEP 19 LOWEST 22.08 FEB 23



MARQUETTE COUNTY

435244089293401. Local number, MQ-16/08E/12-0009.

LOCATION.--Lat 43°52'44", long 89°29'34", Hydrologic Unit 04030201. Owner: Village of Westfield.

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in., depth 274 ft.

INSTRUMENTATION.--Water level measured bi-monthly by observer.

DATUM.--Elevation of land-surface datum is 880 ft above sea level. Measuring point: top of casing, at land-surface datum.

PERIOD OF RECORD.--October 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.15 ft below land-surface datum, July 13, 1993; lowest water level measured, 19.69 ft below land-surface datum, Jan. 25, 1999.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 01	15.04	APR 04	15.14	MAY 08	14.61	MAY 31	14.86	JUL 13	14.18	SEP 13	15.29
JAN 05	14.98										

WATER YEAR 2000 HIGHEST 14.18 JUL 13 LOWEST 15.29 SEP 13

MARQUETTE COUNTY--Continued

433956089275601. Local number, MQ-14/09E/30-0026.

LOCATION.--Lat 43°39'56", long 89°27'56", Hydrologic Unit 04030201. Owner: Leslie Mountford.

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled domestic water-table well, diameter 6 in., depth 170 ft, cased to 145 ft, open end.

INSTRUMENTATION.--Water level measured bi-monthly by observer.

DATUM.--Elevation of land-surface datum is 800 ft above sea level. Measuring point: 0.25-in. hole in cap of casing, 0.75 ft above land-surface datum.

PERIOD OF RECORD.--May 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.80 ft below land-surface datum, Apr. 2, 1973; lowest water level measured, 19.22 ft below land-surface datum, Feb. 22, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 01	17.02	JAN 05	17.31	APR 04	16.36	MAY 08	16.05	SEP 13	16.69
WATER YEAR 2000		HIGHEST	16.05	MAY 08	LOWEST	17.31	JAN 05		

MILWAUKEE COUNTY

425613088014301. Local number, ML-06/21E/32-0148.

LOCATION.--Lat 42°56'13", long 88°01'43", Hydrologic Unit 04040002. Owner: Milwaukee County.

AQUIFER.--Silurian dolomite.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 5 in., depth 180 ft, cased to 43 ft, open end.

INSTRUMENTATION.--Water level measured monthly by observer.

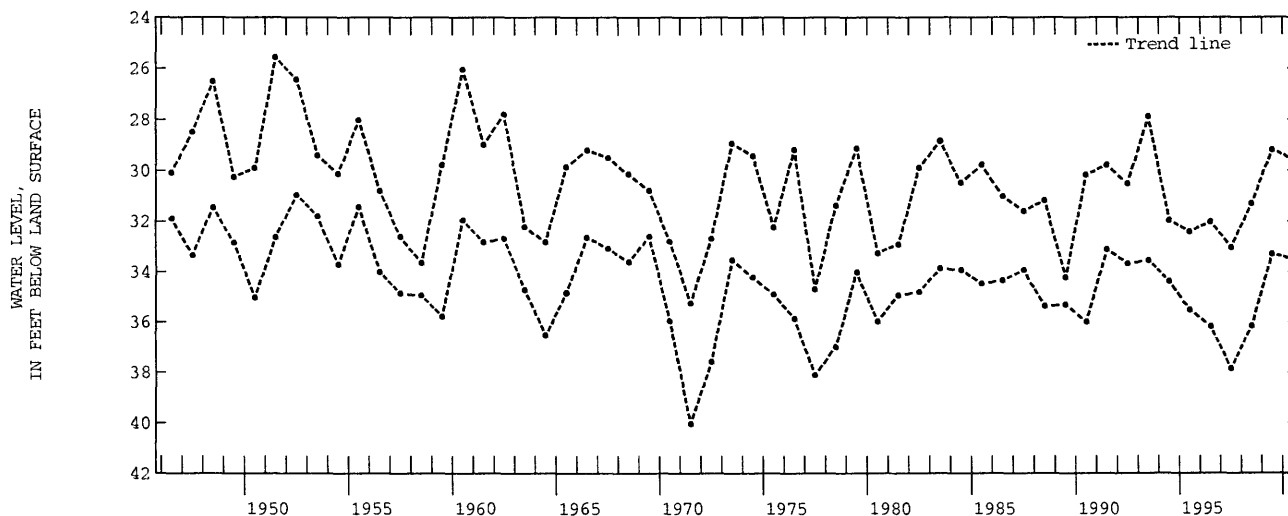
DATUM.--Elevation of land-surface datum is 774 ft above sea level. Measuring point: top of 0.25-in. pipe, at land-surface datum.

PERIOD OF RECORD.--September 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.56 ft below land-surface datum, May 4, 1951; lowest water level measured, 40.03 ft below land-surface datum, Aug. 13, 1971.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	32.12	NOV 15	32.75	JAN 07	33.01	APR 17	33.49	JUN 29	29.93	AUG 21	29.58
WATER YEAR 2000		HIGHEST	29.58	AUG 21	LOWEST	33.49	APR 17				



GROUND-WATER LEVELS

MONROE COUNTY

434342090495601. Local number, MO-15/04W/34-0002.

LOCATION.--Lat 43°43'42", long 90°49'56", Hydrologic Unit 07060001. Owner: Joseph Anderson.

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 5 in., depth 44 ft.

INSTRUMENTATION.--Continuous water-level recorder.

DATUM.--Elevation of land-surface datum is 1,100 ft above sea level. Measuring point: top of casing, 0.50 ft above land-surface datum.

REMARKS.--No measurements made in 1981-82 water year.

PERIOD OF RECORD.--July 1934 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.70 ft below land-surface datum, Apr. 10, 1976; lowest water level measured, 18.68 ft below land-surface datum, Feb. 23, 1935.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.04	7.17	7.31	7.41	7.53	7.20	7.45	7.46	6.61	7.02	7.22	7.18
10	7.03	7.23	7.36	7.37	7.50	7.36	7.51	7.50	6.67	6.96	7.20	7.29
15	7.03	7.27	7.37	7.47	7.53	7.39	7.52	7.65	7.07	7.01	7.23	7.35
20	7.05	7.28	7.45	7.49	7.57	7.42	7.50	7.00	6.67	7.13	7.23	7.26
25	7.10	7.23	7.48	7.53	6.75	7.37	7.36	7.33	7.06	7.20	7.21	7.30
EOM	7.10	7.33	7.39	7.57	7.06	7.44	7.43	7.45	6.96	7.26	7.14	7.32

WATER YEAR 2000 HIGHEST 6.21 JUN 07 LOWEST 11.53 OCT 19

440026090390101. Local number, MO-18/02W/29-0017.

LOCATION.--Lat 44°00'26", long 90°39'01", Hydrologic Unit 07040006. Owner: U.S. Army.

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 9 in., depth 192 ft, cased to 109 ft, open end.

INSTRUMENTATION.--Continuous water-level recorder.

DATUM.--Elevation of land-surface datum is 909 ft above sea level. Measuring point: top of casing, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--November 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.48 ft below land-surface datum, Sept. 29, 1965; lowest water level, 8.62 ft below land-surface datum, Oct. 7, 1987.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.96	6.44	6.64	6.72	7.57	7.54	7.84	6.95	5.09	4.43	5.01	5.61
10	5.94	6.54	5.82	6.75	7.62	7.58	7.83	6.91	4.58	4.49	5.19	5.73
15	5.95	6.59	5.73	6.83	7.71	7.71	7.80	6.99	4.58	4.61	5.34	5.89
20	6.13	6.63	6.34	6.91	7.76	7.81	7.75	6.69	4.36	4.76	5.34	6.00
25	6.14	6.30	6.24	7.29	7.51	7.82	7.29	6.32	4.14	4.88	5.46	6.04
EOM	6.29	6.60	6.57	7.47	7.50	7.82	7.04	6.16	4.28	4.95	5.51	6.12

WATER YEAR 2000 HIGHEST 4.14 JUN 25 LOWEST 7.84 APR 04, 05, 07, 08, 09

OCONTO COUNTY

450819088263901. Local number, OC-31/16E/25-0179.

LOCATION.--Lat 45°08'19", long 88°26'392", Hydrologic Unit 04030104. Owner: U.S. Forest Service.

AQUIFER.--Prairie du Chien.

WELL CHARACTERISTICS.--Drilled public water-table well, diameter 6 in., depth 46 ft, cased to 38 ft, open end.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--Elevation of land-surface datum is 920 ft above sea level. Measuring point: hole in pump base, 2.00 ft above land-surface datum.

PERIOD OF RECORD.--September 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.54 ft below land-surface datum, June 30, 1993; lowest water level measured, 20.52 ft below land-surface datum, May 12, 1999.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06	20.00	NOV 17	20.15	DEC 22	20.22	MAR 08	20.08	JUL 05	19.97
13	20.04	24	20.15	29	20.23	MAY 03	20.01	AUG 15	19.98
20	20.07	DEC 01	20.16	JAN 05	20.31	17	19.99	SEP 15	19.73
NOV 10	20.14	08	20.18	MAR 01	20.12	JUN 28	20.14		

WATER YEAR 2000 HIGHEST 19.73 SEP 15 LOWEST 20.31 JAN 05

ONEIDA COUNTY

455213089323501. Local number, ON-39/08E/18-0022.

LOCATION.--Lat 45°52'13", long 89°32'35", Hydrologic Unit 07070001. Owner: Wisconsin Valley Improvement Co.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Jetted unused water-table well, diameter 6 in., depth 27 ft, cased to 27 ft, open end.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--Elevation of land-surface datum is 1,607 ft above sea level. Measuring point: top of casing, 6.00 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.31 ft below land-surface datum, May 26, 1973; lowest water level, 19.29 ft below land-surface datum, Mar. 27, 1949.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	16.20	DEC 17	16.70	FEB 25	17.15	APR 15	17.21	JUN 16	16.73	AUG 18	16.20
17	16.15	24	16.75	29	17.40	22	17.13	23	16.64	25	16.21
24	16.23	31	16.90	MAR 03	17.30	29	17.05	30	16.70	SEP 01	16.30
31	16.70	JAN 07	16.90	10	17.30	MAY 01	16.90	JUL 01	16.55	09	16.34
NOV 07	16.25	14	16.94	17	17.33	12	16.84	08	16.50	16	16.41
14	16.40	21	17.00	24	17.35	19	16.80	14	16.44	23	16.41
21	16.45	28	17.05	31	17.31	26	16.75	21	16.38	30	16.47
30	16.55	FEB 04	17.04	APR 01	17.31	JUN 01	16.65	31	16.35		
DEC 03	16.55	11	17.10	03	16.08	02	16.65	AUG 04	16.29		
10	16.60	18	17.20	08	17.35	09	16.70	11	16.27		

WATER YEAR 2000 HIGHEST 16.08 APR 03 LOWEST 17.40 FEB 29

453720089215401. Local number, ON-36/09E/09-0024.

LOCATION.--Lat 45°37'20", long 89°21'54", Hydrologic Unit 07070001. Owner: U.S. Geol. Survey.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Driven observation water-table well, diameter 1.25 in., depth 33 ft, cased to 37 ft, well point 31-33 ft.

INSTRUMENTATION.--Water level measured weekly by observer.

DATUM.--Elevation of land-surface datum is 1,560 ft above sea level. Measuring point: top of casing, 0.80 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.67 ft below land-surface datum, Aug. 3, 1968; lowest water level measured, 23.16 ft below land-surface datum, Mar. 12, 1990.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	21.88	DEC 03	22.04	FEB 07	22.86	APR 03	21.28	JUN 03	21.83	AUG 02	20.85
04	21.67	JAN 05	22.26	MAR 03	22.48	MAY 05	21.95	JUL 05	21.93	SEP 04	20.48

WATER YEAR 2000 HIGHEST 20.48 SEP 04 LOWEST 22.86 FEB 07

GROUND-WATER LEVELS

POLK COUNTY

452352092332001. Local number, PK-34/18W/26-0093.

LOCATION.--Lat 45°23'52", long 92°33'20", Hydrologic Unit 07030005. Owner: Wis. Dept. of Transportation.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Drilled domestic artesian well, diameter 6 in., depth 64 ft, cased to 60 ft, open end.

INSTRUMENTATION.--Water level measured weekly by observer.

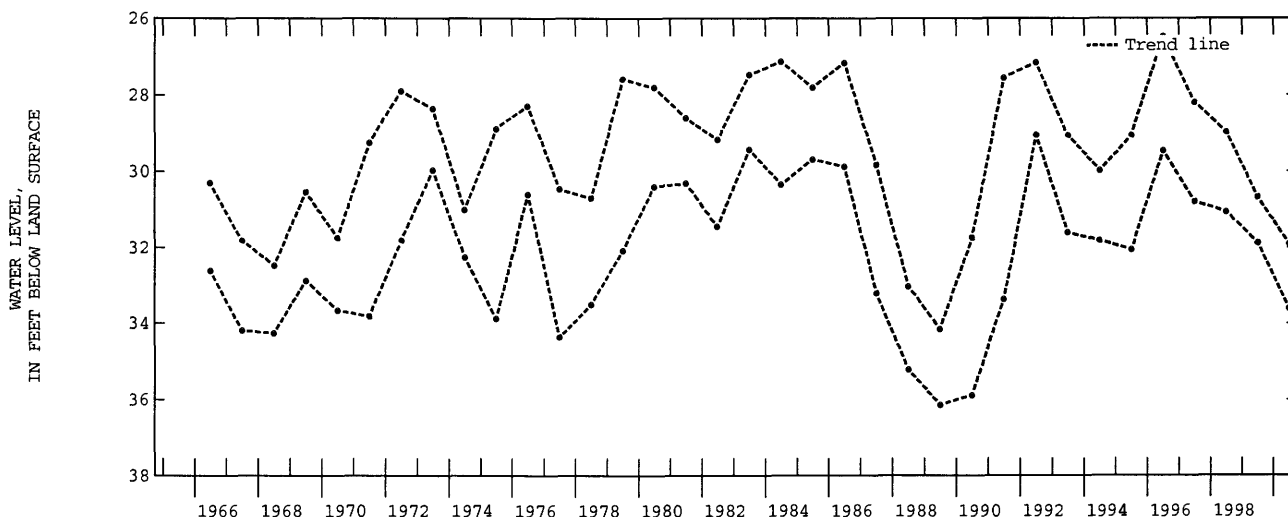
DATUM.--Elevation of land-surface datum is 1,140 ft above sea level. Measuring point: hole in pump base, 2.00 ft above land-surface datum.

PERIOD OF RECORD.--March 10, 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.72 ft below land-surface datum, June 20, 1973; lowest water level measured, 36.13 ft below land-surface datum, Mar. 22, 1989.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	31.90	DEC 17	32.50	FEB 14	33.06	APR 14	32.40	JUN 15	33.10	AUG 14	33.05
NOV 15	32.15	JAN 17	32.75	MAR 13	32.40	MAY 15	32.90	JUL 13	33.00	SEP 14	33.60
WATER YEAR 2000		HIGHEST	31.90	OCT 15	LOWEST	33.60	SEP 14				



PORTAGE COUNTY

442810089194501. Local number, PT-23/10E/18-0276.

LOCATION.--Lat 44°28'10", long 89°19'45", Hydrologic Unit 04030202. Owner: Portage County.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Driven unused water-table well, diameter 1.25 in., depth 17 ft, cased to 15 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--Elevation of land-surface datum is 1,090 ft above sea level. Measuring point: rim of casing, 3.50 ft above land-surface datum.

PERIOD OF RECORD.--July 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.01 ft below land-surface datum, Apr. 22, 1974; lowest water level measured, 11.09 ft below land-surface datum, Mar. 3, 1959.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	6.61	JAN 30	7.90	MAY 17	5.42	JUL 02	6.60	SEP 19	7.25
15	6.71	APR 13	6.24	JUN 27	6.65	AUG 20	7.15	25	7.50
WATER YEAR 2000		HIGHEST	5.42	MAY 17	LOWEST	7.90	JAN 30		

GROUND-WATER LEVELS

501

PRICE COUNTY

453311090065301. Local number, PR-35/03E/04-0065.

LOCATION.--Lat 45°33'11", long 90°06'53", Hydrologic Unit 07070001. Owner: Town of Knox.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Drilled domestic water-table well, diameter 6 in., depth 118 ft, cased to 118 ft, open end.

INSTRUMENTATION.--Water level measured monthly by observer.

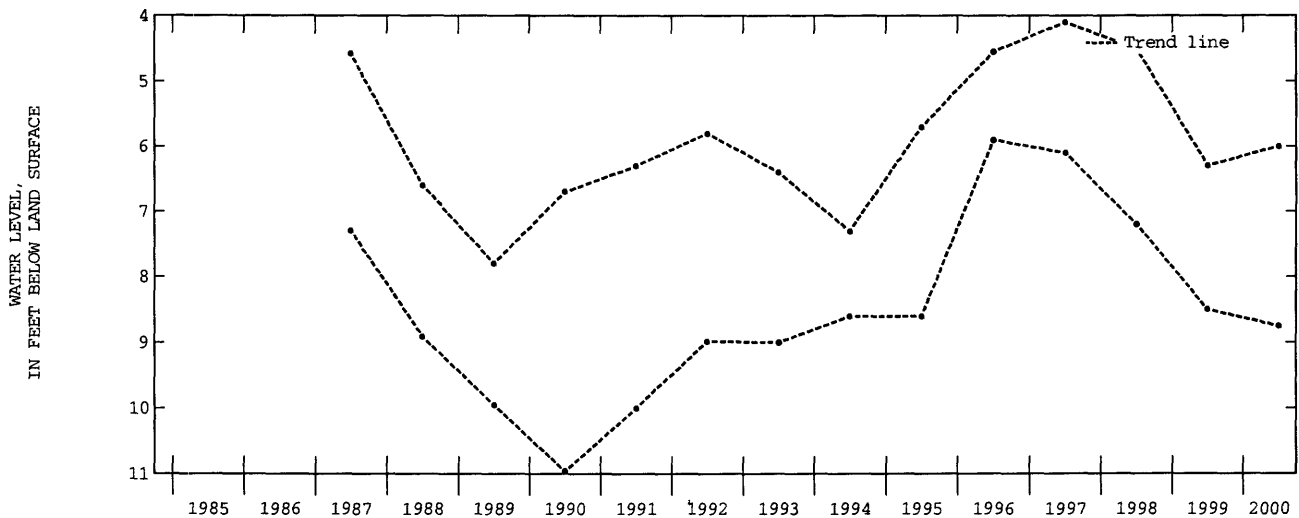
DATUM.--Elevation of land-surface datum is 1,695 ft above sea level. Measuring point: top of casing, 2.00 ft above land-surface datum.

PERIOD OF RECORD.--October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.10 ft above land-surface datum, July 14, 1997; lowest water level measured, 10.96 ft below land-surface datum, Feb. 15, 1990.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 11	7.60	JAN 10	7.50	MAR 06	7.70	MAY 08	7.75	JUL 10	6.00	SEP 11	6.70
DEC 20	7.00	FEB 07	8.75	APR 10	7.70	JUN 05	7.00	AUG 07	7.00		
WATER YEAR 2000		HIGHEST	6.00	JUL 10	LOWEST	8.75	FEB 07				



RACINE COUNTY

424119088081801. Local number, RA-03/20E/28-0062.

LOCATION.--Lat 42°41'19", long 88°08'18", Hydrologic Unit 07120006. Owner: Wis. Dept .of Transportation.

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 104 ft, cased to 104 ft, open hole.

INSTRUMENTATION.--Water level measured monthly by observer.

DATUM.--Elevation of land-surface datum is 800 ft above sea level. Measuring point: hole in pump base, 1.50 ft above land-surface datum.

PERIOD OF RECORD.--November 1963 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.21 ft below land-surface datum, Apr. 28, 1988; lowest water level measured, 31.15 ft below land-surface datum, Nov. 11, 1993.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 17	27.38	MAY 17	26.29	JUL 12	23.45	AUG 16	25.03	SEP 13	25.66
20	26.94	JUN 14	23.66						
WATER YEAR 2000		HIGHEST	23.45	JUL 12	LOWEST	27.38	APR 17		

GROUND-WATER LEVELS

RICHLAND COUNTY

431840090203201. Local number, RI-10/01E/26-0023.

LOCATION.--Lat 43°18'40", long 90°20'32", Hydrologic Unit 07070005. Owner: Koch Tractor, Inc.

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled domestic artesian well, diameter 6 in., depth 160 ft, cased to 135 ft, open end.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--Elevation of land-surface datum is 725 ft above sea level. Measuring point: top of 1-in. breather pipe, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--February 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.11 ft below land-surface datum, May 22, 1973; lowest water level measured, 16.45 ft below land-surface datum, Mar. 14, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	11.58	JAN 13	12.89	MAY 12	12.22	JUL 27	11.63	SEP 20	11.12
DEC 16	12.44	MAR 16	12.55	JUN 27	11.14				
WATER YEAR 2000		HIGHEST	11.12	SEP 20	LOWEST	12.89	JAN 13		

ROCK COUNTY

423956089022301. Local number, RO-02/12E/02-0003.

LOCATION.--Lat 42°39'56", long 89°02'23", Hydrologic Unit 07090001. Owner: School for the Blind, Janesville.

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in., depth 470 ft, cased to 113 ft, open end.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--Elevation of land-surface datum is 824 ft above sea level. Measuring point: 0.25-in. hole cap of casing, 1.50 ft above land-surface datum.

PERIOD OF RECORD.--July 1947 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 49.27 ft below land-surface datum, Apr. 2 and 16, 1986; lowest water level measured, 67.52 ft below land-surface datum, Nov. 10, 1994.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 15	58.94	DEC 10	60.36	MAR 10	56.60	MAY 19	55.70	JUN 13	56.42	AUG 03	57.80
WATER YEAR 2000		HIGHEST	55.70	MAY 19	LOWEST	60.36	DEC 10				

RUSK COUNTY

453107090420101. Local number, RU-35/03W/14-0089.

LOCATION.--Lat 45°31'07", long 90°42'01", Hydrologic Unit 07050004. Owner: Hawkins Cemetery.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Drilled public-supply water-table well, diameter 6 in., depth 25 ft.

INSTRUMENTATION.--Water level measured monthly by observer.

DATUM.--Elevation of land-surface datum is 1,380 ft above sea level. Measuring point: top of casing, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--April 1957 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.25 ft below land-surface datum, June 12, 1991; lowest water level measured, 23.50 ft below land-surface datum, Mar. 2, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 05	13.33	FEB 28	14.65	APR 14	13.85	MAY 19	12.65	SEP 12	11.76
DEC 13	13.76	MAR 21	14.57	MAY 19	12.65				
WATER YEAR 2000		HIGHEST	11.76	SEP 12	LOWEST	14.65	FEB 28		

SAUK COUNTY

432100089440001. Local number, SK-10/06E/02-0003.

LOCATION.--Lat 43°21'00", long 89°44'00", Hydrologic Unit 07070005. Owner: Badger Army Ammunition Plant.

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in., depth 451 ft, cased to 160 ft, open end.

INSTRUMENTATION.--Continuous water-level recorder.

DATUM.--Elevation of land-surface datum is 884 ft above sea level. Measuring point: hole in platform, at land-surface datum.

REMARKS.--Water level affected by pumping of nearby wells.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 67.23 ft below land-surface datum, Aug. 10, 1993; lowest water level, 83.92 ft below land-surface datum, Aug. 2, 1946.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	75.73	76.45	76.80	77.57	78.02	78.09	78.28	78.14	76.51	73.80	73.31	73.90
10	75.96	76.50	76.95	77.31	77.85	78.21	78.47	78.08	75.23	73.67	73.44	73.80
15	75.84	76.55	76.78	77.67	77.98	78.21	78.46	78.18	74.71	73.52	73.49	74.03
20	76.09	76.57	77.11	77.78	78.09	78.17	78.34	78.03	74.33	73.34	73.53	73.98
25	76.17	76.74	77.22	77.85	77.99	78.08	78.52	77.69	74.04	73.31	73.54	74.21
EOM	76.32	76.95	77.40	77.80	78.01	78.32	78.37	77.47	73.92	73.23	73.58	74.16

WATER YEAR 2000 HIGHEST 73.17 AUG 06 LOWEST 78.55 APR 12

TAYLOR COUNTY

450947090483902. Local number, TA-31/04W/13-0001.

LOCATION.--Lat 45°09'47", long 90°48'39", Hydrologic Unit 07050005. Owner: Village of Gilman.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 18 in., depth 26 ft, cased to 16 ft, screened 16-26 ft.

INSTRUMENTATION.--Continuous water-level recorder.

DATUM.--Elevation of land-surface datum is 1,200 ft above sea level. Measuring point: top of casing, 2.00 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby wells.

PERIOD OF RECORD.--April 1957 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.69 ft below land-surface datum, June 21, 1993; lowest water level, 13.11 ft below land-surface datum, Oct. 15, 1959.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.02	9.85	9.60	9.90	9.83	8.05	9.12	9.23	8.92	9.08	9.69	8.74
10	9.86	9.87	9.92	9.85	9.81	8.19	9.33	9.48	9.10	7.75	9.35	9.22
15	9.88	9.89	9.95	9.58	9.71	8.56	9.42	9.66	9.22	8.94	8.59	8.51
20	9.81	9.89	9.94	9.66	9.79	9.18	9.16	9.12	8.92	9.45	8.21	9.02
25	9.86	9.55	9.94	9.72	9.21	9.06	8.21	9.43	7.46	9.73	8.98	9.22
EOM	9.82	9.51	9.98	9.72	7.70	8.93	8.84	9.54	8.55	9.68	9.33	9.45

WATER YEAR 2000 HIGHEST 6.59 JUN 21 LOWEST 10.02 OCT 05

TREMPEALEAU COUNTY

440422091182901. Local number, TR-19/08W/35-0001.

LOCATION.--Lat 44°04'22", long 91°18'29", Hydrologic Unit 07040007. Owner: Mrs. William Davidson.

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in., depth 195 ft.

INSTRUMENTATION.--Water level measured monthly by observer.

DATUM.--Elevation of land-surface datum is 820 ft above sea level. Measuring point: top of casing, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--October 1947 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 131.38 ft below land-surface datum, Sept. 7, 1993; lowest water level measured, 146.56 ft below land-surface datum, Sept. 1, 1959.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	138.79	DEC 10	139.77	FEB 20	139.90	APR 20	140.32	JUN 19	138.49	AUG 14	139.69
NOV 01	139.64	JAN 19	140.36	MAR 24	139.07	MAY 27	139.92	JUL 26	139.08	SEP 18	140.49

WATER YEAR 2000 HIGHEST 138.49 JUN 19 LOWEST 140.49 SEP 18

GROUND-WATER LEVELS

TREMPEALEAU COUNTY--Continued

440414091270401. Local number, TR-19/09W/33-0009.

LOCATION.--Lat 44°04'14", long 91°27'04", Hydrologic Unit 07040005. Owner: Village of Centerville.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Drilled public-supply water-table, diameter 6 in., depth 71 ft, cased to 66 ft, screened 66-71 ft.

INSTRUMENTATION.--Water level measured monthly by observer.

DATUM.--Elevation of land-surface datum is 740 ft above sea level. Measuring point: top of breather pipe, at land-surface datum.

REMARKS.--Water level affected by pumping of nearby wells.

PERIOD OF RECORD.--May 1953 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.80 ft below land-surface datum, Oct. 12, 1993, and Apr. 12, 1994; lowest water level measured, 57.11 ft below land-surface datum, Mar. 16, 1965.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03	48.00	JAN 06	48.50	MAR 02	48.60	MAY 03	49.00	JUL 05	49.20	SEP 02	49.60
DEC 05	47.80	FEB 03	48.40	APR 04	48.70	JUN 09	48.50	AUG 02	49.20		
WATER YEAR 2000		HIGHEST	47.80	DEC 05	LOWEST	49.60	SEP 02				

VILAS COUNTY

455517089144001. Local number, VI-40/10E/28-0033.

LOCATION.--Lat 45°55'17", long 89°14'40", Hydrologic Unit 07070001. Owner: Trees for Tomorrow, Inc.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Drilled observation water table well, diameter 6 in., depth 37 ft, cased to 37 ft.

INSTRUMENTATION.--Water level measured monthly by observer.

DATUM.--Elevation of land-surface datum is 1,640 ft above sea level. Measuring point: top of casing, 0.75 ft above land-surface datum.

PERIOD OF RECORD.--December 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.41 ft below land-surface datum, May 14, 1997; lowest water level measured, 14.92 ft below land-surface datum, Aug. 10, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	13.75	NOV 22	13.33	FEB 17	13.75	APR 15	13.27	JUN 24	14.04	JUL 20	13.47
19	13.45	DEC 22	13.57	MAR 17	13.48	MAY 15	13.45				
WATER YEAR 2000		HIGHEST	13.27	APR 15	LOWEST	14.04	JUN 24				

WALWORTH COUNTY

423532088254601. Local number, WW-02/17E/36-0037.

LOCATION.--Lat 42°35'32", long 88°25'46", Hydrologic Unit 07120006. Owner: Lake Geneva Water Works.

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in., depth 820 ft, cased to 10 in., 0-214 ft; 8 in., 214-227 ft, open end.

INSTRUMENTATION.--Water level measured monthly by observer.

DATUM.--Elevation of land-surface datum is 860 ft above sea level. Measuring point: top of casing, 2.00 ft above land-surface datum.

PERIOD OF RECORD.--February 1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 129.48 ft below land-surface datum, Feb. 14, 1962; lowest water level measured, 250.71 ft below land-surface datum, Aug. 21, 2000.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	222.96	JAN 07	221.14	MAR 08	220.84	APR 17	223.06	AUG 21	250.71
WATER YEAR 2000		HIGHEST	220.84	MAR 08	LOWEST	250.71	AUG 21		

GROUND-WATER LEVELS

505

WAUKESHA COUNTY

425535088131701. Local number, WK-05/19E/02-0031.

LOCATION.--Lat 42°55'35", long 88°13'17", Hydrologic Unit 07120006. Owner: William Bahl.

AQUIFER.--Silurian dolomite.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 6 in., depth 508 ft, cased to 434 ft, open end.

INSTRUMENTATION.--Water level measured monthly.

DATUM.--Elevation of land-surface datum is 962 ft above sea level. Measuring point: top of casing, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--May 1947 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 126.06 ft below land-surface datum, May 10, 1973; lowest water level, 139.27 ft below land-surface datum, Aug. 31, 1998.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 15	134.71	MAY 15	135.00	JUN 15	134.89	JUL 20	134.52	AUG 5	134.67	AUG 10	134.87
DEC 20	134.93	31	134.92	JUL 15	134.56	31	134.63				
WATER YEAR 2000		HIGHEST	133.59	OCT 04	LOWEST	135.69	APR 26				

WAUPACA COUNTY

441545088522901. Local number, WP-21/13E/25-0002.

LOCATION.--Lat 44°15'45", long 88°52'29", Hydrologic Unit 04030202. Owner: Village of Fremont.

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in., depth 205 ft, cased to 109 ft, open end.

INSTRUMENTATION.--Water level measured weekly by observer.

DATUM.--Elevation of land-surface datum is 764 ft above sea level. Measuring point: hole in cap, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--August 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.65 ft below land-surface datum, Apr. 7, 1979; lowest water level measured, 17.45 ft below land-surface datum, May 12, 1997.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	14.30	DEC 31	14.39	FEB 25	14.80	APR 28	13.96	JUL 07	13.80	AUG 25	13.72
NOV 26	14.33	JAN 28	14.54	MAR 31	14.67	JUN 02	13.88	28	13.91	SEP 29	13.66
WATER YEAR 2000		HIGHEST	13.66	SEP 29	LOWEST	14.80	FEB 25				

WAUSHARA COUNTY

440713089320801. Local number, WS-19/08E/15-0008.

LOCATION.--Lat 44°07'13", long 89°32'08", Hydrologic Unit 07070003. Owner: University of Wisconsin Experiment Farm, Hancock.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 4 in., depth 18 ft, cased to 18 ft.

INSTRUMENTATION.--Continuous water-level recorder.

DATUM.--Elevation of land-surface datum is 1,080 ft above sea level. Measuring point: top of casing, 1.00 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.88 ft below land-surface datum, July 5, 1973; lowest water level, 15.34 ft below land-surface datum, Apr. 25, 1959.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.84	12.13	12.40	---	---	---	---	13.06	12.75	11.92	12.11	12.31
10	11.87	12.16	12.46	---	---	---	---	13.00	12.61	11.87	12.21	12.30
15	11.90	12.23	12.48	---	---	---	---	12.98	12.48	11.85	12.24	12.33
20	11.97	12.25	12.58	---	---	---	---	12.88	12.27	11.86	12.25	12.33
25	12.03	12.31	12.63	---	---	---	---	12.86	12.08	11.76	12.27	12.36
EOM	12.05	12.38	12.66	---	---	---	13.19	12.81	12.01	12.01	12.28	12.36
WATER YEAR 2000		HIGHEST	11.43	JUL 29	LOWEST	13.23	APR 27, 28					

GROUND-WATER LEVELS

WAUSHARA COUNTY--Continued

440345089151701. Local number, WS-18/10E/01-0105.

LOCATION.--Lat 44°03'45", long 89°15'17", Hydrologic Unit 04030201. Owner: Ronald Campbell.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 4 in., depth 14 ft, cased to 14 ft, open hole.

INSTRUMENTATION.--Continuous water-level recorder.

DATUM.--Elevation of land-surface datum is 873 ft above sea level. Measuring point: top of casing, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--April 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.08 ft below land-surface datum, June 18, 1993; lowest water level measured, 7.87 ft below land-surface datum, Mar. 19, 1959.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	3.31	3.62	2.66	3.14	---	---	---	---	---
10	---	---	---	3.26	3.61	2.72	3.30	---	---	---	---	---
15	---	---	---	3.30	3.65	2.92	3.39	---	---	---	---	---
20	---	---	---	3.43	3.66	2.93	3.18	---	---	3.21	---	---
25	---	---	---	3.52	2.91	2.81	2.54	---	---	---	---	---
ECM	---	---	---	3.54	2.38	3.05	---	---	---	---	---	---
WATER YEAR 2000				HIGHEST	2.26	APR 21	LOWEST	3.70	FEB 16, 17			

WINNEBAGO COUNTY

440122088324601. Local number, WI-18/16E/23-0006.

LOCATION.--Lat 44°01'22", long 88°2'46", Hydrologic Unit 04030201. Owner: City of Oshkosh. Winnebago County, ground-water levels in

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in., depth 200 ft.

INSTRUMENTATION.--Water level measured monthly by observer.

DATUM.--Elevation of land-surface datum is 765 ft above sea level. Measuring point: top of 1-in. pipe, at land-surface datum.

REMARKS.--Water level affected by pumping of nearby wells.

PERIOD OF RECORD.--August 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.65 ft below land-surface datum, Apr. 28, 1993; lowest water level measured, 45.13 ft below land-surface datum, Jan. 1, 1966.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	21.95	DEC 22	22.49	FEB 29	22.17	APR 26	21.20	JUN 29	20.42	AUG 30	21.64
29	21.89	JAN 31	22.62	APR 03	21.43	MAY 31	20.74	JUL 31	21.54	SEP 29	20.39
DEC 03	21.78										
WATER YEAR 2000				HIGHEST	20.39	SEP 29	LOWEST	22.62	JAN 31		

QUALITY OF GROUND WATER

507

Data at the following sites were collected and sampled as part of the Upper Illinois River Basin (UIRB) National Water Quality Assessment Program (NAWQA) urban land-use study during the period April, May and June, 2000. The aquifer at each site was glacial drift.

RACINE COUNTY

STATION NUMBER.--424052088180101 LOCAL NUMBER.--3N19E-31.4h

LOCATION.--Lat 42°40'52", long 88°18'01", NW1/4 NW1/4 NE1/4 sec.31 T.3N., R.19E, Hydrologic Unit 07120006.

WELL CHARACTERISTICS.--Diameter 2.0 inches, depth 18.0 feet, cased to 13.0 feet, type of opening in this interval - slotted screen.

DATE	TIME	DEPTH OF WELL, TOTAL (FEET) (72008)	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	FLOW RATE (G/M) (00059)	SAM- PLING DEPTH (FEET) (00003)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	SAM- PLING METHOD, CODES (82398)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)
MAY 2000												
04...	1000	18.00	13.25	.22	16.2	13	18	4040	741	7.9	6.8	1600
04...	1009	18.00	13.25	.22	16.2	13	18	4040	741	7.9	6.8	1600
MAY 2000												
DATE	TEMPER- ATURE WATER (DEG C) (00010)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ALKA- LINITY WAT DIS TOT IT FIELD CACO3 (39086)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)
04...	15.6	137	64.8	1.8	80.0	429	249	<.1	13.8	32.8	.023	.22
04...	15.6	--	--	--	--	429	--	--	--	--	--	--
MAY 2000												
DATE	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	TUR- BID- ITY (NTU) (00076)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)
04...	9.9	9.65	.20	<.010	E.003	<.010	874	2.2	--	--	--	--
04...	--	--	--	--	--	--	--	2.2	<1	<1	<.9	79
MAY 2000												
DATE	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	SULFIDE WATER WHOLE TOTAL (UG/L) (77041)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
04...	--	--	.24	--	<.07	--	--	--	<10	--	--	3
04...	<1	22	--	<1.0	--	1.1	<1	3	--	<1	2.9	2
MAY 2000												
DATE	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506)	1,1,2- TRI- CHLORO- ETHANE TOTAL (UG/L) (34511)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501)
04...	--	--	--	--	--	--	--	1.8	<.03	<.06	<.07	<.04
04...	<1	<1	E.4	<1	141	<1	<1	--	--	--	--	--

RACINE COUNTY--Continued

DATE	1,1-DI CHLORO- PRO- PENE, WAT, WH TOTAL (UG/L) (77168)	123-TRI CHLORO- PROPANE WATER WHOLE TOTAL (UG/L) (77443)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L) (77651)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546)	2,2-DI CHLORO- PRO- PANE WAT, WH TOTAL (UG/L) (77170)	2,6-DI- ETHYL WAT FLT 0.7 U GF, REC (UG/L) (82660)	2BUTENE TRANS-1 4-DI- CHLORO UNFLTRD RECOVER (UG/L) (73547)	2-HEXA- NONE WATER WHOLE TOTAL (UG/L) (77103)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)	
	ACRYLO- NITRILE TOTAL (UG/L) (34215)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	1,2,3- TRI- CHLORO BENZENE WAT, WH UNFLTRD REC (UG/L) (77613)	BENZENE 123-TRI METHYL- WATER UNFLTRD RECOVER (UG/L) (77221)	BENZENE 1,2,4- TRI- CHLORO WAT UNF REC (UG/L) (34551)	BENZENE 124-TRI METHYL UNFILTR RECOVER (UG/L) (77222)	BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226)	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566)	BENZENE 14BRFL- SURROG VOC UNFLTRD REC (UG/L) (99834)	
	MAY 2000 04... 04...	<.03 --	<.2 --	<.04 --	<.1 --	<.07 --	<.03 --	<.05 --	<.003 --	<.7 --	<.7 --	<.002 --	<.7 --
DATE	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	ISO- PROPYL- BENZENE WATER WHOLE REC (UG/L) (77223)	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	BENZENE SEC BUTYL- WATER UNFLTRD REC (UG/L) (77350)	BENZENE TERT- BUTYL- WATER UNFLTRD REC (UG/L) (77353)	BENZENE BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (34030)	BENZENE BROMO- DI- CHLORO- ETHANE TOTAL (UG/L) (34311)	BENZENE BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32106)	BENZENE BROMO- DI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34668)	BENZENE BROMO- DI- CHLORO- ELDRIN DIS- SOLVED (UG/L) (39381)	BENZENE BROMO- DI- CHLORO- ELDRIN DIS- SOLVED (UG/L) (39381)
MAY 2000 04... 04...	<.05 --	<.03 --	<.2 --	<.04 --	<.05 --	<.03 --	<.06 --	<.04 --	<.04 --	<.04 --	<.1 --	<.06 --	
DATE	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ- INON D10 SRG WAT FLT 0.7 U GF, REC (UG/L) (91063)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DIBROMO CHLORO- PROPANE WATER WHOLE TOT.REC (UG/L) (82625)	DI- BROMO- METHANE WATER WHOLE RECOVER (UG/L) (30217)	DI- BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101)	DI- BROMO- DI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34668)	DI- BROMO- DI- CHLORO- ELDRIN DIS- SOLVED (UG/L) (39381)	DI- BROMO- DI- CHLORO- ELDRIN DIS- SOLVED (UG/L) (39381)	DI- BROMO- DI- CHLORO- ELDRIN DIS- SOLVED (UG/L) (39381)	DI- BROMO- DI- CHLORO- ELDRIN DIS- SOLVED (UG/L) (39381)
MAY 2000 04... 04...	<.002 --	<.003 --	<.003 --	<.06 --	<.03 --	<.2 --	<.1 --	E.01 --	<.004 --	<.04 --	<.09 --		
DATE	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHANE, 1112- TETRA- CHLORO- WAT UNF REC (UG/L) (77562)	ETHANE, 1,1,2,2 CHLORO- CHLORO- WAT UNF REC (UG/L) (34516)	ETHANE 12DI1CL SURROG VOC UNFLTRD PERCENT (99832)	ETHANE HEXA- CHLORO- WATER UNFLTRD RECOVER (UG/L) (34396)	ETHER TERT- BUTYL ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT- BUTYL ETHYL WATER UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT- BUTYL METHYL UNFLTRD RECOVER (UG/L) (50005)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)
MAY 2000 04... 04...	<.002 --	<.004 --	<.03 --	<.09 --	105 --	<.2 --	<.2 --	<.05 --	<.1 --	<.003 --	<.03 --		

	FONOFOS WATER DISS REC (UG/L) (04095)	FREON- 113 WATER UNFLTRD REC (UG/L) (77652)	FURAN, TETRA- HYDRO- WATER UNFLTRD UNFLTRD RECOVER (UG/L) (81607)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (91065)	HEXA- CHLORO- BUT- ADIENE TOTAL (UG/L) (39702)	ISO- DURENE WATER UNFLTRD RECOVER (UG/L) (50000)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHAC- RYLATE ETHYL- WATER UNFLTRD RECOVER (UG/L) (73570)	METHAC- RYLATE METHYL WATER UNFLTRD RECOVER (UG/L) (81597)	
MAY 2000 04... 04...	<.003 --	<.06 --	<2 --	82 --	<.1 --	<.2 --	<.004 --	<.002 --	<.005 --	<.2 --	<.3 --
	METH- ACRYLO- NITRITE WATER UNFLTRD RECOVER (UG/L) (81593)	METHANE BROMO- CHLORO- WAT UNFLTRD REC (UG/L) (77297)	METHYL ACRY- LATE WATER UNFLTRD RECOVER (UG/L) (49991)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL IODIDE UNFLTRD RECOVER (UG/L) (77424)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)	METHYL- BROMIDE TOTAL (UG/L) (34413)	METHYL- CHLO- RIDE TOTAL (UG/L) (34418)	METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423)	METHYL ETHYL- KETONE WATER WHOLE TOTAL (UG/L) (81595)
MAY 2000 04... 04...	<.6 --	<.04 --	<1 --	<.001 --	<.1 --	<.006 --	<.2 --	<.3 --	<.5 --	<.4 --	<2 --
	METHYL ISO- BUTYL KETONE WAT.WH. TOTAL (UG/L) (78133)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENSOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	NAPHTH- ALENE TOTAL (UG/L) (34696)	NAPPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	O- CHLORO- TOLUENE WATER WHOLE TOTAL (UG/L) (77275)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	P,P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)
MAY 2000 04... 04...	<.4 --	.010 --	<.004 --	<.004 --	<.06 --	<.2 --	<.003 --	<.04 --	<.04 --	<.006 --	<.004 --
	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L) (77356)	1234- TETRA METHYL BENZENE UNFLTRD REC (UG/L) (49999)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	1,3-DI- CHLORO- PROPANE WAT. WH TOTAL (UG/L) (77173)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)
MAY 2000 04... 04...	<.004 --	<.004 --	<.005 --	<.002 --	<.07 --	<.2 --	<.018 --	<.003 --	<.007 --	<.1 --	<.004 --
	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	PROPENE 3- CHLORO- WATER UNFLTRD RECOVER (UG/L) (78109)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	STYRENE TOTAL (UG/L) (77128)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TOLUENE D8 SURROG VOC UNFLTRD REC PERCENT (99833)	TOLUENE O-ETHYL WATER UNFLTRD RECOVER (UG/L) (77220)
MAY 2000 04... 04...	<.013 --	<.2 --	<.005 --	<.04 --	<.010 --	<.007 --	<.013 --	<.1 --	<.002 --	105 --	<.06 --
	TOLUENE P-CHLOR WATER UNFLTRD REC (UG/L) (77277)	TOLUENE TOTAL (UG/L) (34010)	TRANS- 1,3-DI- CHLORO- PROPENE (UG/L) (34699)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	TRI- CHLORO- FLUORO- METHANE (UG/L) (34488)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	RA-226 2 SIGMA WATER, DISS, (PCI/L) (76001)	RADON 222 TOTAL (PCI/L) (82303)	URANIUM NATURAL DIS- SOLVED (UG/L) AS U) (22703)
MAY 2000 04... 04...	<.06 --	E.04 --	<.09 --	<.04 --	<.04 --	<.09 --	<.002 --	<.1 --	.12 --	265 --	-- <1

RACINE COUNTY--Continued

STATION NUMBER.--424700088133201 LOCAL NUMBER.--4N19E-26.7e

LOCATION.--Lat 42°47'00", long 88°13'32'', SE1/4 SW1/4 NW1/4 sec.26 T.4N., R.9E, Hydrologic Unit 07120006.

WELL CHARACTERISTICS.--Diameter 2.0 inches, depth 32.5 feet, cased to 27.5 feet, type of opening in this interval - slotted screen.

		DEPTH BELOW LAND SURFACE			PUMP OR FLOW PERIOD PRIOR TO SAM-		DEPTH TO TOP OF SAMPLE		DEPTH TO BOT- TOM OF SAMPLE		BARO- METRIC PRES- SURE		PH WATER WHOLE FIELD (STAND- ARD UNITS)	
DATE	TIME	DEPTH OF WELL, TOTAL (FEET) (72008)	(WATER LEVEL) (FEET) (72019)	FLOW RATE (G/M) (00059)	PLING (MIN) (72004)	SAM- PLING DEPTH (FEET) (00003)	SAMPLE INTER- VAL (FT) (72015)	SAMPLE INTER- VAL (FT) (72016)	SAM- PLING METHOD, CODES (82398)	(MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)			
MAY 2000														
03...	1500	32.50	29.95	.11	86	33.0	28	33	4040	741	5.2	7.1		
03...	1509	32.50	29.95	.11	86	33.0	28	33	4040	741	5.2	7.1		
DATE	SPE- CIFIC CON- DUCT- ANCE (UG/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ALKA- LINITY WAT DIS TOT IT FIELD CACO3 (39086)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS AS SO4) (00945)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)		
MAY 2000														
03...	866	24.4	93.1	43.1	2.5	13.3	421	55.6	.1	14.4	26.7	.041		
03...	866	24.4	--	--	--	--	421	--	--	--	--	--		
DATE	NITRO- GEN, AM- MONIA + ORGANIC DIS- (MG/L AS N) (00623)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	TUR- BID- ITY (NTU) (00076)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)		
MAY 2000														
03...	.11	7.0	6.93	.10	<.010	.104	.039	.034	485	13	--	--		
03...	--	--	--	--	--	--	--	--	--	13	13	<1		
DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CARBON DI- SULFIDE WATER WHOLE TOTAL (UG/L) (77041)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)		
MAY 2000														
03...	--	--	--	--	.08	--	<.07	--	--	--	<10	--		
03...	<.9	31	<1	22	--	<1.0	--	1.6	<1	5	--	<1		
DATE	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506)	1,1,2- TRI- CHLORO- ETHANE TOTAL (UG/L) (34511)		
MAY 2000														
03...	--	26	--	--	--	--	--	--	--	.65	<.03	<.06		
03...	3.8	27	2	6	.8	<1	113	<1	4	--	--	--		
DATE	1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501)	1,1-DI- CHLORO- PRO- PENE, WAT, WH TOTAL (UG/L) (77168)	123-TRI- CHLORO- PROPANE WATER WHOLE TOTAL (UG/L) (77443)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L) (77651)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546)	2,2-DI- CHLORO- PRO- PANE WAT, WH TOTAL (UG/L) (77170)	2,6-DI- ETHYL ANILINE WAT FLT GF, REC (UG/L) (82660)	2BUTENE TRANS-1 4-DI- CHLORO UNFLTRD RECOVER (UG/L) (73547)	2-HEXA- NONE WATER WHOLE TOTAL (UG/L) (77103)		
MAY 2000														
03...	<.07	<.04	<.03	<.2	<.04	<.1	<.07	<.03	<.05	<.003	<.7	<.7		
03...	--	--	--	--	--	--	--	--	--	--	--	--		

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	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)	ACRYLO- NITRILE TOTAL (UG/L) (34215)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINC, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLD 0.7 U GP, REC (UG/L) (82673)	1,2,3- TRI- CHLORO BENZENE WAT, WH REC (UG/L) (77613)	BENZENE 123-TRI METHYL- WATER UNFLTRD RECOVER (UG/L) (77221)	BENZENE 1,2,4- TRI- CHLORO- WAT UNF REC (UG/L) (34551)	BENZENE 124-TRI METHYL UNFLT RECOVER (UG/L) (77222)	BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226)
MAY 2000												
03...	<.002	<7	<1	<.002	<.002	.028	<.002	<.3	<.1	<.2	<.06	<.04
03...	--	--	--	--	--	--	--	--	--	--	--	--
	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566)	BENZENE 14BRFL- SURROG VOC UNFLTRD REC (UG/L) (99834)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	ISO- PROPYL- BENZENE WATER WHOLE UNFLTRD REC (UG/L) (77223)	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	BENZENE SEC BUTYL- WATER UNFLTRD REC (UG/L) (77350)	BENZENE TERT- BUTYL- WATER UNFLTRD REC (UG/L) (77353)	BENZENE BROMO- BENZENE WATER, WHOLE, TOTAL (UG/L) (34030)	BENZENE BROMO- ETHENE WATER UNFLTRD RECOVER (UG/L) (50002)	
MAY 2000												
03...	<.05	113	<.05	<.03	<.2	<.04	<.05	<.03	<.06	E.01	<.04	<.1
03...	--	--	--	--	--	--	--	--	--	--	--	--
	BROMO- FORM TOTAL (UG/L) (32104)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102)	CHLORO- BENZENE TOTAL (UG/L) (34301)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- ETHANE TOTAL (UG/L) (34311)	CHLORO- FORM TOTAL (UG/L) (32106)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)
MAY 2000												
03...	<.06	<.002	<.003	<.003	<.06	<.03	<.2	<.1	<.05	<.004	<.04	<.09
03...	--	--	--	--	--	--	--	--	--	--	--	--
	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ- INON D10 SRG WAT FLT 0.7 U GF, REC (UG/L) (91063)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DIBROMO CHLORO- PROPANE WATER WHOLE TOT.REC (UG/L) (82625)	DI- BROMO- METHANE WATER WHOLE RECOVER (UG/L) (30217)	BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	
MAY 2000												
03...	<.004	<.002	E.11	97	<.002	<.2	<.05	<.05	<.3	<.001	<.017	
03...	--	--	--	--	--	--	--	--	--	--	--	
	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHANE, 1112- TETRA- CHLORO- WAT UNF REC (UG/L) (77562)	ETHANE, 1,1,2,2 TETRA- CHLORO- WAT UNF REC (UG/L) (34516)	ETHANE 12DICL SURROG VOC UNFLTRD REC (UG/L) (99832)	ETHANE HEXA- CHLORO- WATER UNFLTRD RECOVER (UG/L) (34396)	ETHER HEXA- CHLORO- WATER UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT- BUTYL ETHYL WATER UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	ETHYL- BENZENE TOTAL (UG/L) (34371)	
MAY 2000												
03...	<.002	<.004	<.03	<.09	102	<.2	<.2	<.05	<.1	<.003	E.01	
03...	--	--	--	--	--	--	--	--	--	--	--	
	FONOFOS WATER DISS REC (UG/L) (04095)	FREON- 113 WATER UNFLTRD REC (UG/L) (77652)	FURAN, TETRA- HYDRO- WATER UNFLTRD RECOVER (UG/L) (81607)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC (UG/L) (91065)	HEXA- CHLORO- BUT- ADIENE TOTAL (UG/L) (39702)	ISO- DURENE WATER UNFLTRD RECOVER (UG/L) (50000)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (39341)	LIN- URON WATER				

	METH- ACRYLO- NITRITE WATER UNFLTRD RECOVER (UG/L) (81593)	METHANE BROMO- CHLORO- WAT UNFLTRD REC (UG/L) (77297)	METHYL ACRY- LATE WATER UNFLTRD RECOVER (UG/L) (49991)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)		METHYL- CHLO- RIDE TOTAL (UG/L) (34413)	METHYL- CHLO- RIDE TOTAL (UG/L) (34418)	METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423)	METHYL- ETHYL- KETONE WATER WHOLE TOTAL (UG/L) (81595)
MAY 2000 03... 03...	<.6 --	<.04 --	<1 --	<.001 --	<.1 --	<.006 --	<.2 --	<.3 --	<.5 --	<.4 --	<2 --	
	METHYL ISO- BUTYL KETONE WAT.WH. TOTAL (UG/L) (78133)	METHANE METO- LACHLOR- WATER DISSOLV (UG/L) (39415)	METHYL METRI- BUZIN SENSOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)		NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	O- CHLORO- TOLUENE WATER WHOLE TOTAL (UG/L) (77275)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)		P, P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)
MAY 2000 03... 03...	<.4 --	<.004 --	<.004 --	<.004 --	<.06 --	<.2 --	<.003 --	<.04 --	<.04 --	<.006 --	<.004 --	
	PEB- ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L) (77356)	1234- TETRA METHYL BENZENE UNFLTRD REC (UG/L) (49999)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	1,3-DI- CHLORO- PROPANE WAT. WH TOTAL (UG/L) (77173)		PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)
MAY 2000 03... 03...	<.004 --	<.004 --	<.005 --	<.002 --	<.07 --	<.2 --	E.015 --	<.003 --	<.007 --	<.1 --	<.004 --	
	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	PROPENE 3- CHLORO- WATER UNFLTRD RECOVER (UG/L) (78109)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	STYRENE TOTAL (UG/L) (77128)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TOLUENE D8 SURROG VOC UNFLTRD REC PERCENT (99833)		TOLUENE O-ETHYL WATER UNFLTRD RECOVER (UG/L) (77220)
MAY 2000 03... 03...	<.013 --	<.2 --	<.005 --	<.04 --	<.010 --	<.007 --	<.013 --	<.1 --	<.002 --	101 --	<.06 --	
	TOLUENE P-CHLOR WATER UNFLTRD REC (UG/L) (77277)		TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34699)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	RA-226 2 SIGMA WATER, DISS, TOTAL (PCI/L) (76001)		RADON 222 TOTAL (PCI/L) (82303)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
MAY 2000 03... 03...	<.06 --	E.05 --	<.09 --	<.001 --	<.04 --	<.09 --	<.002 --	<.1 --	.07 --	456 --	-- --	-- --

QUALITY OF GROUND WATER

513

WALWORTH COUNTY

STATION NUMBER.--423523088244901 LOCAL NUMBER.--2N18E-31.8a

LOCATION.--Lat 42°35'23", long 88°24'49", SW1/4 SW1/4 SW1/4 sec.31 T.2N., R.18E, Hydrologic Unit 07120001.

WELL CHARACTERISTICS.--Diameter 2.0 inches, depth 17.0 feet, cased to 12.0 feet, type of opening in this interval - slotted screen.

		DEPTH OF WELL, TOTAL (FEET) (72008)	DEPTH BELOW SURFACE (WATER LEVEL) (FEET) (72019)	FLOW RATE (G/M) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	SAM- PLING DEPTH (FEET) (00003)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	SAM- PLING METHOD, INTER- VAL CODES (82398)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)
MAY 2000												
09...	0900	17.00	5.71	.10	96	13.0	12	17	4040	730	5.7	7.0
09...	0909	17.00	5.71	.10	96	13.0	12	17	4040	730	5.7	7.0
JUN												
07...	0900	17.00	5.33	.04	102	12.0	12	18	4040	744	3.7	6.8
07...	0909	17.00	5.33	.04	102	12.0	12	18	4040	744	3.7	6.8
DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
MAY 2000												
09...	1020	16.6	99.2	48.0	5.7	17.2	380	110	.2	13.8	49.8	--
09...	1020	16.6	--	--	--	--	380	--	--	--	--	--
JUN												
07...	1170	21.5	117	58.5	4.2	23.7	342	148	.2	15.2	52.1	.023
07...	1170	21.5	--	--	--	--	342	--	--	--	--	--
DATE	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L AS P) (70300)	TUR- BID- ITY (NTU) (00076)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)
MAY 2000												
09...	--	--	--	--	--	--	--	--	546	1.7	--	--
09...	--	--	--	--	--	--	--	--	--	1.7	12	<1
JUN												
07...	.14	.20	.062	.12	<.010	.058	.022	.019	636	3.6	--	--
07...	--	--	--	--	--	--	--	--	--	3.6	V134	<1
DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CARBON DI- SULFIDE WHOLE TOTAL (UG/L) (77041)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)
MAY 2000												
09...	--	--	--	--	.09	--	--	--	--	--	<10	--
09...	E.5	83	<1	17	--	<1.0	--	E.7	<1	3	--	<1
JUN												
07...	--	--	--	--	.14	--	<.07	--	--	--	E10	--
07...	10.7	90	<1	<12	--	V5.7	--	1.7	<1	V20	--	<1

	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506)	1,1,2- TRI- CHLORO- ETHANE TOTAL (UG/L) (34511)
MAY 2000												
09...	--	6	--	--	--	--	--	--	--	--	--	--
09...	7.3	5	2	4	E.6	<1	110	1	4	--	--	--
JUN												
07...	--	25	--	--	--	--	--	--	--	2.3	<.03	<.06
07...	6.4	28	<1	2	<.7	<1	48.2	<1	6	--	--	--
	1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501)	1,1-DI- CHLORO- PRO- PENE, WAT, WH TOTAL (UG/L) (77168)	123-TRI- CHLORO- PROPANE WATER WHOLE TOTAL (UG/L) (77443)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L) (77651)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546)	2,2-DI- CHLORO- PRO- PANE WAT, WH TOTAL (UG/L) (77170)	2,6-DI- ETHYL ANILINE WAT FLT GF, REC TOTAL (UG/L) (82660)	2BUTENE TRANS-1 4-DI- CHLORO UNFLTRD RECOVER TOTAL (UG/L) (73547)	2-HEXA- NONE WATER WHOLE TOTAL (UG/L) (77103)
MAY 2000												
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
07...	<.07	<.04	<.03	<.2	<.04	<.1	<.07	<.03	<.05	<.003	<.7	<.7
07...	--	--	--	--	--	--	--	--	--	--	--	--
	ACETO- CHLOR, WATER FLTTRD REC (UG/L) (49260)	ACETONE WATER WHOLE NITRILE TOTAL (UG/L) (81552)	ALCRO- CHLOR, WATER, DISS, REC, SOLVED (UG/L) (34215)	ALA- CHLOR, WATER, DISS, REC, SOLVED (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLD GF, REC (UG/L) (82673)	1,2,3- TRI- CHLORO BENZENE WAT, WH REC (UG/L) (77613)	BENZENE 123-TRI- METHYL- WATER UNFLTRD RECOVER (UG/L) (77221)	BENZENE 1,2,4- TRI- CHLORO- WAT UNF REC (UG/L) (34551)	BENZENE 124-TRI- METHYL RECOVER (UG/L) (77222)	BENZENE 135-TRI- METHYL WATER UNFLTRD REC (UG/L) (77226)
MAY 2000												
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
07...	.004	<7	<1	<.002	<.002	.006	<.002	<.3	<.1	<.2	<.06	<.04
07...	--	--	--	--	--	--	--	--	--	--	--	--
	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566)	BENZENE 14BRFL- SURROG VOC UNFLTRD REC (UG/L) (99834)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	ISO- PROPYL- BENZENE WATER WHOLE REC (UG/L) (77223)	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	BENZENE SEC BUTYL- WATER UNFLTRD REC (UG/L) (77350)	BENZENE TERT- BUTYL- WATER UNFLTRD REC (UG/L) (77353)	BENZENE TOTAL (UG/L) (34030)	BROMO- BENZENE WATER, WHOLE, TOTAL (UG/L) (81555)	BROMO- ETHENE WATER UNFLTRD RECOVER (UG/L) (50002)
MAY 2000												
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
07...	<.05	77	<.05	<.03	<.2	<.04	<.05	<.03	<.06	<.04	<.04	<.1
07...												
	BROMO- FORM TOTAL (UG/L) (32104)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTTRD GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTTRD GF, REC (UG/L) (82674)	CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102)	CHLORO- BENZENE TOTAL (UG/L) (34301)	CHLORO- DI- BROMO METHANE TOTAL (UG/L) (32105)	CHLORO- ETHANE TOTAL (UG/L) (34311)	CHLORO- FORM TOTAL (UG/L) (32106)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)
MAY 2000												
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
07...	<.06	<.002	<.003	<.003	<.06	<.03	<.2	<.1	E.01	<.004	<.04	<.09
07...	--	--	--	--	--	--	--	--	--	--	--	--

515

DATE	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC (UG/L) (91063)	DI-AZINON, DIS- SOLVED (UG/L) (39572)	DIBROMO CHLORO- PROPANE WATER WHOLE TOT.REC (UG/L) (82625)	DI-BROMO- METHANE WATER WHOLE RECOVER (UG/L) (30217)	BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)
	MAY 2000 09... 09...	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
	JUN 07... 07...	<.004 --	<.002 --	E.027 --	121 --	<.002 --	<.2 --	<.05 --	<.05 --	<.3 --	<.001 --
DATE	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHANE, 1112- TETRA- CHLORO- WAT UNF REC (UG/L) (77562)	ETHANE, 1,1,2,2 TETRA- CHLORO- WAT UNF REC (UG/L) (34516)	ETHANE 12DICL SURROG VOC UNFLTRD REC (UG/L) (99832)	ETHANE HEXA- CHLORO- WATER UNFLTRD RECOVER (UG/L) (34396)	ETHER ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	ETHYL- BENZENE TOTAL (UG/L) (34371)
	MAY 2000 09... 09...	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
	JUN 07... 07...	<.002 --	<.004 --	<.03 --	<.09 --	124 --	<.2 --	<.2 --	<.05 --	<.1 --	<.003 --
DATE	FONOPOS WATER DISS REC (UG/L) (04095)	FREON- 113 WATER UNFLTRD REC (UG/L) (77652)	FURAN, TETRA- HYDRO- WATER UNFLTRD REC (UG/L) (81607)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC (UG/L) (91065)	HEXA- BUT- ADIENE TOTAL (UG/L) (39702)	ISO- DURENE WATER UNFLTRD RECOVER (UG/L) (50000)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHAC- RYLATE ETHYL- WATER UNFLTRD RECOVER (UG/L) (73570)	METHAC- RYLATE METHYL WATER UNFLTRD RECOVER (UG/L) (81597)
	MAY 2000 09... 09...	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
	JUN 07... 07...	<.003 --	<.06 --	<2 --	98 --	<.1 --	<.2 --	<.004 --	<.002 --	<.005 --	<.2 --
DATE	METH- ACRYLO- NITRITE WATER UNFLTRD RECOVER (UG/L) (81593)	METHANE BROMO- CHLORO- WAT UNFLTRD REC (UG/L) (77297)	METHYL ACRY- LATE WATER UNFLTRD RECOVER (UG/L) (49991)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)	METHYL- CHLO- RIDE TOTAL (UG/L) (34413)	METHYL- ENE CHLO- RIDE TOTAL (UG/L) (34418)	METHYL ETHYL- KETONE WATER WHOLE TOTAL (UG/L) (81595)	
	MAY 2000 09... 09...	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
	JUN 07... 07...	<.6 --	<.04 --	<1 --	<.001 --	<.1 --	<.006 --	<.2 --	<.3 --	<.5 --	<.4 --
DATE	METHYL ISO- BUTYL KETONE WAT.WH. TOTAL (UG/L) (78133)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	NAPHTH- ALENE TOTAL (UG/L) (34696)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	O- CHLORO- TOLUENE WATER WHOLE TOTAL (UG/L) (77275)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	P,P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)
	MAY 2000 09... 09...	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --
	JUN 07... 07...	<.4 --	.007 --	<.004 --	<.004 --	<.06 --	<.2 --	<.003 --	<.04 --	<.04 --	<.006 --

WAUKESHA COUNTY

WELL CHARACTERISTICS.--Diameter 2.0 inches, depth 25.0 feet, cased to 20.0 feet, type of opening in this interval - slotted screen.

[illegible]

517

[illegible]

QUALITY OF GROUND WATER

WAUKESHA COUNTY--Continued

		PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	URANIUM NATURAL DIS- SOLVED (UG/L) AS U) (22703)	
MAY 2000												
02...		<.004	<.013	<.005	<.010	E.007	<.013	<.002	<.001	<.002	--	
02...		--	--	--	--	--	--	--	--	--	5	
NUMBER.--425402088241601 LOCAL NUMBER.--5N18E-17.8h												
-Lat 42°54'02", long 88°24'16'', NW1/4 NW1/4 NW1/4 sec.17 T.5N., R.18E, Hydrologic Unit 07120006.												
ACTERISTICS.--Diameter 2.0 inches, depth 48.5 feet, cased to 43.5 feet, type of opening in this interval - slotted screen.												
DATE	TIME	DEPTH OF WELL, TOTAL (FEET) (72008)	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	FLOW RATE (G/M) (00059)	SAM- PLING DEPTH (FEET) (00003)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	SAM- PLING METHOD, CODES (82398)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)
MAY 2000												
03...	0900	48.50	47.58	.20	48.6	44	48	4040	740	8.2	7.1	954
03...	0909	48.50	47.58	.20	48.6	44	48	4040	740	8.2	7.1	954
DATE	TEMPER- ATURE WATER (DEG C) (00010)	CALCIUM DIS- SOLVED (MG/L) AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L) AS K) (00935)	SODIUM, DIS- SOLVED (MG/L) AS NA) (00930)	ALKA- LINITY WAT DIS TOT IT FIELD CACO3 (39086)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L) AS F) (00950)	SILICA, DIS- SOLVED (MG/L) AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L) AS SO4) (00945)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L) AS N) (00623)
MAY 2000												
03...	13.5	87.3	40.7	2.4	40.1	299	105	.1	12.1	21.8	<.020	E.10
03...	13.5	--	--	--	--	299	--	--	--	--	--	--
DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L) AS N) (00613)	PHOS- PHORUS DIS- SOLVED (MG/L) AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L) AS P) (00671)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	TUR- BID- ITY (NTU) (00076)	ALUM- INUM, DIS- SOLVED (UG/L) AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L) AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L) AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L) AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L) AS BE) (01010)	BORON, DIS- SOLVED (UG/L) AS B) (01020)
MAY 2000												
03...	6.03	<.010	E.004	<.010	557	6.1	--	--	--	--	--	--
03...	--	--	--	--	--	6.1	6	<1	<.9	36	<1	43
DATE	BROMIDE DIS- SOLVED (MG/L) AS BR) (71870)	CADMIUM DIS- SOLVED (UG/L) AS CD) (01025)	CARBON DI- SULFIDE WATER TOTAL (UG/L) (77041)	CHRO- MIUM, DIS- SOLVED (UG/L) AS CR) (01030)	COBALT, DIS- SOLVED (UG/L) AS CO) (01035)	COPPER, DIS- SOLVED (UG/L) AS CU) (01040)	IRON, DIS- SOLVED (UG/L) AS FE) (01046)	LEAD, DIS- SOLVED (UG/L) AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L) AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L) AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L) AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L) AS NI) (01065)
MAY 2000												
03...	.06	--	<.07	--	--	--	<10	--	--	<2	--	--
03...	--	<1.0	--	1.0	<1	2	--	<1	1.9	<1	<1	4

519

	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506)	1,1,2- TRI- CHLORO- ETHANE TOTAL (UG/L) (34511)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501)	1,1-DI- CHLORO- PRO- PENE, WAT, WH TOTAL (UG/L) (77168)	123-TRI- CHLORO- PROPANE WATER WHOLE TOTAL (UG/L) (77443)
MAY 2000												
03...	--	--	--	--	--	.91	<.03	<.06	<.07	<.04	<.03	<.2
03...	.9	<1	104	<1	3	--	--	--	--	--	--	--
	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L) (77651)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546)	2,2-DI- CHLORO- PRO- PANE WAT, WH TOTAL (UG/L) (77170)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	2BUTENE TRANS-1 4-DI- CHLORO UNFLTRD RECOVER (UG/L) (73547)	2-HEXA- NONE WATER TOTAL (UG/L) (77103)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)	ACRYLO- NITRILE TOTAL (UG/L) (34215)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)
MAY 2000												
03...	<.04	<.1	<.07	<.03	<.05	<.003	<.7	<.7	<.002	<7	<1	<.002
03...	--	--	--	--	--	--	--	--	--	--	--	--
	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	1,2,3- TRI- CHLORO BENZENE WAT, WH REC (UG/L) (77613)	BENZENE 123-TRI METHYL- WATER UNFLTRD RECOVER (UG/L) (77221)	BENZENE 1,2,4- TRI- CHLORO WAT UNF REC (UG/L) (34551)	BENZENE 124-TRI METHYL UNFLTRD RECOVER (UG/L) (77222)	BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226)	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566)	BENZENE 14BRFL- SURROG VOC UNFLTRD REC (99834)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	ISO- PROPYL- BENZENE WATER WHOLE REC (UG/L) (77223)
MAY 2000												
03...	<.002	E.004	<.002	<.3	<.1	<.2	<.06	<.04	<.05	115	<.05	<.03
03...	--	--	--	--	--	--	--	--	--	--	--	--
	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	BENZENE SEC BUTYL- WATER UNFLTRD REC (UG/L) (77350)	BENZENE TERT- BUTYL- WATER UNFLTRD REC (UG/L) (77353)	BENZENE WHOLE, TOTAL (UG/L) (34030)	BROMO- BENZENE WATER, TOTAL (UG/L) (81555)	BROMO- ETHENE WATER UNFLTRD RECOVER (UG/L) (50002)	BROMO- FORM TOTAL (UG/L) (32104)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)
MAY 2000												
03...	<.2	<.04	<.05	<.03	<.06	<.04	<.04	<.1	<.06	<.002	<.003	<.003
03...	--	--	--	--	--	--	--	--	--	--	--	--
	CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102)	CHLORO- BENZENE TOTAL (UG/L) (34301)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- DI- ETHANE TOTAL (UG/L) (34311)	CHLORO- FORM TOTAL (UG/L) (32106)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ- INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)
MAY 2000												
03...	<.06	<.03	<.2	<.1	.15	<.004	<.04	<.09	<.004	<.002	E.012	101
03...	--	--	--	--	--	--	--	--	--	--	--	--
	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DIBROMO CHLORO- PROPANE WATER TOT.REC (UG/L) (82625)	DI- BROMO- METHANE WATER RECOVER (UG/L) (30217)	BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DISUL					

DATE	ETHANE HEXA- CHLORO- WATER UNFLTRD RECOVER (UG/L) (34396)	ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	ETHYL- BENZENE TOTAL (UG/L) (34371)	PONOFOS WATER DISS REC (UG/L) (04095)	FREON- 113 WATER UNFLTRD REC (UG/L) (77652)	FURAN, TETRA- HYDRO- WATER UNFLTRD RECOVER (UG/L) (81607)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (91065)	HEXA- CHLORO- BUT- ADIENE TOTAL (UG/L) (39702)	ISO- DURENE WATER UNFLTRD RECOVER (UG/L) (50000)	
	MAY 2000 03... 03...	<.2 --	<.2 --	<.05 --	<.1 --	<.003 --	<.03 --	<.003 --	<.06 --	<2 --	87 --	<.1 --	<.2 --
	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHAC- RYLATE ETHYL- METHYL WATER UNFLTRD RECOVER (UG/L) (73570)	METHAC- RYLATE METHYL WATER UNFLTRD RECOVER (UG/L) (81597)	METH- ACRYLO- NITRITE WATER UNFLTRD RECOVER (UG/L) (81593)	METHANE BROMO CHLORO- WAT UNFLTRD REC (UG/L) (77297)	METHYL ACRY- LATE WATER UNFLTRD RECOVER (UG/L) (49991)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL IODIDE WATER RECOVER (UG/L) (77424)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)	
MAY 2000 03... 03...	<.004 --	<.002 --	<.005 --	<.2 --	<.3 --	<.6 --	<.04 --	<1 --	<.001 --	<.1 --	<.006 --	<.2 --	
DATE	METHYL- BROMIDE TOTAL (UG/L) (34413)	METHYL- CHLO- RIDE TOTAL (UG/L) (34418)	METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423)	METHYL- ETHYL- KETONE WATER WHOLE TOTAL (UG/L) (81595)	METHYL ISO- BUTYL KETONE WAT.WH. TOTAL (UG/L) (78133)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENSOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	NAPHTH- ALENE TOTAL (UG/L) (34696)	NAPPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	O- CHLORO- TOLUENE WATER WHOLE TOTAL (UG/L) (77275)	
	MAY 2000 03... 03...	<.3 --	<.5 --	<.4 --	<2 --	<.4 --	<.002 --	<.004 --	<.004 --	<.06 --	<.2 --	<.003 --	<.04 --
	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	P,P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L) (77356)	1234- TETRA METHYL BENZENE UNFLTRD REC (UG/L) (49999)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	
MAY 2000 03... 03...	<.04 --	<.006 --	<.004 --	<.004 --	<.004 --	<.005 --	<.002 --	<.07 --	<.2 --	E.013 --	<.003 --	<.007 --	
DATE	1,3-DI- CHLORO- PROPANE WAT. WH TOTAL (UG/L) (77173)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	PROPENE 3- CHLORO- WATER UNFLTRD RECOVER (UG/L) (78109)	SI- MAZINE, WATER, DISS, STYRENE REC (UG/L) (04035)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (77128)	TEBU- THIUON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TOLUENE D8 SURROG VOC UNFLTRD REC (UG/L) (99833)	
	MAY 2000 03... 03...	<.1 --	<.004 --	<.013 --	<.2 --	<.006 --	<.04 --	<.010 --	<.007 --	<.013 --	<.1 --	<.002 --	108 --
	TOLUENE O-ETHYL WATER UNFLTRD RECOVER (UG/L) (77220)	TOLUENE P-CHLOR WATER UNFLTRD REC (UG/L) (77277)	TOLUENE TOTAL (UG/L) (34010)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34699)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	RA-226 2 SIGMA WATER, DISS, (PCI/L) (76001)	RADON 222 TOTAL (PCI/L) (82303)	URANIUM NATURAL DIS- SOLVED (UG/L) AS U (22703)	
MAY 2000 03... 03...	<.06 --	<.06 --	E.01 --	<.09 --	<.001 --	<.04 --	<.09 --	<.002 --	<.1 --	.13 --	182 --	-- <1	

		BENZENE	BENZENE	BENZENE	BENZENE	BENZENE	BENZENE	BENZENE	BENZENE	BENZENE	BENZENE	ISO-PROPYLBENZENE
	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	BEN-FLURALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	1,2,3-TRI-CHLORO BENZENE WAT, WH REC (UG/L) (77613)	BENZENE 123-TRI METHYL-WATER UNFLTRED RECOVER (UG/L) (77221)	BENZENE 1,2,4-TRI-CHLORO-WAT UNF REC (UG/L) (34551)	BENZENE 124-TRI METHYL-WATER UNFLTRED RECOVER (UG/L) (77222)	BENZENE 135-TRI METHYL-WATER UNFLTRED REC (UG/L) (77226)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRED REC (UG/L) (34566)	BENZENE 14BRFL-SURROG VOC UNFLTRED REC PERCENT (99834)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRED REC (UG/L) (34571)	WHOLE REC (UG/L) (77223)
APR 2000 13... 13...	<.002 --	<.001 --	<.002 --	<.3 --	<.1 --	<.2 --	<.06 --	<.04 --	<.05 --	89 --	<.05 --	<.03 --
	BENZENE N-BUTYL WATER UNFLTRED REC (UG/L) (77342)	BENZENE N-PROPYLENE WATER UNFLTRED REC (UG/L) (77224)	BENZENE O-DI-CHLORO-WATER UNFLTRED REC (UG/L) (34536)	BENZENE SEC-BUTYL-WATER UNFLTRED REC (UG/L) (77350)	BENZENE TERT-BUTYL-WATER UNFLTRED REC (UG/L) (77353)	BENZENE TOTAL BENZENE (UG/L) (34030)	BROMO-BENZENE WATER, WHOLES, TOTAL (UG/L) (81555)	BROMO-ETHYLENE WATER UNFLTRED RECOVER (UG/L) (50002)	BROMO-FORM WATER, DISS, REC (UG/L) (32104)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBON FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	
APR 2000 13... 13...	<.2 --	<.04 --	<.05 --	<.03 --	<.06 --	<.04 --	<.04 --	<.1 --	<.06 --	<.002 --	<.003 --	<.003 --
	CARBON TETRA-CHLORIDE TOTAL (UG/L) (32102)	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-DI-BROMOMETHANE TOTAL (UG/L) (32105)	CHLORO-ETHANE TOTAL (UG/L) (34311)	CHLORO-FORM TOTAL (UG/L) (32106)	CHLOROPYRIFOS DIS-SOLVED (UG/L) (38933)	CIS-1,2-DI-CHLORO-ETHYLENE WATER TOTAL (UG/L) (77093)	CIS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34704)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ-INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)
APR 2000 13... 13...	<.06 --	<.03 --	<.2 --	<.1 --	<.05 --	<.004 --	<.04 --	<.09 --	<.004 --	<.002 --	<.002 --	103 --
	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DIBROMO-CHLORO-PROPANE WATER TOT.REC (UG/L) (82625)	DI-BROMO-METHANE WATER WHOLE RECOVER (UG/L) (30217)	BROMO-DI-CHLORO-METHANE TOTAL (UG/L) (32101)	DI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34668)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHANE, 1112-TETRA-CHLORO-WAT UNF REC (UG/L) (77562)	ETHANE, 1,1,2,2-TETRA-CHLORO-WAT UNF REC (UG/L) (34516)	ETHANE 12DICL SURROG VOC UNFLTRED REC PERCENT (99832)
APR 2000 13... 13...	<.002 --	<.2 --	<.05 --	<.05 --	<.3 --	<.001 --	<.017 --	<.002 --	<.004 --	<.03 --	<.09 --	110 --
	ETHANE HEXA-CHLORO-WATER UNFLTRED RECOVER (UG/L) (34396)	ETHER ETHYL-WATER UNFLTRED RECOVER (UG/L) (81576)	ETHER TERT-BUTYL METHYL UNFLTRED RECOVER (UG/L) (50004)	ETHER TERT-PENTYL METHYL UNFLTRED RECOVER (UG/L) (50005)	ETHO-PROP WATER 0.7 U GF, REC (UG/L) (82672)	ETHYL-BENZENE TOTAL (UG/L) (34371)	FONOFOS WATER DISS REC (UG/L) (04095)	FREON-113 WATER UNFLTRED REC (UG/L) (77652)	FURAN, TETRA-HYDRO-WATER UNFLTRED RECOVER (UG/L) (81607)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (91065)	HEXA-CHLORO-BUT-ADIENE TOTAL (UG/L) (39702)	ISO-DURENE WATER UNFLTRED RECOVER (UG/L) (50000)
APR 2000 13... 13...	<.2 --	<.2 --	<.05 --	<.1 --	<.003 --	<.03 --	<.003 --	<.06 --	<2 --	75 --	<.1 --	<.2 --
	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHAC-RYLATE ETHYL-WATER UNFLTRED RECOVER (UG/L) (73570)	METHAC-RYLATE METHYL-WATER UNFLTRED RECOVER (UG/L) (81597)	METH-ACRYLO-NITRATE UNFLTRED RECOVER (UG/L) (81593)	METHANE BROMO-CHLORO-WAT REC (UG/L) (77297)	METHYL ACRY-LATE WATER UNFLTRED RECOVER (UG/L) (49991)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL IODIDE WATER UNFLTRED RECOVER (UG/L) (77424)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L) (78032)
APR 2000 13... 13...	<.004 --	<.002 --	<.005 --	<.2 --	<.3 --	<.6 --	<.04 --	<1 --	<.001 --	<.1 --	<.006 --	<.2 --

WAUKESHA COUNTY--Continued

DATE	METHYL- BROMIDE TOTAL (UG/L) (34413)	METHYL- CHLO- RIDE TOTAL (UG/L) (34418)	METHYL- CHLO- RIDE TOTAL (UG/L) (34423)	METHYL- ETHYL- KETONE TOTAL (UG/L) (81595)	METHYL- ISO- BUTYL KETONE TOTAL (UG/L) (78133)	METHYL- LACHLOR WATER DISSOLV (UG/L) (39415)	METHYL- BUZIN WATER DISSOLV (UG/L) (82630)	METHYL- INATE FLTRD 0.7 U (UG/L) (82671)	METHYL- PARA- XYLENE WATER UNFLTRD (UG/L) (85795)	METHYL- NAPHTH- ALENE TOTAL (UG/L) (34696)	METHYL- FLTRD 0.7 U (UG/L) (82684)	METHYL- O- CHLORO- TOLUENE WATER WHOLE (UG/L) (77275)
APR 2000												
13...	<.3	<.5	<.4	<2	<.4	<.002	<.004	<.004	<.06	<.2	<.003	<.04
13...	--	--	--	--	--	--	--	--	--	--	--	--
DATE	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	P,P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	P-ISO- PROPYL- TOLUENE WHOLE REC (UG/L) (77356)	1234- TETRA METHYL BENZENE UNFLTRD REC (UG/L) (49999)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)
APR 2000												
13...	<.04	<.006	<.004	<.004	<.004	<.005	<.002	<.07	<.2	<.018	<.003	<.007
13...	--	--	--	--	--	--	--	--	--	--	--	--
DATE	1,3-DI- CHLORO- PROPANE WAT. WH TOTAL (UG/L) (77173)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	PROPENE 3- CHLORO- WATER UNFLTRD RECOVER (UG/L) (78109)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	STYRENE TOTAL (UG/L) (77128)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TOLUENE D8 SURROG VOC UNFLTRD REC (UG/L) (99833)
APR 2000												
13...	<.1	<.004	<.013	<.2	<.005	<.04	<.010	<.007	<.013	<.1	<.002	98
13...	--	--	--	--	--	--	--	--	--	--	--	--
DATE	TOLUENE O-ETHYL WATER UNFLTRD RECOVER (UG/L) (77220)	TOLUENE P-CHLOR WATER UNFLTRD REC (UG/L) (77277)	TOLUENE TOTAL (UG/L) (34010)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34699)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	RA-226 2 SIGMA WATER, DISS, (PCI/L) (76001)	RADON 222 TOTAL (PCI/L) (82303)	URANIUM NATURAL DIS- SOLVED (UG/L) (22703)
APR 2000												
13...	<.06	<.06	E.02	<.09	<.001	<.04	<.09	<.002	<.1	.10	392	--
13...	--	--	--	--	--	--	--	--	--	--	--	1

STATION NUMBER.--430003088164601 LOCAL NUMBER.--6N19E-8.8f

LOCATION.--Lat 43°00'03", long 88°16'46", NW1/4 SW1/4 NW1/4 sec.8 T.6N., R.19E, Hydrologic Unit 07120006.

WELL CHARACTERISTICS.--Diameter 2.0 inches, depth 33.5 feet, cased to 28.5 feet, type of opening in this interval - slotted screen.

DATE	TIME	DEPTH	DEPTH	DEPTH	PUMP	DEPTH	DEPTH	BARO-	PH			
		BELOW	OR FLOW	TO TOP	TO BOT-	METRIC	WATER	SPE-				
		LAND	PERIOD	OF	TOM OF	PRES-	WHOLE	CIFIC				
		OF	PRIOR	SAM-	SAMPLE	SAMPLE	SURE	FIELD	CON-			
		WELL,	(WATER	FLOW	TO SAM-	PLING	INTER-	INTER-	PLING	OF	(STAND-	DUCT-
		TOTAL	LEVEL)	RATE	PLING	DEPTH	VAL	VAL	METHOD,	(MM	ARD	ANCE
		(FEET)	(FEET)	(G/M)	(MIN)	(FEET)	(FT)	(FT)	CODES	HG)	UNITS)	(US/CM)
		(72008)	(72019)	(00059)	(72004)	(00003)	(72015)	(72016)	(82398)	(00025)	(00400)	(00095)
APR 2000												
12...	1600	33.50	9.87	.15	100	14.0	28	33	4040	751	7.2	712
12...	1609	33.50	9.87	.15	100	14.0	28	33	4040	751	7.2	712
DATE	TEMPER- ATURE WATER (DEG C) (00010)	CALCIUM	MAGNE-	POTAS-	SODIUM,	ALKA-	CHLO-	FLUO-	SILICA,		NITRO-	NITRO-
		DIS-	SIUM,	SIUM,	DIS-	LINITY	RIDE,	RIDE,	DIS-	SULFATE	GEN,	GEN,AM-
		SOLVED	DIS-	DIS-	SOLVED	WAT DIS	DIS-	DIS-	SOLVED	DIS-	AMMONIA	MONIA +
		(MG/L	SOLVED	SOLVED	SOLVED	TOT IT	SOLVED	SOLVED	(MG/L	SOLVED	DIS-	ORGANIC
		(MG/L	(MG/L	(MG/L	(MG/L	MG/L AS	(MG/L	(MG/L	AS	(MG/L	(MG/L	DIS.
		AS CA)	AS MG)	AS K)	AS NA)	CACO3	AS CL)	AS F)	SIO2)	AS SO4)	AS N)	AS N)
		(00915)	(00925)	(00935)	(00930)	(39086)	(00940)	(00950)	(00955)	(00945)	(00608)	(00623)
APR 2000												
12...	12.3	80.4	40.7	1.4	4.4	414	6.2	.2	25.2	16.5	.281	.48
12...	12.3	--	--	--	--	414	--	--	--	--	--	--

APR 2000
12...
12...

DATE	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR-	CARBO-	CARBON			CHLORO-			CIS-1,2	CIS
		BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	TETRA- CHLO- RIDE TOTAL (UG/L) (32102)	CHLORO- BENZENE TOTAL (UG/L) (34301)	DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- ETHANE TOTAL (UG/L) (34311)	CHLORO- FORM TOTAL (UG/L) (32106)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	-DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)
APR 2000 12... 12...	<.002 --	<.003 --	<.003 --	<.06 --	<.03 --	<.2 --	<.1 --	<.05 --	<.004 --	<.04 --	<.09 --
DATE	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL	DIAZ-			DIBROMO	DI-	BROMO-	DI-	DISUL-
			ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	CHLORO- PROPANE WATER WHOLE TOT.REC (UG/L) (82625)	BROMO- METHANE WATER WHOLE RECOVER (UG/L) (30217)	BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101)	CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)
APR 2000 12... 12...	<.004 --	<.002 --	E.003 --	95 --	<.002 --	<.2 --	<.05 --	<.05 --	<.05 --	<.3 --	<.017 --
DATE	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHANE,	ETHANE,	ETHANE	ETHANE	ETHER	ETHER	ETHER	ETHO-	ETHYL- BENZENE TOTAL (UG/L) (34371)
			1112- TETRA- CHLORO- WAT UNF REC (UG/L) (77562)	1,1,2,2 TETRA- CHLORO- WAT UNF REC (UG/L) (34516)	12DICL SURROG VOC UNFLTRD REC PERCENT (99832)	HEXA- CHLORO- WATER UNFLTRD RECOVER (UG/L) (34396)	ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT- BUTYL WATER ETHYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	
APR 2000 12... 12...	<.002 --	<.004 --	<.03 --	<.09 --	110 --	<.2 --	<.2 --	<.05 --	<.1 --	<.003 --	<.03 --
DATE	FONOFOS WATER DISS REC (UG/L) (04095)	FREON- 113 WATER UNFLTRD REC (UG/L) (77652)	FURAN,	HCH	HEXA-	ISO-	LINDANE	LIN-	MALA-	METHAC-	METHAC-
			TETRA- HYDRO- WATER UNFLTRD RECOVER (UG/L) (81607)	ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (91065)	BUT- ADIENE TOTAL (UG/L) (39702)	DURENE WATER UNFLTRD RECOVER (UG/L) (50000)	DIS- SOLVED (UG/L) (39341)	URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	THION, DIS- SOLVED (UG/L) (39532)	RYLATE ETHYL- WATER UNFLTRD RECOVER (UG/L) (73570)	RYLATE METHYL WATER UNFLTRD RECOVER (UG/L) (81597)
APR 2000 12... 12...	<.003 --	<.06 --	<2 --	69 --	<.1 --	<.2 --	<.004 --	<.002 --	<.005 --	<.2 --	<.3 --
DATE	METH- ACRYLO- NITRITE WATER UNFLTRD RECOVER (UG/L) (81593)	METHANE BROMO CHLORO- WAT UNFLTRD REC (UG/L) (77297)	METHYL	METHYL	METHYL	METHYL	METHYL	METHYL-	METHYL-	METHYL-	METHYL-
			ACRY- LATE WATER UNFLTRD RECOVER (UG/L) (49991)	AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)	METHYL- BROMIDE TOTAL (UG/L) (34413)	METHYL- CHLO- RIDE TOTAL (UG/L) (34418)	METHYL- ENE CHLO- RIDE TOTAL (UG/L) (34423)	METHYL- ETHYL- KETONE WATER WHOLE TOTAL (UG/L) (81595)
APR 2000 12... 12...	<.6 --	<.04 --	<1 --	<.001 --	<.1 --	<.006 --	<.2 --	<.3 --	<.5 --	<.4 --	<2 --
DATE	METHYL ISO- BUTYL KETONE WAT.WH. TOTAL (UG/L) (78133)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-	MOL-	META/ PARA-	NAPHTH-	NAPROP-	O-	O-	P,P'	PARA-
			BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	XYLENE WATER UNFLTRD REC (UG/L) (85795)	ALENE TOTAL (UG/L) (34696)	AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	CHLORO- TOLUENE WATER WHOLE TOTAL (UG/L) (77275)	XYLENE WATER WHOLE TOTAL (UG/L) (77135)	DDE DISSOLV (UG/L) (34653)	THION, DIS- SOLVED (UG/L) (39542)
APR 2000 12... 12...	<.4 --	<.002 --	<.004 --	<.004 --	<.06 --	<.2 --	<.003 --	<.04 --	<.04 --	<.006 --	<.004 --

QUALITY OF GROUND WATER

WAUKESHA COUNTY--Continued

DATE	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L) (77356)	1234- TETRA METHYL BENZENE UNFLTRD REC (UG/L) (49999)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	1,3-DI- CHLORO- PROPANE WAT. WH TOTAL (UG/L) (77173)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)
APR 2000											
12...	<.004	<.004	<.005	<.002	<.07	<.2	<.018	<.003	<.007	<.1	<.004
12...	--	--	--	--	--	--	--	--	--	--	--
DATE	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	PROPENE 3- CHLORO- WATER UNFLTRD RECOVER (UG/L) (78109)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	STYRENE TOTAL (UG/L) (77128)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TOLUENE D8 SURROG VOC UNFLTRD REC PERCENT (99833)	TOLUENE O-ETHYL WATER UNFLTRD RECOVER (UG/L) (77220)
APR 2000											
12...	<.013	<.2	<.005	<.04	<.010	<.007	<.013	<.1	<.002	99	<.06
12...	--	--	--	--	--	--	--	--	--	--	--
DATE	TOLUENE P-CHLOR WATER UNFLTRD REC (UG/L) (77277)	TOLUENE TOTAL (UG/L) (34010)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34699)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	RA-226 2 SIGMA WATER, DISS, (PCI/L) (76001)	RADON 222 TOTAL (PCI/L) (82303)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
APR 2000											
12...	<.06	E.02	<.09	<.001	<.04	<.09	<.002	<.1	.05	355	--
12...	--	--	--	--	--	--	--	--	--	--	<1

STATION NUMBER.--430155088114701 LOCAL NUMBER.--7N19E-36.7g

LOCATION.--Lat 43°01'55", long 88°11'47", SE1/4 NW1/4 NW1/4 sec.36 T.7N., R.19E, Hydrologic Unit 07120006.

WELL CHARACTERISTICS.--Diameter 2.0 inches, depth 43.5 feet, cased to 38.5 feet, type of opening in this interval - slotted screen.

DATE	TIME	DEPTH	DEPTH		DEPTH	DEPTH		BARO-		PH		
			BELOW		TO TOP	TO BOT-		METRIC		WATER	SPE-	
		OF	LAND		OF	TOM OF			WHOLE	CIFIC		
		WELL,	SURFACE	SAM-	SAMPLE	SAMPLE	SAM-	SURE	OXYGEN,	FIELD	CON-	TEMPER-
	TOTAL	(WATER	PLING	INTER-	INTER-	PLING	(MM	DIS-	(STAND-	DUCT-	ATURE	
	(FEET)	LEVEL)	DEPTH	VAL	VAL	METHOD,	OF	SOLVED	ARD	ANCE	WATER	
	(72008)	(FEET)	(FEET)	(FT)	(FT)	CODES	(HG)	(MG/L)	(UNITS)	(US/CM)	(DEG C)	
		(72019)	(00003)	(72015)	(72016)	(82398)	(00025)	(00300)	(00400)	(00095)	(00010)	
MAY 2000												
08...	1500	43.50	37.75	40.1	39	44	4040	725	4.3	6.9	1170	19.0
08...	1509	43.50	37.75	40.1	39	44	4040	725	4.3	6.9	1170	19.0

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DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00671)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	TUR- BID- ITY (NTU) (00076)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	
	MAY 2000												
	08...	<.010	<.006	<.010	636	1.1	--	--	--	--	--	--	.05
	08...	--	--	--	--	1.1	9	<1	<.9	58	<1	15	--
DATE	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CARBON DI- SULFIDE WATER WHOLE TOTAL (UG/L) (77041)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	
	MAY 2000												
	08...	--	<.07	--	--	--	<10	--	--	E1	--	--	--
	08...	<1.0	--	1.2	<1	3	--	<1	4.4	1	1	4	E.5
DATE	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506)	1,1,2- TRI- CHLORO- ETHANE TOTAL (UG/L) (34511)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501)	1,1-DI- CHLORO- PRO- PANE, WAT, WH TOTAL (UG/L) (77168)	123-TRI- CHLORO- PROPANE WATER WHOLE TOTAL (UG/L) (77443)	1,2- DIBROMO ETHANE WHOLE TOTAL (UG/L) (77651)	
	MAY 2000												
	08...	--	--	--	--	.77	<.03	<.06	<.07	<.04	<.03	<.2	<.04
	08...	<1	216	<1	14	--	--	--	--	--	--	--	--
DATE	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546)	2,2-DI- CHLORO- PRO- PANE WAT, WH TOTAL (UG/L) (77170)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	2BUTENE TRANS-1 4-DI- CHLORO UNFLTRD RECOVER (UG/L) (73547)	2-HEXA- NONE WATER WHOLE TOTAL (UG/L) (77103)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)	1,1-DI- CHLORO- NITRILE TOTAL (UG/L) (34215)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	1,2- DIBROMO ETHANE WHOLE TOTAL (UG/L) (34253)	
	MAY 2000												
	08...	<.1	<.07	<.03	<.05	<.003	<.7	<.7	<.002	<7	<1	<.002	<.002
	08...	--	--	--	--	--	--	--	--	--	--	--	--
DATE	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	1,2,3- TRI- CHLORO BENZENE WAT, WH REC (UG/L) (77613)	BENZENE 123-TRI METHYL- WATER UNFLTRD RECOVER (UG/L) (77221)	BENZENE 1,2,4- TRI- CHLORO- WAT UNF REC (UG/L) (34551)	BENZENE 124-TRI METHYL UNFLTRD RECOVER (UG/L) (77222)	BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226)	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566)	BENZENE 14BRFL- SURROG VOC UNFLTRD REC (UG/L) (99834)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	ISO- PROPYL- BENZENE WATER WHOLE REC (UG/L) (77223)	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)	
	MAY 2000												
	08...	<.001	<.002	<.3	<.1	<.2	<.06	<.04	<.05	106	<.05	<.03	<.2
	08...	--	--	--	--	--	--	--	--	--	--	--	--
DATE	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	BENZENE SEC BUTYL- WATER UNFLTRD REC (UG/L) (77350)	BENZENE TERT- BUTYL- WATER UNFLTRD REC (UG/L) (77353)	BENZENE TOTAL (UG/L) (34030)	BROMO- BENZENE WATER, WHOLE, TOTAL (UG/L) (81555)	BROMO- ETHENE WATER UNFLTRD RECOVER (UG/L) (5						

DATE	CHLORO- BENZENE TOTAL (UG/L) (34301)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- ETHANE TOTAL (UG/L) (34311)	CHLORO- FORM TOTAL (UG/L) (32106)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ- INON D10 SRG FLT GF, REC PERCENT (91063)	DI- AZINON, DIS- SOLVED (UG/L) (39572)
	MAY 2000 08... 08...	<.03 --	<.2 --	<.1 --	<.05 --	<.004 --	<.04 --	<.09 --	<.004 --	<.002 --	E.009 --	97 --
DATE	DIBROMO- CHLORO- PROPANE WATER WHOLE TOT. REC (UG/L) (82625)	DI- BROMO- METHANE WATER WHOLE RECOVER (UG/L) (30217)	BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHANE, 1112- TETRA- CHLORO- WAT UNF REC (UG/L) (77562)	ETHANE, 1,1,2,2 TETRA- CHLORO- WAT UNF REC (UG/L) (34516)	ETHANE 12DICL SURROG VOC UNFLTRD REC PERCENT (99832)	ETHANE HEXA- CHLORO- WATER UNFLTRD RECOVER (UG/L) (34396)
MAY 2000 08... 08...	<.2 --	<.05 --	<.05 --	<.3 --	<.001 --	<.017 --	<.002 --	<.004 --	<.03 --	<.09 --	91 --	<.2 --
DATE	ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	ETHYL- BENZENE TOTAL (UG/L) (34371)	FONOFOS WATER DISS REC (UG/L) (04095)	FREON- 113 WATER UNFLTRD REC (UG/L) (77652)	FURAN, TETRA- HYDRO- WATER UNFLTRD RECOVER (UG/L) (81607)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (91065)	HEXA- CHLORO- BUT- ADIENE TOTAL (UG/L) (39702)	ISO- DURENE WATER UNFLTRD RECOVER (UG/L) (50000)	LINDANE DIS- SOLVED (UG/L) (39341)
MAY 2000 08... 08...	<.2 --	<.05 --	<.1 --	<.003 --	<.03 --	<.003 --	<.06 --	<2 --	82 --	<.1 --	<.2 --	<.004 --
DATE	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHAC- RYLATE ETHYL- WATER UNFLTRD RECOVER (UG/L) (73570)	METHAC- RYLATE METHYL WATER UNFLTRD RECOVER (UG/L) (81597)	METH- ACRYLO- NITRITE WATER UNFLTRD RECOVER (UG/L) (81593)	METHANE BROMO CHLORO- WAT UNFLTRD REC (UG/L) (77297)	METHYL ACRYL- LATE WATER UNFLTRD RECOVER (UG/L) (49991)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)	METHYL- BROMIDE TOTAL (UG/L) (34413)
MAY 2000 08... 08...	<.002 --	<.005 --	<.2 --	<.3 --	<.6 --	<.04 --	<1 --	<.001 --	<.1 --	<.006 --	<.2 --	<.3 --
DATE	METHYL- CHLO- RIDE TOTAL (UG/L) (34418)	METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423)	METHYL- ETHYL- KETONE WATER WHOLE TOTAL (UG/L) (81595)	METHYL ISO- BUTYL KETONE WAT. WH. TOTAL (UG/L) (78133)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUGIN WATER WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	META/ PARA- XYLENE WATER NAPHTH- ALENE REC (UG/L) (85795)	METHYL BENZENE UNFLTRD REC (UG/L) (34696)	NAPPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	O- CHLORO- TOLUENE WATER WHOLE TOTAL (UG/L) (77275)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)
MAY 2000 08... 08...	E.1 --	<.4 --	<2 --	<.4 --	<.002 --	<.004 --	<.004 --	<.06 --	<.2 --	<.003 --	<.04 --	<.04 --
DATE	P,P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD WATER GF, REC (UG/L) (82664)	P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L) (77356)	1234- TETRA METHYL BENZENE UNFLTRD REC (UG/L) (49999)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	1,3-DI- CHLORO- PROPANE WAT. WH TOTAL (UG/L) (77173)
MAY 2000 08... 08...	<.006 --	<.004 --	<.004 --	<.004 --	<.005 --	<.002 --	<.07 --	<.2 --	<.018 --	<.003 --	<.007 --	<.1 --

QUALITY OF GROUND WATER

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WAUKESHA COUNTY--Continued

DATE	PRO-PANIL	PRO-PARGITE	PROPENE 3-	SI-MAZINE,		TEBU-THIURON	TER-BACIL	TER-BUFOS	TETRA-CHLORO-	THIO-BENCARB	TOLUENE D8	TOLUENE O-ETHYL
	WATER	WATER	CHLORO-	WATER,		WATER	WATER	WATER	CHLORO-	WATER	SURROG	WATER
	FLTRD	FLTRD	WATER	WATER,		FLTRD	FLTRD	FLTRD	ETHYL-	FLTRD	VOC	WATER
	0.7 U	0.7 U	UNFLTRD	DISS,	STYRENE	0.7 U	0.7 U	0.7 U	ENE	0.7 U	UNFLTRD	UNFLTRD
	GF, REC	GF, REC	RECOVER	REC	TOTAL	GF, REC	GF, REC	GF, REC	TOTAL	GF, REC	REC	RECOVER
	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	PERCENT	(UG/L)
	(82679)	(82685)	(78109)	(04035)	(77128)	(82670)	(82665)	(82675)	(34475)	(82681)	(99833)	(77220)
MAY 2000												
08...	<.004	<.013	<.2	<.005	<.04	<.010	<.007	<.013	<.1	<.002	103	<.06
08...	--	--	--	--	--	--	--	--	--	--	--	--
DATE	TOLUENE P-CHLOR		TRANS-1,3-DI-CHLORO-	TRIAL-LATE WATER		TRI-CHLORO-ETHYL-	TRI-CHLORO-FLUORO-	TRI-FLUR-ALIN			URANIUM NATURAL	
	WATER		CHLORO-	FLTRD		ENE	METHANE	WAT FLT	VINYL	RA-226		
	UNFLTRD	TOLUENE	PROPENE	0.7 U				0.7 U	CHLO-	2 SIGMA	RADON	
	REC	TOTAL	TOTAL	GF, REC	TOTAL	TOTAL	TOTAL	GF, REC	RIDE	WATER,	222	
	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(PCI/L)	(PCI/L)	DIS-SOLVED (UG/L)
	(77277)	(34010)	(34699)	(82678)	(39180)	(34488)	(82661)	(39175)	(76001)	(82303)	(22703)	
MAY 2000												
08...	<.06	E.02	<.09	<.001	<.04	<.09	<.002	<.1	.05	152	--	
08...	--	--	--	--	--	--	--	--	--	--	<1	

STATION NUMBER.--430239088164001 LOCAL NUMBER.--7N19E-29.5f

LOCATION.--Lat 43°02'39", long 88°16'40", NE1/4 SW1/4 NE1/4 sec.29 T.7N., R.19E, Hydrologic Unit 07120006.

WELL CHARACTERISTICS.--Diameter 2.0 inches, depth 23.5 feet, cased to 18.5 feet, type of opening in this interval - slotted screen.

DATE	TIME	DEPTH OF WELL, TOTAL (FEET) (72008)	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DEPTH FLOW RATE (G/M) (00059)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	SAM- PLING DEPTH (FEET) (00003)	DEPTH TO TOP OF SAMPLE INTER- VAL (FT) (72015)	DEPTH TO BOT- TOM OF SAMPLE INTER- VAL (FT) (72016)	SAM- PLING METHOD, CODES (82398)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)
APR 2000												
12...	1000	23.50	.33	.13	90	14.0	18	22	4040	746	7.1	943
12...	1009	23.50	.33	.13	90	14.0	18	22	4040	746	7.1	943
DATE	TEMPER- ATURE WATER (DEG C) (00010)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CAC03) (39086)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)
APR 2000												
12...	12.5	106	55.2	1.6	11.1	424	36.7	<.1	21.7	60.0	<.020	E.10
12...	12.5	--	--	--	--	424	--	--	--	--	--	--
DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	TUR- BID- ITY (NTU) (00076)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)
APR 2000												
12...	<.050	<.010	<.006	<.010	575	7.9	--	--	--	--	--	--
12...	--	--	--	--	--	7.9	2	<1	2.7	102	<1	E11

DATE	CARBON										MANGA- NESE, DIS- SOLVED (UG/L (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L (01060)	NICKEL, DIS- SOLVED (UG/L (01065)
	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	DI- SULFIDE WATER WHOLE TOTAL (UG/L) (77041)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)				
APR 2000													
12...	.09	--	<.07	--	--	--	1160	--	--	19	--	--	
12...	--	<1.0	--	<.8	<1	<1	--	<1	4.4	21	<1	<1	
DATE	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506)	1,1,2- TRI- CHLORO- ETHANE TOTAL (UG/L) (34511)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501)	1,1-DI- CHLORO- PRO- PENE, WAT, WH TOTAL (UG/L) (77168)	123-TRI- CHLORO- PROPANE WATER WHOLE TOTAL (UG/L) (77443)	
APR 2000													
12...	--	--	--	--	--	E.75	<.03	<.06	<.07	<.04	<.03	<.2	
12...	<.7	<1	110	<1	1	--	--	--	--	--	--	--	
DATE	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L) (77651)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546)	2,2-DI- CHLORO- PRO- PANE WAT, WH TOTAL (UG/L) (77170)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	2BUTENE TRANS-1 4-DI- CHLORO UNFLT RECOVER (UG/L) (73547)	2-HEXA- NONE WATER WHOLE TOTAL (UG/L) (77103)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)	ACRYLO- NITRILE TOTAL (UG/L) (34215)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	
APR 2000													
12...	<.04	<.1	<.07	<.03	<.05	<.003	<.7	<.7	<.002	<7	<1	<.002	
12...	--	--	--	--	--	--	--	--	--	--	--	--	
DATE	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	1,2,3- TRI- CHLORO BENZENE WAT, WH REC (UG/L) (77613)	BENZENE 123-TRI METHYL- WATER UNFLT RECOVER (UG/L) (77221)	BENZENE 1,2,4- TRI- CHLORO- WAT UNF REC (UG/L) (34551)	BENZENE 124-TRI METHYL UNFLT RECOVER (UG/L) (77222)	BENZENE 135-TRI METHYL WATER UNFLT REC (UG/L) (77226)	BENZENE 1,3-DI- CHLORO- WATER UNFLT REC (UG/L) (34566)	BENZENE 14BRFL- SURROG VOC UNFLT REC (UG/L) (99834)	BENZENE 1,4-DI- CHLORO- WATER UNFLT REC (UG/L) (34571)	ISO- PROPYL- BENZENE WATER WHOLE REC (UG/L) (77223)	
APR 2000													
12...	<.002	<.001	<.002	<.3	<.1	<.2	<.06	<.04	<.05	90	<.05	<.03	
12...	--	--	--	--	--	--	--	--	--	--	--	--	
DATE	BENZENE N-BUTYL WATER UNFLT REC (UG/L) (77342)	BENZENE N-PROPY WATER UNFLT REC (UG/L) (77224)	BENZENE O-DI- CHLORO- WATER UNFLT REC (UG/L) (34536)	BENZENE SEC BUTYL- WATER UNFLT REC (UG/L) (77350)	BENZENE TERT- BUTYL- WATER UNFLT REC (UG/L) (77353)	BENZENE BROMO- BENZENE WATER, WHOLE, TOTAL (UG/L) (34030)	BROMO- BENZENE WATER UNFLT RECOVER (UG/L) (81555)	BROMO- ETHENE WATER UNFLT RECOVER (UG/L) (50002)	BROMO- FORM TOTAL REC (UG/L) (32104)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	
APR 2000													
12...	<.2	<.04	<.05	<.03	<.06	<.04	<.04	<.1	<.06	<.002	<.003	<.003	
12...	--	--	--	--	--	--	--	--	--	--	--	--	
DATE	CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102)	CHLORO- BENZENE TOTAL (UG/L) (34301)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- ETHANE TOTAL (UG/L) (34311)	CHLORO- FORM TOTAL (UG/L) (32106)	CHLOR- PYRIPOS DIS- SOLVED (UG/L) (38933)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ- INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	
APR 2000													
12...	<.06	<.03	<.2	<.1	<.05	<.004	<.04	<.09	<.004	<.002	<.002	84	
12...	--	--	--	--	--	--	--	--	--	--	--	--	

531

		DIBROMO- CHLORO- PROPANE WATER WHOLE TOT. REC (UG/L) (39572)	DI- BROMO- METHANE WATER WHOLE RECOVER (UG/L) (30217)	BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHANE, 1112- TETRA- CHLORO- WAT UNF REC (UG/L) (77562)	ETHANE, 1,1,2,2 TETRA- CHLORO- WAT UNF REC (UG/L) (34516)	ETHANE 12DICL SURROG VOC UNFLTRD REC (99832)	
APR 2000	12...	<.002	<.2	<.05	<.05	<.3	<.001	<.017	<.002	<.004	<.03	<.09	111
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
		ETHANE HEXA- CHLORO- WATER UNFLTRD RECOVER (UG/L) (34396)	ETHER TERT- BUTYL ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	ETHYL- BENZENE TOTAL (UG/L) (34371)	FONOFOS WATER DISS REC (UG/L) (04095)	FREON- 113 WATER UNFLTRD REC (UG/L) (77652)	FURAN, TETRA- HYDRO- WATER UNFLTRD RECOVER (UG/L) (81607)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (91065)	HEXA- CHLORO- BUT- ADIENE TOTAL (UG/L) (39702)	ISO- DURENE WATER UNFLTRD RECOVER (UG/L) (50000)
APR 2000	12...	<.2	<.2	<.05	<.1	<.003	<.03	<.003	<.06	<2	69	<.1	<.2
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
		LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	METHAC- RYLATE ETHYL- WATER UNFLTRD RECOVER (UG/L) (39532)	METHAC- RYLATE ETHYL- WATER UNFLTRD RECOVER (UG/L) (73570)	METH- ACRYLO- NITRITE WATER UNFLTRD RECOVER (UG/L) (81597)	METH- ACRYLO- NITRITE WATER UNFLTRD RECOVER (UG/L) (81593)	METHYL BROMO CHLORO- WAT UNFLTRD REC (UG/L) (77297)	METHYL ACRY- LATE WATER UNFLTRD RECOVER (UG/L) (49991)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)
APR 2000	12...	<.004	<.002	<.005	<.2	<.3	<.6	<.04	<1	<.001	<.1	<.006	<.2
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
		METHYL- BROMIDE TOTAL (UG/L) (34413)	METHYL- CHLO- RIDE TOTAL (UG/L) (34418)	METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423)	METHYL- ETHYL- KETONE WATER TOTAL (UG/L) (81595)	METHYL ISO- BUTYL KETONE WAT. WH. TOTAL (UG/L) (78133)	METHO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER SENOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	NAPHTH- ALENE TOTAL (UG/L) (34696)	NAPPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	O- CHLORO- TOLUENE WATER WHOLE TOTAL (UG/L) (77275)
APR 2000	12...	<.3	<.5	<.4	<2	<.4	<.002	<.004	<.004	<.06	<.2	<.003	<.04
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
		O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	P, P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L) (77356)	1234- TETRA METHYL BENZENE UNFLTRD REC (UG/L) (49999)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)
APR 2000	12...	<.04	<.006	<.004	<.004	<.004	<.005	<.002	<.07	<.2	<.018	<.003	<.007
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
		1,3-DI- CHLORO- PROPANE WAT. WH TOTAL (UG/L) (77173)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	PROPENE 3- CHLORO- WATER UNFLTRD RECOVER (UG/L) (78109)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	STYRENE TOTAL (UG/L) (77128)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC		

QUALITY OF GROUND WATER

WAUKESHA COUNTY--Continued

DATE	TOLUENE O-ETHYL WATER UNFLTRD RECOVER (UG/L) (77220)	TOLUENE P-CHLOR WATER UNFLTRD REC (UG/L) (77277)	TOLUENE TOTAL (UG/L) (34010)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34699)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	RA-226 2 SIGMA WATER, DISS, (PCI/L) (76001)	RADON 222 TOTAL (PCI/L) (82303)	URANIUM NATURAL DIS- SOLVED (UG/L) AS U) (22703)
APR 2000												
12...	<.06	<.06	E.02	<.09	<.001	<.04	<.09	<.002	<.1	.06	286	--
12...	--	--	--	--	--	--	--	--	--	--	--	<1

STATION NUMBER.--430353088095901 LOCAL NUMBER.--7N20E-18.1c

LOCATION.--Lat 43°03'53", long 88°09'59", SE1/4 NE1/4 SE1/4 sec.18 T.7N., R.20E, Hydrologic Unit 07120006.

WELL CHARACTERISTICS.--Diameter 2.0 inches, depth 18.5 feet, cased to 13.5 feet, type of opening in this interval - slotted screen.

DATE	TIME	DEPTH	DEPTH	DEPTH	PUMP	DEPTH	DEPTH		BARO-		PH		
		OF	BELOW	OR FLOW	OR FLOW	TO TOP	TO BOT-	METRIC		WATER			
		WELL,	LAND	PERIOD	PERIOD	OF	TOM OF	PRES-	OXYGEN,	WHOLE			
		TOTAL	(WATER	FLOW	TO SAM-	SAM-	SAMPLE	SAMPLE	SAM-	SURE	DIS-	(STAND-	
		(FEET)	LEVEL)	RATE	PLING	PLING	INTER-	INTER-	PLING	OF	SOLVED	ARD	
		(72008)	(FEET)	(G/M)	(MIN)	(FEET)	VAL	VAL	METHOD,	MM	(MG/L)	UNITS)	
							(PT)	(FT)	CODES	(00025)	(00300)	(00400)	
MAY 2000													
02...	0900	18.50	15.60	.15	80	17.3	13	18	4040	744	5.1	6.6	
02...	0909	18.50	15.60	.15	80	17.3	13	18	4040	744	5.1	6.6	
DATE		SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
MAY 2000													
02...	1270	13.5	121	50.5	1.5	62.0	442	130	<.1	17.9	34.2	<.020	
02...	1270	13.5	--	--	--	--	442	--	--	--	--	--	
DATE		NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	TUR- BID- ITY (NTU) (00076)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)
MAY 2000													
02...	.11	6.8	6.72	<.010	<.006	<.010	732	1.5	--	--	--	--	
02...	--	--	--	--	--	--	--	1.5	15	<1	<.9	61	
DATE		BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	BROMIDE DIS- SOLVED (MG/L AS BR) (71870)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CARBON DI- SULFIDE WATER WHOLE TOTAL (UG/L) (77041)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
MAY 2000													
02...	--	--	.10	--	<.07	--	--	--	<10	--	--	E2	
02...	<1	21	--	<1.0	--	1.0	<1	2	--	<1	3.1	2	

DATE	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506)	1,1,2- TRI- CHLORO- ETHANE TOTAL (UG/L) (34511)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501)		
	MAY 2000	02...	--	--	--	--	--	1.3	E.02	<.06	<.07	<.04		
	02...	<1	4	1.1	<1	82.2	<1	6	--	--	--	--	--	
DATE	1,1-DI- CHLORO- PRO- PENE, WAT, WH TOTAL (UG/L) (77168)	123-TRI- CHLORO- PROPANE WATER WHOLE TOTAL (UG/L) (77443)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L) (77651)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546)	2,2-DI- CHLORO- PANE WAT, WH TOTAL (UG/L) (77170)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	2BUTENE TRANS-1 4-DI- CHLORO UNFLTRD RECOVER (UG/L) (73547)	2-HEXA- NONE WATER WHOLE TOTAL (UG/L) (77103)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)		
	MAY 2000	02...	<.03	<.2	<.04	<.1	<.07	<.03	<.05	<.003	<.7	<.7	<.002	<.7
	02...	--	--	--	--	--	--	--	--	--	--	--	--	--
DATE	ACRYLO- NITRILE TOTAL (UG/L) (34215)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	1,2,3- TRI- CHLORO BENZENE WAT, WH REC (UG/L) (77613)	BENZENE 123-TRI- METHYL- WATER UNFLTRD RECOVER (UG/L) (77221)	BENZENE 1,2,4- TRI- CHLORO WAT UNF REC (UG/L) (34551)	BENZENE 124-TRI- METHYL UNFILT RECOVER (UG/L) (77222)	BENZENE 135-TRI- METHYL WATER UNFLTRD REC (UG/L) (77226)	BENZENE 1,3-DI- CHLORO WATER UNFLTRD REC (UG/L) (34566)	BENZENE 14BRFL- SURROG VOC REC (UG/L) (99834)		
	MAY 2000	02...	<1	<.002	<.002	E.004	<.002	<.3	<.1	<.2	<.06	<.04	<.05	111
	02...	--	--	--	--	--	--	--	--	--	--	--	--	--
DATE	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	ISO- PROPYL- BENZENE WATER WHOLE REC (UG/L) (77223)	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	BENZENE SEC BUTYL- WATER UNFLTRD REC (UG/L) (77350)	BENZENE TERT- BUTYL- WATER UNFLTRD REC (UG/L) (77353)	BENZENE BROMO- BENZENE WATER, WHOLE, TOTAL (UG/L) (34030)	BENZENE ETHENE WATER UNFLTRD RECOVER (UG/L) (81555)	BENZENE 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (50002)	BENZENE FORM TOTAL (UG/L) (32104)	BENZENE 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)		
	MAY 2000	02...	<.05	<.03	<.2	<.04	<.05	<.03	<.06	<.04	<.04	<.1	<.06	
	02...	--	--	--	--	--	--	--	--	--	--	--	--	
DATE	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (34301)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- ETHANE TOTAL (UG/L) (34311)	CHLORO- FORM TOTAL (UG/L) (32106)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)			
	MAY 2000	02...	<.002	<.003	<.003	<.06	<.03	<.2	<.1	E.06	<.004	<.04	<.09	
	02...	--	--	--	--	--	--	--	--	--	--	--	--	
DATE	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ- INON D10 SRG WAT FLT 0.7 U GF, REC (UG/L) (91063)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DIBROMO CHLORO- PROPANE WATER WHOLE TOT.REC (UG/L) (82625)	DI- BROMO- METHANE WATER WHOLE RECOVER (UG/L) (30217)	BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101)	DI- CHLORO- DI- FLUROO- METHANE TOTAL (UG/L) (34668)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)			
	MAY 2000	02...	<.004	<.002										

[illegible]

WAUKESHA COUNTY--Continued

DATE	TOLUENE P-CHLOR WATER		TRANS- 1,3-DI- CHLORO- FLTRD		TRIAL- WATER FLTRD		TRI- CHLORO- ETHYL-		TRI- CHLORO- FLUORO-		FLUR- ALIN WAT FLT		VINYL CHLO-		RA-226 2 SIGMA		URANIUM NATURAL	
	UNFLTRD	TOLUENE	PROPENE	0.7 U	ENE	METHANE	0.7 U	RIDE	WATER,	DISS,	TOTAL	(PCI/L)	(PCI/L)	AS U)				
	REC	TOTAL	TOTAL	GF, REC	TOTAL	TOTAL	GF, REC	TOTAL	DISS,	TOTAL	(PCI/L)	(PCI/L)	AS U)					
	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
	(77277)	(34010)	(34699)	(82678)	(39180)	(34488)	(82661)	(39175)	(76001)	(82303)	(22703)							
MAY 2000																		
02...	<.06	<.05	<.09	<.001	<.04	<.09	<.002	<.1	.08	510	--							
02...	--	--	--	--	--	--	--	--	--	--	<1							
NUMBER.--430728088132801 LOCAL NUMBER.--8N18E-27.1c																		
Lat 43°07'28", long 88°13'28", SE1/4 NE1/4 SE1/4 sec.27 T.8N., R.18E, Hydrologic Unit 07120006.																		
ACTERISTICS.--Diameter 2.0 inches, depth 28.0 feet, cased to 23.0 feet, type of opening in this interval - slotted screen.																		
DATE	TIME	DEPTH		PUMP		DEPTH		DEPTH		BARO-		PH						
		BELOW		OR FLOW		TO TOP		TO BOT-		METRIC		WATER						
		LAND		PERIOD		OF		TOM OF		PRES-		WHOLE						
		WELL,	(WATER	FLOW	TO SAM-	SAM-	SAMPLE	INTER-	INTER-	PLING	OXYGEN,	FIELD						
		TOTAL	LEVEL)	RATE	PLING	PLING	VAL	VAL	VAL	METHOD,	DIS-	SOLVED	ARD					
		(FEET)	(FEET)	(G/M)	(MIN)	(FEET)	(FT)	(FT)	(FT)	CODES	OF	SOLVED	UNITS)					
		(72008)	(72019)	(00059)	(72004)	(00003)	(72015)	(72016)	(82398)	(00025)	(00300)	(00400)						
MAY 2000																		
01...	1500	28.00	13.18	.12	85	15.0	21	26	4040	733	2.8	7.2						
01...	1509	28.00	13.18	.12	85	15.0	21	26	4040	733	2.8	7.2						
DATE	TIME	SPE-		MAGNE-		POTAS-		ALKA-		CHLO-		FLUO-		SILICA,		NITRO-		
		CIFIC		SIUM,		SIUM,		LINTY		RIDE,		RIDE,		DIS-		GEN,		
		CON-		DIS-		DIS-		WAT DIS		DIS-		DIS-		SOLVED		AMMONIA		
		DUCT-		SOLVED		SOLVED		TOT IT		SOLVED		SOLVED		SOLVED		DIS-		
		ANCE	ATURE	SOLVED	SOLVED	SOLVED	SOLVED	FIELD	FIELD	SOLVED	SOLVED	SOLVED	SOLVED	(MG/L	(MG/L	(MG/L		
		(US/CM)	(DEG C)	(MG/L	(MG/L	(MG/L	(MG/L	MG/L AS	MG/L AS	(MG/L	(MG/L	(MG/L	(MG/L	AS	AS	AS		
		(00095)	(00010)	AS CA)	AS MG)	AS K)	AS NA)	CACO3	CACO3	AS CL)	AS F)	AS SO2)	AS SO4)	AS N)	AS N)	AS N)		
MAY 2000																		
01...	1470	15.5	109	56.0	2.2	93.8	286	253	.2	11.9	41.6	.022						
01...	1470	15.5	--	--	--	--	286	--	--	--	--	--						
DATE	TIME	NITRO-		NITRO-		NITRO-		PHOS-		SOLIDS,		ALUM-		ANTI-		ARSENIC		
		GEN, AM-		GEN,		GEN,		PHOS-		RESIDUE		INUM,		MONY,		DIS-		
		ORGANIC		NO2+NO3		ORGANIC		PHORUS		AT 180		DIS-		DIS-		DIS-		
		DIS.		SOLVED		SOLVED		SOLVED		SOLVED		SOLVED		SOLVED		SOLVED		
		(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L		
		AS N)	AS N)	AS N)	AS N)	AS N)	AS P)	AS P)	AS P)	(MG/L)	(NTU)	AS AL)	AS SB)	AS AS)	AS AS)	AS AS)		
		(00623)	(00602)	(00631)	(00607)	(00613)	(00666)	(00671)	(70300)	(00076)	(01106)	(01095)	(01000)					
MAY 2000																		
01...	.11	3.0	2.93	.10	<.010	<.006	<.010	800	1.2	--	--	--	--	--	--	--		
01...	--	--	--	--	--	--	--	--	1.2	11	<1	<1	<.9					
DATE	TIME	BERYL-		BORON,		BROMIDE		CADMIUM		CHRO-		COBALT,		COPPER,		IRON,		
		LIUM,		DIS-		DIS-		DIS-		MIUM,		DIS-		DIS-		DIS-		
		SOLVED		SOLVED		SOLVED		SOLVED		SOLVED		SOLVED		SOLVED		SOLVED		
		SOLVED		SOLVED		SOLVED		SOLVED		SOLVED		SOLVED		SOLVED		SOLVED		
		(UG/L	(UG/L	(UG/L	(UG/L	(UG/L	(UG/L	(UG/L	(UG/L	(UG/L	(UG/L	(UG/L	(UG/L	(UG/L	(UG/L	(UG/L		
		AS BA)	AS BE)	AS B)	AS BR)	AS CD)	(UG/L)	AS CR)	AS CO)	AS CU)	AS FE)	AS PB)	AS LI)					
		(01005)	(01010)	(01020)	(71870)	(01025)	(77041)	(01030)	(01035)	(01040)	(01046)	(01049)	(01130)					
MAY 2000																		
01...	--	--	--	.09	--	<.07	--	--	--	--	<10	--	--					
01...	67	<1	25	--	<1.0	--	E.8	1	2	--	--	<1	2.7					
DATE	TIME	MANGA-		SELE-		STRON-		VANA-		ZINC,		CARBON,		1,1,1-		1,1,2-		
		NESE,		NIUM,		TIUM,		DIUM,		DIS-		ORGANIC		TRI-		TRI-		
		DIS-		DIS-		DIS-		DIS-		DIS-		DIS-		CHLORO-		CHLORO-		
		SOLVED		SOLVED		SOLVED		SOLVED		SOLVED		SOLVED		SOLVED		ETHANE		
		(UG/L	(UG/L	(UG/L	(UG/L	(UG/L	(UG/L	(UG/L	(UG/L	(UG/L	(MG/L	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL		
		AS MN)	AS MO)	AS NI)	AS SE)	AS AG)	AS SR)	AS V)	AS ZN)	AS C)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)		
		(01056)	(01060)	(01065)	(01145)	(01075)	(01080)	(01085)	(01090)	(00681)	(34506)	(34511)	(34496)					
MAY 2000																		
01...	67	--	--	--	--	--	--	--	1.0	<.03	<.06	<.07						
01...	70	2	7	2.0	<1	219	<1	4	--	--	--	--						

		1,1-DI	123-TRI	1,2-				TRANS-	2,2-DI	2,6-DI-	2BUTENE		
	1,1-DI-	CHLORO-	CHLORO-	DIBROMO				TRANS-	CHLORO-	ETHYL	TRANS-1	2-HEXA-	ACETO-
	CHLORO-	PRO-	PROPANE	ETHANE	1,2-DI-	1,2-DI-	1,2-DI-	CHLORO-	PRO-	ANILINE	4-DI-	NONE	CHLOR,
	ETHYL-	PENE,	WATER	WATER	CHLORO-	CHLORO-	CHLORO-	CHLORO-	PANE	WAT FLT	CHLORO	WATER	WATER
	ENE	WAT, WH	WHOLE	WHOLE	ETHANE	PROPANE	ETHENE	TOTAL	TOTAL	0.7 U	UNFLTRD	WHOLE	FLTRD
DATE	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
	(34501)	(77168)	(77443)	(77651)	(32103)	(34541)	(34546)	(77170)	(82660)	(73547)	(77103)	(49260)	
MAY 2000													
01...	<.04	<.03	<.2	<.04	<.1	<.07	<.03	<.05	<.003	<.7	<.7	<.002	
01...	--	--	--	--	--	--	--	--	--	--	--	--	
	ACETONE		ALA-		ATRA-	BEN-	1,2,3-	BENZENE	BENZENE		BENZENE	BENZENE	
	WATER	ACRYLO-	CHLOR,	ALPHA	ZINE,	FLUR-	TRI-	123-TRI	1,2,4-	BENZENE	135-TRI	1,3-DI-	
	WHOLE	NITRILE	WATER,	BHC	WATER,	ALIN	CHLORO	METHYL-	TRI-	124-TRI	METHYL	CHLORO-	
	TOTAL	TOTAL	DISS,	DIS-	DISS,	0.7 U	WAT, WH	UNFLTRD	WAT UNF	UNFILTR	UNFLTRD	UNFLTRD	
	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	
	(81552)	(34215)	(46342)	(34253)	(39632)	(82673)	(77613)	(77221)	(34551)	(77222)	(77226)	(34566)	
MAY 2000													
01...	<7	<1	<.002	<.002	.030	<.002	<.3	<.1	<.2	<.06	<.04	<.05	
01...	--	--	--	--	--	--	--	--	--	--	--	--	
	BENZENE	BENZENE	ISO-			BENZENE	BENZENE	BENZENE	BENZENE		BROMO-	BROMO-	
	14BRFL-	1,4-DI-	PROPYL-	BENZENE	BENZENE	O-DI-	SEC	TERT-			BENZENE	ETHENE	
	SURROG	CHLORO-	BENZENE	N-BUTYL	N-PROPY	CHLORO-	BUTYL-	BUTYL-			WATER,	WATER	BROMO-
	VOC	WATER	WATER	WATER	WATER	WATER	WATER	WATER			WHOLE,	UNFLTRD	FORM
DATE	UNFLTRD	UNFLTRD	WHOLE	UNFLTRD	UNFLTRD	UNFLTRD	UNFLTRD	UNFLTRD	BENZENE	TOTAL	TOTAL	RECOVER	TOTAL
	REC	REC	REC	REC	REC	REC	REC	REC	TOTAL	TOTAL	TOTAL	RECOVER	TOTAL
	PERCENT	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
	(99834)	(34571)	(77223)	(77342)	(77224)	(34536)	(77350)	(77353)	(34030)	(81555)	(50002)	(32104)	
MAY 2000													
01...	98	<.05	<.03	<.2	<.04	<.05	<.03	<.06	E.02	<.04	<.1	<.06	
01...	--	--	--	--	--	--	--	--	--	--	--	--	
			CAR-	CARBO-			CHLORO-				CIS-1,2		
	BUTYL-	BARYL	FURAN	CARBON			DI-				-DI-		CIS
	ATE,	WATER	WATER	TETRA-			BROMO-	CHLORO-	CHLORO-	CHLOR-	CHLORO-	1,3-DI-	
	WATER,	FLTRD	FLTRD	CHLO-	CHLORO-	METHANE	ETHANE	ETHANE	FORM	PYRIFOS	ETHENE	CHLORO-	
	DISS,	0.7 U	0.7 U	RIDE	BENZENE					DIS-	WATER	PROPENE	
DATE	REC	GF, REC	GF, REC	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	SOLVED	TOTAL	TOTAL	
	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	
	(04028)	(82680)	(82674)	(32102)	(34301)	(32105)	(34311)	(32106)	(38933)	(77093)	(34704)		
MAY 2000													
01...	<.002	<.003	<.003	<.06	<.03	<.2	<.1	<.05	<.004	<.04	<.09		
01...	--	--	--	--	--	--	--	--	--	--	--		
		CYANA-	DEETHYL	DIAZ-		DIBROMO	DI-		DI-			DISUL-	
	ZINE,	DCPA	ATRA-	INON		CHLORO-	BROMO-	BROMO-	CHLORO-			POTON	
	WATER,	WATER	ZINE,	D10 SRG		CHLORO-	BROMO-	BROMO-	CHLORO-			WATER	
	DISS,	FLTRD	WATER,	WAT FLT	DI-	PROPANE	METHANE	METHANE	DI-		DI-	FLTRD	
	REC	0.7 U	DISS,	0.7 U	AZINON,	WATER	WHOLE	WHOLE	FLUORO-		ELDRIN	0.7 U	
DATE	GF, REC	GF, REC	REC	GF, REC	SOLVED	TOT. REC	RECOVER	TOTAL	TOTAL	SOLVED	GF, REC	TOTAL	
	(UG/L)	(UG/L)	(UG/L)	PERCENT	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	
	(04041)	(82682)	(04040)	(91063)	(39572)	(82625)	(30217)	(32101)	(34668)	(39381)	(82677)		
MAY 2000													
01...	<.004	<.002	E.047	99	<.002	<.2	<.05	<.05	<.3	<.001	<.017		
01...	--	--	--	--	--	--	--	--	--	--	--		
		ETHAL-	ETHANE,	ETHANE,	ETHANE	ETHANE	ETHER	ETHER	ETHER	ETHO-			
	EPTC	FLUR-	1112-	1,1,2,2	12DICL	HEXA-	TERT-	TERT-	TERT-	PROP			
	WATER	ALIN	TETRA-	TETRA-	SURROG	CHLORO-	ETHYL	PENTYL	PENTYL	WATER			
	FLTRD	WAT FLT	CHLORO-	CHLORO-	VOC	WATER	WATER	METHYL	METHYL	FLTRD		ETHYL-	
	0.7 U	0.7 U	WAT UNF	WAT UNF	UNFLTRD	UNFLTRD	UNFLTRD	UNFLTRD	UNFLTRD	0.7 U		BENZENE	
DATE	GF, REC	GF, REC	REC	REC	REC	RECOVER	RECOVER	RECOVER	RECOVER	GF, REC	TOTAL		
	(UG/L)	(UG/L)	(UG/L)	(UG/L)	PERCENT	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)		
	(82668)	(82663)	(77562)	(34516)	(99832)	(34396)	(81576)	(50004)	(50005)	(82672)	(34371)		
MAY 2000													
01...	<.002	<.004	<.03	<.09	96	<.2	<.2	<.05	<.1	<.003	<.03		
01...	--	--	--	--	--	--	--	--	--	--	--		

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		FONOFOS WATER DISS REC (UG/L) (04095)	FREON- 113 WATER UNFLTRD REC (UG/L) (77652)	FURAN, TETRA- HYDRO- WATER UNFLTRD RECOVER (UG/L) (81607)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (91065)	HEXA- CHLORO- BUT- ADIENE TOTAL (UG/L) (39702)	ISO- DURENE WATER UNFLTRD RECOVER (UG/L) (50000)		LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)		METHAC- RYLATE- ETHYL- WATER UNFLTRD RECOVER (UG/L) (73570)	METHAC- RYLATE- METHYL WATER UNFLTRD RECOVER (UG/L) (81597)
MAY 2000 01... 01...		<.003 --	<.06 --	<2 --	83 --	<.1 --	<.2 --	<.004 --	<.002 --	<.005 --	<.2 --	<.3 --
		METH- ACRYLO- NITRITE WATER UNFLTRD RECOVER (UG/L) (81593)	METHANE BROMO- CHLORO- WAT UNFLTRD REC (UG/L) (77297)	METHYL ACRY- LATE WATER UNFLTRD RECOVER (UG/L) (49991)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)		METHYL- CHLO- RIDE TOTAL (UG/L) (34418)	METHYL- ENE CHLO- RIDE TOTAL (UG/L) (34423)	METHYL- KETONE WATER WHOLE TOTAL (UG/L) (81595)
MAY 2000 01...		<.6	<.04	<1	<.001	<.1	<.006	.2	<.3	<.5	<.4	<2
		METHYL ISO- BUTYL KETONE WAT.WH. TOTAL (UG/L) (78133)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)		NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	O- CHLORO- TOLUENE WATER WHOLE TOTAL (UG/L) (77275)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	P, P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)
MAY 2000 01... 01...		<.4 --	<.002 --	<.004 --	<.004 --	<.06 --	<.2 --	<.003 --	<.04 --	<.04 --	<.006 --	<.004 --
		PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	P-ISO- PROPYL- TOLUENE METHYL BENZENE UNFLTRD REC (UG/L) (77356)	1234- TETRA METHYL BENZENE UNFLTRD REC (UG/L) (49999)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	1,3-DI- CHLORO- PROPANE WAT. WH TOTAL (UG/L) (77173)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)
MAY 2000 01... 01...		<.004 --	<.004 --	<.005 --	<.002 --	<.07 --	<.2 --	.094 --	<.003 --	<.007 --	<.1 --	<.004 --
		PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	PROPENE 3- CHLORO- WATER UNFLTRD RECOVER (UG/L) (78109)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	STYRENE TOTAL (UG/L) (77128)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TOLUENE D8 SURROG VOC UNFLTRD REC PERCENT (99833)	TOLUENE O-ETHYL WATER UNFLTRD RECOVER (UG/L) (77220)
MAY 2000 01... 01...		<.013 --	<.2 --	<.005 --	<.04 --	<.010 --	<.007 --	<.013 --	<.1 --	<.002 --	103 --	<.06 --
		TOLUENE P-CHLOR WATER UNFLTRD REC (UG/L) (77277)	TOLUENE TOTAL (UG/L) (34010)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34699)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	RA-226 2 SIGMA WATER, DISS, TOTAL (PCI/L) (76001)	RADON 222 TOTAL (PCI/L) (82303)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
MAY 2000 01... 01...		<.06 --	E.02 --	<.09 --	<.001 --	<.04 --	<.09 --	<.002 --	<.1 --	.08 --	362 --	-- <1

WELL CHARACTERISTICS.--Diameter 2.0 inches, depth 17.5 feet, cased to 12.5 feet, type of opening in this interval - slotted screen.

		DEPTH BELOW LAND			PUMP OR FLOW PERIOD			DEPTH TO TOP OF	DEPTH TO BOT- TOM OF			BARO- METRIC	PH WATER	SPE- CIFIC
DATE	TIME	DEPTH OF WELL, TOTAL (FEET) (72008)	SURFACE (WATER LEVEL) (FEET) (72019)	FLOW RATE (G/M) (00059)	PRIOR TO SAM- PLING (MIN) (72004)	SAM- PLING DEPTH (FEET) (00003)	SAMPLE INTER- VAL (FT) (72015)	SAMPLE INTER- VAL (FT) (72016)	SAM- PLING METHOD, CODES (82398)	PRES- SURE (MM OF HG) (00025)	FIELD WHOLE (STAND- ARD UNITS) (00400)	CON- DUCT- ANCE (US/CM) (00095)		
APR 2000														
11...	1700	17.50	8.50	.14	115	11.7	11	16	4040	745	6.8	1700		
11...	1709	17.50	8.50	.14	115	11.7	11	16	4040	745	6.8	1700		
		CALCIUM	MAGNE- SIUM,	POTAS- SIUM,	SODIUM,	ALKA- LINITY WAT DIS	CHLO- RIDE,	FLUO- RIDE,	SILICA,			NITRO- GEN,	NITRO- GEN,AM-	
DATE	TEMPER -	DIS- SOLVED	DIS- SOLVED	DIS- SOLVED	DIS- SOLVED	TOT IT FIELD	DIS- SOLVED	DIS- SOLVED	DIS- SOLVED	SULFATE	AMMONIA	DIS- SOLVED	DIS- SOLVED	
	ATURE WATER (DEG C) (00010)	(MG/L AS CA) (00915)	(MG/L AS MG) (00925)	(MG/L AS K) (00935)	(MG/L AS NA) (00930)	MG/L AS CACO3 (39086)	(MG/L AS CL) (00940)	(MG/L AS F) (00950)	(MG/L AS SIO2) (00955)	AS (MG/L AS SO4) (00945)	(MG/L AS N) (00608)	(MG/L AS N) (00623)	ORGANIC DIS. (MG/L AS N) (00623)	
APR 2000														
11...	6.0	103	47.0	1.1	168	333	316	<.1	13.6	54.8	<.020	<.10		
11...	6.0	--	--	--	--	333	--	--	--	--	--	--		
		NITRO- GEN, NO2+NO3 DIS- SOLVED	NITRO- GEN, NITRITE DIS- SOLVED	PHOS- PHORUS DIS- SOLVED	PHOS- PHORUS ORTHO, DIS- SOLVED	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED	TUR- BID- ITY (NTU) (00076)	ALUM- INUM, DIS- SOLVED	ANTI- MONY, DIS- SOLVED	ARSENIC DIS- SOLVED	BARIUM, DIS- SOLVED	BERYL- LIUM, DIS- SOLVED	BORON, DIS- SOLVED	
DATE		(MG/L AS N) (00631)	(MG/L AS N) (00613)	(MG/L AS P) (00666)	(MG/L AS P) (00671)	(MG/L) (70300)		(UG/L AS AL) (01106)	(UG/L AS SB) (01095)	(UG/L AS AS) (01000)	(UG/L AS BA) (01005)	(UG/L AS BE) (01010)	(UG/L AS B) (01020)	
APR 2000														
11...	.889	<.010	.006	<.010	976	41	--	--	--	--	--	--		
		BROMIDE DIS- SOLVED	CADMIUM DIS- SOLVED	CARBON DI- SULFIDE WHOLE TOTAL	CHRO- MIUM, DIS- SOLVED	COBALT, DIS- SOLVED	COPPER, DIS- SOLVED	IRON, DIS- SOLVED	LEAD, DIS- SOLVED	LITHIUM DIS- SOLVED	MANGA- NESE, DIS- SOLVED	MOLYB- DENUM, DIS- SOLVED	NICKEL, DIS- SOLVED	
DATE		(MG/L AS BR) (71870)	(UG/L AS CD) (01025)	(UG/L) (77041)	(UG/L AS CR) (01030)	(UG/L AS CO) (01035)	(UG/L AS CU) (01040)	(UG/L AS FE) (01046)	(UG/L AS PB) (01049)	(UG/L AS LI) (01130)	(UG/L AS MN) (01056)	(UG/L AS MO) (01060)	(UG/L AS NI) (01065)	
APR 2000														
11...	.06	--	<.07	--	--	--	<10	--	--	4	--	--		
11...	--	<1.0	--	<.8	<1	1	--	<1	2.1	6	1	<1		
		SELE- NIUM, DIS- SOLVED	SILVER, DIS- SOLVED	STRON- TIUM, DIS- SOLVED	VANA- DIUM, DIS- SOLVED	ZINC, DIS- SOLVED	CARBON, ORGANIC DIS- SOLVED	1,1,1- TRI- CHLORO- ETHANE TOTAL	1,1,2- TRI- CHLORO- ETHANE TOTAL	1,1-DI- CHLORO- ETHYL- ENE TOTAL	1,1-DI- CHLORO- PRO- PENE, WAT, WH TOTAL	1,1-DI- CHLORO- PROPANE, WATER WHOLE TOTAL		
DATE		(UG/L AS SE) (01145)	(UG/L AS AG) (01075)	(UG/L AS SR) (01080)	(UG/L AS V) (01085)	(UG/L AS ZN) (01090)	(MG/L AS C) (00681)	(UG/L) (34506)	(UG/L) (34511)	(UG/L) (34496)	(UG/L) (34501)	(UG/L) (77168)	(UG/L) (77443)	
APR 2000														
11...	--	--	--	--	--	1.2	<.03	<.06	<.07	<.04	<.03	<.2		
11...	<.7	<1	87.7	<1	2	--	--	--	--	--	--	--		
		1,2- DIBROMO ETHANE WATER WHOLE TOTAL	1,2-DI- CHLORO- ETHANE TOTAL	1,2-DI- CHLORO- PROPANE TOTAL	TRANS- 1,2-DI- CHLORO- ETHENE TOTAL	2,2-DI- CHLORO- PRO- PANE WAT, WH TOTAL	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC	2BUTENE TRANS-1 4-DI- CHLORO UNFLTRD RECOVER	2-HEXA- NONE WATER WHOLE TOTAL	ACETO- CHLOR, WATER FLTRD REC TOTAL	ACETONE WATER WHOLE TOTAL	ACRYLO- NITRILE TOTAL	ALA- CHLOR, WATER, DISS, REC, TOTAL	
DATE		(UG/L) (77651)	(UG/L) (32103)	(UG/L) (34541)	(UG/L) (34546)	(UG/L) (77170)	(UG/L) (82660)	(UG/L) (73547)	(UG/L) (77103)	(UG/L) (49260)	(UG/L) (81552)	(UG/L) (34215)	(UG/L) (46342)	
APR 2000														
11...	<.04	<.1	<.07	<.03	<.05	<.003	<.7	<.7	<.002	<7	<1	<.002		
11...	--	--	--	--	--	--	--	--	--	--	--	--		

	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	1,2,3- TRI- CHLORO BENZENE WAT, WH REC (UG/L) (77613)	BENZENE 123-TRI METHYL- WATER UNFLTRD RECOVER (UG/L) (77221)	BENZENE 1,2,4- TRI- CHLORO- WAT UNF REC (UG/L) (34551)	BENZENE 124-TRI METHYL UNFILTR RECOVER (UG/L) (77222)	BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226)	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566)	BENZENE 14BRFL- SURROG VOC UNFLTRD REC (UG/L) (99834)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	ISO- PROPYL- BENZENE WATER WHOLE REC (UG/L) (77223)	
APR 2000	11...	<.002	<.005	<.002	<.3	<.1	<.2	<.06	<.04	<.05	94	<.05	<.03
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	BENZENE SEC BUTYL- WATER UNFLTRD REC (UG/L) (77350)	BENZENE TERT- BUTYL- WATER UNFLTRD REC (UG/L) (77353)	BENZENE TOTAL (UG/L) (34030)	BROMO- BENZENE WATER, WHOLE, TOTAL (UG/L) (81555)	BROMO- ETHENE WATER UNFLTRD RECOVER (UG/L) (50002)	BROMO- FORM TOTAL (UG/L) (32104)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	
APR 2000	11...	<.2	<.04	<.05	<.03	<.06	<.04	<.04	<.1	<.06	<.002	<.003	<.003
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
	CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102)	CHLORO- BENZENE TOTAL (UG/L) (34301)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)	CHLORO- ETHANE TOTAL (UG/L) (34311)	CHLORO- FORM TOTAL (UG/L) (32106)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ- INON D10 SRG WAT FLT 0.7 U GF, REC (UG/L) (91063)	
APR 2000	11...	<.06	<.03	<.2	<.1	<.05	<.004	<.04	<.09	<.004	<.002	E.004	96
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DIBROMO CHLORO- PROPANE WATER WHOLE TOT. REC (UG/L) (82625)	DI- BROMO- METHANE WATER WHOLE RECOVER (UG/L) (30217)	BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHANE, 1112- TETRA- CHLORO- WAT UNF REC (UG/L) (77562)	ETHANE, 1,1,2,2 TETRA- CHLORO- WAT UNF REC (UG/L) (34516)	ETHANE 12DICL SURROG VOC UNFLTRD PERCENT (99832)	
APR 2000	11...	<.002	<.2	<.05	<.05	<.3	<.001	<.017	<.002	<.004	<.03	<.09	104
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
	ETHANE HEXA- CHLORO- WATER UNFLTRD RECOVER (UG/L) (34396)	ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	ETHYL- BENZENE TOTAL (UG/L) (34371)	FONOFOS WATER DISS UNFLTRD REC (UG/L) (04095)	FREON- 113 HYDRO- WATER UNFLTRD REC (UG/L) (77652)	FURAN, TETRA- HYDRO- WATER UNFLTRD RECOVER (UG/L) (81607)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC (UG/L) (91065)	HEXA- CHLORO- BUT- ADIENE TOTAL (UG/L) (39702)	ISO- DURENE WATER UNFLTRD RECOVER (UG/L) (50000)	
APR 2000	11...	<.2	<.2	<.05	<.1	<.003	<.03	<.003	<.06	<2	66	<.1	<.2
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHAC- RYLATE ETHYL- WATER UNFLTRD RECOVER (UG/L) (73570)	METHAC- RYLATE METHYL WATER UNFLTRD RECOVER (UG/L) (81597)	METH- ACRYLO- NITRILE WATER UNFLTRD RECOVER (UG/L) (81593)	METHANE BROMO CHLORO- WAT UNFLTRD REC (UG/L) (77297)	METHYL ACRY- LATE WATER UNFLTRD RECOVER (UG/L) (49991)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L			

[illegible]

The reports listed below are a partial list of reports prepared by the Wisconsin District in cooperation with other agencies since 1948. The list contains reports that are relevant and contribute significantly to understanding the hydrology of Wisconsin's water resources.

The reports published in a U.S. Geological Survey series are for sale by the U.S. Geological Survey, Box 25425, Federal Center, Denver, CO 80225. Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices can be obtained by writing to the above address or by calling (303)236-7476. Copies of reports published by the University of Wisconsin, Geological and Natural History Survey, can be obtained from their office at 3817 Mineral Point Road, Madison, WI 53705.

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CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
<i>Length</i>		
inch (in.)	2.54×10^1	millimeter
	2.54×10^{-2}	meter
foot (ft)	3.048×10^{-1}	meter
mile (mi)	1.609×10^0	kilometer
<i>Area</i>		
acre	4.047×10^3	square meter
	4.047×10^{-1}	square hectometer
	4.047×10^{-3}	square kilometer
square mile (mi ²)	2.590×10^0	square kilometer
<i>Volume</i>		
gallon (gal)	3.785×10^0	liter
	3.785×10^0	cubic decimeter
	3.785×10^{-3}	cubic meter
million gallons (Mgal)	3.785×10^3	cubic meter
	3.785×10^{-3}	cubic hectometer
cubic foot (ft ³)	2.832×10^1	cubic decimeter
	2.832×10^{-2}	cubic meter
cubic-foot-per-second day [(ft ³ /s) d]	2.447×10^3	cubic meter
	2.447×10^{-3}	cubic hectometer
acre-foot (acre-ft)	1.233×10^3	cubic meter
	1.233×10^{-3}	cubic hectometer
	1.233×10^{-6}	cubic kilometer
<i>Flow</i>		
cubic foot per second (ft ³ /s)	2.832×10^1	liter per second
	2.832×10^1	cubic decimeter per second
	2.832×10^{-2}	cubic meter per second
gallon per minute (gal/min)	6.309×10^{-2}	liter per second
	6.309×10^{-2}	cubic decimeter per second
	6.309×10^{-5}	cubic meter per second
million gallons per day (Mgal/d)	4.381×10^1	cubic decimeter per second
	4.381×10^{-2}	cubic meter per second
<i>Mass</i>		
ton (short)	9.072×10^{-1}	megagram or metric ton

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

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