

Water Resources Data Wisconsin Water Year 1995



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT WI-95-1
Prepared in cooperation with the State of Wisconsin
and with other agencies

CALENDAR FOR WATER YEAR 1995

1994

OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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23	24	25	26	27	28	29	27	28	29	30				25	26	27	28	29	30	31
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1995

JANUARY							FEBRUARY							MARCH						
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by B.K. Holmstrom, D. L. Olson, and B.R. Ellefson



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

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City of Thorp
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City of Hillsboro
Illinois Department of Transportation
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City of Peshtigo
Rock County Public Works Department
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Oneida Indian Tribe of Wisconsin
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Lac du Flambeau Band of Lake Superior Chippewa
Stockbridge/Munsee Indian Tribe
City of Sparta
City of Brookfield
Fontana/Walworth Water Pollution Control Commission

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Madison, Wisconsin 53719

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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RECORDS ARE PUBLISHED IN THIS VOLUME**

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

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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			
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	3.27	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
Pine River below Pine River Powerplant nr Florence, WI	04064500	533	1924-76
Pike River at Amberg, WI	04066500	255	1914-70
Peshtigo River at High Falls near Crivitz, WI	04068000	537	1912-57
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
White Creek at Forest Glen Beach near Green Lake, WI	04073462	3.05	1982-88
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
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
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 Fillmore, WI	04086340	148	1968-81
Milwaukee River at Waubeka, WI	04086360	432	1968-81, 1994

Station name	Station number	Drainage area (mi ²)	Period of record
STREAMS TRIBUTARY TO LAKE MICHIGAN—CONTINUED			
Mud Lake Outlet near Decker Corner, WI	04086488	7.36	1983-84
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
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
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	1914-80, 1990
Eau Galle River near Woodville, WI	05369900	39.4	1978-83
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

Station name	Station number	Drainage area (mi ²)	Period of record
BUFFALO RIVER BASIN			
Buffalo River near Tell, WI	05372000	406	1933-51
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
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
Tenmile Creek near Nekoosa, WI	05401050	73.3	1963-79, 1988-94
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 South Valley Road nr Black Earth, WI	05406497	40.6	1990-93

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS

Station name	Station number	Drainage area (mi ²)	Period of record
WISCONSIN RIVER BASIN—CONTINUED			
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
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			
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
East Branch Rock River near Mayville, WI	05424000	179	1949-70
Rock River at Hustisford, WI	05424082	511	1978-85
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 ¹
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
Pheasant Branch at Airport Road near Middleton, WI	05427943	9.61	1977-81
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

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS

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Station name	Station number	Drainage area (mi²)	Period of record
ROCK RIVER BASIN—CONTINUED			
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
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 years 1993 and 1994

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

The following daily- or continuous-record surface-water-quality stations were discontinued prior to the 1995 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	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
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
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
Milwaukee River near Cedarburg, WI	04086600	607	SED	1982-84
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

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

xxi

Station name	Station number	Drainage area (mi ²)	Type of record	Period of record
STREAMS TRIBUTARY TO LAKE MICHIGAN—CONTINUED				
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
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
Tenmile 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 ³	1985-86
Brewery Creek at Cross Plains, WI	05406470	10.5	SED ³	1985-86
Garfoot Creek near Cross Plains, WI	05406491	5.39	SED ³	1985-86
Black Earth Creek at Black Earth, WI	05406500	45.6	T	1954-65, 1985-86
			DO	1986 ¹
			SED	1956-65, 1985-86
			C	1985-86
Trout Creek Confluence Arneson 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	1975-80 ¹ , 1981
			SED	1975-79
Kickapoo River at Ontario, WI	05407500	150	T	1974-77
			SED	1973-77
Kickapoo River near Rockton, WI	05407920	260	T,SED	1972-77

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station numberr	Drainage area (mi ²)	Type of record	Period of record
WISCONSIN RIVER BASIN—CONTINUED				
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
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
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 DO	1987-91 1987-91 ¹
Yellowstone River near Blanchardville, WI	05433500	28.5	T SED	1954-60 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 SED	1954-60 1956-60
Sugar River near Brodhead, WI	05436500	523	SED	1978-86
ILLINOIS RIVER BASIN				
Muskego Lake Outlet near Wind Lake, WI	425109088075000	28.3	C	1988-89
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; 1995 water year data for lakes are published in Open-File Report 96-168.

Water-resources data for Wisconsin for the 1995 water year include 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. These volumes contain discharge records from 147 gaging stations and peak stage and discharge from 66 crest-stage stations; stage for 6 lakes and contents for 24 reservoirs; water-quality data from 57 streams and from 4 lakes; precipitation from 27 sites; and water-level records from 60 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-95-1." 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. All water-data reports from 1990 through 1994 water years are available on Compact Disc - Read Only Memory (CD-ROM)..

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)274-3535. A limited number of CD-ROM discs will be available for sale by the Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, Colorado 80225.

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, K. W. Bauer, executive director.
U.S. Army Corps of Engineers.
U.S. Environmental Protection Agency, Region 5, Water Division, Barry DeGraff, director.
U.S. Environmental Protection Agency, National Program Office, Chris Grundler, director.
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 Public Works, Kenneth J. Kosciak, director.
Dane County Regional Planning Commission, Thomas Favour, executive director.
City of Madison, Paul Soglin, mayor.
City of Middleton, Dan Ramsey, mayor.
City of Beaver Dam, Robert Sackett, utilities superintendent.
City of Thorp, Bernell Lange, 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. Boekme, 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, Phillip Meyer, chairman, sewer and water committee.
 Menominee Indian Tribe of Wisconsin, Betty Jo Wozniak, administrator.
 Oneida Indian Tribe of Wisconsin, Pat Pelky, environmental department.
 Town of Delavan, Wayne Polzon, town clerk.
 Green Lake Sanitary District, Ron Edwards, administrator.
 City of Fond du Lac, David Boede, city engineer.
 City of Barron, Bard Kittleson, mayor.
 Lac du Flambeau Band of Lake Superior Chippewa, Thomas Maulson, president.
 Stockbridge/Munsee Indian Tribe, Virgil Murphy, tribal chairman.
 City of Sparta, Milo Seubert, mayor.
 City of Brookfield, Kathryn C. Bloomberg, mayor.
 Fontana/Walworth Water Pollution Control Commission, Dean M. Donner, superintendent.

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

SUMMARY OF HYDROLOGIC CONDITIONS

Streamflow

The statewide average precipitation of 29.34 inches for the 1995 water year was 92 percent of the normal annual precipitation of 31.79 inches for water years 1961-90. Average precipitation values ranged from 61 percent of normal at Plymouth in east-central Wisconsin to 126 percent of normal at Grantsburg Department of Natural Resources ranger station in northwest Wisconsin (Pamela Nabor-Knox, UW-Extension, Geological and Natural History Survey, written commun., 1995).

Runoff was variable for rivers throughout the State ranging from 31 percent in east-central Wisconsin to 150 percent in northwest Wisconsin. Runoff was lowest (31 percent of the average annual runoff from 1973-95) for the Manitowoc River at Manitowoc and highest (150 percent of the average annual runoff from 1902-70, 1987-95) for Apple River near Somerset. Departures of runoff in the 1995 water year as a percent of long-term average runoff in the State are shown in Figure 1.

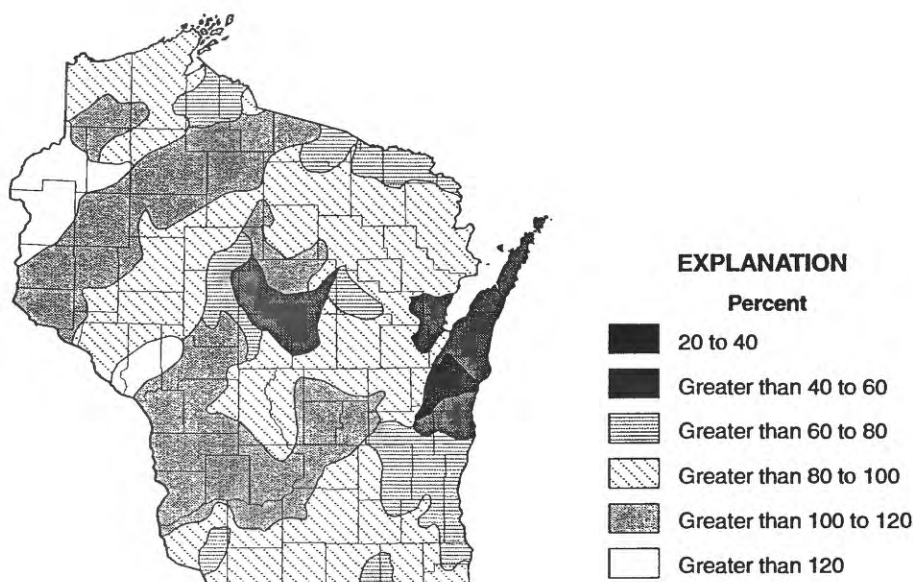


Figure 1. 1995 runoff as percent of long-term average runoff.

Annual discharges for the individual water years (1916-95) 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 1995 water year to discharge for a 80-year base period at the same three gaging stations are shown in Figure 3.

The annual precipitation in the State was below normal for the 1995 water year, and low flows occurred at 21 gaging stations where the annual minimum 7-consecutive day average flows (Q7) had recurrence intervals of 2 or more years. The Q7 values typically occurred in July and early August, or in the winter months of February and March. The low-flow values which occurred in the summer were the result of below normal precipitation along with extremely high temperatures during the months of June and July. The extreme temperatures caused 120 heat-related deaths in Wisconsin by July 22. The heat also caused livestock and poultry deaths (Midwestern Climate Center, July, 1995) along with crop damages which the Wisconsin Agricultural Statistics Service reported to have helped cause 1995 harvests to be 20 percent below the 1994 harvest (Midwestern Climate Center, January, 1996). The Q7 values with the largest recurrence intervals occurred at stations draining into Lake Michigan in eastern Wisconsin. The Q7 values and recurrence intervals for gaging stations that equalled or exceeded 2 years are listed in the following table:

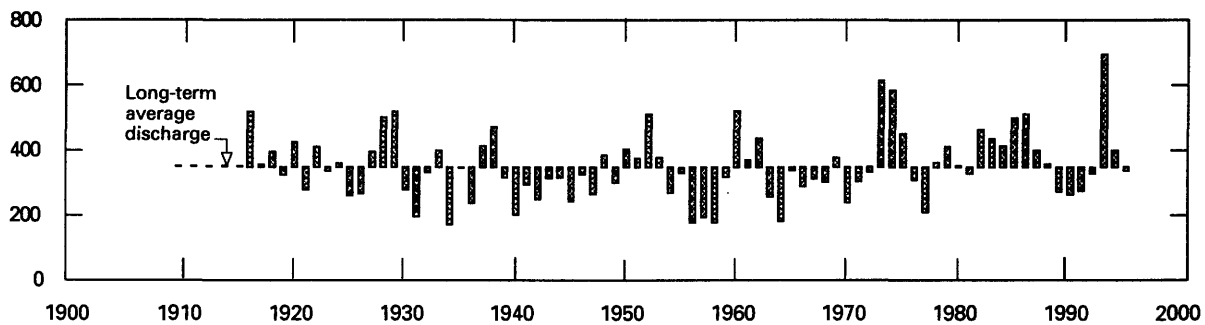
Station number	Station name	Date	Q7 (ft ³ /s)	Recurrence interval (years)
04027000	Bad River near Odanah	Aug. 2-8	91	3
04027500	White River near Ashland	Feb. 4-10	136	4
04069500	Peshtigo River at Peshtigo	July 27-Aug. 2	295	3
04071858	Pensaukee River near Pensaukee	July 25-31	3.4	3
04078500	Embarrass River near Embarrass	July 27-Aug. 2	82	2
04079000	Wolf River at New London	July 30-Aug. 5	675	2
04085200	Kewaunee River near Kewaunee	July 15-21	11	3
04085281	East River at Mishicot	July 24-30	5.5	13
04085427	Manitowoc River at Manitowoc	July 25-31	14	7
04087030	Menomonee River at Menomonee Falls	July 27-Aug. 2	1.6	10
04087159	Kinnickinnic River at Milwaukee	Feb. 7-13	4.1	6
04087240	Root River at Racine	Oct. 18-24	5.5	3
05332500	Namekagon River near Trego	July 31-Aug. 6	284	2
05369500	Chippewa River at Durand	Feb. 13-19	2,740	3
05397500	Eau Claire River at Kelly	Feb. 28-Mar. 6	46	4
05398000	Wisconsin River at Rothschild	July 25-31	1,420	2
05400760	Wisconsin River at Wisconsin Rapids	July 24-30	1,870	2
05402000	Yellow River at Babcock	July 30-Aug. 5	5.9	3
05404000	Wisconsin River near Wisconsin Dells	July 28-Aug. 3	2,230	4
05407000	Wisconsin River at Muscoda	July 29-Aug. 4	3,680	2
05544200	Mukwonago River at Mukwonago	July 9-15	15	3

An isolated storm in June and widespread precipitation in August caused floods with discharges that equalled or exceeded those with a recurrence interval of 5 years (Krug and others, 1991) at six crest-stage gages. Precipitation throughout Wisconsin in August resulted in a Statewide average of 7.10 inches, which was 175 percent of the normal August Statewide precipitation of 4.06 inches for the period from 1961-90. The highest August precipitation total of 16.45 inches occurred at Rosholt in north-central Wisconsin (Pamela Nabor-Knox, UW-Extension, Geological and Natural History Survey, written commun., 1995), which was approximately 392 percent of the normal August precipitation of 4.2 inches for this station. Average precipitation in August was the highest value in the last 101 years. Heavy rains in August caused flooding that washed out some roads in west-central and north-central Wisconsin (Midwestern Climate Center, August, 1995). Peak discharges which had recurrence intervals that equalled or exceeded 5 years are summarized in the following table:

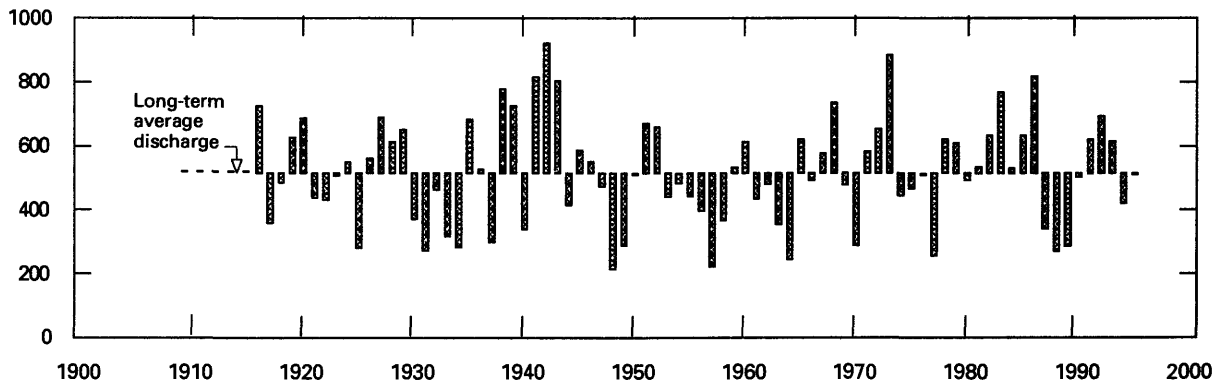
Station number	Station name	Date	Peak discharge (ft ³ /s)	Recurrence interval (years)
04087100	Honey Creek at Milwaukee	Aug. 16	500	6
05341900	Kinnickinnic River Tributary at River Falls	Aug. 13	3,040	15
05371800	Buffalo River Tributary near Osseo	Aug. 14	110	7
05382200	French Creek near Ettrick	Aug. 14	1,790	50
05397600	Big Sandy Creek near Wausau	Aug. 15	1,600	50
05430403	Fisher Creek Tributary at Janesville	June 27	796	10

ANNUAL DISCHARGE, IN CUBIC FEET PER SECOND

05436500 SUGAR RIVER NEAR BRODHEAD



05362000 JUMP RIVER AT SHELDON



04071000 OCONTO RIVER NEAR GILLETT

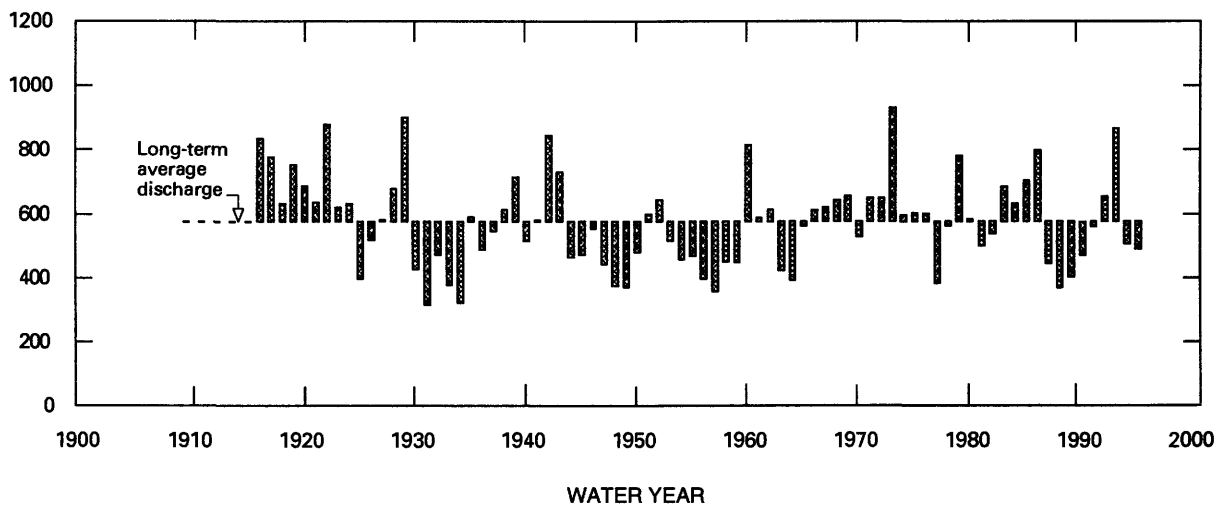


Figure 2. Comparison of annual discharge at representative gaging stations to their long-term average discharge for water years 1916–1995.

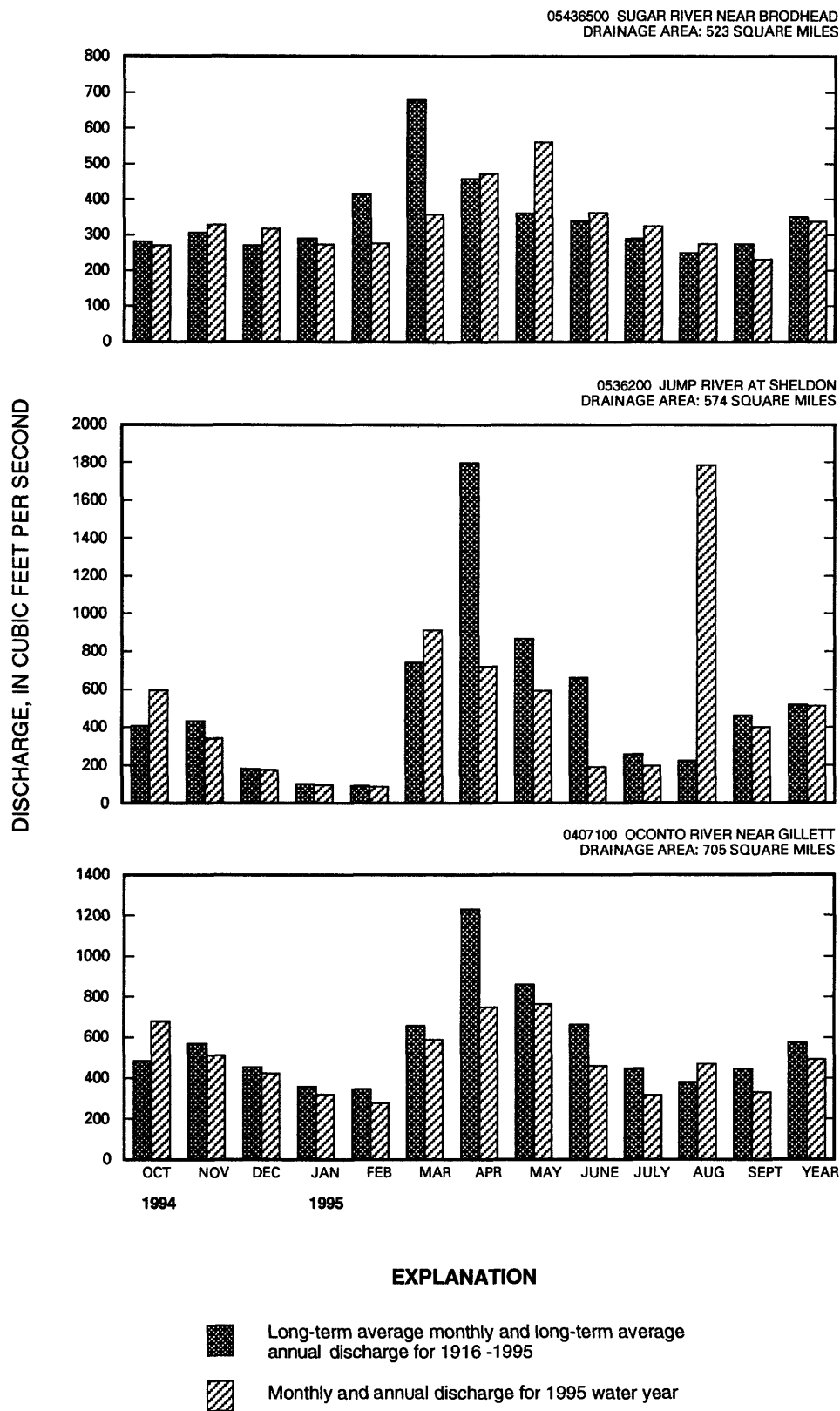


Figure 3. Comparison of discharge at representative gaging stations during 1995 water year with discharge for 1916–1995.

References cited:

- Krug, W. R., Conger, D. H., and Gebert, W. A., 1991, Flood-frequency Characteristics of Wisconsin Streams: U.S. Geological Survey Water-Resources Investigations Report 91-4128, 185 p.
- Midwestern Climate Center, 1995, Weather and Climate Impacts in the Midwest-Major Climate Conditions for July, 1995-Regional Impacts-Wisconsin: Champaign, Ill., v. V, no. 8, p. 7.
- _____, 1995, Weather and Climate Impacts in the Midwest-Major Climate Conditions for August, 1995: Champaign, Ill., v. V, no. 9, p. 2, 8.
- _____, 1996, Weather and Climate Impacts in the Midwest-Major Climate Conditions for January, 1996-Regional Impacts-Wisconsin: Champaign, Ill., v. VI, no. 2, p. 7.

Water Quality

Suspended-sediment and total phosphorus yields for streams in southern Wisconsin for water year 1995 were low ranging from 23 to 60 percent of long-term annual average. The suspended-sediment yield at the Grant River at Burton in southwestern Wisconsin was 59 tons/mi² (tons per square mile), or 23 percent of the average annual yield for 1978-95. The suspended-sediment yield for Jackson Creek Tributary near Elkhorn in southeastern Wisconsin for water year 1995 was 42 tons/mi², which was 59 percent of the average annual yield for the period 1984-95. The total phosphorus yield for Jackson Creek Tributary was 201 lbs/mi² (pounds per square mile), or 42 percent of the 1984-95 annual average. At Silver Creek near Ripon suspended sediment yield was 12.3 tons/mi², or 52 percent of the 1988-95 annual average, and total phosphorus yield was 209 lbs/mi², or 60 percent of the 1988-95 annual average.

Ground-Water Levels

Maps showing the seasonal ground-water trends for the year (fig. 4) are based on water-level data from 26 shallow-aquifer wells, each having at least 15 years of record. Water-level measurements from each well are grouped so that FALL consists of measurements from October through December 1994; WINTER consists of measurements from January through March 1995; SPRING consists of measurements from April through June 1995; and SUMMER consists of measurements from July through September 1995. Mean seasonal water levels were compared to the long-term mean seasonal water levels. The 1995 water level was considered normal if it was within one-half of the standard deviation on the long-term mean.

In general, shallow ground-water levels during the 1995 water year were normal to above normal for most of the wells in the State. Several counties, Barron, Vilas, Door, and Milwaukee, had below normal ground-water levels at the beginning of the water year, and some of those 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 1995 water year and above normal rainfall during the previous water year.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Bench-Mark Network is a network of 53 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

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, diverse, and geographically distributed part of the Nation's ground- and surface-water resources, and to identify, describe, and explain the major natural and human factors that affect these observed conditions and trends.

Assessment activities have begun in about two-thirds of the study units and ultimately will be conducted in 60 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.

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

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are from the 1995 water year that began October 1, 1994, and ended September 30, 1995. 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 5 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 6.

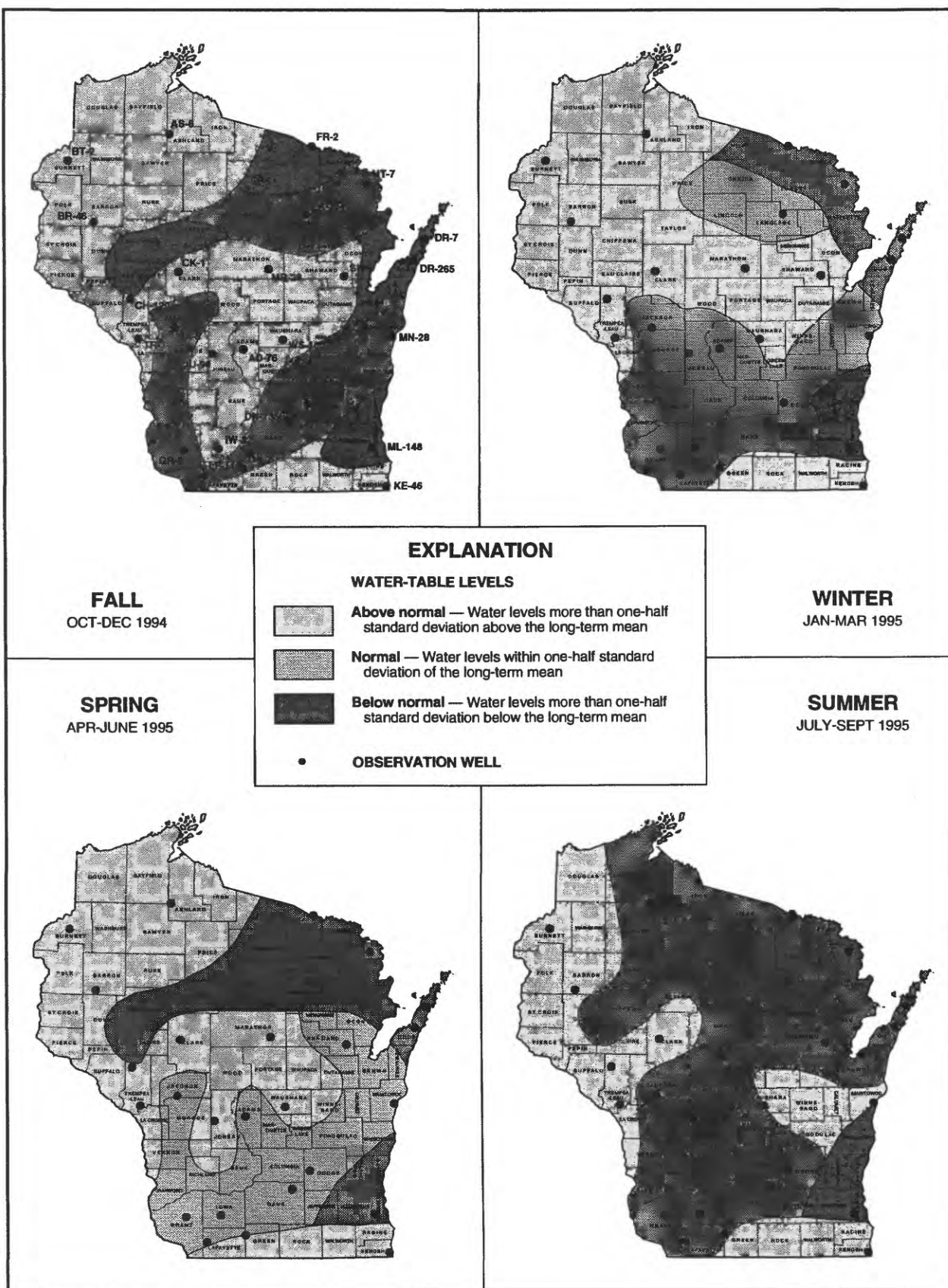


Figure 4. Relation of seasonal water-table levels to long-term means.

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.

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)

Records of Ground-Water Levels

Water-level data for 60 wells are given in this report. The locations of these wells are shown in figure 6. 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 60 wells are presented in this report, water-level data are currently being collected for a total of 165 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 OF WATSTORE DATA

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

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

In 1976, the U.S. Geological Survey opened WATSTORE to the public for direct access. The signing of a Memorandum of Agreement with the Survey is required to obtain direct access to WATSTORE. The system can be accessed either synchronously or asynchronously. The requester will be expected to pay all computer costs he/she incurs. Direct access may be obtained by contacting:

U.S. Geological Survey
National Water Data Exchange
421 USGS National Center
Reston, Virginia 22092

In addition to providing direct access to WATSTORE, data can be provided in various machine-readable formats on magnetic tape or 5-1/4 inch floppy disk. Water-data reports from 1990-94 also are available on Compact Disc-Read Only Memory (CD-ROM). 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.) A limited number of CD-ROM discs will be available for sale by the Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, CO 80225.

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.

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.

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.

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 $44.5^{\circ}\text{C} + 0.2^{\circ}$ 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 $35^{\circ} \pm 1.0^{\circ}$ on KF-streptococcus culture medium. Their concentrations are expressed as number of colonies per 100 ml of sample.

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

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

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, 1,983 acre-feet, 646,000 gallons, or 2,447 cubic meters.

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 (ft^3/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.

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 $0.45\ \mu\text{m}$ membrane filter. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

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.

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.

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.

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.

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.

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.
Sand.....	.062 - 2.0	Sedimentation or sieve.
Gravel.....	2.0 - 64.0	Sieve.

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.

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.

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.

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 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. Topography, geology, soil type, land cover, land use, quantity and intensity of precipitation, and other environmental factors influence the quantity, characteristics, and cause of sediment in streams.

Suspended sediment is sediment maintained in suspension by turbulent currents or as a colloid.

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

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

Suspended-sediment discharge is the quantity of suspended sediment passing through a stream cross section in a unit of time. It is computed by multiplying water discharge times suspended-sediment concentration times 0.0027.

Sodium-adsorption ratio (SAR) expresses the relative activity of sodium ions in exchange reactions with soil.

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 about 65 percent of the specific conductance.

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

Streamflow uniquely describes discharge in the natural channel of a surface stream course as opposed to the term "discharge", which can be applied to the flow of a canal. Unlike the term "runoff", streamflow may be applied to discharge whether it is affected by diversion or regulation or not.

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.

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. It is computed by multiplying the concentration of the substance (mg/L) by 0.0027 times the discharge of the stream (cfs).

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, 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."

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 1982).

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."

- 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.
- 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.
- 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.
- 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.
- 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.
- 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 1. 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.
- 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.
- 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.
- 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.

- 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.
- 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.
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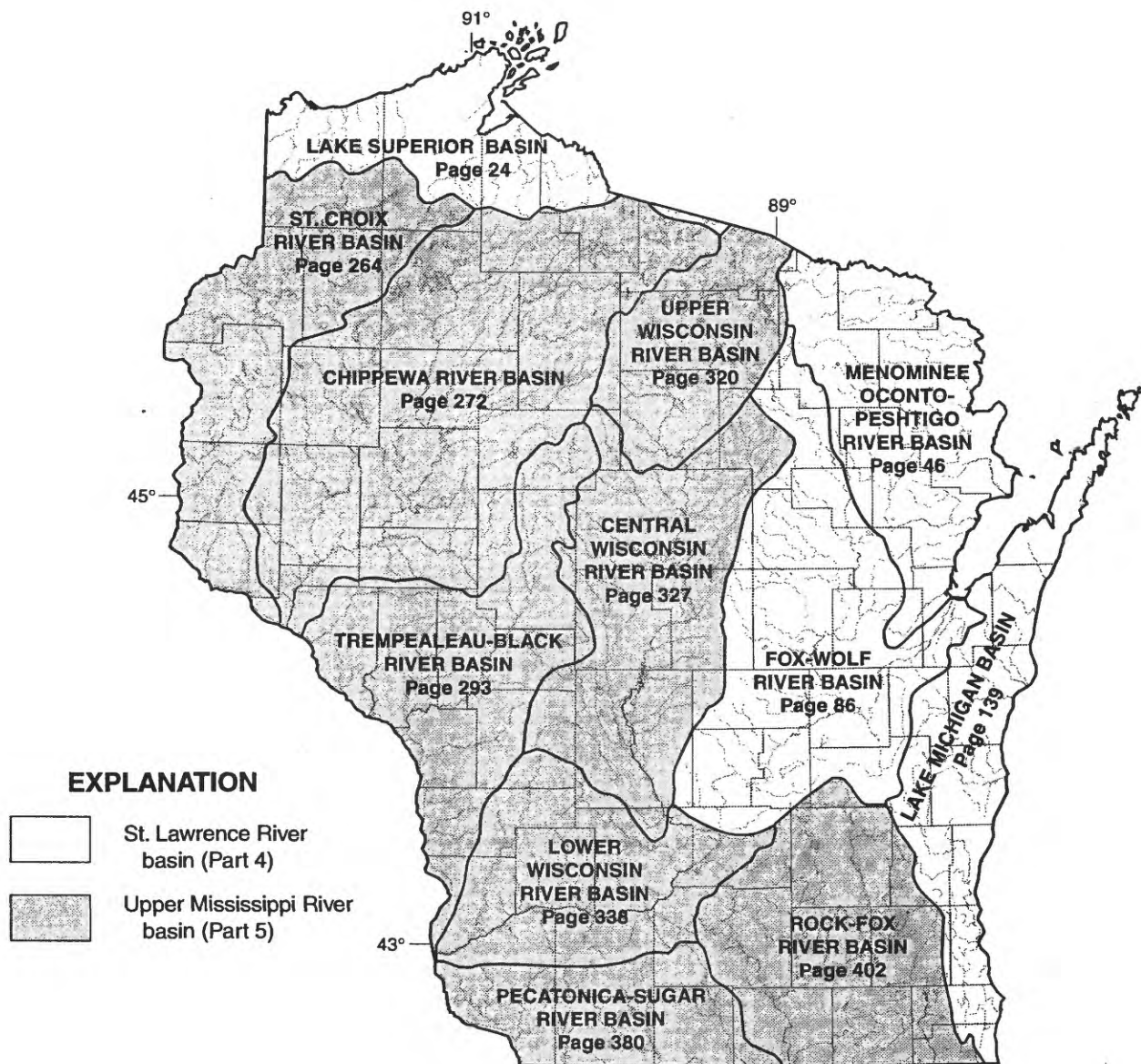
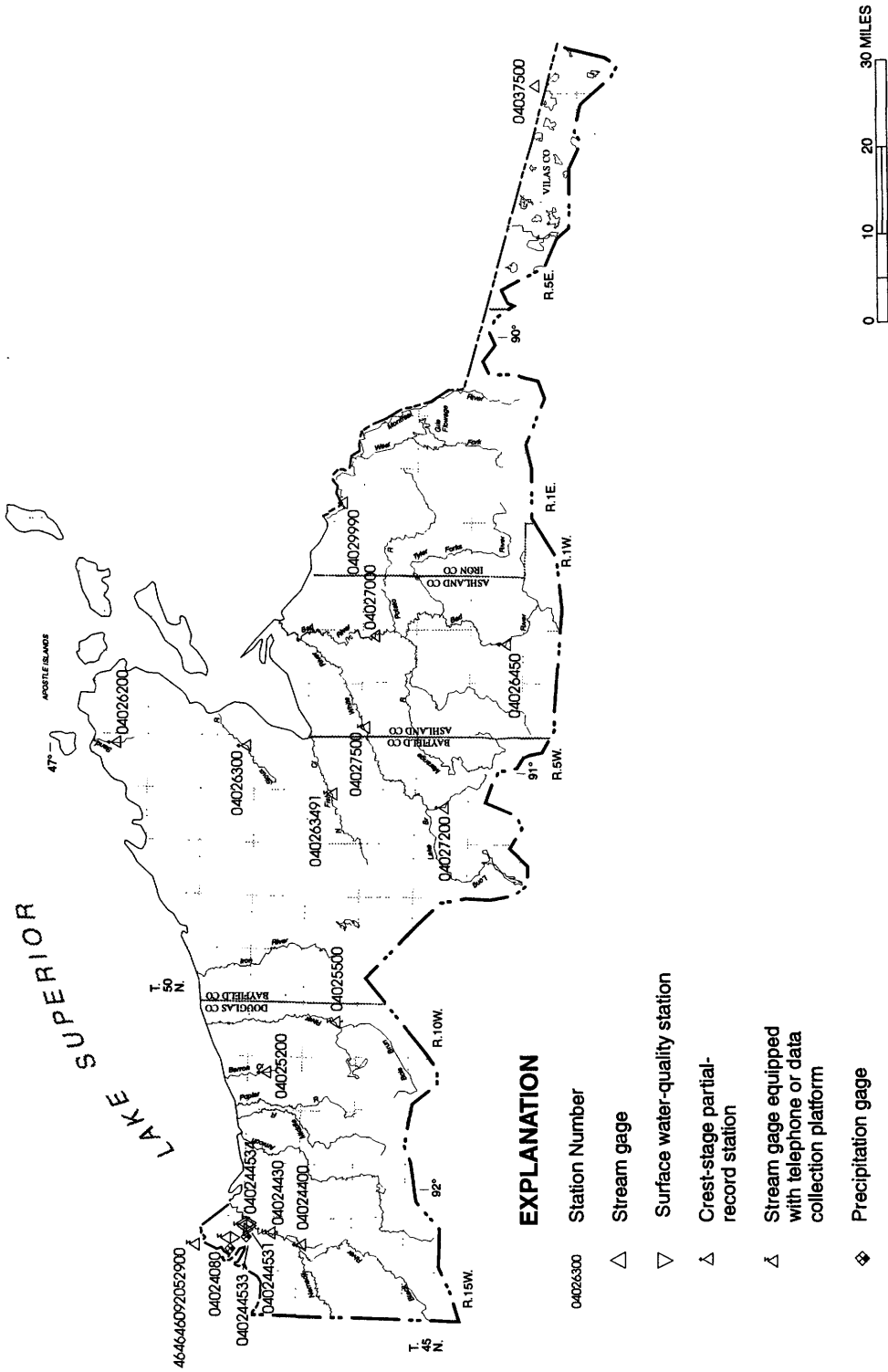


Figure 5. Major surface-water drainage basins and index of hydrologic records.

ST. LAWRENCE 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.

LAKE SUPERIOR BASIN

STREAMS TRIBUTARY TO LAKE SUPERIOR
464646092052900 SUPERIOR BAY DULUTH SHIP CANAL AT DULUTH, MN

25

LOCATION.--Lat 46°46'46", long 92°05'29", in SE 1/4 SE 1/4 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.--3,720 mi², approximately.

PERIOD OF RECORD.--October 1994 to current year.

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

REMARKS.--Estimated daily discharges: Oct. 1, 20, 23, Mar. 14, May 12, June 13, 20, 24, 30, and July 1-3. Records good except estimated daily discharges, which are fair (see page 11). Gage-height telemeter at station.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge observed, 4,830 ft³/s, July 30; minimum daily discharge observed, -3,330 ft³/s, July 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	862	1050	2040	3400	463	526	1300	1420	3310	-1560	---	3070
2	1030	572	-549	2090	1010	-79	1210	1360	2120	3480	-1390	1890
3	2260	-268	1230	3970	2330	323	1920	1190	1390	-684	-1330	1300
4	476	1070	1270	3360	2880	322	1530	608	1840	214	-498	747
5	381	1240	-1030	-1740	2500	-1860	914	-1340	1440	1410	114	726
6	-69	-580	914	1830	877	520	1690	408	578	-271	143	1150
7	1230	1210	1620	1400	994	1060	1180	596	1740	-893	309	2990
8	-881	597	1060	1100	812	502	473	113	239	---	-186	1410
9	-2020	1080	1320	-133	-190	430	251	138	213	---	1290	1480
10	1160	535	2730	867	3530	899	36	2000	903	---	1270	1310
11	1240	2070	390	1190	2090	364	166	890	603	---	944	2000
12	277	370	830	222	1530	609	1810	3690	704	---	-366	1840
13	46	1550	1200	1530	1260	1500	768	2100	698	---	343	-1100
14	353	-772	516	809	392	2170	121	1940	750	---	1380	1160
15	150	880	783	76	1790	3150	1010	2520	196	---	1100	499
16	387	1070	682	-595	974	3520	216	3030	146	---	1010	-543
17	710	1560	1570	1380	264	3360	664	454	357	---	-475	907
18	2630	20	1090	506	1000	2710	1380	2910	1900	---	-1810	1570
19	676	770	788	790	199	2810	218	965	---	---	-555	623
20	-1050	551	960	2310	1480	3950	2520	-3000	1180	---	2280	-1860
21	---	300	1080	2600	632	2380	3110	-694	-558	---	619	-340
22	---	-1050	580	2530	1010	2400	-513	1260	1160	---	625	-1290
23	826	640	707	886	1940	2580	1440	-1380	870	---	-1240	562
24	-2520	440	175	899	136	1960	2440	955	703	---	912	67
25	-259	-1200	386	960	-1310	1790	2350	993	-693	---	3020	1470
26	1880	1260	1250	305	733	1670	40	1560	556	---	2970	636
27	1130	311	1260	-570	686	1770	1830	614	928	-3330	2880	-1020
28	1770	2730	647	301	1070	1630	1550	2020	1470	207	3140	-979
29	1550	264	244	1130	---	2600	744	2.3	1040	---	1570	-966
30	227	870	1700	1560	---	1900	1850	2480	-2190	4830	1800	86
31	1270	---	1560	475	---	1520	---	3550	---	---	1290	---
TOTAL	---	19140	29003	35438	31082	48986	34218	33352.3	---	---	---	19395
MEAN	---	638	936	1143	1110	1580	1141	1076	---	---	---	646
MAX	---	2730	2730	3970	3530	3950	3110	3690	---	---	---	3070
MIN	---	-1200	-1030	-1740	-1310	-1860	-513	-3000	---	---	---	-1860

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

	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995
MEAN	---	638	936	1143	1110	1580	1141	1076	---	---	---	646
MAX	---	638	936	1143	1110	1580	1141	1076	---	---	---	646
(WY)	---	1995	1995	1995	1995	1995	1995	1995	---	---	---	1995
MIN	---	638	936	1143	1110	1580	1141	1076	---	---	---	646
(WY)	---	1995	1995	1995	1995	1995	1995	1995	---	---	---	1995

LOCATION.--Lat 46°42'00", long 92°06'30", in NE 1/4 sec.27, T.49 N., R.14 W., Douglas County, Hydrologic Unit 04010301, west side of intersection of Tower Avenue and 32nd Street, at Superior.

DRAINAGE AREA.--0.034 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1993 to September 1995 (discontinued).

GAGE.--Continuous water-stage recorder and Palmer-Bowlus flume. Elevation of gage is 655 ft above sea level, from topographic map.

REMARKS.--Flume installed in 36-inch storm sewer. Missing record Oct. 12 to Nov. 21. Records are good (see page 11). Records from July 1993 to September 1994 are unpublished but available at the District Office. Station discontinued Sept. 21, 1995.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

[illegible]

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1993 to September 1995, open-water periods.

INSTRUMENTATION.--Volume-activated water-quality sampler.

REMARKS.--Chemical analysis by the Wisconsin State Laboratory of Hygiene. Samples are storm-composite samples collected by an automatic point sampler

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

BEGIN- NING DATE	BEGIN- NING TIME	ENDING DATE	ENDING TIME	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (99901)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	OXYGEN DEMAND, BIOCHEM ICAL, 5-DAY DISS (MG/L) (99900)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	CALCIUM TOTAL RECOVER- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
03-14-95	1256	03-14-95	1527	--	--	--	--	--	--	--
03-15-95	1441	03-15-95	1442	--	--	--	--	--	--	--
03-20-95	0231	03-21-95	1912	--	--	--	--	--	--	--
03-26-95	1251	03-26-95	1711	--	--	--	--	--	--	--
04-12-95	0031	04-12-95	2207	--	--	--	--	--	--	--
07-03-95	2240	07-05-95	0037	80	21	--	--	--	30	15
07-05-95	1536	07-05-95	2302	92	23	--	--	--	24	17
07-10-95	0236	07-10-95	1434	--	--	--	--	1600	--	--
07-13-95	0659	07-13-95	0806	110	78	49	>48	22000	43	18
07-31-95	0219	07-31-95	0407	--	--	--	--	--	--	--
08-06-95	1116	08-06-95	1251	200	97	70	>20	12000	19	15
08-09-95	0234	08-09-95	0342	150	140	70	>50	7300	50	15
08-12-95	1933	08-12-95	2127	45	16	9.8	6.2	5600	28	14
08-13-95	1944	08-14-95	0331	87	63	54	53	7400	19	15
*08-13-95	1944	08-14-95	0331	88	54	40	39	10000	19	15
09-06-95	0404	09-07-95	0026	--	--	--	--	--	--	--

DATE	MAGNE- SIUM, TOTAL RECOVER- ABLE (MG/L) (00921)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SULFATE (MG/L AS SO4) (00946)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
03-14-95	--	--	--	270	98	640	--	--	--	--	--	--
03-15-95	--	--	--	290	18	616	--	--	--	--	--	--
03-20-95	--	--	--	98	136	450	--	--	--	--	--	--
03-26-95	--	--	--	190	160	608	--	--	--	--	--	--
04-12-95	--	--	--	270	336	944	--	--	--	--	--	--
07-03-95	6.0	2.2	8.0	16	256	350	0.420	0.341	1.0	0.50	0.390	--
07-05-95	6.0	3.0	9.0	23	124	252	0.181	0.072	0.60	0.30	0.227	--
07-10-95	--	--	--	--	170	--	--	--	--	--	--	--
07-13-95	8.0	2.5	13	15	272	418	0.387	0.208	1.1	0.50	0.485	0.046
07-31-95	--	--	--	--	196	336	--	--	--	--	--	--
08-06-95	4.0	1.6	11	20	--	258	0.480	0.217	1.2	0.70	0.225	0.059
08-09-95	8.0	1.9	14	12	348	476	0.259	0.135	1.0	0.30	0.634	0.061
08-12-95	5.0	1.9	10	14	--	--	0.289	0.112	0.70	0.30	0.405	0.089
08-13-95	4.0	2.5	7.0	17	--	--	0.470	0.115	0.60	0.30	0.160	0.026
08-13-95	4.0	2.5	9.0	17	--	--	0.341	0.116	0.70	0.30	0.162	0.028
09-06-95	--	--	--	--	46	--	--	--	--	--	--	--

DATE	ARSENIC TOTAL RECOVER- ABLE (UG/L) (99910)	CADMIUM TOTAL RECOVER- ABLE (UG/L) (01113)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	COPPER, TOTAL RECOVER- ABLE (UG/L) (01119)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, TOTAL RECOVER- ABLE (UG/L) (01114)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	SILVER, TOTAL RECOVER- ABLE (UG/L) (01079)	ZINC, TOTAL RECOVER- ABLE (UG/L) (01094)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
03-14-95	--	--	--	--	--	--	--	--	--	--	--	--
03-15-95	--	--	--	--	--	--	--	--	--	--	--	--
03-20-95	--	--	--	--	--	--	--	--	--	--	--	--
03-26-95	--	--	--	--	--	--	--	--	--	--	--	--
04-12-95	--	--	--	--	--	--	--	--	--	--	--	--
07-03-95	5.1	1	0.0	38	6	53	0.4	0.4	160	<8	--	--
07-05-95	4.7	0	0.1	25	5	34	0.4	<0.2	100	<8	9.0	--
07-10-95	--	--	--	--	--	--	--	--	--	--	--	--
07-13-95	9.8	1	0.1	48	7	49	4	<0.2	170	18	20	--
07-31-95	--	--	--	--	--	--	--	--	--	--	--	--
08-06-95	2.0	1	0.1	76	9	32	0.5	<0.2	150	12	48	--
08-09-95	10.0	1	0.1	57	6	65	0.6	<0.2	210	<8	29	--
08-12-95	5.8	1	0.1	31	6	32	<0.4	<0.2	110	<8	7.0	--
08-13-95	3.8	0	0.0	17	4	20	<0.4	<0.2	61	<8	--	--
08-13-95	3.4	0	0.0	17	4	21	<0.4	<0.2	60	<8	--	--
09-06-95	--	--	--	--	--	--	--	--	--	--	21	16

* Sample processing duplicate

STREAMS TRIBUTARY TO LAKE SUPERIOR
04024080 TOWER AVENUE AT SUPERIOR, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

BEGIN- NING DATE	BEGIN- NING TIME	ENDING DATE	ENDING TIME	ACE- NAPHTH- ENE TOTAL (UG/L) (34205)	ACE- NAPHTH- YLENE TOTAL (UG/L) (34200)	ACETATE VINYL WATER UNFLTRD REC (UG/L) (77057)	ACETONE WHOLE TOTAL (UG/L) (81552)	ALLY CHLORIDE TOTAL (UG/L) (99921)	ANTHRA- CENE TOTAL (UG/L) (34220)	BENZENE TOTAL (UG/L) (34030)
06-29-95	0846	--	--	--	--	<5.00	<5	<5.000	--	<0.500
07-02-95	1606	07-02-95	1607	--	--	<5.00	<5	<5.000	--	<0.500
07-02-95	2223	07-02-95	2224	--	--	<5.00	<5	<5.000	--	<0.500
07-02-95	2242	07-02-95	2243	--	--	<5.00	<5	<5.000	--	<0.500
07-31-95	0219	07-31-95	0407	<0.048	<0.052	--	--	--	0.040	--
08-09-95	0245	08-09-95	0246	--	--	<5.00	<5	<5.000	--	<0.500
08-09-95	0303	08-09-95	0304	--	--	<5.00	<5	<5.000	--	<0.500
08-09-95	0346	08-09-95	0347	--	--	<5.00	<5	<5.000	--	<0.500
09-06-95	0404	09-07-95	0026	--	<0.044	--	--	--	<0.015	--

DATE	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)	BENZENE N-PROPYL WATER UNFLTRD REC (UG/L) (77224)	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	BENZENE 124-TRI METHYL UNFLTRD REC (UG/L) (77222)	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,2,4- TRI- CHLORO- WAT UNF REC (UG/L) (34551)	BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226)	BENZENE SEC BUTYL- WATER UNFLTRD REC (UG/L) (77350)	BENZENE TERT- BUTYL- WATER UNFLTRD REC (UG/L) (77353)	BENZO- A- PYRENE TOTAL (UG/L) (34247)	BENZO B FLUOR- AN- THENE TOTAL (UG/L) (34230)
06-29-95	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	--	--
07-02-95	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	--	--
07-02-95	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	--	--
07-02-95	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	--	--
07-31-95	--	--	--	--	--	--	--	--	--	--	0.250	0.440
08-09-95	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	--	--
08-09-95	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	--	--
08-09-95	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	--	--
09-06-95	--	--	--	--	--	--	--	--	--	--	0.098	0.100

DATE	BENZO K FLUOR- AN- THENE TOTAL (UG/L) (34242)	BENZO A ANTHRAC- ENE1,2- BENZANT HRACENE TOTAL (UG/L) (34526)	BENZOGH I PERYL ENE1,12 -BENZOP ERYLENE TOTAL (UG/L) (34521)	BROMO- BENZENE WATER, WHOLE, TOTAL (UG/L) (81555)	BROMO- FORM TOTAL (UG/L) (32104)	CARBON DI- SULFIDE WATER WHOLE TOTAL (UG/L) (77041)	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)	CHRY- SENE TOTAL (UG/L) (34320)
06-29-95	--	--	--	<0.500	<0.500	<5	<0.500	<0.500	<0.500	<0.500	<0.500	--
07-02-95	--	--	--	<0.500	<0.500	<5	<0.500	<0.500	<0.500	<0.500	<0.500	--
07-02-95	--	--	--	<0.500	<0.500	<5	<0.500	<0.500	<0.500	<0.500	<0.500	--
07-02-95	--	--	--	<0.500	<0.500	<5	<0.500	<0.500	<0.500	<0.500	<0.500	--
07-31-95	0.210	0.220	0.320	--	--	--	--	--	--	--	--	0.340
08-09-95	--	--	--	<0.500	<0.500	<5	<0.500	<0.500	<0.500	<0.500	<0.500	--
08-09-95	--	--	--	<0.500	<0.500	<5	<0.500	<0.500	<0.500	<0.500	<0.500	--
08-09-95	--	--	--	<0.500	<0.500	<5	<0.500	<0.500	<0.500	<0.500	<0.500	--
09-06-95	0.061	0.059	0.110	--	--	--	--	--	--	--	--	0.110

DATE	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (UG/L) (77093)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L) (32101)	ETHYL- BENZENE TOTAL (UG/L) (34371)	ETHANE HEXA- CHLORO- WATER UNFLTRD RECOVER TOTAL (UG/L) (34396)	ETHANE, 1,2-DI- CHLORO- WATER UNFLTRD REC TOTAL (UG/L) (34531)	ETHANE, 1112- TETRA- CHLORO- WAT UNF REC TOTAL (UG/L) (77562)	ETHANE, 1,1,2,2 TETRA- CHLORO- WAT UNF REC TOTAL (UG/L) (34516)	FLUOR- ANTHENE TOTAL (UG/L) (34376)	FLUOR- ENE TOTAL (UG/L) (34381)	FREON- 113 WATER UNFLTRD REC TOTAL (UG/L) (77652)	HEXA- CHLORO- BUTA- DIENE WAT.WH. TOTAL (UG/L) (34391)
06-29-95	<0.500	<0.500	<0.500	<0.500	<5.00	<0.5	<0.500	<0.500	--	--	<5.00	<0.50
07-02-95	<0.500	<0.500	<0.500	<0.500	<5.00	<0.5	<0.500	<0.500	--	--	<5.00	<0.50
07-02-95	<0.500	<0.500	<0.500	<0.500	<5.00	<0.5	<0.500	<0.500	--	--	<5.00	<0.50
07-02-95	<0.500	<0.500	<0.500	<0.500	<5.00	<0.5	<0.500	<0.500	--	--	<5.00	<0.50
07-31-95	--	--	--	--	--	--	--	--	0.740	<0.130	--	--
08-09-95	<0.500	<0.500	<0.500	<0.500	<5.00	<0.5	<0.500	<0.500	--	--	<5.00	<0.50
08-09-95	<0.500	<0.500	<0.500	<0.500	<5.00	<0.5	<0.500	<0.500	--	--	<5.00	<0.50
08-09-95	<0.500	<0.500	<0.500	<0.500	<5.00	<0.5	<0.500	<0.500	--	--	<5.00	<0.50
09-06-95	--	--	--	--	--	--	--	--	0.210	<0.120	--	--

STREAMS TRIBUTARY TO LAKE SUPERIOR
04024080 TOWER AVENUE AT SUPERIOR, WI--CONTINUED

PRECIPITATION QUANTITY

PERIOD OF RECORD.--July 1993 to September 1995 (non-frozen precipitation).

GAGE.--Tipping-bucket rain gage with electronic datalogger.

REMARKS.--Gage established July 1993. Recorded precipitation between Nov. 13 and Apr. 25 interpreted as collector snowmelt. Missing record May 8-24 and June 12, 13.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 1.61 in., Aug. 9, 1993.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 1.34 in., Aug. 24.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.66	.00	.02
3	.02	.00	.00	.00	.00	.00	.06	.00	.00	1.06	.00	.55
4	.00	.00	.00	.00	.00	.00	.00	.01	.00	.38	.00	.01
5	.00	.00	.00	.00	.00	.00	.00	.00	.40	.37	.00	.00
6	.31	.00	.00	.00	.00	.00	.03	.00	.11	.05	.20	.84
7	.04	.00	.00	.00	.00	.11	.00	.08	.06	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	---	.00	.00	.00	.00
9	.00	.00	.00	.00	.01	.01	.00	---	.00	.04	.62	.00
10	.00	.00	.00	.00	.00	.00	.00	---	.28	.65	.00	.00
11	.00	.00	.00	.00	.00	.00	.23	---	.00	.00	.00	.00
12	.00	.00	.00	.21	.00	.00	.74	---	---	.25	.82	.00
13	.00	.28	.00	.00	.00	.00	.00	---	---	.47	.14	.02
14	.00	.00	.00	.00	.00	.00	.00	---	.00	.02	.27	.01
15	.00	.00	.00	.00	.00	.00	.00	---	.00	.00	.00	.20
16	.15	.00	.00	.00	.00	.00	.00	---	.00	.00	.00	.33
17	.17	.05	.00	.05	.00	.00	.03	---	.00	.04	.00	.00
18	.11	.02	.00	.00	.18	.00	.42	---	.00	.00	.00	.00
19	.00	.00	.00	.00	.03	.01	.11	---	.00	.06	1.21	.26
20	.00	.07	.01	.00	.01	.63	.00	---	.00	.00	.00	.00
21	.00	.44	.01	.00	.00	.00	.01	---	.00	.00	.00	---
22	.25	.00	.00	.00	.00	.00	.00	---	.07	.00	.00	---
23	.01	.00	.00	.00	.00	.00	.54	---	.00	.00	.00	---
24	.00	.00	.00	.00	.00	.00	.00	---	.00	.01	1.34	---
25	.00	.00	.00	.00	.00	.06	.00	.00	.00	.00	1.32	---
26	.00	.00	.00	.00	.00	.55	.00	.00	.00	.00	.00	---
27	.00	.12	.00	.00	.00	.06	.00	.06	.00	.23	.00	---
28	.00	.05	.00	.00	.00	.00	.00	.58	.00	.00	1.33	---
29	.00	.00	.00	.00	---	.00	.00	.00	.12	.00	.00	---
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	---
31	.00	---	.00	.05	---	.00	---	.00	---	.60	.00	---
TOTAL	1.06	1.03	0.03	0.31	0.23	1.43	2.17	---	---	4.89	7.25	---

STREAMS TRIBUTARY TO LAKE SUPERIOR
04024430 NEMADJI RIVER NEAR SOUTH SUPERIOR, WI

31

LOCATION.--Lat 46°38'00", long 92°05'38", in SW 1/4 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.--Estimated daily discharges: Aug. 21-23 and ice-affected periods, Nov. 24 to Mar. 25 and Apr. 3-7. Records poor (see page 11). 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 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	303	236	160	74	64	58	572	435	314	112	115	386
2	279	217	170	72	66	58	501	397	278	109	114	319
3	254	205	180	68	66	58	440	366	248	184	103	270
4	245	194	170	66	64	62	400	345	231	295	95	509
5	235	188	170	64	62	62	380	335	211	330	94	332
6	219	183	160	62	60	62	410	317	211	437	105	264
7	253	179	150	60	58	60	350	300	260	459	117	353
8	334	176	140	58	58	58	313	294	314	343	143	309
9	327	175	130	56	58	58	303	1380	283	259	151	240
10	296	168	120	56	60	56	286	2920	276	267	131	215
11	268	160	110	58	62	58	284	1510	427	398	116	193
12	248	156	110	60	60	64	697	1040	428	320	104	177
13	223	158	110	62	58	190	1240	827	356	276	104	163
14	203	183	110	62	56	600	971	2630	285	274	109	149
15	198	200	110	60	54	3000	752	2380	245	213	108	139
16	193	184	110	62	54	2800	603	1510	223	184	100	145
17	220	175	110	62	54	2600	536	1270	198	176	92	155
18	307	178	98	62	58	2500	540	929	179	185	90	154
19	481	194	92	60	58	2400	728	734	166	199	111	147
20	425	198	84	60	58	2400	1890	622	152	192	163	145
21	365	218	84	58	56	2800	1990	533	132	172	170	141
22	328	412	88	58	56	2600	1640	460	125	153	130	135
23	421	363	92	58	56	2000	1220	410	123	138	100	126
24	457	310	94	56	58	1800	1160	387	118	140	119	119
25	382	290	96	56	60	1600	1060	353	114	163	787	118
26	338	250	96	56	62	1310	839	319	109	138	1840	115
27	301	230	94	56	62	1340	692	298	112	129	1160	114
28	277	200	88	58	60	919	590	324	111	120	991	116
29	263	180	86	60	---	826	530	448	116	111	818	127
30	256	160	82	62	---	695	479	423	118	104	614	135
31	245	---	78	62	---	637	---	360	---	106	484	---
TOTAL	9144	6320	3572	1884	1658	33731	22396	24856	6463	6686	9478	6010
MEAN	295	211	115	60.8	59.2	1088	747	802	215	216	306	200
MAX	481	412	180	74	66	3000	1990	2920	428	459	1840	509
MIN	193	156	78	56	54	56	284	294	109	104	90	114
CFSM	.70	.50	.27	.14	.14	2.59	1.78	1.91	.51	.51	.73	.48
IN.	.81	.56	.32	.17	.15	2.99	1.98	2.20	.57	.59	.84	.53

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1995, BY WATER YEAR (WY)												
MEAN	338	312	141	80.6	92.6	482	1346	651	504	348	202	390
MAX	1082	1200	418	177	336	1088	2426	1355	1357	790	978	1485
(WY)	1983	1992	1992	1984	1984	1995	1986	1979	1993	1986	1986	1986
MIN	41.0	33.9	28.2	27.3	29.8	102	244	120	82.9	46.6	40.6	34.4
(WY)	1977	1977	1977	1977	1977	1980	1987	1980	1988	1988	1976	1976

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR			FOR 1995 WATER YEAR			WATER YEARS 1974 - 1995		
ANNUAL TOTAL	133531			132198					
ANNUAL MEAN	366			362			407		
HIGHEST ANNUAL MEAN							786		
LOWEST ANNUAL MEAN							200		
HIGHEST DAILY MEAN	5430			Apr 27			7630		
LOWEST DAILY MEAN	(a)50			Feb 8			(a)19		
ANNUAL SEVEN-DAY MINIMUM	(a)52			Feb 4			(a)26		
INSTANTANEOUS PEAK FLOW				(b)3540			(c)13700		
INSTANTANEOUS PEAK STAGE				(a)18.82			Mar 14		
ANNUAL RUNOFF (CFSM)	.87			.86			25.97		
ANNUAL RUNOFF (INCHES)	11.83			11.71			13.17		
10 PERCENT EXCEEDS	820			826			1000		
50 PERCENT EXCEEDS	184			180			150		
90 PERCENT EXCEEDS	72			60			56		

(a) Ice affected

(b) Gage height, 17.23 ft

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

STREAMS TRIBUTARY TO LAKE SUPERIOR

040244531 UNPAVED RECREATIONAL PARK SITE IN PETROSKI PARK AT SOUTH SUPERIOR, WI.

LOCATION.--Lat 46°40'08", long 92°05'13", in NW 1/4 SE 1/4 sec.2, T.48 N., R.14 W., Douglas County, Hydrologic Unot 04010301, in drainage ditch separating east and west baseball diamonds.

DRAINAGE AREA.--0.006 mi².

PERIOD OF RECORD.--July 1995 to September 1995.

INSTRUMENTATION.--Liquid-level activated water-quality sampler.

REMARKS.--Chemical analysis by the Wisconsin State Laboratory of Hygiene. Samples are time-composite samples collected by an automatic point sampler. Suction line located in a ditch draining baseball field and lawn.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

BEGIN- NING DATE	BEGIN- NING TIME	ENDING DATE	ENDING TIME	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (99901)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	OXYGEN DEMAND, BIOCHEM ICAL 5 DAY DISS (MG/L) (99900)	COLI- FORM, FECAL, UM-MF (COLS. / 100 ML) (31625)	CALCIUM TOTAL RECOV- ERABLE (MG/L) AS CA (00916)
07-03-95	2300	07-04-95	0010	44	25	--	--	--	--
07-10-95	0306	07-10-95	0416	64	46	28	20	6400	120
07-13-95	0730	07-13-95	0840	78	50	23	13	29000	100
08-09-95	0830	08-09-95	0900	95	120	44	39	4400	39
08-12-95	2000	08-12-95	2110	65	63	16	8.7	15000	69
08-24-95	1201	08-24-95	1311	73	68	38	--	2400	30
09-06-95	0355	09-06-95	0505	49	42	6.0	3.6	27000	65
*09-06-95	0355	09-06-95	0505	46	46	6.5	3.7	24000	65

DATE	CALCIUM DIS- SOLVED (MG/L) AS CA (00915)	MAGNE- SIUM, TOTAL RECOVER -ABLE (MG/L) (00921)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS MG (00925)	SULFATE (MG/L) AS SO4 (00946)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL (00940)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L) AS N (00625)
07-03-95	--	--	--	10	2.5	304	446	0.445	0.300	1.6
07-10-95	--	50	--	9.0	5.1	928	1100	0.048	0.154	2.2
07-13-95	--	41	--	9.0	5.0	584	862	0.219	0.034	2.4
08-09-95	32	10	7.5	11	4.2	22	206	<0.010	<0.027	1.3
08-12-95	26	27	5.8	11	9.7	--	--	0.322	<0.027	2.4
08-24-95	23	11	6.9	12	6.1	76	234	0.248	0.049	1.5
09-06-95	45	25	15	12	6.7	160	430	0.572	0.129	2.0
09-06-95	45	25	15	--	7.0	--	--	0.540	0.154	1.8

DATE	NITRO- GEN, AM- MONIA + ORGANIC DIS- (MG/L) AS N (00623)	PHOS- PHORUS TOTAL (MG/L) AS P (00665)	PHOS- PHORUS ORTHOS, DIS- SOLVED (MG/L) AS P (00671)	ARSENIC TOTAL RECOVER -ABLE (UG/L) (99910)	CADMIUM TOTAL RECOVER -ABLE (UG/L) (01113)	COPPER, TOTAL RECOVER -ABLE (UG/L) (01119)	LEAD, TOTAL RECOVER -ABLE (UG/L) (01114)	SILVER, TOTAL RECOVER -ABLE (UG/L) (01079)	ZINC, TOTAL RECOVER -ABLE (UG/L) (01094)	CARBON, ORGANIC TOTAL (MG/L) AS C (00680)
07-03-95	0.90	0.774	--	--	--	--	--	--	--	--
07-10-95	1.0	2.26	0.060	4.200	<0.04	<1	46	<0.2	130	--
07-13-95	1.2	1.40	0.034	--	--	--	--	--	--	18
08-09-95	0.80	0.212	0.047	--	--	--	--	--	--	25
08-12-95	0.80	1.44	0.100	--	--	--	--	--	--	14
08-24-95	0.80	0.478	0.150	--	--	--	--	--	--	22
09-06-95	1.4	0.587	0.067	--	--	--	--	--	--	35
09-06-95	1.4	0.558	0.061	--	--	--	--	--	--	39

* Sample processing duplicate

STREAMS TRIBUTARY TO LAKE SUPERIOR
040244533 UNDEVELOPED URBAN SITE AT SUPERIOR, WI

33

LOCATION.--Lat 46°40'45", long 92°04'24", in SW 1/4 SW 1/4 sec.36, T.49 N., R.14 W., Douglas County, Hydrologic Unit 04010301, adjacent to drainage creek behind hole No. 7 green on east/west course of Nemadji Public Golf Course.

DRAINAGE AREA.--

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July to September 1995.

GAGE.--Continuous water-stage recorder and Parshall flume. Elevation of gage is 650 ft above sea level, from topographic map.

REMARKS.--Record are good (see page 11).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	.00	.00	.00
2	---	---	---	---	---	---	---	---	---	.00	.00	.00
3	---	---	---	---	---	---	---	---	---	.01	.00	.08
4	---	---	---	---	---	---	---	---	---	.05	.00	.23
5	---	---	---	---	---	---	---	---	---	.10	.00	.05
6	---	---	---	---	---	---	---	---	---	.25	.00	.23
7	---	---	---	---	---	---	---	---	---	.07	.00	.49
8	---	---	---	---	---	---	---	---	---	.00	.00	.08
9	---	---	---	---	---	---	---	---	---	.00	.05	.03
10	---	---	---	---	---	---	---	---	---	.11	.00	.00
11	---	---	---	---	---	---	---	---	---	.00	.00	.00
12	---	---	---	---	---	---	---	---	---	.00	.04	.00
13	---	---	---	---	---	---	---	---	---	.10	.05	.00
14	---	---	---	---	---	---	---	---	---	.00	.05	.00
15	---	---	---	---	---	---	---	---	---	.00	.00	.00
16	---	---	---	---	---	---	---	---	---	.00	.00	.00
17	---	---	---	---	---	---	---	---	---	.00	.00	.00
18	---	---	---	---	---	---	---	---	---	.00	.00	.00
19	---	---	---	---	---	---	---	---	---	.00	.20	.00
20	---	---	---	---	---	---	---	---	---	.00	.00	.00
21	---	---	---	---	---	---	---	---	---	.00	.00	.00
22	---	---	---	---	---	---	---	---	---	.00	.00	.00
23	---	---	---	---	---	---	---	---	---	.00	.00	---
24	---	---	---	---	---	---	---	---	---	.00	.34	---
25	---	---	---	---	---	---	---	---	---	.00	1.40	---
26	---	---	---	---	---	---	---	---	---	.00	.30	---
27	---	---	---	---	---	---	---	---	---	.00	.09	---
28	---	---	---	---	---	---	---	---	---	.00	.99	---
29	---	---	---	---	---	---	---	---	---	.00	.17	---
30	---	---	---	---	---	---	---	---	---	.00	.07	---
31	---	---	---	---	---	---	---	---	---	.00	.03	---
TOTAL	---	---	---	---	---	---	---	---	---	0.69	3.78	---
MEAN	---	---	---	---	---	---	---	---	---	.022	.12	---
MAX	---	---	---	---	---	---	---	---	---	.25	1.40	---
MIN	---	---	---	---	---	---	---	---	---	.00	.00	---

STREAMS TRIBUTARY TO LAKE SUPERIOR
040244533 UNDEVELOPED URBAN SITE AT SUPERIOR, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June to September 1995.

INSTRUMENTATION.--Volume-activated water-quality sampler.

REMARKS.--Chemical analysis by the Wisconsin State Laboratory of Hygiene. Samples are storm-composite samples collected by an automatic point sampler.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

BEGIN- NING DATE	BEGIN- NING TIME	ENDING DATE	ENDING TIME	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (00335)	OXYGEN DEMAND CHEM DISS (LOW LEVEL) (99901)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (00310)	OXYGEN DEMAND, BIOCHEM ICAL, 5-DAY DISS (99900)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)
07-04-95	0045	07-05-95	0937	45	55	--	--	--	23
07-05-95	1126	07-07-95	0929	66	69	--	--	470	--
07-10-95	0350	07-11-95	0323	80	67	25	24	680	23
07-13-95	0735	07-13-95	2127	70	62	16	>20	2100	25
08-06-95	1300	08-06-95	1315	100	91	37	>19	2500	--
08-09-95	0329	08-09-95	1106	240	190	>52	>19	4200	30
08-12-95	2035	08-13-95	0627	58	58	14	14	5900	25
08-13-95	2343	08-14-95	1044	64	52	24	20	450	28
*08-13-95	2343	08-14-95	1044	66	55	12	14	--	27

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOVER -ABLE (MG/L) (00921)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SULFATE (MG/L AS SO4) (00946)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEED (MG/L) (00530)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)
07-04-95	--	10	--	12	0.90	27	200	0.038	<0.027	1.2
07-05-95	--	--	--	12	1.7	9	210	<0.010	<0.027	1.1
07-10-95	--	10	--	10	1.2	15	194	<0.010	<0.027	1.0
07-13-95	--	10	--	7.0	0.80	16	202	<0.010	<0.027	1.0
08-06-95	--	--	--	26	9.0	--	548	0.117	0.041	2.7
08-09-95	29	12	11	10	2.6	12	204	0.027	<0.027	1.2
08-12-95	26	10	10	8.0	2.8	--	--	<0.010	<0.027	1.1
08-13-95	27	11	11	8.0	2.1	--	--	<0.010	0.030	3.8
08-13-95	--	11	--	--	--	--	--	0.025	<0.027	1.0

DATE	NITRO- GEN, AM- MONIA + ORGANIC DIS- (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ARSENIC TOTAL RECOVER -ABLE (UG/L) (99910)	CADMIUM TOTAL RECOVER -ABLE (UG/L) (01113)	COPPER, TOTAL RECOVER -ABLE (UG/L) (01119)	LEAD, TOTAL RECOVER -ABLE (UG/L) (01114)	SILVER, TOTAL RECOVER -ABLE (UG/L) (01079)	ZINC, TOTAL RECOVER -ABLE (UG/L) (01094)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
07-04-95	0.90	0.085	--	<0.800	<0.04	5	1	<0.2	<20	17
07-05-95	1.0	0.087	--	--	--	--	--	--	--	23
07-10-95	0.80	0.050	0.007	--	--	--	--	--	--	--
07-13-95	0.90	0.053	0.007	--	--	--	--	--	--	22
08-06-95	1.1	0.391	0.093	--	--	--	--	--	--	36
08-09-95	0.80	0.101	0.026	--	--	--	--	--	--	66
08-12-95	0.80	0.084	0.010	--	--	--	--	--	--	18
08-13-95	0.80	0.124	0.010	--	--	--	--	--	--	--
08-13-95	0.90	0.064	0.012	--	--	--	--	--	--	--

* Sample processing duplicate

STREAMS TRIBUTARY TO LAKE SUPERIOR
040244533 UNDEVELOPED URBAN SITE AT SUPERIOR, WI--CONTINUED

35

PRECIPITATION QUANTITY

PERIOD OF RECORD.--July to September 1995.

GAGE.--Tipping-bucket rain gage with electronic datalogger.

REMARKS.--Gage established July 1995.

EXTREMES FOR CURRENT PERIOD.--Maximum daily rainfall, 1.60 in., Aug. 24.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	.00	.00	.00
2	---	---	---	---	---	---	---	---	---	.70	.00	.01
3	---	---	---	---	---	---	---	---	---	1.36	.00	.99
4	---	---	---	---	---	---	---	---	---	.37	.00	.00
5	---	---	---	---	---	---	---	---	---	.45	.00	.00
6	---	---	---	---	---	---	---	---	---	.10	.65	.96
7	---	---	---	---	---	---	---	---	---	.00	.00	.00
8	---	---	---	---	---	---	---	---	---	.00	.00	.00
9	---	---	---	---	---	---	---	---	---	.04	.77	.00
10	---	---	---	---	---	---	---	---	---	.67	.00	.00
11	---	---	---	---	---	---	---	---	---	.00	.00	.00
12	---	---	---	---	---	---	---	---	---	.19	.91	.00
13	---	---	---	---	---	---	---	---	---	.44	.17	.00
14	---	---	---	---	---	---	---	---	---	.01	.15	.18
15	---	---	---	---	---	---	---	---	---	.01	.00	.17
16	---	---	---	---	---	---	---	---	---	.01	.00	.26
17	---	---	---	---	---	---	---	---	---	.05	.00	.00
18	---	---	---	---	---	---	---	---	---	.00	.00	.00
19	---	---	---	---	---	---	---	---	---	.04	1.15	.27
20	---	---	---	---	---	---	---	---	---	.00	.00	.01
21	---	---	---	---	---	---	---	---	---	.00	.00	.01
22	---	---	---	---	---	---	---	---	---	.00	.00	---
23	---	---	---	---	---	---	---	---	---	.00	.00	---
24	---	---	---	---	---	---	---	---	---	.01	1.60	---
25	---	---	---	---	---	---	---	---	---	.00	1.37	---
26	---	---	---	---	---	---	---	---	---	.00	.00	---
27	---	---	---	---	---	---	---	---	---	.35	.00	---
28	---	---	---	---	---	---	---	---	---	.00	1.11	---
29	---	---	---	---	---	---	---	---	---	.00	.00	---
30	---	---	---	---	---	---	---	---	---	.00	.00	---
31	---	---	---	---	---	---	---	---	---	.45	.00	---
TOTAL	---	---	---	---	---	---	---	---	---	5.25	7.88	---

STREAMS TRIBUTARY TO LAKE SUPERIOR

040244534 GOLF COURSE SITE AT SUPERIOR, WI

LOCATION.--Lat 46°40'41", long 92°04'21", in SW 1/4 SW 1/4 sec.36, T.49 N., R.14 W., Douglas County, Hydrologic Unit 04010301, north side of No. 2 fairway on east/west course of Nemadji Public Golf Course.

DRAINAGE AREA.--0.018 mi².

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--July to September 1995.

GAGE.--Continuous water-stage recorder and Parshall flume. Elevation of gage is 660 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Flume over-topped July 3-4, Aug. 9, 19. Records are good except those for estimated daily discharges, which are poor (see page 11).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	.00	.00	.00
2	---	---	---	---	---	---	---	---	---	.00	.00	.00
3	---	---	---	---	---	---	---	---	---	.14	.00	.06
4	---	---	---	---	---	---	---	---	---	.10	.00	.00
5	---	---	---	---	---	---	---	---	---	.10	.00	.00
6	---	---	---	---	---	---	---	---	---	.03	.03	.20
7	---	---	---	---	---	---	---	---	---	.00	.00	.13
8	---	---	---	---	---	---	---	---	---	.00	.00	.12
9	---	---	---	---	---	---	---	---	---	.00	.14	.03
10	---	---	---	---	---	---	---	---	---	.02	.00	.03
11	---	---	---	---	---	---	---	---	---	.00	.00	.02
12	---	---	---	---	---	---	---	---	---	.00	.04	.02
13	---	---	---	---	---	---	---	---	---	.06	.05	.01
14	---	---	---	---	---	---	---	---	---	.00	.05	.01
15	---	---	---	---	---	---	---	---	---	.00	.00	.05
16	---	---	---	---	---	---	---	---	---	.00	.00	.05
17	---	---	---	---	---	---	---	---	---	.00	.00	.02
18	---	---	---	---	---	---	---	---	---	.00	.00	.00
19	---	---	---	---	---	---	---	---	---	.00	.23	.00
20	---	---	---	---	---	---	---	---	---	.00	.00	.00
21	---	---	---	---	---	---	---	---	---	.00	.00	.00
22	---	---	---	---	---	---	---	---	---	.00	.00	.00
23	---	---	---	---	---	---	---	---	---	.00	.00	---
24	---	---	---	---	---	---	---	---	---	.02	.25	---
25	---	---	---	---	---	---	---	---	---	.00	.43	---
26	---	---	---	---	---	---	---	---	---	.00	.00	---
27	---	---	---	---	---	---	---	---	---	.00	.00	---
28	---	---	---	---	---	---	---	---	---	.00	.20	---
29	---	---	---	---	---	---	---	---	---	.00	.00	---
30	---	---	---	---	---	---	---	---	---	.00	.00	---
31	---	---	---	---	---	---	---	---	---	.00	.00	---
TOTAL	---	---	---	---	---	---	---	---	---	0.47	1.42	---
MEAN	---	---	---	---	---	---	---	---	---	.015	.046	---
MAX	---	---	---	---	---	---	---	---	---	.14	.43	---
MIN	---	---	---	---	---	---	---	---	---	.00	.00	---

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July to September 1995.

INSTRUMENTATION.--Volume-activated water-quality sampler.

REMARKS.--Chemical analysis by the Wisconsin State Laboratory of Hygiene. Samples are storm-composite samples collected by an automatic point sampler.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

BEGIN- NING DATE	BEGIN- NING TIME	ENDING DATE	ENDING TIME	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (00335)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L) (99901)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	OXYGEN DEMAND, BIOCHEM ICAL 5 DAY DISS (MG/L) (99900)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	CALCIUM TOTAL RECOV- ERABLE (MG/L) AS CA) (00916)
07-03-95	2246	07-04-95	0554	50	52	--	--	--	18
07-05-95	1305	07-06-95	1641	78	81	--	--	--	--
07-13-95	0706	07-13-95	0935	130	110	50	>19	--	16
08-06-95	1113	08-06-95	1916	240	170	>82	>19	10000	--
08-09-95	0238	08-09-95	1143	92	100	33	26	2400	14
08-12-95	2006	08-13-95	0905	74	80	25	23	660	17
08-13-95	2122	08-14-95	1230	130	130	22	19	140	26

DATE	CALCIUM DIS- SOLVED (MG/L) AS CA) (00915)	MAGNE- SIUM, TOTAL RECOVER- ABLE (MG/L) (00921)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS MG) (00925)	SULFATE (MG/L) AS SO4) (00946)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL) (00940)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) AS N) (00625)
07-03-95	--	9.0	--	8.0	3.9	54	216	0.186	0.327	2.9
07-05-95	--	--	--	10	3.8	20	194	0.035	0.038	1.9
07-13-95	--	6.1	--	11	3.1	76	248	0.233	0.144	3.4
08-06-95	--	--	--	17	4.2	--	--	0.127	0.243	6.6
08-09-95	11	7.0	4.7	11	3.6	48	168	0.121	0.054	2.4
08-12-95	17	9.0	9.1	12	3.5	--	--	0.060	0.041	1.9
08-13-95	26	11	11	--	--	--	--	<0.010	0.074	3.8

DATE	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L) AS N) (00623)	PHOS- PHORUS TOTAL (MG/L) AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L) AS P) (00671)	ARSENIC TOTAL RECOVER- ABLE (UG/L) (99910)	CADMIUM TOTAL RECOVER- ABLE (UG/L) (01113)	COPPER, TOTAL RECOVER- ABLE (UG/L) (01119)	LEAD, TOTAL RECOVER- ABLE (UG/L) (01114)	SILVER, TOTAL RECOVER- ABLE (UG/L) (01079)	ZINC, TOTAL RECOVER- ABLE (UG/L) (01094)	CARBON, ORGANIC TOTAL (MG/L) AS C) (00680)
07-03-95	2.3	0.313	--	1.5	0.05	6	3	<0.2	30	--
07-05-95	1.5	0.118	--	--	--	--	--	--	--	--
07-13-95	2.2	0.326	0.038	--	--	--	--	--	--	--
08-06-95	2.3	0.787	0.089	--	--	--	--	--	--	69
08-09-95	1.4	0.267	0.003	--	--	--	--	--	--	27
08-12-95	1.3	0.231	0.058	--	--	--	--	--	--	20
08-13-95	3.1	0.196	0.023	--	--	--	--	--	--	--

LOCATION.--Lat 46°32'16", long 91°35'43", in NW 1/4 SW 1/4 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.--Estimated daily discharges: Ice-affected periods, Nov. 28-30, Dec. 6-15, Dec. 31 to Jan. 15, Jan. 19, Jan. 23-27, Feb. 4-20, Feb. 28 to Mar. 3, and Mar. 5, 9. Records good except those for ice-affected periods, which are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	166	143	151	140	131	130	185	191	172	128	125	156
2	162	143	149	140	131	130	181	188	167	133	124	147
3	161	142	149	130	131	130	179	184	162	168	123	142
4	161	143	149	130	130	127	175	181	158	164	124	139
5	160	143	148	130	130	130	168	180	156	157	125	138
6	158	143	150	140	130	131	166	177	157	154	124	140
7	158	142	150	130	120	131	164	176	159	151	128	144
8	157	140	140	130	120	130	162	180	155	143	138	139
9	155	141	140	130	120	130	161	265	151	138	153	136
10	151	139	150	130	130	130	159	297	163	139	152	134
11	150	140	140	130	120	132	160	281	171	138	148	134
12	148	140	140	140	120	142	198	261	164	140	138	132
13	146	147	140	140	120	182	212	265	155	140	136	132
14	146	149	140	140	120	200	213	329	149	135	141	131
15	146	145	140	140	120	266	202	310	145	132	139	131
16	149	142	149	134	120	270	191	306	142	132	135	140
17	154	142	144	136	120	245	185	288	140	134	131	137
18	156	144	143	135	130	213	190	260	137	135	128	134
19	154	142	141	130	130	206	221	239	135	135	140	133
20	150	140	140	134	130	226	259	223	133	147	140	134
21	147	171	141	134	132	234	266	210	131	141	134	133
22	151	176	143	134	130	226	251	202	131	133	128	138
23	160	165	141	130	130	215	235	197	149	129	126	134
24	157	157	141	130	129	205	240	191	233	134	138	132
25	152	149	140	130	128	197	239	185	170	151	177	133
26	149	148	140	130	129	210	230	180	143	161	205	131
27	148	146	140	130	128	225	217	177	135	157	205	129
28	147	150	139	132	130	217	208	193	132	147	248	128
29	147	150	138	131	---	207	201	198	131	135	228	129
30	145	150	138	131	---	196	195	188	130	129	196	140
31	143	---	140	132	---	190	---	178	---	127	173	---
TOTAL	4734	4412	4434	4133	3539	5703	6013	6880	4556	4387	4650	4080
MEAN	153	147	143	133	126	184	200	222	152	142	150	136
MAX	166	176	151	140	132	270	266	329	233	168	248	156
MIN	143	139	138	130	120	127	159	176	130	127	123	128
CFSM	1.29	1.25	1.21	1.13	1.07	1.56	1.70	1.88	1.29	1.20	1.27	1.15
IN.	1.49	1.39	1.40	1.30	1.12	1.80	1.90	2.17	1.44	1.38	1.47	1.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1995, BY WATER YEAR (WY)

MEAN	159	161	143	133	132	154	277	237	195	166	147	158
MAX	259	295	205	164	187	265	399	495	416	345	252	297
(WY)	1978	1972	1972	1984	1966	1945	1976	1950	1944	1952	1986	1951
MIN	110	119	113	104	104	105	157	140	122	108	114	108
(WY)	1949	1949	1948	1948	1948	1943	1959	1958	1948	1964	1948	1948

STREAMS TRIBUTARY TO LAKE SUPERIOR
04025500 BOIS BRULE RIVER AT BRULE, WI--CONTINUED

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SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1943 - 1995	
ANNUAL TOTAL	59919		57521		171	
ANNUAL MEAN	164		158		223	1972
HIGHEST ANNUAL MEAN					133	1948
LOWEST ANNUAL MEAN					1270	Jun 5 1944
HIGHEST DAILY MEAN	566	Apr 27	329	May 14	74	Mar 23 1943
LOWEST DAILY MEAN	(a) 114	Jul 30	(b) 120	Feb 7-9, 11-17	89	Mar 23 1943
ANNUAL SEVEN-DAY MINIMUM	117	Aug 12	(b) 120	Feb 11	(d) 1520	Jun 5 1944
INSTANTANEOUS PEAK FLOW			(c) 342	Mar 15	(e) 5.20	Jun 5 1944
INSTANTANEOUS PEAK STAGE			(b) 3.99	Jan 9	67	Mar 13 1943
INSTANTANEOUS LOW FLOW					1.45	
ANNUAL RUNOFF (CFSM)	1.39		1.34		19.72	
ANNUAL RUNOFF (INCHES)	18.89		18.13		256	
10 PERCENT EXCEEDS	236		211		146	
50 PERCENT EXCEEDS	143		143		119	
90 PERCENT EXCEEDS	126		130			

(a) Also occurred Aug. 17

(b) Ice affected

(c) Gage height, 2.62 ft

(d) From rating curve extended above 750 ft³/s

(e) From graph based on gage readings

STREAMS TRIBUTARY TO LAKE SUPERIOR
040263491 NORTH FISH CREEK NEAR MOQUAH, WI

LOCATION.--Lat 46°32'56", long 91°03'43", in SW 1/4 SE 1/4 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 1995.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 660 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Nov. 22 to Jan. 10 and Apr. 13 to May 10. Records good except those for estimated periods, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	51	52	46	54	50	73	70	61	51	50	53
2	50	51	52	45	54	52	72	66	59	55	49	54
3	50	51	52	47	54	50	79	66	57	58	49	53
4	50	51	52	49	54	51	73	66	57	53	50	54
5	49	51	50	52	52	53	67	64	57	56	50	54
6	49	50	48	54	54	52	66	64	64	54	50	55
7	49	50	47	56	53	52	65	64	80	51	50	54
8	49	50	47	56	52	51	70	64	75	51	50	54
9	49	50	50	54	53	51	68	400	65	51	52	54
10	49	49	49	54	52	51	66	200	78	51	50	53
11	50	49	48	56	51	53	71	111	81	50	50	53
12	50	49	54	57	54	68	256	86	68	51	51	53
13	50	50	48	57	53	648	170	168	62	52	53	53
14	51	50	49	56	53	387	110	258	60	50	53	53
15	50	49	52	56	53	272	88	119	58	50	51	54
16	51	49	52	56	51	205	90	120	56	50	51	55
17	50	49	54	56	52	165	78	94	54	50	52	54
18	51	50	52	56	52	132	120	78	53	49	51	53
19	51	49	52	54	52	131	170	71	53	52	56	54
20	51	49	50	54	51	224	280	67	53	51	52	54
21	51	84	52	54	50	186	100	64	53	50	51	53
22	53	78	54	54	50	144	84	64	53	50	51	56
23	52	70	54	54	50	113	110	62	52	51	51	54
24	52	60	52	55	50	99	160	61	52	50	55	54
25	52	50	50	54	50	91	110	60	52	50	68	54
26	52	52	50	55	50	113	90	59	52	50	66	55
27	52	52	52	54	50	116	82	59	52	51	62	53
28	52	50	52	54	50	94	78	104	52	50	58	53
29	52	50	52	54	---	86	74	91	52	49	56	54
30	52	50	50	54	---	78	70	72	51	49	55	58
31	52	---	48	54	---	75	---	65	---	50	53	---
TOTAL	1571	1593	1576	1667	1454	3993	3090	3057	1772	1586	1646	1618
MEAN	50.7	53.1	50.8	53.8	51.9	129	103	98.6	59.1	51.2	53.1	53.9
MAX	53	84	54	57	54	648	280	400	81	58	68	58
MIN	49	49	47	45	50	50	65	59	51	49	49	53
CFSM	.77	.81	.78	.82	.79	1.97	1.57	1.51	.90	.78	.81	.82
IN.	.89	.91	.90	.95	.83	2.27	1.76	1.74	1.01	.90	.94	.92

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1995, BY WATER YEAR (WY)

MEAN	72.7	56.7	53.2	53.8	55.3	129	96.8	83.8	71.2	79.0	59.9	102
MAX	110	60.0	56.2	54.0	59.9	141	103	98.6	97.6	108	74.4	135
(WY)	1991	1991	1991	1990	1991	1990	1995	1995	1991	1991	1990	1990
MIN	50.7	53.1	50.8	53.5	51.9	119	87.8	59.6	56.8	51.2	52.1	53.9
(WY)	1995	1995	1995	1991	1995	1991	1990	1990	1990	1995	1991	1995

SUMMARY STATISTICS

FOR 1995 WATER YEAR

WATER YEARS 1990 - 1995

ANNUAL TOTAL	24623	
ANNUAL MEAN	67.5	76.3
HIGHEST ANNUAL MEAN		85.7
LOWEST ANNUAL MEAN		67.5
HIGHEST DAILY MEAN	648	696
LOWEST DAILY MEAN	45	45
ANNUAL SEVEN-DAY MINIMUM	48	48
INSTANTANEOUS PEAK FLOW	1080	1690
INSTANTANEOUS PEAK STAGE	10.51	12.06
INSTANTANEOUS LOW FLOW	(a)41	(b)35
ANNUAL RUNOFF (CFSM)	1.03	1.17
ANNUAL RUNOFF (INCHES)	14.01	15.85
10 PERCENT EXCEEDS	90	105
50 PERCENT EXCEEDS	53	56
90 PERCENT EXCEEDS	50	51

(a) May have been lower during period of estimated record

(b) Result of freezeup

STREAMS TRIBUTARY TO LAKE SUPERIOR

41

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 and crest-stage gage. 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.--Estimated daily discharges: Ice-affected periods, Nov. 22 to Mar. 17 and Apr. 4-7. Records are poor (see page 11).

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 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	661	446	280	150	170	160	636	802	748	195	98	172
2	555	406	290	150	170	150	572	717	605	174	93	158
3	486	382	300	150	170	150	539	658	499	170	91	144
4	439	369	310	160	160	160	440	615	421	166	92	136
5	405	366	270	160	150	160	360	595	369	172	92	128
6	377	366	240	160	150	160	410	572	330	182	90	127
7	368	359	230	160	150	160	450	521	327	212	89	138
8	438	345	220	160	150	160	401	498	335	218	89	138
9	459	326	220	160	160	160	389	2830	328	198	94	132
10	436	314	220	160	160	160	383	4340	328	177	94	125
11	395	300	210	160	160	170	374	2730	472	160	93	119
12	361	298	200	160	150	500	1170	1840	514	147	92	110
13	334	290	190	170	150	1200	1560	1350	415	154	92	107
14	314	287	170	170	150	2200	1360	1480	343	156	101	106
15	296	287	170	160	150	3200	1140	1390	293	141	108	104
16	282	282	180	160	150	3600	966	1230	256	133	108	108
17	279	271	190	170	150	4000	856	1200	228	130	108	122
18	353	281	180	170	160	1940	996	966	206	142	104	130
19	442	307	170	160	170	1610	2120	800	187	156	116	132
20	432	317	160	150	170	1770	2800	676	172	203	123	137
21	394	411	160	150	170	2150	2130	589	156	227	114	140
22	381	700	160	150	170	1800	1770	522	146	201	105	147
23	858	600	180	160	180	1510	1440	535	141	174	102	161
24	1070	500	190	160	180	1250	2280	568	156	157	97	172
25	948	440	190	150	180	1060	2320	522	167	142	119	180
26	840	390	190	150	170	986	1910	466	168	134	150	178
27	751	350	190	160	170	1150	1580	421	182	132	164	166
28	676	320	180	160	170	1060	1280	843	202	128	168	158
29	618	300	180	160	---	944	1060	1710	220	120	194	161
30	564	280	170	160	---	814	917	1360	213	107	202	157
31	502	---	160	160	---	710	---	987	---	102	193	---
TOTAL	15714	10890	6350	4920	4540	35204	34609	34333	9127	5010	3575	4193
MEAN	507	363	205	159	162	1136	1154	1108	304	162	115	140
MAX	1070	700	310	170	180	4000	2800	4340	748	227	202	180
MIN	279	271	160	150	150	150	360	421	141	102	89	104
CFSM	.85	.61	.34	.27	.27	1.90	1.93	1.86	.51	.27	.19	.23
IN.	.98	.68	.40	.31	.28	2.19	2.16	2.14	.57	.31	.22	.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 1995, BY WATER YEAR (WY)

	MEAN	467	528	293	187	187	662	2165	1070	656	471	297	365
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	261	121	77.9	68.2	74.3	
(WY)	1949	1949	1977	1917	1964	1917	1987	1980	1948	1964	1948	1976	

STREAMS TRIBUTARY TO LAKE SUPERIOR
04027000 BAD RIVER NEAR ODANAH, WI--CONTINUED

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1914 - 1995	
ANNUAL TOTAL	162745		168465			
ANNUAL MEAN	446		462		615	
HIGHEST ANNUAL MEAN					942	1983
LOWEST ANNUAL MEAN					346	1990
HIGHEST DAILY MEAN	4510	Apr 27	4340	May 10	22000	Apr 24 1960
LOWEST DAILY MEAN	110	Feb 8-15	89	Aug 7,8	(a) 52	Oct 1 1948
ANNUAL SEVEN-DAY MINIMUM	110	Feb 8	91	Aug 2	54	Feb 19 1964
INSTANTANEOUS PEAK FLOW			(b) 5090	May 10	(c) 27700	Apr 24 1960
INSTANTANEOUS PEAK STAGE			(d) 11.93	Mar 17	(e) 21.70	Apr 24 1960
INSTANTANEOUS LOW FLOW			84	Aug 3	(f) 34	Nov 8 1976
ANNUAL RUNOFF (CFSM)	.75		.77		1.03	
ANNUAL RUNOFF (INCHES)	10.14		10.50		13.99	
10 PERCENT EXCEEDS	982		1160		1440	
50 PERCENT EXCEEDS	263		195		270	
90 PERCENT EXCEEDS	146		126		116	

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

(b) Gage height, 9.42 ft; discharge may have been greater on Mar. 17 (ice affected)

(c) From rating curve extended above 12,000 ft³/s and a comparison with contracted-opening measurement of peak flow 45,6000 ft³/s at Odanah, drainage area, 990 mi²

(d) Backwater from ice

(e) From floodmarks

(f) Result of freezeup

04027500 WHITE RIVER NEAR ASHLAND, WI

LOCATION.--Lat 46°29'50", long 90°54'15", in NE 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.--Estimated daily discharges: Ice-affected periods, Dec. 6-14, Jan. 1 to Mar. 3, and Mar. 9-11. Records good except for ice-affected periods, which are fair (see page 11). Diurnal fluctuation caused by hydroelectric plant at gage. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	248	171	257	110	170	150	229	233	327	163	156	213
2	236	189	260	100	180	140	235	264	297	160	164	183
3	224	190	262	100	160	160	234	256	281	176	170	175
4	212	228	255	160	140	189	228	248	271	186	162	172
5	191	187	224	160	120	180	195	249	269	195	155	164
6	210	183	140	180	110	159	205	251	295	189	162	167
7	202	162	130	170	140	192	221	242	259	189	161	165
8	190	182	130	180	150	178	199	243	260	189	156	174
9	205	185	190	160	140	160	217	978	253	183	161	165
10	190	182	180	160	150	150	214	722	251	182	162	161
11	188	180	180	160	140	180	197	877	291	175	161	159
12	187	182	200	190	120	255	555	809	274	185	156	166
13	186	186	160	170	140	1090	473	657	288	192	159	166
14	164	188	170	170	150	804	480	822	261	194	167	158
15	200	189	214	170	150	890	414	542	250	178	169	163
16	178	186	216	170	170	852	334	578	241	164	168	162
17	169	183	221	180	150	718	288	530	232	183	168	174
18	167	187	203	180	170	615	348	449	223	180	163	177
19	193	192	198	150	170	528	737	350	207	197	170	170
20	220	192	198	150	160	493	823	325	194	198	170	170
21	192	224	204	170	160	577	698	291	173	192	168	170
22	194	325	214	170	160	502	672	263	177	188	161	173
23	200	298	223	150	160	432	594	252	148	182	154	168
24	232	261	215	140	160	354	596	250	188	168	160	179
25	238	241	203	140	160	320	524	242	174	173	175	166
26	220	186	213	140	160	300	523	241	169	178	206	167
27	210	161	218	160	160	384	456	239	167	169	208	167
28	206	144	214	180	160	374	384	291	162	173	215	167
29	203	146	198	180	---	327	331	384	165	158	225	162
30	197	184	195	170	---	281	310	410	175	144	241	177
31	175	---	180	170	---	267	---	373	---	173	237	---
TOTAL	6227	5894	6265	4940	4260	12201	11914	12861	6922	5556	5410	5100
MEAN	201	196	202	159	152	394	397	415	231	179	175	170
MAX	248	325	262	190	180	1090	823	978	327	198	241	213
MIN	164	144	130	100	110	140	195	233	148	144	154	158
CFSM	.67	.65	.67	.53	.51	1.31	1.32	1.38	.77	.60	.58	.56
IN.	.77	.73	.77	.61	.53	1.51	1.47	1.59	.86	.69	.67	.63

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1995, BY WATER YEAR (WY)

	MEAN	238	251	204	188	192	310	568	373	288	260	228	244
MAX	445	509	285	248	318	666	1017	867	707	697	744	635	
(WY)	1983	1992	1961	1952	1984	1973	1960	1950	1952	1953	1972	1960	
MIN	152	160	150	146	136	178	238	197	139	142	147	146	
(WY)	1949	1977	1964	1991	1968	1965	1987	1980	1948	1988	1948	1948	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1948 - 1995
ANNUAL TOTAL	89257	87550	
ANNUAL MEAN	245	240	279
HIGHEST ANNUAL MEAN			426
LOWEST ANNUAL MEAN			217
HIGHEST DAILY MEAN	1020	1090	4100
LOWEST DAILY MEAN	(a)130	(a)100	61
ANNUAL SEVEN-DAY MINIMUM	157	(a)136	68
INSTANTANEOUS PEAK FLOW		1700	(b)8100
INSTANTANEOUS PEAK STAGE		3.61	7.90
ANNUAL RUNOFF (CFSM)	.81	.80	.93
ANNUAL RUNOFF (INCHES)	11.03	10.82	12.61
10 PERCENT EXCEEDS	398	384	472
50 PERCENT EXCEEDS	195	187	210
90 PERCENT EXCEEDS	163	156	160

(a) Ice affected

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

LOCATION.--Lat 46°32'13", long 90°22'47", in SW 1/4 NW 1/4 sec.21, T.47 N., R.1 E., Iron County, Hydrologic Unit 04010302, at Saxon Falls powerhouse, 3.4 mi northeast of Saxon, and 3.8 mi upstream from mouth.

DRAINAGE AREA.--262 mi².

PERIOD OF RECORD.--September 1938 to September 1970, October 1986 to current year. Published as "Montreal River near Saxon" (04030000), September 1938 to September 1970.

REVISED RECORDS.--WSP 894: 1938-39. WSP 924: 1939-40. WSP 1307: 1948(M). WSP 1627: 1958.

GAGE.--Headwater and tailwater gages read by Northern States Power Company. September 1938 to September 1970, water-stage recorder at site 1.8 mi downstream at elevation of 760 ft above sea level (from Power Company data).

REMARKS.--No estimated daily discharges. Diurnal fluctuation caused by Saxon Falls powerplant. Flow regulated by Gile Reservoir on West Branch Montreal River (capacity 1,290,000,000 ft³/s) since April 1941.

COOPERATION.--Records were provided by Northern States Power Company and reviewed by the Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	225	210	210	190	205	120	315	315	420	265	125	100
2	225	225	205	190	200	120	315	280	420	265	125	115
3	190	225	170	150	195	135	260	245	220	250	120	115
4	195	215	170	155	185	140	285	245	220	250	120	115
5	200	215	185	155	185	140	210	230	190	235	120	115
6	205	205	190	185	145	155	200	230	190	225	120	115
7	210	210	200	185	185	155	185	230	200	255	120	115
8	265	200	180	185	185	155	200	195	300	230	120	110
9	265	190	190	185	185	130	200	425	240	230	130	100
10	345	200	188	185	205	145	220	1600	230	205	130	100
11	245	205	188	185	173	155	220	1410	230	205	125	100
12	205	205	150	200	173	155	525	1180	280	205	125	88.0
13	190	205	185	205	178	305	870	720	255	225	125	65.0
14	210	195	215	205	160	670	870	720	213	255	135	65.0
15	200	200	215	205	170	1400	649	715	215	225	115	55.0
16	200	205	215	180	185	1600	649	675	203	225	115	65.0
17	205	205	215	195	175	1300	420	835	200	210	120	65.0
18	210	220	215	195	110	1120	420	585	200	205	120	55.0
19	255	220	190	190	95.0	1120	790	420	190	205	120	65.0
20	195	220	195	195	75.0	780	980	325	166	290	120	75.0
21	180	335	200	195	80.0	1120	870	325	190	255	120	80.0
22	195	425	210	195	75.0	950	650	285	205	235	120	75.0
23	195	330	210	190	80.0	790	650	295	225	235	115	80.0
24	530	250	210	170	80.0	645	650	320	220	210	115	80.0
25	415	250	210	175	90.0	585	825	285	220	205	135	55.0
26	490	185	210	170	90.0	585	715	250	205	155	135	30.0
27	510	185	195	175	100	520	580	235	220	220	135	29.0
28	420	200	195	185	110	470	500	235	245	135	90.0	42.0
29	325	180	185	185	---	470	420	235	245	130	100	35.0
30	325	190	180	185	---	420	420	718	325	130	98.0	60.0
31	255	---	190	190	---	345	---	585	---	130	105	---
TOTAL	8280	6705	6066	5735	4074.0	16900	15063	15348	7082	6700	3718.0	2364.0
MEAN	267	223	196	185	145	545	502	495	236	216	120	78.8
MAX	530	425	215	205	205	1600	980	1600	420	290	135	115
MIN	180	180	150	150	75	120	185	195	166	130	90	29
CFSM	1.02	.85	.75	.71	.56	2.08	1.92	1.89	.90	.82	.46	.30
IN.	1.18	.95	.86	.81	.58	2.40	2.14	2.18	1.01	.95	.53	.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1995, BY WATER YEAR (WY)

MEAN	201	258	181	164	155	304	940	511	379	282	193	200
MAX	495	800	391	295	321	888	1795	1180	1172	1068	432	894
(WY)	1942	1992	1952	1969	1969	1945	1939	1954	1939	1992	1953	1941
MIN	38.2	34.2	38.1	27.8	21.0	55.4	213	127	101	74.1	36.1	33.6
(WY)	1949	1949	1949	1949	1949	1940	1987	1941	1987	1987	1987	1939

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1938 - 1995	
ANNUAL TOTAL	89021		98035.0			
ANNUAL MEAN	244		269		314	
HIGHEST ANNUAL MEAN					487	
LOWEST ANNUAL MEAN					162	
HIGHEST DAILY MEAN	1450		1600		9880	
LOWEST DAILY MEAN	50		29		7.2	
ANNUAL SEVEN-DAY MINIMUM	78		47		7.7	
ANNUAL RUNOFF (CFSM)	.93		1.03		1.20	
ANNUAL RUNOFF (INCHES)	12.64		13.92		16.28	
10 PERCENT EXCEEDS	412		582		642	
50 PERCENT EXCEEDS	190		200		191	
90 PERCENT EXCEEDS	100		108		85	

(a) Also occurred May 10

STREAMS TRIBUTARY TO LAKE SUPERIOR

45

04037500 CISCO BRANCH ONTONAGON RIVER AT CISCO LAKE OUTLET, MI

LOCATION.--Lat 46°15'12", long 89°27'05", in NE 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 those below 3.0 ft³/s, which are poor (see page 11). Flow regulated by Cisco Lake (station 04037400). Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	44	61	5.8	20	23	35	3.7	161	66	.62	.85
2	38	45	70	6.0	20	36	36	3.2	89	65	.44	.70
3	24	43	80	6.2	21	35	35	2.3	15	64	.42	.52
4	4.6	43	79	6.4	21	34	35	1.5	4.7	62	.40	.43
5	4.2	43	77	6.4	21	36	36	1.3	4.3	42	.38	.39
6	3.5	42	76	6.3	22	58	37	1.3	3.2	23	.37	.38
7	38	43	74	6.1	22	80	37	1.2	27	21	12	.37
8	67	41	32	6.1	22	78	36	1.2	48	11	23	.37
9	65	41	5.5	21	22	76	36	2.3	47	1.4	22	.37
10	65	40	5.5	35	23	74	36	2.3	48	1.0	21	.37
11	47	42	5.8	36	23	72	46	2.0	47	.87	21	.39
12	34	40	5.8	35	23	71	58	1.7	47	.86	21	.41
13	13	41	5.9	36	23	37	55	1.8	46	12	23	.42
14	.60	39	6.1	35	23	5.8	54	16	45	27	24	.43
15	.45	39	6.2	35	38	5.7	51	29	23	87	23	.45
16	.48	40	6.6	35	55	5.3	48	74	1.2	168	22	.53
17	46	41	6.7	35	54	50	48	124	.77	165	22	.54
18	74	39	7.2	35	54	78	69	123	.62	159	22	13
19	128	37	22	34	51	77	89	121	.61	139	21	24
20	153	38	49	34	25	78	86	116	.61	86	21	24
21	149	39	59	34	5.8	101	82	113	.61	46	13	23
22	147	39	58	34	6.4	117	81	94	.61	45	.83	23
23	146	39	57	34	6.6	115	77	37	.59	45	.54	24
24	141	40	56	34	6.7	72	75	4.6	.53	23	.45	23
25	136	39	55	33	6.9	35	83	4.4	.58	1.9	.43	12
26	134	39	54	33	7.1	35	100	3.8	.59	1.3	.43	.97
27	132	39	53	27	7.4	36	93	3.2	.61	1.2	.41	.95
28	80	52	37	21	7.5	35	45	44	.86	.98	.41	.87
29	46	63	5.2	20	---	35	4.3	131	32	.88	.41	.87
30	45	62	5.5	20	---	35	3.9	149	71	.77	9.0	84
31	44	---	5.5	20	---	35	---	166	---	.76	11	---
TOTAL	2043.83	1272	1126.5	765.3	637.4	1660.8	1607.2	1378.8	766.99	1367.92	337.54	261.58
MEAN	65.9	42.4	36.3	24.7	22.8	53.6	53.6	44.5	25.6	44.1	10.9	8.72
MAX	153	63	80	36	55	117	100	166	161	168	24	84
MIN	.45	37	5.2	5.8	5.8	5.3	3.9	1.2	.53	.76	.37	.37
CFSM	1.30	.84	.72	.49	.45	1.06	1.06	.88	.50	.87	.21	.17
IN.	1.50	.93	.83	.56	.47	1.22	1.18	1.01	.56	1.00	.25	.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1995, BY WATER YEAR (WY)

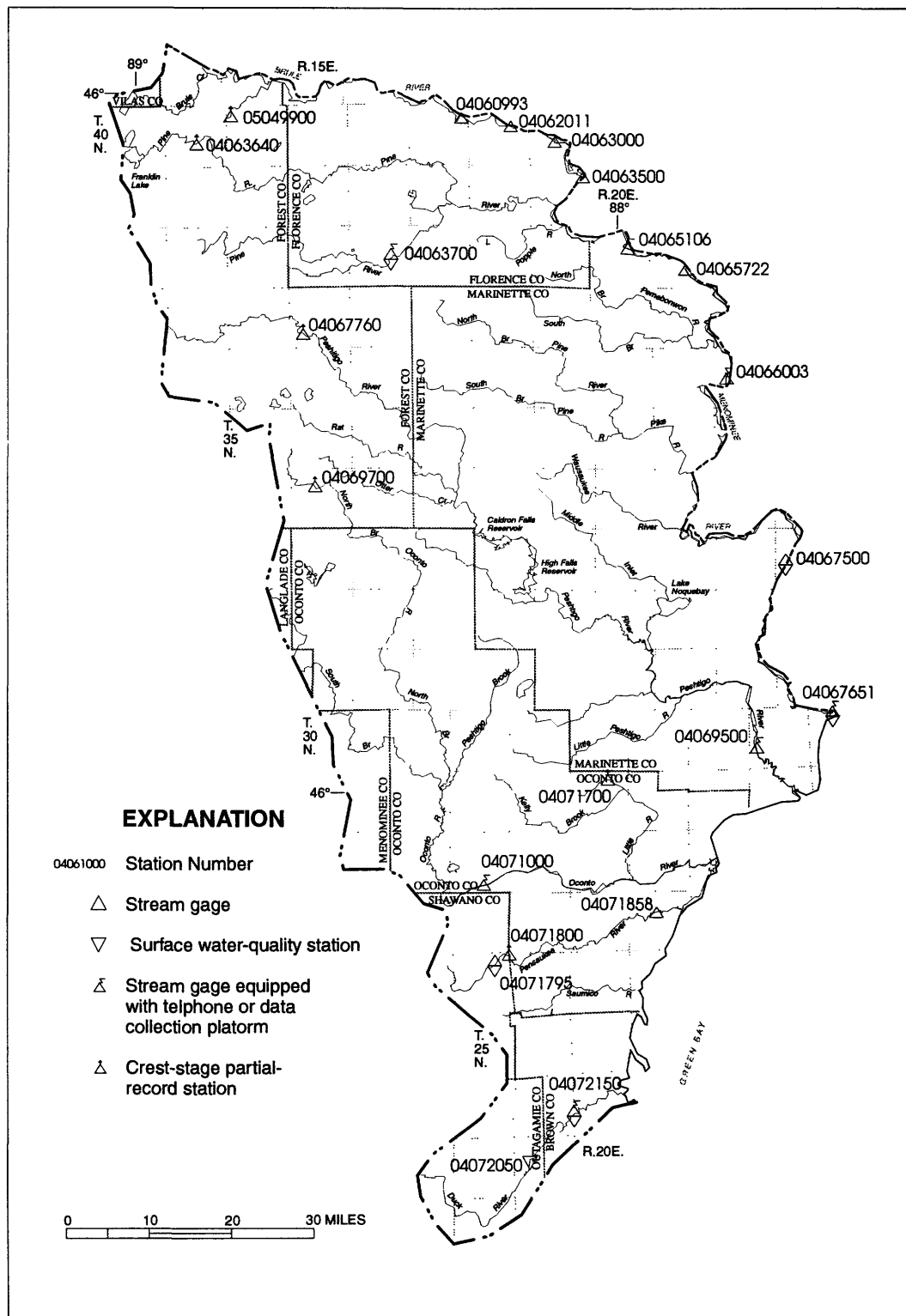
	MEAN	69.2	67.4	48.9	38.8	35.0	43.6	59.7	45.1	46.1	31.7	25.8	38.5
MAX	151	116	84.1	62.6	81.0	92.1	111	137	123	113	99.7	104	
(WY)	1986	1968	1961	1983	1945	1973	1985	1960	1953	1953	1978	1977	
MIN	13.1	14.5	23.5	23.1	20.6	24.1	2.02	.17	.11	.25	.15	.23	
(WY)	1958	1945	1990	1959	1950	1956	1948	1977	1977	1977	1970	1976	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1945 - 1995
ANNUAL TOTAL	13443.02	13225.86	
ANNUAL MEAN	36.8	36.2	45.8
HIGHEST ANNUAL MEAN			65.9
LOWEST ANNUAL MEAN			25.2
HIGHEST DAILY MEAN	175	168	288
LOWEST DAILY MEAN	.30	.37	.08
ANNUAL SEVEN-DAY MINIMUM	.32	.38	.09
INSTANTANEOUS PEAK FLOW		176	288
INSTANTANEOUS PEAK STAGE		5.58	(c) 6.10
ANNUAL RUNOFF (CFSM)	.73	.71	.90
ANNUAL RUNOFF (INCHES)	9.86	9.70	12.28
10 PERCENT EXCEEDS	79	81	102
50 PERCENT EXCEEDS	34	33	37
90 PERCENT EXCEEDS	.68	.61	1.0

(a) Aug. 6, Sept. 7-10

(b) July 21, Aug. 2, 3, 1988

(c) Present datum



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

MENOMINEE-OCONTO-PESHTIGO BASIN

STREAMS TRIBUTARY TO LAKE MICHIGAN
04060993 BRULE RIVER NEAR FLORENCE, WI

47

LOCATION.--Lat 45°57'39", long 88°18'57", in NW 1/4 SE 1/4 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.--Estimated daily discharges: Dec. 9 to Mar. 20. Records good except for estimated daily discharges, which are fair (see page 11). Discharge includes some mine pumpage prior to August 1977. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	280	249	278	145	190	150	288	315	413	244	304	222
2	272	246	324	140	180	150	282	309	377	227	268	217
3	276	242	288	140	180	150	282	304	359	219	247	212
4	271	243	287	139	175	150	279	302	330	214	266	208
5	254	250	272	140	175	155	257	305	304	213	303	206
6	246	245	265	140	170	155	265	295	291	249	276	211
7	239	241	268	140	170	155	281	287	301	253	237	318
8	240	237	249	140	170	160	278	286	300	234	232	340
9	239	236	240	145	170	160	266	494	277	223	271	282
10	234	233	225	145	170	165	260	670	290	211	256	250
11	227	229	210	145	165	220	268	562	334	203	235	235
12	221	229	200	150	165	300	367	468	324	204	237	232
13	225	233	190	150	160	350	408	423	284	220	465	224
14	220	248	185	150	160	550	369	575	268	219	540	219
15	217	246	180	155	155	450	337	703	253	295	428	223
16	216	236	180	155	150	400	325	650	245	410	320	252
17	278	232	175	155	160	350	314	726	236	498	289	268
18	499	236	170	155	165	300	345	613	230	607	267	240
19	494	233	170	160	165	270	498	506	229	529	287	238
20	399	236	170	160	160	250	492	446	221	427	252	268
21	344	275	170	160	160	558	451	406	215	356	229	256
22	316	324	170	165	160	508	421	384	250	307	215	260
23	336	298	170	165	150	453	396	462	243	279	212	265
24	360	296	170	170	150	415	390	474	239	257	208	250
25	326	303	175	170	150	384	380	418	227	244	230	241
26	302	250	170	170	150	359	374	394	217	242	312	230
27	288	262	165	170	150	341	371	379	214	233	372	223
28	278	257	160	175	150	328	358	502	227	227	324	217
29	276	273	155	175	---	321	336	749	266	221	285	216
30	275	260	150	180	---	307	322	637	276	216	256	249
31	260	---	145	180	---	296	---	483	---	241	237	---
TOTAL	8908	7578	6326	4829	4575	9260	10260	14527	8240	8722	8860	7272
MEAN	287	253	204	156	163	299	342	469	275	281	286	242
MAX	499	324	324	180	190	558	498	749	413	607	540	340
MIN	216	229	145	139	150	150	257	286	214	203	208	206
CFSM	.79	.69	.56	.43	.45	.82	.93	1.28	.75	.77	.78	.66
IN.	.91	.77	.64	.49	.46	.94	1.04	1.48	.84	.89	.90	.74

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 1995, BY WATER YEAR (WY)

	MEAN	325	337	277	251	244	321	641	499	396	335	290	314
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	251	194	185	186	182	
(WY)	1949	1990	1990	1995	1995	1965	1990	1988	1988	1989	1948	1948	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1914 - 1995
ANNUAL TOTAL	98703	99357	
ANNUAL MEAN	270	272	351
HIGHEST ANNUAL MEAN			512
LOWEST ANNUAL MEAN			221
HIGHEST DAILY MEAN	774	749	4420
LOWEST DAILY MEAN	145	(e)139	130
ANNUAL SEVEN-DAY MINIMUM	160	(e)140	140
INSTANTANEOUS PEAK FLOW		(a)788	4700
INSTANTANEOUS PEAK STAGE		(b)6.18	(c)8.60
INSTANTANEOUS LOW FLOW			(d)118
ANNUAL RUNOFF (CFSM)	.74	.74	.96
ANNUAL RUNOFF (INCHES)	10.03	10.10	13.03
10 PERCENT EXCEEDS	360	419	553
50 PERCENT EXCEEDS	249	249	290
90 PERCENT EXCEEDS	195	158	205

- (a) Gage height, 4.69 ft
(b) Backwater from ice
(c) Backwater from ice, site and datum then in use
(d) Discharge measurement
(e) Estimated

STREAMS TRIBUTARY TO LAKE MICHIGAN
04062011 BRULE RIVER NEAR COMMONWEALTH, WI

LOCATION.--Lat 45°56'51" long 88°12'55", in NW 1/4 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.--Estimated daily discharge: Jan. 14 to Feb. 1, Mar. 15 to Apr. 25, and June 1-6. Records good except those for estimated daily discharges, which are fair (see page 11). 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. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	341	355	258	250	290	276	520	448	550	374	476	343
2	361	346	444	259	302	247	490	424	470	335	350	295
3	371	361	330	265	300	296	540	423	430	297	352	317
4	404	345	398	255	332	306	490	404	440	324	368	314
5	295	332	397	242	300	306	440	381	420	289	369	303
6	343	343	312	283	234	293	450	404	370	395	404	307
7	367	343	297	309	297	286	480	401	365	496	348	463
8	330	345	263	277	296	270	515	401	344	440	290	425
9	324	341	257	301	268	297	480	651	395	347	406	414
10	312	285	329	228	313	269	480	777	389	314	427	299
11	332	283	297	267	292	284	430	707	450	295	353	331
12	291	388	254	325	274	340	580	582	471	289	355	389
13	291	386	267	315	276	502	625	529	357	344	557	302
14	291	353	360	300	290	739	590	667	402	358	801	349
15	314	320	340	320	284	720	595	1110	338	383	566	278
16	318	310	335	290	271	710	550	1400	349	557	440	388
17	406	372	359	280	284	540	550	1480	344	738	434	354
18	730	333	319	310	301	525	540	1380	333	796	375	332
19	534	338	306	310	270	440	620	1210	293	676	408	330
20	520	322	323	310	282	695	640	987	318	533	397	352
21	439	422	342	300	329	520	610	856	325	470	340	375
22	401	389	338	300	293	615	520	700	343	443	311	348
23	441	358	341	320	290	590	470	579	326	372	344	343
24	448	349	351	360	304	535	490	602	306	371	311	339
25	472	345	290	400	306	450	480	509	345	438	313	318
26	394	315	302	350	299	440	495	493	303	405	506	326
27	387	285	344	300	297	500	496	507	296	326	525	290
28	381	347	347	300	312	550	484	645	335	327	418	335
29	395	370	316	300	---	520	418	896	371	313	430	254
30	380	326	339	285	---	560	429	812	385	261	374	360
31	353	---	286	280	---	480	---	565	---	319	341	---
TOTAL	11966	10307	10041	9191	8186	14101	15497	21930	11163	12625	12689	10173
MEAN	386	344	324	296	292	455	517	707	372	407	409	339
MAX	730	422	444	400	332	739	640	1480	550	796	801	463
MIN	291	283	254	228	234	247	418	381	293	261	290	254

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1995, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995
MEAN	411	388	335	307	311	704
MAX	712	571	416	345	344	506
(WY)	1991	1993	1992	1993	1990	1991
MIN	276	307	270	259	270	359
(WY)	1990	1990	1990	1991	1991	1994

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1990 - 1995

ANNUAL TOTAL	140225	147869	
ANNUAL MEAN	384	405	419
HIGHEST ANNUAL MEAN			491
LOWEST ANNUAL MEAN			325
HIGHEST DAILY MEAN	1580	1480	3060
LOWEST DAILY MEAN	182	228	182
ANNUAL SEVEN-DAY MINIMUM	254	263	202
INSTANTANEOUS PEAK FLOW		1720	3430
INSTANTANEOUS PEAK STAGE		8.42	10.22
10 PERCENT EXCEEDS	482	571	593
50 PERCENT EXCEEDS	347	349	347
90 PERCENT EXCEEDS	286	285	264

STREAMS TRIBUTARY TO LAKE MICHIGAN
04062085 PESHEKEE RIVER NEAR MARTINS LANDING, MI
(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

49

LOCATION.--Lat 46°36'35", long 88°01'20", in SW 1/4 SE 1/4 sec.26, T.49 N., R.30 W., Marquette County, Hydrologic Unit 04030107, at bridge on Huron Bay Peshekee Grade Road, 0.8 mi upstream from Van Riper Lakes outlet, 5.4 mi northwest of Martins Landing, and 6.4 mi northeast of Michigamme.

DRAINAGE AREA.--43.9 mi².

PERIOD OF RECORD.--April 1993 to September 1995 (discontinued).

REMARKS.--Stage-discharge data collected at gaging site downstream from sampling location. Cross-sectional samples were collected at or near bridge.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	
NOV 1994												
01...	1115	44	37	6.9	3.5	12.5	758	18	5.1	1.2	0.70	
28...	1500	49	38	7.1	0.0	12.4	695	17	4.9	1.1	0.60	
JAN 1995												
05...	1245	17	48	6.8	0.0	11.8	705	23	6.6	1.5	0.80	
FEB												
02...	1245	18	48	7.0	0.0	12.8	714	23	6.7	1.5	0.80	
MAR												
23...	1415	147	24	6.4	0.0	12.6	718	12	3.5	0.84	0.50	
APR												
25...	1145	239	22	6.4	1.0	12.8	711	10	2.9	0.71	0.50	
MAY												
03...	1130	411	25	6.4	4.0	11.4	715	8	2.2	0.51	0.40	
25...	1145	121	26	7.0	10.0	10.4	725	12	3.6	0.82	0.50	
JUL												
13...	1320	19	60	7.6	20.0	8.2	767	26	7.5	1.7	0.80	
DATE		POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	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)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
NOV 1994												
01...	0.40	14	11	1.7	0.50	<0.10	5.4	36	<0.050	<0.010	<0.015	
28...	0.30	15	12	1.5	0.40	<0.10	6.2	45	0.090	<0.010	<0.015	
JAN 1995												
05...	0.40	21	17	2.4	0.30	<0.10	8.8	52	0.110	<0.010	0.040	
FEB												
02...	0.40	20	17	2.1	0.30	<0.10	9.4	57	0.110	0.010	0.040	
MAR												
23...	0.40	8	7	2.2	0.10	<0.10	6.4	43	0.140	<0.010	<0.015	
APR												
25...	0.40	6	5	1.7	0.20	<0.10	5.3	35	0.130	<0.010	<0.015	
MAY												
03...	0.30	4	5	1.7	0.10	<0.10	3.9	30	0.060	<0.010	0.020	
25...	0.30	8	6	1.7	0.20	<0.10	2.1	41	0.060	<0.010	0.020	
JUL												
13...	0.40	26	21	2.2	0.20	<0.10	5.3	52	0.110	<0.010	0.030	
DATE		NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 1994												
01...	0.60	0.40	0.020	<0.010	<0.010	390	10	15	0.10	2	61	
28...	0.40	0.40	0.010	<0.010	<0.010	310	9	12	0.30	3	80	
JAN 1995												
05...	0.40	0.30	0.030	0.010	<0.010	400	11	9.9	0.10	2	93	
FEB												
02...	0.30	0.30	<0.010	<0.010	<0.010	360	9	9.0	--	1	95	
MAR												
23...	0.40	0.40	<0.010	<0.010	<0.010	270	11	12	0.40	6	68	
APR												
25...	0.40	0.30	0.040	<0.010	<0.010	190	11	9.6	0.20	3	69	
MAY												
03...	0.20	0.30	<0.010	<0.010	<0.010	140	7	9.2	0.20	2	75	
25...	0.40	0.20	0.010	0.020	<0.010	250	12	12	0.20	2	79	
JUL												
13...	0.40	0.40	<0.010	<0.010	<0.010	500	17	--	--	2	78	

STREAMS TRIBUTARY TO LAKE MICHIGAN
04062100 PESHEKEE RIVER NEAR MICHIGAMME, MI

LOCATION.--Lat 46°34'55", long 87°59'51", in SW 1/4 SE 1/4 sec.1, T.48 N., R.30 W., Marquette County, Hydrologic Unit 04030107, on right bank 10 ft downstream from bridge on county highway, 0.2 mi downstream from Dishno Creek, 5 mi north of Champion, and 6 mi northeast of Michigamme.

DRAINAGE AREA.--66.5 mi².

PERIOD OF RECORD.--July 1961 to September 1968, May 1993 to September 1995 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 1,598.01 ft above sea level. Prior to Aug. 11, 1961, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Nov. 30 to Mar. 25, Apr. 5-10, and Apr. 29 to May 11. Records good except for estimated daily discharges, Nov. 30 to Mar. 25 and Apr. 5-10, which are fair, and Apr. 29 to May 11, which are poor (see page 11). Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	63	94	27	25	24	117	600	193	20	15	11
2	79	56	84	27	25	24	103	580	151	19	13	11
3	63	52	74	27	25	24	99	550	123	18	18	9.9
4	53	49	68	27	25	24	99	530	103	17	29	9.7
5	46	49	66	26	25	24	95	510	85	16	26	9.5
6	41	51	62	26	24	24	92	480	73	16	21	14
7	37	53	58	26	24	24	90	470	70	20	17	36
8	34	53	56	26	24	25	88	450	70	23	15	38
9	33	51	52	25	24	26	85	460	67	24	28	30
10	35	47	50	25	24	30	84	500	64	23	41	25
11	36	44	46	25	24	31	84	440	69	20	31	22
12	35	42	44	26	24	31	124	325	65	17	26	19
13	32	41	40	27	24	40	176	261	56	19	25	17
14	29	43	38	26	24	70	188	363	50	24	25	16
15	28	44	37	26	24	110	197	384	44	25	21	15
16	26	42	36	26	25	200	203	319	39	26	18	19
17	32	40	36	25	25	350	187	276	35	30	16	23
18	71	39	35	25	25	390	212	232	31	34	14	21
19	91	38	34	25	25	350	242	191	28	37	13	19
20	87	36	34	25	24	300	231	154	25	74	12	20
21	76	49	32	25	24	250	233	144	24	86	11	21
22	69	76	32	25	24	220	210	139	23	79	9.8	21
23	75	94	31	25	24	194	229	180	34	57	9.3	26
24	85	120	30	25	24	190	321	195	36	41	8.8	25
25	93	116	30	25	24	175	360	175	34	44	16	25
26	106	115	29	25	24	164	371	143	29	38	24	23
27	105	119	28	25	24	147	412	119	26	30	23	21
28	94	117	28	25	24	147	435	216	23	25	18	19
29	90	115	28	25	---	131	480	386	22	21	15	17
30	82	110	28	25	---	129	530	407	22	19	13	28
31	71	---	27	25	---	125	---	285	---	16	12	---
TOTAL	1939	1964	1367	793	681	3993	6377	10464	1714	958	583.9	611.1
MEAN	62.5	65.5	44.1	25.6	24.3	129	213	338	57.1	30.9	18.8	20.4
MAX	106	120	94	27	25	390	530	600	193	86	41	38
MIN	26	36	27	25	24	24	84	119	22	16	8.8	9.5
CFSM	.94	.98	.66	.38	.37	1.94	3.20	5.08	.86	.46	.28	.31
IN.	1.08	1.10	.76	.44	.38	2.23	3.57	5.85	.96	.54	.33	.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1995, BY WATER YEAR (WY)

	MEAN	81.7	89.3	59.9	32.6	26.3	68.7	399	273	113	51.8	26.5	56.0
MAX	173	160	92.8	56.5	44.6	212	622	695	233	184	68.7	266	
(WY)	1968	1968	1963	1966	1966	1968	1967	1965	1967	1968	1964	1968	
MIN	9.01	65.5	35.9	18.8	16.2	22.3	213	120	54.8	7.82	7.47	8.87	
(WY)	1964	1995	1994	1994	1994	1994	1995	1968	1965	1966	1961	1967	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1961 - 1995
ANNUAL TOTAL	30924	31445.0	
ANNUAL MEAN	84.7	86.2	108
HIGHEST ANNUAL MEAN			145
LOWEST ANNUAL MEAN			83.3
HIGHEST DAILY MEAN	1210	(e) 600	2710
LOWEST DAILY MEAN	10	8.8	3.9
ANNUAL SEVEN-DAY MINIMUM	(e) 12	11	4.3
INSTANTANEOUS PEAK FLOW		(a)	3060
INSTANTANEOUS PEAK STAGE		(a)	11.46
INSTANTANEOUS LOW FLOW		8.4	3.6
ANNUAL RUNOFF (CFSM)	1.27	1.30	1.63
ANNUAL RUNOFF (INCHES)	17.30	17.59	22.09
10 PERCENT EXCEEDS	160	230	235
50 PERCENT EXCEEDS	40	34	45
90 PERCENT EXCEEDS	14	19	12

(a) Not determined
(e) Estimated

STREAMS TRIBUTARY TO LAKE MICHIGAN
04063000 MENOMINEE RIVER NEAR FLORENCE, WI

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LOCATION.--Lat 45°57'04", long 88°11'13", in NE 1/4 sec.16, T.41 N., R.31 W., Michigan Meridian, Iron County, Hydrologic Unit 04030108, on left bank 0.5 mi downstream from confluence of Brule and Michigamme Rivers, 3.5 mi northeast of Florence, and at mile 117.

DRAINAGE AREA.--1,760 mi².

PERIOD OF RECORD.--January 1914 to current year. Published as "at Twin Falls near Iron Mountain, MI" January 1914 to June 1950.

REVISED RECORDS.--WSP 1707: 1953(M). WDR MI-92-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,119.23 ft above sea level (levels by Owen Ayres Associates). Prior to July 1950, headwater and tailwater gages and generation data entered hourly in daily log sheets by company employees at the Twin Falls Powerplant of Wisconsin Electric Power Co., 10.4 mi downstream.

REMARKS.--Estimated daily discharges: Jan. 5-6, 12-13, Feb. 3-4, 8, 13-14, 17, Mar. 3-4, and Sept. 19-20. Records good (see page 11). Prior to July 1950, discharge determined from powerplant records computed on basis of load-discharge rating of hydroelectric units and rating for tail water 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 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1320	1070	897	1310	1140	1170	1570	1940	2930	1240	1210	1450
2	970	1150	1060	1380	1050	1290	1560	1980	2970	920	1270	1170
3	993	1170	990	1290	1110	1380	1530	2050	2700	1090	1220	1150
4	906	1070	1100	1050	1100	1400	1160	1390	1720	993	1240	951
5	963	809	1150	1130	1110	1560	1140	1370	1940	1170	1120	1110
6	1160	750	1040	1140	1090	1340	1280	2010	2180	1330	1190	1140
7	970	920	1060	1220	1060	1470	1310	1720	2140	969	1610	1970
8	978	775	1080	1170	1100	1440	1250	1830	2040	1220	1160	1910
9	928	917	903	1220	1190	1470	1090	1870	1870	1050	1490	1830
10	1060	847	931	1150	1200	1480	1210	2380	1560	1140	1330	1700
11	1120	775	767	1180	1160	1530	856	3010	1620	1120	1280	1440
12	1050	689	1020	1120	1180	1580	743	3020	1900	1190	906	1370
13	785	808	984	1120	1100	1730	746	3090	1940	1110	1500	1300
14	845	1020	1140	1210	1100	1930	1120	3230	1510	1210	2030	1370
15	838	828	1380	1100	1200	1640	958	3880	1460	1070	1950	1310
16	766	928	1350	1040	1160	1730	1030	4840	1480	1700	1820	1210
17	746	1170	1660	1160	1180	1640	1180	5100	1680	1850	1640	1480
18	1370	725	1580	1100	1280	1700	1320	4600	1810	2110	1170	1160
19	1600	752	1560	1150	1150	1620	1390	3910	1750	1990	895	980
20	1570	737	1500	1050	1110	1680	1460	3230	1630	1790	847	1050
21	1520	704	1460	1050	1200	1640	1520	2820	1730	1690	1260	1170
22	1340	917	1420	1080	1180	1650	1810	2820	923	1740	1310	1290
23	1260	1030	1460	1240	1180	2130	1830	2380	938	1660	1100	1310
24	1340	862	1430	1110	1190	2160	1850	2650	1100	1660	1220	1200
25	1140	949	1350	1180	1110	1990	1830	2540	1220	1470	1190	1140
26	1120	1120	1360	1080	1180	2160	1840	2620	880	1170	1480	1220
27	1410	740	1440	1130	1150	2010	1840	2170	1080	1340	1620	1070
28	1260	1030	1480	1090	1110	1810	1950	2240	1040	1250	1530	1330
29	1170	1350	1460	1100	---	1420	2020	3360	1200	1280	1710	1260
30	865	769	1430	1010	---	1480	1820	3110	1270	1140	1850	1130
31	1040	---	1340	1190	---	1150	---	3100	---	1040	1700	---
TOTAL	34403	27381	38782	35550	32070	50380	42213	86260	50211	41702	42848	39171
MEAN	1110	913	1251	1147	1145	1625	1407	2783	1674	1345	1382	1306
MAX	1600	1350	1660	1380	1280	2160	2020	5100	2970	2110	2030	1970
MIN	746	689	767	1010	1050	1150	743	1370	880	920	847	951
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 1995, BY WATER YEAR (WY)												
MEAN	1474	1603	1453	1388	1358	1582	3167	3033	2135	1591	1293	1407
MAX	3537	3465	2640	2253	2514	3544	8159	6319	5035	4253	2359	3149
(WY)	1986	1986	1984	1983	1984	1973	1916	1960	1916	1953	1972	1968
MIN	726	725	765	691	647	692	735	595	799	721	545	718
(WY)	1949	1964	1925	1924	1926	1914	1990	1987	1988	1925	1925	1925
SUMMARY STATISTICS FOR 1994 CALENDAR YEAR FOR 1995 WATER YEAR WATER YEARS 1914 - 1995												
ANNUAL TOTAL	487772			520971			1790			1916		
ANNUAL MEAN	1336			1427			3069			1925		
HIGHEST ANNUAL MEAN							922					
LOWEST ANNUAL MEAN							18800			Jul 2 1953		
HIGHEST DAILY MEAN	3180			Jul 14			57			Sep 26 1975		
LOWEST DAILY MEAN	486			May 22			277			Oct 18 1975		
ANNUAL SEVEN-DAY MINIMUM	717			Apr 9			810			Nov 6		
INSTANTANEOUS PEAK FLOW							5440			May 17		
INSTANTANEOUS PEAK STAGE							7.21			May 17		
INSTANTANEOUS LOW FLOW							239			(a) 14.15		
10 PERCENT EXCEEDS	1800						2010			3040		
50 PERCENT EXCEEDS	1340						1240			1460		
90 PERCENT EXCEEDS	823						922			841		

(a) Since July 1950

(b) Aug. 21, 1962, Sept. 26, 1975

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 11). 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 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1270	1160	932	1290	1090	1150	1690	2120	3120	1380	1340	1560
2	1120	1140	1050	1340	1080	1170	1640	2050	3040	1070	1430	1200
3	1050	1150	1030	1030	1110	1460	1470	2090	2790	1060	1280	1180
4	1070	1150	1060	1170	1130	1400	1230	1430	2010	905	1430	1010
5	1060	842	1100	1100	1130	1470	1230	1370	2070	1310	1180	1160
6	1160	831	1060	1170	1050	1540	1300	2130	2240	1250	1280	1380
7	1050	938	1140	1060	1080	1370	1370	1870	2310	1110	1610	1930
8	1090	828	924	1190	1190	1340	1280	1890	2140	1200	1320	2090
9	1070	931	903	1150	1140	1520	1190	2050	1960	1110	1570	1960
10	1120	871	859	1110	1090	1320	1210	2360	1740	1280	1470	1770
11	1110	790	755	1150	1170	1380	969	3150	1760	1190	1330	1580
12	1040	820	1050	1130	1150	1460	743	3230	2000	1100	1040	1460
13	819	811	1050	1110	1160	1640	908	3160	2010	1140	1630	1420
14	812	1150	1160	1130	1110	1850	1100	3500	1580	1320	2340	1400
15	852	777	1260	1100	1110	1780	1010	3990	1550	1340	2370	1350
16	860	1050	1360	1070	1150	1770	1120	4870	1670	1690	1780	1430
17	942	999	1510	1100	1150	1750	1150	5160	1660	1970	1810	1470
18	1370	830	1580	1090	1090	1810	1490	4750	1880	2230	1210	1310
19	1730	806	1520	1160	1110	1670	1640	4120	1790	2180	997	1090
20	1730	810	1500	1060	1160	1580	1330	3400	1760	1980	872	1170
21	1550	783	1410	1050	1140	1840	1620	3060	1800	1820	1380	1210
22	1320	928	1310	1160	1110	1810	1900	2930	940	1820	1290	1370
23	1410	1060	1430	1100	1130	2270	1850	2760	1040	1730	1240	1420
24	1280	914	1340	1040	1160	2140	2010	2650	1090	1730	1280	1220
25	1330	1030	1380	1170	1050	2150	1930	2750	1300	1610	1160	1220
26	1160	981	1250	1060	1080	2200	1940	2700	1030	1190	1580	1210
27	1310	850	1340	1030	1190	2160	1960	2250	1090	1430	1790	1170
28	1380	1010	1470	1050	1130	1860	2100	2530	1130	1350	1760	1340
29	1160	1310	1420	1020	---	1660	2100	3290	1210	1420	1750	1370
30	904	816	1360	1080	---	1440	1850	3420	1450	1060	1880	1190
31	1140	---	1380	1140	---	1370	---	3240	---	1040	1850	---
TOTAL	36269	28366	37893	34610	31440	51330	44330	90270	53160	44015	46249	41640
MEAN	1170	946	1222	1116	1123	1656	1478	2912	1772	1420	1492	1388
MAX	1730	1310	1580	1340	1190	2270	2100	5160	3120	2230	2370	2090
MIN	812	777	755	1020	1050	1150	743	1370	940	905	872	1010

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 1995, BY WATER YEAR (WY)

	1950	1955	1960	1965	1970	1975	1980	1985	1990	1995	2000	2005
MEAN	1481	1614	1462	1397	1365	1594	3183	3044	2150	1603	1306	1418
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 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1914 - 1995
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ANNUAL TOTAL	515381		539572				
ANNUAL MEAN	1412		1478			1802	
HIGHEST ANNUAL MEAN						3069	1916
LOWEST ANNUAL MEAN						922	1925
HIGHEST DAILY MEAN	3380	Jul 14	5160	May 17		18100	Apr 26 1960
LOWEST DAILY MEAN	635	May 8	743	Apr 12		57	Sep 26 1975
ANNUAL SEVEN-DAY MINIMUM	856	Nov 7	856	Nov 7		277	Oct 18 1975
INSTANTANEOUS PEAK FLOW			5480	May 16		19500	Apr 26 1960
INSTANTANEOUS PEAK STAGE			9.62	May 16		(a)9.91	May 5 1993
INSTANTANEOUS LOW FLOW			420	Apr 12		(a)399	Aug 30 1992
10 PERCENT EXCEEDS	1880		2140			3050	
50 PERCENT EXCEEDS	1380		1290			1470	
90 PERCENT EXCEEDS	879		991			850	

(a) Since October 1989

MEAN	120	117	67.3	48.2	47.4	87.1	304	222	144	76.4	66.5	114
MAX	265	220	116	86.6	107	356	613	617	345	235	147	356
(WY)	1972	1986	1992	1969	1984	1973	1979	1965	1993	1968	1978	1980
MIN	25.0	30.9	23.9	24.6	26.0	30.5	54.6	70.7	21.2	17.5	23.1	16.4
(WY)	1990	1977	1990	1977	1982	1964	1990	1977	1988	1988	1989	1989

STREAMS TRIBUTARY TO LAKE MICHIGAN
04063700 POPPLE RIVER NEAR FENCE, WI--CONTINUED

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1964 - 1995	
ANNUAL TOTAL	35870		33177		118	
ANNUAL MEAN	98.3		90.9		175	
HIGHEST ANNUAL MEAN					64.3	
LOWEST ANNUAL MEAN					1610	
HIGHEST DAILY MEAN	389	Sep 16	313	May 12	10	Apr 25 1979
LOWEST DAILY MEAN	34	Aug 25,26	28	Jul 30	12	Aug 12 1989
ANNUAL SEVEN-DAY MINIMUM	35	Feb 8	33	Mar 3	12	(a) Jul 3 1988
INSTANTANEOUS PEAK FLOW			(b) 318	May 16	1640	Apr 25 1979
INSTANTANEOUS PEAK STAGE			(c) 2.90	Mar 13	4.52	Apr 25 1979
INSTANTANEOUS LOW FLOW			27	Jul 30,31	(d) 5.9	Oct 28 1976
ANNUAL RUNOFF (CFSM)	.71		.65		.85	
ANNUAL RUNOFF (INCHES)	9.60		8.88		11.51	
10 PERCENT EXCEEDS	194		180		259	
50 PERCENT EXCEEDS	74		70		72	
90 PERCENT EXCEEDS	42		38		33	

(a) Also occurred Sept. 20, 1989

(b) Gage height, 2.37 ft

(c) Ice jam

(d) Result of temporary storage from beaver dam

STREAMS TRIBUTARY TO LAKE MICHIGAN
04063700 POPPLE RIVER NEAR FENCE, WI--CONTINUED
(HYDROLOGIC BENCHMARK STATION
(RADIOCHEMICAL PROGRAM STATION)
(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1964 to current year. National Water-Quality Assessment Program sampling began in April 1993.

WATER-QUALITY DATA, OCTOBER 1994 TO SEPTEMBER 1995

HYDROLOGIC BENCHMARK AND RADIOCHEMICAL PROGRAM DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI, KF AGAR (COLS. PER 100 ML) (31673)
		HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
NOV 1994 09...	1000	76	150	7.3	4.5	1.2	11.6	727	94	--	--
MAR 1995 30...	1205	98	126	7.6	2.5	1.0	12.9	725	99	K4	K1
JUN 20...	1240	47	175	7.8	27.0	1.7	8.1	725	107	100	K9
SEP 07...	1125	69	154	8.0	17.5	1.7	7.9	729	86	>130	140
DATE		SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS DIS-SOLVED (MG/L AS AL) (01106)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)
NOV 1994 09...	112	<0.010	<0.050	<0.015	0.30	0.010	<0.010	<0.010	30	8	<3
MAR 1995 30...	88	0.010	0.080	<0.015	0.30	<0.010	<0.010	<0.010	10	7	<3
JUN 20...	122	<0.010	<0.050	0.030	0.50	0.030	0.020	<0.010	<10	8	<3
SEP 07...	135	<0.010	<0.050	0.020	0.80	0.030	0.020	<0.010	10	11	<3
DATE		IRON, DIS-SOLVED (UG/L AS FE) (01046)	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)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	226, DIS-SOLVED, RADON METHOD (PCI/L) (09511)	RADIUM URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)
NOV 1994 09...		360	<4	61	<10	<1	<1	20	<6	--	--
MAR 1995 30...		280	<4	46	<10	<1	<1	16	<6	--	0.64
JUN 20...		320	5	300	<10	<1	<1	24	<6	0.03	0.53
SEP 07...		420	<4	140	<10	<1	<1	23	<6	--	--

k Results based on count outside of the acceptable range (non-ideal colony count)

STREAMS TRIBUTARY TO LAKE MICHIGAN
04063700 POPPLE RIVER NEAR FENCE, WI--CONTINUED

WATER-QUALITY DATA, OCTOBER 1994 TO SEPTEMBER 1995

NATIONAL WATER-QUALITY ASSESSMENT PROGRAM DATA

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
NOV 1994											
02...	0920	86	136	7.5	4.0	12.0	756	74	16	8.2	1.4
30...	1123	75	162	7.8	0.0	12.2	734	80	17	9.2	1.5
JAN 1995											
03...	1230	40	235	7.1	0.0	10.9	725	120	26	13	1.8
FEB											
01...	1130	40	250	7.4	0.0	11.6	715	120	26	14	1.7
MAR											
27...	1045	127	117	7.3	1.0	12.9	726	55	12	6.1	1.4
APR											
21...	0945	257	83	7.3	2.0	12.2	711	40	8.6	4.6	1.1
MAY											
17...	1040	314	78	7.4	12.0	9.4	718	41	9.0	4.6	1.1
JUN											
05...	1130	132	107	7.7	24.5	7.8	721	58	13	6.3	1.3
JUL											
12...	1000	39	197	8.1	23.0	7.0	723	100	23	11	1.6
AUG											
03...	0930	47	206	8.1	22.0	6.6	723	110	23	12	1.5
31...	1000	109	141	7.8	21.0	7.4	717	73	16	8.0	1.4
SEP											
26...	0945	68	163	7.6	9.0	9.5	713	84	18	9.6	1.4

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	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)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
NOV 1994											
02...	1.1	76	62	3.6	1.3	<0.10	9.1	110	<0.050	<0.010	<0.015
30...	0.60	88	72	4.0	1.4	<0.10	11	117	0.080	<0.010	0.020
JAN 1995											
03...	0.90	127	104	6.6	1.5	<0.10	14	144	0.160	<0.010	0.030
FEB											
01...	0.90	137	112	6.2	1.4	<0.10	14	155	0.190	<0.010	0.080
MAR											
27...	1.2	56	46	4.3	2.0	<0.10	7.5	84	0.100	<0.010	0.040
APR											
21...	1.0	38	31	2.8	1.4	<0.10	5.3	73	0.080	<0.010	0.020
MAY											
17...	0.40	39	32	2.8	0.90	<0.10	3.6	75	<0.050	<0.010	<0.015
JUN											
05...	0.30	61	52	2.4	0.80	0.20	3.9	89	<0.050	<0.010	0.020
JUL											
12...	0.50	116	95	4.7	1.2	<0.10	6.6	126	<0.050	<0.010	<0.015
AUG											
03...	0.70	121	99	5.2	1.2	0.10	9.1	132	<0.050	<0.010	<0.015
31...	0.50	71	58	5.1	1.1	<0.10	11	126	<0.050	<0.010	<0.015
SEP											
26...	0.60	84	69	4.2	1.3	<0.10	9.1	115	<0.050	0.020	0.030

STREAMS TRIBUTARY TO LAKE MICHIGAN
04063700 POPPLE RIVER NEAR FENCE, WI--CONTINUED

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WATER-QUALITY DATA, OCTOBER 1994 TO SEPTEMBER 1995

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 1994											
02...	0.50	0.40	0.010	<0.010	0.010	410	62	16	0.20	3	88
30...	0.40	0.40	0.010	<0.010	<0.010	280	50	13	0.20	4	59
JAN 1995											
03...	0.30	0.20	<0.010	0.010	<0.010	310	64	7.3	0.20	3	78
FEB											
01...	0.20	<0.20	0.030	<0.010	<0.010	280	70	4.0	0.20	3	94
MAR											
27...	0.40	0.40	<0.010	<0.010	<0.010	290	65	11	0.30	5	83
APR											
21...	0.60	0.50	0.020	0.010	<0.010	220	27	13	0.60	7	93
MAY											
17...	0.60	0.60	0.020	0.010	0.010	220	34	16	0.50	7	76
JUN											
05...	0.60	0.50	<0.010	<0.010	0.010	400	110	17	0.60	6	94
JUL											
12...	0.50	0.40	0.030	<0.010	<0.010	270	130	8.4	0.20	8	88
AUG											
03...	0.60	0.30	0.020	<0.010	<0.010	220	95	8.8	0.30	3	91
31...	0.90	0.80	0.030	<0.010	0.010	360	88	23	0.40	4	95
SEP											
26...	0.60	0.60	0.040	<0.010	0.020	400	55	15	0.30	2	90

STREAMS TRIBUTARY TO LAKE MICHIGAN

04065106 MENOMINEE RIVER AT NIAGARA, WI

LOCATION.--Lat 45°46'04", long 87°58'50", in NE 1/4 NE 1/4 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.--Estimated daily discharges: Feb. 20 to Mar. 7. Records good except for estimated daily discharges, which are fair (see page 11). 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 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1890	1480	1290	1560	1350	1500	2000	2620	4270	1620	1510	2000
2	1660	1490	1490	1660	1360	1600	1880	2530	3930	1380	1710	1660
3	1570	1530	1450	1420	1350	1800	1780	2600	3470	1350	1600	1490
4	1560	1480	1440	1390	1360	1700	1480	1880	2430	1110	1980	1270
5	1380	1270	1510	1380	1430	1800	1530	1930	2690	1470	1560	1560
6	1560	1130	1510	1370	1380	1800	1590	2430	2580	1510	1560	1640
7	1470	1170	1490	1360	1370	1800	1550	2350	2670	1340	2090	2070
8	1490	1220	1100	1370	1380	1730	1650	2210	2630	1450	1720	2360
9	1470	1150	1100	1390	1380	1720	1470	2860	2210	1390	1780	2300
10	1430	1180	1130	1390	1410	1660	1470	3490	2050	1520	2150	2060
11	1380	1150	1100	1380	1490	1650	1220	4340	2170	1460	1680	1940
12	1390	1090	1250	1350	1430	1740	1290	4400	2390	1380	1380	1550
13	1150	1040	1410	1350	1390	1990	1560	4220	2390	1330	2290	1740
14	1120	1430	1440	1380	1440	2590	1780	4660	1940	1550	3600	1550
15	1060	1260	1530	1340	1340	2750	1590	5190	1830	1670	3250	1710
16	1120	1460	1630	1340	1390	2880	1640	6040	1830	2000	2310	1670
17	1310	1160	1840	1330	1420	2650	1550	6740	1880	2220	2300	1740
18	1910	1150	1910	1340	1350	2500	1930	6180	2050	3210	1750	1680
19	2680	1030	1820	1350	1340	2350	2590	5440	2070	2690	1530	1530
20	2740	1140	1830	1340	1400	1980	2300	4320	1970	2420	1290	1590
21	2220	1110	1840	1390	1400	2700	2560	3820	1940	2290	1660	1580
22	1980	1380	1600	1360	1400	2800	2570	3740	1160	2020	1530	1670
23	2000	1460	1710	1370	1400	3160	2600	3490	1210	2140	1520	1680
24	2030	1380	1710	1340	1400	2940	2620	3470	1370	2030	1560	1620
25	1820	1460	1720	1360	1400	2690	2720	3530	1370	1850	1540	1510
26	1780	1310	1640	1370	1400	2650	2360	3470	1270	1480	1820	1510
27	1770	1150	1610	1330	1400	2460	2600	2860	1290	1650	2480	1470
28	1860	1380	1660	1260	1400	2350	2670	3280	1340	1650	2460	1510
29	1700	1760	1730	1250	---	1950	2680	4360	1480	1490	2380	1510
30	1140	1080	1700	1290	---	1780	2390	4730	1930	1260	2300	1430
31	1060	---	1610	1330	---	1790	---	4400	---	1330	2270	---
TOTAL	50700	38480	47800	42440	38960	67460	59620	117580	63810	53260	60560	50600
MEAN	1635	1283	1542	1369	1391	2176	1987	3793	2127	1718	1954	1687
MAX	2740	1760	1910	1660	1490	3160	2720	6740	4270	3210	3600	2360
MIN	1060	1030	1100	1250	1340	1500	1220	1880	1160	1110	1290	1270

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1995, BY WATER YEAR (WY)

	1993	1994	1995	1993	1994	1995	1993	1994	1995	1993	1994	1995
MEAN	1678	1804	1943	1774	1786	1906	2445	3316	2737	2068	1605	1942
MAX	1767	2531	2458	2258	2082	2176	3395	4083	4184	2579	1954	2225
(WY)	1994	1993	1993	1993	1993	1995	1993	1993	1993	1994	1995	1994
MIN	1632	1283	1542	1369	1391	1764	1953	2074	1899	1718	1368	1687
(WY)	1993	1995	1995	1995	1995	1994	1994	1994	1994	1995	1993	1995

SUMMARY STATISTICS FOR 1994 CALENDAR YEAR FOR 1995 WATER YEAR WATER YEARS 1993 - 1995

ANNUAL TOTAL	669830	691270	
ANNUAL MEAN	1835	1894	
HIGHEST ANNUAL MEAN			2085
LOWEST ANNUAL MEAN			2463
HIGHEST DAILY MEAN	4330	Sep 16	7770
LOWEST DAILY MEAN	1030	Nov 19	1030
ANNUAL SEVEN-DAY MINIMUM	1110	Aug 14	1110
INSTANTANEOUS PEAK FLOW			8070
INSTANTANEOUS PEAK STAGE		10.23	May 17
10 PERCENT EXCEEDS	2530	2710	3350
50 PERCENT EXCEEDS	1720	1600	1800
90 PERCENT EXCEEDS	1160	1270	1310

STREAMS TRIBUTORY TO LAKE MICHIGAN
04065722 MENOMINEE RIVER NEAR VULCAN, MI

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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.--Estimated daily discharges: Feb. 19 to Mar. 14 and Sept. 7-25. Records good except for estimated daily discharges, which are fair (see page 11). 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. Several measurements of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2250	1870	1520	1750	1500	1250	2430	3060	4600	1970	1600	2190
2	1830	1780	1870	1790	1520	1250	2230	3070	4300	1700	1720	1850
3	1980	1830	1760	1530	1510	1300	2240	3060	3960	1580	1710	1600
4	1850	1790	1750	1450	1450	1500	1880	2440	2870	1340	2130	1320
5	1570	1580	1770	1430	1660	1600	1830	2290	3090	1660	1760	1560
6	1760	1430	1810	1440	1500	1650	1930	2880	2870	1730	1740	1700
7	1740	1430	1820	1460	1480	1700	1870	2750	2940	1510	2290	2400
8	1710	1490	1400	1470	1490	1900	1920	2610	3000	1570	1870	2500
9	1620	1450	1320	1430	1500	1950	1820	3160	2540	1530	1880	2400
10	1630	1420	1340	1480	1520	1950	1770	4070	2360	1660	2340	2250
11	1590	1420	1360	1480	1490	1900	1580	4800	2400	1580	1750	2000
12	1580	1310	1470	1470	1500	1950	1660	4890	2760	1560	1530	1850
13	1400	1300	1640	1440	1500	2100	1920	4670	2770	1440	2180	1750
14	1320	1640	1630	1460	1500	2500	2300	4990	2350	1610	3920	1750
15	1220	1540	1690	1480	1420	3240	2080	5500	2150	1920	3610	1800
16	1310	1730	1820	1490	1480	3470	2070	6340	2120	2430	2610	1900
17	1490	1490	2040	1470	1480	3250	2000	7200	2030	2560	2610	1900
18	2170	1430	2070	1470	1490	3090	2190	6780	2270	3530	2150	1800
19	3080	1250	2110	1500	1450	2910	3370	6060	2350	3140	1630	1700
20	3190	1360	2030	1490	1400	2620	3260	4800	2190	2920	1590	1800
21	2670	1400	2040	1490	1350	3350	3520	4260	2170	2640	1810	1800
22	2470	1630	1790	1500	1400	3560	3470	4150	1430	2370	1740	1800
23	2540	1720	1890	1500	1400	3990	3370	3960	1320	2490	1610	1900
24	2570	1750	1750	1500	1320	3640	3360	3960	1560	2290	1540	1850
25	2390	1670	1950	1490	1300	3310	3370	3960	1530	2230	1740	1850
26	2370	1640	1870	1510	1250	3280	3060	3860	1450	1590	1900	2000
27	2160	1410	1820	1480	1280	2910	3140	3470	1420	1870	2780	1750
28	2240	1600	1810	1440	1250	2890	3310	3580	1490	1750	2830	1700
29	2090	2110	1890	1400	---	2410	3280	4670	1640	1610	2660	1760
30	1770	1450	1900	1400	---	2220	3020	5170	2100	1400	2600	1680
31	1720	---	1800	1460	---	2190	---	4930	---	1450	2470	---
TOTAL	61280	46920	54730	46150	40390	76830	75250	131390	72030	60630	66300	56110
MEAN	1977	1564	1765	1489	1442	2478	2508	4238	2401	1956	2139	1870
MAX	3190	2110	2110	1790	1660	3990	3520	7200	4600	3530	3920	2500
MIN	1220	1250	1320	1400	1250	1250	1580	2290	1320	1340	1530	1320

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1995, BY WATER YEAR (WY)

MEAN	1854	2382	2293	1989	1887	2410	3581	3319	2810	2012	1579	1945
MAX	2510	4412	3008	2533	2378	2849	5756	4917	4832	2735	2139	2456
(WY)	1991	1989	1989	1993	1993	1991	1992	1993	1993	1992	1995	1994
MIN	1081	1382	1555	1489	1442	2028	1356	1720	1062	1100	1256	1223
(WY)	1990	1990	1990	1995	1995	1994	1990	1988	1988	1988	1989	1989

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1988 - 1995	
ANNUAL TOTAL	780900		788010			
ANNUAL MEAN	2139		2159		2395	
HIGHEST ANNUAL MEAN					2920	
LOWEST ANNUAL MEAN					1864	
HIGHEST DAILY MEAN	5140	Apr 28	7200	May 17	10300	May 31 1991
LOWEST DAILY MEAN	1180	Aug 17	1220	Oct 15	846	Aug 3 1988
ANNUAL SEVEN-DAY MINIMUM	1220	Aug 14	1270	(a) Feb 25	932	Oct 1 1989
INSTANTANEOUS PEAK FLOW			7310	May 17	10700	May 31 1991
INSTANTANEOUS PEAK STAGE			10.51	May 17	12.82	May 31 1991
INSTANTANEOUS LOW FLOW			749	Nov 18	603	Aug 1 1992
10 PERCENT EXCEEDS	2950		3370		3860	
50 PERCENT EXCEEDS	2000		1810		1980	
90 PERCENT EXCEEDS	1450		1430		1290	

(a) Ice affected

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 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.--Estimated daily discharges: Ice-affected periods, Dec. 10-18, and Jan. 2 to Mar. 14. Records good except those for ice-affected periods, which are fair (see page 11). 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 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2600	1900	1440	1800	1700	1600	2470	3180	4840	2110	1570	2470
2	1890	1810	1780	2100	1700	1600	2250	3250	4500	1780	1670	2010
3	2170	1810	1850	1800	1700	1800	2270	3180	4170	1560	1840	1860
4	1880	1880	1760	1800	1700	2000	1900	2800	3210	1510	2090	1590
5	1670	1710	1810	1800	1800	2000	1790	2360	3020	1400	1990	1550
6	1650	1530	1830	1800	1800	2000	1900	2900	3000	1690	1780	1880
7	1710	1430	1880	1800	1800	2000	1890	2830	2980	1610	2190	2470
8	1690	1460	1700	1800	1800	2000	1880	2810	3060	1470	2080	2760
9	1600	1560	1380	1800	1800	2000	1930	3160	2670	1560	2020	2730
10	1640	1380	1400	1800	1900	2000	1710	4330	2440	1540	2490	2670
11	1560	1430	1500	1800	1900	2000	1720	4900	2450	1630	2000	2300
12	1570	1350	1600	1700	1800	2400	1660	5110	2790	1540	1880	1940
13	1530	1340	1800	1700	1800	3200	1980	4920	2770	1380	1920	2120
14	1370	1450	1800	1800	1900	3000	2530	5080	2490	1450	3980	1850
15	1310	1680	1900	1700	1800	3400	2140	5800	2180	1870	3970	1930
16	1320	1620	2000	1700	1800	3640	2200	6490	2110	2400	3090	2000
17	1370	1660	2100	1700	1800	3490	2100	7560	2030	2540	2850	2260
18	2070	1420	2200	1700	1700	3360	2170	7270	2230	3520	2400	1890
19	3220	1350	2220	1700	1800	2990	3650	6430	2320	3360	1960	1860
20	3280	1340	2090	1700	1800	2870	3610	5160	2170	3110	1860	2020
21	2930	1420	2060	1800	1900	3480	3900	4480	2140	2690	1770	2010
22	2670	1550	1830	1700	2000	3850	3800	4290	1660	2470	1900	1990
23	2690	1760	1880	1800	1900	4080	3610	4090	1300	2480	1750	2090
24	2890	1840	1740	1700	1900	3810	3530	4180	1430	2320	1660	2110
25	2690	1640	1990	1800	1800	3540	3510	4090	1530	2260	1890	1920
26	2570	1710	1880	1800	1700	3340	3420	4010	1460	1720	1880	1850
27	2360	1490	1840	1700	1800	3070	3240	3780	1430	1780	2890	1860
28	2370	1570	1840	1600	1700	2880	3530	3570	1390	1820	3000	1810
29	2200	2090	1920	1600	---	2560	3480	4840	1530	1670	2840	1840
30	1980	1740	1910	1700	---	2220	3230	5520	2000	1560	2780	1710
31	1800	---	1840	1700	---	2180	---	5330	---	1320	2700	---
TOTAL	64250	47920	56770	54400	50500	84360	79000	137700	73300	61120	70690	61350
MEAN	2073	1597	1831	1755	1804	2721	2633	4442	2443	1972	2280	2045
MAX	3280	2090	2220	2100	2000	4080	3900	7560	4840	3520	3980	2760
MIN	1310	1340	1380	1600	1700	1600	1660	2360	1300	1320	1570	1550

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1995, BY WATER YEAR (WY)

	MEAN	2497	2653	2324	2119	2069	2605	5532	4787	3405	2530	2100	2356
MAX	5659	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 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1950 - 1995
ANNUAL TOTAL	818590	841360	
ANNUAL MEAN	2243	2305	2915
HIGHEST ANNUAL MEAN			4318
LOWEST ANNUAL MEAN			1778
HIGHEST DAILY MEAN	5760	Apr 28	7560 May 17
LOWEST DAILY MEAN	1260	Aug 15, 17	1300 Jun 23
ANNUAL SEVEN-DAY MINIMUM	1290	Aug 15	1420 Nov 7
INSTANTANEOUS PEAK FLOW		7740	May 17
INSTANTANEOUS PEAK STAGE		11.00	May 17
10 PERCENT EXCEEDS	3200	3550	4960
50 PERCENT EXCEEDS	2040	1900	2300
90 PERCENT EXCEEDS	1500	1540	1450

(a) Site and datum then in use

WATER-DISCHARGE RECORDS

REMARKS.--Estimated daily discharges: Jan. 3 to Mar. 31. Records good except for estimated daily discharges, which are fair (see page 11). 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.

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3610	2790	2410	2310	1900	1950	2980	4270	6140	2390	1580	2780
2	3300	2530	2280	1890	1950	1850	3000	4270	5600	2180	1500	2610
3	2450	2380	2410	1850	1950	1700	2980	4100	5180	2020	1870	2130
4	2980	2410	2420	1750	1950	1900	2560	4140	4680	1830	2110	2000
5	2830	2350	2390	1550	1750	2200	2400	3350	3570	1720	2280	1860
6	2300	2140	2360	1900	1550	2050	2420	3220	3660	1750	2350	1650
7	2270	1940	2340	2200	1700	2100	2370	3780	3640	1960	2040	2120
8	2290	2060	2350	1950	1800	2200	2360	3590	3560	1850	2460	2640
9	2100	1930	2010	1950	1900	2100	2360	3920	3570	1830	2260	2990
10	2080	2040	2080	1900	1850	2200	2410	4980	3110	1820	2410	2950
11	2180	1830	1600	2050	1700	2300	2310	5800	3050	1800	2790	2750
12	1920	1890	1630	2100	1680	2400	2280	6350	3150	1820	2400	2370
13	1950	1850	1980	2100	1700	2450	2790	6320	3340	1800	2360	2140
14	1670	1850	2270	2000	1800	2780	3200	6230	3190	1770	2670	2340
15	1630	2030	2350	1950	1850	3900	3210	6440	2860	1870	4360	1780
16	1550	2180	2240	2000	1820	4450	2990	7260	2540	2420	4310	2120
17	1820	2170	2490	2000	1750	4800	3090	7620	2480	2830	3280	2390
18	2420	2270	2580	1950	1800	4750	2980	8420	2460	3180	3310	2110
19	3480	1790	2600	1950	1900	4400	4030	8050	2710	4140	2470	2140
20	4410	1770	2750	1900	1800	4350	6000	7130	2550	3810	2200	2180
21	4130	1990	2560	1900	1850	4400	5630	5740	2470	3580	2250	2250
22	3760	2130	2480	1950	1950	5900	5720	5300	2300	2920	2040	2090
23	3500	2310	2250	1950	2000	5400	5160	5170	1920	2850	2070	2090
24	3990	2400	2460	1900	2000	5300	4950	4930	1590	2790	1940	2290
25	4100	2310	2260	1980	2050	4850	4740	5150	1660	2660	1870	2300
26	3590	2160	2380	1750	1950	4300	4720	4750	1740	2450	2020	2030
27	3300	2160	2270	1800	2000	4000	4690	4670	1700	2010	2450	1960
28	3230	2230	2320	1900	2000	3700	4510	4460	1680	2110	3260	2040
29	2850	2480	2440	1800	---	3600	4780	5010	1810	1970	3070	1870
30	2850	2580	2370	1800	---	3600	4700	6190	1960	1980	3100	2200
31	2480	---	2310	1790	---	2900	---	6520	---	1930	3060	---
TOTAL	87020	64950	71640	59770	51900	104780	108320	167130	89870	72040	78140	67170
MEAN	2807	2165	2311	1928	1854	3380	3611	5391	2996	2324	2521	2239
MAX	4410	2790	2750	2310	2050	5900	6000	8420	6140	4140	4360	2990
MIN	1550	1770	1600	1550	1550	1700	2280	3220	1590	1720	1500	1650

MEAN	3021	3349	2653	2413	2380	3011	6608	5429	4012	3204	2403	2727
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	2257	1296	1374	1377	1390
(WY)	1949	1990	1990	1949	1948	1956	1990	1988	1988	1988	1957	1989

STREAMS TRIBUTARY TO LAKE MICHIGAN
04067500 MENOMINEE RIVER NEAR MC ALLISTER, WI--CONTINUED

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1945 - 1995	
ANNUAL TOTAL	1004490		1022730		3451	
ANNUAL MEAN	2752		2802		5496	1960
HIGHEST ANNUAL MEAN					2118	1948
LOWEST ANNUAL MEAN					31800	May 9 1960
HIGHEST DAILY MEAN	7190	Sep 17	8420	May 18	810	Oct 26 1948
LOWEST DAILY MEAN	1370	Aug 17	1500	Aug 2	952	Oct 24 1948
ANNUAL SEVEN-DAY MINIMUM	1450	Aug 13	1730	Jun 23	32500	May 9 1960
INSTANTANEOUS PEAK FLOW			8980	May 18	(a) 20.00	May 9 1960
INSTANTANEOUS PEAK STAGE			13.34	May 18	(b) 538	Oct 6 1946
INSTANTANEOUS LOW FLOW			1330	Jul 14	6180	
10 PERCENT EXCEEDS	4130		4730		2670	
50 PERCENT EXCEEDS	2440		2340		1670	
90 PERCENT EXCEEDS	1900		1800			

(a) From graph based on gage readings

(b) Observed

STREAMS TRIBUTARY TO LAKE MICHIGAN
04067500 MENOMINEE RIVER NEAR MC ALLISTER, WI--CONTINUED
(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1993 to July 1995 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	
NOV 1994												
03...	0900	2460	255	8.1	5.0	11.9	740	120	28	13	6.7	
DEC												
01...	1240	2090	309	8.2	0.0	13.8	745	120	28	13	9.6	
JAN 1995												
04...	1230	1750	286	7.8	0.0	14.0	746	120	28	13	8.4	
31...	1130	1790	304	7.9	0.0	13.2	729	130	29	13	12	
MAR												
30...	1245	3190	230	7.8	4.0	12.8	743	110	24	11	5.4	
APR												
20...	1100	6120	233	7.9	6.0	13.2	740	110	25	11	6.0	
MAY												
04...	1030	4210	211	7.9	12.5	12.3	744	99	23	10	5.0	
23...	1030	4460	175	8.0	15.5	10.0	744	82	19	8.3	4.0	
JUL												
12...	1245	1760	259	8.3	24.0	7.3	--	150	41	12	9.9	
DATE		POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	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)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
NOV 1994												
03...	1.4	127	104	13	5.4	<0.10	8.9	164	0.120	<0.010	<0.015	
DEC												
01...	1.3	138	113	17	6.7	<0.10	8.6	181	0.120	<0.010	<0.015	
JAN 1995												
04...	1.5	121	99	16	6.7	<0.10	10	171	0.210	<0.010	0.030	
31...	1.7	146	120	21	7.7	<0.10	11	189	0.220	<0.010	0.050	
MAR												
30...	1.6	106	87	11	4.5	<0.10	8.2	137	0.200	<0.010	0.020	
APR												
20...	1.6	116	95	9.6	5.6	<0.10	6.0	143	0.110	0.010	<0.015	
MAY												
04...	1.2	106	87	10	4.6	0.10	4.7	138	<0.050	0.010	0.020	
23...	1.0	90	74	8.3	3.4	<0.10	5.2	126	0.080	<0.010	<0.015	
JUL												
12...	1.5	129	106	16	7.0	<0.10	6.2	153	0.060	<0.010	<0.015	
DATE		NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV 1994												
03...	0.50	0.40	0.040	0.020	0.010	130	18	10	0.40	5	79	
DEC												
01...	0.30	0.30	0.020	<0.010	<0.010	120	26	8.6	0.40	4	83	
JAN 1995												
04...	0.30	0.30	0.040	0.030	0.010	110	15	7.2	0.20	--	--	
31...	0.30	0.20	0.030	0.020	<0.010	100	12	6.1	0.20	2	89	
MAR												
30...	0.30	0.30	0.020	<0.010	<0.010	140	15	6.7	0.30	6	63	
APR												
20...	0.50	0.30	0.020	0.010	<0.010	100	13	7.4	0.80	11	82	
MAY												
04...	0.30	0.30	<0.010	<0.010	<0.010	87	15	7.6	0.40	5	76	
23...	0.40	0.30	<0.010	<0.010	<0.010	84	14	9.2	0.60	9	91	
JUL												
12...	0.40	0.30	0.040	0.020	0.010	57	24	--	--	6	96	

STREAMS TRIBUTARY TO LAKE MICHIGAN
04067651 MENOMINEE RIVER, AT MOUTH, AT MARINETTE, WI

LOCATION.--Lat 45°05'43", long 87°35'22", in SE 1/4 SW 1/4 sec.4, T.30 N., R.24 E., Marinette County, Hydrologic Unit 04030108, at mouth.

DRAINAGE AREA.--4,070 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1988 to September 1990, April 1994 to October 1995 (discontinued).

GAGE.--Acoustical velocity meter (AVM) system. Two-path transducer installation.

REMARKS.--April to September 1994: Estimated daily discharges, Apr. 1 to Sept. 30. Discharges estimated using record from upstream station 04067500 multiplied by an area basin ratio of 1.036. Records are poor (see page 11).

Water year 1995: Estimated daily discharges, Oct. 1-4, Nov. 27 to Dec. 9, and Jan. 17 to Aug. 12. Discharges estimated using record from upstream station 04067500 multiplied by an area basin ratio of 1.036. Records are poor (see page 11). For discharges measured by acoustic velocity meter (AVM), records are good.

October 1995: No estimated daily discharges. Records are good (see page 11).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	2660	6820	4500	3080	2800	2920
2	---	---	---	---	---	---	2600	6470	4530	2650	2560	3190
3	---	---	---	---	---	---	3100	5820	4110	2200	2530	2870
4	---	---	---	---	---	---	2920	5440	3420	2070	2150	3170
5	---	---	---	---	---	---	2990	5120	3090	2090	2810	2770
6	---	---	---	---	---	---	2380	4480	2800	2440	2110	2800
7	---	---	---	---	---	---	2320	3990	2890	2290	1470	2800
8	---	---	---	---	---	---	1960	3000	2790	2330	1750	2490
9	---	---	---	---	---	---	2090	3000	2600	2790	1890	2210
10	---	---	---	---	---	---	2320	3290	2780	3530	1630	1970
11	---	---	---	---	---	---	2110	3170	2540	4290	1790	1940
12	---	---	---	---	---	---	2220	2860	1950	4530	1560	1940
13	---	---	---	---	---	---	2930	2910	2240	4560	1480	2330
14	---	---	---	---	---	---	3110	3080	2950	4060	1550	3150
15	---	---	---	---	---	---	3480	2960	4290	4110	1530	4190
16	---	---	---	---	---	---	4420	3260	4280	4080	1510	6380
17	---	---	---	---	---	---	5080	3840	3780	4630	1420	7450
18	---	---	---	---	---	---	5000	3290	3590	4730	1490	6160
19	---	---	---	---	---	---	4360	3510	2670	4680	1530	4980
20	---	---	---	---	---	---	4550	3090	2430	4120	1610	3710
21	---	---	---	---	---	---	2990	3090	2760	3690	1590	3550
22	---	---	---	---	---	---	3770	2710	3030	3390	1560	3330
23	---	---	---	---	---	---	3670	2240	3080	3510	1830	2680
24	---	---	---	---	---	---	3610	2340	2540	3520	2090	2440
25	---	---	---	---	---	---	4040	2420	2230	3480	2090	2380
26	---	---	---	---	---	---	4350	2710	2040	3210	2290	2670
27	---	---	---	---	---	---	5910	2750	1770	3430	2310	3390
28	---	---	---	---	---	---	6220	2830	1900	3160	2170	3970
29	---	---	---	---	---	---	7420	2990	2230	3400	1990	4490
30	---	---	---	---	---	---	6920	3800	2650	2940	2360	4070
31	---	---	---	---	---	---	---	4270	---	3080	2710	---
TOTAL	---	---	---	---	---	---	111500	111550	88460	106070	60160	102390
MEAN	---	---	---	---	---	---	3717	3598	2949	3422	1941	3413
MAX	---	---	---	---	---	---	7420	6820	4530	4730	2810	7450
MIN	---	---	---	---	---	---	1960	2240	1770	2070	1420	1940
CFSM	---	---	---	---	---	---	.91	.88	.72	.84	.48	.84
IN.	---	---	---	---	---	---	1.02	1.02	.81	.97	.55	.94

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1994, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992	1993	1994	1988	1989	1990	1991	1992	1993	1994
MEAN	1557	3480	2517	2104	1988	3163	3758	3920	3509	2083	1784	2316		
MAX	1795	5144	3448	2275	2024	3578	5622	4850	5712	3422	1941	3413		
(WY)	1989	1989	1989	1989	1990	1990	1989	1990	1989	1994	1994	1994		
MIN	1320	1815	1586	1933	1952	2747	1936	3312	1343	1423	1542	1441		
(WY)	1990	1990	1990	1990	1989	1989	1990	1989	1988	1988	1989	1989		

SUMMARY STATISTICS

FOR 1994 WATER YEAR
(APRIL TO SEPTEMBER)

WATER YEARS 1988 - 1994

ANNUAL MEAN		2750	
HIGHEST ANNUAL MEAN		3049	1989
LOWEST ANNUAL MEAN		2450	1990
HIGHEST DAILY MEAN	7450	Sep 17	10400 May 18 1990
LOWEST DAILY MEAN	1420	Aug 17	1080 Aug 3 1988
ANNUAL SEVEN-DAY MINIMUM	1500	Aug 13	1130 Oct 2 1989
ANNUAL RUNOFF (CFSM)			.68
ANNUAL RUNOFF (INCHES)			9.18
10 PERCENT EXCEEDS	4600		5070
50 PERCENT EXCEEDS	2930		2070
90 PERCENT EXCEEDS	1890		1350

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04067651 MENOMINEE RIVER, AT MOUTH, AT MARINETTE, WI--CONTINUED

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3740	3110	2500	2730	1970	2020	3090	4420	6360	2480	1640	2840
2	3420	2660	2360	2420	2020	1920	3110	4420	5800	2260	1550	2930
3	2540	2610	2500	1820	2020	1760	3090	4250	5370	2090	1940	2170
4	3090	2770	2510	1890	2020	1970	2650	4290	4850	1900	2190	3070
5	3320	2650	2480	2260	1810	2280	2490	3470	3700	1780	2360	2830
6	2810	2710	2440	1890	1610	2120	2510	3340	3790	1810	2430	4160
7	2720	2190	2420	2170	1760	2180	2460	3920	3770	2030	2110	3090
8	3050	2340	2430	2430	1860	2280	2440	3720	3690	1920	2550	2830
9	2620	2140	2080	1970	1970	2180	2440	4060	3700	1900	2340	2940
10	1830	2200	2140	1620	1920	2280	2500	5160	3220	1890	2500	2920
11	2500	1860	1650	1720	1760	2380	2390	6010	3160	1860	2890	3060
12	2030	2100	1730	2050	1740	2490	2360	6580	3260	1890	2490	2860
13	1810	2110	1870	1980	1760	2540	2890	6550	3460	1860	3090	3380
14	1850	2880	2050	1910	1860	2880	3320	6450	3300	1830	4280	2530
15	1600	2370	2270	1950	1920	4040	3330	6670	2960	1940	5090	1970
16	1690	2250	1760	1830	1890	4610	3100	7520	2630	2510	5050	2330
17	1970	1920	2780	2010	1810	4970	3200	7890	2570	2930	3590	2530
18	3110	2430	2900	2020	1860	4920	3090	8720	2550	3290	2750	2550
19	4180	2390	2750	2020	1970	4560	4180	8340	2810	4290	3120	2310
20	4500	1830	2750	1970	1860	4510	6220	7390	2640	3950	3090	2550
21	4110	2580	2960	1970	1920	4560	5830	5950	2560	3710	3300	2330
22	4080	3310	2930	2020	2020	6110	5930	5490	2380	3030	2540	2180
23	4170	2720	2540	2020	2070	5590	5350	5360	1990	2950	3610	2360
24	4290	3060	2440	1970	2070	5490	5130	5110	1650	2890	2070	2480
25	4440	3130	2390	2050	2120	5020	4910	5340	1720	2760	2330	2430
26	4030	2320	2500	1810	2020	4450	4890	4920	1800	2540	2350	2210
27	3540	2240	2760	1860	2070	4140	4860	4840	1760	2080	2290	1870
28	3500	2310	2700	1970	2070	3830	4670	4620	1740	2190	3050	2010
29	3490	2570	2260	1860	---	3730	4950	5190	1880	2040	2880	2150
30	3460	2670	2430	1860	---	3730	4870	6410	2030	2050	3500	2430
31	2990	---	2720	1850	---	3000	---	6750	---	2000	3390	---
TOTAL	96480	74430	75000	61900	53750	108540	112250	173150	93100	74650	88360	78300
MEAN	3112	2481	2419	1997	1920	3501	3742	5585	3103	2408	2850	2610
MAX	4500	3310	2960	2730	2120	6110	6220	8720	6360	4290	5090	4160
MIN	1600	1830	1650	1620	1610	1760	2360	3340	1650	1780	1550	1870
CFSM	.76	.61	.59	.49	.47	.86	.92	1.37	.76	.59	.70	.64
IN.	.88	.68	.69	.57	.49	.99	1.03	1.58	.85	.68	.81	.72

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1995, BY WATER YEAR (WY)

	MEAN	2076	3147	2484	2068	1965	3275	3754	4336	3428	2148	1997	2375
MAX	3112	5144	3448	2275	2024	3578	5622	5585	5712	3422	2850	3413	
(WY)	1995	1989	1989	1989	1990	1990	1989	1995	1989	1994	1995	1994	
MIN	1320	1815	1586	1933	1920	2747	1936	3312	1343	1423	1542	1441	
(WY)	1990	1990	1990	1990	1995	1989	1990	1989	1988	1988	1989	1989	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR
(APRIL TO DECEMBER)

FOR 1995 WATER YEAR

WATER YEARS 1988 - 1995

ANNUAL TOTAL	826040	1089910	
ANNUAL MEAN	3004	2986	2765
HIGHEST ANNUAL MEAN			3170
LOWEST ANNUAL MEAN			1584
HIGHEST DAILY MEAN	7450	Sep 17	8720
LOWEST DAILY MEAN	1420	Aug 17	1550
ANNUAL SEVEN-DAY MINIMUM	1500	Aug 13	1790
ANNUAL RUNOFF (CFSM)	.74	.73	.68
ANNUAL RUNOFF (INCHES)	7.55	9.96	9.23
10 PERCENT EXCEEDS	4430	4920	4980
50 PERCENT EXCEEDS	2770	2530	2240
90 PERCENT EXCEEDS	1870	1860	1400

STREAMS TRIBUTARY TO LAKE MICHIGAN
04067651 MENOMINEE RIVER, AT MOUTH, AT MARINETTE, WI--CONTINUED

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2360	---	---	---	---	---	---	---	---	---	---	---
2	1880	---	---	---	---	---	---	---	---	---	---	---
3	2160	---	---	---	---	---	---	---	---	---	---	---
4	2980	---	---	---	---	---	---	---	---	---	---	---
5	3250	---	---	---	---	---	---	---	---	---	---	---
6	3710	---	---	---	---	---	---	---	---	---	---	---
7	3780	---	---	---	---	---	---	---	---	---	---	---
8	4740	---	---	---	---	---	---	---	---	---	---	---
9	5460	---	---	---	---	---	---	---	---	---	---	---
10	5670	---	---	---	---	---	---	---	---	---	---	---
11	5880	---	---	---	---	---	---	---	---	---	---	---
12	5100	---	---	---	---	---	---	---	---	---	---	---
13	4890	---	---	---	---	---	---	---	---	---	---	---
14	3710	---	---	---	---	---	---	---	---	---	---	---
15	3730	---	---	---	---	---	---	---	---	---	---	---
16	3210	---	---	---	---	---	---	---	---	---	---	---
17	3270	---	---	---	---	---	---	---	---	---	---	---
18	2620	---	---	---	---	---	---	---	---	---	---	---
19	3020	---	---	---	---	---	---	---	---	---	---	---
20	3440	---	---	---	---	---	---	---	---	---	---	---
21	3150	---	---	---	---	---	---	---	---	---	---	---
22	4380	---	---	---	---	---	---	---	---	---	---	---
23	4480	---	---	---	---	---	---	---	---	---	---	---
24	4660	---	---	---	---	---	---	---	---	---	---	---
25	5420	---	---	---	---	---	---	---	---	---	---	---
26	6450	---	---	---	---	---	---	---	---	---	---	---
27	7040	---	---	---	---	---	---	---	---	---	---	---
28	6400	---	---	---	---	---	---	---	---	---	---	---
29	6090	---	---	---	---	---	---	---	---	---	---	---
30	5740	---	---	---	---	---	---	---	---	---	---	---
31	5170	---	---	---	---	---	---	---	---	---	---	---
TOTAL	133840	---	---	---	---	---	---	---	---	---	---	---
MEAN	4317	---	---	---	---	---	---	---	---	---	---	---
MAX	7040	---	---	---	---	---	---	---	---	---	---	---
MIN	1880	---	---	---	---	---	---	---	---	---	---	---
CFSM	1.06	---	---	---	---	---	---	---	---	---	---	---
IN.	1.22	---	---	---	---	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1996, BY WATER YEAR (WY)

MEAN	2636	3147	2484	2068	1965	3275	3754	4336	3428	2148	1997	2375
MAX	4317	5144	3448	2275	2024	3578	5622	5585	5712	3422	2850	3413
(WY)	1996	1989	1989	1989	1990	1990	1989	1995	1989	1994	1995	1994
MIN	1320	1815	1586	1933	1920	2747	1936	3312	1343	1423	1542	1441
(WY)	1990	1990	1990	1990	1995	1989	1990	1989	1988	1988	1989	1989

SUMMARY STATISTICS

**FOR 1995 CALENDAR YEAR
(JANUARY TO DECEMBER)**

**FOR 1996 WATER YEAR
(OCTOBER)**

WATER YEARS 1988 - 1996

ANNUAL MEAN										2828		
HIGHEST ANNUAL MEAN										3049		1989
LOWEST ANNUAL MEAN										2450		1990
HIGHEST DAILY MEAN				8720	May 18		7040	Oct 27		10400	May 18	1990
LOWEST DAILY MEAN				1550	Aug 2		1880	Oct 2		1080	Aug 3	1988
ANNUAL SEVEN-DAY MINIMUM				1790	Jun 23		2870	Oct 1		1130	Oct 2	1989
ANNUAL RUNOFF (CFSM)										.69		
ANNUAL RUNOFF (INCHES)										9.44		
10 PERCENT EXCEEDS				5440			6340			5080		
50 PERCENT EXCEEDS				2630			4380			2280		
90 PERCENT EXCEEDS				1860			2410			1410		

STREAMS TRIBUTARY TO LAKE MICHIGAN
04067651 MENOMINEE RIVER, AT MOUTH, AT MARINETTE, WI--CONTINUED

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WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1989 to October 1995 (discontinued).

REMARKS.--Water-quality analyses by the Wisconsin State Laboratory of Hygiene.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)
OCT 1994				
12...	1100	--	1610	<2
14...	1100	--	1380	3
15...	2300	--	972	<2
20...	1015	--	6180	8
21...	1100	--	3550	8
23...	1100	--	5650	6
25...	1100	--	6680	7
27...	0815	--	3740	6
29...	1100	--	4850	6
31...	1000	--	3580	4
NOV				
01...	2200	--	2860	10
03...	0715	--	2390	5
04...	1100	--	2310	6
06...	1100	--	1990	28
07...	1630	--	875	4
09...	1100	--	1190	4
11...	1100	--	1350	<2
13...	1100	--	-318	<2
15...	1515	--	-239	2
16...	1100	--	3260	3
18...	2300	--	2090	10
19...	1100	--	2370	4
29...	1529	2570	--	4
30...	2300	2670	--	8
DEC				
01...	2300	2500	--	4
08...	0800	2430	--	3
11...	2300	--	1100	2
14...	1535	--	2140	2
18...	1100	--	2510	2
22...	1100	--	4240	3
27...	1215	--	1490	2
JAN 1995				
02...	1100	--	4180	2
09...	1100	--	993	<2
17...	1530	2010	--	2
20...	1100	1970	--	3
25...	1100	2050	--	<2
FEB				
01...	1100	1970	--	2
09...	1100	1970	--	2
15...	1130	1920	--	4
20...	1100	1860	--	14
27...	1100	2070	--	2
MAR				
07...	0858	2180	--	3
10...	1100	2280	--	<2
13...	1100	2540	--	3
15...	1510	4040	--	4
16...	0935	4610	--	6
17...	1100	4970	--	8
20...	1100	4510	--	6
25...	1100	5020	--	14
29...	1610	3730	--	6

STREAMS TRIBUTARY TO LAKE MICHIGAN
04067651 MENOMINEE RIVER, AT MOUTH, AT MARINETTE, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
APR 1995			
01...	1100	3090	4
04...	1100	2650	12
09...	1100	2440	15
11...	1500	2390	6
12...	1100	2360	4
13...	1100	2890	7
14...	1100	3320	8
15...	1100	3330	8
16...	1100	3100	8
17...	1100	3200	8
18...	1100	3090	12
19...	1100	4180	12
20...	1100	6220	12
21...	1100	5830	11
22...	1100	5930	8
23...	1100	5350	6
24...	1100	5130	6
25...	1100	4910	8
26...	1100	4890	10
27...	1100	4860	10
28...	1100	4670	11
29...	1100	4950	7
30...	1100	4870	10
MAY			
01...	1100	4420	11
02...	1100	4420	10
03...	1100	4250	6
04...	1100	4290	8
05...	1000	3470	9
05...	1100	3470	9
06...	1100	3340	9
07...	1100	3920	12
08...	1100	3720	18
09...	1100	4060	16
10...	1100	5160	15
11...	1100	6010	32
12...	1100	6580	16
13...	1100	6550	16
14...	1100	6450	20
15...	1100	6670	16
16...	1100	7520	16
17...	1100	7890	27
18...	1100	8720	16
19...	1100	8340	22
20...	1100	7390	20
21...	1100	5950	18
22...	1100	5490	18
23...	1100	5360	20
24...	1100	5110	20
25...	1100	5340	16
26...	1100	4920	18
27...	1100	4840	16
28...	1100	4620	31
29...	1100	5190	26
30...	1100	6410	18
31...	1100	6750	12
JUN			
01...	1100	6360	14
02...	1100	5800	14
03...	1100	5370	18
04...	1100	4850	12
05...	1100	3700	10
06...	1100	3790	8
07...	1100	3770	8
08...	1100	3690	25
09...	1100	3700	33
10...	1100	3220	18
11...	1100	3160	36
12...	1100	3260	18
13...	1100	3460	10
14...	1100	3300	9
15...	1100	2960	12
16...	1100	2630	8
17...	1100	2570	9
18...	1100	2550	10
19...	1100	2810	10
20...	1100	2640	8
21...	1100	2560	10
22...	1100	2380	4
23...	1100	1990	8
24...	1100	1650	5
25...	1100	1720	7

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04067651 MENOMINEE RIVER, AT MOUTH, AT MARINETTE, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEED (MG/L) (00530)
JUN 1995				
26...	1100	1800		11
27...	1100	1760		12
28...	1100	1740		9
29...	1100	1880		8
30...	1100	2030		5
JUL				
01...	1100	2480		8
02...	1100	2260		12
03...	1100	2090		10
04...	1100	1900		9
05...	1100	1780		9
06...	1100	1810		6
07...	1100	2030		6
07...	1210	2030		4
08...	1100	1920		12
10...	1100	1890		7
11...	1100	1860		8
12...	1100	1890		6
13...	1100	1860		7
13...	1426	1860		8
14...	1100	1830		5
15...	1100	1940		8
16...	1100	2510		12
17...	1100	2930		18
18...	1100	3290		10
19...	1100	4290		20
19...	1450	4290		16
20...	1100	3950		14
21...	1100	3710		10
22...	1100	3030		9
23...	1100	2950		7
24...	1100	2890		6
25...	1100	2760		6
26...	1100	2540		10
27...	1101	2080		6
27...	1102	2080		8
28...	1100	2190		2
29...	1100	2040		4
30...	1100	2050		4
31...	1100	2000		4
DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEED (MG/L) (00530)
AUG 1995				
01...	1100	1640	--	6
01...	1535	1640	--	4
02...	1100	1550	--	2
03...	1100	1940	--	8
04...	1100	2190	--	2
05...	1100	2360	--	2
06...	1100	2430	--	6
07...	1100	2110	--	6
08...	1100	2550	--	4
09...	1100	2340	--	6
10...	1100	2500	--	4
11...	1100	2890	--	6
12...	1100	2490	--	6
13...	1100	--	3050	7
14...	1100	--	10200	14
15...	1100	--	6220	13
15...	1440	--	7600	8
16...	1100	--	6490	11
17...	1100	--	804	33
18...	1100	--	7470	30
19...	1100	--	5820	17
20...	1100	--	-319	13
21...	1100	--	4110	7
22...	1100	--	-2450	7
23...	1100	--	4240	4
24...	1100	--	1590	10
25...	1100	--	1510	8
26...	1100	--	2450	10
27...	1100	--	2390	18

STREAMS TRIBUTARY TO LAKE MICHIGAN

04067651 MENOMINEE RIVER, AT MOUTH, AT MARINETTE, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
AUG 1995			
28...	1100	3840	17
29...	1100	4100	13
30...	1100	2870	11
31...	1100	2820	13
SEP			
01...	1100	1810	18
02...	1100	1500	12
03...	1100	5370	16
04...	1100	1100	7
05...	1100	2440	7
06...	1100	2700	8
07...	1100	3480	22
08...	0730	4300	22
08...	1100	1990	8
09...	1100	3310	12
10...	1100	3390	16
11...	1100	2350	8
12...	1100	2980	6
13...	1100	3680	7
14...	1100	2590	9
15...	1100	1260	12
16...	1100	1250	10
17...	1100	2250	12
18...	1100	3590	8
19...	1100	1320	8
20...	1100	389	13
21...	1100	4360	16
22...	1100	2010	12
23...	1100	2550	11
24...	1100	2640	8
25...	1100	3820	6
26...	1100	1090	8
27...	1100	935	8
28...	1100	3130	5
29...	1100	1410	5
30...	1100	2820	6

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
OCT 1995			
01...	1100	1010	8
02...	1100	1690	8
03...	1100	3030	10
04...	1100	3190	8
05...	1100	4760	20
06...	1100	5120	18
07...	1100	4520	18
08...	1100	9030	10
09...	1100	5620	12
10...	1100	6490	16
11...	1100	6300	11
12...	1100	4270	12
13...	1100	5770	10
14...	1100	3470	8
15...	1100	4600	8
16...	1100	3300	9
16...	1359	2650	6
17...	1100	2160	6
18...	1100	2010	9
19...	1100	3040	10
20...	1100	2320	16
21...	1100	3560	11
22...	1100	2910	7
23...	1100	5660	12
24...	1100	5440	11
25...	1100	4060	10
26...	0715	6980	18
26...	1100	6090	11
27...	1100	7240	20
28...	1100	5650	22
29...	1000	6400	14
30...	1000	6620	7
31...	1000	4300	5

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04067651 MENOMINEE RIVER, AT MOUTH, AT MARINETTE, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
OCT 1994												
20...	0830	--	9650	268	7.8	13.5	0.91	9.8	30	13	7.1	1.6
NOV												
15...	1405	--	-1190	261	8.4	7.0	1.52	13.7	29	13	9.0	1.4
29...	1330	2570	--	293	8.4	0.0	1.83	14.3	31	13	10	1.3
DEC												
14...	1330	--	2200	305	--	0.0	--	15.1	33	15	9.6	1.6
JAN 1995												
17...	1330	2010	--	280	7.9	0.5	--	12.4	29	13	12	1.7
FEB												
15...	0845	1920	--	--	--	--	--	--	32	15	13	2.1
15...	1259	1920	--	--	--	--	--	--	32	15	13	1.9
15...	1300	1920	--	289	8.0	0.0	--	13.7	32	15	13	1.9
MAR												
07...	0920	2180	--	--	--	--	--	--	30	14	12	1.5
15...	1400	4040	--	240	7.9	0.5	--	12.6	25	11	9.6	2.4
16...	0830	4610	--	238	7.7	0.0	1.10	12.6	25	11	8.8	2.3
29...	1425	3730	--	232	7.8	3.5	1.52	13.6	23	11	5.8	1.7
APR												
11...	1330	2390	--	241	8.1	4.0	1.52	13.6	26	12	7.9	1.5
MAY												
05...	0835	3470	--	218	8.1	11.0	1.22	11.5	--	--	--	--
23...	1330	5360	--	180	7.5	16.0	1.07	9.6	--	--	--	--
31...	1430	6750	--	213	7.6	17.5	0.91	9.7	--	--	--	--
AUG												
15...	1330	--	3650	256	7.7	24.0	1.22	7.4	26	11	10	1.6

DATE	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L) (00535)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	CHLORO- PHYLL A TRICHR. UNCORR. WHOLE TOTAL (UG/L) (32210)
OCT 1994												
20...	13	8.0	8.0	8	7	0.078	0.027	0.60	0.048	0.005	0.02	3.83
NOV												
15...	14	8.5	7.6	2	2	0.117	0.027	0.40	0.020	0.005	0.02	2.00
29...	16	9.0	8.2	2	6	0.155	0.027	0.40	0.020	0.002	0.01	2.00
DEC												
14...	18	8.3	9.1	3	2	0.213	0.00	0.40	0.030	0.009	0.03	1.09
JAN 1995												
17...	18	9.0	9.7	3	3	0.250	0.044	0.30	0.020	0.010	0.03	0.578
FEB												
15...	21	9.7	11	2	2	0.309	0.069	0.40	0.030	0.013	0.04	1.06
15...	21	9.7	11	2	0	0.305	0.047	0.30	0.020	0.012	0.04	1.06
15...	21	9.7	11	2	<2	0.305	0.047	0.30	0.020	0.012	0.04	1.06
MAR												
07...	21	9.7	10	4	4	0.301	0.032	0.50	0.040	0.017	0.05	1.06
15...	16	8.3	8.5	6	6	0.329	0.111	0.70	0.075	0.031	0.09	2.85
16...	15	7.5	8.3	10	6	0.290	0.135	0.80	0.076	0.021	0.06	5.24
29...	12	5.3	7.6	6	4	0.235	0.035	0.60	0.030	0.004	0.01	3.07
APR												
11...	14	7.3	6.6	6	4	0.151	<0.027	0.50	0.030	0.003	0.01	6.15
MAY												
05...	12	5.4	3.5	7	5	0.020	<0.027	0.60	0.037	--	--	9.00
23...	--	4.5	5.1	10	--	0.081	<0.027	0.70	0.040	<0.002	--	5.71
31...	--	5.2	5.2	12	--	0.125	<0.027	0.80	0.060	0.007	0.02	6.09
AUG												
15...	16	7.1	7.2	8	5	0.062	<0.027	0.40	0.042	0.013	0.04	6.78

STREAMS TRIBUTARY TO LAKE MICHIGAN
04067651 MENOMINEE RIVER, AT MOUTH, AT MARINETTE, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)
OCT 1995									
11...	1305	7140	251	7.8	13.0	0.91	10.3	5.9	8.4
11...	1515	6840	243	7.7	13.0	0.91	10.4	5.9	8.5

DATE	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- ORTHOPHOS- PHATE, ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	CHLORO- PHYLL A TRICHR. UNCORR. TOTAL (UG/L) (32210)
OCT 1995							
11...	11	0.085	<0.027	0.60	0.049	0.011	5.88
11...	12	0.112	<0.027	0.60	0.049	0.014	5.99

04069500 PESHTIGO RIVER AT PESHTIGO, WI

LOCATION.--Lat 45°02'49", long 87°44'40", in NE 1/4 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.--Estimated daily discharges: Ice-affected period, Jan. 1 to Mar. 17. Records good except those for ice-affected period, which is poor (see page 11). Diurnal fluctuation caused by two powerplants upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1920	1000	1000	400	450	330	733	1010	1390	342	380	435
2	1580	949	860	300	480	360	841	1210	1470	422	296	261
3	1790	889	916	270	400	360	634	941	1070	359	490	301
4	1590	745	734	330	420	370	491	1110	951	440	444	366
5	1430	937	863	400	440	410	577	1000	686	400	484	375
6	1030	875	941	380	400	340	537	1030	868	446	515	436
7	1060	720	798	370	400	370	516	734	773	395	445	333
8	961	936	596	390	420	370	655	837	1080	427	516	482
9	706	741	678	380	380	400	634	1170	887	471	473	328
10	725	691	612	350	370	390	585	1710	815	431	488	360
11	762	673	431	450	430	500	668	1610	796	333	539	275
12	725	763	427	400	430	520	679	1670	943	353	566	358
13	755	722	567	440	340	700	1090	1750	889	361	587	358
14	733	830	421	400	350	660	1100	1740	719	367	673	374
15	650	807	538	370	400	900	1130	1870	652	370	1170	314
16	674	853	558	370	350	1300	1060	1990	475	412	1020	315
17	695	784	604	450	390	1600	993	1710	577	513	687	273
18	1450	663	569	410	370	1300	1010	1550	387	476	862	241
19	1720	592	521	410	400	1250	1810	1320	371	459	850	500
20	1630	649	437	390	400	1260	2190	1110	651	465	803	752
21	1660	823	603	380	390	1880	2380	1190	556	608	673	642
22	1610	1370	567	380	370	2080	2220	1070	417	547	606	517
23	1640	1020	576	380	390	1890	2140	1140	369	551	491	534
24	1680	915	559	450	430	1680	1930	949	411	487	573	528
25	1640	843	576	450	350	1560	1740	1120	301	428	454	537
26	1490	679	564	480	400	1200	1580	1010	251	388	327	344
27	1360	742	542	430	380	1050	1650	989	233	265	579	520
28	1270	956	558	430	380	977	1290	1110	389	297	496	371
29	1260	1130	570	450	---	1050	1430	1220	475	286	583	368
30	1070	827	567	370	---	888	1310	1390	380	222	505	466
31	933	---	580	380	---	913	---	1490	---	317	748	---
TOTAL	38199	25124	19333	12240	11110	28858	35603	39750	20232	12638	18323	12264
MEAN	1232	837	624	395	397	931	1187	1282	674	408	591	409
MAX	1920	1370	1000	480	480	2080	2380	1990	1470	608	1170	752
MIN	650	592	421	270	340	330	491	734	233	222	296	241
CFSM	1.14	.78	.58	.37	.37	.86	1.10	1.19	.62	.38	.55	.38
IN.	1.32	.87	.67	.42	.38	.99	1.23	1.37	.70	.44	.63	.42

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 1995, BY WATER YEAR (WY)

	MEAN	801	916	644	540	541	1082	2050	1492	1051	646	595	759
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	1988	1957	1989	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1953 - 1995	
ANNUAL TOTAL	298291		273674			
ANNUAL MEAN	817		750		927	
HIGHEST ANNUAL MEAN					1559	
LOWEST ANNUAL MEAN					591	
HIGHEST DAILY MEAN	3030		2380		9600	
LOWEST DAILY MEAN	258		222		84	
ANNUAL SEVEN-DAY MINIMUM	319		295		172	
INSTANTANEOUS PEAK FLOW			2710		(a) 9790	
INSTANTANEOUS PEAK STAGE			5.76		11.59	
ANNUAL RUNOFF (CFSM)	.76		.69		.86	
ANNUAL RUNOFF (INCHES)	10.27		9.43		11.66	
10 PERCENT EXCEEDS	1500		1490		1830	
50 PERCENT EXCEEDS	679		577		675	
90 PERCENT EXCEEDS	416		360		350	

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

REMARKS.--Estimated daily discharges: Ice-affected periods, Nov. 25 to Dec. 2, and Dec. 8 to Mar. 21. Records good except those for ice-affected periods, which are fair (see page 11). Gage-height telemeter at station.

- Gage height, 2.82 ft
- Backwater from ice
- From floodmarks, caused by a failure of a dam at Pulcifer 4 mi above station
- Flow retarded by anchor ice above station

STREAMS TRIBUTARY TO LAKE MICHIGAN
04071795 PENSAAKKEE RIVER NEAR KRAKOW, WI
(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

75

LOCATION.--Lat 44°45'09", long 88°16'35", in SW 1/4 SE 1/4 sec.2, T.26 N., R.18 E., Shawano County, Hydrologic Unit 04030103, on left bank downstream from bridge on Nichols Road, 0.4 mi west of intersection of Nichols Road and Green Valley Road, and 2 mi from intersection of Angelica Street and Highway 32, in Krakow.

DRAINAGE AREA.--35.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1993 to September 1995 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 770 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Mar. 13 to Apr. 25, July 1-6, July 13 to August 10, and ice-affected period, Nov. 28 to Mar. 12. Records fair except those for estimated daily discharges, which are poor (see page 11).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	3.9	12	.50	.85	.66	13	11	7.6	3.7	.00	55
2	6.1	3.6	12	.40	.80	.66	12	9.9	5.4	2.1	.00	25
3	5.3	3.6	14	.35	.60	.70	12	9.0	4.0	1.0	.00	14
4	4.4	3.6	15	.30	.50	.80	11	8.6	2.9	.45	.00	8.2
5	4.1	3.6	12	.33	.40	.74	10	8.3	2.1	.27	.00	4.9
6	4.0	3.4	10	.35	.42	.70	9.5	7.6	1.7	.15	.03	3.6
7	3.9	3.3	8.5	.35	.44	.70	10	7.0	4.3	.05	.02	3.2
8	3.9	3.4	7.5	.34	.46	.68	12	6.9	5.0	.00	.02	3.1
9	3.8	3.4	6.6	.35	.47	.68	13	14	3.4	.00	.15	2.7
10	3.8	3.2	5.6	.36	.46	.68	13	19	7.8	.00	1.2	2.3
11	3.5	3.1	3.5	.38	.44	3.5	13	16	17	.04	10	2.1
12	4.0	3.3	2.4	.50	.45	12	34	13	13	.55	18	1.8
13	3.3	3.4	1.8	.60	.45	170	44	11	7.3	.60	19	1.7
14	2.9	5.1	1.4	.54	.50	75	34	21	4.3	.68	28	1.5
15	3.1	5.8	1.4	.50	.52	40	25	19	2.8	.70	41	1.3
16	3.4	5.3	1.5	.50	.50	36	21	14	1.8	.74	38	1.2
17	3.7	4.6	1.6	.52	.56	34	19	11	1.2	.76	28	1.2
18	7.0	4.5	1.6	.50	.90	29	33	11	.91	.80	23	1.1
19	8.3	4.5	1.6	.50	.85	27	100	8.2	.72	.70	20	1.4
20	7.4	4.3	1.6	.49	.80	35	95	7.0	.38	.50	15	2.1
21	7.0	6.0	1.6	.50	.72	120	58	6.0	.07	.35	9.3	2.8
22	6.1	7.4	1.5	.49	.72	88	45	5.4	.01	.19	7.0	2.6
23	8.0	9.1	1.5	.48	.70	50	38	5.4	.00	.06	5.3	2.0
24	8.7	7.6	1.6	.46	.70	34	29	5.6	.00	.03	4.4	1.7
25	7.8	5.8	1.6	.45	.66	26	22	5.3	.00	.02	4.5	1.6
26	6.6	6.5	1.7	.45	.62	23	16	5.0	.00	.00	4.6	1.4
27	6.0	6.5	1.8	.45	.64	20	16	4.5	.20	.00	4.4	1.3
28	5.6	9.5	1.4	.47	.70	17	16	10	.78	.00	4.0	1.3
29	5.3	16	1.1	.48	---	16	14	18	1.0	.00	3.6	1.3
30	4.9	12	1.0	.70	---	15	13	16	5.1	.00	11	1.4
31	4.3	---	.70	.80	---	14	---	11	---	.00	47	---
TOTAL	163.7	165.3	137.10	14.39	16.83	891.50	800.5	324.7	100.77	14.44	346.52	154.8
MEAN	5.28	5.51	4.42	.46	.60	28.8	26.7	10.5	3.36	.47	11.2	5.16
MAX	8.7	16	15	.80	.90	170	100	21	17	3.7	47	55
MIN	2.9	3.1	.70	.30	.40	.66	9.5	4.5	.00	.00	.00	1.1
CFSM	.15	.15	.12	.01	.02	.80	.75	.29	.09	.01	.31	.14
IN.	.17	.17	.14	.01	.02	.93	.83	.34	.10	.02	.36	.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1995, BY WATER YEAR (WY)

	1993	1994	1995	1994	1995	1994	1995	1995	1994	1995	1994	1995
MEAN	11.4	8.09	6.35	1.37	4.66	22.8	41.6	11.1	28.5	31.9	6.22	6.63
MAX	17.5	10.7	8.27	2.28	8.72	28.8	56.5	11.8	79.6	91.3	11.2	9.74
(WY)	1994	1994	1994	1994	1994	1995	1994	1994	1993	1993	1995	1993
MIN	5.28	5.51	4.42	.46	.60	16.9	26.7	10.5	2.57	.47	1.36	4.98
(WY)	1995	1995	1995	1995	1995	1994	1995	1995	1994	1995	1994	1994

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1993 - 1995
ANNUAL TOTAL	3755.91	3130.55	
ANNUAL MEAN	10.3	8.58	10.3
HIGHEST ANNUAL MEAN			12.1
LOWEST ANNUAL MEAN			8.58
HIGHEST DAILY MEAN	239	170	410
LOWEST DAILY MEAN	.12	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.35	(b) .00	(b) .00
INSTANTANEOUS PEAK FLOW		208	465
INSTANTANEOUS PEAK STAGE		(c) 15.18	17.15
INSTANTANEOUS LOW FLOW		.00	.00
ANNUAL RUNOFF (CFSM)	.29	.24	.29
ANNUAL RUNOFF (INCHES)	3.90	3.25	3.92
10 PERCENT EXCEEDS	25	20	34
50 PERCENT EXCEEDS	3.7	3.4	5.6
90 PERCENT EXCEEDS	1.1	.35	.50

(a) Also occurred June 24-26, July 8-10, and July 26 to Aug. 5 (estimated), 1995

(b) Estimated

(c) From crest-stage gage

(d) Also occurred June 23-27, July 7-11, and July 26 to Aug. 5 (estimated), 1995

STREAMS TRIBUTARY TO LAKE MICHIGAN
04071795 PENSABKEE RIVER NEAR KRAKOW, WI--CONTINUED
(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1993 to August 1995 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
OCT 1994											
04...	1420	3.8	740	8.1	11.5	11.5	765	400	97	38	12
NOV											
15...	1745	4.4	722	8.3	5.5	15.3	767	390	95	38	12
DEC											
06...	1540	10	760	8.1	0.5	15.0	762	390	95	36	12
JAN 1995											
10...	1600	0.36	593	7.6	0.5	3.5	760	750	180	74	25
MAR											
01...	1600	0.72	651	7.9	0.0	12.1	773	390	92	39	16
21...	1145	147	524	7.7	2.0	11.4	751	220	55	20	8.9
APR											
20...	0845	95	556	7.6	6.0	9.3	762	260	65	23	8.8
MAY											
09...	1635	18	644	8.4	12.5	15.8	750	350	83	35	9.3
JUL											
12...	0905	0.60	567	7.9	21.5	3.1	765	290	63	33	11

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	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)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
OCT 1994											
04...	6.2	371	304	65	29	<0.10	13	473	1.10	0.020	0.030
NOV											
15...	4.0	344	322	45	30	<0.10	8.0	456	1.30	0.020	<0.015
DEC											
06...	6.2	373	306	72	34	<0.10	9.5	485	1.10	<0.010	0.050
JAN 1995											
10...	5.8	754	618	85	61	<0.10	11	890	2.00	0.070	0.340
MAR											
01...	6.0	412	338	39	38	<0.10	11	479	2.90	0.020	0.080
21...	14	168	138	40	37	0.10	7.3	317	5.00	0.060	0.460
APR											
20...	8.5	246	202	49	28	<0.10	7.5	352	1.80	0.010	0.020
MAY											
09...	4.3	305	270	52	24	0.10	3.7	414	0.430	0.020	<0.015
JUL											
12...	2.7	301	247	8.4	27	0.10	38	395	<0.050	0.010	0.140

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 1994											
04...	0.90	0.80	0.180	0.140	0.160	110	44	--	--	38	86
NOV											
15...	0.60	0.70	0.110	0.090	0.090	120	25	10	0.20	48	82
DEC											
06...	0.80	0.90	0.080	0.070	0.070	76	33	--	--	21	80
JAN 1995											
10...	1.3	1.1	0.050	0.040	0.030	39	100	11	0.30	--	--
MAR											
01...	0.60	0.50	0.080	0.050	0.040	36	37	--	--	10	84
21...	2.7	2.5	0.350	0.300	0.240	150	31	18	1.9	36	89
APR											
20...	1.4	1.2	0.150	0.090	0.080	83	16	15	0.70	15	96
MAY											
09...	1.1	1.0	0.120	0.090	0.080	230	73	16	0.80	6	79
JUL											
12...	1.5	1.3	1.20	1.20	1.00	150	630	--	--	--	--

STREAMS TRIBUTARY TO LAKE MICHIGAN
04071858 PENSAAKKE RIVER NEAR PENSAAKKE, WI

77

LOCATION.--Lat 44°49'08", long 87°57'12", in NW 1/4 NE 1/4 sec.16, T.27 N., R.21 E., Oconto County, Hydrologic Unit 04030103, on right bank 300 ft downstream from bridge on town road, 2.8 mi downstream from Brookside Creek, 2.6 mi west of Pensaukee, 3.5 mi upstream from mouth.

DRAINAGE AREA.--134 mi².

PERIOD OF RECORD.--October 1972 to current year.

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 583.69 ft above sea level (Wisconsin Department of Transportation bench mark).

REMARKS.--Estimated daily discharges: Ice-affected period, Nov. 23 to Mar. 19. Records good except those for ice-affected period, which is poor (see page 11).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96	33	56	18	17	14	65	80	57	14	4.9	52
2	80	31	56	16	16	13	62	72	43	11	5.2	64
3	66	30	62	15	16	13	61	66	34	8.7	4.6	40
4	56	30	64	14	15	14	59	61	29	7.4	5.1	27
5	49	28	56	15	14	14	53	56	25	6.7	6.8	21
6	43	28	50	14	15	14	48	53	21	7.0	11	17
7	38	30	44	14	15	15	53	47	20	7.3	8.2	14
8	34	29	39	15	14	16	61	44	23	6.3	6.7	12
9	33	27	34	16	15	15	67	101	24	6.2	6.2	12
10	31	27	29	17	14	16	67	141	24	6.0	6.2	11
11	28	25	24	17	13	18	66	124	49	5.2	6.6	11
12	26	25	22	17	13	60	173	100	56	4.6	77	10
13	25	25	20	18	13	170	244	81	41	4.6	227	8.9
14	23	33	19	18	13	330	171	107	29	4.7	185	7.6
15	24	41	17	18	15	310	128	125	23	4.4	182	7.3
16	22	42	17	18	14	210	107	101	18	6.1	130	7.1
17	22	38	18	19	15	150	96	105	16	5.9	126	6.8
18	29	35	19	19	16	120	164	85	13	5.6	110	6.8
19	56	34	17	18	15	110	501	67	10	5.1	95	7.6
20	63	33	17	18	15	199	476	53	8.9	4.8	82	12
21	55	45	18	18	14	539	289	43	8.1	4.6	68	14
22	49	61	19	18	15	433	225	38	7.5	4.6	55	14
23	71	50	20	17	15	254	188	36	6.8	4.5	46	14
24	88	45	21	16	15	169	149	34	6.4	4.0	39	13
25	77	39	22	16	14	134	129	32	5.7	4.0	35	13
26	63	36	22	16	14	116	113	29	5.7	3.5	33	12
27	54	34	22	17	15	101	108	27	5.7	3.2	31	11
28	49	50	23	17	15	89	116	49	6.1	3.3	29	10
29	45	68	23	16	---	82	104	112	23	3.4	26	10
30	41	60	24	17	---	77	91	109	17	3.2	23	10
31	37	---	22	18	---	71	---	81	---	3.0	23	---
TOTAL	1473	1112	916	520	410	3886	4234	2259	655.9	172.9	1693.5	476.1
MEAN	47.5	37.1	29.5	16.8	14.6	125	141	72.9	21.9	5.58	54.6	15.9
MAX	96	68	64	19	17	539	501	141	57	14	227	64
MIN	22	25	17	14	13	13	48	27	5.7	3.0	4.6	6.8
CFSM	.35	.28	.22	.13	.11	.94	1.05	.54	.16	.04	.41	.12
IN.	.41	.31	.25	.14	.11	1.08	1.18	.63	.18	.05	.47	.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1995, BY WATER YEAR (WY)

	MEAN	57.6	85.1	49.0	25.0	41.7	243	259	118	67.7	49.6	27.5	52.2
MAX	176	327	206	97.6	231	618	657	577	384	334	141	178	
(WY)	1987	1986	1983	1973	1984	1986	1975	1973	1993	1993	1984	1984	
MIN	8.61	7.75	3.30	3.26	3.19	63.8	38.4	19.0	2.77	3.04	2.14	1.06	
(WY)	1977	1977	1990	1977	1977	1975	1990	1977	1988	1988	1989	1989	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1973 - 1995	
ANNUAL TOTAL	22770.8		17808.4			
ANNUAL MEAN	62.4		48.8		89.7	
HIGHEST ANNUAL MEAN					162	
LOWEST ANNUAL MEAN					25.2	
HIGHEST DAILY MEAN	1610	Apr 26	539	Mar 21	3700	Mar 31 1979
LOWEST DAILY MEAN	6.0	Sep 12	3.0	Jul 31	.52	Sep 22 1989
ANNUAL SEVEN-DAY MINIMUM	6.9	Sep 6	3.4	Jul 25	.64	Sep 19 1989
INSTANTANEOUS PEAK FLOW			(a) 595	Mar 21	4310	Mar 31 1979
INSTANTANEOUS PEAK STAGE			(b) 6.95	Mar 14	13.58	Mar 31 1979
ANNUAL RUNOFF (CFSM)	.47		.36		.67	
ANNUAL RUNOFF (INCHES)	6.32		4.94		9.10	
10 PERCENT EXCEEDS	128		111		202	
50 PERCENT EXCEEDS	29		24		30	
90 PERCENT EXCEEDS	11		6.7		6.0	

(a) Gage height, 5.95 ft
(b) Backwater from ice

STREAMS TRIBUTARY TO LAKE MICHIGAN

04072050 DUCK CREEK, AT SEMINARY ROAD, NEAR ONEIDA, WI

(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

(FORMERLY PUBLISHED AS DUCK CREEK AT COUNTY TRUNK HIGHWAY J NEAR ONEIDA)

LOCATION (REVISED).--Lat 44°27'57", long 88°13'082", in SW 1/4 NE 1/4 sec.17, T.23 N., R.19 E., Outagamie County, Hydrologic Unit 04030103, at town road, 2.9 mi southwest of Oneida.

PERIOD OF RECORD.--March 1993 to current year.

REMARKS.--Stage-discharge data collected at gaging station 04072150 downstream from sampling location. Concentration for organic compounds are not rounded.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
OCT 1994											
04...	1650	3.8	840	7.9	11.5	10.3	765	370	88	37	31
NOV											
*16...	0710	5.2	990	7.8	3.5	10.0	767	430	100	44	46
DEC											
07...	1110	43	975	8.1	0.5	13.6	764	450	110	42	28
JAN 1995											
*11...	1020	8.3	1380	7.5	0.5	6.1	758	620	150	60	55
MAR											
01...	1120	74	870	7.6	0.0	7.1	773	300	73	28	48
20...	1430	149	652	7.8	2.5	11.6	741	290	73	26	17
21...	1750	503	615	7.8	2.5	12.5	751	250	65	22	13
APR											
07...	0745	11	870	8.0	2.5	12.9	765	380	93	36	22
19...	1050	320	569	7.5	6.0	13.0	754	240	61	22	14
20...	1150	317	649	7.9	7.0	11.0	762	290	75	26	13
MAY											
10...	0845	37	775	8.2	11.5	9.5	747	360	89	34	22
29...	1110	222	600	8.1	13.5	--	759	300	73	28	16
30...	0920	99	714	8.1	12.5	8.6	763	320	80	29	17
JUN											
01...	1045	45	825	8.3	18.5	6.8	763	380	95	35	19
JUL											
*11...	1451	0.27	852	8.3	26.5	9.4	--	--	--	--	--

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	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)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
OCT 1994											
04...	14	300	246	100	66	0.20	6.8	524	1.20	<0.010	<0.015
NOV											
16...	6.8	393	322	79	87	0.20	1.8	604	0.940	0.010	0.030
DEC											
07...	10	403	330	100	68	<0.10	6.4	602	1.90	<0.010	0.020
JAN 1995											
11...	7.7	552	452	110	110	0.20	8.5	856	4.40	0.040	0.160
MAR											
01...	19	329	270	49	92	0.20	7.8	532	2.40	0.030	1.20
20...	9.3	234	192	64	47	0.10	6.3	402	2.00	0.050	0.350
21...	13	159	130	60	54	0.10	6.2	382	6.30	0.060	0.320
APR											
07...	6.6	312	256	96	62	0.10	1.7	541	1.70	0.010	0.030
19...	8.8	195	160	63	42	0.10	4.6	363	1.60	0.030	0.140
20...	8.5	229	188	73	45	0.10	5.8	422	3.40	0.030	0.030
MAY											
10...	5.9	300	246	73	52	0.10	1.5	489	0.560	0.020	<0.015
29...	5.7	339	278	53	40	0.10	4.7	417	1.00	0.060	0.160
30...	8.3	339	278	66	49	0.20	6.8	467	4.00	0.140	0.220
JUN											
01...	7.1	317	260	79	52	0.10	6.4	542	3.90	0.150	0.130
JUL											
11...	--	--	--	--	--	--	--	--	<0.050	<0.010	0.040

* Grab sample

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04072050 DUCK CREEK, AT SEMINARY ROAD, NEAR ONEIDA, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDEDED TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDEDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	
	OCT 1994											
04...	0.60	0.80	0.270	0.140	0.150	110	40	--	--	6	92	
NOV												
16...	0.80	0.70	0.100	0.080	0.060	66	16	12	0.20	10	71	
DEC												
07...	0.80	0.90	0.100	0.090	0.080	52	11	--	--	24	72	
JAN 1995												
11...	2.9	1.2	0.110	0.090	0.090	43	32	10	0.20	--	--	
M												
01...	3.1	2.9	0.390	0.370	0.290	150	40	16	0.40	5	95	
20...	1.4	1.4	0.140	0.100	0.090	150	59	12	1.7	35	97	
21...	2.1	2.0	0.280	0.240	0.180	100	33	15	2.2	46	94	
APR												
07...	0.80	0.90	0.050	0.030	0.030	84	48	11	--	53	90	
19...	1.2	1.3	0.150	0.270	0.180	51	24	15	1.2	70	95	
20...	1.4	1.1	0.140	0.070	0.080	74	15	15	0.70	23	94	
MAY												
10...	1.2	1.1	0.100	0.090	0.080	120	43	--	--	7	93	
29...	1.4	1.2	0.180	0.140	0.140	87	63	18	1.0	56	99	
30...	1.6	1.4	0.180	0.150	0.150	87	38	--	--	19	98	
JUN												
01...	1.5	1.3	0.130	0.090	0.100	62	49	--	--	--	--	
JUL												
11...	1.3	0.90	0.450	0.370	0.370	--	--	--	--	13	99	
DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	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)	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)	
MAY 1995												
10...	0845	37	0.034	E0.005	<0.007	0.090	<0.013	<0.008	<0.046	<0.013	<0.005	
29...	1110	222	0.220	0.020	<0.007	0.690	<0.013	E0.005	E0.013	<0.013	<0.005	
30...	0920	99	1.60	0.210	<0.007	1.70	<0.013	E0.004	<0.046	E0.024	<0.005	
JUN												
01...	1045	45	0.450	0.120	<0.007	1.60	<0.013	<0.008	<0.046	<0.013	<0.005	
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)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DIAZ- INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)
MAY 1995												
10...	0.031	<0.004	E0.030	<0.008	126	<0.008	<0.060	0.019	<0.013	<0.012	<0.008	
29...	0.190	E0.001	E0.058	<0.008	125	<0.008	<0.060	0.045	<0.013	<0.012	<0.008	
30...	1.70	E0.001	E0.067	<0.008	116	<0.008	<0.060	0.091	<0.013	<0.012	<0.008	
JUN												
01...	1.10	<0.004	E0.098	<0.008	128	<0.008	<0.060	0.050	<0.013	<0.012	<0.008	
DATE		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)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	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)	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)	
MAY 1995												
10...	107	<0.011	<0.039	<0.014	0.130	<0.038	<0.035	<0.012	<0.007	<0.010		
29...	108	<0.011	<0.039	<0.014	5.20	<0.038	<0.035	<0.012	<0.007	<0.010		
30...	101	<0.011	<0.039	<0.014	20.0	<0.038	<0.035	<0.012	<0.007	<0.010		
JUN												
01...	106	<0.011	<0.039	<0.014	E5.20	<0.038	<0.035	<0.012	<0.007	<0.010		

STREAMS TRIBUTARY TO LAKE MICHIGAN
04072050 DUCK CREEK, AT SEMINARY ROAD, NEAR ONEIDA, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	P, P' DDE DISSOLV (UG/L) (34653)	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)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)
MAY 1995										
10...	<0.022	<0.009	<0.016	<0.018	<0.010	<0.011	<0.008	<0.009	<0.016	<0.006
29...	<0.022	<0.009	<0.016	<0.018	<0.010	0.058	<0.008	<0.009	<0.016	<0.006
30...	<0.022	<0.009	<0.016	<0.018	<0.010	0.013	E0.007	<0.009	<0.016	<0.006
JUN										
01...	<0.022	<0.009	<0.016	<0.018	<0.010	<0.011	E0.006	<0.009	<0.016	<0.006

DATE	PROP- CHLOR, WATER, DISS, REC (UG/L) (04024)	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)	TERBUTH YLAZINE SURROGT WAT FLT 0.7 U GF, REC PERCENT (91064)	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)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)
MAY 1995										
10...	<0.015	0.014	<0.015	<0.030	<0.012	107	<0.008	<0.008	<0.012	<0.006
29...	<0.015	0.031	<0.015	<0.030	<0.012	102	<0.008	<0.008	<0.012	<0.006
30...	<0.015	0.027	<0.015	<0.030	<0.012	96.5	<0.008	<0.008	<0.012	<0.006
JUN										
01...	<0.015	0.040	<0.015	<0.030	<0.012	107	<0.008	<0.008	<0.012	<0.006

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04072150 DUCK CREEK NEAR HOWARD, WI

LOCATION.--Lat 44°32'01", long 88°07'46", in SW 1/4 sec.19, T.24 N., R.20 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.--Estimated daily discharges: Ice-affected periods, Nov. 23, 24, 26, Nov. 28 to Dec. 1, Dec. 6 to Mar. 18. Records fair except for ice-affected periods, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	4.1	11	4.6	3.5	2.4	37	36	44	.00	.00	6.1
2	6.1	3.8	10	4.1	3.3	2.2	35	33	33	.00	.00	5.2
3	5.4	3.9	11	3.8	3.1	2.4	34	29	25	.00	.00	4.0
4	4.4	4.0	14	3.5	2.9	2.7	32	27	19	.00	.00	3.2
5	4.2	4.0	18	3.8	2.8	2.5	28	23	14	.20	.00	2.5
6	4.3	4.4	16	3.5	3.0	2.4	25	21	11	.31	.00	2.6
7	3.7	4.3	14	3.4	2.8	2.5	23	18	12	.10	.00	3.6
8	3.6	4.4	11	3.3	2.7	2.5	24	17	26	.00	.00	3.0
9	3.7	4.6	9.0	3.2	3.0	2.2	24	27	28	.00	.00	2.2
10	3.6	4.4	7.4	3.6	3.0	2.9	24	44	23	.00	.00	1.8
11	3.6	4.7	6.6	3.9	2.6	2.0	25	54	20	.00	.00	1.6
12	3.8	4.8	5.8	4.3	2.7	100	47	48	18	.00	8.1	1.6
13	3.7	4.8	5.4	4.7	2.6	200	120	44	16	.00	5.6	1.6
14	3.7	5.4	5.0	4.5	2.8	160	86	131	11	.00	9.7	1.4
15	3.7	5.1	5.0	4.2	3.0	100	61	153	7.7	.00	16	1.2
16	3.7	5.2	5.0	4.5	2.8	76	48	81	6.3	.00	16	1.5
17	3.3	5.7	5.2	4.8	3.0	62	41	55	5.2	.00	15	1.1
18	3.9	5.8	5.2	4.4	3.0	56	62	41	4.4	.00	30	1.0
19	3.8	5.9	5.2	4.5	2.9	61	303	33	3.9	.00	33	1.8
20	3.6	5.6	5.0	4.5	2.7	136	301	28	3.5	.00	21	3.8
21	3.5	7.5	5.2	4.4	2.4	444	143	23	3.2	.00	10	2.6
22	4.0	7.5	5.4	4.2	2.6	369	101	19	2.7	.00	6.2	2.2
23	5.7	11	5.6	4.0	2.8	170	84	16	2.0	.00	4.7	2.3
24	6.4	9.4	5.8	3.8	2.6	105	68	14	1.1	.00	5.2	2.5
25	10	7.3	6.0	3.7	2.5	77	55	12	1.2	.00	5.1	2.6
26	8.2	7.0	5.8	3.6	2.6	64	47	11	.91	.00	5.0	2.5
27	7.4	6.3	5.6	3.4	2.7	56	44	10	.64	.00	4.8	2.3
28	5.9	7.4	5.6	3.3	2.7	49	46	23	.23	.00	4.2	2.1
29	5.1	8.2	5.8	3.3	---	45	48	79	.14	.00	4.3	2.2
30	4.6	9.4	5.8	3.3	---	43	42	95	.28	.00	12	2.0
31	4.0	---	5.2	3.6	---	40	---	66	---	.00	7.1	---
TOTAL	148.2	175.9	236.6	121.7	79.1	2457.7	2058	1311	343.40	0.61	223.00	74.1
MEAN	4.78	5.86	7.63	3.93	2.82	79.3	68.6	42.3	11.4	.020	7.19	2.47
MAX	10	11	18	4.8	3.5	444	303	153	44	.31	33	6.1
MIN	3.3	3.8	5.0	3.2	2.4	2.2	23	10	.14	.00	.00	1.0
CFSM	.04	.05	.07	.04	.03	.73	.64	.39	.11	.00	.07	.02
IN.	.05	.06	.08	.04	.03	.85	.71	.45	.12	.00	.08	.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1995, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992	1993	1994	1995
MEAN	9.85	46.9	28.3	4.44	7.60	146	177	45.5
MAX	25.8	207	93.5	9.28	30.1	250	318	109
(WY)	1994	1993	1993	1992	1994	1991	1994	1990
MIN	.26	1.81	.59	.11	.51	77.2	9.40	2.79
(WY)	1989	1990	1990	1990	1989	1994	1990	1988

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1988 - 1995
ANNUAL TOTAL	17000.8	7229.31	
ANNUAL MEAN	46.6	19.8	54.7
HIGHEST ANNUAL MEAN			123
LOWEST ANNUAL MEAN			19.8
HIGHEST DAILY MEAN	2600	444	3690
LOWEST DAILY MEAN	1.3	.00	.00
ANNUAL SEVEN-DAY MINIMUM	1.4	.00	.00
INSTANTANEOUS PEAK FLOW		(b)505	(c)4520
INSTANTANEOUS PEAK STAGE		(d)15.41	(e)21.00
ANNUAL RUNOFF (CFSM)	.43	.18	.51
ANNUAL RUNOFF (INCHES)	5.86	2.49	6.88
10 PERCENT EXCEEDS	105	48	103
50 PERCENT EXCEEDS	6.0	4.6	6.3
90 PERCENT EXCEEDS	1.9	.00	.02

(a) Also occurred July 8 to Aug. 11

(b) Gage height, 13.83 ft

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

(d) Backwater from ice

(e) Estimated from floodmarks

STREAMS TRIBUTARY TO LAKE MICHIGAN
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 to September 1995.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

		DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	
APR 1995													
*19...	0925	300	674	8.1	6.5	11.1	754	300	74	28	17	6.9	
*19...	1610	376	615	7.9	8.0	11.4	756	270	68	24	15	7.7	
*20...	1429	278	619	7.8	7.5	11.0	762	280	71	25	14	8.8	
MAY													
*0...	1300	50	815	8.3	11.0	9.6	747	390	96	37	23	5.3	
16...	1035	81	663	7.7	15.0	11.1	754	--	--	--	--	--	
*28...	0940	18	--	7.9	--	--	--	340	81	34	23	5.1	
*28...	1500	27	726	7.9	15.0	18.1	754	340	81	34	24	5.0	
*29...	0605	194	776	8.0	13.5	10.3	759	350	84	33	26	5.6	
*29...	1200	79	763	8.3	13.5	--	759	340	83	33	25	5.5	
29...	1205	79	763	7.8	13.5	19.6	759	--	--	--	--	--	
*29...	1615	92	692	8.3	14.0	--	--	310	75	30	23	5.9	
29...	1620	92	692	--	14.0	--	--	--	--	--	--	--	
*30...	0425	101	645	8.2	12.5	8.7	749	290	70	27	18	5.7	
*30...	1410	92	650	8.3	17.5	10.4	765	300	72	28	17	8.3	
30...	1415	92	--	--	17.5	--	765	--	--	--	--	--	
JUN													
*01...	1515	42	766	8.3	20.5	10.1	764	350	88	32	19	7.4	
*07...	1330	12	795	8.3	24.0	8.3	753	370	90	35	21	6.4	
JUL													
*11...	0915	0.0	<744	7.8	22.0	5.2	767	320	67	37	26	7.0	
SEP													
*06...	1445	2.5	869	8.3	24.0	12.0	740	380	91	37	34	12	
DATE		BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	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)	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)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)
APR 1995													
19...	246	--	202	74	45	0.10	3.0	418	40	35	13	1.9	
19...	212	--	174	68	43	0.10	4.0	395	70	29	14	2.2	
20...	220	--	180	68	44	0.10	5.7	391	60	16	13	1.1	
MAY													
10...	332	--	272	74	54	0.10	1.2	505	130	47	--	--	
16...	--	--	--	--	--	--	--	--	--	--	--	--	
28...	347	--	284	58	50	0.20	1.7	478	83	87	14	0.80	
28...	342	--	280	55	50	0.20	2.4	476	60	80	14	0.80	
29...	327	--	268	64	56	0.20	4.1	491	65	53	16	1.4	
29...	--	--	--	66	54	0.20	4.4	492	52	43	--	--	
29...	--	--	--	--	--	--	--	--	--	--	--	--	
29...	366	--	300	56	47	0.20	4.3	443	57	31	--	--	
29...	--	--	--	--	--	--	--	--	--	--	--	--	
30...	322	--	264	51	40	0.10	5.0	415	67	17	--	--	
30...	303	--	248	60	45	0.20	5.8	412	76	25	--	--	
30...	--	--	--	--	--	--	--	--	--	--	--	--	
JUN													
01...	298	--	244	71	50	0.20	6.2	509	48	26	--	--	
07...	329	--	270	67	52	0.20	6.7	501	37	66	14	0.90	
JUL													
11...	312	--	256	28	60	0.20	21	453	51	140	--	--	
SEP													
06...	281	14	254	120	68	0.20	5.6	550	33	49	12	1.0	

* Equal-width increment (EWI) sample

** Grab sample

STREAMS TRIBUTARY TO LAKE MICHIGAN
04072150 DUCK CREEK NEAR HOWARD, WI--CONTINUED
WATER-QUALITY DATA, OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDEED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
APR 1995												
18...	1259	45	1.00	0.010	<0.015	1.1	1.0	0.070	0.020	0.010	19	93
19...	0244	158	1.30	0.020	0.070	1.3	1.0	0.220	0.090	0.090	76	96
19...	0914	300	2.50	0.030	0.070	1.4	1.3	0.200	0.190	0.100	77	92
*19...	0925	300	1.10	0.020	0.080	1.3	1.0	0.200	0.070	0.070	75	95
19...	1609	376	1.40	0.020	0.130	1.4	1.2	0.210	0.110	0.090	84	93
19...	1610	376	1.30	0.020	0.130	1.7	1.2	0.290	0.110	0.090	126	94
19...	2005	388	1.50	0.020	0.110	1.5	1.1	0.240	0.110	0.100	80	94
20...	0914	326	1.10	0.020	0.080	1.3	1.0	0.200	0.070	0.070	40	96
20...	1428	278	2.70	0.040	0.060	1.5	1.2	0.200	0.110	0.090	33	90
*20...	1429	278	2.80	0.030	0.050	1.3	1.1	0.160	0.090	0.090	30	95
21...	0914	145	2.50	<0.010	0.020	1.2	1.0	0.100	0.030	0.030	17	86
22...	0914	103	3.20	0.020	0.040	1.2	1.1	0.120	0.070	0.060	17	100
23...	0914	86	3.00	0.010	0.040	1.1	1.1	0.080	0.070	0.050	12	100
24...	0914	69	2.70	0.020	0.030	1.1	1.1	0.070	0.050	0.040	12	88
25...	0914	56	2.10	<0.010	0.020	1.0	1.0	0.040	0.030	0.030	15	95
MAY												
*10...	1300	50	0.300	0.010	<0.015	1.1	1.0	0.060	0.050	0.030	9	89
10...	1301	50	0.320	0.010	<0.015	1.3	1.0	0.120	0.050	0.030	58	78
11...	1630	55	0.300	0.010	0.040	1.2	<0.20	0.100	0.070	0.050	20	69
13...	2030	55	0.380	0.020	0.060	1.3	<0.20	0.140	0.050	0.040	50	98
14...	1415	158	0.600	0.020	0.040	1.4	<0.20	0.150	0.080	0.070	43	96
15...	1415	143	1.20	0.040	0.060	1.3	<0.20	0.180	0.130	0.110	42	97
16...	1035	81	1.10	0.030	0.030	1.2	<0.20	0.150	0.110	0.090	21	99
*28...	0940	18	0.080	<0.010	0.070	1.1	1.0	0.110	0.090	0.090	13	88
28...	0945	18	0.090	0.010	0.060	0.90	1.0	0.090	0.080	0.080	69	90
28...	1450	27	0.100	0.020	0.070	1.0	0.80	0.110	0.080	0.080	21	83
*28...	1500	27	0.090	0.010	0.060	1.1	0.90	0.120	0.080	0.090	19	88
29...	0600	194	0.290	0.030	0.100	1.2	1.0	0.170	0.100	0.100	42	93
*29...	0605	194	0.270	0.030	0.120	1.3	1.0	0.180	0.100	0.110	30	99
*29...	1200	79	0.540	0.040	0.120	1.1	1.0	0.130	0.110	0.110	29	95
29...	1205	79	0.540	0.040	0.120	1.3	1.0	0.170	0.100	0.110	33	87
*29...	1615	92	0.570	0.050	0.130	1.1	1.0	0.130	0.120	0.120	31	98
29...	1620	92	0.560	0.040	0.050	1.2	1.0	0.140	0.130	0.100	39	93
29...	1830	99	1.00	0.060	0.160	1.2	1.0	0.210	0.140	0.140	43	75
*30...	0425	101	0.970	0.050	0.160	1.3	1.1	0.200	0.120	0.130	38	99
30...	0430	101	0.930	0.060	0.160	1.2	1.1	0.150	0.130	0.130	41	57
30...	1010	99	1.40	0.080	0.210	1.3	1.3	0.190	0.140	0.140	34	84
*30...	1410	92	2.20	0.120	0.210	1.4	1.4	0.170	0.160	0.150	25	78
30...	1415	92	2.10	0.110	0.210	1.5	1.4	0.190	0.160	0.150	261	19
31...	1045	68	3.40	0.140	0.150	1.6	1.3	0.160	0.100	0.110	25	92
JUN												
01...	1045	46	3.50	0.130	0.110	1.5	1.2	0.140	0.090	0.100	--	--
*01...	1515	42	3.40	0.130	0.090	1.4	1.2	0.120	0.100	0.090	--	--
01...	1520	42	2.90	0.110	0.110	1.3	1.2	0.130	0.080	0.080	14	78
02...	1045	34	2.90	0.130	0.090	1.6	1.3	0.140	0.110	0.080	69	94
03...	1045	26	2.00	0.100	0.100	1.2	1.1	0.080	0.080	0.080	71	90
04...	1045	19	1.10	0.060	0.080	1.3	1.1	0.130	0.080	0.080	61	83
*07...	1330	12	0.260	0.030	0.030	1.2	1.1	0.170	0.120	0.100	71	93
JUL												
**11...	0915	0.0	0.160	0.010	0.060	1.3	1.1	0.390	0.330	0.340	--	--
SEP												
**06...	1445	2.5	0.140	<0.010	0.020	1.2	1.0	0.240	0.170	0.160	14	96

* Equal-width increment (EWI) sample

** Grab sample

STREAMS TRIBUTARY TO LAKE MICHIGAN
04072150 DUCK CREEK NEAR HOWARD, WI-CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	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)	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)
MAY 1995											
*10...	1300	50	E0.006	<0.009	<0.007	0.044	<0.013	<0.008	<0.046	<0.013	<0.005
10...	1301	50	E0.005	<0.009	<0.007	0.043	<0.013	<0.008	<0.046	<0.013	<0.005
*28...	0940	18	0.020	0.017	<0.007	0.110	<0.013	0.010	<0.046	<0.013	<0.005
28...	0945	18	0.013	0.010	<0.007	0.063	<0.013	E0.006	E0.010	<0.013	<0.005
*28...	1500	27	0.015	0.014	<0.007	0.090	<0.013	E0.006	E0.017	<0.013	<0.005
29...	0600	194	0.560	0.013	<0.007	0.470	<0.013	<0.008	E0.013	<0.013	<0.005
*29...	0605	194	0.660	0.015	<0.007	0.520	<0.013	E0.006	<0.046	<0.013	<0.005
*29...	1200	79	0.340	0.014	<0.007	0.350	<0.013	E0.005	E0.012	<0.013	<0.005
29...	1205	79	0.340	0.014	<0.007	0.350	<0.013	<0.008	E0.013	<0.013	<0.005
*29...	1615	92	0.460	0.014	<0.007	0.340	<0.013	<0.008	E0.013	<0.013	<0.005
29...	1620	92	0.480	0.018	<0.007	0.350	<0.013	E0.006	E0.012	<0.013	<0.005
*30...	0425	101	0.340	0.018	<0.007	1.10	<0.013	E0.005	E0.011	<0.013	<0.005
30...	0430	101	0.360	0.020	<0.007	1.10	<0.013	<0.008	E0.014	<0.013	<0.005
*30...	1410	92	1.90	0.096	<0.007	1.50	<0.013	E0.005	E0.012	E0.020	<0.005
30...	1415	92	1.70	0.090	<0.007	1.30	<0.013	<0.008	<0.046	E0.021	<0.005
JUN											
*01...	1515	42	0.550	0.120	<0.007	2.00	<0.013	E0.003	<0.046	E0.014	<0.005
01...	1520	42	0.570	0.120	<0.007	1.90	<0.013	<0.008	<0.046	E0.015	<0.005
*07...	1330	12	0.047	0.010	<0.007	0.810	<0.013	<0.008	<0.046	<0.013	<0.005

DATE	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DIAZ- INON D10 SRG WAT FLT 0.7 U GF, REC (UG/L) (91063)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)
MAY 1995											
10...	0.017	<0.004	E0.040	<0.008	123	<0.008	<0.060	0.016	<0.013	<0.012	<0.008
10...	0.018	<0.004	E0.028	<0.008	122	<0.008	<0.060	0.014	<0.013	<0.012	<0.008
28...	0.110	<0.004	E0.028	<0.008	114	<0.008	<0.060	0.013	<0.013	<0.012	<0.008
28...	0.062	<0.004	E0.041	<0.008	69.0	<0.008	<0.060	0.013	<0.013	<0.012	<0.008
28...	0.080	<0.004	E0.044	<0.008	121	<0.008	<0.060	<0.005	<0.013	<0.012	<0.008
28...	0.073	<0.004	E0.037	<0.008	124	<0.008	<0.060	<0.014	<0.013	<0.012	<0.008
29...	0.068	<0.004	E0.054	<0.008	105	<0.008	<0.060	<0.069	<0.013	<0.012	<0.008
29...	0.088	<0.004	E0.040	<0.008	109	<0.008	<0.060	0.063	<0.013	<0.012	<0.008
29...	0.076	<0.004	E0.046	<0.008	115	<0.008	<0.060	0.074	<0.013	<0.012	<0.008
29...	0.077	<0.004	E0.057	<0.008	123	<0.008	<0.060	<0.084	<0.013	<0.012	<0.008
29...	0.067	<0.004	E0.049	<0.008	116	<0.008	<0.060	<0.086	<0.013	<0.012	<0.008
29...	0.069	E0.001	E0.040	<0.008	114	<0.008	<0.060	0.072	<0.013	<0.012	<0.008
30...	0.130	<0.004	E0.060	<0.008	123	<0.008	<0.060	0.050	<0.013	<0.012	<0.008
30...	0.150	<0.004	E0.080	<0.008	120	<0.008	<0.060	<0.058	<0.013	<0.012	<0.008
30...	0.770	<0.004	E0.071	E0.007	117	<0.008	<0.060	0.045	<0.013	<0.012	<0.008
30...	0.850	E0.001	E0.097	0.009	116	<0.008	<0.060	<0.005	<0.013	<0.012	<0.008
JUN											
01...	1.30	E0.001	E0.100	<0.008	124	<0.008	<0.060	0.056	<0.013	<0.012	<0.008
01...	1.30	<0.004	E0.110	<0.008	119	<0.008	<0.060	<0.005	<0.013	<0.012	<0.008
07...	0.640	<0.004	E0.057	<0.008	105	<0.008	<0.060	0.016	<0.013	<0.012	<0.008

DATE	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)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	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)	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)
MAY 1995										
10...	106	<0.011	<0.039	<0.014	0.036	<0.038	<0.035	<0.012	<0.007	<0.010
10...	104	<0.011	<0.039	<0.014	0.037	<0.038	<0.035	<0.012	<0.007	<0.010
28...	98.9	<0.011	<0.039	<0.014	0.140	<0.038	<0.035	<0.012	<0.007	<0.010
28...	58.3	<0.011	<0.039	<0.014	0.070	<0.038	<0.035	<0.012	<0.007	<0.010
28...	106	<0.011	<0.039	<0.014	0.100	<0.038	<0.035	<0.012	<0.007	<0.010
28...	106	<0.011	<0.039	<0.014	0.110	<0.038	<0.035	<0.012	<0.007	<0.010
29...	92.8	<0.011	<0.039	<0.014	0.680	<0.038	<0.035	<0.012	<0.007	<0.010
29...	105	<0.011	<0.039	<0.014	0.950	<0.038	<0.035	<0.012	<0.007	<0.010
29...	103	<0.011	<0.039	<0.014	0.750	<0.038	<0.035	<0.012	<0.007	<0.010
29...	105	<0.011	<0.039	<0.014	0.750	<0.038	<0.035	<0.012	<0.007	<0.010
29...	99.8	<0.011	<0.039	<0.014	0.790	<0.038	<0.035	<0.012	<0.007	<0.010
29...	104	<0.011	<0.039	<0.014	0.800	<0.038	<0.035	<0.012	<0.007	<0.010
30...	103	<0.011	<0.039	<0.014	6.70	<0.038	<0.035	<0.012	<0.007	<0.010
30...	104	<0.011	<0.039	<0.014	6.10	<0.038	<0.035	<0.012	<0.007	<0.010
30...	104	<0.011	<0.039	<0.014	E10.0	<0.038	<0.035	<0.012	<0.007	<0.010
30...	99.1	<0.011	<0.039	<0.014	8.10	<0.038	<0.035	<0.012	<0.007	<0.010
JUN										
01...	105	<0.011	<0.039	<0.014	E8.30	<0.038	<0.035	<0.012	<0.007	<0.010
01...	104	<0.011	<0.039	<0.014	7.40	<0.038	<0.035	<0.012	<0.007	<0.010
07...	102	<0.011	<0.039	<0.014	1.40	<0.038	<0.035	<0.012	<0.007	<0.010

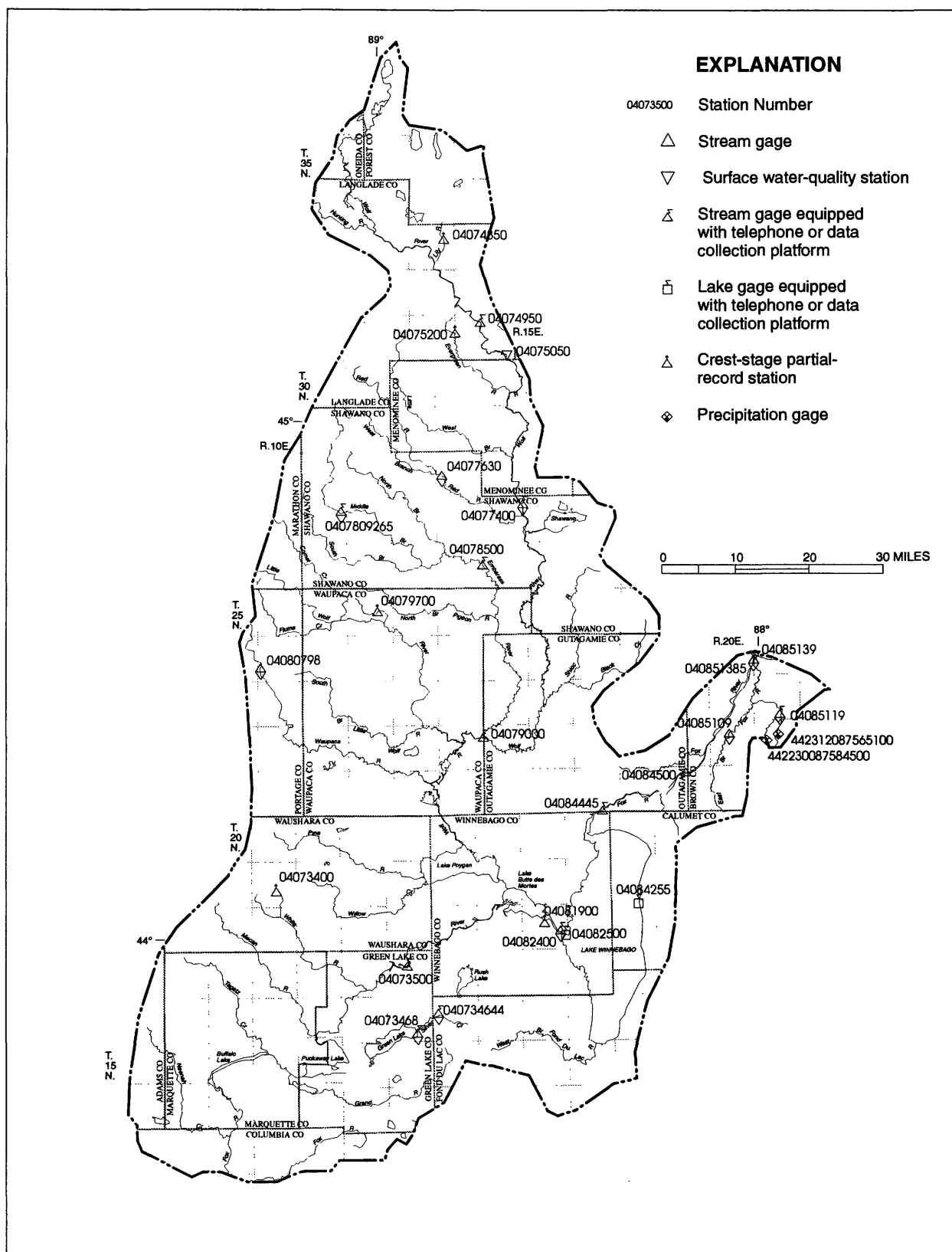
* Equal-width increment (EWI) sample

STREAMS TRIBUTARY TO LAKE MICHIGAN
04072150 DUCK CREEK NEAR HOWARD, WI--CONTINUED

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U (UG/L) (82669)	PER- METHRIN CIS WAT FLT 0.7 U (UG/L) (82687)	PENDI- METH- ALIN WAT FLT 0.7 U (UG/L) (82683)	P, P' DDE DISSOLV (UG/L) (34653)	PHORATE WATER FLTRD 0.7 U (UG/L) (82664)	PRO- METON, WATER, REC DISS, (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U (UG/L) (82676)	PRO- PANIL WATER FLTRD 0.7 U (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U (UG/L) (82685)
MAY 1995										
10...	<0.022	<0.009	<0.016	<0.018	<0.010	<0.011	E0.007	<0.009	<0.016	<0.006
10...	<0.022	<0.009	<0.016	<0.018	<0.010	<0.011	E0.006	<0.009	<0.016	<0.006
28...	<0.022	<0.009	<0.016	<0.018	<0.010	<0.011	<0.008	<0.009	<0.016	<0.006
28...	<0.022	<0.009	<0.016	<0.018	<0.010	<0.011	<0.008	<0.009	<0.016	<0.006
28...	<0.022	<0.009	<0.016	<0.018	<0.010	<0.011	<0.008	<0.009	<0.016	<0.006
28...	<0.022	<0.009	<0.016	<0.018	<0.010	<0.011	<0.008	<0.009	<0.016	<0.006
28...	<0.022	<0.009	<0.016	<0.018	<0.010	<0.011	<0.008	<0.009	<0.016	<0.006
29...	<0.022	<0.009	<0.016	<0.018	<0.010	<0.011	<0.008	<0.009	<0.016	<0.006
29...	<0.022	<0.009	<0.016	<0.018	<0.010	<0.011	E0.008	<0.009	<0.016	<0.006
29...	<0.022	<0.009	<0.016	<0.018	<0.010	<0.011	<0.008	<0.009	<0.016	<0.006
29...	<0.022	<0.009	<0.016	<0.018	<0.010	<0.011	<0.008	<0.009	<0.016	<0.006
29...	<0.022	<0.009	<0.016	<0.018	<0.010	<0.011	<0.008	<0.009	<0.016	<0.006
29...	<0.022	<0.009	<0.016	<0.018	<0.010	<0.011	<0.008	<0.009	<0.016	<0.006
29...	<0.022	<0.009	<0.016	<0.018	<0.010	<0.011	<0.008	<0.009	<0.016	<0.006
30...	<0.022	<0.009	<0.016	<0.018	<0.010	0.037	<0.008	<0.009	<0.016	<0.006
30...	<0.022	<0.009	<0.016	<0.018	<0.010	0.040	<0.008	<0.009	<0.016	<0.006
30...	<0.022	<0.009	<0.016	<0.018	<0.010	<0.011	E0.007	<0.009	<0.016	<0.006
30...	<0.022	<0.009	<0.016	<0.018	<0.010	<0.011	0.009	<0.009	<0.016	<0.006
JUN										
01...	<0.022	<0.009	<0.016	<0.018	<0.010	<0.011	E0.006	<0.009	<0.016	<0.006
01...	<0.022	<0.009	<0.016	<0.018	<0.010	<0.011	E0.006	<0.009	<0.016	<0.006
07...	<0.022	<0.009	<0.016	<0.018	<0.010	<0.011	E0.007	<0.009	<0.016	<0.006
DATE	PROP- CHLOR, WATER, DISS, REC (UG/L) (04024)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U (UG/L) (82675)	TERBUTH YLAZINE SURROGT WAT FLT 0.7 U PERCENT (91064)	THIO- BENCARB WATER FLTRD 0.7 U (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U (UG/L) (82661)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U (UG/L) (82660)
MAY 1995										
10...	<0.015	0.020	<0.015	<0.030	<0.012	109	<0.008	<0.008	<0.012	<0.006
10...	<0.015	0.019	<0.015	<0.030	<0.012	103	<0.008	<0.008	<0.012	<0.006
28...	<0.015	0.160	<0.015	<0.030	<0.012	114	<0.008	<0.008	<0.012	<0.006
28...	<0.015	0.087	<0.015	<0.030	<0.012	59.4	<0.008	<0.008	<0.012	<0.006
28...	<0.015	0.330	<0.015	<0.030	<0.012	102	<0.008	<0.008	<0.012	<0.006
28...	<0.015	0.350	<0.015	<0.030	<0.012	103	<0.008	<0.008	<0.012	<0.006
29...	<0.015	0.200	<0.015	<0.030	<0.012	88.6	<0.008	<0.008	<0.012	<0.006
29...	<0.015	0.200	<0.015	<0.030	<0.012	111	<0.008	<0.008	<0.012	<0.006
29...	<0.015	0.270	<0.015	<0.030	<0.012	98.0	<0.008	<0.008	<0.012	<0.006
29...	<0.015	0.270	<0.015	<0.030	<0.012	101	<0.008	<0.008	<0.012	<0.006
29...	<0.015	0.240	<0.015	<0.030	<0.012	95.8	<0.008	<0.008	<0.012	<0.006
29...	<0.015	0.240	<0.015	<0.030	<0.012	103	<0.008	<0.008	<0.012	<0.006
29...	<0.015	0.100	<0.015	<0.030	<0.012	101	<0.008	<0.008	<0.012	<0.006
30...	<0.015	0.110	<0.015	<0.030	<0.012	99.4	<0.008	<0.008	<0.012	<0.006
30...	<0.015	0.088	<0.015	<0.030	<0.012	107	<0.008	<0.008	<0.012	<0.006
30...	<0.015	0.086	<0.015	<0.030	<0.012	102	<0.008	<0.008	<0.012	<0.006
JUN										
01...	<0.015	0.042	<0.015	<0.030	<0.012	109	<0.008	<0.008	<0.012	<0.006
01...	<0.015	0.044	<0.015	<0.030	<0.012	105	<0.008	<0.008	<0.012	<0.006
07...	<0.015	10.0	<0.015	<0.030	<0.012	117	<0.008	<0.008	<0.012	<0.006



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

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040734644 SILVER CREEK AT SOUTH KORO ROAD NEAR RIPON, WI

LOCATION.--Lat 43°51'30", long 88°52'17" in NW 1/4 SE 1/4 sec.18, T.16 N., R.14 E., Fond du Lac County, Hydrologic Unit 04030201, on left bank at upstream side of culvert on South Koro Road, 1.8 mi west of Ripon.

DRAINAGE AREA.--36.2 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR WI-88-1: (M).

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Elevation of gage is 810 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 28 to Dec. 8 and ice-affected periods, Jan. 2-9, 24-30, and Feb. 4-14. Records good, except for estimated daily discharges, which are fair (see page 11). Approximately 1.9 ft³/s of daily flow is effluent from Ripon Wastewater Treatment Plant. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	8.4	22	7.5	6.8	4.9	42	26	24	9.7	8.2	81
2	25	8.3	18	7.0	7.1	4.9	38	24	20	9.1	7.8	65
3	23	8.0	16	6.4	6.8	5.0	34	22	17	8.7	17	52
4	21	8.3	15	5.4	5.6	4.8	27	21	15	8.2	20	41
5	18	9.0	16	4.8	5.2	5.0	23	20	14	11	13	33
6	16	13	17	4.9	5.0	5.1	23	19	15	10	9.9	28
7	14	13	15	5.0	4.8	5.4	22	18	26	10	17	29
8	12	12	13	5.0	4.6	5.0	24	22	18	8.8	13	23
9	11	12	14	5.2	4.7	5.0	23	33	17	8.3	42	20
10	11	11	10	5.7	4.9	5.6	22	43	18	8.2	28	18
11	11	10	9.5	5.9	4.1	18	32	46	17	7.7	22	17
12	9.8	9.4	8.1	6.8	3.9	55	47	46	17	7.2	16	17
13	10	10	7.7	7.0	3.9	98	48	46	16	7.2	24	17
14	9.8	13	8.2	7.0	3.8	101	48	43	14	6.9	45	16
15	8.4	11	8.0	6.8	4.1	87	42	39	13	6.8	33	14
16	8.3	11	8.6	7.2	4.3	68	35	35	12	14	36	14
17	12	11	8.8	7.4	4.2	51	31	31	11	8.1	32	15
18	12	10	8.7	7.4	4.8	39	43	27	11	7.1	27	14
19	13	9.1	8.5	7.6	5.5	31	45	23	11	6.7	31	21
20	12	10	9.1	7.2	6.4	51	46	20	9.8	6.8	27	25
21	11	13	9.0	7.1	5.9	53	47	17	9.3	6.6	24	23
22	12	11	9.1	7.2	5.8	53	43	16	8.8	6.7	20	20
23	13	10	9.1	7.2	5.8	48	37	17	8.6	7.4	17	17
24	12	11	9.4	6.8	6.1	38	34	17	7.8	10	15	15
25	11	11	9.4	6.6	5.7	30	32	16	7.5	8.4	13	16
26	11	9.1	9.3	6.6	5.4	25	29	15	8.3	7.4	12	15
27	10	18	9.7	6.4	5.7	22	34	22	11	13	18	14
28	9.3	34	11	6.2	5.9	21	33	43	11	13	42	13
29	8.7	30	9.6	6.0	---	34	30	37	11	9.6	80	12
30	8.4	25	9.1	6.4	---	41	29	35	11	7.6	91	16
31	8.6	---	11	6.9	---	43	---	30	---	7.6	90	---
TOTAL	408.3	379.6	346.9	200.6	146.8	1057.7	1043	869	410.1	267.8	890.9	721
MEAN	13.2	12.7	11.2	6.47	5.24	34.1	34.8	28.0	13.7	8.64	28.7	24.0
MAX	36	34	22	7.6	7.1	101	48	46	26	14	91	81
MIN	8.3	8.0	7.7	4.8	3.8	4.8	22	15	7.5	6.6	7.8	12
CFSM	.36	.35	.31	.18	.14	.94	.96	.77	.38	.24	.79	.66
IN.	.42	.39	.36	.21	.15	1.09	1.07	.89	.42	.28	.92	.74

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1995, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993	1994	1995
MEAN	13.6	19.1	16.7	9.67	14.2	53.2	49.2	29.4	32.8
MAX	20.6	37.3	36.1	21.5	38.1	73.1	148	70.8	123
(WY)	1994	1993	1993	1992	1994	1991	1993	1993	1993
MIN	5.49	9.37	3.88	4.66	5.24	34.1	21.0	11.6	3.84
(WY)	1989	1990	1990	1990	1995	1995	1990	1988	1988

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1987 - 1995
ANNUAL TOTAL	6729.8	6741.7	
ANNUAL MEAN	18.4	18.5	26.1
HIGHEST ANNUAL MEAN			62.3
LOWEST ANNUAL MEAN			13.4
HIGHEST DAILY MEAN	184	101	478
LOWEST DAILY MEAN	4.8	(a) 3.8	1.8
ANNUAL SEVEN-DAY MINIMUM	(a) 5.1	(a) 4.0	2.2
INSTANTANEOUS PEAK FLOW		168	545
INSTANTANEOUS PEAK STAGE		7.70	10.83
ANNUAL RUNOFF (CFSM)	.51	.51	.72
ANNUAL RUNOFF (INCHES)	6.92	6.93	9.79
10 PERCENT EXCEEDS	34	41	53
50 PERCENT EXCEEDS	10	12	15
90 PERCENT EXCEEDS	6.2	5.8	5.4

(a) Ice affected

STREAMS TRIBUTARY TO LAKE MICHIGAN
040734644 SILVER CREEK AT SOUTH KORO ROAD NEAR RIPON, 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 since April 1987.

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

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 3,330 mg/L, May 31, 1987; minimum observed, 1 mg/L, Aug. 29, 1988 and Oct. 10, 1989.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 378 tons, May 30, 1989; minimum daily, 0.00 ton, Aug. 12, 1988.

TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 5.28 mg/L, Sept. 3, 1988; minimum observed, 0.04 mg/L, Apr. 30, 1992.

TTOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 1,620 lb, May 30, 1989; Minimum daily, 2.3 Lb, Aug. 7, 1988.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 962 mg/L, Aug. 4; minimum observed, 4 mg/L, Nov. 15 and Dec. 9.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 20 tons, Aug. 9; minimum daily, 0.08 ton, Dec. 12-13.

TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 1.89 mg/L, July 27; minimum observed, 0.08 mg/L, Apr. 3, 7.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 218 lb, Mar. 13; minimum daily, 3.3 lb, Jan. 5, 6.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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)
OCT 1994					
01...	0145	--	32	0.498	147
01...	0210	--	56	0.909	447
01...	0705	--	42	0.248	44
01...	1905	--	29	0.188	14
02...	0705	--	25	0.184	16
03...	1215	--	24	0.249	7
*05...	0755	--	17	0.134	19
NOV					
*15...	1200	--	12	0.360	4
27...	1455	--	27	0.220	39
27...	1930	--	29	0.340	36
27...	2000	--	38	0.370	109
28...	0200	34	--	0.150	14
28...	0800	34	--	0.660	6
30...	0800	25	--	0.170	15
DEC					
*09...	1200	--	14	0.120	4
JAN 1995					
*25...	1035	6.6	--	0.130	16
*31...	1051	--	8.4	0.530	10
FEB					
*28...	1447	--	6.7	0.130	12
MAR					
11...	1220	--	7.2	0.192	18
11...	1345	--	11	0.219	23
11...	1530	--	29	0.657	173
11...	1640	--	49	0.946	301
11...	2015	--	36	0.512	58
12...	0815	--	22	0.455	29
12...	1035	--	30	0.477	35
12...	1235	--	62	0.804	158
12...	1610	--	87	--	168
12...	2210	--	87	0.739	85
13...	0410	--	92	0.388	61
13...	2210	--	104	0.406	45
15...	0410	--	93	0.300	26
17...	2215	--	45	0.240	10
19...	2215	--	29	0.210	11

* Equal-width increment (EWI) sample

STREAMS TRIBUTARY TO LAKE MICHIGAN

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040734644 SILVER CREEK AT SOUTH KORO ROAD NEAR RIPON, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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)
MAR					
20...	0415	--	32	0.210	19
20...	0820	--	64	0.320	62
20...	0920	--	76	0.360	92
21...	0605	--	52	0.160	13
22...	1420	--	54	0.130	12
28...	2255	--	30	0.140	15
31...	1315	--	45	0.110	8
APR					
03...	0715	--	34	0.080	10
*07...	0943	--	22	0.080	8
11...	1825	--	33	0.090	13
11...	2250	--	64	0.290	102
14...	1340	--	49	--	14
17...	1340	--	32	0.180	8
18...	1140	--	48	--	21
18...	1220	--	59	0.240	51
19...	0020	--	48	0.110	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)
------	------	---	---	--

MAY 1995

08...	1625	27	0.250	33
09...	0320	28	0.150	19
09...	0540	46	0.205	53
10...	0310	35	0.116	18
10...	1210	55	0.180	41
11...	0010	45	0.113	23
13...	1210	52	0.141	27
*19...	0750	22	0.109	15
27...	1825	23	0.275	--
27...	2015	26	--	65
27...	2045	30	0.338	--
27...	2130	40	--	106
27...	2145	51	0.701	--
27...	2205	66	--	302
27...	2230	77	0.220	--
28...	0120	60	--	66
28...	1540	39	0.154	--
29...	0340	38	--	21
30...	0340	38	0.234	--
30...	1540	36	--	17

JUN

*01...	1230	26	0.146	39
07...	0305	35	0.606	--
07...	0315	50	--	238
07...	0330	63	0.356	415
07...	0455	46	--	104
07...	0620	34	--	49
07...	1125	24	0.240	--
*12...	1125	18	0.178	22

JUL

*10...	1505	9.2	0.320	34
15...	2340	17	0.692	183
15...	2350	26	--	769
15...	2400	36	1.32	861
16...	0455	15	0.292	75
*18...	1400	7.9	0.207	21
24...	1625	21	0.889	262
24...	1635	29	1.67	612
24...	1820	20	0.582	113
27...	2105	17	0.486	168
27...	2135	41	1.46	719
27...	2200	70	1.89	870
27...	2330	38	0.503	133
28...	0140	18	0.311	74
*28...	1730	12	0.208	19

* Equal-width increment (EWI) sample

STREAMS TRIBUTARY TO LAKE MICHIGAN
040734644 SILVER CREEK AT SOUTH KORO ROAD NEAR RIPON, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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)
AUG 1995				
03...	0910	17	0.610	163
03...	0945	53	1.74	889
03...	1240	27	0.367	77
04...	1705	17	0.391	59
04...	1730	39	0.814	350
04...	1750	79	1.71	962
04...	1925	43	0.402	123
05...	0250	15	0.248	43
07...	1515	17	--	72
07...	1530	25	0.508	167
09...	0705	18	0.471	156
09...	0730	67	1.25	726
09...	0810	116	1.17	738
09...	1030	63	0.415	94
09...	2000	33	--	35
11...	0800	22	0.299	17
14...	0835	56	0.286	31
*15...	1042	34	0.265	19
16...	1155	41	0.280	50
16...	1225	71	0.469	177
16...	1600	40	0.225	26
19...	1150	52	0.289	61
28...	0845	51	0.671	237
28...	0855	75	1.14	517
28...	0915	108	1.37	715
28...	1600	43	0.213	37
29...	1210	59	0.253	38
29...	1305	119	0.783	388
29...	1325	132	--	482
29...	1425	164	0.481	205
29...	1610	143	0.305	59
30...	2040	92	--	38
SEP				
*01...	1210	82	0.264	26
07...	0050	41	0.291	55
*12...	1525	17	--	5
12...	1625	17	0.246	--
19...	1540	25	0.284	29
19...	1645	37	0.335	58
20...	0120	25	0.175	21
*25...	1420	16	0.088	19

* Equal-width increment (EWI) sample

STREAMS TRIBUTARY TO LAKE MICHIGAN

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040734644 SILVER CREEK AT SOUTH KORO ROAD NEAR RIPON, WI--CONTINUED

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	.14	.73	.15	.18	.16	.93	.76	2.4	.51	.41	5.8
2	.91	.13	.51	.14	.19	.15	.94	.69	1.9	.47	.39	4.2
3	.51	.12	.39	.13	.19	.16	.88	.63	1.4	.44	7.7	3.0
4	.68	.12	.31	.12	.15	.15	.68	.59	1.1	.40	8.9	2.2
5	.89	.13	.28	.11	.14	.15	.57	.55	.87	.96	1.3	1.6
6	.77	.18	.26	.11	.14	.15	.53	.52	1.3	.62	.68	1.2
7	.63	.17	.19	.12	.14	.16	.50	.49	5.6	.61	4.1	1.8
8	.53	.15	.14	.12	.13	.14	.52	1.2	1.4	.51	.95	.79
9	.47	.15	.17	.13	.13	.14	.50	2.5	1.2	.48	20	.56
10	.44	.13	.10	.15	.14	.15	.48	3.2	1.2	.46	2.0	.40
11	.39	.12	.10	.16	.12	5.2	2.3	2.9	1.1	.44	1.0	.31
12	.35	.11	.08	.19	.11	16	3.5	3.1	1.0	.40	.71	.25
13	.34	.11	.08	.20	.11	14	2.2	3.3	.93	.40	8.9	.24
14	.31	.13	.09	.21	.11	9.6	1.8	2.9	.85	.38	6.8	.23
15	.25	.12	.09	.21	.12	5.5	1.3	2.3	.77	1.1	1.8	.21
16	.24	.12	.10	.23	.13	3.1	.93	1.9	.72	6.7	3.8	.22
17	1.1	.12	.11	.24	.13	1.6	.68	1.5	.66	.64	1.7	.23
18	.51	.11	.11	.25	.15	1.1	3.1	1.2	.63	.42	1.2	.22
19	.45	.10	.11	.27	.17	.90	1.9	.91	.61	.38	2.1	1.5
20	.35	.11	.12	.26	.20	5.6	1.7	.76	.55	.38	1.4	1.4
21	.30	.13	.12	.27	.18	2.0	1.6	.66	.52	.36	1.2	1.2
22	.75	.11	.13	.28	.18	1.7	1.4	.61	.49	.37	.97	1.1
23	.36	.11	.13	.29	.18	1.6	1.2	.63	.48	.40	.78	.91
24	.25	.12	.14	.28	.19	1.3	1.1	.60	.43	2.9	.66	.79
25	.23	.12	.15	.28	.18	1.1	.99	.54	.41	.58	.56	.77
26	.21	.10	.15	.26	.17	.94	.90	.50	.45	.45	.48	.67
27	.19	1.7	.16	.23	.19	.87	1.0	5.1	1.4	7.6	1.1	.56
28	.17	.79	.19	.21	.19	.85	.99	4.9	.76	1.4	18	.47
29	.16	.81	.17	.19	---	1.2	.90	2.1	1.0	.50	19	.39
30	.15	.93	.17	.18	---	1.1	.84	1.7	.62	.39	9.7	.82
31	.14	---	.20	.19	---	.93	---	2.0	---	.38	8.1	---
TOTAL	21.13	7.49	5.78	6.16	4.34	77.70	36.86	51.24	32.75	32.03	136.39	34.04

WTR YR 1995 TOTAL 445.91

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	11	19	5.0	18	3.5	22	16	20	9.3	8.9	115
2	27	11	15	4.7	18	3.4	18	14	15	8.6	8.5	90
3	29	11	13	4.3	17	3.5	15	13	12	8.1	49	69
4	20	12	12	3.7	13	3.4	12	12	10	7.6	51	53
5	13	13	12	3.3	12	3.5	10	12	9.4	13	17	41
6	11	20	12	3.3	11	3.6	9.8	11	12	11	12	34
7	9.7	19	10	3.4	9.7	3.8	9.7	11	39	11	36	42
8	8.7	19	8.8	3.4	8.8	3.5	10	20	19	9.2	15	32
9	8.1	19	11	3.6	8.6	3.5	9.8	28	18	8.7	126	27
10	8.0	18	6.5	3.9	8.5	3.9	9.5	34	18	8.4	53	24
11	7.5	18	6.1	4.1	6.8	54	22	29	17	7.9	35	23
12	7.0	17	5.3	4.7	6.1	206	62	32	16	7.2	24	22
13	7.2	18	5.0	4.8	5.8	218	60	35	15	7.2	68	21
14	6.9	24	5.4	4.8	5.4	193	56	32	14	6.8	87	19
15	5.9	22	5.2	4.7	5.5	138	46	27	13	9.0	46	16
16	5.9	21	5.6	5.0	5.5	99	37	24	12	34	51	16
17	13	19	5.8	5.1	5.2	69	30	20	11	9.7	37	16
18	11	16	5.8	5.1	5.5	49	44	16	11	8.0	30	14
19	12	13	5.6	5.2	6.1	36	27	13	10	7.5	37	27
20	12	14	6.0	5.0	6.7	70	28	12	9.5	7.6	32	22
21	12	16	5.9	4.9	5.9	45	28	10	9.0	7.2	28	18
22	15	12	6.0	5.0	5.5	38	26	9.7	8.5	7.3	23	14
23	13	11	6.0	5.0	5.3	34	22	10	8.3	8.0	19	11
24	12	11	6.3	4.8	5.2	27	20	10	7.5	26	16	8.4
25	12	10	6.3	4.8	4.6	22	19	9.3	7.3	11	14	7.5
26	11	7.9	6.2	6.0	4.2	19	17	8.9	8.0	9.4	13	6.9
27	11	23	6.5	7.3	4.2	17	20	32	13	44	22	6.4
28	11	87	7.3	9.0	4.2	16	19	46	11	19	118	5.9
29	10	51	6.4	11	---	24	18	35	12	11	143	5.5
30	10	24	6.1	15	---	27	17	41	11	8.5	143	10
31	11	---	7.1	19	---	26	---	31	---	8.3	136	---
TOTAL	413.9	587.9	245.2	178.9	222.3	1462.6	743.8	653.9	396.5	359.5	1498.4	816.6

WTR YR 1995 TOTAL 7579.5

STREAMS TRIBUTARY TO LAKE MICHIGAN

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

LOCATION.--Lat 43°49'18", long 88°55'36", in NE 1/4 SE 1/4 SE 1/4 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.--Estimated daily discharges: Aug. 9 to Sept. 30. Estimated discharges are based on discharges from upstream station, Silver Creek near Ripon (040734644), adjusted for drainage area. Approximately 1.9 ft³/s of daily flow is effluent from Ripon Waste-Water Treatment Plant. Flows fluctuate due to seiche from Green Lake. Records are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	13	26	14	11	9.4	53	29	38	22	16	107
2	44	13	30	13	8.1	9.3	45	33	32	16	14	85
3	30	17	24	12	10	7.1	52	32	28	16	19	68
4	29	10	22	7.3	10	6.8	40	30	21	17	23	53
5	23	14	23	8.3	7.8	6.2	36	22	23	10	22	43
6	22	18	28	9.6	8.1	5.5	32	26	18	22	16	36
7	19	19	13	6.1	8.7	6.4	33	22	45	21	15	37
8	24	21	19	6.9	6.6	9.1	38	33	22	16	17	29
9	23	16	19	6.9	6.6	8.0	33	50	25	11	55	26
10	19	17	14	7.9	5.1	8.9	30	62	26	14	36	23
11	21	14	17	7.7	6.7	37	39	63	28	8.9	28	22
12	19	16	12	9.2	6.8	144	82	56	24	8.7	20	22
13	18	14	13	11	6.4	135	66	58	22	9.3	31	22
14	15	26	12	12	2.8	116	62	63	22	7.0	59	20
15	14	21	12	10	3.6	99	45	52	19	9.5	43	18
16	19	19	13	10	5.7	79	46	47	16	18	47	18
17	16	12	14	11	7.1	58	47	42	17	11	41	19
18	27	34	16	12	6.7	48	52	36	15	16	35	18
19	26	23	14	7.9	8.3	36	83	34	16	8.4	40	27
20	25	18	15	12	8.7	69	53	32	15	18	35	32
21	19	14	14	12	9.8	76	60	30	15	10	31	29
22	21	18	13	12	9.1	60	61	20	10	12	26	26
23	23	19	14	11	9.1	54	52	31	15	14	22	22
24	22	17	14	11	10	45	48	27	9.9	15	19	19
25	23	18	15	11	7.4	37	44	26	13	18	16	20
26	17	16	13	9.9	7.6	33	42	27	9.9	12	15	19
27	18	17	13	9.1	3.6	20	47	33	16	8.9	23	18
28	15	55	18	9.3	7.5	25	48	87	12	24	55	16
29	21	37	13	9.2	---	48	40	61	16	18	105	15
30	16	28	12	9.8	---	58	31	53	18	12	120	20
31	15	---	12	9.9	---	56	---	43	---	9.3	119	---
TOTAL	702	594	507	309.0	208.9	1409.7	1440	1260	606.8	433.0	1163	929
MEAN	22.6	19.8	16.4	9.97	7.46	45.5	48.0	40.6	20.2	14.0	37.5	31.0
MAX	59	55	30	14	11	144	83	87	45	24	120	107
MIN	14	10	12	6.1	2.8	5.5	30	20	9.9	7.0	14	15
CFSM	.42	.37	.31	.19	.14	.85	.90	.76	.38	.26	.70	.58
IN.	.49	.41	.35	.21	.15	.98	1.00	.88	.42	.30	.81	.65

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1995, BY WATER YEAR (WY)

	MEAN	18.5	26.3	23.0	13.1	19.3	71.7	64.6	39.9	43.9	37.1	24.4	21.2
MAX	27.7	45.1	47.5	27.5	53.8	97.1	185	89.9	156	190	67.5	38.8	
(WY)	1994	1992	1993	1993	1994	1989	1993	1993	1993	1993	1990	1993	
MIN	7.00	13.8	5.73	6.66	6.71	45.5	31.2	16.1	4.57	3.78	5.03	9.01	
(WY)	1989	1990	1990	1989	1989	1995	1990	1988	1988	1988	1988	1988	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1987 - 1995
ANNUAL TOTAL	9700.2	9562.4	
ANNUAL MEAN	26.6	26.2	34.7
HIGHEST ANNUAL MEAN			79.9
LOWEST ANNUAL MEAN			18.7
HIGHEST DAILY MEAN	(a) 260	Feb 21	144 Mar 12
LOWEST DAILY MEAN	-4.1	Jun 14	2.8 Feb 14
ANNUAL SEVEN-DAY MINIMUM	5.4	Aug 21	5.3 Feb 10
ANNUAL RUNOFF (CFSM)	.50		.49
ANNUAL RUNOFF (INCHES)	6.74		6.65
10 PERCENT EXCEEDS	52		53
50 PERCENT EXCEEDS	16		19
90 PERCENT EXCEEDS	7.7		8.7
			6.3

(a) Estimated

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.--Observer takes samples during periods of low flow and more frequently during runoff periods.

REMARKS.--Records poor from October to February and fair from March to September. Phosphorus analyses by the Wisconsin State Laboratory of Hygiene. All samples are equal-width increment (EWI).

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, -0.22 ton, June 14, 1994.

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, -5.5 lb, June 14, 1994.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 88 mg/L, May 23; minimum observed, 1.0 mg/L, Feb. 23.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 19 tons, Aug. 30; minimum daily, 0.02 ton, Feb. 14 and 27.

TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.43 mg/L, Nov. 15; minimum observed, 0.05 mg/L, Apr. 3 and 11.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 313 lb, Mar. 12; minimum daily, 1.2 lb, Feb. 14,

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDE (MG/L) (80154)
OCT 1994					MAY 1995				
03...	0900	30	0.213	18	10...	0805	62	0.258	65
05...	0955	23	0.202	19	15...	0830	52	0.205	65
14...	1130	15	0.155	5	19...	0656	34	0.241	66
NOV					23...	1145	31	0.252	88
15...	1115	21	0.430	20	JUN				
30...	1130	28	0.140	19	01...	0900	38	0.149	43
DEC					01...	1253	38	0.151	27
09...	1300	19	0.090	15	07...	0815	45	0.138	28
JAN 1995					12...	1210	24	0.175	28
13...	1330	11	0.111	--	26...	0830	9.9	0.271	47
18...	1430	12	0.081	--	29...	1310	16	0.269	57
25...	0910	11	0.074	11	JUL				
26...	1330	9.9	0.070	22	11...	0815	8.9	0.112	27
31...	1020	9.9	0.070	10	18...	1212	16	0.251	30
FEB					24...	1000	15	0.238	27
23...	1030	9.1	0.090	1	28...	1800	24	0.067	24
28...	1512	7.5	0.080	3	AUG				
MAR					03...	1000	19	0.063	12
10...	1400	8.9	0.240	19	08...	0845	17	0.288	31
13...	0830	135	0.400	24	10...	0845	36	0.272	31
14...	0840	116	0.240	5	10...	1000	36	0.303	--
20...	0835	69	0.150	27	14...	0855	59	0.230	13
21...	0840	76	0.160	10	15...	1000	43	--	23
24...	1000	45	0.140	12	20...	0820	35	0.126	6
APR					24...	0845	19	0.174	--
03...	0900	52	0.050	--	30...	0820	120	0.385	69
07...	0900	33	--	6	31...	0815	119	0.200	36
07...	1010	33	0.070	21	SEP				
11...	0840	39	0.050	8	01...	1035	107	0.191	24
12...	1300	82	0.130	42	12...	0845	22	0.121	19
19...	0845	83	0.190	52	25...	1100	20	0.155	7
26...	0845	42	0.183	51					

STREAMS TRIBUTARY TO LAKE MICHIGAN

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

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	.23	1.3	.48	.27	.06	1.2	4.0	3.6	3.5	.63	7.3
2	2.4	.22	1.5	.44	.18	.06	.97	4.5	2.4	2.4	.49	5.4
3	1.5	.28	1.1	.41	.21	.04	1.1	4.4	2.1	2.2	.62	4.3
4	1.5	.16	1.0	.25	.19	.04	.79	4.1	1.6	2.2	.89	3.2
5	1.1	.25	1.0	.28	.14	.03	.68	3.0	1.7	1.2	1.0	2.6
6	.94	.37	1.2	.32	.13	.03	.58	3.5	1.3	2.4	.92	2.1
7	.70	.43	.56	.20	.13	.06	1.3	3.0	3.4	2.1	1.0	2.1
8	.76	.53	.80	.22	.09	.15	1.7	4.9	1.6	1.5	1.4	1.6
9	.62	.45	.78	.22	.08	.23	1.2	8.1	1.9	.94	4.6	1.4
10	.44	.54	.57	.25	.06	.44	.83	11	1.9	1.1	2.9	1.2
11	.42	.50	.69	.25	.07	3.1	1.3	11	2.1	.65	1.8	1.1
12	.33	.63	.48	.29	.07	17	8.1	9.9	1.8	.62	1.1	1.1
13	.27	.62	.52	.34	.06	10	7.8	10	1.7	.64	1.4	1.0
14	.20	1.3	.47	.37	.02	12	7.5	11	1.8	.49	2.4	.87
15	.19	1.1	.47	.31	.03	10	5.6	9.2	1.6	.82	2.4	.73
16	.33	1.0	.51	.31	.04	7.5	5.9	8.3	1.4	1.9	2.1	.68
17	.35	.65	.54	.33	.04	5.1	6.2	7.4	1.5	1.0	1.4	.66
18	.71	1.8	.61	.36	.04	4.0	7.1	6.4	1.4	1.3	.93	.62
19	.68	1.2	.53	.24	.04	2.8	12	6.2	1.6	.67	.81	1.3
20	.64	.94	.57	.36	.04	4.3	7.4	6.2	1.5	1.4	.57	2.0
21	.47	.72	.52	.35	.04	2.3	8.4	6.2	1.6	.77	.50	1.5
22	.50	.92	.48	.35	.04	1.8	8.5	4.4	1.1	.90	.42	1.1
23	.53	.96	.52	.32	.04	1.7	7.2	7.2	1.7	1.0	.35	.70
24	.50	.85	.51	.32	.04	1.4	6.7	5.6	1.2	1.1	.31	.47
25	.50	.89	.54	.36	.04	1.1	6.1	4.8	1.6	1.3	.26	.39
26	.36	.79	.47	.52	.04	.97	5.8	4.5	1.3	.82	.27	.36
27	.37	.86	.46	.46	.02	.56	6.5	6.2	2.2	.59	.74	.34
28	.30	3.5	.64	.40	.05	.67	6.6	18	1.7	1.5	3.3	.30
29	.41	2.2	.46	.34	---	1.2	5.5	11	2.4	1.0	12	.30
30	.30	1.5	.42	.31	---	1.4	4.3	8.4	2.8	.61	19	.55
31	.27	---	.42	.27	---	1.3	---	5.8	---	.42	11	---
TOTAL	22.29	26.39	20.64	10.23	2.24	91.34	144.85	218.2	55.5	39.04	77.51	47.27

WTR YR 1995 TOTAL 755.50

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	10	19	7.8	4.2	4.1	17	26	31	35	4.7	110
2	51	10	21	7.3	3.1	4.0	13	29	26	23	4.4	84
3	34	13	16	6.8	3.9	3.1	14	28	22	21	6.8	64
4	32	7.7	14	4.1	4.0	2.9	12	26	16	20	11	48
5	25	12	14	4.7	3.1	2.7	12	18	18	11	14	37
6	23	17	16	5.5	3.3	2.5	11	21	14	22	14	30
7	20	20	7.0	3.5	3.6	3.7	12	18	34	19	18	30
8	24	24	9.7	4.0	2.7	6.8	13	33	17	13	26	22
9	22	20	9.3	4.0	2.8	7.8	10	60	21	8.0	83	19
10	18	24	6.8	4.6	2.2	11	8.7	85	22	9.2	53	16
11	19	22	8.4	4.6	2.9	63	13	83	25	5.4	39	15
12	17	27	5.9	5.5	2.9	313	52	71	23	5.0	27	14
13	16	27	6.5	6.5	2.8	266	44	70	21	5.2	40	14
14	13	55	6.0	6.8	1.2	152	39	73	22	4.1	78	13
15	12	48	6.0	5.3	1.6	112	27	58	20	8.9	67	11
16	17	40	6.6	5.0	2.6	79	26	55	17	25	64	11
17	16	22	7.1	5.2	3.2	52	27	51	19	16	46	11
18	29	57	8.2	5.3	3.1	38	40	45	17	22	33	11
19	27	35	7.2	3.4	3.9	26	83	44	19	11	32	22
20	26	25	7.8	5.1	4.1	56	54	42	18	24	24	33
21	19	17	7.3	5.1	4.7	65	61	40	19	13	23	30
22	21	20	6.8	5.0	4.4	49	62	27	13	16	21	25
23	22	19	7.4	4.5	4.4	43	52	42	20	18	19	20
24	21	15	7.4	4.4	4.7	34	48	35	14	18	18	17
25	21	14	8.0	4.4	3.4	25	44	31	19	17	14	17
26	15	12	7.0	3.8	3.4	20	41	32	14	8.5	13	15
27	16	12	7.0	3.4	1.6	11	46	45	23	4.7	25	13
28	13	55	9.8	3.5	3.3	12	46	135	17	9.5	75	10
29	17	34	7.1	3.5	---	21	37	83	23	6.0	181	9.1
30	13	21	6.6	3.7	---	23	28	60	28	3.6	218	13
31	12	---	6.7	3.7	---	20	---	41	---	2.6	133	---
TOTAL	701	734.7	283.6	150.0	91.1	1528.6	992.7	1507	612	424.7	1424.9	784.1

WTR YR 1995 TOTAL 9234.4

04073500 FOX RIVER AT BERLIN, WI

LOCATION.--Lat 43°57'14", long 88°57'08", in NE 1/4 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.--Estimated daily discharges: Ice-affected period, Dec. 9 to Mar. 15. Records good except for ice-affected period, which is fair (see page 11). 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 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1130	989	1160	760	680	640	1870	2130	2390	776	706	2000
2	1190	981	1180	740	700	640	1900	2070	2430	741	698	1990
3	1220	1120	1210	720	700	640	1920	2010	2400	745	735	1970
4	1220	1180	1220	700	680	640	1920	1960	2320	749	803	1940
5	1230	1180	1220	680	660	640	1890	1910	2220	738	834	1900
6	1240	1180	1220	680	640	640	1860	1860	2120	765	825	1840
7	1240	1150	1220	680	640	620	1830	1800	2070	776	831	1800
8	1250	1160	1150	660	640	600	1800	1770	1990	739	832	1700
9	1240	1130	1100	660	660	600	1760	1810	1930	761	1020	1610
10	1200	1090	1100	660	660	680	1730	1850	1880	723	1180	1540
11	1170	1070	1100	660	640	780	1710	1900	1830	697	1220	1470
12	1160	1060	1000	680	640	920	1770	1950	1770	685	1230	1400
13	1140	1070	1000	700	640	1100	1850	2000	1710	687	1220	1320
14	1110	1100	1000	700	640	1300	1910	2090	1630	698	1350	1250
15	1080	1110	1000	720	640	1500	1960	2130	1500	682	1410	1180
16	1060	1100	1000	720	620	1710	2010	2150	1380	686	1460	1130
17	1070	1100	1100	740	640	1720	2040	2160	1280	680	1530	1080
18	1100	1110	1100	760	660	1720	2100	2150	1210	676	1570	1020
19	1130	1140	1100	760	660	1710	2200	2120	1150	663	1640	1020
20	1130	1110	1100	740	660	1740	2250	2070	1100	676	1730	1070
21	1120	1110	1100	700	640	1790	2300	2010	1040	651	1780	1090
22	1120	1130	1200	680	640	1810	2350	1940	977	651	1790	1090
23	1150	1140	1100	660	640	1820	2370	1880	923	667	1790	1080
24	1160	1110	980	640	660	1820	2370	1820	873	690	1800	1060
25	1150	1110	940	640	660	1820	2350	1760	834	698	1780	1060
26	1110	1100	900	660	660	1800	2310	1700	795	691	1750	1050
27	1090	1090	900	640	660	1790	2300	1670	762	689	1750	1040
28	1090	1120	900	640	660	1780	2270	1800	779	716	1790	1020
29	1100	1190	880	640	---	1760	2230	1950	803	709	1860	1020
30	1060	1170	840	640	---	1790	2190	2130	800	694	1930	1000
31	1020	---	800	660	---	1840	---	2280	---	692	1990	---
TOTAL	35480	33400	32820	21320	18320	40360	61320	60830	44896	21891	42834	40740
MEAN	1145	1113	1059	688	654	1302	2044	1962	1497	706	1382	1358
MAX	1250	1190	1220	760	700	1840	2370	2280	2430	776	1990	2000
MIN	1020	981	800	640	620	600	1710	1670	762	651	698	1000
CFSM	.85	.83	.79	.51	.49	.97	1.53	1.46	1.12	.53	1.03	1.01
IN.	.98	.93	.91	.59	.51	1.12	1.70	1.69	1.25	.61	1.19	1.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1898 - 1995, BY WATER YEAR (WY)

	MEAN	984	1074	899	696	753	1769	2226	1455	1173	901	790	896
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 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1898 - 1995
ANNUAL TOTAL	461649	454211	
ANNUAL MEAN	1265	1244	1138
HIGHEST ANNUAL MEAN			2203
LOWEST ANNUAL MEAN			559
HIGHEST DAILY MEAN	(a) 3200	2430	6900
LOWEST DAILY MEAN	575	(a) 600	217
ANNUAL SEVEN-DAY MINIMUM	594	(a) 626	266
INSTANTANEOUS PEAK FLOW		2440	6900
INSTANTANEOUS PEAK STAGE		11.80	15.50
INSTANTANEOUS LOW FLOW			210
ANNUAL RUNOFF (CFSM)	.94	.93	.85
ANNUAL RUNOFF (INCHES)	12.82	12.61	11.54
10 PERCENT EXCEEDS	2080	2000	2170
50 PERCENT EXCEEDS	1100	1110	865
90 PERCENT EXCEEDS	719	660	500

(a) Ice affected

STREAMS TRIBUTARY TO LAKE MICHIGAN

04074950 WOLF RIVER AT LANGLADE, WI

LOCATION.--Lat 45°11'24", long 88°44'00", in SE 1/4 SW 1/4 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.--Estimated daily discharges: Oct. 1-20, Mar. 22-24, and ice-affected periods, Dec. 7-15 and Dec. 29 to Mar. 20. Records good except those for Oct. 1-20 and Mar. 22-24, which are fair, and ice-affected periods, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	620	432	525	320	300	240	372	493	561	251	308	394
2	640	429	524	320	300	250	364	464	555	235	308	366
3	620	434	463	320	300	260	360	434	523	224	263	350
4	560	435	440	320	290	260	356	431	468	219	250	340
5	520	436	450	320	280	270	334	434	414	218	254	328
6	500	444	438	320	270	270	331	434	397	235	252	335
7	490	440	430	310	270	260	438	427	424	252	305	389
8	490	438	420	300	270	260	380	423	388	249	378	387
9	470	443	410	280	270	260	375	555	368	244	378	355
10	460	420	460	270	280	280	364	658	363	239	440	331
11	440	402	430	280	280	330	372	665	380	229	461	320
12	430	397	400	290	280	390	499	665	363	220	579	307
13	420	405	380	290	270	450	533	666	343	224	640	292
14	400	453	410	300	250	520	529	723	330	222	748	285
15	380	457	450	300	250	600	537	729	317	239	760	278
16	380	468	447	290	270	560	524	720	295	296	730	289
17	400	459	352	280	280	520	495	713	282	345	728	321
18	460	428	362	280	280	500	497	675	274	348	679	303
19	570	423	429	280	280	470	671	638	267	333	696	323
20	620	449	424	280	280	540	673	593	257	346	715	384
21	613	531	443	270	270	687	646	522	251	350	637	415
22	606	568	406	270	270	640	636	523	247	343	559	401
23	602	562	420	270	260	600	616	576	240	327	493	383
24	593	586	489	260	260	570	585	617	234	295	458	382
25	574	575	457	260	250	539	555	591	226	258	469	360
26	586	533	451	270	250	506	541	549	220	238	467	350
27	581	455	351	280	250	488	539	519	218	231	468	343
28	513	463	349	290	240	478	522	548	236	223	467	334
29	477	515	340	290	---	454	510	647	296	216	469	330
30	456	538	330	300	---	397	491	656	277	231	496	357
31	438	---	320	300	---	383	---	600	---	212	457	---
TOTAL	15909	14018	13000	9010	7600	13232	14645	17888	10014	8092	15312	10332
MEAN	513	467	419	291	271	427	488	577	334	261	494	344
MAX	640	586	525	320	300	687	673	729	561	350	760	415
MIN	380	397	320	260	240	240	331	423	218	212	250	278
CFSM	1.11	1.01	.91	.63	.59	.92	1.05	1.25	.72	.56	1.07	.74
IN.	1.28	1.13	1.04	.72	.61	1.06	1.18	1.44	.80	.65	1.23	.83

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1995, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1966	444	813	1986	196	1977
1967	454	788	1986	203	1977
1968	379	578	1986	226	1977
1969	318	548	1969	193	1977
1970	314	482	1984	213	1982
1971	477	1227	1973	278	1982
1972	812	1330	1976	263	1990
1973	615	1312	1973	319	1987
1974	493	1013	1991	173	1988
1975	360	874	1968	183	1989
1976	327	632	1972	188	1989
1977	418	813	1968	171	1989

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1966 - 1995
ANNUAL TOTAL	162054	149052	
ANNUAL MEAN	444	408	452
HIGHEST ANNUAL MEAN			666
LOWEST ANNUAL MEAN			326
HIGHEST DAILY MEAN	(a) 1600	760	2200
LOWEST DAILY MEAN	246	212	137
ANNUAL SEVEN-DAY MINIMUM	261	230	142
INSTANTANEOUS PEAK FLOW		(b) 771	(c) 2200
INSTANTANEOUS PEAK STAGE		(d) 9.73	(d) 10.18
INSTANTANEOUS LOW FLOW		200	119
ANNUAL RUNOFF (CFSM)	.96	.88	.98
ANNUAL RUNOFF (INCHES)	13.02	11.98	13.28
10 PERCENT EXCEEDS	619	601	774
50 PERCENT EXCEEDS	405	394	371
90 PERCENT EXCEEDS	290	251	240

(a) Estimated

(b) Gage height, 8.72 ft

(c) Gage height, 9.48 ft

(d) Backwater from ice

STREAMS TRIBUTARY TO LAKE MICHIGAN

97

04075050 WOLF RIVER AT HIGHWAY M NEAR LANGLADE, WI

LOCATION.--Lat 45°07'38", long 88°39'45", in SE 1/4 NE 1/4 sec.31, T.31 N., R.14 E., Langland County, Hydrologic Unit 04030202, at County Highway M bridge near State Highway 55, 5.7 mi southeast of Langlade.

DRAINAGE AREA.--489 mi².

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

REMARKS.--Discharge values are estimated from record at station 04074950 Wolf River at Langlade.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	
APR 1995										
19...	1225	714	161	7.0	6.0	12.3	18	8.3	2.1	
MAY										
31...	1105	598	144	7.7	18.0	9.5	17	7.8	2.0	
JUL										
18...	1145	348	202	8.3	21.5	8.6	24	11	2.2	
AUG										
10...	1025	434	193	7.9	24.0	8.2	22	11	2.3	
16...	1710	725	153	7.9	22.0	8.5	18	8.7	2.0	
SEP										
26...	1145	352	210	8.2	10.5	11.2	23	11	2.4	
DATE		POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINIT LAB (MG/L AS CACO3) (90410)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
APR 1995										
19...	1.1	75	3.0	4.9	<0.10	5.7	98	--	0.130	
MAY										
31...	0.70	70	2.2	3.3	0.10	4.6	92	<1	0.050	
JUL										
18...	0.70	100	2.3	4.6	0.10	8.2	122	9	<0.050	
AUG										
10...	0.70	97	2.4	4.9	0.10	9.3	125	6	<0.050	
16...	0.90	73	2.0	3.3	0.10	11	121	17	0.060	
SEP										
26...	0.90	100	2.7	4.7	<0.10	6.1	116	4	<0.050	
DATE		NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	
APR 1995										
19...	<0.015	0.50	0.020	<0.010	350	100	60	11		
MAY										
31...	0.030	0.40	<0.010	<0.010	350	96	90	12		
JUL										
18...	0.020	0.40	0.020	<0.010	260	63	90	12		
AUG										
10...	<0.015	0.40	0.010	<0.010	390	73	100	8		
16...	0.020	0.70	0.040	0.020	710	290	180	10		
SEP										
26...	0.040	0.40	0.020	<0.010	140	72	20	6		

STREAMS TRIBUTARY TO LAKE MICHIGAN
04075050 WOLF RIVER AT HIGHWAY M NEAR LANGLADE, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA) (01007)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	
SEP 1995 26...	0955	352	194	8.1	10.5	11.0	30	20	<1	<100	10	
DATE		BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM 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)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LITHIUM TOTAL RECOV- ERABLE (UG/L AS LI) (01132)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)
SEP 1995 26...	20	<1	<1	<1	<1	140	<1	<10	<10	20	<0.10	
DATE		NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	THAL- LIUM, DIS- SOLVED (UG/L AS TL) (01057)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	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)	FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BEN- BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)
SEP 1995 26...	<1	<1	<1.0	<1	<10	<0.002	<0.002	<0.002	0.009	<0.002	<0.002	
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)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DIAZ- INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	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)
SEP 1995 26...	<0.003	<0.003	<0.004	<0.004	<0.002	E0.003	<0.002	96.7	<0.001	<0.017	<0.002	
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)	METO- LACHLOR WATER FLTRD 0.7 U DISSOLV (UG/L) (39415)	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)	METRI- BUZIN WATER FLTRD 0.7 U DISSOLV (UG/L) (82630)
SEP 1995 26...	<0.004	<0.003	<0.003	89.0	<0.004	<0.002	<0.005	<0.002	<0.001	<0.006	<0.004	
DATE		MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	P, P' DDE DISSOLV (UG/L) (34653)	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)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)
SEP 1995 26...	<0.004	<0.003	<0.004	<0.004	<0.005	<0.004	<0.006	<0.002	<0.018	<0.003	<0.004	
DATE		PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	PROP- CHLOR, WATER, DISS, REC (UG/L) (04024)	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)	TERBUTH YLAZINE SURROGT WAT FLT 0.7 U PERCENT (91064)	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)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)
SEP 1995 26...	<0.013	<0.007	<0.005	<0.010	<0.007	<0.013	119	<0.002	<0.001	<0.002	<0.003	

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04077400 WOLF RIVER NEAR SHAWANO, WI

LOCATION.--Lat 44°50'09", long 88°37'30", in SE 1/4 NW 1/4 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.

WATER-DISCHARGE RECORDS

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. Gage-height telemeter at station.

REMARKS.--Estimated daily discharges: Ice-affected period, Dec. 6 to Mar. 20. Records fair except those for ice-affected period, which is poor (see page 11). Minor regulation by power dam upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1030	728	801	560	580	480	605	731	916	505	449	772
2	1070	722	853	410	580	440	589	742	820	458	519	742
3	1050	714	916	400	580	430	569	698	783	494	548	697
4	915	708	842	390	580	450	580	664	736	487	499	637
5	904	704	832	400	540	450	578	655	707	386	514	592
6	907	699	740	410	480	460	545	657	631	427	499	582
7	904	720	600	430	480	470	603	658	669	443	536	607
8	843	708	500	440	490	480	697	656	669	469	767	634
9	696	697	640	430	490	460	663	855	625	484	1010	621
10	682	660	620	440	490	520	644	1060	602	475	1040	584
11	686	650	600	470	470	560	653	1120	655	453	1120	536
12	671	667	470	520	440	620	783	1030	644	447	1960	562
13	648	688	480	560	430	740	878	1020	616	468	2350	538
14	581	810	500	600	430	1000	854	1100	583	480	2550	554
15	542	878	580	620	440	1100	821	1120	570	503	2410	552
16	564	872	680	600	440	1000	785	1100	545	618	1850	562
17	615	871	740	600	450	940	741	1050	516	648	1500	550
18	883	831	740	600	470	860	805	988	491	663	1290	558
19	1130	791	620	600	480	820	1120	908	483	630	1150	624
20	1150	820	580	580	490	960	1250	844	441	609	1200	692
21	1030	906	620	580	500	1280	1100	760	456	620	1160	700
22	1000	1000	700	580	500	1190	1050	746	430	595	999	704
23	1290	968	720	580	500	1070	954	801	401	578	897	657
24	1190	862	720	560	500	994	950	889	402	575	778	608
25	1080	858	700	540	500	873	917	908	420	492	833	583
26	1010	664	720	520	500	760	853	860	427	449	889	603
27	977	836	720	540	500	721	831	797	436	458	798	579
28	937	709	700	560	500	709	822	952	506	473	751	579
29	835	840	640	580	---	720	787	1100	662	448	793	605
30	730	806	600	580	---	680	760	1150	644	399	864	614
31	704	---	580	600	---	612	---	1060	---	411	914	---
TOTAL	27254	23387	20754	16280	13830	22849	23787	27679	17486	15645	33437	18428
MEAN	879	780	669	525	494	737	793	893	583	505	1079	614
MAX	1290	1000	916	620	580	1280	1250	1150	916	663	2550	772
MIN	542	650	470	390	430	430	545	655	401	386	449	536
CFSM	1.08	.96	.82	.64	.61	.90	.97	1.09	.71	.62	1.32	.75
IN.	1.24	1.07	.95	.74	.63	1.04	1.08	1.26	.80	.71	1.52	.84

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1907 - 1995, BY WATER YEAR (WY)

	MEAN	716	749	608	520	498	730	1335	1104	902	680	614	705
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 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1907 - 1995	
ANNUAL TOTAL	288562		260816			
ANNUAL MEAN	791		715		764	
HIGHEST ANNUAL MEAN					1119 1973	
LOWEST ANNUAL MEAN					510 1934	
HIGHEST DAILY MEAN	2270	Sep 17	2550	Aug 14	5200	Mar 15 1973
LOWEST DAILY MEAN	434	Sep 11,12	386	Jul 5	194	Feb 7 1936
ANNUAL SEVEN-DAY MINIMUM	476	Sep 6	(a) 411	Jan 2	260	Feb 3 1936
INSTANTANEOUS PEAK FLOW			2630	Aug 14		
INSTANTANEOUS PEAK STAGE			10.92	Aug 14	(b) 15.59	Dec 2 1983
INSTANTANEOUS LOW FLOW					77	Nov 19 1989
ANNUAL RUNOFF (CFSM)	.97		.88		.94	
ANNUAL RUNOFF (INCHES)	13.16		11.89		12.76	
10 PERCENT EXCEEDS	1170		1030		1290	
50 PERCENT EXCEEDS	700		653		640	
90 PERCENT EXCEEDS	520		455		413	

(a) Ice affected

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

STREAMS TRIBUTARY TO LAKE MICHIGAN
04077400 WOLF RIVER NEAR SHAWANO, WI--CONTINUED

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WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
APR 1995									
19...	1440	1310	194	7.2	7.0	12.6	21	10	2.0
MAY									
31...	1335	1190	189	7.5	18.0	9.1	23	11	2.1
JUL									
18...	1635	712	252	8.2	24.0	5.7	30	15	2.4
AUG									
10...	1355	1160	213	7.5	23.0	7.4	25	12	2.1
16...	1320	2070	170	7.8	22.0	7.2	21	9.8	1.9
SEP									
26...	1545	656	253	8.4	22.0	10.6	28	14	2.5

STREAMS TRIBUTARY TO LAKE MICHIGAN
04077630 RED RIVER, AT MORGAN ROAD, NEAR MORGAN, WI

LOCATION.--Lat 44°53'53", long 88°50'39" (revised), in NW 1/4 NE 1/4 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.

WATER-DISCHARGE RECORDS

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

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

REMARKS.--Estimated daily discharges: Ice-affected period, Nov. 24 to Mar. 22. Records good except those for ice-affected period, which is fair (see page 11).

REVISIONS.--The peak discharge for the water year 1993 has been revised to 704 ft³/s, June 20, 1993, gage height, 8.11 ft. This value supersedes that published in reports for 1993 and 1994.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	103	110	86	84	76	109	122	120	90	76	164
2	113	102	110	84	84	76	107	124	110	82	85	139
3	108	101	110	86	82	78	107	125	112	76	82	126
4	109	100	110	86	80	82	103	120	118	75	79	120
5	103	103	100	88	78	84	78	118	108	76	79	112
6	101	102	98	88	80	84	114	117	103	82	78	108
7	97	101	98	88	80	84	114	115	116	91	109	115
8	89	99	98	88	78	82	106	113	126	84	201	111
9	89	100	100	88	78	86	104	161	113	80	208	110
10	89	99	100	88	76	88	102	196	107	75	265	108
11	88	97	98	88	76	92	110	176	114	74	213	105
12	88	95	96	88	74	98	156	150	111	77	359	102
13	89	99	98	90	74	130	173	137	107	79	602	102
14	90	121	100	94	74	200	155	157	105	77	582	100
15	92	132	110	94	76	190	135	172	108	78	501	97
16	95	122	110	92	76	180	125	154	93	112	370	99
17	96	112	110	92	78	160	121	136	87	106	293	99
18	152	103	100	90	82	140	142	125	86	90	233	98
19	177	101	98	90	84	120	235	118	84	82	187	112
20	156	105	96	90	84	150	240	111	82	82	198	146
21	134	128	96	88	82	220	199	105	80	79	175	141
22	134	161	96	88	82	190	182	104	77	78	150	123
23	170	146	96	86	80	171	174	112	76	73	133	113
24	160	120	94	86	80	147	158	127	74	71	120	108
25	140	120	94	86	80	131	156	120	72	71	145	106
26	140	120	94	86	80	124	149	108	71	71	159	105
27	133	110	92	86	80	120	135	103	73	68	143	104
28	125	110	92	84	78	115	132	136	93	69	146	102
29	123	120	92	84	---	113	130	180	113	66	162	100
30	109	120	92	84	---	113	125	175	107	64	163	105
31	104	---	90	84	---	111	---	140	---	65	181	---
TOTAL	3613	3352	3078	2720	2220	3835	4176	4157	2946	2443	6477	3380
MEAN	117	112	99.3	87.7	79.3	124	139	134	98.2	78.8	209	113
MAX	177	161	110	94	84	220	240	196	126	112	602	164
MIN	88	95	90	84	74	76	78	103	71	64	76	97
CFSM	1.02	.98	.87	.77	.70	1.09	1.22	1.18	.86	.69	1.83	.99
IN.	1.18	1.09	1.00	.89	.72	1.25	1.36	1.36	.96	.80	2.11	1.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1995, BY WATER YEAR (WY)

	1993	1994	1995	1993	1994	1995	1993	1994	1995	1993	1994	1995
MEAN	136	156	122	107	92.6	128	194	177	165	128	156	129
MAX	151	221	164	126	103	131	245	254	292	189	209	160
(WY)	1994	1993	1993	1993	1993	1994	1993	1993	1993	1993	1995	1993
MIN	117	112	99.3	87.7	79.3	124	139	134	98.2	78.8	110	113
(WY)	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1994	1995

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1993 - 1995
ANNUAL TOTAL	44101	42397	
ANNUAL MEAN	121	116	141
HIGHEST ANNUAL MEAN			181
LOWEST ANNUAL MEAN			116
HIGHEST DAILY MEAN	(a) 340	602	602
LOWEST DAILY MEAN	78	64	64
ANNUAL SEVEN-DAY MINIMUM	83	68	68
INSTANTANEOUS PEAK FLOW		631	(b) 704
INSTANTANEOUS PEAK STAGE		7.93	8.11
INSTANTANEOUS LOW FLOW		(c) 61	(c) 61
ANNUAL RUNOFF (CFSM)	1.06	1.02	1.24
ANNUAL RUNOFF (INCHES)	14.39	13.83	16.83
10 PERCENT EXCEEDS	165	162	222
50 PERCENT EXCEEDS	110	103	120
90 PERCENT EXCEEDS	90	78	86

(a) Estimated

(b) Revised

(c) Result of freezeup

STREAMS TRIBUTARY TO LAKE MICHIGAN
04077630 RED RIVER, AT MORGAN ROAD, NEAR MORGAN, WI--CONTINUED

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WATER-QUALITY RECORDS

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

REMARKS.--Samples are point samples unless otherwise indicated.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDED (MG/L) (80154)
OCT 1994												
12...	1100	88	--	--	--	--	--	--	--	--	--	27
*17...	1350	94	378	8.4	13.0	9.8	0.920	0.020	0.20	0.010	<0.010	--
17...	1420	94	378	8.4	13.0	9.8	0.940	0.020	0.30	0.020	0.010	15
26...	1353	141	--	--	--	--	--	--	--	--	--	7
NOV												
18...	1130	103	--	--	--	--	--	--	--	--	--	11
MAR 1995												
28...	1300	114	--	--	--	--	--	--	--	--	--	11
APR												
19...	1251	241	--	--	--	--	--	--	--	--	--	19
19...	1254	241	244	7.7	6.5	12.2	0.700	0.020	0.60	0.030	<0.010	--
19...	1448	245	--	--	--	--	--	--	--	--	--	16
*19...	1451	245	240	7.9	6.5	12.2	0.720	0.020	0.70	0.030	0.010	--
*20...	1111	243	225	8.0	4.5	12.4	0.630	0.020	0.60	0.020	<0.010	--
20...	1142	243	--	--	--	--	--	--	--	--	--	12
20...	1144	243	222	8.0	4.5	12.4	0.610	0.020	0.60	0.020	<0.010	--
MAY												
10...	1450	199	--	--	--	--	--	--	--	--	--	6
*10...	1501	199	264	7.9	8.5	10.8	0.480	0.020	0.50	0.030	0.010	--
10...	1526	199	--	--	--	--	--	--	--	--	--	21
10...	1527	199	243	8.0	8.5	11.1	0.460	0.020	0.60	0.030	<0.010	--
15...	0900	172	--	--	--	--	--	--	--	--	--	8
25...	0800	121	--	--	--	--	--	--	--	--	--	9
30...	1422	176	--	--	--	--	--	--	--	--	--	6
*30...	1426	176	264	8.0	17.0	10.0	0.400	0.020	0.30	<0.010	0.010	--
30...	1521	174	--	--	--	--	--	--	--	--	--	16
30...	1522	174	264	8.0	17.5	10.2	0.390	0.030	0.40	<0.010	<0.010	--
30...	1630	172	--	--	--	--	--	--	--	--	--	7
30...	2358	157	--	--	--	--	--	--	--	--	--	11
30...	2359	157	--	--	--	--	0.430	0.030	0.30	<0.010	<0.010	--
31...	0800	143	--	--	--	--	--	--	--	--	--	10
31...	1515	137	275	7.6	20.5	9.9	0.420	0.040	0.40	<0.010	<0.010	--
31...	1516	139	--	--	--	--	--	--	--	--	--	6
31...	1631	135	--	--	--	--	--	--	--	--	--	6
*31...	1636	137	255	8.0	20.5	9.5	0.430	0.040	0.30	<0.010	<0.010	--
JUN												
01...	1600	119	--	--	--	--	--	--	--	--	--	7
01...	1601	119	--	--	--	--	0.490	0.020	0.40	<0.010	<0.010	--
02...	1600	112	--	--	--	--	--	--	--	--	--	7
02...	1601	112	--	--	--	--	0.520	0.030	0.40	<0.010	0.010	--
03...	1600	119	--	--	--	--	--	--	--	--	--	8
03...	1601	119	--	--	--	--	0.550	0.020	0.40	<0.010	<0.010	--
04...	1600	119	--	--	--	--	--	--	--	--	--	10
04...	1601	119	--	--	--	--	0.540	0.020	0.50	<0.010	<0.010	--
05...	1600	108	--	--	--	--	--	--	--	--	--	7
05...	1601	108	--	--	--	--	0.510	0.030	0.40	<0.010	0.010	--
06...	1201	103	348	8.1	19.5	8.2	0.540	0.040	0.30	0.010	0.010	--
06...	1204	103	--	--	--	--	--	--	--	--	--	8
10...	1115	107	--	--	--	--	--	--	--	--	--	7
16...	0820	92	--	--	--	--	--	--	--	--	--	12
22...	1100	76	--	--	--	--	--	--	--	--	--	9
27...	1630	75	--	--	--	--	--	--	--	--	--	6
28...	0432	85	--	--	--	--	0.640	0.050	0.40	0.040	0.040	--
28...	1631	102	--	--	--	--	--	--	--	--	--	10
28...	1632	101	--	--	--	--	0.620	0.030	0.30	0.030	0.030	--
29...	0432	111	--	--	--	--	0.640	0.050	0.40	0.050	0.030	--
29...	1631	116	--	--	--	--	--	--	--	--	--	10
29...	1632	116	--	--	--	--	0.670	<0.015	0.40	0.060	0.020	--
30...	0431	114	--	--	--	--	--	--	--	--	--	20
30...	0432	112	--	--	--	--	0.700	0.020	0.40	0.040	0.030	--
JUL												
06...	1347	85	--	--	--	--	--	--	--	--	--	9
06...	1351	85	364	8.0	18.5	9.8	0.580	0.030	0.30	0.020	0.020	--
14...	0800	79	--	--	--	--	--	--	--	--	--	10
20...	1200	84	--	--	--	--	--	--	--	--	--	9
27...	1600	65	--	--	--	--	--	--	--	--	--	21
31...	1356	65	370	8.3	26.0	9.0	0.270	<0.015	0.30	0.040	0.020	5
31...	1431	65	--	--	--	--	--	--	--	--	--	30
31...	1433	65	365	8.4	26.5	10.4	0.280	<0.015	0.30	0.020	0.010	--

*Equal-width increment (EWI) samples

STREAMS TRIBUTARY TO LAKE MICHIGAN
04077630 RED RIVER, AT MORGAN ROAD, NEAR MORGAN, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDEDED (MG/L) (80154)
AUG 1995												
01...	1325	80	--	--	--	--	--	--	--	--	--	6
07...	2003	160	--	--	--	--	--	--	--	--	--	44
07...	2006	160	--	--	--	--	0.420	<0.015	0.50	0.050	<0.010	--
08...	0833	215	--	--	--	--	--	--	--	--	--	58
08...	2109	187	--	--	--	--	--	--	--	--	--	52
09...	0944	174	--	--	--	--	--	--	--	--	--	30
09...	2219	263	--	--	--	--	--	--	--	--	--	60
10...	1054	265	--	--	--	--	--	--	--	--	--	44
10...	1057	265	--	--	--	--	0.330	<0.015	0.80	0.030	0.010	--
10...	1521	257	--	--	--	--	--	--	--	--	--	28
*10...	1523	258	228	7.6	22.0	8.1	0.320	0.020	0.80	0.040	0.020	--
11...	1453	209	--	--	--	--	--	--	--	--	--	57
12...	1507	379	--	--	--	--	--	--	--	--	--	78
13...	1520	618	--	--	--	--	--	--	--	--	--	34
13...	1523	619	--	--	--	--	0.140	0.050	1.0	0.020	0.030	--
14...	1534	562	--	--	--	--	--	--	--	--	--	11
15...	1455	492	--	--	--	--	--	--	--	--	--	7
*15...	1458	493	169	7.1	21.0	7.4	0.140	0.040	1.1	0.020	0.010	--
15...	1544	489	--	--	--	--	--	--	--	--	--	11
16...	1609	345	--	--	--	--	--	--	--	--	--	11
17...	1609	286	--	--	--	--	--	--	--	--	--	19
18...	1608	221	--	--	--	--	--	--	--	--	--	16
18...	1610	222	--	--	--	--	0.390	0.020	1.0	0.030	0.020	--
19...	1608	182	--	--	--	--	--	--	--	--	--	37
20...	1607	207	--	--	--	--	--	--	--	--	--	16
21...	1607	169	--	--	--	--	--	--	--	--	--	40
22...	1606	149	--	--	--	--	--	--	--	--	--	13
23...	1251	136	--	--	--	--	--	--	--	--	--	13
23...	1254	135	311	7.9	20.0	9.0	0.680	0.030	0.80	0.040	0.030	--

*Equal-width increment (EWI) samples

STREAMS TRIBUTARY TO LAKE MICHIGAN

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0407809265 MIDDLE BRANCH EMBARRASS RIVER NEAR WITTENBERG, WI

LOCATION.--Lat 44°49'31", long 89°07'05", in NW 1/4 NW 1/4 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. Datum of gage is 1,118.24 ft above sea level (levels by Wisconsin Department of Transportation).

REMARKS.--Estimated daily discharges: Ice-affected period, Nov. 22 to Mar. 17. Records good except those for ice-affected period, which is poor (see page 11). Flow affected by pumping for irrigation many times during summer months. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	38	40	25	18	21	44	55	52	39	21	124
2	53	40	37	23	18	22	42	54	44	35	33	80
3	48	39	36	22	17	23	41	52	42	35	36	63
4	43	37	35	20	17	25	40	50	48	29	29	54
5	41	36	35	21	16	23	38	49	43	15	15	48
6	39	36	38	22	16	22	38	47	39	15	15	44
7	38	35	39	20	16	23	38	47	38	15	16	47
8	36	35	34	19	16	22	38	45	38	15	18	54
9	34	34	29	17	17	22	37	62	40	18	53	49
10	33	34	30	18	16	24	37	110	38	27	54	44
11	33	32	31	18	16	29	38	102	38	22	57	40
12	33	31	31	19	16	35	48	77	38	23	77	38
13	32	32	31	19	17	48	84	65	37	34	155	38
14	32	38	31	19	18	86	73	75	36	22	249	37
15	33	51	30	19	19	180	62	91	35	14	258	36
16	34	46	30	18	20	170	56	76	33	18	230	36
17	35	40	29	19	20	150	53	63	17	34	177	35
18	67	39	27	18	20	110	64	54	17	35	115	35
19	100	37	29	18	20	88	135	48	17	24	96	38
20	86	37	28	17	20	102	164	44	26	14	113	38
21	65	50	28	17	19	142	144	41	34	15	134	59
22	57	80	28	17	21	131	111	39	31	19	106	56
23	71	84	28	17	20	100	101	39	21	21	64	47
24	83	54	27	17	19	81	87	46	15	29	54	43
25	67	49	28	16	20	69	80	49	15	28	59	41
26	54	46	28	16	21	62	73	44	15	13	75	40
27	48	48	28	17	22	58	69	41	16	14	67	39
28	45	47	27	16	22	53	66	46	17	13	150	38
29	43	41	26	16	---	50	64	84	29	14	200	38
30	40	43	27	16	---	48	59	92	40	15	212	39
31	39	---	26	17	---	46	---	66	---	15	171	---
TOTAL	1519	1289	951	573	517	2065	2024	1853	949	679	3109	1418
MEAN	49.0	43.0	30.7	18.5	18.5	66.6	67.5	59.8	31.6	21.9	100	47.3
MAX	100	84	40	25	22	180	164	110	52	39	258	124
MIN	32	31	26	16	16	21	37	39	15	13	15	35
CFSM	.64	.56	.40	.24	.24	.87	.88	.78	.41	.29	1.31	.62
IN.	.74	.63	.46	.28	.25	1.01	.99	.90	.46	.33	1.52	.69

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1995, BY WATER YEAR (WY)

	MEAN	50.6	65.8	44.1	29.3	29.6	79.3	129	101	89.0	45.2	54.4	62.9
MAX	69.1	128	73.3	42.5	38.7	116	198	167	222	84.7	100	97.9	
(WY)	1994	1993	1993	1992	1993	1990	1992	1993	1993	1993	1995	1992	
MIN	23.2	27.2	13.5	18.5	18.5	55.1	40.4	59.8	31.6	21.9	32.8	41.0	
(WY)	1990	1990	1990	1995	1995	1994	1990	1995	1995	1995	1992	1991	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1990 - 1995

ANNUAL TOTAL	19499	16946	
ANNUAL MEAN	53.4	46.4	65.1
HIGHEST ANNUAL MEAN			100
LOWEST ANNUAL MEAN			46.4
HIGHEST DAILY MEAN	425	258	601
LOWEST DAILY MEAN	(a)12	(a)13	(b)11
ANNUAL SEVEN-DAY MINIMUM	22	15	12
INSTANTANEOUS PEAK FLOW		(c)265	710
INSTANTANEOUS PEAK STAGE		(d)2.75	(d)4.77
ANNUAL RUNOFF (CFSM)	.70	.61	.85
ANNUAL RUNOFF (INCHES)	9.51	8.26	11.59
10 PERCENT EXCEEDS	87	86	130
50 PERCENT EXCEEDS	39	37	44
90 PERCENT EXCEEDS	27	17	22

(a) Result of pumping

(b) Result of freezeup

(c) Gage-height, 2.66 ft

(d) Backwater from ice

STREAMS TRIBUTARY TO LAKE MICHIGAN
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.

EXTREMES FOR PERIOD OF RECORD.--

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

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 30.5°C, July 14; minimum, 0.0°C, Jan. 15.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	13.5	11.0	12.0	7.5	5.5	6.0	1.5	1.0	1.5	2.0	1.5	2.0
2	12.5	11.0	12.0	7.5	5.5	6.0	2.5	1.0	1.5	2.0	1.5	1.5
3	12.5	11.0	11.5	7.0	6.5	6.5	3.0	1.5	2.0	1.5	1.5	1.5
4	12.0	11.0	11.5	6.5	6.5	6.5	2.5	2.0	2.5	1.5	1.5	1.5
5	12.0	10.0	10.5	7.0	6.0	6.5	2.5	1.5	2.0	1.5	1.5	1.5
6	12.5	10.0	11.0	7.0	4.5	6.0	2.0	1.5	1.5	1.5	1.0	1.5
7	14.0	11.5	12.5	7.0	4.5	5.5	2.0	1.5	1.5	1.5	1.0	1.5
8	13.0	12.0	12.5	7.0	5.0	6.0	2.0	1.5	1.5	1.5	1.0	1.0
9	12.5	10.0	11.5	6.5	4.0	5.5	2.0	1.5	1.5	1.5	1.0	1.0
10	12.5	9.0	10.5	6.0	3.5	4.5	2.0	1.5	2.0	1.0	1.0	1.0
11	12.5	8.5	10.0	6.0	3.5	4.5	2.0	2.0	2.0	1.0	1.0	1.0
12	12.5	8.0	10.0	5.5	4.0	5.0	2.5	2.0	2.0	1.0	.5	.5
13	12.5	8.5	10.0	6.5	5.0	6.0	2.5	2.0	2.0	.5	.5	.5
14	12.0	9.0	10.0	6.5	5.0	6.5	2.5	2.0	2.5	.5	.5	.5
15	12.0	10.0	11.0	6.0	4.5	5.0	2.5	2.0	2.0	.5	.0	.5
16	13.5	10.0	11.5	5.5	3.5	4.5	2.5	2.0	2.0	1.0	.5	.5
17	12.5	11.5	12.0	5.5	3.5	4.5	2.5	2.0	2.0	.5	.5	.5
18	12.0	11.5	11.5	5.0	3.0	4.0	2.5	2.0	2.5	.5	.5	.5
19	12.0	11.0	11.5	4.0	3.0	3.5	2.5	2.0	2.5	1.0	.5	.5
20	11.0	10.5	11.0	4.5	3.0	3.5	2.5	2.0	2.5	.5	.5	.5
21	11.5	9.5	10.0	4.5	2.5	4.0	2.5	2.5	2.5	1.0	.5	.5
22	11.0	9.5	10.0	2.5	1.0	1.5	2.5	2.0	2.5	1.0	.5	.5
23	9.5	8.0	9.0	1.5	.5	1.0	2.5	2.0	2.5	1.0	.5	1.0
24	8.0	6.5	7.5	2.5	1.0	1.5	2.5	1.5	2.0	1.0	.5	1.0
25	7.0	5.5	6.5	2.5	1.0	1.5	2.5	1.5	2.0	1.0	.5	1.0
26	7.0	5.5	6.0	2.5	1.0	1.5	2.5	1.5	2.0	1.0	.5	1.0
27	7.5	5.0	6.0	2.0	1.0	1.5	2.0	2.0	2.0	1.0	.5	1.0
28	8.0	6.0	6.5	2.0	1.0	1.5	2.0	2.0	2.0	1.0	1.0	1.0
29	9.0	7.0	7.5	2.0	1.0	1.5	2.0	2.0	2.0	1.0	1.0	1.0
30	8.5	6.0	7.0	1.5	1.0	1.5	2.0	2.0	2.0	1.0	1.0	1.0
31	8.0	6.0	7.0	---	---	---	2.0	1.5	2.0	1.0	.5	1.0
MONTH	14.0	5.0	9.9	7.5	.5	4.1	3.0	1.0	2.0	2.0	.0	1.0

STREAMS TRIBUTARY TO LAKE MICHIGAN

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

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1.0	.5	1.0	1.0	1.0	1.0	7.0	3.0	4.5	12.0	8.5	9.5
2	1.0	.5	1.0	1.0	1.0	1.0	8.5	2.5	5.0	13.0	8.5	10.5
3	1.0	1.0	1.0	1.0	1.0	1.0	10.5	3.5	6.5	13.0	8.5	10.5
4	1.0	1.0	1.0	1.0	1.0	1.0	6.5	.5	3.0	15.5	9.5	11.5
5	1.0	1.0	1.0	1.0	1.0	1.0	3.0	1.0	2.0	17.5	10.5	13.5
6	1.0	1.0	1.0	1.0	1.0	1.0	7.0	1.5	3.5	18.5	11.0	14.0
7	1.0	1.0	1.0	1.0	1.0	1.0	4.5	1.5	3.0	18.5	13.0	15.0
8	1.0	1.0	1.0	1.0	1.0	1.0	7.5	2.5	4.5	14.0	11.5	13.0
9	1.0	1.0	1.0	1.0	1.0	1.0	8.0	2.0	4.5	11.5	10.0	11.0
10	1.0	1.0	1.0	1.0	.5	1.0	5.5	3.0	4.0	10.0	9.0	9.5
11	1.0	1.0	1.0	1.0	.5	1.0	6.0	3.5	4.5	13.5	8.0	10.5
12	1.0	1.0	1.0	1.0	.5	1.0	7.0	4.0	5.0	15.5	10.0	12.5
13	1.0	1.0	1.0	1.0	.5	1.0	8.0	4.0	5.5	13.0	12.0	13.0
14	1.0	1.0	1.0	1.0	.5	1.0	10.0	4.0	6.5	14.0	12.0	13.0
15	1.0	1.0	1.0	1.0	.5	1.0	8.5	5.5	6.5	16.5	11.5	13.5
16	1.0	1.0	1.0	1.5	1.0	1.0	7.5	6.0	6.5	17.5	12.5	15.0
17	1.0	.5	1.0	2.0	1.0	1.5	12.0	6.0	8.0	19.0	13.5	16.0
18	1.0	1.0	1.0	2.0	1.0	1.5	7.0	6.5	6.5	19.0	13.0	16.0
19	1.0	1.0	1.0	2.5	1.0	1.5	8.0	5.5	6.5	21.0	14.0	17.0
20	1.0	1.0	1.0	2.0	1.5	1.5	7.0	4.5	5.5	19.5	15.0	17.0
21	1.0	1.0	1.0	2.5	1.5	2.0	4.5	3.5	4.0	19.5	13.5	16.0
22	1.0	1.0	1.0	4.0	1.5	2.5	8.0	3.0	5.5	18.0	13.0	15.5
23	1.0	1.0	1.0	6.0	2.0	3.5	10.0	5.0	7.0	16.5	14.5	15.5
24	1.0	1.0	1.0	7.0	2.5	4.0	9.0	7.0	8.0	17.0	13.5	15.0
25	1.0	1.0	1.0	5.0	2.5	4.0	9.5	6.5	8.0	19.5	13.0	16.0
26	1.0	1.0	1.0	4.5	3.0	4.0	9.0	6.5	7.5	20.0	13.5	16.5
27	1.0	1.0	1.0	4.0	3.0	3.0	9.5	7.0	8.0	16.5	14.5	15.5
28	1.0	1.0	1.0	5.0	2.5	3.5	11.0	6.5	8.5	16.5	14.0	15.0
29	---	---	---	7.5	2.5	4.5	12.5	7.0	9.5	16.0	13.5	14.5
30	---	---	---	8.5	2.5	5.0	11.5	7.5	9.5	19.0	13.0	15.5
31	---	---	---	7.0	3.5	5.0	---	---	---	21.5	14.5	18.0
MONTH	1.0	.5	1.0	8.5	.5	2.0	12.5	.5	5.9	21.5	8.0	14.0
JUNE			JULY			AUGUST			SEPTEMBER			
1	22.0	17.0	19.0	22.5	18.5	20.5	26.5	21.5	23.5	22.5	20.0	21.0
2	23.5	17.5	20.0	23.5	17.5	20.0	24.5	20.5	22.5	22.5	19.0	20.5
3	25.0	18.0	21.0	23.0	18.0	20.0	24.0	22.0	22.5	22.5	18.5	20.0
4	24.0	18.5	21.0	21.5	19.5	20.5	25.0	21.5	23.0	23.0	18.5	20.5
5	---	---	---	22.0	19.0	20.5	26.5	21.0	23.5	23.5	18.5	20.5
6	---	---	---	20.5	17.0	18.5	25.5	21.0	23.5	22.5	19.5	21.0
7	---	---	---	22.5	16.0	18.5	23.5	21.5	22.5	21.0	17.0	19.0
8	---	---	e17.5	20.0	15.5	18.0	23.5	20.0	21.5	19.5	15.5	17.0
9	19.0	15.5	17.0	23.5	17.5	20.0	22.0	20.0	21.0	18.5	14.5	16.0
10	15.5	15.0	15.5	24.0	18.0	21.0	21.5	19.5	20.5	18.0	13.5	15.5
11	19.0	13.5	16.0	26.5	19.5	23.0	20.5	19.5	20.0	18.5	13.5	15.5
12	21.0	13.0	16.5	23.5	20.5	22.0	19.5	17.5	18.5	18.5	14.0	16.0
13	22.5	14.5	18.0	27.5	22.0	24.5	18.5	16.5	17.5	20.5	16.0	17.5
14	24.0	16.5	20.0	30.5	24.0	27.0	20.0	17.5	19.0	19.0	15.5	17.0
15	24.5	17.5	21.0	27.0	23.5	25.5	19.5	18.0	18.5	19.0	14.5	16.0
16	26.0	19.0	22.0	25.5	22.0	23.5	18.5	16.5	17.5	18.5	15.0	16.5
17	28.5	19.0	23.5	25.0	22.0	23.5	17.5	16.0	17.0	18.0	14.0	15.5
18	30.0	21.0	25.5	24.5	21.0	22.5	18.5	17.5	17.5	17.5	13.5	15.0
19	30.0	22.0	26.0	22.0	20.0	21.0	19.5	17.5	18.5	14.5	13.5	14.0
20	30.0	21.5	25.5	25.0	18.0	21.0	19.5	17.0	18.0	15.0	12.0	13.0
21	30.0	24.0	26.5	24.5	18.0	21.5	---	---	e19.5	12.0	10.5	11.5
22	30.0	24.0	26.5	24.5	20.0	22.0	21.5	18.5	19.5	11.0	8.5	10.0
23	29.5	22.0	26.0	26.0	20.0	23.0	23.5	19.0	21.0	11.5	7.5	9.0
24	29.5	22.0	25.5	25.5	20.0	23.0	21.5	18.5	19.5	11.0	7.5	9.0
25	29.5	21.0	25.0	---	---	e24.0	19.0	18.0	18.5	11.0	8.5	10.0
26	27.0	21.0	23.5	27.0	21.0	24.0	21.5	18.0	19.0	13.5	9.0	11.0
27	24.5	21.5	22.5	25.0	20.0	23.0	20.5	18.5	19.0	14.5	9.5	12.0
28	24.0	20.5	22.0	27.5	21.0	24.0	22.0	19.5	20.5	15.5	11.0	13.0
29	25.5	20.5	23.0	27.0	20.0	23.5	21.5	20.5	21.0	15.0	12.0	13.5
30	23.5	20.5	22.0	28.5	20.0	24.5	22.0	20.5	21.5	17.0	13.5	15.0
31	---	---	---	28.0	23.0	25.0	23.0	21.5	22.0	---	---	---
MONTH	---	---	---	---	---	22.2	---	---	20.2	23.5	7.5	15.4

e Estimated

STREAMS TRIBUTARY TO LAKE MICHIGAN
04078500 EMBARRASS RIVER NEAR EMBARRASS, WI

LOCATION.--Lat 44°43'29", long 88°44'10", in SW 1/4 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 September 1994.

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.--Estimated daily discharges: Ice-affected period, Nov. 27 to Mar. 22. Records good except those for ice-affected period, which is poor (see page 11). Slight diurnal fluctuation caused by powerplants above station. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	312	206	190	140	130	120	240	307	315	175	75	641
2	261	197	190	130	130	120	228	293	245	171	82	469
3	218	195	190	130	130	120	225	278	223	160	96	344
4	219	193	190	120	130	130	218	271	208	158	125	283
5	213	190	190	130	120	130	204	263	201	135	126	231
6	207	188	190	130	120	120	189	255	191	118	115	220
7	200	183	180	120	120	120	200	248	197	112	102	214
8	187	181	170	120	120	130	205	239	198	110	116	258
9	177	179	160	120	130	120	204	287	188	110	190	255
10	167	174	160	120	120	130	203	426	187	107	437	229
11	166	171	160	130	110	140	214	463	205	107	541	196
12	163	170	150	130	120	170	332	415	213	115	568	191
13	159	173	160	130	130	250	476	351	195	111	753	182
14	157	206	160	130	130	350	450	350	174	117	1100	171
15	157	260	170	130	130	520	373	374	156	128	1280	164
16	158	261	170	130	130	500	327	368	143	112	1150	163
17	162	245	170	130	130	440	305	323	141	113	878	163
18	226	227	160	130	140	370	331	283	134	117	632	160
19	351	210	150	130	140	300	687	262	115	120	438	169
20	379	205	150	120	140	400	867	235	103	102	450	240
21	329	235	150	120	130	680	770	215	100	79	394	300
22	289	316	150	120	140	720	651	201	104	93	368	288
23	346	338	140	120	140	606	531	207	112	90	329	260
24	466	302	140	120	130	457	447	222	109	91	296	227
25	423	263	140	110	130	323	438	221	100	90	280	210
26	352	223	150	110	130	314	390	216	98	91	340	200
27	296	200	140	120	130	302	374	203	99	93	370	185
28	265	200	140	120	120	275	360	276	104	90	505	171
29	245	200	140	120	---	268	349	486	136	84	1010	51
30	227	190	150	120	---	258	327	495	143	83	1050	124
31	215	---	130	130	---	250	---	412	---	66	869	---
TOTAL	7692	6481	4980	3860	3600	9133	11115	9445	4837	3448	15065	6959
MEAN	248	216	161	125	129	295	370	305	161	111	486	232
MAX	466	338	190	140	140	720	867	495	315	175	1280	641
MIN	157	170	130	110	110	120	189	201	98	66	75	51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1919 - 1995, BY WATER YEAR (WY)

	MEAN	266	291	197	149	153	396	760	442	347	214	187	243
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 1994 CALENDAR YEAR			FOR 1995 WATER YEAR			WATER YEARS 1919 - 1995		
ANNUAL TOTAL	103100			86615					
ANNUAL MEAN	282			237			298		
HIGHEST ANNUAL MEAN							515		
LOWEST ANNUAL MEAN							126		
HIGHEST DAILY MEAN	(a)3300			1280			6280		
LOWEST DAILY MEAN	112			51			24		
ANNUAL SEVEN-DAY MINIMUM	120			82			27		
INSTANTANEOUS PEAK FLOW				1320			7080		
INSTANTANEOUS PEAK STAGE				5.44			(b)12.13		
10 PERCENT EXCEEDS	422			437			662		
50 PERCENT EXCEEDS	207			188			190		
90 PERCENT EXCEEDS	144			113			93		

(a) From graph based on gage readings

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

04079000 WOLF RIVER AT NEW LONDON, WI

LOCATION.--Lat 44°23'32", long 88°44'25", in NE 1/4 SE 1/4 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.--Estimated daily discharges: Ice-affected period, Dec. 7 to Mar. 19. Records good except those for ice-affected period, which is fair (see page 11). 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 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2420	1590	1440	1000	820	780	2610	2770	2410	926	668	3200
2	2400	1520	1490	980	840	760	2410	2640	2350	946	653	3120
3	2360	1450	1530	940	840	760	2210	2510	2230	969	657	3040
4	2310	1380	1590	900	840	780	2020	2390	2090	908	672	2960
5	2260	1330	1620	860	820	780	1840	2240	1950	864	697	2830
6	2180	1310	1610	840	820	760	1650	2090	1820	865	751	2610
7	2090	1300	1500	840	800	760	1510	1950	1690	834	773	2290
8	1990	1300	1400	840	800	760	1450	1840	1600	798	807	1990
9	1860	1290	1300	800	800	760	1430	1840	1560	777	1090	1770
10	1730	1280	1200	800	800	760	1430	1940	1540	765	1490	1610
11	1640	1280	1200	800	800	800	1470	2080	1570	758	1810	1490
12	1540	1280	1100	800	800	1000	1670	2160	1580	749	2140	1390
13	1440	1260	1100	820	800	1300	1970	2230	1520	741	2340	1310
14	1370	1280	1100	840	800	1600	2160	2290	1450	731	2570	1200
15	1330	1300	1100	840	800	1900	2260	2330	1360	718	2730	1100
16	1300	1330	1100	860	800	2100	2300	2330	1260	737	2870	1040
17	1280	1350	1200	880	800	2200	2300	2320	1180	777	2990	996
18	1260	1380	1200	880	800	2500	2300	2290	1120	799	3080	973
19	1310	1350	1200	880	800	2700	2590	2230	1080	827	3180	988
20	1430	1310	1100	880	800	3080	2860	2160	1030	862	3270	1080
21	1560	1340	1100	880	800	3350	3030	2080	988	863	3360	1210
22	1650	1410	1100	880	820	3510	3140	2010	956	854	3400	1390
23	1720	1470	1100	860	820	3620	3160	1940	910	844	3370	1470
24	1760	1540	1200	840	820	3640	3200	1850	842	849	3270	1470
25	1800	1570	1200	840	820	3580	3220	1740	804	854	3120	1410
26	1830	1550	1200	820	820	3530	3230	1650	781	827	2970	1350
27	1840	1460	1100	820	820	3420	3200	1620	772	810	2880	1280
28	1810	1440	1100	820	800	3280	3130	1770	780	801	2950	1190
29	1760	1440	1100	800	---	3130	3010	2050	828	739	3150	1130
30	1700	1430	1000	820	---	2980	2900	2290	886	701	3220	1060
31	1650	---	1000	820	---	2810	---	2400	---	677	3240	---
TOTAL	54580	41520	38280	26480	22700	63690	71660	66030	40937	25170	70168	49947
MEAN	1761	1384	1235	854	811	2055	2389	2130	1365	812	2263	1665
MAX	2420	1590	1620	1000	840	3640	3230	2770	2410	969	3400	3200
MIN	1260	1260	1000	800	800	760	1430	1620	772	677	653	973
CFSM	.78	.61	.55	.38	.36	.91	1.06	.94	.60	.36	1.00	.74
IN.	.90	.68	.63	.44	.37	1.05	1.18	1.09	.67	.41	1.15	.82

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1896 - 1995, BY WATER YEAR (WY)

MEAN	1486	1625	1235	959	921	2139	3943	2784	2135	1468	1139	1344
MAX	4761	4738	3258	2149	2003	7566	9169	7452	5764	5005	4485	4544
(WY)	1987	1986	1912	1960	1984	1973	1922	1960	1993	1993	1912	1938
MIN	533	617	429	323	388	486	1157	901	595	427	443	429
(WY)	1949	1934	1899	1899	1900	1896	1931	1931	1988	1910	1933	1933

STREAMS TRIBUTARY TO LAKE MICHIGAN
04079000 WOLF RIVER AT NEW LONDON, WI--CONTINUED

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1896 - 1995	
ANNUAL TOTAL	668479		571162		1771	
ANNUAL MEAN	1831		1565		3200	1973
HIGHEST ANNUAL MEAN					866	1931
LOWEST ANNUAL MEAN					15500	Apr 13 1922
HIGHEST DAILY MEAN	8070	Apr 30	3640	Mar 24	216	Aug 27 1931
LOWEST DAILY MEAN	922	Jul 3	653	Aug 2	337	Sep 3 1933
ANNUAL SEVEN-DAY MINIMUM	983	Feb 12	675	Jul 30		
INSTANTANEOUS PEAK FLOW			3650	Mar 23		
INSTANTANEOUS PEAK STAGE			6.91	Mar 23	(a) 11.83	Apr 3 1979
INSTANTANEOUS LOW FLOW			651	Aug 1, 2		
ANNUAL RUNOFF (CFSM)	.81		.69		.80	
ANNUAL RUNOFF (INCHES)	11.00		9.40		10.64	
10 PERCENT EXCEEDS	2830		2960		3530	
50 PERCENT EXCEEDS	1500		1350		1280	
90 PERCENT EXCEEDS	1060		800		709	

(a) Backwater from ice

DRAINAGE AREA.--44.0 mi².

PERIOD OF RECORD.--May 1993 to September 1995 (discontinued).

REMARKS.--Estimated daily discharges: Nov. 16 to Dec. 5, Sept. 1-7, 26-30, and ice-affected period, Dec. 29 to Mar. 10. Records fair except those for estimated daily discharges, which are poor (see page 11).

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	21	33	20	20	22	29	29	26	18	16	58
2	25	21	33	19	21	21	29	29	25	18	16	42
3	25	21	32	18	21	21	28	29	24	17	16	36
4	25	21	32	17	20	22	28	28	24	17	17	32
5	25	21	31	17	20	21	28	28	23	17	20	29
6	24	22	30	18	19	21	28	28	23	17	20	28
7	24	22	31	19	19	21	28	27	23	17	21	30
8	21	21	29	18	20	20	27	27	23	17	21	23
9	21	21	27	19	19	21	27	32	23	18	23	22
10	21	21	28	19	19	22	27	32	24	17	23	21
11	20	21	26	20	18	24	28	31	25	17	22	20
12	20	21	26	20	17	45	37	30	24	17	29	20
13	20	22	26	21	17	67	35	29	23	17	39	19
14	20	28	26	20	18	61	33	30	22	17	69	18
15	20	26	26	21	19	58	31	30	22	16	53	18
16	20	27	25	21	21	51	30	29	21	16	50	18
17	22	27	25	21	21	43	30	29	20	16	47	18
18	44	26	25	21	20	39	43	28	20	16	39	19
19	36	25	25	21	21	38	61	27	19	16	46	23
20	28	25	25	20	20	53	54	27	19	16	41	28
21	25	30	25	20	21	63	53	26	18	16	37	27
22	24	36	25	20	20	51	47	24	18	17	33	26
23	28	37	25	20	20	42	40	24	18	17	30	23
24	28	31	25	19	19	38	36	24	18	16	30	22
25	27	29	25	19	20	36	36	24	18	16	30	22
26	25	28	24	20	19	34	35	24	18	16	30	22
27	24	39	24	21	20	34	34	24	18	16	68	22
28	23	40	24	21	21	33	34	33	18	16	95	22
29	22	35	24	20	---	31	31	34	18	16	89	21
30	22	34	23	20	---	31	30	29	18	16	67	23
31	21	---	22	19	---	30	---	27	---	16	61	---
TOTAL	754	799	827	609	550	1114	1037	872	633	515	1198	752
MEAN	24.3	26.6	26.7	19.6	19.6	35.9	34.6	28.1	21.1	16.6	38.6	25.1
MAX	44	40	33	21	21	67	61	34	26	18	95	58
MIN	20	21	22	17	17	20	27	24	18	16	16	18
CFSM	.55	.61	.61	.45	.45	.82	.79	.64	.48	.38	.88	.57
IN.	.64	.68	.70	.51	.46	.94	.88	.74	.54	.44	1.01	.47

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1995, BY WATER YEAR (WY)

[illegible]

STREAMS TRIBUTARY TO LAKE MICHIGAN
04080798 TOMORROW RIVER NEAR NELSONVILLE, WI--CONTINUED

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1993 - 1995	
ANNUAL TOTAL	10807		9660		29.0	
ANNUAL MEAN	29.6		26.5		31.6	
HIGHEST ANNUAL MEAN					26.5	
LOWEST ANNUAL MEAN					212	
HIGHEST DAILY MEAN	95	Apr 25	95	Aug 28	212	Jun 9 1993
LOWEST DAILY MEAN	(a)17	Jan 12,13	16	(b)Jul 15	16	(b)Jul 15 1995
ANNUAL SEVEN-DAY MINIMUM	(a)18	Jan 10	16	Jul 15	16	Jul 15 1995
INSTANTANEOUS PEAK FLOW			124	Aug 28	212	Jun 9 1993
INSTANTANEOUS PEAK STAGE			27.04	Aug 28		
INSTANTANEOUS LOW FLOW			16	(c)Jul 14	16	(c)Jul 14 1995
ANNUAL RUNOFF (CFSM)	.67		.60		.66	
ANNUAL RUNOFF (INCHES)	9.14		8.17		8.96	
10 PERCENT EXCEEDS	41		38		51	
50 PERCENT EXCEEDS	26		23		28	
90 PERCENT EXCEEDS	20		18		19	

(a) Ice affected

(b) Also occurred July 16-21 and July 24 to Aug. 3, 1995

(c) Also occurred July 15 to Aug. 3, 1995

STREAMS TRIBUTARY TO LAKE MICHIGAN
04080798 TOMORROW RIVER NEAR NELSONVILLE, WI--CONTINUED
(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

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WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1993 to August 1995 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
OCT 1994											
04...	1100	24	420	8.0	10.0	10.3	765	240	51	27	2.9
NOV											
15...	1045	27	412	7.9	5.0	12.7	767	220	48	25	2.9
DEC											
06...	1125	18	392	8.2	2.5	12.3	762	200	44	22	2.5
JAN 1995											
10...	1030	19	449	7.7	1.5	12.8	760	250	54	27	2.8
MAR											
02...	0830	21	478	7.9	0.0	13.0	772	240	53	27	2.6
APR											
25...	1420	35	335	7.5	8.0	11.7	758	180	39	19	2.3
MAY											
11...	1155	30	362	8.2	11.5	10.7	745	190	41	21	2.5
JUL											
14...	1155	17	471	8.2	18.0	9.8	--	240	53	26	2.8

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	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)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
OCT 1994											
04...	1.2	244	200	9.7	6.1	0.20	14	233	2.10	<0.010	<0.015
NOV											
15...	1.2	254	208	9.3	6.6	0.20	13	239	2.10	<0.010	<0.015
DEC											
06...	0.80	246	202	9.7	5.6	0.20	12	234	2.10	<0.010	0.030
JAN 1995											
10...	1.1	261	214	9.9	5.8	0.20	14	260	3.10	0.010	0.030
MAR											
02...	1.2	293	240	11	5.6	0.30	14	266	3.10	<0.010	0.030
APR											
25...	1.1	195	160	8.6	4.7	0.20	9.0	197	1.60	<0.010	0.020
MAY											
11...	0.90	210	172	7.1	5.6	0.20	9.1	212	1.60	0.010	<0.015
JUL											
14...	1.1	268	220	9.8	5.4	0.20	13	267	2.50	0.010	0.020

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 1994											
04...	0.30	<0.20	0.030	0.010	0.020	40	12	--	--	5	90
NOV											
15...	0.30	<0.20	0.020	<0.010	<0.010	34	10	4.3	0.30	7	77
DEC											
06...	0.20	<0.20	0.010	<0.010	<0.010	47	10	3.4	0.40	8	91
JAN 1995											
10...	<0.20	<0.20	0.020	0.010	<0.010	12	7	1.2	0.40	55	80
MAR											
02...	<0.20	0.40	0.020	<0.010	<0.010	6	5	--	--	7	90
APR											
25...	0.50	0.40	0.010	<0.010	<0.010	41	6	6.2	0.60	6	96
MAY											
11...	0.40	0.30	0.020	<0.010	<0.010	42	9	6.3	0.60	6	96
JUL											
14...	0.20	<0.20	0.010	0.020	<0.010	23	10	--	--	17	79

STREAMS TRIBUTARY TO LAKE MICHIGAN

04082400 FOX RIVER AT OSHKOSH, WI

LOCATION.--Lat 44°00'49", long 88°32'27" in SW 1/4 SW 1/4 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.

WATER-DISCHARGE RECORDS

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

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

REMARKS.--Estimated daily discharges: Oct. 31, Nov. 1, Dec. 1, 2, 7, 8, Dec. 15 to Mar. 23, June 20 to July 21, and Aug. 28 to Sept. 7. Records fair, except for days with negative mean daily flow, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4150	3290	3320	2250	1910	1810	5750	6800	5720	2170	665	6640
2	2930	744	3410	2190	1970	1790	2800	7160	5780	2160	617	6520
3	5330	4480	2940	2120	1970	1790	11500	5900	5390	2180	2340	6390
4	5660	3920	2670	2040	1940	1810	8490	5920	5230	2120	2020	6250
5	4120	2150	3860	1970	1890	1810	-4830	7440	5280	2040	1030	6040
6	2130	5030	1200	1940	1860	1790	8280	2660	5240	2080	508	5680
7	4420	93	3470	1940	1840	1760	2360	2520	4300	2050	1800	5220
8	6320	4800	3250	1910	1840	1740	4490	-103	5870	1970	566	6570
9	5260	3660	3430	1860	1860	1740	-213	8680	5140	1970	5510	3750
10	-116	2140	6520	1860	1860	1840	2570	8730	5690	1900	5560	4270
11	3390	1690	852	1860	1840	2020	5700	6280	4950	1850	3690	3730
12	2470	4010	2040	1890	1840	2450	7660	4800	4340	1820	3860	4200
13	3740	2560	2090	1940	1840	3060	7480	431	4580	1820	5340	4990
14	2180	5960	1950	1970	1840	3700	956	12200	2470	1820	10000	293
15	1470	986	2680	1990	1840	4340	1890	5270	2150	1790	8250	476
16	2490	401	2680	2020	1810	4860	7630	5230	3960	1810	7840	6340
17	3810	1010	2930	2070	1840	5000	5770	6860	3460	1860	9020	1810
18	3030	9980	2930	2090	1860	5380	2800	4890	3320	1880	8390	2220
19	5490	-54	2930	2090	1860	5630	9660	6820	2200	1900	9390	2370
20	1660	-747	2810	2070	1860	6150	2920	7820	2720	1970	8490	4400
21	2980	11600	2810	2020	1840	6560	9910	3220	2590	1930	8450	3460
22	4620	4400	2930	1990	1860	6790	8400	1890	2460	1740	7080	4920
23	6230	-2490	2810	1940	1860	6940	5490	6660	2340	591	7610	-1300
24	3680	2950	2780	1890	1890	6460	8580	1550	2180	2590	4390	3690
25	1360	3460	2730	1890	1890	5580	6160	4830	2090	2810	7120	3260
26	837	-792	2680	1890	1890	5610	5610	2250	2020	-364	7080	2780
27	2570	-1410	2550	1860	1890	4530	9350	-1120	1950	297	6720	2840
28	3020	10000	2550	1860	1860	8300	6820	8680	1990	5360	6050	2060
29	4600	1630	2530	1840	---	7030	4480	8790	2080	1170	6390	1690
30	3060	1700	2350	1860	---	7450	7040	5840	2160	1330	6570	1940
31	3410	---	2300	1890	---	6570	---	5700	---	3490	6670	---
TOTAL	106301	87151	86982	61000	52350	132290	165503	164598	109650	60104	169016	113499
MEAN	3429	2905	2806	1968	1870	4267	5517	5310	3655	1939	5452	3783
MAX	6320	11600	6520	2250	1970	8300	11500	12200	5870	5360	10000	6640
MIN	-116	-2490	852	1840	1810	1740	-4830	-1120	1950	-364	508	-1300
CFSM	.65	.55	.53	.37	.35	.80	1.04	1.00	.69	.37	1.03	.71
IN.	.74	.61	.61	.43	.37	.93	1.16	1.15	.77	.42	1.18	.80

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1995, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
MEAN	3524	4736	4575	2869	2593	5288	8064	7236	5365	5761	4225	3794
MAX	4493	6165	6811	3673	3016	6348	12870	11050	11980	13440	5915	4240
(WY)	1994	1993	1993	1992	1992	1992	1993	1993	1993	1993	1993	1992
MIN	2655	2905	2806	1968	1870	4267	5517	5310	2645	1939	2294	3105
(WY)	1992	1995	1995	1995	1995	1995	1995	1995	1994	1995	1992	1994

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1992 - 1995
ANNUAL TOTAL	1444637	1308444	
ANNUAL MEAN	3958	3585	4846
HIGHEST ANNUAL MEAN			7221
LOWEST ANNUAL MEAN			3585
HIGHEST DAILY MEAN	14000	Apr 29	18600
LOWEST DAILY MEAN	-2490	Nov 23	-6270
ANNUAL SEVEN-DAY MINIMUM	1690	Jun 26	1270
ANNUAL RUNOFF (CFSM)	.75	.68	.91
ANNUAL RUNOFF (INCHES)	10.12	9.17	12.40
10 PERCENT EXCEEDS	7050	7060	9450
50 PERCENT EXCEEDS	3410	2680	4100
90 PERCENT EXCEEDS	1740	1600	1840

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: April 1992 to current year.

INSTRUMENTATION.--Continuous water temperature recorder since April 1992.

REMARKS.--Records represent water temperature at sensor within 0.5°C.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum observed, 30.0°C, June 22, 23, 1995; minimum observed, 0.0°C, for many days.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum observed, 30.0°C, June 22, 23; minimum observed, 0.0°C, for many days November through March.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	15.5	15.0	15.0	8.5	7.5	8.0	.5	.0	.5	1.0	.0	.5
2	15.0	14.0	14.5	8.5	7.5	8.0	1.0	.5	.5	.5	.0	.5
3	14.5	13.5	14.0	9.0	8.5	8.5	1.5	.5	1.0	.5	.0	.5
4	14.0	13.5	14.0	9.0	8.5	8.5	1.5	1.0	1.5	.5	.5	.5
5	13.5	13.0	13.5	9.0	8.5	8.5	1.5	1.0	1.5	1.0	.5	.5
6	13.5	13.5	13.5	8.5	8.0	8.0	1.0	1.0	1.0	.5	.5	.5
7	15.0	13.5	14.0	8.5	7.5	8.0	1.0	.0	.5	.5	.5	.5
8	15.0	14.5	15.0	8.5	8.0	8.0	.5	.0	.5	.5	.5	.5
9	14.5	12.5	13.5	8.5	8.0	8.0	.5	.0	.5	.5	.5	.5
10	13.5	12.5	12.5	8.0	7.0	7.5	1.0	.0	.5	.5	.5	.5
11	12.5	11.5	11.5	7.5	7.0	7.0	.5	.0	.0	.5	.5	.5
12	12.5	11.5	12.0	7.5	7.0	7.0	1.0	.0	.5	.5	.5	.5
13	13.0	12.0	12.5	8.0	7.0	7.0	1.0	.5	1.0	.5	.5	.5
14	13.0	12.5	13.0	8.5	8.0	8.0	1.0	.5	1.0	.5	.5	.5
15	13.0	12.5	13.0	8.5	7.0	8.0	1.0	.5	1.0	.5	.5	.5
16	14.0	13.0	13.0	7.5	7.0	7.0	1.0	1.0	1.0	1.0	.5	.5
17	14.5	13.5	14.0	7.0	6.5	7.0	1.5	1.0	1.0	1.0	.5	1.0
18	15.0	14.5	14.5	7.0	6.0	6.5	1.0	.5	1.0	1.0	.5	1.0
19	15.5	15.0	15.0	6.0	5.5	6.0	1.0	.5	.5	1.0	.5	.5
20	15.0	14.5	15.0	6.0	5.5	6.0	1.0	.5	.5	.5	.5	.5
21	14.5	14.0	14.5	6.0	4.5	5.5	1.0	.5	1.0	.5	.0	.5
22	14.5	14.0	14.5	4.5	2.5	3.0	1.0	.5	1.0	.5	.0	.0
23	14.5	12.5	13.5	3.5	2.5	3.0	1.0	.5	1.0	.5	.5	.5
24	12.5	10.0	11.5	3.5	1.5	3.0	1.0	.5	1.0	.5	.5	.5
25	10.0	9.0	9.5	1.5	1.0	1.5	1.0	.5	1.0	.5	.5	.5
26	9.5	8.0	8.5	2.0	1.0	1.5	1.5	1.0	1.0	.5	.5	.5
27	8.0	7.5	8.0	2.0	1.5	1.5	2.0	1.5	1.5	.5	.5	.5
28	8.0	7.5	8.0	1.5	.0	.5	2.0	1.0	1.5	.5	.5	.5
29	8.5	8.0	8.5	.0	.0	.0	1.0	.5	1.0	.5	.5	.5
30	8.5	8.5	8.5	.5	.0	.0	1.5	1.0	1.0	.5	.5	.5
31	8.5	8.5	8.5	---	---	---	1.5	1.0	1.5	.5	.5	.5
MONTH	15.5	7.5	12.5	9.0	.0	5.7	2.0	.0	.9	1.0	.0	.5

STREAMS TRIBUTARY TO LAKE MICHIGAN
04082400 FOX RIVER AT OSHKOSH, WI--CONTINUED

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	.5	.5	.5	1.0	.0	.5	4.0	3.5	4.0	11.5	10.5	11.0
2	.5	.0	.5	1.0	.5	.5	5.0	3.5	4.5	12.5	11.0	11.5
3	.5	.0	.5	1.0	.5	1.0	7.0	4.5	6.0	13.0	12.0	12.5
4	.5	.0	.0	1.5	1.0	1.0	6.5	4.0	5.0	13.0	12.0	12.5
5	.5	.0	.0	1.0	.5	1.0	4.0	3.0	3.0	14.0	12.5	13.5
6	.5	.5	.5	1.0	.5	.5	4.0	2.5	3.5	15.0	14.0	14.5
7	.5	.5	.5	1.0	.5	.5	4.0	3.5	3.5	15.5	14.5	14.5
8	.5	.0	.5	1.0	.5	.5	4.0	3.5	4.0	15.0	13.5	14.0
9	.5	.5	.5	1.0	.5	1.0	4.0	3.0	4.0	13.5	12.0	12.5
10	.5	.5	.5	1.0	.5	1.0	4.0	3.0	3.5	13.0	11.5	12.0
11	.5	.0	.5	1.5	.5	1.0	4.5	3.0	3.5	13.5	11.5	12.5
12	.5	.0	.5	2.0	1.0	1.5	5.0	4.5	4.5	15.0	13.5	14.0
13	.5	.5	.5	2.5	1.5	2.0	7.0	5.0	5.5	15.0	14.0	14.5
14	.5	.5	.5	3.5	2.0	3.0	7.5	5.5	6.5	15.0	14.0	14.5
15	.5	.5	.5	3.5	2.5	3.0	7.5	6.5	7.0	16.0	14.5	15.0
16	.5	.5	.5	4.0	3.0	3.5	7.5	7.0	7.0	17.0	15.5	16.0
17	1.0	.5	.5	3.5	2.5	3.0	9.0	7.0	8.0	17.5	16.0	17.0
18	.5	.5	.5	3.5	2.5	3.0	8.5	7.5	8.5	18.0	17.5	17.5
19	.5	.5	.5	3.5	2.5	2.5	9.0	8.0	8.5	18.5	17.5	18.0
20	.5	.5	.5	3.0	2.0	2.5	9.0	8.0	8.5	18.5	18.0	18.5
21	1.0	.0	.5	3.0	1.5	2.0	8.0	7.5	7.5	18.5	17.0	17.5
22	1.0	.5	1.0	3.0	1.5	2.0	8.5	7.0	8.0	18.0	16.0	17.0
23	1.0	1.0	1.0	3.5	2.0	3.0	9.5	8.0	9.0	18.0	17.0	17.5
24	1.5	.5	1.0	5.0	2.0	3.5	10.0	9.0	9.5	17.5	16.5	17.0
25	1.5	.5	1.0	5.0	4.0	4.5	10.5	9.0	10.0	17.5	16.0	16.5
26	1.0	.5	.5	4.5	3.5	4.0	10.5	10.0	10.0	18.5	17.0	17.5
27	1.5	.5	1.0	4.0	3.0	3.5	10.0	9.5	9.5	17.5	16.5	17.0
28	1.5	1.0	1.0	3.0	2.5	3.0	10.0	9.0	9.5	17.0	16.0	16.5
29	---	---	---	3.5	2.5	3.0	11.0	10.0	10.5	16.5	15.5	15.5
30	---	---	---	4.0	3.0	3.5	11.5	10.5	11.0	18.0	15.0	16.5
31	---	---	---	4.0	3.0	3.5	---	---	---	20.0	18.0	18.5
MONTH	1.5	.0	.6	5.0	.0	2.2	11.5	2.5	6.8	20.0	10.5	15.3
JUNE			JULY			AUGUST			SEPTEMBER			
1	20.5	19.5	20.0	25.0	23.0	24.0	28.0	26.5	27.0	24.5	23.5	23.5
2	21.0	19.5	20.5	23.5	22.5	23.0	27.0	25.5	26.0	23.5	23.0	23.0
3	22.5	21.0	21.5	23.5	22.5	23.0	25.5	25.0	25.0	23.5	22.5	23.0
4	23.0	22.0	22.5	22.5	22.0	22.5	26.0	25.0	25.5	24.0	22.5	23.5
5	24.0	22.5	23.5	22.5	22.0	22.5	26.5	25.0	25.5	25.0	24.0	24.5
6	24.0	23.0	23.5	22.5	21.0	22.0	27.0	25.5	26.0	25.0	24.0	24.0
7	24.5	22.0	24.0	21.0	20.0	20.5	26.0	25.5	26.0	24.0	21.0	22.5
8	23.5	20.5	21.5	21.5	20.5	21.0	26.5	25.5	26.0	21.0	19.5	19.5
9	20.5	19.5	20.0	22.0	21.0	21.5	26.5	25.0	25.5	19.5	18.5	19.0
10	19.5	18.5	19.0	23.5	21.5	22.5	26.0	25.0	25.5	19.0	18.5	18.5
11	19.5	18.5	19.0	24.5	22.5	23.0	26.0	25.5	26.0	18.5	18.5	18.5
12	20.5	19.0	20.0	24.5	23.0	24.0	26.0	25.0	25.5	19.0	18.5	18.5
13	22.0	20.5	21.0	27.5	24.0	25.5	26.0	25.5	25.5	20.0	19.0	19.5
14	23.5	22.0	22.5	29.5	27.5	28.0	26.5	25.5	26.0	20.0	19.5	20.0
15	23.5	21.5	22.5	29.0	25.0	27.0	26.5	25.0	25.5	19.5	19.0	19.5
16	23.5	22.0	22.5	28.0	25.5	27.5	25.5	25.0	25.0	19.0	18.5	18.5
17	25.0	23.5	24.0	28.0	26.0	27.5	25.5	24.5	25.0	19.5	18.0	18.5
18	26.5	25.0	25.5	26.5	24.5	25.5	26.0	25.0	25.5	18.0	17.5	18.0
19	28.0	26.5	27.0	24.5	24.0	24.5	26.0	25.0	25.5	17.5	17.0	17.5
20	29.5	27.5	28.0	25.5	24.0	24.5	25.5	24.5	25.0	17.0	16.0	16.5
21	29.5	27.5	28.5	26.0	24.5	25.0	25.5	24.5	25.0	16.0	14.5	15.0
22	30.0	28.0	28.5	25.5	25.0	25.5	26.0	24.5	25.5	14.5	12.5	13.5
23	30.0	28.0	29.0	26.0	25.0	25.0	26.0	24.5	25.0	14.0	13.0	13.5
24	29.5	28.0	28.5	26.0	25.0	25.5	26.0	24.0	25.0	13.5	12.5	12.5
25	29.5	28.0	28.5	27.0	25.5	26.0	24.0	23.0	23.5	12.5	12.0	12.0
26	29.0	27.5	28.0	27.5	24.5	26.0	24.5	23.0	23.5	13.5	12.0	12.5
27	27.5	26.5	27.0	27.0	26.0	26.5	24.5	23.5	24.0	15.0	13.0	14.0
28	26.5	26.0	26.0	26.5	25.5	26.0	24.0	23.0	23.5	15.0	14.5	15.0
29	27.0	26.0	26.5	27.5	26.0	26.5	24.0	23.5	24.0	16.0	15.0	15.5
30	26.5	24.5	25.5	27.5	26.0	26.5	24.5	23.5	24.0	16.0	15.5	15.5
31	---	---	---	28.0	27.0	27.5	24.5	24.0	24.5	---	---	---
MONTH	30.0	18.5	24.1	29.5	20.0	24.7	28.0	23.0	25.2	25.0	12.0	18.2

04082500 LAKE WINNEBAGO AT OSHKOSH, WI

LOCATION.--Lat 44°00'35", long 88°31'38", in NE 1/4 NE 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.--Records good (see page 11). 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. 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 gage height, 3.92 ft, Aug. 28; minimum, 1.31 ft, Feb. 14-19.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.65	2.46	2.20	1.89	1.44	1.39	2.50	3.07	3.23	2.91	2.77	3.08
2	2.62	2.41	2.21	1.86	1.43	1.40	2.53	3.04	3.23	2.87	2.73	3.02
3	2.55	2.40	2.21	1.83	1.42	1.39	2.43	3.02	3.23	2.81	2.74	3.04
4	2.52	2.40	2.22	1.80	1.41	1.39	2.51	2.99	3.22	2.81	2.74	2.99
5	2.51	2.41	2.23	1.78	1.40	1.39	2.56	2.96	3.20	2.79	2.76	2.98
6	2.49	2.36	2.27	1.76	1.39	1.40	2.47	2.97	3.18	2.74	2.74	2.93
7	2.44	2.35	2.26	1.74	1.37	1.45	2.55	2.93	3.26	2.80	2.73	3.06
8	2.45	2.32	2.22	1.72	1.36	1.45	2.58	2.94	3.21	2.80	2.71	2.96
9	2.45	2.32	2.17	1.69	1.35	1.43	2.66	2.93	3.13	2.80	2.79	3.00
10	2.48	2.29	2.13	1.67	1.35	1.42	2.61	2.99	3.08	2.78	2.90	3.01
11	2.45	2.25	2.11	1.64	1.34	1.41	2.60	3.03	3.06	2.79	2.96	3.00
12	2.45	2.21	2.10	1.62	1.33	1.41	2.61	3.05	3.02	2.76	3.03	3.00
13	2.45	2.21	2.08	1.61	1.32	1.44	2.67	3.05	3.00	2.77	3.12	3.01
14	2.47	2.18	2.07	1.60	1.32	1.47	2.74	2.97	2.99	2.77	3.26	3.05
15	2.47	2.23	2.06	1.59	1.31	1.51	2.75	3.09	2.98	2.78	3.33	3.02
16	2.46	2.22	2.05	1.57	1.31	1.56	2.74	3.09	2.96	2.77	3.37	2.97
17	2.47	2.19	2.05	1.54	1.31	1.61	2.79	3.09	2.97	2.76	3.39	3.02
18	2.50	2.01	2.04	1.53	1.31	1.66	2.85	3.09	2.99	2.75	3.37	3.00
19	2.48	2.20	2.03	1.54	1.31	1.70	2.87	3.05	3.00	2.75	3.34	3.04
20	2.53	2.20	2.02	1.56	1.32	1.80	2.99	3.02	3.00	2.73	3.34	3.09
21	2.51	2.03	2.01	1.56	1.33	1.93	2.96	3.05	2.99	2.72	3.29	3.08
22	2.50	2.13	2.00	1.56	1.33	2.00	2.99	3.03	2.98	2.71	3.25	3.03
23	2.49	2.19	1.99	1.54	1.33	2.04	3.04	3.00	2.97	2.75	3.15	3.07
24	2.51	2.14	1.98	1.53	1.34	2.11	3.02	3.04	2.95	2.73	3.22	3.06
25	2.54	2.16	1.97	1.52	1.35	2.17	3.06	3.02	2.94	2.73	3.12	3.07
26	2.53	2.21	1.96	1.51	1.37	2.22	3.07	3.03	2.94	2.74	3.09	3.08
27	2.48	2.24	1.95	1.49	1.38	2.27	3.07	3.07	2.91	2.73	3.07	3.10
28	2.45	2.02	1.94	1.48	1.39	2.33	3.10	3.07	2.89	2.72	3.13	3.10
29	2.46	2.21	1.92	1.47	---	2.39	3.11	3.11	2.89	2.75	3.18	3.09
30	2.47	2.20	1.90	1.46	---	2.43	3.08	3.19	2.91	2.73	3.12	3.09
31	2.48	---	1.89	1.45	---	2.48	---	3.21	---	2.71	3.07	---
MEAN	2.49	2.24	2.07	1.62	1.35	1.74	2.78	3.04	3.04	2.77	3.06	3.03
MAX	2.65	2.46	2.27	1.89	1.44	2.48	3.11	3.21	3.26	2.91	3.39	3.10
MIN	2.44	2.01	1.89	1.45	1.31	1.39	2.43	2.93	2.89	2.71	2.71	2.93

STREAMS TRIBUTARY TO LAKE MICHIGAN
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.--Records good (see page 11). 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 gage height observed, 4.13 ft, July 9, 1993; minimum observed, 0.30 ft, Mar. 1, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 3.74 ft, Aug. 28; minimum, 1.27 ft, Feb. 17-20.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.54	2.40	2.22	1.86	1.41	1.35	2.41	2.98	3.19	2.92	2.69	3.06
2	2.49	2.37	2.18	1.84	1.40	1.35	2.44	2.98	3.19	2.86	2.70	3.07
3	2.45	2.35	2.19	1.80	1.39	1.35	2.52	2.98	3.18	2.82	2.71	2.99
4	2.46	2.34	2.19	1.78	1.39	1.34	2.62	2.95	3.18	2.76	2.74	2.96
5	2.49	2.31	2.20	1.73	1.38	1.34	2.52	2.95	3.17	2.79	2.71	2.95
6	2.48	2.38	2.19	1.70	1.37	1.35	2.46	2.92	3.16	2.88	2.70	2.99
7	2.47	2.36	2.12	1.70	1.36	1.38	2.48	2.85	3.15	2.83	2.69	2.80
8	2.50	2.30	2.16	1.68	1.34	1.40	2.50	2.74	3.08	2.76	2.69	2.89
9	2.53	2.25	2.16	1.65	1.33	1.40	2.38	2.79	3.06	2.76	2.80	2.94
10	2.45	2.23	2.16	1.63	1.32	1.39	2.42	2.89	3.02	2.77	2.88	2.94
11	2.44	2.21	2.11	1.60	1.32	1.37	2.48	2.99	3.00	2.73	2.93	2.98
12	2.41	2.20	2.06	1.58	1.31	1.37	2.64	3.01	2.98	2.73	2.99	2.99
13	2.41	2.19	2.04	1.57	1.30	1.38	2.71	2.99	2.97	2.75	3.07	3.04
14	2.42	2.24	2.03	1.56	1.29	1.40	2.67	3.07	2.96	2.77	3.27	3.00
15	2.41	2.20	2.02	1.56	1.28	1.43	2.61	3.08	2.93	2.73	3.30	2.97
16	2.41	2.18	2.01	1.54	1.28	1.47	2.66	3.08	2.93	2.76	3.32	2.99
17	2.44	2.16	2.01	1.51	1.27	1.51	2.73	3.06	2.95	2.81	3.34	2.97
18	2.48	2.36	2.00	1.49	1.27	1.55	2.75	3.04	2.97	2.79	3.33	3.00
19	2.53	2.19	1.98	1.49	1.27	1.60	2.89	3.06	2.97	2.74	3.33	3.00
20	2.52	2.12	1.97	1.52	1.27	1.66	2.87	3.10	2.97	2.72	3.31	3.00
21	2.48	2.28	1.96	1.53	1.28	1.76	2.91	3.07	2.94	2.71	3.28	3.06
22	2.51	2.41	1.96	1.53	1.28	1.85	2.98	3.00	2.93	2.73	3.22	3.15
23	2.64	2.26	1.95	1.52	1.29	1.90	2.99	3.01	2.92	2.72	3.18	3.04
24	2.64	2.19	1.94	1.50	1.30	1.96	3.01	2.97	2.91	2.72	3.10	3.03
25	2.58	2.18	1.93	1.49	1.30	2.02	3.03	2.95	2.88	2.74	3.06	3.06
26	2.51	2.09	1.91	1.47	1.31	2.07	3.00	2.97	2.83	2.69	3.03	3.06
27	2.52	2.01	1.90	1.46	1.32	2.12	3.04	2.91	2.84	2.68	3.01	3.06
28	2.55	2.35	1.90	1.45	1.33	2.17	3.10	2.97	2.86	2.74	3.09	3.06
29	2.47	2.25	1.88	1.44	---	2.23	3.05	3.12	2.89	2.73	3.13	3.06
30	2.47	2.21	1.86	1.43	---	2.30	2.99	3.16	2.97	2.71	3.13	3.08
31	2.42	---	1.85	1.42	---	2.37	---	3.18	---	2.72	3.11	---
MEAN	2.49	2.25	2.03	1.58	1.32	1.65	2.73	2.99	3.00	2.76	3.03	3.01
MAX	2.64	2.41	2.22	1.86	1.41	2.37	3.10	3.18	3.19	2.92	3.34	3.15
MIN	2.41	2.01	1.85	1.42	1.27	1.34	2.38	2.74	2.83	2.68	2.69	2.80

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04084445 FOX RIVER AT APPLETON, WI

LOCATION.--Lat 44°14'53", long 88°25'23" in NW 1/4 SE 1/4 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.--Estimated daily discharges: Oct. 1-3, 19, Mar. 1-7, June 22, 23, July 2, 3, 6, 7, 11, 23, and Aug. 9, 11, 29. Records good, except for estimated daily discharges, which are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7200	4120	3580	4120	3130	1800	5210	7620	5380	1850	1460	8550
2	7200	4740	3470	4000	3070	2100	5250	7620	5850	1800	1500	8150
3	5400	4660	3410	4170	3190	2200	5290	7690	5800	1800	1510	7920
4	4650	4600	3380	4030	3140	2100	4950	7580	5870	1820	1550	7820
5	4850	4570	3950	3910	3100	1900	5210	7060	6370	1810	1520	7300
6	4970	4540	4350	3900	3120	1900	4480	6620	6710	1700	1500	6350
7	5040	5220	4670	3950	3160	2200	3050	6500	7410	1800	1510	4260
8	3930	5550	5170	3940	2930	2620	3120	5890	7280	1660	1540	3070
9	3810	5330	5400	3900	2680	3090	3020	4970	7520	1440	1900	2070
10	3570	4920	5240	3880	2590	3320	3070	4550	7130	1640	1930	2030
11	3700	4550	4780	3850	2620	3260	3370	4810	6950	1600	2000	2190
12	3750	4490	4400	3840	2610	3410	3650	5150	6030	1630	2140	2200
13	3130	4480	3970	3840	2530	3450	3470	5300	4480	1600	2490	2190
14	2550	3940	3880	3830	2210	3350	3490	5310	4080	1700	5110	2110
15	2500	3410	3660	3820	2180	3340	3470	5220	3370	1730	7070	2200
16	2500	3390	3890	3790	2020	3340	3460	5800	2620	1820	8600	2350
17	2540	3480	4010	3780	1650	3340	3560	6110	2100	1760	9020	1980
18	2490	3650	3960	3470	1630	3350	3930	6280	2060	1640	9350	2220
19	2500	3360	3900	3200	1730	3400	4110	5880	2050	1690	9660	2300
20	2510	3340	3940	3280	1720	3350	4640	5140	2040	1650	9590	2160
21	2550	3420	3920	3260	1680	2740	5610	5020	1990	1560	10400	2140
22	2590	3220	3920	3240	1700	2660	6160	5100	1900	1530	11400	2190
23	2670	3430	3920	3230	1760	2640	6290	5000	1900	1600	10600	2260
24	2630	3440	3910	3210	1720	2720	6460	4550	1920	1500	9330	2260
25	3210	3310	3880	3200	1640	2750	6350	3560	1830	1500	9150	2330
26	3730	3230	3870	3170	1740	2790	6410	2840	1800	1470	9070	2330
27	4040	3290	3910	3120	1750	3400	6260	2840	1830	1430	9040	2210
28	4140	3700	3950	3180	1750	4130	7080	3080	1890	1590	9090	2240
29	3950	3350	3870	3180	---	4050	7820	3080	1840	1440	9100	2250
30	3780	3350	4270	3170	---	4150	7690	4140	1960	1480	10600	2410
31	3620	---	4240	3150	---	4890	---	4760	---	1510	9730	---
TOTAL	115700	120080	126670	111610	64750	93740	145930	165070	119960	50750	188460	102040
MEAN	3732	4003	4086	3600	2312	3024	4864	5325	3999	1637	6079	3401
MAX	7200	5550	5400	4170	3190	4890	7820	7690	7520	1850	11400	8550
MIN	2490	3220	3380	3120	1630	1800	3020	2840	1800	1430	1460	1980
CFSM	.63	.67	.69	.61	.39	.51	.82	.89	.67	.28	1.02	.57
IN.	.72	.75	.79	.70	.40	.59	.91	1.03	.75	.32	1.18	.64

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1995, BY WATER YEAR (WY)

	MEAN	4304	4978	4548	4015	3717	4990	5691	5701	5107	3882	3193	3865
MAX	13510	7344	7509	5575	5422	7702	11920	11900	13300	15110	6259	8899	
(WY)	1987	1993	1993	1987	1994	1993	1993	1993	1993	1993	1993	1986	
MIN	1845	2923	2541	2535	2312	3024	2688	2682	1243	944	971	1226	
(WY)	1990	1990	1990	1990	1995	1995	1990	1988	1988	1988	1988	1988	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1986 - 1995

ANNUAL TOTAL	1574330	1404760	
ANNUAL MEAN	4313	3849	4441
HIGHEST ANNUAL MEAN			8107
LOWEST ANNUAL MEAN			2995
HIGHEST DAILY MEAN	11300	May 8	11400
LOWEST DAILY MEAN	1520	Jun 8	1430
ANNUAL SEVEN-DAY MINIMUM	1820	Jun 4	1480
ANNUAL RUNOFF (CFSM)	.72	.65	.75
ANNUAL RUNOFF (INCHES)	9.84	8.78	10.14
10 PERCENT EXCEEDS	7840	6990	8440
50 PERCENT EXCEEDS	3780	3410	3700
90 PERCENT EXCEEDS	2030	1720	1640

STREAMS TRIBUTARY TO LAKE MICHIGAN
04084500 FOX RIVER AT RAPIDE CROCHE DAM, NEAR WRIGHTSTOWN, WI

LOCATION.--Lat 44°19'03", long 88°11'50", in SE 1/4 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 three 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 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7720	4310	4120	4550	3240	2060	5280	7510	5280	1790	1490	8440
2	7520	5010	4190	4070	3220	2570	5280	7370	5780	1830	1620	8040
3	6390	4980	4310	4390	3350	2680	5500	7470	5680	1980	1610	7860
4	5080	4540	4010	4580	3230	2320	5150	7230	5730	1980	1710	7770
5	5180	4530	4600	4540	3180	2270	5070	7230	6010	1820	1600	6860
6	5420	4540	4960	5090	3310	2310	4800	6680	6190	1760	1740	5780
7	5390	4710	5180	4860	3230	2330	2990	5580	7460	1900	1510	4300
8	4730	5010	5710	5030	3050	2460	3200	6070	6090	1550	1700	3090
9	4440	4850	5800	4300	2200	3130	3130	5390	7230	1680	1980	2010
10	4280	5220	5840	4450	2500	3580	3370	4570	6930	1610	2920	1920
11	4200	4810	5550	4560	2590	3470	3120	5000	6710	1640	2160	2010
12	4230	4770	5350	4450	2580	3830	3910	5230	6180	1600	2510	2160
13	3780	4760	5180	4020	2900	3760	3630	5340	4660	1770	2670	2030
14	3120	4480	5280	3990	2200	3520	3480	5480	3970	1730	5430	1980
15	2990	3900	4850	4020	2310	3360	3580	5550	3370	1700	5390	2110
16	2950	4010	4410	3920	2250	3590	3440	5700	2650	1920	7470	2240
17	2920	4120	4830	3950	1990	3400	3570	6030	2210	1570	9020	1980
18	2900	4190	4520	3660	1990	3510	3950	6120	2160	1720	9710	2020
19	2920	3750	4440	3790	2030	3470	4470	6010	2170	1850	9180	2340
20	2990	4060	4560	3810	2100	3850	4690	5430	2110	1640	9500	2120
21	2960	4010	4680	3940	1920	3070	5720	5220	2040	1660	9830	2180
22	3000	3530	4590	3700	1960	2860	6580	5090	2020	1660	10100	2210
23	3120	4150	4560	3800	1950	2650	6540	5760	2080	1670	10100	2170
24	2940	4240	4520	3640	2070	2790	6620	4750	2070	1600	8720	2400
25	3200	3680	4520	3490	1830	2780	6380	3640	1870	1600	8070	2220
26	3960	3790	4610	3960	2030	2830	6350	2880	1800	1710	7920	2370
27	4500	3770	4600	3380	2070	3380	6140	2900	1910	1630	8100	2270
28	4550	4370	4520	3810	2090	3940	6680	3300	1980	1610	8880	2330
29	4420	3870	4660	3850	---	4290	7490	3390	2010	1700	9380	2410
30	4220	3920	4760	3450	---	4190	7410	3830	2050	1580	9550	2440
31	4080	---	4910	3290	---	4780	---	4880	---	1670	9110	---
TOTAL	130100	129880	148620	126340	69370	99030	147520	166630	118400	53130	180680	100060
MEAN	4197	4329	4794	4075	2477	3195	4917	5375	3947	1714	5828	3335
MAX	7720	5220	5840	5090	3350	4780	7490	7510	7460	1980	10100	8440
MIN	2900	3530	4010	3290	1830	2060	2990	2880	1800	1550	1490	1920

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1896 - 1995, BY WATER YEAR (WY)

	MEAN	3308	3954	4018	4032	4056	4928	7124	6098	5006	3420	2688	2864
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	1767	1596	1590	1260	1097	983	761	709	
(WY)	1933	1931	1959	1977	1977	1964	1954	1931	1931	1931	1936	1933	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1896 - 1995
ANNUAL TOTAL	1737570	1469760	
ANNUAL MEAN	4760	4027	4300
HIGHEST ANNUAL MEAN			8427
LOWEST ANNUAL MEAN			1626
HIGHEST DAILY MEAN	11600	May 7, 8	24000
LOWEST DAILY MEAN	1700	Jun 8	138
ANNUAL SEVEN-DAY MINIMUM	2120	Jun 4	499
10 PERCENT EXCEEDS	8500		7770
50 PERCENT EXCEEDS	4120		3580
90 PERCENT EXCEEDS	2450		1680

STREAMS TRIBUTARY TO LAKE MICHIGAN
04085109 EAST RIVER AT MIDWAY ROAD NEAR DE PERE, WI
(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

121

LOCATION.--Lat 44°23'12", long 88°04'47", in NE 1/4 NW 1/4 sec.16 (revised), T.22 N., R.20 E., Brown County, Hydrologic Unit 04030204, on left bank downstream from bridge on Midway Road, 0.5 mi east of intersection of Midway Road and State Highways 32 and 57 south of De Pere.

DRAINAGE AREA.--47.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1993 to April 1994, October 1994 to September 1995 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 610 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-7 and ice-affected period, Dec 3 to Mar. 11. Records fair except those for estimated daily discharges, which are poor (see page 11). Gage was removed Apr. 5, 1994, due to bridge construction and re-established Oct. 7, 1994 (gage reset approximately 10 ft lower than original datum).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.80	1.1	3.6	.60	.27	1.6	8.8	8.6	5.4	.12	.00	.24
2	.80	1.1	3.5	.25	.26	1.8	7.9	8.1	3.7	.00	.00	.16
3	.80	1.0	3.5	.20	.25	2.5	7.0	7.7	3.3	.00	.00	.11
4	.85	1.0	3.5	.18	.25	3.0	6.5	7.4	3.0	.00	.00	.12
5	.86	1.0	3.0	.20	.23	2.5	6.5	7.0	2.9	.00	.00	.08
6	.90	1.2	2.5	.20	.22	2.3	5.7	6.5	2.8	.00	.00	.02
7	.90	1.2	2.1	.20	.22	2.3	5.1	5.7	3.1	.00	.00	.00
8	.93	1.3	2.0	.18	.22	2.3	5.0	4.8	3.3	.00	.00	.00
9	1.0	1.2	1.8	.18	.22	2.1	5.0	6.7	3.2	.00	.00	.00
10	1.1	1.2	1.5	.18	.22	3.0	4.8	9.2	3.0	.00	.00	.00
11	1.1	1.1	1.4	.17	.22	5.0	4.5	9.4	2.8	.00	.00	.00
12	1.2	1.1	1.4	.17	.20	95	7.0	8.6	2.7	.00	.09	.00
13	1.2	1.1	1.4	.18	.20	226	10	7.8	2.5	.00	1.8	.00
14	1.3	1.2	1.4	.18	.20	97	8.1	9.0	2.3	.00	15	.00
15	1.3	1.2	1.5	.18	.20	48	6.7	9.8	2.2	.00	23	.00
16	1.3	1.2	1.8	.18	.20	34	5.6	8.3	2.0	.00	7.6	.00
17	1.3	1.3	2.0	.18	.40	25	5.2	7.5	1.9	.00	4.0	.00
18	1.9	1.4	1.9	.19	.55	19	8.0	6.4	1.7	.00	3.3	.00
19	2.2	1.5	2.0	.19	1.2	17	43	5.1	1.4	.00	2.4	.00
20	2.3	1.6	2.5	.19	1.3	76	31	4.3	1.2	.00	1.5	.00
21	2.4	1.9	2.7	.20	1.4	167	20	3.7	.94	.00	.57	.00
22	2.7	2.2	2.7	.20	1.5	70	16	3.4	.69	.00	.26	.04
23	3.3	2.3	2.9	.20	1.5	37	13	3.2	.50	.00	.18	.08
24	1.7	2.4	2.9	.20	1.5	26	11	3.1	.28	.00	.20	.08
25	1.2	2.5	3.0	.20	1.6	20	9.9	3.1	.03	.00	.27	.10
26	1.2	2.6	2.8	.20	1.6	16	9.2	3.1	.00	.00	.21	.15
27	1.2	2.7	2.8	.20	1.6	14	9.2	3.0	.00	.00	.18	.16
28	1.2	3.2	2.8	.20	1.6	13	11	4.6	.00	.00	.35	.16
29	1.1	3.5	2.5	.20	---	11	11	11	.01	.00	1.3	.16
30	1.1	3.7	2.0	.22	---	10	9.4	10	.19	.00	.98	.16
31	1.1	---	1.0	.25	---	9.6	---	7.7	---	.00	.39	---
TOTAL	42.24	51.0	72.4	6.45	19.33	1059.0	311.1	203.8	57.04	0.12	63.58	1.82
MEAN	1.36	1.70	2.34	.21	.69	34.2	10.4	6.57	1.90	.004	2.05	.061
MAX	3.3	3.7	3.6	.60	1.6	226	43	11	5.4	.12	23	.24
MIN	.80	1.0	1.0	.17	.20	1.6	4.5	3.0	.00	.00	.00	.00
CFSM	.03	.04	.05	.00	.01	.73	.22	.14	.04	.00	.04	.00
IN.	.03	.04	.06	.01	.02	.84	.25	.16	.05	.00	.05	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1995, BY WATER YEAR (WY)

	1993	1994	1995	1993	1994	1995	1993	1994	1995	1993	1994	1995
MEAN	5.73	6.47	3.25	.62	20.1	45.2	96.8	11.4	110	74.7	7.94	8.54
MAX	10.1	11.2	4.16	1.04	39.4	56.2	183	16.3	219	149	13.8	17.0
(WY)	1994	1994	1994	1994	1994	1994	1993	1993	1993	1993	1993	1993
MIN	1.36	1.70	2.34	.21	.69	34.2	10.4	6.57	1.90	.004	2.05	.061
(WY)	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995

SUMMARY STATISTICS

FOR 1995 WATER YEAR

WATER YEARS 1993 - 1995

ANNUAL TOTAL	1887.88		
ANNUAL MEAN	5.17		
HIGHEST DAILY MEAN	226	Mar 13	1550 Jun 9 1993
LOWEST DAILY MEAN	.00	Many days, 1995	.00 Many days, 1995
ANNUAL SEVEN-DAY MINIMUM	.00	Many periods, 1995	.00 Many periods, 1995
INSTANTANEOUS PEAK FLOW	274	Mar 12	2280 Jul 5 1993
INSTANTANEOUS PEAK STAGE	10.36	Mar 12	(a)23.67 Jul 5 1993
INSTANTANEOUS LOW FLOW	.00	Many days, 1995	.00 Many days, 1995
ANNUAL RUNOFF (CFSM)	.11		.11
ANNUAL RUNOFF (INCHES)	1.49		1.50
10 PERCENT EXCEEDS	9.4		55
50 PERCENT EXCEEDS	1.3		3.7
90 PERCENT EXCEEDS	.00		.16

(a) At a datum approximately 10 ft higher than present datum

STREAMS TRIBUTARY TO LAKE MICHIGAN
04085109 EAST RIVER AT MIDWAY ROAD NEAR DE PERE, WI--CONTINUED
(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1993 to August 1995 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
OCT 1994											
05...	0800	0.86	800	7.8	10.5	7.2	762	330	66	39	43
NOV											
16...	0940	1.1	858	8.0	3.0	8.9	767	430	85	52	27
DEC											
07...	0740	2.1	957	8.1	0.5	13.0	764	420	86	51	36
JAN 1995											
11...	0820	0.19	1350	7.5	0.5	6.5	758	650	130	79	45
MAR											
01...	0800	1.8	753	7.6	0.0	8.7	773	300	64	34	31
20...	1730	155	638	7.8	2.5	11.6	741	270	60	30	19
21...	1505	182	763	7.8	2.0	12.1	751	280	62	31	28
APR											
06...	1500	5.2	832	8.2	4.5	17.0	758	380	78	44	24
MAY											
09...	1235	7.2	828	8.2	10.5	11.6	735	400	83	46	24
JUL											
11...	1320	0.0	852	7.8	22.5	2.7	767	390	83	45	27

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	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)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L AS N) (70300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
OCT 1994											
05...	15	312	256	56	80	0.20	6.3	477	0.330	0.040	0.060
NOV											
16...	8.1	398	326	54	47	0.20	7.3	512	<0.050	<0.010	<0.015
DEC											
07...	7.0	412	326	74	70	0.10	5.8	560	0.500	<0.010	0.050
JAN 1995											
11...	9.0	627	514	110	84	0.20	3.3	823	0.300	0.010	0.100
MAR											
01...	16	298	244	47	64	0.20	8.9	300	1.20	0.020	1.20
20...	9.5	205	168	64	50	0.10	7.6	379	4.70	0.040	0.330
21...	13	168	138	63	86	0.20	7.9	459	11.0	0.090	0.480
APR											
06...	6.4	283	268	90	57	0.10	1.9	515	0.070	<0.010	0.020
MAY											
09...	5.7	364	298	74	54	0.10	2.3	524	0.090	0.010	0.040
JUL											
11...	9.3	--	--	20	56	0.20	13	540	<0.050	0.020	0.730

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHOS, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 1994											
05...	1.1	0.90	0.330	0.260	0.260	150	74	--	--	22	97
NOV											
16...	0.60	0.50	0.230	0.170	0.180	39	32	7.7	0.30	61	69
DEC											
07...	0.60	0.60	0.110	0.090	0.090	26	17	--	--	53	57
JAN 1995											
11...	0.70	0.90	0.060	0.050	0.040	24	110	8.0	0.30	--	--
MAR											
01...	3.1	2.9	0.390	0.370	0.310	210	47	17	0.60	9	91
20...	1.4	1.5	0.270	0.240	0.200	70	40	11	4.0	255	100
21...	2.6	2.2	0.370	0.340	0.270	71	33	15	2.7	110	99
APR											
06...	0.70	0.80	0.060	0.030	0.040	41	72	6.5	1.4	42	91
MAY											
09...	1.2	1.0	0.230	0.130	0.120	84	130	16	1.1	59	100
JUL											
11...	2.4	1.9	1.30	1.40	1.30	93	750	--	--	--	--

STREAMS TRIBUTARY TO LAKE MICHIGAN
442312087565100 BOWER CREEK RAIN GAGE #2 NEAR DE PERE, WI

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LOCATION.--Lat 44°23'12", long 87°56'51", in NE 1/4 SW 1/4 sec.17, T.22 N., R.21 E., Brown County, Hydrologic Unit 04030204, on CTH X, 0.3 mi south of junction with Zion Road, near De Pere.

PERIOD OF RECORD.--January 1991 to April 1995, non-frozen precipitation, (discontinued).

REMARKS.--Gage established on Jan. 29, 1991. Rainfall estimated to be 0.00 for Feb. 20, Mar. 7, 9, and Apr. 2, 8 because recorded precipitation interpreted as collector snowmelt. Rainfall data missing for the period Apr. 14 to Sept. 30.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 3.32 in., June 17, 1993.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall during period October 1994 to April 13, 1995, 1.17 in., Mar. 20.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY SUM VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.00	.00	.00	.00	.00	.00	---	---	---	---	---
2	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
3	.02	.00	.00	.00	.00	.00	.02	---	---	---	---	---
4	.00	.03	.00	.00	.00	.00	.00	---	---	---	---	---
5	.00	.21	.00	.00	.00	.00	.00	---	---	---	---	---
6	.00	.18	.00	.00	.00	.00	.00	---	---	---	---	---
7	.03	.00	.00	.00	.00	.00	.00	---	---	---	---	---
8	.17	.00	.00	.00	.00	.00	.00	---	---	---	---	---
9	.01	.00	.00	.00	.00	.00	.00	---	---	---	---	---
10	.00	.00	.00	.00	.00	.00	.01	---	---	---	---	---
11	.00	.00	.00	.00	.00	.00	.51	---	---	---	---	---
12	.00	.00	.00	.00	.00	.00	.01	---	---	---	---	---
13	.01	.18	.00	.00	.00	.00	.00	---	---	---	---	---
14	.00	.00	.00	.00	.00	.00	---	---	---	---	---	---
15	.00	.00	.00	.00	.00	.02	---	---	---	---	---	---
16	.00	.00	.00	.00	.00	.00	---	---	---	---	---	---
17	.17	.00	.00	.00	.00	.04	---	---	---	---	---	---
18	.01	.00	.00	.00	.00	.10	---	---	---	---	---	---
19	.00	.00	.00	.00	.00	.09	---	---	---	---	---	---
20	.00	.17	.00	.00	.00	1.17	---	---	---	---	---	---
21	.00	.22	.00	.00	.00	.00	---	---	---	---	---	---
22	.40	.00	.00	.00	.00	.00	---	---	---	---	---	---
23	.00	.00	.00	.00	.00	.00	---	---	---	---	---	---
24	.00	.00	.00	.00	.00	.00	---	---	---	---	---	---
25	.00	.00	.00	.00	.00	.00	---	---	---	---	---	---
26	.00	.00	.00	.00	.00	.00	---	---	---	---	---	---
27	.00	.30	.00	.00	.00	.00	---	---	---	---	---	---
28	.00	.00	.00	.00	.00	.01	---	---	---	---	---	---
29	.00	.00	.00	.00	---	.00	---	---	---	---	---	---
30	.00	.00	.00	.00	---	.00	---	---	---	---	---	---
31	.00	---	.00	.00	---	.00	---	---	---	---	---	---
TOTAL	0.87	1.29	0.00	0.00	0.00	1.43	---	---	---	---	---	---

STREAMS TRIBUTARY TO LAKE MICHIGAN
442230087584500 BOWER CREEK RAIN GAGE #1 NEAR DE PERE, WI

LOCATION.--Lat 44°22'30", long 87°58'45", in SE 1/4 SE 1/4 sec.9, T.22 N., R.21 E., Brown County, Hydrologic Unit 04030204, on CTH G, just west of the junction with Langers Corner Road, near De Pere.

PERIOD OF RECORD.--January 1991 to April 1995, non-frozen precipitation, (discontinued).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established on Jan. 29, 1991. Rainfall estimated to be 0.00 for Dec. 15, 17, Jan. 17, Feb. 15, 20, Mar. 9, and Apr. 8 because recorded precipitation interpreted as collector snowmelt. Rainfall data missing for the period Apr. 14 to Sept. 30.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 3.25 in., June 17, 1993.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall October 1994 to April 13, 1995, 1.14 in., Mar. 20.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.00	.00	.00	.00	.00	.00	---	---	---	---	---
2	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
3	.02	.00	.00	.00	.00	.00	.02	---	---	---	---	---
4	.01	.03	.00	.00	.00	.00	.00	---	---	---	---	---
5	.00	.29	.00	.00	.00	.00	.00	---	---	---	---	---
6	.00	.18	.00	.00	.00	.00	.00	---	---	---	---	---
7	.03	.00	.00	.00	.00	.00	.00	---	---	---	---	---
8	.19	.00	.00	.00	.00	.00	.00	---	---	---	---	---
9	.01	.00	.00	.00	.00	.00	.00	---	---	---	---	---
10	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
11	.00	.00	.00	.01	.00	.00	.02	---	---	---	---	---
12	.00	.00	.00	.01	.00	.00	.00	---	---	---	---	---
13	.00	.18	.00	.01	.00	.00	.00	---	---	---	---	---
14	.00	.00	.00	.00	.00	.00	---	---	---	---	---	---
15	.00	.00	.00	.00	.00	.01	---	---	---	---	---	---
16	.00	.00	.00	.00	.00	.00	---	---	---	---	---	---
17	.13	.00	.00	.00	.00	.01	---	---	---	---	---	---
18	.02	.01	.00	.00	.00	.08	---	---	---	---	---	---
19	.00	.00	.00	.00	.00	.11	---	---	---	---	---	---
20	.00	.20	.00	.00	.00	1.14	---	---	---	---	---	---
21	.00	.23	.00	.00	.00	.01	---	---	---	---	---	---
22	.47	.00	.00	.00	.00	.00	---	---	---	---	---	---
23	.01	.00	.00	.00	.00	.00	---	---	---	---	---	---
24	.00	.00	.00	.00	.00	.00	---	---	---	---	---	---
25	.00	.00	.00	.00	.00	.00	---	---	---	---	---	---
26	.00	.00	.00	.00	.00	.00	---	---	---	---	---	---
27	.00	.36	.00	.00	.00	.00	---	---	---	---	---	---
28	.00	.01	.00	.00	.00	.00	---	---	---	---	---	---
29	.00	.00	.00	.00	---	.01	---	---	---	---	---	---
30	.00	.00	.00	.00	---	.00	---	---	---	---	---	---
31	.00	---	.00	.00	---	.00	---	---	---	---	---	---
TOTAL	0.94	1.49	0.00	0.03	0.00	1.37	---	---	---	---	---	---

STREAMS TRIBUTARY TO LAKE MICHIGAN
04085119 BOWER CREEK, AT COUNTY MM, NEAR DE PERE, WI

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LOCATION.--Lat 44°25'21", long 87°56'24", in NE 1/4 SW 1/4 sec.34, T.23 N., R.21 E., Brown County, Hydrologic Unit 04030204, on right bank upstream from bridge on Highway MM, 1.1 mi east from intersection of Highways G and MM, and 6.2 mi southeast of post office in De Pere.

DRAINAGE AREA.--14.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1990 to March 1995 (discontinued).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 790 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Ice-affected period, Nov. 19 to Mar. 14. Records are fair except those for ice-affected period, which is poor (see page 11). Gage-height telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 23, 1990, maximum discharge, 4,020 ft³/s, gage height, 14.11 ft, estimated from floodmarks, based on step-backwater model.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.22	.03	.06	.08	.04	.15	---	---	---	---	---	---
2	.16	.02	.07	.07	.04	.13	---	---	---	---	---	---
3	.13	.00	.08	.07	.04	.12	---	---	---	---	---	---
4	.06	.00	.08	.06	.03	.11	---	---	---	---	---	---
5	.11	.00	.09	.06	.03	.11	---	---	---	---	---	---
6	.08	.11	.09	.06	.03	.10	---	---	---	---	---	---
7	.04	.11	.08	.05	.02	.11	---	---	---	---	---	---
8	.04	.06	.07	.05	.02	.10	---	---	---	---	---	---
9	.04	.07	.06	.05	.02	.10	---	---	---	---	---	---
10	.04	.05	.05	.05	.03	.15	---	---	---	---	---	---
11	.04	.06	.05	.05	.03	48	---	---	---	---	---	---
12	.02	.09	.04	.06	.02	150	---	---	---	---	---	---
13	.00	.10	.03	.07	.02	81	---	---	---	---	---	---
14	.00	.10	.02	.07	.03	27	---	---	---	---	---	---
15	.00	.08	.02	.06	.03	16	---	---	---	---	---	---
16	.00	.08	.05	.05	.03	10	---	---	---	---	---	---
17	.04	.08	.06	.05	.04	6.2	---	---	---	---	---	---
18	.10	.03	.07	.06	.08	4.4	---	---	---	---	---	---
19	.04	.03	.07	.06	.14	5.5	---	---	---	---	---	---
20	.00	.04	.07	.06	.22	59	---	---	---	---	---	---
21	.00	.05	.08	.05	.20	77	---	---	---	---	---	---
22	.00	.06	.08	.05	.17	18	---	---	---	---	---	---
23	.03	.07	.09	.05	.21	9.2	---	---	---	---	---	---
24	.04	.06	.09	.04	.20	5.6	---	---	---	---	---	---
25	.00	.05	.10	.04	.18	4.0	---	---	---	---	---	---
26	.00	.05	.10	.04	.17	3.2	---	---	---	---	---	---
27	.00	.06	.11	.03	.16	2.3	---	---	---	---	---	---
28	.03	.07	.11	.03	.17	2.1	---	---	---	---	---	---
29	.03	.07	.10	.03	---	1.9	---	---	---	---	---	---
30	.04	.06	.10	.03	---	1.6	---	---	---	---	---	---
31	.04	---	.09	.04	---	1.5	---	---	---	---	---	---
TOTAL	1.37	1.74	2.26	1.62	2.40	534.68	---	---	---	---	---	---
MEAN	.044	.058	.073	.052	.086	17.2	---	---	---	---	---	---
MAX	.22	.11	.11	.08	.22	150	---	---	---	---	---	---
MIN	.00	.00	.02	.03	.02	.10	---	---	---	---	---	---
CFSM	.00	.00	.00	.00	.01	1.17	---	---	---	---	---	---
IN.	.00	.00	.01	.00	.01	1.34	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1995, BY WATER YEAR (WY)

MEAN	1.33	7.96	6.53	1.74	5.39	21.9	30.7	1.68	15.1	7.72	.23	2.10
MAX	3.16	27.4	20.4	4.31	11.5	41.1	54.3	2.95	59.2	29.4	.69	7.33
(WY)	1991	1993	1993	1992	1991	1991	1993	1993	1993	1993	1993	1992
MIN	.044	.058	.073	.000	.086	11.4	16.9	.52	.000	.000	.000	.000
(WY)	1995	1995	1995	1994	1995	1994	1991	1992	1992	1991	1991	1991

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

WATER YEARS 1991 - 1995

ANNUAL TOTAL	1492.24		
ANNUAL MEAN	4.09		9.06
HIGHEST ANNUAL MEAN			18.5
LOWEST ANNUAL MEAN			4.56
HIGHEST DAILY MEAN	460	Apr 25	525
LOWEST DAILY MEAN	.00	Many days	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Many periods	.00
INSTANTANEOUS PEAK FLOW			1540
INSTANTANEOUS PEAK STAGE			10.79
INSTANTANEOUS LOW FLOW			.00
ANNUAL RUNOFF (CFSM)	.28		.61
ANNUAL RUNOFF (INCHES)	3.75		8.32
10 PERCENT EXCEEDS	6.3		16
50 PERCENT EXCEEDS	.07		.59
90 PERCENT EXCEEDS	.00		.00

STREAMS TRIBUTARY TO LAKE MICHIGAN

04085119 BOWER CREEK, AT HIGHWAY MM, NEAR DE PERE, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1990 to May 1995 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1990 to May 1995.

DISSOLVED OXYGEN: April to June 1991.

SUSPENDED-SOLIDS DISCHARGE: October 1990 to January 1995.

TOTAL-PHOSPHORUS DISCHARGE: October 1990 to January 1995.

INSTRUMENTATION.--Stage-activated water-quality sampler since October 1990. Continuous water-temperature recorder from October 1990 to May 1995. Dissolved-oxygen recorder during open-water periods from April to June 1991.

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

Dissolved-oxygen concentrations greater than 20.0 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, 30.0°C, June 19, 1991; minimum observed, 0.0°C, many days during winter periods.

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 3,000 tons, June 18, 1993; minimum daily, 0.0 ton, many days.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 6,400 lb, June 18, 1993; minimum daily, 0.0 lb, many days.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum observed, 19.0°C, May 12, 16; minimum observed, 0.0°C, Mar. 12-13.

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 0.01 ton, Oct. 1; minimum daily, 0.0 ton, many days.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 0.44 lb, Oct. 1; minimum daily, 0.0 lb, many days.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
OCT 1994								
*04...	1525	--	0.04	4.0	150	7	<0.027	0.211
*31...	1015	--	0.04	4.0	10	<5	<0.027	0.136
NOV								
*15...	1420	--	0.08	5.0	<10	<5	0.040	0.210
*29...	1350	0.07	--	2.0	20	<5	<0.027	0.230
DEC								
*19...	1545	0.07	--	2.4	<10	<5	<0.027	0.140
JAN 1995								
*18...	1700	0.06	--	16	30	<5	0.193	0.260

* Equal-width increment (EWI) sample

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04085119 BOWER CREEK, AT HIGHWAY MM, NEAR DE PERE, WI--CONTINUED

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	14.0	13.0	13.5	8.5	7.5	8.0	4.0	3.5	4.0	4.0	3.5	3.5
2	13.5	12.5	13.0	8.5	7.5	8.0	4.5	3.5	4.0	3.5	3.0	3.0
3	13.0	12.0	12.5	9.5	8.5	9.0	4.5	4.0	4.5	3.0	3.0	3.0
4	13.0	12.0	12.5	9.5	9.0	9.0	4.5	4.5	4.5	3.0	2.5	3.0
5	12.5	11.5	12.0	9.0	8.5	9.0	4.5	4.0	4.0	2.5	2.5	2.5
6	14.0	12.0	12.5	8.5	8.0	8.5	4.0	3.5	3.5	2.5	2.5	2.5
7	15.0	13.5	14.0	8.0	7.5	8.0	3.5	3.0	3.0	3.0	2.5	2.5
8	14.5	13.0	14.0	8.5	8.0	8.0	3.5	3.0	3.0	3.0	2.5	2.5
9	13.0	12.0	12.5	8.5	7.5	8.0	4.0	3.5	3.5	3.0	2.5	2.5
10	12.0	10.5	11.0	7.5	7.0	7.0	3.5	3.0	3.5	3.0	2.5	3.0
11	12.0	10.0	11.0	7.0	6.5	7.0	3.5	3.0	3.0	3.0	2.5	3.0
12	12.0	10.5	11.5	7.5	6.5	7.0	4.0	3.5	3.5	2.5	2.5	2.5
13	12.0	11.0	11.5	8.5	7.5	7.5	4.0	3.5	3.5	3.0	2.5	3.0
14	12.5	11.5	12.0	9.5	8.5	9.0	4.0	3.5	4.0	3.0	3.0	3.0
15	12.0	11.5	12.0	8.5	7.5	8.0	3.5	3.5	3.5	3.5	3.0	3.0
16	13.5	12.0	12.5	7.5	6.5	7.0	4.0	3.5	3.5	3.5	2.5	3.0
17	14.0	13.0	13.5	7.0	6.0	6.5	4.0	3.5	3.5	2.5	2.0	2.5
18	15.0	14.0	14.5	7.0	6.0	6.5	3.5	3.5	3.5	2.0	2.0	2.0
19	15.0	14.0	14.5	6.0	5.5	6.0	3.5	3.5	3.5	2.0	2.0	2.0
20	14.0	13.0	13.5	6.0	5.5	6.0	3.5	3.5	3.5	2.5	2.0	2.5
21	13.5	12.0	12.5	6.5	5.5	6.0	3.5	3.5	3.5	2.5	2.5	2.5
22	13.5	12.0	13.0	5.5	3.5	4.0	3.5	3.5	3.5	2.5	2.5	2.5
23	13.0	11.5	12.0	4.0	3.0	3.5	3.5	3.5	3.5	2.5	2.5	2.5
24	11.5	9.5	10.5	4.5	4.0	4.0	3.5	3.5	3.5	2.5	2.5	2.5
25	9.5	8.5	9.0	4.5	4.5	4.5	3.5	3.0	3.5	2.5	2.5	2.5
26	8.5	8.0	8.5	4.5	4.0	4.5	3.5	3.0	3.5	2.5	2.5	2.5
27	8.5	7.0	8.0	4.5	4.0	4.0	4.0	3.5	3.5	2.5	2.5	2.5
28	8.5	8.0	8.0	4.0	3.0	3.5	4.0	3.5	3.5	2.5	2.5	2.5
29	9.5	8.5	9.0	3.5	3.0	3.5	4.0	3.5	4.0	2.5	2.5	2.5
30	9.0	8.0	8.5	3.5	3.5	3.5	4.0	3.5	3.5	2.5	2.5	2.5
31	9.0	8.5	8.5	---	---	---	4.0	3.5	3.5	2.5	2.0	2.5
MONTH	15.0	7.0	11.7	9.5	3.0	6.5	4.5	3.0	3.6	4.0	2.0	2.6
FEBRUARY			MARCH			APRIL			MAY			
1	2.0	2.0	2.0	1.5	1.5	1.5	5.5	4.0	4.5	11.0	8.5	10.0
2	2.0	2.0	2.0	1.5	1.5	1.5	6.0	4.0	5.0	14.0	10.0	12.0
3	2.0	2.0	2.0	1.5	1.5	1.5	8.5	5.5	6.5	14.0	11.0	12.5
4	2.0	2.0	2.0	1.5	1.0	1.5	7.5	4.0	5.0	13.0	11.0	12.0
5	2.5	2.0	2.0	2.0	1.5	1.5	4.0	3.5	3.5	14.5	10.5	12.5
6	2.0	2.0	2.0	2.0	2.0	2.0	4.5	3.0	3.5	16.0	11.5	13.5
7	2.0	2.0	2.0	2.0	2.0	2.0	5.0	4.0	4.5	16.5	13.5	15.0
8	2.0	2.0	2.0	2.0	2.0	2.0	5.0	4.0	4.5	15.0	10.5	12.5
9	2.0	2.0	2.0	2.0	1.5	2.0	5.5	4.0	5.0	13.0	9.0	11.0
10	2.0	2.0	2.0	2.0	1.5	1.5	5.0	4.0	4.5	12.5	10.5	11.0
11	2.0	2.0	2.0	1.5	1.0	1.5	5.5	4.0	4.5	16.0	10.0	13.0
12	2.0	2.0	2.0	1.0	.0	.5	7.0	5.5	6.0	19.0	13.5	16.0
13	2.0	2.0	2.0	1.0	.0	.5	8.0	5.5	6.5	17.5	14.5	15.5
14	2.0	2.0	2.0	3.5	.5	1.5	9.0	6.0	7.5	15.0	13.5	14.5
15	2.0	2.0	2.0	5.5	2.5	3.5	8.5	6.5	7.5	17.0	12.5	15.0
16	2.0	2.0	2.0	6.5	3.0	4.5	8.0	6.5	7.5	19.0	15.5	17.0
17	2.0	2.0	2.0	4.5	3.0	3.5	10.5	7.5	9.0	---	---	---
18	2.0	2.0	2.0	4.5	2.5	3.5	10.5	7.5	8.5	---	---	---
19	2.0	2.0	2.0	4.0	3.5	3.5	8.0	6.0	7.0	---	---	---
20	2.0	2.0	2.0	3.5	2.0	3.0	7.5	6.0	6.5	---	---	---
21	2.5	2.0	2.0	3.0	1.5	2.0	6.0	5.5	5.5	---	---	---
22	2.5	2.0	2.5	5.5	2.5	4.0	8.5	5.5	6.5	---	---	---
23	2.0	1.5	1.5	5.5	3.5	4.5	10.0	6.5	8.0	---	---	---
24	1.5	1.5	1.5	6.5	3.0	4.5	10.0	8.0	9.0	---	---	---
25	1.5	1.5	1.5	5.5	3.5	4.5	10.5	8.0	9.0	---	---	---
26	1.5	1.5	1.5	5.0	4.0	4.5	10.0	8.5	9.5	---	---	---
27	1.5	1.5	1.5	4.5	3.5	3.5	10.0	8.0	8.5	---	---	---
28	1.5	1.5	1.5	4.0	3.5	3.5	10.5	7.0	8.5	---	---	---
29	---	---	---	4.0	3.5	3.5	11.5	8.0	10.0	---	---	---
30	---	---	---	4.0	3.0	3.5	11.0	9.5	10.0	---	---	---
31	---	---	---	4.5	3.0	4.0	---	---	---	---	---	---
MONTH	2.5	1.5	1.9	6.5	.0	2.7	11.5	3.0	6.7	---	---	---

04085119 BOWER CREEK, AT HIGHWAY MM, NEAR DE PERE, WI--CONTINUED

SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED(TONS PER DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.00	.00	.00	---	---	---	---	---	---	---	---
2	.00	.00	.00	.00	---	---	---	---	---	---	---	---
3	.00	.00	.00	.00	---	---	---	---	---	---	---	---
4	.00	.00	.00	.00	---	---	---	---	---	---	---	---
5	.00	.00	.00	.00	---	---	---	---	---	---	---	---
6	.00	.00	.00	.00	---	---	---	---	---	---	---	---
7	.00	.00	.00	.00	---	---	---	---	---	---	---	---
8	.00	.00	.00	.00	---	---	---	---	---	---	---	---
9	.00	.00	.00	.00	---	---	---	---	---	---	---	---
10	.00	.00	.00	.00	---	---	---	---	---	---	---	---
11	.00	.00	.00	.00	---	---	---	---	---	---	---	---
12	.00	.00	.00	.00	---	---	---	---	---	---	---	---
13	.00	.00	.00	.00	---	---	---	---	---	---	---	---
14	.00	.00	.00	.00	---	---	---	---	---	---	---	---
15	.00	.00	.00	.00	---	---	---	---	---	---	---	---
16	.00	.00	.00	.00	---	---	---	---	---	---	---	---
17	.00	.00	.00	.00	---	---	---	---	---	---	---	---
18	.00	.00	.00	.00	---	---	---	---	---	---	---	---
19	.00	.00	.00	.00	---	---	---	---	---	---	---	---
20	.00	.00	.00	.00	---	---	---	---	---	---	---	---
21	.00	.00	.00	.00	---	---	---	---	---	---	---	---
22	.00	.00	.00	.00	---	---	---	---	---	---	---	---
23	.00	.00	.00	.00	---	---	---	---	---	---	---	---
24	.00	.00	.00	.00	---	---	---	---	---	---	---	---
25	.00	.00	.00	.00	---	---	---	---	---	---	---	---
26	.00	.00	.00	.00	---	---	---	---	---	---	---	---
27	.00	.00	.00	.00	---	---	---	---	---	---	---	---
28	.00	.00	.00	.00	---	---	---	---	---	---	---	---
29	.00	.00	.00	.00	---	---	---	---	---	---	---	---
30	.00	.00	.00	.00	---	---	---	---	---	---	---	---
31	.00	---	.00	.00	---	---	---	---	---	---	---	---
TOTAL	0.01	0.00	0.00	0.00	---	---	---	---	---	---	---	---

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.44	.02	.07	.08	---	---	---	---	---	---	---	---
2	.27	.01	.08	.07	---	---	---	---	---	---	---	---
3	.18	.00	.09	.07	---	---	---	---	---	---	---	---
4	.07	.00	.09	.06	---	---	---	---	---	---	---	---
5	.12	.00	.10	.06	---	---	---	---	---	---	---	---
6	.09	.10	.09	.07	---	---	---	---	---	---	---	---
7	.04	.10	.08	.06	---	---	---	---	---	---	---	---
8	.04	.06	.07	.06	---	---	---	---	---	---	---	---
9	.04	.07	.06	.06	---	---	---	---	---	---	---	---
10	.04	.05	.05	.06	---	---	---	---	---	---	---	---
11	.04	.06	.05	.06	---	---	---	---	---	---	---	---
12	.02	.09	.04	.07	---	---	---	---	---	---	---	---
13	.00	.11	.03	.09	---	---	---	---	---	---	---	---
14	.00	.11	.02	.09	---	---	---	---	---	---	---	---
15	.00	.09	.02	.08	---	---	---	---	---	---	---	---
16	.00	.09	.04	.07	---	---	---	---	---	---	---	---
17	.04	.09	.05	.07	---	---	---	---	---	---	---	---
18	.09	.04	.05	.08	---	---	---	---	---	---	---	---
19	.04	.03	.05	.08	---	---	---	---	---	---	---	---
20	.00	.05	.05	.08	---	---	---	---	---	---	---	---
21	.00	.06	.06	.07	---	---	---	---	---	---	---	---
22	.00	.07	.06	.07	---	---	---	---	---	---	---	---
23	.03	.08	.07	.07	---	---	---	---	---	---	---	---
24	.03	.07	.08	.06	---	---	---	---	---	---	---	---
25	.00	.06	.09	.06	---	---	---	---	---	---	---	---
26	.00	.06	.09	.06	---	---	---	---	---	---	---	---
27	.00	.07	.10	.04	---	---	---	---	---	---	---	---
28	.02	.09	.10	.04	---	---	---	---	---	---	---	---
29	.03	.09	.09	.04	---	---	---	---	---	---	---	---
30	.03	.07	.09	.04	---	---	---	---	---	---	---	---
31	.03	---	.09	.06	---	---	---	---	---	---	---	---
TOTAL	1.73	1.89	2.10	2.03	---	---	---	---	---	---	---	---

PRECIPITATION QUANTITY

PERIOD OF RECORD.--October 1990 to April 1995, non-frozen precipitation, (discontinued).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established on Oct. 1, 1990. Rainfall estimated to be 0.00 for Dec. 15-16, Jan. 15, Feb. 10, 20, Mar. 5, and Apr. 7 because recorded precipitation interpreted as collector snowmelt. Rainfall missing for the period Apr. 14 to Sept. 30.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 2.97 in., June 17, 1993.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall October 1994 to April 13, 1995, 0.76 in., Mar. 20.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY SUM VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.00	.00	.00	.00	.00	.00	---	---	---	---	---
2	.01	.00	.00	.00	.00	.00	.00	---	---	---	---	---
3	.00	.00	.00	.00	.00	.00	.00	---	---	---	---	---
4	.03	.00	.00	.00	.00	.00	.00	---	---	---	---	---
5	.01	.18	.00	.00	.00	.00	.00	---	---	---	---	---
6	.00	.09	.00	.00	.00	.00	.00	---	---	---	---	---
7	.03	.00	.00	.00	.00	.00	.00	---	---	---	---	---
8	.16	.00	.00	.00	.00	.00	.00	---	---	---	---	---
9	.01	.00	.00	.00	.00	.00	.00	---	---	---	---	---
10	.01	.00	.00	.00	.00	.00	.00	---	---	---	---	---
11	.00	.00	.00	.00	.00	.00	.30	---	---	---	---	---
12	.00	.00	.00	.00	.00	.00	.20	---	---	---	---	---
13	.00	.10	.00	.00	.00	.00	.00	---	---	---	---	---
14	.00	.01	.00	.13	.00	.00	---	---	---	---	---	---
15	.01	.00	.00	.00	.00	.01	---	---	---	---	---	---
16	.00	.00	.00	.00	.00	.00	---	---	---	---	---	---
17	.16	.00	.00	.00	.00	.00	---	---	---	---	---	---
18	.06	.00	.00	.00	.00	.10	---	---	---	---	---	---
19	.00	.00	.00	.00	.00	.10	---	---	---	---	---	---
20	.00	.17	.00	.00	.00	.76	---	---	---	---	---	---
21	.00	.12	.00	.00	.00	.20	---	---	---	---	---	---
22	.36	.00	.00	.00	.00	.00	---	---	---	---	---	---
23	.01	.00	.00	.00	.00	.00	---	---	---	---	---	---
24	.00	.00	.00	.00	.00	.00	---	---	---	---	---	---
25	.01	.00	.00	.00	.00	.00	---	---	---	---	---	---
26	.00	.00	.00	.00	.00	.00	---	---	---	---	---	---
27	.00	.33	.00	.00	.00	.00	---	---	---	---	---	---
28	.00	.00	.00	.00	.00	.00	---	---	---	---	---	---
29	.00	.00	.00	.00	---	.00	---	---	---	---	---	---
30	.00	.00	.00	.00	---	.00	---	---	---	---	---	---
31	.00	---	.00	.00	---	.00	---	---	---	---	---	---
TOTAL	0.88	1.00	0.00	0.13	0.00	1.17	---	---	---	---	---	---

STREAMS TRIBUTARY TO LAKE MICHIGAN

040851385 FOX RIVER, AT OIL TANK DEPOT, AT GREEN BAY, WI

LOCATION.--Lat 44°31'43", long 88°01'12" 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.

WATER-DISCHARGE RECORDS

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

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

REMARKS.--Estimated daily discharges: Oct. 27 to Nov. 3, Mar. 30 to Apr. 5, Apr. 10-12, June 8, Aug. 10, and Sept. 9. Records good, except for estimated daily discharges, which are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7310	4560	3410	4380	2380	1750	5750	7630	5120	2630	2570	8940
2	7110	5240	3120	3690	2680	1890	5790	8030	6150	3260	1480	8010
3	5920	5150	3320	4410	3400	1950	5840	8210	6380	2620	1830	8440
4	4890	4780	3140	3600	3240	1650	5470	7970	5650	2380	1650	8390
5	5230	3870	3270	4710	2780	2050	5750	7110	6630	2140	1170	7300
6	5240	5390	3830	2370	2680	1080	5360	7020	7200	1940	394	6890
7	4930	4810	4450	4380	2860	2220	3070	6750	6930	2280	1410	4470
8	4680	4630	5110	3910	3030	2390	2040	5810	7990	1860	2450	3060
9	4010	5730	5390	3360	2120	2580	3280	5350	8040	1300	2620	2320
10	3080	5180	5530	3360	2280	3000	3420	5340	7300	1890	2170	1860
11	3720	5050	4550	3550	3430	3860	3750	4770	6990	2420	1590	3500
12	3250	4150	4280	4300	1540	5460	4050	5580	6960	2060	2750	2330
13	2710	4750	3640	3860	2480	5060	3730	5370	5290	443	2250	2390
14	2040	4370	3550	3580	1740	4200	3270	6200	3820	1790	6480	1230
15	2060	3460	4380	4060	2110	4010	3460	5010	4240	1480	5900	2790
16	2440	3180	3260	3350	1790	3830	3180	6140	4280	1030	7530	2300
17	2770	3010	3870	3560	1520	3120	3230	6080	6200	2090	9930	1550
18	3110	3690	3970	3500	1390	3270	3220	6680	5290	2320	10400	2100
19	3070	2810	3600	2470	1460	3530	5220	6620	5060	2860	9900	2160
20	2180	2460	3610	3410	1670	5050	4850	5690	3070	1170	10500	1920
21	2510	4330	3840	2980	1250	4870	5630	5530	2960	3800	9650	2150
22	3200	3100	3980	3060	1440	3060	6670	4610	2580	3260	11900	1950
23	3390	2770	3610	3150	1450	2770	6960	5650	3820	1270	11200	2730
24	2020	3630	4330	3210	1520	3180	6970	4520	4760	3230	9460	2240
25	2590	3500	3600	2940	991	2930	6790	3120	2670	2120	9080	2170
26	3980	1690	3850	3450	1010	2480	6220	2930	-211	1240	8910	2070
27	4480	2560	3790	2510	2080	3130	6870	2240	1970	2270	9660	2120
28	4590	4520	3500	2750	1640	4110	6760	3380	2570	1920	9990	2310
29	4380	3650	3630	3520	---	4430	7700	3520	2450	2550	10400	2290
30	4190	2770	3860	3070	---	4600	8110	3930	2350	2790	11200	2180
31	4020	---	4360	3300	---	5400	---	5370	---	1940	9870	---
TOTAL	119100	118790	121630	107750	57961	102910	152410	172160	144509	66353	196294	104160
MEAN	3842	3960	3924	3476	2070	3320	5080	5554	4817	2140	6332	3472
MAX	7310	5730	5530	4710	3430	5460	8110	8210	8040	3800	11900	8940
MIN	2020	1690	3120	2370	991	1080	2040	2240	-211	443	394	1230
CFSM	.61	.63	.62	.55	.33	.52	.80	.88	.76	.34	1.00	.55
IN.	.70	.70	.71	.63	.34	.60	.90	1.01	.85	.39	1.15	.61

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1995, BY WATER YEAR (WY)

	MEAN	3473	5309	5231	4189	3521	6089	6822	6954	6943	4932	4157	4114
MAX	4654	8668	9446	6092	4397	7827	13660	13220	14780	15620	6855	6172	
(WY)	1994	1993	1993	1993	1993	1994	1993	1993	1993	1993	1993	1993	
MIN	1699	3069	2977	2768	2070	3320	3010	3667	2484	2140	2134	1673	
(WY)	1990	1990	1990	1990	1995	1995	1990	1989	1994	1995	1989	1989	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1989 - 1995	
ANNUAL TOTAL	1666060		1464027			
ANNUAL MEAN	4565		4011		5150	
HIGHEST ANNUAL MEAN					9102	
LOWEST ANNUAL MEAN					3851	
HIGHEST DAILY MEAN	11600	May 5	11900	Aug 22	33800	Jun 23 1990
LOWEST DAILY MEAN	1070	Jun 7	-211	Jun 26	-3260	Nov 4 1990
ANNUAL SEVEN-DAY MINIMUM	2040	Jun 7	1330	Feb 20	598	Oct 12 1989
ANNUAL RUNOFF (CFSM)	.72		.63		.81	
ANNUAL RUNOFF (INCHES)	9.79		8.60		11.05	
10 PERCENT EXCEEDS	8060		6980		9620	
50 PERCENT EXCEEDS	3830		3500		4070	
90 PERCENT EXCEEDS	2450		1850		2040	

STREAMS TRIBUTARY TO LAKE MICHIGAN
040851385 FOX RIVER, AT OIL TANK DEPOT, AT GREEN BAY, WI--CONTINUED

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WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1989 to October 1995 (discontinued).

REMARKS.--Water-quality analyses by the Wisconsin State Laboratory of Hygiene.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)
OCT 1994				
01...	1100	--	13000	59
02...	1100	--	11500	43
03...	1100	--	4200	47
04...	1525	--	-2460	41
14...	2300	--	4980	22
17...	1100	--	3980	25
18...	1100	--	3380	30
19...	1520	--	853	36
21...	1100	--	1690	28
23...	1100	--	220	49
25...	1100	--	0.0	36
26...	1440	--	4470	26
NOV				
03...	1015	5150	--	28
04...	1100	--	5520	24
05...	2300	--	3250	20
06...	1100	--	3020	23
07...	1353	--	6420	42
10...	1100	--	5440	91
12...	1100	--	-2550	21
14...	1100	--	10200	24
16...	1030	--	1050	63
18...	1100	--	19700	104
20...	1100	--	7410	30
23...	1100	--	3650	23
25...	2300	--	20200	68
26...	1100	--	-6250	37
27...	1100	--	976	18
30...	1145	--	0.0	22
DEC				
02...	2300	--	1870	20
04...	2300	--	10300	18
07...	1100	--	10200	22
09...	1100	--	4060	18
11...	1100	--	8180	24
12...	0845	--	4830	50
13...	1100	--	4850	12
15...	0940	--	6370	11
18...	1100	--	7610	10
23...	1100	--	3450	7
27...	1030	--	4070	7
29...	1100	--	999	7
JAN 1995				
03...	1100	--	8820	4
11...	0900	--	4430	5
18...	1100	--	7390	3
27...	1100	--	1520	4
FEB				
03...	1100	--	6100	4
14...	1340	--	0.0	26
22...	1100	--	55	3
MAR				
01...	1100	--	4240	6
06...	1310	--	0.0	5
10...	1100	--	2310	6
13...	1100	--	3780	24
15...	1100	--	4670	28
16...	1150	--	4280	24
19...	1100	--	6920	26
21...	1100	--	12000	40
22...	0940	--	0.0	18
24...	1100	--	8380	27
27...	1100	--	5250	15
30...	0955	4600	--	16
31...	1100	5400	--	24

STREAMS TRIBUTARY TO LAKE MICHIGAN

040851385 FOX RIVER, AT OIL TANK DEPOT, AT GREEN BAY, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)
APR 1995				
03...	1100	5840	--	16
05...	1240	5750	--	16
08...	1100	--	-2080	18
11...	1100	3750	--	72
12...	1050	4050	--	48
13...	1100	--	4660	42
15...	1100	--	1940	21
17...	1100	--	12500	31
19...	1100	--	3770	39
20...	1225	--	4780	26
21...	1100	--	846	36
22...	1100	--	11700	37
23...	1100	--	9510	31
24...	1100	--	11000	38
25...	1100	--	7670	38
26...	1100	--	5750	20
27...	1100	--	7890	32
28...	1100	--	6570	41
29...	1100	--	10100	31
30...	1100	--	8930	27
MAY				
01...	1100	--	7180	29
02...	1100	--	10900	36
03...	1100	--	12100	34
04...	1100	--	9330	39
04...	1315	--	5470	34
05...	1100	--	5010	24
06...	1100	--	12400	29
07...	1100	--	8900	24
08...	1100	--	-111	23
09...	1100	--	-3880	22
09...	1130	--	619	22
10...	1100	--	11900	30
11...	1100	--	9600	32
12...	1100	--	6910	35
13...	1100	--	11200	34
14...	1100	--	9780	40
15...	1100	--	1770	36
16...	1100	--	17500	90
17...	1100	--	4830	39
18...	1100	--	7070	38
23...	1100	--	10800	51
24...	1100	--	4940	42
25...	1010	--	5560	34
25...	1100	--	10700	42
26...	1100	--	3820	30
27...	1100	--	1230	19
28...	1100	--	5990	22
29...	1100	--	7130	30
30...	1100	--	11000	42
31...	1100	--	10900	39
JUN				
01...	1100	--	3540	33
02...	1100	--	6140	32
03...	1100	--	-1760	23
04...	1100	--	447	28
05...	1100	--	11700	34
06...	1100	--	6550	26
06...	1320	--	9380	28
07...	1100	--	9100	30
08...	1100	7990	--	66
09...	1100	--	12400	48
10...	1100	--	-1140	21
11...	1100	--	946	37
12...	1100	--	7350	34
13...	1100	--	3360	24
14...	1100	--	7860	22
15...	1100	--	6990	20
16...	1100	--	4760	22
17...	1100	--	5630	21
18...	1100	--	14500	18
19...	1100	--	7160	17
20...	1100	--	4830	15
21...	1035	--	671	22
21...	1100	--	671	19
22...	1100	--	-2300	18
23...	1100	--	4750	16
24...	1100	--	3650	24
25...	1100	--	4370	18
26...	1100	--	1930	25
27...	1100	--	-1760	48
28...	1100	--	56	32
29...	0930	--	-791	40
29...	1100	--	4370	34
30...	1100	--	7830	46

STREAMS TRIBUTARY TO LAKE MICHIGAN

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040851385 FOX RIVER, AT OIL TANK DEPOT, AT GREEN BAY, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)
JUL 1995				
01...	1100	--	-2490	66
02...	1100	--	1510	38
03...	1100	--	5760	44
04...	1100	--	4050	41
05...	1100	--	-5860	50
06...	1100	--	-929	41
07...	0750	--	1060	44
07...	1100	--	9270	42
08...	1100	--	-1210	36
09...	1100	--	3820	34
10...	1100	--	3240	34
11...	1100	--	5610	42
12...	1100	--	4850	28
13...	1100	--	10700	42
13...	1215	--	4230	34
14...	1100	--	10500	34
15...	1100	--	-2410	38
16...	1100	--	-13200	43
17...	1100	--	7520	35
18...	1100	--	5860	30
19...	1100	--	1900	24
20...	1100	--	-2070	30
21...	1100	--	1560	23
22...	1100	--	2850	17
23...	1100	--	1490	22
24...	1100	--	5040	27
25...	1100	--	5040	25
26...	1100	--	3060	17
27...	1100	--	3500	34
28...	1100	--	8790	26
29...	1100	--	9840	33
AUG				
01...	1100	--	1170	34
02...	1100	--	-3870	28
03...	1100	--	-112	28
04...	1100	--	-281	37
05...	1100	--	2240	24
07...	1100	--	3300	32
09...	1015	--	396	23
09...	1100	--	8480	28
10...	1100	2170	--	42
11...	1100	--	-842	30
16...	1040	--	5350	35
16...	1100	--	6350	46
17...	1100	--	10900	39
18...	1100	--	11800	47
19...	1100	--	5360	48
20...	1100	--	8440	41
21...	1100	--	10000	67
22...	1100	--	15700	87
23...	1100	--	13500	103
24...	0904	--	12500	44
24...	1100	--	4950	48
25...	1100	--	8130	59
26...	1100	--	13800	61
27...	1100	--	12200	48
28...	1100	--	-26000	116
29...	1100	--	12000	54
30...	1100	--	8880	59
30...	1137	--	13400	46
31...	1100	--	14600	77

STREAMS TRIBUTARY TO LAKE MICHIGAN
040851385 FOX RIVER, AT OIL TANK DEPOT, AT GREEN BAY, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)
SEP 1995				
01...	1100	--	10700	74
02...	1100	--	6400	65
03...	1100	--	9350	67
04...	1100	--	11100	70
05...	1100	--	10300	67
06...	1100	--	4220	61
07...	1100	--	18900	85
07...	1400	--	457	46
08...	1100	--	7840	58
09...	1100	2320	--	32
10...	1100	--	9640	46
11...	1100	--	2940	36
12...	1100	--	3030	36
13...	1100	--	812	28
13...	1110	--	271	26
14...	1100	--	1110	22
15...	1100	--	3790	36
16...	1100	--	1590	38
17...	1100	--	-4350	62
18...	1100	--	5090	58
19...	1100	--	1520	42
20...	0900	--	8850	50
20...	1100	--	4150	38
21...	1100	--	6530	48
22...	1100	--	6570	52
23...	1100	--	8360	36
24...	1100	--	5960	37
25...	1100	--	2950	31
26...	1100	--	5020	30
27...	1100	--	3320	28
27...	1345	--	5080	27
28...	1100	--	3570	28
29...	1100	--	3410	26
30...	1100	--	217	27

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS-	RESIDUE
		CHARGE,	TOTAL
		INST.	AT 105
		CUBIC	DEG. C,
		FEET	SUS-
		PER	PENDED
		SECOND	(MG/L)
		(00061)	(00530)
OCT 1995			
01...	1100	886	33
02...	1100	4500	42
03...	1100	-3590	24
04...	1100	9120	38
04...	1250	3010	33
05...	1100	9580	24
06...	1100	9720	36
07...	1100	4670	42
08...	1100	6990	48
09...	1100	6480	30
10...	1100	10100	30
10...	1300	10300	32
11...	1100	9650	68
12...	1100	14500	43
13...	1100	11700	52
14...	1100	14000	60
15...	1100	11300	46
16...	1100	7400	58
16...	1235	5690	40
17...	1100	12200	37
18...	1100	3520	24
19...	1100	12300	48
20...	1100	11100	43
21...	1100	12400	46
22...	1100	8590	34
23...	1100	8780	30
24...	1100	11600	38
25...	1100	14400	38
26...	1100	10500	38
27...	1100	6870	32
28...	1100	7900	27
29...	1000	9420	39
30...	1000	6770	170
31...	1000	4900	26

STREAMS TRIBUTARY TO LAKE MICHIGAN

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040851385 FOX RIVER, AT OIL TANK DEPOT, AT GREEN BAY, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS-SOLVED (MG/L) (00300)	CALCIUM, DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
OCT 1994												
04...	1155	--	9280	366	8.3	15.0	0.46	9.8	32	20	10	2.6
04...	1355	--	2590	361	8.4	15.0	0.46	9.9	32	20	10	2.7
19...	1350	--	-1080	381	8.1	15.5	0.46	8.7	35	20	15	3.0
NOV												
07...	1155	--	7540	365	8.4	9.0	0.46	11.3	34	20	13	2.6
10...	1050	--	5560	384	8.1	8.5	0.61	12.1	33	20	12	2.6
16...	0900	--	6440	385	7.9	8.0	0.61	11.0	34	20	13	2.4
30...	0855	--	11800	383	8.4	1.5	0.46	14.1	37	20	14	2.7
DEC												
01...	0855	--	7640	--	--	--	--	--	37	20	14	2.7
15...	0930	--	4190	368	--	0.5	--	14.5	38	22	14	2.5
JAN 1995												
11...	1000	--	223	395	8.1	0.5	--	12.8	39	22	15	2.7
FEB												
14...	1200	--	3500	440	7.9	1.0	--	15.3	42	24	21	3.0
MAR												
06...	1200	--	-3370	--	--	--	--	--	43	23	29	2.9
22...	0820	--	-1650	479	7.8	4.5	--	11.4	45	24	21	4.2
30...	0845	4600	--	440	7.8	5.0	0.61	12.6	43	24	21	3.4
APR												
05...	1150	5750	--	405	8.2	4.5	0.76	12.4	37	21	14	2.4
12...	0930	4050	--	419	8.4	5.5	0.30	12.9	39	22	18	2.4
20...	1125	--	2150	433	8.4	8.5	0.46	12.0	43	23	18	2.9
MAY												
04...	1210	--	10500	377	8.5	12.0	0.76	10.5	--	--	--	--
09...	1150	--	5000	392	8.4	13.0	0.51	9.4	--	--	--	--
18...	0845	--	9530	418	8.1	16.5	0.46	8.7	--	--	--	--
25...	0920	--	6780	409	8.1	17.5	0.46	9.5	--	--	--	--
JUN												
06...	1215	--	9160	391	8.1	23.5	0.49	7.9	--	--	--	--
13...	1115	--	3750	385	8.2	20.5	0.61	9.4	--	--	--	--
AUG												
16...	0930	--	3030	384	7.6	25.5	0.46	5.2	33	18	18	3.5
21...	1200	--	8590	348	8.6	25.5	0.46	8.1	--	--	--	--
30...	1200	--	12200	--	--	--	--	--	--	--	--	--
30...	1201	--	12100	--	--	--	--	--	--	--	--	--

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SILICA, SOLVED (MG/L AS SIO2) (00955)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L) (00535)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC (MG/L AS N) (00625)	PHOS-PHORUS, PHOS-TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	CHLORO-PHYLL A TRICHR. UNCORR. WHOLE TOTAL (UG/L) (32210)
OCT 1994												
04...	13	17	0.0	37	16	0.391	0.357	1.5	0.170	0.068	0.21	27.2
04...	14	17	0.0	34	15	0.378	0.360	1.5	0.167	0.068	0.21	25.6
19...	18	23	0.10	30	10	0.504	0.311	1.5	0.169	--	0.07	26.1
NOV												
07...	19	19	0.0	36	10	0.350	0.127	1.2	0.130	0.025	0.08	25.5
10...	17	19	0.10	22	9	0.337	0.155	1.1	0.095	0.019	0.06	21.9
16...	18	19	0.10	22	7	0.339	0.135	1.1	0.100	0.022	0.07	12.9
30...	21	21	0.40	21	12	0.321	0.154	1.1	0.090	0.022	0.07	13.6
DEC												
01...	21	21	0.40	21	12	0.321	0.154	1.1	0.090	0.022	0.07	13.6
15...	20	20	0.80	12	4	0.390	0.184	1.0	0.070	0.027	0.08	7.36
JAN 1995												
11...	20	21	1.0	4	4	0.413	0.204	1.0	0.070	0.033	0.10	0.982
FEB												
14...	22	27	1.4	3	3	0.435	0.150	1.1	0.060	0.034	0.10	1.70
MAR												
06...	28	36	1.0	6	5	0.621	0.136	1.2	0.090	0.034	0.10	4.73
22...	30	35	2.8	26	6	1.51	0.208	1.5	0.130	0.052	0.16	10.0
30...	27	32	2.0	14	6	0.938	0.154	1.4	0.120	0.046	0.14	17.4
APR												
05...	19	22	2.7	18	6	0.448	0.061	1.0	0.080	0.007	0.02	24.7
12...	22	25	1.7	66	17	0.469	0.040	1.4	0.160	0.007	0.02	49.0
20...	27	27	0.40	24	8	0.417	<0.027	1.1	0.103	0.006	0.02	46.4
MAY												
04...	17	19	0.10	30	12	0.316	0.073	1.0	0.089	0.012	0.04	28.9
09...	18	19	0.20	22	8	0.317	0.130	1.0	0.096	0.027	0.08	22.3
18...	--	22	0.40	34	--	0.399	0.144	1.2	0.124	0.026	0.08	24.9
25...	--	22	0.30	26	--	0.323	0.045	1.0	0.116	0.024	0.07	26.6
JUN												
06...	20	19	0.70	26	10	0.227	0.051	1.1	0.121	0.024	0.07	33.1
13...	--	20	0.40	19	--	0.232	0.051	0.90	0.097	0.018	0.05	25.7
AUG												
16...	27	26	3.0	28	10	0.662	0.306	1.5	0.166	0.043	0.13	43.4
21...	--	17	2.1	39	--	0.026	<0.027	1.5	0.168	0.049	0.15	120
30...	--	18	6.3	42	--	0.101	0.028	1.4	0.206	0.086	0.26	102
30...	--	18	6.4	44	--	0.107	<0.027	1.3	0.217	0.086	0.26	94.8

STREAMS TRIBUTARY TO LAKE MICHIGAN

040851385 FOX RIVER, AT OIL TANK DEPOT, AT GREEN BAY, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)
OCT 1995 12...	1010 11800		366	8.5	15.0	0.61	9.6	19	0.30

DATE	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHOR, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHOR, DIS- SOLVED (MG/L AS PO4) (00660)	CHLORO- PHYLL A TRICHR. UNCORR. WHOLE TOTAL (UG/L) (32210)
OCT 1995 12...	30	0.096	0.071	1.2	0.132	0.041	0.13	33.4

STREAMS TRIBUTARY TO LAKE MICHIGAN
04085139 FOX RIVER, AT MOUTH, AT GREEN BAY, WI
(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

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LOCATION.--Lat 44°32'22", long 88°00'16" in Land Grant 45, T.24 N., R.21 E., Brown County, Hydrologic Unit 04030204, at Green Bay.

PERIOD OF RECORD.--November 1993 to current year.

REMARKS.--Discharge data from station 040851385 Fox River at Oil Tank Depot used for this site.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

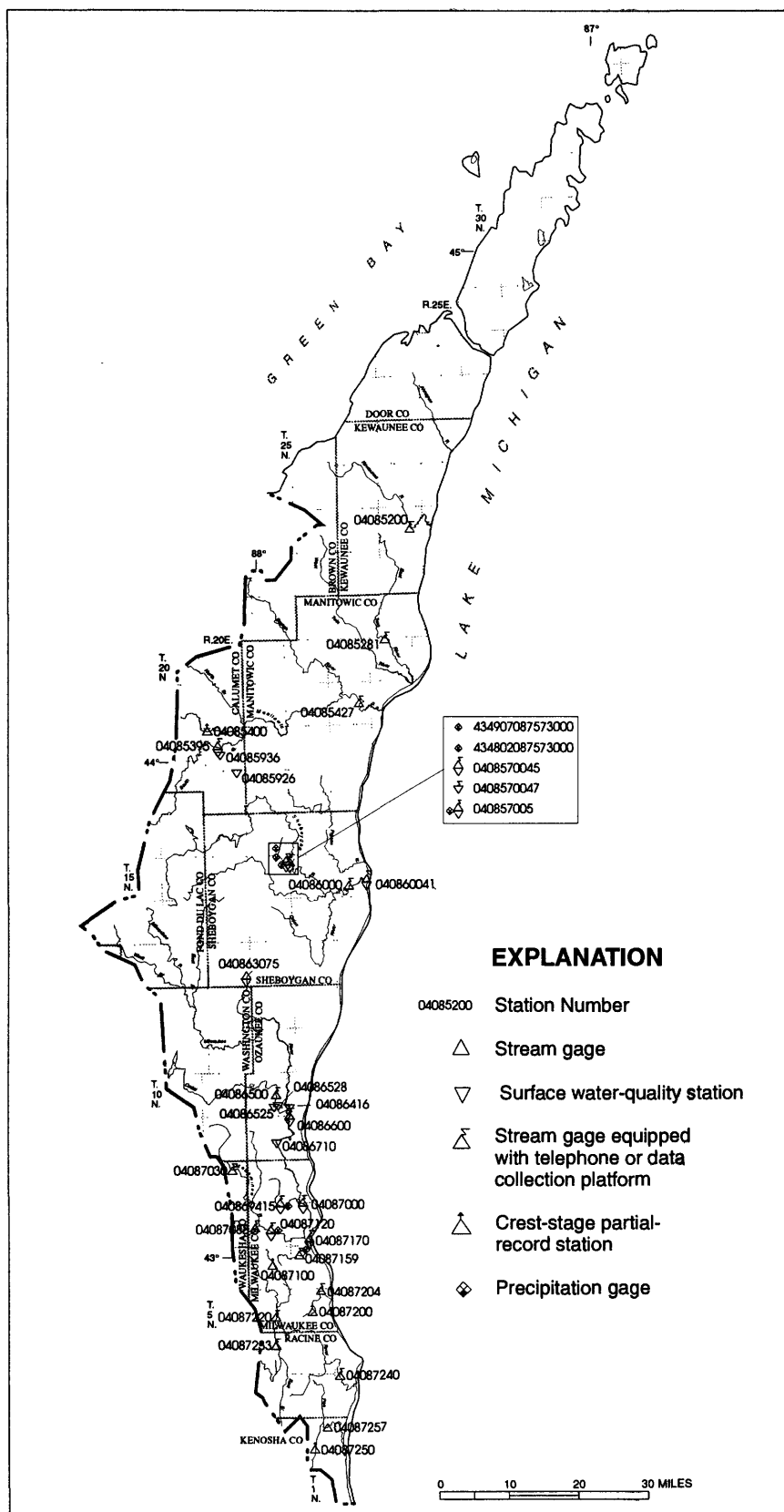
DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
OCT 1994											
05...	1055	5680	350	8.2	15.0	11.8	762	170	33	21	11
NOV											
16...	1200	-3350	379	8.0	8.5	10.9	767	170	35	20	13
DEC											
07...	1300	6010	411	8.4	2.5	11.8	764	170	36	20	15
JAN 1995											
11...	1210	5460	394	8.0	0.5	12.2	758	180	39	21	15
MAR											
01...	1330	8040	515	8.3	1.0	14.2	773	190	41	21	30
22...	0800	-107	467	8.5	5.0	11.4	757	210	45	23	20
APR											
07...	1050	3320	405	7.9	5.0	13.7	765	170	36	20	13
MAY											
11...	0800	8020	420	8.5	12.5	9.0	740	180	39	21	13
JUL											
11...	1100	5610	471	8.7	24.5	9.8	767	190	41	21	25
AUG											
08...	1635	1650	--	8.3	--	--	748	160	33	20	29
SEP											
07...	0810	7690	360	9.0	24.0	8.5	758	170	35	21	12

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	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)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
OCT 1994											
05...	2.6	168	154	14	16	0.20	0.14	204	0.400	0.050	0.290
NOV											
16...	2.9	181	148	17	18	0.20	0.18	212	0.330	0.020	0.130
DEC											
07...	2.8	195	160	21	20	0.10	0.60	232	0.320	0.020	0.210
JAN 1995											
11...	2.5	198	162	19	21	0.20	0.99	243	0.400	0.010	0.160
MAR											
01...	3.7	232	190	27	39	0.20	1.2	301	0.500	0.030	0.150
22...	4.5	200	164	29	33	0.20	3.0	285	1.70	0.040	0.230
APR											
07...	2.5	212	174	17	19	0.20	3.0	231	0.430	0.020	0.030
MAY											
11...	2.3	190	184	16	19	0.20	0.28	233	0.280	0.020	0.120
JUL											
11...	3.4	159	170	26	34	0.20	0.11	282	<0.050	<0.010	0.020
AUG											
08...	3.1	193	158	26	35	0.20	1.1	258	<0.050	<0.010	0.120
SEP											
07...	2.3	135	135	14	18	0.20	0.82	211	<0.050	<0.010	<0.015

STREAMS TRIBUTARY TO LAKE MICHIGAN
04085139 FOX RIVER, AT MOUTH, AT GREEN BAY, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 1994											
05...	1.6	1.1	0.160	0.060	0.070	33	8	--	--	39	97
NOV											
16...	1.0	0.80	0.080	0.040	0.020	25	6	8.1	0.80	18	97
DEC											
07...	1.3	1.1	0.080	0.040	0.020	29	4	--	--	20	97
JAN 1995											
11...	1.0	0.80	0.050	0.050	0.030	17	9	--	--	--	--
MAR											
01...	1.1	0.90	0.100	0.050	0.040	30	22	--	--	6	93
22...	1.2	1.0	0.110	0.070	0.050	45	24	9.4	1.0	23	99
APR											
07...	0.80	0.50	0.050	<0.010	<0.010	24	2	8.6	0.50	8	93
MAY											
11...	1.0	0.70	0.090	0.040	0.020	16	6	6.6	1.3	--	--
JUL											
11...	1.3	0.60	0.150	0.050	0.050	15	2	--	--	--	--
AUG											
08...	1.5	0.70	0.180	0.070	0.070	10	1	--	--	26	93
SEP											
07...	1.4	0.60	0.160	0.060	0.050	12	2	--	--	37	99



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 SW 1/4 sec.14, T.23 N., R.24 E., Kewaunee County, Hydrologic Unit 04030102, on left bank just downstream 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 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 and crest-stage gage. 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.--Estimated daily discharges: Ice-affected periods, Nov. 29 to Dec. 1, Dec. 6-18, Jan. 3, 4, 9, 10, and Jan. 22 to Mar. 14. Records good except those for ice-affected periods, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	117	27	52	25	20	16	66	60	51	27	10	48
2	81	27	46	23	19	15	63	56	38	20	11	36
3	64	27	49	21	18	16	60	51	31	16	12	31
4	54	27	51	19	18	17	56	47	27	13	12	25
5	49	27	52	20	18	17	48	46	24	13	12	23
6	45	35	49	19	18	17	46	43	23	16	12	20
7	42	42	42	20	18	17	53	41	85	16	13	25
8	40	37	36	21	17	18	55	39	147	16	13	29
9	43	34	29	19	18	17	56	51	77	15	13	26
10	41	31	25	21	19	19	52	62	47	14	13	22
11	38	29	23	23	17	25	51	58	56	13	14	20
12	36	28	21	24	17	140	87	50	49	13	92	20
13	34	28	21	27	17	700	106	43	38	13	99	19
14	33	30	22	37	17	600	85	71	32	13	88	19
15	32	31	22	35	18	439	68	74	26	12	72	18
16	31	29	23	31	17	305	59	55	24	12	57	19
17	31	28	25	29	18	211	55	45	22	12	50	19
18	33	28	26	30	18	150	126	38	19	11	49	18
19	35	26	28	29	18	155	339	35	18	10	47	23
20	33	26	28	29	17	337	257	32	16	10	37	36
21	31	33	28	28	16	1010	169	28	15	10	31	35
22	31	45	28	26	16	589	129	27	14	14	26	31
23	41	38	29	25	17	301	106	26	13	13	23	27
24	43	34	30	24	17	196	88	27	14	12	21	25
25	39	32	30	24	16	146	78	26	14	12	23	26
26	35	30	29	23	16	123	69	24	14	12	24	27
27	32	35	29	22	17	109	74	23	13	11	26	27
28	31	84	30	21	16	98	90	41	14	14	27	26
29	30	78	30	21	---	88	80	158	19	13	28	23
30	29	62	35	22	---	77	68	138	48	11	32	20
31	28	---	29	21	---	70	---	81	---	9.8	54	---
TOTAL	1282	1068	997	759	488	6038	2739	1596	1028	416.8	1041	763
MEAN	41.4	35.6	32.2	24.5	17.4	195	91.3	51.5	34.3	13.4	33.6	25.4
MAX	117	84	52	37	20	1010	339	158	147	27	99	48
MIN	28	26	21	19	16	15	46	23	13	9.8	10	18
CFSM	.33	.28	.25	.19	.14	1.53	.72	.41	.27	.11	.26	.20
IN.	.38	.31	.29	.22	.14	1.77	.80	.47	.30	.12	.30	.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1995, BY WATER YEAR (WY)

	MEAN	46.4	68.7	56.4	37.0	57.4	274	209	83.9	77.5	41.3	34.7	58.3
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	77.5	56.4	21.2	12.3	8.29	7.90	8.98	
(WY)	1967	1977	1977	1977	1977	1970	1990	1977	1988	1965	1970	1966	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1964 - 1995
ANNUAL TOTAL	31894	18215.8	
ANNUAL MEAN	87.4	49.9	87.8
HIGHEST ANNUAL MEAN			178
LOWEST ANNUAL MEAN			35.7
HIGHEST DAILY MEAN	1950	1010	5950
LOWEST DAILY MEAN	15	9.8	5.9
ANNUAL SEVEN-DAY MINIMUM	18	11	6.3
INSTANTANEOUS PEAK FLOW		(a)1180	(b)8570
INSTANTANEOUS PEAK STAGE		(c)13.41	(c)16.03
INSTANTANEOUS LOW FLOW		(d)6.0	(d)4.0
ANNUAL RUNOFF (CFSM)	.69	.39	.69
ANNUAL RUNOFF (INCHES)	9.34	5.34	9.40
10 PERCENT EXCEEDS	208	85	173
50 PERCENT EXCEEDS	35	28	32
90 PERCENT EXCEEDS	20	14	13

(a) Gage height, 11.65 ft

(b) Gage height, 16.00 ft, from crest-stage gage

(c) Backwater from ice

(d) Result of freezeup

LOCATION.--Lat 44°14'16", long 87°38'11", in NW 1/4 NW 1/4 sec.4, T.20 N., R.24 E., Manitowoc County, Hydrologic Unit 04030101, on right bank 500 ft downstream from bridge on State Highway 147, at Mishicot, 0.8 mi upstream from Johnson Creek, and 9.8 mi upstream from mouth.

DRAINAGE AREA.--110 mi².

PERIOD OF RECORD.--July 1972 to current year.

REVISED RECORDS.--WDR WI-79-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 584.72 ft above sea level.

REMARKS.--Estimated daily discharges: Ice-affected periods, Nov. 25-30, Dec. 6-20, and Dec. 29 to Mar. 15. Records good except those for ice-affected periods, which are poor (see page 11). Occasional regulation caused by recreation dam 0.3 mi upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	20	54	24	18	14	61	69	40	15	5.9	9.7
2	32	20	49	21	17	14	59	63	33	11	5.7	9.3
3	28	20	45	19	16	14	58	58	28	9.7	5.9	8.9
4	26	20	45	18	16	15	56	54	25	9.2	6.9	8.8
5	24	21	45	19	15	15	48	52	23	10	7.2	8.8
6	23	31	40	18	15	15	46	49	24	12	6.8	8.8
7	23	36	36	18	15	15	48	46	54	10	6.2	8.2
8	22	34	33	18	15	15	51	41	79	9.6	5.9	9.1
9	23	29	31	17	15	15	53	48	65	9.1	10	9.6
10	22	27	31	18	15	15	51	57	50	8.8	8.1	9.6
11	22	25	24	19	14	35	51	55	48	8.7	8.6	9.1
12	21	24	19	20	15	120	85	51	43	8.0	28	8.8
13	21	23	17	21	15	200	103	45	33	7.5	58	8.8
14	21	26	18	24	14	250	90	48	27	7.5	77	8.4
15	21	27	18	25	15	220	76	47	23	7.0	46	8.4
16	21	26	19	24	15	182	66	42	21	7.0	29	8.8
17	23	24	20	25	15	134	61	37	18	7.6	23	9.2
18	25	25	21	24	16	102	101	35	17	7.6	20	8.9
19	25	27	20	23	16	99	305	33	16	6.5	18	10
20	25	27	22	22	15	175	263	30	14	6.2	15	13
21	24	34	23	22	14	346	191	27	13	6.2	13	13
22	24	42	22	21	14	319	136	25	12	6.1	11	13
23	26	41	24	20	15	223	109	26	11	6.0	11	12
24	27	34	27	18	15	143	94	29	11	5.7	13	11
25	27	30	27	18	14	110	88	30	10	5.7	12	11
26	26	27	27	18	14	96	80	27	9.8	5.3	12	11
27	24	35	27	19	15	87	85	24	10	5.3	13	11
28	23	56	31	18	15	80	101	46	10	5.7	13	13
29	22	68	29	18	---	76	91	68	10	5.5	13	12
30	22	60	30	19	---	71	79	66	15	5.6	12	8.8
31	21	---	27	19	---	65	---	52	---	5.8	11	---
TOTAL	752	939	901	627	423	3280	2786	1380	792.8	240.9	525.2	300.0
MEAN	24.3	31.3	29.1	20.2	15.1	106	92.9	44.5	26.4	7.77	16.9	10.0
MAX	38	68	54	25	18	346	305	69	79	15	77	13
MIN	21	20	17	17	14	14	46	24	9.8	5.3	5.7	8.2
CFSM	.22	.28	.26	.18	.14	.96	.84	.40	.24	.07	.15	.09
IN.	.25	.32	.30	.21	.14	1.11	.94	.47	.27	.08	.18	.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1995, BY WATER YEAR (WY)

	MEAN	50.8	73.8	57.8	35.8	54.1	211	199	83.6	72.4	29.5	31.6	50.1
MAX	228	365	161	156	307	435	453	331	440	120	108	345	
(WY)	1985	1986	1993	1973	1984	1986	1993	1973	1990	1993	1980	1986	
MIN	9.80	11.9	7.72	7.70	9.39	34.5	53.3	20.2	9.19	7.77	6.75	5.63	
(WY)	1977	1977	1977	1977	1977	1980	1990	1977	1988	1995	1988	1976	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1972 - 1995
ANNUAL TOTAL	25497	12946.9	
ANNUAL MEAN	69.9	35.5	78.8
HIGHEST ANNUAL MEAN			151
LOWEST ANNUAL MEAN			34.5
HIGHEST DAILY MEAN	734	346	2930
LOWEST DAILY MEAN	14	5.3	4.5
ANNUAL SEVEN-DAY MINIMUM	15	5.5	4.8
INSTANTANEOUS PEAK FLOW		(b) 363	(c) 3380
INSTANTANEOUS PEAK STAGE		(d) 7.34	13.75
INSTANTANEOUS LOW FLOW			1.7
ANNUAL RUNOFF (CFSM)	.64	.32	.72
ANNUAL RUNOFF (INCHES)	8.62	4.38	9.73
10 PERCENT EXCEEDS	171	76	184
50 PERCENT EXCEEDS	29	22	32
90 PERCENT EXCEEDS	17	8.8	11

(a) Also occurred Sept. 22, 23

(b) Gage height, 6.71 ft

(c) Gage height, 13.35 ft

(d) Ice jam

STREAMS TRIBUTARY TO LAKE MICHIGAN
040853926 PINE CREEK AT MEGGERS ROAD NEAR NEW HOLSTEIN, WI

LOCATION.--Lat 43°58'18", long 88°03'54", in NE 1/4 SE 1/4 sec. 32, T.17 N., R.20 E., Calumet County, Hydrologic Unit 04030101, at Meggers Road bridge.

PERIOD OF RECORD.--April 1995 to September 1995 (discontinued).

REMARKS.--Samples for chemical analysis were composite samples of water collected from four locations in the stream cross section. Water-quality analysis by Wisconsin State Laboratory of Hygiene and National Water-Quality Laboratory.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	CHLORIDE, DIS- SOLVED (MG/L AS CL) (00940)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	RESIDUE VOLATILE, SUS- PENDE (MG/L) (00535)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	CHLORO- PHYLL A TRICHR. UNCORR. WHOLE TOTAL (UG/L) (32210)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN (70331)
APR 1995									
**20...	1015	65	6	2	11	0.60	3.92	12	85
*20...	1016	66	4	2	--	--	--	--	--
MAY									
**18...	1030	90	6	4	9.4	0.70	11.8	6	95
*18...	1031	140	6	4	--	--	--	--	--
JUN									
15...	1208	130	16	--	--	--	--	--	--
**15...	1214	130	18	14	5.6	1.0	6.65	42	68
*15...	1215	130	26	16	--	--	--	--	--
JUL									
**25...	1600	100	6	--	--	--	--	--	--
SEP									
*11...	1515	170	4	4	4.6	0.50	17.1	--	--

DATE	TIME	PCB COG 5 + 8 SED SUSP REC (NG/L) (19067)	PCB COG 5 + 8 WATER DISS REC (NG/L) (19004)	PCB COG 6 SED SUSP REC (NG/L) (19066)	PCB COG 6 WATER DISS REC (NG/L) (19003)	PCB COG 7 SED SUSP REC (NG/L) (19065)	PCB COG 7 WATER DISS REC (NG/L) (19002)	PCB COG 16 + 32 SED SUSP REC (NG/L) (19072)	PCB COG 16 + 32 WATER DISS REC (NG/L) (19009)	PCB COG 17 SED SUSP REC (NG/L) (19070)	PCB COG 17 WATER DISS REC (NG/L) (19007)	PCB COG 18 SED SUSP REC (NG/L) (19069)
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APR 1995												
**20...	1015	--	<0.15	--	<0.08	--	<0.02	--	0.18	--	0.10	--
MAY												
**18...	1030	<0.09	<0.09	<0.08	<0.08	<0.02	<0.02	<0.03	0.21	<0.03	0.17	<0.03
JUN												
**15...	1214	--	--	--	0.19	--	--	--	0.57	--	0.42	0.11

DATE	TIME	PCB COG 18 WATER DISS REC (NG/L) (19006)	PCB COG 19 SED SUSP REC (NG/L) (19068)	PCB COG 19 WATER DISS REC (NG/L) (19005)	PCB COG 22 SED SUSP REC (NG/L) (19076)	PCB COG 22 WATER DISS REC (NG/L) (19013)	PCB COG 24 + 27 SED SUSP REC (NG/L) (19071)	PCB COG 24 + 27 WATER DISS REC (NG/L) (19008)	PCB COG 26 SED SUSP REC (NG/L) (19073)	PCB COG 26 WATER DISS REC (NG/L) (19010)	PCB COG 28 + 31 SED SUSP REC (NG/L) (19074)	PCB COG 28 + 31 WATER DISS REC (NG/L) (19011)	PCB COG 33 SED SUSP REC (NG/L) (19075)
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APR 1995												
20...	0.19	--	<0.02	--	0.06	--	<0.03	0.55	1.7	0.23	0.60	<0.20
MAY												
18...	0.31	<0.02	<0.04	<0.05	0.07	<0.02	<0.03	0.34	2.2	0.15	0.90	<0.10
JUN												
15...	0.79	--	<0.09	--	0.16	--	<0.05	2.3	5.9	0.74	2.2	<0.29

DATE	TIME	PCB COG 33 WATER DISS REC (NG/L) (19012)	PCB COG 37 + 42 SED SUSP REC (NG/L) (19083)	PCB COG 37 + 42 WATER DISS REC (NG/L) (19020)	PCB COG 40 SED SUSP REC (NG/L) (19085)	PCB COG 40 WATER DISS REC (NG/L) (19022)	PCB COG 41 +64+71 SED SUSP REC (NG/L) (19084)	PCB COG 41 +64+71 WATER DISS REC (NG/L) (19021)	PCB COG 44 SED SUSP REC (NG/L) (19082)	PCB COG 44 WATER DISS REC (NG/L) (19019)	PCB COG 45 SED SUSP REC (NG/L) (19077)	PCB COG 45 WATER DISS REC (NG/L) (19014)	PCB COG 46 SED SUSP REC (NG/L) (19078)
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APR 1995												
20...	>0.14	1.1	0.85	0.24	0.22	1.4	1.1	3.3	2.8	0.08	0.11	--
MAY												
18...	>0.25	0.51	1.0	0.11	0.27	0.69	1.3	1.6	3.3	0.04	0.12	<0.03
JUN												
15...	0.69	2.1	2.6	0.43	0.70	2.6	3.2	5.8	7.9	0.14	0.34	--

* Equal-width increment (EWI) sample
 ** Multiple verticals

STREAMS TRIBUTARY TO LAKE MICHIGAN
040853926 PINE CREEK AT MEGGERS ROAD NEAR NEW HOLSTEIN, WI--CONTINUED

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PCB COG 46 WATER DISS REC (NG/L) (19015)	PCB COG 47 + 48 SED SUSP REC (NG/L) (19081)	PCB COG 47 + 48 WATER DISS REC (NG/L) (19018)	PCB COG 49 SED SUSP REC (NG/L) (19080)	PCB COG 49 WATER DISS REC (NG/L) (19017)	PCB COG 52 SED SUSP REC (NG/L) (19079)	PCB COG 52 WATER DISS REC (NG/L) (19016)	PCB COG 56 + 60 SED SUSP REC (NG/L) (19090)	PCB COG 56 + 60 WATER DISS REC (NG/L) (19027)	PCB COG 66 + 95 SED SUSP REC (NG/L) (19088)	PCB COG 66 + 95 WATER DISS REC (NG/L) (19025)	PCB COG 70 + 76 SED SUSP REC (NG/L) (19087)
APR 1995												
20...	0.07	2.2	1.5	3.8	2.7	5.6	4.4	0.74	0.39	15	6.6	3.9
MAY												
18...	0.08	1.0	1.7	1.8	3.1	2.6	5.1	0.32	0.49	6.6	6.6	1.8
JUN												
15...	0.21	4.2	4.1	6.7	7.7	9.3	13	1.4	1.1	23	16	7.4
DATE	PCB COG 70 + 76 WATER DISS REC (NG/L) (19024)	PCB COG 74 SED SUSP REC (NG/L) (19086)	PCB COG 74 WATER DISS REC (NG/L) (19023)	PCB COG 77+110 SED SUSP REC (NG/L) (19098)	PCB COG 77+110 WATER DISS REC (NG/L) (19035)	PCB COG 82 SED SUSP REC (NG/L) (19099)	PCB COG 82 WATER DISS REC (NG/L) (19036)	PCB COG 84 + 92 SED SUSP REC (NG/L) (19091)	PCB COG 84 + 92 WATER DISS REC (NG/L) (19028)	PCB COG 85 SED SUSP REC (NG/L) (19096)	PCB COG 85 WATER DISS REC (NG/L) (19033)	
APR 1995												
20...	2.3	0.30	0.19	17	4.5	1.0	0.24	6.8	2.6	1.9	0.41	
MAY												
18...	2.5	<0.27	0.23	7.3	5.3	0.48	0.30	3.0	3.0	0.80	0.48	
JUN												
15...	5.7	<0.78	0.51	27	12	1.8	0.71	11	7.4	3.0	1.1	
DATE	PCB COG 87 SED SUSP REC (NG/L) (19095)	PCB COG 87 WATER DISS REC (NG/L) (19032)	PCB COG 91 SED SUSP REC (NG/L) (19089)	PCB COG 91 WATER DISS REC (NG/L) (19026)	PCB COG 97 SED SUSP REC (NG/L) (19094)	PCB COG 97 WATER DISS REC (NG/L) (19031)	PCB COG 99 SED SUSP REC (NG/L) (19093)	PCB COG 99 WATER DISS REC (NG/L) (19030)	PCB COG 101 SED SUSP REC (NG/L) (19092)	PCB COG 101 WATER DISS REC (NG/L) (19029)	PCB COG 118 SED SUSP REC (NG/L) (19103)	
APR 1995												
20...	4.9	1.3	2.3	0.72	3.2	0.90	4.1	1.1	7.8	2.4	7.2	
MAY												
18...	2.0	1.5	1.1	0.79	1.4	1.0	1.8	1.1	3.5	2.5	3.3	
JUN												
15...	7.4	3.3	4.0	2.1	5.0	2.4	6.5	2.6	12	5.8	13	
DATE	PCB COG 118 WATER DISS REC (NG/L) (19040)	PCB COG 128 SED SUSP REC (NG/L) (99924)	PCB COG 128 WATER DISS REC (NG/L) (99922)	PCB COG 132+153 SED SUSP REC (NG/L) (19105)	PCB COG 132+153 WATER DISS REC (NG/L) (19042)	PCB COG 135+144 SED SUSP REC (NG/L) (19101)	PCB COG 135+144 WATER DISS REC (NG/L) (19038)	PCB COG 136 SED SUSP REC (NG/L) (19097)	PCB COG 136 WATER DISS REC (NG/L) (19034)	PCB COG 137+176 SED SUSP REC (NG/L) (19107)	PCB COG 137+176 WATER DISS REC (NG/L) (19044)	
APR 1995												
20...	1.5	2.200	0.150	11	1.3	1.7	0.23	0.98	0.16	0.12	<0.09	
MAY												
18...	1.5	1.000	0.230	5.4	1.5	0.80	0.30	0.43	0.19	0.07	<0.03	
JUN												
15...	3.5	3.900	0.620	19	3.7	3.2	0.79	1.5	0.49	0.29	<0.03	
DATE	PCB COG 138+163 SED SUSP REC (NG/L) (19108)	PCB COG 138+163 WATER DISS REC (NG/L) (19045)	PCB COG 141 SED SUSP REC (NG/L) (19106)	PCB COG 141 WATER DISS REC (NG/L) (19043)	PCB COG 146 SED SUSP REC (NG/L) (19104)	PCB COG 146 WATER DISS REC (NG/L) (19041)	PCB COG 149 SED SUSP REC (NG/L) (19102)	PCB COG 149 WATER DISS REC (NG/L) (19039)	PCB COG 151 SED SUSP REC (NG/L) (19100)	PCB COG 151 WATER DISS REC (NG/L) (19037)	PCB COG 167 SED SUSP REC (NG/L) (99925)	
APR 1995												
20...	12	1.1	<2.2	<0.20	2.2	0.22	6.2	0.91	1.9	0.30	0.570	
MAY												
18...	5.5	1.5	<1.0	<0.28	1.1	0.30	3.0	1.1	0.96	0.36	0.230	
JUN												
15...	21	3.8	<3.8	<0.69	4.2	0.75	11	2.8	3.6	0.92	0.930	

STREAMS TRIBUTARY TO LAKE MICHIGAN
040853926 PINE CREEK AT MEGGERS ROAD NEAR NEW HOLSTEIN, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PCB COG 167 WATER DISS REC (NG/L) 7 (99923)	PCB COG 170+190 SED SUSP REC (NG/L) (19119)	PCB COG 170+190 WATER DISS REC (NG/L) (19056)	PCB COG 171+202 SED SUSP REC (NG/L) (19115)	PCB COG 171+202 WATER DISS REC (NG/L) (19052)	PCB COG 172+197 SED SUSP REC (NG/L) (19116)	PCB COG 172+197 WATER DISS REC (NG/L) (19053)	PCB COG 174 SED SUSP REC (NG/L) (19113)	PCB COG 174 WATER DISS REC (NG/L) (19050)	PCB COG 177 SED SUSP REC (NG/L) (19114)	PCB COG 177 WATER DISS REC (NG/L) (19051)
APR 1995											
20...	<0.080	3.9	0.09	0.52	<0.03	0.54	<0.05	1.7	0.07	1.2	0.05
MAY											
18...	<0.080	1.6	0.19	0.22	<0.03	0.23	<0.05	0.72	0.11	0.53	0.08
JUN											
15...	0.110	6.6	0.56	0.88	0.08	0.97	0.08	2.9	0.31	2.3	0.22
DATE	PCB COG 178 SED SUSP REC (NG/L) (19109)	PCB COG 178 WATER DISS REC (NG/L) (19046)	PCB COG 180 SED SUSP REC (NG/L) (19117)	PCB COG 180 WATER DISS REC (NG/L) (19054)	PCB COG 182+187 SED SUSP REC (NG/L) (19110)	PCB COG 182+187 WATER DISS REC (NG/L) (19047)	PCB COG 183 SED SUSP REC (NG/L) (19111)	PCB COG 183 WATER DISS REC (NG/L) (19048)	PCB COG 185 SED SUSP REC (NG/L) (19112)	PCB COG 185 WATER DISS REC (NG/L) (19049)	PCB COG 194 SED SUSP REC (NG/L) (19123)
APR 1995											
20...	0.54	<0.04	3.6	0.13	2.0	0.11	1.2	0.05	0.22	<0.03	0.71
MAY											
18...	0.25	0.04	1.6	0.22	0.95	0.15	0.54	0.08	0.10	<0.03	0.26
JUN											
15...	1.0	0.12	6.5	0.60	3.8	0.41	2.2	0.22	0.42	0.04	1.2
DATE	PCB COG 194 WATER DISS REC (NG/L) (19060)	PCB COG 195+208 SED SUSP REC (NG/L) (19122)	PCB COG 195+208 WATER DISS REC (NG/L) (19059)	PCB COG 196+203 SED SUSP REC (NG/L) (19121)	PCB COG 196+203 WATER DISS REC (NG/L) (19058)	PCB COG 199 SED SUSP REC (NG/L) (19118)	PCB COG 199 WATER DISS REC (NG/L) (19055)	PCB COG 201 SED SUSP REC (NG/L) (19120)	PCB COG 201 WATER DISS REC (NG/L) (19057)	PCB COG 206 SED SUSP REC (NG/L) (19124)	PCB COG 206 WATER DISS REC (NG/L) (19061)
APR 1995											
20...	<0.03	0.85	<0.08	1.4	<0.08	0.08	<0.02	1.3	<0.04	0.34	<0.04
MAY											
18...	<0.03	0.32	<0.08	0.58	<0.08	0.03	<0.02	0.51	<0.04	0.11	<0.04
JUN											
15...	0.05	1.4	<0.08	2.5	0.12	0.15	--	2.2	<0.09	0.53	<0.04

STREAMS TRIBUTARY TO LAKE MICHIGAN
040853936 PINE CREEK AT QUARRY ROAD AT HAYTON, WI

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LOCATION.--Lat 44°00'30", long 88°06'40", in SW 1/4 SW 1/4 sec. 21, T.18 N., R.20 E., Calumet County, Hydrologic Unit 04030101, at Quarry Road bridge.

PERIOD OF RECORD.--February 1994 to September 1995 (discontinued).

REMARKS.--Samples for chemical analysis were composite samples of water collected from four locations in the stream cross section. Water-quality analysis by Wisconsin State Laboratory of Hygiene and National Water-Quality Laboratory.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

		CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDE (MG/L) (00535)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	CHLORO- PHYLL A TRICHR. UNCORR. WHOLE TOTAL (UG/L) (32210)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)				
MAR 1995													
	*16...	1305	51	9	5	--	--	--	--				
	*22...	1720	--	16	5	--	--	--	--				
APR													
	*20...	1100	54	7	--	--	--	--	--				
	**20...	1230	52	10	7	10	0.70	4.87	10				
	*20...	1231	52	8	4	--	--	--	--				
MAY													
	*18...	1032	89	5	--	--	--	--	--				
	**18...	1200	83	5	2	9.2	0.60	5.14	5				
	*18...	1201	81	6	2	--	5.14	--	100				
JUN													
	*15...	1015	120	26	--	--	--	--	--				
	**15...	1020	120	28	16	12	1.6	14.7	92				
	*15...	1021	120	22	16	--	--	--	--				
JUL													
	*25...	1510	110	21	--	--	--	--	--				
SEP													
	*11...	1610	140	12	6	5.3	1.0	22.0	--				
DATE	TIME	PCB COG 5 + 8 SED SUSP REC (NG/L) (19067)	PCB COG 5 + 8 WATER DISS REC (NG/L) (19004)	PCB COG 6 SED SUSP REC (NG/L) (19066)	PCB COG 6 WATER DISS REC (NG/L) (19003)	PCB COG 7 SED SUSP REC (NG/L) (19065)	PCB COG 7 WATER DISS REC (NG/L) (19002)	PCB COG 16 + 32 SED SUSP REC (NG/L) (19072)	PCB COG 16 + 32 WATER DISS REC (NG/L) (19009)	PCB COG 17 SED SUSP REC (NG/L) (19070)	PCB COG 17 WATER DISS REC (NG/L) (19007)	PCB COG 18 SED SUSP REC (NG/L) (19069)	
APR 1995	20...	1230	--	<0.35	--	0.83	--	0.29	0.29	1.5	0.85	2.2	0.44
MAY	18...	1200	--	0.70	--	1.0	--	0.38	--	2.0	0.38	3.1	0.21
JUN	15...	1020	--	1.1	0.21	1.7	--	0.58	0.33	1.7	1.3	3.8	0.63
DATE	TIME	PCB COG 18 WATER DISS REC (NG/L) (19006)	PCB COG 19 SED SUSP REC (NG/L) (19068)	PCB COG 19 WATER DISS REC (NG/L) (19005)	PCB COG 22 SED SUSP REC (NG/L) (19076)	PCB COG 22 WATER DISS REC (NG/L) (19013)	PCB COG 24 + 27 SED SUSP REC (NG/L) (19071)	PCB COG 24 + 27 WATER DISS REC (NG/L) (19008)	PCB COG 26 SED SUSP REC (NG/L) (19073)	PCB COG 26 WATER DISS REC (NG/L) (19010)	PCB COG 28 + 31 SED SUSP REC (NG/L) (19074)	PCB COG 28 + 31 WATER DISS REC (NG/L) (19011)	PCB COG 33 SED SUSP REC (NG/L) (19075)
APR 1995	20...	1.3	0.19	0.70	<0.51	--	0.12	0.27	4.8	8.6	1.5	2.5	<0.55
MAY	18...	1.9	0.06	1.1	<0.39	0.14	<0.02	0.41	2.1	9.9	0.65	3.3	<0.97
JUL	15...	2.1	0.23	1.5	<0.74	0.18	0.16	0.53	8.4	12	2.7	4.0	<1.1

* Equal-width increment (EWI) sample
** Multiple verticals

STREAMS TRIBUTARY TO LAKE MICHIGAN
040853936 PINE CREEK AT QUARRY ROAD AT HAYTON, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

	PCB COG 33 WATER DISS REC (NG/L) (19012)	PCB COG 37 + 42 SED SUSP REC (NG/L) (19083)	PCB COG 37 + 42 WATER DISS REC (NG/L) (19020)	PCB COG 40 SED SUSP REC (NG/L) (19085)	PCB COG 40 WATER DISS REC (NG/L) (19022)	PCB COG 41 +64+71 SED SUSP REC (NG/L) (19084)	PCB COG 41 +64+71 WATER DISS REC (NG/L) (19021)	PCB COG 44 SED SUSP REC (NG/L) (19082)	PCB COG 44 WATER DISS REC (NG/L) (19019)	PCB COG 45 SED SUSP REC (NG/L) (19077)	PCB COG 45 WATER DISS REC (NG/L) (19014)	PCB COG 46 SED SUSP REC (NG/L) (19078)
APR 1995												
20...	<2.1	3.3	2.6	0.49	0.41	3.1	2.4	7.2	6.7	0.23	0.31	0.32
MAY												
18...	<1.4	1.6	3.2	0.21	0.50	1.6	3.0	3.5	7.7	0.12	0.42	0.19
JUN												
15...	>0.72	4.8	3.7	0.67	0.63	4.7	3.7	11	9.7	0.35	0.51	0.39
	PCB COG 46 WATER DISS REC (NG/L) (19015)	PCB COG 47 + 48 SED SUSP REC (NG/L) (19081)	PCB COG 47 + 48 WATER DISS REC (NG/L) (19018)	PCB COG 49 SED SUSP REC (NG/L) (19080)	PCB COG 49 WATER DISS REC (NG/L) (19017)	PCB COG 52 SED SUSP REC (NG/L) (19079)	PCB COG 52 WATER DISS REC (NG/L) (19016)	PCB COG 56 + 60 SED SUSP REC (NG/L) (19090)	PCB COG 56 + 60 WATER DISS REC (NG/L) (19027)	PCB COG 66 + 95 SED SUSP REC (NG/L) (19088)	PCB COG 66 + 95 WATER DISS REC (NG/L) (19025)	PCB COG 70 + 76 SED SUSP REC (NG/L) (19087)
APR 1995												
20...	0.48	7.6	5.9	12	9.9	14	14	0.77	0.36	22	12	4.1
MAY												
18...	0.67	4.5	7.0	6.2	12	7.2	16	0.37	0.48	13	14	2.3
JUN												
15...	0.56	11	7.4	18	14	21	19	1.1	0.54	35	17	6.6
	PCB COG 70 + 76 WATER DISS REC (NG/L) (19024)	PCB COG 74 SED SUSP REC (NG/L) (19086)	PCB COG 74 WATER DISS REC (NG/L) (19023)	PCB COG 77+110 SED SUSP REC (NG/L) (19098)	PCB COG 77+110 WATER DISS REC (NG/L) (19035)	PCB COG 82 SED SUSP REC (NG/L) (19099)	PCB COG 82 WATER DISS REC (NG/L) (19036)	PCB COG 84 + 92 SED SUSP REC (NG/L) (19091)	PCB COG 84 + 92 WATER DISS REC (NG/L) (19028)	PCB COG 85 SED SUSP REC (NG/L) (19096)	PCB COG 85 WATER DISS REC (NG/L) (19033)	
APR 1995												
20...	2.5	0.39	0.17	26	9.0	0.66	0.29	10	4.7	1.6	0.44	
MAY												
18...	3.1	<0.23	0.20	15	12	0.58	0.38	5.8	6.3	0.95	0.61	
JUN												
15...	3.3	<0.82	0.24	42	15	1.5	0.44	16	7.6	2.5	0.71	
	PCB COG 87 SED SUSP REC (NG/L) (19095)	PCB COG 87 WATER DISS REC (NG/L) (19032)	PCB COG 91 SED SUSP REC (NG/L) (19089)	PCB COG 91 WATER DISS REC (NG/L) (19026)	PCB COG 97 SED SUSP REC (NG/L) (19094)	PCB COG 97 WATER DISS REC (NG/L) (19031)	PCB COG 99 SED SUSP REC (NG/L) (19093)	PCB COG 99 WATER DISS REC (NG/L) (19030)	PCB COG 101 SED SUSP REC (NG/L) (19092)	PCB COG 101 WATER DISS REC (NG/L) (19029)	PCB COG 118 SED SUSP REC (NG/L) (19103)	
APR 1995												
20...	3.8	1.3	4.8	1.8	3.0	1.0	4.1	1.4	8.5	3.5	5.0	
MAY												
18...	2.3	1.8	3.0	2.5	1.8	1.4	2.6	1.8	5.4	4.4	4.6	
JUN												
15...	5.9	2.0	7.7	3.0	4.5	1.6	6.6	2.0	14	5.0	12	
	PCB COG 118 WATER DISS REC (NG/L) (19040)	PCB COG 128 SED SUSP REC (NG/L) (99924)	PCB COG 128 WATER DISS REC (NG/L) (99922)	PCB COG 132+153 SED SUSP REC (NG/L) (19105)	PCB COG 132+153 WATER DISS REC (NG/L) (19042)	PCB COG 135+144 SED SUSP REC (NG/L) (19101)	PCB COG 135+144 WATER DISS REC (NG/L) (19038)	PCB COG 136 SED SUSP REC (NG/L) (19097)	PCB COG 136 WATER DISS REC (NG/L) (19034)	PCB COG 137+176 SED SUSP REC (NG/L) (19107)	PCB COG 137+176 WATER DISS REC (NG/L) (19044)	
APR 1995												
20...	2.1	1.800	0.260	12	2.7	2.7	0.70	1.5	0.32	0.20	<0.21	
MAY												
18...	2.5	1.800	0.530	10	4.1	2.3	1.1	1.0	0.51	0.19	--	
JUN												
15...	2.7	4.700	0.710	26	5.2	6.1	1.4	2.5	0.64	0.46	--	

STREAMS TRIBUTARY TO LAKE MICHIGAN
040853936 PINE CREEK AT QUARRY ROAD AT HAYTON, WI--CONTINUED

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PCB COG 138+163 SED SUSP REC (NG/L) (19108)	PCB COG 138+163 WATER DISS REC (NG/L) (19045)	PCB COG 141 SED SUSP REC (NG/L) (19106)	PCB COG 141 WATER DISS REC (NG/L) (19043)	PCB COG 146 SED SUSP REC (NG/L) (19104)	PCB COG 146 WATER DISS REC (NG/L) (19041)	PCB COG 149 SED SUSP REC (NG/L) (19102)	PCB COG 149 WATER DISS REC (NG/L) (19039)	PCB COG 151 SED SUSP REC (NG/L) (19100)	PCB COG 151 WATER DISS REC (NG/L) (19037)	PCB COG 167 SED SUSP REC (NG/L) (99925)
APR 1995											
20...	11	2.2	<1.5	<0.27	2.7	0.57	8.8	2.3	2.7	0.75	0.330
MAY											
18...	10	3.6	<1.5	<0.48	2.5	0.91	7.2	3.4	2.4	1.1	0.390
JUN											
15...	25	4.5	<3.2	<0.54	6.5	1.2	19	4.4	6.0	1.4	0.950
DATE	PCB COG 167 WATER DISS REC (NG/L) (99923)	PCB COG 170+190 SED SUSP REC (NG/L) (19119)	PCB COG 170+190 WATER DISS REC (NG/L) (19056)	PCB COG 171+202 SED SUSP REC (NG/L) (19115)	PCB COG 171+202 WATER DISS REC (NG/L) (19052)	PCB COG 172+197 SED SUSP REC (NG/L) (19116)	PCB COG 172+197 WATER DISS REC (NG/L) (19053)	PCB COG 174 SED SUSP REC (NG/L) (19113)	PCB COG 174 WATER DISS REC (NG/L) (19050)	PCB COG 177 SED SUSP REC (NG/L) (19114)	PCB COG 177 WATER DISS REC (NG/L) (19051)
APR 1995											
20...	--	3.8	0.21	0.69	--	0.56	--	1.7	0.13	1.6	0.14
MAY											
18...	0.097	3.3	0.58	0.58	>0.10	0.55	0.09	1.4	0.28	1.5	0.29
JUN											
15...	0.120	8.6	0.86	1.5	0.16	1.3	0.13	3.3	0.38	3.8	0.44
DATE	PCB COG 178 SED SUSP REC (NG/L) (19109)	PCB COG 178 WATER DISS REC (NG/L) (19046)	PCB COG 180 SED SUSP REC (NG/L) (19117)	PCB COG 180 WATER DISS REC (NG/L) (19054)	PCB COG 182+187 SED SUSP REC (NG/L) (19110)	PCB COG 182+187 WATER DISS REC (NG/L) (19047)	PCB COG 183 SED SUSP REC (NG/L) (19111)	PCB COG 183 WATER DISS REC (NG/L) (19048)	PCB COG 185 SED SUSP REC (NG/L) (19112)	PCB COG 185 WATER DISS REC (NG/L) (19049)	PCB COG 194 SED SUSP REC (NG/L) (19123)
APR 1995											
20...	1.0	--	3.5	0.26	2.7	0.26	1.4	0.11	0.19	--	0.79
MAY											
18...	0.87	0.19	3.3	0.59	2.5	0.55	1.2	0.23	0.20	--	0.72
JUN											
15...	2.2	0.27	7.8	0.85	6.2	0.80	3.0	0.34	0.44	--	1.8
DATE	PCB COG 194 WATER DISS REC (NG/L) (19060)	PCB COG 195+208 SED SUSP REC (NG/L) (19122)	PCB COG 195+208 WATER DISS REC (NG/L) (19059)	PCB COG 196+203 SED SUSP REC (NG/L) (19121)	PCB COG 196+203 WATER DISS REC (NG/L) (19058)	PCB COG 199 SED SUSP REC (NG/L) (19118)	PCB COG 199 WATER DISS REC (NG/L) (19055)	PCB COG 201 SED SUSP REC (NG/L) (19120)	PCB COG 201 WATER DISS REC (NG/L) (19057)	PCB COG 206 SED SUSP REC (NG/L) (19124)	PCB COG 206 WATER DISS REC (NG/L) (19061)
APR 1995											
20...	--	0.96	--	1.5	--	0.89	--	1.4	--	0.36	--
MAY											
18...	0.06	0.88	--	1.5	0.14	0.09	--	1.4	0.15	0.31	--
JUN											
15...	0.11	2.2	0.14	3.8	0.25	0.22	--	3.3	0.24	0.85	--

STREAMS TRIBUTARY TO LAKE MICHIGAN
04085395 SOUTH BRANCH MANITOWOC RIVER AT HAYTON, WI

LOCATION.--Lat 44°01'29", long 88°07'05", in SW 1/4 SW 1/4 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.

WATER-DISCHARGE RECORDS

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.--Estimated daily discharges: Nov. 10-13, 16-17, Dec. 1-5, and ice-affected period Dec. 6 to Mar. 12. Records fair except those for ice-affected period, which is poor (see page 11).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	5.8	13	6.6	5.8	7.4	54	42	19	4.1	1.4	12
2	12	6.1	12	6.4	5.8	7.2	50	38	17	3.6	2.0	10
3	7.8	6.5	12	6.2	5.8	7.2	47	32	16	3.2	2.4	8.1
4	6.9	6.5	11	6.0	5.6	7.2	43	31	13	2.8	3.6	7.2
5	6.5	7.5	10	6.0	5.4	7.0	40	30	12	3.0	2.4	6.0
6	6.5	13	15	6.0	5.6	7.2	37	28	22	5.0	1.5	6.5
7	7.2	13	12	6.0	5.8	7.6	36	30	32	4.7	1.3	9.3
8	7.0	12	10	5.8	5.8	7.2	37	26	25	4.0	1.3	8.2
9	7.2	11	9.4	5.8	5.8	7.4	37	39	20	3.3	4.3	8.0
10	6.4	10	8.6	5.8	5.8	7.4	36	50	18	3.1	4.1	8.0
11	7.5	9.8	8.6	6.0	6.0	45	38	57	16	2.2	2.8	7.8
12	7.0	9.5	8.0	6.4	6.0	120	60	51	15	2.3	3.9	7.6
13	6.5	9.2	7.6	6.8	6.0	169	58	42	14	2.6	16	7.5
14	6.4	14	7.6	7.6	6.2	114	51	39	13	2.9	21	6.2
15	6.1	12	7.4	8.0	6.2	88	45	25	12	2.3	10	5.5
16	6.1	11	7.4	7.4	6.2	77	42	31	11	2.3	9.3	7.0
17	6.7	10	7.4	7.0	6.2	75	39	28	11	2.0	16	8.0
18	11	14	7.4	6.6	6.4	78	49	24	9.7	1.3	13	6.0
19	9.1	7.1	7.4	6.3	6.8	79	71	27	8.6	1.4	9.8	9.4
20	3.6	9.5	7.4	6.0	7.2	96	66	23	8.3	2.0	7.9	13
21	3.5	14	7.4	5.8	8.0	121	59	20	7.7	2.1	6.1	10
22	5.6	13	7.4	5.8	7.8	103	56	14	6.4	1.9	5.3	9.9
23	10	11	7.4	5.8	7.6	85	52	19	5.6	1.8	5.4	9.2
24	8.5	13	7.4	5.8	7.4	73	48	21	5.0	1.7	9.8	8.0
25	6.3	11	7.6	5.8	7.2	65	46	20	4.5	1.5	9.2	7.6
26	6.1	10	7.6	5.8	7.2	59	45	18	4.1	1.5	6.8	7.6
27	6.7	12	7.6	5.8	7.0	56	51	17	4.2	1.5	8.2	7.2
28	7.6	18	7.6	5.8	7.2	55	56	25	4.4	1.9	17	7.2
29	5.4	15	7.8	5.8	---	56	51	32	4.4	1.9	22	6.9
30	5.4	14	7.0	5.8	---	60	45	29	4.8	1.4	23	6.2
31	5.7	---	6.8	5.8	---	58	---	24	---	.92	16	---
TOTAL	222.3	328.5	270.8	192.5	179.8	1804.8	1445	932	363.7	76.22	262.8	241.1
MEAN	7.17	10.9	8.74	6.21	6.42	58.2	48.2	30.1	12.1	2.46	8.48	8.04
MAX	14	18	15	8.0	8.0	169	71	57	32	5.0	23	13
MIN	3.5	5.8	6.8	5.8	5.4	7.0	36	14	4.1	.92	1.3	5.5
CFSM	.07	.10	.08	.06	.06	.53	.44	.28	.11	.02	.08	.07
IN.	.08	.11	.09	.07	.06	.62	.49	.32	.12	.03	.09	.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1995, BY WATER YEAR (WY)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	18.2	22.4	16.4	7.83	20.4	73.7	58.4	36.0	12.4	83.5	15.8	16.1
MAX	29.3	33.8	24.0	9.45	34.4	89.2	68.7	42.0	12.6	232	30.4	35.3
(WY)	1994	1994	1994	1994	1994	1994	1994	1994	1994	1993	1993	1993
MIN	7.17	10.9	8.74	6.21	6.42	58.2	48.2	30.1	12.1	2.46	8.48	4.91
(WY)	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1994

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1993 - 1995

ANNUAL TOTAL	9502.5	6319.52	24.2
ANNUAL MEAN	26.0	17.3	31.1
HIGHEST ANNUAL MEAN			1994
LOWEST ANNUAL MEAN			1995
HIGHEST DAILY MEAN	(a)190	Mar 7	640
LOWEST DAILY MEAN	2.2	(b)Sep 23	.92
ANNUAL SEVEN-DAY MINIMUM	2.3	Sep 19	1.5
INSTANTANEOUS PEAK FLOW			866
INSTANTANEOUS PEAK STAGE			6.76
INSTANTANEOUS LOW FLOW			.89
ANNUAL RUNOFF (CFSM)	.24		.22
ANNUAL RUNOFF (INCHES)	3.24		3.02
10 PERCENT EXCEEDS	72		74
50 PERCENT EXCEEDS	10		14
90 PERCENT EXCEEDS	6.1		5.4

(a) Ice affected

(b) Also occurred Sept. 24, estimated

(c) Also occurred July 31 to Aug. 1

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1993 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: July 1994 to current year.

SUSPENDED-SOLIDS DISCHARGE: June 1993 to current year.

INSTRUMENTATION.--Stage-activated water-quality sampler since June 16, 1993. Continuous water-temperature recorder since July 7, 1994.

REMARKS.--Chemical analyses by the Wisconsin State Laboratory of Hygiene and National Water-Quality Laboratory. 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, 33.5°C, July 14, 1995; minimum observed, 0.0°C, on many days during 1995 water year.

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 26 tons, Mar. 12, 1995; minimum daily, 0.08 ton, on many days during 1994 and 1995 water years.

SUSPENDED-SOLIDS CONCENTRATIONS: Maximum observed, 466 mg/L, July 25, 1994; minimum observed, 3 mg/L, numerous days.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum observed, 33.5°C, July 14; minimum observed, 0.0°C, on many day.

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 26 tons, Mar. 12; minimum daily, 0.08 ton, on many days.

SUSPENDED-SOLIDS CONCENTRATIONS: Maximum observed, 156 mg/L, Nov. 18, 1994; minimum observed, 4mg/L, Mar. 1, 6.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)
OCT 1994				NOV 1994			
01...	1200	16	49	01...	1200	5.7	28
02...	1200	11	44	02...	1200	6.1	22
03...	1200	7.2	45	03...	1200	6.5	19
04...	1200	6.9	43	04...	1200	6.5	30
05...	1200	6.5	37	05...	1200	6.9	35
06...	1200	6.5	49	06...	0123	12	41
07...	1200	6.9	52	06...	0613	12	34
08...	1200	6.9	47	06...	1200	13	40
09...	1200	7.2	53	07...	1200	12	25
10...	1200	5.7	30	08...	1200	12	22
11...	1200	7.6	28	09...	1200	11	28
12...	1200	6.9	32	10...	1200	11	19
13...	1200	6.5	29	11...	1200	11	23
14...	1200	6.5	30	12...	1200	11	20
15...	1200	6.1	28	13...	1200	11	22
16...	1200	6.1	34	14...	1200	14	41
17...	1200	5.7	40	15...	1200	12	35
18...	1200	7.6	42	16...	1200	12	21
18...	1530	15	46	17...	1200	12	15
19...	1200	9.8	46	18...	0845	18	94
20...	1200	2.9	39	18...	1200	22	156
21...	1200	3.1	36	19...	1200	7.2	27
22...	1200	4.1	38	20...	1200	9.2	11
23...	1200	9.8	49	21...	0830	16	28
24...	1200	8.3	28	21...	1200	18	33
25...	1014	6.5	18	22...	1200	12	28
**25...	1045	6.5	14	22...	1330	16	38
*25...	1046	6.5	13	23...	1200	13	13
26...	1200	6.1	17	24...	1200	12	9
27...	1200	6.9	16	25...	1200	11	8
28...	1200	6.9	25	26...	1200	10	13
29...	1200	4.7	31	27...	1200	11	10
30...	1200	5.0	31	27...	2200	15	6
31...	1200	5.7	31	28...	1200	19	7
				29...	1200	15	6
				30...	1200	14	10

* Equal-width increment (EWI) sample
** Multiple verticals

STREAMS TRIBUTARY TO LAKE MICHIGAN
04085395 SOUTH BRANCH MANITOWOC RIVER AT HAYTON, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	RESIDUE TOTAL AT 105 SUS- PENDE (MG/L) (00530)	DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	RESIDUE TOTAL AT 105 SUS- PENDE (MG/L) (00530)
DEC 1994					APR 1995				
01...	1200	--	14	6	**20...	1315	--	65	18
02...	1200	--	14	7	*20...	1316	--	65	17
03...	1200	--	14	8	22...	1200	--	56	11
04...	1200	--	14	7	24...	1200	--	48	20
05...	1200	--	15	8	26...	1200	--	45	20
06...	1200	15	--	9	28...	1200	--	57	20
07...	1200	12	--	8	30...	1200	--	44	29
10...	1200	8.6	--	118	MAY 1995				
13...	1200	7.6	--	18	02...	1200	--	38	22
16...	1200	7.4	--	4	03...	1200	--	36	26
19...	1200	7.4	--	5	05...	1200	--	30	49
22...	1200	7.4	--	6	06...	1200	--	27	26
25...	1200	7.6	--	6	07...	1200	--	45	44
29...	1200	7.8	--	125	09...	1200	--	39	32
JAN 1995					**10...	1100	--	50	35
01...	1200	6.6	--	149	*10...	1101	--	50	35
04...	1200	6.0	--	147	11...	1200	--	52	26
07...	1200	6.0	--	10	11...	1345	--	64	68
10...	1200	5.8	--	7	13...	1200	--	41	62
13...	1200	6.0	--	8	15...	1200	--	11	68
16...	1200	6.0	--	10	15...	1415	--	15	46
19...	1200	6.0	--	7	15...	2230	--	24	47
22...	1200	5.8	--	5	16...	1200	--	32	36
25...	0810	5.8	--	5	18...	0830	--	28	54
*25...	0812	5.8	--	5	**18...	0915	--	46	46
**25...	0830	5.8	--	5	*18...	0916	--	44	46
**25...	0835	5.8	--	5	18...	1315	--	15	36
*25...	0836	5.8	--	5	19...	0100	--	24	46
28...	1200	5.8	--	108	19...	1200	--	24	44
FEB					19...	1430	--	36	42
02...	1200	5.8	--	118	21...	1200	--	20	46
07...	1200	5.8	--	121	22...	2245	--	15	56
12...	1200	6.0	--	134	24...	1200	--	21	38
17...	1200	6.2	--	150	26...	1200	--	18	32
21...	1707	8.0	--	112	28...	0400	--	24	35
26...	1200	7.2	--	81	29...	1200	--	32	38
MAR					31...	1200	--	23	17
01...	1200	7.4	--	4	JUN				
06...	1200	7.2	--	6	02...	1200	--	16	20
06...	2215	7.2	--	4	04...	1200	--	13	22
11...	1200	45	--	8	06...	1200	--	11	30
11...	1400	45	--	8	06...	1845	--	28	40
11...	1500	45	--	20	06...	1930	--	62	32
11...	1615	45	--	48	08...	1200	--	25	45
11...	1815	45	--	76	10...	1200	--	18	29
12...	1200	120	--	92	12...	1200	--	15	24
13...	0015	--	184	57	14...	1200	--	13	22
16...	0942	--	76	12	15...	0915	--	12	30
*16...	1000	--	76	10	**15...	0920	--	12	30
**16...	1001	--	76	10	*15...	0921	--	12	27
16...	1300	--	75	9	15...	1200	--	12	24
20...	1200	--	98	13	17...	1200	--	11	32
21...	1200	--	123	12	19...	1200	--	8.3	28
22...	1439	--	99	6	21...	1200	--	7.6	28
**22...	1445	--	99	7	23...	1200	--	5.3	19
*22...	1446	--	99	6	25...	1200	--	4.7	22
22...	1730	--	98	8	27...	1200	--	4.1	23
27...	1200	--	56	13	29...	1200	--	4.4	27
APR					JUL				
01...	1200	--	54	<5	01...	1200	--	4.1	29
03...	1200	--	48	21	04...	1200	--	2.7	42
05...	1200	--	39	7	07...	1200	--	4.7	44
07...	1200	--	36	9	10...	1200	--	3.6	35
09...	1200	--	37	10	13...	1200	--	2.3	39
11...	1200	--	36	<5	16...	1200	--	2.3	53
12...	1200	--	60	19	19...	1200	--	1.3	72
13...	1200	--	59	15	22...	1200	--	1.8	48
15...	1200	--	44	12	25...	1200	--	1.6	38
17...	1200	--	38	10	25...	1400	--	1.6	50
18...	1200	--	49	18	28...	1200	--	2.0	88
19...	1215	--	71	29					
20...	1200	--	66	14					

STREAMS TRIBUTARY TO LAKE MICHIGAN
04085395 SOUTH BRANCH MANITOWOC RIVER AT HAYTON, WI--CONTINUED

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)
AUG 1995				SEP 1995			
01...	1200	1.3	70	02...	1200	11	59
04...	1200	3.8	52	05...	1200	5.7	41
07...	1200	1.3	67	08...	1200	8.0	37
10...	1200	4.1	59	11...	1200	7.6	40
13...	1200	3.3	41	**11...	1715	7.6	45
13...	1545	15	83	14...	1200	5.7	46
13...	1645	31	66	15...	1600	5.7	46
13...	1715	49	60	15...	2000	5.3	59
*13...	2229	30	46	15...	2400	5.3	51
**13...	2230	30	46	16...	0400	5.3	52
13...	2231	30	48	16...	0800	5.3	49
15...	1200	10	44	16...	0832	5.3	47
17...	0130	16	32	16...	0834	5.3	46
17...	1200	16	27	16...	0838	5.3	45
20...	1200	8.0	35	16...	1200	5.7	44
23...	1200	5.3	62	19...	1200	7.2	42
26...	1200	6.5	59	20...	1200	13	52
28...	0945	17	71	24...	1200	7.6	30
28...	1100	26	62	26...	1200	7.6	36
29...	1200	24	57	29...	1200	6.9	56
30...	1200	24	56				

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	RESIDUE VOLA- TILE, SUS- PENDE (MG/L) (00535)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	CHLORO- PHYLL A TRICHR. UNCORR. WHOLE TOTAL (UG/L) (32210)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 1994										
**25...	1045	--	6.5	180	<5	8.2	1.6	20.7	17	97
*25...	1046	--	6.5	--	<5	--	--	--	--	--
JAN 1995										
**25...	0830	5.8	--	180	5	7.4	0.50	4.72	11	93
*25...	0831	5.8	--	200	--	--	--	--	--	--
**25...	0835	5.8	--	170	5	7.4	0.50	4.24	52	51
*25...	0836	5.8	--	180	4	--	--	--	--	--
MAR										
*16...	1000	--	76	43	7	--	--	--	--	--
**16...	1001	--	76	42	4	--	--	--	11	96
**22...	1445	--	99	43	4	--	--	6.37	8	89
*22...	1446	--	99	43	4	--	--	--	--	--
APR										
**20...	1315	--	65	51	7	13	0.60	15.0	17	92
*20...	1316	--	65	50	6	--	--	--	--	--
MAY										
**10...	1100	--	50	51	10	12	2.1	18.9	34	96
*10...	1101	--	50	51	13	--	--	--	--	--
**18...	0915	--	46	70	12	14	2.6	21.5	49	96
*18...	0916	--	44	69	14	--	--	--	--	--
JUN										
**15...	0920	--	12	98	18	5.9	1.9	63.9	53	59
*15...	0921	--	12	98	18	--	--	--	--	--
AUG										
*13...	2229	--	30	160	16	--	--	--	--	--
**13...	2230	--	30	160	17	7.7	3.5	79.5	38	100
SEP										
**11...	1715	--	7.6	--	--	13	2.1	35.0	--	--

* Equal-width increment (EWI) sample
** Multiple verticals

STREAMS TRIBUTARY TO LAKE MICHIGAN
04085395 SOUTH BRANCH MANITOWOC RIVER AT HAYTON, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PCB COG 5 + 8 SED SUSP REC (19067)	PCB COG 5 + 8 WATER DISS REC (19004)	PCB COG 6 SED SUSP REC (19066)	PCB COG 6 WATER DISS REC (19003)	PCB COG 7 SED SUSP REC (19065)	PCB COG 7 WATER DISS REC (19002)	PCB COG 16 + 32 SED SUSP REC (19072)	PCB COG 16 + 32 WATER DISS REC (19009)	PCB COG 17 SED SUSP REC (19070)
JUL 1993 **06...	1130	640	--	0.15	0.13	<0.08	<0.08	<0.03	<0.02	0.13	<0.03	0.05
AUG **24...	1000	--	22	<0.09	0.28	<0.08	0.29	<0.05	0.07	--	0.11	<0.12
SEP **16...	1350	--	46	0.17	0.31	0.09	0.41	<0.02	0.10	0.08	0.22	0.12
DATE		PCB COG 17	PCB COG 18	PCB COG 18	PCB COG 19	PCB COG 22	PCB COG 22	PCB COG 24 + 27	PCB COG 24 + 27	PCB COG 26	PCB COG 26	PCB COG 28 + 31
		WATER DISS REC (19007)	SED SUSP REC (19069)	WATER DISS REC (19006)	SED SUSP REC (19068)	WATER DISS REC (19005)	SED SUSP REC (19076)	WATER DISS REC (19013)	SED SUSP REC (19071)	WATER DISS REC (19008)	SED SUSP REC (19073)	WATER DISS REC (19010)
JUL 1993 06...	0.05	0.05	0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.02	0.37	0.16	0.22
AUG 24...	0.15	--	0.15	--	0.05	<0.05	<0.05	--	<0.02	1.2	1.7	0.40
SEP 16...	0.33	0.07	0.27	<0.02	0.10	<0.09	0.16	<0.02	<0.04	1.2	1.9	0.39
DATE		PCB COG 28 + 31	PCB COG 33	PCB COG 33	PCB COG 37 + 42	PCB COG 37 + 42	PCB COG 40	PCB COG 40	PCB COG 41	PCB COG 41	PCB COG 44	PCB COG 44
		WATER DISS REC (19011)	SED SUSP REC (19075)	WATER DISS REC (19012)	SED SUSP REC (19083)	WATER DISS REC (19020)	SED SUSP REC (19085)	WATER DISS REC (19022)	SED SUSP REC (19084)	WATER DISS REC (19021)	SED SUSP REC (19082)	WATER DISS REC (19019)
JUL 1993 06...	0.14	0.09	0.06	0.34	0.10	0.03	<0.03	0.21	0.08	0.65	0.24	<0.04
AUG 24...	0.42	<0.44	0.46	1.5	0.82	0.14	0.10	0.64	0.54	3.1	1.9	0.04
SEP 16...	0.65	<0.31	<0.54	0.87	0.89	0.09	0.11	0.48	0.70	1.8	1.9	0.06
DATE		PCB COG 45	PCB COG 46	PCB COG 46	PCB COG 47 + 48	PCB COG 47 + 48	PCB COG 49	PCB COG 49	PCB COG 52	PCB COG 52	PCB COG 56 + 60	PCB COG 56 + 60
		WATER DISS REC (19014)	SED SUSP REC (19078)	WATER DISS REC (19015)	SED SUSP REC (19081)	WATER DISS REC (19018)	SED SUSP REC (19080)	WATER DISS REC (19017)	SED SUSP REC (19079)	WATER DISS REC (19016)	SED SUSP REC (19090)	WATER DISS REC (19027)
JUL 1993 06...	<0.02	<0.03	<0.03	0.47	0.11	0.92	0.24	1.2	0.36	0.24	0.09	3.4
AUG 24...	0.05	<0.13	0.07	2.3	1.1	4.7	2.5	6.2	3.6	0.78	0.29	20
SEP 16...	<0.09	0.06	0.09	1.4	1.2	2.8	2.3	3.5	3.4	<0.45	0.24	7.6
DATE		PCB COG 66 + 95	PCB COG 70 + 76	PCB COG 70 + 76	PCB COG 74	PCB COG 74	PCB COG 77+110	PCB COG 77+110	PCB COG 82	PCB COG 82	PCB COG 84 + 92	PCB COG 84 + 92
		WATER DISS REC (19025)	SED SUSP REC (19087)	WATER DISS REC (19024)	SED SUSP REC (19086)	WATER DISS REC (19023)	SED SUSP REC (19098)	WATER DISS REC (19035)	SED SUSP REC (19099)	WATER DISS REC (19036)	SED SUSP REC (19091)	WATER DISS REC (19028)
JUL 1993 06...	0.72	0.68	0.18	0.18	0.04	4.7	0.66	0.21	<0.03	1.3	0.26	<0.50
AUG 24...	5.4	2.9	0.72	0.63	0.13	24	3.8	1.1	0.17	6.3	1.8	2.4
SEP 16...	4.3	1.3	0.88	<0.45	0.15	9.2	3.5	0.33	0.11	3.2	1.7	0.80

** Multiple verticals

STREAMS TRIBUTARY TO LAKE MICHIGAN
04085395 SOUTH BRANCH MANITOWOC RIVER AT HAYTON, WI--CONTINUED

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	PCB COG 85 WATER DISS REC (NG/L) (19033)	PCB COG 87 SED SUSP REC (NG/L) (19095)	PCB COG 87 WATER DISS REC (NG/L) (19032)	PCB COG 91 SED SUSP REC (NG/L) (19089)	PCB COG 91 WATER DISS REC (NG/L) (19026)	PCB COG 97 SED SUSP REC (NG/L) (19094)	PCB COG 97 WATER DISS REC (NG/L) (19031)	PCB COG 99 SED SUSP REC (NG/L) (19093)	PCB COG 99 WATER DISS REC (NG/L) (19030)	PCB COG 101 SED SUSP REC (NG/L) (19092)	PCB COG 101 WATER DISS REC (NG/L) (19029)	PCB COG 118 SED SUSP REC (NG/L) (19103)	
	JUL 1993												
	06...	<0.06	1.1	0.15	0.40	0.07	0.71	0.10	0.96	0.13	1.7	0.26	2.3
	AUG												
24...	0.29	5.7	0.85	2.5	0.54	4.4	0.72	6.0	0.86	11	1.8	9.8	
SEP													
16...	0.32	1.8	0.78	1.2	0.57	1.4	0.60	2.1	0.79	3.9	1.6	3.8	
DATE	PCB COG 118 WATER DISS REC (NG/L) (19040)	PCB COG 128 SED SUSP REC (NG/L) (99924)	PCB COG 128 WATER DISS REC (NG/L) (99922)	PCB COG 132+153 SED SUSP REC (NG/L) (19105)	PCB COG 132+153 WATER DISS REC (NG/L) (19042)	PCB COG 135+144 SED SUSP REC (NG/L) (19101)	PCB COG 135+144 WATER DISS REC (NG/L) (19038)	PCB COG 136 SED SUSP REC (NG/L) (19097)	PCB COG 136 WATER DISS REC (NG/L) (19034)	PCB COG 137+176 SED SUSP REC (NG/L) (19107)	PCB COG 137+176 WATER DISS REC (NG/L) (19044)		
	JUL 1993												
	06...	0.22	0.760	0.041	3.6	0.32	0.44	0.05	<0.25	<0.05	<0.16	<0.03	
	AUG												
24...	0.84	3.200	0.140	17	1.2	2.1	0.19	1.2	0.13	<0.80	<0.05		
SEP													
16...	0.94	1.100	0.160	6.9	1.1	0.99	0.20	0.52	0.15	<0.31	<0.04		
DATE	PCB COG 138+163 SED SUSP REC (NG/L) (19108)	PCB COG 138+163 WATER DISS REC (NG/L) (19045)	PCB COG 141 SED SUSP REC (NG/L) (19106)	PCB COG 141 WATER DISS REC (NG/L) (19043)	PCB COG 146 SED SUSP REC (NG/L) (19104)	PCB COG 146 WATER DISS REC (NG/L) (19041)	PCB COG 149 SED SUSP REC (NG/L) (19102)	PCB COG 149 WATER DISS REC (NG/L) (19039)	PCB COG 151 SED SUSP REC (NG/L) (19100)	PCB COG 151 WATER DISS REC (NG/L) (19037)	PCB COG 167 SED SUSP REC (NG/L) (99925)		
	JUL 1993												
	06...	3.8	0.27	0.31	0.03	0.61	0.05	1.7	0.18	0.42	0.05	0.160	
	AUG												
24...	17	0.95	1.4	0.08	2.8	0.18	7.9	0.70	2.0	0.19	0.730		
SEP													
16...	6.4	0.97	0.59	0.09	1.2	0.20	3.4	0.67	0.99	0.20	0.280		
DATE	PCB COG 167 WATER DISS REC (NG/L) (99923)	PCB COG 170+190 SED SUSP REC (NG/L) (19119)	PCB COG 170+190 WATER DISS REC (NG/L) (19056)	PCB COG 171+202 SED SUSP REC (NG/L) (19115)	PCB COG 171+202 WATER DISS REC (NG/L) (19052)	PCB COG 172+197 SED SUSP REC (NG/L) (19116)	PCB COG 172+197 WATER DISS REC (NG/L) (19053)	PCB COG 174 SED SUSP REC (NG/L) (19113)	PCB COG 174 WATER DISS REC (NG/L) (19050)	PCB COG 177 SED SUSP REC (NG/L) (19114)	PCB COG 177 WATER DISS REC (NG/L) (19051)		
	JUL 1993												
	06...	<0.080	0.84	<0.23	0.17	<0.03	0.10	<0.05	0.25	<0.02	0.24	<0.03	
	AUG												
24...	<0.080	3.9	<0.30	0.86	<0.03	0.48	<0.05	1.2	0.05	1.1	0.04		
SEP													
16...	<0.080	1.6	0.13	0.43	0.04	0.29	<0.05	0.56	0.06	0.60	0.06		
DATE	PCB COG 178 SED SUSP REC (NG/L) (19109)	PCB COG 178 WATER DISS REC (NG/L) (19046)	PCB COG 180 SED SUSP REC (NG/L) (19117)	PCB COG 180 WATER DISS REC (NG/L) (19054)	PCB COG 182+187 SED SUSP REC (NG/L) (19110)	PCB COG 182+187 WATER DISS REC (NG/L) (19047)	PCB COG 183 SED SUSP REC (NG/L) (19111)	PCB COG 183 WATER DISS REC (NG/L) (19048)	PCB COG 185 SED SUSP REC (NG/L) (19112)	PCB COG 185 WATER DISS REC (NG/L) (19049)	PCB COG 194 SED SUSP REC (NG/L) (19123)		
	JUL 1993												
	06...	0.11	<0.04	0.67	0.05	0.31	0.03	0.23	<0.03	0.04	<0.03	0.10	
	AUG												
24...	0.48	<0.04	3.3	0.09	1.5	0.06	1.1	0.04	0.18	<0.03	0.46		
SEP													
16...	0.31	<0.04	1.4	0.14	0.90	0.10	0.46	0.05	0.11	<0.03	0.25		

STREAMS TRIBUTARY TO LAKE MICHIGAN
04085395 SOUTH BRANCH MANITOWOC RIVER AT HAYTON, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	PCB COG 194 WATER DISS REC (NG/L) (19060)	PCB COG 195+208 SED SUSP REC (NG/L) (19122)	PCB COG 195+208 WATER DISS REC (NG/L) (19059)	PCB COG 196+203 SED SUSP REC (NG/L) (19121)	PCB COG 196+203 WATER DISS REC (NG/L) (19058)	PCB COG 199 SED SUSP REC (NG/L) (19118)	PCB COG 199 WATER DISS REC (NG/L) (19055)	PCB COG 201 SED SUSP REC (NG/L) (19120)	PCB COG 201 WATER DISS REC (NG/L) (19057)	PCB COG 206 SED SUSP REC (NG/L) (19124)	PCB COG 206 WATER DISS REC (NG/L) (19061)
JUL 1993											
06...	<0.03	0.13	<0.08	0.22	<0.08	<0.02	<0.02	0.16	<0.04	0.06	<0.04
AUG											
24...	<0.03	0.58	<0.08	0.90	<0.08	0.05	<0.02	0.77	<0.04	0.26	<0.04
SEP											
16...	<0.03	0.32	<0.08	0.52	<0.08	0.05	<0.02	0.46	<0.04	0.12	<0.04

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PCB COG 5 + 8 SED SUSP REC (NG/L) (19067)	PCB COG 5 + 8 WATER DISS REC (NG/L) (19004)	PCB COG 6 SED SUSP REC (NG/L) (19066)	PCB COG 6 WATER DISS REC (NG/L) (19003)	PCB COG 7 SED SUSP REC (NG/L) (19065)	PCB COG 7 WATER DISS REC (NG/L) (19002)	PCB COG 16 + 32 SED SUSP REC (NG/L) (19072)	PCB COG 16 + 32 WATER DISS REC (NG/L) (19009)	PCB COG 17 SED SUSP REC (NG/L) (19070)	
NOV 1993													
**16...	1120	--	45	<0.09	0.16	<0.08	0.16	<0.02	0.04	<0.03	0.20	0.03	
FEB 1994													
**16...	1345	8.0	--	--	0.24	--	0.28	--	0.07	0.10	0.36	0.15	
**16...	1500	8.0	--	--	0.22	--	0.27	--	0.07	0.10	0.34	0.12	
**21...	1345	140	--	--	0.17	--	0.11	--	0.03	0.11	0.15	0.12	
APR													
**26...	1015	--	193	--	0.15	--	0.14	<0.02	0.03	<0.32	0.12	<0.07	
**JUL													
**13...	0930	--	15	--	0.26	--	0.40	--	0.09	--	0.13	0.06	
DATE		PCB COG 17 WATER DISS REC (NG/L) (19007)	PCB COG 18 SED SUSP REC (NG/L) (19069)	PCB COG 18 WATER DISS REC (NG/L) (19006)	PCB COG 19 SED SUSP REC (NG/L) (19068)	PCB COG 19 WATER DISS REC (NG/L) (19005)	PCB COG 22 SED SUSP REC (NG/L) (19076)	PCB COG 22 WATER DISS REC (NG/L) (19013)	PCB COG 24 + 27 SED SUSP REC (NG/L) (19071)	PCB COG 24 + 27 WATER DISS REC (NG/L) (19008)	PCB COG 26 SED SUSP REC (NG/L) (19073)	PCB COG 26 WATER DISS REC (NG/L) (19010)	PCB COG 28 + 31 SED SUSP REC (NG/L) (19074)
NOV 1993													
16...	0.25	0.04	0.24	<0.02	0.07	<0.05	<0.05	<0.02	0.04	0.27	1.8	<0.08	
FEB 1994													
16...	0.49	0.12	0.44	--	0.07	<0.18	<0.05	<0.04	0.06	1.4	3.3	0.36	
16...	0.47	0.11	0.42	--	0.06	<0.18	<0.05	--	0.05	1.5	3.3	0.31	
21...	0.18	0.12	0.16	--	0.02	<0.14	<0.05	--	<0.02	1.7	1.5	0.37	
APR													
26...	0.16	<0.08	0.18	--	0.05	<0.06	<0.05	--	<0.02	0.52	1.6	<0.39	
JUL													
13...	0.22	0.06	0.25	--	0.07	--	<0.05	--	0.03	0.77	1.9	<0.21	
DATE		PCB COG 28 + 31 WATER DISS REC (NG/L) (19011)	PCB COG 33 SED SUSP REC (NG/L) (19075)	PCB COG 33 WATER DISS REC (NG/L) (19012)	PCB COG 37 + 42 SED SUSP REC (NG/L) (19083)	PCB COG 37 + 42 WATER DISS REC (NG/L) (19020)	PCB COG 40 SED SUSP REC (NG/L) (19085)	PCB COG 40 WATER DISS REC (NG/L) (19022)	PCB COG 41 SED SUSP REC (NG/L) (19084)	PCB COG 41 WATER DISS REC (NG/L) (19021)	PCB COG 44 SED SUSP REC (NG/L) (19082)	PCB COG 44 WATER DISS REC (NG/L) (19019)	PCB COG 45 SED SUSP REC (NG/L) (19077)
NOV 1993													
16...	0.32	<0.07	<0.19	0.17	0.45	<0.03	0.07	0.12	0.38	0.42	1.3	<0.02	
FEB 1994													
16...	0.60	<0.37	<0.73	0.80	0.79	0.08	0.09	0.60	0.67	1.7	2.0	--	
16...	0.58	<0.37	<0.70	0.83	0.76	0.08	0.08	0.61	0.61	1.8	2.0	--	
21...	0.29	<0.41	<0.35	1.1	0.51	0.11	0.06	0.82	0.42	2.3	1.3	--	
APR													
26...	0.42	<0.16	<0.28	0.40	0.49	0.06	0.08	0.41	0.52	1.1	1.5	<0.08	
JUL													
13...	0.48	<0.15	0.23	0.67	0.74	0.09	0.13	0.62	0.71	1.8	2.0	--	

** Multiple verticals

04085395 SOUTH BRANCH MANITOWOC RIVER AT HAYTON, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	PCB COG 45	PCB COG 46	PCB COG 46	PCB COG 47 + 48	PCB COG 47 + 48	PCB COG 49	PCB COG 49	PCB COG 52	PCB COG 52	PCB COG 56 + 60	PCB COG 56 + 60	PCB COG 66 + 95
	WATER	SED	WATER	SED	WATER	SED	WATER	SED	WATER	SED	WATER	SED
	DISS REC	SUSP REC	DISS REC	SUSP REC	DISS REC	SUSP REC	DISS REC	SUSP REC	DISS REC	SUSP REC	DISS REC	SUSP REC
	(NG/L) (19014)	(NG/L) (19078)	(NG/L) (19015)	(NG/L) (19081)	(NG/L) (19018)	(NG/L) (19080)	(NG/L) (19017)	(NG/L) (19079)	(NG/L) (19016)	(NG/L) (19090)	(NG/L) (19027)	(NG/L) (19088)
NOV 1993												
16...	0.04	<0.03	0.06	0.38	0.90	0.71	1.8	0.87	2.7	0.06	0.09	<1.9
FEB 1994												
16...	0.05	0.05	0.09	1.5	1.6	2.8	3.2	3.4	4.6	<0.30	0.12	7.0
16...	0.05	0.06	0.09	1.6	1.6	2.9	3.1	3.5	4.5	<0.26	0.12	7.1
21...	0.03	0.06	0.05	2.1	0.97	3.8	2.0	4.6	2.8	<0.40	0.13	10
APR												
26...	<0.06	<0.04	0.05	1.2	1.1	1.9	2.1	2.3	2.9	0.31	0.16	5.5
JUL												
13...	0.06	<0.06	0.09	1.8	1.7	2.6	2.5	3.5	3.6	0.26	0.24	7.4
DATE	PCB COG 66 + 95	PCB COG 70 + 76	PCB COG 70 + 76	PCB COG 74	PCB COG 74	PCB COG 77+110	PCB COG 77+110	PCB COG 82	PCB COG 82	PCB COG 84 + 92	PCB COG 84 + 92	PCB COG 85
	WATER	SED	WATER	SED	WATER	SED	WATER	SED	WATER	SED	WATER	SED
	DISS REC	SUSP REC	DISS REC	SUSP REC	DISS REC	SUSP REC	DISS REC	SUSP REC	DISS REC	SUSP REC	DISS REC	SUSP REC
	(NG/L) (19025)	(NG/L) (19087)	(NG/L) (19024)	(NG/L) (19086)	(NG/L) (19023)	(NG/L) (19098)	(NG/L) (19035)	(NG/L) (19099)	(NG/L) (19036)	(NG/L) (19091)	(NG/L) (19028)	(NG/L) (19096)
NOV 1993												
16...	<2.3	0.30	0.51	<0.08	0.05	2.6	2.1	0.08	0.06	0.75	0.86	0.16
FEB 1994												
16...	4.5	1.3	0.86	<0.16	0.08	7.5	3.1	0.30	0.07	2.4	1.3	0.61
16...	4.4	1.4	0.85	<0.16	0.08	7.8	2.9	0.33	0.07	2.5	1.2	0.64
21...	3.5	1.9	0.71	<0.22	0.06	11	2.9	0.44	0.08	3.5	1.1	0.89
APR												
26...	3.6	1.2	0.74	<0.37	0.09	6.4	3.0	0.26	0.08	2.0	1.4	0.54
JUL												
13...	4.3	1.5	1.1	<0.27	0.14	8.3	3.9	0.40	0.16	2.9	1.8	0.65
DATE	PCB COG 85	PCB COG 87	PCB COG 87	PCB COG 91	PCB COG 91	PCB COG 97	PCB COG 97	PCB COG 99	PCB COG 99	PCB COG 101	PCB COG 101	PCB COG 118
	WATER	SED	WATER	SED	WATER	SED	WATER	SED	WATER	SED	WATER	SED
	DISS REC	SUSP REC	DISS REC	SUSP REC	DISS REC	SUSP REC	DISS REC	SUSP REC	DISS REC	SUSP REC	DISS REC	SUSP REC
	(NG/L) (19033)	(NG/L) (19095)	(NG/L) (19032)	(NG/L) (19089)	(NG/L) (19026)	(NG/L) (19094)	(NG/L) (19031)	(NG/L) (19093)	(NG/L) (19030)	(NG/L) (19092)	(NG/L) (19029)	(NG/L) (19103)
NOV 1993												
16...	0.10	0.40	0.33	0.27	0.29	0.30	0.25	0.46	0.35	0.88	0.84	0.90
FEB 1994												
16...	0.17	1.3	0.48	1.0	0.49	1.0	0.41	1.5	0.57	3.0	1.4	3.2
16...	0.16	1.4	0.45	1.1	0.46	1.1	0.39	1.6	0.56	3.1	1.3	3.5
21...	0.17	2.1	0.46	1.5	0.40	1.5	0.38	2.3	0.52	4.3	1.2	4.9
APR												
26...	0.19	1.4	0.58	0.91	0.52	1.0	0.44	1.6	0.58	2.7	1.3	2.3
JUL												
13...	0.27	1.7	0.82	1.0	0.56	1.3	0.64	1.9	0.81	3.5	1.6	3.6
DATE	PCB COG 118	PCB COG 128	PCB COG 128	PCB COG 132+153	PCB COG 132+153	PCB COG 135+144	PCB COG 135+144	PCB COG 136	PCB COG 136	PCB COG 137+176	PCB COG 137+176	
	WATER	SED	WATER	SED	WATER	SED	WATER	SED	WATER	SED	WATER	
	DISS REC	SUSP REC	DISS REC	SUSP REC	DISS REC	SUSP REC	DISS REC	SUSP REC	DISS REC	SUSP REC	DISS REC	
	(NG/L) (19040)	(NG/L) (99924)	(NG/L) (99922)	(NG/L) (19105)	(NG/L) (19042)	(NG/L) (19101)	(NG/L) (19038)	(NG/L) (19097)	(NG/L) (19034)	(NG/L) (19107)	(NG/L) (19044)	
NOV 1993												
16...	0.47	0.310	0.070	2.0	0.64	0.28	0.12	0.13	0.06	<0.03	<0.03	
FEB 1994												
16...	0.68	1.000	0.090	5.7	0.92	0.92	0.18	0.40	0.09	<0.05	<0.03	
16...	0.67	1.100	0.086	6.1	0.89	0.99	0.17	0.41	0.08	<0.05	<0.03	
21...	0.73	1.600	0.100	8.5	0.87	1.4	0.16	0.60	0.08	<0.07	<0.03	
APR												
26...	0.58	0.940	0.100	4.6	0.78	0.68	0.16	0.38	0.10	--	<0.03	
JUL												
13...	1.1	1.100	0.190	7.8	1.3	0.96	0.23	0.41	0.13	<0.06	<0.03	

STREAMS TRIBUTARY TO LAKE MICHIGAN
04085395 SOUTH BRANCH MANITOWOC RIVER AT HAYTON, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	PCB COG 138+163 SED SUSP REC (NG/L) (19108)	PCB COG 138+163 WATER DISS REC (NG/L) (19045)	PCB COG 141 SED SUSP REC (NG/L) (19106)	PCB COG 141 WATER DISS REC (NG/L) (19043)	PCB COG 146 SED SUSP REC (NG/L) (19104)	PCB COG 146 WATER DISS REC (NG/L) (19041)	PCB COG 149 SED SUSP REC (NG/L) (19102)	PCB COG 149 WATER DISS REC (NG/L) (19039)	PCB COG 151 SED SUSP REC (NG/L) (19100)	PCB COG 151 WATER DISS REC (NG/L) (19037)	PCB COG 167 SED SUSP REC (NG/L) (99925)
NOV 1993 16...	1.7	0.50	<0.17	<0.06	0.34	0.11	0.99	0.37	0.27	0.13	<0.080
FEB 1994 16...	5.4	0.69	<0.45	<0.06	1.1	0.16	3.1	0.58	0.88	0.18	0.250
16...	5.8	0.66	<0.49	<0.06	1.2	0.16	3.3	0.58	0.94	0.18	0.260
21...	7.8	0.70	<0.66	<0.06	1.6	0.15	4.6	0.55	1.3	0.16	0.330
APR 26...	4.5	0.64	<0.50	<0.06	0.84	0.13	2.4	0.51	0.67	0.15	0.170
JUL 13...	6.3	1.3	<0.70	<0.14	1.2	0.24	3.6	0.84	1.0	0.25	0.230
DATE	PCB COG 167 WATER DISS REC (NG/L) (99923)	PCB COG 170+190 SED SUSP REC (NG/L) (19119)	PCB COG 170+190 WATER DISS REC (NG/L) (19056)	PCB COG 171+202 SED SUSP REC (NG/L) (19115)	PCB COG 171+202 WATER DISS REC (NG/L) (19052)	PCB COG 172+197 SED SUSP REC (NG/L) (19116)	PCB COG 172+197 WATER DISS REC (NG/L) (19053)	PCB COG 174 SED SUSP REC (NG/L) (19113)	PCB COG 174 WATER DISS REC (NG/L) (19050)	PCB COG 177 SED SUSP REC (NG/L) (19114)	PCB COG 177 WATER DISS REC (NG/L) (19051)
NOV 1993 16...	<0.080	0.55	0.11	0.06	<0.03	0.07	<0.05	0.18	0.03	0.18	<0.03
FEB 1994 16...	<0.080	1.6	<0.08	0.24	<0.03	0.23	<0.05	0.52	0.04	0.53	0.04
16...	<0.080	1.7	<0.08	0.26	<0.03	0.24	<0.05	0.55	0.04	0.56	0.03
21...	<0.080	2.3	<0.08	0.32	<0.03	0.31	<0.05	0.74	0.04	0.75	0.03
APR 26...	<0.080	1.2	0.13	0.19	<0.03	0.18	<0.05	0.44	0.04	0.44	0.03
JUL 13...	<0.080	1.5	<0.19	0.18	<0.03	0.20	<0.05	0.58	0.07	0.53	0.06
DATE	PCB COG 178 SED SUSP REC (NG/L) (19109)	PCB COG 178 WATER DISS REC (NG/L) (19046)	PCB COG 180 SED SUSP REC (NG/L) (19117)	PCB COG 180 WATER DISS REC (NG/L) (19054)	PCB COG 182+187 SED SUSP REC (NG/L) (19110)	PCB COG 182+187 WATER DISS REC (NG/L) (19047)	PCB COG 183 SED SUSP REC (NG/L) (19111)	PCB COG 183 WATER DISS REC (NG/L) (19048)	PCB COG 185 SED SUSP REC (NG/L) (19112)	PCB COG 185 WATER DISS REC (NG/L) (19049)	PCB COG 194 SED SUSP REC (NG/L) (19123)
NOV 1993 16...	0.09	<0.04	0.42	0.06	0.28	0.05	0.16	<0.03	<0.03	<0.03	0.08
FEB 1994 16...	0.26	<0.04	1.4	0.08	0.83	0.07	0.47	0.03	0.08	<0.03	0.28
16...	0.27	<0.04	1.5	0.08	0.86	0.07	0.49	0.04	0.08	<0.03	0.28
21...	0.36	<0.04	1.9	0.08	1.1	0.06	0.64	<0.03	0.10	<0.03	0.36
APR 26...	0.19	<0.04	1.1	0.07	0.58	0.05	0.40	<0.03	0.06	<0.03	0.23
JUL 13...	0.24	<0.04	1.3	0.14	0.79	0.11	0.51	0.06	0.07	<0.03	0.19
DATE	PCB COG 194 WATER DISS REC (NG/L) (19060)	PCB COG 195+208 SED SUSP REC (NG/L) (19122)	PCB COG 195+208 WATER DISS REC (NG/L) (19059)	PCB COG 196+203 SED SUSP REC (NG/L) (19121)	PCB COG 196+203 WATER DISS REC (NG/L) (19058)	PCB COG 199 SED SUSP REC (NG/L) (19118)	PCB COG 199 WATER DISS REC (NG/L) (19055)	PCB COG 201 SED SUSP REC (NG/L) (19120)	PCB COG 201 WATER DISS REC (NG/L) (19057)	PCB COG 206 SED SUSP REC (NG/L) (19124)	PCB COG 206 WATER DISS REC (NG/L) (19061)
NOV 1993 16...	<0.03	0.11	<0.08	0.18	<0.08	<0.02	<0.02	0.16	<0.04	0.05	<0.04
FEB 1994 16...	<0.03	0.32	<0.08	0.53	<0.08	--	<0.02	0.45	<0.04	0.12	<0.04
16...	<0.03	0.32	<0.08	0.52	<0.08	--	<0.02	0.45	<0.04	0.14	<0.04
21...	<0.03	0.42	<0.08	0.69	<0.08	--	<0.02	0.59	<0.04	0.16	<0.04
APR 26...	<0.03	0.28	<0.08	0.46	<0.08	--	<0.02	0.35	<0.04	0.11	<0.04
JUL 13...	<0.03	0.25	<0.08	0.42	<0.08	--	<0.02	0.38	<0.04	<0.06	<0.04

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04085395 SOUTH BRANCH MANITOWOC RIVER AT HAYTON, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PCB COG 5 + 8 SED SUSP REC (NG/L) (19067)	PCB COG 5 + 8 WATER DISS REC (NG/L) (19004)	PCB COG 6 SED SUSP REC (NG/L) (19066)	PCB COG 6 WATER DISS REC (NG/L) (19003)	PCB COG 7 SED SUSP REC (NG/L) (19065)	PCB COG 7 WATER DISS REC (NG/L) (19002)	PCB COG 16 + 32 SED SUSP REC (NG/L) (19072)	PCB COG 16 + 32 WATER DISS REC (NG/L) (19009)	PCB COG 17 SED SUSP REC (NG/L) (19070)	PCB COG 17 WATER DISS REC (NG/L) (19007)	
MAR 1995													
**16...	1001	76	<0.09	<0.18	<0.08	0.27	<0.02	0.09	0.07	0.23	0.20	0.37	
**22...	1445	99	<0.09	<0.09	<0.08	0.08	<0.02	0.03	<0.03	0.13	0.04	0.18	
APR													
**20...	1315	65	<0.09	<0.10	<0.08	0.21	<0.02	0.07	0.05	0.14	0.09	0.27	
MAY													
**10...	1100	50	--	<0.17	--	0.47	--	0.13	--	0.21	0.22	0.40	
**18...	0915	46	--	0.24	--	0.53	--	0.12	0.11	0.18	0.28	0.38	
JUN													
**15...	0920	12	--	0.23	--	0.42	<0.02	0.09	--	0.13	0.16	0.27	
AUG													
**13...	2230	30	--	<0.13	--	0.24	--	0.05	--	0.09	--	0.12	
DATE		PCB COG 18 SED SUSP REC (NG/L) (19069)	PCB COG 18 WATER DISS REC (NG/L) (19006)	PCB COG 19 SED SUSP REC (NG/L) (19068)	PCB COG 19 WATER DISS REC (NG/L) (19005)	PCB COG 22 SED SUSP REC (NG/L) (19076)	PCB COG 22 WATER DISS REC (NG/L) (19013)	PCB COG 24 + 27 SED SUSP REC (NG/L) (19071)	PCB COG 24 + 27 WATER DISS REC (NG/L) (19008)	PCB COG 26 SED SUSP REC (NG/L) (19073)	PCB COG 26 WATER DISS REC (NG/L) (19010)	PCB COG 28 + 31 SED SUSP REC (NG/L) (19074)	PCB COG 28 + 31 WATER DISS REC (NG/L) (19011)
MAR 1995													
16...	0.09	0.26	0.03	0.13	<0.07	<0.05	<0.02	0.05	0.85	1.8	0.17	0.57	
22...	<0.03	0.12	<0.02	0.06	<0.05	<0.05	<0.02	<0.02	0.10	0.84	<0.08	0.27	
APR													
20...	0.06	0.18	0.03	0.10	<0.06	<0.05	<0.02	<0.02	0.63	1.3	0.17	0.42	
MAY													
10...	0.15	0.30	--	0.16	<0.13	0.06	--	<0.04	2.3	2.5	0.71	0.78	
18...	0.21	0.32	--	0.14	<0.18	0.06	<0.03	<0.04	2.8	2.2	0.90	0.82	
JUN													
15...	0.14	0.24	--	0.09	<0.09	0.07	<0.02	<0.03	1.7	1.7	0.57	0.69	
AUG													
13...	--	0.12	--	0.05	--	<0.05	<0.07	<0.03	0.60	0.74	0.34	0.30	
DATE		PCB COG 33 SED SUSP REC (NG/L) (19075)	PCB COG 33 WATER DISS REC (NG/L) (19012)	PCB COG 37 + 42 SED SUSP REC (NG/L) (19083)	PCB COG 37 + 42 WATER DISS REC (NG/L) (19020)	PCB COG 40 SED SUSP REC (NG/L) (19085)	PCB COG 40 WATER DISS REC (NG/L) (19022)	PCB COG 41 +64+71 SED SUSP REC (NG/L) (19084)	PCB COG 41 +64+71 WATER DISS REC (NG/L) (19021)	PCB COG 44 SED SUSP REC (NG/L) (19082)	PCB COG 44 WATER DISS REC (NG/L) (19019)	PCB COG 45 SED SUSP REC (NG/L) (19077)	PCB COG 45 WATER DISS REC (NG/L) (19014)
MAR 1995													
16...	<0.08	>0.13	0.63	0.51	0.14	0.09	0.55	0.52	1.7	1.4	0.05	0.06	
22...	<0.09	<0.11	0.19	0.28	0.04	0.06	0.18	0.29	0.47	0.78	<0.02	0.04	
APR													
20...	<0.08	>0.11	0.60	0.38	0.10	0.08	0.58	0.40	1.5	1.1	0.04	<0.05	
MAY													
10...	<0.42	>0.28	1.8	0.85	0.25	0.15	1.7	0.80	4.1	2.3	0.08	0.08	
18...	<0.45	0.45	2.2	0.87	0.32	0.17	2.2	0.85	5.3	2.3	0.11	<0.08	
JUN													
15...	<0.31	0.40	1.2	0.74	0.19	0.15	1.2	0.75	3.0	1.9	0.06	0.06	
AUG													
13...	<0.15	0.17	0.85	0.34	0.15	0.08	1.0	0.40	2.5	1.1	--	<0.04	
DATE		PCB COG 46 SED SUSP REC (NG/L) (19078)	PCB COG 46 WATER DISS REC (NG/L) (19015)	PCB COG 47 + 48 SED SUSP REC (NG/L) (19081)	PCB COG 47 + 48 WATER DISS REC (NG/L) (19018)	PCB COG 49 SED SUSP REC (NG/L) (19080)	PCB COG 49 WATER DISS REC (NG/L) (19017)	PCB COG 52 SED SUSP REC (NG/L) (19079)	PCB COG 52 WATER DISS REC (NG/L) (19016)	PCB COG 56 + 60 SED SUSP REC (NG/L) (19090)	PCB COG 56 + 60 WATER DISS REC (NG/L) (19027)	PCB COG 66 + 95 SED SUSP REC (NG/L) (19088)	PCB COG 66 + 95 WATER DISS REC (NG/L) (19025)
MAR 1995													
16...	0.06	0.08	1.8	1.5	2.7	2.0	3.3	2.8	0.18	0.13	5.6	2.8	
22...	<0.03	0.05	0.49	0.66	0.74	1.1	0.95	1.5	<0.06	0.08	1.9	1.7	
APR													
20...	0.05	0.05	1.4	0.97	2.2	1.5	2.8	2.1	0.25	0.12	5.3	2.4	
MAY													
10...	0.13	0.11	3.9	1.7	6.3	3.2	8.0	4.4	0.79	0.21	15	4.5	
18...	0.15	0.11	4.9	1.6	7.8	3.0	9.7	4.3	1.0	0.26	19	4.5	
JUN													
15...	0.09	0.09	2.7	1.4	4.4	2.3	5.6	3.4	0.62	0.29	11	4.0	
AUG													
13...	--	0.04	2.6	0.78	3.4	1.2	5.0	1.8	0.68	0.16	12	2.5	

** Multiple verticals

STREAMS TRIBUTARY TO LAKE MICHIGAN
04085395 SOUTH BRANCH MANITOWOC RIVER AT HAYTON, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PCB COG 70 + 76 SED SUSP REC (NG/L) (19087)	PCB COG 70 + 76 WATER DISS REC (NG/L) (19024)	PCB COG 74 SED SUSP REC (NG/L) (19086)	PCB COG 74 WATER DISS REC (NG/L) (19023)	PCB COG 77+110 SED SUSP REC (NG/L) (19098)	PCB COG 77+110 WATER DISS REC (NG/L) (19035)	PCB COG 82 SED SUSP REC (NG/L) (19099)	PCB COG 82 WATER DISS REC (NG/L) (19036)	PCB COG 84 + 92 SED SUSP REC (NG/L) (19091)	PCB COG 84 + 92 WATER DISS REC (NG/L) (19028)	PCB COG 85 SED SUSP REC (NG/L) (19096)	PCB COG 85 WATER DISS REC (NG/L) (19033)
MAR 1995												
16...	1.2	0.67	<0.17	0.08	6.5	2.1	0.27	0.07	2.6	1.0	0.49	0.12
22...	0.33	0.43	<0.09	0.04	2.2	1.4	0.12	0.06	0.86	0.66	0.19	0.09
APR												
20...	1.0	0.60	<0.22	0.07	6.6	1.8	0.35	0.08	2.5	0.91	0.56	0.12
MAY												
10...	3.5	1.0	0.44	0.14	18	3.3	0.75	0.11	6.8	1.7	1.4	0.20
18...	4.5	1.2	<0.96	0.16	22	3.7	1.2	0.14	8.5	2.0	2.0	0.25
JUN												
15...	2.7	1.1	<0.64	0.16	12	3.5	0.70	0.16	4.8	1.8	1.1	0.28
AUG												
13...	2.5	0.64	<0.58	0.09	12	1.9	0.94	0.11	4.9	1.1	1.3	0.17
DATE	PCB COG 87 SED SUSP REC (NG/L) (19095)	PCB COG 87 WATER DISS REC (NG/L) (19032)	PCB COG 91 SED SUSP REC (NG/L) (19089)	PCB COG 91 WATER DISS REC (NG/L) (19026)	PCB COG 97 SED SUSP REC (NG/L) (19094)	PCB COG 97 WATER DISS REC (NG/L) (19031)	PCB COG 99 SED SUSP REC (NG/L) (19093)	PCB COG 99 WATER DISS REC (NG/L) (19030)	PCB COG 101 SED SUSP REC (NG/L) (19092)	PCB COG 101 WATER DISS REC (NG/L) (19029)	PCB COG 118 SED SUSP REC (NG/L) (19103)	
MAR 1995												
16...	1.2	0.38	1.1	0.39	0.96	0.30	1.4	0.41	2.6	0.92	2.2	
22...	0.49	0.30	0.35	0.24	0.35	0.20	0.48	0.26	0.95	0.61	0.86	
APR												
20...	1.4	0.39	1.0	0.31	1.0	0.30	1.4	0.38	2.7	0.84	2.6	
MAY												
10...	3.3	0.57	2.9	0.61	2.9	0.52	4.1	0.72	7.4	1.5	6.8	
18...	4.5	0.74	3.8	0.69	3.8	0.64	5.5	0.81	9.7	1.7	10	
JUN												
15...	2.7	0.80	2.2	0.62	2.2	0.64	3.2	0.80	5.9	1.6	5.6	
AUG												
13...	3.6	0.55	1.9	0.33	2.5	0.39	3.4	0.46	6.5	1.0	7.1	
DATE	PCB COG 128 SED SUSP REC (NG/L) (99924)	PCB COG 128 WATER DISS REC (NG/L) (99922)	PCB COG 118 WATER DISS REC (NG/L) (19040)	PCB COG 132+153 SED SUSP REC (NG/L) (19105)	PCB COG 132+153 WATER DISS REC (NG/L) (19042)	PCB COG 135+144 SED SUSP REC (NG/L) (19101)	PCB COG 135+144 WATER DISS REC (NG/L) (19038)	PCB COG 136 SED SUSP REC (NG/L) (19097)	PCB COG 136 WATER DISS REC (NG/L) (19034)	PCB COG 137+176 SED SUSP REC (NG/L) (19107)	PCB COG 137+176 WATER DISS REC (NG/L) (19044)	
MAR 1995												
16...	0.760	0.065	0.55	4.2	0.61	0.82	0.14	0.37	0.07	0.05	<0.05	
22...	0.290	0.045	0.39	1.5	0.39	0.26	0.08	0.11	0.04	<0.03	<0.03	
APR												
20...	0.880	0.063	0.53	4.4	0.56	0.78	0.11	0.36	0.06	0.05	<0.04	
MAY												
10...	2.300	0.100	0.88	13	1.0	2.2	0.21	1.0	0.11	0.16	<0.07	
18...	3.400	0.180	0.93	18	1.3	3.0	0.25	1.2	0.14	0.24	<0.03	
JUN												
15...	1.800	0.200	0.92	9.9	1.2	1.6	0.24	0.67	0.13	0.11	<0.03	
AUG												
13...	2.000	0.100	0.62	11	0.71	1.4	0.11	0.58	0.06	0.09	<0.03	
DATE	PCB COG 138+163 SED SUSP REC (NG/L) (19108)	PCB COG 138+163 WATER DISS REC (NG/L) (19045)	PCB COG 141 SED SUSP REC (NG/L) (19106)	PCB COG 141 WATER DISS REC (NG/L) (19043)	PCB COG 146 SED SUSP REC (NG/L) (19104)	PCB COG 146 WATER DISS REC (NG/L) (19041)	PCB COG 149 SED SUSP REC (NG/L) (19102)	PCB COG 149 WATER DISS REC (NG/L) (19039)	PCB COG 151 SED SUSP REC (NG/L) (19100)	PCB COG 151 WATER DISS REC (NG/L) (19037)	PCB COG 167 SED SUSP REC (NG/L) (99925)	
MAR 1995												
16...	4.2	0.53	<0.53	<0.06	0.97	0.12	2.7	0.47	0.86	0.15	0.170	
22...	1.6	0.36	<0.25	<0.05	0.32	0.08	0.90	0.31	0.28	0.10	<0.080	
APR												
20...	4.8	0.50	<0.75	<0.07	0.98	0.11	2.6	0.42	0.86	0.13	0.200	
MAY												
10...	12	0.83	<1.8	<0.10	2.7	0.20	7.0	0.74	2.3	0.23	0.600	
18...	18	1.1	<2.6	<0.15	3.7	0.24	9.9	0.88	3.1	0.27	0.780	
JUN												
15...	9.7	1.2	<1.4	<0.18	2.0	0.24	5.3	0.83	1.7	0.26	0.400	
AUG												
13...	11	0.70	<1.6	<0.10	1.8	0.11	5.7	0.45	1.6	0.12	0.430	

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04085395 SOUTH BRANCH MANITOWOC RIVER AT HAYTON, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PCB COG 167 WATER DISS REC (NG/L) (99923)	PCB COG 170+190 SED SUSP REC (NG/L) (19119)	PCB COG 170+190 WATER DISS REC (NG/L) (19056)	PCB COG 171+202 SED SUSP REC (NG/L) (19115)	PCB COG 171+202 WATER DISS REC (NG/L) (19052)	PCB COG 172+197 SED SUSP REC (NG/L) (19116)	PCB COG 172+197 WATER DISS REC (NG/L) (19053)	PCB COG 174 SED SUSP REC (NG/L) (19113)	PCB COG 174 WATER DISS REC (NG/L) (19050)	PCB COG 177 SED SUSP REC (NG/L) (19114)	PCB COG 177 WATER DISS REC (NG/L) (19051)
MAR 1995											
16...	<0.080	1.3	<0.08	0.22	<0.03	0.18	<0.05	0.52	0.03	0.51	<0.03
22...	<0.080	0.42	<0.08	0.06	<0.03	0.06	<0.05	0.18	<0.02	0.15	<0.03
APR											
20...	<0.080	1.5	<0.08	0.19	<0.03	0.20	<0.05	0.53	0.03	0.52	<0.03
MAY											
10...	<0.080	4.0	<0.09	0.60	<0.03	0.56	<0.05	1.5	0.05	1.5	0.04
18...	<0.080	5.4	0.16	0.80	<0.03	0.79	<0.05	2.1	0.08	2.0	0.06
JUN											
15...	<0.080	2.6	0.19	0.39	<0.03	0.36	<0.05	0.98	0.09	0.94	0.07
AUG											
13...	<0.080	2.5	<0.08	0.36	<0.03	0.32	<0.05	1.0	0.04	0.76	<0.03
DATE	PCB COG 178 SED SUSP REC (NG/L) (19109)	PCB COG 178 WATER DISS REC (NG/L) (19046)	PCB COG 180 SED SUSP REC (NG/L) (19117)	PCB COG 180 WATER DISS REC (NG/L) (19054)	PCB COG 182+187 SED SUSP REC (NG/L) (19110)	PCB COG 182+187 WATER DISS REC (NG/L) (19047)	PCB COG 183 SED SUSP REC (NG/L) (19111)	PCB COG 183 WATER DISS REC (NG/L) (19048)	PCB COG 185 SED SUSP REC (NG/L) (19112)	PCB COG 185 WATER DISS REC (NG/L) (19049)	PCB COG 194 SED SUSP REC (NG/L) (19123)
MAR 1995											
16...	0.26	<0.04	1.1	0.07	0.78	0.06	0.46	<0.03	0.07	<0.03	0.18
22...	0.08	<0.04	0.39	0.05	0.25	0.03	0.15	<0.03	<0.03	<0.03	0.05
APR											
20...	0.25	<0.04	1.2	0.06	0.79	0.05	0.48	<0.03	0.07	<0.03	0.19
MAY											
10...	0.69	<0.04	3.4	0.10	2.2	0.08	1.4	0.04	0.19	<0.03	0.62
18...	0.92	<0.04	4.7	0.15	2.9	0.12	1.9	0.06	0.25	<0.03	0.85
JUN											
15...	0.41	<0.04	2.3	0.18	1.4	0.12	0.89	0.07	0.12	<0.03	0.36
AUG											
13...	0.30	<0.04	2.2	0.09	1.1	0.05	0.76	<0.03	0.12	<0.03	0.28
DATE	PCB COG 194 WATER DISS REC (NG/L) (19060)	PCB COG 195+208 SED SUSP REC (NG/L) (19122)	PCB COG 195+208 WATER DISS REC (NG/L) (19059)	PCB COG 196+203 SED SUSP REC (NG/L) (19121)	PCB COG 196+203 WATER DISS REC (NG/L) (19058)	PCB COG 199 SED SUSP REC (NG/L) (19118)	PCB COG 199 WATER DISS REC (NG/L) (19055)	PCB COG 201 SED SUSP REC (NG/L) (19120)	PCB COG 201 WATER DISS REC (NG/L) (19057)	PCB COG 206 SED SUSP REC (NG/L) (19124)	PCB COG 206 WATER DISS REC (NG/L) (19061)
MAR 1995											
16...	<0.03	0.26	<0.08	0.40	<0.08	0.02	<0.02	0.38	<0.04	0.09	<0.04
22...	<0.03	<0.08	<0.08	0.12	<0.08	<0.02	<0.02	0.11	<0.04	<0.04	<0.04
APR											
20...	<0.03	0.28	<0.08	0.42	<0.08	0.02	<0.02	0.40	<0.04	0.11	<0.04
MAY											
10...	<0.03	0.81	<0.08	1.2	<0.08	0.07	<0.02	1.1	<0.04	0.31	<0.04
18...	<0.03	1.1	<0.08	1.8	<0.08	0.10	<0.02	1.5	<0.04	0.37	<0.04
JUN											
15...	<0.03	0.46	<0.08	0.78	<0.08	0.05	<0.02	0.68	<0.04	0.16	<0.04
AUG											
13...	<0.03	0.36	<0.08	0.60	<0.08	--	<0.02	0.49	<0.04	<0.14	<0.04

STREAMS TRIBUTARY TO LAKE MICHIGAN
04085395 SOUTH BRANCH MANITOWOC RIVER AT HAYTON, WI--CONTINUED

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	16.5	13.5	15.0	9.0	6.0	7.5	2.5	1.5	2.0	1.5	.0	1.0
2	15.0	13.0	14.0	9.0	6.5	8.0	3.0	2.0	2.5	1.0	.0	.5
3	15.0	12.5	13.5	9.5	8.0	9.0	3.5	2.5	3.0	.5	.0	.0
4	14.5	12.5	13.5	9.0	8.5	9.0	3.5	2.5	3.0	.5	.0	.0
5	14.0	11.5	12.5	9.0	8.0	8.5	3.5	2.5	3.0	.5	.0	.0
6	15.5	11.5	13.5	8.0	6.0	7.5	2.5	2.0	2.5	.5	.0	.5
7	17.0	14.0	15.5	8.0	6.0	7.0	2.0	1.0	1.5	.5	.0	.5
8	15.5	12.5	14.5	8.0	7.0	7.5	1.5	1.0	1.0	.5	.0	.0
9	13.0	10.5	11.5	8.0	6.0	7.5	2.0	1.0	1.5	.5	.0	.0
10	13.0	9.0	11.0	7.0	5.0	6.0	2.0	1.0	1.0	.5	.0	.5
11	13.5	9.5	11.5	7.5	5.0	6.0	2.0	.5	1.0	1.0	.0	.5
12	14.0	10.5	12.0	7.0	5.5	6.0	2.0	1.0	1.0	.5	.5	.5
13	13.0	11.0	12.0	9.5	6.5	8.0	1.5	1.0	1.0	.5	.5	.5
14	14.5	12.0	13.0	10.0	8.0	9.5	1.5	1.0	1.0	.5	.5	.5
15	14.0	12.5	13.0	8.0	6.0	7.0	1.5	1.0	1.0	1.0	.0	.5
16	16.0	12.5	14.0	7.5	5.0	6.0	1.5	1.0	1.0	.5	.5	.5
17	16.0	14.0	15.0	6.5	4.5	6.0	1.5	.5	1.0	.5	.5	.5
18	16.5	15.0	16.0	6.5	3.5	5.5	2.0	.5	1.0	1.0	.5	.5
19	16.5	14.5	15.5	4.5	2.5	3.5	1.5	.5	1.0	1.0	.5	1.0
20	15.0	12.5	14.0	5.0	3.5	4.0	2.0	.5	1.0	1.0	.5	.5
21	15.5	11.5	13.0	6.0	2.5	5.0	2.0	.5	1.0	1.0	.5	.5
22	15.5	12.0	14.0	2.5	.0	.5	2.0	1.0	1.5	.5	.5	.5
23	13.5	10.0	11.5	1.0	.0	.5	1.5	1.5	1.5	.5	.0	.5
24	10.0	6.5	8.0	2.0	.5	1.5	2.0	1.0	1.5	1.0	.0	.5
25	7.0	5.0	6.5	3.5	2.0	2.5	3.0	1.0	2.0	1.0	.0	.5
26	7.5	5.5	6.5	4.0	2.5	3.0	3.0	1.5	2.0	1.0	.0	.5
27	9.0	5.0	7.0	3.5	2.0	3.0	3.0	2.0	2.5	1.0	.0	.5
28	8.0	6.5	7.5	2.5	1.0	2.0	2.0	1.5	2.0	1.0	.0	.5
29	10.0	7.5	8.5	2.0	1.0	1.5	2.5	1.0	1.5	1.0	.0	.5
30	10.0	7.0	8.5	2.0	1.0	1.5	2.5	1.5	2.0	1.0	.0	.5
31	9.0	7.5	8.5	---	---	---	2.0	1.5	1.5	1.0	.0	.5
MONTH	17.0	5.0	11.9	10.0	.0	5.3	3.5	.5	1.6	1.5	.0	.5
FEBRUARY			MARCH			APRIL			MAY			
1	.5	.5	.5	1.0	.0	.5	6.5	3.5	5.5	12.0	9.5	11.0
2	1.0	.5	.5	1.0	.0	.5	8.5	4.5	6.5	14.0	10.5	12.5
3	.5	.5	.5	1.0	.0	.5	10.5	6.0	8.0	14.5	11.5	13.0
4	1.0	.5	.5	1.0	.0	.5	8.5	2.5	4.5	13.5	12.5	13.0
5	1.0	.0	.5	.0	.0	.0	3.0	1.5	2.5	16.0	11.5	13.5
6	1.0	.0	.5	.5	.0	.0	7.0	2.0	4.5	18.5	13.0	15.5
7	1.0	.0	.5	.5	.0	.0	6.0	4.5	5.5	18.0	15.0	16.5
8	1.0	.0	.5	.5	.0	.0	6.0	4.5	5.5	16.5	10.5	13.0
9	1.0	.0	.5	.5	.0	.0	5.5	4.0	5.0	15.0	9.5	12.0
10	.5	.0	.5	.5	.0	.0	4.5	3.0	4.0	14.0	11.0	12.0
11	.0	.0	.0	1.0	.0	.5	7.0	3.5	5.0	17.5	10.5	13.5
12	.5	.0	.0	1.5	.0	.5	7.5	5.5	6.5	19.5	13.0	16.5
13	.5	.0	.0	2.0	.5	1.0	10.5	5.0	7.5	17.5	14.0	15.0
14	1.0	.0	.5	3.0	.5	2.0	11.5	6.5	9.0	17.0	13.5	15.0
15	.5	.0	.5	3.5	2.0	2.5	10.5	7.0	8.5	19.5	12.0	16.0
16	1.0	.0	.5	5.0	2.5	3.5	9.5	7.0	8.5	21.5	16.0	19.0
17	1.0	.0	.5	4.0	3.0	3.5	13.0	8.0	10.5	20.0	16.5	18.5
18	1.0	.0	.5	4.5	3.0	3.5	12.0	8.0	9.5	20.0	16.0	18.0
19	.5	.0	.0	4.5	3.5	4.0	10.5	8.0	9.0	20.5	16.0	18.0
20	.0	.0	.0	4.0	2.5	3.5	9.5	7.0	8.0	20.5	17.0	18.5
21	1.0	.0	.5	3.0	2.0	2.5	7.5	6.0	6.5	19.0	14.5	17.0
22	.5	.0	.5	6.0	2.0	3.5	11.0	5.5	8.5	21.0	16.0	18.5
23	1.0	.0	.5	6.0	3.0	4.5	12.5	8.5	10.5	18.0	16.0	17.0
24	1.0	.0	.5	7.5	3.0	5.0	12.0	9.0	10.5	16.5	14.5	15.5
25	.5	.0	.5	6.5	4.0	5.5	13.0	8.5	11.0	18.5	14.5	16.5
26	.5	.0	.5	5.5	4.5	5.0	12.0	9.5	10.5	20.0	16.0	18.0
27	1.0	.0	.5	5.0	2.5	3.5	10.5	8.5	9.5	19.0	16.0	17.5
28	1.0	.0	.5	4.0	2.5	3.0	12.0	7.5	10.0	17.5	15.0	16.0
29	---	---	---	4.5	3.0	3.5	13.5	9.5	12.0	16.0	14.0	15.0
30	---	---	---	5.0	3.0	4.0	13.0	10.5	11.5	21.0	13.0	17.0
31	---	---	---	6.5	3.0	5.0	---	---	---	24.0	18.0	21.0
MONTH	1.0	.0	.4	7.5	.0	2.3	13.5	1.5	7.8	24.0	9.5	15.8

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04085395 SOUTH BRANCH MANITOWOC RIVER AT HAYTON, WI--CONTINUED

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	24.5	20.5	22.5	23.5	20.5	22.0	27.0	24.0	25.5	25.0	22.0	23.5
2	23.5	21.0	22.5	25.0	19.5	22.0	26.0	23.0	24.5	24.0	21.0	22.5
3	24.5	20.5	22.5	24.5	19.5	22.0	25.5	23.0	24.0	26.5	21.5	23.0
4	26.5	21.5	24.0	24.5	21.0	22.5	29.5	23.5	26.0	27.0	21.0	24.0
5	27.0	22.0	24.0	25.0	21.5	23.0	28.0	24.5	26.0	29.5	22.0	25.5
6	25.5	22.0	23.5	22.5	18.5	20.5	29.0	24.5	26.5	25.0	22.0	23.5
7	24.5	21.0	22.5	21.5	17.5	19.5	28.0	24.5	26.0	22.0	17.5	19.5
8	21.0	17.5	18.5	22.0	18.5	20.5	29.0	24.5	26.5	19.5	15.5	17.5
9	19.0	17.0	18.0	25.0	19.5	22.0	26.5	24.0	25.0	20.5	15.5	18.0
10	18.5	17.5	18.0	26.5	21.0	23.5	28.5	24.0	26.0	21.5	16.0	18.5
11	21.0	16.5	18.5	27.5	22.5	25.0	29.0	25.0	26.5	21.5	16.5	18.5
12	23.0	18.0	20.5	27.5	23.0	25.5	27.5	25.0	26.0	21.0	17.0	19.0
13	24.0	19.0	21.5	33.0	25.5	29.0	29.0	24.5	26.0	23.0	18.5	20.5
14	25.5	21.0	23.0	33.5	28.0	30.5	28.0	24.0	26.0	21.5	19.0	20.0
15	25.5	21.5	23.5	30.0	26.5	28.5	26.5	24.5	25.5	20.5	17.0	18.5
16	26.0	21.5	24.0	29.0	25.5	27.0	24.5	23.5	24.0	20.0	16.5	18.5
17	27.5	22.5	25.0	27.5	24.0	25.5	26.5	24.0	25.0	19.5	16.0	17.5
18	29.5	24.5	27.0	26.0	21.5	24.0	29.5	24.5	26.5	19.5	16.0	17.5
19	31.0	25.5	28.0	25.5	22.0	23.5	27.0	25.0	26.0	17.5	15.5	16.5
20	31.0	26.5	28.5	27.5	21.5	24.0	28.5	23.5	25.5	15.5	13.0	14.0
21	30.0	26.0	28.0	27.5	22.0	25.0	28.5	23.5	26.0	13.0	11.5	12.5
22	30.5	25.5	28.0	24.5	22.5	23.5	30.0	23.5	26.5	11.5	9.5	10.5
23	30.5	25.5	28.0	26.5	22.5	24.0	28.0	22.5	25.0	13.0	8.0	10.5
24	30.0	25.0	27.0	27.5	22.0	25.0	26.0	23.5	25.0	12.5	9.0	11.0
25	29.0	25.0	27.0	29.5	23.5	26.5	26.0	21.5	23.5	14.0	10.5	12.0
26	28.5	25.0	26.5	29.5	24.5	26.0	29.0	22.5	25.0	16.5	11.5	14.0
27	28.0	25.0	26.5	29.0	23.5	25.5	24.5	23.0	24.0	18.5	13.5	16.0
28	28.0	24.5	26.0	29.0	24.0	26.0	25.0	22.0	23.5	19.5	15.0	17.0
29	27.0	24.0	25.5	29.5	24.5	26.5	25.0	23.5	24.0	18.5	16.0	17.0
30	26.0	22.5	24.5	31.5	24.5	27.5	26.5	23.0	25.0	19.0	16.0	17.5
31	---	---	---	31.5	25.5	28.0	26.0	24.0	24.5	---	---	---
MONTH	31.0	16.5	24.1	33.5	17.5	24.6	30.0	21.5	25.3	29.5	8.0	17.8

SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (TONS PER DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	.43	.23	2.6	1.8	.09	.82	2.9	.96	.32	.26	1.9
2	1.5	.37	.23	2.6	1.8	.08	1.4	2.4	.91	.32	.34	1.6
3	.94	.36	.25	2.5	1.9	.09	2.3	2.3	.88	.32	.37	1.1
4	.80	.51	.22	2.2	1.8	.10	1.4	3.0	.81	.31	.52	.90
5	.69	.73	.22	1.1	1.7	.10	.83	3.5	.84	.34	.36	.67
6	.83	1.3	.35	.44	1.8	.10	.79	2.2	1.9	.59	.24	.69
7	.99	.91	.30	.18	1.9	.09	.86	3.3	3.1	.56	.24	.97
8	.92	.73	.58	.14	1.9	.10	.95	2.6	2.9	.44	.23	.83
9	.95	.79	1.3	.12	2.0	.12	.95	3.5	2.0	.33	.71	.82
10	.56	.55	2.3	.11	2.0	.14	.69	4.4	1.4	.30	.65	.84
11	.58	.58	1.5	.12	2.1	3.7	.55	7.4	1.2	.21	.39	.84
12	.59	.53	.76	.13	2.2	26	2.4	8.9	.99	.23	.48	.86
13	.51	.59	.38	.15	2.2	21	2.4	7.1	.88	.28	2.3	.89
14	.52	1.4	.23	.18	2.3	9.1	1.9	6.8	.83	.34	2.6	.77
15	.47	1.1	.14	.20	2.4	4.4	1.5	4.0	.88	.30	1.2	.81
16	.56	.64	.09	.20	2.5	2.2	1.2	3.3	.85	.33	.89	.86
17	.71	.42	.09	.17	2.5	1.8	1.1	3.4	.89	.32	1.2	.94
18	1.3	3.3	.09	.14	2.4	1.9	2.2	3.0	.78	.24	1.0	.69
19	1.1	.59	.10	.12	2.4	1.9	4.8	3.2	.66	.27	.85	1.1
20	.39	.37	.11	.10	2.4	3.0	2.9	2.7	.63	.34	.76	1.8
21	.35	1.1	.11	.09	2.5	3.7	2.2	2.5	.57	.32	.70	1.2
22	.59	1.0	.12	.08	2.2	2.1	1.8	2.0	.40	.26	.74	1.1
23	1.2	.43	.12	.08	2.0	2.0	2.1	2.5	.30	.22	.88	.86
24	.67	.32	.12	.08	1.9	1.9	2.5	2.2	.28	.19	1.6	.66
25	.28	.26	.14	.10	1.7	1.9	2.5	1.9	.26	.18	1.5	.67
26	.27	.33	.28	.27	1.4	1.9	2.4	1.6	.25	.24	1.1	.74
27	.31	.29	.60	.71	.63	1.9	2.7	1.5	.26	.29	1.3	.81
28	.50	.33	1.3	1.5	.24	1.6	3.1	2.4	.29	.45	2.8	.94
29	.44	.27	2.4	1.7	---	1.4	3.3	3.1	.32	.42	3.5	1.0
30	.46	.34	2.5	1.8	---	1.2	3.4	2.0	.36	.29	3.5	1.1
31	.47	---	2.6	1.8	---	.96	---	1.2	---	.19	2.5	---
TOTAL	22.25	20.87	19.76	21.71	54.57	96.57	57.94	102.8	27.58	9.74	35.71	28.96

STREAMS TRIBUTARY TO LAKE MICHIGAN
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 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.--Estimated daily discharges: Ice-affected period, Nov. 28 to Mar. 16. Records good except those for ice-affected period, which is poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	39	88	45	37	43	326	261	170	31	17	30
2	44	37	86	42	36	40	303	242	147	33	16	32
3	46	38	86	40	35	42	279	221	124	34	14	30
4	45	35	84	39	34	45	264	197	108	32	16	25
5	46	37	82	39	33	42	219	181	91	28	16	22
6	48	53	78	41	35	39	173	175	82	27	15	19
7	46	59	72	41	35	40	165	157	277	26	14	18
8	42	63	64	40	34	42	160	138	337	27	14	17
9	42	56	66	40	35	40	159	128	318	31	24	20
10	46	56	58	40	34	45	151	144	288	29	23	19
11	48	54	52	40	33	90	158	181	260	25	20	18
12	40	53	48	44	34	350	221	200	227	21	35	18
13	36	53	46	47	34	660	271	200	189	21	47	19
14	35	59	46	50	34	740	279	189	159	19	59	19
15	35	62	47	54	36	800	250	198	130	18	46	21
16	36	67	48	50	36	740	220	175	108	18	50	25
17	37	59	49	50	38	568	209	150	94	18	63	23
18	38	54	48	48	39	562	257	142	79	16	62	18
19	42	59	46	45	40	533	367	128	66	15	59	23
20	45	76	48	44	45	575	412	121	60	18	49	28
21	50	65	48	43	46	673	432	113	51	18	44	26
22	47	67	48	42	50	664	441	101	45	16	37	26
23	43	75	48	41	48	627	430	85	42	18	36	26
24	41	74	49	38	45	602	386	79	36	14	29	28
25	54	60	50	36	44	554	355	78	34	14	26	29
26	51	58	52	36	44	503	296	73	31	13	24	25
27	45	70	54	37	45	456	286	71	29	13	43	22
28	39	80	54	37	46	421	316	84	29	14	31	22
29	36	78	50	36	---	397	311	129	31	15	29	22
30	36	78	54	37	---	374	280	179	38	13	29	22
31	41	---	48	38	---	356	---	185	---	13	28	---
TOTAL	1330	1774	1797	1300	1085	11663	8376	4705	3680	648	1015	692
MEAN	42.9	59.1	58.0	41.9	38.7	376	279	152	123	20.9	32.7	23.1
MAX	54	80	88	54	50	800	441	261	337	34	63	32
MIN	35	35	46	36	33	39	151	71	29	13	14	17
CFSM	.08	.11	.11	.08	.07	.72	.53	.29	.23	.04	.06	.04
IN.	.09	.13	.13	.09	.08	.82	.59	.33	.26	.05	.07	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1995, BY WATER YEAR (WY)												
MEAN	216	274	207	127	201	920	1018	390	262	136	74.2	156
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	20.7	226	222	53.8	18.1	13.6	13.7	14.9
(WY)	1977	1977	1977	1977	1977	1980	1990	1977	1988	1988	1988	1976

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1972 - 1995	
ANNUAL TOTAL	78130		38065			
ANNUAL MEAN	214		104		331	
HIGHEST ANNUAL MEAN					728	
LOWEST ANNUAL MEAN					82.7	
HIGHEST DAILY MEAN	(a)1900	Mar 7	(a)800	Mar 15	8000	Mar 31 1979
LOWEST DAILY MEAN	22	Sep 24	13	Jul 26, 27, 30, 31	7.0	Oct 3 1989
ANNUAL SEVEN-DAY MINIMUM	25	Sep 19	14	Jul 25	8.1	Sep 28 1989
INSTANTANEOUS PEAK FLOW					(c)8280	Mar 31 1979
INSTANTANEOUS PEAK STAGE			(b)8.81	Mar 15	(d)13.30	Mar 25 1986
INSTANTANEOUS LOW FLOW			12	Jul 27, 30, 31	6.8	(e)Jul 8 1988
ANNUAL RUNOFF (CFSM)	.41		.20		.63	
ANNUAL RUNOFF (INCHES)	5.53		2.69		8.56	
10 PERCENT EXCEEDS	695		282		900	
50 PERCENT EXCEEDS	54		46		120	
90 PERCENT EXCEEDS	34		20		30	

(a) Ice affected

(b) Backwater from ice

(c) Gage height, 13.24 ft

(d) From floodmarks

(e) Also occurred Oct. 3-5, 1989

STREAMS TRIBUTARY TO LAKE MICHIGAN

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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. 15-17, Feb. 27, Mar. 7, 9, and Apr. 10 because recorded precipitation interpreted as collector snowmelt. Rainfall data missing for the period June 6-12.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 2.48 in., July 5, 1993.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 1.01 in., Apr. 18.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.92	.01	.00	.00	.00	.00	.00	.00	.00	.00	.07	.00
2	.00	.00	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00
3	.00	.07	.00	.00	.00	.00	.00	.00	.00	.00	.09	.00
4	.00	.03	.00	.00	.00	.00	.00	.00	.00	.02	.00	.00
5	.00	.57	.14	.00	.00	.00	.00	.00	.00	.41	.00	.00
6	.00	.13	.00	.00	.00	.00	.00	.00	---	.05	.00	.93
7	.00	.00	.00	.00	.00	.00	.00	.00	---	.00	.00	.01
8	.27	.07	.00	.00	.00	.00	.30	.20	---	.11	.00	.00
9	.01	.00	.00	.00	.00	.00	.00	.37	---	.01	.51	.00
10	.00	.00	.00	.00	.00	.00	.00	.27	---	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.70	.00	---	.00	.00	.00
12	.00	.00	.00	.01	.00	.00	.02	.00	---	.00	.42	.00
13	.00	.11	.00	.00	.00	.00	.00	.38	.00	.00	.75	.00
14	.00	.00	.00	.82	.00	.00	.00	.01	.00	.00	.46	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.98	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.08	.31	.04
17	.03	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00
18	.01	.00	.00	.00	.00	.03	1.01	.00	.00	.00	.00	.01
19	.00	.00	.00	.00	.00	.01	.01	.00	.00	.24	.04	.70
20	.00	.09	.00	.00	.01	.61	.00	.00	.00	.00	.00	.01
21	.00	.15	.00	.00	.00	.02	.08	.00	.00	.00	.00	.07
22	.24	.00	.00	.00	.00	.00	.00	.00	.00	.26	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.20	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.02	.00	.00	.01	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.03
26	.00	.00	.00	.00	.00	.00	.22	.00	.29	.28	.00	.00
27	.00	.75	.00	.00	.00	.00	.42	.51	.00	.55	.29	.00
28	.00	.00	.00	.00	.00	.27	.00	.20	.32	.00	.34	.00
29	.00	.00	.00	.00	---	.02	.00	.00	.50	.00	.03	.02
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.18
31	.01	---	.00	.00	---	.00	---	.00	---	.07	.00	---
TOTAL	1.49	1.98	0.14	0.83	0.01	0.96	2.80	2.14	---	3.08	3.32	2.00

STREAMS TRIBUTARY TO LAKE MICHIGAN

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. 15-17, Jan. 11-12, 17, Mar. 9-10, and Apr. 10 because recorded precipitation interpreted as collector snowmelt. Rainfall data missing for the period June 6-19.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 1.97 in., July 5, 1993.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 1.06 in., July 15.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.01	.01	.00	.00	.00	.00	.00	.00	.00	.00	.09	.00
2	.00	.00	.00	.00	.00	.00	.04	.00	.00	.00	.00	.00
3	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00
4	.00	.06	.00	.00	.00	.00	.00	.00	.00	.02	.00	.00
5	.00	.56	.12	.00	.00	.00	.00	.00	.00	.38	.00	.00
6	.00	.11	.00	.00	.00	.00	.00	.00	---	.04	.00	.91
7	.00	.00	.00	.00	.00	.00	.00	.00	---	.00	.00	.00
8	.25	.05	.00	.00	.00	.00	.30	.23	---	.12	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.38	---	.00	.55	.00
10	.00	.00	.00	.00	.00	.00	.00	.28	---	.00	.00	.00
11	.00	.01	.00	.00	.00	.00	.68	.00	---	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.04	.00	---	.00	.61	.00
13	.00	.09	.00	.00	.00	.00	.00	.36	---	.00	.57	.00
14	.00	.01	.00	.85	.00	.00	.00	.01	---	.00	.38	.00
15	.01	.00	.00	.00	.00	.00	.01	.00	---	1.06	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	---	.06	.33	.08
17	.03	.01	.00	.00	.00	.00	.00	.00	---	.02	.00	.00
18	.03	.00	.00	.00	.00	.03	1.03	.00	---	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.01	.00	---	.20	.05	.67
20	.00	.08	.00	.00	.02	.56	.01	.00	.00	.00	.00	.00
21	.00	.14	.00	.00	.00	.01	.14	.00	.00	.00	.00	.05
22	.23	.00	.00	.00	.00	.00	.00	.00	.00	.36	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.17	.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	.01	.01
26	.00	.00	.00	.00	.00	.00	.26	.00	.25	.23	.00	.00
27	.00	.84	.00	.00	.00	.00	.41	.54	.01	.54	.12	.00
28	.00	.00	.00	.00	.00	.35	.00	.21	.37	.00	.33	.00
29	.00	.00	.00	.00	---	.01	.00	.00	.63	.00	.00	.01
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.19
31	.01	---	.00	.00	---	.00	---	.00	---	.11	.00	---
TOTAL	1.57	2.02	0.12	0.85	0.02	0.96	2.93	2.18	---	3.14	3.09	1.92

0408570045 OTTER CREEK #3A, AT COUNTY HIGHWAY J, NEAR PLYMOUTH, WI

LOCATION.--Lat 43°47'26", long 87°56'00" in NE 1/4 NW 1/4 sec.12, T.15 N., R.21 E., Sheboygan County, Hydrologic Unit 04030101, on right bank downstream of easternmost bridge on County Highway J, 0.4 mi east of intersection of Highway 57, and 3.7 mi northeast of Plymouth.

DRAINAGE AREA.--9.10 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1994 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 775 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-3 and ice-affected periods Nov. 22, 23, 26, 30, Dec. 7, 8, 10, 11, 18, 19, Jan. 1-5, 22-27, 29, Feb. 4, 5, 21, 25, 26, and Mar. 1, 2, 8-10. Records are good except those for estimated daily discharges, which are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	2.0	3.0	2.4	2.1	2.0	6.2	5.2	2.8	1.7	1.7	1.5
2	1.8	2.0	2.9	2.3	2.0	2.0	5.5	4.8	2.6	1.6	1.7	1.4
3	1.8	2.0	2.8	2.2	2.1	2.0	5.2	4.4	2.4	1.6	1.7	1.4
4	2.0	2.2	2.7	2.1	1.9	1.9	4.1	4.1	2.2	1.6	1.7	1.3
5	1.9	2.4	3.0	2.1	2.1	2.0	3.5	3.8	2.1	2.0	1.6	1.3
6	1.8	3.8	3.2	2.1	2.1	1.9	3.4	3.6	2.1	2.3	1.6	1.4
7	1.8	3.2	2.9	2.1	2.0	2.1	3.4	3.4	3.3	2.1	1.6	2.1
8	1.7	2.9	2.8	2.1	2.0	2.0	4.1	3.3	3.5	2.0	1.7	1.6
9	1.8	2.8	2.7	1.9	1.9	2.0	4.0	5.3	2.3	2.1	2.2	1.5
10	1.8	2.7	2.5	1.9	1.9	2.1	3.9	6.0	2.2	2.1	2.1	1.5
11	1.8	2.6	2.4	1.9	2.1	2.8	6.4	6.0	2.1	1.9	1.9	1.4
12	1.8	2.6	2.3	2.1	2.1	2.2	15	5.0	2.0	1.9	2.5	1.4
13	1.8	2.6	2.3	2.2	2.0	17	9.9	4.9	1.9	1.7	2.8	1.3
14	1.8	2.8	2.2	8.7	2.0	11	6.7	6.3	1.9	1.6	4.2	1.3
15	1.8	2.6	2.3	5.9	1.9	8.4	5.2	5.2	1.9	2.8	3.1	1.3
16	1.8	2.6	2.4	4.2	1.8	7.3	4.4	4.4	1.9	2.5	3.0	1.3
17	1.8	2.6	2.5	3.4	1.7	6.4	3.8	3.8	1.8	1.9	3.0	1.3
18	1.8	2.5	2.4	3.0	2.6	5.7	17	3.3	1.9	1.7	2.5	1.3
19	1.9	2.3	2.4	2.9	2.8	5.4	17	3.1	1.8	1.7	2.3	1.6
20	1.8	2.5	2.5	2.7	2.5	7.8	10	2.9	1.8	1.8	2.1	1.8
21	1.9	2.9	2.5	2.6	2.3	9.0	8.8	2.7	1.8	1.7	1.9	1.6
22	2.0	2.7	2.6	2.5	2.2	7.0	7.4	2.5	1.7	1.8	1.7	1.6
23	2.2	2.6	2.9	2.4	2.2	5.8	5.9	2.7	1.8	2.0	1.7	1.4
24	2.1	2.5	3.2	2.3	2.1	4.7	5.3	2.8	1.7	1.8	1.6	1.5
25	2.0	2.4	3.1	2.2	2.0	3.9	5.0	2.6	1.6	1.7	1.5	1.5
26	2.0	2.4	3.0	2.1	2.1	3.7	4.7	2.4	1.6	1.7	1.6	1.5
27	2.0	3.8	3.0	2.1	2.1	3.7	9.0	2.4	1.6	1.8	1.6	1.5
28	2.0	4.8	3.2	2.1	2.0	4.1	8.3	3.8	2.0	2.5	1.9	1.4
29	1.9	3.9	3.0	2.0	---	5.6	6.4	4.1	4.8	1.9	1.9	1.4
30	1.9	3.3	2.9	2.1	---	6.9	5.5	3.6	2.6	1.7	1.8	1.4
31	1.9	---	2.8	2.1	---	7.0	---	3.2	---	1.6	1.6	---
TOTAL	58.2	83.0	84.4	82.7	58.6	200.4	205.0	121.6	65.7	58.8	63.8	43.8
MEAN	1.88	2.77	2.72	2.67	2.09	6.46	6.83	3.92	2.19	1.90	2.06	1.46
MAX	2.2	4.8	3.2	8.7	2.8	28	17	6.3	4.8	2.8	4.2	2.1
MIN	1.7	2.0	2.2	1.9	1.7	1.9	3.4	2.4	1.6	1.6	1.5	1.3
CFSM	.21	.30	.30	.29	.23	.71	.75	.43	.24	.21	.23	.16
IN.	.24	.34	.35	.34	.24	.82	.84	.50	.27	.24	.26	.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1995, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
MEAN	1.88	2.77	2.72	2.67	2.09	6.46	7.17	4.61	2.15	2.33	2.18	1.64
MAX	1.88	2.77	2.72	2.67	2.09	6.46	7.52	5.31	2.19	2.76	2.30	1.82
(WY)	1995	1995	1995	1995	1995	1995	1994	1994	1995	1994	1994	1994
MIN	1.88	2.77	2.72	2.67	2.09	6.46	6.83	3.92	2.11	1.90	2.06	1.46
(WY)	1995	1995	1995	1995	1995	1995	1995	1995	1994	1995	1995	1995

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR
(APRIL-DECEMBER)

FOR 1995 WATER YEAR

WATER YEARS 1994 - 1995

(APRIL-DECEMBER)										1126.0						
ANNUAL TOTAL										3.08		3.08				
ANNUAL MEAN										3.08		3.08		1995		
HIGHEST ANNUAL MEAN										3.08		3.08		1995		
LOWEST ANNUAL MEAN										3.08		3.08		1995		
HIGHEST DAILY MEAN										22	Apr 25	28	Mar 11	28	Mar 11	1995
LOWEST DAILY MEAN										1.4	Jul 28-29,31	1.3 (a)	Sep 4	1.3	(a) Sep 4	1995
ANNUAL SEVEN-DAY MINIMUM										1.5	Jul 25	1.3	Sep 12	1.3	Sep 12	1995
INSTANTANEOUS PEAK FLOW										139		Mar 11		139	Mar 11 1995	
INSTANTANEOUS PEAK STAGE										27.19		Mar 11		27.19	Mar 11 1995	
INSTANTANEOUS LOW FLOW										1.2		Many days		1.2	Many days	
ANNUAL RUNOFF (CFSM)										.34				.34		
ANNUAL RUNOFF (INCHES)										4.60				4.61		
10 PERCENT EXCEEDS										5.9		5.4		6.0		
50 PERCENT EXCEEDS										2.3		2.2		2.2		
90 PERCENT EXCEEDS										1.8		1.6		1.7		

(a) Also occurred Sept. 5, 13-18

STREAMS TRIBUTARY TO LAKE MICHIGAN

0408570045 OTTER CREEK #3A, AT COUNTY HIGHWAY J, NEAR PLYMOUTH, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1994 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED-SOLIDS DISCHARGE: April 1994 to current year.

TOTAL-PHOSPHORUS DISCHARGE: April 1994 to current year.

INSTRUMENTATION.--Stage-activated water-quality sampler since April 1994.

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

EXTREMES FOR PERIOD OF RECORD.--

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 32.0 tons, Mar. 11, 1995; minimum daily, 0.009 ton, Sept. 2-6, 1995.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 160 lb, Mar. 11, 1995; minimum daily, 0.022 ton, Sept. 17, 18, 1994.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 32.0 tons, Mar. 11; minimum daily, 0.009 ton, Sept. 2-6.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 160 lb, Mar. 11; minimum daily, 0.04 lb, Oct. 16-20.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML) (31625)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
OCT 1994								
*04...	1205	--	2.0	1.2	460	<5	0.031	0.023
*17...	1140	--	1.8	1.3	1700	6	<0.027	<0.008
DEC								
*19...	1155	2.4	--	2.0	870	7	0.053	0.040
JAN 1995								
*18...	1320	--	3.0	2.8	90	8	<0.027	0.070
FEB								
*21...	1045	2.3	--	4.3	50	9	0.201	0.040
MAR								
11...	1335	--	14	--	--	428	0.582	0.850
11...	1440	--	64	--	--	868	1.10	1.58
11...	1525	--	119	--	--	816	1.23	1.57
11...	1825	--	77	--	--	252	0.931	0.950
11...	2105	--	26	--	--	90	0.730	0.640
12...	0305	--	17	--	--	58	0.536	0.410
12...	1300	--	26	--	--	98	0.508	0.460
12...	1900	--	27	--	--	64	0.388	0.410
*13...	1322	--	16	3.8	140	23	0.251	0.230
13...	1323	--	16	4.1	140	22	0.243	0.240
*29...	1119	--	4.9	1.5	60	<5	0.068	0.050
APR								
*04...	1031	--	4.2	2.8	--	<5	0.028	0.030
11...	2105	--	10	4.1	1200	30	0.033	0.110
11...	2240	--	18	5.9	500	22	0.040	0.310
12...	0440	--	17	5.8	1200	39	0.052	0.230
*12...	1311	--	14	2.2	270	7	0.051	0.100
12...	1312	--	14	3.8	450	10	0.028	0.110
18...	1040	--	7.0	6.1	5700	134	0.087	0.320
18...	1140	--	12	4.0	3500	88	0.056	0.210
18...	1315	--	26	11	2800	184	0.106	0.520
18...	1400	--	36	11	4000	242	0.111	0.570
*18...	1501	--	38	11	6100	180	0.098	0.540
18...	1502	--	38	9.8	5900	172	0.088	0.520
18...	1830	--	29	6.1	1000	50	0.115	0.330
19...	0630	--	19	--	400	17	0.031	0.140
*26...	1215	--	4.7	2.6	190	5	<0.027	0.040
MAY								
*02...	1137	--	4.9	2.4	50	<5	<0.027	0.040
*16...	1555	--	4.4	2.6	10	6	<0.027	0.046
*31...	1444	--	3.1	2.2	220	8	0.068	0.058
JUN								
*13...	1238	--	1.9	1.9	620	<5	0.031	0.063
*27...	1407	--	1.6	1.2	610	6	<0.027	0.056
28...	1800	--	5.6	9.2	520000	510	0.317	1.13
28...	2400	--	2.0	2.0	49000	42	0.042	0.141
29...	1345	--	5.6	4.4	530000	208	0.245	0.522
29...	1430	--	14	4.6	66000	240	0.180	0.435
29...	1505	--	22	9.2	70000	704	0.296	1.38
29...	1655	--	11	6.1	46000	252	0.195	0.470
29...	2255	--	4.4	5.0	84000	28	0.120	0.211
*30...	1047	--	2.7	2.5	36000	7	0.042	0.099
30...	1048	--	2.7	3.4	59000	8	0.052	0.102

* Equal-width increment (EWI) sample

STREAMS TRIBUTARY TO LAKE MICHIGAN

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0408570045 OTTER CREEK #3A, AT COUNTY HIGHWAY J, NEAR PLYMOUTH, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
JUL 1995								
*11...	1209	--	1.6	1.3	410	<5	<0.027	0.022
*25...	1154	--	1.6	1.4	440	<5	<0.027	0.030
AUG								
*08...	1149	--	1.9	1.3	3200	13	0.072	0.061
13...	1945	--	4.0	3.5	13000	30	0.075	0.151
14...	0255	--	4.4	3.6	30000	29	0.102	0.185
14...	0855	--	4.9	3.7	13000	26	0.080	0.248
14...	1056	--	4.5	3.1	11000	17	0.077	0.217
*14...	1057	--	4.5	2.5	8800	15	0.076	0.232
14...	1455	--	4.2	2.6	1200	11	0.040	0.159
14...	1855	--	4.2	4.5	770	31	<0.027	0.169
*22...	1418	--	1.7	<1.0	220	<5	0.027	0.056
SEP								
*07...	1422	--	1.9	1.7	4000	<5	<0.027	0.067
*21...	1041	--	1.6	<1.0	2800	8	<0.027	0.030

* Equal-width increment (EWI) sample

SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED(TONS PER DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.012	.033	.054	.048	.047	.055	.042	.039	.056	.032	.027	.010
2	.012	.033	.053	.046	.046	.056	.037	.033	.048	.028	.030	.009
3	.012	.034	.052	.044	.047	.057	.035	.032	.041	.025	.034	.009
4	.014	.037	.050	.043	.044	.056	.028	.032	.034	.023	.037	.009
5	.014	.040	.055	.043	.048	.058	.024	.031	.029	.026	.039	.009
6	.014	.065	.058	.043	.048	.058	.023	.031	.027	.026	.044	.009
7	.015	.054	.053	.043	.047	.065	.023	.031	.038	.022	.051	.014
8	.015	.050	.052	.042	.045	.062	.027	.032	.038	.019	.058	.012
9	.017	.048	.050	.040	.045	.063	.027	.055	.023	.018	.074	.012
10	.018	.046	.046	.040	.044	.067	.027	.067	.019	.015	.067	.013
11	.020	.044	.044	.041	.049	32.0	.21	.071	.017	.013	.056	.013
12	.021	.044	.043	.045	.049	4.23	.74	.062	.015	.013	.072	.014
13	.022	.045	.042	.047	.048	1.26	.067	.066	.013	.012	.13	.015
14	.023	.048	.042	e.31	.047	.40	.045	.089	.014	.011	.26	.015
15	.025	.045	.044	.13	.044	.28	.035	.078	.014	.019	.086	.017
16	.027	.045	.045	.090	.043	.22	.030	.070	.015	.017	.064	.019
17	.029	.045	.047	.073	.041	.17	.025	.062	.016	.013	.053	.020
18	.030	.044	.045	.066	.061	.14	4.17	.056	.017	.012	.036	.022
19	.030	.041	.045	.062	.067	.11	.86	.053	.018	.012	.028	.029
20	.030	.043	.047	.059	.061	e.23	.38	.051	.019	.012	.021	.035
21	.031	.051	.048	.056	.056	e.33	.28	.048	.020	.012	.016	.034
22	.032	.048	.050	.055	.055	e.18	.20	.046	.020	.012	.012	.033
23	.036	.046	.056	.053	.055	.077	.13	.049	.022	.013	.011	.031
24	.034	.045	.062	.051	.054	.056	.10	.053	.022	.012	.011	.032
25	.034	.043	.060	.049	.052	.042	.080	.050	.023	.012	.010	.033
26	.034	.043	.058	.047	.055	.035	.064	.048	.024	.013	.010	.032
27	.033	.068	.060	.047	.056	.031	e.33	.048	.026	.015	.011	.032
28	.033	.087	.062	.048	.055	.031	e.28	.077	.22	.024	.013	.031
29	.032	.071	.059	.045	---	.039	e.14	.085	2.98	.020	.013	.030
30	.032	.060	.057	.047	---	.047	.047	.076	.092	.020	.012	.030
31	.032	---	.055	.047	---	.047	---	.067	---	.021	.011	---
TOTAL	0.763	1.446	1.594	1.900	1.409	40.552	8.506	1.688	3.960	0.542	1.397	0.623

e Estimated

STREAMS TRIBUTARY TO LAKE MICHIGAN
0408570045 OTTER CREEK #3A, AT COUNTY HIGHWAY J, NEAR PLYMOUTH, WI--CONTINUED

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.22	.07	.34	.66	.62	.56	1.29	1.11	.89	.80	.40	.50
2	.22	.08	.34	.64	.60	.57	1.06	1.05	.83	.66	.41	.48
3	.22	.08	.34	.63	.60	.59	.91	.96	.78	.58	.44	.47
4	.24	.09	.34	.61	.54	.58	.67	.91	.72	.52	.45	.46
5	.21	.10	.39	.62	.59	.62	.59	.86	.67	.55	.45	.48
6	.17	.17	.42	.64	.57	.63	.61	.81	.68	.55	.47	.49
7	.15	.15	.40	.64	.55	.72	.63	.77	1.08	.44	.51	.74
8	.13	.14	.40	.64	.52	.69	.77	.76	1.16	.36	.55	.56
9	.12	.14	.41	.62	.50	.71	.80	1.23	.77	.33	.73	.50
10	.10	.14	.39	.62	.49	.77	.82	1.41	.73	.28	.69	.44
11	.09	.14	.39	.65	.53	160	4.10	1.42	.70	.23	.60	.41
12	.08	.14	.39	.72	.52	48.4	12.8	1.19	.66	.23	.82	.38
13	.07	.15	.40	.77	.50	21.7	2.83	1.19	.66	.21	1.43	.35
14	.06	.17	.40	e4.8	.48	5.57	2.19	1.53	.64	.21	4.22	.30
15	.05	.16	.43	2.10	.44	4.21	1.94	1.27	.62	.36	1.70	.29
16	.04	.17	.47	1.52	.42	3.50	1.87	1.09	.63	.33	1.47	.29
17	.04	.17	.50	1.27	.40	2.94	1.83	.95	.60	.26	1.36	.26
18	.04	.17	.50	1.15	.58	2.50	32.3	.86	.62	.24	1.03	.25
19	.04	.17	.52	1.07	.62	2.27	13.8	.81	.59	.24	.89	.29
20	.04	.18	.54	1.00	.55	e3.73	6.23	.76	.58	.26	.75	.30
21	.05	.22	.56	.93	.50	e5.18	4.51	.72	.56	.26	.62	.26
22	.05	.22	.59	.89	.50	e4.30	3.21	.68	.54	.27	.52	.25
23	.06	.22	.68	.84	.51	2.03	2.15	.74	.55	.30	.51	.23
24	.06	.22	.75	.79	.50	1.57	1.62	.79	.52	.29	.48	.24
25	.06	.22	.75	.74	.49	1.26	1.29	.74	.49	.27	.48	.24
26	.06	.22	.73	.70	.53	1.14	1.04	.71	.49	.30	.49	.24
27	.06	.37	.76	.68	.54	1.10	e5.18	.71	.49	.32	.52	.24
28	.06	.48	.81	.68	.55	1.15	e4.30	1.13	1.58	.47	.61	.23
29	.06	.41	.78	.63	---	1.51	e2.37	1.25	13.2	.37	.61	.23
30	.07	.36	.76	.65	---	1.71	1.19	1.11	1.75	.35	.58	.22
31	.07	---	.74	.63	---	1.59	---	.99	---	.34	.54	---
TOTAL	2.99	5.72	16.22	29.53	14.74	283.80	114.90	30.51	34.78	11.18	25.33	10.62

e Estimated

0408570047 OTTER CREEK, AT LAACK FARM, NEAR PLYMOUTH, WI

LOCATION.--Lat 43°47'18" long 87°55'44", in NW 1/4 NE 1/4 sec.12, T.15 N., R.21 E., Sheboygan County, Hydrologic Unit 04030101, on left bank downstream from cattle bridge on Howard Laack farm, 800 ft south of County Highway J, and 3.8 mi northeast of Plymouth.

DRAINAGE AREA.--9.16 mi².

PERIOD OF RECORD.--April 1994 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED-SOLIDS DISCHARGE: April 1994 to current year.

TOTAL-PHOSPHORUS DISCHARGE: April 1994 to current year.

INSTRUMENTATION.--Stage-activated water-quality sampler since April 1994.

REMARKS.--Chemical analyses by the Wisconsin State Laboratory of Hygiene. Samples are point samples unless otherwise indicated. See station 0408570045 Otter Creek #3A at County Highway J near Plymouth for daily mean discharges. Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 71.3 tons, Mar. 11, 1995; minimum daily, 0.011 ton, July 1-3, 1994.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 227 lb, Mar. 11, 1995; minimum daily, 0.22 lb, Sept. 27, 1995.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 71.3 tons, Mar. 11; minimum daily, 0.019 ton, Sept. 17-18 and 26-27.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 227 lb, Mar. 11; minimum daily, 0.22 lb, Sept. 27.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
OCT 1994								
*04...	1120	2.0	--	<1.0	4000	9	0.028	0.046
*17...	1115	--	2.0	2.8	8000	23	<0.027	0.080
DEC								
*19...	1120	2.4	--	2.3	130	8	0.046	0.040
JAN 1995								
*18...	1035	3.0	--	3.5	200	21	0.039	0.100
FEB								
*21...	1010	2.3	--	1.7	330	16	0.208	0.060
MAR								
11...	1415	--	31	--	--	2840	0.925	3.49
11...	1535	--	123	--	--	1640	1.21	2.29
11...	1845	--	77	--	--	520	0.880	1.03
11...	2000	--	44	--	--	196	0.777	0.810
*13...	1103	--	18	3.7	20	17	0.294	0.220
13...	1104	--	18	4.2	200	40	0.276	0.270
*29...	1107	--	5.2	3.0	4800	<5	0.077	0.090
APR								
*04...	1003	--	4.6	2.7	--	<5	<0.027	0.030
11...	2055	--	9.2	13	8000	80	0.117	0.420
11...	2240	--	16	8.7	3500	112	0.059	0.340
12...	0055	--	25	9.9	2100	116	0.106	0.400
*12...	1213	--	14	3.2	370	7	0.042	0.100
12...	1214	--	14	3.7	320	10	<0.027	0.110
18...	1035	--	7.5	30	45000	824	0.324	1.50
18...	1135	--	11	18	40000	306	0.234	0.710
18...	1225	--	23	18	53000	324	0.173	0.660
18...	1340	--	34	16	39000	346	0.167	0.760
18...	1408	--	40	18	30000	394	0.183	0.840
*18...	1409	--	41	19	8500	276	0.126	0.620
18...	1840	--	33	9.5	12000	79	0.125	0.370
19...	0640	--	20	--	800	19	0.037	0.140
*26...	1245	--	4.6	2.5	180	6	0.032	0.040
MAY								
*02...	1101	--	4.4	4.1	<10	<5	<0.027	0.050
*16...	1535	--	4.5	3.2	700	11	<0.027	0.053
*31...	1402	--	3.0	2.9	2900	14	0.080	0.083
JUN								
*13...	1127	--	2.1	5.0	1000	40	0.078	0.216
*27...	1352	--	1.8	1.5	5100	6	0.031	0.067
28...	1810	--	4.4	23	1500000	1560	0.565	3.02
28...	1825	--	6.8	12	480000	284	0.282	0.850
28...	2015	--	3.4	5.5	230000	35	0.188	0.305
29...	0215	--	2.2	3.2	120000	9	0.134	0.156
29...	1350	--	6.5	22	3000000	202	0.968	1.41
29...	1400	--	12	--	1700000	12000	1.40	10.8

* Equal-width increment (EWI) sample

STREAMS TRIBUTARY TO LAKE MICHIGAN

0408570047 OTTER CREEK, AT LAACK FARM, NEAR PLYMOUTH, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
JUN 1995							
29...	1530	19	31	1600000	408	0.990	1.98
29...	1700	10	--	2400000	1010	0.780	2.39
29...	1800	7.5	19	1800000	584	0.698	1.30
29...	2300	4.4	5.5	120000	26	0.184	0.253
30...	0500	3.6	6.3	130000	30	0.311	0.246
*30...	1028	2.8	2.4	31000	6	0.051	0.104
30...	1029	2.8	3.3	61000	9	0.072	0.126
JUL							
*11...	1132	2.1	1.2	14000	5	<0.027	0.045
*25...	1136	1.7	38	23000	6	<0.027	0.074
AUG							
*08...	1111	1.5	1.3	2100	21	0.051	0.056
12...	1135	4.0	--	--	1120	0.329	1.73
12...	1735	3.4	--	--	92	0.500	0.523
13...	1615	3.2	13	670000	596	0.556	1.41
13...	1735	3.0	7.7	87000	55	0.323	0.401
13...	2035	4.0	8.8	66000	53	0.357	0.355
14...	0235	3.4	5.8	27000	37	0.298	0.285
14...	0300	4.9	27	1100000	824	0.754	2.46
14...	0900	5.9	23	420000	100	1.09	0.895
14...	1006	5.6	18	300000	94	0.871	0.742
*14...	1007	5.6	3.4	8700	83	0.100	0.276
14...	1500	4.4	6.8	41000	67	0.249	0.339
14...	2100	3.6	4.6	10000	46	0.126	0.211
15...	0305	3.2	4.2	7700	39	0.172	0.203
*22...	1346	1.8	1.1	3700	8	<0.027	0.067
SEP							
*07...	1406	2.1	1.9	4900	6	<0.027	0.062
*21...	1021	1.5	1.1	1200	<5	<0.027	0.030

* Equal-width increment (EWI) sample

SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED(TONS PER DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.049	.097	.093	.079	.11	.086	.041	.069	.11	.049	.058	.028
2	.049	.10	.089	.078	.10	.086	.038	.062	.12	.041	.062	.026
3	.049	.10	.085	.077	.10	.086	.035	.061	.12	.039	.069	.026
4	.049	.11	.081	.076	.094	.082	.032	.062	.13	.039	.075	.026
5	.053	.11	.081	.079	.10	.086	.038	.063	.14	.036	.080	.026
6	.057	.16	.091	.081	.10	.082	.042	.063	.16	.040	.087	.026
7	.060	.13	.087	.084	.097	.091	.050	.065	.24	.034	.091	.034
8	.063	.12	.083	.086	.096	.086	.071	.069	.26	.032	.086	.027
9	.073	.12	.074	.081	.090	.086	.086	.12	.24	.032	.12	.025
10	.074	.11	.068	.083	.090	.091	.10	.14	.23	.031	.12	.023
11	.076	.11	.064	.086	.098	71.3	.85	.15	.22	.029	.11	.023
12	.084	.10	.061	.098	.097	1.85	1.46	.13	.21	.031	1.32	.023
13	.091	.10	.057	.11	.092	1.91	.19	.13	.21	.030	.63	.021
14	.095	.11	.054	e.67	.091	1.11	.14	.17	.18	.025	1.80	.020
15	.11	.10	.053	e.43	.086	.74	.11	.15	.16	.040	.20	.020
16	.11	.099	.054	.22	.081	.52	.094	.13	.14	.040	.14	.020
17	.12	.097	.056	.19	.076	.37	.089	.12	.12	.032	.13	.019
18	.12	.097	.053	.17	.11	.26	8.76	.12	.10	.028	.098	.019
19	.12	.087	.052	.16	.12	.21	1.10	.11	.089	.027	.073	.023
20	.11	.089	.056	.15	.11	e.64	.46	.10	.079	.029	.060	.024
21	.11	.10	.058	.14	.099	e.74	.33	.095	.067	.027	.047	.021
22	.12	.11	.062	.14	.095	e.54	.22	.092	.058	.029	.039	.020
23	.12	.097	.071	.13	.095	.11	.15	.093	.047	.030	.036	.020
24	.11	.085	.081	.12	.091	.082	.12	.092	.041	.028	.034	.021
25	.11	.083	.081	.12	.086	.061	.094	.093	.034	.028	.033	.020
26	.10	.078	.081	.11	.091	.048	.078	.093	.032	.032	.033	.019
27	.10	.12	.084	.11	.091	.040	e.70	.094	.032	.039	.033	.019
28	.10	.16	.092	.11	.086	.035	e.62	.14	.49	.055	.036	.020
29	.10	.12	.090	.10	---	.040	e.48	.15	10.7	.046	.035	.020
30	.098	.12	.089	.11	---	.047	.079	.13	.12	.047	.034	.020
31	.099	---	.089	.11	---	.046	---	.12	---	.049	.031	---
TOTAL	2.779	3.219	2.270	4.388	2.672	81.561	16.657	3.276	14.879	1.094	5.800	0.679

e Estimated

STREAMS TRIBUTARY TO LAKE MICHIGAN

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0408570047 OTTER CREEK, AT LAACK FARM, NEAR PLYMOUTH, WI--CONTINUED

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.50	.73	.84	.77	.92	.82	1.69	1.28	1.32	1.31	.66	.54
2	.50	.78	.80	.76	.86	.84	1.29	1.22	1.36	1.06	.63	.51
3	.50	.79	.78	.75	.89	.86	1.01	1.15	1.43	.97	.64	.52
4	.50	.83	.74	.74	.79	.84	.76	1.11	1.46	.93	.62	.52
5	.52	.88	.75	.76	.86	.91	.79	1.08	1.62	.82	.59	.53
6	.55	1.23	.85	.79	.85	.89	.77	1.03	1.76	.87	.57	.53
7	.56	1.05	.81	.81	.80	1.01	.82	1.00	2.67	.72	.54	.71
8	.57	.96	.78	.84	.79	.99	1.03	1.02	2.86	.65	.46	.54
9	.64	.93	.70	.78	.74	1.02	1.11	1.65	2.62	.63	.64	.48
10	.63	.90	.64	.80	.73	1.10	1.19	1.84	2.56	.57	.68	.43
11	.63	.89	.61	.83	.79	227	6.75	1.85	2.43	.53	.61	.41
12	.68	.85	.58	.95	.78	31.2	15.6	1.50	2.29	.57	7.54	.39
13	.72	.85	.55	1.02	.73	27.0	5.35	1.44	2.34	.56	7.09	.35
14	.72	.89	.52	e10.6	.72	16.7	3.88	1.85	2.07	.48	18.1	.32
15	.78	.83	.52	e6.97	.67	12.4	3.08	1.54	1.89	.79	2.01	.30
16	.81	.82	.54	2.14	.63	9.69	2.68	1.31	1.70	.80	1.57	.29
17	.84	.81	.55	1.78	.58	7.55	2.55	1.21	1.57	.65	1.47	.27
18	.83	.81	.52	1.61	.88	6.00	51.0	1.17	1.45	.60	1.24	.26
19	.83	.73	.52	1.54	.93	5.33	15.3	1.09	1.31	.58	.99	.29
20	.81	.75	.56	1.41	.82	e10.1	6.65	1.02	1.23	.63	.86	.29
21	.79	.89	.57	1.34	.75	e11.7	4.68	.98	1.10	.60	.74	.25
22	.83	.90	.62	1.27	.73	e8.60	3.15	.96	1.00	.68	.64	.24
23	.86	.83	.71	1.20	.76	4.36	2.13	.98	.85	.72	.61	.24
24	.82	.74	.81	1.13	.74	3.52	1.59	.99	.79	.68	.58	.25
25	.78	.72	.81	1.07	.73	2.90	1.27	1.01	.69	.67	.58	.24
26	.76	.69	.80	1.00	.79	2.54	1.05	1.02	.68	.71	.57	.23
27	.77	1.08	.83	.99	.81	2.37	e11.0	1.05	.74	.76	.60	.22
28	.76	1.39	.91	.97	.79	2.31	e9.83	1.61	4.04	.98	.65	.24
29	.75	1.06	.88	.91	---	2.77	e7.74	1.74	43.9	.73	.64	.24
30	.74	1.06	.88	.95	---	2.77	1.38	1.55	2.60	.67	.62	.23
31	.75	---	.87	.93	---	2.30	---	1.36	---	.62	.58	---
TOTAL	21.73	26.67	21.85	48.41	21.86	408.39	167.12	39.61	94.33	22.54	54.32	10.86

e Estimated

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 1/4 NW 1/4 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.--Estimated daily discharges: Oct. 1-4, Aug. 19-22, and ice-affected periods, Nov. 22-24, 26, 30, Dec. 1, and Dec. 7 to Mar. 11. Records are good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	2.2	3.9	2.4	2.1	2.0	6.9	5.4	3.1	2.4	1.9	1.6
2	2.3	2.3	3.7	2.3	2.0	2.0	6.3	4.7	3.0	2.1	1.8	1.6
3	2.2	2.4	3.6	2.2	2.1	2.0	5.8	4.4	2.8	2.0	2.0	1.4
4	2.1	2.4	3.4	2.1	1.9	1.9	5.0	4.2	2.6	2.0	2.0	1.5
5	2.0	2.6	3.5	2.1	2.1	2.0	4.6	4.0	2.4	2.2	1.8	1.5
6	2.0	4.1	3.6	2.1	2.1	1.9	4.4	3.8	2.5	2.5	1.8	1.5
7	2.1	3.3	3.4	2.1	2.0	2.1	4.2	3.6	3.7	2.3	1.7	2.3
8	2.0	3.1	3.2	2.1	2.0	2.0	4.8	3.7	3.6	2.2	1.8	1.8
9	2.1	3.0	3.0	1.9	1.9	2.0	4.9	6.1	3.1	2.3	2.2	1.6
10	2.1	2.8	2.8	1.9	1.9	2.1	4.8	6.8	2.9	2.3	2.3	1.6
11	2.0	2.7	2.7	1.9	2.1	2.9	6.8	7.0	2.8	2.2	2.1	1.4
12	2.0	2.7	2.6	2.1	2.1	2.6	1.6	5.7	2.5	2.1	2.7	1.5
13	1.9	2.8	2.5	2.2	2.0	2.0	11	5.5	2.4	2.1	2.8	1.5
14	1.9	3.0	2.4	8.7	2.0	13	7.7	7.0	2.3	2.1	4.7	1.4
15	2.0	2.8	2.4	5.9	1.9	11	6.1	5.8	2.2	2.9	3.2	1.3
16	2.0	2.7	2.4	4.2	1.8	9.1	5.5	4.8	2.1	3.0	3.1	1.4
17	2.0	2.6	2.5	3.4	1.7	7.6	4.9	4.4	2.0	2.5	3.2	1.4
18	2.0	2.6	2.4	3.0	2.6	6.5	19	4.0	2.1	2.1	2.6	1.4
19	2.0	2.5	2.4	2.9	2.8	6.2	19	3.7	1.9	2.0	2.4	1.7
20	2.0	2.6	2.5	2.7	2.5	9.0	12	3.4	1.9	2.1	2.2	2.0
21	2.0	3.2	2.5	2.6	2.3	11	9.8	2.9	1.8	2.0	2.0	1.8
22	2.1	3.1	2.6	2.5	2.2	8.2	8.4	2.8	1.9	2.1	1.8	1.7
23	2.4	3.0	2.9	2.4	2.2	6.6	6.4	2.8	1.8	2.2	1.9	1.5
24	2.2	3.0	3.2	2.3	2.1	5.4	5.6	2.9	1.7	2.0	1.8	1.5
25	2.2	2.9	3.1	2.2	2.0	5.0	5.0	2.9	1.7	1.8	1.8	1.5
26	2.2	3.0	3.0	2.1	2.1	4.8	4.6	2.7	1.7	1.7	1.7	1.5
27	2.2	4.2	3.0	2.1	2.1	4.6	9.5	2.7	1.9	1.9	1.8	1.5
28	2.2	5.5	3.2	2.1	2.0	4.9	9.2	4.2	2.3	2.6	2.2	1.6
29	2.3	4.5	3.0	2.0	---	6.2	6.9	4.5	5.2	2.1	2.0	1.7
30	2.2	4.4	2.9	2.1	---	7.7	5.9	3.9	3.5	2.0	2.0	1.7
31	2.2	---	2.8	2.1	---	7.8	---	3.4	---	1.9	1.9	---
TOTAL	65.3	92.0	91.1	82.7	58.6	229.6	231.0	133.7	75.4	67.7	69.2	47.4
MEAN	2.11	3.07	2.94	2.67	2.09	7.41	7.70	4.31	2.51	2.18	2.23	1.58
MAX	2.4	5.5	3.9	8.7	2.8	29	19	7.0	5.2	3.0	4.7	2.3
MIN	1.9	2.2	2.4	1.9	1.7	1.9	4.2	2.7	1.7	1.7	1.7	1.3
CFSM	.22	.32	.31	.28	.22	.78	.81	.45	.26	.23	.23	.17
IN.	.26	.36	.36	.32	.23	.90	.90	.52	.30	.27	.27	.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1995, BY WATER YEAR (WY)

	1991	1992	1993	1994	1995
MEAN	3.54	5.99	6.46	4.17	6.64
MAX	4.82	8.67	11.5	6.76	13.9
(WY)	1992	1993	1992	1994	1993
MIN	2.11	3.07	2.94	2.67	2.09
(WY)	1995	1995	1995	1995	1995

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1991 - 1995
ANNUAL TOTAL	2097.4	1243.7	
ANNUAL MEAN	5.75	3.41	6.50
HIGHEST ANNUAL MEAN			10.9
LOWEST ANNUAL MEAN			3.41
HIGHEST DAILY MEAN	(a) 82	Mar 6	130
LOWEST DAILY MEAN	1.8	(b) Sep 10	1.3
ANNUAL SEVEN-DAY MINIMUM	1.9	Sep 7	1.4
INSTANTANEOUS PEAK FLOW			(d) 223
INSTANTANEOUS PEAK STAGE		(c) 6.48	Mar 11
INSTANTANEOUS LOW FLOW		1.3	Sep 14-18
ANNUAL RUNOFF (CFSM)	.60	.36	.68
ANNUAL RUNOFF (INCHES)	8.21	4.87	9.30
10 PERCENT EXCEEDS	11	6.1	12
50 PERCENT EXCEEDS	2.9	2.4	3.8
90 PERCENT EXCEEDS	2.0	1.8	2.0

(a) Ice affected

(b) Also occurred Sept. 11, 18, 19, and may have been lower during estimated period Sept. 16-30

(c) Backwater from ice

(d) Gage height, 7.53 ft

040857005 OTTER CREEK, AT WILLOW ROAD, NEAR PLYMOUTH, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1990 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1990 to current year.

DISSOLVED OXYGEN: October 1990 to current year, open-water periods.

SUSPENDED-SOLIDS DISCHARGE: October 1990 to current year.

TOTAL-PHOSPHORUS DISCHARGE: October 1990 to current year.

INSTRUMENTATION.--Stage-activated water-quality sampler since October 1990. Continuous water-temperature recorder since October 1990. Dissolved-oxygen recorder during open-water periods since October 1990.

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

Dissolved-oxygen concentrations greater than 20.0 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, 30.5°C, June 16, 18, 1994; minimum observed, 0.0°C, many days during winter period.

DISSOLVED OXYGEN: Maximum observed, 19.1 mg/L, Nov. 2, 1990; minimum observed, 0.2 mg/L, Sept. 18, 1992.

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 132 tons, June 8, 1993; minimum daily, 0.01 ton, many days during 1992 and 1993 water years.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 455 lb, June 8, 1993; minimum daily, 0.23 lb, Sept. 28, 1995.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum observed, 25.0°C, July 14; minimum observed, 0.0°C, many days during winter period.

DISSOLVED OXYGEN: Maximum observed, 17.4 mg/L, May 17; minimum observed, 2.6 mg/L, July 14.

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 25 tons, Mar. 11; minimum daily, 0.02 ton, many days.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 116 lb, Mar. 12; minimum daily, 0.23 lb, Sept. 28.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML) (31625)	RESIDUE TOTAL AT 105 DEG. C, PENDE (MG/L) (00530)	NITRO- GEN, DIS- SOLVED (MG/L) AS N (00608)	PHOS- PHORUS TOTAL (MG/L) AS P (00665)
OCT 1994								
*04...	0945	2.1	--	2.2	2000	6	0.038	0.042
*11...	1345	--	2.0	1.0	800	7	<0.027	0.047
*17...	0955	--	2.0	1.6	2000	<5	<0.027	0.044
*24...	1030	--	2.3	1.7	550	<5	<0.027	0.031
*31...	1435	--	2.2	2.0	650	<5	0.030	0.047
NOV								
*15...	0900	--	2.8	<3.0	110	11	0.087	0.040
*29...	1010	--	4.6	1.5	470	7	0.111	0.050
DEC								
*19...	0955	2.4	--	2.2	410	27	0.063	0.070
JAN 1995								
*18...	1005	3.0	--	3.5	320	19	0.052	0.100
FEB								
*21...	0935	2.3	--	1.3	340	9	0.201	0.060
MAR								
11...	1445	29	--	--	--	1900	0.734	2.64
11...	1500	29	--	--	--	1900	0.904	2.74
11...	1525	29	--	--	--	1570	1.21	2.48
11...	1605	29	--	--	--	568	1.31	1.52
11...	1710	29	--	--	--	296	0.987	1.01
11...	1855	29	--	--	--	214	0.915	0.890
11...	1950	29	--	--	--	212	0.851	0.860
*13...	0943	--	19	3.4	830	27	0.294	0.230
13...	0944	--	19	4.4	1400	44	0.286	0.260
*29...	1033	--	5.7	2.3	2200	<5	0.062	0.070
APR								
*04...	0943	--	6.0	2.8	--	7	<0.027	0.040
11...	2115	--	11	23	5300	96	0.233	0.775
12...	0010	--	22	10	2300	148	0.068	0.435
*12...	1147	--	15	3.0	530	9	0.046	0.130
12...	1148	--	15	4.0	480	12	0.041	0.151
12...	1210	--	15	--	--	13	0.069	0.132
13...	1210	--	11	--	--	11	0.028	0.081
*18...	1125	--	14	12	5700	72	0.108	0.370
18...	1126	--	14	13	7700	78	0.110	0.380
18...	1240	--	23	16	10000	182	0.122	0.510
18...	1325	--	32	15	15000	392	0.159	0.960
19...	0125	--	25	9.5	--	43	0.066	0.250
19...	1325	--	18	--	15000	14	0.076	0.130

* Equal-width increment (EWI) sample

STREAMS TRIBUTARY TO LAKE MICHIGAN
040857005 OTTER CREEK, AT WILLOW ROAD, NEAR PLYMOUTH, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
APR 1995								
20...	1325	--	11	--	--	6	0.057	0.080
*26...	1315	--	4.6	2.4	100	6	<0.027	0.050
27...	1510	--	11	--	--	8	0.065	0.100
MAY								
*02...	1019	--	4.7	2.5	30	<5	<0.027	0.042
*10...	1213	--	6.3	2.8	12000	<5	<0.027	0.070
*16...	1232	--	4.7	3.3	620	10	<0.027	0.065
*23...	1038	--	2.7	2.4	1300	<5	0.083	0.049
*31...	1252	--	3.5	2.4	3000	10	0.087	0.095
JUN								
*06...	1007	--	2.4	2.6	100	9	0.078	0.097
*13...	0942	--	2.3	1.5	4600	<5	0.034	0.076
*20...	1038	--	2.1	1.7	5300	8	0.077	0.103
*27...	1141	--	2.0	1.7	1900	6	0.028	0.072
29...	1605	--	14	15	900000	157	0.373	0.700
*30...	0933	--	3.5	2.9	140000	14	0.135	0.205
30...	0934	--	3.5	3.7	190000	21	0.144	0.224
JUL								
*05...	1232	--	2.1	1.3	1700	<5	<0.027	0.068
*11...	1012	--	2.2	1.0	620	5	<0.027	0.054
*18...	1008	--	2.2	1.1	900	<5	<0.027	0.048
*25...	0958	--	2.0	1.6	670	<5	0.672	0.045
AUG								
*01...	0938	--	2.0	1.4	1400	6	0.027	0.070
*08...	1028	--	1.9	1.6	1500	7	0.052	0.069
*14...	0921	--	5.6	7.9	530000	57	0.313	0.516
*22...	1123	1.8	--	<1.0	3500	<5	0.027	0.077
*29...	0956	--	2.1	2.0	3100	5	0.044	0.092
SEP								
*07...	1251	--	2.4	2.0	7700	<5	<0.027	0.215
*14...	1114	--	1.4	1.1	630	<5	<0.027	0.040
*21...	0952	--	1.9	1.2	2200	<5	<0.027	0.037
*29...	1311	--	1.6	--	--	<5	0.185	0.026

* Equal-width increment (EWI) sample

STREAMS TRIBUTARY TO LAKE MICHIGAN

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040857005 OTTER CREEK, AT WILLOW ROAD, NEAR PLYMOUTH, WI--CONTINUED

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	11.5	11.5	14.0	5.0	5.0	7.0	.0	.0	2.0	.0	.0	.0
2	9.5	9.5	11.5	5.5	5.5	7.5	2.0	2.0	4.0	.0	.0	.0
3	11.0	11.0	13.0	8.0	8.0	9.5	3.0	3.0	4.5	.0	.0	.0
4	10.5	10.5	12.0	8.5	8.5	9.0	2.5	2.5	4.0	.0	.0	.0
5	8.5	8.5	11.0	8.0	8.0	8.5	3.5	3.5	5.0	.0	.0	.0
6	10.5	10.5	13.5	5.5	5.5	8.0	.0	.0	2.0	.0	.0	.0
7	13.0	13.0	15.0	5.0	5.0	7.5	.0	.0	.0	.0	.0	.0
8	10.5	10.5	13.0	7.5	7.5	9.0	.0	.0	.0	.0	.0	.0
9	8.5	8.5	10.0	5.0	5.0	7.5	.0	.0	.5	.0	.0	.0
10	6.0	6.0	9.0	3.5	3.5	5.5	.0	.0	.0	.0	.0	.0
11	6.0	6.0	9.5	3.0	3.0	5.5	.0	.0	.0	.0	.0	.0
12	6.5	6.5	10.0	4.5	4.5	6.5	.0	.0	.0	.0	.0	.0
13	7.0	7.0	10.5	7.0	7.0	9.0	.0	.0	.0	.0	.0	.0
14	9.5	9.5	12.0	6.0	6.0	10.0	.0	.0	.0	.0	.0	.0
15	9.0	9.0	11.0	4.0	4.0	5.5	.0	.0	.0	.0	.0	.0
16	10.5	10.5	13.0	2.0	2.0	4.5	.0	.0	.0	.0	.0	.0
17	12.0	12.0	14.0	3.5	3.5	5.0	.0	.0	.0	.0	.0	.0
18	14.0	14.0	15.0	2.5	2.5	6.0	.0	.0	.0	.0	.0	.0
19	12.5	12.5	14.5	1.5	1.5	3.5	.0	.0	.0	.0	.0	.0
20	10.5	10.5	12.5	3.5	3.5	5.5	.0	.0	1.0	.0	.0	.0
21	8.0	8.0	11.0	1.5	1.5	6.0	.5	.5	1.5	.0	.0	.0
22	9.5	9.5	12.0	.0	.0	.5	.5	.5	2.0	.0	.0	.0
23	8.5	8.5	10.0	.0	.0	.5	2.0	2.0	2.5	.0	.0	.0
24	6.0	6.0	7.5	.0	.0	2.0	1.0	1.0	2.5	.0	.0	.0
25	5.0	5.0	6.5	.5	.5	2.0	.0	.0	1.5	.0	.0	.0
26	5.5	5.5	7.5	.0	.0	.5	.0	.0	2.0	.0	.0	.0
27	4.0	4.0	7.0	.5	.5	1.5	2.5	2.5	3.5	.0	.0	.0
28	6.0	6.0	8.0	.5	.5	2.0	.5	.5	2.5	.0	.0	.0
29	8.0	8.0	9.5	.5	.5	1.0	.5	.5	1.0	.0	.0	.0
30	5.5	5.5	8.0	.0	.0	.5	.0	.0	1.0	.0	.0	.0
31	6.5	6.5	8.0	---	---	---	.5	.5	1.5	.0	.0	.0
MONTH	14.0	4.0	10.9	8.5	.0	5.2	3.5	.0	1.4	.0	.0	.0
FEBRUARY			MARCH			APRIL			MAY			
1	.0	.0	.0	.0	.0	.0	1.5	1.5	4.5	6.0	6.0	10.5
2	.0	.0	.5	.0	.0	.0	2.5	2.5	6.0	8.0	8.0	11.0
3	.0	.0	1.0	.0	.0	.0	5.0	5.0	8.5	6.5	6.5	11.5
4	.0	.0	.0	.0	.0	.0	.0	.0	3.0	8.5	8.5	10.5
5	.0	.0	.0	.0	.0	.0	.0	.0	.5	7.0	7.0	12.5
6	.0	.0	.0	.0	.0	.0	1.5	1.5	5.5	8.0	8.0	13.0
7	.0	.0	.0	.0	.0	.0	3.0	3.0	4.5	10.5	10.5	14.5
8	.0	.0	.0	.0	.0	.0	3.0	3.0	4.5	8.0	8.0	10.0
9	.0	.0	.0	.0	.0	.0	1.5	1.5	3.5	7.5	7.5	11.0
10	.0	.0	.0	.0	.0	1.0	.0	.0	2.5	9.5	9.5	10.0
11	.0	.0	.0	.0	.0	1.5	3.0	3.0	5.5	9.0	9.0	13.5
12	.0	.0	.0	.0	.0	2.0	4.0	4.0	5.5	9.5	9.5	15.0
13	.0	.0	.0	1.5	1.5	4.5	4.0	4.0	7.5	12.0	12.0	13.0
14	.0	.0	.0	2.0	2.0	5.5	3.5	3.5	8.0	11.5	11.5	14.0
15	.0	.0	.0	3.5	3.5	6.5	4.0	4.0	6.5	10.5	10.5	15.5
16	.0	.0	.0	3.0	3.0	6.5	5.0	5.0	7.5	13.0	13.0	17.5
17	.0	.0	.0	3.0	3.0	4.0	6.0	6.0	10.0	12.5	12.5	17.0
18	.0	.0	.0	2.0	2.0	5.0	5.5	5.5	7.5	10.5	10.5	14.0
19	.0	.0	.0	4.0	4.0	5.0	6.0	6.0	7.5	10.5	10.5	16.0
20	.0	.0	.0	3.0	3.0	4.0	5.0	5.0	6.0	12.5	12.5	16.5
21	.0	.0	.0	2.0	2.0	3.5	5.5	5.5	6.0	10.5	10.5	15.0
22	.0	.0	.0	2.0	2.0	5.0	5.0	5.0	9.0	10.5	10.5	15.5
23	.0	.0	.0	2.5	2.5	4.5	5.0	5.0	9.5	12.0	12.0	14.0
24	.0	.0	.0	.5	.5	5.0	5.5	5.5	9.0	10.5	10.5	13.5
25	.0	.0	.0	1.0	1.0	4.5	6.0	6.0	10.0	10.0	10.0	15.0
26	.0	.0	.0	3.5	3.5	4.5	6.0	6.0	8.0	11.0	11.0	16.0
27	.0	.0	.0	.0	.0	2.0	6.5	6.5	7.5	12.0	12.0	14.0
28	.0	.0	1.0	1.0	1.0	3.0	5.5	5.5	9.5	12.0	12.0	14.5
29	---	---	---	2.5	2.5	4.0	7.5	7.5	10.0	13.0	13.0	14.0
30	---	---	---	2.0	2.0	4.0	7.0	7.0	9.5	10.5	10.5	17.0
31	---	---	---	1.0	1.0	4.5	---	---	---	14.0	14.0	19.0
MONTH	.0	.0	.1	4.0	.0	2.9	7.5	.0	6.7	14.0	6.0	14.0

040857005 OTTER CREEK, AT WILLOW ROAD, NEAR PLYMOUTH, WI--CONTINUED

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	15.5	15.5	19.5	16.0	16.0	18.5	20.0	20.0	22.0	17.0	17.0	20.0
2	15.0	15.0	18.0	14.5	14.5	18.5	18.0	18.0	19.5	16.5	16.5	19.5
3	14.5	14.5	19.5	15.5	15.5	19.0	19.0	19.0	20.5	17.0	17.0	20.0
4	15.5	15.5	20.0	17.5	17.5	19.5	19.5	19.5	23.0	16.0	16.0	19.5
5	16.0	16.0	20.5	18.5	18.5	20.5	20.5	20.5	23.0	16.5	16.5	20.5
6	15.5	15.5	20.0	17.0	17.0	18.5	20.0	20.0	22.5	18.0	18.0	19.5
7	15.5	15.5	20.0	16.0	16.0	18.0	20.5	20.5	22.0	13.5	13.5	16.5
8	12.5	12.5	15.0	14.5	14.5	17.5	20.5	20.5	22.5	12.0	12.0	15.0
9	13.0	13.0	16.5	17.0	17.0	20.0	21.0	21.0	21.5	11.5	11.5	15.0
10	14.0	14.0	15.5	17.0	17.0	20.5	20.0	20.0	22.0	11.5	11.5	15.0
11	14.0	14.0	17.5	18.5	18.5	21.5	20.5	20.5	22.5	10.5	10.5	15.0
12	13.0	13.0	17.5	19.0	19.0	22.0	21.5	21.5	22.5	13.0	13.0	16.5
13	13.5	13.5	19.0	21.5	21.5	26.0	21.0	21.0	22.5	16.5	16.5	19.0
14	16.0	16.0	20.5	25.0	25.0	28.0	20.5	20.5	23.0	14.5	14.5	17.0
15	15.5	15.5	20.5	21.5	21.5	24.0	20.0	20.0	21.5	11.5	11.5	15.0
16	16.5	16.5	21.5	20.0	20.0	22.0	19.5	19.5	21.5	13.5	13.5	16.5
17	18.0	18.0	22.5	19.0	19.0	22.0	21.0	21.0	22.5	13.0	13.0	15.0
18	20.5	20.5	24.5	18.5	18.5	21.5	21.0	21.0	23.0	11.0	11.0	14.0
19	22.0	22.0	25.0	18.0	18.0	20.0	21.5	21.5	22.5	13.0	13.0	13.5
20	21.5	21.5	25.5	19.0	19.0	21.5	19.5	19.5	22.0	11.5	11.5	12.5
21	20.5	20.5	24.5	18.0	18.0	21.0	18.5	18.5	22.0	10.0	10.0	11.0
22	20.0	20.0	24.0	19.0	19.0	20.5	17.5	17.5	21.0	7.5	7.5	9.5
23	20.0	20.0	24.0	19.0	19.0	22.0	17.5	17.5	21.5	5.5	5.5	9.0
24	19.0	19.0	23.5	18.5	18.5	22.0	20.0	20.0	21.0	7.0	7.0	10.0
25	20.0	20.0	23.5	20.0	20.0	23.5	18.0	18.0	20.5	10.0	10.0	12.0
26	20.5	20.5	22.5	20.5	20.5	22.0	18.5	18.5	21.5	11.0	11.0	13.5
27	19.5	19.5	22.0	18.0	18.0	21.5	20.0	20.0	21.0	10.0	10.0	14.0
28	20.0	20.0	22.0	20.0	20.0	23.0	19.0	19.0	21.0	11.0	11.0	14.0
29	19.0	19.0	20.5	20.0	20.0	23.0	20.5	20.5	21.0	11.0	11.0	14.0
30	19.0	19.0	21.0	19.0	19.0	23.5	19.5	19.5	22.0	14.5	14.5	16.5
31	---	---	---	22.0	22.0	25.0	20.5	20.5	22.5	---	---	---
MONTH	22.0	12.5	20.9	25.0	14.5	21.5	21.5	17.5	21.8	18.0	5.5	15.3

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

[illegible]

STREAMS TRIBUTARY TO LAKE MICHIGAN

177

040857005 OTTER CREEK, AT WILLOW ROAD, NEAR PLYMOUTH, WI--CONTINUED

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	17.4	5.7	10.8
18	---	---	---	---	---	---	---	---	---	16.6	6.5	10.9
19	---	---	---	---	---	---	---	---	---	16.5	5.4	10.5
20	---	---	---	---	---	---	---	---	---	14.9	5.5	9.6
21	---	---	---	---	---	---	---	---	---	14.1	5.7	9.2
22	---	---	---	---	---	---	---	---	---	13.1	5.6	9.0
23	---	---	---	---	---	---	---	---	---	9.2	5.5	7.4
24	---	---	---	---	---	---	---	---	---	11.1	7.2	8.9
25	---	---	---	---	---	---	---	---	---	10.9	6.0	8.5
26	---	---	---	---	---	---	---	---	---	10.4	5.9	8.2
27	---	---	---	---	---	---	---	---	---	10.5	6.5	8.4
28	---	---	---	---	---	---	---	---	---	10.2	6.9	8.2
29	---	---	---	---	---	---	---	---	---	10.5	7.0	8.6
30	---	---	---	---	---	---	---	---	---	10.7	5.9	8.7
31	---	---	---	---	---	---	---	---	---	10.2	5.9	8.1
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	JUNE			JULY			AUGUST			SEPTEMBER		
1	10.5	5.7	8.0	10.5	5.8	7.9	8.9	3.8	6.0	9.8	5.6	7.4
2	10.3	6.2	8.1	11.5	5.8	8.2	8.2	5.2	6.5	10.3	5.4	7.5
3	10.6	5.4	8.0	11.2	5.4	8.0	8.0	5.0	6.1	9.9	5.4	7.3
4	10.9	5.2	8.0	9.9	5.4	7.3	8.4	3.9	5.8	10.4	5.5	7.4
5	10.7	5.3	7.8	10.9	5.1	7.1	8.5	4.0	5.8	10.4	4.7	7.3
6	10.7	5.1	7.5	9.7	5.2	7.4	8.6	4.3	6.1	9.6	5.2	7.4
7	9.9	5.7	7.5	11.8	6.2	8.4	8.3	4.4	5.8	10.7	5.2	7.8
8	11.7	7.1	9.3	12.1	6.2	8.5	7.0	4.1	5.6	11.0	7.1	8.9
9	11.8	7.0	9.3	12.4	5.4	8.0	6.8	4.5	5.3	11.1	6.9	8.8
10	11.0	7.3	8.8	12.5	4.8	7.7	7.4	4.1	5.5	11.3	7.1	8.8
11	12.2	7.0	9.2	10.6	4.6	7.2	7.2	3.9	5.2	10.5	6.7	8.5
12	12.4	6.6	9.2	9.8	4.2	6.7	6.0	3.9	4.9	---	---	---
13	12.4	5.4	9.0	8.9	2.8	5.5	6.8	3.5	4.9	---	---	---
14	11.9	5.5	8.4	7.9	2.6	4.6	6.0	3.8	4.8	---	---	---
15	12.0	5.2	8.4	7.0	2.7	4.6	7.0	4.4	5.8	---	---	---
16	11.8	5.0	8.0	7.7	4.0	5.6	7.5	4.7	5.8	---	---	---
17	11.1	4.3	7.5	8.3	4.3	6.0	7.5	4.2	5.3	---	---	---
18	10.7	4.0	6.9	9.6	4.5	6.7	7.2	4.4	5.6	---	---	---
19	10.1	3.7	6.5	9.6	5.0	6.6	8.0	4.8	5.9	---	---	---
20	10.0	3.7	6.3	10.0	4.9	6.7	8.5	5.0	6.3	10.4	7.4	8.7
21	10.1	3.6	6.5	9.8	4.7	6.9	8.8	4.7	6.4	12.2	8.3	9.7
22	10.4	3.8	6.6	8.7	4.5	6.3	9.4	5.2	6.8	12.5	8.7	10.3
23	10.1	3.8	6.5	9.7	4.3	6.2	9.5	4.1	6.8	12.6	8.4	10.3
24	10.3	3.6	6.6	9.8	4.0	6.3	10.0	4.1	6.7	13.0	7.9	10.2
25	10.7	3.6	6.6	9.3	3.6	6.0	10.4	5.2	7.3	13.5	7.7	9.7
26	9.8	3.9	6.3	9.0	3.6	5.8	9.9	5.1	6.9	14.3	6.6	9.5
27	10.6	4.1	6.9	10.4	4.3	6.6	9.4	5.3	6.6	14.0	6.6	9.4
28	10.1	4.1	6.5	9.2	3.5	5.8	9.3	5.4	6.8	15.8	6.6	10.1
29	10.0	4.5	5.9	9.0	4.2	6.1	8.9	5.4	6.6	15.6	6.2	9.8
30	9.7	4.8	7.0	9.0	3.8	6.0	9.1	4.8	6.6	14.7	5.0	8.5
31	---	---	---	8.4	3.3	5.4	9.8	5.2	6.5	---	---	---
MONTH	12.4	3.6	7.6	12.5	2.6	6.6	10.4	3.5	6.0	---	---	---

STREAMS TRIBUTARY TO LAKE MICHIGAN
040857005 OTTER CREEK, AT WILLOW ROAD, NEAR PLYMOUTH, WI--CONTINUED

SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED(TONS PER DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	.03	.08	.15	.08	.05	e.22	.08	.08	.03	.03	.02
2	.04	.03	.09	.14	.07	.05	e.17	.06	.08	.03	.03	.02
3	.03	.04	.09	.13	.08	.05	.10	.06	.07	.03	.03	.02
4	.03	.04	.09	.13	.07	.05	.09	.06	.07	.03	.03	.02
5	.03	.05	.10	.13	.07	.05	.09	.05	.06	.03	.03	.02
6	.03	.08	.11	.12	.07	.05	.08	.05	.06	.03	.03	.02
7	.04	.06	.11	.12	.07	.05	.08	.05	.08	.03	.03	.03
8	.04	.06	.11	.12	.06	.05	.09	.05	.07	.03	.03	.02
9	.04	.07	.11	.11	.06	.05	.09	.13	.06	.03	.04	.02
10	.04	.06	.11	.11	.06	.05	.09	.14	.05	.03	.04	.02
11	.04	.06	.12	.11	.06	25	.87	.16	.04	.03	.04	.02
12	.04	.07	.12	.12	.06	15	1.6	.10	.04	.03	.06	.02
13	.03	.07	.12	.12	.06	2.1	.34	.09	.03	.03	.17	.02
14	.03	.08	.13	.47	.06	.86	.23	.19	.03	.03	.54	.02
15	.03	.08	.13	.31	.05	.64	.18	.16	.03	.04	.12	.02
16	.03	.08	.14	.22	.05	.48	.16	.13	.03	.04	.04	.02
17	.03	.07	.16	.18	.05	.36	.14	.11	.04	.03	.04	.02
18	.03	.07	.16	.15	.07	.28	8.4	.09	.04	.03	.04	.02
19	.03	.07	.17	.15	.07	.24	1.2	.07	.04	.03	.03	.02
20	.03	.07	.18	.13	.06	e.43	.22	.06	.04	.03	.03	.03
21	.03	.08	.18	.12	.06	e.72	.16	.05	.04	.03	.03	.02
22	.03	.07	.18	.12	.05	e.34	.14	.04	.04	.03	.02	.02
23	.03	.07	.20	.11	.05	.17	.10	.04	.03	.03	.03	.02
24	.03	.07	.22	.10	.05	.12	.09	.04	.03	.03	.02	.02
25	.03	.06	.21	.10	.05	.10	.08	.05	.03	.02	.02	.02
26	.03	.06	.20	.09	.05	.09	.07	.05	.03	.02	.02	.02
27	.03	.08	.20	.09	.05	.08	.19	.05	.03	.03	.02	.02
28	.03	.11	.21	.09	.05	.07	.18	.09	.08	.04	.03	.02
29	.03	.09	.19	.08	---	e.17	.12	.10	1.0	.03	.03	.02
30	.03	.09	.19	.08	---	e.29	.10	.10	.18	.03	.03	.02
31	.03	---	.18	.08	---	e.30	---	.09	---	.03	.03	---
TOTAL	1.01	2.02	4.59	4.28	1.69	48.34	15.67	2.59	2.53	0.94	1.71	0.62

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.52	.55	1.1	1.1	.92	.65	e2.8	1.4	1.6	.88	.71	.80
2	.51	.57	1.1	1.0	.86	.65	e2.3	1.0	1.5	.77	.69	.79
3	.49	.58	1.0	.99	.89	.65	1.4	.94	1.4	.75	.74	.72
4	.48	.59	.99	.96	.79	.62	1.1	.91	1.4	.73	.74	.75
5	.46	.62	1.1	.97	.86	.65	1.0	.87	1.3	.80	.67	.75
6	.47	.98	1.1	.98	.85	.62	.95	.82	1.3	.87	.66	.73
7	.49	.78	1.1	1.0	.80	.68	.91	.78	1.8	.79	.65	2.1
8	.48	.72	1.0	1.0	.79	.65	1.0	.79	1.8	.72	.67	1.2
9	.52	.70	.96	.92	.74	.65	1.1	2.2	1.4	.73	.81	.74
10	.52	.63	.91	.93	.73	.68	1.0	2.6	1.3	.68	.85	.62
11	.51	.60	.89	.94	.79	106	9.5	2.6	1.2	.63	.77	.49
12	.49	.61	.87	1.1	.78	116	18	2.1	1.1	.60	1.2	.42
13	.47	.61	.86	1.1	.73	30	5.2	2.0	.98	.58	3.2	.38
14	.46	.65	.84	4.5	.72	15	3.4	2.5	.99	.57	10	.31
15	.48	.60	.85	3.1	.67	12	2.7	2.1	.99	.79	2.9	.29
16	.48	.59	.86	2.2	.63	9.0	2.4	1.7	.97	.80	1.3	.29
17	.47	.59	.92	1.8	.58	7.0	2.1	1.5	1.0	.65	1.3	.30
18	.45	.60	.89	1.6	.88	5.5	54	1.3	1.0	.55	1.1	.29
19	.43	.59	.91	1.5	.93	4.9	17	1.1	1.0	.52	1.0	.35
20	.40	.61	.96	1.4	.82	e4.9	5.4	1.0	1.1	.55	.91	.41
21	.38	.75	.97	1.3	.75	e7.3	3.9	.84	.97	.52	.83	.37
22	.39	.75	1.0	1.3	.71	e4.0	3.1	.76	.94	.51	.75	.33
23	.41	.74	1.2	1.2	.71	3.9	2.2	.74	.87	.54	.82	.28
24	.38	.75	1.3	1.1	.68	2.9	1.8	.83	.77	.50	.80	.27
25	.39	.73	1.3	1.1	.65	2.5	1.5	.89	.74	.45	.81	.26
26	.41	.77	1.2	1.0	.68	2.3	1.3	.92	.70	.45	.79	.25
27	.44	1.1	1.2	.99	.68	2.0	4.3	.99	.75	.54	.85	.24
28	.46	1.5	1.3	.97	.65	2.0	4.2	1.7	1.7	.76	1.1	.23
29	.52	1.2	1.3	.91	---	e2.3	2.6	1.9	12	.66	1.0	.24
30	.53	1.2	1.3	.95	---	e3.5	1.8	1.8	3.8	.66	.98	.24
31	.55	---	1.2	.93	---	e3.6	---	1.7	---	.70	.93	---
TOTAL	14.44	22.26	32.48	40.84	21.27	353.10	159.96	43.28	48.37	20.25	40.53	15.44

e Estimated

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. 6, 8-9, 15-16, Jan. 17, 19, and Mar. 5-7, 9 because recorded precipitation interpreted as collector snowmelt. Rainfall data missing for the period July 6-18.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 2.39 in., June 14, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 1.45 in., June 29.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.04	.00	.00	.00	.00	.00	.04	.00	.00	.00	.18	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.04	.00	.00	.00	.00	.00	.00	.00	.00	.12	.00
4	.00	.07	.00	.00	.00	.00	.00	.00	.00	.02	.00	.00
5	.00	.62	.14	.00	.00	.00	.00	.00	.00	.22	.00	.00
6	.00	.11	.00	.00	.00	.00	.00	.00	.22	---	.00	.30
7	.00	.00	.00	.00	.00	.00	.22	.00	.44	---	.00	.28
8	.27	.03	.00	.00	.00	.00	.05	.18	.00	---	.00	.00
9	.01	.01	.00	.00	.00	.00	.00	.36	.00	---	.45	.00
10	.00	.00	.00	.00	.00	.00	.00	.27	.00	---	.00	.00
11	.00	.00	.00	.00	.00	.00	.56	.00	.00	---	.00	.00
12	.00	.00	.00	.00	.00	.00	.02	.00	.00	---	.59	.00
13	.00	.07	.00	.00	.00	.00	.00	.32	.00	---	.36	.00
14	.00	.00	.00	.86	.00	.00	.00	.06	.00	---	.46	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	---	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	---	.33	.02
17	.03	.00	.00	.00	.00	.00	.00	.00	.00	---	.04	.00
18	.01	.00	.00	.00	.00	.03	1.05	.00	.00	---	.00	.00
19	.00	.00	.00	.00	.00	.01	.00	.00	.00	.09	.06	.68
20	.00	.07	.00	.00	.00	.42	.00	.00	.00	.06	.00	.00
21	.00	.14	.00	.00	.00	.01	.00	.00	.00	.00	.00	.06
22	.20	.00	.00	.00	.00	.00	.00	.00	.00	.58	.00	.01
23	.00	.00	.00	.00	.00	.00	.00	.22	.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	.01	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.17	.07	.00	.00
27	.00	.54	.00	.00	.00	.21	.00	.33	.00	.46	.11	.00
28	.00	.00	.00	.00	.00	.15	.00	.49	.36	.00	.27	.00
29	.00	.00	.00	.00	---	.00	.00	.00	1.45	.00	.01	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.09
31	.02	---	.00	.00	---	.00	---	.00	---	.08	.00	---
TOTAL	1.58	1.70	0.14	0.86	0.00	0.83	1.94	2.23	2.64	---	2.99	1.44

REMARKS.--Estimated daily discharges: Ice-affected periods, Dec. 4-7, 9, and Dec. 11 to Mar. 14. Records good except those for ice-affected periods, which are poor (see page 11). Diurnal fluctuation caused by numerous powerplants above station. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	61	142	80	62	86	449	287	259	55	33	76
2	143	60	136	54	60	74	396	245	217	47	35	58
3	106	59	110	40	60	76	370	238	174	42	39	49
4	158	71	110	35	58	76	342	227	107	39	41	43
5	95	92	100	33	56	80	291	216	91	43	44	41
6	61	121	96	35	56	78	265	202	86	51	37	47
7	57	142	96	38	54	80	249	182	81	50	35	62
8	62	118	95	45	56	80	260	159	105	46	35	48
9	61	103	100	52	58	78	271	204	103	46	46	45
10	63	96	102	57	60	80	261	295	93	44	47	40
11	58	96	100	62	58	120	275	378	88	42	49	36
12	52	92	96	70	56	300	702	364	84	37	52	37
13	50	87	94	74	56	700	700	344	77	36	65	39
14	50	88	92	150	58	660	537	323	71	33	109	36
15	49	85	90	230	60	662	411	306	61	43	114	31
16	47	90	94	190	64	512	358	264	54	44	106	33
17	48	87	96	130	76	462	330	235	50	46	103	31
18	52	85	100	100	80	514	544	166	49	42	95	31
19	54	82	90	90	86	495	1050	112	48	37	81	40
20	55	89	88	80	100	512	794	127	48	39	69	52
21	57	96	90	84	100	616	666	123	45	42	58	52
22	58	95	90	78	98	531	683	114	42	34	49	48
23	62	86	100	76	96	458	646	112	41	32	45	44
24	61	91	110	78	100	410	495	117	40	32	41	40
25	66	96	120	76	100	380	433	115	39	34	38	39
26	65	77	120	78	94	351	380	105	43	34	43	39
27	64	118	120	74	92	328	462	94	48	34	43	38
28	61	179	110	66	90	307	542	153	46	50	47	38
29	59	203	110	64	---	342	407	218	57	46	61	38
30	58	160	110	58	---	412	330	213	76	41	79	39
31	61	---	100	62	---	474	---	264	---	35	111	---
TOTAL	2105	3005	3207	2439	2044	10334	13899	6502	2423	1276	1850	1290
MEAN	67.9	100	103	78.7	73.0	333	463	210	80.8	41.2	59.7	43.0
MAX	158	203	142	230	100	700	1050	378	259	55	114	76
MIN	47	59	88	33	54	74	249	94	39	32	33	31
CFSM	.16	.24	.25	.19	.17	.80	1.11	.50	.19	.10	.14	.10
IN.	.19	.27	.29	.22	.18	.92	1.24	.58	.22	.11	.16	.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 1995, BY WATER YEAR (WY)

MEAN	160	210	169	113	167	694	736	301	197	108	108	142
MAX	741	1372	505	370	887	2052	1994	1027	789	607	1433	1143
(WY)	1987	1986	1983	1960	1984	1918	1993	1960	1984	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 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1916 - 1995	
ANNUAL TOTAL	70553		50374			
ANNUAL MEAN	193		138		259	
HIGHEST ANNUAL MEAN					526	
LOWEST ANNUAL MEAN					47.1	
HIGHEST DAILY MEAN	1410	Mar 23	1050	Apr 19	7000	Aug 6 1924
LOWEST DAILY MEAN	39	Jul 3	31	Sep 15	1.0	Aug 27 1922
ANNUAL SEVEN-DAY MINIMUM	46	Sep 16	34	Sep 12	8.9	Aug 14 1958
INSTANTANEOUS PEAK FLOW			(a) 1230	Apr 19	7680	Mar 22 1975
INSTANTANEOUS PEAK STAGE			(b) 5.75	Mar 14	11.64	Mar 22 1975
INSTANTANEOUS LOW FLOW			30	(c) Sep 15	1.0	Aug 27 1922
ANNUAL RUNOFF (CFSM)	.46		.33		.62	
ANNUAL RUNOFF (INCHES)	6.28		4.48		8.42	
10 PERCENT EXCEEDS	488		360		610	
50 PERCENT EXCEEDS	90		80		112	
90 PERCENT EXCEEDS	53		39		37	

- (a) Gage height, 5.30 ft
- (b) Backwater from ice
- (c) Also occurred Sept. 17, 18

STREAMS TRIBUTARY TO LAKE MICHIGAN
040860041 SHEBOYGAN RIVER, AT MOUTH, AT SHEBOYGAN, WI

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LOCATION.--Lat 43°44'50", long 87°42'33", in SE 1/4 SW 1/4 sec.23, T.15 N., R.23 E., Sheboygan County, Hydrologic Unit 04030101, at mouth.

DRAINAGE AREA.--427 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1993 to October 1995 (discontinued).

REMARKS.--Discharges estimated using record from upstream station 04086000 times a basin ration estimator of 1.022. Records are poor (see page 11).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	206	152	175	72	82	613	327	370	109	50	200	73
2	207	150	175	74	78	531	330	436	97	45	177	67
3	192	148	179	76	78	491	345	403	91	40	128	60
4	190	146	176	76	78	450	338	327	94	52	121	55
5	181	149	169	78	78	409	308	278	121	102	122	55
6	178	147	169	78	78	613	310	249	144	107	94	55
7	175	141	165	78	80	1120	303	229	147	121	79	55
8	174	138	157	78	80	1430	294	219	126	154	73	51
9	191	138	156	80	76	1120	284	207	106	147	69	50
10	190	137	179	82	76	1230	254	197	94	113	69	49
11	189	138	127	84	78	981	237	204	83	100	74	50
12	182	140	129	85	80	1020	243	221	75	93	78	51
13	176	160	184	86	82	1020	408	202	73	89	78	50
14	168	177	149	88	84	981	436	183	72	107	84	51
15	166	190	140	82	86	1020	542	173	69	110	79	52
16	171	191	138	80	90	818	541	169	65	107	79	50
17	168	189	137	78	92	715	456	134	60	96	76	48
18	162	180	141	78	102	613	401	136	53	89	81	44
19	157	173	142	78	153	552	383	138	50	84	81	44
20	155	164	139	76	409	511	332	130	55	78	86	45
21	179	156	135	80	1230	1020	299	125	54	78	80	48
22	199	160	92	84	1120	1350	279	121	51	80	75	50
23	190	155	72	86	1120	1440	259	113	51	66	73	50
24	182	148	92	88	1020	1080	245	108	64	79	69	53
25	179	133	123	88	920	825	308	113	65	61	66	60
26	174	156	112	88	858	711	424	212	58	54	66	75
27	169	202	98	92	777	672	414	189	53	50	62	89
28	164	194	90	90	695	644	371	151	60	50	72	77
29	167	184	82	88	---	568	346	132	58	52	78	63
30	159	174	76	86	---	486	341	123	54	81	78	58
31	152	---	72	82	---	418	---	117	---	64	75	---
TOTAL	5492	4810	4170	2539	9780	25452	10358	6109	2352	2599	2722	1678
MEAN	177	160	135	81.9	349	821	345	197	78.4	83.8	87.8	55.9
MAX	207	202	184	92	1230	1440	542	436	147	154	200	89
CFSM	.41	.38	.32	.19	.82	1.92	.81	.46	.18	.20	.21	.13
IN.	.48	.42	.36	.22	.85	2.22	.90	.53	.20	.23	.24	.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1994, BY WATER YEAR (WY)

	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994
MEAN	177	160	135	81.9	349	821	345	197	78.4	83.8	87.8	55.9
MAX	177	160	135	81.9	349	821	345	197	78.4	83.8	87.8	55.9
(WY)	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994	1994

SUMMARY STATISTICS

FOR 1994 WATER YEAR

ANNUAL TOTAL	78061
ANNUAL MEAN	214
HIGHEST DAILY MEAN	1440 Mar 23
LOWEST DAILY MEAN	40 Jul 3
ANNUAL SEVEN-DAY MINIMUM	47 Sep 16
ANNUAL RUNOFF (CFSM)	.50
ANNUAL RUNOFF (INCHES)	6.80
10 PERCENT EXCEEDS	499
50 PERCENT EXCEEDS	128
90 PERCENT EXCEEDS	55

STREAMS TRIBUTARY TO LAKE MICHIGAN
040860041 SHEBOYGAN RIVER, AT MOUTH, AT SHEBOYGAN, WI--CONTINUED

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	114	62	145	82	63	88	459	293	265	56	34	78
2	146	61	139	55	61	76	405	250	222	48	36	59
3	108	60	112	41	61	78	378	243	178	43	40	50
4	161	73	112	36	59	78	350	232	109	40	42	44
5	97	94	102	34	57	82	297	221	93	44	45	42
6	62	124	98	36	57	80	271	206	88	52	38	48
7	58	145	98	39	55	82	254	186	83	51	36	63
8	63	121	97	46	57	82	266	162	107	47	36	49
9	62	105	102	53	59	80	277	208	105	47	47	46
10	64	98	104	58	61	82	267	301	95	45	48	41
11	59	98	102	63	59	123	281	386	90	43	50	37
12	53	94	98	72	57	307	717	372	86	38	53	38
13	51	89	96	76	57	715	715	352	79	37	66	40
14	51	90	94	153	59	675	549	330	73	34	111	37
15	50	87	92	235	61	677	420	313	62	44	117	32
16	48	92	96	194	65	523	366	270	55	45	108	34
17	49	89	98	133	78	472	337	240	51	47	105	32
18	53	87	102	102	82	525	556	170	50	43	97	32
19	55	84	92	92	88	506	1070	114	49	38	83	41
20	56	91	90	82	102	523	811	130	49	40	71	53
21	58	98	92	86	102	630	681	126	46	43	59	53
22	59	97	92	80	100	543	698	117	43	35	50	49
23	63	88	102	78	98	468	660	114	42	33	46	45
24	62	93	112	80	102	419	506	120	41	33	42	41
25	67	98	123	78	102	388	443	118	40	35	39	40
26	66	79	123	80	96	359	388	107	44	35	44	40
27	65	121	123	76	94	335	472	96	49	35	44	39
28	62	183	112	67	92	314	554	156	47	51	48	39
29	60	207	112	65	---	350	416	223	58	47	62	39
30	59	164	112	59	---	421	337	218	78	42	81	40
31	62	---	102	63	---	484	---	270	---	36	113	---
TOTAL	2143	3072	3274	2494	2084	10565	14201	6644	2477	1307	1891	1321
MEAN	69.1	102	106	80.5	74.4	341	473	214	82.6	42.2	61.0	44.0
MAX	161	207	145	235	102	715	1070	386	265	56	117	78
CFSM	.16	.24	.25	.19	.17	.80	1.11	.50	.19	.10	.14	.10
IN.	.19	.27	.29	.22	.18	.92	1.24	.58	.22	.11	.16	.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1995, BY WATER YEAR (WY)

	MEAN	123	131	120	81.2	212	581	409	206	80.5	63.0	74.4	50.0
	MAX	177	160	135	81.9	349	821	473	214	82.6	83.8	87.8	55.9
(WY)		1994	1994	1994	1994	1994	1994	1995	1995	1995	1994	1994	1994

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1994 - 1995
ANNUAL TOTAL	72078	51473	
ANNUAL MEAN	197	141	177
HIGHEST ANNUAL MEAN			214
HIGHEST DAILY MEAN	1440	1070	1440
LOWEST DAILY MEAN	40	32	32
ANNUAL SEVEN-DAY MINIMUM	47	35	35
ANNUAL RUNOFF (CFSM)	.46	.33	.42
ANNUAL RUNOFF (INCHES)	6.28	4.48	5.65
10 PERCENT EXCEEDS	499	368	418
50 PERCENT EXCEEDS	92	82	94
90 PERCENT EXCEEDS	54	40	46

STREAMS TRIBUTARY TO LAKE MICHIGAN
040860041 SHEBOYGAN RIVER, AT MOUTH, AT SHEBOYGAN, WI--CONTINUED

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DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	---	---	---	---	---	---	---	---	---	---	---
2	45	---	---	---	---	---	---	---	---	---	---	---
3	42	---	---	---	---	---	---	---	---	---	---	---
4	43	---	---	---	---	---	---	---	---	---	---	---
5	44	---	---	---	---	---	---	---	---	---	---	---
6	90	---	---	---	---	---	---	---	---	---	---	---
7	102	---	---	---	---	---	---	---	---	---	---	---
8	106	---	---	---	---	---	---	---	---	---	---	---
9	88	---	---	---	---	---	---	---	---	---	---	---
10	72	---	---	---	---	---	---	---	---	---	---	---
11	62	---	---	---	---	---	---	---	---	---	---	---
12	57	---	---	---	---	---	---	---	---	---	---	---
13	61	---	---	---	---	---	---	---	---	---	---	---
14	68	---	---	---	---	---	---	---	---	---	---	---
15	78	---	---	---	---	---	---	---	---	---	---	---
16	84	---	---	---	---	---	---	---	---	---	---	---
17	78	---	---	---	---	---	---	---	---	---	---	---
18	72	---	---	---	---	---	---	---	---	---	---	---
19	68	---	---	---	---	---	---	---	---	---	---	---
20	80	---	---	---	---	---	---	---	---	---	---	---
21	97	---	---	---	---	---	---	---	---	---	---	---
22	94	---	---	---	---	---	---	---	---	---	---	---
23	101	---	---	---	---	---	---	---	---	---	---	---
24	100	---	---	---	---	---	---	---	---	---	---	---
25	104	---	---	---	---	---	---	---	---	---	---	---
26	112	---	---	---	---	---	---	---	---	---	---	---
27	176	---	---	---	---	---	---	---	---	---	---	---
28	205	---	---	---	---	---	---	---	---	---	---	---
29	183	---	---	---	---	---	---	---	---	---	---	---
30	161	---	---	---	---	---	---	---	---	---	---	---
31	146	---	---	---	---	---	---	---	---	---	---	---
TOTAL	2861	---	---	---	---	---	---	---	---	---	---	---
MEAN	92.3	---	---	---	---	---	---	---	---	---	---	---
MAX	205	---	---	---	---	---	---	---	---	---	---	---
CFSM	.22	---	---	---	---	---	---	---	---	---	---	---
IN.	.25	---	---	---	---	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1996, BY WATER YEAR (WY)

MEAN	113	131	120	81.2	212	581	409	206	80.5	63.0	74.4	50.0
MAX	177	160	135	81.9	349	821	473	214	82.6	83.8	87.8	55.9
(WY)	1994	1994	1994	1994	1994	1994	1995	1995	1995	1994	1994	1994

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR		FOR 1996 WATER YEAR (OCTOBER)		WATER YEARS 1994 - 1996	
ANNUAL TOTAL	45845		2861			
ANNUAL MEAN	151		92.3		174	
HIGHEST ANNUAL MEAN					214	
HIGHEST DAILY MEAN	1070	Apr 19	205	Oct 28	1440	Mar 23 1994
LOWEST DAILY MEAN	32	Sep 15	42	Oct 1	32	Sep 15 1995
ANNUAL SEVEN-DAY MINIMUM	35	Sep 12	58	Oct 1	35	Sep 12 1995
ANNUAL RUNOFF (CFSM)	.35		.22		.41	
ANNUAL RUNOFF (INCHES)	3.99		.25		5.54	
10 PERCENT EXCEEDS	410		173		409	
50 PERCENT EXCEEDS	78		84		94	
90 PERCENT EXCEEDS	39		43		46	

STREAMS TRIBUTARY TO LAKE MICHIGAN
040860041 SHEBOYGAN RIVER, AT MOUTH, AT SHEBOYGAN, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1992 to October 1995 (discontinued).

REMARKS.--Water-quality analyses by the Wisconsin State Laboratory of Hygiene.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
OCT 1994				DEC 1994			
02...	1100	146	44	01...	2300	145	13
04...	1100	161	22	04...	2300	112	37
05...	1400	97	24	06...	1415	98	25
05...	2300	97	24	09...	1100	102	10
06...	2300	62	23	12...	1100	98	10
07...	2300	58	28	16...	1100	96	10
09...	1100	62	35	21...	1145	92	10
11...	1100	59	55	25...	1100	123	5
13...	0920	51	34	31...	1100	102	8
14...	1100	51	26	JAN 1995			
16...	1100	48	30	07...	1100	39	12
17...	2300	49	24	12...	0950	72	7
18...	1515	53	41	18...	1100	102	18
20...	1100	56	16	28...	1100	67	15
22...	1100	59	18	FEB			
24...	1100	62	29	04...	1100	59	5
26...	1100	66	23	16...	0831	65	15
27...	1325	65	22	21...	1100	102	8
28...	2300	62	23	MAR			
30...	1100	59	20	01...	1100	88	6
31...	2200	62	26	09...	1140	80	7
NOV				10...	1100	82	9
02...	1300	61	26	11...	1100	123	8
04...	1100	73	18	12...	1100	307	22
05...	1100	94	18	12...	1530	307	38
06...	2300	124	26	13...	1100	715	63
08...	0930	121	19	14...	1100	675	48
12...	1100	94	10	16...	1100	523	27
13...	2300	89	10	18...	1130	525	42
14...	2300	90	102	19...	1100	506	39
16...	1550	92	17	21...	1225	630	24
19...	2300	84	18	24...	1100	419	18
23...	1100	88	13	25...	1100	388	19
27...	1100	121	41	27...	1345	335	22
27...	2300	121	57	30...	1500	421	17
28...	1100	183	36	31...	1355	484	22
28...	1430	183	35				
29...	2300	207	30				

STREAMS TRIBUTARY TO LAKE MICHIGAN

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040860041 SHEBOYGAN RIVER, AT MOUTH, AT SHEBOYGAN, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)
APR 1995				MAY 1995			
02...	1100	405	20	06...	1100	206	34
04...	1100	350	17	07...	1100	186	24
06...	0935	271	11	08...	1100	162	30
07...	1100	254	20	09...	1100	208	55
11...	1100	281	32	10...	1100	301	56
13...	1300	715	59	11...	1100	386	47
16...	1100	366	24	12...	1100	372	42
18...	1100	556	48	13...	1100	352	46
18...	1430	556	46	14...	1100	330	48
19...	1100	1070	73	15...	1100	313	64
20...	1100	811	56	16...	1100	270	29
21...	1100	681	34	17...	1100	240	32
22...	1100	698	18	17...	1220	240	39
23...	1100	660	27	18...	1100	170	33
24...	1100	506	26	19...	1100	114	20
25...	1100	443	52	20...	1100	130	20
26...	1100	388	37	21...	1100	126	26
27...	1100	472	14	22...	1100	117	26
28...	1100	554	26	23...	1100	114	26
29...	1100	416	33	24...	1100	120	39
30...	1100	337	30	25...	1100	118	76
MAY				26...	1100	107	52
01...	1100	293	34	27...	1100	96	51
02...	1100	250	41	28...	1100	156	96
03...	1100	243	50	29...	1100	223	58
04...	1100	232	26	30...	1100	218	47
05...	1100	221	33	31...	1100	270	50
DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)
JUN 1995				JUL 1995			
02...	1100	222	22	02...	1100	48	104
03...	1100	178	37	03...	1100	43	62
04...	1100	109	41	04...	1100	40	72
05...	1100	93	54	05...	1100	44	38
06...	1100	88	43	06...	1100	52	29
07...	1100	83	75	07...	0950	51	26
07...	1243	83	66	07...	1100	51	16
08...	1100	107	116	08...	1100	47	18
09...	1100	105	95	09...	1100	47	48
10...	1100	95	94	10...	1100	45	61
11...	1100	90	116	11...	1100	43	64
12...	1100	86	98	12...	1100	38	57
13...	1100	79	340	13...	1007	37	77
14...	1100	73	86	13...	1100	37	63
15...	1100	62	59	14...	1100	34	33
16...	1100	55	56	15...	1100	44	25
17...	1100	51	70	16...	1100	45	34
18...	1100	50	89	17...	1100	47	45
19...	1100	49	47	18...	1100	43	40
20...	1030	49	24	19...	1100	38	36
20...	1100	49	18	20...	1100	40	42
21...	1100	46	33	20...	1345	40	38
22...	1100	43	52	21...	1100	43	79
23...	1100	42	38	22...	1100	35	73
24...	1100	41	33	23...	1100	33	81
25...	1100	40	61	24...	1100	33	73
26...	1100	44	62	25...	1100	35	61
27...	1100	49	106	26...	1100	35	71
28...	0935	47	58	27...	1012	35	44
28...	1100	47	44	27...	1100	35	46
29...	1100	58	116	28...	1100	51	75
30...	1100	78	78	29...	1100	47	60
JUL				30...	1100	42	54
01...	1100	56	62	31...	1100	36	94

STREAMS TRIBUTARY TO LAKE MICHIGAN
040860041 SHEBOYGAN RIVER, AT MOUTH, AT SHEBOYGAN, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

		DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)			DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
DATE	TIME			DATE	TIME		
AUG 1995				SEP 1995			
01...	1100	34	60	01...	1100	78	58
02...	0855	36	60	02...	1100	59	56
02...	1100	36	82	03...	1100	50	60
03...	1100	40	118	04...	1040	44	30
04...	1100	42	72	04...	1100	44	28
05...	1100	45	44	05...	1100	42	64
06...	1100	38	28	06...	1100	48	42
07...	1100	36	23	07...	1100	63	51
08...	1100	36	38	08...	1100	49	127
09...	1100	47	38	09...	1100	46	50
09...	1500	47	70	10...	1100	41	54
10...	1100	48	53	11...	1100	37	40
11...	1100	50	42	12...	1100	38	32
12...	1100	53	50	12...	1413	38	26
13...	1100	66	32	13...	1100	40	30
14...	1100	111	44	14...	1100	37	29
15...	1100	117	55	15...	1100	32	46
16...	1100	108	54	16...	1100	34	54
17...	0821	105	48	17...	1100	32	40
17...	1100	105	25	18...	1100	32	50
18...	1100	97	32	19...	1100	41	36
19...	1100	83	58	19...	1410	41	38
20...	1100	71	48	20...	1100	53	54
21...	1100	59	26	21...	1100	53	42
22...	1100	50	42	22...	1100	49	40
23...	1020	46	37	23...	1100	45	30
23...	1100	46	93	24...	1100	41	40
24...	1100	42	26	25...	1100	40	42
25...	1100	39	56	26...	1100	40	28
26...	1100	44	52	26...	1528	40	24
27...	1100	44	28	27...	1100	39	34
28...	1100	48	46	28...	1100	39	30
29...	1100	62	28	29...	1100	39	24
30...	1100	81	33	30...	1100	40	46
31...	1100	113	97				

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEED (MG/L) (00530)
OCT 1995			
01...	1100	42	41
02...	1100	45	48
03...	1100	42	39
04...	1030	43	36
04...	1100	43	24
05...	1100	44	27
06...	1100	90	80
07...	1100	102	18
08...	1100	106	43
09...	1100	88	39
10...	1100	72	30
11...	1100	62	34
12...	1100	57	34
13...	1100	61	29
14...	1100	68	38
15...	1100	78	48
16...	1100	84	58
17...	1100	78	73
18...	1100	72	38
19...	1100	68	46
20...	1100	80	44
21...	1100	97	52
22...	1100	94	39
23...	1100	101	32
24...	1100	100	36
24...	1525	100	27
25...	1100	104	24
26...	1100	112	32
27...	1100	176	46
28...	1100	205	49
29...	1000	183	38
30...	1000	161	41
31...	1000	146	46

040860041 SHEBOYGAN RIVER, AT MOUTH, AT SHEBOYGAN, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
OCT 1994												
19...	0820	55	644	8.4	14.0	0.50	11.3	63	38	28	3.5	36
NOV												
02...	1120	61	633	8.6	8.0	0.50	14.3	58	37	32	2.9	38
16...	1440	92	559	8.2	8.0	1.10	11.6	53	29	22	2.8	36
28...	1235	183	648	8.4	1.0	0.50	14.0	61	39	25	2.9	36
DEC												
21...	0930	92	597	8.5	1.0	1.10	13.9	62	33	25	2.3	35
JAN 1995												
12...	1000	72	620	8.2	0.5	2.10	12.5	63	31	24	2.6	38
FEB												
16...	0915	65	691	8.2	0.5	--	13.2	71	38	33	2.8	42
16...	1045	65	691	8.2	0.5	--	13.2	71	37	34	2.9	42
MAR												
09...	1215	80	569	--	1.0	--	13.1	58	29	25	2.4	34
12...	1415	307	566	7.6	0.5	0.20	13.8	44	24	39	5.5	26
14...	1130	675	420	8.0	0.5	0.20	12.5	38	20	16	5.7	20
18...	1040	525	512	8.2	3.5	0.60	15.2	58	31	16	3.9	32
21...	1120	630	583	8.0	3.5	--	12.0	59	30	19	5.2	32
22...	1335	543	592	8.2	4.5	--	11.8	61	31	18	5.1	35
27...	1240	335	581	8.4	4.5	0.60	12.3	62	33	16	4.2	38
30...	1410	421	610	8.4	4.0	0.50	12.5	63	35	26	4.3	41
APR												
06...	0835	271	645	8.5	3.0	0.90	13.2	67	38	18	3.7	45
13...	1105	715	583	8.2	6.0	0.20	11.1	58	32	19	5.3	36
19...	0825	1070	505	8.1	8.0	0.20	10.2	57	29	18	5.0	33
27...	1245	472	578	7.9	9.0	0.50	10.1	--	--	--	--	--
MAY												
10...	0859	301	629	8.4	13.0	0.40	10.5	--	--	--	--	36
10...	0900	301	--	--	13.0	--	--	--	--	--	--	--
12...	1020	372	643	8.3	13.5	0.40	9.0	--	--	--	--	36
17...	1120	240	635	8.4	18.0	0.40	7.6	--	--	--	--	--
JUN												
01...	1130	265	562	8.4	19.0	0.30	9.2	--	--	--	--	--
AUG												
17...	0830	105	459	8.2	24.0	0.30	5.5	36	25	23	2.8	24
SEP												
19...	1125	41	--	--	--	--	--	--	--	--	--	--
19...	1340	41	--	--	--	--	--	--	--	--	--	--

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDE (MG/L) (00535)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHOPHOS- PHATE, ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS PO4) (00660)	CHLORO- PHYLL A TRICHR. UNCORR. WHOLE TOTAL (UG/L) (32210)
OCT 1994											
19...	51	5.5	24	9	0.566	0.128	1.1	0.136	0.007	0.02	108
NOV											
02...	52	2.2	25	15	0.203	0.028	1.1	0.108	<0.002	--	84.0
16...	37	3.6	9	4	0.562	0.051	0.60	0.070	0.023	0.07	15.5
28...	44	4.8	36	12	1.16	0.00	0.80	0.130	0.00	0.0	49.3
DEC											
21...	46	5.4	8	4	1.25	0.055	0.60	0.060	0.019	0.06	13.6
JAN 1995											
12...	42	4.6	6	4	1.29	0.075	0.60	0.040	0.021	0.06	6.23
FEB											
16...	57	6.2	8	4	1.73	0.052	0.50	0.060	0.035	0.11	2.51
16...	59	6.0	8	4	1.74	0.056	0.60	0.060	0.034	0.10	2.43
MAR											
09...	43	4.7	6	5	1.27	0.061	0.50	0.050	0.026	0.08	1.88
12...	70	5.4	48	11	1.80	0.508	2.4	0.330	0.176	0.54	21.6
14...	33	5.2	54	12	2.25	0.405	2.1	0.350	0.176	0.54	12.0
18...	36	6.6	22	8	2.26	0.084	1.4	0.144	0.047	0.14	14.3
21...	44	7.1	26	6	2.64	0.245	1.6	0.150	0.063	0.19	14.6
22...	43	7.5	22	8	3.47	0.175	1.5	0.140	0.068	0.21	12.4
27...	37	5.7	17	6	1.77	0.035	1.4	0.100	0.027	0.08	16.2
30...	56	5.6	23	6	1.92	0.052	1.2	0.100	0.032	0.10	14.6
APR											
06...	43	3.0	22	6	2.13	<0.027	1.2	0.080	0.019	0.06	12.3
13...	48	5.4	40	8	4.56	0.097	1.7	0.200	0.055	0.17	17.6
19...	42	3.5	76	14	2.75	0.106	1.6	0.234	0.067	0.21	33.4
27...	--	--	--	--	--	--	--	--	--	--	--
MAY											
10...	43	0.10	50	14	0.554	0.00	1.7	0.190	0.010	0.03	100
10...	--	--	58	--	--	--	--	--	--	--	--
12...	43	2.7	36	12	1.49	0.00	1.6	0.152	--	--	80.6
17...	36	2.2	48	--	0.510	0.080	2.0	0.205	0.015	0.05	97.0
JUN											
01...	33	0.90	50	--	0.044	<0.027	2.3	0.214	0.005	0.02	145
AUG											
17...	38	0.40	42	14	0.041	0.111	1.4	0.180	0.019	0.06	127
SEP											
19...	34	3.2	22	--	0.102	0.229	0.90	0.125	0.038	0.12	39.9
19...	34	3.1	29	--	0.104	0.234	1.0	0.143	0.035	0.11	36.0

STREAMS TRIBUTARY TO LAKE MICHIGAN
040860041 SHEBOYGAN RIVER, AT MOUTH, AT SHEBOYGAN, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)
OCT 1995									
24...	1230	100	683	8.4	9.5	0.60	10.7	59	1.9
24...	1515	100	683	8.4	9.5	0.60	11.0	59	1.8

DATE	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	CHLORO- PHYLL A TRICHR. UNCORR. WHOLE TOTAL (UG/L) (32210)
OCT 1995								
24...	21	0.402	0.099	1.0	0.098	0.013	0.04	33.5
24...	24	0.445	0.053	1.2	0.106	0.011	0.03	39.2

STREAMS TRIBUTARY TO LAKE MICHIGAN

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040863075 NORTH BRANCH MILWAUKEE RIVER NEAR RANDOM LAKE, WI
(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

LOCATION.--Lat 43°33'25", long 88°03'10", in SE 1/4 SW 1/4 sec.25, T.13 N., R.20 E., Sheboygan County, Hydrologic Unit 04040003, on left bank downstream from bridge on State Highway 144, 1.1 mi east of intersection of State Highways 144 and 28, 4.1 mi west of the village limits of Random Lake.

DRAINAGE AREA.--51.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1993 to September 1995 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 800 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Ice-affected period, Dec. 5 to Mar. 14. Records fair except those for ice-affected period, which is poor (see page 11).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	18	34	19	14	18	66	49	28	21	10	18
2	40	18	30	15	14	18	69	41	25	18	8.2	13
3	32	18	26	12	14	17	69	40	24	15	6.8	8.9
4	24	20	23	10	14	17	60	38	26	12	13	13
5	20	24	25	10	14	18	50	36	24	13	9.8	12
6	20	43	24	10	13	16	41	32	23	16	6.0	11
7	19	42	26	10	13	17	37	29	26	16	8.3	13
8	18	36	24	11	14	17	45	29	30	16	11	14
9	22	30	24	12	14	18	48	49	27	15	17	17
10	21	28	24	12	15	20	49	56	21	14	20	9.1
11	20	26	23	12	14	24	48	57	18	13	14	8.7
12	19	24	22	19	13	43	92	51	18	12	12	9.8
13	18	12	20	24	14	70	97	47	17	11	7.8	10
14	18	12	22	50	13	130	86	46	15	6.6	24	9.7
15	18	15	23	46	14	112	66	44	14	6.4	20	7.4
16	18	20	24	50	15	89	47	40	13	14	22	8.0
17	18	21	24	43	16	75	49	34	13	13	27	11
18	18	20	24	28	17	63	67	32	12	6.6	20	11
19	18	17	23	22	18	58	104	29	9.1	6.2	21	13
20	18	18	22	18	19	64	103	28	12	12	19	19
21	18	21	23	17	20	72	94	25	9.9	9.6	17	17
22	19	23	23	18	22	68	83	25	8.6	6.1	14	17
23	23	22	25	18	23	59	68	26	8.5	13	12	16
24	24	21	25	18	22	49	58	26	8.6	14	7.2	16
25	21	20	26	17	22	42	52	29	8.5	11	7.0	15
26	20	23	26	17	21	41	47	27	8.6	10	7.6	15
27	20	30	27	16	20	40	64	26	8.5	5.9	8.5	14
28	20	50	27	16	20	38	77	37	9.1	17	43	14
29	19	43	24	15	---	44	72	43	29	15	42	14
30	19	43	23	14	---	54	61	37	29	6.9	33	13
31	19	---	22	14	---	61	---	29	---	11	24	---
TOTAL	667	758	758	613	462	1472	1969	1137	523.4	376.3	512.2	387.6
MEAN	21.5	25.3	24.5	19.8	16.5	47.5	65.6	36.7	17.4	12.1	16.5	12.9
MAX	46	50	34	50	23	130	104	57	30	21	43	19
MIN	18	12	20	10	13	16	37	25	8.5	5.9	6.0	7.4
CFSM	.42	.49	.48	.38	.32	.92	1.28	.71	.34	.24	.32	.25
IN.	.48	.55	.55	.44	.33	1.07	1.43	.82	.38	.27	.37	.28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1995, BY WATER YEAR (WY)

	MEAN	28.0	28.9	26.0	19.4	41.2	72.0	110	45.0	38.8	28.6	21.3	25.4
MAX	34.5	32.5	27.6	19.8	65.9	96.5	212	67.2	84.9	56.6	27.1	48.1	
(WY)	1994	1994	1994	1995	1994	1994	1993	1993	1993	1993	1993	1993	
MIN	21.5	25.3	24.5	19.0	16.5	47.5	52.7	31.2	14.1	12.1	16.5	12.9	
(WY)	1995	1995	1995	1994	1995	1995	1994	1994	1994	1995	1995	1995	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1993 - 1995

ANNUAL TOTAL	12191.9	9635.5	
ANNUAL MEAN	33.4	26.4	30.9
HIGHEST ANNUAL MEAN			35.4
LOWEST ANNUAL MEAN			26.4
HIGHEST DAILY MEAN	(a)280	Feb 21	442
LOWEST DAILY MEAN	6.7	Jun 17	5.9
ANNUAL SEVEN-DAY MINIMUM	9.4	Jun 14	8.6
INSTANTANEOUS PEAK FLOW			142
INSTANTANEOUS PEAK STAGE			14.31
INSTANTANEOUS LOW FLOW			4.8
ANNUAL RUNOFF (CFSM)	.65		.51
ANNUAL RUNOFF (INCHES)	8.82		6.97
10 PERCENT EXCEEDS	68		82
50 PERCENT EXCEEDS	21		25
90 PERCENT EXCEEDS	14		13

(a) Ice affected

STREAMS TRIBUTARY TO LAKE MICHIGAN
040863075 NORTH BRANCH MILWAUKEE RIVER NEAR RANDOM LAKE, WI--CONTINUED
(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1993 to August 1995 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
OCT 1994											
05...	1445	21	718	8.3	12.0	12.8	762	380	79	44	18
NOV											
17...	1245	22	734	8.3	5.5	13.0	758	390	81	45	18
DEC											
07...	1545	26	715	8.4	1.0	14.9	764	350	74	40	15
JAN 1995											
11...	1550	12	828	7.8	0.0	10.8	758	400	86	46	20
FEB											
28...	1530	20	720	8.0	0.0	13.6	770	350	75	40	16
APR											
04...	1045	55	600	7.8	5.0	14.0	766	310	65	35	13
MAY											
09...	0825	44	657	8.5	10.0	9.8	735	330	69	39	16
JUL											
10...	1540	13	773	8.1	24.5	6.2	762	350	72	41	20

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	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)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
OCT 1994											
05...	2.8	386	324	34	35	<0.10	14	438	1.80	0.010	0.030
NOV											
17...	2.8	400	328	35	32	<0.10	14	439	2.40	0.030	0.030
DEC											
07...	2.2	349	302	33	29	<0.10	12	418	2.00	0.010	0.030
JAN 1995											
11...	2.8	439	360	35	33	<0.10	14	474	3.60	0.030	0.260
FEB											
28...	2.5	339	278	30	31	<0.10	11	431	3.00	0.010	0.120
APR											
04...	2.9	325	266	31	28	<0.10	4.9	384	0.960	0.020	0.030
MAY											
09...	2.4	356	292	22	29	<0.10	3.5	391	0.980	0.030	0.060
JUL											
10...	2.8	376	308	28	32	<0.10	16	429	0.790	0.080	0.200

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 1994											
05...	0.60	0.50	0.110	0.090	0.100	43	26	--	--	87	87
NOV											
17...	0.50	0.40	0.120	0.100	0.100	37	19	6.2	0.40	29	79
DEC											
07...	0.50	0.40	0.060	0.050	0.050	37	17	5.7	0.30	24	94
JAN 1995											
11...	0.60	0.70	0.060	0.060	0.060	20	19	3.3	0.30	--	--
FEB											
28...	0.50	0.40	0.090	0.060	0.060	25	18	4.2	0.20	7	82
APR											
04...	0.60	0.60	0.030	0.020	0.020	41	19	11	0.30	12	80
MAY											
09...	1.1	0.70	0.130	0.060	0.050	84	69	8.7	0.60	35	96
JUL											
10...	1.2	0.70	0.290	0.190	0.190	72	120	--	--	81	97

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04086416 MILWAUKEE RIVER AT HIGHWAY T NEAR CEDARBURG, WI

LOCATION.--Lat 43°17'42", long 87°56'36", in SW 1/4 SW 1/4 sec.30, T.10 N., R.22 E., Ozaukee County, Hydrologic Unit 04040003, at Highway T bridge, near Cedarburg.

DRAINAGE AREA.--

PERIOD OF RECORD.--April to August 1995 (discontinued).

REMARKS.--Samples for chemical analysis were composite samples of water collected from four locations in the stream cross section. Water-quality analysis by Wisconsin State Laboratory of Hygiene and National Water-Quality Laboratory.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

		CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDE (MG/L) (00535)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	CHLORO- PHYLL A TRICHR. UNCORR. WHOLE TOTAL (UG/L) (32210)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)			
APR 1995												
	**13...	1530	46	14	6	7.7	1.0	16.9	57	94		
	*13...	1531	47	13	4	--	--	16.9	--	--		
	**27...	1700	42	20	6	9.5	1.5	25.3	31	90		
	*27...	1701	41	18	6	--	--	--	--	--		
JUN												
	**27...	1140	100	32	--	9.2	3.7	165	17	97		
	*27...	1141	100	26	--	--	--	165	--	--		
AUG												
	*08...	1500	91	45	27	--	--	--	--	--		
	**08...	1502	91	52	28	6.6	7.3	171	25	97		
	*17...	0745	46	60	15	9.0	4.0	85.0	47	88		
	*17...	0746	46	64	24	--	--	--	--	--		
DATE	TIME	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	
		COG	COG	COG	COG	COG	COG	COG	COG	COG	COG	
		5 + 8	5 + 8	6	6	7	7	16 + 32	16 + 32	17	17	
		SED	WATER	SED	WATER	SED	WATER	SED	WATER	SED	WATER	
		SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	
DATE	TIME	REC	REC	REC	REC	REC	REC	REC	REC	REC	REC	
		(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	
		(19067)	(19004)	(19066)	(19003)	(19065)	(19002)	(19072)	(19009)	(19070)	(19007)	
		(19067)	(19004)	(19066)	(19003)	(19065)	(19002)	(19072)	(19009)	(19070)	(19007)	
		(19067)	(19004)	(19066)	(19003)	(19065)	(19002)	(19072)	(19009)	(19070)	(19007)	
APR 1995												
	**13...	1530	<0.09	<0.09	<0.08	<0.08	<0.02	<0.02	<0.03	<0.03	<0.03	<0.03
	**27...	1700	<0.09	<0.09	<0.08	<0.08	<0.02	<0.02	<0.03	<0.03	<0.03	<0.03
DATE	TIME	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	
		COG	COG	COG	COG	COG	COG	COG	COG	COG	COG	
		18	19	19	22	24 + 27	24 + 27	26	26	28 + 31	28 + 31	
		WATER	SED	WATER	SED	WATER	SED	WATER	SED	WATER	SED	
		DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP	
DATE	TIME	REC	REC	REC	REC	REC	REC	REC	REC	REC	REC	
		(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	
		(19006)	(19068)	(19005)	(19076)	(19013)	(19071)	(19008)	(19073)	(19010)	(19074)	
		(19006)	(19068)	(19005)	(19076)	(19013)	(19071)	(19008)	(19073)	(19010)	(19074)	
		(19006)	(19068)	(19005)	(19076)	(19013)	(19071)	(19008)	(19073)	(19010)	(19074)	
APR 1995												
	13...	<0.03	<0.02	<0.02	<0.05	<0.05	<0.02	<0.02	<0.03	<0.03	<0.08	<0.08
	27...	<0.03	<0.02	<0.02	<0.05	<0.05	<0.02	<0.02	<0.03	<0.03	<0.08	<0.08
DATE	TIME	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	
		COG	COG	COG	COG	COG	COG	COG	COG	COG	COG	
		33	37 + 42	37 + 42	40	40	+64+71	+64+71	44	44	45	
		WATER	SED	WATER	SED	WATER	SED	WATER	SED	WATER	SED	
		DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP	
DATE	TIME	REC	REC	REC	REC	REC	REC	REC	REC	REC	REC	
		(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	
		(19012)	(19083)	(19020)	(19085)	(19022)	(19084)	(19021)	(19082)	(19019)	(19077)	
		(19012)	(19083)	(19020)	(19085)	(19022)	(19084)	(19021)	(19082)	(19019)	(19077)	
		(19012)	(19083)	(19020)	(19085)	(19022)	(19084)	(19021)	(19082)	(19019)	(19077)	
APR 1995												
	13...	<0.03	<0.03	<0.03	<0.03	<0.03	<0.04	<0.04	<0.02	<0.02	<0.02	<0.03
	27...	<0.03	<0.03	<0.03	<0.03	<0.03	<0.04	<0.04	<0.02	<0.02	<0.02	<0.03

* Equal-width increment (EWI) samples
** Multiple verticals

STREAMS TRIBUTARY TO LAKE MICHIGAN
04086416 MILWAUKEE RIVER AT HIGHWAY T NEAR CEDARBURG, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

	PCB COG 46 WATER DISS REC (NG/L) (19015)	PCB COG 47 + 48 SED SUSP REC (NG/L) (19081)	PCB COG 47 + 48 WATER DISS REC (NG/L) (19018)	PCB COG 49 SED SUSP REC (NG/L) (19080)	PCB COG 49 WATER DISS REC (NG/L) (19017)	PCB COG 52 SED SUSP REC (NG/L) (19079)	PCB COG 52 WATER DISS REC (NG/L) (19016)	PCB COG 56 + 60 SED SUSP REC (NG/L) (19090)	PCB COG 56 + 60 WATER DISS REC (NG/L) (19027)	PCB COG 66 + 95 SED SUSP REC (NG/L) (19088)	PCB COG 66 + 95 WATER DISS REC (NG/L) (19025)	PCB COG 70 + 76 SED SUSP REC (NG/L) (19087)
APR 1995												
13...	<0.03	<0.03	0.06	<0.02	<0.02	<0.02	0.03	<0.05	<0.05	<0.06	<0.05	<0.06
27...	<0.03	0.12	0.12	<0.02	<0.02	<0.02	0.03	<0.05	<0.05	<0.09	<0.05	<0.09
DATE	PCB COG 70 + 76 WATER DISS REC (NG/L) (19024)	PCB COG 74 SED SUSP REC (NG/L) (19086)	PCB COG 74 WATER DISS REC (NG/L) (19023)	PCB COG 77+110 SED SUSP REC (NG/L) (19098)	PCB COG 77+110 WATER DISS REC (NG/L) (19035)	PCB COG 82 SED SUSP REC (NG/L) (19099)	PCB COG 82 WATER DISS REC (NG/L) (19036)	PCB COG 84 + 92 SED SUSP REC (NG/L) (19091)	PCB COG 84 + 92 WATER DISS REC (NG/L) (19028)	PCB COG 85 SED SUSP REC (NG/L) (19096)	PCB COG 85 WATER DISS REC (NG/L) (19033)	
APR 1995												
13...	<0.04	<0.05	<0.03	<0.03	<0.03	<0.03	<0.03	<0.05	<0.05	<0.08	<0.03	
27...	<0.04	<0.06	<0.03	<0.04	<0.03	<0.03	<0.03	<0.05	<0.05	<0.09	<0.03	
DATE	PCB COG 87 SED SUSP REC (NG/L) (19095)	PCB COG 87 WATER DISS REC (NG/L) (19032)	PCB COG 91 SED SUSP REC (NG/L) (19089)	PCB COG 91 WATER DISS REC (NG/L) (19026)	PCB COG 97 SED SUSP REC (NG/L) (19094)	PCB COG 97 WATER DISS REC (NG/L) (19031)	PCB COG 99 SED SUSP REC (NG/L) (19093)	PCB COG 99 WATER DISS REC (NG/L) (19030)	PCB COG 101 SED SUSP REC (NG/L) (19092)	PCB COG 101 WATER DISS REC (NG/L) (19029)	PCB COG 118 SED SUSP REC (NG/L) (19103)	
APR 1995												
13...	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.02	<0.02	<0.02	<0.02	<0.03	
27...	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.02	<0.02	0.02	<0.02	<0.03	
DATE	PCB COG 118 WATER DISS REC (NG/L) (19040)	PCB COG 128 SED SUSP REC (NG/L) (99924)	PCB COG 128 WATER DISS REC (NG/L) (99922)	PCB COG 132+153 SED SUSP REC (NG/L) (19105)	PCB COG 132+153 WATER DISS REC (NG/L) (19042)	PCB COG 135+144 SED SUSP REC (NG/L) (19101)	PCB COG 135+144 WATER DISS REC (NG/L) (19038)	PCB COG 136 SED SUSP REC (NG/L) (19097)	PCB COG 136 WATER DISS REC (NG/L) (19034)	PCB COG 137+176 SED SUSP REC (NG/L) (19107)	PCB COG 137+176 WATER DISS REC (NG/L) (19044)	
APR 1995												
13...	<0.03	<0.035	<0.035	0.03	<0.03	<0.02	<0.02	<0.03	<0.03	<0.03	<0.03	
27...	<0.03	<0.035	<0.035	0.05	<0.03	<0.02	<0.02	<0.03	<0.03	<0.03	<0.03	
DATE	PCB COG 138+163 SED SUSP REC (NG/L) (19108)	PCB COG 138+163 WATER DISS REC (NG/L) (19045)	PCB COG 141 SED SUSP REC (NG/L) (19106)	PCB COG 141 WATER DISS REC (NG/L) (19043)	PCB COG 146 SED SUSP REC (NG/L) (19104)	PCB COG 146 WATER DISS REC (NG/L) (19041)	PCB COG 149 SED SUSP REC (NG/L) (19102)	PCB COG 149 WATER DISS REC (NG/L) (19039)	PCB COG 151 SED SUSP REC (NG/L) (19100)	PCB COG 151 WATER DISS REC (NG/L) (19037)	PCB COG 167 SED SUSP REC (NG/L) (99925)	
APR 1995												
13...	<0.03	<0.03	<0.02	<0.02	<0.03	<0.03	<0.02	<0.02	<0.02	<0.02	<0.080	
27...	0.05	<0.03	<0.02	<0.02	<0.03	<0.03	<0.02	<0.02	<0.02	<0.02	<0.080	
DATE	PCB COG 167 WATER DISS REC (NG/L) (99923)	PCB COG 170+190 SED SUSP REC (NG/L) (19119)	PCB COG 170+190 WATER DISS REC (NG/L) (19056)	PCB COG 171+202 SED SUSP REC (NG/L) (19115)	PCB COG 171+202 WATER DISS REC (NG/L) (19052)	PCB COG 172+197 SED SUSP REC (NG/L) (19116)	PCB COG 172+197 WATER DISS REC (NG/L) (19053)	PCB COG 174 SED SUSP REC (NG/L) (19113)	PCB COG 174 WATER DISS REC (NG/L) (19050)	PCB COG 177 SED SUSP REC (NG/L) (19114)	PCB COG 177 WATER DISS REC (NG/L) (19051)	
APR 1995												
13...	<0.080	<0.08	<0.08	<0.03	<0.03	<0.05	<0.05	<0.02	<0.02	<0.03	<0.03	
27...	<0.080	<0.08	<0.08	<0.03	<0.03	<0.05	<0.05	<0.02	<0.02	<0.03	<0.03	

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04086416 MILWAUKEE RIVER AT HIGHWAY T NEAR CEDARBURG, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB
	COG	COG	COG	COG	COG	COG	COG	COG	COG	COG	COG
	178	178	180	180	182+187	182+187	183	183	185	185	194
	SED	WATER	SED	WATER	SED	WATER	SED	WATER	SED	WATER	SED
	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP
	REC	REC	REC	REC	REC	REC	REC	REC	REC	REC	REC
	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)
	(19109)	(19046)	(19117)	(19054)	(19110)	(19047)	(19111)	(19048)	(19112)	(19049)	(19123)
APR 1995											
13...	<0.04	<0.04	<0.03	<0.03	<0.02	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03
27...	<0.04	<0.04	<0.04	<0.03	0.02	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03
DATE	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB
	COG	COG	COG	COG	COG	COG	COG	COG	COG	COG	COG
	194	195+208	195+208	196+203	196+203	199	199	201	201	206	206
	WATER	SED	WATER	SED	WATER	SED	WATER	SED	WATER	SED	WATER
	DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS
	REC	REC	REC	REC	REC	REC	REC	REC	REC	REC	REC
	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)
	(19060)	(19122)	(19059)	(19121)	(19058)	(19118)	(19055)	(19120)	(19057)	(19124)	(19061)
APR 1995											
13...	<0.03	<0.08	<0.08	<0.08	<0.08	<0.02	<0.02	<0.04	<0.04	<0.04	<0.04
27...	<0.03	<0.08	<0.08	<0.08	<0.08	<0.02	<0.02	<0.04	<0.04	<0.04	<0.04

STREAMS TRIBUTARY TO LAKE MICHIGAN
04086500 CEDAR CREEK NEAR CEDARBURG, WI

LOCATION.--Lat 43°19'23", long 87°58'43", in SE 1/4 SW 1/4 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.--Estimated daily discharges: Sept. 5-19, 22, 26-28, and ice-affected periods, Dec. 9-12, 20, 21, and Jan. 2 to Mar. 11. Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	17	47	35	40	31	140	162	46	17	9.4	202
2	24	17	37	34	40	31	118	134	35	14	10	110
3	19	18	36	31	41	29	104	112	31	12	11	90
4	18	19	39	30	38	29	89	98	27	11	12	56
5	18	22	36	28	38	29	72	88	26	11	12	45
6	18	64	37	27	34	29	66	78	25	11	11	44
7	17	80	40	27	31	29	63	70	26	13	11	40
8	17	55	47	27	29	28	72	70	31	13	14	37
9	20	44	48	27	28	28	77	105	33	11	22	34
10	20	42	45	30	28	31	74	171	32	11	38	30
11	18	34	42	37	28	100	73	236	28	9.6	30	25
12	18	31	41	45	26	290	160	210	24	9.1	20	24
13	17	28	33	80	24	271	197	157	22	9.0	16	22
14	16	32	33	110	22	174	152	154	20	8.7	17	20
15	16	38	34	130	22	126	113	137	20	8.8	29	18
16	15	35	37	120	23	107	95	115	18	10	29	17
17	16	32	41	110	25	93	99	124	17	17	60	19
18	16	30	42	100	28	80	151	138	16	14	59	20
19	17	28	36	70	30	72	260	108	15	11	42	21
20	16	25	36	66	35	96	249	83	14	11	57	20
21	16	29	40	60	37	139	203	65	14	11	51	22
22	17	32	43	54	37	125	176	55	14	11	35	24
23	19	26	44	54	40	99	149	51	13	11	31	22
24	18	29	58	50	41	83	125	55	13	12	28	18
25	17	26	71	47	42	70	118	55	13	12	22	17
26	17	25	69	44	40	61	110	50	13	11	20	16
27	17	36	54	43	37	61	230	45	14	11	47	15
28	17	80	55	43	34	74	300	81	15	11	141	15
29	17	73	53	41	---	110	274	98	19	11	198	15
30	17	55	49	40	---	171	211	79	20	9.9	228	14
31	17	---	39	36	---	172	---	62	---	8.7	210	---
TOTAL	547	1102	1362	1676	918	2868	4320	3246	654	351.8	1520.4	1072
MEAN	17.6	36.7	43.9	54.1	32.8	92.5	144	105	21.8	11.3	49.0	35.7
MAX	24	80	71	130	42	290	300	236	46	17	228	202
MIN	15	17	33	27	22	28	63	45	13	8.7	9.4	14
CFSM	.15	.31	.37	.45	.27	.77	1.20	.87	.18	.09	.41	.30
IN.	.17	.34	.42	.52	.28	.89	1.34	1.01	.20	.11	.47	.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1995, BY WATER YEAR (WY)

	MEAN	44.8	58.6	50.8	50.1	61.4	196	163	79.9	65.5	41.9	24.5	46.9
MAX	306	376	268	273	253	575	585	291	364	298	106	485	
(WY)	1955	1986	1992	1975	1984	1976	1993	1933	1940	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 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1930 - 1995
ANNUAL TOTAL	25182	19637.2	
ANNUAL MEAN	69.0	53.8	73.7
HIGHEST ANNUAL MEAN			168
LOWEST ANNUAL MEAN			13.5
HIGHEST DAILY MEAN	(a) 560	Feb 23	300
LOWEST DAILY MEAN	(b) 10	Sep 20, 21	8.7
ANNUAL SEVEN-DAY MINIMUM	(b) 11	Sep 17	9.5
INSTANTANEOUS PEAK FLOW			310
INSTANTANEOUS PEAK STAGE			7.00
INSTANTANEOUS LOW FLOW			8.0
ANNUAL RUNOFF (CFSM)	.57	.45	.61
ANNUAL RUNOFF (INCHES)	7.81	6.09	8.34
10 PERCENT EXCEEDS	194	125	164
50 PERCENT EXCEEDS	32	34	31
90 PERCENT EXCEEDS	17	13	7.0

(a) Ice affected

(b) Estimated

(c) From graph based on gage readings, backwater from ice

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04086525 CEDAR CREEK AT COLUMBIA AVENUE AT CEDARBURG, WI

LOCATION.--Lat 43°17'49", long 87°59'09" in SE 1/4 SE 1/4 sec.27, T.10 N., R.21 E., Ozaukee County, Hydrologic Unit 04040003, at Columbia Avenue dam, at Cedarburg.

DRAINAGE AREA.--121 mi².

PERIOD OF RECORD.--December 1994 to August 1995 (discontinued).

REMARKS.--Samples for chemical analysis were composite samples of water collected from four locations in the stream cross section. Water-quality analysis by Wisconsin State Laboratory of Hygiene and National Water-Quality Laboratory.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

		CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDE (MG/L) (00535)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	CHLORO- PHYLL A TRICHR. UNCORR. WHOLE TOTAL (UG/L) (32210)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)				
DATE		TIME											
DEC 1994													
**02...		1430	56	3	2	9.0	0.50	1.60	3	100			
*02...		1431	57	6	5	--	--	--	--	--			
JAN 1995													
**12...		1320	77	<5	<5	5.2	0.40	0.874	38	87			
*12...		1321	74	<5	<5	--	--	--	--	--			
**24...		1240	52	<5	<5	8.4	0.50	--	4	100			
*24...		1241	52	<5	<5	--	--	--	--	--			
MAR													
*16...		1045	45	4	2	--	--	--	--	--			
**16...		1730	45	4	2	9.7	0.60	7.10	8	83			
16...		1731	45.4	4	2	--	--	7.10	--	--			
**22...		1045	65	4	2	11	0.70	3.35	12	85			
*22...		1046	67	6	4	--	--	--	--	--			
APR													
**14...		0715	53	8	4	11	0.60	10.7	--	--			
*14...		0716	54	8	2	--	--	--	--	--			
**27...		1430	44	8	3	8.7	1.2	13.1	9	100			
*27...		1431	44	8	3	--	--	--	--	--			
JUN													
**28...		0700	76	8	--	7.9	1.1	5.41	9	86			
*28...		0701	76	8	--	--	--	--	--	--			
AUG													
**08...		1000	81	8	5	5.6	1.0	13.0	7	91			
*08...		1001	81	10	9	5.5	1.3	11.8	8	93			
*08...		1006	82	8	7	--	--	--	--	--			
*08...		1007	81	9	7	--	--	--	--	--			
**17...		1315	54	12	5	7.1	1.3	7.53	12	91			
*17...		1316	54	16	14	--	--	--	12	91			
DATE		TIME	PCB COG 5 + 8 SED SUSP REC (NG/L) (19067)	PCB COG 5 + 8 WATER DISS REC (NG/L) (19004)	PCB COG 6 SED SUSP REC (NG/L) (19066)	PCB COG 6 WATER DISS REC (NG/L) (19003)	PCB COG 7 SED SUSP REC (NG/L) (19065)	PCB COG 7 WATER DISS REC (NG/L) (19002)	PCB COG 16 + 32 SED SUSP REC (NG/L) (19072)	PCB COG 16 + 32 WATER DISS REC (NG/L) (19009)	PCB COG 17 SED SUSP REC (NG/L) (19070)	PCB COG 17 WATER DISS REC (NG/L) (19007)	PCB COG 18 SED SUSP REC (NG/L) (19069)
DEC 1994													
**02...		1430	<0.09	<0.09	<0.08	<0.08	<0.02	<0.02	<0.03	0.05	<0.03	0.08	<0.03
JAN 1995													
**12...		1320	<0.09	<0.09	<0.08	<0.08	<0.02	<0.02	<0.03	0.04	<0.03	0.06	<0.03
**24...		1240	<0.09	<0.09	<0.08	<0.08	<0.02	<0.02	<0.03	0.04	<0.03	0.04	<0.03
MAR													
**16...		1730	<0.09	0.36	<0.08	<0.08	<0.02	0.04	<0.03	0.15	<0.03	0.15	<0.03
**22...		1045	<0.09	<0.09	<0.08	<0.08	<0.02	<0.02	<0.03	<0.03	<0.03	0.04	<0.03
APR													
**14...		0715	<0.09	0.11	<0.08	<0.08	<0.02	<0.02	<0.03	0.06	0.03	0.06	<0.03
**27...		1430	<0.09	<0.09	<0.08	<0.08	<0.02	<0.02	<0.03	<0.04	<0.03	<0.06	<0.03
JUN													
**28...		0700	<0.09	1.2	<0.08	<0.08	<0.02	0.03	<0.03	0.35	0.14	1.2	<0.06
AUG													
**08...		1000	--	0.46	--	<0.08	--	<0.02	--	0.21	0.14	0.64	--
**08...		1001	--	0.52	--	<0.08	--	0.06	<0.04	0.22	0.12	0.66	--
**17...		1315	<0.09	0.20	<0.08	<0.08	<0.02	<0.02	<0.03	0.09	0.03	0.23	<0.03

* Equal-width increment (EWI) sample

** Multiple verticals

STREAMS TRIBUTARY TO LAKE MICHIGAN
04086525 CEDAR CREEK AT COLUMBIA AVENUE AT CEDARBURG, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PCB COG 18 WATER DISS REC (NG/L) (19006)	PCB COG 19 SED SUSP REC (NG/L) (19068)	PCB COG 19 WATER DISS REC (NG/L) (19005)	PCB COG 22 SED SUSP REC (NG/L) (19076)	PCB COG 22 WATER DISS REC (NG/L) (19013)	PCB COG 24 + 27 SED SUSP REC (NG/L) (19071)	PCB COG 24 + 27 WATER DISS REC (NG/L) (19008)	PCB COG 26 SED SUSP REC (NG/L) (19073)	PCB COG 26 WATER DISS REC (NG/L) (19010)	PCB COG 28 + 31 SED SUSP REC (NG/L) (19074)	PCB COG 28 + 31 WATER DISS REC (NG/L) (19011)	PCB COG 33 SED SUSP REC (NG/L) (19075)
DEC 1994												
02...	0.04	<0.02	0.04	<0.05	<0.05	<0.02	<0.02	<0.03	<0.03	<0.08	0.12	<0.03
JAN 1995												
12...	0.03	<0.02	<0.02	<0.05	<0.05	<0.02	<0.02	<0.03	<0.03	<0.08	0.11	<0.03
24...	0.03	<0.02	<0.02	<0.05	<0.05	<0.02	<0.02	<0.03	<0.03	<0.08	0.10	<0.03
MAR												
16...	0.13	<0.02	0.03	<0.05	0.07	<0.02	<0.07	<0.03	0.13	<0.08	0.43	<0.03
22...	<0.03	<0.02	<0.02	<0.05	<0.05	<0.02	<0.02	<0.03	<0.03	<0.08	<0.08	<0.03
APR												
14...	0.04	<0.02	<0.02	<0.05	<0.05	<0.02	<0.02	<0.03	<0.03	<0.08	0.14	<0.03
27...	<0.03	<0.02	0.03	<0.05	<0.05	<0.02	<0.02	<0.03	<0.03	<0.08	0.09	<0.03
JUN												
28...	0.25	0.03	0.23	<0.05	0.08	<0.02	0.13	<0.03	0.11	0.16	0.97	<0.17
AUG												
08...	0.20	--	0.41	--	0.07	<0.03	0.04	--	0.10	0.25	0.64	<0.15
08...	0.22	--	0.42	<0.09	0.07	<0.03	0.05	<0.03	0.11	0.23	0.66	<0.13
17...	0.08	<0.02	0.14	<0.05	<0.05	<0.02	<0.02	<0.03	<0.03	<0.08	0.25	<0.03
DATE	PCB COG 33 WATER DISS REC (NG/L) (19012)	PCB COG 37 + 42 SED SUSP REC (NG/L) (19083)	PCB COG 37 + 42 WATER DISS REC (NG/L) (19020)	PCB COG 40 SED SUSP REC (NG/L) (19085)	PCB COG 40 WATER DISS REC (NG/L) (19022)	PCB COG 41 +64+71 SED SUSP REC (NG/L) (19084)	PCB COG 41 +64+71 WATER DISS REC (NG/L) (19021)	PCB COG 44 SED SUSP REC (NG/L) (19082)	PCB COG 44 WATER DISS REC (NG/L) (19019)	PCB COG 45 SED SUSP REC (NG/L) (19077)	PCB COG 45 WATER DISS REC (NG/L) (19014)	PCB COG 46 SED SUSP REC (NG/L) (19078)
DEC 1994												
02...	<0.03	<0.03	<0.03	<0.03	<0.03	<0.04	<0.04	<0.02	0.03	<0.02	<0.02	<0.03
JAN 1995												
12...	<0.03	<0.03	<0.03	<0.03	<0.03	<0.04	<0.04	<0.02	0.03	<0.02	<0.02	<0.03
24...	<0.03	<0.03	<0.03	<0.03	<0.03	<0.04	<0.04	<0.02	0.03	<0.02	<0.02	<0.03
MAR												
16...	0.08	<0.03	0.07	<0.03	<0.03	<0.04	0.12	<0.02	0.16	<0.02	<0.02	<0.03
22...	<0.03	<0.03	<0.03	<0.03	<0.03	<0.04	<0.04	<0.02	<0.02	<0.02	<0.02	<0.03
APR												
14...	<0.04	<0.03	<0.03	<0.03	<0.03	<0.04	<0.04	<0.02	0.05	<0.02	<0.02	<0.03
27...	<0.03	<0.03	<0.03	<0.03	<0.03	<0.04	0.04	<0.02	0.04	<0.02	<0.02	<0.03
JUN												
28...	<0.55	0.05	0.10	<0.03	<0.03	<0.06	0.15	0.07	0.16	<0.02	0.05	<0.03
AUG												
08...	<0.38	0.07	0.09	<0.15	<0.04	0.10	<0.17	0.09	0.14	--	0.05	--
08...	<0.37	0.06	0.09	<0.12	<0.04	0.08	0.13	0.07	0.14	--	0.04	--
17...	<0.12	<0.03	<0.03	<0.03	<0.03	<0.05	0.05	<0.02	0.05	<0.02	<0.02	<0.03
DATE	PCB COG 46 WATER DISS REC (NG/L) (19015)	PCB COG 47 + 48 SED SUSP REC (NG/L) (19081)	PCB COG 47 + 48 WATER DISS REC (NG/L) (19018)	PCB COG 49 SED SUSP REC (NG/L) (19080)	PCB COG 49 WATER DISS REC (NG/L) (19017)	PCB COG 52 SED SUSP REC (NG/L) (19079)	PCB COG 52 WATER DISS REC (NG/L) (19016)	PCB COG 56 + 60 SED SUSP REC (NG/L) (19090)	PCB COG 56 + 60 WATER DISS REC (NG/L) (19027)	PCB COG 66 + 95 SED SUSP REC (NG/L) (19088)	PCB COG 66 + 95 WATER DISS REC (NG/L) (19025)	PCB COG 70 + 76 SED SUSP REC (NG/L) (19087)
DEC 1994												
02...	<0.03	<0.03	0.06	<0.02	0.03	<0.02	0.06	<0.05	<0.05	0.09	0.14	<0.04
JAN 1995												
12...	<0.03	<0.03	0.04	<0.02	0.03	<0.02	0.05	<0.05	<0.05	0.08	0.11	<0.04
24...	<0.03	0.05	0.24	<0.02	0.03	<0.02	0.05	<0.05	<0.05	0.06	0.09	<0.04
MAR												
16...	<0.03	0.12	0.77	<0.02	0.19	0.03	0.25	<0.05	0.09	0.13	0.32	<0.03
22...	<0.03	<0.03	0.26	<0.02	<0.02	<0.02	0.04	<0.05	<0.05	0.09	0.10	<0.04
APR												
14...	<0.03	0.07	0.22	0.05	0.04	0.05	0.07	<0.08	<0.05	0.20	0.14	<0.04
27...	<0.03	<0.05	0.23	0.03	0.03	0.03	0.08	<0.05	<0.05	<0.16	0.15	<0.08
JUN												
28...	<0.03	0.54	0.86	0.29	0.50	0.28	0.57	<0.05	0.08	0.97	0.93	0.09
AUG												
08...	<0.03	0.69	0.73	0.42	0.46	0.39	0.49	0.09	0.08	1.1	0.74	0.15
08...	<0.03	1.3	1.2	0.38	0.49	0.34	0.52	0.06	0.07	0.92	0.74	0.11
17...	<0.03	0.17	0.26	0.07	0.14	0.07	0.15	<0.05	<0.05	0.21	0.23	<0.04

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04086525 CEDAR CREEK AT COLUMBIA AVENUE AT CEDARBURG, WI

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PCB COG 70 + 76 WATER DISS REC (NG/L) (19024)	PCB COG 74 SED SUSP REC (NG/L) (19086)	PCB COG 74 WATER DISS REC (NG/L) (19023)	PCB COG 77+110 SED SUSP REC (NG/L) (19098)	PCB COG 77+110 WATER DISS REC (NG/L) (19035)	PCB COG 82 SED SUSP REC (NG/L) (19099)	PCB COG 82 WATER DISS REC (NG/L) (19036)	PCB COG 84 + 92 SED SUSP REC (NG/L) (19091)	PCB COG 84 + 92 WATER DISS REC (NG/L) (19028)	PCB COG 85 SED SUSP REC (NG/L) (19096)	PCB COG 85 WATER DISS REC (NG/L) (19033)
DEC 1994											
02...	<0.04	<0.03	<0.03	0.04	0.05	<0.03	<0.03	<0.05	<0.05	<0.03	<0.03
JAN 1995											
12...	<0.04	<0.03	<0.03	0.04	0.04	<0.03	<0.03	<0.05	<0.05	<0.32	<0.03
24...	0.04	<0.03	<0.03	<0.03	0.04	<0.03	<0.03	<0.05	<0.05	<0.05	<0.03
MAR											
16...	0.17	<0.03	0.04	0.06	0.20	<0.03	<0.03	<0.05	0.09	<0.05	<0.03
22...	<0.04	<0.03	<0.03	0.04	0.04	<0.03	<0.03	<0.05	<0.05	<0.03	<0.03
APR											
14...	0.05	<0.03	<0.03	0.09	0.06	<0.03	<0.03	<0.05	<0.05	<0.07	<0.03
27...	0.04	<0.05	<0.03	0.06	0.07	<0.03	<0.03	<0.05	<0.05	<0.10	<0.06
JUN											
28...	0.16	<0.03	<0.04	0.39	0.34	<0.03	<0.03	0.06	0.12	<0.19	<0.11
AUG											
08...	0.12	<0.15	0.04	0.52	0.24	<0.03	<0.03	0.11	0.08	<0.51	<0.14
08...	0.12	<0.16	0.04	0.40	0.23	--	<0.03	0.08	0.09	<0.44	<0.18
17...	0.05	<0.03	<0.03	0.10	0.08	<0.03	<0.03	<0.05	<0.05	<0.13	<0.08
DATE	PCB COG 87 SED SUSP REC (NG/L) (19095)	PCB COG 87 WATER DISS REC (NG/L) (19032)	PCB COG 91 SED SUSP REC (NG/L) (19089)	PCB COG 91 WATER DISS REC (NG/L) (19026)	PCB COG 97 SED SUSP REC (NG/L) (19094)	PCB COG 97 WATER DISS REC (NG/L) (19031)	PCB COG 99 SED SUSP REC (NG/L) (19093)	PCB COG 99 WATER DISS REC (NG/L) (19030)	PCB COG 101 SED SUSP REC (NG/L) (19092)	PCB COG 101 WATER DISS REC (NG/L) (19029)	PCB COG 118 SED SUSP REC (NG/L) (19103)
DEC 1994											
02...	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	<0.02	0.05	0.06	<0.03
JAN 1995											
12...	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.02	<0.02	0.05	0.04	<0.03
24...	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.02	<0.02	0.07	0.04	<0.03
MAR											
16...	<0.03	0.05	<0.03	0.04	<0.03	<0.03	0.03	0.06	0.07	0.14	<0.03
22...	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	<0.02	0.06	0.05	<0.03
APR											
14...	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.06	<0.02	0.14	0.06	<0.03
27...	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.02	<0.02	0.07	0.06	<0.03
JUN											
28...	0.05	0.06	0.18	0.15	<0.03	0.04	0.34	0.20	0.80	0.51	0.09
AUG											
08...	0.08	0.04	0.23	0.12	0.05	<0.03	0.47	0.16	1.0	0.41	0.13
08...	0.06	0.04	0.20	0.13	0.03	<0.03	0.33	0.15	0.78	0.40	0.11
17...	<0.03	<0.03	0.04	0.04	<0.03	<0.03	0.07	0.04	0.17	0.11	0.03
DATE	PCB COG 118 WATER DISS REC (NG/L) (19040)	PCB COG 128 SED SUSP REC (NG/L) (99924)	PCB COG 128 WATER DISS REC (NG/L) (99922)	PCB COG 132+153 SED SUSP REC (NG/L) (19105)	PCB COG 132+153 WATER DISS REC (NG/L) (19042)	PCB COG 135+144 SED SUSP REC (NG/L) (19101)	PCB COG 135+144 WATER DISS REC (NG/L) (19038)	PCB COG 136 SED SUSP REC (NG/L) (19097)	PCB COG 136 WATER DISS REC (NG/L) (19034)	PCB COG 137+176 SED SUSP REC (NG/L) (19107)	PCB COG 137+176 WATER DISS REC (NG/L) (19044)
DEC 1994											
02...	<0.03	<0.035	<0.035	0.24	0.09	0.03	<0.02	<0.03	<0.03	<0.03	<0.03
JAN 1995											
12...	<0.03	<0.035	<0.035	0.26	0.05	0.04	<0.02	<0.03	<0.03	<0.03	<0.03
24...	<0.03	<0.035	<0.035	0.22	0.04	0.06	<0.02	<0.03	<0.03	<0.03	<0.03
MAR											
16...	0.04	<0.035	<0.035	0.34	0.10	0.05	<0.02	<0.03	<0.03	<0.03	<0.03
22...	<0.03	<0.035	<0.035	0.31	0.08	0.05	<0.02	<0.03	<0.03	<0.03	<0.03
APR											
14...	<0.03	<0.035	<0.035	0.70	0.09	0.13	<0.02	0.04	<0.03	0.04	<0.03
27...	<0.03	<0.035	<0.035	0.36	0.07	0.05	<0.02	<0.03	<0.03	<0.03	<0.03
JUN											
28...	0.09	0.053	<0.035	3.3	1.2	0.68	0.34	0.23	0.12	0.18	0.04
AUG											
08...	0.05	0.082	<0.035	5.0	0.76	0.90	0.21	>0.21	>0.06	0.26	<0.03
08...	0.04	0.055	<0.035	3.4	0.70	0.64	0.19	>0.17	>0.05	0.16	<0.03
17...	<0.03	<0.035	<0.035	0.74	0.17	0.16	0.05	>0.04	<0.03	0.04	<0.03

STREAMS TRIBUTARY TO LAKE MICHIGAN
04086525 CEDAR CREEK AT COLUMBIA AVENUE AT CEDARBURG, WI

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PCB COG 138+163 SED SUSP REC (NG/L) (19108)	PCB COG 138+163 WATER DISS REC (NG/L) (19045)	PCB COG 141 SED SUSP REC (NG/L) (19106)	PCB COG 141 WATER DISS REC (NG/L) (19043)	PCB COG 146 SED SUSP REC (NG/L) (19104)	PCB COG 146 WATER DISS REC (NG/L) (19041)	PCB COG 149 SED SUSP REC (NG/L) (19102)	PCB COG 149 WATER DISS REC (NG/L) (19039)	PCB COG 151 SED SUSP REC (NG/L) (19100)	PCB COG 151 WATER DISS REC (NG/L) (19037)	PCB COG 167 SED SUSP REC (NG/L) (99925)
DEC 1994											
02...	0.12	0.04	0.04	<0.02	0.06	<0.03	0.13	0.06	0.06	0.03	<0.080
JAN 1995											
12...	0.14	<0.03	0.04	<0.02	0.06	<0.03	0.14	0.04	0.06	<0.02	<0.080
24...	0.15	<0.03	0.06	<0.02	0.10	<0.03	0.17	0.03	0.08	<0.02	<0.080
MAR											
16...	0.18	0.06	0.05	<0.02	0.09	<0.03	0.18	0.07	0.08	0.03	<0.080
22...	0.16	<0.03	<0.05	<0.02	0.07	<0.03	0.17	0.05	0.08	0.02	<0.080
APR											
14...	0.39	0.04	0.13	<0.02	0.21	<0.03	0.38	0.06	0.19	0.03	<0.080
27...	0.18	<0.03	0.05	<0.02	<0.07	<0.03	0.18	0.04	0.09	<0.02	<0.080
JUN											
28...	1.7	0.66	0.69	0.20	1.1	0.42	1.8	0.89	0.90	0.46	<0.080
AUG											
08...	2.5	0.36	0.95	0.11	1.6	0.24	2.8	0.54	1.3	0.29	<0.080
08...	1.7	0.34	0.64	0.10	1.1	0.22	1.9	0.52	0.92	0.26	<0.080
17...	0.38	0.09	0.15	0.03	0.24	0.05	0.46	0.14	0.22	0.07	<0.080

DATE	PCB COG 167 WATER DISS REC (NG/L) (99923)	PCB COG 170+190 SED SUSP REC (NG/L) (19119)	PCB COG 170+190 WATER DISS REC (NG/L) (19056)	PCB COG 171+202 SED SUSP REC (NG/L) (19115)	PCB COG 171+202 WATER DISS REC (NG/L) (19052)	PCB COG 172+197 SED SUSP REC (NG/L) (19116)	PCB COG 172+197 WATER DISS REC (NG/L) (19053)	PCB COG 174 SED SUSP REC (NG/L) (19113)	PCB COG 174 WATER DISS REC (NG/L) (19050)	PCB COG 177 SED SUSP REC (NG/L) (19114)	PCB COG 177 WATER DISS REC (NG/L) (19051)
DEC 1994											
02...	<0.080	0.12	<0.08	<0.03	<0.03	<0.05	<0.05	0.07	<0.02	0.05	<0.03
JAN 1995											
12...	<0.080	0.14	<0.08	<0.03	<0.03	<0.05	<0.05	0.08	<0.02	0.06	<0.03
24...	<0.080	0.12	<0.08	<0.03	<0.03	<0.05	<0.05	0.06	<0.02	0.08	<0.03
MAR											
16...	<0.080	0.17	<0.08	<0.03	<0.03	<0.05	<0.05	0.10	<0.02	0.08	<0.03
22...	<0.080	0.19	<0.08	0.03	<0.03	<0.05	<0.05	0.09	<0.02	0.07	<0.03
APR											
14...	<0.080	<0.60	<0.08	0.09	<0.03	0.07	<0.05	0.23	<0.02	0.20	<0.03
27...	<0.080	<0.25	<0.08	<0.03	<0.03	<0.05	<0.05	0.10	<0.02	0.08	<0.03
JUN											
28...	<0.080	1.9	0.36	0.47	0.09	0.33	0.07	1.1	0.28	1.1	0.25
AUG											
08...	<0.080	2.6	0.14	0.64	0.04	0.47	<0.05	1.7	0.13	1.5	0.11
08...	<0.080	1.7	0.14	0.43	0.04	0.30	<0.05	1.1	0.13	0.99	0.11
17...	<0.080	0.35	<0.08	0.09	<0.03	0.06	<0.05	0.24	0.03	0.22	<0.03

DATE	PCB COG 178 SED SUSP REC (NG/L) (19109)	PCB COG 178 WATER DISS REC (NG/L) (19046)	PCB COG 180 SED SUSP REC (NG/L) (19117)	PCB COG 180 WATER DISS REC (NG/L) (19054)	PCB COG 182+187 SED SUSP REC (NG/L) (19110)	PCB COG 182+187 WATER DISS REC (NG/L) (19047)	PCB COG 183 SED SUSP REC (NG/L) (19111)	PCB COG 183 WATER DISS REC (NG/L) (19048)	PCB COG 185 SED SUSP REC (NG/L) (19112)	PCB COG 185 WATER DISS REC (NG/L) (19049)	PCB COG 194 SED SUSP REC (NG/L) (19123)
DEC 1994											
02...	<0.04	<0.04	0.16	<0.03	0.10	<0.02	0.05	<0.03	<0.03	<0.03	0.03
JAN 1995											
12...	<0.04	<0.04	0.18	<0.03	0.12	<0.02	0.05	<0.03	<0.03	<0.03	0.04
24...	0.08	<0.04	0.16	<0.03	0.18	<0.02	0.05	<0.03	<0.03	<0.03	0.04
MAR											
16...	0.05	<0.04	0.23	<0.03	0.16	0.03	0.07	<0.03	<0.03	<0.03	0.06
22...	0.05	<0.04	0.25	<0.03	0.16	<0.02	0.08	<0.03	<0.03	<0.03	0.05
APR											
14...	0.14	<0.04	0.47	<0.03	0.38	0.05	0.18	<0.03	<0.03	<0.03	0.15
27...	0.05	<0.04	0.22	<0.03	0.16	<0.02	0.07	<0.03	<0.03	<0.03	0.05
JUN											
28...	0.87	0.21	2.6	0.53	2.2	0.56	0.83	0.18	0.18	0.04	0.75
AUG											
08...	1.1	0.10	3.6	0.25	3.2	0.28	1.2	0.08	0.27	<0.03	1.0
08...	0.77	0.10	2.4	0.24	2.1	0.26	0.75	0.08	0.18	<0.03	0.69
17...	0.18	<0.04	0.49	<0.07	0.48	0.06	0.16	<0.03	0.03	<0.03	0.13

STREAMS TRIBUTARY TO LAKE MICHIGAN
04086525 CEDAR CREEK AT COLUMBIA AVENUE AT CEDARBURG, WI

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PCB COG 194 WATER DISS REC (NG/L) (19060)	PCB COG 195+208 SED SUSP REC (NG/L) (19122)	PCB COG 195+208 WATER DISS REC (NG/L) (19059)	PCB COG 196+203 SED SUSP REC (NG/L) (19121)	PCB COG 196+203 WATER DISS REC (NG/L) (19058)	PCB COG 199 SED SUSP REC (NG/L) (19118)	PCB COG 199 WATER DISS REC (NG/L) (19055)	PCB COG 201 SED SUSP REC (NG/L) (19120)	PCB COG 201 WATER DISS REC (NG/L) (19057)	PCB COG 206 SED SUSP REC (NG/L) (19124)	PCB COG 206 WATER DISS REC (NG/L) (19061)
DEC 1994											
02...	<0.03	<0.08	<0.08	<0.08	<0.08	<0.02	<0.02	0.07	<0.04	<0.04	<0.04
JAN 1995											
12...	<0.03	<0.08	<0.08	<0.08	<0.08	<0.02	<0.02	0.07	<0.04	<0.04	<0.04
24...	<0.03	<0.08	<0.08	0.08	<0.08	<0.02	<0.02	0.08	<0.04	<0.04	<0.04
MAR											
16...	<0.03	<0.08	<0.08	0.11	<0.08	<0.02	<0.02	0.11	<0.04	<0.04	<0.04
22...	<0.03	<0.08	<0.08	0.12	<0.08	<0.02	<0.02	0.10	<0.04	<0.04	<0.04
APR											
14...	<0.03	0.19	<0.08	0.30	<0.08	<0.02	<0.02	0.27	<0.04	0.06	<0.04
27...	<0.03	<0.08	<0.08	0.10	<0.08	<0.02	<0.02	0.09	<0.04	<0.04	<0.04
JUN											
28...	0.08	0.98	0.09	1.6	0.18	0.09	<0.02	1.4	0.19	0.33	<0.04
AUG											
08...	<0.03	1.3	<0.08	2.2	<0.08	0.13	<0.02	1.9	0.07	0.42	<0.04
08...	<0.03	0.84	<0.08	1.4	<0.08	0.08	<0.02	1.4	0.07	0.29	<0.04
17...	<0.03	0.17	<0.08	0.29	<0.08	<0.02	<0.02	0.27	<0.04	0.06	<0.04

STREAMS TRIBUTARY TO LAKE MICHIGAN
04086528 CEDAR CREEK AT HIGHLAND ROAD AT CEDARBURG, WI

LOCATION.--Lat 43°18'01", long 87°58'31", in NE 1/4 SW 1/4 sec.26, T.10 N., R.21 E., Ozaukee County, Hydrologic Unit 04040003, 50 ft downstream of Highland Road dam, at Cedarburg.

DRAINAGE AREA.--123 mi².

PERIOD OF RECORD.--August 1994 to August 1995 (discontinued).

REMARKS.--Samples for chemical analysis were composite samples of water collected from four locations in the stream cross section. Water-quality analysis by Wisconsin State Laboratory of Hygiene and National Water-Quality Laboratory.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDED (MG/L) (00535)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00689)	CHLORO- PHYLL A TRICHR. UNCORR. WHOLE TOTAL (UG/L) (32210)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 1994									
**11...	1020	69	8	5	4.8	0.60	3.09	12	75
*11...	1021	--	10	5	--	--	--	--	--
JAN 1995									
**24...	1030	54	<5	<5	8.2	0.60	1.43	4	87
*24...	1031	54	<5	<5	--	--	--	--	--
MAR									
**16...	1510	45	6	3	9.4	0.80	5.27	7	87
*16...	1511	45	5	2	--	--	--	--	--
**22...	0700	65	5	2	11	0.60	3.94	8	80
*22...	0701	66	4	2	--	--	--	--	--
APR									
**14...	0940	54	8	4	11	0.70	5.75	10	87
*14...	0941	54	8	3	--	--	4.97	--	--
**14...	0942	54	8	4	--	--	9.70	26	94
*14...	0943	54	8	4	--	--	--	--	--
**27...	1220	47	12	4	9.0	0.70	11.4	21	99
27...	1221	46.7	10	4	--	--	--	--	--
*27...	1222	47	10	4	--	--	--	--	--
JUN									
27...	1510	--	20	9	--	--	--	--	--
**27...	1530	75	8	--	8.6	1.2	7.99	8	97
*27...	1531	76	10	--	--	--	--	--	--
30...	1200	--	19	10	--	--	--	--	--
JUL									
04...	1200	--	28	12	--	--	--	--	--
08...	1200	--	16	8	--	--	--	--	--
12...	1200	--	22	9	--	--	--	--	--
24...	1055	--	14	8	--	--	--	--	--
AUG									
02...	1200	--	17	7	--	--	--	--	--
05...	1200	--	10	5	--	--	--	--	--
**08...	1230	79	15	12	5.9	2.0	32.8	11	95
08...	1231	79	16	13	--	--	--	--	--
*08...	1232	79	15	12	--	--	--	--	--
09...	1200	--	24	10	--	--	--	--	--
09...	1201	--	18	6	--	--	--	--	--
09...	1230	--	18	11	--	--	--	--	--
09...	1231	--	12	4	--	--	--	--	--
10...	1200	--	14	7	--	--	--	--	--
14...	0615	--	12	6	--	--	--	--	--
16...	0345	--	10	4	--	--	--	--	--
**17...	0845	56	18	7	5.8	1.8	9.50	16	94
*17...	0846	55	18	10	--	--	--	--	--
17...	0847	--	14	5	--	--	--	--	--
27...	0415	--	20	10	--	--	--	--	--
27...	0615	--	18	8	--	--	--	--	--
28...	0300	--	24	8	--	--	--	--	--
28...	0730	--	26	10	--	--	--	--	--
28...	0915	--	32	11	--	--	--	--	--
28...	0930	--	28	9	--	--	--	--	--
28...	0945	--	20	7	--	--	--	--	--
30...	1200	--	32	10	--	--	--	--	--
SEP									
04...	1200	--	26	9	--	--	--	--	--

* Equal-width increment (EWI) sample
** Multiple verticals

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04086528 CEDAR CREEK AT HIGHLAND ROAD AT CEDARBURG, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	
		COG	COG	COG	COG	COG	COG	COG	COG	COG	COG	COG	
		5 + 8	5 + 8	6	6	7	7	16 + 32	16 + 32	17	17	18	
DATE	TIME	SED	WATER	SED	WATER	SED	WATER	SED	WATER	SED	WATER	SED	
		SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP	
		REC	REC	REC	REC	REC	REC	REC	REC	REC	REC	REC	
		(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	
		(19067)	(19004)	(19066)	(19003)	(19065)	(19002)	(19072)	(19009)	(19070)	(19007)	(19069)	
AUG 1994													
**11...		0745	--	2.9	--	0.42	--	0.08	0.16	1.5	0.15	2.1	0.09
**31...		0800	--	2.3	--	0.31	--	0.06	--	1.0	0.29	1.9	0.12
SEP													
**21...		1335	--	1.8	--	0.29	--	0.05	<0.03	0.74	0.09	1.3	0.05
DATE		PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB
		COG	COG	COG	COG	COG	COG	COG	COG	COG	COG	COG	COG
		18	19	19	22	22	24 + 27	24 + 27	26	26	28 + 31	28 + 31	33
DATE		WATER	SED	WATER	SED	WATER	SED	WATER	SED	WATER	SED	WATER	SED
		DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP
		REC	REC	REC	REC	REC	REC	REC	REC	REC	REC	REC	REC
		(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)
		(19006)	(19068)	(19005)	(19076)	(19013)	(19071)	(19008)	(19073)	(19010)	(19074)	(19011)	(19075)
AUG 1994													
11...		1.3	0.18	1.2	--	0.65	--	0.20	0.10	0.64	0.74	3.7	<0.80
31...		1.1	0.08	0.91	<0.17	0.30	--	0.13	0.15	0.60	1.0	3.0	<0.71
SEP													
21...		0.94	--	0.59	<0.05	0.21	--	0.10	0.05	0.55	0.45	2.6	<0.38
DATE		PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB
		COG	COG	COG	COG	COG	COG	COG	COG	COG	COG	COG	COG
		33	37 + 42	37 + 42	40	40	+64+71	+64+71	44	44	45	45	46
DATE		WATER	SED	WATER	SED	WATER	SED	WATER	SED	WATER	SED	WATER	SED
		DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP
		REC	REC	REC	REC	REC	REC	REC	REC	REC	REC	REC	REC
		(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)
		(19012)	(19083)	(19020)	(19085)	(19022)	(19084)	(19021)	(19082)	(19019)	(19077)	(19014)	(19078)
AUG 1994													
11...		<0.45	0.58	0.58	0.18	0.20	0.67	0.91	0.92	0.95	0.19	0.27	<0.10
31...		<1.3	0.41	0.46	0.09	0.12	0.57	0.79	0.45	0.56	<0.11	0.15	--
SEP													
21...		<1.1	0.19	0.37	0.04	0.10	0.25	0.71	0.21	0.41	<0.04	0.11	<0.03
DATE		PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB
		COG	COG	COG	COG	COG	COG	COG	COG	COG	COG	COG	COG
		46	47 + 48	47 + 48	49	49	52	52	56 + 60	56 + 60	66 + 95	66 + 95	70 + 76
DATE		WATER	SED	WATER	SED	WATER	SED	WATER	SED	WATER	SED	WATER	SED
		DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP
		REC	REC	REC	REC	REC	REC	REC	REC	REC	REC	REC	REC
		(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)
		(19015)	(19081)	(19018)	(19080)	(19017)	(19079)	(19016)	(19090)	(19027)	(19088)	(19025)	(19087)
AUG 1994													
11...		0.13	2.5	1.7	2.5	2.0	2.2	2.0	<0.30	0.49	6.8	3.0	0.43
31...		0.10	2.6	2.3	2.8	2.7	2.1	2.3	<0.15	0.28	4.7	2.7	0.52
SEP													
21...		0.10	1.3	1.9	1.6	2.4	1.2	2.0	<0.07	0.21	2.3	2.1	0.16
DATE		PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB
		COG	COG	COG	COG	COG	COG	COG	COG	COG	COG	COG	COG
		70 + 76	74	74	77+110	77+110	82	82	84 + 92	84 + 92	85	85	85
DATE		WATER	SED	WATER	SED	WATER	SED	WATER	SED	WATER	SED	WATER	SED
		DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP
		REC	REC	REC	REC	REC	REC	REC	REC	REC	REC	REC	REC
		(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)
		(19024)	(19086)	(19023)	(19098)	(19035)	(19099)	(19036)	(19091)	(19028)	(19096)	(19033)	
AUG 1994													
11...		0.81	>0.08	0.21	3.2	1.0	0.16	0.04	0.85	0.43	<0.77	<0.24	
31...		0.50	>0.12	0.12	2.4	0.95	0.07	<0.03	0.56	0.35	<0.78	<0.26	
SEP													
21...		0.36	<0.16	0.08	1.1	0.77	<0.03	<0.03	0.27	0.28	<0.39	<0.22	

** Multiple verticals

STREAMS TRIBUTARY TO LAKE MICHIGAN
04086528 CEDAR CREEK AT HIGHLAND ROAD AT CEDARBURG, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	PCB COG 87 SED SUSP REC (NG/L) (19095)	PCB COG 87 WATER DISS REC (NG/L) (19032)	PCB COG 91 SED SUSP REC (NG/L) (19089)	PCB COG 91 WATER DISS REC (NG/L) (19026)	PCB COG 97 SED SUSP REC (NG/L) (19094)	PCB COG 97 WATER DISS REC (NG/L) (19031)	PCB COG 99 SED SUSP REC (NG/L) (19093)	PCB COG 99 WATER DISS REC (NG/L) (19030)	PCB COG 101 SED SUSP REC (NG/L) (19092)	PCB COG 101 WATER DISS REC (NG/L) (19029)	PCB COG 118 SED SUSP REC (NG/L) (19103)
AUG 1994											
11...	0.58	0.19	1.0	0.44	0.41	0.13	2.0	0.55	5.6	1.5	0.84
31...	0.30	0.16	1.2	0.65	0.28	<0.07	1.9	0.65	4.8	1.7	0.68
SEP											
21...	0.14	0.10	0.65	0.55	0.12	0.08	0.88	0.55	2.3	1.4	0.30
DATE	PCB COG 118 WATER DISS REC (NG/L) (19040)	PCB COG 128 SED SUSP REC (NG/L) (99924)	PCB COG 128 WATER DISS REC (NG/L) (99922)	PCB COG 132+153 SED SUSP REC (NG/L) (19105)	PCB COG 132+153 WATER DISS REC (NG/L) (19042)	PCB COG 135+144 SED SUSP REC (NG/L) (19101)	PCB COG 135+144 WATER DISS REC (NG/L) (19038)	PCB COG 136 SED SUSP REC (NG/L) (19097)	PCB COG 136 WATER DISS REC (NG/L) (19034)	PCB COG 137+176 SED SUSP REC (NG/L) (19107)	PCB COG 137+176 WATER DISS REC (NG/L) (19044)
AUG 1994											
11...	0.18	0.580	0.048	27	2.3	4.6	0.59	1.4	0.28	1.3	0.07
31...	0.15	0.330	0.041	18	2.4	3.7	0.73	1.1	0.30	0.87	0.08
SEP											
21...	0.13	0.140	0.038	8.3	2.3	1.7	0.65	0.54	0.26	0.39	0.08
DATE	PCB COG 138+163 SED SUSP REC (NG/L) (19108)	PCB COG 138+163 WATER DISS REC (NG/L) (19045)	PCB COG 141 SED SUSP REC (NG/L) (19106)	PCB COG 141 WATER DISS REC (NG/L) (19043)	PCB COG 146 SED SUSP REC (NG/L) (19104)	PCB COG 146 WATER DISS REC (NG/L) (19041)	PCB COG 149 SED SUSP REC (NG/L) (19102)	PCB COG 149 WATER DISS REC (NG/L) (19039)	PCB COG 151 SED SUSP REC (NG/L) (19100)	PCB COG 151 WATER DISS REC (NG/L) (19037)	PCB COG 167 SED SUSP REC (NG/L) (99925)
AUG 1994											
11...	13	1.2	4.9	0.33	6.9	0.66	16	1.7	7.0	0.91	0.220
31...	9.3	1.3	3.8	0.41	5.7	0.85	12	1.9	5.9	1.1	0.140
SEP											
21...	4.2	1.3	1.7	0.40	2.6	0.80	5.6	1.7	2.5	0.93	<0.080
DATE	PCB COG 167 WATER DISS REC (NG/L) (99923)	PCB COG 170+190 SED SUSP REC (NG/L) (19119)	PCB COG 170+190 SED DISS REC (NG/L) (19056)	PCB COG 171+202 SED SUSP REC (NG/L) (19115)	PCB COG 171+202 SED DISS REC (NG/L) (19052)	PCB COG 172+197 SED SUSP REC (NG/L) (19116)	PCB COG 172+197 WATER DISS REC (NG/L) (19053)	PCB COG 174 SED SUSP REC (NG/L) (19113)	PCB COG 174 WATER DISS REC (NG/L) (19050)	PCB COG 177 SED SUSP REC (NG/L) (19114)	PCB COG 177 WATER DISS REC (NG/L) (19051)
AUG 1994											
11...	<0.080	14	0.52	3.0	0.12	2.4	0.09	8.5	0.47	6.8	0.35
31...	<0.080	8.9	0.57	2.2	0.14	1.7	0.11	6.2	0.50	4.6	0.42
SEP											
21...	<0.080	4.0	0.63	1.0	0.16	0.76	0.13	2.4	0.52	2.2	0.44
DATE	PCB COG 178 SED SUSP REC (NG/L) (19109)	PCB COG 178 WATER DISS REC (NG/L) (19046)	PCB COG 180 SED SUSP REC (NG/L) (19117)	PCB COG 180 WATER DISS REC (NG/L) (19054)	PCB COG 182+187 SED SUSP REC (NG/L) (19110)	PCB COG 182+187 WATER DISS REC (NG/L) (19047)	PCB COG 183 SED SUSP REC (NG/L) (19111)	PCB COG 183 WATER DISS REC (NG/L) (19048)	PCB COG 185 SED SUSP REC (NG/L) (19112)	PCB COG 185 WATER DISS REC (NG/L) (19049)	PCB COG 194 SED SUSP REC (NG/L) (19123)
AUG 1994											
11...	5.0	0.28	18	0.82	15	0.81	6.0	0.30	1.5	0.07	4.5
31...	4.3	0.40	14	0.92	13	1.0	3.9	0.32	0.92	0.07	3.9
SEP											
21...	2.0	0.43	5.9	0.98	5.6	1.1	1.8	0.35	0.41	0.08	1.6

04086528 CEDAR CREEK AT HIGHLAND ROAD AT CEDARBURG, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	PCB COG 194 WATER DISS REC (NG/L) (19060)	PCB COG 195+208 SED SUSP REC (NG/L) (19122)	PCB COG 195+208 WATER DISS REC (NG/L) (19059)	PCB COG 196+203 SED SUSP REC (NG/L) (19121)	PCB COG 196+203 WATER DISS REC (NG/L) (19058)	PCB COG 199 SED SUSP REC (NG/L) (19118)	PCB COG 199 WATER DISS REC (NG/L) (19055)	PCB COG 201 SED SUSP REC (NG/L) (19120)	PCB COG 201 WATER DISS REC (NG/L) (19057)	PCB COG 206 SED SUSP REC (NG/L) (19124)	PCB COG 206 WATER DISS REC (NG/L) (19061)
AUG 1994											
11...	0.09	5.9	0.12	9.9	0.22	0.65	<0.02	8.9	0.22	1.7	<0.04
31...	0.11	4.4	0.16	7.3	0.29	0.47	0.02	7.6	0.30	1.4	<0.04
SEP											
21...	0.15	2.0	0.19	3.4	0.36	0.22	0.02	3.0	0.36	0.64	0.04

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB
		COG	COG	COG	COG	COG	COG	COG	COG	COG	COG	COG
		5 + 8	5 + 8	6	6	7	7	16 + 32	16 + 32	17	17	18
		SED	WATER	SED	WATER	SED	WATER	SED	WATER	SED	WATER	SED
SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	
REC	REC	REC	REC	REC	REC	REC	REC	REC	REC	REC	REC	REC
(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)
(19067)	(19004)	(19066)	(19003)	(19065)	(19002)	(19072)	(19009)	(19070)	(19007)	(19069)		
OCT 1994												
**11...	1020	<0.09	0.76	<0.08	0.12	<0.02	<0.02	0.13	0.37	0.12	0.65	0.07
JAN 1995												
**24...	1030	<0.09	<0.09	<0.08	<0.08	<0.02	<0.02	<0.03	<0.03	<0.03	0.06	<0.03
MAR												
**16...	1510	<0.09	0.18	<0.08	<0.08	<0.02	<0.02	<0.03	0.11	0.03	0.08	<0.03
**22...	0700	<0.09	<0.09	<0.08	<0.08	<0.02	<0.02	<0.03	<0.03	0.03	0.06	<0.03
APR												
**14...	0940	<0.09	0.19	<0.08	<0.08	<0.02	<0.02	<0.03	0.11	0.06	0.17	0.04
**14...	0942	<0.09	0.15	<0.08	<0.08	<0.02	<0.02	<0.03	0.09	0.05	0.16	0.03
**27...	1220	<0.09	<0.09	<0.08	<0.08	<0.02	<0.02	<0.03	0.06	<0.03	0.11	<0.03
JUN												
**27...	1530	<0.09	2.1	<0.08	0.34	<0.02	0.05	<0.08	0.82	0.33	1.5	0.18
AUG												
**08...	1230	--	2.2	--	0.41	--	0.10	--	0.84	0.42	1.5	0.33
**17...	0845	--	1.1	--	0.18	--	0.03	--	0.55	0.12	0.90	--
DATE		PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB	PCB
		COG	COG	COG	COG	COG	COG	COG	COG	COG	COG	COG
		18	19	19	22	22	24 + 27	24 + 27	26	26	28 + 31	28 + 31
		WATER	SED	WATER	SED	WATER	SED	WATER	SED	WATER	SED	WATER
DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP	DISS	SUSP	
REC	REC	REC	REC	REC	REC	REC	REC	REC	REC	REC	REC	REC
(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)	(NG/L)
(19006)	(19068)	(19005)	(19076)	(19013)	(19071)	(19008)	(19073)	(19010)	(19074)	(19011)	(19075)	
OCT 1994												
11...	0.43	0.04	0.26	<0.05	0.10	<0.02	<0.06	0.07	0.26	0.64	1.4	<0.44
JAN 1995												
24...	0.03	<0.02	0.03	<0.05	<0.05	<0.02	<0.02	<0.03	<0.03	<0.08	0.10	<0.03
MAR												
16...	0.09	<0.02	0.06	<0.05	<0.05	<0.02	<0.02	<0.03	0.06	0.13	0.33	<0.06
22...	0.05	<0.02	<0.03	<0.05	<0.05	<0.02	<0.02	<0.03	<0.03	0.15	0.12	<0.05
APR												
14...	0.12	<0.02	0.06	<0.05	<0.05	<0.02	<0.02	<0.04	0.07	0.26	0.40	<0.13
14...	0.11	<0.02	0.07	<0.05	<0.05	<0.02	<0.02	<0.04	0.07	0.23	0.35	<0.12
27...	0.08	<0.02	0.06	<0.05	<0.05	<0.02	<0.02	<0.03	0.05	0.14	0.24	<0.08
JUN												
27...	1.1	0.03	0.16	<0.05	0.24	<0.02	0.15	0.12	0.58	0.92	2.8	<0.58
AUG												
08...	1.2	--	0.66	<0.36	0.24	--	0.14	0.31	0.68	1.9	3.1	<0.77
17...	0.62	--	0.41	<0.22	0.16	--	0.06	0.08	0.37	0.54	1.7	<0.42

** Multiple verticals

STREAMS TRIBUTARY TO LAKE MICHIGAN
04086528 CEDAR CREEK AT HIGHLAND ROAD AT CEDARBURG, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PCB COG 33 WATER DISS REC (NG/L) (19012)	PCB COG 37 + 42 SED SUSP REC (NG/L) (19083)	PCB COG 37 + 42 WATER DISS REC (NG/L) (19020)	PCB COG 40 SED SUSP REC (NG/L) (19085)	PCB COG 40 WATER DISS REC (NG/L) (19022)	PCB COG 41 +64+71 SED SUSP REC (NG/L) (19084)	PCB COG 41 +64+71 WATER DISS REC (NG/L) (19021)	PCB COG 44 SED SUSP REC (NG/L) (19082)	PCB COG 44 WATER DISS REC (NG/L) (19019)	PCB COG 45 SED SUSP REC (NG/L) (19077)	PCB COG 45 WATER DISS REC (NG/L) (19014)	PCB COG 46 SED SUSP REC (NG/L) (19078)
OCT 1994												
11...	<0.58	0.28	0.20	0.06	0.06	0.40	0.39	0.28	0.24	<0.08	0.06	0.04
JAN 1995												
24...	<0.03	<0.03	<0.03	<0.03	<0.03	<0.05	<0.04	<0.02	0.03	<0.02	<0.02	<0.03
MAR												
16...	<0.06	0.04	0.06	<0.03	<0.03	0.05	0.09	0.05	0.11	<0.02	<0.02	<0.03
22...	<0.03	0.05	<0.03	<0.05	<0.03	0.07	<0.04	0.05	0.03	<0.02	<0.02	<0.03
APR												
14...	<0.06	0.08	0.06	<0.12	<0.03	0.12	0.11	0.08	0.09	<0.02	<0.02	<0.03
14...	<0.06	0.07	0.06	<0.11	<0.03	0.10	0.10	0.07	0.07	<0.02	<0.02	<0.03
27...	<0.03	0.05	0.04	<0.07	<0.03	0.06	0.06	0.06	0.06	<0.02	<0.02	<0.03
JUN												
27...	<1.2	0.29	0.40	0.06	0.10	0.42	0.53	0.30	0.42	<0.06	0.13	0.04
AUG												
08...	<1.3	0.41	0.43	<0.68	0.15	0.70	0.86	0.40	0.47	--	0.13	--
17...	<0.72	0.26	0.26	<0.44	0.08	0.40	0.45	0.29	0.34	--	0.09	--

DATE	PCB COG 46 WATER DISS REC (NG/L) (19015)	PCB COG 47 + 48 SED SUSP REC (NG/L) (19081)	PCB COG 47 + 48 WATER DISS REC (NG/L) (19018)	PCB COG 49 SED SUSP REC (NG/L) (19080)	PCB COG 49 WATER DISS REC (NG/L) (19017)	PCB COG 52 SED SUSP REC (NG/L) (19079)	PCB COG 52 WATER DISS REC (NG/L) (19016)	PCB COG 56 + 60 SED SUSP REC (NG/L) (19090)	PCB COG 56 + 60 WATER DISS REC (NG/L) (19027)	PCB COG 66 + 95 SED SUSP REC (NG/L) (19088)	PCB COG 66 + 95 WATER DISS REC (NG/L) (19025)	PCB COG 70 + 76 SED SUSP REC (NG/L) (19087)
OCT 1994												
11...	0.04	1.6	1.1	1.8	1.4	1.3	1.2	<0.10	0.14	3.1	1.3	0.31
JAN 1995												
24...	<0.03	0.04	0.08	<0.02	0.08	<0.02	0.08	<0.05	<0.05	0.07	0.14	<0.04
MAR												
16...	<0.03	0.25	1.1	0.22	0.26	0.18	0.26	<0.05	<0.05	0.46	0.40	<0.19
22...	<0.03	0.24	0.09	0.26	0.09	0.20	0.09	0.05	<0.05	0.45	0.13	0.09
APR												
14...	<0.03	0.47	1.0	0.52	0.38	0.41	0.34	0.07	0.06	0.80	0.39	0.17
14...	<0.03	0.40	0.33	0.46	0.37	0.35	0.32	0.06	<0.05	0.70	0.36	0.10
27...	<0.03	0.26	0.18	0.30	0.21	0.25	0.20	<0.05	<0.05	0.58	0.24	0.16
JUN												
27...	0.09	2.1	2.2	2.5	2.6	1.8	2.3	0.18	0.24	3.9	2.5	0.37
AUG												
08...	0.12	4.6	3.4	3.6	3.1	2.7	2.7	0.30	0.23	4.0	2.3	0.57
17...	0.07	2.0	1.7	1.8	1.6	1.4	1.4	0.20	0.17	2.9	1.5	0.28

DATE	PCB COG 70 + 76 WATER DISS REC (NG/L) (19024)	PCB COG 74 SED SUSP REC (NG/L) (19086)	PCB COG 74 WATER DISS REC (NG/L) (19023)	PCB COG 77+110 SED SUSP REC (NG/L) (19098)	PCB COG 77+110 WATER DISS REC (NG/L) (19035)	PCB COG 82 SED SUSP REC (NG/L) (19099)	PCB COG 82 WATER DISS REC (NG/L) (19036)	PCB COG 84 + 92 SED SUSP REC (NG/L) (19091)	PCB COG 84 + 92 WATER DISS REC (NG/L) (19028)	PCB COG 85 SED SUSP REC (NG/L) (19096)	PCB COG 85 WATER DISS REC (NG/L) (19033)
OCT 1994											
11...	0.24	>0.08	0.05	1.7	0.51	0.05	<0.03	0.39	0.17	<0.59	<0.16
JAN 1995											
24...	0.04	<0.03	<0.03	0.04	0.05	<0.03	<0.03	<0.05	<0.05	<0.04	<0.06
MAR											
16...	0.11	<0.11	<0.03	0.26	0.16	<0.03	<0.03	0.07	0.07	<0.11	<0.07
22...	0.04	<0.08	<0.03	0.26	0.05	<0.03	<0.03	0.07	<0.05	<0.16	<0.04
APR											
14...	0.10	<0.09	<0.03	0.44	0.17	<0.03	<0.03	0.11	0.07	<0.22	<0.08
14...	0.08	<0.08	<0.03	0.40	0.15	<0.03	<0.03	0.10	0.06	<0.19	<0.07
27...	0.06	<0.11	<0.03	0.31	0.11	<0.03	<0.03	0.08	<0.05	<0.25	<0.07
JUN											
27...	0.44	<0.13	0.12	1.9	1.0	0.05	<0.03	0.35	0.37	<0.75	<0.35
AUG											
08...	0.38	<0.31	0.12	2.1	0.87	--	--	0.55	0.36	<0.76	<0.29
17...	0.29	<0.11	0.08	1.7	0.56	0.06	<0.03	0.44	0.25	<0.91	<0.24

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04086528 CEDAR CREEK AT HIGHLAND ROAD AT CEDARBURG, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PCB COG 87 SED SUSP REC (NG/L) (19095)	PCB COG 87 WATER DISS REC (NG/L) (19032)	PCB COG 91 SED SUSP REC (NG/L) (19089)	PCB COG 91 WATER DISS REC (NG/L) (19026)	PCB COG 97 SED SUSP REC (NG/L) (19094)	PCB COG 97 WATER DISS REC (NG/L) (19031)	PCB COG 99 SED SUSP REC (NG/L) (19093)	PCB COG 99 WATER DISS REC (NG/L) (19030)	PCB COG 101 SED SUSP REC (NG/L) (19092)	PCB COG 101 WATER DISS REC (NG/L) (19029)	PCB COG 118 SED SUSP REC (NG/L) (19103)
OCT 1994											
11...	0.21	0.07	0.81	0.34	0.20	0.05	1.3	0.36	2.8	0.93	0.45
JAN 1995											
24...	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	<0.02	0.06	0.07	<0.03
MAR											
16...	0.04	<0.03	0.07	0.05	<0.03	<0.03	0.19	0.08	0.41	0.21	0.08
22...	0.04	<0.03	0.14	<0.03	<0.03	<0.03	0.19	0.03	0.47	0.08	0.08
APR											
14...	0.05	0.04	0.29	0.10	0.04	<0.03	0.32	0.10	0.81	0.27	0.09
14...	0.05	<0.03	0.26	0.10	0.03	<0.03	0.30	0.09	0.74	0.25	0.08
27...	0.04	<0.03	0.16	0.05	<0.03	<0.03	0.21	0.05	0.52	0.15	0.07
JUN											
27...	<0.27	<0.15	1.3	0.73	0.16	0.12	1.5	0.66	3.8	1.6	0.42
AUG											
08...	0.28	0.12	1.6	0.75	0.22	0.10	1.8	0.60	4.2	1.6	0.66
17...	0.30	0.10	0.98	0.39	0.21	0.07	1.2	0.32	2.8	0.87	0.57
DATE	PCB COG 118 WATER DISS REC (NG/L) (19040)	PCB COG 128 SED SUSP REC (NG/L) (99924)	PCB COG 128 WATER DISS REC (NG/L) (99922)	PCB COG 132+153 SED SUSP REC (NG/L) (19105)	PCB COG 132+153 WATER DISS REC (NG/L) (19042)	PCB COG 135+144 SED SUSP REC (NG/L) (19101)	PCB COG 135+144 WATER DISS REC (NG/L) (19038)	PCB COG 136 SED SUSP REC (NG/L) (19097)	PCB COG 136 WATER DISS REC (NG/L) (19034)	PCB COG 137+176 SED SUSP REC (NG/L) (19107)	PCB COG 137+176 WATER DISS REC (NG/L) (19044)
OCT 1994											
11...	0.08	0.240	<0.035	13	1.4	2.8	0.40	0.80	0.16	0.58	0.04
JAN 1995											
24...	<0.03	<0.035	<0.035	0.25	0.09	0.04	<0.02	<0.03	<0.03	<0.03	<0.03
MAR											
16...	<0.03	0.036	<0.035	1.6	0.20	0.32	0.05	0.11	<0.03	0.08	<0.03
22...	<0.03	0.043	<0.035	1.9	0.11	0.38	0.03	<0.03	<0.03	0.10	<0.03
APR											
14...	<0.03	0.058	<0.035	2.9	0.34	0.64	0.10	0.24	0.04	0.16	<0.03
14...	<0.03	0.054	<0.035	2.7	0.36	0.60	0.10	0.22	0.04	0.16	<0.03
27...	<0.03	0.050	<0.035	2.1	0.18	0.42	0.05	0.14	<0.03	0.12	<0.03
JUN											
27...	0.23	0.210	0.069	11	3.4	2.7	1.1	0.98	0.32	0.62	0.14
AUG											
08...	0.17	0.250	0.038	14	2.5	3.3	0.82	0.96	0.26	0.78	0.08
17...	0.11	0.240	<0.035	10	1.2	2.4	0.39	0.64	0.12	0.60	0.03
DATE	PCB COG 138+163 SED SUSP REC (NG/L) (19108)	PCB COG 138+163 WATER DISS REC (NG/L) (19045)	PCB COG 141 SED SUSP REC (NG/L) (19106)	PCB COG 141 WATER DISS REC (NG/L) (19043)	PCB COG 146 SED SUSP REC (NG/L) (19104)	PCB COG 146 WATER DISS REC (NG/L) (19041)	PCB COG 149 SED SUSP REC (NG/L) (19102)	PCB COG 149 WATER DISS REC (NG/L) (19039)	PCB COG 151 SED SUSP REC (NG/L) (19100)	PCB COG 151 WATER DISS REC (NG/L) (19037)	PCB COG 167 SED SUSP REC6 (NG/L) (99925)
OCT 1994											
11...	6.0	0.72	2.4	0.21	3.7	0.47	8.6	1.1	4.0	0.59	0.100
JAN 1995											
24...	0.11	0.04	0.03	<0.02	0.06	<0.03	0.12	0.06	0.07	0.03	<0.080
MAR											
16...	0.89	0.09	0.33	<0.02	0.51	0.05	0.92	0.14	0.46	0.07	<0.080
22...	1.0	0.05	0.41	<0.02	0.58	<0.03	1.1	0.08	0.55	0.04	<0.080
APR											
14...	1.6	0.18	0.68	0.05	0.87	0.10	1.8	0.27	0.92	0.15	<0.080
14...	1.5	0.18	0.65	0.05	0.86	0.11	1.7	0.28	0.86	0.15	<0.080
27...	1.2	0.09	0.46	0.02	0.61	0.05	1.2	0.14	0.62	0.08	<0.080
JUN											
27...	6.1	1.9	2.5	0.62	3.8	1.2	7.3	2.6	3.7	1.4	<0.080
AUG											
08...	7.7	1.4	3.2	0.44	4.8	0.87	9.4	2.1	4.8	1.1	0.110
17...	5.9	0.61	2.3	0.18	3.4	0.37	6.7	1.0	3.4	0.55	0.092

STREAMS TRIBUTARY TO LAKE MICHIGAN
04086528 CEDAR CREEK AT HIGHLAND ROAD AT CEDARBURG, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PCB COG 167 WATER DISS REC (NG/L) (99923)	PCB COG 170+190 SED SUSP REC (NG/L) (19119)	PCB COG 170+190 WATER DISS REC (NG/L) (19056)	PCB COG 171+202 SED SUSP REC (NG/L) (19115)	PCB COG 171+202 WATER DISS REC (NG/L) (19052)	PCB COG 172+197 SED SUSP REC (NG/L) (19116)	PCB COG 172+197 WATER DISS REC (NG/L) (19053)	PCB COG 174 SED SUSP REC (NG/L) (19113)	PCB COG 174 WATER DISS REC (NG/L) (19050)	PCB COG 177 SED SUSP REC (NG/L) (19114)	PCB COG 177 WATER DISS REC (NG/L) (19051)
OCT 1994											
11...	<0.080	6.7	0.29	1.5	0.08	1.2	0.06	3.8	0.26	3.5	0.22
JAN 1995											
24...	<0.080	<0.33	<0.08	<0.03	<0.03	<0.05	<0.05	0.06	<0.02	0.05	<0.03
MAR											
16...	<0.080	0.91	<0.09	0.20	<0.03	0.16	<0.05	0.52	0.02	0.45	<0.03
22...	<0.080	1.1	<0.08	0.26	<0.03	0.19	<0.05	0.67	<0.02	0.59	<0.03
APR											
14...	<0.080	1.6	<0.08	0.42	<0.03	0.30	<0.05	1.0	0.06	0.92	0.05
14...	<0.080	1.6	<0.08	0.40	<0.03	0.28	<0.05	0.96	0.06	0.89	0.05
27...	<0.080	1.2	<0.08	0.30	<0.03	0.20	<0.05	0.75	0.03	0.66	<0.03
JUN											
27...	<0.080	5.9	1.0	1.6	0.29	1.1	0.20	3.9	0.87	3.6	0.72
AUG											
08...	--	7.3	0.60	1.9	0.17	1.4	0.12	4.7	0.53	4.2	0.44
17...	<0.080	6.0	0.23	1.5	0.06	1.1	<0.05	3.7	0.22	3.3	0.17

DATE	PCB COG 178 SED SUSP REC (NG/L) (19109)	PCB COG 178 WATER DISS REC (NG/L) (19046)	PCB COG 180 SED SUSP REC (NG/L) (19117)	PCB COG 180 WATER DISS REC (NG/L) (19054)	PCB COG 182+187 SED SUSP REC (NG/L) (19110)	PCB COG 182+187 WATER DISS REC (NG/L) (19047)	PCB COG 183 SED SUSP REC (NG/L) (19111)	PCB COG 183 WATER DISS REC (NG/L) (19048)	PCB COG 185 SED SUSP REC (NG/L) (19112)	PCB COG 185 WATER DISS REC (NG/L) (19049)	PCB COG 194 SED SUSP REC (NG/L) (19123)
OCT 1994											
11...	2.8	0.21	8.7	0.49	8.4	0.56	2.8	0.18	0.63	0.04	2.7
JAN 1995											
24...	<0.04	<0.04	0.15	<0.03	0.11	0.02	0.04	<0.03	<0.03	<0.03	<0.03
MAR											
16...	0.36	<0.04	1.2	0.05	1.1	0.05	0.39	<0.03	0.09	<0.03	0.35
22...	0.46	<0.04	1.5	0.04	1.3	0.03	0.46	<0.03	0.10	<0.03	0.43
APR											
14...	0.76	0.05	2.3	0.11	2.0	0.14	0.74	0.04	0.16	<0.03	0.68
14...	0.73	0.05	2.2	0.12	1.9	0.13	0.71	0.04	0.16	<0.03	0.66
27...	0.49	<0.04	1.7	0.05	1.4	0.05	0.54	<0.03	0.12	<0.03	0.45
JUN											
27...	3.0	0.64	8.8	1.5	7.9	1.7	2.9	0.58	0.62	0.12	2.4
AUG											
08...	3.9	0.43	9.8	0.96	9.6	1.1	3.5	0.35	0.74	0.08	2.9
17...	2.7	0.16	8.0	0.38	7.2	0.44	2.7	0.13	0.61	0.03	2.3

DATE	PCB COG 194 WATER DISS REC (NG/L) (19060)	PCB COG 195+208 SED SUSP REC (NG/L) (19122)	PCB COG 195+208 WATER DISS REC (NG/L) (19059)	PCB COG 196+203 SED SUSP REC (NG/L) (19121)	PCB COG 196+203 WATER DISS REC (NG/L) (19058)	PCB COG 199 SED SUSP REC (NG/L) (19118)	PCB COG 199 WATER DISS REC (NG/L) (19055)	PCB COG 201 SED SUSP REC (NG/L) (19120)	PCB COG 201 WATER DISS REC (NG/L) (19057)	PCB COG 206 SED SUSP REC (NG/L) (19124)	PCB COG 206 WATER DISS REC (NG/L) (19061)
OCT 1994											
11...	0.06	3.4	0.08	5.5	0.15	0.34	<0.02	4.9	0.16	1.1	<0.04
JAN 1995											
24...	<0.03	<0.08	<0.08	<0.08	<0.08	<0.02	<0.02	0.06	<0.04	<0.04	<0.04
MAR											
16...	<0.03	0.43	<0.08	0.73	<0.08	0.04	<0.02	0.64	<0.04	0.14	<0.04
22...	<0.03	0.55	<0.08	0.93	<0.08	0.05	<0.02	0.83	<0.04	0.18	<0.04
APR											
14...	<0.03	0.87	<0.08	1.4	<0.08	0.08	<0.02	1.3	<0.04	0.28	<0.04
14...	<0.03	0.83	<0.08	1.4	<0.08	0.08	<0.02	1.2	<0.04	0.27	<0.04
27...	<0.03	0.60	<0.08	1.0	<0.08	0.06	<0.02	0.88	<0.04	0.18	<0.04
JUN											
27...	0.23	3.2	0.32	5.4	0.57	0.33	0.04	4.9	0.58	1.0	0.08
AUG											
08...	0.14	3.7	0.20	6.3	0.34	0.39	0.02	5.7	0.34	1.2	0.04
17...	0.04	3.0	<0.08	5.2	0.12	0.31	<0.02	4.7	0.12	1.0	<0.04

STREAMS TRIBUTARY TO LAKE MICHIGAN
04086600 MILWAUKEE RIVER NEAR CEDARBURG, WI

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LOCATION.--Lat 43°16'49", long 87°56'34" (revised), in NW 1/4 NW 1/4 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.

WATER-DISCHARGE RECORDS

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.--Estimated daily discharges: July 20 to Aug. 8, and ice-affected period, Dec. 6 to Mar. 14. Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	110	249	150	100	140	648	593	237	125	110	698
2	157	102	265	120	100	140	607	501	200	93	120	549
3	182	104	243	90	98	130	565	429	175	76	110	454
4	195	106	226	80	96	130	516	379	153	76	140	378
5	180	126	210	74	94	130	452	338	143	73	130	333
6	159	226	200	72	90	120	405	313	129	71	100	297
7	130	304	190	70	90	120	364	289	141	94	94	273
8	126	251	180	74	92	120	361	271	146	98	90	253
9	107	230	190	80	94	130	373	365	175	91	257	239
10	106	215	190	90	100	140	367	546	175	81	237	207
11	100	190	180	98	96	170	380	785	157	76	281	186
12	111	178	170	120	90	300	561	741	134	73	237	161
13	107	167	160	160	94	500	761	623	114	69	208	154
14	102	160	170	330	90	800	714	584	103	71	262	139
15	101	156	180	310	94	965	633	517	90	92	269	125
16	104	143	180	350	100	863	560	464	85	104	409	118
17	112	143	180	320	110	756	508	421	77	130	511	123
18	110	154	180	250	110	642	648	390	72	127	435	135
19	135	142	180	190	120	550	950	331	70	91	347	138
20	147	127	170	160	130	522	940	271	63	80	328	147
21	139	135	180	150	140	591	857	227	59	78	333	189
22	138	142	180	150	150	634	797	211	58	76	274	208
23	138	129	190	140	160	586	697	213	60	84	243	208
24	140	127	190	140	160	529	595	214	60	100	219	189
25	150	134	200	130	160	464	542	219	60	130	206	177
26	154	129	200	130	160	398	509	208	59	120	183	165
27	149	189	210	120	150	370	793	203	58	100	353	162
28	140	275	210	120	150	384	956	285	59	110	748	138
29	134	306	190	110	---	438	857	338	93	96	1200	119
30	125	276	180	110	---	539	722	324	99	100	1170	96
31	124	---	180	100	---	641	---	285	---	100	930	---
TOTAL	4131	5176	6003	4588	3218	12942	18638	11878	3304	2885	10534	6758
MEAN	133	173	194	148	115	417	621	383	110	93.1	340	225
MAX	195	306	265	350	160	965	956	785	237	130	1200	698
MIN	100	102	160	70	90	120	361	203	58	69	90	96
CFSM	.22	.28	.32	.24	.19	.69	1.02	.63	.18	.15	.56	.37
IN.	.25	.32	.37	.28	.20	.79	1.14	.73	.20	.18	.65	.41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 1995, BY WATER YEAR (WY)

	MEAN	350	531	430	260	403	987	994	451	386	241	210	334
MAX	1157	1565	757	406	997	1793	2501	757	1232	767	349	1593	
(WY)	1987	1986	1983	1985	1984	1986	1993	1984	1984	1993	1987	1986	
MIN	133	173	120	120	115	417	453	219	89.5	69.7	69.5	108	
(WY)	1995	1995	1990	1994	1995	1995	1994	1988	1988	1988	1988	1994	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1982 - 1995	
ANNUAL TOTAL	105698		90055			
ANNUAL MEAN	290		247		462	
HIGHEST ANNUAL MEAN					720	
LOWEST ANNUAL MEAN					247	
HIGHEST DAILY MEAN	1880	Mar 23	1200	Aug 29	4630	Apr 21 1993
LOWEST DAILY MEAN	57	Jun 19	58	Jun 22, 27	42	Jul 9 1988
ANNUAL SEVEN-DAY MINIMUM	69	Jun 16	59	Jun 21	49	Jul 5 1988
INSTANTANEOUS PEAK FLOW			1330	Aug 29	(a) 4860	Mar 27 1989
INSTANTANEOUS PEAK STAGE			7.70	Aug 29	(b) 12.85	Mar 1 1985
INSTANTANEOUS LOW FLOW			52	Jun 25	42	Jul 9 1988
ANNUAL RUNOFF (CFSM)	.48		.41		.76	
ANNUAL RUNOFF (INCHES)	6.48		5.52		10.34	
10 PERCENT EXCEEDS	656		563		1020	
50 PERCENT EXCEEDS	161		160		283	
90 PERCENT EXCEEDS	104		90		118	

(a) Gage height, 12.21 ft
(b) Backwater from ice

STREAMS TRIBUTARY TO LAKE MICHIGAN
04086600 MILWAUKEE RIVER NEAR CEDARBURG, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1993 to August 1995 (discontinued).

REMARKS.--Samples for chemical analysis were composite samples of water collected from four locations in the stream cross section. Water-quality analysis by Wisconsin State Laboratory of Hygiene and National Water-Quality Laboratory. The Milwaukee Metropolitan Sewerage District and Wisconsin Department of Natural Resources maintain a continuous suspended solids record from an automatic point sampler.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDE (MG/L) (00535)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	CHLORO- PHYLL A TRICHR. UNCORR. WHOLE TOTAL (UG/L) (32210)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 1994											
**11...	1150	--	98	70	5	<5	6.0	0.30	5.49	6	63
*11...	1151	--	97	73	5	<5	--	--	--	--	--
JAN 1995											
**19...	1445	190	--	58	10	6	10	1.3	8.89	11	67
*19...	1446	190	--	59	8	6	--	--	--	--	--
MAR											
**17...	0740	--	774	31	18	6	9.0	1.2	15.5	17	95
*17...	0741	--	773	32	17	8	--	--	--	--	--
**21...	1430	--	626	41	6	3	8.8	0.60	10.1	14	78
APR											
**13...	1200	--	772	53	12	5	9.0	1.0	17.9	17	83
*13...	1201	--	772	53	12	6	--	--	--	--	--
**28...	1420	--	945	42	19	6	10	1.3	24.7	17	92
*28...	1421	--	945	42	20	6	--	--	--	--	--
AUG											
16...	0852	--	482	--	107	38	--	--	--	--	--
16...	1608	--	392	--	69	20	--	--	--	--	--
**16...	1615	--	392	59	79	26	8.2	7.3	116	60	90
*16...	1617	--	392	59	75	21	--	--	--	--	--
28...	1100	--	1120	--	185	47	--	--	--	--	--
28...	2153	--	1020	--	72	20	--	--	--	--	--
29...	1045	--	1250	--	78	23	--	--	--	--	--
29...	1719	--	1320	--	72	21	--	--	--	--	--
*29...	1731	--	1320	40	71	21	--	--	--	--	--
**29...	1732	--	1320	40	77	22	8.4	5.2	34.4	71	97

WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PCB COG 5 + 8 SED SUSP REC (NG/L) (19067)	PCB COG 5 + 8 WATER DISS REC (NG/L) (19004)	PCB COG 6 SED SUSP REC (NG/L) (19066)	PCB COG 6 WATER DISS REC (NG/L) (19003)	PCB COG 7 SED SUSP REC (NG/L) (19065)	PCB COG 7 WATER DISS REC (NG/L) (19002)	PCB COG 16 + 32 SED SUSP REC (NG/L) (19072)	PCB COG 16 + 32 WATER DISS REC (NG/L) (19009)	PCB COG 17 SED SUSP REC (NG/L) (19070)
JUL 1993												
**11...	1345	--	1870	0.19	0.72	<0.15	<0.12	<0.03	<0.05	0.08	0.23	0.07
AUG												
**03...	1000	--	300	<0.17	0.29	<0.08	<0.08	<0.02	<0.02	<0.07	0.12	<0.05
**24...	1515	--	250	0.10	0.15	<0.08	<0.08	<0.02	<0.02	<0.03	0.08	<0.03
SEP												
**14...	1520	580	--	0.32	<0.09	<0.08	<0.08	<0.02	<0.02	0.12	0.08	0.21
**28...	1415	--	614	0.10	0.26	<0.08	<0.09	<0.02	<0.04	<0.03	0.15	<0.03
		PCB COG 17	PCB COG 18	PCB COG 19	PCB COG 19	PCB COG 22	PCB COG 22	PCB COG 24 + 27	PCB COG 24 + 27	PCB COG 26	PCB COG 26	PCB COG 28 + 31
		WATER DISS REC (NG/L) (19007)	SED SUSP REC (NG/L) (19069)	WATER DISS REC (NG/L) (19006)	SED SUSP REC (NG/L) (19068)	WATER DISS REC (NG/L) (19005)	SED SUSP REC (NG/L) (19076)	WATER DISS REC (NG/L) (19013)	SED SUSP REC (NG/L) (19071)	WATER DISS REC (NG/L) (19008)	SED SUSP REC (NG/L) (19073)	WATER DISS REC (NG/L) (19010)
JUL 1993												
11...		0.19	<0.05	0.21	0.04	0.11	<0.13	0.16	<0.04	<0.06	<0.06	0.09
AUG												
03...		<0.10	<0.05	0.11	<0.02	0.05	<0.05	<0.12	<0.02	<0.04	<0.03	<0.07
24...		0.07	<0.03	0.08	<0.02	0.03	<0.05	0.08	<0.02	<0.02	<0.03	0.06
SEP												
14...		0.09	0.11	0.05	0.06	<0.02	0.19	0.11	<0.02	<0.02	0.15	0.06
28...		0.16	<0.03	0.12	<0.02	0.03	<0.05	<0.10	<0.02	<0.02	<0.03	<0.10

* Equal-width increment (EWI) sample

** Multiple verticals

STREAMS TRIBUTARY TO LAKE MICHIGAN
04086600 MILWAUKEE RIVER NEAR CEDARBURG, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	PCB COG 28 + 31 WATER DISS REC (NG/L) (19011)	PCB COG 33 SED SUSP REC (NG/L) (19075)	PCB COG 33 WATER DISS REC (NG/L) (19012)	PCB COG 37 + 42 SED SUSP REC (NG/L) (19083)	PCB COG 37 + 42 WATER DISS REC (NG/L) (19020)	PCB COG 40 SED SUSP REC (NG/L) (19085)	PCB COG 40 WATER DISS REC (NG/L) (19022)	PCB COG 41 +64+71 SED SUSP REC (NG/L) (19084)	PCB COG 41 +64+71 WATER DISS REC (NG/L) (19021)	PCB COG 44 SED SUSP REC (NG/L) (19082)	PCB COG 44 WATER DISS REC (NG/L) (19019)	PCB COG 45 SED SUSP REC (NG/L) (19077)	
	JUL 1993												
	11...	0.54	<0.15	0.16	0.10	0.08	<0.05	<0.05	0.08	>0.08	0.12	0.16	<0.06
	AUG												
03...	0.37	<0.05	0.12	<0.03	0.07	<0.03	<0.03	<0.04	>0.05	0.03	0.09	<0.02	
24...	0.26	<0.03	0.09	<0.03	0.06	<0.03	<0.03	<0.04	0.08	0.04	0.12	<0.02	
SEP													
14...	0.45	<0.34	<0.16	0.22	0.11	0.06	<0.03	0.27	0.14	0.30	0.14	0.06	
28...	0.39	<0.06	<0.14	0.04	0.06	<0.03	<0.03	<0.04	0.07	0.03	0.10	<0.02	
DATE	PCB COG 45 WATER DISS REC (NG/L) (19014)	PCB COG 46 SED SUSP REC (NG/L) (19078)	PCB COG 46 WATER DISS REC (NG/L) (19015)	PCB COG 47 + 48 SED SUSP REC (NG/L) (19081)	PCB COG 47 + 48 WATER DISS REC (NG/L) (19018)	PCB COG 49 SED SUSP REC (NG/L) (19080)	PCB COG 49 WATER DISS REC (NG/L) (19017)	PCB COG 52 SED SUSP REC (NG/L) (19079)	PCB COG 52 WATER DISS REC (NG/L) (19016)	PCB COG 56 + 60 SED SUSP REC (NG/L) (19090)	PCB COG 56 + 60 WATER DISS REC (NG/L) (19027)	PCB COG 66 + 95 SED SUSP REC (NG/L) (19088)	
	JUL 1993												
	11...	<0.04	<0.05	<0.05	0.21	0.25	0.26	0.16	0.27	0.20	<0.21	0.25	0.66
	AUG												
03...	<0.03	<0.03	<0.03	<0.03	0.10	0.03	0.12	0.05	0.13	<0.08	<0.15	0.13	
24...	<0.02	<0.03	<0.03	0.05	0.11	0.06	0.15	0.07	0.18	0.06	0.13	0.20	
SEP													
14...	0.04	<0.03	<0.03	0.65	0.24	0.79	0.31	0.70	0.29	<0.45	<0.14	1.6	
28...	<0.03	<0.03	<0.03	0.06	0.22	0.08	0.16	0.08	0.19	<0.12	<0.08	0.16	
DATE	PCB COG 66 + 95 WATER DISS REC (NG/L) (19025)	PCB COG 70 + 76 SED SUSP REC (NG/L) (19087)	PCB COG 70 + 76 WATER DISS REC (NG/L) (19024)	PCB COG 74 SED SUSP REC (NG/L) (19086)	PCB COG 74 WATER DISS REC (NG/L) (19023)	PCB COG 77+110 SED SUSP REC (NG/L) (19098)	PCB COG 77+110 WATER DISS REC (NG/L) (19035)	PCB COG 82 SED SUSP REC (NG/L) (19099)	PCB COG 82 WATER DISS REC (NG/L) (19036)	PCB COG 84 + 92 SED SUSP REC (NG/L) (19091)	PCB COG 84 + 92 WATER DISS REC (NG/L) (19028)	PCB COG 85 SED SUSP REC (NG/L) (19096)	
	JUL 1993												
	11...	0.40	0.21	0.17	<0.16	0.06	0.50	0.22	<0.09	<0.06	<0.32	0.12	<0.72
	AUG												
03...	0.24	0.06	0.09	<0.06	0.03	0.10	0.11	<0.03	<0.03	<0.09	<0.06	<0.11	
24...	0.38	<0.05	0.11	<0.34	<0.03	0.11	0.26	<0.03	<0.03	<0.05	0.14	<0.12	
SEP													
14...	0.50	<0.50	0.13	<0.52	0.06	0.98	0.27	<0.12	<0.03	<0.53	<0.16	<1.0	
28...	0.27	<0.06	0.08	<0.07	0.03	0.12	0.15	<0.03	<0.03	<0.13	<0.09	<0.08	
DATE	PCB COG 85 WATER DISS REC (NG/L) (19033)	PCB COG 87 SED SUSP REC (NG/L) (19095)	PCB COG 87 WATER DISS REC (NG/L) (19032)	PCB COG 91 SED SUSP REC (NG/L) (19089)	PCB COG 91 WATER DISS REC (NG/L) (19026)	PCB COG 97 SED SUSP REC (NG/L) (19094)	PCB COG 97 WATER DISS REC (NG/L) (19031)	PCB COG 99 SED SUSP REC (NG/L) (19093)	PCB COG 99 WATER DISS REC (NG/L) (19030)	PCB COG 101 SED SUSP REC (NG/L) (19092)	PCB COG 101 WATER DISS REC (NG/L) (19029)	PCB COG 118 SED SUSP REC (NG/L) (19103)	
	JUL 1993												
	11...	<0.07	0.15	0.08	0.09	<0.05	0.11	<0.05	0.26	0.05	0.45	0.14	0.22
	AUG												
03...	<0.10	<0.03	0.04	<0.03	<0.04	<0.03	<0.03	0.05	0.04	0.09	0.10	0.05	
24...	<0.08	<0.03	0.07	<0.03	0.04	<0.03	0.05	0.05	0.08	0.11	0.16	0.06	
SEP													
14...	<0.18	0.25	0.05	0.34	0.09	0.21	<0.04	0.65	0.14	1.4	0.32	0.58	
28...	<0.09	<0.03	<0.05	0.04	<0.04	<0.03	<0.03	0.07	0.06	0.14	0.14	0.06	
DATE	PCB COG 118 WATER DISS REC (NG/L) (19040)	PCB COG 128 SED SUSP REC (NG/L) (99924)	PCB COG 128 WATER DISS REC (NG/L) (99922)	PCB COG 132+153 SED SUSP REC (NG/L) (19105)	PCB COG 132+153 WATER DISS REC (NG/L) (19042)	PCB COG 135+144 SED SUSP REC (NG/L) (19101)	PCB COG 135+144 WATER DISS REC (NG/L) (19038)	PCB COG 136 SED SUSP REC (NG/L) (19097)	PCB COG 136 WATER DISS REC (NG/L) (19034)	PCB COG 137+176 SED SUSP REC (NG/L) (19107)	PCB COG 137+176 WATER DISS REC (NG/L) (19044)		
	JUL 1993												
	11...	0.10	0.080	<0.060	1.5	0.23	0.34	0.06	<0.36	<0.09	0.08	<0.05	
	AUG												
03...	0.04	<0.035	<0.035	0.33	0.15	0.06	0.03	<0.06	<0.05	<0.03	<0.03		
24...	0.07	<0.035	<0.035	0.36	0.19	0.08	0.04	<0.06	<0.04	<0.03	<0.03		
SEP													
14...	0.08	0.150	<0.035	5.1	0.54	1.1	0.14	<0.50	<0.09	0.30	<0.03		
28...	0.05	<0.035	<0.035	0.51	0.16	0.13	0.04	<0.04	<0.05	<0.03	<0.03		

STREAMS TRIBUTARY TO LAKE MICHIGAN
04086600 MILWAUKEE RIVER NEAR CEDARBURG, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	PCB COG 138+163 SED SUSP REC (NG/L) (19108)	PCB COG 138+163 WATER DISS REC (NG/L) (19045)	PCB COG 141 SED SUSP REC (NG/L) (19106)	PCB COG 141 WATER DISS REC (NG/L) (19043)	PCB COG 146 SED SUSP REC (NG/L) (19104)	PCB COG 146 WATER DISS REC (NG/L) (19041)	PCB COG 149 SED SUSP REC (NG/L) (19102)	PCB COG 149 WATER DISS REC (NG/L) (19039)	PCB COG 151 SED SUSP REC (NG/L) (19100)	PCB COG 151 WATER DISS REC (NG/L) (19037)	PCB COG 167 SED SUSP REC (NG/L) (99925)
JUL 1993											
11...	1.0	0.15	0.30	0.03	0.50	0.06	0.90	0.17	0.47	0.09	<0.150
AUG											
03...	0.22	0.09	0.06	<0.02	0.10	0.04	0.18	0.10	0.08	0.05	<0.080
24...	0.19	0.13	0.06	0.02	0.11	0.05	0.21	0.12	0.09	0.05	<0.080
SEP											
14...	3.2	0.31	0.95	0.08	1.9	0.18	3.0	0.42	1.5	0.20	<0.080
28...	0.28	0.09	0.10	0.02	0.17	0.05	0.35	0.12	0.17	0.06	<0.080
DATE	PCB COG 167 WATER DISS REC (NG/L) (99923)	PCB COG 170+190 SED SUSP REC (NG/L) (19119)	PCB COG 170+190 WATER DISS REC (NG/L) (19056)	PCB COG 171+202 SED SUSP REC (NG/L) (19115)	PCB COG 171+202 WATER DISS REC (NG/L) (19052)	PCB COG 172+197 SED SUSP REC (NG/L) (19116)	PCB COG 172+197 WATER DISS REC (NG/L) (19053)	PCB COG 174 SED SUSP REC (NG/L) (19113)	PCB COG 174 WATER DISS REC (NG/L) (19050)	PCB COG 177 SED SUSP REC (NG/L) (19114)	PCB COG 177 WATER DISS REC (NG/L) (19051)
JUL 1993											
11...	<0.150	0.93	<0.15	0.23	<0.06	0.19	<0.08	0.47	0.10	0.50	<0.06
AUG											
03...	<0.080	0.21	<0.16	0.06	<0.03	0.05	<0.05	0.11	0.03	0.12	<0.03
24...	<0.080	0.20	<0.09	0.06	<0.03	<0.05	<0.05	0.13	0.03	0.11	<0.03
SEP											
14...	<0.080	2.9	0.14	0.75	0.04	0.48	<0.05	1.7	0.11	1.6	0.09
28...	<0.080	0.27	<0.08	0.08	<0.03	0.05	<0.05	0.17	0.02	0.17	<0.03
DATE	PCB COG 178 SED SUSP REC (NG/L) (19109)	PCB COG 178 WATER DISS REC (NG/L) (19046)	PCB COG 180 SED SUSP REC (NG/L) (19117)	PCB COG 180 WATER DISS REC (NG/L) (19054)	PCB COG 182+187 SED SUSP REC (NG/L) (19110)	PCB COG 182+187 WATER DISS REC (NG/L) (19047)	PCB COG 183 SED SUSP REC (NG/L) (19111)	PCB COG 183 WATER DISS REC (NG/L) (19048)	PCB COG 185 SED SUSP REC (NG/L) (19112)	PCB COG 185 WATER DISS REC (NG/L) (19049)	PCB COG 194 SED SUSP REC (NG/L) (19123)
JUL 1993											
11...	0.35	<0.07	1.2	0.14	0.87	0.09	0.36	<0.07	0.10	<0.06	0.34
AUG											
03...	0.08	<0.04	0.28	0.07	0.21	0.06	0.09	<0.03	<0.03	<0.03	0.08
24...	0.10	<0.04	0.29	0.07	0.26	0.06	0.10	<0.03	<0.03	<0.03	0.08
SEP											
14...	1.3	0.08	3.9	0.21	3.5	0.22	1.3	0.07	0.28	<0.03	0.99
28...	0.13	<0.04	0.39	0.05	0.33	0.05	0.12	<0.03	<0.03	<0.03	0.10
DATE	PCB COG 194 WATER DISS REC (NG/L) (19060)	PCB COG 195+208 SED SUSP REC (NG/L) (19122)	PCB COG 195+208 WATER DISS REC (NG/L) (19059)	PCB COG 196+203 SED SUSP REC (NG/L) (19121)	PCB COG 196+203 WATER DISS REC (NG/L) (19058)	PCB COG 199 SED SUSP REC (NG/L) (19118)	PCB COG 199 WATER DISS REC (NG/L) (19055)	PCB COG 201 SED SUSP REC (NG/L) (19120)	PCB COG 201 WATER DISS REC (NG/L) (19057)	PCB COG 206 SED SUSP REC (NG/L) (19124)	PCB COG 206 WATER DISS REC (NG/L) (19061)
JUL 1993											
11...	<0.06	0.42	<0.15	0.69	<0.15	0.05	<0.04	0.62	<0.08	0.16	<0.08
AUG											
03...	<0.03	0.10	<0.08	0.16	<0.08	<0.02	<0.02	0.16	<0.04	0.04	<0.04
24...	<0.03	0.11	<0.08	0.19	<0.08	<0.02	<0.02	0.18	<0.04	0.05	<0.04
SEP											
14...	<0.03	1.3	<0.08	2.3	<0.08	0.15	<0.02	2.1	0.07	0.41	<0.04
28...	<0.03	0.12	<0.08	0.22	<0.08	<0.02	<0.02	0.20	<0.04	<0.04	<0.04

STREAMS TRIBUTARY TO LAKE MICHIGAN
04086600 MILWAUKEE RIVER NEAR CEDARBURG, WI--CONTINUED

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (000060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (000061)	PCB COG 5 + 8 SED SUSP REC (NG/L) (19067)	PCB COG 5 + 8 WATER DISS REC (NG/L) (19004)	PCB COG 6 SED SUSP REC (NG/L) (19066)	PCB COG 6 WATER DISS REC (NG/L) (19003)	PCB COG 7 SED SUSP REC (NG/L) (19065)	PCB COG 7 WATER DISS REC (NG/L) (19002)	PCB COG 16 + 32 SED SUSP REC (NG/L) (19072)	PCB COG 16 + 32 WATER DISS REC (NG/L) (19009)	PCB COG 17 SED SUSP REC (NG/L) (19070)
OCT 1993												
**20...	0915	--	290	<0.10	<0.22	<0.08	<0.08	<0.02	<0.02	<0.03	<0.09	<0.04
NOV												
**16...	0745	--	322	<0.09	0.17	<0.08	<0.08	<0.02	<0.02	<0.03	0.07	<0.03
DEC												
**14...	1445	--	265	<0.09	0.19	<0.08	<0.08	<0.02	<0.02	<0.03	0.08	<0.03
FEB 1994												
**16...	0745	110	--	<0.09	0.26	<0.08	<0.08	<0.02	<0.02	<0.03	0.05	<0.03
MAR												
**10...	1200	1300	--	<0.09	0.13	<0.08	<0.08	<0.02	<0.02	0.23	0.06	0.07
**16...	0900	1100	--	<0.09	0.17	<0.08	<0.08	<0.02	<0.02	0.04	0.11	<0.03
MAY												
**17...	1600	--	250	<0.09	0.19	<0.08	<0.08	<0.02	<0.02	<0.03	0.06	<0.03
JUN												
**22...	1400	--	67	<0.09	0.16	<0.08	<0.08	<0.02	<0.02	0.05	<0.10	<0.06
JUL												
**07...	1430	--	224	<0.09	0.29	<0.08	<0.08	<0.02	<0.02	0.04	0.10	0.15
**08...	1515	--	410	--	1.0	--	0.10	--	<0.03	--	0.45	0.14

DATE	PCB COG 17 WATER DISS REC (NG/L) (19007)	PCB COG 18 SED SUSP REC (NG/L) (19069)	PCB COG 18 WATER DISS REC (NG/L) (19006)	PCB COG 19 SED SUSP REC (NG/L) (19068)	PCB COG 19 WATER DISS REC (NG/L) (19005)	PCB COG 22 SED SUSP REC (NG/L) (19076)	PCB COG 22 WATER DISS REC (NG/L) (19013)	PCB COG 24 + 27 SED SUSP REC (NG/L) (19071)	PCB COG 24 + 27 WATER DISS REC (NG/L) (19008)	PCB COG 26 SED SUSP REC (NG/L) (19073)	PCB COG 26 WATER DISS REC (NG/L) (19010)	PCB COG 28 + 31 SED SUSP REC (NG/L) (19074)
OCT 1993												
20...	<0.09	<0.06	<0.09	<0.02	0.03	<0.05	<0.05	<0.02	<0.02	<0.03	<0.05	<0.16
NOV												
16...	0.08	<0.03	0.07	<0.02	0.03	<0.05	<0.05	<0.02	<0.02	<0.03	<0.03	0.09
DEC												
14...	0.06	<0.03	0.07	<0.02	<0.02	<0.05	<0.05	<0.02	<0.02	<0.03	0.04	<0.08
FEB 1994												
16...	0.07	<0.03	0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.02	<0.03	<0.03	<0.08
MAR												
10...	0.05	0.06	0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.02	0.05	<0.03	0.28
16...	0.06	0.03	0.10	<0.02	<0.02	<0.05	0.07	<0.02	<0.02	<0.03	0.06	0.12
MAY												
17...	0.07	<0.03	0.07	<0.02	<0.02	<0.05	<0.05	<0.02	<0.02	<0.03	<0.03	<0.08
JUN												
22...	<0.06	<0.06	0.06	<0.02	<0.02	<0.05	<0.05	<0.02	<0.03	<0.06	0.03	0.19
JUL												
07...	0.11	0.10	0.11	0.03	0.09	0.09	0.06	<0.02	<0.02	0.07	0.06	0.82
08...	0.48	0.07	0.47	0.04	0.49	--	0.23	<0.02	0.09	0.08	0.23	0.77

DATE	PCB COG 28 + 31 WATER DISS REC (NG/L) (19011)	PCB COG 33 SED SUSP REC (NG/L) (19075)	PCB COG 33 WATER DISS REC (NG/L) (19012)	PCB COG 37 + 42 SED SUSP REC (NG/L) (19083)	PCB COG 37 + 42 WATER DISS REC (NG/L) (19020)	PCB COG 40 SED SUSP REC (NG/L) (19085)	PCB COG 40 WATER DISS REC (NG/L) (19022)	PCB COG 41 +64+71 SED SUSP REC (NG/L) (19084)	PCB COG 41 +64+71 WATER DISS REC (NG/L) (19021)	PCB COG 44 SED SUSP REC (NG/L) (19082)	PCB COG 44 WATER DISS REC (NG/L) (19019)	PCB COG 45 SED SUSP REC (NG/L) (19077)
OCT 1993												
20...	0.21	<0.05	0.07	<0.03	<0.05	<0.03	<0.03	<0.04	0.04	<0.03	0.06	<0.02
NOV												
16...	0.20	<0.03	<0.03	<0.03	0.04	<0.03	<0.03	<0.04	0.05	0.03	0.07	<0.02
DEC												
14...	0.22	<0.03	<0.06	<0.03	0.04	<0.03	<0.03	<0.04	0.05	<0.02	0.07	<0.02
FEB 1994												
16...	0.16	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.04	0.04	<0.02	0.04	<0.02
MAR												
10...	0.16	<0.07	<0.03	0.07	<0.03	<0.03	<0.03	0.11	0.04	0.10	0.05	<0.02
16...	0.30	<0.03	<0.06	<0.03	0.07	<0.03	<0.03	<0.04	0.07	0.04	0.09	<0.02
MAY												
17...	0.20	<0.03	<0.03	<0.03	0.04	<0.03	<0.03	<0.04	0.05	0.03	0.06	<0.02
JUN												
22...	0.37	<0.07	<0.08	0.06	0.06	<0.03	<0.03	0.09	0.10	0.08	0.09	<0.02
JUL												
07...	0.52	<0.07	<0.07	0.19	0.09	0.05	<0.03	0.29	0.14	0.24	0.13	0.03
08...	1.7	<0.29	<0.16	0.30	0.27	0.07	0.09	0.43	0.44	0.40	0.41	0.06

** Multiple verticals

STREAMS TRIBUTARY TO LAKE MICHIGAN
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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	PCB COG 45 WATER DISS REC (NG/L) (19014)	PCB COG 46 SED SUSP REC (NG/L) (19078)	PCB COG 46 WATER DISS REC (NG/L) (19015)	PCB COG 47 + 48 SED SUSP REC (NG/L) (19081)	PCB COG 47 + 48 WATER DISS REC (NG/L) (19018)	PCB COG 49 SED SUSP REC (NG/L) (19080)	PCB COG 49 WATER DISS REC (NG/L) (19017)	PCB COG 52 SED SUSP REC (NG/L) (19079)	PCB COG 52 WATER DISS REC (NG/L) (19016)	PCB COG 56 + 60 SED SUSP REC (NG/L) (19090)	PCB COG 56 + 60 WATER DISS REC (NG/L) (19027)	PCB COG 66 + 95 SED SUSP REC (NG/L) (19088)
OCT 1993												
20...	<0.02	<0.03	<0.03	0.04	0.08	0.04	0.09	0.05	0.11	<0.05	<0.05	<0.08
NOV												
16...	<0.02	<0.03	<0.03	0.07	0.09	0.07	0.12	0.06	0.14	<0.05	<0.05	<0.05
DEC												
14...	<0.02	<0.03	<0.03	0.04	0.19	0.03	0.08	0.04	0.11	<0.05	<0.05	<0.07
FEB 1994												
16...	<0.02	<0.03	<0.03	<0.03	0.05	0.03	0.05	0.03	0.06	<0.05	<0.05	0.08
MAR												
10...	<0.02	<0.03	<0.03	0.23	0.06	0.23	0.07	0.20	0.09	0.12	<0.05	0.51
16...	<0.02	<0.03	<0.03	0.05	0.07	0.05	0.08	0.05	0.10	<0.05	0.06	0.11
MAY												
17...	<0.02	<0.03	<0.03	0.08	0.26	0.07	0.09	0.07	0.10	<0.05	<0.05	>0.07
JUN												
22...	<0.02	<0.05	<0.03	0.14	0.20	0.14	0.18	0.14	0.19	0.09	0.08	0.30
JUL												
07...	<0.03	<0.03	<0.03	0.66	0.26	0.64	0.25	0.56	0.27	0.15	0.09	0.58
08...	0.09	<0.03	0.05	1.2	0.84	1.2	0.91	1.0	0.91	0.23	0.27	1.7
DATE	PCB COG 66 + 95 WATER DISS REC (NG/L) (19025)	PCB COG 70 + 76 SED SUSP REC (NG/L) (19087)	PCB COG 70 + 76 WATER DISS REC (NG/L) (19024)	PCB COG 74 SED SUSP REC (NG/L) (19086)	PCB COG 74 WATER DISS REC (NG/L) (19023)	PCB COG 77+110 SED SUSP REC (NG/L) (19098)	PCB COG 77+110 WATER DISS REC (NG/L) (19035)	PCB COG 82 SED SUSP REC (NG/L) (19099)	PCB COG 82 WATER DISS REC (NG/L) (19036)	PCB COG 84 + 92 SED SUSP REC (NG/L) (19091)	PCB COG 84 + 92 WATER DISS REC (NG/L) (19028)	PCB COG 85 SED SUSP REC (NG/L) (19096)
OCT 1993												
20...	0.21	<0.10	<0.07	<0.09	<0.03	0.06	0.09	<0.03	<0.03	<0.05	<0.05	<0.08
NOV												
16...	<0.22	<0.04	0.10	0.15	<0.03	0.08	0.20	<0.03	<0.03	<0.05	0.07	<0.04
DEC												
14...	<0.07	<0.04	0.08	<0.05	<0.03	0.05	0.08	<0.03	<0.03	<0.05	<0.05	<0.03
FEB 1994												
16...	0.10	<0.04	0.05	<0.03	<0.03	0.04	0.05	<0.03	<0.03	<0.05	<0.05	<0.03
MAR												
10...	0.14	0.18	0.06	0.07	<0.03	0.35	0.08	<0.03	<0.03	0.07	<0.05	<0.24
16...	0.12	0.07	0.10	0.03	<0.03	0.07	0.08	<0.03	<0.03	<0.05	<0.05	<0.07
MAY												
17...	>0.08	<0.06	0.08	<0.04	<0.03	0.09	0.08	<0.03	<0.03	<0.05	<0.05	<0.04
JUN												
22...	0.27	0.15	0.13	<0.14	0.05	0.22	0.14	<0.03	<0.03	0.05	<0.05	<0.14
JUL												
07...	0.30	0.50	0.17	<0.19	0.05	0.68	0.18	0.04	<0.03	0.17	0.06	<0.45
08...	0.99	0.59	0.45	<0.28	0.13	1.4	0.50	0.07	<0.03	0.34	0.20	<0.81
DATE	PCB COG 85 WATER DISS REC (NG/L) (19033)	PCB COG 87 SED SUSP REC (NG/L) (19095)	PCB COG 87 WATER DISS REC (NG/L) (19032)	PCB COG 91 SED SUSP REC (NG/L) (19089)	PCB COG 91 WATER DISS REC (NG/L) (19026)	PCB COG 97 SED SUSP REC (NG/L) (19094)	PCB COG 97 WATER DISS REC (NG/L) (19031)	PCB COG 99 SED SUSP REC (NG/L) (19093)	PCB COG 99 WATER DISS REC (NG/L) (19030)	PCB COG 101 SED SUSP REC (NG/L) (19092)	PCB COG 101 WATER DISS REC (NG/L) (19029)	PCB COG 118 SED SUSP REC (NG/L) (19103)
OCT 1993												
20...	<0.10	<0.03	<0.05	<0.03	<0.03	<0.03	<0.03	<0.02	0.04	0.08	0.10	0.04
NOV												
16...	<0.03	<0.03	0.07	<0.03	0.04	<0.03	0.04	0.05	0.06	0.09	0.15	<0.03
DEC												
14...	<0.04	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	0.03	0.06	0.07	<0.03
FEB 1994												
16...	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.02	<0.02	0.05	0.04	<0.03
MAR												
10...	<0.04	0.07	<0.03	0.11	<0.03	0.05	<0.03	0.20	0.03	0.38	0.06	0.14
16...	<0.05	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.05	0.02	0.05	0.05	0.04
MAY												
17...	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.05	0.03	0.11	0.07	0.03
JUN												
22...	<0.07	0.06	<0.03	0.08	0.05	<0.03	<0.03	0.14	0.08	0.26	0.17	0.12
JUL												
07...	<0.03	0.14	0.04	0.19	0.06	0.11	<0.03	0.31	0.10	0.81	0.22	0.28
08...	<0.06	0.24	0.09	0.44	0.21	0.19	0.07	0.88	0.31	<1.9	0.71	0.50

STREAMS TRIBUTARY TO LAKE MICHIGAN
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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	PCB COG 118 WATER DISS REC (NG/L) (19040)	PCB COG 167 SED SUSP REC (NG/L) (99924)	PCB COG 167 WATER DISS REC (NG/L) (99922)	PCB COG 132+153 SED SUSP REC (NG/L) (19105)	PCB COG 132+153 WATER DISS REC (NG/L) (19042)	PCB COG 135+144 SED SUSP REC (NG/L) (19101)	PCB COG 135+144 WATER DISS REC (NG/L) (19038)	PCB COG 136 SED SUSP REC (NG/L) (19097)	PCB COG 136 WATER DISS REC (NG/L) (19034)	PCB COG 137+176 SED SUSP REC (NG/L) (19107)	PCB COG 137+176 WATER DISS REC (NG/L) (19044)
OCT 1993											
20...	0.03	<0.035	<0.035	0.31	0.13	0.05	0.03	<0.04	<0.05	<0.03	<0.03
NOV											
16...	0.08	<0.035	<0.035	0.38	0.16	0.08	0.03	<0.03	<0.03	<0.03	<0.03
DEC											
14...	<0.03	<0.035	<0.035	0.21	0.07	0.04	<0.02	<0.03	<0.03	<0.03	<0.03
FEB 1994											
16...	<0.03	<0.035	<0.035	0.16	0.04	0.03	<0.02	<0.03	<0.03	<0.03	<0.03
MAR											
10...	0.03	0.054	<0.035	1.5	0.08	0.30	<0.02	0.07	<0.03	0.07	<0.03
16...	0.03	<0.035	<0.035	0.25	0.05	0.05	<0.02	<0.03	<0.03	<0.03	<0.03
MAY											
17...	<0.03	<0.035	<0.035	0.42	0.16	0.08	0.03	<0.03	<0.03	<0.03	<0.03
JUN											
22...	0.03	0.041	<0.035	1.3	0.24	0.22	0.06	0.04	<0.03	0.05	<0.03
JUL											
07...	0.04	0.094	<0.035	3.3	0.38	0.61	0.08	0.15	<0.03	0.14	<0.03
08...	0.07	0.190	<0.035	8.1	0.85	1.6	0.21	0.42	0.11	0.39	<0.03
DATE	PCB COG 138+163 SED SUSP REC (NG/L) (19108)	PCB COG 138+163 WATER DISS REC (NG/L) (19045)	PCB COG 141 SED SUSP REC (NG/L) (19106)	PCB COG 141 WATER DISS REC (NG/L) (19043)	PCB COG 146 SED SUSP REC (NG/L) (19104)	PCB COG 146 WATER DISS REC (NG/L) (19041)	PCB COG 149 SED SUSP REC (NG/L) (19102)	PCB COG 149 WATER DISS REC (NG/L) (19039)	PCB COG 151 SED SUSP REC (NG/L) (19100)	PCB COG 151 WATER DISS REC (NG/L) (19037)	PCB COG 167 SED SUSP REC (NG/L) (99925)
OCT 1993											
20...	0.18	0.08	0.05	<0.02	0.09	0.04	0.17	0.09	0.07	0.04	<0.080
NOV											
16...	0.19	0.14	0.07	<0.02	0.12	0.04	0.22	0.10	0.10	0.05	<0.080
DEC											
14...	0.11	0.05	0.03	<0.02	0.06	<0.03	0.12	0.05	0.05	0.02	<0.080
FEB 1994											
16...	0.09	<0.03	0.02	<0.02	0.05	<0.03	0.09	0.03	0.04	<0.02	<0.080
MAR											
10...	0.93	0.06	0.27	<0.02	0.49	<0.03	0.78	0.05	0.40	0.02	<0.080
16...	0.15	0.04	0.04	<0.02	0.07	<0.03	0.13	0.03	0.06	<0.02	<0.080
MAY											
17...	0.22	0.08	0.08	<0.03	0.12	0.04	0.25	0.10	0.11	0.04	<0.080
JUN											
22...	0.72	0.15	0.20	0.04	0.40	0.08	0.63	0.15	0.30	0.08	<0.080
JUL											
07...	1.8	0.21	0.62	0.06	1.0	0.12	1.7	0.23	0.82	0.12	<0.080
08...	4.4	0.44	1.7	0.13	2.7	0.28	4.5	0.56	2.3	0.29	<0.080
DATE	PCB COG 167 WATER DISS REC (NG/L) (99923)	PCB COG 170+190 SED SUSP REC (NG/L) (19119)	PCB COG 170+190 WATER DISS REC (NG/L) (19056)	PCB COG 171+202 SED SUSP REC (NG/L) (19115)	PCB COG 171+202 WATER DISS REC (NG/L) (19052)	PCB COG 172+197 SED SUSP REC (NG/L) (19116)	PCB COG 172+197 WATER DISS REC (NG/L) (19053)	PCB COG 174 SED SUSP REC (NG/L) (19113)	PCB COG 174 WATER DISS REC (NG/L) (19050)	PCB COG 177 SED SUSP REC (NG/L) (19114)	PCB COG 177 WATER DISS REC (NG/L) (19051)
OCT 1993											
20...	<0.080	0.15	<0.08	<0.04	<0.03	<0.05	<0.05	0.08	<0.02	0.09	<0.03
NOV											
16...	<0.080	0.20	0.08	0.04	<0.03	<0.05	<0.05	0.11	<0.02	0.10	<0.03
DEC											
14...	<0.080	0.14	<0.08	<0.03	<0.03	<0.05	<0.05	0.05	<0.02	0.05	<0.03
FEB 1994											
16...	<0.080	0.14	<0.08	<0.03	<0.03	<0.05	<0.05	0.04	<0.02	0.04	<0.03
MAR											
10...	<0.080	1.0	<0.08	0.21	<0.03	0.17	<0.05	0.51	<0.02	0.48	<0.03
16...	<0.080	0.14	<0.08	<0.03	<0.03	<0.05	<0.05	0.07	<0.02	0.06	<0.03
MAY											
17...	<0.080	0.22	<0.09	0.04	<0.03	<0.05	<0.05	0.12	0.03	0.11	<0.03
JUN											
22...	<0.080	0.73	0.12	0.17	<0.03	0.13	<0.05	0.38	0.06	0.39	0.05
JUL											
07...	<0.080	1.6	0.12	0.42	<0.03	0.28	<0.05	1.0	0.08	1.0	0.08
08...	<0.080	4.4	0.23	1.1	0.05	0.76	<0.05	2.3	0.18	2.4	0.15

STREAMS TRIBUTARY TO LAKE MICHIGAN
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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	PCB COG 178 SED SUSP REC (NG/L) (19109)	PCB COG 178 WATER DISS REC (NG/L) (19046)	PCB COG 180 SED SUSP REC (NG/L) (19117)	PCB COG 180 WATER DISS REC (NG/L) (19054)	PCB COG 182+187 SED SUSP REC (NG/L) (19110)	PCB COG 182+187 WATER DISS REC (NG/L) (19047)	PCB COG 183 SED SUSP REC (NG/L) (19111)	PCB COG 183 WATER DISS REC (NG/L) (19048)	PCB COG 185 SED SUSP REC (NG/L) (19112)	PCB COG 185 WATER DISS REC (NG/L) (19049)	PCB COG 194 SED SUSP REC (NG/L) (19123)
OCT 1993											
20...	0.06	<0.04	0.22	0.06	0.17	0.05	0.06	<0.03	<0.03	<0.03	0.05
NOV											
16...	0.08	<0.04	0.24	0.05	0.22	0.04	0.08	<0.03	<0.03	<0.03	0.06
DEC											
14...	<0.04	<0.04	0.12	0.04	0.11	0.03	0.04	<0.03	<0.03	<0.03	<0.03
FEB 1994											
16...	<0.04	<0.04	0.10	<0.03	0.08	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03
MAR											
10...	0.36	<0.04	1.3	<0.03	0.85	0.02	0.38	<0.03	0.09	<0.03	0.39
16...	0.04	<0.04	0.18	0.03	0.14	<0.02	0.05	<0.03	<0.03	<0.03	0.05
MAY											
17...	0.09	<0.04	0.25	0.06	0.25	0.08	0.08	<0.03	<0.03	<0.03	0.06
JUN											
22...	0.30	0.04	0.94	0.14	0.76	0.12	0.29	0.04	0.07	<0.03	0.28
JUL											
07...	0.79	0.07	2.0	0.18	1.9	0.18	0.76	0.05	0.17	<0.03	0.59
08...	2.0	0.13	5.5	0.34	4.8	0.36	1.8	0.11	0.45	<0.03	1.6

DATE	PCB COG 194 WATER DISS REC (NG/L) (19060)	PCB COG 195+208 SED SUSP REC (NG/L) (19122)	PCB COG 195+208 WATER DISS REC (NG/L) (19059)	PCB COG 196+203 SED SUSP REC (NG/L) (19121)	PCB COG 196+203 WATER DISS REC (NG/L) (19058)	PCB COG 199 SED SUSP REC (NG/L) (19118)	PCB COG 199 WATER DISS REC (NG/L) (19055)	PCB COG 201 SED SUSP REC (NG/L) (19120)	PCB COG 201 WATER DISS REC (NG/L) (19057)	PCB COG 206 SED SUSP REC (NG/L) (19124)	PCB COG 206 WATER DISS REC (NG/L) (19061)
OCT 1993											
20...	<0.03	<0.08	<0.08	0.12	<0.08	<0.02	<0.02	0.11	<0.04	<0.04	<0.04
NOV											
16...	<0.03	<0.08	<0.08	0.14	<0.08	<0.02	<0.02	0.12	<0.04	<0.04	<0.04
DEC											
14...	<0.03	<0.08	<0.08	<0.08	<0.08	<0.02	<0.02	0.06	<0.04	<0.04	<0.04
FEB 1994											
16...	<0.03	<0.08	<0.08	<0.08	<0.08	<0.02	<0.02	0.05	<0.04	<0.04	<0.04
MAR											
10...	<0.03	0.50	<0.08	0.82	<0.08	0.05	<0.02	0.68	<0.04	0.17	<0.04
16...	<0.03	<0.08	<0.08	0.10	<0.08	<0.02	<0.02	0.09	<0.04	<0.04	<0.04
MAY											
17...	<0.03	0.08	<0.08	0.15	<0.08	<0.02	<0.02	0.14	<0.04	<0.04	<0.04
JUN											
22...	<0.03	0.38	<0.08	0.57	<0.08	0.03	<0.02	0.51	0.05	0.12	<0.04
JUL											
07...	<0.03	0.92	<0.08	1.5	<0.08	0.09	<0.02	1.3	0.07	0.29	<0.04
08...	0.05	2.3	<0.08	3.8	0.12	0.24	<0.02	3.5	0.12	0.72	<0.04

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PCB COG 5 + 8 SED SUSP REC (NG/L) (19067)	PCB COG 5 + 8 WATER DISS REC (NG/L) (19004)	PCB COG 6 SED SUSP REC (NG/L) (19066)	PCB COG 6 WATER DISS REC (NG/L) (19003)	PCB COG 7 SED SUSP REC (NG/L) (19065)	PCB COG 7 WATER DISS REC (NG/L) (19002)	PCB COG 16 + 32 SED SUSP REC (NG/L) (19072)	PCB COG 16 + 32 WATER DISS REC (NG/L) (19009)	PCB COG 17 SED SUSP REC (NG/L) (19070)	PCB COG 17 WATER DISS REC (NG/L) (19007)
MAR 1995												
**11...	1430	626	<0.09	<0.09	<0.08	<0.08	<0.02	<0.02	<0.03	<0.03	<0.03	<0.05
APR												
**28...	1420	945	<0.09	0.09	<0.08	<0.08	<0.02	<0.02	0.04	0.05	<0.03	0.06
AUG												
**16...	1615	392	<0.09	0.12	<0.08	<0.08	<0.02	<0.02	<0.09	0.06	<0.10	0.06

** Multiple verticals

STREAMS TRIBUTARY TO LAKE MICHIGAN
04086600 MILWAUKEE RIVER NEAR CEDARBURG, WI--CONTINUED

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 19935

DATE	PCB COG 18 SED SUSP REC (NG/L) (19069)	PCB COG 18 WATER DISS REC (NG/L) (19006)	PCB COG 19 SED SUSP REC (NG/L) (19068)	PCB COG 19 WATER DISS REC (NG/L) (19005)	PCB COG 22 SED SUSP REC (NG/L) (19076)	PCB COG 22 WATER DISS REC (NG/L) (19013)	PCB COG 24 + 27 SED SUSP REC (NG/L) (19071)	PCB COG 24 + 27 WATER DISS REC (NG/L) (19008)	PCB COG 26 SED SUSP REC (NG/L) (19073)	PCB COG 26 WATER DISS REC (NG/L) (19010)	PCB COG 28 + 31 SED SUSP REC (NG/L) (19074)	PCB COG 28 + 31 WATER DISS REC (NG/L) (19011)
MAR 1995												
21...	<0.03	0.03	<0.02	<0.02	<0.05	<0.05	<0.02	<0.02	<0.03	<0.03	<0.08	0.14
APR 28...	<0.03	0.05	<0.02	<0.02	<0.05	<0.05	<0.03	<0.02	<0.03	0.03	<0.09	0.21
AUG 16...	<0.10	0.06	<0.02	0.03	<0.05	<0.05	<0.03	<0.03	<0.06	0.03	0.52	0.24
DATE	PCB COG 33 SED SUSP REC (NG/L) (19075)	PCB COG 33 WATER DISS REC (NG/L) (19012)	PCB COG 37 + 42 SED SUSP REC (NG/L) (19083)	PCB COG 37 + 42 WATER DISS REC (NG/L) (19020)	PCB COG 40 SED SUSP REC (NG/L) (19085)	PCB COG 40 WATER DISS REC (NG/L) (19022)	PCB COG 41 +64+71 SED SUSP REC (NG/L) (19084)	PCB COG 41 +64+71 WATER DISS REC (NG/L) (19021)	PCB COG 44 SED SUSP REC (NG/L) (19082)	PCB COG 44 WATER DISS REC (NG/L) (19019)	PCB COG 45 SED SUSP REC (NG/L) (19077)	PCB COG 45 WATER DISS REC (NG/L) (19014)
MAR 1995												
21...	<0.03	<0.03	<0.03	0.04	<0.03	<0.03	<0.04	<0.04	<0.02	0.04	<0.02	<0.02
APR 28...	<0.03	<0.03	<0.03	0.04	<0.03	<0.03	0.04	0.06	0.04	0.07	<0.02	<0.02
AUG 16...	<0.03	0.04	0.09	0.05	0.03	<0.03	<0.26	0.06	0.16	0.09	<0.05	<0.02
DATE	PCB COG 46 SED SUSP REC (NG/L) (19078)	PCB COG 46 WATER DISS REC (NG/L) (19015)	PCB COG 47 + 48 SED SUSP REC (NG/L) (19081)	PCB COG 47 + 48 WATER DISS REC (NG/L) (19018)	PCB COG 49 SED SUSP REC (NG/L) (19080)	PCB COG 49 WATER DISS REC (NG/L) (19017)	PCB COG 52 SED SUSP REC (NG/L) (19079)	PCB COG 52 WATER DISS REC (NG/L) (19016)	PCB COG 56 + 60 SED SUSP REC (NG/L) (19090)	PCB COG 56 + 60 WATER DISS REC (NG/L) (19027)	PCB COG 66 + 95 SED SUSP REC (NG/L) (19088)	PCB COG 66 + 95 WATER DISS REC (NG/L) (19025)
MAR 1995												
21...	<0.03	<0.03	0.07	<0.10	<0.02	0.09	<0.02	0.07	<0.05	<0.05	0.08	0.08
APR 28...	<0.03	<0.03	0.14	0.22	0.11	0.12	0.10	0.13	<0.05	<0.05	0.26	0.17
AUG 16...	<0.03	<0.03	0.76	0.23	0.32	0.10	0.32	0.12	0.21	0.06	0.47	0.17
DATE	PCB COG 70 + 76 SED SUSP REC (NG/L) (19087)	PCB COG 70 + 76 WATER DISS REC (NG/L) (19024)	PCB COG 74 SED SUSP REC (NG/L) (19086)	PCB COG 74 WATER DISS REC (NG/L) (19023)	PCB COG 77+110 SED SUSP REC (NG/L) (19098)	PCB COG 77+110 WATER DISS REC (NG/L) (19035)	PCB COG 82 SED SUSP REC (NG/L) (19099)	PCB COG 82 WATER DISS REC (NG/L) (19036)	PCB COG 84 + 92 SED SUSP REC (NG/L) (19091)	PCB COG 84 + 92 WATER DISS REC (NG/L) (19028)	PCB COG 85 SED SUSP REC (NG/L) (19096)	PCB COG 85 WATER DISS REC (NG/L) (19033)
MAR 1995												
21...	<0.04	<0.04	<0.03	<0.03	0.05	0.05	<0.03	<0.03	<0.05	<0.05	<0.03	<0.05
APR 28...	<0.07	0.08	<0.12	<0.03	0.15	0.09	<0.03	<0.03	<0.05	<0.05	<0.18	<0.07
AUG 16...	0.29	0.10	<0.23	<0.03	0.37	0.12	0.04	<0.03	0.11	0.06	<0.28	<0.06
DATE	PCB COG 87 SED SUSP REC (NG/L) (19095)	PCB COG 87 WATER DISS REC (NG/L) (19032)	PCB COG 91 SED SUSP REC (NG/L) (19089)	PCB COG 91 WATER DISS REC (NG/L) (19026)	PCB COG 97 SED SUSP REC (NG/L) (19094)	PCB COG 97 WATER DISS REC (NG/L) (19031)	PCB COG 99 SED SUSP REC (NG/L) (19093)	PCB COG 99 WATER DISS REC (NG/L) (19030)	PCB COG 101 SED SUSP REC (NG/L) (19092)	PCB COG 101 WATER DISS REC (NG/L) (19029)	PCB COG 118 SED SUSP REC (NG/L) (19103)	
MAR 1995												
21...	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	<0.02	0.06	0.06	<0.03	
APR 28...	<0.03	<0.03	0.07	0.03	<0.03	<0.03	0.10	0.04	0.24	0.10	0.06	
AUG 16...		0.09	0.04	0.15	<0.03	0.07	<0.03	0.24	0.04	0.50	0.09	0.25

STREAMS TRIBUTARY TO LAKE MICHIGAN
04086600 MILWAUKEE RIVER NEAR CEDARBURG, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PCB COG 118 WATER DISS REC (NG/L) (19040)	PCB COG 128 SED SUSP REC (NG/L) (99924)	PCB COG 128 WATER DISS REC (NG/L) (99922)	PCB COG 132+153 SED SUSP REC (NG/L) (19105)	PCB COG 132+153 WATER DISS REC (NG/L) (19042)	PCB COG 135+144 SED SUSP REC (NG/L) (19101)	PCB COG 135+144 WATER DISS REC (NG/L) (19038)	PCB COG 136 SED SUSP REC (NG/L) (19097)	PCB COG 136 WATER DISS REC (NG/L) (19034)	PCB COG 137+176 SED SUSP REC (NG/L) (19107)	PCB COG 137+176 WATER DISS REC (NG/L) (19044)
MAR 1995											
21...	<0.03	<0.035	<0.035	0.23	0.08	0.04	<0.02	<0.03	<0.03	<0.03	<0.03
APR											
28...	<0.03	<0.035	<0.035	0.95	0.15	0.18	0.03	0.05	<0.03	0.04	<0.03
AUG											
16...	0.03	0.072	<0.035	2.1	0.11	0.36	<0.02	<0.09	<0.03	0.08	<0.03
DATE	PCB COG 138+163 SED SUSP REC (NG/L) (19108)	PCB COG 138+163 WATER DISS REC (NG/L) (19045)	PCB COG 141 SED SUSP REC (NG/L) (19106)	PCB COG 141 WATER DISS REC (NG/L) (19043)	PCB COG 146 SED SUSP REC (NG/L) (19104)	PCB COG 146 WATER DISS REC (NG/L) (19041)	PCB COG 149 SED SUSP REC (NG/L) (19102)	PCB COG 149 WATER DISS REC (NG/L) (19039)	PCB COG 151 SED SUSP REC (NG/L) (19100)	PCB COG 151 WATER DISS REC (NG/L) (19037)	PCB COG 167 SED SUSP REC (NG/L) (99925)
MAR 1995											
21...	0.13	0.04	0.04	<0.02	0.06	<0.03	0.13	0.06	0.06	0.03	<0.080
APR											
28...	0.53	0.08	0.18	<0.02	0.27	0.04	0.54	0.11	0.26	0.05	<0.080
AUG											
16...	1.2	0.06	0.38	<0.02	0.60	<0.03	1.0	0.07	0.51	0.03	<0.080
DATE	PCB COG 167 WATER DISS REC (NG/L) (99923)	PCB COG 170+190 SED SUSP REC (NG/L) (19119)	PCB COG 170+190 WATER DISS REC (NG/L) (19056)	PCB COG 171+202 SED SUSP REC (NG/L) (19115)	PCB COG 171+202 WATER DISS REC (NG/L) (19052)	PCB COG 172+197 SED SUSP REC (NG/L) (19116)	PCB COG 172+197 WATER DISS REC (NG/L) (19053)	PCB COG 174 SED SUSP REC (NG/L) (19113)	PCB COG 174 WATER DISS REC (NG/L) (19050)	PCB COG 177 SED SUSP REC (NG/L) (19114)	PCB COG 177 WATER DISS REC (NG/L) (19051)
MAR 1995											
21...	<0.080	0.11	<0.08	<0.03	<0.03	<0.05	<0.05	0.08	<0.02	0.06	<0.03
APR											
28...	<0.080	0.47	<0.08	0.12	<0.03	0.08	<0.05	0.32	0.03	0.27	<0.03
AUG											
16...	<0.080	1.1	<0.08	0.26	<0.03	0.20	<0.05	0.68	<0.02	0.59	<0.03
DATE	PCB COG 178 SED SUSP REC (NG/L) (19109)	PCB COG 178 WATER DISS REC (NG/L) (19046)	PCB COG 180 SED SUSP REC (NG/L) (19117)	PCB COG 180 WATER DISS REC (NG/L) (19054)	PCB COG 182+187 SED SUSP REC (NG/L) (19110)	PCB COG 182+187 WATER DISS REC (NG/L) (19047)	PCB COG 183 SED SUSP REC (NG/L) (19111)	PCB COG 183 WATER DISS REC (NG/L) (19048)	PCB COG 185 SED SUSP REC (NG/L) (19112)	PCB COG 185 WATER DISS REC (NG/L) (19049)	PCB COG 194 SED SUSP REC (NG/L) (19123)
MAR 1995											
21...	0.04	<0.04	0.17	<0.05	0.14	0.02	0.05	<0.03	<0.03	<0.03	0.04
APR											
28...	0.20	<0.04	0.70	0.06	0.58	0.06	0.20	<0.03	0.05	<0.03	0.18
AUG											
16...	0.44	<0.04	1.5	<0.07	1.2	0.05	0.44	<0.03	0.10	<0.03	0.40
DATE	PCB COG 194 WATER DISS REC (NG/L) (19060)	PCB COG 195+208 SED SUSP REC (NG/L) (19122)	PCB COG 195+208 WATER DISS REC (NG/L) (19059)	PCB COG 196+203 SED SUSP REC (NG/L) (19121)	PCB COG 196+203 WATER DISS REC (NG/L) (19058)	PCB COG 199 SED SUSP REC (NG/L) (19118)	PCB COG 199 WATER DISS REC (NG/L) (19055)	PCB COG 201 SED SUSP REC (NG/L) (19120)	PCB COG 201 WATER DISS REC (NG/L) (19057)	PCB COG 206 SED SUSP REC (NG/L) (19124)	PCB COG 206 WATER DISS REC (NG/L) (19061)
MAR 1995											
21...	<0.03	<0.08	<0.08	0.09	<0.08	<0.02	<0.02	0.08	<0.04	<0.04	<0.04
APR											
28...	<0.03	0.23	<0.08	0.39	<0.08	0.02	<0.02	0.36	<0.04	0.08	<0.04
AUG											
16...	<0.03	0.54	<0.08	0.95	<0.08	0.06	<0.02	0.84	<0.04	0.20	<0.04

STREAMS TRIBUTARY TO LAKE MICHIGAN
04086710 MILWAUKEE RIVER AT THIENSVILLE, WI

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LOCATION.--Lat 43°13'18", long 87°58'52", in SW 1/4 NW 1/4 sec.23, T.9 N., R.21 E., Ozaukee County, Hydrologic Unit 04040003, at the Highway 167 bridge at Thiensville.

PERIOD OF RECORD.--June 1993 to August 1995 (discontinued).

REMARKS.--Samples for chemical analysis were composite samples of water collected from four locations in the stream cross section. Water-quality analysis by Wisconsin State Laboratory of Hygiene and National Water-Quality Laboratory. The Milwaukee Metropolitan Sewerage District and Wisconsin Department of Natural Resources maintain a continuous suspended solids record from an automatic point sampler.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	RESIDUE VOL-A- TILE, SUS- PENDE (MG/L) (00535)
OCT 1994			
*11...	1400	8	6
JAN 1995			
*19...	1305	6	5
MAR			
*17...	1520	7	5
*21...	1245	8	4
APR			
*13...	0945	11	4
*28...	1315	17	5
AUG			
*17...	1406	44	14
*17...	1610	36	13
*29...	0900	54	12

WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	PCB COG 5 + 8 SED SUSP REC (NG/L) (19067)	PCB COG 5 + 8 WATER DISS REC (NG/L) (19004)	PCB COG 6 SED SUSP REC (NG/L) (19066)	PCB COG 6 WATER DISS REC (NG/L) (19003)	PCB COG 7 SED SUSP REC (NG/L) (19065)	PCB COG 7 WATER DISS REC (NG/L) (19002)	PCB COG 16 + 32 SED SUSP REC (NG/L) (19072)	PCB COG 16 + 32 WATER DISS REC (NG/L) (19009)	PCB COG 17 SED SUSP REC (NG/L) (19070)	PCB COG 17 WATER DISS REC (NG/L) (19007)
JUL 1993											
**11...	1140	<0.26	1.3	<0.15	<0.15	<0.03	0.04	0.14	0.83	0.13	0.45
AUG											
**03...	1330	<0.09	0.14	<0.08	<0.08	<0.02	<0.02	<0.03	0.08	0.04	<0.07
**25...	0745	<0.22	0.27	<0.08	<0.08	<0.02	<0.02	<0.05	0.08	<0.03	0.08
SEP											
**14...	1300	<0.28	<0.09	<0.08	<0.08	<0.02	<0.02	0.06	<0.06	0.04	<0.04
**28...	1215	0.15	<0.18	<0.08	<0.08	<0.02	<0.02	0.08	0.09	<0.05	<0.08

DATE	TIME	PCB COG 18 SED SUSP REC (NG/L) (19069)	PCB COG 18 WATER DISS REC (NG/L) (19006)	PCB COG 19 SED SUSP REC (NG/L) (19068)	PCB COG 19 WATER DISS REC (NG/L) (19005)	PCB COG 22 SED SUSP REC (NG/L) (19076)	PCB COG 22 WATER DISS REC (NG/L) (19013)	PCB COG 24 + 27 SED SUSP REC (NG/L) (19071)	PCB COG 24 + 27 WATER DISS REC (NG/L) (19008)	PCB COG 26 SED SUSP REC (NG/L) (19073)	PCB COG 26 WATER DISS REC (NG/L) (19010)	PCB COG 28 + 31 SED SUSP REC (NG/L) (19074)	PCB COG 28 + 31 WATER DISS REC (NG/L) (19011)
JUL 1993													
11...	0.11	0.55	<0.04	0.08	0.15	1.2	<0.04	<0.05	0.08	0.27	0.53	2.5	
AUG													
03...	0.04	<0.07	<0.02	<0.02	<0.05	0.07	<0.02	<0.02	<0.03	0.04	0.16	0.24	
25...	<0.03	0.09	<0.02	0.04	<0.05	0.07	<0.02	<0.02	<0.03	0.05	0.09	0.26	
SEP													
14...	0.04	<0.05	<0.02	<0.02	<0.09	<0.09	<0.02	<0.02	0.05	<0.05	0.30	0.16	
28...	<0.03	<0.08	<0.02	<0.02	<0.08	0.11	<0.02	<0.02	<0.04	0.06	0.15	0.37	

* Equal-width increment (EWI) sample
** Multiple verticals

STREAMS TRIBUTARY TO LAKE MICHIGAN
04086710 MILWAUKEE RIVER AT THIENSVILLE, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	PCB COG 33 SED SUSP REC (NG/L) (19075)	PCB COG 33 WATER DISS REC (NG/L) (19012)	PCB COG 37 + 42 SED SUSP REC (NG/L) (19083)	PCB COG 37 + 42 WATER DISS REC (NG/L) (19020)	PCB COG 40 SED SUSP REC (NG/L) (19085)	PCB COG 40 WATER DISS REC (NG/L) (19022)	PCB COG +64+71 SED SUSP REC (NG/L) (19084)	PCB COG +64+71 WATER DISS REC (NG/L) (19021)	PCB COG 44 SED SUSP REC (NG/L) (19082)	PCB COG 44 WATER DISS REC (NG/L) (19019)	PCB COG 45 SED SUSP REC (NG/L) (19077)	PCB COG 45 WATER DISS REC (NG/L) (19014)
JUL 1993												
11...	<0.17	1.1	0.16	0.65	<0.05	0.21	0.12	0.75	0.22	0.99	0.05	0.16
AUG												
03...	<0.07	0.08	0.05	0.05	<0.03	<0.03	0.06	0.05	0.07	0.08	<0.02	<0.02
25...	<0.03	0.08	0.04	0.06	<0.03	<0.03	0.09	0.09	0.05	0.10	<0.02	<0.02
SEP												
14...	<0.10	<0.10	0.10	0.05	<0.03	<0.03	0.07	0.05	0.12	0.08	<0.03	<0.03
28...	<0.09	0.12	0.05	0.08	<0.03	<0.03	0.04	0.10	0.06	0.12	<0.03	<0.03
DATE	PCB COG 46 SED SUSP REC (NG/L) (19078)	PCB COG 46 WATER DISS REC (NG/L) (19015)	PCB COG 47 + 48 SED SUSP REC (NG/L) (19081)	PCB COG 47 + 48 WATER DISS REC (NG/L) (19018)	PCB COG 49 SED SUSP REC (NG/L) (19080)	PCB COG 49 WATER DISS REC (NG/L) (19017)	PCB COG 52 SED SUSP REC (NG/L) (19079)	PCB COG 52 WATER DISS REC (NG/L) (19016)	PCB COG 56 + 60 SED SUSP REC (NG/L) (19090)	PCB COG 56 + 60 WATER DISS REC (NG/L) (19027)	PCB COG 66 + 95 SED SUSP REC (NG/L) (19088)	PCB COG 66 + 95 WATER DISS REC (NG/L) (19025)
JUL 1993												
11...	<0.05	0.09	0.67	<6.4	0.30	0.60	0.29	0.92	<0.27	0.87	0.88	2.1
AUG												
03...	<0.03	<0.03	0.08	0.09	0.09	0.10	0.09	0.11	<0.11	<0.11	0.29	0.23
25...	<0.03	<0.03	<0.07	0.10	0.08	0.12	0.09	0.14	<0.12	0.11	0.29	0.28
SEP												
14...	<0.03	<0.03	0.10	0.06	0.15	0.09	0.16	0.12	<0.21	<0.12	0.37	0.21
28...	<0.03	<0.03	0.09	0.32	0.11	0.16	0.12	0.20	<0.15	<0.13	0.26	0.34
DATE	PCB COG 70 + 76 SED SUSP REC (NG/L) (19087)	PCB COG 70 + 76 WATER DISS REC (NG/L) (19024)	PCB COG 74 SED SUSP REC (NG/L) (19086)	PCB COG 74 WATER DISS REC (NG/L) (19023)	PCB COG 77+110 SED SUSP REC (NG/L) (19098)	PCB COG 77+110 WATER DISS REC (NG/L) (19035)	PCB COG 82 SED SUSP REC (NG/L) (19099)	PCB COG 82 WATER DISS REC (NG/L) (19036)	PCB COG 84 + 92 SED SUSP REC (NG/L) (19091)	PCB COG 84 + 92 WATER DISS REC (NG/L) (19028)	PCB COG 85 SED SUSP REC (NG/L) (19096)	PCB COG 85 WATER DISS REC (NG/L) (19033)
JUL 1993												
11...	0.32	1.1	<0.19	0.34	0.58	0.78	0.07	<0.15	0.35	0.52	<0.92	<0.14
AUG												
03...	0.10	0.08	<0.08	<0.03	0.27	0.10	<0.08	<0.03	<0.16	0.06	<0.40	<0.10
25...	0.07	0.10	<0.40	0.03	0.14	0.15	<0.06	<0.03	<0.13	0.08	<0.28	<0.12
SEP												
14...	0.16	0.09	<0.09	<0.03	0.32	0.16	0.05	<0.03	0.15	<0.13	<0.24	<0.14
28...	0.07	0.12	<0.07	0.04	0.21	0.22	<0.03	<0.03	<0.16	<0.16	<0.14	<0.14
DATE	PCB COG 87 SED SUSP REC (NG/L) (19095)	PCB COG 87 WATER DISS REC (NG/L) (19032)	PCB COG 91 SED SUSP REC (NG/L) (19089)	PCB COG 91 WATER DISS REC (NG/L) (19026)	PCB COG 97 SED SUSP REC (NG/L) (19094)	PCB COG 97 WATER DISS REC (NG/L) (19031)	PCB COG 99 SED SUSP REC (NG/L) (19093)	PCB COG 99 WATER DISS REC (NG/L) (19030)	PCB COG 101 SED SUSP REC (NG/L) (19092)	PCB COG 101 WATER DISS REC (NG/L) (19029)	PCB COG 118 SED SUSP REC (NG/L) (19103)	
JUL 1993												
11...	0.15	0.31	0.13	0.18	0.10	0.18	0.30	0.22	0.54	0.55	0.30	
AUG												
03...	0.10	0.04	0.04	<0.03	0.08	<0.03	0.14	0.03	0.20	0.09	0.14	
25...	0.06	0.04	<0.06	<0.03	0.05	<0.03	0.10	0.06	0.20	0.11	0.08	
SEP												
14...	0.10	<0.06	0.06	<0.03	0.04	<0.05	0.12	0.05	0.22	0.12	0.19	
28...	0.03	<0.10	0.06	0.05	<0.07	<0.08	0.08	0.10	0.20	0.18	0.11	

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	PCB COG 118 WATER DISS REC (NG/L) (19040)	PCB COG 128 SED SUSP REC (NG/L) (99924)	PCB COG 128 WATER DISS REC (NG/L) (99922)	PCB COG 132+153 SED SUSP REC (NG/L) (19105)	PCB COG 132+153 WATER DISS REC (NG/L) (19042)	PCB COG 135+144 SED SUSP REC (NG/L) (19101)	PCB COG 135+144 WATER DISS REC (NG/L) (19038)	PCB COG 136 SED SUSP REC (NG/L) (19097)	PCB COG 136 WATER DISS REC (NG/L) (19034)	PCB COG 137+176 SED SUSP REC (NG/L) (19107)	PCB COG 137+176 WATER DISS REC (NG/L) (19044)
JUL 1993											
11...	0.26	0.100	<0.060	2.0	0.51	0.43	0.13	<0.46	<0.12	0.10	<0.05
AUG											
03...	0.04	0.051	<0.035	0.81	0.14	0.18	0.03	<0.20	<0.05	0.06	<0.03
25...	0.05	0.044	<0.035	0.62	0.15	0.14	0.04	<0.14	<0.06	0.05	<0.03
SEP											
14...	0.06	0.069	<0.035	1.0	0.16	0.21	0.03	<0.12	<0.07	0.05	<0.03
28...	0.07	0.037	<0.035	0.82	0.22	0.21	0.05	<0.07	<0.07	0.05	<0.03
DATE	PCB COG 138+163 SED SUSP REC (NG/L) (19108)	PCB COG 138+163 WATER DISS REC (NG/L) (19045)	PCB COG 141 SED SUSP REC (NG/L) (19106)	PCB COG 141 WATER DISS REC (NG/L) (19043)	PCB COG 146 SED SUSP REC (NG/L) (19104)	PCB COG 146 WATER DISS REC (NG/L) (19041)	PCB COG 149 SED SUSP REC (NG/L) (19102)	PCB COG 149 WATER DISS REC (NG/L) (19039)	PCB COG 151 SED SUSP REC (NG/L) (19100)	PCB COG 151 WATER DISS REC (NG/L) (19037)	PCB COG 167 SED SUSP REC (NG/L) (99925)
JUL 1993											
11...	1.4	0.29	0.38	0.09	0.67	0.09	1.2	0.45	0.60	0.46	<0.150
AUG											
03...	0.55	0.08	0.16	<0.02	0.29	0.04	0.45	0.09	0.24	0.05	<0.080
25...	0.34	0.09	0.12	0.02	0.24	0.05	0.35	0.10	0.17	0.05	<0.080
SEP											
14...	0.66	0.10	0.19	<0.02	0.29	0.04	0.59	0.10	0.28	0.04	<0.080
28...	0.46	0.11	0.16	0.02	0.27	0.08	0.52	0.14	0.28	0.06	<0.080
DATE	PCB COG 167 WATER DISS REC (NG/L) (99923)	PCB COG 170+190 SED SUSP REC (NG/L) (19119)	PCB COG 170+190 WATER DISS REC (NG/L) (19056)	PCB COG 171+202 SED SUSP REC (NG/L) (19115)	PCB COG 171+202 WATER DISS REC (NG/L) (19052)	PCB COG 172+197 SED SUSP REC (NG/L) (19116)	PCB COG 172+197 WATER DISS REC (NG/L) (19053)	PCB COG 174 SED SUSP REC (NG/L) (19113)	PCB COG 174 WATER DISS REC (NG/L) (19050)	PCB COG 177 SED SUSP REC (NG/L) (19114)	PCB COG 177 WATER DISS REC (NG/L) (19051)
JUL 1993											
11...	<0.220	1.3	<0.15	0.31	<0.06	0.24	<0.08	0.66	0.12	0.67	0.07
AUG											
03...	<0.080	0.53	<0.08	0.12	<0.03	0.08	<0.05	0.26	0.04	0.26	<0.03
25...	<0.080	0.41	0.13	0.10	<0.03	0.06	<0.05	0.22	<0.02	0.20	<0.03
SEP											
14...	<0.080	0.59	<0.08	0.15	<0.03	0.10	<0.05	0.32	0.03	0.31	<0.03
28...	<0.080	0.47	<0.08	0.13	<0.03	0.08	<0.05	0.26	0.03	0.27	<0.03
DATE	PCB COG 178 SED SUSP REC (NG/L) (19109)	PCB COG 178 WATER DISS REC (NG/L) (19046)	PCB COG 180 SED SUSP REC (NG/L) (19117)	PCB COG 180 WATER DISS REC (NG/L) (19054)	PCB COG 182+187 SED SUSP REC (NG/L) (19110)	PCB COG 182+187 WATER DISS REC (NG/L) (19047)	PCB COG 183 SED SUSP REC (NG/L) (19111)	PCB COG 183 WATER DISS REC (NG/L) (19048)	PCB COG 185 SED SUSP REC (NG/L) (19112)	PCB COG 185 WATER DISS REC (NG/L) (19049)	PCB COG 194 SED SUSP REC (NG/L) (19123)
JUL 1993											
11...	0.46	<0.07	1.7	0.17	1.2	0.15	0.50	<0.07	0.13	<0.06	0.47
AUG											
03...	0.20	<0.04	0.66	0.06	0.47	0.05	0.21	<0.03	0.05	<0.03	0.19
25...	0.17	<0.04	0.53	0.06	0.45	0.05	0.18	<0.03	0.06	<0.03	0.15
SEP											
14...	0.22	<0.04	0.80	0.06	0.60	0.05	0.25	<0.03	0.06	<0.03	0.20
28...	0.20	<0.04	0.67	0.08	0.52	0.07	0.21	<0.03	0.05	<0.03	0.17
DATE	PCB COG 194 WATER DISS REC (NG/L) (19060)	PCB COG 195+208 SED SUSP REC (NG/L) (19122)	PCB COG 195+208 WATER DISS REC (NG/L) (19059)	PCB COG 196+203 SED SUSP REC (NG/L) (19121)	PCB COG 196+203 WATER DISS REC (NG/L) (19058)	PCB COG 199 SED SUSP REC (NG/L) (19118)	PCB COG 199 WATER DISS REC (NG/L) (19055)	PCB COG 201 SED SUSP REC (NG/L) (19120)	PCB COG 201 WATER DISS REC (NG/L) (19057)	PCB COG 206 SED SUSP REC (NG/L) (19124)	PCB COG 206 WATER DISS REC (NG/L) (19061)
JUL 1993											
11...	<0.06	0.59	<0.15	0.95	<0.15	0.07	<0.04	0.87	<0.08	0.21	<0.08
AUG											
03...	<0.03	0.24	<0.08	0.38	<0.08	0.03	<0.02	0.35	<0.04	0.09	<0.04
25...	<0.03	0.19	<0.08	0.32	<0.08	<0.02	<0.02	0.30	<0.04	0.08	<0.04
SEP											
14...	<0.03	0.26	<0.08	0.44	<0.08	0.03	<0.02	0.39	<0.04	0.08	<0.04
28...	<0.03	0.22	<0.08	0.39	<0.08	0.03	<0.02	0.35	<0.04	0.07	<0.04

STREAMS TRIBUTARY TO LAKE MICHIGAN
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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	PCB COG 5 + 8 SED SUSP REC (NG/L) (19067)	PCB COG 5 + 8 WATER DISS REC (NG/L) (19004)	PCB COG 6 SED SUSP REC (NG/L) (19066)	PCB COG 6 WATER DISS REC (NG/L) (19003)	PCB COG 7 SED SUSP REC (NG/L) (19065)	PCB COG 7 WATER DISS REC (NG/L) (19002)	PCB COG 16 + 32 SED SUSP REC (NG/L) (19072)	PCB COG 16 + 32 WATER DISS REC (NG/L) (19009)	PCB COG 17 SED SUSP REC (NG/L) (19070)	PCB COG 17 WATER DISS REC (NG/L) (19007)	PCB COG 18 SED SUSP REC (NG/L) (19069)
OCT 1993												
**20...	1140	<0.09	<0.25	<0.08	<0.08	<0.02	<0.02	<0.03	0.09	<0.03	<0.09	<0.03
NOV												
**15...	1000	<0.09	0.19	<0.08	<0.08	<0.02	<0.02	<0.03	0.07	<0.03	0.06	<0.03
DEC												
**14...	1250	<0.09	0.23	<0.08	<0.08	<0.02	<0.02	<0.03	0.09	<0.03	0.08	<0.03
FEB 1994												
**15...	1500	<0.09	0.21	<0.08	<0.08	<0.02	0.03	<0.03	0.08	<0.03	0.09	<0.03
MAR												
**10...	1500	<0.09	0.12	<0.08	<0.08	<0.02	<0.02	0.08	0.06	0.04	0.05	0.03
**16...	1200	<0.09	0.16	<0.08	<0.08	<0.02	<0.02	<0.03	0.06	<0.03	0.05	<0.03
MAY												
**17...	1400	<0.09	0.18	<0.08	<0.08	<0.02	<0.02	<0.04	0.07	<0.04	0.08	<0.04
JUN												
**22...	1145	<0.09	0.14	<0.08	<0.08	<0.02	<0.02	<0.03	<0.12	<0.07	<0.06	<0.06
JUL												
**07...	1245	<0.09	0.24	<0.08	<0.08	<0.02	<0.02	<0.03	0.09	0.08	<0.07	0.07
**08...	1315	<0.09	0.41	<0.08	<0.08	<0.02	<0.02	<0.03	0.17	<0.03	0.08	<0.03

DATE	PCB COG 18 WATER DISS REC (NG/L) (19006)	PCB COG 19 SED SUSP REC (NG/L) (19068)	PCB COG 19 WATER DISS REC (NG/L) (19005)	PCB COG 22 SED SUSP REC (NG/L) (19076)	PCB COG 22 WATER DISS REC (NG/L) (19013)	PCB COG 24 + 27 SED SUSP REC (NG/L) (19071)	PCB COG 24 + 27 WATER DISS REC (NG/L) (19008)	PCB COG 26 SED SUSP REC (NG/L) (19073)	PCB COG 26 WATER DISS REC (NG/L) (19010)	PCB COG 28 + 31 SED SUSP REC (NG/L) (19074)	PCB COG 28 + 31 WATER DISS REC (NG/L) (19011)	PCB COG 33 SED SUSP REC (NG/L) (19075)
OCT 1993												
20...	<0.09	<0.02	0.03	<0.05	<0.05	<0.02	<0.02	<0.05	<0.05	<0.14	0.28	<0.06
NOV												
15...	0.08	<0.02	<0.02	<0.05	<0.05	<0.02	<0.02	<0.03	<0.03	0.08	0.23	<0.03
DEC												
14...	0.08	<0.02	<0.02	<0.05	0.06	<0.02	<0.02	<0.03	0.05	<0.08	0.28	<0.03
FEB 1994												
15...	0.08	<0.02	<0.02	<0.05	0.07	<0.02	<0.02	<0.03	0.05	<0.08	0.28	<0.03
MAR												
10...	0.05	<0.02	<0.02	<0.05	<0.05	<0.02	<0.02	<0.03	<0.03	0.14	0.15	<0.03
16...	0.06	<0.02	<0.02	<0.05	<0.05	<0.02	<0.02	<0.03	0.04	<0.08	0.18	<0.03
MAY												
17...	0.08	<0.02	0.03	<0.05	<0.05	<0.02	<0.02	<0.03	0.04	0.17	0.25	<0.03
JUN												
22...	0.08	<0.02	<0.02	<0.05	<0.05	<0.02	<0.04	<0.07	0.04	0.30	0.32	<0.03
JUL												
07...	0.13	<0.02	0.04	0.06	<0.05	<0.02	<0.02	0.04	<0.04	0.55	0.38	<0.05
08...	0.15	<0.02	0.07	<0.05	0.08	<0.02	<0.02	<0.03	0.05	0.13	0.49	<0.03

DATE	PCB COG 33 WATER DISS REC (NG/L) (19012)	PCB COG 37 + 42 SED SUSP REC (NG/L) (19083)	PCB COG 37 + 42 WATER DISS REC (NG/L) (19020)	PCB COG 40 SED SUSP REC (NG/L) (19085)	PCB COG 40 WATER DISS REC (NG/L) (19022)	PCB COG +64+71 SED SUSP REC (NG/L) (19084)	PCB COG +64+71 WATER DISS REC (NG/L) (19021)	PCB COG 44 SED SUSP REC (NG/L) (19082)	PCB COG 44 WATER DISS REC (NG/L) (19019)	PCB COG 45 SED SUSP REC (NG/L) (19077)	PCB COG 45 WATER DISS REC (NG/L) (19014)	PCB COG 46 SED SUSP REC (NG/L) (19078)
OCT 1993												
20...	0.07	<0.05	0.05	<0.03	<0.03	<0.04	0.06	<0.05	0.09	<0.02	<0.02	<0.03
NOV												
15...	<0.03	<0.03	0.05	<0.03	<0.03	<0.04	0.07	0.03	0.08	<0.02	<0.02	<0.03
DEC												
14...	0.04	<0.03	0.05	<0.03	<0.03	<0.04	0.07	<0.02	0.08	<0.02	<0.02	<0.03
FEB 1994												
15...	0.08	<0.03	0.06	<0.03	<0.03	<0.04	0.08	<0.02	0.09	<0.02	<0.02	<0.03
MAR												
10...	<0.03	<0.03	<0.03	<0.03	<0.03	0.05	<0.04	0.04	0.04	<0.02	<0.02	<0.03
16...	<0.03	<0.03	0.04	<0.03	<0.03	<0.04	0.05	<0.02	0.06	<0.02	<0.02	<0.03
MAY												
17...	<0.06	0.05	0.05	<0.03	<0.03	0.08	0.07	0.08	0.08	<0.02	<0.02	<0.03
JUN												
22...	<0.03	0.10	0.06	<0.03	<0.03	0.16	0.09	0.16	0.10	<0.02	<0.02	<0.03
JUL												
07...	<0.05	0.14	0.06	0.04	<0.03	0.23	0.09	0.20	0.10	<0.02	<0.02	<0.03
08...	<0.08	0.09	0.07	<0.03	<0.03	0.11	0.12	0.12	0.12	<0.02	<0.03	<0.03

** Multiple verticals

STREAMS TRIBUTARY TO LAKE MICHIGAN
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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	PCB COG 46 WATER DISS REC (NG/L) (19015)	PCB COG 47 + 48 SED SUSP REC (NG/L) (19081)	PCB COG 47 + 48 WATER DISS REC (NG/L) (19018)	PCB COG 49 SED SUSP REC (NG/L) (19080)	PCB COG 49 WATER DISS REC (NG/L) (19017)	PCB COG 52 SED SUSP REC (NG/L) (19079)	PCB COG 52 WATER DISS REC (NG/L) (19016)	PCB COG 56 + 60 SED SUSP REC (NG/L) (19090)	PCB COG 56 + 60 WATER DISS REC (NG/L) (19027)	PCB COG 66 + 95 SED SUSP REC (NG/L) (19088)	PCB COG 66 + 95 WATER DISS REC (NG/L) (19025)	PCB COG 70 + 76 SED SUSP REC (NG/L) (19087)
OCT 1993												
20...	<0.03	0.05	0.10	0.05	0.10	0.06	0.12	<0.10	<0.05	0.13	0.33	0.06
NOV												
15...	<0.03	0.06	0.09	0.06	0.10	0.07	0.13	<0.05	0.06	<0.12	<0.16	<0.12
DEC												
14...	<0.03	<0.03	0.14	0.03	0.11	0.03	0.14	<0.05	0.06	<0.06	<0.08	<0.04
FEB 1994												
15...	<0.03	<0.03	0.27	0.02	0.12	0.03	0.14	<0.05	0.06	0.07	0.20	<0.04
MAR												
10...	<0.03	0.10	0.06	0.10	0.05	0.09	0.07	0.07	<0.05	0.23	0.12	0.09
16...	<0.03	<0.03	0.10	0.03	0.06	0.03	0.09	<0.05	<0.05	0.09	0.13	<0.04
MAY												
17...	<0.03	0.19	0.17	0.15	0.11	0.15	0.12	<0.05	0.06	>0.17	>0.11	0.12
JUN												
22...	<0.03	0.23	0.14	0.24	0.14	0.25	0.15	0.22	0.07	0.63	0.24	0.25
JUL												
07...	<0.03	0.36	0.17	0.37	0.12	0.38	0.14	0.13	0.09	<0.05	0.18	<0.04
08...	<0.03	0.21	0.15	0.18	0.15	0.20	0.18	<0.05	0.09	0.35	0.18	0.12

DATE	PCB COG 70 + 76 WATER DISS REC (NG/L) (19024)	PCB COG 74 SED SUSP REC (NG/L) (19086)	PCB COG 74 WATER DISS REC (NG/L) (19023)	PCB COG 77+110 SED SUSP REC (NG/L) (19098)	PCB COG 77+110 WATER DISS REC (NG/L) (19035)	PCB COG 82 SED SUSP REC (NG/L) (19099)	PCB COG 82 WATER DISS REC (NG/L) (19036)	PCB COG 84 + 92 SED SUSP REC (NG/L) (19091)	PCB COG 84 + 92 WATER DISS REC (NG/L) (19028)	PCB COG 85 SED SUSP REC (NG/L) (19096)	PCB COG 85 WATER DISS REC (NG/L) (19033)
OCT 1993											
20...	0.15	<0.10	0.04	0.11	0.28	<0.03	<0.03	<0.13	0.07	<0.20	<0.17
NOV											
15...	0.10	<0.12	<0.03	0.10	0.12	<0.03	<0.03	<0.05	0.05	<0.08	<0.06
DEC											
14...	0.10	<0.06	<0.03	0.04	0.13	<0.03	<0.03	<0.05	0.06	<0.04	<0.08
FEB 1994											
15...	0.11	<0.03	0.03	0.04	0.10	<0.03	<0.03	<0.05	<0.05	<0.04	<0.05
MAR											
10...	0.05	0.04	<0.03	0.15	0.07	<0.03	<0.03	<0.05	<0.05	<0.16	<0.03
16...	0.08	<0.03	<0.03	0.04	0.08	<0.03	<0.03	<0.05	<0.05	<0.08	<0.05
MAY											
17...	0.10	<0.05	<0.03	0.25	0.10	<0.03	<0.03	0.06	<0.05	<0.21	<0.03
JUN											
22...	0.11	<0.18	0.03	0.42	0.14	<0.03	<0.03	0.09	<0.05	<0.51	<0.11
JUL											
07...	0.13	<0.14	0.04	0.51	0.13	<0.03	<0.03	0.11	<0.05	<0.76	<0.03
08...	0.14	<0.09	0.05	0.31	0.12	<0.03	<0.03	0.09	<0.05	<1.2	<0.03

DATE	PCB COG 87 SED SUSP REC (NG/L) (19095)	PCB COG 87 WATER DISS REC (NG/L) (19032)	PCB COG 91 SED SUSP REC (NG/L) (19089)	PCB COG 91 WATER DISS REC (NG/L) (19026)	PCB COG 97 SED SUSP REC (NG/L) (19094)	PCB COG 97 WATER DISS REC (NG/L) (19031)	PCB COG 99 SED SUSP REC (NG/L) (19093)	PCB COG 99 WATER DISS REC (NG/L) (19030)	PCB COG 101 SED SUSP REC (NG/L) (19092)	PCB COG 101 WATER DISS REC (NG/L) (19029)	PCB COG 118 SED SUSP REC (NG/L) (19103)
OCT 1993											
20...	<0.03	0.10	<0.03	<0.05	<0.03	0.06	<0.04	0.08	0.12	0.19	0.07
NOV											
15...	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.05	0.04	0.11	0.10	0.04
DEC											
14...	<0.03	0.05	<0.03	<0.03	<0.03	0.04	<0.02	0.04	0.04	0.10	<0.03
FEB 1994											
15...	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.02	0.03	0.04	0.08	<0.03
MAR											
10...	<0.03	<0.03	0.05	<0.03	<0.03	<0.03	0.09	<0.02	0.17	0.05	0.07
16...	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	<0.02	0.05	0.05	0.03
MAY											
17...	0.05	<0.03	0.06	<0.03	0.04	<0.03	0.13	0.04	0.26	0.09	0.10
JUN											
22...	0.11	<0.03	0.11	0.04	0.06	<0.03	0.25	0.06	0.40	0.13	0.22
JUL											
07...	0.12	0.04	0.12	<0.03	0.09	<0.03	0.17	0.05	0.54	0.11	0.20
08...	0.07	<0.03	0.07	<0.03	0.05	<0.03	0.17	0.05	0.34	0.11	0.14

STREAMS TRIBUTARY TO LAKE MICHIGAN
04086710 MILWAUKEE RIVER AT THIENSVILLE, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	PCB COG 118 WATER DISS REC (NG/L) (19040)	PCB COG 128 SED SUSP REC (NG/L) (99924)	PCB COG 128 WATER DISS REC (NG/L) (99922)	PCB COG 132+153 SED SUSP REC (NG/L) (19105)	PCB COG 132+153 WATER DISS REC (NG/L) (19042)	PCB COG 135+144 SED SUSP REC (NG/L) (19101)	PCB COG 135+144 WATER DISS REC (NG/L) (19038)	PCB COG 136 SED SUSP REC (NG/L) (19097)	PCB COG 136 WATER DISS REC (NG/L) (19034)	PCB COG 137+176 SED SUSP REC (NG/L) (19107)	PCB COG 137+176 WATER DISS REC (NG/L) (19044)
OCT 1993											
20...	0.20	<0.035	0.043	0.62	0.29	0.10	0.04	<0.10	<0.09	<0.03	<0.03
NOV											
15...	0.03	<0.035	<0.035	0.45	0.13	0.08	0.02	<0.03	<0.03	<0.03	<0.03
DEC											
14...	0.05	<0.035	<0.035	0.16	0.12	0.03	<0.02	<0.03	<0.03	<0.03	<0.03
FEB 1994											
15...	0.03	<0.035	<0.035	0.15	0.08	0.02	<0.02	<0.03	<0.03	<0.03	<0.03
MAR											
10...	<0.03	<0.035	<0.035	0.72	0.07	0.14	<0.02	<0.03	<0.03	0.03	<0.03
16...	0.04	<0.035	<0.035	0.27	0.06	0.05	<0.02	<0.03	<0.03	<0.03	<0.03
MAY											
17...	0.03	0.037	<0.035	1.2	0.19	0.22	0.04	0.05	<0.03	0.04	<0.03
JUN											
22...	<0.03	0.075	<0.035	2.0	0.17	0.35	0.04	<0.03	<0.03	0.08	<0.03
JUL											
07...	<0.03	0.061	<0.035	1.9	0.14	0.38	<0.02	>0.07	<0.03	0.06	<0.03
08...	<0.03	0.045	<0.035	1.4	0.16	0.27	0.03	>0.03	<0.03	0.05	<0.03
DATE	PCB COG 138+163 SED SUSP REC (NG/L) (19108)	PCB COG 138+163 WATER DISS REC (NG/L) (19045)	PCB COG 141 SED SUSP REC (NG/L) (19106)	PCB COG 141 WATER DISS REC (NG/L) (19043)	PCB COG 146 SED SUSP REC (NG/L) (19104)	PCB COG 146 WATER DISS REC (NG/L) (19041)	PCB COG 149 SED SUSP REC (NG/L) (19102)	PCB COG 149 WATER DISS REC (NG/L) (19039)	PCB COG 151 SED SUSP REC (NG/L) (19100)	PCB COG 151 WATER DISS REC (NG/L) (19037)	PCB COG 167 SED SUSP REC (NG/L) (99925)
OCT 1993											
20...	0.37	0.28	0.10	0.04	0.18	0.06	0.32	0.15	0.15	0.06	<0.080
NOV											
15...	0.25	0.07	0.08	<0.02	0.13	0.03	0.24	0.08	0.11	0.03	<0.080
DEC											
14...	0.08	0.10	0.03	<0.02	0.04	<0.03	0.09	0.08	0.04	0.03	<0.080
FEB 1994											
15...	0.08	0.05	0.02	<0.02	0.04	<0.03	0.08	0.05	0.03	0.02	<0.080
MAR											
10...	0.43	0.05	0.13	<0.02	0.22	<0.03	0.39	0.05	0.19	<0.02	<0.080
16...	0.15	0.04	0.04	<0.02	0.07	<0.03	0.14	0.04	0.07	<0.02	<0.080
MAY											
17...	0.63	0.10	0.21	<0.03	0.33	0.05	0.64	0.11	0.30	0.05	<0.080
JUN											
22...	1.1	0.10	0.30	0.02	0.58	0.05	1.0	0.11	0.47	0.05	<0.080
JUL											
07...	1.0	0.10	0.32	<0.02	0.57	0.04	1.1	0.07	0.51	0.03	<0.080
08...	0.78	0.09	0.25	<0.02	0.41	<0.03	0.78	0.09	0.38	0.04	<0.080
DATE	PCB COG 167 WATER DISS REC (NG/L) (99923)	PCB COG 170+190 SED SUSP REC (NG/L) (19119)	PCB COG 170+190 WATER DISS REC (NG/L) (19056)	PCB COG 171+202 SED SUSP REC (NG/L) (19115)	PCB COG 171+202 WATER DISS REC (NG/L) (19052)	PCB COG 172+197 SED SUSP REC (NG/L) (19116)	PCB COG 172+197 WATER DISS REC (NG/L) (19053)	PCB COG 174 SED SUSP REC (NG/L) (19113)	PCB COG 174 WATER DISS REC (NG/L) (19050)	PCB COG 177 SED SUSP REC (NG/L) (19114)	PCB COG 177 WATER DISS REC (NG/L) (19051)
OCT 1993											
20...	<0.080	0.32	0.08	0.06	<0.03	0.07	<0.05	0.16	0.04	0.17	0.04
NOV											
15...	<0.080	0.28	<0.08	0.05	<0.03	<0.05	<0.05	0.14	<0.02	0.13	<0.03
DEC											
14...	<0.080	0.09	0.10	<0.03	<0.03	<0.05	<0.05	0.04	<0.02	0.04	<0.03
FEB 1994											
15...	<0.080	0.13	<0.08	<0.03	<0.03	<0.05	<0.05	0.04	<0.02	0.04	<0.03
MAR											
10...	<0.080	0.44	<0.08	0.09	<0.03	0.07	<0.05	0.22	<0.02	0.21	<0.03
16...	<0.080	0.12	<0.08	<0.03	<0.03	<0.05	<0.05	0.07	<0.02	0.06	<0.03
MAY											
17...	<0.080	0.59	<0.11	0.13	<0.03	0.10	<0.05	0.36	0.04	0.32	<0.03
JUN											
22...	<0.080	1.0	<0.08	0.23	<0.03	0.18	<0.05	0.52	0.03	0.54	0.03
JUL											
07...	<0.080	0.60	<0.08	0.19	<0.03	0.09	<0.05	0.45	0.03	0.45	<0.03
08...	<0.080	0.61	<0.09	0.15	<0.03	0.10	<0.05	0.35	0.03	0.33	<0.03

STREAMS TRIBUTARY TO LAKE MICHIGAN
04086710 MILWAUKEE RIVER AT THIENSVILLE, WI--CONTINUED

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	PCB COG 178 SED SUSP REC (NG/L) (19109)	PCB COG 178 WATER DISS REC (NG/L) (19046)	PCB COG 180 SED SUSP REC (NG/L) (19117)	PCB COG 180 WATER DISS REC (NG/L) (19054)	PCB COG 182+187 SED SUSP REC (NG/L) (19110)	PCB COG 182+187 WATER DISS REC (NG/L) (19047)	PCB COG 183 SED SUSP REC (NG/L) (19111)	PCB COG 183 WATER DISS REC (NG/L) (19048)	PCB COG 185 SED SUSP REC (NG/L) (19112)	PCB COG 185 WATER DISS REC (NG/L) (19049)	PCB COG 194 SED SUSP REC (NG/L) (19123)
OCT 1993											
20...	0.12	<0.04	0.42	0.12	0.33	0.07	0.13	<0.03	0.03	<0.03	0.10
NOV											
15...	0.09	<0.04	0.32	0.04	0.26	0.04	0.10	<0.03	<0.03	<0.03	0.08
DEC											
14...	<0.04	<0.04	0.10	0.06	0.08	0.04	<0.03	<0.03	<0.03	<0.03	<0.03
FEB 1994											
15...	<0.04	<0.04	0.10	<0.03	0.08	0.02	<0.03	<0.03	<0.03	<0.03	<0.03
MAR											
10...	0.16	<0.04	0.54	<0.03	0.41	<0.02	0.16	<0.03	0.03	<0.03	0.16
16...	0.05	<0.04	0.16	<0.03	0.14	<0.02	0.05	<0.03	<0.03	<0.03	0.04
MAY											
17...	0.24	<0.04	0.76	0.07	0.63	0.07	0.25	<0.03	0.06	<0.03	0.21
JUN											
22...	0.38	<0.04	1.2	0.07	0.98	0.07	0.42	<0.03	0.10	<0.03	0.32
JUL											
07...	0.36	<0.04	0.71	0.08	0.90	0.06	0.35	<0.03	0.08	<0.03	0.19
08...	0.28	<0.04	0.78	0.07	0.73	0.06	0.28	<0.03	0.06	<0.03	0.20
DATE	PCB COG 194 WATER DISS REC (NG/L) (19060)	PCB COG 195+208 SED SUSP REC (NG/L) (19122)	PCB COG 195+208 WATER DISS REC (NG/L) (19059)	PCB COG 196+203 SED SUSP REC (NG/L) (19121)	PCB COG 196+203 WATER DISS REC (NG/L) (19058)	PCB COG 199 SED SUSP REC (NG/L) (19118)	PCB COG 199 WATER DISS REC (NG/L) (19055)	PCB COG 201 SED SUSP REC (NG/L) (19120)	PCB COG 201 WATER DISS REC (NG/L) (19057)	PCB COG 206 SED SUSP REC (NG/L) (19124)	PCB COG 206 WATER DISS REC (NG/L) (19061)
OCT 1993											
20...	<0.03	0.13	<0.08	0.24	<0.08	<0.02	<0.02	0.22	<0.04	0.05	<0.04
NOV											
15...	<0.03	0.11	<0.08	0.20	<0.08	<0.02	<0.02	0.17	<0.04	0.04	<0.04
DEC											
14...	<0.03	<0.08	<0.08	<0.08	<0.08	<0.02	<0.02	0.05	<0.04	<0.04	<0.04
FEB 1994											
15...	<0.03	<0.08	<0.08	<0.08	<0.08	<0.02	<0.02	0.05	<0.04	<0.04	<0.04
MAR											
10...	<0.03	0.19	<0.08	0.33	<0.08	<0.02	<0.02	0.29	<0.04	0.07	<0.04
16...	<0.03	<0.08	<0.08	0.08	<0.08	<0.02	<0.02	0.08	<0.04	<0.04	<0.04
MAY											
17...	<0.03	0.28	<0.08	0.48	<0.08	0.03	<0.02	0.44	<0.04	0.09	<0.04
JUN											
22...	<0.03	0.45	<0.08	0.73	<0.08	0.03	<0.02	0.66	<0.04	0.14	<0.04
JUL											
07...	<0.03	0.35	<0.08	0.57	<0.08	<0.04	<0.02	0.51	<0.04	0.11	<0.04
08...	<0.03	0.31	<0.08	0.52	<0.08	0.03	<0.02	0.47	<0.04	0.10	<0.04

STREAMS TRIBUTARY TO LAKE MICHIGAN
040869415 LINCOLN CREEK, AT 47TH STREET, AT MILWAUKEE, WI
(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

LOCATION.--Lat 43°05'49", long 87°58'20", in NW 1/4 SE 1/4 sec.2, T.7 N., R.21 E., Milwaukee County, Hydrologic Unit 04040003, on right bank upstream from concrete drop structure at 47th Street, 100 ft west from intersection of 47th and Congress Streets.

DRAINAGE AREA.--9.56 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1993 to July 1995 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 640 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 13-14 and June 29. Records fair except those for estimated daily discharges, which are poor (see page 11).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	4.9	2.4	4.8	3.2	2.6	5.8	4.8	3.4	1.8	---	---
2	1.3	2.1	2.4	1.2	3.1	2.7	5.5	4.7	3.2	1.2	---	---
3	1.8	2.0	2.3	1.7	2.8	2.6	4.9	4.3	3.1	1.4	---	---
4	3.1	15	2.1	2.4	2.2	2.3	4.7	4.6	2.5	29	---	---
5	2.8	61	2.8	2.5	1.6	3.1	4.2	3.7	2.7	5.4	---	---
6	2.5	33	6.2	2.5	1.9	3.3	4.3	3.1	31	2.5	---	---
7	2.6	3.1	5.1	2.2	2.2	5.0	14	2.5	45	2.2	---	---
8	27	8.9	3.8	1.7	2.0	4.9	7.9	18	9.8	2.2	---	---
9	3.6	16	4.4	3.6	2.5	4.0	10	70	3.6	2.2	---	---
10	2.0	3.5	2.9	2.7	2.8	16	4.6	50	2.9	2.8	---	---
11	2.6	3.0	2.4	5.1	1.7	18	56	11	2.8	2.9	---	---
12	2.9	2.9	2.2	9.7	1.7	6.6	27	7.3	2.5	2.9	---	---
13	2.7	6.2	2.2	8.1	1.8	5.2	11	21	2.7	3.2	---	---
14	2.9	9.9	2.7	75	1.9	4.5	7.0	12	2.8	6.2	---	---
15	3.4	3.1	2.8	6.0	2.7	4.2	5.6	5.5	3.3	67	---	---
16	3.8	2.4	7.8	3.9	2.5	3.8	9.5	6.4	2.7	16	---	---
17	2.6	2.4	8.5	4.0	2.7	3.4	6.6	6.4	2.0	2.7	---	---
18	2.5	2.5	4.1	4.0	5.9	3.1	101	4.3	1.5	2.5	---	---
19	2.6	1.9	3.0	4.0	5.6	5.7	15	4.0	3.2	2.9	---	---
20	2.6	1.5	4.1	4.6	6.3	31	11	3.6	3.3	2.7	---	---
21	2.4	12	4.7	3.2	3.4	6.2	17	3.0	5.9	2.6	---	---
22	2.3	2.8	5.0	2.8	4.1	4.3	7.4	3.4	3.0	2.2	---	---
23	2.3	2.5	6.3	3.5	4.0	4.0	5.7	35	3.7	3.6	---	---
24	2.5	1.6	3.9	3.3	3.4	3.6	6.5	7.2	2.6	15	---	---
25	2.8	1.3	2.7	3.4	2.6	3.2	5.9	4.8	2.2	9.3	---	---
26	2.6	1.1	2.3	3.2	2.1	2.7	36	4.2	3.5	12	---	---
27	2.5	52	2.4	3.0	2.4	25	73	35	8.0	4.0	---	---
28	2.5	5.4	2.5	2.5	2.7	42	11	32	8.6	3.2	---	---
29	2.5	3.1	1.9	1.8	---	21	6.9	4.1	24	2.0	---	---
30	2.3	2.5	1.5	3.6	---	12	5.1	3.9	3.3	1.4	---	---
31	2.7	---	2.2	2.7	---	7.6	---	3.7	---	2.6	---	---
TOTAL	106.0	269.6	109.6	182.7	81.8	263.6	490.1	383.5	198.8	217.6	---	---
MEAN	3.42	8.99	3.54	5.89	2.92	8.50	16.3	12.4	6.63	7.02	---	---
MAX	27	61	8.5	75	6.3	42	101	70	45	67	---	---
MIN	1.3	1.1	1.5	1.2	1.6	2.3	4.2	2.5	1.5	1.2	---	---
CFSM	.36	.94	.37	.62	.31	.89	1.71	1.29	.69	.73	---	---
IN.	.41	1.05	.43	.71	.32	1.03	1.91	1.49	.77	.85	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1995, BY WATER YEAR (WY)												
MEAN	3.60	7.25	3.26	3.84	7.44	15.3	23.3	8.60	14.3	13.1	13.6	10.8
MAX	3.79	8.99	3.54	5.89	12.0	22.7	47.1	12.4	25.4	19.3	14.1	15.7
(WY)	1994	1995	1995	1995	1994	1993	1993	1995	1993	1994	1993	1993
MIN	3.42	5.52	2.98	1.79	2.92	8.50	6.46	5.35	6.63	7.02	13.2	5.94
(WY)	1995	1994	1994	1994	1995	1995	1994	1994	1995	1995	1994	1994

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR (OCTOBER-JULY)		WATER YEARS 1993 - 1995		
ANNUAL TOTAL	3203.7						
ANNUAL MEAN	8.78				8.48		
HIGHEST ANNUAL MEAN					8.48		1994
LOWEST ANNUAL MEAN					8.48		1994
HIGHEST DAILY MEAN	230	Jul 4	101	Apr 18	245	Apr 15	1993
LOWEST DAILY MEAN	(a)1.1	(b)Feb 9-11	1.1	Nov 26	(c).20	Dec 26	1993
ANNUAL SEVEN-DAY MINIMUM	(a)1.2	Feb 5	2.0	Jan 2	(c).76	Dec 23	1993
INSTANTANEOUS PEAK FLOW			1370	Jul 15	3240	Jul 4	1994
INSTANTANEOUS PEAK STAGE			11.68	Jul 15	13.65	Jul 4	1994
INSTANTANEOUS LOW FLOW			.40	Feb 11	(c).10	Dec 26	1993
ANNUAL RUNOFF (CFSM)	.92				.89		
ANNUAL RUNOFF (INCHES)	12.47				12.05		
10 PERCENT EXCEEDS	17		16		25		
50 PERCENT EXCEEDS	3.4		3.3		3.8		
90 PERCENT EXCEEDS	1.8		2.1		2.1		

(a) Ice affected

(b) Also occurred Nov. 26, which was not ice affected

(c) Estimated, result of freezeup

STREAMS TRIBUTARY TO LAKE MICHIGAN
040869415 LINCOLN CREEK, AT 47TH STREET, AT MILWAUKEE, WI--CONTINUED
(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1993 to current year. National Water-Quality Assessment Program sampling began in April 1993.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: March 1993 to current year.

DISSOLVED OXYGEN: June 1994 to current year, open-water periods.

INSTRUMENTATION.--Stage-activated water-quality sampler from March 1993 to July 1995. Continuous water-temperature recorder since March 1993. Dissolved-oxygen recorder during open-water periods since June 1994.

REMARKS.--Chemical analyses are by the Wisconsin State Laboratory of Hygiene. Samples are storm-composite samples collected by an automatic point sampler unless otherwise indicated. Dissolved-oxygen concentrations greater than 20.0 mg/L are out of calibration range of meter. Records represent water temperature at sensor within 0.5°C. Water temperature data for the period June through September 1994 was omitted from the water year 1994 publication and is included here.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum observed, 30.5°C, July 13, 1995; minimum observed, 0.0°C, many days during winter period.

DISSOLVED OXYGEN: Maximum observed, 15.3 mg/L, May 21 and June 17, 1995; minimum observed, 0.1 mg/L, Aug. 25, 1995.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum observed, 30.5°C, July 13; minimum observed, 0.0°C, many days during winter period.

DISSOLVED OXYGEN: Maximum observed, 15.3 mg/L, May 21 and June 17; minimum observed, 0.1 mg/L, Aug. 25.

REVISIONS.--WDR WI-93-1. Runoff volumes (99905) published for storm event samples for the 1993 water year are incorrect due to a calculation error. The published values may be corrected by multiplying them by 0.0864.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

NATIONAL WATER QUALITY ASSESSMENT PROGRAM DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	BARO-METRIC PRES-SURE (MM OF HG)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	
		(00061)	(00095)	(00400)	(00010)	(00300)	(00025)	(00900)	(00915)	(00925)	(00930)	
OCT 1994												
10...	0950	2.0	632	8.0	10.5	8.6	768	210	50	20	51	
NOV												
18...	0850	3.6	733	7.8	9.0	8.6	752	240	58	23	56	
DEC												
08...	1035	3.8	405	7.7	2.5	11.4	765	210	58	16	680	
JAN 1995												
12...	1020	9.7	6640	7.5	1.5	11.4	757	260	76	17	1300	
FEB												
28...	0930	2.6	1520	8.3	2.0	13.2	770	260	66	24	190	
APR												
18...	1415	187	382	7.5	9.0	10.7	746	100	27	8.6	42	
MAY												
08...	1345	10	460	8.2	10.5	11.1	764	350	81	35	130	
JUL												
10...	1000	2.4	1080	7.9	21.0	7.6	762	270	57	31	90	
		POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)
		(00935)	(00453)	(39086)	(00945)	(00940)	(00950)	(00955)	(70300)	(00631)	(00613)	(00608)
OCT 1994												
10...	2.3	181	148	47	83	0.50	3.8	355	0.320	0.010	0.050	
NOV												
18...	2.6	212	174	42	100	0.80	4.7	406	--	--	--	
DEC												
08...	4.6	154	126	42	1200	0.40	3.8	2160	0.410	0.010	0.060	
JAN 1995												
12...	11	134	110	56	2000	0.40	3.8	3610	1.10	0.130	0.430	
FEB												
28...	3.1	229	188	56	350	0.70	4.0	840	0.530	0.020	0.130	
APR												
18...	1.7	95	78	22	73	0.10	3.1	237	0.750	0.020	0.300	
MAY												
08...	3.3	347	284	64	240	0.40	5.5	760	1.70	0.070	0.270	
JUL												
10...	3.4	198	162	67	180	0.50	4.1	578	0.270	0.030	0.060	

STREAMS TRIBUTARY TO LAKE MICHIGAN
040869415 LINCOLN CREEK, AT 47TH STREET, AT MILWAUKEE, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 1994											
10...	0.40	0.40	0.050	0.020	0.020	59	17	--	--	10	86
NOV											
18...	--	--	--	--	--	68	14	--	--	13	93
DEC											
08...	0.40	0.30	0.040	0.030	0.010	72	24	3.7	0.20	11	97
JAN 1995											
12...	1.0	1.1	0.040	0.070	0.030	120	70	8.4	0.70	11	98
FEB											
28...	0.40	0.40	0.050	0.040	0.030	44	24	3.0	0.60	18	98
APR											
18...	1.4	0.70	0.240	0.030	0.020	52	28	5.1	2.3	215	99
MAY											
08...	1.2	1.1	0.100	0.080	0.070	95	27	12	1.1	17	98
JUL											
10...	0.50	0.40	0.050	0.020	0.020	190	19	--	--	10	96

WISCONSIN DISTRICT PROGRAM DATA

FIXED INTERVAL SAMPLES

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOVER- -ABLE (MG/L) (00921)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	ALKA- LITY WAT WH TOT FET LAB MG/L AS CACO3 (00417)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)
OCT 1994											
05...	1305	2.8	--	--	50	50	20	20	141	120	<5
19...	1015	2.0	--	--	53	51	21	21	145	84	<5
NOV											
02...	1045	2.0	--	--	49	50	18	20	142	58	<5
16...	1005	2.4	--	1500	56	54	21	21	161	98	11
30...	1015	2.4	--	760	62	61	24	23	172	110	<5
DEC											
29...	1020	2.0	1.2	1200	93	92	39	37	246	290	14
JAN 1995											
30...	0830	2.8	3.7	8600	80	75	31	30	197	370	31

DATE	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CADMIUM TOTAL RECOVER- -ABLE (UG/L) (01113)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	COPPER, TOTAL RECOVER- -ABLE (UG/L) (01119)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	LEAD, TOTAL RECOVER- -ABLE (UG/L) (01114)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)
OCT 1994											
05...	424	0.189	0.029	0.037	0.007	0	0.0	4	2	1	1
19...	374	0.144	<0.027	0.051	0.018	0	0.0	6	5	<1	1
NOV											
02...	338	0.088	<0.027	0.066	0.036	0	0.0	5	4	2	0
16...	420	0.431	0.056	0.100	0.057	0	0.0	6	2	3	0
30...	442	0.655	0.088	0.040	0.021	0	0.1	8	5	2	1
DEC											
29...	864	1.25	0.090	0.060	0.031	0	0.2	5	2	2	0
JAN 1995											
30...	988	0.799	0.160	0.090	0.022	0	0.2	5	3	2	0

STREAMS TRIBUTARY TO LAKE MICHIGAN
040869415 LINCOLN CREEK, AT 47TH STREET, AT MILWAUKEE, WI-CONTINUED

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	ZINC, TOTAL RECOVER- ABLE (UG/L) (01094)	ZINC, DIS- SOLVED (UG/L) AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L) AS C) (00680)	CARBON, ORGANIC DIS- SOLVED (MG/L) AS C) (00681)	ACE- NAPHTH- ENE TOTAL (UG/L) (34205)	ACE- NAPHTH- YLENE TOTAL (UG/L) (34200)	ANTHRA- CENE TOTAL (UG/L) (34220)	BENZO A ANTHRAC- ENE1,2- BENZANT HRACENE TOTAL (UG/L) (34526)	BENZO- A- PYRENE TOTAL (UG/L) (34247)	BENZO B FLUOR- AN- THENE TOTAL (UG/L) (34230)
OCT 1994										
05...	30	16	3.6	3.3	<3.40	<8.20	<0.120	<0.003	0.004	0.008
19...	50	<8	4.6	4.4	<3.40	<8.20	<0.120	<0.003	<0.002	0.005
NOV										
02...	30	13	5.5	4.9	<3.40	<8.20	<0.120	<0.003	0.003	<0.004
16...	20	15	3.9	3.8	<3.40	<8.20	<0.120	0.007	0.013	0.020
30...	<20	11	3.9	3.8	<3.40	<8.20	<0.120	0.004	0.005	0.010
DEC										
29...	20	14	3.3	3.0	<3.40	<8.20	<0.120	0.013	0.015	0.021
JAN 1995										
30...	30	<8	2.9	2.8	<3.40	<8.20	<0.120	0.015	0.017	0.016

DATE	BENZOGH I PERYL ENE1,12 -BENZOP ERYLENE TOTAL (UG/L) (34521)	BENZO K FLUOR- AN- THENE TOTAL (UG/L) (34242)	CHRY- SENE TOTAL (UG/L) (34320)	FLUOR- ANTHENE TOTAL (UG/L) (34376)	FLUOR- ENE TOTAL (UG/L) (34381)	INDENO (1,2,3- CD) PYRENE TOTAL (UG/L) (34403)	NAPHTH- ALENE TOTAL (UG/L) (34696)	1,2,5,6 -DIBENZ -ANTHRA- CENE TOTAL (UG/L) (34556)	PHENAN- THRENE TOTAL (UG/L) (34461)	PYRENE TOTAL (UG/L) (34469)
OCT 1994										
05...	0.005	0.003	<0.023	0.031	<0.600	<0.020	<10.0	<0.005	<0.170	0.019
19...	<0.005	<0.003	<0.023	0.025	<0.600	<0.020	<10.0	<0.005	<0.170	0.018
NOV										
02...	<0.005	<0.003	<0.023	0.033	<0.600	<0.020	<10.0	<0.005	<0.170	0.024
16...	0.013	0.011	<0.023	0.063	<0.600	<0.020	<10.0	<0.005	<0.170	0.044
30...	0.008	0.005	<0.023	0.032	<0.600	<0.020	<10.0	<0.005	<0.170	0.023
DEC										
29...	0.018	0.012	<0.023	0.070	<0.600	0.022	<10.0	<0.005	<0.170	0.063
JAN 1995										
30...	0.014	0.100	0.025	--	<0.600	0.020	<10.0	<0.005	<0.170	--

STORM EVENT SAMPLES

BEGIN- NING DATE	BEGIN- NING TIME	ENDING DATE	ENDING TIME	RUNOFF VOLUME MILLIONS OF CUBIC FEET (99905)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	CALCIUM TOTAL RECOV- ERABLE (MG/L) AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L) AS CA) (00915)
11-05-94	1846	11-06-94	0803	7.69	--	--	28	14
11-27-94	1212	11-28-94	0342	4.56	--	7400	25	13
01-13-95	2400	01-14-95	2221	6.74	8.2	--	38	22

DATE	MAGNE- SIUM, TOTAL RECOVER- ABLE (MG/L) (00921)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS MG) (00925)	ALKA- LINITY WAT WH TOT FET LAB MG/L AS CACO3 (00417)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL) (00940)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (MG/L) (00500)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N) (00608)	PHOS- PHORUS TOTAL (MG/L) AS P) (00665)
11-05-94	10	4.1	49	14	172	264	0.255	<0.027	0.389
11-27-94	9.0	3.8	43	17	124	226	0.391	0.155	0.280
01-13-95	13	6.0	68	200	144	612	0.547	0.131	0.430

DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L) AS P) (00671)	CADMIUM TOTAL RECOVER- ABLE (UG/L) (01113)	CADMIUM DIS- SOLVED (UG/L) AS CD) (01025)	COPPER, TOTAL RECOVER- ABLE (UG/L) (01119)	COPPER, DIS- SOLVED (UG/L) AS CU) (01040)	LEAD, TOTAL RECOVER- ABLE (UG/L) (01114)	LEAD, DIS- SOLVED (UG/L) AS PB) (01049)	ZINC, TOTAL RECOVER- ABLE (UG/L) (01094)	ZINC, DIS- SOLVED (UG/L) AS ZN) (01090)
11-05-94	0.101	0	0.0	20	2	30	2	120	13
11-27-94	0.065	0	0.0	18	3	24	1	110	13
01-13-95	0.068	1	0.2	29	5	39	1	180	24

STREAMS TRIBUTARY TO LAKE MICHIGAN

040869415 LINCOLN CREEK, AT 47TH STREET, AT MILWAUKEE, WI--CONTINUED

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	21.5	17.0	19.0	24.5	21.5	23.0	24.5	21.0	22.5	18.5	16.0	17.5
2	18.5	13.5	16.0	24.0	20.5	21.5	24.5	20.5	22.5	18.0	17.0	17.5
3	18.5	11.5	16.0	22.0	19.0	20.5	24.5	21.0	22.0	18.0	17.0	17.5
4	20.5	14.0	17.5	22.5	21.0	21.5	22.0	19.5	21.0	17.5	16.5	16.5
5	21.0	16.0	18.5	26.5	21.0	23.5	20.0	16.5	18.5	17.5	17.0	17.0
6	24.0	17.5	20.5	24.5	22.0	23.0	20.0	17.5	18.5	20.0	17.0	18.5
7	23.0	15.5	18.0	23.5	23.5	23.5	21.5	18.0	19.5	20.0	17.5	19.0
8	19.0	14.0	16.5	23.5	23.5	23.5	22.0	19.5	21.0	20.5	17.5	19.5
9	20.0	15.5	18.0	23.5	23.5	23.5	21.0	18.5	19.0	21.5	19.0	20.0
10	19.5	17.0	17.5	23.5	23.5	23.5	18.5	17.5	18.0	22.0	20.5	21.5
11	21.0	16.5	18.5	24.0	21.0	23.0	21.0	17.0	18.5	23.5	21.0	22.0
12	23.0	16.5	19.5	26.0	20.5	23.5	21.0	18.5	19.5	23.0	21.5	22.5
13	23.5	17.5	21.0	25.0	20.0	22.0	24.0	19.0	21.5	24.0	21.5	22.5
14	24.5	19.0	21.5	21.5	18.0	20.0	22.5	19.0	20.5	24.0	21.0	22.5
15	28.0	23.5	25.5	24.0	18.5	21.0	22.0	19.0	20.5	24.5	22.0	23.0
16	28.0	23.5	26.0	23.5	19.5	21.5	22.5	19.5	21.0	24.5	22.5	23.0
17	28.0	23.5	26.0	24.5	21.5	23.0	23.0	19.5	21.5	22.5	20.0	20.5
18	27.0	22.5	25.0	25.5	21.5	23.5	23.0	19.5	22.0	21.0	18.5	20.0
19	25.5	22.5	23.5	26.0	21.5	24.0	22.5	20.5	21.5	21.5	19.0	20.0
20	26.0	19.5	22.5	25.5	21.0	23.5	22.0	20.0	20.5	21.0	19.0	20.5
21	26.5	23.0	25.0	27.0	21.5	24.0	23.0	19.5	21.0	21.0	20.0	20.5
22	25.5	22.0	24.0	24.5	20.5	22.5	22.0	20.0	21.5	20.5	18.5	19.5
23	24.5	18.0	20.5	25.5	21.0	23.5	22.5	18.0	20.5	20.5	18.0	19.5
24	19.5	17.0	18.5	25.0	22.5	24.0	25.0	21.0	23.0	20.5	18.5	19.5
25	24.0	16.5	20.0	24.0	22.0	23.0	25.0	22.0	23.5	19.5	17.0	18.5
26	24.5	18.5	21.5	23.5	20.0	21.0	26.0	21.5	24.0	17.5	15.5	16.5
27	25.0	19.0	22.0	22.5	19.0	21.0	25.5	22.5	24.0	15.5	15.0	15.5
28	24.5	19.0	22.0	23.0	20.0	22.0	24.5	21.0	23.0	15.0	14.0	14.5
29	23.0	19.0	21.0	23.0	20.5	21.5	22.0	19.5	21.0	15.5	13.5	14.5
30	24.0	20.0	22.0	22.5	20.5	21.5	21.0	19.0	20.0	16.0	14.5	15.5
31	---	---	---	24.5	21.0	23.0	19.0	18.0	19.0	---	---	---
MONTH	28.0	11.5	20.8	27.0	18.0	22.5	26.0	16.5	21.0	24.5	13.5	19.2

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	16.5	15.5	16.5	11.0	9.5	11.0	5.0	3.0	5.0	2.5	.5	2.5
2	15.5	14.0	15.5	11.0	9.0	11.0	6.0	5.0	6.0	1.0	.0	1.0
3	15.0	13.5	15.0	13.0	10.5	13.0	8.0	6.0	8.0	1.0	.0	1.0
4	15.5	14.5	15.5	13.5	12.0	13.5	7.5	6.5	7.5	.5	.0	.5
5	15.0	13.0	15.0	12.5	9.5	12.5	8.5	7.5	8.5	.5	.0	.5
6	16.5	14.0	16.5	10.5	9.5	10.5	7.5	4.0	7.5	.0	.0	.0
7	18.0	16.0	18.0	10.0	8.0	10.0	5.0	1.5	5.0	.0	.0	.0
8	18.0	14.0	18.0	13.0	10.0	13.0	4.0	2.5	4.0	.0	.0	.0
9	14.0	11.5	14.0	12.5	9.0	12.5	5.5	4.0	5.5	.0	.0	.0
10	11.5	10.0	11.5	9.0	7.0	9.0	4.5	2.0	4.5	.0	.0	.0
11	12.0	10.0	12.0	9.0	8.0	9.0	2.0	1.0	2.0	.5	.0	.5
12	13.0	11.5	13.0	9.5	8.0	9.5	1.5	.5	1.5	3.0	.5	3.0
13	13.5	12.0	13.5	14.0	9.5	14.0	2.0	1.0	2.0	5.0	3.0	5.0
14	15.0	13.5	15.0	14.0	11.0	14.0	2.0	1.5	2.0	4.5	1.5	4.5
15	15.0	14.5	15.0	11.0	8.0	11.0	3.5	2.0	3.5	3.0	2.0	3.0
16	16.0	14.5	16.0	8.5	7.5	8.5	7.0	3.5	7.0	3.0	2.0	3.0
17	17.0	15.5	17.0	9.0	7.5	9.0	7.0	5.0	7.0	4.0	3.0	4.0
18	17.0	17.0	17.0	9.0	7.0	9.0	5.5	3.5	5.5	4.0	2.5	4.0
19	17.5	16.5	17.5	7.0	5.5	7.0	3.5	2.5	3.5	3.0	1.0	3.0
20	16.5	14.0	16.5	7.5	5.5	7.5	6.5	2.5	6.5	2.5	1.0	2.5
21	14.0	12.5	14.0	10.5	7.0	10.5	6.5	5.0	6.5	2.0	1.0	2.0
22	15.5	13.0	15.5	7.0	2.0	7.0	7.0	4.0	7.0	1.0	.5	1.0
23	14.5	12.0	14.5	3.0	1.5	3.0	7.0	5.5	7.0	2.5	.5	2.5
24	12.0	9.0	12.0	4.5	2.5	4.5	6.5	4.5	6.5	2.5	.5	2.5
25	9.5	8.5	9.5	4.5	3.0	4.5	4.5	3.5	4.5	1.5	.0	1.5
26	10.0	9.0	10.0	3.5	2.5	3.5	3.5	3.0	3.5	1.0	.5	1.0
27	10.5	8.5	10.5	6.0	2.5	6.0	5.0	3.0	5.0	2.0	.5	2.0
28	10.5	9.0	10.5	5.0	3.0	5.0	5.0	3.5	5.0	2.5	1.5	2.5
29	12.5	10.0	12.5	4.0	3.0	4.0	4.0	2.0	4.0	1.5	1.0	1.5
30	12.0	10.5	12.0	4.0	3.5	4.0	2.5	1.5	2.5	2.0	.5	2.0
31	11.0	9.5	11.0	---	---	---	3.0	2.0	3.0	2.5	.5	2.5
MONTH	18.0	8.5	14.2	14.0	1.5	8.9	8.5	.5	5.0	5.0	.0	1.9

STREAMS TRIBUTARY TO LAKE MICHIGAN

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040869415 LINCOLN CREEK, AT 47TH STREET, AT MILWAUKEE, WI--CONTINUED

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	3.5	2.5	3.5	3.0	1.0	3.0	7.5	4.0	7.5	13.0	8.0	13.0
2	3.5	3.0	3.5	2.5	.5	2.5	10.5	5.0	10.5	14.5	8.5	14.5
3	4.0	3.0	4.0	3.0	.5	3.0	12.0	7.0	12.0	15.0	9.0	15.0
4	3.0	.5	3.0	4.0	1.5	4.0	11.0	4.0	11.0	14.5	11.0	14.5
5	1.5	.0	1.5	3.0	1.5	3.0	5.5	2.5	5.5	15.5	8.5	15.5
6	1.5	.0	1.5	2.5	1.5	2.5	11.0	5.0	11.0	15.5	11.5	15.5
7	1.0	.0	1.0	3.5	1.5	3.5	10.5	4.5	10.5	17.0	13.5	17.0
8	1.0	.0	1.0	4.0	1.5	4.0	7.0	5.0	7.0	15.5	9.0	15.5
9	1.0	.0	1.0	3.0	.5	3.0	8.5	4.0	8.5	14.0	8.0	14.0
10	1.0	.0	1.0	6.5	2.0	6.5	7.0	4.0	7.0	11.0	9.5	11.0
11	1.0	.0	1.0	8.0	2.0	8.0	9.5	5.0	9.5	17.5	10.0	17.5
12	1.5	.0	1.5	11.0	4.0	11.0	8.5	6.0	8.5	18.5	11.0	18.5
13	1.0	.0	1.0	12.5	7.5	12.5	13.0	6.0	13.0	16.0	12.0	16.0
14	1.0	.0	1.0	12.5	8.0	12.5	12.5	6.0	12.5	16.0	12.0	16.0
15	.5	.0	.5	12.0	8.5	12.0	10.5	6.5	10.5	19.5	11.5	19.5
16	1.0	.0	1.0	10.5	7.5	10.5	10.5	6.5	10.5	20.5	13.5	20.5
17	1.0	.0	1.0	10.0	6.5	10.0	13.5	7.5	13.5	19.0	14.5	19.0
18	2.0	.5	2.0	7.5	5.0	7.5	12.5	6.5	12.5	18.0	11.5	18.0
19	2.5	1.0	2.5	8.0	6.0	8.0	10.5	8.0	10.5	19.0	12.5	19.0
20	3.5	2.0	3.5	7.0	5.0	7.0	8.5	7.0	8.5	19.0	15.0	19.0
21	2.0	.5	2.0	6.5	5.0	6.5	8.0	6.5	8.0	19.0	15.0	19.0
22	5.5	2.0	5.5	9.0	4.0	9.0	13.0	6.5	13.0	19.0	15.0	19.0
23	5.5	3.0	5.5	8.5	5.5	8.5	11.5	7.5	11.5	19.0	14.0	19.0
24	4.5	2.5	4.5	8.5	4.0	8.5	12.5	7.0	12.5	14.5	13.0	14.5
25	4.0	2.5	4.0	8.0	5.5	8.0	13.0	8.0	13.0	19.0	12.0	19.0
26	2.5	.5	2.5	8.0	6.0	8.0	12.5	8.5	12.5	19.0	13.5	19.0
27	1.5	.5	1.5	6.0	2.0	6.0	9.5	8.0	9.5	18.5	12.5	18.5
28	4.0	1.5	4.0	5.0	2.5	5.0	14.5	7.0	14.5	18.0	12.5	18.0
29	---	---	---	7.5	4.0	7.5	13.5	9.0	13.5	17.0	14.0	17.0
30	---	---	---	7.5	5.0	7.5	12.5	8.5	12.5	21.0	14.0	21.0
31	---	---	---	7.0	4.5	7.0	---	---	---	---	---	---
MONTH	5.5	.0	2.3	12.5	.5	7.0	14.5	2.5	10.7	---	---	---
JUNE			JULY			AUGUST			SEPTEMBER			
1	---	---	---	---	---	---	27.0	21.5	27.0	24.0	20.0	24.0
2	---	---	---	---	---	---	22.0	21.0	22.0	22.0	19.0	22.0
3	---	---	---	---	---	---	23.5	21.0	23.5	22.5	20.5	22.5
4	---	---	---	---	---	---	25.5	22.5	25.5	23.0	21.0	23.0
5	---	---	---	---	---	---	25.5	21.5	25.5	24.0	21.5	24.0
6	---	---	---	---	---	---	26.5	24.0	26.5	24.0	21.5	24.0
7	---	---	---	21.0	19.0	21.0	26.0	22.5	26.0	21.5	17.0	21.5
8	---	---	---	22.0	19.0	22.0	25.0	22.0	25.0	18.0	15.5	18.0
9	16.5	14.0	16.5	24.0	20.5	24.0	24.5	21.5	24.5	18.0	16.0	18.0
10	17.5	15.0	17.5	24.0	21.0	24.0	24.5	21.0	24.5	18.5	17.0	18.5
11	19.0	16.0	19.0	25.0	22.5	25.0	27.0	23.0	27.0	18.0	16.0	18.0
12	20.5	16.5	20.5	26.5	23.0	26.5	27.0	25.0	27.0	19.5	17.0	19.5
13	21.5	17.5	21.5	30.5	25.0	30.5	27.5	25.5	27.5	21.5	19.0	21.5
14	22.5	19.0	22.5	29.5	25.0	29.5	28.5	22.5	28.5	21.0	19.5	21.0
15	22.5	19.0	22.5	25.5	22.5	25.5	26.0	22.5	26.0	19.5	17.5	19.5
16	23.5	20.0	23.5	27.0	22.0	27.0	26.0	22.0	26.0	21.5	18.0	21.5
17	24.5	21.5	24.5	26.5	24.5	26.5	26.5	23.0	26.5	19.5	17.5	19.5
18	26.5	23.0	26.5	25.0	22.5	25.0	27.0	23.0	27.0	18.0	15.5	18.0
19	26.0	23.5	26.0	24.5	22.5	24.5	26.5	22.5	26.5	17.5	16.0	17.5
20	26.5	23.0	26.5	24.0	21.5	24.0	25.5	22.0	25.5	17.5	15.0	17.5
21	26.5	17.0	26.5	24.5	22.0	24.5	25.5	22.0	25.5	15.5	14.0	15.5
22	25.0	21.0	25.0	24.0	22.5	24.0	25.0	22.5	25.0	14.0	12.5	14.0
23	24.5	20.5	24.5	24.0	20.5	24.0	25.5	22.0	25.5	13.0	11.0	13.0
24	25.5	21.5	25.5	25.5	22.5	25.5	25.5	22.5	25.5	14.0	12.0	14.0
25	25.0	22.5	25.0	26.5	22.5	26.5	24.0	21.5	24.0	14.5	13.5	14.5
26	23.0	20.5	23.0	26.0	21.0	26.0	25.5	23.0	25.5	17.0	14.5	17.0
27	21.5	19.0	21.5	26.0	23.0	26.0	25.5	21.5	25.5	17.0	15.0	17.0
28	23.5	20.0	23.5	25.5	22.5	25.5	---	---	---	18.0	16.0	18.0
29	---	---	---	26.5	24.0	26.5	---	---	---	18.0	17.0	18.0
30	---	---	---	28.5	24.5	28.5	---	---	---	19.5	17.5	19.5
31	---	---	---	29.0	26.0	29.0	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	24.0	11.0	19.0

STREAMS TRIBUTARY TO LAKE MICHIGAN

040869415 LINCOLN CREEK, AT 47TH STREET, AT MILWAUKEE, WI--CONTINUED

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

[illegible]

[illegible]

STREAMS TRIBUTARY TO LAKE MICHIGAN
040869415 LINCOLN CREEK, AT 47TH STREET, AT MILWAUKEE, WI--CONTINUED

PRECIPITATION QUANTITY

PERIOD OF RECORD.--February 1993 to July 1995, non-frozen precipitation, (discontinued).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established Feb. 13, 1993. Rainfall estimated to be 0.00 for Dec. 6-9, 15-16, 31, Jan. 6, 19, and Mar. 5-7, 28 because recorded precipitation interpreted as collector snowmelt. Rainfall data missing for the period Aug. 1 to Sept. 30.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 1.73 in., Apr. 19, 1993.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 1.12 in., June 7.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY SUM VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	.05	.00	.00	.00	.00	.03	.00	.00	.00	---	---
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	---	---
3	.00	.04	.00	.00	.00	.00	.00	.00	.00	.00	---	---
4	.01	.20	.00	.00	.00	.00	.00	.00	.00	.44	---	---
5	.00	1.04	.02	.00	.00	.00	.00	.00	.00	.02	---	---
6	.00	.08	.00	.00	.00	.00	.00	.00	.36	.00	---	---
7	.00	.00	.00	.00	.00	.00	.23	.00	1.12	.00	---	---
8	.48	.22	.00	.00	.00	.00	.02	.37	.00	.00	---	---
9	.00	.10	.00	.00	.00	.00	.03	.75	.00	.00	---	---
10	.00	.00	.00	.00	.00	.00	.00	.21	.00	.00	---	---
11	.00	.00	.00	.00	.00	.00	.65	.00	.00	.00	---	---
12	.00	.00	.00	.00	.00	.00	.15	.00	.00	.00	---	---
13	.00	.25	.00	.23	.00	.00	.00	.13	.00	.00	---	---
14	.00	.03	.00	.50	.00	.00	.00	.00	.00	.00	---	---
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.98	---	---
16	.00	.00	.00	.00	.00	.00	.11	.03	.00	.00	---	---
17	.02	.00	.00	.00	.00	.00	.01	.00	.00	.00	---	---
18	.00	.00	.00	.00	.00	.00	.90	.00	.00	.00	---	---
19	.00	.00	.00	.00	.00	.09	.00	.00	.00	.02	---	---
20	.00	.01	.00	.00	.00	.44	.04	.00	.00	.03	---	---
21	.00	.14	.00	.00	.00	.00	.12	.00	.00	.00	---	---
22	.02	.00	.00	.00	.00	.00	.00	.00	.00	.06	---	---
23	.00	.00	.00	.00	.00	.00	.00	.55	.00	.00	---	---
24	.00	.00	.00	.00	.00	.00	.02	.02	.00	.08	---	---
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14	---	---
26	.00	.00	.00	.00	.00	.00	.54	.00	.00	.08	---	---
27	.00	.64	.00	.00	.00	.64	.37	.68	.13	.04	---	---
28	.00	.00	.00	.00	.00	.00	.00	.02	.00	.04	---	---
29	.00	.00	.00	.00	---	.00	.00	.00	.23	.00	---	---
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	---	---
31	.05	---	.00	.00	---	.00	---	.00	---	.30	---	---
TOTAL	0.62	2.80	0.02	0.73	0.00	1.17	3.22	2.76	1.84	2.23	---	---

DRAINAGE AREA.--696 mi².

PERIOD OF RECORD.--April 1914 to current year. Published as "near Milwaukee" prior to 1936.

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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	172	127	279	170	120	170	703	754	341	130	216	685
2	154	120	276	130	120	180	670	647	303	134	107	536
3	182	118	269	100	120	180	619	571	267	106	115	449
4	205	160	253	94	120	160	582	516	235	185	165	379
5	200	218	237	90	110	150	532	474	217	113	138	330
6	184	483	220	88	110	150	478	440	270	93	106	296
7	163	324	210	90	110	140	453	406	323	88	144	292
8	228	329	200	90	110	140	451	402	265	112	87	238
9	161	347	200	100	110	150	454	616	231	108	298	228
10	132	278	200	110	120	170	430	834	243	99	238	207
11	126	252	190	130	120	200	534	925	236	93	217	184
12	217	229	190	150	110	300	682	928	215	87	213	168
13	138	214	190	190	110	600	846	818	203	98	186	153
14	133	254	190	400	110	916	844	766	188	94	276	148
15	129	203	190	390	120	1080	770	675	169	252	223	136
16	125	198	200	430	130	965	712	599	154	210	679	306
17	123	191	200	400	140	857	637	579	141	100	725	187
18	124	185	200	300	140	735	1060	546	133	129	505	130
19	119	193	200	220	150	646	1250	497	151	112	413	155
20	120	178	190	200	160	674	1200	431	120	94	336	176
21	120	196	190	180	170	658	1100	380	112	82	314	197
22	117	177	200	170	190	699	976	287	100	77	273	203
23	118	179	210	170	200	660	883	175	98	89	228	194
24	118	156	220	160	200	607	766	316	93	108	208	180
25	125	163	220	160	200	552	694	299	89	113	185	171
26	137	163	230	150	190	494	666	288	89	143	168	162
27	139	326	230	150	190	490	1130	343	94	105	842	160
28	134	309	230	140	190	564	1220	477	96	116	1310	157
29	124	351	220	130	---	555	1060	409	147	101	1210	144
30	121	330	200	130	---	634	899	401	134	107	1160	136
31	116	---	190	120	---	688	---	379	---	106	915	---
TOTAL	4504	6951	6624	5532	3970	15164	23301	16178	5457	3584	12200	7087
MEAN	145	232	214	178	142	489	777	522	182	116	394	236
MAX	228	483	279	430	200	1080	1250	928	341	252	1310	685
MIN	116	118	190	88	110	140	430	175	89	77	87	130
CFSM	.21	.33	.31	.26	.20	.70	1.12	.75	.26	.17	.57	.34
IN.	.24	.37	.35	.30	.21	.81	1.25	.86	.29	.19	.65	.34

MEAN	282	354	305	252	381	1062	970	495	371	218	205	270
MAX	1316	1956	981	864	2200	3545	3024	1720	1249	1200	2936	2304
(WY)	1987	1986	1929	1916	1938	1929	1993	1973	1984	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 TRIBUTARY TO LAKE MICHIGAN
04087000 MILWAUKEE RIVER AT MILWAUKEE, WI--CONTINUEDd

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1914 - 1995	
ANNUAL TOTAL	127198		110552		430	
ANNUAL MEAN	348		303		874	1986
HIGHEST ANNUAL MEAN					112	1958
LOWEST ANNUAL MEAN					14800	Mar 20 1918
HIGHEST DAILY MEAN	2210	Mar 23	1310	Aug 28	(a).00	Sep 8 1943
LOWEST DAILY MEAN	58	May 26	77	Jul 22	8.3	Aug 3 1936
ANNUAL SEVEN-DAY MINIMUM	84	Sep 15	93	Jan 3	15100	(b)Mar 20 1918
INSTANTANEOUS PEAK FLOW			4550	Aug 28	(c)9.00	Aug 6 1924
INSTANTANEOUS PEAK STAGE			5.68	Aug 28	(a).00	Sep 8 1943
INSTANTANEOUS LOW FLOW			(a)35	May 23	.62	
ANNUAL RUNOFF (CFSM)	.50		.44		8.39	
ANNUAL RUNOFF (INCHES)	6.80		5.91		977	
10 PERCENT EXCEEDS	784		686		223	
50 PERCENT EXCEEDS	193		197		70	
90 PERCENT EXCEEDS	118		109			

(a) Result of regulation

(b) Also occurred Aug. 6, 1924

(c) Datum then in use, from floodmark for 1918, from graph based on gage reading for 1924

STREAMS TRIBUTARY TO LAKE MICHIGAN
04087000 MILWAUKEE RIVER AT MILWAUKEE, WI--CONTINUED
(NATIONAL WATER-QUALITY ASSESSMENT PROGRAM STATION)

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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 1994 TO SEPTEMBER 1995

NATIONAL WATER-QUALITY ASSESSMENT PROGRAM

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
OCT 1994											
10...	1135	120	662	8.3	14.0	9.6	768	280	57	34	38
NOV											
18...	1055	173	805	8.4	8.0	12.4	752	360	73	42	40
DEC											
08...	0830	200	895	8.4	0.5	13.7	765	330	70	37	70
JAN 1995											
12...	0815	150	1880	7.9	0.0	12.4	757	460	100	50	280
FEB											
28...	1215	190	838	7.8	0.5	16.1	770	320	69	36	51
APR											
18...	1620	1230	628	8.5	10.5	10.1	746	230	52	25	35
MAY											
08...	1625	418	720	8.4	13.0	11.6	764	330	70	37	33
JUN											
02...	1010	289	770	8.6	20.5	8.8	745	320	68	36	37
JUL											
10...	1300	98	780	8.8	24.5	9.5	762	230	39	31	48

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO3 (00453)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	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)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)
OCT 1994											
10...	3.6	259	228	33	64	0.20	7.4	382	0.650	0.020	<0.015
NOV											
18...	3.6	329	298	42	70	0.20	4.1	462	--	--	--
DEC											
08...	3.2	317	276	42	130	0.10	5.3	561	1.30	<0.010	0.020
JAN 1995											
12...	4.7	461	378	56	470	0.30	6.4	1250	2.20	0.030	0.100
FEB											
28...	3.5	322	264	38	92	0.20	4.2	496	1.80	0.010	0.030
APR											
18...	2.5	242	198	31	64	0.10	1.7	359	0.470	0.010	0.060
MAY											
08...	2.6	400	348	31	68	0.20	0.72	433	0.330	0.010	0.020
JUN											
02...	2.6	310	294	28	67	0.20	3.8	453	0.500	0.020	0.030
JUL											
10...	3.1	203	206	31	90	0.20	0.40	431	<0.050	<0.010	<0.015

STREAMS TRIBUTARY TO LAKE MICHIGAN
04087000 MILWAUKEE RIVER AT MILWAUKEE, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 1994											
10...	0.70	0.50	0.070	0.020	0.020	45	6	--	--	14	97
NOV											
18...	--	--	--	--	--	48	14	--	--	58	84
DEC											
08...	0.50	0.50	0.070	0.040	0.030	30	9	6.8	0.50	23	86
JAN 1995											
12...	0.80	0.90	0.040	0.070	0.030	38	19	7.7	0.20	--	--
FEB											
28...	0.50	0.40	0.070	0.050	0.040	27	7	4.6	0.30	6	89
APR											
18...	1.2	0.70	0.170	0.020	0.020	57	23	9.5	2.4	111	94
MAY											
08...	1.2	0.70	0.110	0.030	0.020	91	19	9.8	1.0	29	97
JUN											
02...	1.1	0.50	0.090	<0.010	0.010	18	3	8.6	1.8	16	92
JUL											
10...	1.3	0.70	0.160	0.040	0.030	22	6	--	--	13	97

WISCONSIN DISTRICT PROGRAM DATA

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDE (MG/L) (00535)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)	CHLORO- PHYLL A TRICHR. UNCORR. WHOLE TOTAL (UG/L) (32210)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 1994											
**11...	1445	--	124	70	14	<5	6.1	1.0	25.8	13	98
*11...	1446	--	124	70	13	<5	--	--	--	--	--
**12...	1000	--	530	73	436	64	6.6	7.8	90.8	--	--
*12...	1001	--	530	74	576	92	--	--	--	--	--
**12...	1315	--	192	75	99	13	6.4	2.3	43.3	90	99
*12...	1316	--	191	76	100	15	--	--	--	--	--
JAN 1995											
**19...	0930	220	--	87	13	7	7.2	1.1	6.03	--	--
*19...	0931	220	--	84	12	5	--	--	--	--	--
MAR											
**17...	1045	--	858	36	28	6	8.8	2.0	14.6	32	82
*17...	1046	--	858	38	22	6	--	--	--	--	--
**17...	1050	--	858	36	28	8	9.1	1.6	13.9	30	88
*17...	1051	--	858	39	24	6	--	--	--	--	--
**21...	0845	--	647	54	21	6	9.4	0.80	10.8	26	92
*21...	0846	--	647	54	18	6	--	--	--	--	--
APR											
**13...	0830	--	849	59	38	8	8.3	1.3	10.8	40	92
*13...	0831	--	849	59	47	10	--	--	--	--	--
*23...	0930	--	894	--	--	--	--	--	--	45	90
**28...	0930	--	1260	52	48	10	8.8	2.1	25.7	--	--
*28...	1030	--	1260	52	44	10	--	--	24.6	--	--
AUG											
09...	1000	--	1270	--	184	42	--	--	--	--	--
16...	0700	--	1300	--	150	37	--	--	--	--	--
16...	1309	--	531	--	106	24	--	--	--	--	--
**16...	1330	--	557	52	42	14	5.6	4.0	120	30	98
*16...	1331	--	558	52	50	18	--	--	--	--	--
16...	2315	--	1250	--	70	18	--	--	--	--	--
17...	0045	--	1330	--	96	22	--	--	--	--	--
17...	0400	--	1230	--	84	20	--	--	--	--	--
17...	0730	--	1590	--	84	20	--	--	--	--	--
27...	0745	--	1650	--	105	24	--	--	--	--	--
27...	1115	--	2930	--	236	46	--	--	--	--	--
28...	1000	--	2710	--	221	43	--	--	--	--	--
28...	1015	--	3740	--	291	50	--	--	--	--	--
28...	1030	--	4300	--	536	87	--	--	--	--	--
29...	1143	--	1170	--	99	18	--	--	--	--	--
*29...	1231	--	1180	49	65	14	--	--	--	--	--
**29...	1232	--	1180	49	67	14	10	3.8	40.0	64	99
30...	2100	--	1290	--	36	10	--	--	--	--	--
31...	2100	--	1240	--	45	10	--	--	--	--	--

* Equal-width increment (EWI) sample

** Multiple verticals

STREAMS TRIBUTARY TO LAKE MICHIGAN
04087000 MILWAUKEE RIVER AT MILWAUKEE, WI--CONTINUED

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 19953

		DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PCB COG 5 + 8 SED SUSP REC (NG/L) (19067)	PCB COG 5 + 8 WATER DISS REC (NG/L) (19004)	PCB COG 6 SED SUSP REC (NG/L) (19066)	PCB COG 6 WATER DISS REC (NG/L) (19003)	PCB COG 7 SED SUSP REC (NG/L) (19065)	PCB COG 7 WATER DISS REC (NG/L) (19002)	PCB COG 16 + 32 SED SUSP REC (NG/L) (19072)	PCB COG 16 + 32 WATER DISS REC (NG/L) (19009)	PCB COG 17 SED SUSP REC (NG/L) (19070)	PCB COG 17 WATER DISS REC (NG/L) (19007)	
JUL 1993	**11...	0930	1750	0.55	1.3	<0.15	0.28	<0.03	<0.05	0.53	0.92	0.37	0.50
AUG	**04...	0900	305	0.17	0.74	<0.08	0.27	<0.02	0.03	0.30	0.88	0.20	0.53
	**25...	1100	248	0.19	0.73	<0.08	0.27	<0.02	0.03	0.34	0.98	0.24	0.56
SEP	**14...	0945	511	0.62	0.50	0.14	0.14	<0.02	<0.02	0.84	0.49	0.34	0.26
	**28...	0915	715	<0.09	<0.09	<0.08	<0.08	<0.02	<0.02	0.17	0.11	0.10	0.07
DATE	TIME	PCB COG 18 SED SUSP REC (NG/L) (19069)	PCB COG 18 WATER DISS REC (NG/L) (19006)	PCB COG 19 SED SUSP REC (NG/L) (19068)	PCB COG 19 WATER DISS REC (NG/L) (19005)	PCB COG 22 SED SUSP REC (NG/L) (19076)	PCB COG 22 WATER DISS REC (NG/L) (19013)	PCB COG 24 + 27 SED SUSP REC (NG/L) (19071)	PCB COG 24 + 27 WATER DISS REC (NG/L) (19008)	PCB COG 26 SED SUSP REC (NG/L) (19073)	PCB COG 26 WATER DISS REC (NG/L) (19010)	PCB COG 28 + 31 SED SUSP REC (NG/L) (19074)	PCB COG 28 + 31 WATER DISS REC (NG/L) (19011)
JUL 1993	11...	0.48	0.78	0.07	0.15	0.44	0.58	<0.04	<0.12	0.30	0.36	2.4	2.0
AUG	04...	0.26	0.77	0.03	0.13	0.19	0.50	0.03	0.06	0.18	0.36	1.1	1.8
	25...	0.33	0.85	0.03	0.14	0.25	0.43	0.05	0.10	0.23	0.39	1.4	1.7
SEP	14...	0.56	0.39	0.08	0.05	0.57	0.34	0.10	<0.02	0.51	0.27	2.4	1.1
	28...	0.12	0.07	<0.02	<0.02	0.15	0.09	<0.02	<0.02	0.10	<0.08	0.63	0.35
DATE		PCB COG 33 SED SUSP REC (NG/L) (19075)	PCB COG 33 WATER DISS REC (NG/L) (19012)	PCB COG 37 + 42 SED SUSP REC (NG/L) (19083)	PCB COG 37 + 42 WATER DISS REC (NG/L) (19020)	PCB COG 40 SED SUSP REC (NG/L) (19085)	PCB COG 40 WATER DISS REC (NG/L) (19022)	PCB COG 41 +64+71 SED SUSP REC (NG/L) (19084)	PCB COG 41 +64+71 WATER DISS REC (NG/L) (19021)	PCB COG 44 SED SUSP REC (NG/L) (19082)	PCB COG 44 WATER DISS REC (NG/L) (19019)	PCB COG 45 SED SUSP REC (NG/L) (19077)	PCB COG 45 WATER DISS REC (NG/L) (19014)
JUL 1993	11...	<0.40	0.44	0.74	0.42	0.20	0.14	0.72	0.41	0.92	0.59	0.15	0.12
AUG	04...	<0.20	0.40	0.40	0.38	0.12	0.14	0.49	0.41	0.55	0.61	0.09	0.13
	25...	0.28	0.41	0.63	0.40	0.18	0.15	0.48	0.43	0.82	0.64	0.10	0.15
SEP	14...	0.54	0.26	1.2	0.27	0.35	0.10	1.2	0.28	1.5	0.42	0.24	0.09
	28...	<0.14	0.10	0.23	0.11	0.06	0.03	0.21	0.12	0.27	0.17	0.06	<0.03
DATE		PCB COG 46 SED SUSP REC (NG/L) (19078)	PCB COG 46 WATER DISS REC (NG/L) (19015)	PCB COG 47 + 48 SED SUSP REC (NG/L) (19081)	PCB COG 47 + 48 WATER DISS REC (NG/L) (19018)	PCB COG 49 SED SUSP REC (NG/L) (19080)	PCB COG 49 WATER DISS REC (NG/L) (19017)	PCB COG 52 SED SUSP REC (NG/L) (19079)	PCB COG 52 WATER DISS REC (NG/L) (19016)	PCB COG 56 + 60 SED SUSP REC (NG/L) (19090)	PCB COG 56 + 60 WATER DISS REC (NG/L) (19027)	PCB COG 66 + 95 SED SUSP REC (NG/L) (19088)	PCB COG 66 + 95 WATER DISS REC (NG/L) (19025)
JUL 1993	11...	0.10	0.08	0.73	0.38	0.73	0.38	0.76	0.46	0.88	0.44	2.0	0.69
AUG	04...	0.06	0.09	0.40	0.31	0.40	0.37	0.42	0.43	0.40	0.30	0.99	0.52
	25...	0.08	0.10	0.56	0.33	0.58	0.38	0.64	0.48	0.57	0.27	1.2	0.59
SEP	14...	0.17	0.07	1.0	0.18	1.1	0.22	1.3	0.33	0.74	0.15	3.3	0.70
	28...	<0.03	<0.03	0.21	0.10	0.22	0.12	0.25	0.16	0.29	<0.13	0.56	0.29
DATE		PCB COG 70 + 76 SED SUSP REC (NG/L) (19087)	PCB COG 70 + 76 WATER DISS REC (NG/L) (19024)	PCB COG 74 SED SUSP REC (NG/L) (19086)	PCB COG 74 WATER DISS REC (NG/L) (19023)	PCB COG 77+110 SED SUSP REC (NG/L) (19098)	PCB COG 77+110 WATER DISS REC (NG/L) (19035)	PCB COG 82 SED SUSP REC (NG/L) (19099)	PCB COG 82 WATER DISS REC (NG/L) (19036)	PCB COG 84 + 92 SED SUSP REC (NG/L) (19091)	PCB COG 84 + 92 WATER DISS REC (NG/L) (19028)	PCB COG 85 SED SUSP REC (NG/L) (19096)	PCB COG 85 WATER DISS REC (NG/L) (19033)
JUL 1993	11...	1.2	0.50	0.39	0.16	1.2	0.31	0.25	<0.08	<0.60	0.17	<2.4	<0.08
AUG	04...	0.59	0.36	0.18	0.10	0.58	0.19	0.10	<0.03	0.31	0.15	<0.72	<0.14
	25...	0.73	0.34	<0.60	0.09	0.49	0.22	0.08	<0.03	0.35	0.15	<0.53	<0.12
SEP	14...	1.2	0.26	<0.52	0.07	2.1	0.29	<0.33	<0.03	1.0	0.11	<1.6	<0.15
	28...	0.34	0.16	<0.11	0.04	0.32	0.22	0.04	<0.03	0.24	0.12	<0.28	<0.15

** Multiple verticals

STREAMS TRIBUTARY TO LAKE MICHIGAN
04087000 MILWAUKEE RIVER AT MILWAUKEE, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	PCB COG 87 SED SUSP REC (NG/L) (19095)	PCB COG 87 WATER DISS REC (NG/L) (19032)	PCB COG 91 SED SUSP REC (NG/L) (19089)	PCB COG 91 WATER DISS REC (NG/L) (19026)	PCB COG 97 SED SUSP REC (NG/L) (19094)	PCB COG 97 WATER DISS REC (NG/L) (19031)	PCB COG 99 SED SUSP REC (NG/L) (19093)	PCB COG 99 WATER DISS REC (NG/L) (19030)	PCB COG 101 SED SUSP REC (NG/L) (19092)	PCB COG 101 WATER DISS REC (NG/L) (19029)	PCB COG 118 SED SUSP REC (NG/L) (19103)
JUL 1993											
11...	0.39	0.10	0.24	<0.07	0.25	0.06	0.42	0.07	0.69	0.17	0.82
AUG											
04...	0.18	0.07	0.12	<0.05	0.11	0.05	0.19	0.06	0.31	0.12	0.33
25...	0.22	0.08	0.11	0.04	0.14	0.05	0.21	0.06	0.36	0.12	0.21
SEP											
14...	0.70	0.10	<0.18	<0.05	0.44	0.07	0.52	0.04	1.5	0.27	1.1
28...	0.12	<0.09	0.07	<0.04	0.09	0.05	0.13	0.05	0.23	0.12	0.19
DATE	PCB COG 118 WATER DISS REC (NG/L) (19040)	PCB COG 128 SED SUSP REC (NG/L) (99924)	PCB COG 128 WATER DISS REC (NG/L) (99922)	PCB COG 132+153 SED SUSP REC (NG/L) (19105)	PCB COG 132+153 WATER DISS REC (NG/L) (19042)	PCB COG 135+144 SED SUSP REC (NG/L) (19101)	PCB COG 135+144 WATER DISS REC (NG/L) (19038)	PCB COG 136 SED SUSP REC (NG/L) (19097)	PCB COG 136 WATER DISS REC (NG/L) (19034)	PCB COG 137+176 SED SUSP REC (NG/L) (19107)	PCB COG 137+176 WATER DISS REC (NG/L) (19044)
JUL 1993											
11...	0.12	0.170	<0.060	2.5	0.22	0.45	0.05	<1.2	<0.14	0.10	<0.05
AUG											
04...	0.06	0.065	<0.035	0.92	0.10	0.15	<0.02	<0.36	<0.07	<0.04	<0.03
25...	0.05	0.050	<0.035	0.67	0.12	0.11	<0.02	<0.26	<0.06	<0.03	<0.03
SEP											
14...	0.08	0.430	<0.035	8.6	0.58	1.3	0.09	<0.78	<0.08	0.65	<0.03
28...	0.09	0.059	<0.035	0.87	0.16	0.16	0.03	<0.14	<0.08	0.04	<0.03
DATE	PCB COG 138+163 SED SUSP REC (NG/L) (19108)	PCB COG 138+163 WATER DISS REC (NG/L) (19045)	PCB COG 141 SED SUSP REC (NG/L) (19106)	PCB COG 141 WATER DISS REC (NG/L) (19043)	PCB COG 146 SED SUSP REC (NG/L) (19104)	PCB COG 146 WATER DISS REC (NG/L) (19041)	PCB COG 149 SED SUSP REC (NG/L) (19102)	PCB COG 149 WATER DISS REC (NG/L) (19039)	PCB COG 151 SED SUSP REC (NG/L) (19100)	PCB COG 151 WATER DISS REC (NG/L) (19037)	PCB COG 167 SED SUSP REC (NG/L) (99925)
JUL 1993											
11...	1.9	0.14	0.44	<0.03	0.69	<0.06	1.3	0.14	0.61	0.07	<0.150
AUG											
04...	0.69	0.06	0.16	<0.02	0.24	<0.03	0.47	0.07	0.21	0.03	<0.080
25...	0.38	0.08	0.11	<0.02	0.18	<0.03	0.36	0.07	0.17	0.03	<0.140
SEP											
14...	6.5	0.41	2.0	0.11	1.2	0.07	4.4	0.35	2.1	0.15	0.180
28...	0.56	0.10	0.17	<0.02	0.22	0.04	0.49	0.11	0.21	0.04	<0.080
DATE	PCB COG 167 WATER DISS REC (NG/L) (99923)	PCB COG 170+190 SED SUSP REC (NG/L) (19119)	PCB COG 170+190 WATER DISS REC (NG/L) (19056)	PCB COG 171+202 SED SUSP REC (NG/L) (19115)	PCB COG 171+202 WATER DISS REC (NG/L) (19052)	PCB COG 172+197 SED SUSP REC (NG/L) (19116)	PCB COG 172+197 WATER DISS REC (NG/L) (19053)	PCB COG 174 SED SUSP REC (NG/L) (19113)	PCB COG 174 WATER DISS REC (NG/L) (19050)	PCB COG 177 SED SUSP REC (NG/L) (19114)	PCB COG 177 WATER DISS REC (NG/L) (19051)
JUL 1993											
11...	<0.160	1.5	<0.16	0.31	<0.06	0.21	<0.08	0.72	0.09	0.66	<0.06
AUG											
04...	<0.080	0.51	<0.09	0.11	<0.03	0.08	<0.05	0.25	<0.02	0.23	<0.03
25...	<0.080	0.32	<0.12	0.08	<0.03	0.06	<0.05	0.19	<0.02	0.15	<0.03
SEP											
14...	<0.080	7.1	0.28	1.5	0.06	1.1	<0.05	3.7	0.18	2.4	0.11
28...	<0.080	0.54	<0.08	0.12	<0.03	0.09	<0.05	0.29	<0.02	0.25	<0.03
DATE	PCB COG 178 SED SUSP REC (NG/L) (19109)	PCB COG 178 WATER DISS REC (NG/L) (19046)	PCB COG 180 SED SUSP REC (NG/L) (19117)	PCB COG 180 WATER DISS REC (NG/L) (19054)	PCB COG 182+187 SED SUSP REC (NG/L) (19110)	PCB COG 182+187 WATER DISS REC (NG/L) (19047)	PCB COG 183 SED SUSP REC (NG/L) (19111)	PCB COG 183 WATER DISS REC (NG/L) (19048)	PCB COG 185 SED SUSP REC (NG/L) (19112)	PCB COG 185 WATER DISS REC (NG/L) (19049)	PCB COG 194 SED SUSP REC (NG/L) (19123)
JUL 1993											
11...	0.46	<0.07	1.7	0.11	1.2	0.07	0.51	<0.07	0.12	<0.06	0.47
AUG											
04...	0.16	<0.04	0.60	0.04	0.44	0.03	0.18	<0.03	0.04	<0.03	0.16
25...	0.12	<0.04	0.44	0.04	0.35	0.04	0.14	<0.03	<0.06	<0.03	0.11
SEP											
14...	1.2	0.05	8.7	0.38	4.3	0.20	2.9	0.12	0.61	<0.03	1.9
28...	0.17	<0.04	0.68	0.05	0.48	0.05	0.21	<0.03	0.05	<0.03	0.16

STREAMS TRIBUTARY TO LAKE MICHIGAN
04087000 MILWAUKEE RIVER AT MILWAUKEE, WI--CONTINUED

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	PCB COG 194 WATER DISS REC (NG/L) (19060)	PCB COG 195+208 SED SUSP REC (NG/L) (19122)	PCB COG 195+208 WATER DISS REC (NG/L) (19059)	PCB COG 196+203 SED SUSP REC (NG/L) (19121)	PCB COG 196+203 WATER DISS REC (NG/L) (19058)	PCB COG 199 SED SUSP REC (NG/L) (19118)	PCB COG 199 WATER DISS REC (NG/L) (19055)	PCB COG 201 SED SUSP REC (NG/L) (19120)	PCB COG 201 WATER DISS REC (NG/L) (19057)	PCB COG 206 SED SUSP REC (NG/L) (19124)	PCB COG 206 WATER DISS REC (NG/L) (19061)
JUL 1993											
11...	<0.06	0.59	<0.15	1.0	<0.15	0.06	<0.04	0.85	<0.08	0.23	<0.08
AUG											
04...	<0.03	0.20	<0.08	0.34	<0.08	0.02	<0.02	0.29	<0.04	0.08	<0.04
25...	<0.03	0.14	<0.08	0.24	<0.08	<0.02	<0.02	0.22	<0.04	0.06	<0.04
SEP											
14...	0.06	2.4	<0.08	4.3	0.13	0.28	<0.02	3.5	0.11	0.71	<0.04
28...	<0.03	0.20	<0.08	0.37	<0.08	0.03	<0.02	0.32	<0.04	0.07	<0.04

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PCB COG 5 + 8 SED SUSP REC (NG/L) (19067)	PCB COG 5 + 8 WATER DISS REC (NG/L) (19004)	PCB COG 6 SED SUSP REC (NG/L) (19066)	PCB COG 6 WATER DISS REC (NG/L) (19003)	PCB COG 7 SED SUSP REC (NG/L) (19065)	PCB COG 7 WATER DISS REC (NG/L) (19002)	PCB COG 16 + 32 SED SUSP REC (NG/L) (19072)	PCB COG 16 + 32 WATER DISS REC (NG/L) (19009)	PCB COG 17 SED SUSP REC (NG/L) (19070)	
OCT 1993													
**20...	1400	--	316	0.20	0.53	<0.08	0.09	<0.02	<0.02	0.26	0.35	0.16	
NOV													
**15...	1400	--	360	0.14	0.48	<0.08	0.13	<0.02	<0.02	0.30	0.38	0.18	
DEC													
**14...	1010	--	321	<0.09	0.29	<0.08	<0.08	<0.02	<0.02	0.05	0.17	0.04	
FEB 1994													
**15...	1045	180	--	<0.09	0.11	<0.08	<0.08	<0.02	<0.02	<0.03	0.06	<0.03	
MAR													
**11...	1000	1400	--	1.1	1.0	0.32	0.34	0.02	0.02	1.7	0.68	1.1	
**16...	1415	1300	--	0.72	0.97	0.17	0.26	<0.02	0.02	1.0	0.72	0.68	
MAY													
**17...	0900	--	268	0.27	1.3	<0.08	0.41	<0.02	0.03	0.50	1.0	0.53	
**17...	1045	--	268	0.19	1.4	<0.08	0.40	<0.02	0.06	0.24	1.1	0.25	
JUN													
**22...	0915	--	78	0.25	0.74	<0.08	0.23	<0.02	<0.02	0.45	0.86	0.35	
JUL													
**07...	0945	--	268	0.10	0.53	<0.08	0.12	<0.02	<0.02	0.26	0.44	0.26	
**08...	1045	--	1090	0.17	0.77	<0.08	0.17	<0.02	<0.02	0.21	0.63	0.15	
DATE		PCB COG 17 WATER DISS REC (NG/L) (19007)	PCB COG 18 SED SUSP REC (NG/L) (19069)	PCB COG 18 WATER DISS REC (NG/L) (19006)	PCB COG 19 SED SUSP REC (NG/L) (19068)	PCB COG 19 WATER DISS REC (NG/L) (19005)	PCB COG 22 SED SUSP REC (NG/L) (19076)	PCB COG 22 WATER DISS REC (NG/L) (19013)	PCB COG 24 + 27 SED SUSP REC (NG/L) (19071)	PCB COG 24 + 27 WATER DISS REC (NG/L) (19008)	PCB COG 26 SED SUSP REC (NG/L) (19073)	PCB COG 26 WATER DISS REC (NG/L) (19010)	PCB COG 28 + 31 SED SUSP REC (NG/L) (19074)
OCT 1993													
20...	0.22	0.22	0.28	0.02	0.05	0.18	0.22	<0.02	<0.02	0.18	0.13	1.1	
NOV													
15...	0.22	0.26	0.34	0.03	0.05	0.15	0.21	0.03	0.04	0.15	0.16	1.1	
DEC													
14...	0.12	0.05	0.16	<0.02	0.03	<0.05	0.10	<0.02	<0.02	0.04	0.09	0.25	
FEB 1994													
15...	0.06	<0.03	0.06	<0.02	<0.02	<0.05	<0.05	<0.02	<0.02	<0.03	<0.03	0.10	
MAR													
11...	0.44	1.3	0.68	0.08	0.07	1.6	0.32	0.16	0.06	1.0	0.27	5.9	
16...	0.32	0.87	0.48	0.04	0.05	0.86	0.29	0.07	0.04	0.59	0.23	3.2	
MAY													
17...	0.54	0.79	0.93	0.06	0.14	0.53	0.55	0.08	0.11	0.61	0.47	3.0	
17...	0.57	0.31	0.96	0.04	0.18	0.22	0.57	0.05	0.11	0.29	0.52	1.6	
JUN													
22...	0.41	0.48	0.81	0.04	0.12	0.37	0.45	0.07	0.09	0.38	0.34	2.1	
JUL													
07...	0.18	0.40	0.39	0.04	0.08	0.29	0.19	0.04	0.03	0.28	0.16	1.7	
08...	0.26	0.21	0.58	0.04	0.12	0.17	0.29	0.04	0.05	0.15	0.23	1.1	

** Multiple verticals

STREAMS TRIBUTARY TO LAKE MICHIGAN
04087000 MILWAUKEE RIVER AT MILWAUKEE, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	PCB COG 28 + 31 WATER DISS REC (NG/L) (19011)	PCB COG 33 SED SUSP REC (NG/L) (19075)	PCB COG 33 WATER DISS REC (NG/L) (19012)	PCB COG 37 + 42 SED SUSP REC (NG/L) (19083)	PCB COG 37 + 42 WATER DISS REC (NG/L) (19020)	PCB COG 40 SED SUSP REC (NG/L) (19085)	PCB COG 40 WATER DISS REC (NG/L) (19022)	PCB COG +64+71 SED SUSP REC (NG/L) (19084)	PCB COG +64+71 WATER DISS REC (NG/L) (19021)	PCB COG 44 SED SUSP REC (NG/L) (19082)	PCB COG 44 WATER DISS REC (NG/L) (19019)	PCB COG 45 SED SUSP REC (NG/L) (19077)
OCT 1993												
20...	0.83	0.19	0.26	0.40	0.20	0.11	0.07	0.24	0.20	0.56	0.34	0.06
NOV												
15...	0.85	<0.13	0.08	0.32	0.15	0.09	0.05	0.40	0.19	0.45	0.25	0.06
DEC												
14...	0.42	<0.03	0.04	0.06	0.07	<0.03	<0.03	0.08	0.09	0.09	0.13	<0.02
FEB 1994												
15...	0.18	<0.03	<0.03	<0.03	0.04	<0.03	<0.03	<0.04	0.04	0.03	0.06	<0.02
MAR												
11...	1.3	<0.98	<0.22	1.4	0.22	0.43	0.07	1.9	0.24	2.1	0.35	0.25
16...	1.0	0.52	0.18	0.85	0.20	0.19	0.05	0.88	0.18	1.1	0.26	0.12
MAY												
17...	2.2	<0.23	0.19	0.93	0.35	0.28	0.11	1.1	0.40	1.4	0.56	0.16
17...	2.3	<0.16	<0.39	0.73	0.37	0.22	0.12	0.79	0.44	1.1	0.60	0.13
JUN												
22...	1.8	<0.35	<0.30	0.75	0.37	0.23	0.14	0.95	0.48	1.1	0.63	0.14
JUL												
07...	0.87	<0.20	<0.14	0.53	0.16	0.17	0.06	0.73	0.20	0.80	0.27	0.11
08...	1.2	<0.15	<0.21	0.60	0.22	0.22	0.08	0.74	0.31	0.95	0.38	0.15

DATE	PCB COG 45 WATER DISS REC (NG/L) (19014)	PCB COG 46 SED SUSP REC (NG/L) (19078)	PCB COG 46 WATER DISS REC (NG/L) (19015)	PCB COG 47 + 48 SED SUSP REC (NG/L) (19081)	PCB COG 47 + 48 WATER DISS REC (NG/L) (19018)	PCB COG 49 SED SUSP REC (NG/L) (19080)	PCB COG 49 WATER DISS REC (NG/L) (19017)	PCB COG 52 SED SUSP REC (NG/L) (19079)	PCB COG 52 WATER DISS REC (NG/L) (19016)	PCB COG 56 + 60 SED SUSP REC (NG/L) (19090)	PCB COG 56 + 60 WATER DISS REC (NG/L) (19027)	PCB COG 66 + 95 SED SUSP REC (NG/L) (19088)
OCT 1993												
20...	0.06	0.05	0.04	0.49	0.94	0.44	0.20	0.45	0.27	0.43	0.09	1.2
NOV												
15...	0.04	0.05	0.03	0.35	0.14	0.36	0.17	0.40	0.22	0.29	0.10	0.64
DEC												
14...	<0.02	<0.03	<0.03	0.08	0.08	0.09	0.11	0.10	0.14	0.08	0.07	0.17
FEB 1994												
15...	<0.02	<0.03	<0.03	<0.03	0.05	0.04	0.07	0.05	0.07	<0.05	<0.05	0.10
MAR												
11...	0.06	0.22	0.05	1.5	0.20	1.6	0.25	1.7	0.30	1.4	0.13	2.7
16...	0.05	0.10	0.03	0.81	0.17	0.85	0.19	0.90	0.24	0.73	0.12	1.5
MAY												
17...	0.09	0.15	0.09	1.3	0.42	1.0	0.39	1.1	0.47	0.57	0.15	1.7
17...	0.10	0.12	0.10	0.93	0.56	0.87	0.44	0.95	0.53	0.36	0.21	1.3
JUN												
22...	0.12	0.10	0.09	0.89	0.41	0.83	0.41	0.95	0.53	0.66	0.25	1.5
JUL												
07...	0.05	0.07	0.04	0.67	0.19	0.66	0.17	0.77	0.24	0.40	0.12	1.1
08...	0.08	0.12	0.06	0.79	0.24	0.69	0.20	0.95	0.34	0.41	0.19	1.2

DATE	PCB COG 66 + 95 WATER DISS REC (NG/L) (19025)	PCB COG 70 + 76 SED SUSP REC (NG/L) (19087)	PCB COG 70 + 76 WATER DISS REC (NG/L) (19024)	PCB COG 74 SED SUSP REC (NG/L) (19086)	PCB COG 74 WATER DISS REC (NG/L) (19023)	PCB COG 77+110 SED SUSP REC (NG/L) (19098)	PCB COG 77+110 WATER DISS REC (NG/L) (19035)	PCB COG 82 SED SUSP REC (NG/L) (19099)	PCB COG 82 WATER DISS REC (NG/L) (19036)	PCB COG 84 + 92 SED SUSP REC (NG/L) (19091)	PCB COG 84 + 92 WATER DISS REC (NG/L) (19028)	PCB COG 85 SED SUSP REC (NG/L) (19096)
OCT 1993												
20...	0.54	0.57	0.28	<0.26	0.08	0.63	0.21	0.08	<0.03	<0.09	0.14	<1.5
NOV												
15...	0.21	0.34	0.17	0.26	0.05	0.38	0.13	0.06	<0.03	0.15	0.07	<0.21
DEC												
14...	<0.11	0.08	0.10	<0.04	0.04	0.10	0.11	<0.03	<0.03	<0.05	0.05	<0.03
FEB 1994												
15...	0.12	0.06	0.07	<0.03	<0.03	0.05	0.07	<0.03	<0.03	<0.05	<0.05	<0.03
MAR												
11...	0.28	1.8	0.22	0.66	0.07	1.4	0.12	0.20	<0.03	0.58	0.08	<0.65
16...	0.22	1.1	0.20	0.40	0.06	0.66	0.12	0.11	<0.03	0.32	0.06	<0.43
MAY												
17...	0.38	1.1	0.27	0.34	0.09	0.91	0.20	0.11	<0.03	0.42	0.12	<0.14
17...	0.45	0.78	0.36	0.24	0.11	0.78	0.25	0.09	<0.03	0.39	0.14	<0.14
JUN												
22...	0.56	0.82	0.38	0.31	0.11	0.84	0.25	0.12	<0.03	0.33	0.15	<0.58
JUL												
07...	0.25	0.79	0.17	0.24	0.05	0.77	0.13	0.09	<0.03	0.33	0.07	<1.3
08...	0.35	0.65	0.25	0.17	0.08	1.0	0.18	0.14	<0.03	0.43	0.09	<2.3

STREAMS TRIBUTARY TO LAKE MICHIGAN
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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	PCB COG 85 WATER DISS REC (NG/L) (19033)	PCB COG 87 SED SUSP REC (NG/L) (19095)	PCB COG 87 WATER DISS REC (NG/L) (19032)	PCB COG 91 SED SUSP REC (NG/L) (19089)	PCB COG 91 WATER DISS REC (NG/L) (19026)	PCB COG 97 SED SUSP REC (NG/L) (19094)	PCB COG 97 WATER DISS REC (NG/L) (19031)	PCB COG 99 SED SUSP REC (NG/L) (19093)	PCB COG 99 WATER DISS REC (NG/L) (19030)	PCB COG 101 SED SUSP REC (NG/L) (19092)	PCB COG 101 WATER DISS REC (NG/L) (19029)	PCB COG 118 SED SUSP REC (NG/L) (19103)
OCT 1993												
20...	<0.20	0.20	0.08	0.10	<0.05	0.15	0.05	0.24	0.06	0.50	0.15	0.34
NOV												
15...	<0.05	0.13	0.04	0.08	<0.03	0.08	<0.03	0.12	0.03	0.22	0.08	0.20
DEC												
14...	<0.05	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.04	0.03	0.08	0.07	0.05
FEB 1994												
15...	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.02	<0.02	0.05	0.05	0.03
MAR												
11...	<0.06	0.46	0.05	0.32	0.03	0.30	<0.03	0.44	0.04	0.65	0.09	0.73
16...	<0.08	0.19	0.04	0.16	<0.03	0.14	<0.03	0.24	0.03	0.42	0.08	0.57
MAY												
17...	<0.03	0.27	0.05	0.22	0.05	0.18	0.04	0.28	0.05	0.48	0.12	0.41
17...	<0.03	0.22	0.07	0.19	0.05	0.16	<0.03	0.26	0.07	0.45	0.15	0.38
JUN												
22...	<0.11	0.29	0.08	0.20	<0.07	0.19	0.05	0.26	0.07	0.43	0.13	0.42
JUL												
07...	<0.03	0.23	0.05	0.18	<0.05	0.16	<0.03	0.28	0.04	0.60	0.09	0.36
08...	<0.03	0.32	0.06	0.20	<0.06	0.21	<0.03	0.35	0.05	0.69	0.11	0.49

DATE	PCB COG 118 WATER DISS REC (NG/L) (19040)	PCB COG 128 SED SUSP REC (NG/L) (99924)	PCB COG 128 WATER DISS REC (NG/L) (99922)	PCB COG 132+153 SED SUSP REC (NG/L) (19105)	PCB COG 132+153 WATER DISS REC (NG/L) (19042)	PCB COG 135+144 SED SUSP REC (NG/L) (19101)	PCB COG 135+144 WATER DISS REC (NG/L) (19038)	PCB COG 136 SED SUSP REC (NG/L) (19097)	PCB COG 136 WATER DISS REC (NG/L) (19034)	PCB COG 137+176 SED SUSP REC (NG/L) (19107)	PCB COG 137+176 WATER DISS REC (NG/L) (19044)
OCT 1993											
20...	0.08	0.090	<0.035	1.9	0.16	0.25	0.03	<0.76	<0.10	0.08	<0.03
NOV											
15...	0.04	0.047	<0.035	0.86	0.08	0.12	<0.02	<0.03	<0.03	<0.03	<0.03
DEC											
14...	0.03	<0.035	<0.035	0.28	0.07	0.05	<0.02	<0.03	<0.03	<0.03	<0.03
FEB 1994											
15...	<0.03	<0.035	<0.035	0.17	0.05	0.03	<0.02	<0.03	<0.03	<0.03	<0.03
MAR											
11...	0.04	0.140	<0.035	1.3	0.09	0.26	<0.02	<0.33	<0.03	0.04	<0.03
16...	0.05	0.083	<0.035	1.3	0.08	0.23	<0.02	<0.10	<0.03	0.04	<0.03
MAY											
17...	0.05	0.078	<0.035	1.3	0.14	0.23	0.03	0.05	<0.03	0.04	<0.03
17...	0.06	0.075	<0.035	1.2	0.13	0.23	0.03	>0.04	<0.03	0.04	<0.03
JUN											
22...	0.05	0.070	<0.035	0.88	0.11	0.15	<0.02	<0.03	<0.03	<0.03	<0.03
JUL											
07...	0.03	0.074	<0.035	1.9	0.09	0.39	<0.02	<0.11	<0.03	0.06	<0.03
08...	0.04	0.120	<0.035	2.4	0.11	0.43	<0.02	<0.11	<0.03	0.08	<0.03

DATE	PCB COG 138+163 SED SUSP REC (NG/L) (19108)	PCB COG 138+163 WATER DISS REC (NG/L) (19045)	PCB COG 141 SED SUSP REC (NG/L) (19106)	PCB COG 141 WATER DISS REC (NG/L) (19043)	PCB COG 146 SED SUSP REC (NG/L) (19104)	PCB COG 146 WATER DISS REC (NG/L) (19041)	PCB COG 149 SED SUSP REC (NG/L) (19102)	PCB COG 149 WATER DISS REC (NG/L) (19039)	PCB COG 151 SED SUSP REC (NG/L) (19100)	PCB COG 151 WATER DISS REC (NG/L) (19037)	PCB COG 167 SED SUSP REC (NG/L) (99925)
OCT 1993											
20...	1.2	0.11	0.31	0.02	0.42	0.03	0.89	0.11	0.39	0.06	<0.080
NOV											
15...	0.54	0.06	<0.14	<0.02	0.17	<0.03	0.36	0.05	0.17	<0.02	<0.080
DEC											
14...	0.16	0.05	0.05	<0.02	<0.06	<0.03	0.13	0.04	0.06	<0.02	<0.080
FEB 1994											
15...	0.10	0.04	0.03	<0.02	0.04	<0.03	0.08	0.03	0.04	<0.02	<0.080
MAR											
11...	1.3	0.06	0.28	<0.02	0.42	<0.03	0.72	0.06	0.36	0.02	<0.080
16...	0.91	0.06	0.20	<0.02	0.36	<0.03	0.70	0.05	0.31	0.02	<0.080
MAY											
17...	0.92	0.10	0.23	<0.02	0.33	0.03	0.70	0.10	0.33	0.04	<0.080
17...	0.87	0.08	0.22	<0.02	0.33	0.03	0.75	0.08	0.33	0.04	<0.080
JUN											
22...	0.68	0.08	0.15	<0.02	0.23	<0.03	0.49	0.06	0.22	0.03	<0.080
JUL											
07...	1.1	0.07	0.32	<0.02	0.51	<0.03	1.1	0.05	0.57	0.02	<0.080
08...	1.5	0.08	0.40	<0.02	0.51	<0.03	1.4	0.07	0.64	0.03	<0.080

STREAMS TRIBUTARY TO LAKE MICHIGAN
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WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	PCB COG 167 WATER DISS REC (NG/L) (99923)	PCB COG 170+190 SED SUSP REC (NG/L) (19119)	PCB COG 170+190 WATER DISS REC (NG/L) (19056)	PCB COG 171+202 SED SUSP REC (NG/L) (19115)	PCB COG 171+202 WATER DISS REC (NG/L) (19052)	PCB COG 172+197 SED SUSP REC (NG/L) (19116)	PCB COG 172+197 WATER DISS REC (NG/L) (19053)	PCB COG 174 SED SUSP REC (NG/L) (19113)	PCB COG 174 WATER DISS REC (NG/L) (19050)	PCB COG 177 SED SUSP REC (NG/L) (19114)	PCB COG 177 WATER DISS REC (NG/L) (19051)
OCT 1993											
20...	<0.080	0.98	<0.08	0.21	<0.03	0.17	<0.05	0.53	0.03	0.46	<0.03
NOV											
15...	<0.080	0.43	<0.08	0.07	<0.03	0.06	<0.05	0.22	<0.02	0.17	<0.03
DEC											
14...	<0.080	0.15	<0.08	<0.03	<0.03	<0.05	<0.05	0.07	<0.02	0.06	<0.03
FEB 1994											
15...	<0.080	<0.14	<0.08	<0.03	<0.03	<0.05	<0.05	0.04	<0.02	0.04	<0.03
MAR											
11...	<0.080	1.0	<0.20	0.17	<0.03	0.15	<0.05	0.49	<0.02	0.41	<0.03
16...	<0.080	0.61	<0.08	0.13	<0.03	0.10	<0.05	0.36	<0.02	0.30	<0.03
MAY											
17...	<0.080	0.65	<0.10	0.13	<0.03	0.11	<0.05	0.38	0.03	0.31	<0.03
17...	<0.080	0.59	<0.08	0.12	<0.03	0.09	<0.05	0.37	0.03	0.30	<0.03
JUN											
22...	<0.080	0.46	<0.08	0.08	<0.03	0.07	<0.05	0.23	<0.02	0.20	<0.03
JUL											
07...	<0.080	0.48	<0.08	0.15	<0.03	0.07	<0.05	0.44	<0.02	0.40	<0.03
08...	<0.080	0.96	<0.08	0.21	<0.03	0.14	<0.05	0.60	<0.02	0.53	<0.03
DATE	PCB COG 178 SED SUSP REC (NG/L) (19109)	PCB COG 178 WATER DISS REC (NG/L) (19046)	PCB COG 180 SED SUSP REC (NG/L) (19117)	PCB COG 180 WATER DISS REC (NG/L) (19054)	PCB COG 182+187 SED SUSP REC (NG/L) (19110)	PCB COG 182+187 WATER DISS REC (NG/L) (19047)	PCB COG 183 SED SUSP REC (NG/L) (19111)	PCB COG 183 WATER DISS REC (NG/L) (19048)	PCB COG 185 SED SUSP REC (NG/L) (19112)	PCB COG 185 WATER DISS REC (NG/L) (19049)	PCB COG 194 SED SUSP REC (NG/L) (19123)
OCT 1993											
20...	0.28	<0.04	1.2	0.07	0.92	0.05	0.38	<0.03	0.08	<0.03	0.29
NOV											
15...	0.11	<0.04	0.44	0.04	0.34	0.03	0.15	<0.03	0.03	<0.03	0.11
DEC											
14...	0.04	<0.04	0.15	<0.05	0.13	0.03	0.05	<0.03	<0.03	<0.03	0.04
FEB 1994											
15...	<0.04	<0.04	0.11	<0.03	0.08	<0.02	<0.03	<0.03	<0.03	<0.03	0.03
MAR											
11...	0.28	<0.04	1.2	<0.03	0.77	0.02	0.35	<0.03	0.08	<0.03	0.34
16...	0.21	<0.04	0.85	0.04	0.66	0.02	0.25	<0.03	0.06	<0.03	0.20
MAY											
17...	0.21	<0.04	0.80	0.05	0.62	0.05	0.27	<0.03	0.06	<0.03	0.18
17...	0.21	<0.04	0.77	0.06	0.62	0.05	0.26	<0.03	0.05	<0.03	0.16
JUN											
22...	0.13	<0.04	0.51	0.05	0.41	0.04	0.17	<0.03	0.04	<0.03	0.12
JUL											
07...	0.31	<0.04	0.59	0.04	0.86	0.03	0.32	<0.03	0.08	<0.03	0.12
08...	0.36	<0.04	1.2	0.07	1.1	0.04	0.45	<0.03	0.10	<0.03	0.23
DATE	PCB COG 194 WATER DISS REC (NG/L) (19060)	PCB COG 195+208 SED SUSP REC (NG/L) (19122)	PCB COG 195+208 WATER DISS REC (NG/L) (19059)	PCB COG 196+203 SED SUSP REC (NG/L) (19121)	PCB COG 196+203 WATER DISS REC (NG/L) (19058)	PCB COG 199 SED SUSP REC (NG/L) (19118)	PCB COG 199 WATER DISS REC (NG/L) (19055)	PCB COG 201 SED SUSP REC (NG/L) (19120)	PCB COG 201 WATER DISS REC (NG/L) (19057)	PCB COG 206 SED SUSP REC (NG/L) (19124)	PCB COG 206 WATER DISS REC (NG/L) (19061)
OCT 1993											
20...	<0.03	0.39	<0.08	0.72	<0.08	0.04	<0.02	0.57	<0.04	0.14	<0.04
NOV											
15...	<0.03	0.15	<0.08	0.30	<0.08	<0.02	<0.02	0.22	<0.04	0.06	<0.04
DEC											
14...	<0.03	<0.08	<0.08	0.11	<0.08	<0.02	<0.02	0.08	<0.04	<0.04	<0.04
FEB 1994											
15...	<0.03	<0.08	<0.08	<0.08	<0.08	<0.02	<0.02	0.05	<0.04	<0.04	<0.04
MAR											
11...	<0.03	0.44	<0.08	0.76	<0.08	0.04	<0.02	0.60	<0.04	0.17	<0.04
16...	<0.03	0.25	<0.08	0.42	<0.08	0.02	<0.02	0.39	<0.04	0.10	<0.04
MAY											
17...	<0.03	0.24	<0.08	0.45	<0.08	0.03	<0.02	0.38	<0.04	0.08	<0.04
17...	<0.03	0.23	<0.08	0.41	<0.08	0.02	<0.02	0.36	<0.04	0.08	<0.04
JUN											
22...	<0.03	0.18	<0.08	0.27	<0.08	<0.03	<0.02	0.25	<0.04	0.06	<0.04
JUL											
07...	<0.03	0.23	<0.08	0.42	<0.08	<0.03	<0.02	0.37	<0.04	0.07	<0.04
08...	<0.03	0.36	<0.08	0.62	<0.08	0.04	<0.02	0.56	<0.04	0.12	<0.04

STREAMS TRIBUTARY TO LAKE MICHIGAN
04087000 MILWAUKEE RIVER AT MILWAUKEE, WI-CONTINUED

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	PCB COG 5 + 8 SED SUSP REC (NG/L) (19067)	PCB COG 5 + 8 WATER DISS REC (NG/L) (19004)	PCB COG 6 SED SUSP REC (NG/L) (19066)	PCB COG 6 WATER DISS REC (NG/L) (19003)	PCB COG 7 SED SUSP REC (NG/L) (19065)	PCB COG 7 WATER DISS REC (NG/L) (19002)	PCB COG 16 + 32 SED SUSP REC (NG/L) (19072)	PCB COG 16 + 32 WATER DISS REC (NG/L) (19009)	PCB COG 17 SED SUSP REC (NG/L) (19070)	PCB COG 17 WATER DISS REC (NG/L) (19007)
OCT 1994												
**12...	1000	530	1.4	0.72	0.37	0.20	--	<0.02	1.9	0.61	1.1	0.42
**12...	1315	192	0.28	0.81	0.08	0.27	<0.02	<0.02	0.45	0.64	0.27	0.48
AUG 1995												
**16...	1330	557	0.14	0.49	<0.08	0.13	<0.02	<0.02	0.34	0.52	0.18	0.28
DATE	PCB COG 18 SED SUSP REC (NG/L) (19069)	PCB COG 18 WATER DISS REC (NG/L) (19006)	PCB COG 19 SED SUSP REC (NG/L) (19068)	PCB COG 19 WATER DISS REC (NG/L) (19005)	PCB COG 22 SED SUSP REC (NG/L) (19076)	PCB COG 22 WATER DISS REC (NG/L) (19013)	PCB COG 24 + 27 SED SUSP REC (NG/L) (19071)	PCB COG 24 + 27 WATER DISS REC (NG/L) (19008)	PCB COG 26 SED SUSP REC (NG/L) (19073)	PCB COG 26 WATER DISS REC (NG/L) (19010)	PCB COG 28 + 31 SED SUSP REC (NG/L) (19074)	PCB COG 28 + 31 WATER DISS REC (NG/L) (19011)
OCT 1994												
12...	1.4	0.66	--	0.05	1.6	0.34	--	0.05	1.1	0.26	8.7	1.4
12...	0.35	0.76	0.05	0.04	0.37	0.35	0.04	0.06	0.29	0.30	2.1	1.5
AUG 1995												
16...	0.22	0.45	0.09	0.11	0.18	0.23	<0.02	0.03	0.16	0.18	1.2	0.93
DATE	PCB COG 33 SED SUSP REC (NG/L) (19075)	PCB COG 33 WATER DISS REC (NG/L) (19012)	PCB COG 37 + 42 SED SUSP REC (NG/L) (19083)	PCB COG 37 + 42 WATER DISS REC (NG/L) (19020)	PCB COG 40 SED SUSP REC (NG/L) (19085)	PCB COG 40 WATER DISS REC (NG/L) (19022)	PCB COG 41 +64+71 SED SUSP REC (NG/L) (19084)	PCB COG 41 +64+71 WATER DISS REC (NG/L) (19021)	PCB COG 44 SED SUSP REC (NG/L) (19082)	PCB COG 44 WATER DISS REC (NG/L) (19019)	PCB COG 45 SED SUSP REC (NG/L) (19077)	PCB COG 45 WATER DISS REC (NG/L) (19014)
OCT 1994												
12...	<1.4	>0.15	3.7	0.24	1.6	0.08	3.0	<0.44	5.2	0.44	1.3	0.09
12...	<0.47	>0.15	1.0	0.24	0.47	0.08	0.76	0.31	1.7	0.43	0.38	0.09
AUG 1995												
16...	<0.37	0.12	0.53	0.22	0.32	0.09	0.97	0.30	1.1	0.41	0.22	0.09
DATE	PCB COG 46 SED SUSP REC (NG/L) (19078)	PCB COG 46 WATER DISS REC (NG/L) (19015)	PCB COG 47 + 48 SED SUSP REC (NG/L) (19081)	PCB COG 47 + 48 WATER DISS REC (NG/L) (19018)	PCB COG 49 SED SUSP REC (NG/L) (19080)	PCB COG 49 WATER DISS REC (NG/L) (19017)	PCB COG 52 SED SUSP REC (NG/L) (19079)	PCB COG 52 WATER DISS REC (NG/L) (19016)	PCB COG 56 + 60 SED SUSP REC (NG/L) (19090)	PCB COG 56 + 60 WATER DISS REC (NG/L) (19027)	PCB COG 66 + 95 SED SUSP REC (NG/L) (19088)	PCB COG 66 + 95 WATER DISS REC (NG/L) (19025)
OCT 1994												
12...	1.0	0.05	3.7	0.25	3.0	0.27	5.6	0.39	3.2	0.16	9.8	0.36
12...	0.28	0.05	1.2	0.26	0.99	0.27	1.7	0.38	0.70	0.15	2.4	0.31
AUG 1995												
16...	0.16	0.07	1.2	0.31	0.80	0.24	1.2	0.33	0.64	0.15	1.7	0.30
DATE	PCB COG 70 + 76 SED SUSP REC (NG/L) (19087)	PCB COG 70 + 76 WATER DISS REC (NG/L) (19024)	PCB COG 74 SED SUSP REC (NG/L) (19086)	PCB COG 74 WATER DISS REC (NG/L) (19023)	PCB COG 77+110 SED SUSP REC (NG/L) (19098)	PCB COG 77+110 WATER DISS REC (NG/L) (19035)	PCB COG 82 SED SUSP REC (NG/L) (19099)	PCB COG 82 WATER DISS REC (NG/L) (19036)	PCB COG 84 + 92 SED SUSP REC (NG/L) (19091)	PCB COG 84 + 92 WATER DISS REC (NG/L) (19028)	PCB COG 85 SED SUSP REC (NG/L) (19096)	PCB COG 85 WATER DISS REC (NG/L) (19033)
OCT 1994												
12...	4.2	0.27	1.2	0.08	7.2	0.12	1.2	<0.03	4.4	0.10	>0.68	<0.03
12...	0.93	0.25	0.28	0.07	2.0	0.12	0.23	<0.03	1.2	0.09	<0.19	<0.03
AUG 1995												
16...	0.82	0.24	<0.30	0.07	1.2	0.20	0.20	<0.03	0.54	0.12	<1.1	<0.03

** Multiple verticals

STREAMS TRIBUTARY TO LAKE MICHIGAN
04087000 MILWAUKEE RIVER AT MILWAUKEE, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PCB COG 87 SED SUSP REC (NG/L) (19095)	PCB COG 87 WATER DISS REC (NG/L) (19032)	PCB COG 91 SED SUSP REC (NG/L) (19089)	PCB COG 91 WATER DISS REC (NG/L) (19026)	PCB COG 97 SED SUSP REC (NG/L) (19094)	PCB COG 97 WATER DISS REC (NG/L) (19031)	PCB COG 99 SED SUSP REC (NG/L) (19093)	PCB COG 99 WATER DISS REC (NG/L) (19030)	PCB COG 101 SED SUSP REC (NG/L) (19092)	PCB COG 101 WATER DISS REC (NG/L) (19029)	PCB COG 118 SED SUSP REC (NG/L) (19103)
OCT 1994											
12...	2.4	0.05	1.9	0.04	1.7	0.03	2.3	0.04	4.2	0.08	2.9
12...	0.70	0.04	0.54	0.04	0.48	<0.03	0.68	0.04	1.2	0.08	0.58
AUG 1995											
16...	0.43	0.06	0.28	0.04	0.28	0.04	0.39	0.05	0.77	0.12	0.60
DATE	PCB COG 118 WATER DISS REC (NG/L) (19040)	PCB COG 128 SED SUSP REC (NG/L) (99924)	PCB COG 128 WATER DISS REC (NG/L) (99922)	PCB COG 132+153 SED SUSP REC (NG/L) (19105)	PCB COG 132+153 WATER DISS REC (NG/L) (19042)	PCB COG 135+144 SED SUSP REC (NG/L) (19101)	PCB COG 135+144 WATER DISS REC (NG/L) (19038)	PCB COG 136 SED SUSP REC (NG/L) (19097)	PCB COG 136 WATER DISS REC (NG/L) (19034)	PCB COG 137+176 SED SUSP REC (NG/L) (19107)	PCB COG 137+176 WATER DISS REC (NG/L) (19044)
OCT 1994											
12...	0.04	0.770	<0.035	10	0.06	1.4	<0.02	>0.23	<0.03	<0.39	<0.03
12...	0.04	0.180	<0.035	2.8	0.07	0.39	<0.02	<0.11	<0.03	<0.13	<0.03
AUG 1995											
16...	0.06	0.150	<0.035	2.4	0.13	0.35	<0.02	<0.60	<0.03	0.04	<0.03
DATE	PCB COG 138+163 SED SUSP REC (NG/L) (19108)	PCB COG 138+163 WATER DISS REC (NG/L) (19045)	PCB COG 141 SED SUSP REC (NG/L) (19106)	PCB COG 141 WATER DISS REC (NG/L) (19043)	PCB COG 146 SED SUSP REC (NG/L) (19104)	PCB COG 146 WATER DISS REC (NG/L) (19041)	PCB COG 149 SED SUSP REC (NG/L) (19102)	PCB COG 149 WATER DISS REC (NG/L) (19039)	PCB COG 151 SED SUSP REC (NG/L) (19100)	PCB COG 151 WATER DISS REC (NG/L) (19037)	PCB COG 167 SED SUSP REC (NG/L) (99925)
OCT 1994											
12...	7.5	0.05	<1.5	<0.02	2.2	0.14	5.3	0.04	2.1	0.02	0.240
12...	2.0	0.05	0.43	<0.02	0.64	<0.03	1.4	0.05	0.55	0.02	<0.080
AUG 1995											
16...	1.8	0.09	<0.50	<0.02	0.49	<0.03	1.1	0.08	0.51	0.03	<0.080
DATE	PCB COG 167 WATER DISS REC (NG/L) (99923)	PCB COG 170+190 SED SUSP REC (NG/L) (19119)	PCB COG 170+190 WATER DISS REC (NG/L) (19056)	PCB COG 171+202 SED SUSP REC (NG/L) (19115)	PCB COG 171+202 WATER DISS REC (NG/L) (19052)	PCB COG 172+197 SED SUSP REC (NG/L) (19116)	PCB COG 172+197 WATER DISS REC (NG/L) (19053)	PCB COG 174 SED SUSP REC (NG/L) (19113)	PCB COG 174 WATER DISS REC (NG/L) (19050)	PCB COG 177 SED SUSP REC (NG/L) (19114)	PCB COG 177 WATER DISS REC (NG/L) (19051)
OCT 1994											
12...	<0.080	5.2	<0.08	1.0	<0.03	0.79	<0.05	2.8	<0.02	2.2	<0.03
12...	<0.080	1.7	<0.08	0.35	<0.03	0.28	<0.05	0.91	<0.02	0.78	<0.03
AUG 1995											
16...	<0.080	1.1	<0.08	0.21	<0.03	0.17	<0.05	0.63	<0.02	0.47	<0.03
DATE	PCB COG 178 SED SUSP REC (NG/L) (19109)	PCB COG 178 WATER DISS REC (NG/L) (19046)	PCB COG 180 SED SUSP REC (NG/L) (19117)	PCB COG 180 WATER DISS REC (NG/L) (19054)	PCB COG 182+187 SED SUSP REC (NG/L) (19110)	PCB COG 182+187 WATER DISS REC (NG/L) (19047)	PCB COG 183 SED SUSP REC (NG/L) (19111)	PCB COG 183 WATER DISS REC (NG/L) (19048)	PCB COG 185 SED SUSP REC (NG/L) (19112)	PCB COG 185 WATER DISS REC (NG/L) (19049)	PCB COG 194 SED SUSP REC (NG/L) (19123)
OCT 1994											
12...	1.3	<0.04	6.6	<0.03	4.4	0.02	1.9	<0.03	0.38	<0.03	1.5
12...	0.46	<0.04	2.2	<0.03	1.5	0.02	0.62	<0.03	0.13	<0.03	0.65
AUG 1995											
16...	0.28	<0.04	1.4	<0.09	0.94	0.03	0.44	<0.03	0.08	<0.03	0.26
DATE	PCB COG 194 WATER DISS REC (NG/L) (19060)	PCB COG 195+208 SED SUSP REC (NG/L) (19122)	PCB COG 195+208 WATER DISS REC (NG/L) (19059)	PCB COG 196+203 SED SUSP REC (NG/L) (19121)	PCB COG 196+203 WATER DISS REC (NG/L) (19058)	PCB COG 199 SED SUSP REC (NG/L) (19118)	PCB COG 199 WATER DISS REC (NG/L) (19055)	PCB COG 201 SED SUSP REC (NG/L) (19120)	PCB COG 201 WATER DISS REC (NG/L) (19057)	PCB COG 206 SED SUSP REC (NG/L) (19124)	PCB COG 206 WATER DISS REC (NG/L) (19061)
OCT 1994											
12...	<0.03	2.1	<0.08	3.3	<0.08	0.18	<0.02	3.1	<0.04	0.99	<0.04
12...	<0.03	0.88	<0.08	1.3	<0.08	0.07	<0.02	1.2	<0.04	0.37	<0.04
AUG 1995											
16...	<0.03	0.36	<0.08	0.74	<0.08	0.03	<0.02	0.51	<0.04	0.13	<0.04

STREAMS TRIBUTARY TO LAKE MICHIGAN
04087030 MENOMONEE RIVER AT MENOMONEE FALLS, WI

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LOCATION.--Lat 43°10'22", long 88°06'14", in SE 1/4 NE 1/4 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 753.50 ft above sea level (University of Wisconsin benchmark).

REMARKS.--Estimated daily discharges: Ice-affected period, Dec. 7 to Mar. 11. Records good except those for ice-affected period, which is poor (see page 11). 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 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	5.8	17	8.0	5.2	3.9	41	45	18	4.3	2.1	35
2	5.6	4.9	14	7.0	5.4	3.8	34	35	15	3.6	1.6	22
3	5.4	4.9	13	6.4	5.4	3.8	30	32	14	3.3	2.6	16
4	5.8	6.0	13	6.0	5.0	3.6	26	29	12	5.9	2.0	12
5	5.2	18	13	5.6	4.7	3.5	23	28	10	4.2	1.6	10
6	4.7	60	13	5.4	4.4	3.6	23	25	19	4.0	1.2	8.6
7	4.6	33	12	5.4	4.0	3.7	24	23	39	4.1	8.2	8.3
8	7.7	21	11	5.4	3.8	3.5	27	26	38	3.6	3.4	7.9
9	7.1	23	11	5.2	4.0	3.5	25	62	24	3.2	18	7.6
10	6.0	17	10	5.0	4.0	10	23	94	18	2.6	13	6.7
11	5.1	13	9.6	5.2	3.7	30	39	97	14	2.4	6.7	6.3
12	4.9	12	9.0	6.4	3.4	55	80	67	11	2.4	4.8	6.0
13	5.0	10	9.0	8.0	3.2	54	69	56	10	2.3	3.7	5.6
14	5.2	19	8.8	15	3.0	49	49	79	8.8	2.2	23	5.3
15	5.3	15	9.0	23	3.0	42	39	54	7.9	7.3	10	4.9
16	5.1	12	10	15	3.0	36	39	41	7.2	7.7	53	11
17	5.1	11	11	13	3.2	31	37	42	6.5	3.7	39	7.5
18	4.9	10	9.0	12	3.4	27	87	33	5.8	2.5	17	6.2
19	5.0	9.5	8.6	10	3.8	27	106	32	5.2	2.3	19	7.2
20	4.9	9.2	9.0	8.2	4.0	41	74	28	5.2	2.5	24	8.0
21	4.9	11	9.0	7.6	4.0	49	68	25	4.8	2.4	12	8.8
22	4.7	10	9.4	7.0	4.3	38	57	18	3.5	2.1	7.1	9.3
23	4.7	9.1	10	6.6	4.5	31	46	22	1.4	2.4	5.3	8.1
24	4.7	8.7	13	6.2	4.3	26	41	24	3.4	5.4	4.4	7.1
25	4.3	8.6	13	6.0	4.2	23	45	21	3.8	2.4	3.9	6.7
26	4.0	8.2	12	5.8	4.1	21	49	16	3.7	2.2	3.5	6.3
27	4.4	22	12	5.4	4.0	24	150	21	4.3	2.0	52	6.2
28	4.7	31	12	5.4	4.0	36	128	48	4.3	1.8	111	5.8
29	4.3	23	11	5.2	---	52	79	35	9.3	1.5	114	5.4
30	4.2	18	11	5.2	---	66	59	29	5.9	1.3	91	5.3
31	4.1	---	10	5.0	---	52	---	22	---	1.1	57	---
TOTAL	157.7	463.9	342.4	240.6	113.0	852.9	1617	1209	333.0	98.7	715.1	271.1
MEAN	5.09	15.5	11.0	7.76	4.04	27.5	53.9	39.0	11.1	3.18	23.1	9.04
MAX	7.7	60	17	23	5.4	66	150	97	39	7.7	114	35
MIN	4.0	4.9	8.6	5.0	3.0	3.5	23	16	1.4	1.1	1.2	4.9
CFSM	.15	.45	.32	.22	.12	.79	1.55	1.12	.32	.09	.66	.26
IN.	.17	.50	.37	.26	.12	.91	1.73	1.30	.36	.11	.77	.29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1995, 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
MEAN	21.8	31.2	26.7	16.5	28.1	62.6	63.3	25.2	17.5	17.6	14.9	21.7									
MAX	94.3	137	70.4	72.8	87.4	124	193	71.4	54.3	86.1	34.9	151									
(WY)	1982	1986	1985	1988	1984	1976	1993	1990	1993	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 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1975 - 1995	
ANNUAL TOTAL	8898.9		6414.4			
ANNUAL MEAN	24.4		17.6		29.0	
HIGHEST ANNUAL MEAN					53.4	
LOWEST ANNUAL MEAN					10.9	
HIGHEST DAILY MEAN	325		150		674	
LOWEST DAILY MEAN	2.2		1.1		.63	
ANNUAL SEVEN-DAY MINIMUM	2.7		1.6		.82	
INSTANTANEOUS PEAK FLOW			544		(a)1440	
INSTANTANEOUS PEAK STAGE			5.19		6.57	
ANNUAL RUNOFF (CFSM)	.70		.51		.84	
ANNUAL RUNOFF (INCHES)	9.54		6.88		11.35	
10 PERCENT EXCEEDS	57		45		62	
50 PERCENT EXCEEDS	9.7		8.6		14	
90 PERCENT EXCEEDS	4.3		3.5		4.2	

(a) Gage height, 6.49 ft

STREAMS TRIBUTARY TO LAKE MICHIGAN
04087088 UNDERWOOD CREEK AT WAUWATOSA, WI

LOCATION.--Lat 43°03'17", long 88°02'46", in SW 1/4 NW 1/4 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).

GAGE.--Water-stage recorder, crest-stage gage, and steel plate weir. Elevation of gage is 690 ft above sea level, from topographic map. 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.--Estimated daily discharges: Dec. 11-15 and ice-affected periods, Dec. 9-10, Jan. 2-14, Jan. 22 to Feb. 16, and Mar. 1-10. Records good, except those for estimated daily discharges and Oct. 1-3 and Nov. 4-14, which are poor (see page 11). Gage-height tele-meter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	5.3	7.5	4.7	4.4	4.4	11	16	7.7	5.4	17	11
2	3.8	3.2	7.6	4.3	4.2	4.2	10	15	7.5	4.6	5.3	8.8
3	4.4	9.9	6.9	4.0	4.0	4.0	9.2	14	7.2	4.5	11	7.2
4	4.0	17	6.8	3.7	3.8	4.0	7.7	15	6.5	16	11	5.8
5	3.8	44	6.8	3.5	3.7	4.0	7.2	12	6.4	6.5	5.6	5.4
6	4.0	30	9.2	3.3	3.7	4.0	7.2	11	21	4.9	4.1	5.3
7	4.3	8.8	11	3.3	3.6	4.0	18	10	37	4.7	7.2	17
8	19	12	7.9	3.3	3.6	4.0	19	21	30	4.5	4.4	8.7
9	5.8	17	7.2	3.3	3.6	4.0	18	63	16	4.3	24	6.2
10	4.0	6.6	6.0	3.5	3.6	8.0	12	67	12	4.5	10	5.2
11	4.3	5.2	5.2	5.0	3.6	23	37	35	10	4.3	6.7	4.9
12	3.7	4.7	4.5	6.4	3.5	15	43	23	8.8	4.2	5.5	4.8
13	3.5	9.2	4.2	8.0	3.5	13	26	23	8.3	4.3	4.8	4.9
14	3.4	13	4.1	25	3.5	9.6	17	20	7.6	4.5	6.6	4.7
15	3.3	5.4	4.5	16	6.0	8.5	13	15	6.8	9.8	5.3	5.3
16	3.3	4.9	7.7	9.5	12	7.7	12	14	6.3	12	32	4.7
17	4.0	4.4	9.3	8.6	15	7.1	11	12	6.0	5.2	33	4.8
18	3.4	4.2	6.8	7.3	17	6.6	72	9.6	5.9	4.6	15	4.1
19	3.3	4.0	5.7	8.4	7.0	9.4	42	9.1	6.2	5.0	21	6.9
20	3.0	4.0	6.2	7.9	7.6	35	25	8.0	5.6	18	15	7.4
21	3.2	11	6.9	6.8	5.7	18	32	8.3	5.1	6.5	7.7	10
22	2.9	4.5	7.0	6.2	5.9	11	21	8.3	5.1	6.0	5.5	8.0
23	3.6	3.6	8.3	5.4	6.2	8.7	17	29	5.3	8.8	5.0	5.1
24	2.8	3.5	7.6	5.0	5.9	7.7	15	15	4.9	11	4.4	4.5
25	3.0	3.6	6.5	4.8	5.3	7.3	13	9.8	4.9	15	4.3	4.3
26	3.1	3.5	6.0	4.6	4.8	6.7	32	7.9	5.0	18	4.0	4.3
27	3.4	42	5.9	4.4	4.6	23	86	25	5.2	7.8	8.2	4.1
28	3.4	18	6.1	4.3	4.6	33	38	32	5.0	8.1	31	3.9
29	3.2	10	5.3	4.2	---	23	24	13	15	5.2	16	4.3
30	2.9	8.4	4.8	4.1	---	17	18	10	7.6	4.4	38	4.0
31	3.1	---	4.8	4.0	---	14	---	8.4	---	4.5	18	---
TOTAL	127.0	320.9	204.3	192.8	159.9	348.9	713.3	579.4	285.9	227.1	386.6	185.6
MEAN	4.10	10.7	6.59	6.22	5.71	11.3	23.8	18.7	9.53	7.33	12.5	6.19
MAX	19	44	11	25	17	35	86	67	37	18	38	17
MIN	2.8	3.2	4.1	3.3	3.5	4.0	7.2	7.9	4.9	4.2	4.0	3.9
CFSM	.23	.59	.36	.34	.31	.62	1.31	1.03	.52	.40	.69	.34
IN.	.26	.66	.42	.39	.33	.71	1.46	1.18	.58	.46	.79	.38

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1995, 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
MEAN	8.78	12.0	11.7	7.94	11.8	26.1	28.0	14.8	11.0	11.2	13.0	12.8									
MAX	26.9	42.1	27.2	39.1	26.3	73.4	73.6	46.9	34.1	23.9	29.1	56.0									
(WY)	1987	1986	1983	1988	1985	1979	1993	1990	1993	1993	1987	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 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1975 - 1995
ANNUAL TOTAL	4768.9	3731.7	
ANNUAL MEAN	13.1	10.2	14.1
HIGHEST ANNUAL MEAN			23.2
LOWEST ANNUAL MEAN			4.21
HIGHEST DAILY MEAN	(a)220	86	348
LOWEST DAILY MEAN	2.8	2.8	.00
ANNUAL SEVEN-DAY MINIMUM	3.1	3.1	.00
INSTANTANEOUS PEAK FLOW		435	(c)2100
INSTANTANEOUS PEAK STAGE		4.85	7.72
ANNUAL RUNOFF (CFSM)	.72	.56	.77
ANNUAL RUNOFF (INCHES)	9.75	7.63	10.51
10 PERCENT EXCEEDS	24	21	30
50 PERCENT EXCEEDS	7.7	6.5	6.8
90 PERCENT EXCEEDS	3.7	3.6	2.9

(a) Ice affected

(b) No flow on all or part of many days during 1977 winter period

(c) Gage height, 5.55 ft, old orifice location

STREAMS TRIBUTARY TO LAKE MICHIGAN
04087120 MENOMONEE RIVER AT WAUWATOSA, WI

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LOCATION.--Lat 43°02'44", long 87°59'59", in NE 1/4 NW 1/4 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 630.86 ft above sea level. Prior to Nov. 1, 1974, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Ice-affected periods, Dec. 9-15, Jan. 2-14, Jan. 22 to Feb. 20, and Mar. 1-11. Records good except those for ice-affected periods, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	28	40	35	30	27	120	141	58	21	130	131
2	19	19	36	32	29	24	104	119	51	17	17	90
3	17	43	35	28	28	23	90	104	46	15	45	66
4	17	66	32	25	26	22	76	99	40	100	101	51
5	18	206	33	23	25	22	63	87	38	39	21	43
6	16	286	41	21	23	22	59	77	139	20	15	38
7	16	96	42	20	22	21	96	69	269	18	80	95
8	83	78	36	20	22	21	108	113	198	16	24	39
9	46	123	34	20	22	21	100	423	95	15	208	33
10	21	55	28	25	21	35	74	502	69	14	60	27
11	18	41	25	30	21	100	228	319	59	15	31	24
12	16	35	24	40	21	158	354	205	52	13	22	24
13	16	45	24	52	21	135	229	180	48	13	17	23
14	16	89	24	300	21	112	153	214	43	15	96	21
15	15	49	25	208	21	97	117	152	35	108	44	20
16	15	39	40	124	21	85	113	122	30	108	538	54
17	16	34	55	94	25	74	99	124	27	25	501	138
18	16	31	46	79	30	63	576	101	24	17	140	29
19	15	27	36	68	33	72	408	84	23	21	164	35
20	15	25	37	64	35	187	228	72	23	85	112	53
21	15	56	41	51	37	130	234	61	21	16	65	60
22	15	36	46	43	37	97	172	56	19	15	44	46
23	16	28	59	42	39	79	135	171	18	23	36	29
24	14	25	65	40	38	65	115	102	16	58	33	23
25	14	23	59	38	35	57	113	68	16	72	27	22
26	14	22	50	36	31	51	199	58	17	76	23	21
27	14	204	46	33	29	119	702	140	22	21	256	20
28	15	118	47	32	28	224	392	310	27	23	994	19
29	14	67	44	31	---	189	251	120	158	14	680	17
30	13	49	39	30	---	188	179	87	49	13	489	16
31	14	---	37	29	---	150	---	69	---	16	208	---
TOTAL	590	2043	1226	1713	771	2670	5887	4549	1730	1042	5221	1307
MEAN	19.0	68.1	39.5	55.3	27.5	86.1	196	147	57.7	33.6	168	43.6
MAX	83	286	65	300	39	224	702	502	269	108	994	138
MIN	13	19	24	20	21	21	59	56	16	13	15	16
CFSM	.15	.55	.32	.45	.22	.70	1.60	1.19	.47	.27	1.37	.35
IN.	.18	.62	.37	.52	.23	.81	1.78	1.38	.52	.32	1.58	.40

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1995, BY WATER YEAR (WY)

	MEAN	65.9	83.6	82.1	54.8	86.0	215	207	101	80.6	73.4	71.1	86.2
MAX	232	422	222	191	239	582	715	326	276	257	264	562	
(WY)	1982	1986	1988	1974	1971	1979	1993	1990	1993	1964	1986	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 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1962 - 1995
ANNUAL TOTAL	31621	28749	
ANNUAL MEAN	86.6	78.8	101
HIGHEST ANNUAL MEAN			195
LOWEST ANNUAL MEAN			24.0
HIGHEST DAILY MEAN	(a)1500	Feb 20	994
LOWEST DAILY MEAN	(b)12	Jan 7	13
ANNUAL SEVEN-DAY MINIMUM	(a)12	Jan 15	14
INSTANTANEOUS PEAK FLOW			3650
INSTANTANEOUS PEAK STAGE			7.81
ANNUAL RUNOFF (CFSM)	.70		.64
ANNUAL RUNOFF (INCHES)	9.56		8.69
10 PERCENT EXCEEDS	208		183
50 PERCENT EXCEEDS	37		39
90 PERCENT EXCEEDS	15		16

(a) Ice affected

(b) Ice affected, also occurred Jan. 8, 9, and 17-21

(c) Also occurred July 12-13, 30

(d) From rating curve extended above 6,000 ft³/s on basis of slope-area measurement of peak flow

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 1/4 NW 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.--20.2 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.

GAGE.--Water-stage recorder and steel plate weir. Elevation of gage is 590 ft above sea level, from river-profile map.

REMARKS.--Estimated daily discharges: Ice-affected periods, Dec. 11-14, Jan. 2-13, and Jan. 23 to Mar. 10. Records good except those for ice-affected periods, which are poor, and those for discharges greater than 500 ft³/s, which are fair (see page 11). Gage-height tele-meter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	15	6.2	6.3	5.2	4.6	10	13	9.2	5.4	93	9.9
2	5.2	5.9	6.1	5.4	5.0	4.5	9.8	12	9.6	4.7	7.5	7.8
3	5.2	59	6.2	5.0	4.8	4.5	10	11	9.6	4.8	21	7.2
4	5.6	36	5.9	4.7	4.5	4.5	8.8	13	7.3	66	145	7.1
5	5.6	146	17	4.5	4.3	4.5	8.3	10	8.2	7.9	12	7.2
6	5.5	80	10	4.5	4.2	4.5	8.4	9.1	46	7.2	7.0	7.2
7	5.3	8.6	11	4.5	4.1	4.5	38	8.0	53	5.1	26	15
8	48	28	9.1	4.5	4.1	4.5	28	35	19	4.5	7.7	6.3
9	8.3	40	11	4.5	4.1	5.0	27	184	8.0	4.4	78	5.8
10	5.4	8.3	7.5	4.9	4.1	25	11	104	6.9	5.5	10	5.5
11	5.3	7.1	5.4	6.0	4.0	39	111	29	6.4	5.5	7.9	5.7
12	5.3	6.2	5.2	10	4.0	15	60	18	6.5	5.7	7.6	6.1
13	5.2	13	5.2	15	4.0	11	27	23	6.4	6.0	7.2	6.7
14	5.1	25	5.2	202	4.2	8.8	16	14	6.5	6.6	15	6.2
15	4.9	7.1	6.7	18	4.5	7.8	12	12	6.8	26	8.3	5.9
16	4.7	6.5	19	12	5.2	6.8	20	21	6.7	26	313	15
17	6.3	6.4	20	12	6.4	6.2	13	15	7.0	6.2	83	15
18	6.1	5.2	11	10	7.0	5.9	197	10	6.5	6.1	12	5.6
19	5.5	4.7	8.3	15	7.6	12	29	9.2	6.9	20	72	10
20	5.1	4.5	8.8	16	7.8	42	20	8.3	7.7	129	14	17
21	4.8	16	11	9.2	7.6	12	34	7.7	6.5	7.3	10	24
22	5.1	4.9	14	8.2	7.4	9.0	15	7.7	6.3	6.2	8.6	9.7
23	5.1	4.7	18	7.4	7.6	8.2	12	64	6.3	7.4	9.5	6.2
24	4.6	4.3	12	6.6	6.6	7.5	11	14	5.8	18	8.6	5.6
25	4.7	4.3	8.6	6.0	5.2	6.7	11	9.3	5.6	100	7.6	6.1
26	4.7	3.8	7.5	5.6	4.7	6.3	80	8.4	6.4	24	7.2	6.0
27	5.1	108	7.8	5.0	4.7	51	201	60	6.5	11	12	6.1
28	5.1	12	7.6	4.8	4.7	74	31	90	6.9	9.5	366	5.7
29	4.9	7.1	6.4	4.7	---	26	19	11	80	5.8	21	5.5
30	4.6	6.6	6.0	4.6	---	16	15	9.5	9.0	5.4	153	5.3
31	8.5	---	6.2	4.5	---	12	---	9.1	---	11	14	---
TOTAL	211.0	684.2	289.9	431.4	147.6	449.3	1093.3	849.3	383.5	558.2	1564.7	252.4
MEAN	6.81	22.8	9.35	13.9	5.27	14.5	36.4	27.4	12.8	18.0	50.5	8.41
MAX	48	146	20	202	7.8	74	201	184	80	129	366	24
MIN	4.6	3.8	5.2	4.5	4.0	4.5	8.3	7.7	5.6	4.4	7.0	5.3
CFSM	.34	1.13	.46	.69	.26	.72	1.80	1.36	.63	.89	2.50	.42
IN.	.39	1.26	.53	.79	.27	.83	2.01	1.56	.71	1.03	2.88	.46

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1995, BY WATER YEAR (WY)

	MEAN	21.2	29.5	21.3	13.5	18.8	28.2	34.6	23.6	22.2	27.6	37.4	25.7
MAX	60.5	67.8	48.9	43.7	41.9	44.9	104	72.9	47.1	49.9	82.3	68.4	
(WY)	1992	1986	1983	1988	1994	1993	1993	1990	1993	1986	1986	1986	
MIN	6.81	9.15	3.96	4.72	5.27	13.5	14.1	9.07	11.4	13.2	14.7	8.41	
(WY)	1995	1987	1990	1994	1995	1988	1989	1992	1985	1985	1985	1995	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1983 - 1995

ANNUAL TOTAL	7253.8	6914.8	
ANNUAL MEAN	19.9	18.9	25.3
HIGHEST ANNUAL MEAN			39.8
LOWEST ANNUAL MEAN			18.9
HIGHEST DAILY MEAN	455	Feb 20	1630
LOWEST DAILY MEAN	(a)3.5	Feb 10-12	2.9
ANNUAL SEVEN-DAY MINIMUM	(a)3.6	Feb 6	3.0
INSTANTANEOUS PEAK FLOW			(b)10600
INSTANTANEOUS PEAK STAGE			(c)14.41
ANNUAL RUNOFF (CFSM)	.98		1.25
ANNUAL RUNOFF (INCHES)	13.36		17.02
10 PERCENT EXCEEDS	39		50
50 PERCENT EXCEEDS	7.6		9.8
90 PERCENT EXCEEDS	4.5		6.0

(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

STREAMS TRIBUTARY TO LAKE MICHIGAN
04087170 MILWAUKEE RIVER, AT MOUTH, AT MILWAUKEE, WI

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LOCATION.--Lat 43°01'28", long 87°53'54", in SW 1/4 NE 1/4 sec.33, T.7 N., R.22 E., Milwaukee County, Hydrologic Unit 04040003, at mouth.

DRAINAGE AREA.--872 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1994 to October 1995 (discontinued).

REMARKS.--Records estimated from sum of discharges measured at upstream stations 04087000, 04087120 and 04087159, plus sum of 04087120 and 04087159 discharges, multiplied by an area/basin ration of 0.229. Records are poor (see page 11).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	889	586	153	167	653	196
2	---	---	---	---	---	---	814	569	136	146	239	187
3	---	---	---	---	---	---	754	623	133	122	1100	178
4	---	---	---	---	---	---	709	591	126	855	627	166
5	---	---	---	---	---	---	710	546	248	1470	358	175
6	---	---	---	---	---	---	665	498	217	583	337	163
7	---	---	---	---	---	---	622	464	212	1040	303	158
8	---	---	---	---	---	---	583	404	184	1560	281	163
9	---	---	---	---	---	---	548	379	154	1130	261	151
10	---	---	---	---	---	---	527	360	145	810	310	143
11	---	---	---	---	---	---	492	701	216	730	365	134
12	---	---	---	---	---	---	926	416	151	561	263	128
13	---	---	---	---	---	---	813	396	254	380	1180	129
14	---	---	---	---	---	---	809	376	146	2160	301	135
15	---	---	---	---	---	---	917	357	123	1770	250	123
16	---	---	---	---	---	---	895	336	120	1320	223	118
17	---	---	---	---	---	---	819	317	113	1060	200	110
18	---	---	---	---	---	---	731	305	101	817	304	102
19	---	---	---	---	---	---	670	293	88	620	332	100
20	---	---	---	---	---	---	596	282	342	762	384	105
21	---	---	---	---	---	---	533	269	116	528	258	112
22	---	---	---	---	---	---	481	243	109	433	208	127
23	---	---	---	---	---	---	436	226	640	353	195	122
24	---	---	---	---	---	---	404	237	822	309	179	206
25	---	---	---	---	---	---	444	136	238	286	170	283
26	---	---	---	---	---	---	439	115	582	259	408	750
27	---	---	---	---	---	---	398	235	216	230	200	292
28	---	---	---	---	---	---	422	228	265	206	168	211
29	---	---	---	---	---	---	442	221	267	190	169	188
30	---	---	---	---	---	---	519	192	195	173	322	175
31	---	---	---	---	---	---	---	168	---	170	239	---
TOTAL	---	---	---	---	---	---	19007	11069	6812	21200	10787	5330
MEAN	---	---	---	---	---	---	634	357	227	684	348	178
MAX	---	---	---	---	---	---	926	701	822	2160	1180	750
MIN	---	---	---	---	---	---	398	115	88	122	168	100
CFSM	---	---	---	---	---	---	.73	.41	.26	.78	.40	.20
IN.	---	---	---	---	---	---	.81	.47	.29	.90	.46	.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1994, BY WATER YEAR (WY)

MEAN	---	---	---	---	---	---	634	357	227	684	348	178
MAX	---	---	---	---	---	---	634	357	227	684	348	178
(WY)	---	---	---	---	---	---	1994	1994	1994	1994	1994	1994
MIN	---	---	---	---	---	---	634	357	227	684	348	178
(WY)	---	---	---	---	---	---	1994	1994	1994	1994	1994	1994

SUMMARY STATISTICS

FOR 1994 WATER YEAR
(APRIL TO SEPTEMBER)

HIGHEST DAILY MEAN	2160	Jul 14
LOWEST DAILY MEAN	88	Jun 19
ANNUAL SEVEN-DAY MINIMUM	110	Sep 15
10 PERCENT EXCEEDS	816	
50 PERCENT EXCEEDS	286	
90 PERCENT EXCEEDS	126	

STREAMS TRIBUTARY TO LAKE MICHIGAN
04087170 MILWAUKEE RIVER, AT MOUTH, AT MILWAUKEE, WI--CONTINUED

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	205	180	336	221	163	209	863	943	424	162	490	858
2	184	151	328	176	162	215	810	808	377	161	137	656
3	209	243	320	141	160	214	742	712	335	130	196	539
4	233	285	300	130	157	193	686	654	293	389	467	450
5	229	651	298	124	146	183	620	593	274	171	179	392
6	210	933	283	119	143	183	561	546	497	126	133	352
7	189	453	275	120	142	171	618	501	719	116	274	427
8	389	459	255	120	142	171	618	584	532	137	126	294
9	228	547	255	130	142	182	610	1360	358	132	649	276
10	164	356	244	147	151	244	534	1580	336	123	324	247
11	155	311	227	174	151	371	951	1350	316	118	265	220
12	243	280	226	211	141	513	1190	1200	287	110	249	205
13	164	285	226	272	141	779	1160	1070	270	121	216	189
14	159	394	226	1020	141	1060	1050	1050	249	120	412	181
15	153	272	229	668	151	1210	928	877	220	417	287	168
16	149	254	272	597	162	1080	875	775	199	375	1720	391
17	150	241	292	530	179	956	775	750	183	138	1440	375
18	151	229	270	409	185	820	2010	682	170	157	692	172
19	144	232	254	322	200	749	1790	611	188	162	703	210
20	145	214	246	298	213	955	1500	530	158	357	491	262
21	144	284	254	254	225	832	1430	464	146	111	406	300
22	142	227	274	233	245	829	1210	365	131	103	338	271
23	144	219	305	231	257	767	1060	464	128	126	284	237
24	141	192	315	217	255	696	921	459	120	201	259	215
25	148	197	303	214	249	630	846	394	115	324	227	205
26	160	195	301	201	234	564	1010	370	118	266	205	195
27	162	709	296	197	231	699	2240	589	129	144	1170	192
28	159	469	297	185	230	930	1740	969	138	156	2980	187
29	147	442	282	174	---	819	1390	570	439	125	2070	172
30	143	398	255	172	---	885	1140	520	205	130	1950	162
31	144	---	243	161	---	887	---	475	---	139	1190	---
TOTAL	5487	10302	8487	8168	5098	18996	31878	22815	8054	5547	20529	9000
MEAN	177	343	274	263	182	613	1063	736	268	179	662	300
MAX	389	933	336	1020	257	1210	2240	1580	719	417	2980	858
MIN	141	151	226	119	141	171	534	365	115	103	126	162
CFSM	.20	.39	.31	.30	.21	.70	1.22	.84	.31	.21	.76	.34
IN.	.23	.44	.36	.35	.22	.81	1.36	.97	.34	.24	.88	.38

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1995, BY WATER YEAR (WY)

MEAN	177	343	274	263	182	613	848	547	248	431	505	239
MAX	177	343	274	263	182	613	1063	736	268	684	662	300
(WY)	1995	1995	1995	1995	1995	1995	1995	1995	1995	1994	1995	1995
MIN	177	343	274	263	182	613	634	357	227	179	348	178
(WY)	1995	1995	1995	1995	1995	1995	1994	1994	1994	1995	1994	1994

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR (APRIL TO DECEMBER)			FOR 1995 WATER YEAR			WATER YEARS 1994 - 1995		
ANNUAL TOTAL	98481			154361					
ANNUAL MEAN	358			423			417		
HIGHEST ANNUAL MEAN							423		
LOWEST ANNUAL MEAN							405		
HIGHEST DAILY MEAN	2160			2980			2980		
LOWEST DAILY MEAN	88			103			88		
ANNUAL SEVEN-DAY MINIMUM	110			122			110		
ANNUAL RUNOFF (CFSM)	.41			.48			.48		
ANNUAL RUNOFF (INCHES)	4.20			6.59			6.50		
10 PERCENT EXCEEDS	730			937			887		
50 PERCENT EXCEEDS	258			257			268		
90 PERCENT EXCEEDS	142			141			137		

STREAMS TRIBUTARY TO LAKE MICHIGAN
04087170 MILWAUKEE RIVER, AT MOUTH, AT MILWAUKEE, WI--CONTINUED

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DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	189	---	---	---	---	---	---	---	---	---	---	---
2	151	---	---	---	---	---	---	---	---	---	---	---
3	168	---	---	---	---	---	---	---	---	---	---	---
4	160	---	---	---	---	---	---	---	---	---	---	---
5	179	---	---	---	---	---	---	---	---	---	---	---
6	2090	---	---	---	---	---	---	---	---	---	---	---
7	809	---	---	---	---	---	---	---	---	---	---	---
8	671	---	---	---	---	---	---	---	---	---	---	---
9	553	---	---	---	---	---	---	---	---	---	---	---
10	458	---	---	---	---	---	---	---	---	---	---	---
11	398	---	---	---	---	---	---	---	---	---	---	---
12	369	---	---	---	---	---	---	---	---	---	---	---
13	342	---	---	---	---	---	---	---	---	---	---	---
14	326	---	---	---	---	---	---	---	---	---	---	---
15	275	---	---	---	---	---	---	---	---	---	---	---
16	256	---	---	---	---	---	---	---	---	---	---	---
17	237	---	---	---	---	---	---	---	---	---	---	---
18	226	---	---	---	---	---	---	---	---	---	---	---
19	266	---	---	---	---	---	---	---	---	---	---	---
20	415	---	---	---	---	---	---	---	---	---	---	---
21	340	---	---	---	---	---	---	---	---	---	---	---
22	296	---	---	---	---	---	---	---	---	---	---	---
23	332	---	---	---	---	---	---	---	---	---	---	---
24	362	---	---	---	---	---	---	---	---	---	---	---
25	324	---	---	---	---	---	---	---	---	---	---	---
26	330	---	---	---	---	---	---	---	---	---	---	---
27	1100	---	---	---	---	---	---	---	---	---	---	---
28	727	---	---	---	---	---	---	---	---	---	---	---
29	736	---	---	---	---	---	---	---	---	---	---	---
30	933	---	---	---	---	---	---	---	---	---	---	---
31	643	---	---	---	---	---	---	---	---	---	---	---
TOTAL	14661	---	---	---	---	---	---	---	---	---	---	---
MEAN	473	---	---	---	---	---	---	---	---	---	---	---
MAX	2090	---	---	---	---	---	---	---	---	---	---	---
MIN	151	---	---	---	---	---	---	---	---	---	---	---
CFSM	.54	---	---	---	---	---	---	---	---	---	---	---
IN.	.63	---	---	---	---	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1996, BY WATER YEAR (WY)

MEAN	325	343	274	263	182	613	848	547	248	431	505	239
MAX	473	343	274	263	182	613	1063	736	268	684	662	300
(WY)	1996	1995	1995	1995	1995	1995	1995	1995	1995	1994	1995	1995
MIN	177	343	274	263	182	613	634	357	227	179	348	178
(WY)	1995	1995	1995	1995	1995	1995	1994	1994	1994	1995	1994	1994

SUMMARY STATISTICS	FOR 1995 CALENDAR YEAR (JANUARY TO OCTOBER)	FOR 1996 WATER YEAR (OCTOBER)	WATER YEARS 1994 - 1996
ANNUAL TOTAL	144746	14661	
ANNUAL MEAN	476	473	420
HIGHEST ANNUAL MEAN			473
LOWEST ANNUAL MEAN			405
HIGHEST DAILY MEAN	2980	Aug 28	2980
LOWEST DAILY MEAN	103	Jul 22	88
ANNUAL SEVEN-DAY MINIMUM	122	Jul 7	110
ANNUAL RUNOFF (CFSM)	.55	.54	.48
ANNUAL RUNOFF (INCHES)	6.17	.63	6.55
10 PERCENT EXCEEDS	1050	908	887
50 PERCENT EXCEEDS	295	340	272
90 PERCENT EXCEEDS	137	170	138

STREAMS TRIBUTARY TO LAKE MICHIGAN
04087170 MILWAUKEE RIVER, AT MOUTH, AT MILWAUKEE, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1985 to October 1995 (discontinued).

REMARKS.--Water-quality analyses by the Wisconsin State Laboratory of Hygiene.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEED (MG/L) (00530)	DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEED (MG/L) (00530)
OCT 1994				DEC 1994			
01...	1100	205	32	01...	1245	336	10
03...	1100	209	17	02...	2300	328	26
05...	1100	229	6	04...	1100	300	14
06...	1512	210	8	06...	1041	283	7
08...	1100	389	6	06...	2300	283	13
10...	1100	164	7	11...	2300	227	4
12...	0830	243	5	13...	2300	226	4
12...	1300	243	5	16...	2300	272	4
12...	1400	243	6	20...	1144	246	3
12...	1500	243	6	27...	1100	296	8
12...	1600	243	3	JAN 1995			
12...	1700	243	4	02...	1100	176	33
12...	1800	243	3	10...	1200	147	4
12...	1900	243	6	17...	1100	530	18
14...	2300	159	7	24...	1100	217	8
16...	2300	149	24	31...	1100	161	7
18...	1210	151	13	FEB			
20...	1100	145	8	09...	1245	142	12
22...	1100	142	4	MAR			
23...	2300	144	4	13...	1245	779	22
25...	1100	148	4	16...	1100	1080	3
27...	1100	162	3	18...	1100	820	8
29...	1100	147	3	20...	1400	955	8
31...	1100	144	8	23...	1100	767	14
NOV				25...	1100	630	6
01...	1237	180	10	28...	1100	930	34
03...	1100	243	6	APR			
05...	1100	651	6	01...	1100	863	3
07...	1100	453	12	04...	1105	686	14
08...	1130	459	6	09...	1100	610	38
10...	1100	356	4	11...	1100	951	64
12...	2300	280	6	14...	1135	1050	16
15...	1100	272	8	16...	1100	875	25
17...	1015	241	13	18...	1100	2010	28
20...	1100	214	20	19...	1100	1790	33
21...	2300	284	200	19...	1505	1790	16
23...	2300	219	6	25...	1100	846	10
27...	2300	709	60	26...	1100	1010	20
28...	1100	469	31	27...	1100	2240	20
28...	2300	469	15	29...	1100	1390	8
				30...	1100	1140	16

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04087170 MILWAUKEE RIVER, AT MOUTH, AT MILWAUKEE, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
MAY 1995				JUL 1995			
01...	1100	943	34	01...	1100	162	4
02...	1100	808	18	02...	1100	161	4
03...	1100	712	13	03...	1100	130	6
03...	1250	712	8	04...	1100	389	7
04...	1100	654	6	05...	1100	171	5
05...	1100	593	6	06...	1100	126	9
06...	1100	546	10	07...	1100	116	4
07...	1100	501	6	07...	1140	116	4
08...	1100	584	16	08...	1100	137	6
09...	1100	1360	20	09...	1100	132	8
10...	1100	1580	19	10...	1100	123	8
11...	1100	1350	18	11...	1100	118	4
12...	1100	1200	10	12...	1100	110	5
13...	1100	1070	6	13...	1100	121	4
14...	1100	1050	30	13...	1330	121	4
15...	1100	877	15	14...	1100	120	4
16...	1100	775	11	15...	1100	417	3
16...	1240	775	9	16...	1100	375	6
17...	1100	750	8	17...	1100	138	4
18...	1100	682	8	17...	1238	138	5
19...	1100	611	7	18...	1100	157	5
20...	1100	530	6	19...	1100	162	4
21...	1100	464	18	20...	1100	357	5
22...	1100	365	6	21...	1100	111	12
23...	1100	464	8	22...	1100	103	7
24...	1100	459	8	23...	1100	126	5
25...	1100	394	12	24...	1100	201	6
26...	1100	370	12	25...	1100	324	6
27...	1100	589	12	26...	1100	266	6
28...	1100	969	6	27...	1100	144	3
29...	1100	570	14	28...	1100	156	3
30...	1100	520	10	29...	1100	125	2
31...	1100	475	10	30...	1100	130	2
JUN				31...	1100	139	4
01...	1100	424	10	AUG			
02...	1010	377	8	01...	1100	490	2
02...	1100	377	6	02...	1100	137	6
03...	1100	335	8	03...	1105	196	2
04...	1100	293	6	04...	1100	467	6
05...	1100	274	6	05...	1100	179	10
06...	1100	497	7	06...	1100	133	7
07...	1100	719	11	07...	1100	274	8
08...	1100	532	36	08...	1020	126	9
09...	1100	358	18	08...	1100	126	4
10...	1100	336	8	09...	1100	649	8
11...	1100	316	8	10...	1100	324	8
12...	1100	287	6	11...	1100	265	5
13...	1100	270	4	12...	1100	249	8
14...	1100	249	6	13...	1100	216	10
15...	1100	220	8	14...	1100	412	4
16...	0910	199	8	15...	1100	287	4
16...	1100	199	6	16...	1100	1720	9
17...	1100	183	4	16...	1600	1720	11
18...	1100	170	8	17...	1100	1440	15
26...	1100	118	14	18...	1100	692	11
27...	1100	129	6	19...	1100	703	10
28...	1100	138	5	20...	1100	491	7
29...	1100	439	4	21...	1100	406	8
30...	1100	205	6	22...	1100	338	8
				23...	0855	284	7
				23...	1100	284	4
				24...	1100	259	8
				25...	1100	227	8
				26...	1100	205	8
				27...	1100	1170	13
				28...	1100	2980	114
				28...	1434	2980	58
				29...	1100	2070	32
				30...	1100	1950	34
				31...	1105	1190	20
				31...	1135	1190	11

STREAMS TRIBUTARY TO LAKE MICHIGAN
04087170 MILWAUKEE RIVER, AT MOUTH, AT MILWAUKEE, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)
SEP 1995				SEP 1995			
01...	1100	858	12	16...	1100	391	12
02...	1100	656	14	17...	1100	375	16
03...	1100	539	10	18...	1100	172	20
04...	0943	450	10	19...	1100	210	12
04...	1100	450	6	20...	1055	262	14
05...	1100	392	7	20...	1100	262	9
06...	1100	352	7	21...	1100	300	19
07...	1100	427	40	22...	1100	271	9
08...	1100	294	17	23...	1100	237	12
09...	1100	276	24	24...	1100	215	8
10...	1100	247	10	25...	1100	205	16
11...	1100	220	24	26...	1021	195	10
12...	1100	205	13	26...	1100	195	6
13...	1100	189	7	27...	1100	192	12
14...	1100	181	13	28...	1100	187	6
15...	1100	168	14	29...	1100	172	7
				30...	1100	162	18

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)
OCT 1995			
01...	1100	189	10
02...	0940	151	8
02...	1100	151	4
03...	1100	168	5
04...	1100	160	6
05...	1100	179	36
06...	1101	2090	21
07...	1100	809	18
08...	1100	671	12
09...	1100	553	9
10...	1000	458	10
10...	1100	458	6
11...	1100	398	10
12...	1100	369	7
13...	1100	342	6
14...	1100	326	18
15...	1100	275	12
16...	0945	256	9
16...	1100	256	7
17...	1100	237	4
18...	1100	226	6
19...	1100	266	9
20...	1100	415	14
21...	1100	340	8
22...	1100	296	8
23...	1100	332	4
24...	1100	362	8
25...	1100	324	16
26...	1100	330	9
27...	1100	1100	14
28...	1100	727	8
29...	1000	736	10
30...	1000	933	9
31...	1000	643	14

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SULFATE DIS- SOLVED (MG/L AS SO4)
		(00060)	(00095)	(00400)	(00010)	(00078)	(00300)	(00915)	(00925)	(00930)	(00935)	(00945)
OCT 1994												
12...	0950	243	460	7.7	15.5	1.40	6.8	41	17	26	2.1	35
18...	1050	151	477	7.8	16.0	1.22	7.4	45	19	28	3.5	37
NOV												
01...	1040	180	469	7.9	10.5	1.08	9.5	43	18	24	3.5	37
08...	1405	459	461	7.9	10.5	0.91	8.8	40	17	26	3.2	32
DEC												
01...	1115	336	539	8.1	5.0	0.76	10.5	52	23	34	4.2	43
20...	1115	246	618	8.1	3.0	--	16.0	50	20	50	3.8	41
JAN 1995												
10...	1230	147	537	8.1	1.0	--	13.3	55	23	48	3.3	43
FEB												
09...	1115	142	601	7.4	1.0	--	13.5	48	18	37	2.9	36
MAR												
13...	1020	779	850	8.1	3.5	2.01	12.3	49	20	61	3.0	35
20...	1320	955	700	7.8	7.5	--	10.2	55	26	50	4.1	36
23...	1110	767	566	7.8	5.5	--	12.4	54	24	41	3.0	34
28...	1120	930	631	8.2	5.5	0.79	10.7	54	26	39	2.7	38
APR												
04...	1100	686	840	8.3	8.0	0.76	10.1	66	33	62	2.9	47
14...	1005	1050	724	8.3	8.0	0.64	10.7	61	32	54	2.6	43
19...	1425	1790	626	8.2	10.0	0.46	9.6	57	27	49	2.7	38
28...	1030	1740	--	--	--	--	--	61	28	45	3.0	37
28...	1100	1740	--	--	10.0	0.81	9.3	--	--	--	--	--
MAY												
03...	1140	712	692	7.5	12.0	0.91	8.1	--	--	--	--	41
11...	1005	1350	656	8.0	12.5	0.46	6.9	--	--	--	--	--
16...	1055	775	643	8.1	15.0	0.91	6.3	--	--	--	--	--
16...	1220	775	623	8.0	15.0	0.84	6.1	--	--	--	--	--
JUN												
09...	1020	358	508	7.6	16.0	0.76	6.8	44	18	28	2.7	33
JUL												
17...	1145	138	360	7.6	15.5	1.10	8.9	--	--	--	--	--
AUG												
03...	1100	196	341	7.6	16.5	1.22	8.7	--	--	--	--	--
10...	1250	324	372	7.5	21.5	1.07	5.9	--	--	--	--	--
16...	1535	1720	406	7.7	22.5	0.61	6.2	36	16	24	2.4	31
17...	1245	1440	393	7.6	23.0	0.46	5.9	33	14	22	2.1	27
28...	1435	2980	--	--	--	--	--	--	--	--	--	--
28...	1630	2980	--	--	--	--	--	--	--	--	--	--
31...	1100	1190	--	--	--	--	--	--	--	--	--	--

STREAMS TRIBUTARY TO LAKE MICHIGAN
04087170 MILWAUKEE RIVER, AT MOUTH, AT MILWAUKEE, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDE (MG/L) (00535)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	CHLORO- PHYLL A TRICHR. UNCORR. WHOLE TOTAL (UG/L) (32210)
OCT 1994											
12...	44	2.4	5	4	0.741	0.184	1.4	0.091	0.022	0.07	3.48
18...	46	2.9	6	4	0.751	0.190	0.70	0.060	0.021	0.06	5.76
NOV											
01...	38	2.0	12	6	0.778	0.108	0.60	0.049	0.012	0.04	7.94
08...	41	1.9	8	2	0.572	0.137	0.60	0.057	0.018	0.05	4.11
DEC											
01...	57	3.2	10	4	1.06	0.150	0.60	0.050	0.019	0.06	2.57
20...	80	3.2	2	2	1.02	0.277	0.70	0.030	0.011	0.03	0.986
JAN 1995											
10...	76	3.3	6	7	0.960	0.106	0.50	0.030	0.012	0.04	1.20
FEB											
09...	61	3.1	4	4	0.863	0.096	0.50	0.020	0.011	0.03	0.700
MAR											
13...	100	2.4	4	4	0.976	0.122	0.80	0.045	0.017	0.05	0.977
20...	91	5.2	10	4	1.05	0.174	1.3	0.090	0.034	0.10	6.56
23...	74	3.8	14	6	0.832	0.129	1.0	0.070	0.017	0.05	4.49
28...	70	2.8	15	6	0.701	0.122	0.90	0.060	0.015	0.05	5.47
APR											
04...	120	3.0	13	4	0.948	0.115	0.90	0.050	0.009	0.03	2.72
14...	100	1.6	10	4	0.722	0.117	0.90	0.050	<0.002	--	8.16
19...	88	2.1	18	5	0.680	0.176	0.90	0.067	0.010	0.03	11.8
28...	78	2.6	14	6	0.751	0.114	0.90	0.068	0.008	0.02	11.0
28...	--	--	24	--	--	--	--	--	--	--	--
MAY											
03...	71	2.5	9	4	0.838	0.166	1.0	0.059	0.021	0.06	6.89
11...	70	2.0	14	--	0.699	0.211	1.0	0.073	0.021	0.06	9.81
16...	57	2.6	8	--	0.762	0.276	1.1	0.070	0.031	0.09	6.80
16...	56	2.6	8	--	0.738	0.270	1.1	0.070	0.033	0.10	4.82
JUN											
09...	47	1.4	10	5	0.443	0.224	0.90	0.075	0.016	0.05	12.2
JUL											
17...	26	0.80	6	--	0.278	0.094	0.40	0.035	0.018	0.05	2.29
AUG											
03...	25	0.80	6	--	0.304	0.110	0.40	0.034	0.013	0.04	1.10
10...	34	1.2	6	--	0.432	0.203	0.50	0.058	0.021	0.06	4.80
16...	40	1.4	12	6	0.338	0.178	0.70	0.073	0.020	0.06	18.5
17...	36	1.9	16	7	0.434	0.167	0.70	0.077	0.021	0.06	27.0
28...	38	6.1	54	--	0.668	0.508	1.4	0.156	0.030	0.09	29.8
28...	41	6.0	42	--	0.685	0.416	1.2	0.148	0.002	0.01	23.9
31...	36	6.5	14	--	0.860	0.271	1.0	0.104	0.054	0.17	7.25

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT 1995						
06...	1100	594	7.8	17.0	0.76	6.4

STREAMS TRIBUTARY TO LAKE MICHIGAN
04087204 OAK CREEK AT SOUTH MILWAUKEE, WI

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LOCATION.--Lat 42°55'30", long 87°52'12", in NW 1/4 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.--Estimated daily discharges: Ice-affected periods, Dec. 8-14, Jan. 1-10, 23-31, Feb. 4-15, and Mar. 1-10. Records good except those for ice-affected periods, which are fair (see page 11). 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 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	8.4	6.7	5.4	8.1	5.0	20	32	15	5.5	6.4	32
2	2.7	4.6	5.9	4.4	8.2	3.8	18	25	13	3.5	5.6	22
3	2.1	3.0	5.2	3.2	8.1	3.6	17	20	12	3.1	3.4	16
4	1.9	9.3	4.4	2.3	5.8	3.8	14	18	11	19	3.5	12
5	1.7	38	5.1	2.0	5.0	4.2	10	16	8.3	20	2.6	9.9
6	1.6	100	6.3	2.0	3.8	4.4	11	15	12	7.8	2.4	8.1
7	1.4	19	6.0	2.0	3.5	4.3	15	14	39	3.8	2.4	6.9
8	10	14	6.0	2.0	3.3	4.3	37	15	41	3.1	2.2	6.5
9	18	35	5.6	2.1	3.1	4.2	27	172	15	2.9	22	5.5
10	4.6	17	5.8	2.2	3.3	9.0	22	164	11	2.7	22	4.8
11	2.5	10	5.2	3.2	3.2	71	43	93	9.1	2.6	5.7	3.5
12	1.9	6.8	4.3	7.1	2.8	60	142	48	6.9	2.5	3.1	3.6
13	1.7	7.4	3.8	20	2.7	38	69	36	6.0	2.4	2.4	3.7
14	1.6	16	3.7	227	2.7	29	38	32	5.7	2.3	3.2	3.4
15	1.7	11	3.9	103	3.0	24	26	24	5.2	29	5.0	2.7
16	1.9	5.5	6.8	43	3.3	21	66	27	4.9	96	200	5.3
17	1.6	4.6	18	30	3.4	19	46	51	4.4	15	203	12
18	1.6	4.0	18	25	5.8	16	164	25	4.0	6.6	39	7.0
19	2.0	3.5	13	21	16	15	137	18	3.7	4.7	84	5.5
20	2.4	3.3	11	26	19	27	60	15	3.7	21	49	5.2
21	2.3	5.3	10	21	16	29	53	13	3.5	14	18	5.4
22	2.0	5.3	13	15	12	19	42	11	3.4	5.1	12	6.9
23	1.5	3.7	26	14	13	15	30	24	3.2	3.8	8.5	6.6
24	1.3	3.0	32	12	12	13	24	38	2.9	4.1	6.7	5.5
25	1.3	2.8	18	10	11	11	22	15	2.9	5.0	5.6	4.9
26	1.5	2.6	13	9.0	7.8	10	35	12	3.0	7.2	5.2	4.4
27	1.6	33	13	8.4	6.9	22	324	20	3.3	6.4	4.9	3.6
28	1.6	39	12	8.0	6.5	94	143	118	2.9	8.9	74	3.4
29	2.1	15	10	7.4	---	74	66	39	11	4.6	43	3.3
30	1.8	11	7.7	6.8	---	39	43	22	15	2.9	257	3.2
31	3.2	---	7.3	6.8	---	27	---	17	---	2.5	80	---
TOTAL	85.9	441.1	306.7	651.3	199.3	719.6	1764	1189	282.0	318.0	1181.8	222.8
MEAN	2.77	14.7	9.89	21.0	7.12	23.2	58.8	38.4	9.40	10.3	38.1	7.43
MAX	18	100	32	227	19	94	324	172	41	96	257	32
MIN	1.3	2.6	3.7	2.0	2.7	3.6	10	11	2.9	2.3	2.2	2.7
CFSM	.11	.59	.40	.84	.28	.93	2.35	1.53	.38	.41	1.52	.30
IN.	.13	.66	.46	.97	.30	1.07	2.62	1.77	.42	.47	1.76	.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1995, BY WATER YEAR (WY)

MEAN	11.7	18.4	20.8	13.8	22.7	52.0	49.0	23.2	19.3	15.0	14.1	17.8
MAX	48.4	85.3	65.3	77.3	84.4	149	151	96.1	85.8	95.8	52.7	110
(WY)	1992	1986	1983	1974	1971	1979	1993	1990	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 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1964 - 1995	
ANNUAL TOTAL	6346.7		7361.5		23.1	
ANNUAL MEAN	17.4		20.2		41.7	
HIGHEST ANNUAL MEAN					6.67	
LOWEST ANNUAL MEAN					1974	
HIGHEST DAILY MEAN	(a) 600	Feb 20	324	Apr 27	855	Mar 5 1976
LOWEST DAILY MEAN	1.2	Jul 31	1.3	Oct 24, 25	.00	(b)
ANNUAL SEVEN-DAY MINIMUM	1.4	Jul 25	1.5	Oct 22	.00	Jan 7 1977
INSTANTANEOUS PEAK FLOW			438	Aug 30	1140	Aug 6 1986
INSTANTANEOUS PEAK STAGE			6.90	Aug 30	9.88	Aug 6 1986
INSTANTANEOUS LOW FLOW			1.2	Oct 8, 24, 25	.00	(b)
ANNUAL RUNOFF (CFSM)	.70		.81		.92	
ANNUAL RUNOFF (INCHES)	9.44		10.95		12.56	
10 PERCENT EXCEEDS	35		42		49	
50 PERCENT EXCEEDS	6.0		7.8		7.8	
90 PERCENT EXCEEDS	1.8		2.4		1.9	

(a) Ice affected

(b) Several days during 1977

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.

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	6.2	12	15	8.8	8.6	37	56	21	7.0	49	39
2	4.8	6.6	12	13	8.6	7.8	32	43	19	5.2	16	22
3	5.0	5.1	11	11	8.4	7.2	28	36	18	4.8	8.2	16
4	4.1	41	9.3	9.0	8.4	7.0	25	33	16	12	16	14
5	3.9	25	11	8.0	7.8	7.0	21	32	15	32	33	13
6	3.7	146	14	7.0	7.2	6.8	19	28	17	8.8	9.1	9.8
7	3.7	53	14	6.6	6.6	6.8	19	23	50	6.7	6.6	9.4
8	5.0	23	15	6.4	6.0	6.8	60	25	66	5.5	7.4	12
9	24	63	12	6.2	5.8	6.8	43	174	27	5.0	24	8.2
10	6.0	34	11	6.4	5.6	8.0	41	237	19	4.9	58	7.0
11	4.5	17	9.4	7.0	5.6	69	40	167	15	5.2	14	7.1
12	4.2	13	8.4	8.0	5.6	88	191	100	14	4.7	7.6	6.8
13	3.9	11	7.8	15	5.6	57	118	68	12	4.6	6.1	6.1
14	3.7	34	7.4	199	5.6	44	70	62	10	4.3	5.8	6.0
15	4.1	21	7.6	217	5.6	36	47	44	8.9	16	7.7	5.6
16	4.1	12	8.0	88	5.8	31	54	37	8.1	128	192	5.4
17	4.5	12	20	52	6.2	26	44	59	7.4	22	354	8.6
18	4.2	11	24	40	6.6	21	171	37	6.9	11	87	6.5
19	4.5	8.0	20	32	12	22	272	30	6.5	7.7	83	5.3
20	4.2	7.6	15	31	18	45	108	25	7.4	77	121	8.4
21	4.5	12	14	22	23	62	92	21	6.0	33	49	9.2
22	4.4	13	16	20	16	37	85	19	6.4	13	27	14
23	4.1	8.8	30	18	16	29	59	23	6.1	8.5	18	6.3
24	3.9	7.3	45	16	16	24	45	68	5.5	9.2	14	4.9
25	5.4	7.1	34	14	15	21	39	31	5.0	8.4	11	4.4
26	4.2	7.8	26	13	13	20	41	24	5.6	34	9.4	4.6
27	4.1	29	22	12	11	26	324	22	5.4	12	8.0	3.9
28	4.2	83	21	11	9.6	103	254	133	5.8	12	42	3.5
29	4.1	28	19	10	---	106	113	63	5.5	6.8	65	3.6
30	4.0	17	17	9.6	---	67	78	36	18	5.3	192	3.4
31	4.2	---	17	9.0	---	45	---	29	---	4.7	199	---
TOTAL	154.6	762.5	509.9	932.2	269.4	1051.8	2570	1785	433.5	519.3	1739.9	274.0
MEAN	4.99	25.4	16.4	30.1	9.62	33.9	85.7	57.6	14.4	16.8	56.1	9.13
MAX	24	146	45	217	23	106	324	237	66	128	354	39
MIN	3.7	5.1	7.4	6.2	5.6	6.8	19	19	5.0	4.3	5.8	3.4
CFSM	.10	.52	.33	.61	.20	.69	1.74	1.17	.29	.34	1.14	.19
IN.	.12	.58	.39	.70	.20	.80	1.94	1.35	.33	.39	1.32	.21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1995, BY WATER YEAR (WY)

MEAN	24.3	32.8	39.1	29.6	44.2	102	90.6	42.4	36.5	26.5	24.7	31.9
MAX	95.5	151	118	190	161	315	316	138	137	142	72.3	214
(WY)	1992	1986	1983	1974	1971	1979	1973	1990	1969	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	3.04
(WY)	1964	1964	1964	1977	1977	1968	1977	1977	1988	1988	1971	1971

SUMMARY STATISTICS

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1964 - 1995	
ANNUAL TOTAL	11309.6		11002.1			
ANNUAL MEAN	31.0		30.1		43.6	
HIGHEST ANNUAL MEAN					84.0	
LOWEST ANNUAL MEAN					12.7	
HIGHEST DAILY MEAN	(a) 600	Feb 20	354	Aug 17	2390	Apr 21 1973
LOWEST DAILY MEAN	3.3	Jun 19	3.4	Sep 30	.44	Aug 9,10 1971
ANNUAL SEVEN-DAY MINIMUM	(a) 3.4	Jan 16	4.0	Sep 24	1.1	Aug 4 1971
INSTANTANEOUS PEAK FLOW			430	Aug 17	3700	Apr 21 1973
INSTANTANEOUS PEAK STAGE			7.04	Aug 17	9.31	Apr 21 1973
INSTANTANEOUS LOW FLOW			3.1	Sep 28,30	.38	Aug 10 1971
ANNUAL RUNOFF (CFSM)	.63		.61		.89	
ANNUAL RUNOFF (INCHES)	8.55		8.32		12.05	
10 PERCENT EXCEEDS	73		68		92	
50 PERCENT EXCEEDS	11		13		17	
90 PERCENT EXCEEDS	3.9		4.9		4.5	

(a) Ice affected

STREAMS TRIBUTARY TO LAKE MICHIGAN
04087233 ROOT RIVER CANAL NEAR FRANKLIN, WI

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LOCATION.--Lat 42°48'55", long 87°59'40", in SE 1/4 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.--Estimated daily discharges: Ice-affected periods, Jan. 2-11, Jan. 23 to Feb. 18, and Mar. 2-8. Records are good above 40 ft³/s and fair below, except for Oct. 12 to Nov. 5, those for ice-affected periods, and Sept. 22-30, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	4.3	9.9	23	19	11	49	145	32	5.2	6.2	12
2	2.8	4.1	9.2	20	17	10	42	113	28	5.5	7.6	9.6
3	2.4	3.3	8.6	15	16	8.8	38	88	26	4.8	4.5	8.2
4	4.5	6.6	7.7	10	14	8.2	33	73	23	4.8	5.0	7.1
5	2.2	13	7.2	7.4	13	8.0	29	66	21	7.2	9.6	6.2
6	2.4	36	7.4	7.0	11	8.0	27	54	24	6.5	6.1	5.9
7	3.2	23	7.1	6.8	10	8.0	25	44	56	5.6	4.5	6.1
8	4.7	12	9.4	6.8	9.4	8.2	35	41	108	4.7	3.7	7.5
9	6.2	17	8.5	6.8	9.4	8.6	42	170	64	4.3	4.7	6.2
10	5.1	20	8.9	7.0	9.2	16	48	301	42	4.3	23	5.5
11	3.8	12	7.8	12	9.2	76	86	239	31	2.8	11	4.7
12	2.7	9.8	7.8	19	8.0	91	257	147	25	3.1	6.7	4.2
13	2.5	8.5	7.7	32	7.6	69	190	106	22	3.0	5.1	4.1
14	2.3	9.7	7.6	283	7.6	56	119	86	18	2.8	4.0	4.3
15	2.2	11	7.7	349	7.6	48	87	65	15	2.9	3.7	4.5
16	2.3	8.8	8.3	178	7.6	43	69	55	12	24	6.0	4.1
17	2.5	7.8	18	116	7.8	37	56	113	11	12	191	5.0
18	2.6	7.3	29	95	9.0	32	125	74	10	7.2	140	4.7
19	2.5	6.7	25	78	30	31	211	53	9.4	5.6	146	4.7
20	2.6	6.0	21	69	49	41	127	43	8.4	5.4	248	5.3
21	2.4	6.4	18	55	54	53	102	34	7.6	5.0	120	5.9
22	2.5	6.3	18	47	36	43	85	29	6.9	4.0	62	6.1
23	2.3	5.3	30	42	32	36	69	28	6.7	3.7	38	5.3
24	2.3	5.0	76	36	27	31	56	35	6.1	3.7	26	4.5
25	2.5	5.3	76	33	23	27	47	29	6.0	4.1	20	3.8
26	2.5	5.0	53	28	19	26	62	25	5.6	3.8	14	3.2
27	2.5	7.0	44	25	16	34	560	24	5.8	3.2	11	3.3
28	2.5	31	41	23	14	112	703	108	6.1	5.9	13	2.8
29	2.5	19	34	21	---	115	408	85	6.1	5.1	35	2.7
30	2.5	12	29	20	---	83	204	52	6.1	3.5	28	2.6
31	3.1	---	27	20	---	61	---	39	---	2.9	18	---
TOTAL	90.6	329.2	669.8	1690.8	492.4	1239.8	3991	2564	648.8	166.6	1221.4	160.1
MEAN	2.92	11.0	21.6	54.5	17.6	40.0	133	82.7	21.6	5.37	39.4	5.34
MAX	6.2	36	76	349	54	115	703	301	108	24	248	12
MIN	2.2	3.3	7.1	6.8	7.6	8.0	25	24	5.6	2.8	3.7	2.6
CFSM	.05	.19	.38	.96	.31	.70	2.33	1.45	.38	.09	.69	.09
IN.	.06	.21	.44	1.10	.32	.81	2.60	1.67	.42	.11	.80	.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1995, BY WATER YEAR (WY)												
MEAN	23.2	36.6	46.8	32.7	56.0	118	108	48.1	37.3	25.2	23.1	33.1
MAX	113	154	200	219	189	352	312	211	130	141	138	212
(WY)	1973	1993	1983	1974	1971	1979	1993	1990	1967	1978	1978	1972
MIN	1.05	1.27	.86	.56	.69	6.03	10.8	2.47	2.51	2.18	2.20	1.28
(WY)	1964	1964	1964	1977	1977	1968	1977	1977	1977	1991	1985	1971

SUMMARY STATISTICS		FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1964 - 1995	
ANNUAL TOTAL		13075.2		13264.5			
ANNUAL MEAN		35.8		36.3		48.9	
HIGHEST ANNUAL MEAN						98.4	
LOWEST ANNUAL MEAN						4.57	
HIGHEST DAILY MEAN	(a)1000	Feb 21	703	Apr 28	1410	Mar 4	1974
LOWEST DAILY MEAN	(b)2.1	Feb 11-13	2.2	Oct 5,15	(c).40	Dec 19	1963
ANNUAL SEVEN-DAY MINIMUM	(a)2.2	Feb 7	2.4	Oct 13	.45	Feb 8	1977
INSTANTANEOUS PEAK FLOW			750	Apr 28	(d)1440	Mar 4	1974
INSTANTANEOUS PEAK STAGE			9.40	Apr 28	(e)11.26	Feb 21	1994
INSTANTANEOUS LOW FLOW						1.8	Jun 17 1994
ANNUAL RUNOFF (CFSM)	.63		.64			.86	
ANNUAL RUNOFF (INCHES)	8.53		8.66			11.66	
10 PERCENT EXCEEDS	84		86			121	
50 PERCENT EXCEEDS	7.7		11			15	
90 PERCENT EXCEEDS	2.5		3.3			2.3	

- (a) Ice affected
(b) Ice affected, also occurred June 17
(c) Result of freezeup
(d) Gage height, 9.88 ft
(e) Backwater from ice

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.--Estimated daily discharges: Ice-affected periods, Jan. 5-11, Jan. 24 to Feb. 17, and Mar. 4-10. Records good except those for ice-affected periods, which are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	11	52	75	50	36	180	545	128	23	14	221
2	13	11	42	45	49	34	148	351	108	19	41	88
3	11	13	37	59	46	32	127	268	92	15	37	50
4	8.7	19	34	48	43	28	110	211	78	13	19	38
5	7.7	44	32	32	38	27	96	180	65	15	19	32
6	7.7	121	32	27	37	27	88	161	56	37	34	28
7	7.7	182	41	25	33	27	82	136	77	22	23	24
8	8.3	105	34	23	30	27	92	121	174	15	14	20
9	8.2	71	40	23	27	27	145	339	219	13	14	19
10	12	89	33	23	27	27	146	623	144	11	25	19
11	16	78	35	23	27	93	176	739	105	9.9	71	17
12	14	52	32	35	27	274	436	682	82	9.1	31	15
13	11	41	31	52	25	294	571	448	68	8.5	18	13
14	9.0	37	28	355	23	203	548	306	57	7.3	13	12
15	7.8	46	26	530	23	164	346	238	49	7.2	11	10
16	6.7	52	28	644	23	143	236	183	43	45	15	8.2
17	6.0	38	38	620	23	124	239	302	35	131	259	10
18	5.5	34	60	375	25	107	289	275	32	46	429	12
19	5.4	31	78	265	34	101	532	187	29	23	461	11
20	5.3	27	76	229	58	108	656	144	27	18	395	11
21	5.8	26	67	201	87	152	502	118	24	67	429	10
22	5.5	24	67	146	91	165	361	98	23	42	266	11
23	5.5	28	82	123	83	128	287	85	21	20	123	14
24	5.5	26	153	110	79	106	226	95	17	15	80	16
25	5.5	23	205	98	75	89	182	131	15	15	57	16
26	5.5	21	178	84	62	84	197	103	16	15	45	14
27	5.5	25	141	74	53	85	872	89	15	31	39	13
28	6.3	60	123	66	45	204	1050	189	15	29	43	13
29	6.8	120	110	60	---	377	1150	360	17	19	99	11
30	6.8	73	96	56	---	352	884	234	21	16	133	10
31	8.2	---	84	54	---	246	---	148	---	13	214	---
TOTAL	254.9	1528	2115	4580	1243	3891	10954	8089	1852	770.0	3471	786.2
MEAN	8.22	50.9	68.2	148	44.4	126	365	261	61.7	24.8	112	26.2
MAX	17	182	205	644	91	377	1150	739	219	131	461	221
MIN	5.3	11	26	23	23	27	82	85	15	7.2	11	8.2
CFSM	.04	.27	.36	.78	.24	.66	1.93	1.38	.33	.13	.59	.14
IN.	.05	.30	.42	.90	.24	.77	2.16	1.59	.36	.15	.68	.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1995, BY WATER YEAR (WY)

	MEAN	70.1	112	138	95.3	155	365	357	168	113	86.7	69.2	93.5
MAX	335	454	568	401	457	1149	1071	649	378	485	237	683	
(WY)	1987	1986	1983	1974	1971	1979	1993	1990	1967	1969	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 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1963 - 1995	
ANNUAL TOTAL	37139.2		39534.1		152	
ANNUAL MEAN	102		108		268	
HIGHEST ANNUAL MEAN					23.3	
LOWEST ANNUAL MEAN					1993	
HIGHEST DAILY MEAN	1920	Feb 22	1150	Apr 29	4010	Mar 5 1974
LOWEST DAILY MEAN	3.7	Sep 23	5.3	Oct 20	.00	Jul 9-15 1988
ANNUAL SEVEN-DAY MINIMUM	4.3	Sep 18	5.5	Oct 18	.00	Jul 9 1988
INSTANTANEOUS PEAK FLOW			1240	Apr 29	4500	Mar 5 1974
INSTANTANEOUS PEAK STAGE			5.06	Apr 29	8.54	Mar 5 1974
INSTANTANEOUS LOW FLOW			5.1	Oct 19,20	.00	Jul 9-15 1988
ANNUAL RUNOFF (CFSM)	.54		.57		.81	
ANNUAL RUNOFF (INCHES)	7.32		7.79		10.94	
10 PERCENT EXCEEDS	227		280		399	
50 PERCENT EXCEEDS	29		43		53	
90 PERCENT EXCEEDS	7.9		11		9.1	

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 1/4 NE 1/4 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.--Estimated daily discharges: Ice-affected periods, Dec. 11-15, Jan. 2-11, Jan. 23 to Feb. 20, and Feb. 28 to Mar. 10. Records good except those for ice-affected periods, which are fair (see page 11). 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 1994 TO SEPTEMBER 1995 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	31	14	20	19	15	37	84	25	7.8	16	20
2	5.9	11	13	18	19	14	33	63	23	6.9	10	16
3	5.9	8.2	11	15	18	12	31	48	22	7.9	9.7	14
4	7.0	46	9.5	14	16	12	28	40	19	16	8.2	12
5	7.2	46	10	13	14	12	24	35	18	14	7.1	12
6	7.8	151	11	13	13	13	25	29	19	12	6.2	11
7	7.0	54	12	13	12	13	23	27	19	11	6.8	14
8	16	30	12	13	12	12	39	29	46	8.7	7.3	13
9	12	55	14	13	12	12	37	173	21	8.3	17	10
10	7.4	35	13	16	12	18	42	228	18	9.4	18	9.2
11	6.6	24	9.2	18	11	60	93	144	16	9.8	12	9.4
12	6.8	18	9.0	25	11	48	196	86	16	9.9	10	9.9
13	6.2	16	9.0	24	11	40	111	60	16	10	8.1	10
14	6.4	20	9.0	319	11	36	72	48	15	10	8.4	10
15	4.9	15	10	177	11	34	55	39	14	14	9.9	9.7
16	4.8	13	12	103	11	32	46	37	13	35	41	9.7
17	7.6	12	27	75	11	29	46	43	12	12	151	8.7
18	7.0	11	33	61	12	26	117	31	11	11	63	9.1
19	8.0	10	28	54	28	31	113	28	12	11	99	9.6
20	8.0	8.7	23	63	35	41	70	25	12	16	95	10
21	5.8	12	21	52	31	42	63	22	12	11	38	14
22	4.0	9.9	23	42	24	35	51	22	11	8.0	24	14
23	4.6	8.9	36	38	23	32	43	26	11	7.4	19	9.9
24	5.7	6.5	75	33	23	29	39	28	10	9.4	15	8.3
25	6.8	5.9	59	29	20	25	38	23	9.2	15	14	9.3
26	7.0	6.2	42	25	19	24	95	20	11	12	12	9.6
27	6.9	27	38	22	17	48	667	21	12	11	10	8.9
28	7.0	37	35	20	16	91	294	85	12	25	33	8.0
29	5.9	20	29	18	---	70	157	43	11	12	112	7.3
30	5.0	16	24	18	---	53	112	33	10	9.3	52	7.2
31	13	---	22	18	---	43	---	29	---	9.2	28	---
TOTAL	223.4	764.3	692.7	1382	472	1002	2797	1649	476.2	370.0	960.7	323.8
MEAN	7.21	25.5	22.3	44.6	16.9	32.3	93.2	53.2	15.9	11.9	31.0	10.8
MAX	16	151	75	319	35	91	667	228	46	35	151	20
MIN	4.0	5.9	9.0	13	11	12	23	20	9.2	6.9	6.2	7.2
CFSM	.19	.66	.58	1.16	.44	.84	2.42	1.38	.41	.31	.80	.28
IN.	.22	.66	.67	1.34	.46	.97	2.70	1.59	.46	.36	.93	.31

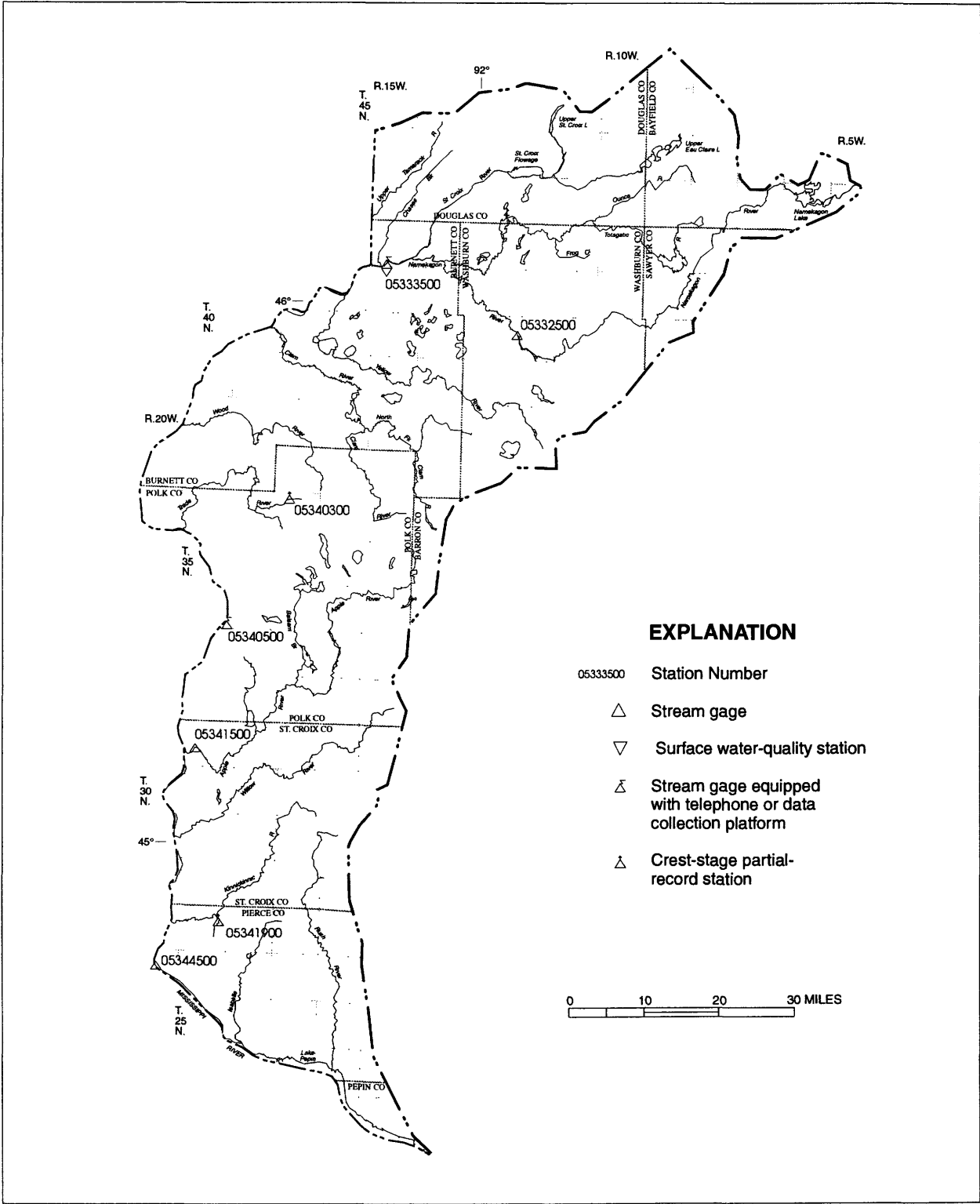
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1995, BY WATER YEAR (WY)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
MEAN	18.2	31.6	36.9	24.9	33.2	78.1	74.3	39.5	29.6	21.6	21.7	27.3												
MAX	61.2	126	101	97.1	69.6	258	185	146	82.4	129	92.5	131												
(WY)	1987	1986	1983	1974	1981	1979	1993	1990	1972	1978	1978	1986												
MIN	4.40	3.62	2.35	2.05	3.74	20.0	12.1	4.57	8.32	4.93	4.35	3.25												
(WY)	1972	1972	1977	1977	1977	1977	1977	1977	1988	1976	1976	1976												

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1972 - 1995
ANNUAL TOTAL	9055.6	11113.1	
ANNUAL MEAN	24.8	30.4	36.4
HIGHEST ANNUAL MEAN			59.0
LOWEST ANNUAL MEAN			8.10
HIGHEST DAILY MEAN	(a) 700	Feb 20	1010
LOWEST DAILY MEAN	4.0	Oct 22	.35
ANNUAL SEVEN-DAY MINIMUM	(a) 5.1	Feb 7	1.7
INSTANTANEOUS PEAK FLOW			1480
INSTANTANEOUS PEAK STAGE			(b) 9.14
ANNUAL RUNOFF (CFSM)	.64		.94
ANNUAL RUNOFF (INCHES)	8.75		12.84
10 PERCENT EXCEEDS	50		82
50 PERCENT EXCEEDS	11		15
90 PERCENT EXCEEDS	6.0		5.3

(a) Ice affected
(b) Backwater from ice

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

05332500 NAMEKAGON RIVER NEAR TREGO, WI

LOCATION.--Lat 45°56'53", long 91°53'17", in SW 1/4 sec.17, T.40 N., R.12 W., Washburn County, Hydrologic Unit 07030002, at power-plant 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.--No estimated daily discharges. 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 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	601	517	362	435	332	326	561	589	596	326	326	481
2	601	481	561	435	332	326	561	561	517	326	326	481
3	601	481	561	290	333	326	481	529	517	326	326	481
4	601	440	561	290	332	326	481	525	517	326	253	481
5	601	440	561	290	332	326	481	525	584	343	253	481
6	488	440	434	290	326	326	440	525	280	385	253	399
7	601	521	290	290	326	326	399	525	604	385	385	385
8	601	440	340	290	253	326	399	525	476	385	517	290
9	601	481	561	326	326	326	399	525	476	386	517	290
10	505	481	561	326	326	326	440	584	476	385	326	290
11	496	440	561	343	326	326	481	589	476	385	326	385
12	481	440	343	343	326	476	517	798	476	335	326	385
13	440	440	343	343	326	561	589	584	476	385	476	385
14	440	440	517	343	326	894	589	995	476	359	594	385
15	440	440	476	343	326	894	589	793	476	359	476	385
16	440	440	517	476	326	894	589	793	403	359	476	385
17	584	440	517	476	326	894	589	584	403	476	476	385
18	584	403	517	326	326	894	589	584	403	476	385	385
19	517	403	476	326	326	894	589	584	403	476	385	385
20	561	403	435	326	326	793	1000	584	403	476	385	385
21	561	403	517	326	326	584	798	584	385	359	385	326
22	561	500	435	326	326	894	798	517	385	359	385	385
23	561	584	435	333	326	689	798	517	385	359	326	385
24	596	584	435	333	333	584	798	517	385	385	359	385
25	561	584	435	326	326	584	589	517	385	385	665	326
26	517	365	435	326	326	584	899	503	385	359	665	326
27	517	365	435	326	326	584	589	503	350	359	665	326
28	561	365	435	326	326	689	589	596	385	385	665	385
29	561	365	435	326	---	584	589	1100	385	385	665	385
30	561	362	435	326	---	561	589	805	326	385	665	385
31	561	---	435	326	---	561	---	805	---	253	585	---
TOTAL	16902	13488	14361	10507	9093	17678	17799	19265	13194	11632	13817	11523
MEAN	545	450	463	339	325	570	593	621	440	375	446	384
MAX	601	584	561	476	333	894	1000	1100	604	476	665	481
MIN	440	362	290	290	253	326	399	503	280	253	253	290
CFSM	1.12	.92	.95	.69	.67	1.17	1.22	1.27	.90	.77	.91	.79
IN.	1.29	1.03	1.09	.80	.69	1.35	1.36	1.47	1.01	.89	1.05	.88

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 1995, BY WATER YEAR (WY)

	MEAN	439	435	382	348	342	440	691	635	558	481	406	479
MAX	893	764	580	531	512	778	1084	1156	1093	1026	687	1834	
(WY)	1969	1992	1992	1969	1969	1945	1969	1950	1944	1958	1953	1941	
MIN	252	288	251	245	241	282	408	389	275	235	195	214	
(WY)	1949	1934	1933	1933	1933	1934	1931	1934	1934	1934	1933	1933	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1928 - 1995

ANNUAL TOTAL	183928	169259	
ANNUAL MEAN	504	464	470
HIGHEST ANNUAL MEAN			607
LOWEST ANNUAL MEAN			300
HIGHEST DAILY MEAN	3060	Sep 17, 18	5200
LOWEST DAILY MEAN	253	Jun 11, 12	113
ANNUAL SEVEN-DAY MINIMUM	295	Aug 15	159
ANNUAL RUNOFF (CFSM)	1.03	.95	.96
ANNUAL RUNOFF (INCHES)	14.02	12.90	13.08
10 PERCENT EXCEEDS	618	601	712
50 PERCENT EXCEEDS	435	440	411
90 PERCENT EXCEEDS	326	326	285

(a) Also occurred July 31 and Aug. 4-6

(b) 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 1/4 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.--Estimated daily discharges: Ice-affected periods, Dec. 1-3 and Dec. 6 to Mar. 24. Records good except those for ice-affected periods, which are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1900	1390	1300	1100	920	940	1870	1830	1760	805	707	1580
2	1860	1320	1300	960	920	940	1810	1790	1650	826	734	1490
3	1730	1240	1400	900	920	940	1750	1730	1580	999	861	1370
4	1650	1240	1410	920	900	1000	1620	1680	1510	948	845	1270
5	1570	1220	1420	940	880	1000	1470	1610	1410	977	767	1220
6	1460	1220	1200	960	860	1100	1400	1500	1370	889	807	1040
7	1490	1210	1100	960	840	1100	1370	1520	1250	1000	933	1020
8	1490	1210	1100	960	800	1100	1380	1520	1410	966	1190	1040
9	1530	1180	1200	1000	820	1000	1420	2030	1240	982	1160	995
10	1500	1050	1200	1000	860	1100	1310	2630	1310	965	1090	910
11	1450	1270	1200	1000	860	1300	1380	2660	1510	985	963	870
12	1400	1200	1100	1100	860	1500	1680	2710	1500	1140	1050	947
13	1310	1260	1100	1100	860	1900	1830	2710	1350	1050	1130	945
14	1250	1270	1200	1100	880	2300	1860	3310	1340	1100	1210	903
15	1230	1260	1200	1100	860	2800	1840	3600	1220	948	1290	957
16	1290	1240	1200	1100	880	3200	1920	3090	1360	923	1090	984
17	1370	1200	1200	1100	860	3400	1890	2680	1200	955	1040	1010
18	1420	1140	1200	1100	840	3600	1810	2410	1150	986	1010	992
19	1460	1180	1200	1000	840	3400	2260	2180	1060	933	1030	926
20	1370	1120	1100	980	860	3200	2520	2020	969	937	1020	997
21	1390	1340	1200	980	880	2900	2720	1860	976	897	980	994
22	1390	1450	1200	1000	940	2700	2760	1830	962	931	940	843
23	1610	1470	1200	1000	1000	2400	2760	1760	905	959	953	982
24	1600	1480	1200	1000	1000	2200	2690	1580	872	853	1060	880
25	1590	1470	1200	960	1100	2200	2460	1440	864	941	1710	901
26	1530	1370	1200	960	1100	2130	2180	1370	836	853	2210	848
27	1550	1340	1200	980	1000	2190	2170	1300	789	937	2400	828
28	1460	1420	1100	980	960	2210	2030	1610	916	904	2270	827
29	1490	1330	1100	980	---	2180	1960	1850	804	856	2160	948
30	1430	1300	1100	940	---	2070	1890	1910	861	907	2030	1110
31	1400	---	1100	920	---	1970	---	1790	---	891	1850	---
TOTAL	46170	38390	37130	31080	25300	61970	58010	63510	35934	29243	38490	30627
MEAN	1489	1280	1198	1003	904	1999	1934	2049	1198	943	1242	1021
MAX	1900	1480	1420	1100	1100	3600	2760	3600	1760	1140	2400	1580
MIN	1230	1050	1100	900	800	940	1310	1300	789	805	707	8

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 1995, BY WATER YEAR (WY)

MEAN	1184	1200	1013	897	887	1336	2327	1846	1525	1286	1060	1217
MAX	2489	2151	1910	1439	1486	2930	4614	4023	3797	3230	2223	4759
(WY)	1969	1952	1992	1992	1992	1973	1916	1950	1944	1958	1955	1941
MIN	590	631	551	600	535	703	939	889	625	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

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SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1914 - 1995	
ANNUAL TOTAL	514539		495854		1314	
ANNUAL MEAN	1410		1359		1982	1986
HIGHEST ANNUAL MEAN					795	1934
LOWEST ANNUAL MEAN					8740	May 2 1954
HIGHEST DAILY MEAN	6760	Sep 16	(a)3600	(b)Mar 18	405	(c)Aug 6 1934
LOWEST DAILY MEAN	695	Jul 18	707	Aug 1	417	Aug 12 1934
ANNUAL SEVEN-DAY MINIMUM	(a)743	Jan 17	802	Jul 31	10200	May 6 1950
INSTANTANEOUS PEAK FLOW			(d)3670	May 15	8.22	May 6 1950
INSTANTANEOUS PEAK STAGE			(e)5.78	Mar 19	393	Aug 6 1934
INSTANTANEOUS LOW FLOW			669	Aug 3		
ANNUAL RUNOFF (CFSM)	.89		.86		.83	
ANNUAL RUNOFF (INCHES)	12.11		11.67		11.30	
10 PERCENT EXCEEDS	2100		2170		2200	
50 PERCENT EXCEEDS	1200		1200		1080	
90 PERCENT EXCEEDS	830		880		725	

(a) Ice affected

(b) Also occurred May 15

(c) Also occurred Aug. 13, 16, 17, 1934

(d) Gage height, 3.68 ft; discharge may have been greater on Mar. 18 or 19 during ice-affected period

(e) Backwater from ice

PERIOD OF RECORD.--June to September 1995.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
JUN 14...	1200	1380	115	7.9	21.5	8.9	739	51	14	3.9	2.2
JUL 26...	1210	854	130	8.1	26.0	9.0	775	62	17	4.8	2.6
AUG 30...	0915	2040	103	7.7	22.5	7.4	751	59	16	4.6	2.3
SEP 27...	1030	808	136	8.1	12.0	10.1	738	66	18	5.2	3.3

DATE	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT WH TOT FET FIELD (MG/L AS CAC03) (00410)	BICARBONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	ALKA-LINITY WAT DIS FIX END FIELD (MG/L AS CAC03) (39036)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CAC03) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS ST02) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
JUN 14...	0.50	54	--	--	--	2.6	1.9	<0.10	8.2	82
JUL 26...	0.40	--	68	--	56	3.1	2.1	<0.10	11	87
AUG 30...	0.50	--	65	53	53	2.4	2.0	<0.10	12	93
SEP 27...	0.60	--	83	--	68	3.3	2.1	<0.10	12	86

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)
JUN 1995 14...	0.050	<0.010	0.020	0.40	0.40	0.020	0.020	<0.010	--	--
JUL 26...	<0.050	<0.010	0.030	0.20	0.20	<0.010	<0.010	<0.010	--	--
AUG 30...	0.050	<0.010	<0.015	0.70	0.40	0.060	<0.010	<0.010	5	<1
SEP 27...	<0.050	<0.010	<0.015	0.20	<0.20	<0.010	<0.010	<0.010	--	--

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)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	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)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
JUN 14...	--	--	--	--	--	--	--	220	--	10
JUL 26...	--	--	--	--	--	--	--	140	--	12
AUG 30...	<1	6	<1	<1.0	2	<1	1	280	<1	<1
SEP 27...	--	--	--	--	--	--	--	150	--	11

[illegible]

05340500 ST. CROIX RIVER AT ST. CROIX FALLS, WI

LOCATION.--Lat 45°24'25", long 92°38'49", in SW 1/4 NW 1/4 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.

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.--No estimated daily discharges. Records good (see page 11). 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 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4980	4890	3540	2950	2390	2490	12900	8720	5850	2310	2850	14500
2	4810	4730	3890	3160	2400	2200	12300	8060	5500	2050	2870	12400
3	4890	4700	4080	2610	2420	2200	11800	7660	5160	2450	2510	10600
4	4900	4390	4230	2240	2580	2300	11600	7290	5280	2560	2970	9650
5	4490	4080	4460	2490	2320	2380	11000	6810	5020	3560	2990	8950
6	4260	4290	3180	2170	2140	2220	10100	6050	5150	4280	3120	8450
7	4870	4030	2890	2490	2190	2070	9300	6410	5880	4410	4980	7620
8	5000	4040	2750	2630	2120	2330	8790	5660	5400	4450	8280	7030
9	5330	4050	2890	2410	2140	2370	8810	5950	5590	4200	7800	6050
10	5120	3890	3200	2440	2260	2240	7610	6400	5500	4190	6600	5270
11	5290	3720	2750	2590	2230	2300	7390	8830	5990	3960	5680	5020
12	4900	3760	2910	2530	1930	2900	7340	9860	7010	4260	6970	4620
13	4780	3910	3420	2740	2000	4580	7880	9710	6790	4480	7190	4320
14	4450	4110	3110	2270	2020	7210	9860	10200	6440	4280	7300	4270
15	4130	4210	3170	2800	2070	8700	10100	12100	5840	4070	7400	4060
16	4120	4050	3490	2710	2010	10400	10400	15000	5140	3780	7340	3810
17	4440	4070	3510	2820	2300	12300	10400	14600	4800	3660	6010	3880
18	5200	3990	3330	2810	2000	14800	11000	12800	4480	3590	6390	3990
19	5690	3780	3550	2720	2090	16400	12200	10700	4120	3820	5810	3790
20	7110	3470	3630	2750	1970	20800	13600	9820	3670	3340	5830	3430
21	6870	4510	3440	2610	2140	23600	14600	8580	3180	3560	5410	3840
22	6940	4230	3510	2700	2120	22800	15300	7670	3210	4220	5340	3330
23	6870	4840	3520	2380	2200	18900	15100	7240	2980	4090	4860	3320
24	6920	4780	3570	2590	2210	17400	14500	6770	2880	3650	5360	2910
25	7250	4760	3430	2490	2320	15800	14100	5960	2320	3630	7980	3860
26	6560	4150	3180	2390	2210	14100	13000	5420	3020	3370	12300	2490
27	6210	3620	3370	2290	2100	13600	12000	5120	2530	3370	16400	3240
28	6330	3380	3320	2370	2310	13800	11000	5490	2600	3540	19700	3010
29	5430	3330	3310	2320	---	13700	10200	5920	2630	3420	19800	3150
30	5620	3400	3570	2650	---	13800	9380	5750	2820	2800	18400	3630
31	4980	---	3040	2350	---	13400	---	5670	---	3150	16600	---
TOTAL	168740	123160	105240	79470	61190	304090	333560	252220	136780	112500	243040	164490
MEAN	5443	4105	3395	2564	2185	9809	11120	8136	4559	3629	7840	5483
MAX	7250	4890	4460	3160	2580	23600	15300	15000	7010	4480	19800	14500
MIN	4120	3330	2750	2170	1930	2070	7340	5120	2320	2050	2510	2490
CFSM	.87	.66	.54	.41	.35	1.57	1.78	1.30	.73	.58	1.26	.88
IN.	1.01	.73	.63	.47	.36	1.81	1.99	1.50	.82	.67	1.45	.98

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1902 - 1995, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
MEAN	3748	14270	1969	1380	1933
MAX	3417	11910	1972	1342	1911
(WY)	2557	5821	1984	1287	1911
MIN	2165	4279	1984	1157	1911
(WY)	2119	6021	1984	1257	1913
	4233	14420	1945	1538	1912
	9976	22320	1952	2212	1902
	7525	21840	1950	2430	1934
	5783	19510	1944	1481	1934
	4125	17260	1952	1014	1934
	2879	9777	1955	839	1934
	3535	14590	1941	1152	1933

SUMMARY STATISTICS

	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1902 - 1995
ANNUAL TOTAL	1862630	2084480	
ANNUAL MEAN	5103	5711	4352
HIGHEST ANNUAL MEAN			8569
LOWEST ANNUAL MEAN			1754
HIGHEST DAILY MEAN	21200	Apr 30	53900
LOWEST DAILY MEAN	2020	Aug 21	75
ANNUAL SEVEN-DAY MINIMUM	2250	Aug 20	754
INSTANTANEOUS PEAK FLOW		31200	54900
INSTANTANEOUS PEAK STAGE		14.60	25.19
ANNUAL RUNOFF (CFSM)	.82	.92	.70
ANNUAL RUNOFF (INCHES)	11.10	12.43	9.47
10 PERCENT EXCEEDS	9190	12100	9070
50 PERCENT EXCEEDS	3890	4230	2740
90 PERCENT EXCEEDS	2510	2320	1560

MISSISSIPPI RIVER MAIN STEM
05344500 MISSISSIPPI RIVER AT PRESCOTT, WI

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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. 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.

REMARKS.--Estimated daily discharges: Nov. 28 to Dec. 1, Dec. 4-9, and Dec. 13 to Mar. 16. Records good except those for estimated daily discharges, which are fair (see page 11). Some regulation by reservoirs, navigation dams, and powerplants at low and medium stages. Discharges below a stage of 26.7 ft may be computed by routing flows from Mississippi River at St. Paul (05331000) and St. Croix River at St. Croix Falls (05340500). Flood flow not materially affected by artificial storage.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

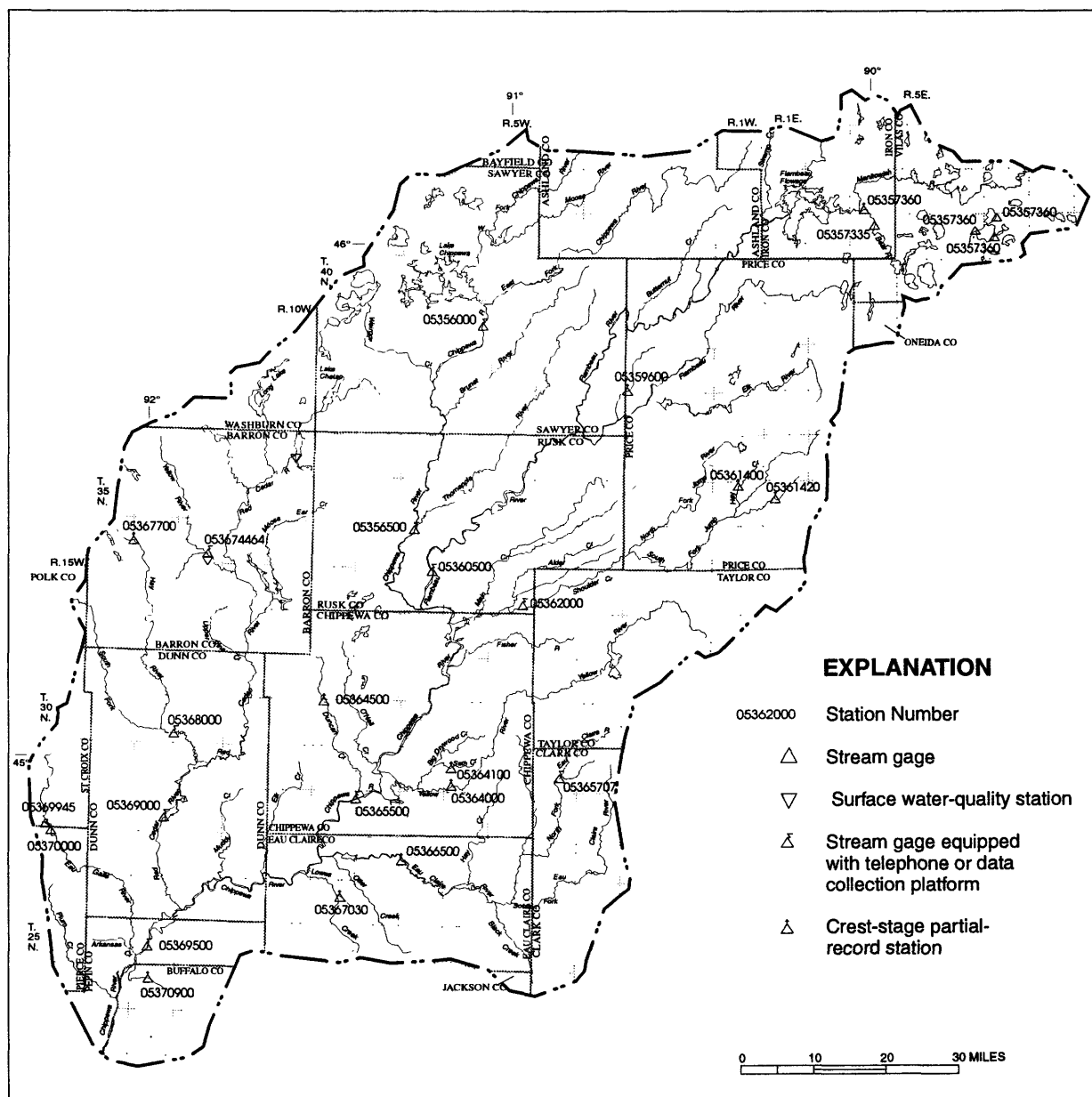
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21300	26300	14300	14200	10100	9270	58000	61000	35300	21300	27500	33900
2	20100	25500	14200	13300	10300	8310	58200	59200	34700	21200	27500	32800
3	18900	24800	15600	13000	10100	8520	57600	56100	34600	21600	27500	31500
4	18400	24100	16500	12300	10300	9530	56500	53500	34300	22100	26900	29900
5	18200	23100	17000	9860	10200	9100	56200	51300	33900	22100	26300	28400
6	18400	22300	17400	10400	9550	9280	55800	48100	34500	23000	25600	26400
7	19100	22000	16000	10200	9330	8800	53600	45700	36200	25900	25200	25500
8	20600	21400	14200	11000	9540	8010	51700	44200	36100	25100	25400	24000
9	22800	20800	13700	11300	9180	8520	47800	42100	35400	25800	26300	23400
10	24300	20600	14200	11000	9790	8880	44100	41600	35700	26400	27700	22000
11	24100	19600	13800	10900	10300	9010	41800	41300	36100	27500	28500	21100
12	24300	19300	12900	11300	7660	9170	40900	41800	36800	27800	29400	20000
13	24000	19100	11900	12000	7970	10100	39900	42600	37500	28300	32200	18800
14	23000	19000	12500	12600	8740	12300	38900	44400	37600	29100	33300	18000
15	22200	18900	12700	11600	8940	18600	39500	44400	37200	28800	32400	17300
16	21400	18800	12200	12000	9110	25500	40800	47000	36200	28400	31800	16100
17	20000	18500	13600	11800	9190	32100	42600	51100	35000	28600	30700	15600
18	20500	18100	14500	12500	9260	35800	44700	53300	33200	28300	28700	15600
19	23000	18000	14600	12100	9380	42300	47400	53800	31200	27900	27800	15300
20	26300	17900	13800	11500	9320	48600	50300	54100	29000	28300	27000	14500
21	30500	17700	13500	11100	9300	53400	54800	53500	27100	28100	25700	13800
22	32100	18100	14000	11000	9160	58800	58000	52500	25100	28200	24200	14500
23	32100	18400	14800	11300	9110	59400	60900	51300	24300	28700	23700	13300
24	32800	18400	15100	10300	9470	56700	62900	49800	22900	28900	22500	13200
25	33800	18800	15400	10200	9440	54000	63900	47700	21400	29300	21900	12600
26	34000	18900	15100	10400	9250	52400	64800	44300	20000	29300	24200	13200
27	32600	18200	14600	10900	8950	51900	64900	42000	20100	28800	25000	12300
28	31100	17200	14800	10500	8830	54700	64700	42000	18900	28700	28600	12800
29	30300	16700	14900	10400	---	57000	64000	40600	19500	28700	31700	12100
30	28500	15700	14900	10400	---	57600	62700	38200	20100	27600	33500	12300
31	27800	---	14300	10500	---	58000	---	36600	---	27500	34400	---
TOTAL	776500	596200	447000	351860	261770	945600	1587900	1475100	919900	831300	863100	580200
MEAN	25050	19870	14420	11350	9349	30500	52930	47580	30660	26820	27840	19340
MAX	34000	26300	17400	14200	10300	59400	64900	61000	37600	29300	34400	33900
MIN	18200	15700	11900	9860	7660	8010	38900	36600	18900	21200	21900	12100
AC-FT	1540000	1183000	886600	697900	519200	1876000	3150000	2926000	1825000	1649000	1712000	1151000
CFSM	.56	.44	.32	.25	.21	.68	1.18	1.06	.68	.60	.62	.43
IN.	.64	.50	.37	.29	.22	.79	1.32	1.22	.76	.69	.72	.48

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 1995, BY WATER YEAR (WY)

	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955
MEAN	13330	12900	9714	8117	7982	17100	40120	31830	25700	20160	13230	12920																
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 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1928 - 1995
ANNUAL TOTAL	9260800	9636430	
ANNUAL MEAN	25370	26400	(a) 17800
HIGHEST ANNUAL MEAN			38540
LOWEST ANNUAL MEAN			4367
HIGHEST DAILY MEAN	72700	May 4	226000
LOWEST DAILY MEAN	10600	Feb 9	1380
ANNUAL SEVEN-DAY MINIMUM	11000	Feb 9	2190
INSTANTANEOUS PEAK FLOW			65000
INSTANTANEOUS PEAK STAGE			32.82
ANNUAL RUNOFF (AC-FT)	18370000	19110000	12900000
ANNUAL RUNOFF (CFSM)	.57	.59	.40
ANNUAL RUNOFF (INCHES)	7.69	8.00	5.40
10 PERCENT EXCEEDS	41100	52100	39000
50 PERCENT EXCEEDS	23000	23400	11500
90 PERCENT EXCEEDS	12900	10100	5010

(a) Median of annual mean discharges is 17800 ft³/s



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 1/4 NE 1/4 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 north-west 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.--No estimated daily discharges. Records good (see page 11). Flow regulated by Moose Lake and Lake Chippewa. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1280	1670	794	764	493	439	763	646	852	468	604	1030
2	1270	1520	789	764	557	439	763	490	881	469	612	611
3	907	1420	789	761	701	439	801	492	881	470	601	582
4	828	1350	800	760	694	437	1050	490	883	470	601	582
5	834	1290	799	761	692	438	1010	488	881	471	475	1120
6	836	1290	792	754	690	438	754	485	877	471	476	1090
7	844	1010	792	755	705	437	755	482	903	461	605	1080
8	837	826	796	755	664	433	754	486	934	275	605	1080
9	836	825	792	751	600	432	465	876	878	268	603	505
10	834	825	792	751	435	431	754	1530	886	277	603	504
11	836	845	791	751	434	431	761	1910	881	272	607	1090
12	834	927	793	749	430	434	794	1910	880	273	491	1080
13	829	936	789	749	427	450	782	1750	881	381	497	1080
14	831	756	788	748	426	459	485	1960	880	472	497	1070
15	830	560	814	749	424	460	479	2390	881	294	490	1080
16	834	510	787	747	421	356	476	2390	856	272	488	491
17	860	529	781	749	421	274	772	2570	460	383	487	486
18	862	628	780	749	421	272	809	2240	467	470	487	1070
19	857	713	780	601	421	264	834	2040	469	471	493	766
20	846	712	776	350	444	306	816	1150	672	471	488	766
21	844	726	775	350	429	433	792	1100	674	462	484	766
22	863	720	774	350	433	474	803	1100	677	278	482	769
23	872	711	771	350	438	561	800	1100	676	268	479	498
24	851	712	771	350	438	634	803	1100	476	391	496	498
25	1140	707	769	350	439	634	767	1020	469	690	491	763
26	1430	708	768	352	438	635	799	811	465	827	507	761
27	1500	721	769	366	438	636	646	812	471	830	501	587
28	1610	790	764	464	439	824	645	828	469	811	540	628
29	1680	828	766	370	---	766	646	827	469	489	512	631
30	1680	808	768	501	---	761	647	823	470	487	502	534
31	1670	---	765	498	---	761	---	824	---	596	494	---
TOTAL	31865	26573	24274	18819	13992	15188	22225	37120	21499	13988	16298	23598
MEAN	1028	886	783	607	500	490	741	1197	717	451	526	787
MAX	1680	1670	814	764	705	824	1050	2570	934	830	612	1120
MIN	828	510	764	350	421	264	465	482	460	268	475	486

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1912 - 1995, BY WATER YEAR (WY)

	MEAN	669	843	1000	916	761	436	507	744	802	660	623	704
MAX	2896	1884	1910	1770	1550	1097	3453	2823	2950	1713	2235	3769	
(WY)	1986	1992	1992	1983	1928	1920	1922	1954	1939	1951	1972	1941	
MIN	43.6	143	321	201	194	117	20.0	24.2	39.8	40.3	146	140	
(WY)	1925	1925	1990	1922	1918	1923	1925	1923	1925	1925	1970	1970	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1912 - 1995	
ANNUAL TOTAL	272228		265439			
ANNUAL MEAN	746		727			
HIGHEST ANNUAL MEAN					1124	
LOWEST ANNUAL MEAN					258	
HIGHEST DAILY MEAN	5710	Sep 16	2570	May 17	7520	Sep 5 1941
LOWEST DAILY MEAN	211	Apr 6	264	Mar 19	14	(a) Apr 17-20 1925
ANNUAL SEVEN-DAY MINIMUM	216	Apr 5	315	Jul 7	15	Apr 30 1925
INSTANTANEOUS PEAK FLOW			2630	May 16	7520	Sep 4,5 1941
INSTANTANEOUS PEAK STAGE			7.21	May 16	11.05	Sep 4,5 1941
INSTANTANEOUS LOW FLOW			257	(b) Mar 19	14	Apr 17-20 1925
10 PERCENT EXCEEDS	1420		1080		1390	
50 PERCENT EXCEEDS	744		726		580	
90 PERCENT EXCEEDS	236		431		170	

(a) Also occurred May 1-5, 1925

(b) Also occurred Aug. 25

CHIPPWEA RIVER BASIN
05356500 CHIPPWEA RIVER NEAR BRUCE, WI

LOCATION.--Lat 45°27'08", long 91°15'39", in SE 1/4 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.--Estimated daily discharges: Ice-affected periods, Nov. 19, 21-26, Nov. 29 to Dec. 3, and Dec. 5 to Mar. 20. Records good except those for ice-affected periods, which are fair (see page 11). 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 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2220	2400	1400	920	720	680	1790	1470	1640	848	938	1750
2	2420	2320	1400	920	740	680	1670	1300	1590	789	905	1820
3	2290	2100	1400	920	900	680	1590	1150	1530	712	911	1420
4	1800	2090	1360	920	900	680	1680	1170	1460	765	885	1210
5	1670	1990	1300	920	920	680	1700	1110	1460	783	872	1080
6	1600	1900	1200	920	920	680	1510	1050	1390	761	801	1620
7	1610	1890	1100	920	920	680	1330	1080	1430	771	810	1590
8	1660	1490	1100	920	920	680	1370	1040	1450	722	1100	1550
9	1650	1400	1000	920	900	680	1330	1390	1430	531	983	1500
10	1620	1370	1000	920	880	700	1010	2760	1570	588	937	934
11	1560	1370	940	920	720	720	1420	3520	1780	613	917	862
12	1460	1400	940	920	700	760	2370	3370	1650	605	1770	1380
13	1470	1490	920	920	700	1000	3430	2980	1510	678	2610	1380
14	1430	1440	920	920	700	1800	2910	3120	1290	773	3230	1370
15	1360	1250	920	920	700	2100	2220	3990	1250	946	2620	1370
16	1410	1000	920	920	700	2900	2000	3990	1290	938	1710	1400
17	2080	1040	920	920	700	3600	1880	4150	1130	781	1320	864
18	4260	1040	920	920	700	4300	2190	3680	826	1040	1110	816
19	4080	1100	920	860	700	5000	4280	3360	759	1060	1170	1300
20	3450	1240	920	780	700	5600	4400	2540	802	952	1140	1040
21	2700	1300	940	600	680	7280	3690	1920	943	883	1050	1020
22	2280	1300	940	580	680	7390	3150	1870	1040	863	887	1030
23	3150	1300	940	580	680	4240	2810	2010	960	759	852	1060
24	3070	1300	940	580	700	2650	2350	1980	904	677	1010	769
25	2710	1300	940	580	700	2450	2050	1880	754	883	2420	773
26	2770	1300	940	580	700	2050	1980	1660	873	1270	2320	1020
27	2840	1360	940	580	700	2020	1840	1480	871	1310	2950	1010
28	2680	1400	940	600	700	2020	1590	1710	895	1280	3110	849
29	2590	1400	940	640	---	2220	1530	2300	990	1190	3510	842
30	2540	1400	940	620	---	2020	1390	2030	933	841	3200	1110
31	2450	---	940	700	---	1910	---	1710	---	822	2230	---
TOTAL	70880	44680	31840	24840	21280	70850	64460	68770	36400	26434	50278	35739
MEAN	2286	1489	1027	801	760	2285	2149	2218	1213	853	1622	1191
MAX	4260	2400	1400	920	920	7390	4400	4150	1780	1310	3510	1820
MIN	1360	1000	920	580	680	680	1010	1040	754	531	801	769

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 1995, BY WATER YEAR (WY)

	MEAN	1263	1421	1404	1199	1033	1447	2653	1925	1753	1239	1047	1376
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 1994 CALENDAR YEAR FOR 1995 WATER YEAR WATER YEARS 1914 - 1995

	ANNUAL TOTAL	576328	546451										
ANNUAL MEAN		1579	1497							1477			
HIGHEST ANNUAL MEAN										2290			1986
LOWEST ANNUAL MEAN										666			1934
HIGHEST DAILY MEAN										24900		Sep 1	1941
LOWEST DAILY MEAN		416		Sep 17	7390		Mar 22			155		Jun 10	1932
ANNUAL SEVEN-DAY MINIMUM		450		Aug 25	531		Jul 9			218		Aug 3	1925
INSTANTANEOUS PEAK FLOW				Sep 6	583		Jan 21			(a)29000		Sep 17	1994
INSTANTANEOUS PEAK STAGE					7760		Mar 22			(b)20.46		Sep 1	1941
INSTANTANEOUS LOW FLOW					8.88		Mar 22			155		Jun 10	1932
10 PERCENT EXCEEDS		2500			402		Jul 9			2700			
50 PERCENT EXCEEDS		1140			2760					1100			
90 PERCENT EXCEEDS		643			1170					500			

(a) From rating curve extended above 25,100 ft³/s, gage height, 18.12 ft
(b) From floodmarks

05357215 ALLEQUASH CREEK (HEAD OF TROUT RIVER) AT CTH M, NEAR BOULDER JUNCTION, WI

LOCATION.--Lat 46°01'25", long 89°39'10", in NW 1/4 NW 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.--Estimated daily discharges: Ice-affected period, Nov. 26 to Mar. 9. Records good except those for ice-affected period, which is fair (see page 11).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	11	11	9.0	10	8.6	11	11	12	9.0	9.0	8.8
2	16	10	11	8.4	10	8.8	11	10	12	8.7	7.3	8.4
3	15	10	11	8.2	10	9.2	10	11	12	8.3	5.7	8.0
4	13	10	11	8.0	9.8	9.8	10	10	11	8.3	4.0	7.6
5	11	12	11	8.0	9.4	10	10	10	11	8.7	1.2	7.6
6	11	13	11	8.2	9.0	11	10	10	11	8.9	1.1	6.9
7	11	12	11	8.2	8.8	11	10	9.9	12	9.2	3.6	5.9
8	11	12	11	8.2	8.6	11	10	11	11	9.1	4.4	5.5
9	11	12	11	8.2	9.0	12	10	14	10	9.4	7.8	5.5
10	11	11	11	8.0	9.2	12	10	14	11	9.3	8.4	5.2
11	11	11	10	8.2	9.4	12	11	14	11	8.9	9.4	5.1
12	10	11	9.8	8.4	9.2	12	12	13	11	9.4	12	4.9
13	10	11	9.0	8.8	9.0	13	12	15	11	11	15	4.9
14	10	11	8.6	8.8	8.8	13	12	17	10	15	18	5.0
15	10	11	8.6	9.0	8.8	13	12	17	9.6	16	16	5.5
16	11	11	8.6	9.2	9.0	13	11	17	9.3	17	15	7.0
17	16	11	8.8	9.4	9.2	12	11	18	9.0	17	15	7.2
18	17	10	9.0	9.4	9.4	11	12	17	8.8	17	14	7.2
19	17	10	9.2	9.2	9.6	11	13	16	8.8	15	13	7.5
20	16	10	9.4	9.4	9.8	13	13	15	11	14	13	7.7
21	16	12	9.2	9.4	9.8	14	12	14	14	15	11	7.9
22	17	14	9.4	9.4	9.8	13	12	14	14	15	11	8.5
23	15	11	9.6	9.4	9.8	13	11	14	11	14	10	8.7
24	14	11	9.8	9.6	9.6	13	11	14	9.1	12	10	8.5
25	13	11	10	9.8	9.2	12	12	13	8.7	11	9.7	8.3
26	13	10	10	9.8	9.0	12	12	13	8.6	12	12	8.5
27	12	10	10	10	8.8	12	12	12	8.9	12	12	8.4
28	11	11	10	10	8.6	12	11	14	9.4	13	11	8.3
29	11	11	10	10	---	11	11	14	9.6	11	10	8.5
30	11	11	10	10	---	11	11	13	9.3	10	9.8	11
31	11	---	9.4	10	---	11	---	13	---	9.4	9.4	---
TOTAL	399	332	308.4	279.6	260.6	360.4	336	417.9	315.1	363.6	308.8	218.0
MEAN	12.9	11.1	9.95	9.02	9.31	11.6	11.2	13.5	10.5	11.7	9.96	7.27
MAX	17	14	11	10	10	14	13	18	14	17	18	11
MIN	10	10	8.6	8.0	8.6	8.6	10	9.9	8.6	8.3	1.1	4.9

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1995, BY WATER YEAR (WY)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	12.9	13.6	11.9	9.84	8.99	10.4	14.8	13.6	11.7	11.8	8.44	10.5
MAX	22.7	20.2	13.6	11.1	9.31	11.6	18.3	14.9	14.9	15.0	9.96	14.8
(WY)	1992	1992	1994	1994	1995	1995	1992	1992	1993	1991	1995	1994
MIN	7.75	10.9	9.95	9.02	8.80	9.33	11.2	12.2	8.88	9.27	6.92	7.27
(WY)	1993	1994	1995	1995	1992	1993	1995	1994	1992	1993	1992	1995

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1991 - 1995

ANNUAL TOTAL	4142.9	3899.4	
ANNUAL MEAN	11.4	10.7	11.5
HIGHEST ANNUAL MEAN			13.3
LOWEST ANNUAL MEAN			10.7
HIGHEST DAILY MEAN	24	18 (a) May 17	56 Oct 5 1991
LOWEST DAILY MEAN	1.7	1.1 Aug 6	.93 Aug 8 1992
ANNUAL SEVEN-DAY MINIMUM	3.9	3.9 Aug 2	1.1 Aug 2 1992
INSTANTANEOUS PEAK FLOW		(b) 19 (c) May 16	79 Oct 5 1991
INSTANTANEOUS PEAK STAGE		(d) 2.11 Mar 9	2.36 Oct 5 1991
INSTANTANEOUS LOW FLOW		.84 Aug 5, 6	.69 Aug 7 1992
10 PERCENT EXCEEDS	15	14	16
50 PERCENT EXCEEDS	11	10	11
90 PERCENT EXCEEDS	9.0	8.3	7.5

(a) Also occurred Aug. 14

(b) Gage height, 1.54 ft

(c) Also occurred July 17 and Aug. 14 (gage height, 1.55 ft)

(d) Ice jam

CHIPPEWA RIVER BASIN

05357225 STEVENSON CREEK, AT COUNTY HIGHWAY M, NEAR BOULDER JUNCTION, WI

LOCATION.--Lat 46°03'41", long 89°38'47", in NW 1/4 SE 1/4 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.--Estimated daily discharges: Mar. 16 to Apr. 14, Aug. 29 to Sept. 30, and ice-affected period, Dec. 9 to Mar. 15. Records fair except those for estimated daily discharges, which are poor (see page 11).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	2.9	3.1	3.0	2.8	2.7	1.1	1.9	3.0	2.6	2.5	2.9
2	3.2	3.0	3.0	2.9	2.7	2.6	1.1	1.9	2.7	2.5	2.5	2.9
3	3.1	3.0	3.1	2.9	2.7	2.6	1.1	2.0	2.5	2.4	2.5	2.8
4	2.9	3.0	3.0	3.0	2.7	2.5	1.1	1.9	2.4	2.4	2.6	2.7
5	2.8	3.0	3.1	3.1	2.8	2.2	1.1	1.8	2.3	2.7	2.5	2.6
6	2.8	3.1	3.1	3.2	2.7	2.0	1.0	1.7	2.4	2.8	2.4	2.2
7	2.9	3.0	3.1	3.2	2.6	1.9	1.0	1.8	2.6	2.7	2.9	2.0
8	2.8	2.9	2.9	3.1	2.6	1.9	1.0	2.2	2.6	2.7	2.8	1.7
9	2.7	2.6	2.7	3.1	2.5	1.8	.98	4.0	2.5	2.7	2.9	1.7
10	2.6	2.5	2.5	3.1	2.5	1.8	.98	3.1	3.1	2.5	2.7	1.6
11	2.6	2.5	2.4	3.2	2.5	1.8	.98	3.0	2.8	2.5	2.7	1.6
12	2.4	2.5	2.3	3.3	2.6	1.8	1.0	2.9	2.6	2.8	2.7	1.6
13	2.4	2.6	2.3	3.3	2.6	1.7	1.0	3.7	2.5	2.7	3.6	1.7
14	2.4	2.6	2.4	3.3	2.6	1.7	1.0	4.3	2.5	2.8	3.8	1.8
15	2.4	2.5	2.4	3.2	2.5	1.6	1.1	3.7	2.4	3.6	3.3	1.8
16	2.4	2.4	2.5	3.1	2.4	1.5	.98	4.3	2.3	5.1	3.2	2.8
17	4.3	2.5	2.5	3.0	2.4	1.5	1.1	3.5	2.2	5.2	3.0	2.9
18	4.9	2.7	2.5	2.9	2.4	1.4	1.6	3.2	2.3	4.6	2.9	2.7
19	3.8	2.6	2.6	2.8	2.5	1.3	1.7	3.1	2.0	4.0	2.8	2.8
20	3.4	2.7	2.7	2.7	2.6	1.2	1.5	2.9	1.9	3.8	2.5	2.9
21	3.2	3.8	2.8	2.7	2.6	1.2	1.4	2.9	2.3	3.7	4.4	3.0
22	3.8	3.7	2.9	2.6	2.7	1.1	1.3	2.9	2.1	3.4	3.1	3.0
23	4.2	3.5	2.9	2.6	2.7	1.1	1.3	2.8	1.9	3.2	2.8	2.9
24	3.9	3.3	3.0	2.6	2.7	1.0	1.4	2.6	1.9	3.1	2.4	2.8
25	3.7	3.1	3.1	2.5	2.7	1.0	1.5	2.7	2.0	2.9	2.6	2.9
26	3.6	2.9	3.3	2.5	2.7	.98	1.8	2.6	2.0	2.6	3.3	2.9
27	3.5	2.9	3.4	2.5	2.7	.98	2.0	2.7	2.3	2.6	3.3	2.9
28	3.3	3.2	3.5	2.5	2.7	.98	1.9	4.0	3.3	2.9	2.9	2.8
29	3.3	3.2	3.5	2.6	---	1.0	1.9	3.5	2.9	2.5	3.5	3.1
30	3.2	3.1	3.4	2.7	---	1.0	1.9	3.3	2.7	2.4	3.2	3.8
31	3.1	---	3.1	2.8	---	1.0	---	3.1	---	2.6	3.0	---
TOTAL	99.0	87.3	89.1	90.0	73.2	48.84	38.82	90.0	73.0	95.0	91.3	75.8
MEAN	3.19	2.91	2.87	2.90	2.61	1.58	1.29	2.90	2.43	3.06	2.95	2.53
MAX	4.9	3.8	3.5	3.3	2.8	2.7	2.0	4.3	3.3	5.2	4.4	3.8
MIN	2.4	2.4	2.3	2.5	2.4	.98	.98	1.7	1.9	2.4	2.4	1.6

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1995, BY WATER YEAR (WY)

	1991	1992	1993	1994	1995
MEAN	3.35	4.52	3.00	2.81	2.89
MAX	3.91	6.28	3.35	2.93	3.44
(WY)	1992	1994	1992	1994	1992
MIN	3.00	2.91	2.71	2.63	2.61
(WY)	1994	1995	1993	1993	1995

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1991 - 1995
ANNUAL TOTAL	947.29	951.36	
ANNUAL MEAN	2.60	2.61	3.13
HIGHEST ANNUAL MEAN			3.60
LOWEST ANNUAL MEAN			2.61
HIGHEST DAILY MEAN	8.1 Sep 16	5.2 Jul 17	36 Jun 29 1991
LOWEST DAILY MEAN	.54 Aug 19	(a).98 (b)Mar 26-28	.54 Aug 19 1994
ANNUAL SEVEN-DAY MINIMUM	.90 Aug 13	(a).99 Mar 24	.90 Aug 13 1994
INSTANTANEOUS PEAK FLOW		(c)6.4 May 13	(d)39 Jun 29 1991
INSTANTANEOUS PEAK STAGE		(e)10.19 Sep 18	(e)10.19 Sep 18 1995
INSTANTANEOUS LOW FLOW		(f).96 Apr 16	.33 Oct 19 1991
10 PERCENT EXCEEDS	3.7	3.4	4.8
50 PERCENT EXCEEDS	2.7	2.7	2.9
90 PERCENT EXCEEDS	1.3	1.5	1.4

(a) Estimated

(b) Also occurred Apr. 9-11 (estimated), 16

(c) Gage height, 8.27 ft

(d) Gage height, 9.62 ft

(e) Beaver dam

(f) May have been lower during period of no gage-height record, Mar. 16 to Apr. 14

05357245 TROUT RIVER AT TROUT LAKE NEAR BOULDER JUNCTION, WI

LOCATION.--Lat 46°02'08", long 89°42'20", in NE 1/4 NE 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.--Estimated daily discharges: Dec. 11-12, 14, Jan. 3-5, 8-9, 24-26, Feb. 4-6, 8, 10-14, 16, 28, and Mar. 1-3. Records good (see page 11).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	39	37	34	35	35	37	40	51	33	40	29
2	49	38	37	34	35	34	37	39	50	31	38	28
3	46	38	37	34	35	33	37	38	51	29	37	28
4	45	38	36	33	36	33	37	38	50	29	37	28
5	43	38	36	33	36	35	37	38	49	30	36	27
6	41	37	36	33	35	36	37	37	50	31	35	27
7	42	37	35	33	35	38	37	37	52	31	37	26
8	42	36	35	33	35	38	37	39	50	30	37	23
9	40	36	35	33	35	37	36	47	49	30	36	22
10	39	35	36	33	36	37	35	47	50	29	35	21
11	38	35	36	34	36	37	36	47	50	29	35	19
12	37	34	37	34	36	37	39	46	48	30	36	18
13	36	34	37	34	35	37	40	47	47	31	38	18
14	36	34	36	34	35	38	39	52	46	32	42	18
15	35	33	37	34	36	38	38	51	44	37	43	17
16	35	32	37	34	36	38	38	54	44	43	42	23
17	41	32	37	34	37	38	38	54	43	45	41	23
18	45	31	37	34	36	38	40	53	43	47	41	22
19	45	31	37	34	36	38	43	52	41	46	40	22
20	45	31	37	34	37	42	42	51	41	46	39	22
21	44	35	37	34	36	44	42	51	41	46	37	22
22	46	36	37	35	36	43	41	51	40	45	35	23
23	46	35	36	36	36	42	41	52	39	44	34	22
24	45	34	36	36	36	41	41	52	38	43	33	21
25	44	33	36	36	35	41	41	50	37	42	33	20
26	43	32	36	36	35	41	42	49	36	41	34	20
27	42	35	35	36	35	40	41	50	36	41	34	20
28	41	37	35	36	35	40	41	56	37	43	33	20
29	42	37	35	35	---	39	40	55	38	41	33	21
30	40	37	34	35	---	38	40	53	36	40	32	27
31	40	---	34	35	---	38	---	52	---	40	31	---
TOTAL	1303	1050	1119	1063	997	1184	1170	1478	1327	1155	1134	677
MEAN	42.0	35.0	36.1	34.3	35.6	38.2	39.0	47.7	44.2	37.3	36.6	22.6
MAX	50	39	37	36	37	44	43	56	52	47	43	29
MIN	35	31	34	33	35	33	35	37	36	29	31	17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1995, BY WATER YEAR (WY)

MEAN	34.7	39.6	43.5	40.2	37.5	37.6	42.9	51.1	45.6	43.2	31.8	31.5
MAX	42.0	47.7	58.1	45.5	40.4	44.9	53.4	60.0	57.1	54.2	36.6	37.8
(WY)	1995	1992	1992	1992	1992	1992	1992	1991	1991	1991	1995	1994
MIN	31.1	35.0	36.1	34.3	35.5	33.0	35.4	37.6	34.9	32.9	26.4	22.6
(WY)	1994	1995	1995	1995	1994	1994	1994	1994	1994	1994	1992	1995

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1991 - 1995

ANNUAL TOTAL	12936	13657	
ANNUAL MEAN	35.4	37.4	39.2
HIGHEST ANNUAL MEAN			43.2
LOWEST ANNUAL MEAN			34.8
HIGHEST DAILY MEAN	56	Sep 26	68
LOWEST DAILY MEAN	19	Sep 9-12	17
ANNUAL SEVEN-DAY MINIMUM	20	Sep 6	19
INSTANTANEOUS PEAK FLOW			58
INSTANTANEOUS PEAK STAGE			1.74
INSTANTANEOUS LOW FLOW			16
10 PERCENT EXCEEDS	41		47
50 PERCENT EXCEEDS	35		37
90 PERCENT EXCEEDS	29		30

CHIPPEWA RIVER BASIN

05357335 BEAR RIVER NEAR MANITOWISH WATERS, WI

LOCATION.--Lat 46°02'56", long 89°59'04", in SE 1/4 NW 1/4 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.--Estimated daily discharges: Jan. 2-5 and Feb. 5-26. Records good except those for estimated daily discharges and Oct. 1-31, Jan. 9 to Feb. 4, Feb. 27 to Mar. 18, and July 1 to Sept. 30, which are poor (see page 11).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	186	90	86	58	55	44	83	92	169	58	52	55
2	173	90	83	54	53	43	80	90	148	56	50	54
3	162	93	80	54	53	42	74	88	117	53	48	51
4	154	95	80	54	51	42	72	84	105	50	46	50
5	144	92	81	56	50	43	68	81	99	47	46	48
6	133	88	71	58	48	43	74	78	97	47	45	45
7	139	88	76	60	48	44	74	74	106	48	46	44
8	136	84	68	60	48	45	70	78	105	45	47	43
9	130	82	74	59	50	46	68	143	98	44	47	41
10	122	82	71	59	50	46	66	170	98	42	46	39
11	113	80	66	61	48	47	72	157	102	40	45	37
12	107	77	67	61	47	49	98	136	96	41	47	34
13	106	78	68	60	47	51	99	126	89	43	49	32
14	97	77	67	61	46	54	98	147	85	45	55	33
15	90	76	68	60	45	61	95	148	79	71	59	33
16	86	72	71	56	45	71	91	155	75	92	61	34
17	116	71	72	56	48	80	91	151	72	98	62	34
18	161	71	72	56	50	89	102	138	69	106	62	34
19	163	67	69	52	50	98	122	125	63	102	66	34
20	149	64	70	55	50	110	127	115	58	98	66	33
21	135	87	70	56	48	115	119	109	57	95	65	33
22	134	97	72	55	48	114	117	107	56	89	63	33
23	148	93	67	56	48	110	111	110	56	83	61	33
24	143	88	66	56	48	105	107	108	55	77	60	32
25	136	81	68	56	48	100	105	105	56	73	61	31
26	128	71	68	56	48	99	104	102	55	69	61	30
27	120	71	68	56	48	100	101	100	54	66	63	29
28	112	80	67	56	46	96	99	126	59	63	63	28
29	107	86	63	55	---	94	96	143	60	60	63	27
30	100	83	65	55	---	91	93	133	59	56	61	29
31	95	---	64	55	---	87	---	120	---	53	58	---
TOTAL	4025	2454	2198	1762	1364	2259	2776	3639	2497	2010	1724	1113
MEAN	130	81.8	70.9	56.8	48.7	72.9	92.5	117	83.2	64.8	55.6	37.1
MAX	186	97	86	61	55	115	127	170	169	106	66	55
MIN	86	64	63	52	45	42	66	74	54	40	45	27
CFSM	1.60	1.01	.87	.70	.60	.90	1.14	1.44	1.02	.80	.68	.46
IN.	1.84	1.12	1.01	.81	.62	1.03	1.27	1.67	1.14	.92	.79	.51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1995, BY WATER YEAR (WY)

	MEAN	72.4	82.2	71.7	64.3	64.4	89.7	116	115	81.0	70.0	50.9	67.1
MAX	130	151	117	105	110	187	201	137	129	83.3	63.9	159	
(WY)	1995	1992	1992	1992	1992	1992	1992	1992	1993	1993	1994	1994	
MIN	37.1	26.4	43.2	35.5	43.4	44.3	67.3	75.3	54.4	58.3	28.9	24.5	
(WY)	1994	1994	1994	1994	1994	1994	1994	1994	1992	1994	1992	1992	

SUMMARY STATISTICS FOR 1994 CALENDAR YEAR FOR 1995 WATER YEAR WATER YEARS 1992 - 1995

	ANNUAL TOTAL	26972	ANNUAL MEAN	73.9	27821	76.2	78.7	104	1992
HIGHEST ANNUAL MEAN							59.1	1994	
LOWEST ANNUAL MEAN									
HIGHEST DAILY MEAN	570	Sep 23	186	Oct 1	570	Sep 23	1994		
LOWEST DAILY MEAN	(a)32	Jan 19-21	27	Sep 29	15	Aug 29	1992		
ANNUAL SEVEN-DAY MINIMUM	(a)33	Jan 15	29	Sep 24	17	Aug 24	1992		
INSTANTANEOUS PEAK FLOW			194	Oct 1	589	Sep 23	1994		
INSTANTANEOUS PEAK STAGE			2.71	Oct 1	3.47	Sep 23	1994		
INSTANTANEOUS LOW FLOW			26	Sep 29	15	(b) Aug 29	1992		
ANNUAL RUNOFF (CFSM)	.91		.94		.97				
ANNUAL RUNOFF (INCHES)	12.34		12.73		13.15				
10 PERCENT EXCEEDS	114		122		143				
50 PERCENT EXCEEDS	63		68		63				
90 PERCENT EXCEEDS	37		45		36				

(a) Estimated

(b) Also occurred Oct. 1, 1992

05360500 FLAMBEAU RIVER NEAR BRUCE, WI

LOCATION.--Lat 45°22'21", long 91°12'34", in Lot 7 of NW 1/4 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.--Estimated daily discharges: Ice-affected period, Dec. 29 to Mar. 21. Records good except those for ice-affected period, which is fair (see page 11). 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 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3740	2360	1770	1100	860	900	1610	2440	2560	1340	1350	3310
2	3960	2630	1700	1200	920	860	1650	2220	2490	1260	1070	2800
3	4100	2570	2070	1100	880	780	1380	2210	2210	1110	1140	2570
4	3600	2460	2120	900	800	760	1260	2040	1900	1040	1100	1990
5	3320	2490	1810	1000	900	720	1270	2070	1820	1090	1160	1950
6	3070	2460	1450	1200	900	700	1220	1740	1630	1050	1080	1940
7	3150	2500	1330	1300	980	860	965	1860	1820	1030	1140	1570
8	3670	2320	1480	1100	900	860	1240	2040	1690	1210	1450	1470
9	3870	2100	1360	1000	780	820	928	2620	1700	1180	1410	1560
10	3610	1880	1890	880	760	920	1000	4620	1940	1220	1490	1210
11	3570	1820	1830	860	820	860	1110	5360	1910	1150	1300	1210
12	2720	1640	2820	1000	820	980	1780	4340	1890	1190	1870	1140
13	2630	1760	1560	1100	760	1000	2460	4390	1700	926	2880	1040
14	2540	1660	1970	1100	720	1700	2330	3670	1760	1050	3370	1180
15	2540	1620	1740	1100	760	3700	2850	4360	1590	1460	3950	928
16	2490	1870	1850	1100	760	3000	2810	4160	1300	1810	2960	1150
17	3070	1660	1760	1100	800	3000	2260	4050	1390	2460	2580	1010
18	4390	1740	1830	1100	860	3000	2440	4080	1290	2690	1990	1180
19	5390	1900	1690	1000	940	3000	3280	3900	1180	2390	1820	954
20	4430	1710	1560	980	860	3100	4210	3200	1040	1900	1780	933
21	3980	2240	1650	940	860	3200	4270	2850	1120	2040	1610	1010
22	3600	2110	1550	920	860	3540	4370	2990	1250	1870	1520	978
23	3480	2670	1860	880	820	3880	3070	2710	899	1760	1500	1180
24	3910	2710	1500	860	900	3640	3460	2710	1010	1470	1650	1420
25	4050	2350	1630	820	940	3420	3040	2720	1060	1380	2410	1430
26	3860	1950	1640	820	900	2910	2810	2330	851	2120	2410	1510
27	2970	1880	1470	760	880	2200	2880	2180	1350	2120	3480	1250
28	2910	1420	1380	800	940	2880	2620	2390	1360	1330	6900	1530
29	3210	1570	1300	980	---	1980	2470	2990	1320	1340	8200	1540
30	2860	1430	1400	720	---	2120	2460	3520	1510	1510	7570	1380
31	2830	---	1200	820	---	1410	---	2590	---	1480	5070	---
TOTAL	107520	61480	52170	30540	23880	62700	69503	95350	46540	46976	79210	44323
MEAN	3468	2049	1683	985	853	2023	2317	3076	1551	1515	2555	1477
MAX	5390	2710	2820	1300	980	3880	4370	5360	2560	2690	8200	3310
MIN	2490	1420	1200	720	720	700	928	1740	851	926	1070	928

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1995, BY WATER YEAR (WY)

	MEAN	1777	1659	1296	1134	1117	1701	3510	2595	2076	1627	1473	1876
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	591	491	
(WY)	1977	1977	1977	1977	1977	1977	1959	1990	1987	1988	1987	1976	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR			FOR 1995 WATER YEAR			WATER YEARS 1951 - 1995		
ANNUAL TOTAL	716395			720192			1817		
ANNUAL MEAN	1963			1973			2900		
HIGHEST ANNUAL MEAN							993		
LOWEST ANNUAL MEAN							1988		
HIGHEST DAILY MEAN	23200			8200			23200		
LOWEST DAILY MEAN	641			(a) 700			205		
ANNUAL SEVEN-DAY MINIMUM	(a) 731			(a) 771			320		
INSTANTANEOUS PEAK FLOW				11000			24100		
INSTANTANEOUS PEAK STAGE				8.29			12.44		
10 PERCENT EXCEEDS	3580			3580			3400		
50 PERCENT EXCEEDS	1420			1660			1350		
90 PERCENT EXCEEDS	940			880			780		

(a) Ice affected

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. 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.--Estimated daily discharges: Ice-affected period, Nov. 23 to Mar. 17. Records good except those for ice-affected period, which is poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	688	386	310	110	82	94	459	452	374	167	111	1950
2	752	357	350	100	80	94	411	423	324	148	98	1230
3	711	337	330	98	80	92	389	396	301	122	91	854
4	636	315	320	96	80	90	372	380	273	103	86	638
5	566	310	260	96	80	96	331	358	242	98	80	506
6	502	299	240	96	78	100	265	330	218	99	76	410
7	521	269	220	96	78	100	289	323	225	102	98	366
8	667	252	190	94	78	110	258	311	241	121	175	427
9	697	238	170	90	80	120	243	544	229	141	244	367
10	649	228	150	94	82	130	260	1530	224	133	220	331
11	561	223	130	98	80	140	276	1510	290	123	192	282
12	488	212	130	100	80	280	553	1190	312	112	1630	250
13	437	206	140	100	78	660	1140	925	258	110	4320	213
14	397	216	140	110	74	1200	1150	889	214	112	6830	192
15	362	244	140	120	74	1400	1010	995	188	133	5500	173
16	332	257	140	120	76	1600	900	892	167	259	3310	180
17	313	243	130	120	80	2000	810	797	134	366	2070	235
18	373	248	130	120	86	1870	850	673	116	461	1400	329
19	532	267	130	110	92	1680	1590	563	102	487	1090	289
20	522	275	140	100	98	1690	1750	474	93	382	955	296
21	464	395	140	98	100	2660	1460	402	85	332	809	359
22	535	889	150	94	110	2560	1240	344	75	294	625	330
23	1170	800	150	88	100	2120	1060	354	69	241	461	288
24	1170	660	160	80	94	1620	901	416	64	208	554	245
25	964	520	160	78	100	1300	783	395	71	189	1860	234
26	802	350	150	78	98	1060	676	341	165	185	2170	223
27	680	340	150	78	96	901	615	306	205	207	1870	207
28	589	330	140	80	94	757	568	319	178	180	2810	194
29	527	300	130	80	---	655	528	492	146	161	6740	178
30	477	280	120	80	---	589	494	577	154	142	5540	184
31	427	---	110	82	---	520	---	466	---	123	3340	---
TOTAL	18511	10246	5450	2984	2408	28288	21631	18367	5737	6041	55355	11960
MEAN	597	342	176	96.3	86.0	913	721	592	191	195	1786	399
MAX	1170	889	350	120	110	2660	1750	1530	374	487	6830	1950
MIN	313	206	110	78	74	90	243	306	64	98	76	173
CFSM	1.04	.59	.31	.17	.15	1.58	1.25	1.03	.33	.34	3.10	.69
IN.	1.20	.66	.35	.19	.16	1.83	1.40	1.19	.37	.39	3.58	.77

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 1995, BY WATER YEAR (WY)

	MEAN	406	434	181	101	93.8	741	1799	868	661	259	233	464
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
05362000 JUMP RIVER AT SHELDON, WI--CONTINUED

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SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1915 - 1995	
ANNUAL TOTAL	167184		186978			
ANNUAL MEAN	458		512		519	
HIGHEST ANNUAL MEAN					923	1942
LOWEST ANNUAL MEAN					214	1948
HIGHEST DAILY MEAN	12700	Sep 16	6830	Aug 14	40800	Aug 31 1941
LOWEST DAILY MEAN	49	Aug 18,19	64	Jun 24	11	Dec 18 1943
ANNUAL SEVEN-DAY MINIMUM	50	Jan 13	77	Feb 11	14	(a) Jan 25 1924
INSTANTANEOUS PEAK FLOW			(b) 7320	Aug 14	(c) 46000	Aug 31 1941
INSTANTANEOUS PEAK STAGE			(d) 10.30	Mar 14	(e) 18.80	Aug 31 1941
INSTANTANEOUS LOW FLOW			62	Jun 24,25	11	Dec 18 1943
ANNUAL RUNOFF (CFSM)	.80		.89		.90	
ANNUAL RUNOFF (INCHES)	10.80		12.08		12.23	
10 PERCENT EXCEEDS	857		1170		1300	
50 PERCENT EXCEEDS	202		260		150	
90 PERCENT EXCEEDS	58		90		46	

(a) Also occurred July 11, 1936

(b) Gage height, 10.14 ft

(c) From rating curve extended above 13,000 ft³/s on basis of contracted-opening measurement of peak flow

(d) Ice jam

(e) 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.--No estimated daily discharges. Records good (see page 11). 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 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6750	6100	4560	2110	1840	2290	5580	6320	4700	2260	2340	9360
2	7800	5620	4340	3000	1710	2450	5980	4150	5900	877	2320	8200
3	8400	6270	4010	2650	2130	3490	5810	4000	2560	3040	2610	5630
4	7460	5940	4790	2380	1950	3600	4160	5880	4170	2160	2400	5120
5	6580	4570	4540	2330	1830	2910	4200	4600	5180	2490	1320	4650
6	5860	4510	3670	1770	1840	3280	3950	3740	4100	1920	2560	5430
7	6730	5960	2770	1880	1720	3630	4510	3170	3950	2800	3460	4860
8	4040	5110	2750	2890	1790	2670	3570	5500	3200	1320	2590	3830
9	7270	4350	3380	2690	1660	2790	1480	5690	3650	1830	2720	3300
10	7630	3990	2500	2710	2010	3160	4460	7510	4310	1840	3050	3620
11	5420	4370	1850	1970	1890	2640	4080	11600	4190	2490	4360	2570
12	6610	2490	3030	2240	1620	1910	4890	11800	3840	3050	5730	3170
13	4920	2830	3880	3210	1350	7270	9190	9650	4220	2490	13900	3070
14	5290	5290	4100	1820	1280	10900	9370	9650	4350	2540	21900	2930
15	3880	3520	3360	2340	1590	10000	9490	9610	3870	2600	25300	3060
16	3900	4050	4320	2690	1350	9800	9390	11200	4070	2960	19200	3060
17	6790	3500	3020	3310	1480	9750	5780	11000	2430	4370	11500	2720
18	7080	4240	2870	3020	1530	11300	7050	9570	2300	3830	9670	2660
19	9710	2250	4220	2940	1830	12200	10800	9600	2560	4210	7670	3570
20	9690	3980	2870	2730	1870	14100	14000	8470	2020	4850	6420	2680
21	9680	4700	3600	1870	1760	14900	13800	4720	1480	3630	6610	2480
22	8780	6540	3600	1640	1640	15100	12600	7740	2600	3480	4990	3440
23	6700	6910	2800	1610	1490	15500	9170	5400	3200	3520	4260	2210
24	8310	5320	3940	1380	1600	15000	9190	4970	1270	1890	4510	2580
25	9660	5020	2210	1220	1510	12100	7940	6200	1100	2900	11000	2550
26	9640	4960	3540	1520	2050	8230	6700	7450	2470	3490	15000	3800
27	8450	3450	3190	1560	1530	7970	6760	4040	2910	4770	11400	2750
28	7170	4930	3320	1720	1560	8120	6010	5810	3260	4890	11900	3420
29	6890	3680	3750	1630	---	6680	4960	7300	2640	1280	20600	3190
30	6100	2080	3080	1650	---	8770	4440	5620	3610	2050	22700	2870
31	6540	---	2310	1460	---	6480	---	6910	---	3290	19100	---
TOTAL	219730	136530	106170	67940	47410	238990	209310	218870	100110	89117	283090	112780
MEAN	7088	4551	3425	2192	1693	7709	6977	7060	3337	2875	9132	3759
MAX	9710	6910	4790	3310	2130	15500	14000	11800	5900	4890	25300	9360
MIN	3880	2080	1850	1220	1280	1910	1480	3170	1100	877	1320	2210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1888 - 1995, BY WATER YEAR (WY)

	MEAN	4209	4179	2995	2566	2570	5333	11530	8609	6935	4297	3393	4496
MAX	15570	15990	7897	5305	6569	17630	28900	22890	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 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1888 - 1995	
ANNUAL TOTAL	1808169		1830047			
ANNUAL MEAN	4954		5014		5088	
HIGHEST ANNUAL MEAN					8868	
LOWEST ANNUAL MEAN					2453	
HIGHEST DAILY MEAN	51600		25300		95500	
LOWEST DAILY MEAN	943		877		40	
ANNUAL SEVEN-DAY MINIMUM	1180		1460		308	
INSTANTANEOUS PEAK FLOW			27400		102000	
INSTANTANEOUS PEAK STAGE			12.85		24.80	
10 PERCENT EXCEEDS	8450		9660		10600	
50 PERCENT EXCEEDS	3600		3880		3320	
90 PERCENT EXCEEDS	1590		1780		1240	

05365707 NORTH FORK EAU CLAIRE RIVER NEAR THORP, WI

LOCATION.--Lat 44°58'25", long 90°50'57", in NW 1/4 NE 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.--Estimated daily discharges: Aug. 12-15 and ice-affected periods, Nov. 23-26, 30, Dec. 5-15, and Jan. 1 to Mar. 18. Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	8.3	8.8	3.7	1.9	2.1	52	19	17	1.1	1.6	28
2	5.9	8.2	8.9	3.2	1.8	2.0	38	18	13	.98	1.4	22
3	5.2	7.8	8.9	2.6	1.8	1.9	38	17	11	1.0	1.0	16
4	4.8	7.3	11	2.1	1.8	1.9	28	15	9.2	1.1	1.0	12
5	4.4	7.2	13	2.0	1.7	1.9	20	14	9.5	.98	.64	9.6
6	4.2	7.2	11	2.1	1.7	1.9	17	14	7.4	1.5	.42	8.1
7	4.9	7.2	10	2.1	1.7	1.9	16	13	7.6	2.1	.95	7.4
8	7.5	6.8	8.8	2.0	1.6	1.8	16	14	8.3	2.0	2.4	6.3
9	5.8	6.6	7.6	1.9	1.6	1.8	18	44	7.4	1.9	2.5	5.7
10	5.0	6.6	7.0	1.9	1.6	2.2	19	50	11	1.6	2.8	4.7
11	4.6	6.5	6.4	2.0	1.5	6.0	23	38	21	1.4	2.7	3.9
12	3.9	6.5	6.6	2.0	1.5	16	164	29	20	1.9	12	3.7
13	3.7	6.5	6.6	2.3	1.5	540	123	24	12	2.2	280	3.7
14	3.4	7.6	6.8	2.3	1.5	370	83	34	7.5	1.9	560	2.7
15	3.2	8.1	7.0	2.1	1.7	290	62	31	5.6	2.9	420	2.4
16	3.4	8.3	7.2	2.2	1.6	180	49	24	5.6	5.3	308	2.4
17	5.6	8.3	7.2	2.2	1.9	140	44	18	3.5	5.0	115	2.6
18	16	9.0	7.2	2.2	2.1	94	109	15	2.9	3.8	63	2.6
19	18	9.5	7.2	2.1	2.4	73	174	12	2.5	2.9	60	3.6
20	14	9.2	7.2	2.0	2.6	225	108	12	2.1	2.2	48	5.1
21	11	36	7.1	2.0	2.6	265	93	9.1	1.9	2.2	33	5.3
22	12	42	7.0	1.9	2.6	147	89	7.5	1.7	1.9	23	4.6
23	24	26	7.3	1.8	2.6	92	69	20	1.3	1.7	18	4.5
24	21	19	6.7	1.7	2.5	61	53	28	1.1	1.6	36	4.0
25	17	15	6.3	1.7	2.5	49	44	21	.87	1.4	131	4.0
26	15	12	5.6	1.7	2.5	38	38	17	.63	1.5	106	4.2
27	13	11	5.3	1.7	2.5	38	34	12	1.6	1.4	61	3.9
28	12	10	4.8	1.7	2.3	39	28	19	1.1	1.6	45	3.5
29	11	9.8	4.8	1.8	---	95	24	55	1.2	6.9	52	3.2
30	9.2	9.0	4.4	1.8	---	120	21	40	1.1	5.2	47	2.9
31	8.8	---	4.4	1.9	---	82	---	26	---	2.8	38	---
TOTAL	284.0	342.5	228.1	64.7	55.6	2979.4	1694	709.6	196.60	71.96	2473.41	192.6
MEAN	9.16	11.4	7.36	2.09	1.99	96.1	56.5	22.9	6.55	2.32	79.8	6.42
MAX	24	42	13	3.7	2.6	540	174	55	21	6.9	560	28
MIN	3.2	6.5	4.4	1.7	1.5	1.8	16	7.5	.63	.98	.42	2.4
CFSM	.18	.22	.14	.04	.04	1.88	1.11	.45	.13	.05	1.56	.13
IN.	.21	.25	.17	.05	.04	2.17	1.24	.52	.14	.05	1.80	.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1995, BY WATER YEAR (WY)

	MEAN	25.9	52.2	17.6	3.65	4.50	130	97.0	60.2	72.3	21.7	42.0	59.6
MAX	123	262	79.7	6.66	13.7	181	220	184	338	49.4	143	420	
(WY)	1987	1992	1992	1992	1994	1989	1993	1993	1993	1986	1986	1986	
MIN	2.17	3.57	.56	.28	.45	62.2	25.9	5.29	1.33	.31	.37	.81	
(WY)	1990	1990	1990	1990	1990	1994	1987	1987	1988	1988	1988	1988	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1986 - 1995

ANNUAL TOTAL	9821.96	9292.47	
ANNUAL MEAN	26.9	25.5	45.6
HIGHEST ANNUAL MEAN			93.0
LOWEST ANNUAL MEAN			25.5
HIGHEST DAILY MEAN	1160	(a)560	3670
LOWEST DAILY MEAN	.29	.42	.03
ANNUAL SEVEN-DAY MINIMUM	.37	1.0	.07
INSTANTANEOUS PEAK FLOW		(b)680	(c)9050
INSTANTANEOUS PEAK STAGE		(d)5.44	10.13
INSTANTANEOUS LOW FLOW		.40	.02
ANNUAL RUNOFF (CFSM)	.53	.50	.89
ANNUAL RUNOFF (INCHES)	7.16	6.78	12.14
10 PERCENT EXCEEDS	53	54	108
50 PERCENT EXCEEDS	6.6	6.8	9.0
90 PERCENT EXCEEDS	1.6	1.7	1.5

(a) Estimated daily mean

(b) Gage height, 5.06 ft, from crest-stage gage

(c) From rating curve extended above 2,500 ft³/s on basis of step-backwater measurement of peak flow

(d) Ice jam

CHIPPEWA RIVER BASIN
053674464 YELLOW RIVER AT BARRON, WI

LOCATION.--Lat 45°23'43", long 91°49'48", in SE 1/4 SE 1/4 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.--Estimated daily discharges: Ice-affected periods, Jan. 2-4, 7-10, 21-24, 26, Feb. 5-6, 8, 10-12, and Mar. 1-2, 9. Records good except those for ice-affected periods, which are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	68	79	63	68	68	168	102	87	171	78	152
2	72	66	80	60	66	68	163	97	86	133	77	131
3	72	76	79	58	67	66	173	92	84	112	75	129
4	71	74	78	56	64	65	170	83	78	102	71	118
5	71	74	78	57	64	65	153	80	75	99	66	110
6	71	75	71	54	62	67	133	80	76	100	92	105
7	74	75	72	56	61	67	123	79	81	95	126	102
8	75	74	72	58	60	67	118	80	76	95	118	102
9	74	72	74	60	59	64	114	87	76	97	102	102
10	70	67	72	60	60	64	108	93	86	99	111	100
11	69	65	69	63	60	69	108	84	89	92	131	71
12	69	72	69	66	62	79	220	72	84	94	155	76
13	64	72	69	71	64	295	220	89	75	97	261	91
14	66	73	70	71	63	1210	205	127	73	95	483	96
15	65	71	70	70	63	1020	171	125	71	126	298	66
16	70	70	71	70	63	600	163	108	68	163	349	68
17	160	66	74	75	64	423	160	101	65	154	224	86
18	249	69	76	77	65	323	222	91	61	129	123	86
19	179	73	74	66	65	259	314	85	64	110	162	84
20	120	71	74	62	66	173	354	83	58	99	138	81
21	106	94	74	62	66	243	244	82	54	93	127	80
22	105	93	78	60	64	162	196	78	54	94	116	81
23	119	84	79	60	65	157	186	98	53	92	107	81
24	131	82	78	60	64	150	217	75	58	67	189	81
25	119	70	76	59	65	137	110	73	68	71	191	81
26	104	67	65	60	66	132	127	75	81	78	173	81
27	97	75	63	63	66	154	127	75	135	78	198	80
28	95	69	71	64	69	220	115	106	281	83	250	79
29	92	86	70	65	---	148	109	129	327	84	222	84
30	89	82	72	66	---	181	103	110	230	82	225	105
31	88	---	70	66	---	198	---	89	---	80	222	---
TOTAL	2981	2225	2267	1958	1791	6994	5094	2828	2854	3164	5260	2789
MEAN	96.2	74.2	73.1	63.2	64.0	226	170	91.2	95.1	102	170	93.0
MAX	249	94	80	77	69	1210	354	129	327	171	483	152
MIN	64	65	63	54	59	64	103	72	53	67	66	66
CFSM	.63	.48	.48	.41	.42	1.47	1.11	.60	.62	.67	1.11	.61
IN.	.72	.54	.55	.48	.44	1.70	1.24	.69	.69	.77	1.28	.68

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1995, BY WATER YEAR (WY)

	MEAN	81.9	104	81.6	72.5	76.4	169	179	102	117	95.2	97.7	106
MAX	96.2	170	101	82.7	89.7	226	206	110	222	105	170	177	
(WY)	1995	1992	1992	1992	1994	1995	1992	1993	1993	1992	1995	1991	
MIN	74.4	74.2	73.1	63.2	64.0	124	166	91.2	73.9	80.6	67.5	78.1	
(WY)	1992	1995	1995	1995	1995	1994	1994	1995	1994	1994	1994	1992	

SUMMARY STATISTICS FOR 1994 CALENDAR YEAR FOR 1995 WATER YEAR WATER YEARS 1991 - 1995

ANNUAL TOTAL	34281	40205	
ANNUAL MEAN	93.9	110	105
HIGHEST ANNUAL MEAN			111
LOWEST ANNUAL MEAN			93.5
HIGHEST DAILY MEAN	745	Apr 27	1210
LOWEST DAILY MEAN	46	Jul 4	53
ANNUAL SEVEN-DAY MINIMUM	55	Aug 18	57
INSTANTANEOUS PEAK FLOW			1260
INSTANTANEOUS PEAK STAGE			6.07
INSTANTANEOUS LOW FLOW			10
ANNUAL RUNOFF (CFSM)	.61	.72	.69
ANNUAL RUNOFF (INCHES)	8.33	9.78	9.36
10 PERCENT EXCEEDS	134	183	159
50 PERCENT EXCEEDS	76	80	81
90 PERCENT EXCEEDS	64	64	65

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.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum temperature, 28.0°C, June 21, 1995; minimum, 0.0°C, for many days.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum temperature, 28.0°C, June 21; minimum, 0.0°C, many days Nov. 29 through Mar. 18.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	13.5	12.0	12.5	7.0	6.0	6.5	1.5	.5	.5	.5	.0	.0
2	12.5	12.0	12.0	7.0	6.0	6.5	1.5	.5	.5	.5	.0	.0
3	12.0	11.0	11.5	6.5	6.0	6.5	1.5	.5	1.0	.0	.0	.0
4	11.5	11.0	11.0	6.0	5.5	6.0	1.0	1.0	1.0	.0	.0	.0
5	11.5	10.5	11.0	6.0	5.5	5.5	1.0	.5	.5	.5	.0	.0
6	12.0	10.5	11.5	6.0	5.5	5.5	.5	.0	.5	.5	.0	.0
7	12.5	12.0	12.5	6.5	5.5	6.0	1.0	.0	.5	.0	.0	.0
8	12.5	11.0	12.0	6.5	5.5	6.0	1.0	.0	.5	.0	.0	.0
9	11.0	10.0	10.5	6.5	5.5	6.0	1.0	.0	.5	.0	.0	.0
10	11.0	9.5	10.0	6.0	5.0	5.5	.5	.0	.0	.0	.0	.0
11	11.0	10.0	10.5	5.5	4.5	5.0	.5	.0	.0	.0	.0	.0
12	11.0	10.0	10.5	6.0	5.5	5.5	.5	.0	.0	.5	.0	.5
13	11.0	9.5	10.5	7.0	6.0	6.5	.5	.0	.5	.5	.0	.5
14	11.5	10.0	10.5	7.0	6.0	6.5	.5	.0	.5	.5	.0	.0
15	11.0	11.0	11.0	6.0	5.0	5.5	.5	.0	.5	.5	.0	.0
16	11.5	11.0	11.0	5.0	4.5	5.0	.5	.0	.5	.5	.0	.0
17	12.5	11.5	12.0	5.0	4.0	4.5	1.0	.0	.5	.5	.0	.5
18	14.5	12.5	13.5	5.0	3.5	4.5	.5	.0	.0	.5	.0	.0
19	14.0	13.0	13.5	3.5	2.5	3.0	.5	.0	.0	.5	.0	.0
20	13.0	12.0	12.5	3.5	2.5	3.0	1.0	.0	.5	.5	.0	.0
21	12.5	11.5	12.0	3.5	1.5	3.0	1.0	.0	.5	.5	.0	.0
22	12.0	11.0	11.5	1.5	.5	1.0	1.0	.0	.5	.5	.0	.0
23	11.0	9.0	10.0	1.0	.5	.5	1.0	.0	.5	.5	.0	.0
24	9.0	7.5	8.0	2.0	1.0	1.5	1.0	.0	.5	.5	.0	.0
25	7.5	6.0	6.5	2.0	1.0	1.5	1.0	.0	.5	.5	.0	.0
26	6.5	5.5	6.0	1.5	1.0	1.5	1.0	.0	.5	.5	.0	.0
27	7.5	6.0	6.5	1.5	.5	1.0	1.0	.0	.5	1.0	.0	.5
28	8.0	7.5	7.5	1.5	.5	1.0	1.0	.0	.5	1.0	.0	.5
29	8.5	8.0	8.0	1.0	.0	.5	.5	.0	.5	.5	.0	.0
30	8.5	7.5	8.0	1.0	.0	.5	.5	.0	.5	.5	.0	.0
31	8.0	7.0	7.5	---	---	---	.5	.0	.0	1.0	.0	.5
MONTH	14.5	5.5	10.4	7.0	.0	4.0	1.5	.0	.4	1.0	.0	.1

CHIPPEWA RIVER BASIN
053674464 YELLOW RIVER AT BARRON, WI--CONTINUED

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1.0	.0	.5	.5	.0	.0	4.5	3.5	4.0	12.0	11.0	11.5
2	1.0	.0	.0	.5	.0	.0	4.5	3.0	4.0	12.5	10.0	11.5
3	1.0	.0	.0	1.0	.0	.0	5.0	3.0	4.0	13.0	11.5	12.0
4	.5	.0	.0	1.0	.0	.0	3.0	1.0	2.0	14.0	12.0	13.0
5	.5	.0	.0	1.0	.0	.0	2.5	1.5	2.0	15.5	12.5	13.5
6	.5	.0	.0	.5	.0	.0	3.0	1.5	2.5	15.5	13.5	14.5
7	.0	.0	.0	1.0	.0	.0	3.0	2.5	2.5	16.5	14.5	15.5
8	.5	.0	.0	1.0	.0	.0	4.5	2.5	3.5	15.5	12.5	14.5
9	.5	.0	.0	.5	.0	.0	5.0	3.5	4.0	12.5	11.5	12.0
10	.0	.0	.0	1.5	.0	.5	4.0	3.5	3.5	12.0	11.0	11.5
11	.0	.0	.0	1.5	.0	.5	3.5	3.0	3.5	14.0	11.0	12.5
12	.0	.0	.0	1.5	.5	.5	3.5	3.0	3.0	15.5	12.5	14.0
13	.0	.0	.0	.5	.0	.5	6.5	2.5	4.0	14.5	14.0	14.0
14	.5	.0	.0	.0	.0	.0	7.5	4.5	6.0	14.5	13.0	14.0
15	.0	.0	.0	.5	.0	.0	7.5	6.0	6.5	15.5	13.5	14.5
16	.0	.0	.0	1.0	.0	.0	6.5	6.0	6.0	17.5	15.0	16.0
17	1.0	.0	.5	1.0	.0	.5	7.0	5.5	6.0	17.5	15.0	16.5
18	1.0	.0	.5	.5	.0	.5	6.5	5.0	5.5	18.5	15.5	17.0
19	1.0	.0	.5	1.0	.5	.5	7.0	4.0	5.5	19.0	16.5	17.5
20	.5	.0	.5	1.5	1.0	1.0	6.0	5.5	5.5	19.0	16.5	18.0
21	.5	.0	.0	2.0	1.0	1.5	6.0	5.0	5.5	18.0	15.5	16.5
22	1.0	.0	.5	3.5	1.0	2.0	8.0	5.0	6.5	17.5	16.0	16.5
23	1.0	.0	.0	3.5	2.5	3.0	9.5	7.0	8.0	16.0	15.0	15.0
24	1.0	.0	.5	4.5	3.0	4.0	10.0	8.5	9.0	17.0	14.0	15.0
25	.5	.0	.0	4.0	3.5	4.0	10.5	7.5	9.0	17.0	14.5	15.5
26	1.0	.0	.0	3.5	3.0	3.5	10.0	8.5	9.5	16.5	15.0	16.0
27	1.0	.0	.5	3.0	1.5	2.0	10.5	8.5	9.5	16.0	14.5	15.5
28	.5	.0	.0	2.5	1.5	2.0	12.5	10.0	11.0	14.5	13.0	13.5
29	---	---	---	4.0	2.0	3.0	12.5	11.0	11.5	15.5	12.5	14.0
30	---	---	---	4.5	3.0	4.0	12.5	11.0	11.5	17.0	14.5	16.0
31	---	---	---	5.0	3.5	4.0	---	---	---	19.0	16.5	18.0
MONTH	1.0	.0	.1	5.0	.0	1.2	12.5	1.0	5.8	19.0	10.0	14.7
JUNE			JULY			AUGUST			SEPTEMBER			
1	19.5	18.5	19.0	19.5	18.0	19.0	23.5	22.0	22.5	22.0	20.5	21.0
2	20.5	19.0	19.5	19.0	18.0	18.5	23.0	21.5	22.0	21.0	20.5	20.5
3	21.5	19.0	20.0	19.5	18.0	19.0	23.0	22.0	22.5	21.0	20.5	20.5
4	22.0	20.0	21.0	20.0	19.5	19.5	23.0	22.0	22.5	21.5	20.5	21.0
5	22.5	21.0	21.5	20.5	19.5	20.0	23.0	21.5	22.5	21.5	21.0	21.0
6	23.0	21.5	22.0	20.0	18.0	19.0	22.5	21.5	22.0	22.0	21.0	21.5
7	21.5	19.0	21.0	20.0	17.5	18.5	22.0	21.0	21.5	21.0	18.5	19.5
8	19.0	17.5	18.0	20.0	18.5	19.0	22.0	21.0	21.5	18.5	17.0	17.5
9	18.5	17.0	17.5	21.0	19.0	20.0	22.5	21.5	22.0	17.5	16.5	17.0
10	17.5	16.0	16.5	23.0	20.0	21.5	23.0	21.0	22.0	16.5	15.5	16.0
11	17.5	15.0	16.0	23.0	21.5	22.5	22.0	21.5	22.0	17.5	15.0	15.5
12	19.0	15.5	17.0	23.5	22.5	23.0	21.5	21.0	21.5	16.5	15.5	16.0
13	20.0	17.0	18.5	25.5	23.5	24.5	22.0	21.0	21.5	18.0	16.0	17.0
14	21.0	18.5	19.5	26.5	25.0	25.5	23.0	21.5	22.0	17.5	16.5	17.0
15	22.5	20.0	21.0	25.0	24.0	25.0	22.5	21.0	22.0	16.5	15.5	16.0
16	23.5	21.0	22.5	24.0	23.0	23.5	22.5	21.5	22.0	17.0	15.5	16.0
17	25.0	22.5	23.5	23.0	21.5	22.0	22.0	21.0	21.5	16.5	15.0	15.5
18	26.5	24.0	25.0	22.5	21.0	21.5	22.5	21.5	22.0	16.0	15.0	15.5
19	27.0	25.0	26.0	22.0	21.0	21.5	23.5	22.5	23.0	15.5	14.0	15.0
20	27.5	25.5	26.5	22.5	20.5	21.5	23.0	22.0	22.5	14.0	12.5	13.0
21	28.0	25.5	26.5	22.5	21.0	21.5	23.5	22.0	22.5	12.5	11.0	11.5
22	27.5	26.0	26.5	23.0	21.5	22.0	23.0	22.0	22.5	11.0	9.5	10.0
23	27.5	25.0	26.0	23.5	21.5	22.5	23.0	22.0	22.5	10.0	9.0	9.5
24	26.5	25.5	26.0	24.0	22.5	23.0	22.0	19.0	21.0	10.0	9.5	9.5
25	26.5	24.0	25.0	24.5	22.5	23.5	19.5	18.0	18.5	10.5	9.5	9.5
26	25.0	23.0	24.0	24.5	23.0	23.5	19.0	18.5	18.5	11.5	9.5	10.5
27	23.5	22.0	23.0	24.0	23.0	23.5	18.5	18.0	18.5	12.5	10.5	11.5
28	22.5	21.5	22.0	24.0	22.5	23.0	19.5	18.5	19.0	13.5	12.0	12.5
29	22.5	21.5	22.0	24.0	22.0	23.0	20.5	19.0	20.0	14.0	13.0	13.5
30	21.5	19.5	20.5	24.5	22.5	23.5	22.5	20.5	21.5	15.5	14.0	14.5
31	---	---	---	24.0	22.5	23.5	22.5	21.5	22.0	---	---	---
MONTH	28.0	15.0	21.8	26.5	17.5	21.8	23.5	18.0	21.5	22.0	9.0	15.5

EXTREMES OUTSIDE OF PERIOD OF RECORD.--Maximum stage since 1915, 16.6 ft April 1934, from floodmarks.

- (a) Ice affected
- (b) From rating curve extended above 9,000 ft³/s
- (c) Result of freezeup

LOCATION.--Lat 44°53'02", long 91°55'57", in NW 1/4 NW 1/4 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, non-recording 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.--No estimated daily discharges. Records good (see page 11). Flow regulated by powerplants at Menomonie and Cedar Falls. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1280	1260	1140	800	911	846	2790	1580	1310	1500	872	2510
2	1110	1440	1380	731	892	943	2530	1540	1340	1410	847	2390
3	1090	1340	1250	746	907	1010	2300	1450	1290	1180	861	1910
4	1080	1350	1310	618	925	1030	2180	1480	1370	1050	892	1690
5	1090	1380	1290	737	739	1080	2240	1330	1330	1290	767	1480
6	1110	1200	1060	850	719	1080	2370	1280	1160	1120	1550	1410
7	1140	1320	1080	837	788	980	1420	1090	1330	1150	1390	1500
8	1140	1200	916	861	720	1070	1420	1350	1110	1080	1360	1420
9	1230	1170	1090	846	850	916	1300	1360	1170	1020	1170	1300
10	1150	1220	1000	925	860	1100	1400	1580	1290	982	986	1310
11	1090	1110	772	911	792	951	1460	1380	1350	1010	1500	1200
12	1130	1220	719	982	653	1670	1440	1280	1110	951	1930	1130
13	1120	1240	871	982	733	3220	2200	1360	1180	968	3980	1190
14	1130	1160	952	969	721	3920	2660	1360	1130	1000	5090	1110
15	1060	1260	1090	975	816	10200	2390	1830	1130	1410	4910	1100
16	1130	1090	1100	933	725	8310	2090	1600	1070	963	4940	1170
17	1160	1030	1140	979	771	5750	2180	1380	1060	1190	4100	1060
18	1850	1130	1090	991	808	4230	2390	1380	1020	1230	2970	1210
19	1970	1080	1120	950	836	3420	2520	1450	1030	1130	2650	1220
20	2110	1080	1080	936	914	3010	3300	1310	921	1110	2680	1140
21	1810	1180	1080	942	804	2830	3170	1180	876	986	2350	1220
22	1630	1360	1210	865	859	2660	2860	1350	786	1350	1960	1120
23	1500	1300	1170	937	893	2480	2200	1310	864	1430	1730	1130
24	1630	1300	1110	865	849	2360	1900	1350	946	1240	1570	1130
25	1520	1220	967	870	858	2260	1930	1260	825	1280	2070	1210
26	1490	1060	1120	806	852	2210	1820	1260	1070	1070	2650	1110
27	1410	1020	1150	838	869	2530	1720	1280	1490	1200	2290	1100
28	1410	736	1180	922	882	2390	1730	1510	1530	1280	2240	1130
29	1430	1140	1020	814	---	2590	1540	2080	2050	1110	2240	1200
30	1380	1090	1080	951	---	2860	1540	1900	1730	858	2440	1320
31	1370	---	990	893	---	2750	---	1490	---	898	2350	---
TOTAL	41750	35686	33527	27262	22946	82656	62990	44340	35868	35446	69335	40120
MEAN	1347	1190	1082	879	819	2666	2100	1430	1196	1143	2237	1337
MAX	2110	1440	1380	991	925	10200	3300	2080	2050	1500	5090	2510
MIN	1060	736	719	618	653	846	1300	1090	786	858	767	1060

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1907 - 1995, BY WATER YEAR (WY)

	MEAN	1124	1140	972	888	945	1933	2282	1478	1462	1108	963	1193
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 1994 CALENDAR YEAR FOR 1995 WATER YEAR WATER YEARS 1907 - 1995

ANNUAL TOTAL	471592	531926	1290	
ANNUAL MEAN	1292	1457	1842	1983
HIGHEST ANNUAL MEAN			711	1931
LOWEST ANNUAL MEAN				
HIGHEST DAILY MEAN	5270	Apr 28,29	10200	Mar 15
LOWEST DAILY MEAN	719	Dec 12	618	Jan 4
ANNUAL SEVEN-DAY MINIMUM	788	Aug 17	744	Feb 11
INSTANTANEOUS PEAK FLOW			12500	Mar 15
INSTANTANEOUS PEAK STAGE			7.04	Mar 15
10 PERCENT EXCEEDS	1840		2390	
50 PERCENT EXCEEDS	1110		1180	
90 PERCENT EXCEEDS	868		856	

(a) From rating curve extended above 27,000 ft³/s on basis of computed flow over Cedar Falls Dam, 6 mi upstream
(b) From floodmarks

CHIPPEWA RIVER BASIN
05369500 CHIPPEWA RIVER AT DURAND, WI

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LOCATION.--Lat 44°37'40", long 91°58'10", in SW 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.

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.--Estimated daily discharges: Ice-affected periods, Dec. 9-19, 21, 24, 26, and Jan. 2 to Mar. 14. Records good except those for ice-affected periods, which are fair (see page 11). 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 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11800	8670	4260	4400	3000	3300	12000	8160	10400	6360	4910	18100
2	8670	8310	7050	4000	3100	3600	11500	10100	8630	5310	4330	13900
3	10700	8040	6840	4200	3200	3900	10900	7960	9180	3660	4230	10900
4	11000	8590	6590	3900	3500	5200	10000	7440	6180	4740	4320	10100
5	9090	8080	7500	3600	3400	5600	8760	8440	7500	4460	4260	8160
6	8950	6870	6740	3400	3200	5400	8280	7390	8340	5090	3590	8200
7	8390	6590	5900	3300	3100	5400	7980	6650	7270	4130	6520	8360
8	8670	7510	4640	3600	3000	5600	7470	6290	6500	4920	5970	7980
9	8070	7100	4300	4300	3000	5200	6090	8800	5720	3760	5160	6320
10	8230	6060	5000	4100	3100	5000	5250	9330	7080	3640	4820	6240
11	8850	5880	4600	4100	3300	5200	7390	12100	6620	4300	5170	6300
12	7550	6270	4000	4200	3200	5000	7490	15400	6880	4390	6450	5280
13	8050	4990	4200	4200	2800	4900	9870	13400	6780	4880	12600	5620
14	7460	5220	5000	4800	2700	10000	14000	12800	7030	4610	20000	5480
15	6420	7260	5800	4200	2700	22400	14200	13100	6650	4590	26900	5250
16	5970	5430	5600	4000	2800	22400	13200	13100	6140	5520	28400	5270
17	6380	6000	5800	4300	2700	19300	12000	14800	6150	5370	23400	5180
18	6640	5260	5600	5000	2700	16900	10600	12900	4430	5970	16700	5100
19	11100	5680	5200	4700	2800	17300	13200	12600	4460	6150	14300	5080
20	12500	4720	6510	4500	3000	17000	17300	12400	4590	6580	14700	6260
21	12100	6420	5000	4300	3200	18500	19600	10200	4360	6230	12700	5180
22	11800	7170	5370	3500	3100	18700	18900	8110	3440	5700	12000	4860
23	10600	8580	6040	3200	3000	19300	16500	10600	4350	5850	8970	5200
24	9620	9090	5000	3000	3000	19100	14100	8170	5150	5480	8330	4590
25	11300	7890	5790	2800	3000	17900	13500	8360	3520	4180	10100	5280
26	12000	7510	4500	2800	3000	14800	11200	8680	3460	4870	15400	5050
27	11500	7190	5540	2800	3500	12400	11700	9830	4940	5280	17200	5730
28	9690	5910	5410	2900	3300	14300	9960	8190	6160	7430	13900	5000
29	9460	6590	5310	3000	---	12200	10300	9880	6370	6150	16500	5530
30	9130	5840	5870	3000	---	12000	8740	11300	5660	3670	22800	5500
31	8410	---	4920	3000	---	13300	---	10400	---	4270	23000	---
TOTAL	290100	204720	169880	117100	85400	361100	341980	316880	183940	157540	377630	205000
MEAN	9358	6824	5480	3777	3050	11650	11400	10220	6131	5082	12180	6833
MAX	12500	9090	7500	5000	3500	22400	19600	15400	10400	7430	28400	18100
MIN	5970	4720	4000	2800	2700	3300	5250	6290	3440	3640	3590	4590
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 1995, BY WATER YEAR (WY)												
MEAN	6490	6800	5400	4777	4973	9719	15590	10490	9433	6262	5096	7130
MAX	20350	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 1994 CALENDAR YEAR			FOR 1995 WATER YEAR			WATER YEARS 1928 - 1995						
ANNUAL TOTAL			2799530			2811270						
ANNUAL MEAN			7670			7702			7672			
HIGHEST ANNUAL MEAN									11550			
LOWEST ANNUAL MEAN									3992			
HIGHEST DAILY MEAN			51900			28400			Aug 16			117000
LOWEST DAILY MEAN			2880			Sep 19			Aug 16			1100
ANNUAL SEVEN-DAY MINIMUM			3110			Aug 22			(a)2700			Feb 14,15,17,18
INSTANTANEOUS PEAK FLOW						Aug 16			(a)2740			Feb 13
INSTANTANEOUS PEAK STAGE									28700			Aug 16
INSTANTANEOUS LOW FLOW									9.47			Aug 16
10 PERCENT EXCEEDS			12000						27400			Jun 22
50 PERCENT EXCEEDS			6000						13900			1020
90 PERCENT EXCEEDS			4060						6230			5600
									3360			2970

(a) Ice affected

CHIPPEWA RIVER BASIN

05369945 EAU GALLE RIVER AT LOW-WATER BRIDGE AT SPRING VALLEY, WI

LOCATION.--Lat 44°52'02", long 92°15'07", in SE 1/4 NW 1/4 sec.31, T.28 N., R.15 W., St. Croix County, Hydrologic Unit 07050005, on right bank 50 ft downstream from Low-Water Bridge on Boston Road, approximately 550 ft upstream from French Creek and at Spring Valley.

DRAINAGE AREA.--47.9 mi².

PERIOD OF RECORD.--November 1981 to September 1983, May 1986 to current year.

REVISED RECORDS.--WDR WI-93-2: 1992.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 960 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Aug. 14 to Sept. 30 and ice-affected periods, Jan. 2, 4-11, 25-27, Feb. 13, 14, and Mar. 1-8. Records good for discharges less than 900 ft³/s, fair for estimated periods, and poor for discharges greater than 900 ft³/s (see page 11).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	13	12	11	11	10	26	14	11	9.2	13	15
2	16	13	12	11	11	9.0	21	14	11	9.2	15	14
3	16	13	12	11	11	9.0	19	14	11	9.3	14	14
4	15	13	12	11	11	9.0	18	14	10	9.7	8.9	14
5	15	12	12	11	11	9.0	16	14	10	9.8	9.5	14
6	15	12	13	11	11	9.6	16	14	11	10	12	14
7	34	12	12	11	11	9.6	15	14	10	9.7	12	13
8	25	12	12	11	11	9.4	15	15	10	9.6	14	13
9	18	12	12	11	11	10	15	15	11	9.6	12	13
10	16	12	12	11	11	11	15	16	14	9.8	11	13
11	15	12	12	11	11	17	16	15	13	9.9	12	13
12	15	12	12	12	11	1040	195	14	9.5	10	45	12
13	15	12	12	11	11	1120	39	19	10	10	928	12
14	15	12	12	11	11	198	21	65	11	11	1200	12
15	14	12	12	11	11	85	18	20	10	12	66	12
16	15	12	12	11	11	61	16	15	10	12	26	13
17	56	12	12	11	11	49	16	14	10	11	23	12
18	54	12	12	11	11	39	198	14	9.2	11	18	12
19	24	12	12	11	11	37	138	13	9.0	12	76	15
20	17	12	12	11	11	78	31	13	9.0	12	44	14
21	16	15	12	11	11	69	23	13	9.0	11	21	13
22	16	23	12	11	11	35	28	13	9.0	14	20	12
23	27	15	12	11	11	29	19	13	9.0	14	25	12
24	18	13	12	11	11	26	17	13	9.0	12	28	14
25	16	13	12	10	11	25	16	13	9.1	12	26	13
26	15	12	12	10	11	147	15	13	9.6	12	26	13
27	14	13	12	10	11	597	15	16	10	13	22	14
28	14	13	12	11	11	179	14	142	9.7	13	17	15
29	14	12	12	11	---	159	14	48	9.4	11	15	16
30	14	12	12	11	---	86	14	17	9.2	12	16	17
31	13	---	11	11	---	39	---	12	---	13	15	---
TOTAL	603	385	372	339	308	4210.6	1039	659	302.7	343.8	2790.4	403
MEAN	19.5	12.8	12.0	10.9	11.0	136	34.6	21.3	10.1	11.1	90.0	13.4
MAX	56	23	13	12	11	1120	198	142	14	14	1200	17
MIN	13	12	11	10	11	9.0	14	12	9.0	9.2	8.9	12
CFSM	.41	.27	.25	.23	.23	2.84	.72	.44	.21	.23	1.88	.28
IN.	.47	.30	.29	.26	.24	3.27	.81	.51	.24	.27	2.17	.31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 1995, BY WATER YEAR (WY)

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
MEAN	16.8	23.1	13.6	9.63	10.2	91.0	49.2	30.5	36.3	18.9	26.0	25.9		
MAX	47.5	65.5	25.7	13.3	18.1	152	104	67.0	157	35.8	90.0	129		
(WY)	1987	1992	1983	1987	1994	1990	1983	1991	1990	1992	1995	1986		
MIN	7.73	7.68	6.61	6.45	6.73	20.5	11.6	10.3	8.87	8.54	8.28	9.34		
(WY)	1990	1990	1990	1990	1990	1987	1987	1987	1988	1988	1988	1982		

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1982 - 1995
ANNUAL TOTAL	8340.8	11755.5	
ANNUAL MEAN	22.9	32.2	28.9
HIGHEST ANNUAL MEAN			40.9
LOWEST ANNUAL MEAN			14.8
HIGHEST DAILY MEAN	746	Apr 26	(a)1200 Aug 14
LOWEST DAILY MEAN	9.8	Feb 18	8.9 Aug 4
ANNUAL SEVEN-DAY MINIMUM	11	Feb 12	9.0 Jun 19
INSTANTANEOUS PEAK FLOW			(a)5420 Aug 14
INSTANTANEOUS PEAK STAGE			8.89 Aug 14
INSTANTANEOUS LOW FLOW			6.0 Mar 9
ANNUAL RUNOFF (CFSM)	.48		.67
ANNUAL RUNOFF (INCHES)	6.48		9.13
10 PERCENT EXCEEDS	27		28
50 PERCENT EXCEEDS	15		12
90 PERCENT EXCEEDS	12		10

(a) Estimated

(b) Also occurred Feb. 1, 1990

(c) From rating curve extended above 172 ft³/s on basis of indirect measurement of peak flow, gage height, 8.80 ft, but may have been exceeded on Mar. 27, 1989

(d) Backwater from reservoir

05370000 EAU GALLE RIVER AT SPRING VALLEY, WI

LOCATION.--Lat 44°51'10", long 92°14'17", in SE 1/4 NE 1/4 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.--Estimated daily discharges: Mar. 13-15. Records good except those for estimated daily discharges, which are fair (see page 11). 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 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	16	16	16	15	14	55	28	31	17	20	22
2	21	17	16	15	15	14	44	28	29	19	19	22
3	22	17	16	15	15	14	38	28	26	20	19	21
4	21	17	16	15	15	14	35	26	24	21	19	21
5	20	17	16	15	14	15	34	22	24	40	19	20
6	21	16	17	15	14	15	32	24	26	17	25	20
7	35	16	16	15	15	15	31	27	30	14	27	20
8	43	16	16	15	14	14	31	28	26	18	26	19
9	29	16	16	15	15	14	30	30	24	19	27	19
10	24	16	16	15	15	14	29	31	25	19	24	18
11	22	16	16	15	14	18	31	31	26	18	25	19
12	21	16	16	16	14	587	157	29	24	20	32	19
13	21	17	16	16	14	1020	107	27	39	20	534	17
14	22	16	16	15	14	364	52	74	23	19	1160	12
15	20	16	16	16	15	135	40	54	5.7	22	157	15
16	21	16	16	15	15	98	35	37	12	26	55	14
17	33	16	17	16	15	76	31	31	18	21	39	12
18	80	16	16	16	15	59	79	28	19	19	32	15
19	41	15	16	15	15	50	224	27	20	20	77	18
20	27	15	16	15	15	60	86	29	20	43	86	18
21	21	18	16	15	15	116	52	29	19	24	44	17
22	20	25	16	15	15	62	48	28	19	7.8	31	17
23	27	22	16	15	14	43	43	64	20	18	35	17
24	26	18	16	15	14	36	37	32	19	21	44	18
25	22	17	16	15	15	33	34	7.9	17	20	38	19
26	40	16	16	15	14	104	33	18	20	19	38	20
27	25	18	16	15	14	493	31	24	26	20	39	22
28	3.0	18	16	15	14	255	29	81	25	26	30	22
29	9.8	17	16	15	---	212	28	124	23	21	23	21
30	15	16	16	15	---	136	28	55	18	19	24	25
31	16	---	16	15	---	80	---	38	---	19	24	---
TOTAL	790.8	508	498	471	408	4180	1564	1139.9	677.7	646.8	2792	559
MEAN	25.5	16.9	16.1	15.2	14.6	135	52.1	36.8	22.6	20.9	90.1	18.6
MAX	80	25	17	16	15	1020	224	124	39	43	1160	25
MIN	3.0	15	16	15	14	14	28	7.9	5.7	7.8	19	12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1995, BY WATER YEAR (WY)

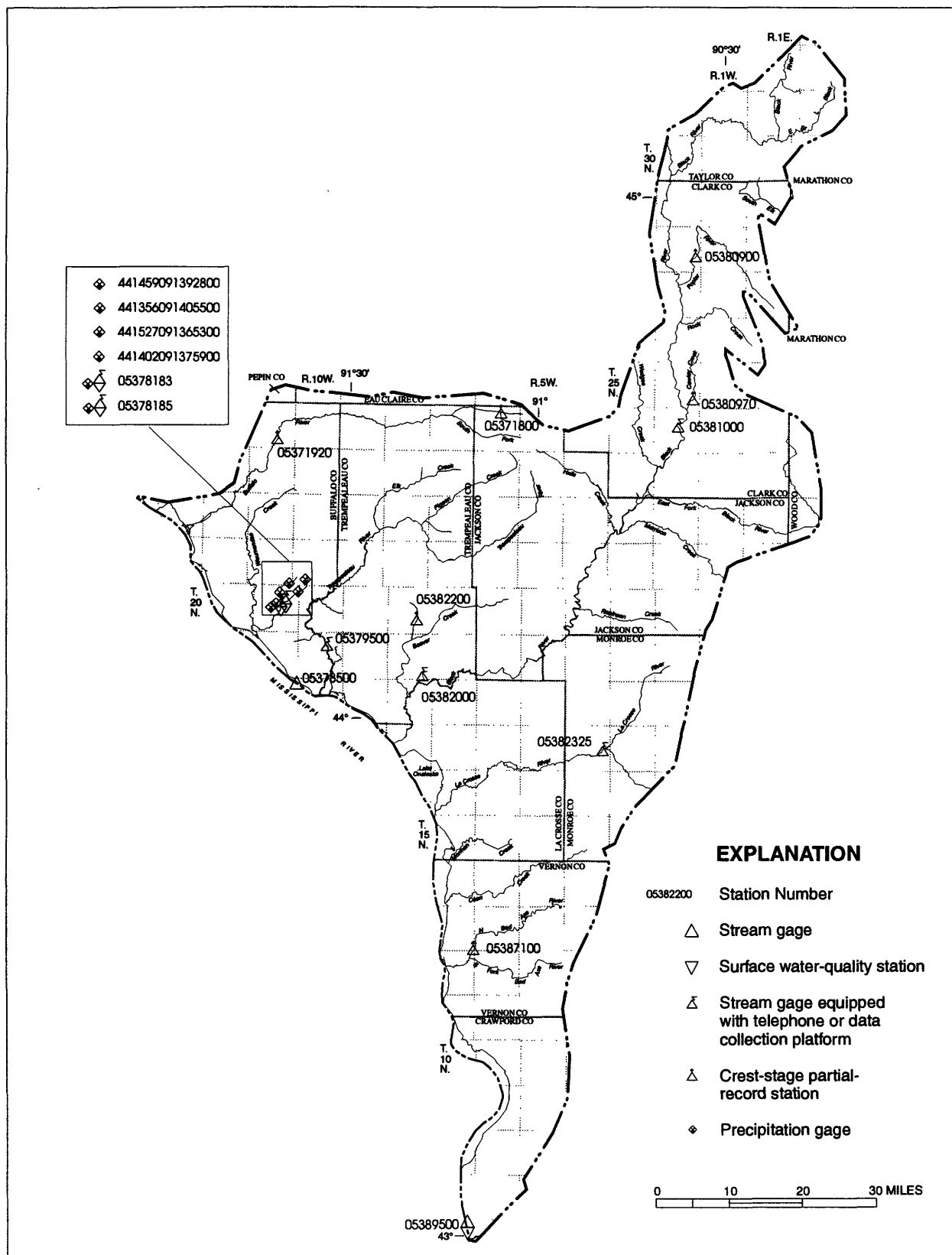
	MEAN	26.1	26.6	18.5	14.9	20.4	76.2	65.2	37.1	40.9	26.7	29.7	31.5
MAX	81.3	86.2	39.7	19.8	71.6	164	128	94.9	148	94.1	90.1	153	
(WY)	1971	1971	1978	1994	1981	1989	1969	1973	1980	1978	1995	1986	
MIN	10.4	7.24	4.22	5.21	5.77	10.1	19.5	12.4	11.6	12.5	5.95	9.81	
(WY)	1970	1969	1969	1969	1969	1970	1987	1977	1969	1988	1969	1969	

CHIPPEWA RIVER BASIN
05370000 EAU GALLE RIVER AT SPRING VALLEY, WI--CONTINUED

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1969 - 1995	
ANNUAL TOTAL	11089.8		14235.2			
ANNUAL MEAN	30.4		39.0		34.5	
HIGHEST ANNUAL MEAN					55.8	1980
LOWEST ANNUAL MEAN					21.2	1988
HIGHEST DAILY MEAN	529	Apr 26	1160	Aug 14	2190	Mar 28 1989
LOWEST DAILY MEAN	3.0	Oct 28	3.0	Oct 28	(a).00	Aug 12-16 1971
ANNUAL SEVEN-DAY MINIMUM	13	Oct 28	13	Oct 28	.91	Sep 15 1969
INSTANTANEOUS PEAK FLOW			2140	Aug 14	(b)3030	Jun 7 1980
INSTANTANEOUS PEAK STAGE			18.62	Aug 14	(b)19.90	Jun 7 1980
INSTANTANEOUS LOW FLOW			2.6	May 24	(a).00	Aug 11-16 1971
10 PERCENT EXCEEDS	40		52		48	
50 PERCENT EXCEEDS	21		20		18	
90 PERCENT EXCEEDS	16		15		12	

(a) 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

(b) 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



TREMPEALEAU-BLACK RIVER BASIN

WAUMANDEE CREEK BASIN

441459091392800 EAGLE CREEK RAIN GAGE E3-1006, LOSINSKI FARM, NEAR FOUNTAIN CITY, WI

LOCATION.--Lat 44°14'59", long 91°39'28", in NE 1/4 SE 1/4 sec.36, T.21 N., R.11 W., Buffalo County, Hydrologic Unit 07040003, on Eagle Valley Road, 0.3 mi west of junction with Glencoe-Waumandee Road, near Fountain City.

PERIOD OF RECORD.--October 1990 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established on July 12, 1990. Rainfall estimated to be 0.00 for Dec. 1-3, 20-24, 31, Jan. 12, 31, Feb. 3, 17, 25, and Mar. 10, 13-14 because recorded precipitation interpreted as collector snowmelt.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 6.71 in., Aug. 13, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 6.71 in., Aug. 13.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.04	.00	.00	.00
2	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.04	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.21	.04	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.23	.01	.04
6	.00	.00	.00	.00	.00	.00	.00	.00	.03	.17	.02	.08
7	.05	.00	.00	.00	.00	.00	.05	.00	.05	.00	.00	.03
8	.03	.00	.00	.00	.00	.00	.00	.49	.01	.05	.00	.00
9	.03	.00	.00	.00	.00	.00	.00	.06	.00	.10	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.01	.12	.02	.01	.00
11	.00	.00	.00	.00	.00	.00	.79	.00	.02	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00
13	.00	.26	.00	.00	.00	.00	.00	.53	.00	.00	6.71	.00
14	.00	.01	.00	.00	.00	.00	.00	.01	.00	.02	.23	.00
15	.00	.00	.00	.00	.00	.00	.05	.00	.00	.09	.01	.00
16	.06	.00	.00	.00	.00	.00	.12	.00	.00	.65	.10	.01
17	.82	.03	.00	.15	.00	.00	.00	.00	.00	.00	.01	.00
18	.00	.01	.00	.00	.00	.09	.69	.00	.00	.00	.00	.17
19	.00	.00	.00	.00	.00	.01	.00	.00	.00	.63	.40	.80
20	.00	.36	.00	.00	.03	.56	.25	.00	.00	.00	.00	.01
21	.00	.33	.00	.00	.00	.00	.47	.00	.00	.00	.00	.01
22	.25	.00	.00	.00	.00	.00	.00	.24	.00	.13	.00	.00
23	.00	.00	.00	.00	.00	.03	.00	.02	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.18	.00	.03	.00	.00	.08
25	.00	.00	.00	.00	.00	.00	.00	.00	.35	.00	.00	.00
26	.00	.00	.00	.00	.00	.13	.00	.00	.07	.00	.33	.00
27	.00	.00	.00	.00	.00	.59	.01	1.21	.08	.54	.00	.00
28	.00	.00	.00	.00	.00	.01	.00	.53	.06	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.05	.11
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.10
31	.00	---	.00	.00	---	.00	---	.00	---	.12	.00	---
TOTAL	1.30	1.00	0.00	0.15	0.03	1.42	2.64	3.10	0.86	2.96	7.92	1.44

441356091405500 EAGLE CREEK RAIN GAGE E2-1005, SCHAFFNER FARM, NEAR FOUNTAIN CITY, WI

LOCATION.--Lat 44°13'56", long 91°40'55", in SW 1/4 SE 1/4 sec.3, T.20 N., R.11 W., Buffalo County, Hydrologic Unit 07040003, on Schaffner Valley Road, 1.7 mi north of junction with CTH G, near Fountain City.

PERIOD OF RECORD.--October 1990 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established on July 19, 1990. Rainfall estimated to be 0.00 for Nov. 30, Dec. 1-2, 20-23, Jan. 12-13, Feb. 3, 10, 17, Mar. 7, 10, 13-14, and Apr. 10 because recorded precipitation interpreted as collector snowmelt.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 5.46 in., Aug. 13, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 5.46 in., Aug. 13.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.07	.00	.00	.00
2	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.06	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.01	.00	.00	.00	.00	.00	.00	.00	.23	.07	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.28	.01	.01
6	.01	.00	.00	.00	.00	.00	.00	.00	.05	.15	.02	.09
7	.02	.00	.00	.00	.00	.00	.07	.00	.05	.00	.00	.07
8	.05	.00	.00	.00	.00	.00	.00	.40	.00	.21	.00	.00
9	.01	.00	.00	.00	.00	.00	.00	.09	.00	.58	.01	.00
10	.01	.00	.00	.00	.00	.00	.00	.01	.13	.00	.02	.00
11	.00	.00	.00	.00	.00	.00	.72	.00	.01	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.01	.00	.00	.01	.02	.00
13	.00	.25	.00	.00	.00	.00	.01	.57	.00	.00	5.46	.00
14	.00	.00	.00	.00	.00	.00	.00	.03	.00	.00	.16	.00
15	.00	.00	.00	.00	.00	.00	.05	.01	.00	.14	.01	.00
16	.08	.01	.00	.00	.00	.00	.14	.00	.00	.70	.16	.01
17	.68	.06	.00	.18	.00	.00	.00	.00	.00	.00	.00	.00
18	.01	.00	.00	.00	.00	.07	.65	.00	.00	.00	.00	.22
19	.00	.00	.00	.00	.00	.02	.00	.00	.00	.63	.43	.91
20	.00	.39	.00	.00	.04	.58	.32	.00	.00	.00	.00	.00
21	.00	.31	.00	.00	.00	.00	.44	.00	.00	.00	.00	.02
22	.22	.00	.00	.00	.00	.00	.00	.25	.00	.14	.00	.00
23	.00	.01	.00	.00	.00	.10	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.19	.00	.06	.00	.00	.09
25	.01	.00	.00	.00	.00	.00	.00	.00	.79	.00	.00	.01
26	.00	.00	.00	.00	.00	.15	.00	.00	.48	.01	.65	.00
27	.00	.00	.00	.00	.00	.77	.01	.98	.12	.14	.00	.00
28	.00	.00	.00	.00	.00	.12	.00	.41	.13	.00	.01	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.06	.11
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.10
31	.00	---	.00	.00	---	.00	---	.00	---	.10	.00	---
TOTAL	1.18	1.04	0.00	0.18	0.04	1.81	2.61	2.75	1.89	3.32	7.09	1.64

WAUMANDEE CREEK BASIN

441527091365300 JOOS VALLEY CREEK RAIN GAGE J3-1003, HANSEN FARM, NEAR ARCADIA, WI

LOCATION.--Lat 44°15'27", long 91°36'53", in NE 1/4 NW 1/4 sec.32, T.21 N., R.10 W., Buffalo County, Hydrologic Unit 07040003, on Hannon Road, 0.1 mi north of the junction with Pausy Pass, near Arcadia.

PERIOD OF RECORD.--October 1990 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established on July 12, 1990. Rainfall estimated to be 0.00 for Dec. 5, 20-21, Jan. 12, and Mar. 10, 13-14 because recorded precipitation interpreted as collector snowmelt.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 7.53 in., Aug. 13, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 7.53 in., Aug. 13.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.04	.00	.00	.00
2	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.03	.00	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14	.04	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.23	.00	.12
6	.00	.00	.00	.00	.00	.00	.00	.00	.02	.30	.00	.05
7	.08	.00	.00	.00	.00	.00	.05	.00	.06	.00	.00	.08
8	.02	.00	.00	.00	.00	.00	.00	.51	.01	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.10	.00	.01	.01	.00
10	.00	.00	.00	.00	.00	.00	.00	.01	.11	.39	.02	.00
11	.00	.00	.00	.00	.00	.00	.64	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00
13	.00	.27	.00	.00	.00	.00	.00	.49	.00	.00	7.53	.00
14	.00	.00	.00	.00	.00	.00	.00	.02	.00	.00	.18	.00
15	.00	.00	.00	.00	.00	.00	.05	.00	.00	.09	.01	.00
16	.06	.00	.00	.00	.00	.00	.13	.00	.00	.60	.11	.00
17	.78	.07	.00	.15	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.01	.00	.00	.00	.08	.71	.00	.00	.00	.00	.20
19	.00	.00	.00	.00	.00	.01	.00	.00	.00	.61	.55	.88
20	.00	.44	.00	.00	.04	.57	.20	.00	.00	.00	.00	.00
21	.00	.39	.00	.00	.00	.00	.45	.00	.00	.00	.00	.02
22	.16	.00	.00	.00	.00	.00	.00	.17	.00	.15	.00	.00
23	.00	.00	.00	.00	.00	.01	.00	.01	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.23	.00	.07	.00	.00	.08
25	.01	.00	.00	.00	.00	.00	.01	.00	.13	.00	.00	.00
26	.00	.00	.00	.00	.00	.08	.00	.00	.02	.00	.89	.00
27	.00	.00	.00	.00	.00	.59	.01	.99	.14	.61	.00	.00
28	.00	.00	.00	.00	.00	.15	.00	.71	.02	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.06	.13
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.10
31	.00	---	.00	.00	---	.00	---	.00	---	.10	.00	---
TOTAL	1.16	1.18	0.00	0.15	0.04	1.49	2.51	3.01	0.62	3.23	9.40	1.66

441402091375900 JOOS VALLEY CREEK RAIN GAGE J2-1002, SLABY FARM, NEAR FOUNTAIN CITY, WI

LOCATION.--Lat 44°14'02", long 91°37'59", in NE 1/4 SE 1/4 sec.1, T.20 N., R.11 W., Buffalo County, Hydrologic Unit 07040003, on Slaby Farm entrance road just off Joos Valley Road, and approximately 3.1 mi northeast of the junction of Joos Valley Road and CTH G, near Fountain City.

PERIOD OF RECORD.--October 1990 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established on July 12, 1990. Rainfall estimated to be 0.00 for Nov. 29-30, Dec. 1, 20-23, Feb. 17, and Mar. 10, 13-14 because recorded precipitation interpreted as collector snowmelt. Rainfall data missing for Jan. 13-17 and June 7-8, 10-11. Prior to October 1992, precipitation data published under number 441402091395900.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 6.36 in., Aug. 13, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 6.36 in., Aug. 13.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.04	.00	.00	.00
2	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14	.06	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.21	.00	.03
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.01	.07
7	.08	.00	.00	.00	.00	.00	.05	.00	---	.00	.00	.05
8	.03	.00	.00	.00	.00	.00	.00	.55	---	.08	.00	.00
9	.03	.00	.00	.00	.00	.00	.00	.09	.00	.09	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	---	.07	.01	.00
11	.00	.00	.00	.00	.00	.00	.84	.00	---	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.02	.00	.00	.00	.01	.00
13	.00	.26	.00	---	.00	.00	.00	.56	.00	.00	6.36	.00
14	.00	.00	.00	---	.00	.00	.00	.04	.00	.00	.18	.00
15	.00	.00	.00	---	.00	.00	.06	.00	.00	.03	.00	.00
16	.07	.00	.00	---	.00	.00	.14	.00	.00	.76	.14	.02
17	.94	.06	.00	---	.00	.00	.01	.00	.00	.00	.01	.00
18	.02	.01	.00	.00	.00	.06	.76	.00	.00	.00	.00	.24
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.76	.67	.97
20	.00	.48	.00	.00	.03	.71	.41	.00	.00	.00	.00	.00
21	.00	.39	.00	.00	.00	.00	.50	.00	.00	.00	.00	.03
22	.19	.00	.00	.00	.00	.00	.00	.18	.00	.13	.00	.00
23	.00	.00	.00	.00	.00	.05	.00	.01	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.15	.00	.00	.00	.00	.10
25	.00	.00	.00	.00	.00	.00	.01	.00	.19	.04	.00	.01
26	.00	.00	.00	.00	.00	.06	.00	.00	.12	.00	.35	.00
27	.00	.08	.00	.00	.00	.80	.01	1.29	.16	.13	.00	.00
28	.00	.00	.00	.00	.00	.16	.00	.70	.01	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.05	.15
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.16
31	.00	---	.00	.00	---	.00	---	.00	---	.07	.00	---
TOTAL	1.41	1.28	0.00	---	0.03	1.84	2.96	3.42	---	2.69	7.85	1.83

WAUMANDEE CREEK BASIN
05378183 JOOS VALLEY CREEK NEAR FOUNTAIN CITY, WI

LOCATION.--Lat 44°12'54", long 91°39'54", in NE 1/4 NW 1/4 sec.14, T.20 N., R.11 W., Buffalo County, Hydrologic Unit 07040003, on left bank at bridge on private road, 6.3 mi northeast of Fountain City.

DRAINAGE AREA.--5.89 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1990 to current year.

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

REMARKS.--Estimated daily discharges: Ice-affected periods, Dec. 6-9, Feb. 7-9, and Mar. 2, 7, 9. Records good except those for ice-affected periods, which are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	4.1	4.1	3.7	3.9	3.5	4.8	3.9	3.5	2.7	2.4	3.0
2	4.9	3.9	4.1	3.5	3.9	3.4	4.8	3.8	3.5	2.6	2.4	3.0
3	4.9	4.0	4.1	3.3	3.9	3.7	4.8	3.7	3.2	2.6	2.4	3.0
4	4.7	4.0	4.3	3.4	3.7	3.8	4.6	3.6	3.0	2.6	2.4	3.0
5	4.5	4.2	4.7	3.4	3.3	4.1	4.4	3.5	3.0	3.1	2.4	2.9
6	4.4	4.5	4.5	3.7	3.2	3.5	4.2	3.2	3.0	3.2	2.4	3.1
7	4.4	4.5	4.3	3.8	3.1	3.4	4.2	2.9	3.0	2.9	2.4	2.9
8	4.5	4.4	4.2	3.7	3.1	3.4	4.5	3.6	3.0	2.7	2.3	2.8
9	4.5	4.3	4.2	3.7	3.1	3.3	4.3	4.1	3.0	3.2	2.2	2.8
10	4.5	4.3	4.1	3.7	3.1	4.0	4.2	3.8	3.1	2.8	2.3	2.8
11	4.5	4.2	4.1	3.7	3.1	5.8	5.3	3.6	3.0	2.7	2.2	2.8
12	4.5	4.2	4.2	3.8	3.3	3.8	6.4	3.4	2.8	2.7	2.3	2.9
13	4.5	4.4	4.2	3.9	3.2	1.8	4.9	4.0	2.7	2.7	3.1	2.9
14	4.5	4.5	4.2	4.0	3.2	6.6	4.5	4.3	2.7	2.5	9.0	2.8
15	4.5	4.4	4.2	3.9	3.2	5.8	4.4	3.7	2.6	2.5	5.2	2.8
16	4.4	4.4	4.2	3.9	2.8	5.4	4.4	3.6	2.5	3.5	4.9	2.8
17	6.6	4.4	4.2	4.2	3.1	5.3	4.6	3.4	2.4	2.8	4.6	2.8
18	5.9	4.4	4.2	3.9	3.5	5.1	6.5	3.2	2.5	2.6	4.4	2.8
19	4.9	4.4	4.2	3.9	4.0	5.0	5.4	3.1	2.5	3.4	5.3	4.5
20	4.8	4.5	4.2	3.6	6.6	9.0	5.1	3.0	2.5	3.0	4.2	3.4
21	4.7	6.5	4.2	3.5	4.3	5.6	7.7	3.0	2.5	2.7	3.9	3.2
22	4.6	4.8	4.2	3.5	3.7	5.2	5.4	3.1	2.5	2.8	3.7	3.1
23	4.6	4.8	4.2	3.5	3.7	5.3	5.1	3.4	2.6	2.7	3.5	3.0
24	4.6	4.7	4.1	3.3	3.9	5.3	5.0	3.2	2.5	2.5	3.5	2.9
25	4.5	4.5	4.2	3.4	3.7	5.2	4.9	3.0	3.6	2.4	3.4	2.9
26	4.2	4.3	4.1	3.5	3.7	5.2	4.7	3.0	3.2	2.4	3.7	2.9
27	4.2	4.4	4.2	3.5	3.7	8.7	4.4	4.7	3.3	2.5	4.1	2.9
28	4.2	4.7	4.2	3.5	3.5	6.3	4.3	5.6	3.1	2.6	3.7	2.8
29	4.2	4.5	4.0	3.5	---	5.9	4.2	4.4	2.8	2.3	3.6	2.8
30	4.2	4.2	3.9	3.5	---	5.4	4.0	3.8	2.7	2.3	3.4	3.4
31	4.2	---	3.9	3.6	---	5.3	---	3.6	---	2.3	3.2	---
TOTAL	143.5	133.4	129.7	113.0	100.5	255.7	146.0	112.2	86.3	84.3	217.4	89.7
MEAN	4.63	4.45	4.18	3.65	3.59	8.25	4.87	3.62	2.88	2.72	7.01	2.99
MAX	6.6	6.5	4.7	4.2	6.6	5.8	7.7	5.6	3.6	3.5	9.0	4.5
MIN	4.2	3.9	3.9	3.3	2.8	3.3	4.0	2.9	2.4	2.3	2.2	2.8
CFSM	.79	.75	.71	.62	.61	1.40	.83	.61	.49	.46	1.19	.51
IN.	.91	.84	.82	.71	.63	1.61	.92	.71	.55	.53	1.37	.57

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1995, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	3.75	4.50	3.71	3.19	3.73	5.70	6.00	5.03	4.25	4.01	5.05	4.33
MAX	5.01	6.24	4.65	4.15	6.85	8.25	10.0	7.26	7.96	7.99	7.06	5.89
(WY)	1994	1992	1994	1994	1994	1995	1993	1993	1993	1993	1993	1993
MIN	2.40	2.09	1.92	1.89	2.05	3.66	4.31	3.62	2.88	2.66	2.98	2.68
(WY)	1991	1991	1991	1991	1991	1991	1991	1995	1995	1990	1991	1991

SUMMARY STATISTICS FOR 1994 CALENDAR YEAR FOR 1995 WATER YEAR WATER YEARS 1990 - 1995

	1994 CALENDAR YEAR	1995 WATER YEAR	1990 - 1995
ANNUAL TOTAL	1830.8	1611.7	
ANNUAL MEAN	5.02	4.42	4.48
HIGHEST ANNUAL MEAN			5.81
LOWEST ANNUAL MEAN			3.03
HIGHEST DAILY MEAN	59 Feb 19	90 Aug 14	90 Aug 14 1995
LOWEST DAILY MEAN	3.1 Jul 31	2.2 Aug 9, 11	1.5 Dec 27 1990
ANNUAL SEVEN-DAY MINIMUM	3.4 Jul 25	2.3 Aug 6	1.6 Dec 22 1990
INSTANTANEOUS PEAK FLOW		(a)1480 Aug 14	(a)1480 Aug 14 1995
INSTANTANEOUS PEAK STAGE		12.14 Aug 14	12.14 Aug 14 1995
INSTANTANEOUS LOW FLOW		(b)1.8 Feb 28	(b).54 Dec 3 1990
ANNUAL RUNOFF (CFSM)	.85	.75	.76
ANNUAL RUNOFF (INCHES)	11.56	10.18	10.34
10 PERCENT EXCEEDS	6.1	5.1	6.1
50 PERCENT EXCEEDS	4.4	3.8	3.8
90 PERCENT EXCEEDS	3.7	2.7	2.4

(a) From rating curve extended above 86 ft³/s on basis of step-backwater method
(b) Result of freezeup

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1990 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: July 1990 to current year.

DISSOLVED OXYGEN: July 1990 to September 1992 (discontinued).

SUSPENDED-SOLIDS DISCHARGE: July 1990 to current year.

TOTAL-PHOSPHORUS DISCHARGE: July 1990 to current year.

INSTRUMENTATION.--Water-quality sampler July 1990 to current year; continuous water-temperature recorder July 1990 to current year; dissolved-oxygen recorder July 1990 to September 1992.

REMARKS.--Chemical analyses by the Wisconsin State Laboratory of Hygiene. Suspended-sediment and particle-size analyses by U.S. Geological Survey Laboratory. Samples are point samples unless otherwise indicated. Water-quality sampling suspended from Feb. 1 to June 30, 1995.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum observed, 31.0°C, June 27-28, 1991 and July 13, 1995; minimum observed, 0.0°C, on many days during 1991, 1992, 1993, and 1995 winter periods.

DISSOLVED OXYGEN: Maximum observed, 15.8 mg/L, Apr. 26, 1991; minimum observed, 4.3 mg/L, June 28, 1991.

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 4,570 tons, Aug. 14, 1995; minimum daily, 0.04 ton, Nov. 8-9, 1990 and Aug. 2-12, 1995.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 7,350 lb, Aug. 14, 1995; minimum daily, 0.22 lb, Nov. 9, 1990.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum observed, 31.0°C, July 13; minimum observed, 0.0°C, many days during winter period.

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 4,570 tons, Aug. 14; minimum daily, 0.04 ton, Aug. 2-12.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 7,350 lb, Aug. 14; minimum daily, 0.32 lb, Aug. 9.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN (70331)
OCT 1994										
*04...	1222	4.5	8.3	--	2400	12	0.029	0.053	--	--
17...	2010	16	7.9	--	--	588	0.041	0.872	--	--
*18...	1131	5.8	8.3	--	22000	24	0.033	0.134	--	--
NOV										
*08...	1329	4.5	8.4	--	140	17	0.029	0.046	--	--
DEC										
*05...	1237	4.7	8.2	--	430	23	<0.027	0.050	--	--
JAN 1995										
*12...	1033	3.7	8.3	--	280	34	0.067	0.060	--	--
MAR										
*11...	1356	128	--	--	--	--	--	--	13700	88
11...	1430	219	--	--	--	--	--	--	12400	90
11...	1445	259	--	--	--	--	--	--	14600	90
11...	1645	221	--	--	--	--	--	--	4830	86
27...	0835	15	--	--	--	--	--	--	760	100
JUL										
*10...	1218	3.0	8.3	<1.0	490	8	<0.027	0.030	--	--
*24...	1257	2.5	8.6	1.4	170	9	<0.027	0.027	--	--
AUG										
*07...	1307	2.4	8.5	1.0	390	6	<0.027	0.027	--	--
13...	2225	23	7.9	--	--	1090	0.148	1.28	--	--
13...	2255	69	7.7	--	--	5750	0.362	4.10	--	--
13...	2315	334	7.6	--	--	22000	0.747	14.2	20900	90
13...	2320	650	7.5	--	--	24500	0.742	19.0	24500	94
14...	0120	563	7.7	--	--	21500	0.224	16.9	21100	94
14...	0150	309	7.7	--	--	15000	0.158	13.2	--	--
14...	0245	166	7.7	--	--	11300	0.143	10.6	--	--
14...	0335	52	7.6	--	--	6750	0.095	7.20	--	--
*14...	1902	6.3	7.9	2.9	--	114	0.071	0.428	130	100
*30...	1447	3.3	8.4	1.4	500	9	<0.027	0.049	--	--
SEP										
*12...	1129	2.8	8.3	1.4	460	10	<0.027	0.030	--	--
*27...	1251	2.9	8.4	1.5	130	6	<0.027	0.032	--	--

* Equal-width increment (EWI) sample

WAUMANDEE CREEK BASIN
05378183 JOOS VALLEY CREEK NEAR FOUNTAIN CITY, WI--CONTINUED

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	16.5	12.5	14.0	9.0	4.0	6.5	5.5	1.0	3.5	1.0	.5	.5
2	12.5	10.5	11.0	11.5	7.0	9.0	5.5	2.5	4.0	.5	.5	.5
3	11.5	10.0	11.0	10.0	9.0	9.5	6.5	3.0	4.5	.5	.0	.0
4	13.0	10.5	11.5	9.0	8.0	8.5	6.0	5.0	5.5	.0	.0	.0
5	15.0	11.0	12.5	9.0	7.5	8.5	5.5	2.5	4.0	.0	.0	.0
6	15.5	11.0	13.0	9.0	6.5	8.0	3.0	1.0	2.0	.5	.0	.5
7	15.5	12.5	14.0	11.0	6.0	8.0	3.5	1.0	2.0	.5	.5	.5
8	13.0	10.5	11.5	9.0	7.0	8.0	3.0	1.0	2.0	.5	.0	.5
9	13.5	8.5	10.5	10.0	5.5	8.0	4.0	.5	2.5	.5	.0	.0
10	13.5	6.5	9.5	8.5	3.5	5.5	1.0	.5	.5	.5	.0	.5
11	14.0	7.0	10.0	8.5	4.0	6.0	.5	.5	.5	1.0	.5	1.0
12	14.0	7.0	10.5	9.0	7.0	8.0	.5	.5	.5	3.0	1.0	2.0
13	14.0	7.0	10.0	10.5	8.0	9.5	1.0	.5	.5	3.0	2.0	3.0
14	14.0	7.5	10.5	10.5	5.5	8.0	.5	.5	.5	3.5	3.0	3.0
15	12.5	11.0	11.5	7.5	3.5	5.0	1.0	.5	.5	3.0	1.5	2.0
16	14.0	11.5	13.0	7.0	3.0	5.0	3.0	1.0	2.0	3.0	1.5	2.0
17	14.5	13.0	13.5	9.0	5.0	7.0	4.0	2.5	3.0	3.0	1.0	2.5
18	17.5	13.0	15.0	7.5	4.0	5.0	3.0	1.0	2.0	2.5	.5	1.5
19	13.0	11.0	12.0	6.0	3.5	5.0	3.0	.5	2.0	2.5	1.0	1.5
20	14.5	10.0	11.5	7.0	5.0	6.0	3.5	1.5	2.5	2.5	1.0	1.5
21	15.0	8.5	11.0	7.0	2.0	5.5	5.5	2.0	4.0	1.5	.5	1.0
22	12.5	9.0	11.5	3.5	1.0	2.0	4.5	2.5	4.0	2.0	.5	1.0
23	9.5	7.5	8.5	5.0	1.5	3.0	3.5	.5	2.0	2.0	.5	1.0
24	7.5	6.5	7.0	6.0	2.5	4.0	2.5	.5	1.0	.5	.5	.5
25	8.0	6.5	7.0	5.0	1.5	3.0	3.0	.5	1.0	1.5	.5	.5
26	11.0	7.0	8.5	3.5	1.0	2.5	4.0	.5	2.0	1.0	.5	.5
27	12.0	6.0	8.5	2.5	.0	2.0	5.0	1.5	3.0	1.5	.5	1.0
28	12.5	8.5	10.5	2.5	1.0	2.0	5.0	2.0	3.5	3.0	1.0	2.0
29	12.5	8.0	10.0	4.0	1.5	2.5	3.5	.5	1.5	2.5	.5	1.5
30	10.0	5.5	7.5	3.0	.5	1.5	3.0	1.0	2.0	3.0	1.0	2.0
31	9.5	6.0	7.5	---	---	---	2.5	.5	1.5	3.5	.5	2.0
MONTH	17.5	5.5	10.8	11.5	.0	5.7	6.5	.5	2.3	3.5	.0	1.2
	FEBRUARY			MARCH			APRIL			MAY		
1	4.5	2.5	3.5	.5	.0	.5	6.5	2.5	4.5	12.0	8.5	10.0
2	4.0	2.0	3.0	.5	.5	.5	12.5	2.0	7.0	15.0	7.5	11.0
3	4.0	1.5	3.0	1.0	.5	.5	12.5	3.5	8.0	14.5	7.5	11.0
4	2.0	.5	1.0	4.5	.5	2.5	7.5	.5	3.0	17.0	9.0	12.0
5	.5	.5	.5	4.0	1.0	2.5	7.5	1.0	3.5	19.5	7.5	13.0
6	.5	.5	.5	2.5	.5	1.5	13.0	2.5	7.0	16.5	7.5	12.5
7	.5	.5	.5	1.5	.5	1.0	7.0	4.5	6.0	19.0	10.5	14.5
8	.5	.5	.5	1.0	.0	.5	8.5	5.0	6.5	14.5	8.5	11.5
9	1.0	.5	.5	.5	.0	.5	6.5	3.0	4.5	12.5	8.0	9.5
10	1.0	.5	.5	6.0	.5	2.5	4.0	2.0	3.0	13.5	9.0	11.0
11	.5	.0	.0	5.5	.5	2.5	6.0	3.0	4.5	19.5	7.5	13.0
12	.0	.0	.0	3.5	1.0	2.0	6.5	4.0	5.0	18.5	9.0	13.5
13	.0	.0	.0	6.5	2.5	4.5	14.5	3.0	8.0	13.0	11.5	12.0
14	.0	.0	.0	7.0	4.5	6.0	15.0	4.5	9.5	15.0	10.5	12.5
15	.5	.0	.5	12.5	4.5	8.0	9.0	5.5	7.0	20.5	8.0	13.5
16	.5	.5	.5	12.5	4.0	8.0	12.5	6.0	9.0	22.0	11.5	16.0
17	.5	.5	.5	12.5	6.5	9.0	13.5	7.5	10.0	21.0	9.5	15.0
18	1.5	.5	1.0	7.0	4.5	5.0	9.5	6.5	8.0	18.5	9.0	13.5
19	3.0	1.5	2.0	9.0	4.5	6.5	15.5	5.5	9.5	21.0	9.0	14.5
20	4.0	.5	2.0	7.0	4.0	5.0	8.5	5.0	6.5	20.5	11.5	15.5
21	2.0	.5	1.0	10.5	3.5	6.5	7.5	3.5	5.5	21.0	9.5	15.0
22	4.0	.5	2.0	11.0	2.5	6.5	15.5	3.5	9.0	15.5	10.5	13.0
23	5.0	1.0	2.5	12.0	6.0	8.5	16.5	5.0	10.0	14.5	10.5	12.5
24	4.5	.5	2.0	13.0	3.0	7.5	10.0	6.5	8.0	19.0	8.0	13.5
25	4.5	1.0	3.0	7.0	5.0	6.0	13.5	5.0	8.5	21.5	10.0	15.5
26	2.0	.5	1.0	9.5	4.5	6.0	10.0	6.5	8.5	17.5	11.0	14.5
27	6.5	1.0	3.0	6.0	3.0	4.0	14.5	6.0	10.0	14.0	11.0	12.0
28	4.0	.0	1.5	7.5	3.0	5.0	18.0	6.5	12.0	12.0	10.5	11.5
29	---	---	---	8.5	3.5	6.0	13.5	8.5	11.0	20.5	9.5	14.5
30	---	---	---	7.0	4.0	5.5	13.0	8.5	10.5	23.5	10.5	16.5
31	---	---	---	8.0	3.5	5.0	---	---	---	23.0	11.5	17.0
MONTH	6.5	.0	1.3	13.0	.0	4.4	18.0	.5	7.4	23.5	7.5	13.2

05378183 JOOS VALLEY CREEK NEAR FOUNTAIN CITY, WI--CONTINUED

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	19.5	14.5	16.5	21.0	12.0	16.5	24.0	16.0	19.5	22.5	17.0	19.5
2	22.0	13.5	17.5	23.5	12.0	17.5	23.0	15.5	19.0	22.5	16.5	19.5
3	26.0	13.0	19.0	24.5	14.5	19.0	25.5	18.0	21.5	23.5	17.5	20.5
4	25.0	14.5	19.5	21.0	17.5	19.0	22.0	18.5	20.0	24.0	18.0	21.0
5	25.0	15.5	20.0	22.5	16.0	18.5	23.5	16.5	20.0	23.0	17.5	20.5
6	24.0	16.0	19.5	18.0	14.5	16.0	22.0	17.5	19.5	23.5	19.0	21.0
7	22.0	14.5	18.0	24.0	12.5	17.5	23.5	17.0	20.0	21.0	15.5	17.5
8	14.5	11.0	13.0	22.5	14.0	18.0	25.0	18.0	21.0	18.5	12.5	15.5
9	19.0	12.0	15.0	24.5	16.0	20.0	21.0	18.5	20.0	18.5	12.0	15.5
10	16.5	13.5	15.0	26.0	15.5	20.0	26.0	17.5	20.5	18.0	13.0	15.5
11	21.0	11.0	15.5	27.5	17.5	22.0	26.0	18.5	21.5	19.0	13.0	16.0
12	23.5	11.0	16.5	28.0	18.5	22.5	27.0	19.5	22.5	19.0	14.5	17.0
13	23.5	12.0	17.5	31.0	20.0	25.0	25.5	19.5	22.0	20.5	15.0	17.5
14	25.0	14.0	18.5	30.5	21.0	25.5	24.0	20.5	22.0	18.0	14.0	16.5
15	26.0	14.0	20.0	25.5	20.5	22.5	23.0	18.5	20.5	18.0	13.0	15.5
16	27.0	16.0	21.0	23.0	18.5	20.0	21.0	18.5	19.5	20.5	16.0	17.5
17	29.5	17.5	23.0	24.0	17.0	20.0	24.0	18.0	21.0	18.0	12.5	15.5
18	29.0	18.0	23.0	24.5	15.5	20.0	25.5	20.0	22.5	16.5	13.5	15.0
19	28.5	17.0	22.5	21.5	15.5	18.0	25.0	21.0	23.0	15.0	12.5	13.5
20	29.0	17.0	22.5	24.5	16.0	20.0	24.0	17.5	21.0	12.5	10.5	11.5
21	29.0	17.0	23.0	25.0	15.0	20.0	25.0	17.5	21.5	11.5	9.5	10.5
22	29.0	18.5	23.0	24.5	17.5	21.0	25.5	18.0	22.0	11.5	8.0	9.5
23	28.5	18.0	23.0	26.5	17.0	21.5	25.5	19.5	22.5	12.0	7.0	9.5
24	25.0	18.0	21.0	27.5	17.0	21.5	23.5	19.5	21.0	10.0	9.0	9.5
25	27.5	16.5	21.0	26.5	17.5	21.5	24.5	17.5	20.5	14.5	9.5	11.5
26	26.5	17.0	21.0	25.5	17.5	21.5	23.0	18.5	21.0	16.0	10.0	13.0
27	21.0	18.0	19.0	21.0	17.5	19.0	21.5	19.5	20.0	16.5	10.5	13.5
28	23.0	16.5	19.0	27.0	15.5	20.5	21.5	18.5	20.0	17.0	11.5	14.5
29	20.0	16.5	18.0	27.0	16.5	21.5	23.5	19.0	21.0	15.0	13.0	14.0
30	18.5	14.0	16.0	29.0	17.0	22.5	24.5	19.5	22.0	17.5	14.5	15.5
31	---	---	---	23.5	18.5	21.5	23.0	19.5	21.5	---	---	---
MONTH	29.5	11.0	19.2	31.0	12.0	20.3	27.0	15.5	21.0	24.0	7.0	15.4

WAUMANDEE CREEK BASIN
05378183 JOOS VALLEY CREEK NEAR FOUNTAIN CITY, WI--CONTINUED

SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED(TONS PER DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	.21	.24	.30	---	---	---	---	---	.06	.05	.08
2	.16	.20	.25	.29	---	---	---	---	---	.06	.04	.08
3	.16	.20	.25	.27	---	---	---	---	---	.06	.04	.08
4	.15	.20	.26	.29	---	---	---	---	---	.06	.04	.08
5	.14	.20	.29	.29	---	---	---	---	---	.07	.04	.07
6	.14	.21	.28	.32	---	---	---	---	---	.07	.04	.08
7	.14	.21	.27	.33	---	---	---	---	---	.06	.04	.08
8	.15	.20	.27	.33	---	---	---	---	---	.06	.04	.07
9	.15	.20	.27	.33	---	---	---	---	---	.12	.04	.07
10	.14	.20	.27	.34	---	---	---	---	---	.06	.04	.08
11	.14	.20	.27	.34	---	---	---	---	---	.06	.04	.08
12	.14	.20	.28	.35	---	---	---	---	---	.06	.04	.08
13	.14	.21	.29	.36	---	---	---	---	---	.06	1610	.08
14	.14	.22	.29	.36	---	---	---	---	---	.06	4570	.07
15	.15	.22	.29	.35	---	---	---	---	---	.06	.82	.07
16	.14	.22	.29	.34	---	---	---	---	---	.17	.41	.07
17	3.6	.22	.30	.37	---	---	---	---	---	.06	.22	.06
18	1.1	.22	.30	.34	---	---	---	---	---	.06	.13	.06
19	.31	.23	.30	.33	---	---	---	---	---	.15	.71	.40
20	.30	.23	.31	.31	---	---	---	---	---	.10	.11	.07
21	.29	2.4	.31	.30	---	---	---	---	---	.06	.10	.06
22	.28	.26	.31	.30	---	---	---	---	---	.07	.10	.06
23	.28	.26	.32	.29	---	---	---	---	---	.06	.09	.06
24	.27	.26	.31	.27	---	---	---	---	---	.06	.09	.05
25	.26	.25	.32	.28	---	---	---	---	---	.06	.09	.05
26	.24	.24	.32	.28	---	---	---	---	---	.06	.20	.05
27	.24	.25	.33	.28	---	---	---	---	---	.06	.29	.05
28	.23	.27	.33	.28	---	---	---	---	---	.06	.09	.05
29	.23	.26	.32	.28	---	---	---	---	---	.05	.09	.05
30	.23	.25	.31	.28	---	---	---	---	---	.05	.08	.05
31	.22	---	.32	.29	---	---	---	---	---	.05	.08	---
TOTAL	10.42	8.90	9.07	9.67	---	---	---	---	---	2.16	6184.19	2.34

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.1	1.1	1.1	---	---	---	---	---	.45	.34	.75
2	1.4	1.0	1.1	1.1	---	---	---	---	---	.44	.35	.72
3	1.4	1.0	1.1	1.0	---	---	---	---	---	.44	.35	.69
4	1.3	1.0	1.2	1.1	---	---	---	---	---	.44	.34	.66
5	1.3	1.1	1.3	1.1	---	---	---	---	---	.52	.35	.62
6	1.3	1.1	1.2	1.2	---	---	---	---	---	.53	.35	.62
7	1.3	1.1	1.2	1.2	---	---	---	---	---	.48	.35	.57
8	1.3	1.1	1.2	1.2	---	---	---	---	---	.44	.33	.53
9	1.3	1.1	1.2	1.2	---	---	---	---	---	.99	.32	.51
10	1.3	1.1	1.1	1.2	---	---	---	---	---	.45	.34	.49
11	1.3	1.1	1.1	1.2	---	---	---	---	---	.43	.33	.47
12	1.3	1.1	1.2	1.2	---	---	---	---	---	.43	.33	.47
13	1.3	1.1	1.2	1.3	---	---	---	---	---	.42	2480	.47
14	1.3	1.1	1.2	1.3	---	---	---	---	---	.40	7350	.46
15	1.3	1.1	1.2	1.3	---	---	---	---	---	.39	8.1	.46
16	1.3	1.1	1.2	1.2	---	---	---	---	---	1.3	4.8	.47
17	13	1.1	1.2	1.3	---	---	---	---	---	.43	2.9	.47
18	6.3	1.1	1.2	1.2	---	---	---	---	---	.39	1.9	.47
19	1.4	1.1	1.2	1.2	---	---	---	---	---	1.2	4.4	2.7
20	1.3	1.2	1.2	1.1	---	---	---	---	---	.81	1.6	.57
21	1.3	9.1	1.2	1.1	---	---	---	---	---	.40	1.4	.54
22	1.3	1.3	1.2	1.1	---	---	---	---	---	.42	1.3	.52
23	1.3	1.2	1.2	1.1	---	---	---	---	---	.39	1.2	.51
24	1.3	1.2	1.2	1.0	---	---	---	---	---	.36	1.1	.50
25	1.2	1.2	1.2	1.0	---	---	---	---	---	.35	1.1	.50
26	1.2	1.1	1.2	1.1	---	---	---	---	---	.35	1.5	.50
27	1.1	1.2	1.3	1.1	---	---	---	---	---	.37	2.0	.50
28	1.1	1.2	1.3	1.1	---	---	---	---	---	.37	1.1	.49
29	1.1	1.2	1.2	1.1	---	---	---	---	---	.34	.99	.49
30	1.1	1.1	1.2	1.1	---	---	---	---	---	.34	.91	.58
31	1.1	---	1.2	1.1	---	---	---	---	---	.34	.82	---
TOTAL	56.2	41.6	37.0	35.6	---	---	---	---	---	15.41	9871.20	18.30

05378183 JOOS VALLEY CREEK NEAR FOUNTAIN CITY, 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 July 12, 1990. Rainfall estimated to be 0.00 for Nov. 30, Dec. 8, 15-16, Jan. 6, 9, and Mar. 6, 7, 13 because recorded precipitation interpreted as collector snowmelt.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 4.26 in., Aug. 13, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 4.26 in., Aug. 13.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00
2	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.06	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.22	.06	.00
5	.00	.00	.00	.00	.00	.07	.00	.00	.00	.27	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.12	.00	.09
7	.03	.00	.00	.00	.00	.00	.06	.00	.03	.00	.00	.05
8	.02	.00	.00	.00	.00	.00	.00	.32	.00	.20	.00	.00
9	.02	.00	.00	.00	.00	.00	.00	.06	.00	.61	.01	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.08	.00	.02	.00
11	.00	.00	.00	.00	.00	.00	.63	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00
13	.00	.26	.00	.00	.00	.00	.01	.48	.00	.00	4.26	.00
14	.00	.00	.00	.00	.00	.00	.00	.02	.00	.00	.15	.00
15	.00	.00	.00	.00	.00	.00	.03	.00	.00	.02	.01	.00
16	.06	.00	.00	.00	.00	.00	.15	.00	.00	.49	.20	.01
17	.87	.03	.00	.15	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.01	.67	.00	.00	.00	.00	.22
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.66	.40	.94
20	.00	.45	.00	.00	.01	.49	.19	.00	.00	.00	.00	.00
21	.00	.35	.00	.00	.00	.00	.54	.00	.00	.00	.00	.01
22	.15	.00	.00	.00	.00	.00	.00	.14	.00	.12	.00	.00
23	.00	.00	.00	.00	.00	.10	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.16	.00	.06	.00	.00	.08
25	.00	.00	.00	.00	.00	.00	.00	.00	.92	.00	.00	.00
26	.00	.00	.00	.00	.00	.08	.00	.00	.04	.00	.83	.00
27	.00	.16	.00	.00	.00	.71	.01	.96	.10	.07	.00	.00
28	.00	.00	.00	.00	.00	.06	.00	.42	.06	.00	.01	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.06	.11
30	.00	.00	.01	.00	---	.00	.00	.00	.00	.00	.00	.09
31	.00	---	.00	.00	---	.00	---	.00	---	.09	.00	---
TOTAL	1.22	1.25	0.01	0.15	0.01	1.52	2.45	2.40	1.34	2.87	6.06	1.60

WAUMANDEE CREEK BASIN

05378185 EAGLE CREEK, AT COUNTY HIGHWAY G, NEAR FOUNTAIN CITY, WI

LOCATION.--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 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1990 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 770 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Ice-affected periods, Dec. 11, 12, Jan. 2, 5, 6, 24, 26, Feb. 5-8, 11, and Mar. 1-3, 8-10. Records good except those for ice-affected periods, which are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	9.3	9.7	9.0	7.9	7.4	9.9	11	8.9	7.0	6.6	7.0
2	10	9.3	9.9	9.0	7.9	7.4	9.6	10	8.5	7.0	6.6	6.8
3	10	9.3	10	8.8	7.9	8.4	9.6	10	8.2	6.9	6.6	6.8
4	10	9.3	11	8.2	7.6	7.6	8.9	9.9	8.0	7.0	6.6	6.8
5	10	9.1	11	8.2	7.6	7.6	8.9	9.9	7.9	7.8	6.6	6.8
6	9.9	9.1	10	8.2	7.6	7.3	9.0	9.9	7.9	7.9	6.6	7.0
7	10	9.1	9.7	8.3	7.4	7.5	8.8	9.7	7.8	7.4	6.6	6.8
8	9.7	9.1	9.6	8.3	7.4	7.4	8.8	11	7.6	7.2	6.5	6.6
9	9.6	9.1	9.6	8.3	7.2	7.0	8.8	11	7.6	8.9	6.4	6.6
10	9.3	9.1	9.3	8.3	7.3	7.6	8.6	10	7.7	7.6	6.7	6.6
11	9.3	9.1	9.0	8.3	7.4	103	11	9.3	7.6	7.4	6.4	6.6
12	9.2	9.1	9.0	8.3	7.5	77	14	9.2	7.4	7.3	6.4	6.6
13	9.3	9.6	9.0	8.3	7.2	35	10	10	7.2	7.2	28	6.6
14	9.3	9.6	8.8	8.3	7.2	13	9.9	11	7.2	7.0	192	6.4
15	9.3	9.1	9.2	8.3	7.4	11	9.6	9.5	7.2	7.0	12	6.4
16	9.3	9.1	9.3	8.3	7.4	10	9.7	9.0	7.1	9.1	11	6.5
17	14	9.2	9.3	8.7	7.6	9.8	10	8.9	7.0	7.5	10	6.3
18	13	9.1	9.3	8.5	7.7	9.4	14	8.5	6.9	7.1	9.6	6.2
19	10	9.1	9.4	8.3	8.4	9.3	12	8.4	6.9	8.5	11	9.5
20	10	9.6	9.6	8.2	11	17	12	8.2	6.8	7.9	9.0	7.4
21	9.9	14	9.6	8.1	8.4	11	18	8.0	6.7	7.3	8.5	6.9
22	10	11	9.6	8.1	7.9	10	13	8.3	6.7	7.4	8.3	6.6
23	10	10	9.6	8.0	7.8	10	12	8.5	6.7	7.2	8.1	6.6
24	9.8	10	9.5	8.0	7.8	9.7	12	8.1	6.8	6.9	8.1	6.6
25	9.6	9.6	9.3	7.8	7.9	9.6	11	8.1	8.0	6.8	7.9	6.8
26	9.3	9.6	9.3	8.0	7.7	9.8	11	8.0	7.9	6.9	8.9	6.8
27	9.3	10	9.4	7.8	7.6	19	11	12	7.7	7.4	9.6	6.6
28	9.5	10	9.6	7.8	7.4	13	11	13	7.7	7.3	8.5	6.5
29	9.4	10	9.6	7.6	---	11	11	11	7.6	6.8	8.3	6.6
30	9.3	9.8	9.6	7.6	---	11	11	9.4	7.2	6.7	7.9	7.3
31	9.3	---	9.6	7.7	---	10	---	9.0	---	6.6	7.2	---
TOTAL	306.6	288.4	296.4	254.6	217.1	493.8	324.1	297.8	224.4	228.0	452.5	203.6
MEAN	9.89	9.61	9.56	8.21	7.75	15.9	10.8	9.61	7.48	7.35	14.6	6.79
MAX	14	14	11	9.0	11	103	18	13	8.9	9.1	192	9.5
MIN	9.2	9.1	8.8	7.6	7.2	7.0	8.6	8.0	6.7	6.6	6.4	6.2
CFSM	.69	.67	.67	.57	.54	1.11	.76	.67	.52	.51	1.02	.47
IN.	.80	.75	.77	.66	.56	1.28	.84	.77	.58	.59	1.18	.53

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1995, BY WATER YEAR (WY)

	MEAN	8.55	9.91	8.41	7.23	8.37	11.7	13.7	12.5	11.0	10.0	12.5	10.2
MAX	11.9	12.9	10.9	9.65	14.3	15.9	21.2	16.4	21.4	19.7	17.8	14.2	14.2
(WY)	1994	1992	1994	1994	1994	1995	1993	1991	1993	1993	1993	1993	1993
MIN	6.44	5.58	4.90	4.70	5.09	7.98	10.2	8.82	7.48	7.35	6.97	6.31	6.31
(WY)	1991	1991	1991	1991	1991	1991	1992	1992	1995	1995	1991	1991	1991

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1990 - 1995	
ANNUAL TOTAL	4123.1		3587.3		10.4	
ANNUAL MEAN	11.3		9.83		13.5	
HIGHEST ANNUAL MEAN					7.75	
LOWEST ANNUAL MEAN					1991	
HIGHEST DAILY MEAN	124	Feb 19	192	Aug 14	192	Aug 14 1995
LOWEST DAILY MEAN	7.2	Aug 9	6.2	Sep 18	3.9	Dec 3 1990
ANNUAL SEVEN-DAY MINIMUM	7.7	Jul 27	6.4	Sep 12	4.4	Jan 25 1991
INSTANTANEOUS PEAK FLOW			(a) 2400	Aug 14	(a) 2400	Aug 14 1995
INSTANTANEOUS PEAK STAGE			11.61	Aug 14	11.61	Aug 14 1995
INSTANTANEOUS LOW FLOW			(b) 4.8	Mar 8	(b) 1.7	Dec 3 1990
ANNUAL RUNOFF (CFSM)	.79		.69		.73	
ANNUAL RUNOFF (INCHES)	10.73		9.33		9.85	
10 PERCENT EXCEEDS	13		11		14	
50 PERCENT EXCEEDS	9.9		8.7		8.7	
90 PERCENT EXCEEDS	8.9		6.8		6.2	

(a) From rating curve extended above 380 ft³/s on basis of step-backwater method
 (b) Result of freezeup

05378185 EAGLE CREEK, AT COUNTY HIGHWAY G, NEAR FOUNTAIN CITY, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1990 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: July 1990 to current year.

DISSOLVED OXYGEN: July 1990 to September 1992 (discontinued).

SUSPENDED-SOLIDS DISCHARGE: July 1990 to current year.

TOTAL-PHOSPHORUS DISCHARGE: July 1990 to current year.

INSTRUMENTATION.--Water-quality sampler July 1990 to current year; continuous water-temperature recorder July 1990 to current year; dissolved-oxygen recorder July 1990 to September 1992.

REMARKS.--Chemical analyses by the Wisconsin State Laboratory of Hygiene. Suspended-sediment and particle-size analyses by U.S. Geological Survey Laboratory. Samples are point samples unless otherwise indicated. Water-quality sampling suspended from Feb. 1 to June 30, 1995.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum observed, 28.0°C, July 14, 1995; minimum observed, 0.0°C, on many days during 1991, 1992, 1993, 1994, and 1995 winter periods.

DISSOLVED OXYGEN: Maximum observed, 14.9 mg/L, Apr. 12; minimum observed, 4.2 mg/L, July 21, 1991.

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 4,750 tons, Aug. 14, 1995; minimum daily, 0.10 ton, Sept. 29-30, 1990 and Oct. 24-27, 1991.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 9,370 lb, Aug. 14, 1995; minimum daily, 0.74 lb., Jan. 25, 1991.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum observed, 28.0°C, July 14; minimum observed, 0.0°C, on many days during winter period.

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 4,750 tons, Aug. 14; minimum daily, 0.16 ton, Sept. 11-15.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 9,370 lb, Aug. 14; minimum daily, 1.5 lb, Sept. 17-18.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 1994										
*04...	1339	10	8.1	--	1700	37	0.033	0.084	--	--
17...	2150	39	7.8	--	--	1660	0.099	2.10	--	--
*18...	1057	12	8.0	--	74000	83	0.047	0.216	--	--
NOV										
*08...	1241	9.1	8.2	--	270	35	<0.027	0.072	--	--
DEC										
*05...	1307	10	7.9	--	400	41	0.040	0.080	--	--
JAN 1995										
*12...	0957	8.3	8.3	--	950	52	0.051	0.070	--	--
MAR										
*11...	1301	68	--	--	--	--	--	--	8840	62
*11...	1411	256	--	--	--	--	--	--	9130	79
11...	1505	359	--	--	--	--	--	--	11600	79
11...	1520	377	--	--	--	--	--	--	11600	72
11...	1705	335	--	--	--	--	--	--	6740	75
27...	0800	34	--	--	--	--	--	--	2100	92
JUL										
*10...	1334	7.6	8.3	1.4	4600	33	0.035	0.076	--	--
*24...	1333	7.0	8.4	1.4	2800	24	<0.027	0.071	--	--
AUG										
*07...	1341	6.6	8.4	1.1	3600	15	<0.027	0.075	--	--
13...	0815	23	7.8	--	--	1110	0.382	1.61	--	--
13...	2255	95	7.7	--	--	3720	0.337	3.45	--	--
13...	2325	210	7.6	--	--	5220	0.498	4.45	--	--
13...	2335	384	7.6	--	--	16000	0.698	10.5	--	--
13...	2345	530	7.6	--	--	18200	0.626	17.4	--	--
13...	2355	624	7.6	--	--	15900	0.489	14.9	15100	96
14...	0020	718	7.6	--	--	12200	0.324	12.4	12100	95
14...	0105	1200	7.6	--	--	11200	0.203	11.4	12000	90
14...	2126	14	7.9	4.1	--	1680	0.068	1.10	1680	77
*30...	1259	7.7	8.1	1.5	350	11	0.031	0.057	--	--
SEP										
*12...	1457	6.6	8.4	<1.0	2800	9	<0.027	0.046	--	--
*27...	1418	6.6	8.4	1.5	790	12	<0.027	0.044	--	--

* Equal-width increment (EWI) sample

WAUMANDEE CREEK BASIN

05378185 EAGLE CREEK, AT COUNTY HIGHWAY G, NEAR FOUNTAIN CITY, WI--CONTINUED

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	15.0	12.0	13.0	8.0	4.0	6.5	5.0	1.5	3.5	1.0	.0	.5
2	12.0	10.5	11.0	10.5	7.0	8.5	5.5	2.5	4.0	1.0	.0	.5
3	11.5	10.0	10.5	10.0	8.5	9.5	6.0	3.0	4.5	.5	.0	.0
4	12.5	10.5	11.5	8.5	8.0	8.0	6.0	5.0	5.5	.5	.0	.0
5	14.0	10.5	12.0	8.5	7.5	8.0	5.5	2.5	4.0	.0	.0	.0
6	15.0	10.5	12.5	8.5	6.5	7.5	3.0	1.5	2.0	1.0	.0	.5
7	15.0	12.0	13.5	10.0	6.0	8.0	3.5	1.5	2.5	.5	.0	.5
8	12.5	10.0	11.5	9.0	7.0	8.0	3.5	1.5	2.5	1.0	.0	.5
9	12.0	8.5	10.0	9.0	5.5	7.5	4.0	1.0	3.0	1.0	.0	.5
10	12.5	7.0	9.5	7.5	4.0	5.5	2.0	.0	1.0	2.0	1.0	1.5
11	12.5	7.0	9.5	8.0	4.0	6.0	.5	.0	.0	2.5	1.0	2.0
12	12.5	7.5	10.0	8.5	7.0	8.0	1.5	.0	.5	3.5	2.5	3.0
13	12.5	7.0	9.5	10.5	8.0	9.0	1.5	.0	.5	4.0	3.5	3.5
14	13.0	7.5	10.0	10.5	5.5	8.0	1.5	.0	1.0	3.5	3.0	3.5
15	12.0	10.5	11.5	7.0	3.5	5.5	2.0	.5	1.5	3.5	1.5	2.5
16	13.5	11.5	12.5	6.5	3.0	5.0	3.5	2.0	3.0	3.5	2.0	2.5
17	14.0	12.5	13.0	8.5	5.0	7.0	4.5	2.5	3.5	3.0	2.0	2.5
18	16.0	12.5	14.5	7.5	4.5	5.5	3.0	1.5	2.5	3.0	1.0	2.0
19	12.5	11.0	12.0	6.0	4.0	5.0	3.0	1.0	2.0	3.0	1.0	2.0
20	13.5	10.0	11.5	7.0	5.0	6.0	4.0	2.0	3.0	2.5	1.0	2.0
21	14.0	8.5	10.5	7.0	3.0	6.0	5.5	2.0	4.0	2.5	1.0	1.5
22	12.0	9.0	11.0	4.0	1.5	3.0	5.0	3.0	4.0	2.5	.5	1.5
23	9.5	8.0	9.0	5.0	2.0	3.0	3.5	1.0	2.0	2.5	.0	1.5
24	8.0	7.0	7.5	6.0	3.0	4.0	2.5	.5	1.5	1.0	.0	.5
25	8.0	6.5	7.5	4.5	2.0	3.5	3.0	.5	1.5	2.5	.0	1.0
26	10.0	7.0	8.0	4.0	1.5	3.0	4.0	.5	2.0	2.0	.0	1.0
27	11.0	6.0	8.5	3.0	1.0	2.5	5.0	2.0	3.5	2.5	.5	1.5
28	12.0	8.5	10.0	3.0	2.0	2.5	4.5	2.0	4.0	3.5	1.5	2.0
29	11.5	8.0	10.0	4.0	2.0	3.0	3.5	1.0	2.0	3.0	1.0	2.0
30	9.5	5.5	7.5	3.0	.5	2.0	3.0	1.5	2.5	3.5	1.0	2.0
31	9.0	6.0	7.5	---	---	---	3.0	1.0	2.0	4.5	1.0	2.5
MONTH	16.0	5.5	10.5	10.5	.5	5.8	6.0	.0	2.5	4.5	.0	1.5
FEBRUARY			MARCH			APRIL			MAY			
1	5.0	2.5	3.5	1.5	.0	.5	6.5	3.0	4.5	11.5	8.0	9.5
2	4.5	2.0	3.0	2.0	.0	.5	11.5	2.5	6.5	14.5	7.5	10.5
3	4.5	1.5	3.5	3.5	.0	1.5	12.0	4.0	8.0	14.0	7.5	10.5
4	2.0	.0	1.0	5.5	1.0	3.0	7.0	.0	3.5	16.5	9.0	12.0
5	1.0	.0	.5	4.0	2.0	3.0	7.0	1.5	4.0	18.5	7.5	12.5
6	1.0	.0	.5	3.0	.0	2.0	12.0	3.0	7.0	16.0	7.5	12.0
7	1.0	.0	.5	3.5	.5	1.5	7.0	5.0	6.0	17.5	10.5	13.5
8	1.0	.0	.5	3.5	.0	1.0	8.5	5.0	6.5	14.0	9.0	11.5
9	3.0	1.0	2.0	1.5	.0	.5	6.5	3.5	5.0	12.0	8.0	9.5
10	2.0	.0	1.5	6.0	.5	3.0	4.5	3.0	3.5	13.0	9.0	10.5
11	.5	.0	.0	5.0	.5	2.5	6.0	3.5	4.5	19.0	7.5	13.0
12	.5	.0	.5	3.5	1.5	2.5	6.0	4.5	5.0	18.0	9.0	13.5
13	.5	.0	.5	7.0	3.0	5.0	13.5	3.5	8.0	13.0	11.5	12.0
14	1.0	.0	.5	7.0	5.0	6.0	14.0	4.5	9.0	14.5	10.5	12.5
15	2.0	.5	1.5	12.0	4.5	7.5	9.0	5.5	7.0	19.0	8.0	13.0
16	2.0	.0	1.0	12.0	4.5	8.0	12.0	6.0	8.5	21.0	11.5	15.5
17	3.0	.5	1.5	12.0	6.5	8.5	12.5	7.5	10.0	19.5	9.5	14.0
18	3.5	2.0	2.5	7.0	4.5	5.0	9.0	7.0	8.0	17.0	9.0	13.0
19	5.0	2.0	3.0	8.5	5.0	6.5	14.5	5.5	9.0	20.0	9.0	14.0
20	4.5	1.0	2.5	7.0	4.0	5.5	8.5	5.0	7.0	19.5	11.0	14.5
21	3.0	.5	1.5	9.5	4.0	6.0	7.0	3.5	5.5	20.0	9.5	14.0
22	4.5	1.0	2.5	10.0	3.0	6.5	14.5	3.5	8.5	15.0	10.0	12.5
23	5.0	2.0	3.0	11.0	6.0	8.0	15.5	5.0	9.5	13.5	10.5	12.0
24	4.5	1.0	2.5	12.0	3.5	7.5	9.5	6.5	8.0	17.5	8.5	12.5
25	4.5	2.0	3.5	7.0	5.0	6.0	12.5	5.0	8.5	19.5	10.0	14.5
26	2.5	1.0	2.0	8.5	4.5	6.0	10.0	6.5	8.0	17.0	10.5	14.0
27	6.0	1.5	3.5	6.0	3.5	4.0	13.5	6.0	9.5	14.0	11.5	12.0
28	4.0	.0	2.0	7.0	3.0	5.0	17.0	6.5	11.5	12.0	10.5	11.5
29	---	---	---	8.0	4.0	6.0	13.0	8.5	11.0	18.5	10.0	14.0
30	---	---	---	6.5	4.0	5.5	12.0	8.5	10.5	21.5	10.0	15.5
31	---	---	---	7.5	4.0	5.0	---	---	---	21.5	11.5	16.5
MONTH	6.0	.0	1.8	12.0	.0	4.5	17.0	.0	7.4	21.5	7.5	12.8

WAUMANDEE CREEK BASIN

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05378185 EAGLE CREEK, AT COUNTY HIGHWAY G, NEAR FOUNTAIN CITY, WI--CONTINUED

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	18.5	14.0	16.0	19.0	12.0	15.5	22.0	15.0	18.5	21.0	16.0	18.5
2	20.5	13.0	16.5	21.5	11.5	16.0	20.5	14.5	17.5	21.0	16.0	18.5
3	23.5	13.0	18.0	22.0	13.5	18.0	23.5	17.0	19.5	21.5	16.5	19.5
4	23.0	14.0	18.0	19.5	16.5	18.0	20.0	17.0	18.5	22.0	17.0	19.5
5	23.5	15.0	18.5	21.0	15.5	18.0	21.5	16.0	18.5	21.0	17.0	19.5
6	22.5	15.5	18.5	17.5	14.5	15.5	20.5	16.5	18.0	22.0	18.5	20.0
7	21.0	14.5	17.5	22.0	12.0	16.5	21.5	16.0	18.5	20.0	15.0	17.0
8	14.5	11.0	13.0	20.5	13.5	16.5	23.0	17.0	20.0	17.0	12.0	14.5
9	17.5	11.5	14.0	22.0	15.5	18.5	20.0	18.0	18.5	17.0	12.0	14.5
10	15.5	13.0	14.5	23.5	15.0	18.5	23.5	16.5	19.0	17.0	13.0	15.0
11	19.5	10.5	15.0	25.0	16.5	20.0	23.5	17.0	20.0	18.0	12.5	15.5
12	21.5	10.5	15.5	25.5	17.0	20.5	24.5	18.0	21.0	18.0	14.0	16.0
13	21.5	11.5	16.5	27.5	18.0	22.5	24.0	19.0	21.0	19.5	14.5	17.0
14	22.5	13.5	17.5	28.0	19.5	23.5	22.5	20.0	21.5	17.0	14.0	15.5
15	24.0	13.5	18.5	23.0	19.0	21.0	21.5	18.0	19.5	17.0	12.5	14.5
16	25.0	15.0	19.5	21.0	17.5	19.0	19.5	18.0	18.5	19.5	15.5	17.0
17	27.0	16.5	21.5	22.0	16.0	18.5	22.0	17.5	19.5	17.0	12.5	15.0
18	26.5	17.0	21.5	22.5	15.0	18.5	23.0	19.0	21.0	15.5	13.0	14.5
19	26.0	16.5	21.0	20.0	15.0	17.0	23.5	20.0	21.5	14.5	12.5	13.5
20	26.0	16.0	21.0	22.0	15.5	18.5	22.0	16.5	19.5	12.5	10.5	11.5
21	26.5	16.5	21.0	22.5	14.5	18.5	22.5	16.5	20.0	11.5	9.5	10.5
22	27.0	17.5	21.5	22.0	16.5	19.5	23.0	17.5	20.5	11.0	8.5	10.0
23	26.0	17.0	21.0	23.5	15.5	19.5	23.5	19.0	21.0	11.5	7.5	9.5
24	23.5	17.0	20.0	24.5	16.0	20.0	22.0	18.5	20.0	10.0	9.5	10.0
25	25.5	16.0	19.5	24.0	16.0	20.0	22.5	17.0	19.5	14.0	9.5	11.5
26	23.5	16.0	19.5	23.0	16.5	19.5	21.5	18.0	20.0	15.0	10.5	13.0
27	20.0	17.0	18.0	19.5	16.5	17.5	20.0	18.5	19.5	15.5	10.5	13.0
28	20.5	16.0	18.0	24.0	14.5	19.0	20.5	17.5	19.0	16.0	11.5	14.0
29	18.5	16.0	17.0	24.0	15.5	19.5	21.5	18.5	20.0	14.5	13.0	14.0
30	17.5	13.5	15.5	26.0	16.0	20.5	23.0	18.5	21.0	16.5	14.5	15.5
31	---	---	---	21.5	17.5	20.0	22.0	18.5	20.0	---	---	---
MONTH	27.0	10.5	18.1	28.0	11.5	18.8	24.5	14.5	19.7	22.0	7.5	14.9

WAUMANDEE CREEK BASIN

05378185 EAGLE CREEK, AT COUNTY HIGHWAY G, NEAR FOUNTAIN CITY, WI--CONTINUED

SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED(TONS PER DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	.88	1.0	1.2	---	---	---	---	---	.64	.33	.20
2	1.2	.88	1.1	1.2	---	---	---	---	---	.63	.32	.19
3	1.1	.88	1.1	1.2	---	---	---	---	---	.63	.31	.19
4	1.0	.88	1.2	1.1	---	---	---	---	---	.64	.30	.19
5	1.0	.86	1.2	1.1	---	---	---	---	---	.71	.29	.18
6	.99	.86	1.1	1.1	---	---	---	---	---	.71	.28	.19
7	1.0	.86	1.1	1.1	---	---	---	---	---	.66	.27	.18
8	.96	.86	1.1	1.1	---	---	---	---	---	.64	.27	.17
9	.95	.86	1.1	1.1	---	---	---	---	---	1.1	.26	.17
10	.93	.87	1.1	1.2	---	---	---	---	---	.68	.27	.17
11	.93	.87	1.0	1.2	---	---	---	---	---	.64	.26	.16
12	.92	.88	1.0	1.2	---	---	---	---	---	.62	.26	.16
13	.93	.94	1.0	1.2	---	---	---	---	---	.60	542	.16
14	.93	.94	1.0	1.2	---	---	---	---	---	.57	4750	.16
15	.93	.90	1.1	1.2	---	---	---	---	---	.55	12	.16
16	.93	.90	1.1	1.2	---	---	---	---	---	1.2	5.0	.17
17	20	.91	1.1	1.2	---	---	---	---	---	.57	3.8	.17
18	9.2	.91	1.1	1.2	---	---	---	---	---	.53	2.9	.17
19	.99	.91	1.1	1.1	---	---	---	---	---	.97	5.0	1.4
20	.96	.97	1.2	1.1	---	---	---	---	---	.56	1.9	.21
21	.93	17	1.2	1.1	---	---	---	---	---	.51	1.4	.20
22	.97	2.9	1.2	1.1	---	---	---	---	---	.50	1.2	.19
23	.96	1.1	1.2	1.1	---	---	---	---	---	.48	.93	.20
24	.93	1.1	1.2	1.1	---	---	---	---	---	.45	.77	.20
25	.91	1.0	1.2	1.1	---	---	---	---	---	.43	.62	.21
26	.88	1.0	1.2	1.1	---	---	---	---	---	.42	.57	.21
27	.88	1.1	1.2	1.1	---	---	---	---	---	.43	1.4	.21
28	.90	1.1	1.2	1.1	---	---	---	---	---	.42	.38	.21
29	.88	1.1	1.2	1.0	---	---	---	---	---	.37	.30	.22
30	.88	1.1	1.2	1.0	---	---	---	---	---	.35	.24	.25
31	.88	---	1.3	1.0	---	---	---	---	---	.34	.21	---
TOTAL	57.25	46.32	35.1	35.0	---	---	---	---	---	18.55	5334.04	6.85

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	3.6	4.1	3.5	---	---	---	---	---	2.9	2.6	2.1
2	5.1	3.6	4.2	3.5	---	---	---	---	---	2.8	2.6	2.0
3	4.8	3.6	4.3	3.5	---	---	---	---	---	2.8	2.6	2.0
4	4.6	3.6	4.5	3.2	---	---	---	---	---	2.9	2.6	1.9
5	4.6	3.5	4.6	3.2	---	---	---	---	---	3.2	2.7	1.9
6	4.5	3.5	4.4	3.2	---	---	---	---	---	3.2	2.7	1.9
7	4.5	3.5	4.2	3.2	---	---	---	---	---	3.0	2.7	1.8
8	4.4	3.5	4.1	3.2	---	---	---	---	---	2.9	2.7	1.8
9	4.3	3.5	4.1	3.2	---	---	---	---	---	5.7	2.6	1.7
10	4.2	3.6	4.0	3.2	---	---	---	---	---	3.1	2.7	1.7
11	4.2	3.6	3.8	3.1	---	---	---	---	---	3.0	2.6	1.7
12	4.2	3.6	3.8	3.1	---	---	---	---	---	3.0	2.6	1.6
13	4.2	3.8	3.8	3.1	---	---	---	---	---	2.9	972	1.6
14	4.2	3.8	3.7	3.1	---	---	---	---	---	2.8	9370	1.6
15	4.2	3.6	3.8	3.1	---	---	---	---	---	2.8	12	1.6
16	4.2	3.6	3.9	3.1	---	---	---	---	---	5.9	4.7	1.6
17	55	3.7	3.9	3.3	---	---	---	---	---	3.0	4.3	1.5
18	32	3.7	3.9	3.2	---	---	---	---	---	2.8	3.9	1.5
19	4.1	3.7	3.9	3.1	---	---	---	---	---	5.0	9.9	6.7
20	4.0	4.7	3.9	3.1	---	---	---	---	---	3.1	3.5	3.5
21	3.8	49	3.9	3.1	---	---	---	---	---	2.9	3.2	1.7
22	4.0	11	3.9	3.1	---	---	---	---	---	2.8	3.0	1.6
23	4.0	4.2	3.9	3.0	---	---	---	---	---	2.8	2.9	1.6
24	3.8	4.2	3.8	3.0	---	---	---	---	---	2.7	2.8	1.6
25	3.7	4.0	3.8	3.0	---	---	---	---	---	2.6	2.7	1.6
26	3.6	4.0	3.7	3.0	---	---	---	---	---	2.6	5.7	1.6
27	3.6	4.2	3.8	3.0	---	---	---	---	---	3.4	6.9	1.6
28	3.7	4.3	3.8	3.0	---	---	---	---	---	3.4	2.7	1.6
29	3.6	4.2	3.8	2.9	---	---	---	---	---	2.6	2.6	1.6
30	3.6	4.1	3.8	2.9	---	---	---	---	---	2.6	2.4	1.8
31	3.6	---	3.8	2.9	---	---	---	---	---	2.6	2.2	---
TOTAL	207.8	166.5	122.9	97.1	---	---	---	---	---	97.8	10449.1	58.0

05378185 EAGLE CREEK, AT COUNTY HIGHWAY G, NEAR FOUNTAIN CITY, 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 July 12, 1990. Rainfall estimated to be 0.00 for Dec. 1, 8, 15-16, Jan. 9, Mar. 6-7, and Apr. 10 because recorded precipitation interpreted as collector snowmelt.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 4.85 in., Aug. 13, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 4.85 in., Aug. 13.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00
2	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.01	.00	.00	.00	.00	.00	.00	.00	.00	.20	.06	.00
5	.00	.00	.00	.00	.00	.16	.00	.00	.00	.36	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.02	.14	.00	.07
7	.02	.00	.00	.00	.00	.00	.08	.00	.03	.00	.01	.05
8	.02	.00	.00	.00	.00	.00	.00	.54	.00	.13	.00	.00
9	.04	.00	.00	.00	.00	.00	.00	.08	.00	.80	.02	.00
10	.00	.00	.00	.00	.00	.00	.00	.01	.08	.00	.01	.00
11	.00	.00	.00	.00	.00	.00	.74	.00	.02	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00
13	.00	.23	.00	.00	.00	.00	.00	.54	.00	.00	4.85	.00
14	.00	.00	.00	.00	.00	.00	.00	.02	.00	.00	.16	.00
15	.00	.00	.00	.00	.00	.00	.03	.00	.00	.02	.01	.00
16	.07	.00	.00	.00	.00	.00	.17	.00	.00	.42	.16	.00
17	.88	.03	.00	.18	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.01	.70	.00	.00	.00	.00	.22
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.67	.42	.97
20	.00	.48	.00	.00	.01	.52	.29	.00	.00	.00	.00	.00
21	.00	.40	.00	.00	.00	.00	.55	.00	.00	.00	.00	.02
22	.16	.00	.00	.00	.00	.00	.00	.14	.00	.16	.00	.01
23	.00	.00	.00	.00	.00	.12	.00	.01	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.15	.00	.09	.00	.00	.08
25	.01	.00	.00	.00	.00	.00	.00	.00	.92	.00	.00	.00
26	.00	.00	.00	.00	.00	.13	.00	.00	.01	.00	1.13	.00
27	.00	.00	.00	.00	.00	.81	.01	1.19	.10	.06	.00	.00
28	.00	.00	.00	.00	.00	.16	.00	.38	.04	.00	.04	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.07	.10
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.08
31	.00	---	.00	.00	---	.00	---	.00	---	.08	.00	---
TOTAL	1.29	1.14	0.00	0.18	0.01	1.91	2.73	2.91	1.36	3.04	6.94	1.60

(a) From floodmark
(b) Result of ice jam

TREMPEALEAU RIVER BASIN
05379500 TREMPEALEAU RIVER AT DODGE, WI

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LOCATION.--Lat 44°07'55", long 91°33'14", in SE 1/4 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.--Estimated daily discharges: Ice-affected period, Dec. 11 to Mar. 12. Records good except those for ice-affected period, which is fair (see page 11). Gage-height telemeter and data-collection platform at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	821	523	539	440	380	330	826	585	627	414	350	573
2	747	513	546	410	370	310	750	577	566	397	353	545
3	700	519	547	400	360	330	677	565	533	383	351	520
4	659	520	561	370	350	340	637	555	509	377	346	512
5	638	521	591	390	330	350	608	547	493	379	346	501
6	623	522	603	400	320	350	579	537	481	390	342	497
7	617	522	571	420	330	340	567	528	470	417	347	493
8	610	511	542	410	330	340	567	535	465	418	358	479
9	592	511	528	400	340	330	561	637	458	426	354	471
10	571	507	522	400	350	320	555	849	452	404	351	463
11	560	504	500	400	340	700	558	809	452	387	348	455
12	545	504	470	400	330	1600	762	693	443	373	349	445
13	543	510	480	400	340	2870	907	620	435	367	433	447
14	540	543	490	400	330	3130	795	750	426	359	1380	442
15	534	550	490	400	330	2760	691	828	418	354	2680	436
16	534	535	500	400	330	2010	631	733	409	378	3930	436
17	546	521	500	410	340	1050	624	627	400	403	3190	431
18	791	524	500	420	350	796	669	565	394	379	2490	428
19	878	523	490	400	350	706	878	536	384	371	1840	479
20	745	518	490	390	360	795	932	516	375	435	1400	578
21	649	610	480	380	370	1180	974	499	370	454	1430	552
22	602	721	480	380	360	1150	1020	484	365	431	1420	514
23	606	660	470	380	350	893	937	493	359	481	1430	481
24	621	593	480	370	340	714	823	497	360	429	1020	465
25	600	555	470	360	340	640	773	493	381	397	783	464
26	570	540	460	370	340	613	714	479	400	378	700	464
27	558	532	450	380	340	809	672	482	398	370	790	459
28	547	551	450	380	340	1310	645	654	487	373	708	447
29	541	554	450	380	---	1240	625	987	456	371	656	438
30	538	546	450	370	---	1010	604	1020	431	357	655	448
31	530	---	440	380	---	895	---	777	---	346	611	---
TOTAL	19156	16263	15540	12190	9640	30211	21561	19457	13197	12198	31741	14363
MEAN	618	542	501	393	344	975	719	628	440	393	1024	479
MAX	878	721	603	440	380	3130	1020	1020	627	481	3930	578
MIN	530	504	440	360	320	310	555	479	359	346	342	428
CFSM	.96	.84	.78	.61	.54	1.52	1.12	.98	.68	.61	1.59	.74
IN.	1.11	.94	.90	.71	.56	1.75	1.25	1.13	.76	.71	1.84	.83

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 1995, BY WATER YEAR (WY)

	MEAN	373	386	323	277	327	820	680	481	486	409	361	410
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 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1914 - 1995	
ANNUAL TOTAL	229918		215517			
ANNUAL MEAN	630		590		445	
HIGHEST ANNUAL MEAN					813	
LOWEST ANNUAL MEAN					237	
HIGHEST DAILY MEAN	3870	Sep 17	3930	Aug 16	12900	Apr 4 1956
LOWEST DAILY MEAN	400	Jun 18	(a) 310	Mar 2	98	Jan 10 1938
ANNUAL SEVEN-DAY MINIMUM	413	May 30	(a) 333	Feb 25	106	Jan 7 1938
INSTANTANEOUS PEAK FLOW			4170	Aug 16	17400	Apr 4 1956
INSTANTANEOUS PEAK STAGE			10.61	Aug 16	(b) 10.35	Apr 4 1956
ANNUAL RUNOFF (CFSM)	.98		.92		.69	
ANNUAL RUNOFF (INCHES)	13.30		12.47		9.41	
10 PERCENT EXCEEDS	1000		824		729	
50 PERCENT EXCEEDS	517		497		334	
90 PERCENT EXCEEDS	420		350		195	

(a) Ice affected
(b) Datum then in use

BLACK RIVER BASIN
05381000 BLACK RIVER AT NEILLSVILLE, WI

LOCATION.--Lat 44°33'34", long 90°36'52", in sec.15, T.24 N., R.2 W., Clark County, Hydrologic Unit 07040007, on right bank at downstream side of bridge on U.S. Highway 10 in Neillsville, 1.0 mi downstream from O'Neill Creek, and 2.6 mi upstream from Cunningham Creek.

DRAINAGE AREA.--749 mi².

PERIOD OF RECORD.--April 1905 to March 1909, October 1913 to current year. Monthly discharge for some periods published in WSP 1308.

REVISED RECORDS.--WSP 1308: 1914. WSP 1438: 1905, 1906-8(M), 1914-17(M), 1918-19, 1920-25(M), 1926-27, 1928-29(M), 1930, 1931(M), 1932, 1933(M), 1934, 1935(M), 1936. WSP 1508: 1950. WDR WI-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 962.34 ft above sea level. Prior to Oct. 24, 1934, nonrecording gage; Oct. 24, 1934, to June 16, 1977, water-stage recorder; June 17, 1977, to Nov. 19, 1977, nonrecording gage at site 150 ft downstream at datum 1.58 ft lower.

REMARKS.--Estimated daily discharges: Ice-affected period, Nov. 28 to Mar. 18. Records good except those for ice-affected period, which is poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	302	185	230	110	84	72	995	381	395	60	119	1350
2	255	172	240	110	84	68	767	348	391	58	101	1040
3	223	166	250	100	80	72	816	320	366	60	92	703
4	213	160	260	94	80	74	582	298	238	61	85	482
5	205	157	270	88	78	76	420	279	189	60	78	376
6	184	150	220	94	78	78	349	258	163	65	75	305
7	183	143	200	98	78	80	301	246	156	68	78	266
8	171	140	180	94	74	88	302	251	157	65	71	233
9	157	139	160	92	78	86	306	560	158	65	81	246
10	180	133	140	90	80	110	288	571	149	66	274	256
11	208	131	140	90	78	240	317	640	153	68	196	207
12	189	130	130	94	74	620	1220	611	157	70	153	177
13	174	133	140	110	68	2500	1330	507	162	72	508	157
14	161	160	130	100	64	4000	1300	752	156	78	2850	138
15	146	163	130	100	60	3900	1040	592	139	74	5300	125
16	137	167	130	100	62	3500	830	518	113	105	5380	117
17	144	188	130	100	64	2800	702	448	98	683	4140	108
18	404	201	130	100	66	2300	965	365	86	848	2350	105
19	308	187	120	100	66	1710	1630	302	74	831	2700	133
20	351	184	130	96	66	2230	1490	257	67	640	1620	154
21	403	521	130	90	64	3810	1490	216	62	455	1030	144
22	349	549	130	88	60	3140	1470	188	56	420	730	149
23	357	652	130	84	60	2260	1070	187	51	337	537	162
24	362	641	140	78	62	1560	858	220	50	279	430	159
25	431	489	140	74	64	1130	704	305	72	241	500	151
26	422	363	140	76	68	874	605	319	73	198	1250	141
27	356	244	140	78	70	790	547	272	57	176	1340	133
28	296	210	140	78	74	740	514	589	53	172	1100	126
29	253	220	140	78	---	741	465	887	60	150	1110	119
30	222	240	130	80	---	1070	421	611	67	139	1540	137
31	199	---	120	80	---	1240	---	515	---	129	1670	---
TOTAL	7945	7318	4940	2844	1984	41959	24094	12813	4168	6793	37488	8099
MEAN	256	244	159	91.7	70.9	1354	803	413	139	219	1209	270
MAX	431	652	270	110	84	4000	1630	887	395	848	5380	1350
MIN	137	130	120	74	60	68	288	187	50	58	71	105
CFSM	.34	.33	.21	.12	.09	1.81	1.07	.55	.19	.29	1.61	.36
IN.	.39	.36	.25	.14	.10	2.08	1.20	.64	.21	.34	1.86	.40

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1905 - 1995, BY WATER YEAR (WY)

	MEAN	382	455	192	108	121	1259	1938	874	826	306	247	541
MAX	2101	2345	1133	615	1348	3960	5025	3538	4689	1538	1293	4304	
(WY)	1983	1992	1966	1973	1984	1973	1951	1973	1905	1978	1928	1938	
MIN	20.7	27.1	35.9	10.0	5.00	56.7	270	77.4	43.0	14.9	10.5	5.77	
(WY)	1934	1977	1934	1918	1918	1940	1946	1934	1964	1933	1933	1933	

BLACK RIVER BASIN
05381000 BLACK RIVER AT NEILLSVILLE, WI--CONTINUED

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SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1905 - 1995	
ANNUAL TOTAL	146897		160445		601	
ANNUAL MEAN	402		440		1213	1942
HIGHEST ANNUAL MEAN					160	1931
LOWEST ANNUAL MEAN					38200	Sep 10 1938
HIGHEST DAILY MEAN	7350	Apr 26	5380	Aug 16	.70 (a)	Aug 10 1936
LOWEST DAILY MEAN	60	Aug 22	50	Jun 24	1.0	Aug 10 1936
ANNUAL SEVEN-DAY MINIMUM	(b) 64	Jan 15	59	Jun 22	48800	Sep 10 1938
INSTANTANEOUS PEAK FLOW			(c) 5780	Aug 15	23.80	Sep 10 1938
INSTANTANEOUS PEAK STAGE			(b) 11.46	Mar 13	.60	Aug 15 1936
INSTANTANEOUS LOW FLOW			44	Jun 24	.80	
ANNUAL RUNOFF (CFSM)	.54		.59		10.90	
ANNUAL RUNOFF (INCHES)	7.30		7.97		1500	
10 PERCENT EXCEEDS	804		1070		148	
50 PERCENT EXCEEDS	168		167		36	
90 PERCENT EXCEEDS	73		70			

(a) Also occurred Aug. 11, 14-16, 1936

(b) Ice affected

(c) Gage height 9.71 ft

BLACK RIVER BASIN
05382000 BLACK RIVER NEAR GALESVILLE, WI

LOCATION.--Lat 44°04'22", long 91°17'41", in SW 1/4 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.--Estimated daily discharges: Aug. 25-30, and ice-affected period, Dec. 11 to Mar. 12. Records good except for those for estimated daily discharges, which are fair (see page 11). 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 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1710	1070	1560	680	640	680	4330	2360	2860	621	616	3310
2	1550	1050	1450	620	580	640	4560	2130	2310	611	720	2920
3	1450	1030	1450	640	600	600	4040	1930	1950	542	642	2630
4	1270	932	1630	680	620	600	3640	1860	1610	584	656	2300
5	1240	947	1570	640	580	620	3300	1640	1660	547	646	1830
6	1170	998	1840	680	560	600	2680	1600	1270	565	622	1600
7	1150	987	1950	620	560	560	2270	1530	1220	660	577	1410
8	1120	976	1700	580	580	600	2180	1490	1160	590	546	1310
9	1050	867	1340	540	600	660	1960	1640	1150	622	642	1230
10	1030	975	1470	600	600	660	1980	2590	1080	583	608	1120
11	1000	928	1300	630	580	1000	2000	3420	1040	535	545	1070
12	994	896	1100	620	560	2000	2110	3070	1020	533	588	1120
13	984	878	1000	600	540	2870	2890	2800	987	512	690	1080
14	1050	911	900	660	560	4780	3770	2710	965	528	1120	944
15	941	930	800	640	580	6370	3890	2990	923	509	3910	885
16	933	1040	900	620	580	7530	3550	3070	891	486	6130	841
17	950	1080	980	620	580	7340	3180	2590	837	509	8840	861
18	1110	1100	1100	620	580	6640	2750	2220	766	541	9920	881
19	1320	1080	1000	620	500	5400	3060	1910	751	965	10700	863
20	1710	1080	900	600	520	4230	4560	1620	685	1110	10100	934
21	1620	1210	1000	620	540	4310	5650	1540	608	1100	12400	1140
22	1350	1510	1000	620	520	5440	5730	1300	660	1020	15100	999
23	1590	2670	920	620	520	6870	5770	1220	656	916	11500	1040
24	1620	2470	840	620	540	6220	5170	1270	640	845	7290	993
25	1480	2360	800	620	540	4900	4300	1150	581	746	5600	939
26	1510	2130	720	600	540	3680	3490	1150	602	740	5400	970
27	1520	1850	780	620	600	3470	3100	1230	628	654	5200	946
28	1400	1620	880	620	640	3240	2890	1390	721	651	4700	901
29	1260	1540	840	620	---	2860	2680	1940	664	733	4200	787
30	1230	1450	760	600	---	2850	2510	3580	670	654	3700	837
31	1130	---	740	600	---	3460	---	3420	---	606	3140	---
TOTAL	39442	38565	35220	19270	15940	101680	103990	64360	31565	20818	137048	38691
MEAN	1272	1285	1136	622	569	3280	3466	2076	1052	672	4421	1290
MAX	1710	2670	1950	680	640	7530	5770	3580	2860	1110	15100	3310
MIN	933	867	720	540	500	560	1960	1150	581	486	545	787
CFSM	.61	.62	.55	.30	.27	1.58	1.67	1.00	.51	.32	2.13	.62
IN.	.71	.69	.63	.34	.29	1.82	1.86	1.15	.56	.37	2.45	.69

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 1995, BY WATER YEAR (WY)

	MEAN	1266	1428	1006	741	747	3046	4610	2558	2232	1228	920	1552
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	1315	591	427	322	293	306	
(WY)	1959	1949	1959	1959	1959	1934	1957	1934	1988	1933	1964	1948	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1932 - 1995
ANNUAL TOTAL	613719	646589	
ANNUAL MEAN	1681	1771	1777
HIGHEST ANNUAL MEAN			3456
LOWEST ANNUAL MEAN			699
HIGHEST DAILY MEAN	12600	15100	62000
LOWEST DAILY MEAN	567	486	180
ANNUAL SEVEN-DAY MINIMUM	634	516	218
INSTANTANEOUS PEAK FLOW		15700	(a) 65500
INSTANTANEOUS PEAK STAGE		12.11	16.64
INSTANTANEOUS LOW FLOW			180
ANNUAL RUNOFF (CFSM)	.81	.85	.85
ANNUAL RUNOFF (INCHES)	10.98	11.56	11.61
10 PERCENT EXCEEDS	2840	3900	3940
50 PERCENT EXCEEDS	1080	1030	880
90 PERCENT EXCEEDS	720	580	380

(a) Gage height, 14.63 ft, at location 1,000 ft downstream

LA CROSSE RIVER BASIN
05382325 LA CROSSE RIVER AT SPARTA, WI

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LOCATION.--Lat 43°56'15", long 90 °48'38", in SE 1/4 NE 1/4 sec.23, T17 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.--Estimated daily discharges: Ice-affected periods, Dec. 11-13, Jan. 2-10, 24-27, Feb. 5-8, 11-14, 16, Mar. 1-3, 9, and 10. Records fair (see page 11). Gage-height telemeter at station. Occasional regulation from two dams upstream from gage.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	226	165	168	151	147	130	201	183	161	139	141	156
2	215	164	172	140	145	120	194	180	157	135	135	155
3	194	164	175	130	144	130	192	179	154	134	135	152
4	180	165	181	120	144	138	186	178	151	134	138	152
5	177	162	182	130	130	139	181	177	147	136	138	152
6	177	163	174	140	120	139	182	172	147	141	134	152
7	177	164	168	130	120	141	188	172	153	145	135	152
8	174	164	165	130	130	140	189	179	157	138	187	152
9	172	163	165	130	145	130	186	216	149	135	153	150
10	168	160	163	140	145	140	186	226	159	133	139	148
11	165	159	140	151	120	313	206	207	165	131	136	148
12	164	161	140	155	120	389	264	186	150	130	133	149
13	163	169	150	153	120	275	228	181	143	128	131	150
14	162	186	155	150	130	225	202	192	141	126	220	147
15	163	174	160	150	139	201	192	181	139	126	226	146
16	165	166	159	149	130	190	188	176	137	157	209	147
17	182	165	161	155	140	184	187	180	135	158	226	147
18	237	166	159	155	146	179	220	168	134	138	199	145
19	221	163	158	149	148	180	289	165	134	136	261	172
20	192	170	157	147	148	246	249	163	131	138	604	193
21	177	224	158	146	146	270	232	159	130	133	387	170
22	180	219	158	146	141	207	222	161	130	133	228	160
23	184	188	158	145	142	193	203	185	129	140	192	154
24	177	176	156	130	141	184	202	178	130	132	174	151
25	175	171	155	130	141	183	209	164	138	128	168	151
26	173	167	155	130	140	182	198	159	135	128	169	151
27	171	169	156	140	140	231	201	165	148	135	169	148
28	170	178	157	144	140	247	198	212	167	152	174	146
29	169	173	156	142	---	236	189	226	154	136	173	146
30	167	169	153	143	---	227	186	195	145	127	166	150
31	166	---	153	145	---	215	---	172	---	132	160	---
TOTAL	5583	5147	4967	4396	3842	6104	6150	5637	4350	4214	5940	4592
MEAN	180	172	160	142	137	197	205	182	145	136	192	153
MAX	237	224	182	155	148	389	289	226	167	158	604	193
MIN	162	159	140	120	120	120	181	159	129	126	131	145
CFSM	1.08	1.03	.96	.85	.82	1.18	1.23	1.09	.87	.81	1.15	.92
IN.	1.24	1.15	1.11	.98	.86	1.36	1.37	1.26	.97	.94	1.32	1.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1995, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
MEAN	165	165	153	136	146	189	248	216	213	190	171	190
MAX	180	172	160	142	167	197	324	279	323	288	204	216
(WY)	1995	1995	1995	1995	1994	1995	1993	1993	1993	1993	1993	1994
MIN	149	155	143	133	133	182	205	182	145	136	111	153
(WY)	1993	1994	1994	1993	1993	1993	1995	1995	1995	1995	1992	1995

SUMMARY STATISTICS FOR 1994 CALENDAR YEAR FOR 1995 WATER YEAR WATER YEARS 1992 - 1995

ANNUAL TOTAL	65926	60922	
ANNUAL MEAN	181	167	185
HIGHEST ANNUAL MEAN			211
LOWEST ANNUAL MEAN			167
HIGHEST DAILY MEAN	696	Sep 14	604 Aug 20
LOWEST DAILY MEAN	(a)120	Jan 5-9	(a)120 (b)Jan 4
ANNUAL SEVEN-DAY MINIMUM	(a)124	Jan 4	(a)128 Feb 11
INSTANTANEOUS PEAK FLOW			761 Aug 20
INSTANTANEOUS PEAK STAGE			7.03 Aug 20
ANNUAL RUNOFF (CFSM)	1.08		1.00
ANNUAL RUNOFF (INCHES)	14.69		13.57
10 PERCENT EXCEEDS	210		209
50 PERCENT EXCEEDS	169		159
90 PERCENT EXCEEDS	138		132

(a) Ice affected

(b) Also occurred Feb. 6, 7, 11-13, and Mar. 2

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.

WATER-DISCHARGE RECORDS

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.--Estimated daily discharges: Dec. 11-22, Jan. 1 to Feb. 24, Mar. 1-11, and Aug. 17-23. Records good except those for estimated daily discharges, which are fair (see page 11). Minor flow regulation caused by navigation dams. U.S. Army Corps of Engineers data collection platform at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1828, that of Apr. 24, 1965.

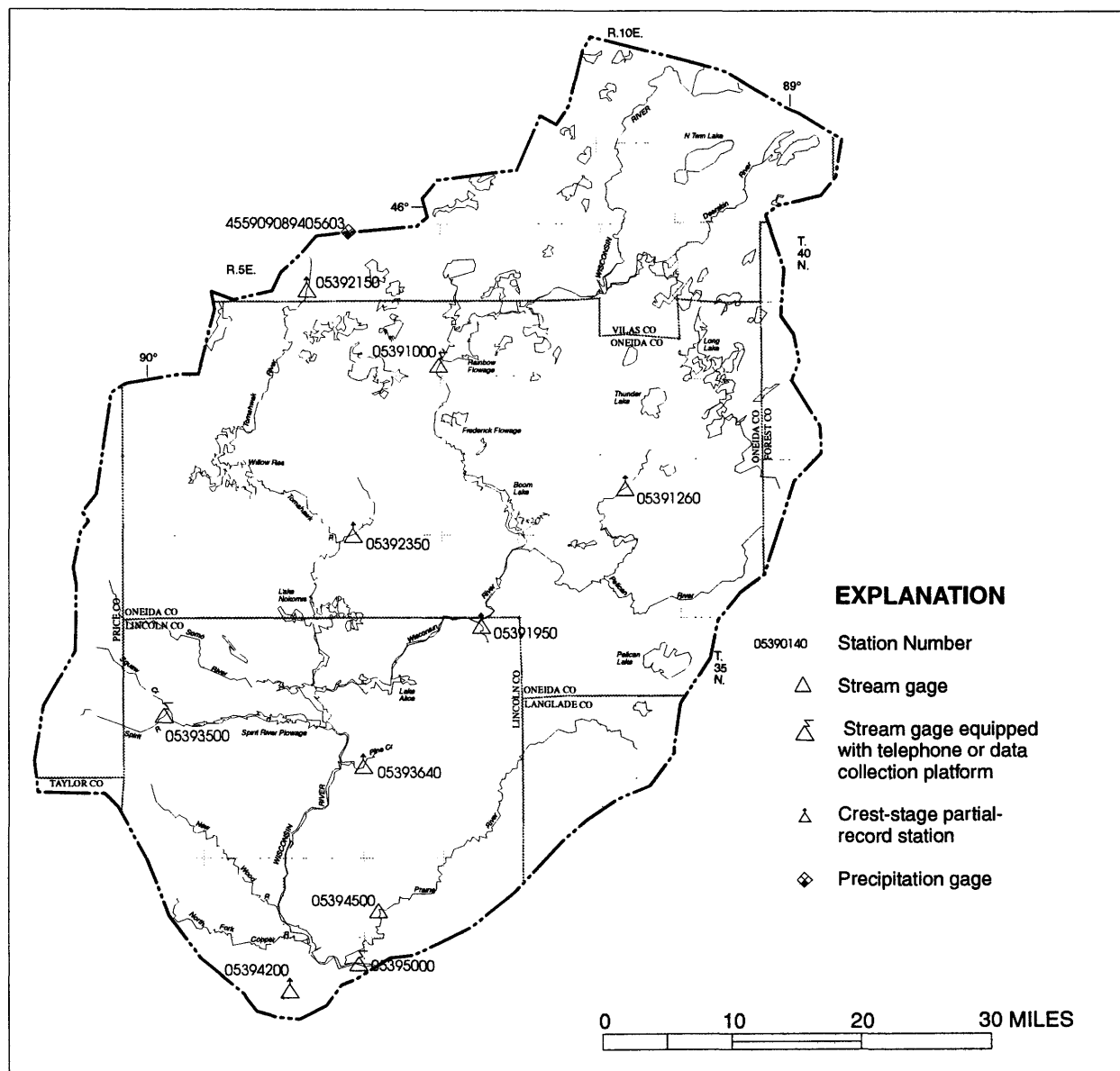
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56100	52800	36000	26000	19500	20500	93700	97500	75400	36500	42600	58000
2	52900	50400	35300	23000	21000	18500	92400	96400	74700	35800	42300	62400
3	48300	47900	34900	22000	23000	17500	93200	95300	74000	32100	41300	65800
4	46000	45600	32900	22000	24000	17500	91600	93900	71600	29500	40300	68400
5	44000	43800	31700	21000	23500	18500	90000	92100	66600	32900	39800	68900
6	41100	41900	29500	20000	23000	20000	89000	90200	62900	37500	38800	67000
7	39500	39800	28900	20000	22500	22000	87200	88200	60400	38100	38400	61900
8	40500	38800	29800	20000	21000	22500	86800	85600	59600	38000	38300	52400
9	43600	38600	31000	20000	18000	23500	85600	84100	59200	37700	38400	46400
10	44200	38300	31800	20500	16000	23500	84600	81600	59400	37300	38400	42700
11	42200	37600	28500	22000	15500	25000	83500	79100	59200	36800	38400	39600
12	40300	37200	22000	23500	16000	31400	82500	76600	57900	36500	38900	37100
13	40300	36800	19000	25000	17500	42200	81100	74800	56300	36400	40300	35800
14	42400	36500	17000	26500	18500	49300	78900	75700	54800	36400	43500	34100
15	42800	35500	16000	27000	19500	54400	77200	75100	53500	36200	47800	32600
16	43000	34000	17000	26500	20000	57200	77100	76000	53600	36800	51600	31900
17	42600	32400	22000	26000	20000	59700	76400	77600	54100	37800	56900	31600
18	42100	31800	31000	27000	19500	62300	76900	78200	54300	38200	63300	29600
19	41800	31700	33000	27500	20000	68600	78700	78800	54900	39300	69400	26600
20	41900	33700	37000	27500	21000	73600	78400	79300	53700	40400	74800	25900
21	43100	36900	38000	27500	22000	76000	80200	79200	51000	41000	80400	27700
22	44900	37200	38000	27500	23000	77100	81700	79000	47400	42000	82800	29000
23	47200	37100	36300	26000	23000	78800	84100	80700	44100	42400	77700	27900
24	50300	36800	35100	24500	22500	81400	88800	80600	41600	42600	74300	26600
25	53300	37000	34900	23000	22500	84500	93200	80600	38700	41700	72100	24600
26	54300	37000	33400	21500	22700	88000	96700	79900	38600	41400	64300	24600
27	54200	35900	31900	19500	22600	91800	98900	78800	39000	41400	54800	25400
28	53000	36900	29900	18500	22500	94500	99100	79800	37900	42200	44300	25900
29	53100	37100	27900	18500	---	95800	98600	79500	35900	42400	44000	25800
30	53300	37300	25600	19000	---	96100	98000	78100	35700	42500	47500	26000
31	53500	---	26900	19000	---	95100	---	76400	---	42600	52600	---
TOTAL	1435800	1154300	922200	717500	579800	1686800	2604100	2548700	1626000	1192400	1618300	1182200
MEAN	46320	38480	29750	23150	20710	54410	86800	82220	54200	38460	52200	39410
MAX	56100	52800	38000	27500	24000	96100	99100	97500	75400	42600	82800	68900
MIN	39500	31700	16000	18500	15500	17500	76400	74800	35700	29500	38300	24600
AC-FT	2848000	2290000	1829000	1423000	1150000	3346000	5165000	5055000	3225000	2365000	3210000	2345000
CFSM	.69	.57	.44	.34	.31	.81	1.29	1.22	.80	.57	.77	.58
IN.	.79	.64	.51	.40	.32	.93	1.44	1.40	.90	.66	.89	.65
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 1995, BY WATER YEAR (WY)												
MEAN	28500	28610	21870	18870	19360	39050	73670	60690	48840	40110	27550	28990
MAX	114600	64840	59200	35700	48540	103800	164800	119200	112600	142200	84430	72890
(WY)	1987	1983	1992	1983	1984	1983	1965	1975	1993	1993	1993	1986
MIN	9874	10870	9506	7665	9934	13190	27780	18240	13420	11220	10330	10650
(WY)	1937	1938	1937	1940	1940	1940	1990	1977	1988	1988	1964	1940
SUMMARY STATISTICS												
FOR 1994 CALENDAR YEAR				FOR 1995 WATER YEAR				WATER YEARS 1936 - 1995				
ANNUAL TOTAL				17159700				17268100				
ANNUAL MEAN				47010				47310				
HIGHEST ANNUAL MEAN								36400				
LOWEST ANNUAL MEAN								64720				
HIGHEST DAILY MEAN				114000				May 6				276000
LOWEST DAILY MEAN				16000				Dec 15				6200
ANNUAL SEVEN-DAY MINIMUM				20200				Dec 11				6490
INSTANTANEOUS PEAK FLOW												99600
INSTANTANEOUS PEAK STAGE								13.49				25.38
ANNUAL RUNOFF (AC-FT)				34040000				34250000				26370000
ANNUAL RUNOFF (CFSM)				.70				.70				.54
ANNUAL RUNOFF (INCHES)				9.46				9.52				7.33
10 PERCENT EXCEEDS				73500				82600				75100
50 PERCENT EXCEEDS				42400				40300				26600
90 PERCENT EXCEEDS				26500				21300				13000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	477	435	---	---	469	---	485	504	---	497	---
2	---	---	---	464	---	---	---	---	---	---	---	390
3	423	---	---	---	---	---	361	---	---	540	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	471	447	---	---	471	---	485	---	---	495	---
6	---	---	---	471	504	---	370	---	504	---	---	---
7	394	450	---	---	---	---	---	---	---	523	498	371
8	---	---	---	---	---	---	---	486	---	---	---	---
9	---	---	445	---	---	---	---	---	509	---	---	---
10	395	---	---	---	486	456	396	---	---	---	---	---
11	---	470	---	---	---	---	---	511	---	538	---	394
12	---	---	455	---	---	---	---	---	535	---	520	---
13	---	466	---	---	498	447	---	---	---	---	---	---
14	439	---	---	---	---	448	413	526	---	552	506	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	600	---	---	---	---	---	543	---	---	380
17	452	---	---	---	505	391	470	---	---	554	---	---
18	---	488	---	---	---	---	---	---	---	---	489	---
19	---	---	448	---	---	---	---	515	549	---	---	375
20	---	---	---	---	---	356	---	---	---	---	405	---
21	473	451	---	---	---	---	461	---	---	557	---	---
22	---	---	---	---	---	---	---	523	---	---	---	375
23	---	---	450	---	487	---	---	---	548	559	375	---
24	449	---	---	---	---	---	---	---	---	533	---	---
25	---	---	---	---	---	401	460	---	---	---	---	370
26	---	463	---	---	---	---	---	517	---	---	---	---
27	---	---	---	500	475	---	---	---	538	---	---	---
28	436	---	467	---	---	---	468	---	---	502	378	---
29	---	---	---	---	---	390	---	---	---	---	---	368
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	505	---	---	---	---	---	---	---	---

DAY	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	29	4390	23	3230	21	2060	6	393	3	159	8	423
2	28	4000	22	3010	19	1760	6	358	3	170	7	368
3	27	3490	21	2760	16	1500	5	293	3	186	7	324
4	26	3240	21	2540	14	1210	4	246	3	194	6	302
5	25	3010	20	2410	12	1040	3	197	3	190	6	316
6	25	2730	22	2450	12	956	3	167	3	191	8	423
7	24	2590	23	2440	12	936	3	181	3	211	10	587
8	25	2780	22	2310	12	966	4	199	4	224	12	757
9	27	3150	21	2220	12	977	4	200	4	218	14	879
10	27	3270	21	2130	10	883	3	150	5	214	13	843
11	25	2870	20	2000	9	691	2	114	5	209	27	1820
12	25	2730	18	1830	8	463	1	86	5	216	58	4890
13	23	2540	17	1700	7	337	1	75	5	235	98	11100
14	21	2350	17	1680	6	254	2	109	5	243	81	10800
15	22	2520	17	1630	5	201	2	161	5	251	68	9980
16	23	2720	17	1560	4	186	3	205	5	252	57	8800
17	25	2830	17	1490	4	238	3	188	5	246	47	7640
18	23	2670	17	1470	4	335	2	176	4	235	38	6390
19	22	2500	17	1490	4	370	2	162	4	235	30	5620
20	21	2370	18	1610	5	488	2	149	4	242	25	4960
21	20	2390	18	1760	6	596	2	148	4	248	23	4700
22	22	2720	16	1650	7	709	2	148	4	253	21	4410
23	25	3160	15	1520	8	754	2	146	4	245	20	4170
24	26	3540	14	1390	7	647	2	162	4	224	18	3990
25	23	3290	13	1280	6	560	3	180	3	208	17	3940
26	20	2890	12	1240	5	467	3	201	3	196	18	4290
27	17	2490	14	1340	5	388	4	206	3	205	19	4720
28	15	2220	16	1550	4	331	4	187	5	323	20	5120
29	17	2430	18	1760	4	331	4	177	---	---	21	5380
30	19	2720	20	2000	5	329	3	171	---	---	20	5260
31	21	3030	---	---	5	375	3	162	---	---	20	5050
TOTAL	---	89630	---	57450	---	21338	---	5697	---	6223	---	128252
DAY	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)	MEAN CONCEN- TRATION (MG/L)	LOAD (TONS/ DAY)
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	19	4820	22	5820	25	5140	30	2970	25	2930	25	3890
2	18	4610	23	5870	26	5260	28	2690	26	3010	25	4240
3	18	4500	23	5930	27	5400	27					

[illegible]



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 1/4 NE 1/4 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.--No estimated daily discharges. Record good (see page 11). 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 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	767	552	765	729	668	568	236	376	698	486	398	377
2	765	619	763	725	667	565	216	376	698	448	398	418
3	729	658	766	721	663	559	213	376	698	476	396	427
4	518	656	766	718	660	553	318	376	689	502	391	432
5	395	654	766	720	658	548	388	373	663	500	396	431
6	392	653	762	716	658	548	375	369	645	498	399	428
7	442	672	757	715	654	547	366	371	637	481	410	419
8	485	686	757	714	653	544	365	373	634	467	414	408
9	497	677	757	713	646	541	364	328	631	464	385	391
10	486	676	756	716	637	537	364	295	629	464	369	383
11	488	674	755	717	634	531	374	288	627	462	372	448
12	505	672	755	714	636	530	388	286	615	460	372	486
13	564	676	748	711	635	416	358	291	535	457	375	482
14	604	682	744	705	632	275	343	307	662	455	366	467
15	601	681	744	702	629	243	345	306	615	500	347	461
16	604	684	744	700	625	244	345	296	653	448	328	463
17	581	691	744	698	620	247	345	297	665	343	321	456
18	578	745	744	696	616	245	348	310	663	292	293	451
19	580	779	747	693	608	241	305	325	609	322	266	374
20	576	780	747	693	603	248	262	326	555	397	264	332
21	621	783	744	691	600	254	299	300	580	435	396	411
22	735	780	743	691	601	254	356	278	506	440	481	467
23	799	775	740	687	595	257	353	279	504	441	478	468
24	803	775	740	683	592	259	347	279	507	433	472	470
25	799	772	740	683	588	260	347	280	507	422	453	467
26	786	767	739	680	585	260	348	332	505	411	416	464
27	709	767	736	679	579	264	348	398	508	398	320	458
28	668	767	733	676	575	266	368	612	519	398	267	443
29	599	768	733	676	---	267	389	740	525	398	265	444
30	556	767	733	676	---	266	382	722	546	399	243	480
31	552	---	729	673	---	265	---	703	---	398	283	---
TOTAL	18784	21288	23197	21711	17517	11602	10155	11568	18028	13495	11334	13106
MEAN	606	710	748	700	626	374	338	373	601	435	366	437
MAX	803	783	766	729	668	568	389	740	698	502	481	486
MIN	392	552	729	673	575	241	213	278	504	292	243	332

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 1995, BY WATER YEAR (WY)

	MEAN	663	692	771	828	824	652	412	708	744	676	592	604
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	322	138	173	228	237	243	268	
(WY)	1988	1949	1949	1990	1977	1990	1949	1949	1987	1988	1988	1948	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1936 - 1995	
ANNUAL TOTAL	193380		191785			
ANNUAL MEAN	530		525		681	
HIGHEST ANNUAL MEAN					1062	
LOWEST ANNUAL MEAN					359	
HIGHEST DAILY MEAN	803	Oct 24	803	Oct 24	2820	Sep 5 1941
LOWEST DAILY MEAN	191	Apr 28	213	Apr 3	35	Apr 6 1955
ANNUAL SEVEN-DAY MINIMUM	196	Apr 27	246	Mar 15	107	Apr 12 1965
INSTANTANEOUS PEAK FLOW			807	Oct 23	3570	Sep 5 1941
INSTANTANEOUS PEAK STAGE			2.80	Oct 23	7.59	Sep 5 1941
10 PERCENT EXCEEDS	744		744		1040	
50 PERCENT EXCEEDS	557		518		657	
90 PERCENT EXCEEDS	258		293		306	

WISCONSIN RIVER BASIN
455909089405603 VANDERCOOK LAKE RAIN GAGE NEAR WOODRUFF, WI

LOCATION.--Lat 45°59'09", long 89°40'56", in SW 1/4 NE 1/4 SE 1/4 sec.36, T.41 N., R.6 E., Vilas County, Hydrologic Unit 07070001, at north end of lake on dirt road off County Trunk Highway M, 6.1 mi north of Woodruff.

PERIOD OF RECORD.--March 1981 to current year.

GAGE.--Standard 8-inch collector above a 3-inch stand pipe with water-stage recorder until Nov. 4, 1993. Tipping-bucket rain gage installed June 16, 1994.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 2.98 in., Aug. 10, 1983.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 1.71 in., June 28.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	---	---	---	---	.00	.00	.00	.01	.05	.00
2	.00	.00	---	---	---	---	.02	.00	.53	.00	.00	.00
3	.02	.04	---	---	---	---	.04	.00	.01	.00	.26	.00
4	.01	.12	---	---	---	---	---	.01	.00	.00	.02	.06
5	.01	.00	---	---	---	---	---	.00	.00	.44	.00	.00
6	.00	.08	---	---	---	---	---	.00	.29	.22	.06	.11
7	.19	.00	---	---	---	---	---	.00	.08	.02	.66	.08
8	.02	.00	---	---	---	---	---	.98	.01	.15	.00	.00
9	.04	.00	---	---	---	---	.00	.31	.01	.01	.04	.00
10	.00	.00	---	---	---	---	.00	.00	.38	.00	.00	.00
11	.00	.00	---	---	---	---	.50	.00	.00	.00	.28	.00
12	.00	.00	---	---	---	.00	.03	.00	.00	.41	.19	.00
13	.00	.05	---	---	---	.00	.03	.63	.00	.01	.84	.01
14	.00	.04	---	---	---	.03	.00	.32	.00	.60	.94	.01
15	.00	.00	---	---	---	.00	.01	.04	.00	.27	.00	.07
16	.05	.00	---	---	---	.00	.00	.51	.00	.31	.00	.58
17	1.27	.13	---	---	---	.00	.07	.00	.00	1.22	.00	.00
18	.00	.00	---	---	---	.07	.67	.00	.00	.01	.00	.00
19	.02	.00	---	---	---	.02	.15	.00	.00	.07	.21	.35
20	.00	.39	---	---	---	.78	.00	.00	.00	.42	.00	.00
21	.20	.54	---	---	---	.12	.02	.01	.00	.02	.00	.03
22	.26	---	---	---	---	.06	.00	.45	.00	.00	.00	.45
23	.13	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
24	.01	---	---	---	---	.00	.11	.00	.00	.04	.15	.00
25	.03	---	---	---	---	.06	.00	.00	.00	.00	.12	.00
26	.01	---	---	---	---	.10	.07	.00	.00	.00	.67	.00
27	.00	---	---	---	---	.00	.00	.66	.43	.53	.01	.00
28	.11	---	---	---	---	.00	.00	.27	1.71	.00	.01	.00
29	.00	---	---	---	---	.00	.00	.00	.00	.00	.00	.60
30	.00	---	---	---	---	.00	.00	.00	.02	.00	.00	.72
31	.00	---	---	---	---	.00	---	.00	---	.05	.00	---
TOTAL	2.38	---	---	---	---	---	---	4.19	3.47	4.81	4.51	3.07

05393500 SPIRIT RIVER AT SPIRIT FALLS, WI

LOCATION.--Lat 45°26'58", long 89°58'47", in NW 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.--Estimated daily discharges: Ice-affected period, Nov. 23 to Mar. 20. Records good except those for ice-affected period, which is poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161	56	66	20	14	11	84	73	66	14	21	271
2	161	51	66	18	13	10	76	68	54	13	19	191
3	127	49	68	17	13	10	77	64	50	11	19	144
4	110	48	60	15	13	11	69	62	42	11	24	113
5	97	49	54	14	12	11	46	60	36	11	20	92
6	87	47	50	15	11	11	60	58	32	14	18	84
7	125	45	44	15	11	11	48	53	33	20	23	200
8	155	43	41	14	10	11	47	54	33	17	47	188
9	127	41	36	14	10	12	59	292	32	16	51	122
10	105	38	33	13	11	12	53	432	31	15	49	87
11	87	37	30	14	11	13	61	276	41	13	48	69
12	74	37	29	15	11	35	261	185	35	13	293	59
13	66	40	30	16	11	150	293	147	29	15	893	53
14	59	67	30	17	11	270	218	243	25	14	1180	48
15	54	66	31	17	10	430	176	222	21	73	837	42
16	52	55	31	16	10	400	149	177	18	126	447	76
17	66	51	32	16	10	460	135	152	16	106	490	146
18	178	61	32	17	11	430	176	118	15	99	454	104
19	179	62	31	16	11	370	403	96	14	78	378	83
20	130	58	32	15	11	440	328	79	13	67	358	102
21	104	232	31	15	11	674	236	66	11	56	242	90
22	109	336	32	15	10	463	204	56	11	48	162	77
23	184	230	34	14	11	347	167	90	9.7	42	123	71
24	162	140	33	14	11	252	142	92	9.2	34	161	62
25	133	110	31	13	11	203	123	74	11	42	629	56
26	110	94	29	13	10	195	110	64	15	40	567	51
27	96	88	30	12	9.8	164	103	56	15	34	345	46
28	85	92	27	12	11	134	95	99	16	37	751	41
29	77	82	25	12	---	122	87	157	19	31	1390	38
30	72	72	23	13	---	107	79	118	16	25	700	73
31	63	---	22	13	---	96	---	85	---	22	405	---
TOTAL	3395	2477	1143	460	309.8	5865	4165	3868	768.9	1157	11144	2879
MEAN	110	82.6	36.9	14.8	11.1	189	139	125	25.6	37.3	359	96.0
MAX	184	336	68	20	14	674	403	432	66	126	1390	271
MIN	52	37	22	12	9.8	10	46	53	9.2	11	18	38
CFSM	1.34	1.01	.45	.18	.14	2.32	1.70	1.53	.31	.46	4.41	1.18
IN.	1.55	1.13	.52	.21	.14	2.67	1.90	1.76	.35	.53	5.08	1.31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1995, BY WATER YEAR (WY)

	MEAN	70.0	74.1	39.1	20.2	18.2	111	317	153	95.9	44.3	35.1	80.3
MAX	306	338	293	71.8	69.8	467	697	408	397	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 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1942 - 1995

ANNUAL TOTAL	32319.4	37631.7	
ANNUAL MEAN	88.5	103	87.4
HIGHEST ANNUAL MEAN			140
LOWEST ANNUAL MEAN			36.3
HIGHEST DAILY MEAN	2980	Sep 16	3290
LOWEST DAILY MEAN	5.6	Sep 11	1.0
ANNUAL SEVEN-DAY MINIMUM	6.7	Sep 6	1.4
INSTANTANEOUS PEAK FLOW		(a)10	(b)4180
INSTANTANEOUS PEAK STAGE		Aug 29	Sep 18 1942
INSTANTANEOUS LOW FLOW		Aug 29	Sep 18 1942
ANNUAL RUNOFF (CFSM)	1.09	1.26	10.00
ANNUAL RUNOFF (INCHES)	14.73	17.16	1.0
10 PERCENT EXCEEDS	177	247	218
50 PERCENT EXCEEDS	32	52	27
90 PERCENT EXCEEDS	9.0	11	8.0

(a) Ice affected

(b) From rating curve extended above 2,500 ft³/s

WISCONSIN RIVER BASIN
05394500 PRAIRIE RIVER NEAR MERRILL, WI

LOCATION.--Lat 45°14'09", long 89°38'59", on line between secs.20 and 29, 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.

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.--Estimated daily discharges: Oct. 1-7, 10-12, Oct. 15 to Nov. 19, Apr. 8-17, and Sept. 27, and ice-affected period, Nov. 23 to Mar. 19. Records good except those for estimated daily discharges, which are fair, and those for ice-affected periods, which are poor (see page 11).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	240	140	130	100	86	80	128	171	208	94	80	313
2	230	140	140	100	90	86	124	167	176	85	78	226
3	220	140	140	94	88	90	124	163	167	80	78	185
4	210	140	130	90	86	96	119	159	144	78	77	158
5	200	140	130	88	82	100	106	156	128	80	86	140
6	190	130	120	86	82	100	114	155	120	85	118	137
7	190	130	120	84	82	100	109	151	119	90	152	244
8	196	130	130	82	82	100	110	154	115	86	175	217
9	190	130	130	82	86	110	110	369	108	83	155	174
10	170	120	120	86	90	120	110	520	111	80	148	149
11	160	120	110	90	84	130	120	439	118	77	165	134
12	150	120	110	94	82	140	160	336	113	79	433	124
13	140	130	110	88	78	250	260	271	103	83	540	118
14	139	160	120	90	84	350	240	374	97	80	724	113
15	130	170	120	84	92	320	200	406	92	84	697	107
16	130	150	120	90	98	280	180	337	90	123	554	112
17	150	140	120	92	110	250	170	285	87	144	451	121
18	270	140	110	92	120	210	207	240	85	142	342	115
19	310	140	110	90	100	190	374	204	82	128	323	133
20	260	153	110	90	92	274	353	179	80	138	293	173
21	210	240	110	90	90	452	289	166	78	139	238	161
22	200	297	120	90	96	356	251	156	78	119	193	142
23	230	230	120	88	86	289	226	253	77	105	162	131
24	220	180	110	86	82	228	215	278	77	96	190	124
25	200	150	110	86	80	199	208	225	75	92	433	119
26	180	130	110	82	78	181	198	187	75	87	404	118
27	170	140	110	88	78	161	199	168	75	83	320	110
28	160	140	110	84	84	149	200	255	79	81	657	109
29	160	130	100	82	---	145	187	398	86	78	494	105
30	150	120	110	82	---	143	178	342	96	75	523	119
31	140	---	110	84	---	135	---	256	---	76	532	---
TOTAL	5895	4520	3650	2734	2468	5814	5569	7920	3139	2950	9815	4431
MEAN	190	151	118	88.2	88.1	188	186	255	105	95.2	317	148
MAX	310	297	140	100	120	452	374	520	208	144	724	313
MIN	130	120	100	82	78	80	106	151	75	75	77	105
CFSM	1.03	.82	.64	.48	.48	1.02	1.01	1.39	.57	.52	1.72	.80
IN.	1.19	.91	.74	.55	.50	1.18	1.13	1.60	.63	.60	1.98	.90

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 1995, BY WATER YEAR (WY)

MEAN	166	170	113	92.7	89.3	190	430	259	213	136	133	175
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

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05394500 PRAIRIE RIVER NEAR MERRILL, WI--CONTINUED

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1914 - 1995
ANNUAL TOTAL	60301	58905	
ANNUAL MEAN	165	161	180
HIGHEST ANNUAL MEAN			272 1942
LOWEST ANNUAL MEAN			108 1931
HIGHEST DAILY MEAN	1470 Sep 17	724 Aug 14	4200 Aug 31 1941
LOWEST DAILY MEAN	85 (a) Jul 3	75 (b) Jun 25	35 Oct 26 1947
ANNUAL SEVEN-DAY MINIMUM	86 Aug 23	76 Jun 21	52 Dec 28 1948
INSTANTANEOUS PEAK FLOW		872 Aug 28	(d) 5800 Aug 31 1941
INSTANTANEOUS PEAK STAGE		4.69 Aug 28	(e) 9.45 Aug 31 1941
INSTANTANEOUS LOW FLOW		(c) 73 Jul 31	34 Oct 26 1947
ANNUAL RUNOFF (CFSM)	.90	.88	.98
ANNUAL RUNOFF (INCHES)	12.19	11.91	13.32
10 PERCENT EXCEEDS	259	287	348
50 PERCENT EXCEEDS	124	130	117
90 PERCENT EXCEEDS	91	82	76

(a) Also occurred Aug. 17-18, 26-28, and Sept. 11, 1994

(b) Also occurred June 26-27 and July 30

(c) May have been less Mar. 2 during freezeup

(d) Based on rating curve extended above 2,200 ft³/s

(e) From floodmarks

WISCONSIN RIVER BASIN
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.--Estimated daily discharges: Ice-affected periods, Dec. 12-14, 16-18, 21, 25-26, 30, Jan. 2 to Mar. 5, and Mar. 8-9. Records good (see page 11). Flow regulated by 20 reservoirs and 9 powerplants upstream from station. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4340	2540	2690	2660	2200	1800	1670	2340	2990	1450	1740	3730
2	4630	2320	2570	2600	2200	1800	1560	2090	2720	1410	1600	2850
3	4380	2280	2420	2200	1900	1500	1430	2040	2540	1630	1550	2350
4	4180	2420	2440	2600	2100	1500	1810	1890	2370	1750	1500	2000
5	3620	2350	2610	2300	1900	1500	1810	1820	2170	1480	1630	2140
6	3400	2360	2710	2000	2000	1860	1680	1820	2070	1780	1320	1850
7	3160	2370	2860	2200	1600	2000	1740	1690	2110	1820	2350	2950
8	3200	2520	2780	1900	1800	1800	1910	1980	1840	1560	2240	2370
9	2690	2480	2530	2300	2000	1800	1810	3290	1770	1490	2000	1880
10	2660	2420	2590	2500	2100	1810	1500	5040	2100	1550	1760	1740
11	2760	2360	2910	2300	1900	1920	1560	4190	1790	1610	1940	2150
12	2440	2370	2700	2300	2000	1870	2250	3660	2130	1550	3690	2240
13	2490	2310	2500	2200	2100	3410	2870	2790	1970	1620	4480	1860
14	2650	2750	2300	2100	1900	3560	2580	3420	1850	1890	7560	1860
15	2530	2860	2380	2100	1900	3630	2240	4060	1770	1610	7870	1950
16	2200	2270	2700	2200	1600	3240	2210	3450	1800	1990	5250	2040
17	2530	2550	2300	2100	1600	3250	2170	3230	1820	2420	4390	2480
18	2960	2440	2400	2200	1800	2650	2460	2710	1730	1650	3880	2450
19	4060	2690	2600	2100	1900	2660	3400	2770	1910	1460	3570	2070
20	3790	2730	2580	2200	2000	2660	4010	2300	1800	1440	3260	2130
21	3440	3250	2600	2300	2000	4180	3910	2190	1850	1690	2820	2110
22	2900	3760	2400	2000	1800	4090	3100	2170	1840	1480	1920	1820
23	3110	3250	2470	2000	1700	3450	2270	2680	1720	1580	2140	1940
24	3570	3330	2500	2100	1900	2990	2620	2990	1680	1710	2040	1950
25	3420	2670	2500	2300	2000	2500	2450	2490	1480	1700	4130	2210
26	3280	2550	2400	1900	1800	2000	2300	2200	1710	1580	4440	2100
27	3200	2760	2470	2200	1900	2160	2300	1840	1760	1430	3210	2080
28	2790	2600	2430	2000	1800	1790	2000	2380	1880	1290	7060	1820
29	2850	2770	2250	2100	---	1860	1720	3550	1830	1670	9640	1870
30	2680	2600	2500	2300	---	1620	1910	3420	1700	1390	9510	2210
31	2320	---	2330	2200	---	1650	---	3230	---	1720	5930	---
TOTAL	98230	78930	78420	68460	53400	74510	67250	85720	58700	50400	116420	65200
MEAN	3169	2631	2530	2208	1907	2404	2242	2765	1957	1626	3755	2173
MAX	4630	3760	2910	2660	2200	4180	4010	5040	2990	2420	9640	3730
MIN	2200	2270	2250	1900	1600	1500	1430	1690	1480	1290	1320	1740

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 1995, BY WATER YEAR (WY)

MEAN	2544	2396	2081	1977	1919	2597	4711	3698	3130	2342	2089	2574
MAX	8654	4632	3887	3138	3063	6275	11500	8928	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

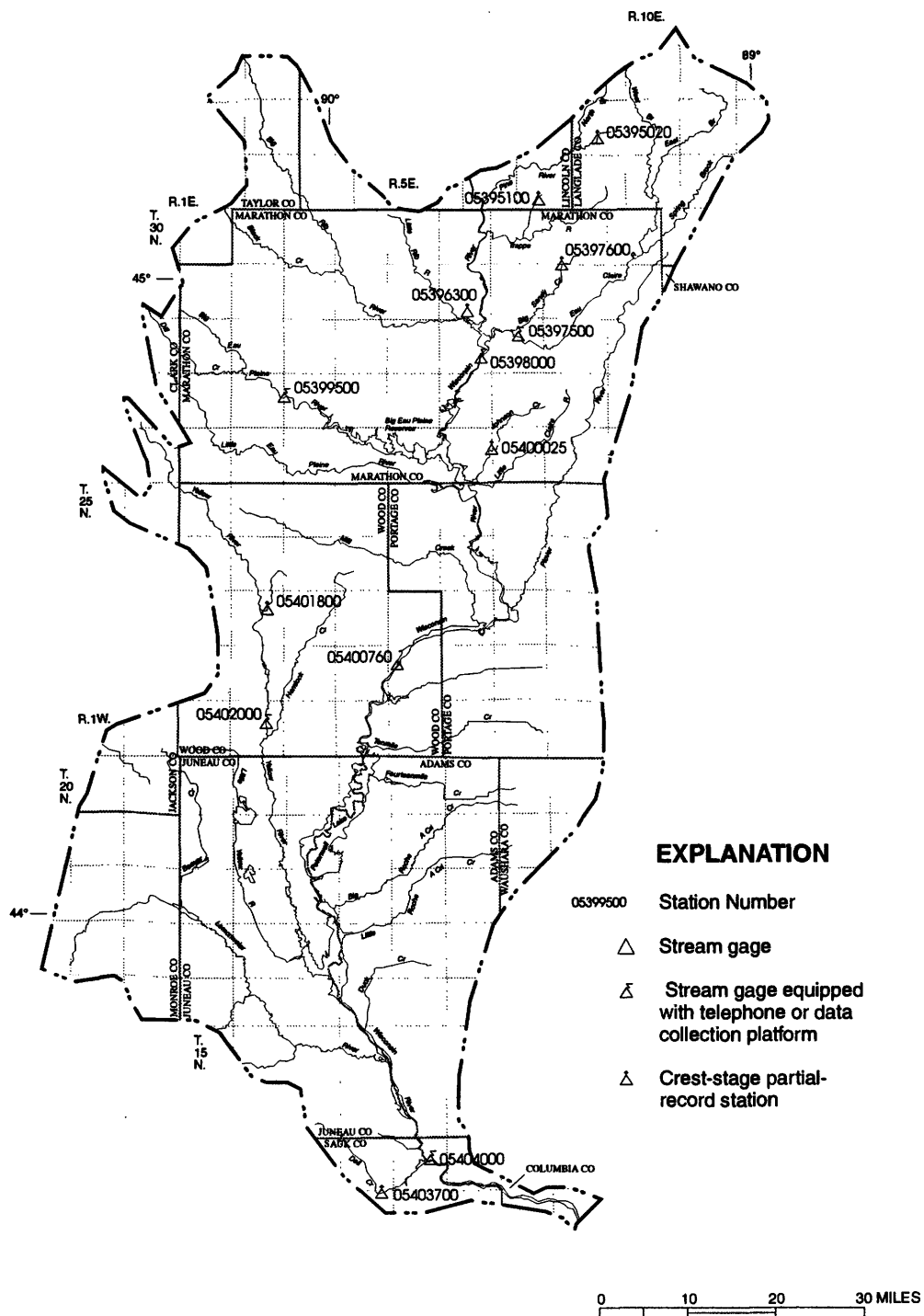
FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1903 - 1995

ANNUAL TOTAL	865550	895640	
ANNUAL MEAN	2371	2454	2657
HIGHEST ANNUAL MEAN			4558
LOWEST ANNUAL MEAN			1348
HIGHEST DAILY MEAN	17500	Sep 16	36400
LOWEST DAILY MEAN	1120	Jul 23	90
ANNUAL SEVEN-DAY MINIMUM	1370	Jul 1	194
INSTANTANEOUS PEAK FLOW		12000	(a)49400
INSTANTANEOUS PEAK STAGE		9.69	18.26
10 PERCENT EXCEEDS	3510	3450	4730
50 PERCENT EXCEEDS	2000	2210	2100
90 PERCENT EXCEEDS	1430	1640	1240

(a) From rating curve extended above 20,000 ft³/s



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

REMARKS.--Estimated daily discharges: Ice-affected period, Nov. 25 to Mar. 16. Records good except those for ice-affected period, which is poor (see page 11). Gage-height telemeter at station.

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	278	184	230	130	78	46	196	241	270	94	90	561
2	275	175	240	120	76	44	185	234	220	77	106	435
3	277	169	230	110	74	45	179	223	196	71	99	314
4	249	166	220	110	70	45	172	214	174	68	82	260
5	231	163	210	110	66	46	152	206	150	72	79	229
6	214	159	200	110	64	47	138	193	140	74	80	202
7	198	154	190	120	62	48	157	189	157	79	102	234
8	185	148	190	120	60	47	143	182	157	78	103	238
9	182	144	200	110	58	46	143	311	135	76	184	214
10	172	139	180	110	62	48	142	538	129	70	285	183
11	162	136	160	110	64	50	146	562	152	67	206	166
12	153	134	170	120	62	72	202	449	153	67	656	155
13	147	138	180	130	60	290	287	354	131	68	1380	147
14	141	185	180	120	56	1300	309	380	115	68	1910	139
15	136	213	180	120	56	2000	285	428	104	75	1910	132
16	135	204	170	120	56	1400	257	384	97	97	1400	129
17	137	185	160	130	56	1020	239	326	91	107	1290	126
18	195	180	160	120	56	607	264	289	86	114	628	128
19	324	176	150	120	54	461	554	247	82	98	993	148
20	427	176	150	110	54	481	610	217	78	92	1030	206
21	362	282	150	100	54	814	531	192	75	100	529	212
22	303	419	150	98	52	678	494	178	71	100	363	186
23	342	388	150	94	52	571	418	213	68	89	287	163
24	398	347	160	88	50	458	361	302	65	85	260	151
25	367	290	160	90	50	373	342	302	64	79	354	146
26	317	270	160	92	50	325	323	257	66	72	480	141
27	276	290	160	86	49	288	306	223	65	68	601	135
28	247	260	150	82	48	255	295	250	78	65	1680	129
29	230	240	140	78	---	240	278	388	109	61	1350	125
30	213	220	140	76	---	231	256	424	108	57	606	133
31	197	---	130	78	---	215	---	352	---	63	524	---
TOTAL	7470	6334	5400	3312	1649	12591	8364	9248	3586	2451	19647	5867
MEAN	241	211	174	107	58.9	406	279	298	120	79.1	634	196
MAX	427	419	240	130	78	2000	610	562	270	114	1910	561
MIN	135	134	130	76	48	44	138	178	64	57	79	125
CFSM	.64	.56	.46	.28	.16	1.08	.74	.80	.32	.21	1.69	.52
IN.	.74	.63	.54	.33	.16	1.25	.83	.92	.36	.24	1.95	.58

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 1995, BY WATER YEAR (WY)

MEAN	206	237	141	90.6	86.1	356	742	368	300	158	153	213
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

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05397500 EAU CLAIRE RIVER AT KELLY, WI--CONTINUED

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1914 - 1995	
ANNUAL TOTAL	76891		85919		254	
ANNUAL MEAN	211		235		440	1942
HIGHEST ANNUAL MEAN					131	1925
LOWEST ANNUAL MEAN					7180	Aug 21 1926
HIGHEST DAILY MEAN	1860	Apr 25	(a)2000	Mar 15	25	(c)Jan 6 1926
LOWEST DAILY MEAN	(a)60	(b)Jan 17-20	(a)44	Mar 2	26	Jan 10 1926
ANNUAL SEVEN-DAY MINIMUM	(a)61	Jan 15	(a)46	Feb 28	(d)8300	Aug 21 1926
INSTANTANEOUS PEAK FLOW			3190	Aug 28	(e)10.14	Mar 24 1991
INSTANTANEOUS PEAK STAGE			(e)7.61	Mar 15	(f)8.0	Jul 17 1944
INSTANTANEOUS LOW FLOW					.68	
ANNUAL RUNOFF (CFSM)	.56		.63		9.18	
ANNUAL RUNOFF (INCHES)	7.63		8.52		540	
10 PERCENT EXCEEDS	368		431		129	
50 PERCENT EXCEEDS	160		160		60	
90 PERCENT EXCEEDS	66		64			

(a) Ice affected

(b) Also occurred Feb. 9-10, ice affected

(c) Also occurred Jan. 10-15, 17, 18, 1926, and Oct. 3, 1948

(d) From rating curve extended above 6,000 ft³/s, gage height, 8.4 ft, from graph based on gage readings

(e) Ice jam

(f) Probably result of temporary regulation

WISCONSIN RIVER BASIN

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.--Estimated daily discharges: May 18, 19, 23-30, June 30 to July 3, Aug. 8-10, and ice-affected period, Dec. 30 to Mar. 12. Records good except those for estimated daily discharges, which are fair (see page 11). Flow regulated by 20 reservoirs and 12 power-plants 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 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5610	3470	3440	2600	2200	1900	2050	2960	3830	1700	1900	6980
2	5770	3130	3660	2400	2400	2000	1900	2820	3510	1500	1490	5110
3	5750	2830	3510	2500	2200	1800	1800	2570	3020	1700	1700	3960
4	5360	3090	3280	2300	2300	1600	2190	2500	2840	1760	1630	3180
5	4980	3090	3910	2500	2200	1600	1980	2370	2670	1590	1720	2720
6	4580	3140	3590	2100	1900	1700	1840	2380	2300	1560	1380	2530
7	4250	3130	3910	2200	1900	2000	2090	1910	2420	1870	2060	3650
8	4130	3150	3550	2300	1700	1800	2110	2320	2160	1570	2700	3280
9	3800	3180	3300	2400	2000	1800	2080	4100	1950	1390	2900	2870
10	3390	3130	3150	2600	2100	1800	1730	7340	2210	1310	3000	1910
11	3660	3020	3010	2700	2400	2000	1820	6440	2330	1540	2500	2080
12	3280	2920	2800	2700	2300	2400	2860	5400	2280	1530	7000	2760
13	3330	3130	2790	2600	2200	7520	4360	4030	2240	1520	9630	2030
14	2800	3430	2980	2400	2300	9890	4270	4780	1990	1660	15700	2070
15	3120	3900	2830	2600	2300	9040	3320	5710	1820	2060	18500	2300
16	2860	3330	3140	2400	2200	7830	3180	5070	1890	2200	12000	2180
17	3180	3310	3320	2400	2000	7250	3020	4400	1960	2920	9510	2380
18	3790	3540	3030	2500	1900	5520	3500	3700	1660	2260	8170	2910
19	5800	3500	2880	2300	2100	4820	6130	3600	1790	1840	7410	2700
20	5440	3680	3180	2400	2000	5280	6750	2970	1720	1560	7290	2590
21	5030	4670	3300	2400	2100	10000	6120	2630	1770	1630	4990	2800
22	4410	6700	3200	2400	2000	8430	5210	2620	1900	1840	3560	2340
23	4670	5360	2990	2100	1800	6410	4450	3100	1560	1580	3030	2350
24	5140	5160	3250	2300	1800	5140	3690	3900	1680	1570	3230	2160
25	5060	4150	3030	2400	1700	4220	3850	3300	1400	1570	5240	2280
26	4610	3740	2970	2200	1900	3650	3400	2900	1550	1560	7100	2420
27	4510	3540	3030	2200	1800	3120	3430	2400	1780	1270	7020	2510
28	4060	3840	2990	2300	1900	2990	3150	3500	2010	1360	13000	2060
29	3790	3540	2810	2300	---	2500	2830	5400	1970	1460	22800	1960
30	3790	3590	2900	2300	---	2440	2530	4900	1900	1400	16800	2330
31	3010	---	2700	2300	---	2030	---	4410	---	1320	11200	---
TOTAL	132960	109390	98430	74100	57600	130480	97640	116430	64110	51600	216160	83400
MEAN	4289	3646	3175	2390	2057	4209	3255	3756	2137	1665	6973	2780
MAX	5800	6700	3910	2700	2400	10000	6750	7340	3830	2920	22800	6980
MIN	2800	2830	2700	2100	1700	1600	1730	1910	1400	1270	1380	1910

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1995, BY WATER YEAR (WY)

	MEAN	MAX	MIN	(WY)
1945	3224	10020	1986	837
1946	3300	7262	1986	863
1947	2742	5484	1992	973
1948	2469	3787	1973	1025
1949	2362	4051	1984	1023
1950	4223	13300	1973	1613
1951	7351	14640	1967	2081
1952	4662	13930	1960	1515
1953	3822	11920	1993	924
1954	2774	7219	1978	933
1955	2458	6973	1995	932
1956	3230	9079	1980	1000
1957				
1958				
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1991				
1992				
1993				
1994				
1995				

WISCONSIN RIVER BASIN
05398000 WISCONSIN RIVER AT ROTHSCHILD, WI

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1945 - 1995	
ANNUAL TOTAL	1214110		1232300		3551	
ANNUAL MEAN	3326		3376		5953	
HIGHEST ANNUAL MEAN					1686	
LOWEST ANNUAL MEAN					1686	
HIGHEST DAILY MEAN	19500	Sep 17	22800	Aug 29	44500	Mar 31 1967
LOWEST DAILY MEAN	1390	Jun 24	1270	Jul 27	575	Jun 16 1988
ANNUAL SEVEN-DAY MINIMUM	1650	Sep 6	1420	Jul 25	757	Nov 28 1976
INSTANTANEOUS PEAK FLOW			26100	Aug 29	49200	(a) Apr 12 1965
INSTANTANEOUS PEAK STAGE			23.25	Aug 29	(b) 18.46	(a) Apr 12 1965
INSTANTANEOUS LOW FLOW					575	Jun 16 1988
10 PERCENT EXCEEDS	5360		5470		6570	
50 PERCENT EXCEEDS	2800		2790		2600	
90 PERCENT EXCEEDS	1800		1700		1500	

(a) Also occurred Mar. 31, 1967

(b) Datum then in use

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 and crest-stage gage. 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.--Estimated daily discharges: May 31 to Sept. 30 and ice-affected period, Nov. 23 to Mar. 14. Records good except those for estimated daily discharges, which are poor (see page 11).

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 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	23	29	15	7.0	3.5	70	76	84	6.0	5.4	220
2	16	22	27	12	6.6	3.4	62	68	64	5.4	4.8	150
3	14	21	26	10	6.2	3.5	57	62	50	5.4	3.8	90
4	14	19	27	8.0	5.8	3.7	53	56	38	5.6	3.5	54
5	13	18	40	8.0	5.4	3.6	45	50	28	8.0	3.2	40
6	11	17	45	8.2	5.0	3.6	39	46	27	11	3.0	36
7	13	17	42	8.4	5.2	3.8	38	42	30	14	8.4	32
8	11	16	33	7.8	4.9	4.1	38	41	26	12	20	29
9	14	16	25	7.4	4.9	3.9	40	102	23	11	50	30
10	15	16	21	7.2	5.2	5.4	39	184	21	8.6	35	33
11	13	16	18	7.4	5.2	8.0	46	131	25	7.0	26	31
12	13	15	15	7.6	4.9	70	251	95	22	5.8	52	30
13	13	16	14	8.0	4.7	1500	334	84	19	5.8	900	29
14	13	23	15	8.4	4.4	2500	227	239	16	6.0	1300	22
15	13	27	15	8.2	4.2	1540	168	191	13	7.8	1700	18
16	12	26	16	7.8	4.4	978	133	123	12	9.8	1200	15
17	18	24	17	8.0	4.7	629	112	91	10	14	760	13
18	137	23	17	8.0	4.7	377	267	69	8.6	12	480	16
19	172	22	16	7.2	4.4	274	645	56	7.4	9.8	720	26
20	95	24	16	6.8	4.1	1110	345	45	6.6	8.4	310	37
21	63	148	16	6.4	4.1	1800	267	37	6.0	9.2	190	29
22	51	253	16	6.4	4.2	640	268	33	5.4	20	120	25
23	58	130	16	6.6	4.3	375	205	47	5.2	16	70	23
24	77	74	17	6.6	3.8	248	156	85	5.0	14	66	21
25	65	58	17	6.2	3.6	178	133	80	7.0	11	260	20
26	52	50	17	6.0	3.6	138	115	61	7.4	9.8	340	20
27	43	44	17	6.0	3.9	116	106	48	5.8	7.8	260	20
28	37	39	16	6.2	3.6	104	107	80	5.4	6.4	440	25
29	33	35	16	6.4	---	106	102	198	7.6	5.4	680	70
30	30	31	16	6.6	---	104	87	160	8.0	4.5	540	180
31	26	---	16	6.8	---	86	---	120	---	4.5	350	---
TOTAL	1174	1263	654	239.6	133.0	12919.5	4555	2800	593.4	282.0	10901.1	1384
MEAN	37.9	42.1	21.1	7.73	4.75	417	152	90.3	19.8	9.10	352	46.1
MAX	172	253	45	15	7.0	2500	645	239	84	20	1700	220
MIN	11	15	14	6.0	3.6	3.4	38	33	5.0	4.5	3.0	13
CFSM	.17	.19	.09	.03	.02	1.86	.68	.40	.09	.04	1.57	.21
IN.	.19	.21	.11	.04	.02	2.15	.76	.46	.10	.05	1.81	.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 1995, BY WATER YEAR (WY)

	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925
MEAN	106	131	48.6	19.8	27.9	421	584	238	211	75.4	74.2	166
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

WISCONSIN RIVER BASIN

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05399500 BIG EAU PLEINE RIVER NEAR STRATFORD, WI--CONTINUED

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1914 - 1995	
ANNUAL TOTAL	43715.3		36898.6		176	
ANNUAL MEAN	120		101		355	
HIGHEST ANNUAL MEAN					47.6	
LOWEST ANNUAL MEAN					26100	
HIGHEST DAILY MEAN	3980	Apr 25	(a) 2500	Mar 14	.00	(c) Sep 9 1938
LOWEST DAILY MEAN	4.4	Sep 20	(b) 3.0	Aug 6	.00	(c) Jan 22 1961
ANNUAL SEVEN-DAY MINIMUM	6.2	Aug 27	(a) 3.6	Feb 28	.00	Jan 22 1961
INSTANTANEOUS PEAK FLOW			(d) 2790	Mar 20	(e) 41000	Sep 9 1938
INSTANTANEOUS PEAK STAGE			(f) 12.06	Mar 13	(g) 24.50	Sep 9 1938
INSTANTANEOUS LOW FLOW					.00	(h) Aug 17 1947
ANNUAL RUNOFF (CFSM)	.53		.45		.79	
ANNUAL RUNOFF (INCHES)	7.26		6.13		10.67	
10 PERCENT EXCEEDS	285		232		370	
50 PERCENT EXCEEDS	22		21		24	
90 PERCENT EXCEEDS	9.7		5.0		4.4	

(a) Ice affected

(b) Estimated

(c) Also occurred Jan. 23 to Feb. 5, 1961

(d) Gage height, 9.76 ft

(e) Based on rating curve extended above 24,000 ft³/s

(f) Ice jam

(g) From floodmarks

(h) Also occurred Jan. 22 to Feb. 5, 1961

WISCONSIN RIVER BASIN

05400760 WISCONSIN RIVER AT WISCONSIN RAPIDS, WI

LOCATION.--Lat 44°23'41", long 89°49'31", in SW 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.--No estimated daily discharges. 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 of 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 1994 to September 1995 were as follows: July, 18.2; August, 38.8.

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 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5520	3670	3200	3710	3080	2110	3000	3540	5820	2850	2000	9390
2	4830	3270	3410	3400	2670	3340	2880	3370	4700	2130	2080	6750
3	4730	2640	3350	3180	3090	2810	3170	3510	3570	1340	2250	6070
4	6010	3090	3600	2810	2460	2260	2000	3420	3500	1320	2200	4440
5	5150	2720	4160	2410	2330	3360	2020	3170	3450	1550	2450	3900
6	4630	2610	4000	2970	2670	2430	3190	2780	2940	2150	2460	3940
7	4210	3420	3660	2830	2410	1880	3100	3320	2600	2380	2880	3660
8	3840	3120	3670	2910	2810	3350	3010	2760	2730	2410	2430	3480
9	3260	2980	4020	2790	2580	2650	2630	4620	3130	2300	2980	3810
10	3700	3000	2900	2300	2640	2660	2440	9950	3000	2180	4060	3650
11	3750	3000	3170	2850	2400	2960	2710	8560	3090	2100	4400	3110
12	2910	3000	3240	3000	2780	2750	3850	6190	3360	2250	5950	3130
13	2960	3000	2840	3260	2700	4900	5030	5360	3060	2520	12000	3110
14	3170	3560	2600	2580	2500	7030	5380	6160	2810	2060	18900	2710
15	2900	3600	2290	3050	2650	9430	4190	6550	2770	2280	21500	2330
16	2660	3470	2900	2500	2310	9290	3670	6110	2570	2000	17800	2420
17	2800	3540	2660	3230	2570	9050	4280	4880	1840	2220	15300	2460
18	3350	3470	3350	2820	2460	7440	5090	4710	1790	2780	13000	3180
19	5240	3440	4180	3160	2700	6430	8390	3930	1800	3060	12900	4160
20	6190	3280	3750	2920	2770	6850	10100	4050	2310	2720	11300	3920
21	5180	3960	3330	3230	2710	11400	10000	3170	2750	2190	8090	3480
22	4560	5450	3270	2850	2540	12300	7110	2990	2120	2310	5850	3080
23	4050	7490	2820	2910	2760	9380	6170	3390	2820	2130	5450	2790
24	4430	5020	3120	2800	2780	7070	5960	3490	2080	1900	5070	2490
25	5860	4900	2890	3030	2630	6020	4810	4710	2060	1780	4400	2830
26	4950	4640	3090	2760	2230	4980	5160	4440	1920	1790	7650	2860
27	4400	3300	3550	2670	2740	4770	4580	4250	2140	1820	8220	3010
28	4180	4040	3530	2450	2640	4250	4370	4820	2590	1990	13600	3240
29	3740	5170	3030	2500	---	3920	3730	5630	3300	1930	26600	2850
30	3300	3310	3350	3000	---	3700	3670	5930	4700	1860	24500	2670
31	3220	---	3700	2490	---	3440	---	6340	---	1930	16500	---
TOTAL	129680	111160	102630	89370	73610	164210	135690	146100	87320	66230	284770	108920
MEAN	4183	3705	3311	2883	2629	5297	4523	4713	2911	2136	9186	3631
MAX	6190	7490	4180	3710	3090	12300	10100	9950	5820	3060	26600	9390
MIN	2660	2610	2290	2300	2230	1880	2000	2760	1790	1320	2000	2330

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 1995, BY WATER YEAR (WY)

MEAN	4105	4421	3338	3046	3136	6456	10930	6993	6096	3522	3150	4420
MAX	13070	10270	7928	5589	6368	19180	25940	19730	19560	10820	9199	17670
(WY)	1987	1920	1966	1973	1984	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

WISCONSIN RIVER BASIN

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05400760 WISCONSIN RIVER AT WISCONSIN RAPIDS, WI--CONTINUED

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1914 - 1995	
ANNUAL TOTAL	1459470		1499690		4960	
ANNUAL MEAN	3999		4109		8499	1973
HIGHEST ANNUAL MEAN					2107	1977
LOWEST ANNUAL MEAN					63600	Jun 21 1993
HIGHEST DAILY MEAN	24200	Apr 27	26600	Aug 29	165	Aug 12 1934
LOWEST DAILY MEAN	1580	Jun 27	1320	Jul 4	790	Jun 18 1988
ANNUAL SEVEN-DAY MINIMUM	2010	Jun 22	1870	Jul 24	(a) 70400	Sep 12 1938
INSTANTANEOUS PEAK FLOW			26900	Aug 30	9690	
10 PERCENT EXCEEDS	5760		6380		3360	
50 PERCENT EXCEEDS	3210		3180		1770	
90 PERCENT EXCEEDS	2260		2240			

(a) From rating curve extended above 58,000 ft³/s

WISCONSIN RIVER BASIN
05402000 YELLOW RIVER AT BABCOCK, WI

LOCATION.--Lat 44°18'05", long 90°07'15", in NW 1/4 sec.14, T.21 N., R.3 E., Wood County, Hydrologic Unit 07070003, on right bank at downstream side of bridge on State Highway 80 at Babcock, 1.9 mi upstream from Hemlock Creek.

DRAINAGE AREA.--215 mi².

PERIOD OF RECORD.--March 1944 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. Datum of gage is 954.75 ft above sea level. Prior to Oct. 28, 1948, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Ice-affected periods, Dec. 5-17, and Jan. 2 to Mar. 17. Records good except those for ice-affected periods, which are poor (see page 11). There is a large recreation dam about 5.0 mi upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	37	68	13	12	9.6	767	158	138	9.7	5.2	33
2	43	34	66	14	11	9.2	652	138	111	9.1	5.1	33
3	33	30	68	13	10	9.6	484	125	86	8.1	5.2	30
4	29	29	77	12	10	11	348	115	67	7.4	6.6	27
5	25	29	90	12	9.4	11	262	106	64	7.8	6.9	23
6	22	29	100	12	9.4	10	192	97	73	8.2	6.9	20
7	23	31	90	12	9.4	10	137	89	85	8.0	7.0	20
8	25	30	76	11	9.4	11	124	86	68	8.7	7.0	19
9	23	31	58	11	9.2	10	119	119	51	7.9	6.5	15
10	27	30	50	11	9.4	11	112	328	55	7.0	6.8	13
11	25	29	42	12	9.6	13	111	383	70	7.0	7.5	12
12	29	29	34	12	9.6	25	139	249	58	6.5	8.1	11
13	36	30	30	13	9.6	100	429	178	47	6.2	11	11
14	40	35	29	13	9.6	1000	476	187	40	6.0	192	12
15	48	41	29	13	9.8	900	340	294	36	6.1	707	11
16	58	55	30	13	11	700	259	340	30	7.9	639	9.3
17	65	54	32	14	12	500	184	248	25	9.0	1060	9.3
18	78	48	32	15	11	411	217	168	23	8.8	1160	10
19	82	45	31	14	10	320	1090	124	21	8.4	1280	15
20	94	43	31	14	11	316	1210	98	19	7.5	2170	30
21	89	85	30	13	10	1050	897	80	17	6.4	1410	33
22	84	422	29	13	10	1070	785	66	16	6.5	923	33
23	87	441	28	12	10	810	737	65	14	6.9	496	33
24	102	216	28	12	11	424	516	67	13	6.7	200	30
25	109	166	31	11	11	264	386	66	12	6.2	108	28
26	88	122	27	11	11	208	341	62	13	5.8	83	26
27	71	95	25	11	10	180	256	57	13	5.6	84	24
28	59	87	28	11	10	182	204	81	12	6.7	84	19
29	51	76	23	11	---	182	195	137	10	7.2	72	96
30	45	70	26	12	---	301	184	287	9.8	6.6	92	45
31	41	---	18	12	---	720	---	205	---	5.7	50	---
TOTAL	1688	2499	1356	383	285.4	9778.4	12153	4803	1296.8	225.6	10899.8	730.6
MEAN	54.5	83.3	43.7	12.4	10.2	315	405	155	43.2	7.28	352	24.4
MAX	109	441	100	15	12	1070	1210	383	138	9.7	2170	96
MIN	22	29	18	11	9.2	9.2	111	57	9.8	5.6	5.1	9.3
CFSM	.25	.39	.20	.06	.05	1.47	1.88	.72	.20	.03	1.64	.11
IN.	.29	.43	.23	.07	.05	1.69	2.10	.83	.22	.04	1.89	.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1995, BY WATER YEAR (WY)

MEAN	105	119	66.2	27.3	38.4	398	541	242	162	66.2	52.5	130
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 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1944 - 1995
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ANNUAL TOTAL	52728.4		46098.6						
ANNUAL MEAN	144		126			162			
HIGHEST ANNUAL MEAN						376			1973
LOWEST ANNUAL MEAN						37.4			1977
HIGHEST DAILY MEAN	2480	Apr 16	2170	Aug 20	10300			Apr 2	1952
LOWEST DAILY MEAN	6.9	Jul 3	5.1	Aug 2		1.4	(a)	Sep 14	1948
ANNUAL SEVEN-DAY MINIMUM	9.6	Jun 28	5.9	Jul 30		1.4		Sep 13	1948
INSTANTANEOUS PEAK FLOW			2470	Aug 20	11600			Apr 2	1952
INSTANTANEOUS PEAK STAGE			11.02	Aug 20		17.38		Apr 2	1952
INSTANTANEOUS LOW FLOW			4.4	Aug 1		.94		Aug 11	1985
ANNUAL RUNOFF (CFSM)	.67		.59			.75			
ANNUAL RUNOFF (INCHES)	9.12		7.98			10.25			
10 PERCENT EXCEEDS	315		340			361			
50 PERCENT EXCEEDS	41		30			31			
90 PERCENT EXCEEDS	13		8.2			8.0			

(a) Also occurred Sept. 15-19, 25, 26, 1948

05404000 WISCONSIN RIVER NEAR WISCONSIN DELLS, WI

LOCATION.--Lat 43°36'22", long 89°45'25" in NW 1/4 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.--Estimated daily discharges: Ice-affected periods, Dec. 30 to Jan. 14 and Feb. 4-18. Records fair (see page 11). 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, Peterwell 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 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

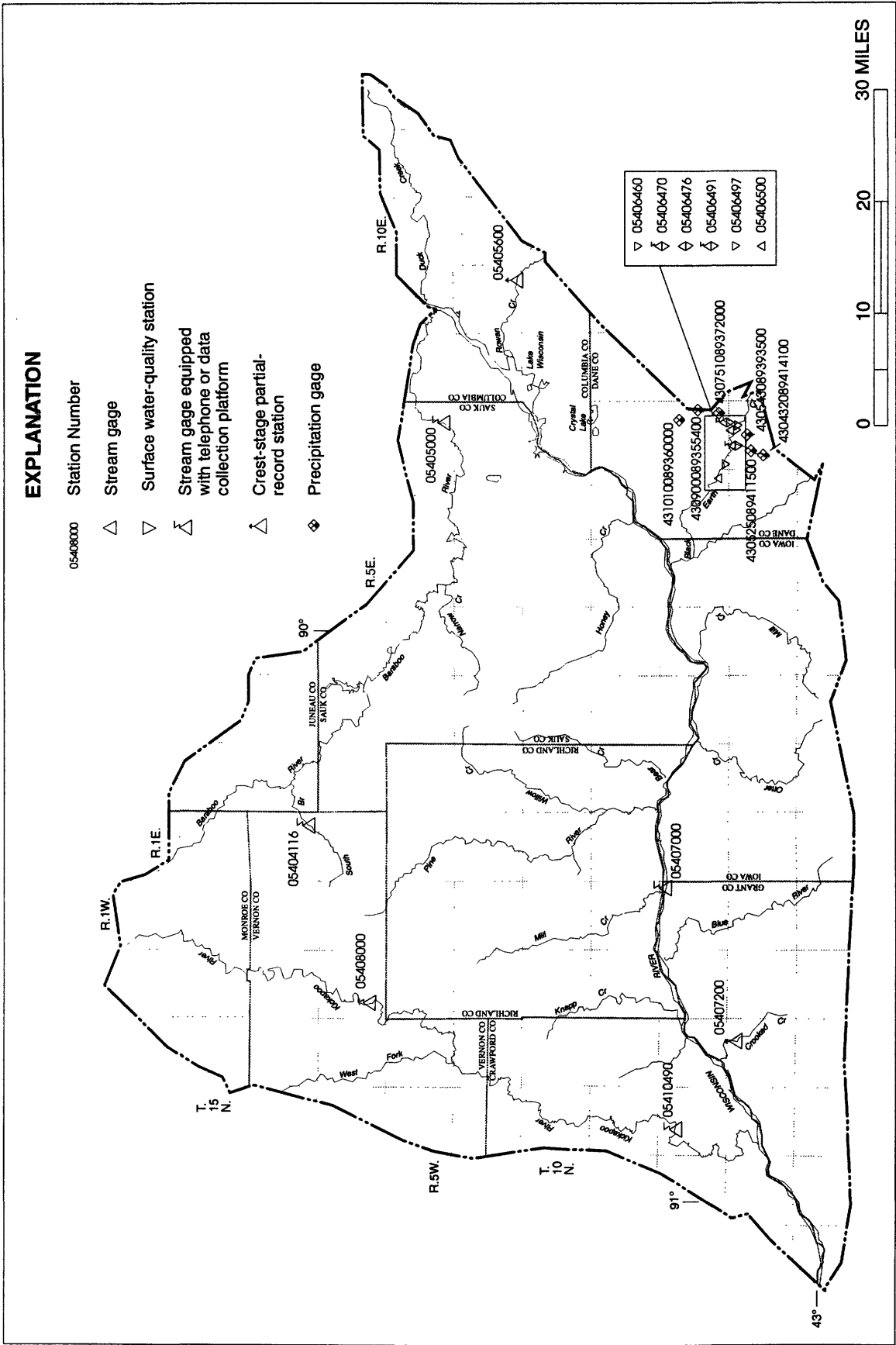
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9080	4640	5410	6000	4980	3500	5670	8540	8470	4620	1980	23400
2	9360	4580	5580	6000	5250	3280	4500	7940	8560	4020	1990	16800
3	9000	4690	5200	6000	5530	3240	4710	8140	7990	3060	2270	8710
4	8070	4660	5300	5800	6000	2940	4380	8090	7180	2950	2590	7540
5	7670	4500	5350	6000	6000	3030	4000	7550	6320	2280	2280	6750
6	7590	4470	6080	6000	6000	3080	3350	6500	5870	2100	2720	5620
7	7090	4490	6180	6000	6200	3110	3080	5340	5600	2850	2890	4290
8	6580	3850	6380	5800	6200	3270	3320	4540	5430	3950	3190	4830
9	6500	4240	6230	5400	6000	3330	3570	4680	4790	3430	4160	4820
10	6310	3930	4860	4100	5200	3710	3400	5940	4320	3380	4390	4780
11	5090	3920	4500	4500	4400	4080	3260	7480	3980	3400	5080	4640
12	4920	3820	4270	4900	5000	4260	3410	8430	4100	3040	5000	4490
13	4340	4290	3920	4800	5200	4710	3480	8650	3730	2650	5060	3570
14	4530	4730	3800	4700	4300	5400	3950	9590	3580	2310	10100	3630
15	4670	4890	4780	4890	4500	7240	4240	10400	3680	2730	18500	3710
16	4760	5800	5440	4960	4400	8490	4160	9220	3420	2870	20500	3240
17	4900	6070	5280	5100	4300	8970	4400	8910	3040	2960	21400	2770
18	4500	6030	5460	5270	4200	9300	5870	8810	2720	2980	17100	2680
19	5260	4680	5910	5290	4480	9400	7460	8660	2630	3560	16300	3120
20	5560	4880	5780	5240	4620	9780	9580	8500	2630	3500	17300	6000
21	6620	5280	5220	5120	4230	10000	9600	8330	2540	3260	13400	6990
22	7590	6120	5610	4530	4430	10400	10200	6690	2580	3090	13400	5250
23	6950	6290	5010	4860	4110	10500	11000	6470	2510	2990	13300	4510
24	6450	6180	4030	4560	4180	10300	10400	7310	2570	2900	9310	3480
25	6290	7920	3700	4890	4040	9990	10200	8000	2540	2550	10700	3210
26	6410	8910	4120	5160	3860	9110	10400	7270	2900	2440	10900	3980
27	6640	8170	4830	5180	3250	8140	10500	6540	2660	2280	12200	3650
28	6300	6980	4960	4400	3130	7160	10400	6210	3160	2200	14100	3800
29	6320	6360	5120	4450	---	6980	9430	7700	3920	2600	17900	3990
30	5540	6120	5800	4290	---	7090	8840	8280	4500	2440	24900	3960
31	4960	---	6000	4200	---	6630	---	8470	---	2100	26900	---
TOTAL	195850	161490	160110	158390	133990	200420	190760	237180	127920	91490	331810	168210
MEAN	6318	5383	5165	5109	4785	6465	6359	7651	4264	2951	10700	5607
MAX	9360	8910	6380	6000	6200	10500	11000	10400	8560	4620	26900	23400
MIN	4340	3820	3700	4100	3130	2940	3080	4540	2510	2100	1980	2680

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 1995, BY WATER YEAR (WY)

	MEAN	5889	6325	5148	4751	5001	8288	12860	9556	8549	5308	4327	6055
MAX	19120	13900	10740	7831	9610	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 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1935 - 1995
ANNUAL TOTAL	2114550	2157620	
ANNUAL MEAN	5793	5911	6834
HIGHEST ANNUAL MEAN			12420
LOWEST ANNUAL MEAN			2993
HIGHEST DAILY MEAN	30400	Apr 29	71200
LOWEST DAILY MEAN	2610	Aug 8	1060
ANNUAL SEVEN-DAY MINIMUM	3090	Apr 9	1210
INSTANTANEOUS PEAK FLOW		27300	72200
INSTANTANEOUS PEAK STAGE		11.99	(a) 23.83
10 PERCENT EXCEEDS	8910	9490	12200
50 PERCENT EXCEEDS	4900	4980	5200
90 PERCENT EXCEEDS	3460	2960	2860

(a) Present datum



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 1/4 NE 1/4 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.--Estimated daily discharges: Ice-affected periods, Dec. 10-13, Jan. 2-11, Feb. 3-16, and Mar. 1-10. Records good except those for ice-affected periods, which are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	17	21	15	16	11	31	25	24	18	18	14
2	23	17	24	14	15	11	28	24	23	18	16	14
3	23	17	23	12	14	12	27	24	22	18	18	13
4	22	17	23	11	13	12	24	23	21	19	18	13
5	22	17	23	11	12	13	23	23	20	22	21	13
6	22	18	21	12	12	13	24	22	21	21	16	13
7	23	17	21	12	12	13	25	21	82	20	25	13
8	21	17	19	12	11	12	33	31	48	18	95	13
9	20	17	20	12	12	12	31	39	28	20	15	13
10	20	16	17	13	13	14	31	38	29	19	18	12
11	19	16	16	14	10	230	68	29	26	18	17	12
12	19	16	16	16	11	158	162	25	23	17	16	13
13	19	19	16	16	11	59	67	35	22	17	14	14
14	19	26	17	16	11	35	47	68	21	16	18	12
15	19	18	18	16	12	29	37	29	20	16	14	12
16	19	17	18	15	12	26	33	42	19	21	19	12
17	22	17	19	20	13	24	31	64	19	17	32	12
18	22	18	19	18	15	23	105	30	18	16	17	12
19	20	17	18	16	18	23	72	26	18	18	114	21
20	19	22	18	15	19	119	43	24	17	25	24	21
21	18	65	18	15	18	43	69	23	17	18	17	15
22	20	23	18	15	16	29	43	22	18	17	16	15
23	21	22	18	15	18	28	35	29	17	17	15	14
24	19	21	18	13	15	26	33	26	17	16	15	14
25	18	21	17	15	15	24	32	23	19	15	15	15
26	18	19	17	14	14	26	30	21	24	16	14	15
27	17	23	18	14	14	124	34	33	28	16	14	14
28	17	30	20	15	14	66	30	88	29	16	18	14
29	17	23	18	14	---	56	27	41	21	14	32	13
30	17	21	17	14	---	45	26	30	19	14	18	15
31	17	---	17	15	---	35	---	23	---	15	15	---
TOTAL	617	624	583	445	386	1351	1301	1001	730	548	734	416
MEAN	19.9	20.8	18.8	14.4	13.8	43.6	43.4	32.3	24.3	17.7	23.7	13.9
MAX	25	65	24	20	19	230	162	88	82	25	114	21
MIN	17	16	16	11	10	11	23	21	17	14	14	12
CFSM	.51	.53	.48	.37	.35	1.11	1.11	.83	.62	.45	.61	.35
IN.	.59	.59	.55	.42	.37	1.29	1.24	.95	.69	.52	.70	.40

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1995, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992	1993	1994	1995	1988	1989	1990	1991	1992	1993	1994	1995
MEAN	13.9	17.6	14.5	12.8	15.1	39.7	36.2	25.7	28.8	18.4	15.2	26.8				
MAX	26.1	28.6	22.9	16.5	28.4	50.8	70.9	52.5	75.3	52.3	28.2	95.3				
(WY)	1994	1993	1993	1994	1994	1989	1993	1993	1990	1993	1993	1992				
MIN	6.79	8.14	4.42	8.95	6.91	25.7	8.47	13.2	8.38	5.83	6.69	6.12				
(WY)	1990	1991	1990	1991	1989	1991	1990	1989	1989	1989	1988	1990				

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1988 - 1995

ANNUAL TOTAL	9303.9	8736	
ANNUAL MEAN	25.5	23.9	22.5
HIGHEST ANNUAL MEAN			35.1
LOWEST ANNUAL MEAN			13.0
HIGHEST DAILY MEAN	308	Apr 25	1190
LOWEST DAILY MEAN	(a)1.2	Jul 24-27	1.2 (a)Jul 24-27
ANNUAL SEVEN-DAY MINIMUM	1.4	Jul 22	1.4
INSTANTANEOUS PEAK FLOW			(c)4010
INSTANTANEOUS PEAK STAGE			(d)15.60
ANNUAL RUNOFF (CFSM)	.65		.57
ANNUAL RUNOFF (INCHES)	8.85		7.80
10 PERCENT EXCEEDS	38		36
50 PERCENT EXCEEDS	19		14
90 PERCENT EXCEEDS	16		6.2

(a) Result of closing dam gates to fill lake 0.35 mi upstream

(b) Ice affected

(c) From rating curve extended above 1,100 ft³/s, on basis of contracted-area measurement

(d) From floodmark on gage house

WISCONSIN RIVER BASIN
05405000 BARABOO RIVER NEAR BARABOO, WI

LOCATION.--Lat 43°28'51", long 89°38'09", in NW 1/4 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.--Estimated daily discharges: Ice-affected periods, Dec. 10-15, Jan. 2-12, 20-29, Feb. 4-16, and Mar. 1-10. Records good except those for ice-affected periods, which are fair (see page 11). 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 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	654	282	451	321	253	250	962	546	695	372	270	323
2	512	280	414	260	259	220	851	499	543	323	253	269
3	455	279	389	200	268	200	717	469	441	288	310	239
4	433	279	383	210	260	210	603	446	396	273	305	222
5	402	283	397	210	240	220	535	428	372	301	304	216
6	375	298	407	210	230	220	493	411	354	325	299	212
7	358	286	416	220	220	220	459	392	392	314	311	212
8	341	285	403	220	220	210	503	419	511	304	324	204
9	338	285	383	220	230	210	584	599	686	301	413	202
10	332	281	310	230	230	230	660	761	664	288	455	203
11	322	278	260	240	210	431	817	898	540	279	410	200
12	310	275	270	250	200	792	1300	824	441	268	312	196
13	299	273	290	264	200	1200	1440	704	403	266	277	196
14	295	297	300	274	210	1170	1300	716	363	258	280	195
15	293	315	300	290	220	1210	1230	732	327	258	252	196
16	292	336	307	299	220	1240	1170	794	311	281	256	192
17	295	350	313	300	232	1150	992	1100	294	274	336	189
18	307	325	325	294	234	861	872	860	279	277	407	187
19	339	298	333	286	260	607	1020	745	265	270	485	213
20	349	297	333	280	323	641	1050	641	260	319	470	235
21	338	333	336	270	356	924	1080	520	253	321	557	276
22	332	390	334	260	372	986	1150	446	245	323	627	305
23	322	482	334	250	375	964	1120	423	241	315	564	284
24	312	542	334	230	350	925	995	427	235	305	377	246
25	321	489	331	230	319	746	853	445	231	297	292	231
26	326	396	328	240	302	579	712	438	256	297	268	228
27	314	391	327	240	280	617	693	425	335	283	248	227
28	303	424	330	240	268	865	704	709	442	284	256	225
29	296	463	338	240	---	1030	655	766	436	270	282	220
30	289	470	346	251	---	1070	602	758	403	256	309	217
31	286	---	344	251	---	1040	---	751	---	265	340	---
TOTAL	10740	10262	10666	7780	7341	21238	26122	19092	11614	9055	10849	6760
MEAN	346	342	344	251	262	685	871	616	387	292	350	225
MAX	654	542	451	321	375	1240	1440	1100	695	372	627	323
MIN	286	273	260	200	200	200	459	392	231	256	248	187
CFSM	.57	.56	.56	.41	.43	1.12	1.43	1.01	.64	.48	.57	.37
IN.	.66	.63	.65	.48	.45	1.30	1.60	1.17	.71	.55	.66	.41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 1995, BY WATER YEAR (WY)

	MEAN	280	327	243	242	325	824	708	431	408	313	254	319
MAX	842	942	519	945	1135	1759	2588	1518	1332	1495	1018	1285	
(WY)	1973	1986	1993	1946	1966	1948	1993	1973	1920	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	

WISCONSIN RIVER BASIN
05405000 BARABOO RIVER NEAR BARABOO, WI--CONTINUED

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SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1914 - 1995	
ANNUAL TOTAL	180223		151519			
ANNUAL MEAN	494		415		389	
HIGHEST ANNUAL MEAN					824	
LOWEST ANNUAL MEAN					158	
HIGHEST DAILY MEAN	2210	Feb 23	1440	Apr 13	7540	Mar 26 1917
LOWEST DAILY MEAN	219	Aug 9	187	Sep 18	26	Oct 6 1950
ANNUAL SEVEN-DAY MINIMUM	234	Aug 3	193	Sep 12	72	Dec 8 1958
INSTANTANEOUS PEAK FLOW			1470	Apr 13	(a) 7900	Mar 26 1917
INSTANTANEOUS PEAK STAGE			12.26	Apr 13	22.78	Jul 18 1993
ANNUAL RUNOFF (CFSM)	.81		.68		.64	
ANNUAL RUNOFF (INCHES)	11.01		9.26		8.69	
10 PERCENT EXCEEDS	946		793		776	
50 PERCENT EXCEEDS	338		315		238	
90 PERCENT EXCEEDS	268		220		136	

(a) Gage height, 17.50 ft, estimated, site and datum then in use, from rating curve extended above 6,000 ft³/s

WISCONSIN RIVER BASIN

05406460 BLACK EARTH CREEK AT CROSS PLAINS, WI

LOCATION.--Lat 43°06'38", long 89°38'44", in NW 1/4 SE 1/4 sec.3, T.7 N., R.7 E., Dane County, Hydrologic Unit 07070005, on left bank at bridge at County Trunk P at Cross Plains.

DRAINAGE AREA.--12.8 mi².

PERIOD OF RECORD.--October 1984 to September 1986, October 1989 to September 1995 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: January 1985 to September 1986, October 1989 to September 1995 (discontinued).

DISSOLVED OXYGEN: April 1984 to September 1986, April 1989 to September 1995 (discontinued).

INSTRUMENTATION.--Continuous water temperature recorder January 1985 to September 1986, October 1989 to current year. Dissolved oxygen recorder April 1984 to September 1986, April 1989 to current year.

REMARKS.--Suspended-sediment, total phosphorus, and total nitrogen discharge were calculated for the period October 1984 to June 1986.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum observed, 23.0°C, July 25, 1985; minimum observed, 0.5°C, Mar. 8, 1990, Mar. 2, 1991.

DISSOLVED OXYGEN: Maximum observed, 16.5 mg/L, May 8, 1990; minimum observed, 3.0 mg/L, July 25, 1985.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum observed, 19.5°C, June 18 and July 30-31; minimum observed, 3.0°C, Feb. 11.

DISSOLVED OXYGEN: Maximum observed, 14.5 mg/L, July 24; minimum observed, 4.9 mg/L, Aug. 28-29.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	14.0	11.5	12.5	11.0	7.5	9.0	8.5	6.0	7.0	6.5	5.0	5.5
2	12.0	11.0	11.5	11.0	8.0	9.5	9.0	7.0	7.5	7.0	4.5	5.5
3	13.5	10.5	11.5	11.0	9.5	10.5	9.5	7.5	8.0	6.0	4.0	5.0
4	12.0	10.0	11.0	10.5	10.0	10.5	9.0	7.5	8.0	6.0	4.0	4.5
5	12.0	9.5	10.5	10.0	9.5	10.0	9.0	7.0	8.0	6.0	4.0	5.0
6	13.0	10.0	11.0	11.0	8.5	9.5	7.0	4.0	6.0	7.0	5.0	6.0
7	14.0	11.0	12.0	11.0	8.0	9.5	7.0	4.0	5.5	7.0	4.0	5.5
8	11.5	9.5	11.0	11.0	9.5	10.0	6.5	4.5	5.5	7.0	4.5	5.0
9	12.0	8.5	10.0	10.0	8.0	9.0	7.0	5.0	6.0	7.0	4.5	5.5
10	12.5	8.0	9.5	10.5	7.0	8.5	7.0	5.0	5.5	7.5	5.5	6.5
11	13.0	8.0	9.5	10.0	7.5	8.5	7.0	4.0	5.0	7.5	6.5	7.0
12	---	---	---	9.5	8.0	9.0	7.0	4.5	5.5	8.0	6.5	7.0
13	12.5	7.5	10.0	10.5	9.0	10.0	7.0	5.0	6.0	7.5	6.5	7.0
14	13.0	9.0	10.5	11.0	8.0	10.0	6.5	5.5	6.0	7.5	6.5	7.0
15	12.5	10.0	11.0	10.0	7.5	8.5	7.0	5.5	6.5	7.5	6.0	6.5
16	13.5	10.5	11.5	10.0	7.0	8.0	7.5	6.5	7.0	7.0	6.0	6.5
17	13.0	11.0	12.0	8.5	7.5	8.0	8.0	6.5	7.0	7.5	6.0	6.5
18	13.5	11.5	12.0	9.5	7.0	8.0	7.5	5.0	6.5	8.0	5.5	6.5
19	13.5	10.0	11.5	9.0	6.5	7.5	7.0	5.5	6.0	6.5	5.0	6.0
20	13.5	9.5	11.0	8.5	8.0	8.5	8.5	6.5	7.0	7.0	5.5	6.0
21	12.5	9.0	10.5	9.0	6.0	8.0	9.0	6.5	7.0	6.5	5.0	5.5
22	13.5	9.5	11.0	8.0	5.5	6.5	8.0	6.0	7.0	7.0	5.5	6.0
23	12.0	9.0	10.0	8.0	6.0	6.5	8.0	6.5	7.5	8.0	4.5	6.0
24	10.0	8.5	9.0	8.5	6.0	7.0	8.5	6.0	7.5	8.0	4.5	5.5
25	9.0	8.0	8.5	8.5	6.5	7.0	8.0	5.5	6.5	8.0	4.5	6.0
26	11.0	8.0	9.0	8.0	6.0	6.5	8.5	6.0	7.0	8.5	4.5	5.5
27	11.5	8.0	9.0	6.5	4.5	6.0	9.0	7.0	7.5	8.0	5.0	6.0
28	10.5	8.5	9.5	5.5	5.0	5.0	7.5	6.0	7.0	8.0	5.0	6.5
29	11.5	8.5	10.0	6.5	5.0	5.5	7.5	5.5	6.5	8.5	4.5	6.0
30	11.0	8.0	9.5	7.5	5.5	6.0	7.0	5.5	6.5	8.0	5.0	6.5
31	10.0	8.5	9.5	---	---	---	7.0	6.0	6.5	9.0	5.0	7.0
MONTH	---	---	---	11.0	4.5	8.2	9.5	4.0	6.6	9.0	4.0	6.0

05406460 BLACK EARTH CREEK AT CROSS PLAINS, WI--CONTINUED

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	8.5	6.5	7.0	8.5	4.0	5.5	10.0	6.0	8.0	11.0	8.0	9.5
2	8.0	6.5	7.0	10.0	4.5	6.0	11.5	6.5	8.5	12.5	8.5	10.0
3	7.5	5.5	7.0	10.0	5.0	6.5	12.5	6.5	9.5	12.5	8.0	10.0
4	7.5	4.0	5.5	9.5	5.5	7.0	10.0	4.5	7.0	12.5	9.0	10.0
5	7.5	4.0	5.0	8.0	6.0	7.0	9.5	5.5	7.5	13.5	8.0	10.5
6	8.0	4.5	5.5	8.0	5.0	6.5	12.5	7.5	9.5	15.0	8.0	11.0
7	6.5	4.5	5.5	8.5	5.0	6.5	9.0	7.0	8.0	15.0	9.5	11.5
8	8.0	4.5	5.5	9.5	5.0	6.5	8.5	7.0	7.5	10.5	9.0	10.0
9	8.5	5.0	6.5	10.0	4.5	6.5	10.5	6.0	7.5	11.0	8.5	10.0
10	7.5	3.5	6.0	11.0	5.5	7.5	7.5	6.5	6.5	10.0	9.5	9.5
11	6.0	3.0	4.0	9.0	5.0	7.0	8.0	6.0	7.0	14.5	9.0	11.5
12	7.5	4.0	5.0	11.0	5.5	8.0	7.5	6.0	7.0	15.5	9.0	12.0
13	7.5	4.5	5.5	11.5	7.5	9.0	12.0	6.5	9.0	11.5	10.5	11.0
14	8.0	4.5	6.0	11.5	7.0	9.0	12.5	6.5	9.5	15.0	10.5	12.0
15	7.5	5.0	6.0	12.5	7.5	9.5	10.0	7.5	8.5	16.0	9.0	12.5
16	9.0	5.0	6.5	12.5	7.5	9.5	11.0	7.5	9.0	16.5	10.0	12.5
17	9.0	5.0	6.5	11.0	7.5	9.0	13.0	8.0	10.0	15.0	9.5	12.0
18	9.5	6.0	7.0	10.5	7.5	8.5	12.5	8.5	10.0	14.5	9.5	11.0
19	9.5	4.5	6.5	10.5	8.0	9.0	12.5	8.0	9.5	15.5	9.0	12.0
20	9.0	4.5	6.5	8.5	6.5	7.5	10.0	8.0	8.5	16.0	10.0	12.0
21	7.5	4.5	6.0	9.0	6.0	7.0	8.5	8.0	8.0	15.5	9.0	11.5
22	10.0	5.5	7.0	11.0	5.5	8.0	13.5	7.0	10.0	16.0	9.0	12.0
23	9.0	5.5	6.5	9.0	6.5	7.5	12.0	7.5	9.5	11.5	9.5	10.5
24	8.5	5.0	6.5	11.5	6.0	8.5	10.5	7.5	9.0	12.5	9.0	11.0
25	8.0	6.0	7.0	11.5	7.0	9.0	12.0	7.0	9.5	15.5	9.5	12.0
26	6.5	5.5	6.0	9.5	8.0	8.5	---	---	---	16.0	9.5	12.0
27	9.0	6.0	7.0	8.0	6.0	7.0	---	---	---	11.5	10.5	11.0
28	9.5	4.5	7.0	7.0	6.5	6.5	---	---	---	14.5	11.5	12.5
29	---	---	---	9.0	6.5	7.5	10.0	9.0	9.5	15.5	11.0	13.0
30	---	---	---	8.5	6.0	7.5	12.5	8.5	10.0	17.0	10.5	13.5
31	---	---	---	8.5	6.5	7.5	---	---	---	16.0	10.5	13.0
MONTH	10.0	3.0	6.2	12.5	4.0	7.6	---	---	---	17.0	8.0	11.4
JUNE				JULY			AUGUST			SEPTEMBER		
1	15.5	11.5	13.0	16.5	10.5	13.0	16.0	14.5	15.0	17.0	12.5	14.0
2	15.5	11.0	12.5	16.5	10.0	13.0	15.0	14.0	14.5	17.0	12.5	14.0
3	17.0	11.0	13.5	---	---	---	16.0	14.0	15.0	17.0	12.5	14.5
4	16.0	11.5	13.5	---	---	---	17.5	14.0	15.5	17.0	12.5	14.5
5	17.5	11.5	13.5	---	---	---	18.0	14.0	15.5	17.0	12.5	14.0
6	17.5	12.0	13.5	---	---	---	17.0	14.0	15.5	15.0	13.5	14.0
7	17.5	12.5	14.5	17.5	12.0	14.5	17.5	14.0	15.5	14.0	11.5	13.0
8	12.5	11.0	11.5	16.0	12.0	14.0	18.0	14.0	15.5	15.5	11.0	12.5
9	14.0	11.0	12.0	17.5	13.0	14.5	16.0	14.5	15.0	16.0	11.0	13.0
10	17.0	11.5	13.5	16.5	12.5	14.5	17.0	14.0	15.5	15.0	11.0	13.0
11	16.5	11.5	13.0	18.0	12.5	15.0	18.5	13.5	16.0	16.0	11.0	13.0
12	16.0	10.5	13.0	---	---	---	18.5	14.5	16.0	14.5	12.0	13.0
13	17.0	10.5	13.0	---	---	---	19.0	14.5	16.5	17.5	13.0	14.5
14	17.5	11.5	14.0	---	---	---	18.0	13.5	16.0	16.0	11.5	13.5
15	18.0	12.0	14.5	---	---	---	15.5	12.5	13.5	16.0	11.0	13.0
16	18.5	12.0	14.5	---	---	---	18.0	12.5	14.0	16.5	12.5	14.0
17	18.5	12.5	15.0	---	---	---	17.5	14.5	16.0	15.5	11.5	13.0
18	19.5	13.0	15.5	16.5	11.5	14.0	17.0	15.0	15.5	14.0	11.0	12.0
19	18.0	12.0	15.0	15.5	12.5	14.0	18.0	14.0	16.0	11.5	10.5	11.0
20	18.0	11.5	14.0	17.5	13.5	15.0	17.5	13.0	15.0	11.5	10.0	11.0
21	18.5	12.0	14.5	17.5	12.5	15.0	17.5	13.0	15.0	10.5	9.0	10.0
22	18.0	11.5	14.0	16.5	13.5	14.5	16.5	12.5	14.5	11.5	8.5	9.5
23	18.5	12.0	14.5	17.5	13.5	15.0	17.0	13.0	14.5	12.5	8.0	9.5
24	17.5	11.5	14.0	17.5	13.5	15.5	14.5	13.0	13.5	11.5	8.0	9.5
25	17.5	11.5	14.0	19.0	13.5	15.5	17.0	12.5	14.0	12.0	9.5	10.5
26	15.5	12.0	13.5	18.0	14.5	16.0	16.0	12.0	13.5	14.5	10.0	11.5
27	15.0	12.0	13.0	18.0	14.0	16.0	14.5	12.5	13.5	14.5	9.0	11.0
28	16.0	11.5	13.0	19.0	13.5	16.0	16.0	12.5	14.0	14.5	9.5	11.5
29	17.0	11.5	14.0	18.5	14.0	16.0	16.0	13.0	14.5	13.0	9.5	11.0
30	17.0	12.0	14.0	19.5	14.0	16.5	18.5	14.0	16.0	14.0	11.5	12.5
31	---	---	---	19.5	15.0	17.0	17.5	13.5	15.5	---	---	---
MONTH	19.5	10.5	13.7	---	---	---	19.0	12.0	15.0	17.5	8.0	12.4

05406460 BLACK EARTH CREEK AT CROSS PLAINS, WI--CONTINUED

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	11.2	7.6	8.8
2	---	---	---	---	---	---	---	---	---	13.5	7.6	9.9
3	---	---	---	---	---	---	---	---	---	13.1	8.8	10.6
4	---	---	---	---	---	---	---	---	---	13.5	8.9	10.3
5	---	---	---	---	---	---	---	---	---	13.4	8.9	10.7
6	---	---	---	---	---	---	---	---	---	13.5	8.5	10.7
7	---	---	---	---	---	---	---	---	---	13.3	8.6	10.4
8	---	---	---	---	---	---	---	---	---	11.0	8.6	9.5
9	---	---	---	---	---	---	---	---	---	12.6	8.4	10.1
10	---	---	---	---	---	---	---	---	---	10.5	8.3	9.2
11	---	---	---	---	---	---	---	---	---	12.6	8.2	10.0
12	---	---	---	---	---	---	---	---	---	12.2	8.0	9.8
13	---	---	---	---	---	---	---	---	---	9.5	7.7	8.5
14	---	---	---	---	---	---	---	---	---	12.0	7.6	9.1
15	---	---	---	---	---	---	---	---	---	11.5	7.2	9.1
16	---	---	---	---	---	---	---	---	---	11.7	7.2	8.7
17	---	---	---	---	---	---	---	---	---	12.2	7.3	9.4
18	---	---	---	---	---	---	---	---	---	12.4	7.9	9.6
19	---	---	---	---	---	---	---	---	---	12.9	8.2	10.1
20	---	---	---	---	---	---	---	---	---	13.2	8.3	10.4
21	---	---	---	---	---	---	---	---	---	13.8	8.8	10.9
22	---	---	---	---	---	---	---	---	---	14.4	8.9	11.2
23	---	---	---	---	---	---	---	---	---	12.2	8.9	10.1
24	---	---	---	---	---	---	---	---	---	13.5	9.2	10.8
25	---	---	---	---	---	---	---	---	---	13.5	8.9	10.8
26	---	---	---	---	---	---	---	---	---	13.5	9.0	10.8
27	---	---	---	---	---	---	---	---	---	11.9	7.7	9.6
28	---	---	---	---	---	---	---	---	---	10.0	7.7	8.8
29	---	---	---	---	---	---	11.0	7.9	9.1	11.0	8.3	9.3
30	---	---	---	---	---	---	12.4	8.0	9.7	12.1	7.8	9.7
31	---	---	---	---	---	---	---	---	---	11.6	7.7	9.4
MONTH	---	---	---	---	---	---	---	---	---	14.4	7.2	9.9
	JUNE			JULY			AUGUST			SEPTEMBER		
1	12.2	7.6	9.4	---	---	---	---	---	---	---	---	---
2	12.6	7.6	9.2	---	---	---	---	---	---	---	---	---
3	13.4	7.4	9.8	---	---	---	---	---	---	---	---	---
4	13.1	7.4	9.7	---	---	---	---	---	---	---	---	---
5	13.3	6.7	9.5	---	---	---	---	---	---	10.1	6.6	7.8
6	12.6	6.7	8.6	---	---	---	---	---	---	9.5	6.4	7.5
7	13.0	6.7	9.2	---	---	---	---	---	---	9.4	6.4	7.5
8	11.8	6.9	9.1	---	---	---	---	---	---	10.4	7.2	8.4
9	13.4	7.6	9.9	---	---	---	---	---	---	10.4	7.1	8.3
10	14.1	7.6	10.0	---	---	---	---	---	---	10.4	7.1	8.3
11	14.2	7.8	10.3	---	---	---	---	---	---	10.6	7.1	8.5
12	13.3	8.0	10.4	---	---	---	---	---	---	9.8	6.9	8.1
13	11.4	7.9	9.5	---	---	---	---	---	---	10.5	6.9	8.1
14	11.4	7.8	9.4	---	---	---	---	---	---	10.9	7.1	8.6
15	10.7	7.6	9.1	---	---	---	---	---	---	11.2	7.6	8.9
16	11.7	7.6	9.3	---	---	---	---	---	---	10.8	7.0	8.5
17	12.6	7.4	9.2	---	---	---	---	---	---	11.4	7.2	8.9
18	13.1	6.9	8.9	13.9	7.1	10.0	---	---	---	11.0	7.7	8.9
19	10.7	7.0	8.7	12.6	6.8	9.3	8.2	5.2	6.1	8.9	7.6	8.1
20	9.9	7.0	8.5	13.8	6.3	9.6	10.4	5.2	7.4	10.6	7.6	8.7
21	9.6	6.9	8.4	13.7	6.5	9.6	10.6	5.6	7.6	10.3	8.1	8.9
22	11.7	6.4	8.3	13.0	6.4	9.0	11.1	5.9	8.1	11.1	8.5	9.4
23	8.4	5.9	7.3	13.4	6.1	9.3	11.0	6.4	8.1	11.4	8.6	9.6
24	8.7	5.9	7.3	14.5	6.3	9.4	8.8	6.0	7.3	10.9	8.2	9.3
25	8.6	5.7	7.4	14.0	6.3	9.4	9.7	6.0	7.3	10.7	8.2	9.0
26	10.3	5.7	7.8	13.8	6.1	9.3	10.1	6.2	7.7	11.0	8.0	9.0
27	11.9	6.5	8.9	13.5	5.9	8.4	9.8	6.4	7.6	10.8	8.0	9.0
28	11.7	5.8	8.6	13.2	5.9	9.0	8.6	4.9	7.0	10.7	7.9	8.9
29	---	---	---	13.0	5.9	8.8	8.0	4.9	6.3	10.0	7.6	8.5
30	---	---	---	13.0	5.9	8.8	8.5	5.0	6.4	10.3	7.2	8.2
31	---	---	---	---	---	---	---	---	---	---	---	---

431010089360000 BREWERY CREEK RAIN GAGE #1 NEAR CROSS PLAINS, WI

LOCATION.--Lat 43°10'10", long 89°36'00", in NE 1/4 SE 1/4 sec.13, T.8 N., R.7 E., Dane County, Hydrologic Unit 07070005, on Whip-porwill Road, 0.5 mi south of intersection with County Trunk K.

PERIOD OF RECORD.--October 1989 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established Oct. 27, 1989. Rainfall estimated to be 0.00 for Dec. 17, 20, 31, Jan. 7, 11-12, 25, and Mar. 5, 10 because recorded precipitation interpreted as collector snowmelt.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 4.09 in., July 5, 1993.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.03 in., May 27.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.01	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.08	.00	.02	.00
3	.04	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.02	.05	.00	.00	.00	.00	.00	.06	.00	.93	.02	.00
5	.00	.56	.14	.00	.00	.00	.00	.00	.00	.40	.00	.00
6	.00	.01	.00	.00	.00	.00	.00	.00	.13	.06	.00	.05
7	.28	.00	.00	.00	.00	.00	.61	.00	.50	.00	.15	.09
8	.13	.10	.00	.00	.00	.00	.14	.65	.00	.00	.18	.00
9	.00	.08	.00	.00	.00	.00	.01	.50	.00	.20	.04	.00
10	.00	.00	.00	.00	.00	.00	.30	.16	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.59	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00
13	.00	.30	.00	.00	.00	.00	.00	.34	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.00
15	.00	.00	.00	.00	.00	.00	.01	.00	.00	.62	.01	.00
16	.00	.00	.00	.00	.00	.00	.38	.00	.00	.00	.80	.23
17	.04	.02	.00	.05	.00	.00	.01	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.05	.82	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.06	.00	.00	.00	.36	1.00	.87
20	.00	.34	.00	.00	.03	.58	.10	.00	.00	.01	.00	.16
21	.00	.11	.00	.00	.00	.00	.11	.00	.00	.00	.00	.01
22	.14	.00	.00	.00	.00	.00	.00	.00	.00	.97	.00	.00
23	.00	.00	.00	.00	.00	.03	.00	.44	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.02	.00	.00	.48	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.21	.00	.07
26	.00	.00	.00	.00	.00	.10	.68	.00	.26	.00	.00	.00
27	.00	.94	.00	.00	.00	.54	.17	2.03	.00	.19	.00	.00
28	.00	.00	.00	.00	.00	.02	.00	.10	.00	.00	.41	.00
29	.00	.00	.00	.00	---	.00	.01	.00	.22	.00	.11	.02
30	.00	.00	.00	.00	---	.00	.01	.00	.00	.00	.00	.07
31	.00	---	.00	.00	---	.00	---	.00	---	1.10	.00	---
TOTAL	0.65	2.51	0.14	0.05	0.03	1.38	3.99	4.28	1.19	5.53	2.78	1.57

WISCONSIN RIVER BASIN

430900089355400 BREWERY CREEK RAIN GAGE #2 NEAR CROSS PLAINS, WI

LOCATION.--Lat 43°09'00", long 89°35'54", in SW 1/4 SW 1/4 sec.19, T.8 N., R.8 E., Dane County, Hydrologic Unit 07070005, at the intersection of County Trunk P and County Trunk K.

PERIOD OF RECORD.--October 1989 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established Oct. 28, 1989. Rainfall estimated to be 0.00 for Dec. 7, 16-18, 20, 22, 31, Jan. 7, 11-12, 14, 24, Feb. 15, and Mar. 5, 7, 10 because recorded precipitation interpreted as collector snowmelt. Unpublished rainfall data collected at this site during 1985-86 water years are available for inspection at the District Office.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 4.60 in., July 5, 1993.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.28 in., May 27.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY SUM 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	.01	.00	.00	.00	.06	.00
3	.06	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.02	.05	.00	.00	.00	.00	.00	.05	.00	.97	.00	.00
5	.00	.66	.14	.00	.00	.00	.00	.00	.00	.32	.00	.00
6	.00	.01	.00	.00	.00	.00	.00	.00	.08	.03	.00	.08
7	.21	.00	.00	.00	.00	.00	.76	.00	.68	.00	.11	.16
8	.14	.13	.00	.00	.00	.00	.17	.80	.00	.00	.12	.00
9	.00	.09	.00	.00	.00	.00	.05	.58	.00	.45	.03	.00
10	.00	.00	.00	.00	.00	.00	.44	.20	.02	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.71	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00
13	.00	.27	.00	.00	.00	.00	.00	.26	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.02	.00
15	.00	.01	.00	.00	.00	.00	.00	.00	.00	.64	.03	.00
16	.00	.00	.00	.00	.00	.00	.18	.00	.00	.00	.66	.13
17	.07	.02	.00	.04	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.04	.95	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.06	.00	.00	.00	.51	.98	.94
20	.00	.39	.00	.00	.03	.69	.11	.00	.00	.00	.00	.16
21	.00	.13	.00	.00	.00	.00	.13	.00	.00	.00	.00	.01
22	.21	.00	.00	.00	.00	.01	.00	.00	.00	1.21	.00	.00
23	.00	.00	.00	.00	.00	.07	.00	.49	.00	.01	.00	.01
24	.00	.00	.00	.00	.00	.01	.01	.00	.00	.28	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.00	.08
26	.00	.00	.00	.00	.00	.12	.94	.00	.36	.01	.00	.00
27	.00	1.30	.00	.00	.00	.80	.16	2.28	.00	.28	.00	.00
28	.00	.00	.00	.00	.00	.09	.00	.16	.00	.00	.41	.00
29	.00	.00	.00	.00	---	.00	.01	.00	.22	.00	.05	.02
30	.00	.00	.00	.00	---	.00	.01	.00	.00	.00	.00	.08
31	.00	---	.00	.00	---	.00	---	.00	---	1.11	.00	---
TOTAL	0.71	3.06	0.14	0.04	0.03	1.89	4.65	4.82	1.37	6.00	2.47	1.67

430751089372000 BREWERY CREEK RAIN GAGE #3 NEAR CROSS PLAINS, WI

LOCATION.--Lat 43°07'51", long 89°37'20", in NE 1/4 NE 1/4 sec.35, T.8 N., R.7 E., Dane County, Hydrologic Unit 07070005, on County Trunk P, 1.9 mi north of intersection with U.S. Highway 14.

PERIOD OF RECORD.--October 1989 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established Oct. 28, 1989. Rainfall estimated to be 0.00 for Dec. 7, 16-17, 20, 26, 31, Jan. 11-12, 14, 20, and Mar. 5, 7, 9-10 because recorded precipitation interpreted as collector snowmelt.

EXTREMES FOR PERIOD OR RECORD.--Maximum daily rainfall, 4.41 in., July 5, 1993.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.09 in., May 27.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00
2	.00	.06	.00	.00	.00	.00	.00	.00	.00	.00	.04	.00
3	.07	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.01	.05	.00	.00	.00	.00	.00	.02	.00	1.00	.03	.00
5	.00	.64	.11	.00	.00	.00	.00	.00	.00	.32	.00	.00
6	.00	.01	.00	.00	.00	.00	.00	.00	.14	.01	.00	.06
7	.25	.00	.00	.00	.00	.00	.75	.00	.37	.00	.15	.21
8	.13	.15	.00	.00	.00	.00	.19	.70	.00	.01	.26	.00
9	.00	.09	.00	.00	.00	.00	.04	.48	.00	.30	.01	.00
10	.01	.01	.00	.00	.00	.00	.38	.17	.01	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.53	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.26	.00	.00	.00	.00	.00	.23	.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	.68	.04	.00
16	.00	.00	.00	.00	.00	.00	.15	.00	.00	.00	.88	.19
17	.07	.02	.00	.05	.00	.00	.01	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.03	.87	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.06	.00	.00	.00	.41	.76	.92
20	.00	.38	.00	.00	.02	.60	.09	.00	.00	.00	.00	.15
21	.00	.12	.00	.00	.00	.00	.13	.00	.00	.00	.00	.01
22	.23	.00	.00	.00	.00	.00	.00	.00	.00	.62	.00	.00
23	.00	.00	.00	.00	.00	.09	.00	.42	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.37	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.26	.00	.04
26	.00	.00	.00	.00	.00	.18	.91	.00	.38	.02	.00	.00
27	.00	1.20	.00	.00	.00	.67	.16	2.09	.00	.28	.00	.00
28	.00	.00	.00	.00	.00	.07	.00	.18	.00	.00	.46	.00
29	.00	.00	.00	.00	---	.00	.01	.01	.04	.00	.06	.02
30	.00	.00	.00	.00	---	.00	.02	.00	.00	.00	.00	.07
31	.00	---	.00	.00	---	.00	---	.00	---	1.17	.00	---
TOTAL	0.78	2.99	0.11	0.05	0.02	1.70	4.24	4.30	0.94	5.45	2.70	1.67

WISCONSIN RIVER BASIN
05406470 BREWERY CREEK AT CROSS PLAINS, WI

LOCATION.--Lat 43°07'09", long 89°38'25", in SW 1/4 SW 1/4 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.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1984 to September 1986, October 1989 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 900 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Ice-affected periods, Dec. 8, 10-12, Jan. 1-10, 22-30, Feb. 5-21, 24, and Mar. 1-9. Records fair except those for ice-affected periods, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	2.4	2.7	2.1	2.1	2.2	2.6	2.6	2.5	2.2	1.7	1.5
2	2.6	2.4	2.7	2.1	2.0	2.1	2.5	2.6	2.4	2.2	1.7	1.4
3	3.0	2.4	2.6	2.0	2.1	2.1	2.5	2.5	2.3	2.2	1.7	1.4
4	3.0	2.4	2.5	2.0	2.1	2.1	2.4	2.5	2.2	2.2	1.6	1.4
5	2.9	2.5	2.5	2.0	2.0	2.0	2.4	2.5	2.1	2.7	1.6	1.4
6	2.8	3.3	2.5	2.0	2.0	2.0	2.4	2.4	2.1	2.2	1.6	1.4
7	3.0	2.7	3.0	1.9	2.0	2.0	2.7	2.3	2.4	2.1	1.6	1.4
8	3.0	2.6	2.8	1.9	2.0	2.0	3.8	2.8	2.5	2.0	1.6	1.4
9	2.8	2.7	2.4	1.9	2.0	2.1	3.5	3.6	2.2	2.0	1.6	1.4
10	2.7	2.6	2.4	2.0	1.9	2.4	3.0	5.2	2.1	2.0	1.6	1.3
11	2.7	2.5	2.3	2.1	1.9	1.8	6.7	3.1	2.1	1.9	1.5	1.3
12	2.6	2.5	2.3	2.2	1.9	6.4	5.8	2.7	2.1	1.9	1.4	1.3
13	2.6	2.6	2.3	2.2	1.9	5.7	3.5	2.7	2.2	1.9	1.4	1.3
14	2.5	2.9	2.3	2.2	1.9	5.1	3.0	2.7	2.2	1.9	1.3	1.2
15	2.5	2.6	2.3	2.1	1.9	5.2	2.9	2.4	2.3	2.0	1.3	1.2
16	2.6	2.6	2.3	2.1	1.9	4.7	2.8	2.3	2.3	2.1	1.6	1.3
17	2.7	2.5	2.3	2.1	2.0	4.1	2.9	2.2	2.4	2.0	2.0	1.3
18	2.8	2.5	2.3	2.1	2.1	3.7	6.6	2.1	2.4	2.1	1.7	1.3
19	2.8	2.5	2.3	2.0	2.4	3.8	4.1	2.2	2.5	2.2	2.5	1.7
20	2.8	2.6	2.3	2.0	4.0	6.5	3.2	2.1	2.5	2.3	2.1	2.1
21	2.8	3.3	2.3	2.0	2.7	4.3	3.4	2.1	2.6	2.2	1.8	1.8
22	2.8	2.8	2.3	1.9	2.4	3.0	3.1	2.1	2.3	2.3	1.7	1.6
23	2.9	2.7	2.3	1.9	2.4	2.9	2.9	2.4	2.3	3.4	1.7	1.6
24	2.8	2.7	2.3	1.9	2.3	2.7	2.7	2.3	2.2	2.6	1.7	1.6
25	2.8	2.6	2.4	1.9	2.3	2.6	2.5	2.2	2.3	2.4	1.7	1.4
26	2.8	2.6	2.3	1.8	2.3	2.7	3.1	2.1	2.3	2.3	1.6	1.4
27	2.7	6.8	2.4	1.8	2.3	5.8	6.2	5.9	2.4	2.2	1.6	1.4
28	2.6	5.3	2.6	1.8	2.3	4.6	3.5	11	2.3	2.0	1.7	1.4
29	2.4	3.2	2.5	1.9	---	3.4	3.0	4.3	2.4	1.9	1.6	1.5
30	2.4	2.8	2.3	2.0	---	3.0	2.8	3.0	2.2	1.7	1.6	1.7
31	2.4	---	2.2	2.2	---	2.8	---	2.7	---	1.6	1.6	---
TOTAL	84.4	86.6	75.0	62.1	61.1	122.0	102.5	93.6	69.1	66.7	51.4	43.4
MEAN	2.72	2.89	2.42	2.00	2.18	3.94	3.42	3.02	2.30	2.15	1.66	1.45
MAX	3.0	6.8	3.0	2.2	4.0	18	6.7	11	2.6	3.4	2.5	2.1
MIN	2.4	2.4	2.2	1.8	1.9	2.0	2.4	2.1	2.1	1.6	1.3	1.2
CFSM	.35	.37	.31	.26	.28	.51	.44	.39	.30	.28	.22	.19
IN.	.41	.42	.36	.30	.30	.59	.50	.45	.33	.32	.25	.21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1995, BY WATER YEAR (WY)

	1991	1991	1991	1991	1991	1992	1990	1992	1991	1990	1990	1990
MEAN	1.93	2.24	1.61	1.47	2.39	4.42	2.40	1.82	2.33	4.07	2.26	2.39
MAX	4.10	4.73	3.82	3.22	5.42	10.5	3.66	3.33	4.76	13.4	6.83	5.15
(WY)	1994	1986	1994	1994	1985	1993	1993	1994	1993	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

WISCONSIN RIVER BASIN
05406470 BREWERY CREEK AT CROSS PLAINS, WI--CONTINUED

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SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1985 - 1995	
ANNUAL TOTAL	1322.4		917.9		2.45	
ANNUAL MEAN	3.62		2.51		4.30	
HIGHEST ANNUAL MEAN					.58	
LOWEST ANNUAL MEAN					142	
HIGHEST DAILY MEAN	61	Jul 4	18	Mar 11	.00 (a) Jul 25 1985	
LOWEST DAILY MEAN	2.1	Jul 29-31	1.2	Sep 14,15	.00 (a) Jul 18 1991	
ANNUAL SEVEN-DAY MINIMUM	2.2	Jul 27	1.3	Sep 10	.00 Jul 31 1991	
INSTANTANEOUS PEAK FLOW			65	Mar 11	420 Jul 6 1993	
INSTANTANEOUS PEAK STAGE			10.98	Mar 11	15.05 Jul 6 1993	
INSTANTANEOUS LOW FLOW					.00 (b) Aug 9 1990	
ANNUAL RUNOFF (CFSM)	.47		.33		.32	
ANNUAL RUNOFF (INCHES)	6.39		4.43		4.32	
10 PERCENT EXCEEDS	4.1		3.2		4.1	
50 PERCENT EXCEEDS	3.0		2.3		1.9	
90 PERCENT EXCEEDS	2.4		1.6		.21	

(a) Occurred on many days July to September 1991

(b) Also occurred many days during 1991 water year

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 current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: November 1984 to September 1986, October 1989 to current year.

DISSOLVED OXYGEN: April 1990 to June 30, 1991 (discontinued).

SUSPENDED-SOLIDS DISCHARGE: October 1989 to September 1992 (discontinued).

TOTAL-NITROGEN DISCHARGE: October 1984 to September 1985 (discontinued).

SUSPENDED-SEDIMENT DISCHARGE: October 1984 to June 1986, October 1989 to current year.

TOTAL-PHOSPHORUS DISCHARGE: October 1984 to June 1986, October 1989 to current year.

INSTRUMENTATION.--Water-quality sampler December 1984 to June 1986, October 1989 to current year; continuous water temperature recorder November 1984 to September 1986, October 1989 to current year; dissolved oxygen recorder April 1990 to June 1991.

REMARKS.--Total-nitrogen discharge was published for the period October 1984 to June 1986. Suspended-solids discharge were published for the period October 1989 to September 1991. 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.

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, and 1995 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, 243 tons, June 29, 1990; 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, 29.5°C, July 13; minimum observed, 0.0°C, Jan. 1-10, 19, 21-31, Feb. 4-17, 20-21, 24, 28, Mar. 1-4, 6-9, and Apr. 4-5.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 126 tons, Mar. 11; minimum observed, 0.09 ton, July 30-31, Aug. 1.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 443 lb, Mar. 11; minimum daily, 0.77 lb, July 11.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (000060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (000061)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 1994												
*04...	1445	--	3.0	8.0	--	--	--	71	0.072	0.139	--	--
*07...	0950	--	3.0	--	--	--	--	--	--	--	177	--
*19...	0800	--	2.8	8.0	--	--	--	50	0.102	0.126	158	--
NOV												
*02...	1125	--	2.4	8.0	--	--	--	56	0.108	0.121	--	--
*16...	1300	--	2.7	--	--	--	--	--	--	--	184	--
27...	1515	--	9.0	7.6	--	51000	--	568	0.431	1.37	652	100
27...	2015	--	15	7.5	--	64000	--	896	0.498	1.98	947	99
28...	0415	--	6.8	7.6	--	--	--	156	0.215	0.640	241	99
*28...	0950	--	4.7	7.8	--	13000	--	118	0.192	0.400	148	--
DEC												
*06...	1520	--	2.4	8.0	--	400	--	92	0.090	0.150	178	--
JAN 1995												
*16...	1545	--	2.0	8.0	--	400	--	123	0.178	0.200	283	--
FEB												
*20...	1545	--	4.0	--	--	--	--	--	--	--	2000	--
*24...	1050	2.3	--	--	--	--	--	--	--	0.380	295	--

* Equal-width increment (EWI) sample

05406470 BREWERY CREEK AT CROSS PLAINS, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH WATER LAB (STAND- ARD UNITS) (00403)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
MAR 1995												
10...	1215	--	2.2	--	--	--	--	--	0.214	0.352	268	--
11...	1215	--	22	--	--	--	--	--	2.74	5.48	3940	--
11...	1400	--	48	--	--	--	--	--	2.50	6.58	4480	--
11...	1445	--	60	--	--	--	--	--	3.63	8.23	4820	--
11...	1730	--	44	--	--	--	--	--	2.01	3.82	1740	--
11...	1830	--	31	--	--	--	--	--	1.70	3.02	1200	--
12...	1230	--	5.2	--	--	--	--	--	0.568	0.460	102	--
*12...	1231	--	5.2	--	--	--	--	--	0.494	0.430	123	--
*21...	1340	--	3.5	--	--	--	--	--	--	0.160	78	--
*29...	1430	--	3.3	--	--	--	--	--	--	0.090	61	--
APR												
*12...	1335	--	4.8	--	--	--	--	--	--	0.150	35	--
*19...	0935	--	4.1	--	--	--	--	--	--	0.123	37	--
MAY												
*02...	1050	--	2.6	--	--	--	--	--	--	0.070	20	--
*10...	1342	--	4.8	--	--	--	--	--	--	0.380	76	--
*15...	1149	--	2.4	--	--	--	--	--	--	0.070	18	--
*28...	1009	--	8.1	--	--	--	--	--	--	0.334	85	--
*30...	1430	--	2.9	--	--	--	--	--	--	--	190	--
JUN												
*12...	1305	--	2.1	--	--	--	--	--	--	0.070	23	--
*27...	1335	--	2.4	--	--	--	--	--	--	0.113	44	--
JUL												
*10...	1031	--	2.0	--	--	--	--	--	--	0.072	21	--
*24...	1540	--	2.5	--	--	--	--	--	<0.027	0.141	16	--
AUG												
*09...	1302	--	1.6	7.9	--	--	--	25	0.139	0.109	--	--
*09...	1415	--	1.6	--	--	2300	2700	--	--	--	--	--
*24...	1136	--	1.7	8.0	2.0	4400	--	83	0.118	0.190	131	--
SEP												
*04...	0920	--	1.5	8.2	1.6	--	3900	63	0.094	0.124	71	--
*21...	1027	--	1.8	8.3	1.2	8600	--	43	0.105	0.131	43	--

* Equal-width increment (EWI) sample

WISCONSIN RIVER BASIN
05406470 BREWERY CREEK AT CROSS PLAINS, WI--CONTINUED

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	15.5	12.0	13.5	11.0	7.0	9.0	7.5	4.0	5.5	2.5	.00	1.5
2	12.0	10.5	11.0	12.0	8.5	10.5	8.0	5.0	6.5	1.0	.00	.50
3	14.0	9.5	11.5	13.0	11.0	12.0	9.5	6.0	7.5	.50	.00	.50
4	13.5	11.0	12.0	12.5	11.0	11.5	8.5	5.5	7.0	.50	.00	.50
5	13.5	10.0	11.5	11.0	10.0	10.5	8.5	5.5	7.5	.50	.00	.00
6	14.5	10.5	12.5	11.5	9.0	10.0	5.5	1.0	4.0	.50	.00	.00
7	16.5	12.5	14.0	12.0	7.5	9.5	5.0	1.0	2.0	.50	.00	.00
8	13.5	10.5	12.0	12.0	9.5	11.0	5.0	.50	2.5	.50	.00	.00
9	13.0	9.0	10.5	11.0	7.0	9.5	6.0	1.0	4.0	.50	.00	.00
10	13.0	7.0	10.0	9.5	5.5	7.5	4.0	.50	2.0	3.5	.00	1.5
11	13.0	7.5	10.0	10.0	6.0	8.0	2.0	.50	1.0	4.5	2.5	3.5
12	13.5	7.5	10.5	10.0	7.0	8.5	2.0	.50	1.0	5.0	3.0	4.0
13	13.0	8.0	10.5	12.5	9.0	11.0	4.5	.50	2.5	5.0	3.5	4.0
14	14.5	8.5	11.5	12.5	8.0	11.0	4.0	2.0	3.0	5.0	2.5	3.5
15	14.0	11.0	12.5	9.0	5.5	7.5	5.0	3.0	4.0	4.5	1.5	3.0
16	15.5	12.0	14.0	9.0	5.0	7.0	5.5	4.0	4.5	4.0	.50	2.5
17	15.5	13.0	14.0	9.0	6.5	7.5	6.0	4.0	5.0	4.5	2.0	3.0
18	16.5	14.0	15.0	9.0	5.5	8.0	5.0	1.0	3.5	4.0	.50	2.0
19	15.5	11.5	13.5	8.0	4.0	6.0	4.5	.50	3.0	2.5	.00	1.0
20	15.0	11.0	12.5	9.0	7.0	8.0	6.0	3.5	5.0	4.0	1.0	2.0
21	14.0	9.0	11.5	9.0	4.5	8.0	6.0	3.0	4.5	2.5	.00	1.0
22	15.5	9.5	12.5	6.0	3.0	4.5	6.5	2.0	4.0	3.5	.00	1.0
23	12.5	9.5	11.0	6.5	3.0	4.5	6.0	3.5	5.0	3.0	.00	.50
24	10.0	8.0	9.0	7.5	4.0	5.5	6.5	2.5	5.0	.50	.00	.00
25	9.5	8.0	9.0	6.5	4.0	5.5	5.5	1.0	3.0	3.5	.00	1.0
26	11.5	8.5	9.5	6.0	3.0	4.5	5.5	1.5	3.5	.50	.00	.00
27	11.5	6.5	9.0	5.5	4.0	4.5	6.5	3.5	5.0	3.0	.00	1.0
28	12.0	8.5	10.0	5.0	4.0	4.5	5.5	3.0	4.5	4.0	.00	2.0
29	14.0	10.5	11.5	6.5	4.0	5.0	5.5	1.5	3.0	3.0	.00	.50
30	11.5	7.5	9.5	6.5	3.5	4.5	4.5	2.0	3.0	5.0	.00	2.5
31	11.0	9.0	10.0	---	---	---	4.5	2.5	3.5	5.5	.00	2.5
MONTH	16.5	6.5	11.5	13.0	3.0	7.8	9.5	.50	4.0	5.5	.00	1.5
FEBRUARY			MARCH			APRIL			MAY			
1	5.5	2.0	3.5	3.0	.00	.50	11.5	2.0	6.0	12.0	5.0	8.5
2	5.5	3.0	4.0	4.5	.00	.50	15.0	2.0	7.5	17.0	7.0	11.0
3	4.5	1.0	3.0	6.5	.00	1.5	16.0	5.5	9.5	17.5	5.5	11.0
4	3.5	.00	1.0	8.0	.00	3.0	11.5	.00	4.0	15.0	8.5	10.5
5	.50	.00	.00	5.0	.50	3.0	9.5	.00	4.0	19.5	6.0	12.0
6	.50	.00	.00	5.5	.00	2.5	16.5	4.5	9.0	22.0	6.0	13.0
7	.50	.00	.00	6.5	.00	2.0	8.5	3.5	6.0	21.0	9.5	14.5
8	.50	.00	.00	9.0	.00	2.5	7.0	4.5	5.5	12.5	9.0	10.5
9	4.0	.00	1.5	6.0	.00	1.5	10.5	2.5	5.5	13.5	8.0	10.5
10	4.5	.00	2.0	10.5	.50	4.5	5.5	3.0	4.0	10.5	9.0	10.0
11	.50	.00	.00	4.5	2.0	3.0	8.0	3.0	5.5	19.5	9.0	13.0
12	.50	.00	.00	12.5	2.5	6.5	6.5	4.0	5.5	21.5	7.5	13.5
13	.50	.00	.00	12.0	5.0	7.5	15.5	4.0	8.5	13.0	11.0	12.0
14	.50	.00	.00	13.5	4.0	7.5	16.5	3.5	9.0	19.5	10.5	13.5
15	4.0	.00	2.0	15.0	4.5	8.5	10.5	4.5	7.5	22.5	7.5	14.0
16	4.5	.00	2.0	15.0	4.0	8.0	13.0	4.5	8.5	21.0	9.0	14.0
17	5.0	.00	2.0	12.0	4.0	7.0	17.0	6.5	10.5	19.5	8.0	13.0
18	6.0	2.0	3.5	9.5	3.5	6.0	13.5	7.0	9.5	16.5	6.5	10.5
19	5.5	.50	2.5	11.0	4.5	7.0	14.5	6.0	9.0	20.0	5.0	11.5
20	5.0	.00	2.0	6.5	4.0	5.0	9.5	6.0	7.0	19.0	6.5	11.5
21	5.5	.00	2.0	9.5	3.5	5.5	8.0	6.0	7.0	18.0	4.0	10.0
22	9.0	1.0	3.5	14.0	2.0	6.5	17.5	4.5	10.0	18.0	3.0	10.0
23	7.0	1.0	3.5	8.0	3.0	5.0	15.5	4.5	9.5	10.5	6.5	8.0
24	7.5	.00	3.0	14.5	1.0	6.5	11.5	4.5	8.0	12.5	5.0	8.5
25	5.0	1.0	3.0	14.0	2.5	7.0	14.5	4.0	9.0	18.0	5.0	11.0
26	3.0	.50	1.5	9.5	4.5	6.5	12.5	6.5	9.0	19.5	5.0	11.5
27	6.5	1.5	3.0	5.5	3.0	4.0	11.5	7.0	8.5	10.5	7.5	9.5
28	8.5	.00	3.5	6.0	3.5	4.5	17.0	6.0	10.5	14.0	9.5	11.5
29	---	---	---	8.5	4.0	5.5	10.5	8.0	9.0	17.0	9.5	12.5
30	---	---	---	7.5	3.0	5.0	15.0	7.0	10.0	22.5	8.0	14.5
31	---	---	---	7.5	3.0	5.0	---	---	---	22.0	9.0	15.0
MONTH	9.0	.00	1.9	15.0	.00	4.8	17.5	.00	7.7	22.5	3.0	11.6

WISCONSIN RIVER BASIN
05406470 BREWERY CREEK AT CROSS PLAINS, WI--CONTINUED

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	20.0	11.0	15.0	21.0	14.0	17.0	21.5	18.5	20.0	22.0	13.0	16.5
2	18.5	11.0	14.5	21.0	13.0	16.5	19.5	17.5	18.0	22.0	13.0	16.5
3	24.0	11.0	16.5	21.5	14.0	17.5	22.5	17.5	19.0	22.0	14.0	17.0
4	23.0	11.5	16.5	20.0	16.5	17.5	25.0	17.0	20.0	22.5	13.5	17.5
5	24.5	11.5	17.5	22.0	15.5	18.5	25.5	16.5	20.5	22.5	13.5	17.0
6	23.5	13.0	17.5	18.5	15.0	16.5	23.5	16.5	19.5	19.5	15.5	17.0
7	26.0	14.5	19.0	22.0	14.0	17.5	24.5	17.0	19.5	17.0	11.0	14.5
8	15.0	11.5	13.0	20.0	14.5	17.0	25.5	16.5	20.0	18.5	10.0	13.0
9	17.5	11.5	14.0	22.0	15.5	18.5	20.0	17.0	17.5	18.5	10.0	13.5
10	22.0	13.0	16.5	22.5	16.0	19.0	22.0	16.5	18.5	17.5	11.0	13.5
11	22.0	12.5	17.0	25.0	16.5	20.5	26.0	15.5	20.0	18.0	10.0	13.5
12	22.5	11.5	17.0	26.0	18.0	21.5	26.5	17.0	21.0	16.5	12.0	14.0
13	23.0	11.0	17.0	29.5	19.5	24.0	27.0	17.5	21.5	21.0	14.5	16.5
14	24.5	12.5	18.5	28.5	21.0	24.5	26.5	18.0	21.5	18.5	12.5	15.0
15	24.5	13.5	19.0	27.5	21.5	24.0	23.0	16.0	19.0	18.5	11.0	14.5
16	24.5	14.0	19.5	24.5	20.5	22.0	23.0	16.5	19.0	19.0	13.0	15.5
17	25.5	15.5	20.5	23.5	19.0	21.0	24.5	16.5	19.5	17.5	12.0	14.0
18	26.0	16.5	21.5	23.5	18.0	20.5	23.0	17.5	19.5	14.5	11.0	12.5
19	25.0	17.0	21.5	21.0	18.0	19.5	21.5	17.0	19.0	13.0	12.5	12.5
20	25.5	16.5	21.5	24.0	18.5	21.0	22.5	14.5	18.0	13.0	11.5	12.5
21	26.0	17.5	22.0	24.5	18.5	21.0	24.0	15.0	18.5	11.5	10.0	11.0
22	25.0	17.5	21.5	23.0	19.5	21.0	24.0	14.0	18.5	11.5	8.5	10.0
23	25.5	18.5	22.0	24.0	19.5	21.5	24.0	15.5	19.0	12.0	7.0	9.5
24	25.0	17.5	21.0	24.0	19.5	21.5	19.5	16.5	17.5	11.5	8.0	9.5
25	24.5	17.0	20.5	25.0	19.5	22.0	24.5	16.0	19.0	13.5	10.0	11.5
26	21.0	17.5	19.0	23.5	20.0	21.5	23.5	15.0	18.5	15.5	10.5	12.5
27	20.5	16.5	18.0	23.5	19.0	21.0	21.0	17.0	18.5	15.5	10.0	12.5
28	21.5	16.0	18.0	24.5	19.5	21.5	22.5	16.5	18.5	16.0	11.5	13.5
29	23.0	16.0	19.5	24.5	19.5	22.0	21.0	16.5	18.0	14.0	11.5	13.0
30	22.5	16.5	19.0	25.0	20.0	22.5	25.0	16.0	19.5	16.0	13.5	14.5
31	---	---	---	29.0	21.0	23.5	23.5	16.0	19.0	---	---	---
MONTH	26.0	11.0	18.4	29.5	13.0	20.4	27.0	14.0	19.2	22.5	7.0	13.8

05406470 BREWERY CREEK AT CROSS PLAINS, WI--CONTINUED

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

[illegible]

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

[illegible]

05406476 BLACK EARTH CREEK AT MILLS STREET AT CROSS PLAINS, WI

LOCATION.--Lat 43°06'48", long 89°39'00", in SW 1/4 NE 1/4 sec.3, T.7 N., R.7 E., Dane County, Hydrologic Unit 07070005, on right bank, at Mills Street at Cross Plains.

DRAINAGE AREA.--25.5 mi², of which 2.8 mi² probably is noncontributing.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Elevation of gage is 870 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Feb. 17 to Mar. 10, Apr. 5-10, May 14-18, 20-24, June 6 to July 2, July 16-19, Aug. 9-18, Aug. 30 to Sept. 10, and Sept. 14-30. Records fair except those for June to September, which are poor (see page 11).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	15	20	15	15	16	20	18	19	15	24	16
2	21	15	19	15	15	15	19	17	20	15	21	16
3	19	16	19	14	15	15	18	17	18	15	21	15
4	17	17	18	14	14	15	18	17	18	19	21	15
5	16	19	19	14	14	14	18	17	19	23	19	15
6	16	21	20	14	14	14	18	17	18	20	18	15
7	17	19	20	14	14	14	19	17	18	18	19	16
8	17	18	20	14	13	14	22	22	18	17	20	16
9	17	19	19	14	14	15	21	26	18	18	20	15
10	16	18	17	14	14	17	20	30	17	16	19	15
11	16	17	16	14	13	34	29	24	17	16	18	15
12	16	17	16	15	14	26	32	19	18	17	18	15
13	16	17	16	15	13	23	24	19	18	17	18	15
14	16	18	15	16	13	19	19	18	18	18	18	15
15	16	17	15	15	14	19	18	17	17	20	19	15
16	15	15	15	15	14	17	18	16	17	21	22	15
17	15	15	15	16	14	15	19	16	17	19	30	15
18	15	15	15	15	15	15	29	15	17	18	23	15
19	15	15	15	15	17	17	26	15	16	17	18	17
20	15	15	15	15	25	27	21	15	16	17	25	18
21	15	20	15	15	20	28	22	15	15	17	20	16
22	15	19	15	16	17	24	20	15	15	18	15	15
23	15	18	15	16	17	21	18	16	15	22	14	14
24	15	18	15	15	16	18	18	17	15	21	14	14
25	14	17	16	15	16	17	17	18	16	20	15	14
26	14	15	15	15	16	18	19	17	16	19	15	14
27	15	30	16	15	16	26	29	26	16	20	16	13
28	15	31	17	15	16	28	23	41	16	19	21	13
29	15	23	16	15	---	25	20	31	16	19	22	13
30	16	21	16	15	---	22	19	24	15	18	19	13
31	15	---	15	15	---	21	---	20	---	21	17	---
TOTAL	497	550	515	460	428	609	633	612	509	570	599	448
MEAN	16.0	18.3	16.6	14.8	15.3	19.6	21.1	19.7	17.0	18.4	19.3	14.9
MAX	22	31	20	16	25	34	32	41	20	23	30	18
MIN	14	15	15	14	13	14	17	15	15	15	14	13
CFSM	.71	.81	.73	.65	.67	.87	.93	.87	.75	.81	.85	.66
IN.	.81	.90	.84	.75	.70	1.00	1.04	1.00	.83	.93	.98	.73

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1995, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995
MEAN	13.1	14.6	13.1	12.1	14.2	23.9
MAX	27.0	24.5	23.5	20.5	30.8	38.6
(WY)	1994	1994	1994	1994	1994	1993
MIN	6.25	6.22	5.70	5.13	7.06	12.3
(WY)	1991	1991	1991	1991	1991	1992

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1990 - 1995
ANNUAL TOTAL	8085	6430	
ANNUAL MEAN	22.2	17.6	16.3
HIGHEST ANNUAL MEAN			24.9
LOWEST ANNUAL MEAN			9.29
HIGHEST DAILY MEAN	147	41	250
LOWEST DAILY MEAN	14	13	4.7
ANNUAL SEVEN-DAY MINIMUM	15	13	4.7
INSTANTANEOUS PEAK FLOW		85	(c) 550
INSTANTANEOUS PEAK STAGE		6.82	(d) 10.90
INSTANTANEOUS LOW FLOW			(e) 4.6 (f) Oct 7 1990
ANNUAL RUNOFF (CFSM)	.98	.78	.72
ANNUAL RUNOFF (INCHES)	13.25	10.54	9.74
10 PERCENT EXCEEDS	31	22	27
50 PERCENT EXCEEDS	20	17	13
90 PERCENT EXCEEDS	15	14	7.2

(a) Also occurred June 16-18, July 19, and Oct. 25-26

(b) Also occurred Feb. 11, 13, 14, and Sept. 27-30 (estimated)

(c) Estimated

(d) Backwater from debris

(e) Revised

(f) Also occurred Dec. 5, 26, 31, 1990 and Jan. 2-10, 1991

WISCONSIN RIVER BASIN

05406476 BLACK EARTH CREEK AT MILLS STREET AT CROSS PLAINS, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1989 to September 1995 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: November 1989 to September 1995 (discontinued).

DISSOLVED OXYGEN: April 1990 to September 1995 (discontinued).

INSTRUMENTATION.--Continuous water temperature recorder since November 1989 and continuous dissolved oxygen recorder since April 1990.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum observed, 25.0°C, July 15, 1995; minimum observed, 0.0°C, Dec. 21, 1989, Mar. 8-9, Dec. 3, 1991, and Mar. 2, 1995.

DISSOLVED OXYGEN: Maximum observed, 19.0 mg/L, May 14, 1992; minimum observed, 3.7 mg/L, July 22, 1991.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum observed, 25.0°C, July 15; minimum observed, 0.0°C, Mar. 2.

DISSOLVED OXYGEN: Maximum observed, 15.4 mg/L, May 22; minimum observed, 5.2 mg/L, Aug. 7-9.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	14.0	11.5	13.0	10.5	7.0	8.5	8.0	5.0	6.5	5.5	4.0	4.5
2	12.0	11.0	11.5	10.5	7.5	9.0	8.5	6.5	7.0	5.5	4.0	4.5
3	13.5	10.0	11.5	11.0	9.5	10.0	9.0	7.0	7.5	5.0	3.5	4.0
4	12.0	10.5	11.0	10.5	10.0	10.0	8.5	7.0	8.0	4.5	3.0	3.5
5	12.5	10.0	10.5	10.0	9.0	9.5	8.5	6.5	7.5	5.0	3.0	4.0
6	13.5	10.0	11.5	11.0	8.5	9.0	6.5	3.5	5.5	6.0	4.0	5.0
7	15.0	11.5	12.5	11.0	7.5	9.0	6.0	3.0	4.5	6.0	3.5	4.5
8	11.5	9.5	11.0	10.5	9.0	10.0	5.5	3.5	5.0	5.5	3.5	4.0
9	12.0	8.5	10.0	9.5	7.0	9.0	6.5	4.0	5.5	6.0	3.5	4.5
10	12.0	7.5	9.5	10.0	6.5	8.0	5.5	4.0	4.5	6.5	4.5	5.5
11	12.5	8.0	10.0	10.0	7.0	8.0	5.5	3.5	4.0	7.0	5.5	6.0
12	12.5	8.0	10.0	9.0	7.5	8.5	5.5	3.5	4.5	7.0	6.0	6.5
13	12.5	8.5	10.0	10.5	8.5	10.0	6.0	4.0	5.0	7.0	6.0	6.5
14	13.0	8.5	10.5	11.0	7.5	10.0	6.0	4.5	5.5	7.0	6.0	6.5
15	12.5	10.0	11.0	9.5	6.5	8.0	6.5	5.0	6.0	7.0	5.5	6.0
16	14.0	10.5	12.0	9.5	6.0	7.5	6.5	6.0	6.5	6.5	5.0	6.0
17	13.5	11.5	12.0	8.5	7.0	7.5	7.5	6.0	6.5	6.5	5.5	6.0
18	14.0	11.5	12.5	9.0	6.5	8.0	7.0	4.0	5.5	7.0	5.0	5.5
19	14.0	10.5	11.5	8.5	6.0	7.0	6.5	4.5	5.5	6.0	4.5	5.0
20	13.5	9.5	11.0	8.5	7.5	8.0	8.0	6.0	6.5	6.0	4.5	5.0
21	12.5	8.5	10.5	8.5	5.5	7.5	8.0	5.5	6.5	5.5	4.5	5.0
22	14.0	9.0	11.0	7.0	5.0	5.5	7.5	5.0	6.0	6.0	4.5	5.0
23	12.0	8.5	10.0	7.5	5.0	6.0	7.5	6.0	6.5	6.5	4.0	5.0
24	9.5	8.0	8.5	8.0	5.5	6.5	8.0	5.0	6.5	6.0	3.5	4.5
25	9.0	8.0	8.5	8.0	5.5	6.5	7.5	4.5	5.5	7.0	4.0	5.0
26	10.5	7.5	9.0	7.5	5.0	6.0	7.5	5.0	6.0	6.5	3.5	4.5
27	11.0	7.0	8.5	6.0	3.5	5.0	8.0	6.0	7.0	6.0	4.0	5.0
28	10.5	8.0	9.0	5.0	4.5	4.5	7.0	5.5	6.0	7.0	4.5	5.5
29	11.5	8.5	10.0	6.0	4.5	5.0	7.0	4.5	5.5	6.5	4.0	5.0
30	11.0	7.5	9.0	7.0	4.5	5.5	6.5	4.5	5.5	7.5	4.5	5.5
31	9.5	8.0	9.0	---	---	---	6.5	5.0	6.0	8.0	4.5	6.0
MONTH	15.0	7.0	10.5	11.0	3.5	7.7	9.0	3.0	5.9	8.0	3.0	5.1

05406476 BLACK EARTH CREEK AT MILLS STREET AT CROSS PLAINS, WI--CONTINUED

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	7.5	6.0	6.5	7.0	.5	4.0	11.5	6.5	8.5	12.0	8.5	10.0
2	7.5	6.0	6.5	8.0	.0	4.0	13.5	6.5	9.5	14.0	9.0	11.0
3	7.0	5.0	6.0	8.5	4.5	5.5	14.0	8.0	10.5	14.0	8.5	11.0
4	6.5	3.5	4.5	9.0	4.5	6.5	11.0	5.0	7.5	14.0	10.0	11.0
5	6.0	3.5	4.0	7.5	5.0	6.5	10.5	5.5	7.5	15.5	8.5	11.5
6	6.0	3.5	4.5	8.0	4.5	6.0	14.5	8.0	10.5	17.0	8.5	12.5
7	5.0	3.5	4.0	8.5	5.5	7.0	10.0	7.5	8.5	17.0	10.5	13.0
8	6.5	3.0	4.5	10.0	5.5	7.0	9.0	7.5	8.0	12.0	9.5	11.0
9	7.5	4.0	5.5	9.5	5.0	6.5	11.0	6.5	8.0	12.5	9.5	11.0
10	7.0	2.5	5.0	11.0	5.5	7.5	8.0	6.5	7.0	11.0	10.0	10.5
11	4.5	2.0	3.0	8.5	4.5	6.0	9.0	6.0	7.5	16.0	10.0	12.5
12	6.5	3.0	4.0	12.0	5.5	8.0	8.5	6.5	7.5	17.0	9.5	13.0
13	6.5	3.5	4.5	12.5	8.0	9.5	14.0	7.0	10.0	12.5	11.5	12.0
14	7.0	3.5	5.0	13.0	7.0	9.5	14.5	7.0	10.5	16.5	11.0	13.0
15	6.0	4.5	5.0	14.0	7.5	10.0	11.0	8.0	9.5	18.5	9.5	13.5
16	7.5	4.0	5.5	14.0	7.5	10.0	12.5	8.0	10.0	18.0	11.5	14.0
17	8.0	4.0	5.5	12.5	7.5	9.5	14.5	9.0	11.5	17.0	11.0	13.5
18	8.5	5.0	6.5	11.0	7.0	9.0	14.0	9.5	11.0	15.5	10.5	12.5
19	8.5	3.5	5.5	11.5	8.0	9.5	14.0	8.5	11.0	17.5	9.5	13.0
20	8.0	2.5	5.0	9.0	7.0	8.0	11.0	9.0	9.5	17.5	10.5	13.5
21	6.5	3.5	5.0	10.0	6.5	8.0	9.5	8.5	9.0	17.0	10.0	13.0
22	9.0	4.5	6.5	12.5	6.0	9.0	15.5	8.0	11.0	18.0	9.5	13.0
23	8.0	4.5	6.0	10.0	7.0	8.0	14.0	8.0	11.0	13.0	11.0	12.0
24	8.0	4.0	6.0	13.0	6.0	9.0	12.0	8.0	10.0	14.5	10.5	12.0
25	7.0	5.0	6.0	13.0	7.0	9.5	13.5	7.5	10.5	17.0	10.5	13.5
26	5.5	4.5	5.0	11.0	8.0	9.0	12.0	9.5	10.5	17.5	10.5	13.5
27	8.0	5.0	6.0	8.5	6.0	7.0	12.0	9.0	10.0	13.0	11.5	12.5
28	9.0	3.5	6.0	8.0	6.5	7.0	14.5	8.5	11.5	15.5	12.5	13.5
29	---	---	---	10.0	7.0	8.0	11.0	10.0	10.5	17.0	12.0	14.0
30	---	---	---	9.0	6.5	8.0	13.5	9.5	11.0	18.5	11.0	14.5
31	---	---	---	9.0	7.0	8.0	---	---	---	18.0	11.5	14.5
MONTH	9.0	2.0	5.2	14.0	.0	7.7	15.5	5.0	9.6	18.5	8.5	12.5
JUNE				JULY			AUGUST			SEPTEMBER		
1	17.0	12.5	14.5	18.0	12.0	14.5	18.0	15.5	16.5	18.0	13.5	15.5
2	16.5	12.0	13.5	18.0	11.0	14.5	16.0	15.0	15.5	18.5	13.0	15.5
3	19.0	12.0	15.0	18.5	12.0	15.0	17.5	15.0	16.0	18.5	13.5	15.5
4	18.0	12.5	15.0	19.5	14.0	15.5	19.0	14.5	16.5	19.0	13.5	15.5
5	20.0	12.5	15.5	21.5	14.5	16.5	19.0	14.5	16.5	18.5	13.5	15.5
6	20.0	13.5	15.5	15.5	14.0	14.5	18.0	14.5	16.5	16.5	14.5	15.5
7	20.5	14.0	16.5	19.0	13.0	15.5	18.5	15.0	16.5	15.5	12.5	14.0
8	15.0	12.0	13.0	17.0	12.5	15.0	21.0	15.0	17.0	16.5	11.5	13.5
9	15.5	12.0	13.5	19.0	13.5	16.0	17.0	15.0	16.0	17.0	11.5	14.0
10	19.0	13.0	15.0	18.5	13.5	16.0	18.5	15.5	16.5	16.5	12.0	14.0
11	18.5	13.0	15.0	20.0	14.0	16.5	20.0	15.0	17.5	17.0	11.5	14.0
12	17.5	12.0	14.5	20.5	14.5	17.5	20.5	16.0	18.0	15.5	12.5	14.0
13	19.0	11.5	14.5	22.0	15.0	18.5	21.0	16.0	18.5	19.0	14.0	16.0
14	19.5	12.5	15.5	22.0	15.5	18.5	---	---	---	17.0	12.5	14.5
15	20.0	13.0	16.0	25.0	15.5	18.5	---	---	---	17.0	11.5	13.5
16	20.5	13.5	16.0	19.0	15.5	17.0	---	---	---	17.5	13.0	14.5
17	20.5	14.0	16.5	18.5	14.0	16.0	24.5	15.5	17.5	16.0	12.0	13.5
18	21.0	14.5	17.0	18.5	13.0	15.5	20.0	16.5	17.5	14.5	11.5	12.5
19	21.0	14.5	17.0	17.5	13.5	15.5	20.5	10.5	17.5	13.0	11.5	12.0
20	21.0	13.5	16.5	19.0	14.5	16.5	19.5	14.5	17.0	12.0	11.0	11.5
21	21.0	14.0	17.0	19.0	13.5	16.0	20.0	14.0	16.5	11.5	10.0	10.5
22	20.0	14.0	16.5	18.0	14.5	16.0	19.0	15.0	17.5	12.0	9.0	10.0
23	20.5	14.0	16.5	19.0	14.5	16.5	18.5	14.0	16.0	13.0	8.0	10.0
24	19.5	13.5	16.0	19.5	14.0	17.0	16.0	14.0	15.0	12.0	8.5	10.5
25	19.5	13.0	16.0	22.0	14.5	17.0	19.0	13.5	15.5	13.0	10.5	11.5
26	18.5	13.5	15.0	19.0	15.0	17.0	18.0	13.0	15.0	15.5	10.5	12.0
27	17.0	13.5	15.0	20.5	14.5	17.0	16.5	14.0	15.0	15.5	9.5	12.0
28	18.0	13.0	15.0	20.0	14.0	17.0	20.0	14.0	16.0	16.0	10.5	12.5
29	19.5	13.0	16.0	19.5	15.0	17.0	18.0	14.5	16.0	14.5	10.5	12.5
30	19.0	13.5	15.5	20.5	15.0	18.0	20.0	15.5	17.5	15.0	12.5	13.5
31	---	---	---	24.0	16.0	18.5	19.0	15.0	17.0	---	---	---
MONTH	21.0	11.5	15.5	25.0	11.0	16.5	---	---	---	19.0	8.0	13.3

WISCONSIN RIVER BASIN

05406476 BLACK EARTH CREEK AT MILLS STREET AT CROSS PLAINS, WI--CONTINUED

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	10.0	8.2	9.0
11	---	---	---	---	---	---	---	---	---	11.5	7.3	9.4
12	---	---	---	---	---	---	---	---	---	11.5	7.2	9.3
13	---	---	---	---	---	---	---	---	---	9.3	7.3	8.2
14	---	---	---	---	---	---	---	---	---	12.0	7.2	9.0
15	---	---	---	---	---	---	---	---	---	12.3	7.0	9.4
16	---	---	---	---	---	---	---	---	---	12.1	7.2	9.1
17	---	---	---	---	---	---	---	---	---	12.9	7.1	9.8
18	---	---	---	---	---	---	---	---	---	13.4	7.7	10.2
19	---	---	---	---	---	---	---	---	---	13.8	8.0	10.7
20	---	---	---	---	---	---	---	---	---	14.2	8.1	10.9
21	---	---	---	---	---	---	---	---	---	14.8	8.5	11.5
22	---	---	---	---	---	---	---	---	---	15.4	8.5	11.8
23	---	---	---	---	---	---	---	---	---	13.3	8.2	10.2
24	---	---	---	---	---	---	---	---	---	12.9	8.3	10.3
25	---	---	---	---	---	---	---	---	---	12.8	8.1	10.2
26	---	---	---	---	---	---	---	---	---	12.8	8.1	10.2
27	---	---	---	---	---	---	---	---	---	11.3	7.8	9.2
28	---	---	---	---	---	---	---	---	---	9.7	7.6	8.5
29	---	---	---	---	---	---	---	---	---	10.5	7.9	9.1
30	---	---	---	---	---	---	---	---	---	11.6	7.8	9.7
31	---	---	---	---	---	---	---	---	---	11.5	7.7	9.5
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
JUNE				JULY			AUGUST			SEPTEMBER		
1	12.1	7.5	9.4	12.8	7.4	9.9	9.8	5.6	7.3	11.3	7.3	9.4
2	12.3	7.7	9.3	12.9	7.5	9.9	9.4	6.5	7.7	11.0	7.2	8.7
3	12.9	7.4	9.9	12.9	7.0	9.6	11.4	6.4	8.2	11.6	7.5	9.2
4	13.0	7.3	9.7	11.8	6.9	8.6	11.8	6.0	8.2	10.2	5.3	8.4
5	13.1	6.9	9.6	11.6	6.4	8.5	11.8	5.9	8.3	10.2	5.5	7.7
6	12.9	6.8	8.8	10.5	6.7	8.4	11.6	5.5	8.1	---	---	---
7	13.1	6.7	9.2	12.7	7.2	9.7	11.0	5.2	7.6	---	---	---
8	11.8	7.0	9.2	12.4	7.1	9.5	12.2	5.2	7.6	10.9	7.8	9.1
9	13.3	7.5	9.9	12.5	6.7	9.4	9.8	5.2	7.0	11.0	7.9	9.2
10	13.9	7.4	9.9	12.7	6.9	9.4	11.1	5.9	8.0	11.2	8.1	9.4
11	13.7	7.5	10.0	12.8	6.7	9.4	11.6	5.6	8.2	11.4	7.9	9.5
12	14.1	7.6	10.3	12.7	6.5	9.3	11.5	5.5	8.0	11.5	7.9	9.6
13	13.4	7.2	10.0	12.7	6.4	9.1	11.8	5.3	8.0	11.5	7.9	9.2
14	13.1	6.9	9.6	12.6	6.2	8.9	---	---	---	11.6	7.6	9.3
15	12.5	6.5	9.2	12.8	5.5	8.7	---	---	---	---	---	---
16	12.0	6.3	8.8	11.9	5.5	8.4	---	---	---	---	---	---
17	11.4	6.0	8.3	13.8	6.4	9.6	---	---	---	---	---	---
18	10.9	5.6	8.0	13.6	7.2	10.0	---	---	---	---	---	---
19	10.8	5.7	7.8	12.3	6.9	9.4	---	---	---	---	---	---
20	10.4	5.6	7.8	13.8	6.5	9.6	---	---	---	---	---	---
21	10.6	5.6	7.9	13.6	6.7	9.8	---	---	---	---	---	---
22	10.6	5.8	7.9	13.2	6.5	9.2	---	---	---	10.8	8.3	9.3
23	10.8	5.8	8.1	13.4	6.4	9.4	---	---	---	11.2	8.3	9.5
24	10.9	6.0	8.2	13.4	6.5	9.2	---	---	---	11.0	8.1	9.4
25	11.2	6.1	8.4	13.2	6.2	9.1	10.5	6.3	8.1	10.9	8.1	9.1
26	10.2	6.1	7.7	12.8	6.2	9.0	10.8	6.4	8.4	11.2	7.8	9.1
27	11.5	6.6	8.7	13.0	6.0	8.3	10.4	6.8	8.2	11.1	7.9	9.2
28	12.1	7.1	9.3	12.9	6.0	9.1	9.5	6.9	7.9	11.1	7.8	9.1
29	12.2	6.9	9.3	13.0	6.1	9.0	9.6	6.9	8.2	10.2	7.6	8.7
30	12.6	6.9	9.5	12.8	6.1	9.0	10.6	7.5	8.7	10.6	7.2	8.5
31	---	---	---	12.9	5.6	8.4	11.0	7.6	9.0	---	---	---
MONTH	14.1	5.6	9.0	13.8	5.5	9.2	---	---	---	---	---	---

430432089414100 GARFOOT CREEK RAIN GAGE #1 NEAR CROSS PLAINS, WI

LOCATION.--Lat 43°04'32", long 89°41'41", in SW 1/4 SE 1/4 sec.17, T.7 N., R.7 E., Dane County, Hydrologic Unit 07070005, on Garfoot Road, 2.8 mi south of intersection with County Trunk KP.

PERIOD OF RECORD.--October 1989 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established Oct. 13, 1989. Rainfall estimated to be 0.00 for Dec. 7, 16-18, 20, 26, 31, Jan. 11-12, 14, 20, 29-31, Feb. 15, and Mar. 5, 9-10 because recorded precipitation interpreted as collector snowmelt.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 2.48 in., Aug. 10, 1994.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.34 in., May 27.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.04	.00	.06	.00
3	.05	.00	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00
4	.01	.08	.00	.00	.00	.00	.00	.00	.00	1.07	.06	.00
5	.00	.71	.14	.00	.00	.00	.00	.00	.00	.77	.00	.00
6	.00	.02	.00	.00	.00	.00	.00	.00	.35	.00	.00	.09
7	.28	.00	.00	.00	.00	.00	.72	.00	.43	.00	1.44	.09
8	.13	.16	.00	.00	.00	.00	.17	.92	.01	.00	.51	.00
9	.00	.08	.00	.00	.00	.00	.07	.54	.00	.12	.00	.00
10	.00	.00	.00	.00	.00	.00	.43	.22	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.57	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.31	.00	.00	.00	.00	.00	.42	.00	.00	.01	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.64	.07	.00
16	.00	.00	.00	.00	.00	.00	.11	.00	.00	.00	2.18	.20
17	.03	.02	.00	.09	.00	.00	.03	.00	.00	.00	.00	.01
18	.00	.00	.00	.00	.00	.02	1.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.05	.00	.00	.00	.61	1.00	.96
20	.00	.44	.00	.00	.03	.76	.13	.00	.00	.00	.00	.19
21	.00	.20	.00	.00	.00	.00	.24	.00	.00	.00	.00	.01
22	.14	.00	.00	.00	.00	.00	.00	.00	.00	.33	.00	.00
23	.00	.00	.00	.00	.00	.10	.00	.45	.00	.00	.00	.01
24	.00	.00	.00	.00	.00	.01	.00	.00	.00	.28	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.54	.00	.00
26	.00	.00	.00	.00	.00	.19	.89	.00	.45	.01	.00	.00
27	.00	1.30	.00	.00	.00	.81	.19	2.34	.00	.50	.00	.00
28	.00	.00	.00	.00	.00	.16	.00	.10	.00	.00	1.21	.00
29	.00	.00	.00	.00	---	.00	.05	.00	.03	.00	.04	.02
30	.00	.00	.00	.00	---	.00	.02	.00	.00	.00	.00	.11
31	.00	---	.00	.00	---	.00	---	.00	---	.51	.00	---
TOTAL	0.65	3.32	0.14	0.09	0.03	2.10	4.64	4.99	1.31	5.38	6.60	1.69

WISCONSIN RIVER BASIN

430525089411500 GARFOOT CREEK RAIN GAGE #2 NEAR CROSS PLAINS, WI

LOCATION.--Lat 43°05'25", long 89°41'15", in SW 1/4 SW 1/4 sec.8, T.7 N., R.7 E., Dane County, Hydrologic Unit 07070005, on Garfoot Road, 1.6 mi south of intersection with County Trunk KP.

PERIOD OF RECORD.--October 1989 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established Oct. 12, 1989. Rainfall estimated to be 0.00 for Dec. 7, 16-17, 20-21, 31, Jan. 7, 11-12, 24-26, 29-30, Feb. 15, and Mar. 5, 7, 10 because recorded precipitation interpreted as collector snowmelt. Unpublished rainfall data collected at this site during 1985-86 water years are available for inspection at the District office.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 3.89 in., July 5, 1993.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.48 in., Aug. 16.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00	.03	.00
3	.05	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00
4	.00	.06	.00	.00	.00	.00	.00	.00	.00	1.00	.07	.00
5	.00	.69	.12	.00	.00	.00	.00	.00	.01	.65	.00	.00
6	.00	.01	.00	.00	.00	.00	.00	.00	.27	.00	.00	.08
7	.26	.00	.00	.00	.00	.00	.71	.00	.40	.00	.95	.10
8	.11	.15	.00	.00	.00	.00	.17	.89	.00	.00	.36	.00
9	.00	.07	.00	.00	.00	.00	.05	.52	.00	.07	.00	.00
10	.00	.01	.00	.00	.00	.00	.34	.20	.01	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.60	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.28	.00	.00	.00	.00	.00	.39	.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	.43	.04	.00
16	.00	.00	.00	.00	.00	.00	.11	.00	.00	.00	2.48	.44
17	.04	.02	.00	.10	.00	.00	.02	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.03	.96	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.04	.00	.00	.00	.46	1.07	1.02
20	.00	.41	.00	.00	.03	.71	.15	.00	.00	.01	.00	.17
21	.00	.19	.00	.00	.00	.00	.23	.00	.00	.00	.00	.02
22	.14	.00	.00	.00	.00	.00	.00	.00	.00	.21	.00	.00
23	.00	.00	.00	.00	.00	.08	.00	.46	.00	.01	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.27	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.79	.00	.01
26	.00	.00	.00	.00	.00	.20	.90	.00	.28	.00	.00	.00
27	.00	1.15	.00	.00	.00	.80	.17	2.47	.00	.42	.00	.00
28	.00	.00	.00	.00	.00	.11	.00	.11	.00	.01	1.17	.00
29	.00	.00	.00	.00	---	.00	.04	.00	.00	.00	.03	.02
30	.00	.00	.00	.00	---	.00	.02	.00	.00	.00	.00	.07
31	.00	---	.00	.00	---	.00	---	.00	---	.87	.00	---
TOTAL	0.61	3.04	0.12	0.10	0.03	1.97	4.48	5.04	0.99	5.20	6.21	1.93

430543089393500 GARFOOT CREEK RAIN GAGE #3 NEAR CROSS PLAINS, WI

LOCATION.--Lat 43°05'43", long 89°39'35", in NW 1/4 SW 1/4 sec.10, T.7 N., R.7 E., Dane County, Hydrologic Unit 07070005, on Stage Coach Road, 0.5 mi west of intersection with County Trunk P.

PERIOD OF RECORD.--October 1989 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established Oct. 27, 1989. Rainfall estimated to be 0.00 for Dec. 7, 16, 20-21, 31, Jan. 11-12, 14, 24, 29, 31, and Mar. 5, 10 because recorded precipitation interpreted as collector snowmelt. Rainfall data missing for the periods July 25, 27, 31, and Aug. 2, 4, 7, 8, 16, 19, 28-29.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 3.60 in., July 5, 1993.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.35 in., May 27.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.01	.00	.00	.00	.00	.01	.00	.00	.00	---	.00
3	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.01	.07	.00	.00	.00	.00	.00	.00	.00	1.13	---	.00
5	.00	.68	.10	.00	.00	.00	.00	.00	.00	.51	.00	.00
6	.00	.01	.00	.00	.00	.00	.00	.00	.22	.00	.00	.03
7	.32	.00	.00	.00	.00	.00	.89	.00	.40	.00	---	.14
8	.11	.14	.00	.00	.00	.00	.19	.91	.00	.00	---	.00
9	.01	.09	.00	.00	.00	.00	.05	.51	.00	.04	.00	.00
10	.00	.00	.00	.00	.00	.00	.52	.20	.01	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.59	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.27	.00	.00	.00	.00	.00	.33	.00	.00	.00	.00
14	.00	.01	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.95	.00	.00
16	.00	.00	.00	.00	.00	.00	.12	.00	.00	.00	---	.32
17	.06	.02	.00	.04	.00	.00	.02	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.03	1.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.07	.00	.00	.00	.49	---	.97
20	.00	.44	.00	.00	.03	.61	.15	.00	.00	.00	.00	.08
21	.00	.16	.00	.00	.00	.00	.15	.00	.00	.00	.00	.08
22	.13	.00	.00	.00	.00	.00	.00	.00	.00	.19	.00	.00
23	.00	.00	.00	.00	.00	.11	.00	.45	.00	.01	.00	.01
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.34	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	---	.00	.00
26	.00	.00	.00	.00	.00	.20	1.00	.00	.29	.00	.00	.00
27	.00	1.39	.00	.00	.00	.85	.14	2.35	.00	---	.00	.00
28	.00	.00	.00	.00	.00	.12	.00	.10	.00	.00	---	.00
29	.00	.00	.00	.00	---	.00	.03	.00	.00	.00	---	.00
30	.00	.00	.00	.00	---	.00	.02	.00	.00	.00	.00	.01
31	.00	---	.00	.00	---	.00	---	.00	---	---	.00	---
TOTAL	0.70	3.29	0.10	0.04	0.03	1.99	4.88	4.86	0.92	---	---	1.64

WISCONSIN RIVER BASIN
05406491 GARFOOT CREEK NEAR CROSS PLAINS, WI

LOCATION.--Lat 43°06'37", long 89°40'46", in NW 1/4 SW 1/4 sec.4, T.7 N., R.7 E., Dane County, Hydrologic Unit 07070005, on left bank at bridge on Garfoot Road, 0.5 mi upstream from Black Earth Creek.

DRAINAGE AREA.--5.39 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1984 to September 1986, October 1989 to May 1994, August 1994 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 860 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Ice-affected periods, Jan. 7-11, 24-26, Feb. 6, and Feb. 8-12. Records are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	4.7	5.7	4.5	3.4	4.1	5.8	6.7	7.3	5.0	6.0	4.1
2	4.5	4.7	5.6	4.3	3.5	3.8	5.4	6.6	7.3	4.9	5.2	4.0
3	4.3	4.6	5.4	4.2	3.4	3.8	5.4	6.5	7.1	4.9	5.1	4.1
4	4.5	4.6	4.9	3.9	3.4	3.8	5.2	6.4	6.9	4.8	4.9	3.9
5	4.5	6.4	4.9	3.9	3.4	4.0	5.0	6.3	6.7	7.6	4.7	3.7
6	4.3	5.5	4.9	3.9	3.4	3.9	5.1	6.3	6.9	5.8	4.7	3.8
7	5.0	5.4	5.2	3.9	3.4	4.0	5.6	6.3	7.7	5.2	5.7	3.9
8	5.1	5.3	4.9	3.8	3.4	3.8	8.6	7.5	7.3	5.0	6.5	3.8
9	5.0	5.1	4.9	3.7	3.4	3.9	7.9	9.4	6.9	4.9	6.2	3.6
10	4.7	4.7	4.8	3.6	3.4	4.2	7.2	12	6.8	4.9	5.3	3.6
11	4.7	4.6	4.7	3.5	3.4	12	12	8.4	6.7	4.8	5.0	3.6
12	4.7	4.6	4.7	3.4	3.4	8.9	11	7.5	6.4	4.7	4.9	3.6
13	4.7	4.7	4.7	3.6	3.4	8.2	7.8	8.1	6.3	4.9	4.9	3.6
14	4.6	4.8	4.7	3.6	3.4	6.8	7.4	8.1	6.3	4.8	4.7	3.4
15	4.7	4.5	4.6	3.6	3.4	6.3	7.1	7.3	6.3	5.0	4.5	3.4
16	4.7	4.3	4.3	3.6	3.4	5.7	7.3	7.1	6.2	5.0	10	3.5
17	4.8	4.1	4.3	3.7	3.4	5.3	7.9	6.5	6.2	4.6	12	3.7
18	4.9	4.0	4.3	3.8	3.5	5.0	14	6.1	6.1	4.5	5.6	3.5
19	5.0	4.2	4.1	3.8	4.8	4.9	9.6	6.0	6.0	4.6	14	4.7
20	5.0	4.3	4.1	3.8	7.4	9.0	8.2	6.0	5.8	4.9	7.0	4.9
21	4.9	7.1	4.2	3.8	5.0	7.3	9.7	5.8	5.7	4.6	5.4	4.3
22	5.0	5.4	4.3	3.8	4.7	5.7	8.5	5.6	5.6	4.5	4.9	4.0
23	5.1	5.0	4.3	3.7	4.8	5.4	8.0	6.0	5.4	4.7	4.8	3.9
24	5.1	4.9	4.4	3.5	4.4	5.2	7.9	6.0	5.4	5.0	4.5	3.8
25	5.1	4.8	4.5	3.4	4.3	5.1	7.9	6.8	5.4	5.3	4.3	3.8
26	5.1	4.7	4.5	3.4	4.3	5.3	9.0	5.6	5.6	5.3	4.2	3.8
27	5.1	11	4.8	3.4	4.3	11	12	11	5.8	5.2	4.3	3.6
28	4.9	8.9	5.2	3.4	4.3	9.1	8.2	24	5.4	5.5	5.4	3.4
29	4.9	6.5	4.9	3.4	---	7.3	7.4	9.4	5.2	4.9	7.7	3.4
30	4.7	5.9	4.7	3.5	---	6.4	7.1	8.0	5.1	4.9	5.3	3.7
31	4.7	---	4.7	3.5	---	6.2	---	7.6	---	5.5	4.6	---
TOTAL	148.9	159.3	146.2	114.9	109.7	185.4	239.2	240.9	187.8	156.2	182.3	114.1
MEAN	4.80	5.31	4.72	3.71	3.92	5.98	7.97	7.77	6.26	5.04	5.88	3.80
MAX	5.1	11	5.7	4.5	7.4	12	14	24	7.7	7.6	14	4.9
MIN	4.3	4.0	4.1	3.4	3.4	3.8	5.0	5.6	5.1	4.5	4.2	3.4
CFSM	.89	.99	.87	.69	.73	1.11	1.48	1.44	1.16	.93	1.09	.71
IN.	1.03	1.10	1.01	.79	.76	1.28	1.65	1.66	1.30	1.08	1.26	.79

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1995, BY WATER YEAR (WY)

MEAN	4.67	5.11	4.23	3.75	4.67	7.28	6.43	5.32	4.91	5.86	4.69	4.58
MAX	6.53	8.76	5.55	5.01	7.61	12.8	11.6	7.77	7.91	15.0	8.64	7.22
(WY)	1994	1986	1994	1986	1994	1993	1993	1995	1993	1993	1993	1993
MIN	2.19	2.59	2.10	2.10	2.72	4.51	2.74	3.38	3.33	2.44	2.56	2.06
(WY)	1991	1991	1990	1991	1991	1992	1990	1990	1992	1990	1990	1990

WISCONSIN RIVER BASIN

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05406491 GARFOOT CREEK NEAR CROSS PLAINS, WI--CONTINUED

SUMMARY STATISTICS

FOR 1995 WATER YEAR

WATER YEARS 1985 - 1995

ANNUAL TOTAL	1984.9		
ANNUAL MEAN	5.44	5.03	
HIGHEST ANNUAL MEAN		7.69	1993
LOWEST ANNUAL MEAN		3.18	1990
HIGHEST DAILY MEAN	24	81	Jul 25 1985
LOWEST DAILY MEAN	3.4 (a)	1.7	(b) Dec 24, 25 1989
ANNUAL SEVEN-DAY MINIMUM	3.4	1.8	Sep 26 1990
INSTANTANEOUS PEAK FLOW	57	(c) 128	Jul 25 1985
INSTANTANEOUS PEAK STAGE	5.17	7.57	Jul 5 1993
INSTANTANEOUS LOW FLOW	2.5	1.6	(d) Dec 21 1989
ANNUAL RUNOFF (CFSM)	1.01	.93	
ANNUAL RUNOFF (INCHES)	13.70	12.68	
10 PERCENT EXCEEDS	7.8	7.3	
50 PERCENT EXCEEDS	4.9	4.6	
90 PERCENT EXCEEDS	3.6	2.5	

(a) Also occurred Jan. 25-29, Feb. 1, 3-17, Sept. 14, 15, 28, 29

(b) Also occurred Aug. 9, 10, Sept. 30, Oct. 1, 2, 1990

(c) Gage height, 5.84 ft

(d) Also occurred Oct. 27, 1990

WISCONSIN RIVER BASIN

05406491 GARFOOT CREEK NEAR CROSS PLAINS, WI--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1984 to September 1986, October 1989 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: November 1984 to September 1986, October 1989 to current year.

DISSOLVED OXYGEN: April 1984 to September 1985, April 1990 to current year.

SUSPENDED-SOLIDS DISCHARGE: October 1989 to September 1991.

TOTAL-NITROGEN DISCHARGE: October 1984 to September 1985 (discontinued).

SUSPENDED-SEDIMENT DISCHARGE: October 1984 to June 1986, October 1991 to current year.

TOTAL-PHOSPHORUS DISCHARGE: October 1984 to June 1986, October 1989 to current year.

INSTRUMENTATION.--Water-quality sampler December 1984 to June 1986, October 1989 to current year; continuous water temperature recorder November 1984 to September 1986, October 1989 to current year; dissolved oxygen recorder April 1984 to September 1985, April 1990 to current year.

REMARKS.--Total-nitrogen discharge were published for the period October 1984 to June 1986. Suspended-solids discharge were published for the period October 1989 to September 1991. 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.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum observed, 24.5°C, July 25, 1985 and July 25, 1993; minimum observed, 0.0°C, on several days during 1985, 1986, 1990, 1991, 1993, 1994, and 1995.

DISSOLVED OXYGEN: Maximum observed, 17.4 mg/L, Apr. 11, 1990; minimum observed, 1.5 mg/L, Aug. 17, 1990.

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 77 tons, June 29, 1990; minimum daily, 0.04 ton, Feb. 26-27, and Aug. 7, 9-10, 1990.

TOTAL-NITROGEN DISCHARGE: Maximum daily, 2,980 lb, July 25, 1985; minimum daily, 49 lb, Jan. 26 to Feb. 3, 1985.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 96 tons, July 5, 1993; minimum, 0.06 ton, Oct. 1-3, 1991.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 747 lb, July 25, 1985; minimum daily, 0.47 lb, Dec. 24, 1989.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum observed, 21.0°C, July 14 and Aug. 16; minimum observed, 0.0°C, Jan. 24, 26, Feb. 6, 8, 10-12, and Mar. 2, 9.

DISSOLVED OXYGEN: Maximum observed, 13.9 mg/L, May 6; minimum observed, 5.1 mg/L, Aug. 29.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 23 tons, Mar. 11; minimum daily, 0.08 ton, Apr. 4-6.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 110 lb, May 28; minimum daily, 0.78 lb, Jan. 12.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH WATER WHOLE LAB (STAND- ARDS UNITS) (00403)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 1994										
*04...	1400	4.5	8.0	4.4	--	27	0.044	0.157	--	--
*07...	0920	4.8	--	--	--	--	--	--	53	--
*19...	0815	4.9	8.2	<1.0	--	28	<0.027	0.101	34	--
NOV										
*02...	1012	4.7	8.2	--	--	21	<0.027	0.103	--	--
*16...	1130	4.2	--	--	--	--	--	--	73	--
*27...	0930	4.7	7.8	3.0	24000	70	0.105	0.330	--	--
27...	1430	14	7.7	13	59000	464	0.137	1.31	530	98
27...	1900	20	7.7	15	63000	708	0.257	1.72	766	98
28...	0415	11	7.7	6.3	31000	180	0.137	0.650	138	96
*28...	0930	8.3	--	--	--	--	--	--	59	--
DEC										
*06...	1440	4.9	8.0	<1.0	540	12	<0.027	0.060	66	--
JAN 1995										
*16...	1455	3.6	7.9	--	400	6	0.028	0.040	15	--
FEB										
*24...	0955	4.3	--	--	--	--	--	0.110	16	--
MAR										
11...	1330	16	--	--	--	--	0.848	1.53	797	--
11...	1400	22	--	--	--	--	0.970	2.57	1760	98
11...	1445	29	--	--	--	--	0.921	2.78	2050	98
11...	1915	19	--	--	--	--	0.797	1.28	406	--
*12...	1208	6.6	--	--	--	--	0.286	0.300	33	--
20...	1800	13	--	--	--	--	--	0.830	193	--
*21...	1420	6.9	--	--	--	--	--	0.190	14	--
*27...	1000	14	--	--	--	--	--	0.620	--	--
*29...	1415	7.2	--	--	--	--	--	0.080	6	--

* Equal-width increment (EWI) sample

05406491 GARFOOT CREEK NEAR CROSS PLAINS, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (000061)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N) (00608)	PHOS- PHORUS TOTAL (MG/L) AS P) (00665)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
APR 1995										
11...	0330	13	--	--	--	--	--	0.620	146	--
11...	2000	14	8.1	--	--	--	0.196	0.710	--	--
*12...	1315	9.6	--	--	--	--	--	0.220	19	--
18...	0930	13	--	--	--	--	--	0.540	165	--
18...	1115	17	--	--	--	--	--	1.19	529	--
18...	2115	13	--	--	--	--	--	0.330	69	--
*19...	1005	9.6	--	--	--	--	--	0.141	17	--
MAY										
*02...	1002	6.5	--	--	--	--	--	0.080	25	--
10...	0030	14	--	--	--	--	--	0.744	231	--
*10...	1325	12	--	--	--	--	--	0.415	50	--
*15...	1336	7.2	--	--	--	--	--	0.081	8	--
27...	2000	14	--	--	--	--	--	1.35	502	--
27...	2045	21	--	--	--	--	--	1.84	868	--
27...	2130	31	--	--	--	--	--	1.98	1180	--
27...	2200	41	--	--	--	--	--	2.39	1550	--
27...	2245	50	--	--	--	--	--	2.47	1590	--
28...	0015	58	--	--	--	--	--	1.88	975	--
28...	0500	44	--	--	--	--	--	0.803	259	--
28...	0615	33	--	--	--	--	--	0.726	217	--
28...	0815	23	--	--	--	--	--	0.677	170	--
28...	1031	16	--	--	--	--	--	0.517	141	--
*28...	1035	16	--	--	--	--	--	0.478	122	--
*31...	0900	7.6	7.3	--	--	<5	<0.027	<0.008	26	--
JUN										
*12...	1055	6.5	--	--	--	--	--	0.099	66	--
*27...	1032	5.8	--	--	--	--	--	0.100	52	--
JUL										
*10...	1233	4.9	--	--	--	--	--	0.195	130	--
*24...	1425	5.4	--	--	--	--	<0.027	0.115	49	--

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (000061)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCOCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) AS N) (00608)	PHOS- PHORUS TOTAL (MG/L) AS P) (00665)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
AUG 1995											
09...	1302	5.8	8.0	--	2600	3600	18	0.054	0.113	--	--
16...	1730	17	7.8	17	--	8300000	1080	0.240	2.00	1080	--
16...	1745	9.1	8.0	15	--	4900000	1970	0.333	5.20	2040	--
16...	1900	15	8.0	15	--	3200000	1150	0.217	3.05	1210	--
16...	2015	23	7.9	16	--	4700000	1020	0.179	1.85	1000	--
16...	2100	31	7.8	18	--	5200000	1240	0.200	2.08	1270	95
16...	2215	38	7.8	16	--	3900000	1060	0.223	1.96	1060	95
17...	0100	28	7.9	12	--	4500000	372	0.124	1.23	378	92
17...	0445	18	8.1	7.7	--	3800000	236	0.092	0.912	204	--
17...	0931	11	8.0	4.8	--	1600000	92	0.066	0.483	57	--
17...	0939	11	--	--	--	--	--	0.071	0.486	72	--
19...	0930	11	8.0	--	--	--	824	0.099	1.69	893	--
19...	1045	19	7.8	--	--	--	752	0.120	1.38	825	--
19...	1130	27	7.8	--	--	--	700	0.146	1.19	718	99
19...	1230	34	7.6	--	--	--	700	0.137	1.55	729	98
19...	1545	23	7.7	--	--	--	252	1.43	1.02	245	98
19...	1915	14	7.8	--	--	--	122	0.122	0.590	129	--
21...	0958	5.4	7.8	--	--	--	30	0.048	0.098	97	--
24...	0950	4.5	8.0	2.0	2300	--	27	<0.027	0.088	47	--
SEP											
04...	1050	3.8	8.1	1.3	--	4900	23	0.035	0.065	38	--
21...	0825	4.3	8.2	1.6	13000	--	48	0.033	0.122	31	--

*Equal-width increment (EWI) sample

WISCONSIN RIVER BASIN
05406491 GARFOOT CREEK NEAR CROSS PLAINS, WI--CONTINUED

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	12.5	9.5	11.0	9.5	6.0	7.5	7.5	4.5	6.0	4.0	2.0	3.5
2	10.0	9.0	9.5	---	---	---	8.0	5.5	6.5	4.0	1.5	2.5
3	15.0	8.5	12.5	---	---	---	9.0	6.0	7.0	3.0	.5	2.0
4	11.5	8.5	10.5	---	---	---	8.5	6.0	7.0	2.0	.5	1.0
5	11.0	8.0	9.0	---	---	---	8.0	5.5	7.0	2.5	.5	1.5
6	12.0	8.5	10.0	---	---	---	5.5	2.0	4.5	4.5	2.5	3.5
7	13.5	10.0	11.5	---	---	---	5.5	1.5	3.5	4.0	1.0	2.5
8	10.5	8.0	10.0	---	---	---	5.0	2.0	3.5	3.5	.5	1.5
9	10.5	7.0	8.5	---	---	---	6.0	2.0	4.5	4.0	.5	2.0
10	11.0	6.0	8.0	---	---	---	4.5	2.0	3.0	5.5	2.5	4.0
11	11.5	6.5	8.5	---	---	---	4.0	1.0	2.5	7.0	5.0	6.0
12	11.5	6.0	8.5	---	---	---	4.5	1.0	2.5	7.5	6.0	6.5
13	11.5	6.5	8.5	---	---	---	5.0	2.0	3.5	7.0	6.0	6.5
14	12.0	7.0	9.0	---	---	---	5.0	3.5	4.0	6.5	5.5	6.0
15	12.0	8.5	10.0	---	---	---	6.0	4.0	5.0	6.0	4.0	5.5
16	13.0	9.5	11.0	---	---	---	6.0	5.5	5.5	5.5	4.0	5.0
17	13.0	10.0	11.5	---	---	---	7.0	5.5	6.0	6.5	4.5	5.5
18	13.0	11.0	12.0	---	---	---	6.0	2.5	4.5	6.0	3.5	4.5
19	13.0	9.5	11.0	7.5	4.5	6.0	5.5	2.5	4.5	5.0	3.0	4.0
20	12.5	8.5	10.0	8.0	6.5	7.5	7.0	5.0	6.0	5.0	3.5	4.0
21	12.0	7.0	9.5	8.0	4.5	7.0	7.0	4.5	5.5	4.5	3.0	3.5
22	13.0	8.0	10.0	6.0	3.5	4.5	7.0	4.0	5.5	5.0	2.5	3.5
23	11.0	7.5	9.0	7.0	4.0	5.0	7.0	5.0	6.0	5.0	1.0	3.0
24	8.0	7.0	7.5	7.5	4.5	5.5	7.0	4.0	6.0	4.5	.0	2.0
25	8.0	6.5	7.5	7.0	4.0	5.5	7.0	3.5	4.5	5.5	1.0	3.5
26	9.5	6.5	8.0	6.5	3.5	4.5	7.0	3.5	5.0	5.5	.0	2.0
27	10.5	6.0	7.5	5.5	4.5	5.0	7.5	5.5	6.0	5.5	1.5	3.5
28	10.0	7.5	8.5	5.0	4.0	4.5	6.5	4.5	5.5	6.0	2.5	4.0
29	11.0	7.5	9.5	6.0	4.5	5.0	6.5	4.0	5.0	5.5	.5	3.0
30	10.5	6.0	8.0	6.5	4.0	5.0	6.0	4.0	5.0	6.0	3.0	4.5
31	9.0	7.5	8.5	---	---	---	5.5	4.0	5.0	7.5	2.5	5.0
MONTH	15.0	6.0	9.5	---	---	---	9.0	1.0	5.0	7.5	.0	3.7
FEBRUARY			MARCH			APRIL			MAY			
1	7.0	5.0	6.0	5.5	.5	2.0	9.5	3.5	6.0	10.0	5.5	8.0
2	7.0	5.0	5.5	6.0	.0	2.5	11.5	3.5	7.0	12.5	7.0	9.5
3	6.0	3.5	5.0	7.0	1.0	3.5	13.0	5.0	8.5	12.5	6.5	9.0
4	4.5	1.0	3.0	8.0	2.0	4.5	8.5	1.5	4.5	12.0	8.0	9.5
5	4.0	.5	1.5	6.0	3.0	4.5	8.0	2.0	5.0	14.5	7.0	10.5
6	4.5	.0	1.5	5.5	1.0	4.0	13.0	5.5	8.0	16.5	7.0	11.0
7	3.5	1.0	2.0	6.5	1.5	4.0	8.0	5.0	6.0	16.5	9.5	12.5
8	4.0	.0	2.0	7.5	1.0	4.0	6.5	4.5	5.5	11.5	9.0	10.0
9	7.0	1.5	4.5	7.0	.0	3.0	8.5	3.5	5.0	12.0	8.5	10.0
10	5.5	.0	3.5	9.5	3.0	5.5	5.0	4.0	4.5	10.0	9.5	9.5
11	1.0	.0	.5	7.0	2.5	4.0	7.0	3.5	5.5	15.5	9.0	11.5
12	4.0	.0	1.5	10.0	3.0	5.5	6.0	4.0	5.0	16.0	8.5	11.5
13	4.0	1.0	2.0	10.0	5.0	7.0	12.0	4.5	7.5	11.5	10.5	11.0
14	5.0	.5	2.5	11.5	4.5	7.0	12.5	4.5	8.0	15.5	9.5	11.5
15	5.5	3.0	4.0	12.5	5.0	8.0	9.0	5.5	7.0	16.5	8.0	11.5
16	6.0	1.5	3.5	12.0	5.0	7.5	10.5	5.5	8.0	17.0	9.5	12.5
17	7.0	1.5	4.0	10.5	5.5	7.0	13.5	6.5	9.5	16.0	9.5	12.0
18	8.0	4.0	5.5	8.5	4.5	6.5	11.5	7.0	8.5	15.0	9.0	11.0
19	8.0	4.0	5.5	9.5	5.5	7.0	11.5	6.0	8.0	17.5	8.0	12.0
20	6.5	2.5	4.0	6.5	4.0	5.5	8.5	6.0	7.0	17.5	10.0	12.5
21	5.5	2.0	3.5	7.5	4.0	5.5	7.0	6.0	6.5	17.0	9.0	12.0
22	8.5	3.5	5.0	11.0	3.5	6.5	13.0	5.5	8.5	17.5	8.5	12.5
23	7.0	3.0	5.0	7.0	4.0	5.5	11.5	5.5	8.0	12.5	9.5	11.0
24	7.5	2.5	4.5	11.0	3.0	6.5	9.5	5.5	7.5	12.5	9.0	10.5
25	6.0	3.5	5.0	11.0	4.0	7.0	11.5	5.0	8.0	16.0	8.5	11.5
26	4.5	3.0	3.5	8.0	5.5	6.5	10.0	7.0	8.0	16.5	8.5	11.5
27	6.5	3.5	5.0	5.5	3.5	4.5	9.0	6.5	7.5	12.0	9.5	10.5
28	8.0	1.5	4.5	5.5	4.0	4.5	12.5	6.0	9.0	14.5	11.5	13.0
29	---	---	---	7.5	4.5	5.5	9.0	7.0	8.0	15.0	10.5	12.5
30	---	---	---	7.0	4.0	5.5	12.0	7.0	9.0	16.5	10.0	12.5
31	---	---	---	6.5	4.5	5.5	---	---	---	15.5	9.5	12.5
MONTH	8.5	.0	3.7	12.5	.0	5.3	13.5	1.5	7.1	17.5	5.5	11.2

WISCONSIN RIVER BASIN

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05406491 GARFOOT CREEK NEAR CROSS PLAINS, WI--CONTINUED

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	15.5	10.5	12.5	17.0	11.0	13.5	15.5	13.0	14.5	16.0	11.5	13.5
2	14.5	10.5	12.0	17.0	10.0	13.0	14.0	13.0	13.5	16.5	11.5	13.5
3	17.5	10.5	13.5	17.0	11.5	14.0	15.5	13.0	14.0	16.5	11.5	13.5
4	16.5	11.0	13.5	15.5	12.5	13.5	17.0	12.5	14.0	16.5	11.5	13.5
5	17.5	11.5	14.0	17.5	13.5	15.0	17.5	12.5	14.5	15.5	11.0	13.0
6	17.5	11.5	14.0	14.5	12.5	13.5	17.0	12.5	14.5	14.5	12.0	13.0
7	18.0	12.5	14.5	17.5	11.5	14.0	18.0	13.0	15.0	13.0	10.0	11.5
8	13.0	10.5	11.5	15.5	11.0	13.0	18.5	14.5	16.0	13.5	9.0	10.5
9	13.5	10.5	12.0	17.5	12.0	14.0	16.5	14.5	15.5	14.0	9.0	11.0
10	17.0	11.0	13.0	16.5	12.0	14.0	17.0	14.0	15.0	13.5	9.0	11.0
11	16.5	11.0	13.0	18.0	12.0	14.5	19.0	13.0	15.5	14.0	9.0	11.0
12	16.0	10.0	12.5	19.5	13.0	15.5	19.0	13.5	15.5	13.0	10.0	11.5
13	17.0	10.0	13.0	20.5	13.5	16.5	20.0	14.0	16.5	16.5	11.5	13.0
14	17.5	10.5	13.5	21.0	13.5	16.5	18.0	13.0	15.5	15.0	10.0	12.0
15	18.0	11.0	14.0	19.5	13.5	16.0	16.5	12.5	14.0	14.5	9.5	11.5
16	18.5	11.5	14.5	18.0	14.0	15.5	21.0	13.0	15.5	16.5	11.0	13.5
17	18.5	12.0	14.5	18.5	12.5	15.0	20.0	15.5	18.0	14.5	10.5	12.0
18	19.0	12.5	15.0	17.5	12.0	14.5	17.0	14.5	15.5	13.0	9.5	11.0
19	19.0	12.5	15.0	15.0	11.5	13.5	20.5	14.0	17.0	12.0	11.0	11.5
20	19.0	12.0	15.0	18.0	13.0	14.5	17.5	14.0	15.5	12.0	10.5	11.0
21	19.5	12.5	15.0	18.0	12.0	14.5	17.5	13.0	15.0	10.5	9.0	10.0
22	19.0	12.5	15.0	16.5	12.5	14.0	17.0	12.5	14.5	10.5	8.0	9.0
23	19.0	12.5	15.0	18.0	12.5	14.5	18.0	13.0	15.0	12.0	7.5	9.5
24	18.5	12.0	14.5	18.5	12.0	14.5	14.5	12.5	13.5	11.0	7.5	9.5
25	18.5	12.0	14.5	19.0	12.0	15.0	17.5	12.0	14.0	12.0	9.5	10.5
26	15.5	12.5	13.5	17.5	13.5	15.0	16.0	12.0	13.5	14.0	9.5	11.0
27	15.5	12.5	13.5	18.0	12.5	14.5	15.0	13.0	14.0	14.0	8.5	11.0
28	16.5	12.0	14.0	19.0	13.5	15.5	17.0	13.0	14.5	14.0	9.5	11.0
29	18.0	12.0	14.5	18.5	12.5	15.0	17.0	14.5	16.0	12.5	9.0	10.5
30	17.5	12.5	14.0	20.0	12.5	15.5	18.5	14.0	16.0	13.5	11.0	12.0
31	---	---	---	19.0	13.5	16.0	17.0	13.0	15.0	---	---	---
MONTH	19.5	10.0	13.8	21.0	10.0	14.6	21.0	12.0	15.0	16.5	7.5	11.5

WISCONSIN RIVER BASIN
05406491 GARFOOT CREEK NEAR CROSS PLAINS, WI--CONTINUED

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	12.6	10.0	11.1
4	---	---	---	---	---	---	---	---	---	12.8	10.0	10.9
5	---	---	---	---	---	---	---	---	---	13.1	9.6	11.1
6	---	---	---	---	---	---	---	---	---	13.9	9.3	11.3
7	---	---	---	---	---	---	---	---	---	13.2	9.2	10.8
8	---	---	---	---	---	---	---	---	---	10.5	9.3	10.0
9	---	---	---	---	---	---	---	---	---	11.6	9.1	10.2
10	---	---	---	---	---	---	---	---	---	9.8	8.9	9.4
11	---	---	---	---	---	---	---	---	---	11.5	9.2	10.1
12	---	---	---	---	---	---	---	---	---	11.4	9.1	10.1
13	---	---	---	---	---	---	---	---	---	9.7	8.4	9.3
14	---	---	---	---	---	---	---	---	---	11.2	8.5	9.6
15	---	---	---	---	---	---	---	---	---	11.6	8.8	10.0
16	---	---	---	---	---	---	---	---	---	11.1	8.6	9.6
17	---	---	---	---	---	---	---	---	---	11.9	8.9	10.2
18	---	---	---	---	---	---	---	---	---	12.3	9.7	10.7
19	---	---	---	---	---	---	---	---	---	12.4	9.7	10.9
20	---	---	---	---	---	---	---	---	---	12.4	9.9	10.9
21	---	---	---	---	---	---	---	---	---	12.9	10.3	11.4
22	---	---	---	---	---	---	---	---	---	13.1	9.9	11.5
23	---	---	---	---	---	---	---	---	---	11.7	10.1	11.0
24	---	---	---	---	---	---	---	---	---	13.1	10.7	11.7
25	---	---	---	---	---	---	---	---	---	12.6	10.1	11.3
26	---	---	---	---	---	---	---	---	---	12.3	9.8	11.0
27	---	---	---	---	---	---	---	---	---	11.4	7.8	10.1
28	---	---	---	---	---	---	---	---	---	9.0	7.5	8.2
29	---	---	---	---	---	---	---	---	---	9.9	8.8	9.4
30	---	---	---	---	---	---	---	---	---	10.3	9.1	9.7
31	---	---	---	---	---	---	---	---	---	10.1	9.0	9.6
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	JUNE			JULY			AUGUST			SEPTEMBER		
1	10.1	9.2	9.6	9.1	8.3	8.7	7.3	6.2	6.8	9.6	8.8	9.2
2	10.2	9.2	9.6	9.4	8.4	9.1	7.5	6.2	7.1	9.8	8.9	9.4
3	10.1	8.9	9.5	9.8	8.7	9.2	8.0	7.0	7.5	9.9	8.9	9.4
4	10.2	8.8	9.5	9.1	7.5	8.4	7.8	7.4	7.6	10.1	9.0	9.5
5	10.0	8.5	9.3	8.2	6.5	7.9	8.2	7.6	7.9	10.1	7.9	9.3
6	10.1	8.6	9.3	9.5	8.2	9.1	8.3	7.7	8.0	9.4	8.6	9.2
7	10.7	8.8	9.6	10.1	9.2	9.7	8.3	7.6	8.0	9.9	8.9	9.4
8	---	---	---	9.9	7.4	8.8	8.0	7.0	7.6	10.3	9.4	9.9
9	---	---	---	7.9	7.3	7.6	---	---	---	10.5	9.4	10.0
10	---	---	---	8.3	7.2	7.7	---	---	---	10.4	9.5	10.0
11	---	---	---	8.3	7.3	7.7	9.4	8.5	8.9	10.5	9.4	10.0
12	---	---	---	9.9	8.3	8.8	9.5	8.6	9.0	10.3	9.5	9.9
13	9.7	8.3	9.0	10.7	9.5	10.0	9.4	8.3	8.9	9.8	9.0	9.5
14	9.3	8.0	8.7	11.4	9.4	10.6	9.6	8.5	9.0	10.3	9.3	9.9
15	9.1	7.5	8.4	11.7	8.7	10.5	10.5	7.6	9.5	10.5	9.4	10.0
16	8.5	7.2	8.0	8.7	7.2	7.7	---	---	---	9.9	8.6	9.4
17	8.3	7.2	7.8	8.2	7.0	7.5	---	---	---	10.4	9.0	9.8
18	8.0	7.2	7.6	7.7	7.1	7.4	---	---	---	10.6	9.7	10.2
19	7.9	7.0	7.5	8.0	7.4	7.7	---	---	---	10.0	8.7	9.6
20	7.7	7.0	7.4	8.7	7.7	8.2	---	---	---	10.3	8.9	9.8
21	7.4	6.8	7.2	9.3	8.3	8.7	---	---	---	10.6	9.9	10.3
22	---	---	---	9.1	8.5	8.7	---	---	---	---	---	---
23	---	---	---	8.8	8.3	8.5	---	---	---	---	---	---
24	---	---	---	8.5	7.2	8.0	---	---	---	---	---	---
25	---	---	---	8.2	7.4	7.8	9.9	8.8	9.4	---	---	---
26	---	---	---	9.3	7.2	8.0	9.3	8.1	8.8	---	---	---
27	---	---	---	8.0	7.5	7.8	8.8	7.9	8.3	---	---	---
28	---	---	---	8.4	7.8	8.1	8.4	6.0	7.6	---	---	---
29	---	---	---	8.9	7.8	8.1	8.6	5.1	7.5	---	---	---
30	9.8	8.1	8.8	8.5	7.8	8.2	9.0	8.2	8.6	---	---	---
31	---	---	---	8.4	7.1	7.8	9.1	8.3	8.7	---	---	---
MONTH	---	---	---	11.7	6.5	8.5	---	---	---	---	---	---

WISCONSIN RIVER BASIN

05406497 BLACK EARTH CREEK AT SOUTH VALLEY ROAD NEAR BLACK EARTH, WI

LOCATION.--Lat 43°07'30", long 89°42'35", in NE 1/4 SW 1/4 sec.31, T.8 N., R.7 E., Dane County, Hydrologic Unit 07070005, on right bank, at bridge on South Valley Road, 2.1 mi southeast of Black Earth.

DRAINAGE AREA.--40.6 mi², of which 2.8 mi² probably is noncontributing.

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

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: November 1989 to current year.

DISSOLVED OXYGEN: April 1990 to current year.

INSTRUMENTATION.--Continuous water temperature recorder since November 1989 and continuous dissolved oxygen recorder since April 1990.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum observed, 24.0°C, June 27, 1991; minimum observed, 0.0°C, many days during the 1990, 1991, 1992, 1993, 1994, and 1995 water years.

DISSOLVED OXYGEN: Maximum observed, 18.3 mg/L, Apr. 28, 1991 and May 8, 1992; minimum observed, 3.9 mg/L, July 2, 1991.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum observed, 21.5°C, July 14; minimum observed, 0.0°C, Jan. 4-5, and Feb. 6, 8, 11-12.

DISSOLVED OXYGEN: Maximum observed, 16.1 mg/L, May 6; minimum observed, 4.4 mg/L, July 16.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	7.0	5.0	6.5	5.0	2.5	3.5
2	---	---	---	---	---	---	8.0	6.5	7.0	3.0	1.5	2.5
3	---	---	---	11.0	10.0	10.5	9.0	7.0	8.0	2.5	.5	1.5
4	---	---	---	11.0	10.0	10.5	9.0	7.0	8.0	1.0	.0	.5
5	---	---	---	10.0	9.5	9.5	9.0	6.5	8.0	2.0	.0	1.0
6	---	---	---	10.5	9.0	9.5	6.5	3.5	5.5	4.0	2.0	3.0
7	---	---	---	10.0	7.5	9.0	5.0	2.5	4.0	4.0	2.0	2.5
8	---	---	---	10.5	9.0	10.0	5.0	2.5	4.0	2.0	.5	1.5
9	---	---	---	10.5	7.5	9.0	6.0	3.5	5.0	3.0	.5	2.0
10	---	---	---	8.5	6.0	7.5	4.0	2.5	3.5	5.0	2.5	3.5
11	---	---	---	8.5	6.5	8.0	3.5	1.5	2.5	6.5	4.5	5.5
12	---	---	---	9.0	7.5	8.5	3.5	1.5	2.5	7.0	6.0	6.5
13	---	---	---	11.0	9.0	10.0	4.5	2.5	3.5	6.5	6.0	6.5
14	---	---	---	11.0	8.5	10.5	4.5	3.5	4.0	6.5	5.5	6.0
15	---	---	---	8.5	6.5	7.5	6.0	4.5	5.0	6.0	4.5	5.5
16	---	---	---	8.0	6.0	7.0	6.0	5.5	6.0	5.0	4.0	4.5
17	---	---	---	8.5	6.5	7.5	6.5	5.5	6.0	5.5	5.0	5.0
18	---	---	---	8.5	6.5	7.5	6.0	4.0	5.0	5.0	3.5	4.5
19	---	---	---	7.5	5.0	6.5	5.0	3.5	4.5	5.0	3.0	4.0
20	---	---	---	8.5	7.5	8.0	7.0	5.0	6.0	4.5	3.0	4.0
21	---	---	---	8.5	5.5	8.0	7.0	5.5	6.0	4.0	3.0	3.5
22	---	---	---	5.5	4.0	5.0	6.5	4.5	6.0	4.0	2.5	3.0
23	---	---	---	6.0	4.0	5.5	7.0	5.5	6.5	4.0	1.5	3.0
24	---	---	---	7.5	5.0	6.0	7.0	5.5	6.5	3.0	.5	2.0
25	---	---	---	7.0	5.5	6.5	6.0	3.5	5.0	4.5	2.5	3.5
26	---	---	---	6.0	4.5	5.5	6.5	4.0	5.5	4.0	.5	2.5
27	---	---	---	6.0	5.0	5.5	7.5	6.0	6.5	5.0	1.5	3.5
28	---	---	---	5.0	4.5	4.5	6.5	5.0	6.0	5.5	3.5	4.5
29	---	---	---	5.5	4.5	5.0	5.5	4.0	5.0	4.5	1.5	3.0
30	---	---	---	6.0	4.5	5.5	5.5	4.0	5.0	6.0	4.0	4.5
31	---	---	---	---	---	---	5.5	5.0	5.5	6.5	3.0	5.0
MONTH	---	---	---	---	---	---	9.0	1.5	5.4	7.0	.0	3.6

05406497 BLACK EARTH CREEK AT SOUTH VALLEY ROAD NEAR BLACK EARTH, WI--CONTINUED

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	7.0	5.0	6.0	4.5	1.0	3.0	9.5	5.5	7.5	10.5	7.5	9.5
2	6.5	5.5	6.0	5.5	1.0	3.0	11.5	6.0	8.5	12.5	8.0	10.5
3	6.0	4.5	5.5	6.5	1.5	4.0	12.5	8.5	10.5	12.5	8.0	10.5
4	4.5	2.0	3.5	7.5	3.0	5.5	9.5	3.5	6.5	12.0	9.5	10.5
5	3.0	.5	2.0	6.5	4.5	5.5	8.5	3.5	6.0	14.5	8.0	11.0
6	3.0	.0	2.0	6.0	3.5	5.0	13.0	6.5	9.5	16.0	8.0	12.0
7	3.5	1.5	2.0	6.0	2.5	4.5	10.5	7.0	8.0	16.0	11.0	13.5
8	3.0	.0	1.5	6.5	2.5	5.0	8.0	6.5	7.0	14.0	9.5	11.0
9	6.0	2.5	4.0	6.0	1.0	4.0	8.5	5.5	7.0	11.5	9.0	10.0
10	5.5	1.5	4.5	9.0	3.5	6.5	6.5	5.5	6.0	11.5	10.0	10.5
11	1.5	.0	.5	9.5	4.0	6.5	8.5	5.5	7.0	16.0	9.5	12.5
12	2.0	.0	1.0	11.0	4.0	7.5	8.0	6.0	7.0	16.5	10.0	13.5
13	3.0	1.0	2.0	12.0	8.0	9.5	12.5	6.0	9.0	14.5	12.0	12.5
14	4.0	1.0	2.5	12.0	7.5	10.0	12.5	7.0	10.0	16.0	11.5	13.5
15	5.0	4.0	4.5	13.0	8.0	10.5	10.5	7.5	9.0	17.5	10.5	14.0
16	5.5	2.0	4.0	12.5	7.5	10.0	11.0	7.5	9.5	17.0	12.0	14.5
17	6.0	2.0	4.5	10.5	7.5	9.0	13.5	8.5	11.0	16.5	11.5	14.0
18	8.0	4.5	6.0	9.5	6.5	8.5	12.5	9.0	10.5	14.5	10.5	12.5
19	8.0	5.0	6.5	10.5	7.5	9.0	12.0	8.0	10.0	17.0	10.0	13.5
20	7.5	3.0	5.5	9.5	6.0	7.5	10.5	8.0	9.0	17.0	11.5	14.0
21	5.5	2.0	3.5	8.5	5.5	7.0	8.5	7.5	8.0	16.5	10.5	13.5
22	8.0	4.0	6.0	10.5	5.0	8.0	14.0	7.0	10.0	17.0	10.0	13.5
23	7.0	5.0	6.0	9.5	6.5	7.5	12.5	7.5	10.5	15.5	11.0	12.5
24	6.5	3.0	5.0	11.0	5.0	8.0	10.5	7.5	9.5	13.5	10.0	11.5
25	6.5	5.0	6.0	11.0	6.0	8.5	12.0	7.0	9.5	16.5	10.0	13.0
26	5.0	4.0	4.5	9.5	7.0	8.0	10.5	8.5	9.5	16.5	10.5	13.5
27	6.5	4.5	5.5	8.0	5.5	6.5	10.0	8.0	9.0	14.5	11.5	12.0
28	7.5	4.5	6.0	7.0	5.5	6.0	13.5	8.0	10.5	15.0	12.5	13.5
29	---	---	---	8.5	6.0	7.0	11.5	9.5	10.0	16.0	12.0	13.5
30	---	---	---	8.0	6.0	7.0	12.5	8.5	10.5	17.5	11.5	14.5
31	---	---	---	7.5	6.0	7.0	---	---	---	17.0	11.5	14.5
MONTH	8.0	.0	4.2	13.0	1.0	6.9	14.0	3.5	8.8	17.5	7.5	12.5
JUNE				JULY			AUGUST			SEPTEMBER		
1	16.5	12.5	14.5	16.5	13.5	15.5	19.0	15.5	17.5	17.0	14.0	16.0
2	15.0	12.5	14.0	16.5	13.0	15.0	15.5	14.5	15.0	17.0	13.5	15.5
3	18.0	12.0	15.0	17.0	14.0	16.0	16.5	14.5	15.5	17.5	14.0	16.0
4	18.0	13.0	15.5	17.0	15.0	16.0	18.0	15.0	16.5	17.5	14.0	16.0
5	18.5	13.0	16.0	18.0	15.5	17.0	18.5	15.5	17.0	17.0	14.0	16.0
6	18.0	13.5	16.0	18.0	14.5	15.5	17.5	15.5	17.0	16.5	15.0	15.5
7	19.0	14.0	16.5	17.5	13.0	15.5	18.5	16.0	17.0	16.0	12.5	14.0
8	17.0	12.0	13.5	16.5	14.0	15.5	19.0	16.5	17.5	14.0	10.5	12.5
9	14.5	11.5	13.0	17.5	14.5	16.0	17.5	16.0	17.0	14.5	11.0	13.0
10	17.5	13.0	15.0	17.0	15.0	16.0	18.0	16.0	17.0	14.5	11.5	13.0
11	17.0	13.0	15.5	18.5	15.0	16.5	19.5	15.5	17.5	14.5	11.0	13.0
12	17.0	12.5	15.0	19.5	16.0	18.0	20.0	17.5	18.5	14.0	12.5	13.5
13	17.5	12.0	15.0	21.0	17.5	19.0	21.0	17.5	19.5	17.0	13.5	15.0
14	18.5	13.0	16.0	21.5	18.0	20.0	20.5	18.5	19.5	16.0	12.5	14.0
15	18.5	13.5	16.5	20.5	18.5	19.5	18.5	16.0	17.0	15.0	11.0	13.5
16	19.0	14.0	17.0	19.5	18.0	19.0	19.5	16.0	17.0	16.0	12.5	14.5
17	19.5	14.5	17.5	19.0	16.0	17.5	20.5	18.5	19.0	15.0	12.0	13.5
18	20.0	15.0	18.0	18.5	15.5	17.0	18.5	16.5	17.5	12.5	11.0	12.0
19	19.5	15.0	17.5	17.0	15.0	16.0	20.5	16.5	18.0	12.5	11.5	12.0
20	20.0	15.0	17.5	18.5	15.5	17.0	18.0	15.5	17.0	12.0	11.0	11.5
21	20.5	16.0	18.5	18.5	15.5	17.0	18.5	15.0	16.5	11.0	9.5	10.0
22	19.5	16.0	18.0	17.5	16.0	16.5	18.0	14.5	16.5	10.5	8.5	9.5
23	19.5	16.0	18.0	18.5	15.5	17.0	18.5	15.0	16.5	10.5	7.5	9.0
24	19.0	15.5	17.5	18.5	15.5	17.0	17.5	15.5	16.0	10.5	8.5	9.5
25	19.0	15.5	17.5	19.0	16.0	17.5	18.5	15.0	16.5	12.5	10.0	11.0
26	18.5	15.5	16.5	18.5	17.0	17.5	17.5	15.0	16.5	14.0	10.5	12.5
27	16.5	14.5	15.5	18.0	15.5	16.5	17.0	15.5	16.5	14.0	10.5	12.5
28	16.5	14.5	15.5	19.0	15.5	17.0	18.0	15.5	16.5	15.0	11.5	13.0
29	18.0	15.0	16.5	18.5	15.5	17.0	17.5	16.5	17.0	13.5	11.5	12.5
30	18.0	15.5	16.5	19.5	15.5	17.5	19.5	15.5	17.5	15.0	13.0	14.0
31	---	---	---	20.0	16.5	18.5	18.5	16.5	18.0	---	---	---
MONTH	20.5	11.5	16.1	21.5	13.0	17.0	21.0	14.5	17.1	17.5	7.5	13.1

WISCONSIN RIVER BASIN

05406497 BLACK EARTH CREEK AT SOUTH VALLEY ROAD NEAR BLACK EARTH, WI--CONTINUED

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	15.4	8.8	11.5
4	---	---	---	---	---	---	---	---	---	15.3	8.8	11.0
5	---	---	---	---	---	---	---	---	---	15.5	8.6	11.6
6	---	---	---	---	---	---	---	---	---	16.1	8.0	11.5
7	---	---	---	---	---	---	---	---	---	15.7	7.9	10.9
8	---	---	---	---	---	---	---	---	---	10.8	8.0	9.3
9	---	---	---	---	---	---	---	---	---	12.0	8.5	9.9
10	---	---	---	---	---	---	---	---	---	9.7	8.2	8.9
11	---	---	---	---	---	---	---	---	---	13.1	8.0	10.3
12	---	---	---	---	---	---	---	---	---	13.5	7.8	10.1
13	---	---	---	---	---	---	---	---	---	9.5	7.8	8.6
14	---	---	---	---	---	---	---	---	---	13.0	8.0	9.7
15	---	---	---	---	---	---	---	---	---	13.2	7.0	9.9
16	---	---	---	---	---	---	---	---	---	12.3	6.5	8.5
17	---	---	---	---	---	---	---	---	---	10.2	6.2	8.0
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	13.7	8.0	10.4
26	---	---	---	---	---	---	---	---	---	14.0	7.9	10.3
27	---	---	---	---	---	---	---	---	---	11.2	7.8	9.2
28	---	---	---	---	---	---	---	---	---	8.1	7.1	7.6
29	---	---	---	---	---	---	---	---	---	10.5	7.7	8.8
30	---	---	---	---	---	---	---	---	---	12.1	7.6	9.5
31	---	---	---	---	---	---	---	---	---	12.1	7.5	9.4
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
JUNE				JULY			AUGUST			SEPTEMBER		
1	11.9	7.5	9.3	14.1	7.1	10.2	8.8	4.5	6.6	12.2	6.3	8.6
2	11.7	7.6	9.0	14.3	7.3	10.4	10.2	6.9	8.3	12.3	6.5	8.7
3	12.2	7.1	9.5	13.6	7.1	9.9	12.0	7.1	8.9	12.2	6.3	8.6
4	12.1	7.1	9.2	12.5	6.7	8.7	12.8	6.8	9.0	11.8	6.1	8.4
5	12.0	6.8	9.1	11.2	6.0	8.1	12.8	6.2	9.0	11.8	6.3	8.4
6	11.9	6.6	8.5	9.7	5.7	7.9	12.5	6.2	8.8	10.3	6.1	7.6
7	12.1	6.5	8.7	13.0	6.9	9.6	10.7	5.7	7.7	9.8	6.0	7.4
8	11.0	6.2	8.7	12.2	6.6	9.1	12.0	5.5	7.7	11.8	6.9	8.8
9	12.4	7.9	9.7	12.6	6.5	9.1	9.2	5.0	6.4	12.3	6.9	8.9
10	12.9	7.4	9.5	12.7	6.2	9.1	10.7	5.8	7.7	12.5	7.1	9.2
11	13.3	7.3	9.7	13.4	6.6	9.5	12.1	5.8	8.3	13.0	7.1	9.3
12	13.5	7.5	10.1	13.0	6.2	9.2	12.5	5.5	8.3	11.6	6.9	8.9
13	13.5	7.2	10.0	12.9	5.7	8.8	12.7	5.7	8.5	13.0	6.5	8.9
14	13.0	6.8	9.6	12.9	5.3	8.5	12.9	5.5	8.4	13.8	6.4	9.4
15	12.8	6.5	9.2	13.1	5.2	8.5	13.2	6.1	8.7	14.0	7.5	9.9
16	12.5	6.1	8.9	11.9	4.4	7.7	11.9	5.1	8.0	13.4	7.1	9.4
17	11.8	5.9	8.4	13.0	5.9	9.0	9.6	4.5	6.7	14.0	7.1	9.6
18	11.4	5.6	8.1	13.2	6.5	9.5	11.2	6.0	8.0	13.7	7.7	9.9
19	11.3	5.4	8.0	12.1	6.7	9.1	8.6	5.6	6.4	9.5	7.4	8.2
20	11.2	5.6	8.1	13.0	6.3	9.2	11.1	6.0	8.2	12.4	7.3	9.1
21	11.4	5.6	8.1	13.3	6.4	9.3	11.7	6.7	8.6	12.0	8.3	9.8
22	11.5	5.5	8.1	12.7	6.2	8.7	12.0	6.7	8.8	13.2	9.1	10.6
23	11.5	5.6	8.2	13.5	6.4	9.1	12.2	6.8	8.9	14.0	8.9	10.9
24	11.4	5.5	8.2	12.6	6.1	8.8	11.4	6.6	8.6	13.4	8.7	10.4
25	11.5	5.8	8.3	13.4	6.0	9.0	12.6	7.1	9.2	12.6	8.2	10.0
26	10.2	5.7	7.6	13.0	5.3	8.7	12.9	6.9	9.3	13.8	7.7	10.0
27	12.2	5.1	8.6	13.5	6.3	8.6	12.0	6.8	8.6	13.7	7.7	9.9
28	13.1	7.3	9.7	13.9	5.9	9.1	10.7	6.3	8.1	13.8	7.6	9.8
29	13.4	7.0	9.8	14.1	6.2	9.3	10.6	5.4	7.7	12.5	7.6	9.4
30	13.9	6.7	9.8	13.8	5.4	8.9	11.8	5.8	8.3	12.5	7.1	8.7
31	---	---	---	13.4	5.1	8.2	11.9	5.7	8.1	---	---	---
MONTH	13.9	5.1	8.9	14.3	4.4	9.0	13.2	4.5	8.2	14.0	6.0	9.2

05406500 BLACK EARTH CREEK AT BLACK EARTH, WI

LOCATION.--Lat 43°08'03", long 89°43'56" in SW 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.--Estimated daily discharges: July 18 to Aug. 16 and ice-affected periods, Jan. 5, 6, 25-27, Feb. 5-8, and 11-13. Records fair (see page 11).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	31	40	34	33	31	41	43	45	32	43	34
2	37	30	39	33	33	29	40	42	45	32	40	33
3	36	31	38	32	32	29	38	41	44	32	37	33
4	33	33	38	31	32	28	37	40	42	35	36	32
5	33	35	39	30	30	29	35	39	42	54	34	30
6	33	43	40	30	30	29	36	38	44	42	34	31
7	34	37	40	30	29	29	37	37	45	37	42	32
8	34	36	38	30	29	28	52	44	47	35	47	32
9	32	37	37	30	30	28	51	54	44	35	45	31
10	31	35	35	29	30	30	47	71	44	34	40	30
11	30	34	34	30	29	77	68	58	43	34	37	30
12	30	34	33	33	29	58	79	48	42	34	36	29
13	30	35	32	33	29	49	59	48	41	35	35	30
14	30	39	31	34	29	43	50	47	40	35	34	29
15	30	35	32	34	30	41	45	41	40	37	33	29
16	30	32	33	33	29	39	43	39	39	42	50	29
17	31	32	34	34	29	37	43	38	39	35	104	30
18	32	32	34	34	30	36	65	36	38	34	55	29
19	31	31	33	34	39	37	60	35	38	34	86	34
20	31	33	33	33	55	53	50	34	36	35	63	35
21	31	43	33	33	43	54	54	33	35	34	46	32
22	32	39	34	33	37	45	50	33	36	33	40	31
23	32	37	34	33	37	42	44	36	35	34	38	29
24	30	36	35	31	35	38	43	36	35	36	35	29
25	31	36	35	30	33	36	42	36	35	37	34	29
26	31	33	34	29	32	36	43	35	37	38	32	29
27	30	54	35	30	31	58	72	56	36	37	31	29
28	30	69	38	31	32	58	56	144	36	40	36	28
29	30	49	37	32	---	52	49	69	34	37	48	30
30	30	43	36	32	---	46	47	53	34	36	39	30
31	30	---	35	32	---	43	---	47	---	40	35	---
TOTAL	983	1124	1099	987	916	1268	1476	1451	1191	1125	1345	918
MEAN	31.7	37.5	35.5	31.8	32.7	40.9	49.2	46.8	39.7	36.3	43.4	30.6
MAX	38	69	40	34	55	77	79	144	47	54	104	35
MIN	30	30	31	29	29	28	35	33	34	32	31	28
CFSM	.74	.88	.83	.74	.76	.96	1.15	1.09	.93	.85	1.01	.71
IN.	.85	.98	.96	.86	.80	1.10	1.28	1.26	1.04	.98	1.17	.80

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1995, BY WATER YEAR (WY)

	MEAN	30.5	31.9	29.5	28.3	32.0	48.6	41.5	36.7	35.1	34.9	30.3	31.8
MAX	50.8	70.2	48.0	51.6	64.9	85.3	86.5	91.2	68.6	140	73.2	66.0	
(WY)	1994	1986	1988	1974	1994	1961	1993	1973	1974	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 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1954 - 1995

ANNUAL TOTAL	15228	13883	
ANNUAL MEAN	41.7	38.0	34.3
HIGHEST ANNUAL MEAN			61.0
LOWEST ANNUAL MEAN			19.8
HIGHEST DAILY MEAN	460	144	733
LOWEST DAILY MEAN	27	28	12
ANNUAL SEVEN-DAY MINIMUM	28	29	13
INSTANTANEOUS PEAK FLOW		238	1750
INSTANTANEOUS PEAK STAGE		3.25	6.58
INSTANTANEOUS LOW FLOW		(c)19	(c)4.8
ANNUAL RUNOFF (CFSM)	.97	.89	.80
ANNUAL RUNOFF (INCHES)	13.24	12.07	10.89
10 PERCENT EXCEEDS	49	49	50
50 PERCENT EXCEEDS	38	35	29
90 PERCENT EXCEEDS	31	30	19

(a) Also occurred Mar. 8, 9, and Sept. 28

(b) Also occurred July 26, 29, 1965

(c) Result of freezeup

REMARKS.--Estimated daily discharges: Ice-affected periods, Dec. 12-17 and Jan. 3 to Mar. 14. Records good except those for ice-affected periods, which are fair (see page 11). 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.

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12500	7350	8500	8030	6400	4800	9520	11600	10900	5430	4130	21700
2	11300	6670	7890	7930	6400	4500	9000	10800	11000	5980	4230	23800
3	10700	6730	7790	6400	7000	5200	8350	10500	11200	6000	3380	24300
4	10900	6730	7580	5200	7600	5200	7580	9850	11000	5320	3250	19500
5	10500	6580	7460	5800	7800	5200	7430	9840	9790	4970	3740	12900
6	9920	6670	7360	6400	7800	5000	6970	9890	9160	4570	4550	10300
7	9610	6690	8200	8200	7400	4800	6220	9580	8700	4170	3470	8720
8	9240	6630	7940	8200	8200	5000	6250	8730	8800	3940	4180	8050
9	8940	6620	7800	8200	8200	5000	6260	8480	8530	4530	4610	6300
10	8500	6410	8140	8200	8200	5000	6770	8550	8210	5690	4400	6780
11	8440	6150	7740	8200	8800	5200	6660	8550	7880	4780	5670	6720
12	8080	5970	6000	6400	7400	5600	6910	8390	7120	4770	5930	6460
13	7090	5740	4700	6000	5800	7000	7390	9980	6100	4830	6340	6410
14	6750	5890	4700	6600	7000	8000	7410	11700	6340	4230	6380	6120
15	6770	6410	5000	7200	7600	7930	7580	11200	5910	3880	6560	5660
16	6650	7180	6000	7600	6000	8020	7310	12100	5710	3920	11300	5020
17	6630	7080	6400	7200	6200	10100	7180	12600	5430	4430	16500	5110
18	6860	7530	7550	7200	6200	10700	7800	12100	5290	4330	19800	5520
19	6940	7260	7490	7200	6200	10800	8530	11500	5040	4190	20800	4850
20	6550	8040	7310	7600	6200	11500	8500	10800	4370	4530	20200	5000
21	7100	7030	7460	7400	6800	12000	10700	10600	4280	5250	18700	5420
22	7310	6800	8060	7400	6400	12700	12000	10600	4310	4840	18300	7780
23	7950	7590	8000	6400	6800	12800	12300	10300	4210	4120	15000	7920
24	8720	8160	8100	5800	6600	12300	12600	9350	4220	4860	14900	6440
25	8740	8240	7340	6000	6400	12100	12900	8460	4280	4820	14400	6020
26	8320	8490	6380	6200	6400	12200	12700	9040	3900	4180	12400	5150
27	8300	9900	6120	7200	5400	12000	12500	9750	4390	4010	12300	4920
28	7720	10400	6430	6600	5000	11400	12900	10400	4760	3980	12700	5530
29	7800	9060	6870	7400	---	10800	13200	10700	5110	3640	13200	5220
30	8380	9370	6930	6400	---	10000	11900	10100	4800	3350	15000	5380
31	7940	---	7330	6400	---	9620	---	10400	---	3750	17900	---
TOTAL	261150	219370	220570	216960	192200	262470	273320	316440	200740	141290	324220	259000
MEAN	8424	7312	7115	6999	6864	8467	9111	10210	6691	4558	10460	8633
MAX	12500	10400	8500	8200	8800	12800	13200	12600	11200	6000	20800	24300
MIN	6550	5740	4700	5200	5000	4500	6220	8390	3900	3350	3250	4850

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 1995, BY WATER YEAR (WY)

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914-1935, BY WATER YEAR (WY)												
MEAN	7385	7782	6566	6026	6573	10890	16770	11920	10460	7264	5894	7287
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

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1914 - 1995	
ANNUAL TOTAL	3044570		2887730			
ANNUAL MEAN	8341		7912		8732	
HIGHEST ANNUAL MEAN					16030	
LOWEST ANNUAL MEAN					4145	
HIGHEST DAILY MEAN	29900	May 1,2	24300	Sep 3	79500	Sep 16 1938
LOWEST DAILY MEAN	4440	Aug 9	3250	Aug 4	1460	Jul 3 1988
ANNUAL SEVEN-DAY MINIMUM	5080	Aug 29	3680	Jul 29	1900	Aug 13 1988
INSTANTANEOUS PEAK FLOW			24700	Sep 3	80800	Sep 16 1938
INSTANTANEOUS PEAK STAGE			5.88	Sep 3	11.48	Sep 16 1938
10 PERCENT EXCEEDS	11700		12000		15300	
50 PERCENT EXCEEDS	7460		7310		6900	
90 PERCENT EXCEEDS	5560		4590		3900	

LOCATION.--Lat 43°34'27", long 90°38'35", on east-west quarter section line in W 1/2 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.--Estimated daily discharges: Ice-affected periods, Dec. 10-20 and Dec. 31 to Mar. 11. Records good except those for ice-affected periods, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	248	165	182	140	140	130	232	205	206	160	166	133
2	240	166	193	130	140	120	218	201	199	155	140	131
3	220	166	197	130	140	130	214	198	194	153	141	129
4	210	165	207	120	130	140	197	196	183	153	151	128
5	201	164	212	120	120	140	182	193	177	161	200	126
6	200	163	200	120	120	140	186	184	177	178	149	126
7	201	160	194	120	120	130	185	183	290	176	157	129
8	202	159	192	120	120	120	219	193	261	159	153	130
9	194	160	192	120	120	120	214	284	196	172	140	129
10	186	156	160	130	120	150	206	278	195	159	139	127
11	180	156	150	140	110	250	262	257	198	152	139	127
12	179	158	150	140	110	1390	628	218	183	148	135	127
13	177	163	150	150	110	742	408	214	176	147	132	129
14	177	220	150	150	120	350	304	292	172	143	136	125
15	176	180	160	150	120	249	264	237	170	140	136	123
16	176	165	160	150	130	215	243	232	165	173	141	125
17	186	165	170	150	130	197	232	394	163	154	188	127
18	224	168	170	150	140	186	304	253	161	144	147	125
19	213	163	170	150	150	184	584	227	159	143	144	141
20	191	163	170	150	170	443	353	209	157	173	323	202
21	183	337	174	150	180	482	364	200	157	152	151	153
22	182	303	168	150	160	256	369	193	154	142	135	147
23	197	209	163	150	150	229	289	234	151	144	130	148
24	185	194	159	140	150	210	267	228	150	138	129	143
25	179	188	154	140	150	197	262	203	184	134	130	143
26	173	178	170	140	140	197	246	192	166	135	126	144
27	171	182	166	140	140	423	247	195	202	135	128	141
28	171	219	165	140	140	480	247	341	198	154	137	138
29	170	204	159	140	---	367	222	360	180	141	200	135
30	166	186	151	140	---	309	214	251	171	129	154	140
31	165	---	140	140	---	258	---	218	---	131	141	---
TOTAL	5923	5525	5298	4300	3770	8934	8362	7263	5495	4678	4718	4071
MEAN	191	184	171	139	135	288	279	234	183	151	152	136
MAX	248	337	212	150	180	1390	628	394	290	178	323	202
MIN	165	156	140	120	110	120	182	183	150	129	126	123
CFSM	.72	.69	.64	.52	.51	1.08	1.05	.88	.69	.57	.57	.51
IN.	.83	.77	.74	.60	.53	1.25	1.17	1.02	.77	.65	.66	.51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1995, BY WATER YEAR (WY)

MEAN	145	154	133	127	158	310	279	194	188	161	142	161
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 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1939 - 1995
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ANNUAL TOTAL	79053		68337				
ANNUAL MEAN	217		187		179		
HIGHEST ANNUAL MEAN					282		1993
LOWEST ANNUAL MEAN					97.1		1958
HIGHEST DAILY MEAN	1590	Apr 26	1390	Mar 12	7730	Feb 9	1966
LOWEST DAILY MEAN	137	Jun 18	(a)110	Feb 11-13	36	Nov 3	1939
ANNUAL SEVEN-DAY MINIMUM	(a)144	Feb 5	(a)116	Feb 7	49	Jan 3	1968
INSTANTANEOUS PEAK FLOW			1910	Mar 12	14300	Jul 1	1978
INSTANTANEOUS PEAK STAGE			10.10	Mar 12	14.92	Jul 1	1978
ANNUAL RUNOFF (CFSM)	.81		.70		.67		
ANNUAL RUNOFF (INCHES)	11.06		9.56		9.17		
10 PERCENT EXCEEDS	302		254		262		
50 PERCENT EXCEEDS	178		165		131		
90 PERCENT EXCEEDS	150		129		86		

(a) Ice affected

WISCONSIN RIVER BASIN
05410490 KICKAPOO RIVER AT STEUBEN, WI

LOCATION.--Lat 43°10'58", long 90°51'30", in NE 1/4 SW 1/4 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.--Estimated daily discharges: Ice-affected periods, Dec. 10-17 and Jan. 3 to Mar. 12. Records good except those for ice-affected periods, which are poor (see page 11). Data-collection platform and gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	644	498	588	493	350	370	746	650	589	480	496	444
2	624	499	572	472	350	360	696	631	565	461	509	419
3	631	504	575	450	350	370	665	612	563	449	482	411
4	616	503	583	430	350	380	640	605	556	446	463	407
5	590	500	589	410	350	390	617	596	531	452	461	403
6	576	501	601	400	340	380	594	585	526	459	498	399
7	569	494	599	390	330	360	591	572	593	469	516	397
8	563	493	579	390	330	350	648	587	789	471	466	398
9	558	492	556	390	330	350	701	636	764	464	474	401
10	545	489	540	400	330	350	730	692	647	483	458	399
11	529	485	520	430	320	420	768	713	616	473	444	396
12	522	483	520	440	310	1000	939	680	591	450	443	395
13	518	491	520	450	320	1380	1160	645	558	440	434	396
14	515	522	520	450	320	1450	1180	657	534	434	425	396
15	513	555	560	450	320	1470	947	715	519	430	422	392
16	511	561	580	460	330	964	807	683	507	432	433	387
17	518	521	580	460	330	727	751	637	496	469	440	393
18	544	517	574	460	350	656	755	752	486	456	462	389
19	560	516	548	450	400	623	882	694	479	435	478	398
20	577	520	518	440	470	677	1020	615	472	455	446	424
21	550	575	532	420	480	922	996	583	466	460	505	458
22	529	666	526	400	490	1050	908	559	460	461	511	460
23	526	754	523	390	470	853	903	570	456	445	432	424
24	533	644	516	370	450	715	814	595	451	435	417	418
25	534	590	510	360	440	669	760	597	454	428	413	419
26	519	572	505	360	420	636	735	562	478	439	411	418
27	512	573	490	360	400	668	727	549	487	447	409	418
28	508	604	515	360	380	829	713	606	506	460	411	416
29	510	624	515	350	---	1020	700	674	510	449	435	409
30	508	619	510	350	---	921	680	725	504	449	480	409
31	502	---	501	350	---	807	---	658	---	441	489	---
TOTAL	16954	16365	16865	12785	10410	22117	23773	19635	16153	14022	14163	12293
MEAN	547	545	544	412	372	713	792	633	538	452	457	410
MAX	644	754	601	493	490	1470	1180	752	789	483	516	460
MIN	502	483	490	350	310	350	591	549	451	428	409	387
CFSM	.80	.79	.79	.60	.54	1.04	1.15	.92	.78	.66	.67	.60
IN.	.92	.89	.91	.69	.56	1.20	1.29	1.06	.87	.76	.77	.67

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 1995, BY WATER YEAR (WY)

	MEAN	416	434	380	358	421	788	707	521	497	477	421	452
MAX	798	858	781	846	1276	1856	1748	1415	981	1901	1180	1331	
(WY)	1973	1983	1985	1946	1966	1946	1959	1973	1947	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 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1933 - 1995
ANNUAL TOTAL	221242	195535	
ANNUAL MEAN	606	536	490
HIGHEST ANNUAL MEAN			792
LOWEST ANNUAL MEAN			273
HIGHEST DAILY MEAN	1460	1470	12600
LOWEST DAILY MEAN	450	(a) 310	165
ANNUAL SEVEN-DAY MINIMUM	(a) 466	(a) 321	165
INSTANTANEOUS PEAK FLOW		1510	16500
INSTANTANEOUS PEAK STAGE		11.33	(c) 14.81
INSTANTANEOUS LOW FLOW			(c) 161
ANNUAL RUNOFF (CFSM)	.88	.78	.71
ANNUAL RUNOFF (INCHES)	11.98	10.59	9.70
10 PERCENT EXCEEDS	806	726	750
50 PERCENT EXCEEDS	548	502	397
90 PERCENT EXCEEDS	480	384	258

(a) Ice affected

(b) Also occurred Jan. 4-9, Feb. 5-7, 1959

(c) Site and datum then in use

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.

WISCONSIN RIVER BASIN
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 Strong's 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 1994 TO SEPTEMBER 1995

	LAC VIEUX DESERT	TWIN LAKES	BUCKATABON LAKE	SEVENMILE LAKE	LOWER NINEMILE LAKE	BURNT ROLLWAYS RESERVOIR	LONG LAKE	DEERSKIN LAKE
Sept. 30	240	242	115	57	96	536	126	19
Oct. 31	248	251	114	58	97	536	119	14
Nov. 30	159	192	83	25	56	389	92	13
Dec. 31	81	100	52	0	4	61	78	12
Jan. 31	46	2	34	0	24	0	76	10
Feb. 28	27	2	26	0	24	0	87	9
Mar. 31	88	58	59	15	75	127	129	12
Apr. 30	159	108	97	30	102	348	170	14
May 31	248	195	115	54	96	575	229	19
June 30	244	192	115	54	100	533	193	14
July 31	238	220	112	45	100	530	183	15
Aug.31	226	247	116	54	96	562	166	18
Sept. 30	211	242	115	55	99	581	155	15

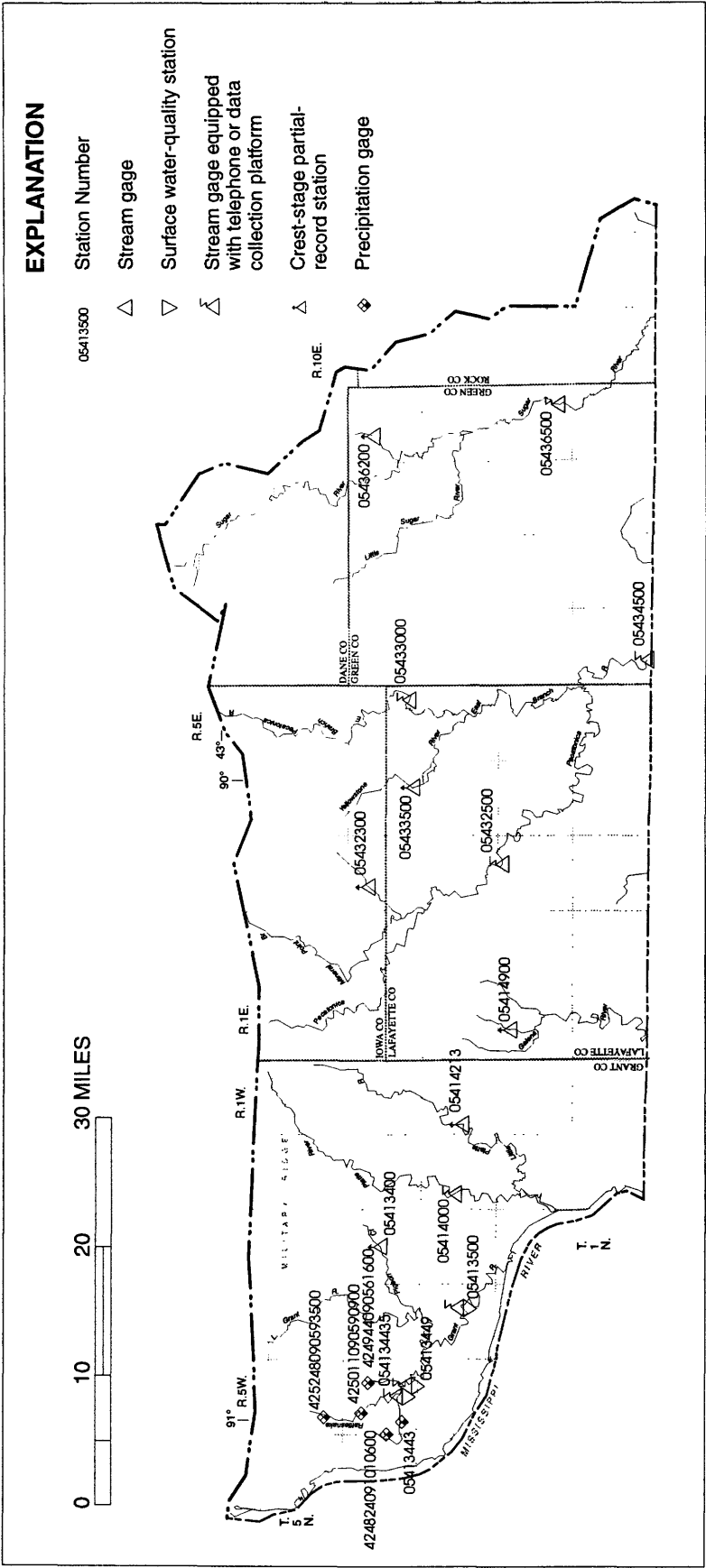
	SUGAR CAMP RESERVOIR	LITTLE ST. GERMAIN LAKE	BIG ST. GERMAIN LAKE	PICKEREL LAKE	RAINBOW LAKE	SOUTH PELICAN LAKE	NORTH PELICAN LAKE	MINOCQUA LAKE
Sept. 30	406	72	160	268	2,066	316	133	499
Oct. 31	397	70	158	268	2,094	308	135	491
Nov. 30	356	52	95	243	2,030	254	102	356
Dec. 31	304	28	55	218	1,913	210	33	133
Jan. 31	109	19	29	198	1,522	109	2	0
Feb. 28	84	12	20	186	911	6	0	5
Mar. 31	241	27	106	264	1,156	102	75	138
Apr. 30	326	47	161	266	1,351	164	136	274
May 31	415	74	159	267	2,092	249	139	425
June 30	408	70	160	272	1,513	240	138	459
July 31	412	71	160	262	1,404	258	133	485
Aug. 31	416	72	161	268	1,922	289	137	493
Sept. 30	408	72	167	274	1,711	274	137	511

WISCONSIN RIVER BASIN
RESERVOIRS IN WISCONSIN RIVER BASIN--CONTINUED

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MONTH-END CONTENTS, IN MILLIONS OF CUBIC FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

	SQUIRREL LAKE	WILLOW RESERVOIR	LAKE NOKOMIS	SPIRIT RIVER FLOWAGE	BIG EAU PLEINE RESERVOIR	LAKE DUBAY	PETENWELL FLOWAGE	CASTLE ROCK FLOWAGE
Sept. 30	172	3,138	1,690	729	2,377	4,063	17,448	6,015
Oct. 31	169	3,202	1,718	715	2,368	4,082	17,615	5,722
Nov. 30	108	3,178	1,697	666	2,440	4,032	17,738	5,786
Dec. 31	42	2,666	1,440	523	2,325	4,197	17,090	5,735
Jan. 31	10	1,871	1,008	330	1,960	3,165	14,887	5,518
Feb. 28	25	1,252	569	169	1,204	2,815	14,258	3,200
Mar. 31	73	1,666	1,036	693	2,856	4,278	15,864	4,023
Apr. 30	126	2,197	1,405	689	3,301	4,271	17,914	6,055
May 31	167	2,930	1,718	736	3,545	4,345	17,615	5,780
June 30	166	2,498	1,401	539	3,140	3,948	17,844	5,949
July 31	167	2,027	1,241	512	2,547	4,101	17,544	5,735
Aug. 31	170	2,755	1,711	699	3,898	4,107	17,641	6,068
Sept. 30	167	2,589	1,440	626	3,770	4,066	17,668	5,831



PECATONICA-SUGAR BASIN

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

425248090593500 RATTLESNAKE CREEK RAIN GAGE #1, ON HOLLY ROAD, NEAR BLOOMINGTON, WI

LOCATION.--Lat 42°52'48", long 90°59'35", in NE 1/4 SW 1/4 sec.29, T.5 N., R.5 W., Grant County, Hydrologic Unit 07060003, on Holly Road, 0.6 mi north of intersection with Maine Road, near Bloomington.

PERIOD OF RECORD.--October 1990 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established on Oct. 16, 1990. Rainfall estimated to be 0.00 for Dec. 25-26, Jan. 6-7, 11, 19, 28, Feb. 16, and Mar. 5, 9-10 because recorded precipitation interpreted as collector snowmelt. Rainfall data missing for the period Nov. 26 to Dec. 17.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 4.06 in., June 14, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.14 in., July 27.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	---	.00	.00	.00	.00	.00	.01	.00	.00	.00
2	.02	.00	---	.00	.00	.00	.00	.00	.01	.00	.00	.00
3	.00	.00	---	.00	.00	.00	.00	.00	.01	.00	.35	.00
4	.00	.00	---	.00	.00	.00	.00	.01	.00	.66	.00	.00
5	.00	.03	---	.00	.00	.00	.02	.00	.00	.30	.00	.00
6	.00	.00	---	.00	.00	.00	.00	.00	.13	.00	1.87	.62
7	.03	.00	---	.00	.00	.00	.48	.02	.00	.00	.00	.01
8	.00	.06	---	.00	.00	.00	.09	1.06	.00	.00	.01	.01
9	.00	.06	---	.00	.00	.00	.04	1.25	.00	.00	.00	.00
10	.00	.00	---	.00	.00	.00	.53	.00	.00	.00	.00	.00
11	.00	.00	---	.00	.00	.00	.84	.00	.00	.00	.00	.00
12	.00	.00	---	.02	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.47	---	.00	.00	.06	.00	.69	.00	.00	.01	.00
14	.00	.00	---	.00	.00	.00	.00	.01	.00	.00	.08	.00
15	.00	.00	---	.00	.00	.00	.00	.00	.00	.74	.01	.00
16	.00	.00	---	.00	.00	.00	.15	.02	.00	.00	.10	.08
17	.02	.04	---	.17	.00	.00	.01	.00	.00	.00	.01	.00
18	.01	.00	.00	.00	.00	.05	.99	.00	.00	.00	.05	.00
19	.00	.00	.00	.00	.00	.25	.00	.00	.00	.34	.00	.87
20	.00	.52	.00	.00	.00	.60	.33	.00	.00	.00	.00	.18
21	.00	.23	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.07	.00	.00	.00	.06	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.22	1.07	.01	.00	.00
24	.00	.00	.00	.00	.00	.01	.06	.00	.00	.00	.00	.14
25	.00	.00	.00	.00	.00	.00	.00	.00	.61	.32	.00	.00
26	.00	---	.00	.00	.00	.32	.48	.00	.11	.00	.00	.00
27	.00	---	.00	.00	.00	.46	.04	1.16	.02	2.14	.00	.00
28	.00	---	.00	.00	.00	.04	.00	.11	.00	.00	.95	.00
29	.00	---	.00	.00	---	.00	.22	.00	.13	.00	.23	.10
30	.00	---	.00	.00	---	.00	.05	.00	.00	.00	.00	.33
31	.00	---	.00	.00	---	.00	---	.05	---	.22	.00	---
TOTAL	0.08	---	---	0.19	0.00	1.86	4.36	4.60	2.10	4.79	3.67	2.34

GRANT RIVER BASIN

425011090590900 RATTLESNAKE CREEK RAIN GAGE #2, ON DODGE ROAD, NEAR NORTH ANDOVER, WI

LOCATION.--Lat 42°50'11", long 90°59'09", in NW 1/4 SE 1/4 sec.8, T.4 N., R.5 W., Grant County, Hydrologic Unit 07060003, on Dodge Road, 0.3 mi west of intersection with Maine Road, near North Andover.

PERIOD OF RECORD.--October 1990 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established on Oct. 16, 1990. Rainfall estimated to be 0.00 for Dec. 7, 15-17, 25, Jan. 6-7, 11, Feb. 16-17, and Mar. 5, 7, 10 because recorded precipitation interpreted as collector snowmelt.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 3.62 in., June 23, 1994.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 3.12 in., Aug. 6.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY SUM 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	.01	.00	.00	.00	.00	.00	.00	.00	.02	.00	.00	.00
3	.01	.00	.00	.00	.00	.00	.00	.00	.01	.00	.22	.01
4	.00	.00	.04	.00	.00	.00	.00	.02	.00	.65	.01	.00
5	.00	.05	.15	.00	.00	.00	.01	.00	.00	.18	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.01	.32	.00	3.12	.90
7	.06	.00	.00	.00	.00	.00	.68	.02	.00	.00	.00	.03
8	.00	.13	.00	.00	.00	.00	.09	1.26	.00	.00	.02	.00
9	.00	.06	.00	.00	.00	.00	.04	1.37	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.59	.00	.00	.00	.00	.00
11	.01	.01	.00	.00	.00	.00	.94	.00	.00	.00	.03	.00
12	.00	.00	.00	.05	.00	.00	.00	.01	.00	.00	.00	.01
13	.00	.46	.00	.00	.00	.08	.00	.65	.00	.00	.05	.01
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.43	.07	.00
16	.01	.00	.00	.00	.00	.00	.08	.07	.00	.00	.07	.13
17	.04	.10	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00
18	.01	.00	.00	.00	.00	.06	1.04	.00	.00	.00	.02	.02
19	.00	.00	.00	.00	.00	.12	.00	.00	.00	.29	.00	.90
20	.00	.90	.00	.00	.00	.65	.45	.00	.00	.00	.00	.18
21	.00	.25	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.09	.00	.00	.00	.03	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.17	.89	.00	.00	.00
24	.00	.00	.00	.00	.00	.01	.08	.00	.60	.00	.00	.08
25	.00	.00	.00	.00	.00	.00	.00	.00	.41	.21	.00	.01
26	.00	.00	.00	.00	.00	.36	.61	.00	.91	.00	.00	.00
27	.00	.78	.00	.00	.00	.50	.06	1.16	.32	2.81	.00	.00
28	.00	.01	.00	.00	.00	.04	.00	.20	.00	.00	1.30	.00
29	.00	.00	.00	.00	---	.01	.29	.00	.10	.00	.20	.16
30	.00	.00	.00	.00	---	.00	.06	.00	.00	.00	.00	.31
31	.00	---	.00	.00	---	.00	---	.04	---	.10	.00	---
TOTAL	0.15	2.75	0.19	0.06	0.00	1.92	5.05	4.98	3.58	4.70	5.12	2.75

424944090561600 RATTLESNAKE CREEK RAIN GAGE #3, ON HUDSON ROAD, NEAR NORTH ANDOVER, WI

LOCATION.--Lat 42°49'44", long 90°56'16", in SW 1/4 SW 1/4 sec.11, T.4 N., R.5 W., Grant County, Hydrologic Unit 07060003, on Hudson Road, 0.6 mi east of intersection with Wisconsin Highway 133, near North Andover.

PERIOD OF RECORD.--October 1990 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established on Oct. 16, 1990. Rainfall estimated to be 0.00 for Dec. 7, 15-16, 25-26, Jan. 7, 11, 28, and Mar. 5, 7, 9 because recorded precipitation interpreted as collector snowmelt.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 3.65 in., June 23, 1994.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.73 in., Aug. 6.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY SUM 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	.02	.00	.02	.00
3	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.24	.01
4	.00	.00	.05	.00	.00	.00	.00	.01	.00	.56	.02	.00
5	.00	.11	.08	.00	.00	.00	.00	.00	.00	.20	.00	.41
6	.00	.00	.00	.00	.00	.00	.00	.00	.73	.01	2.73	.70
7	.03	.00	.00	.00	.00	.00	.61	.01	.00	.00	.00	.03
8	.00	.11	.00	.00	.00	.00	.08	1.13	.00	.00	.01	.00
9	.00	.07	.00	.00	.00	.00	.04	1.20	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.52	.01	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.80	.00	.00	.00	.00	.00
12	.00	.00	.00	.01	.00	.00	.00	.01	.00	.00	.00	.02
13	.00	.41	.00	.00	.00	.07	.00	.34	.00	.00	.03	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.31	.02	.00
16	.00	.00	.00	.00	.00	.00	.06	.05	.00	.01	.02	.07
17	.07	.10	.00	.13	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.01	.00	.00	.00	.06	1.00	.00	.00	.00	.02	.00
19	.00	.00	.00	.00	.00	.12	.00	.00	.00	.23	.02	.82
20	.00	.78	.00	.00	.00	.61	.45	.00	.00	.00	.00	.21
21	.00	.14	.00	.00	.00	.00	.04	.00	.00	.00	.00	.00
22	.01	.00	.00	.00	.00	.10	.00	.00	.00	.03	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.14	.31	.01	.00	.00
24	.00	.00	.00	.00	.00	.01	.12	.00	.00	.00	.00	.07
25	.00	.00	.00	.00	.00	.00	.00	.00	.68	.30	.00	.05
26	.00	.00	.00	.00	.00	.27	.54	.00	.30	.00	.00	.00
27	.00	.68	.00	.00	.00	.41	.07	.88	.01	2.36	.00	.00
28	.00	.00	.00	.00	.00	.04	.00	.11	.01	.01	1.06	.00
29	.00	.00	.00	.00	---	.00	.27	.00	.02	.00	.19	.14
30	.00	.00	.00	.00	---	.00	.07	.00	.00	.00	.00	.11
31	.00	---	.00	.00	---	.00	---	.05	---	.09	.00	---
TOTAL	0.12	2.41	0.13	0.14	0.00	1.69	4.67	3.94	2.08	4.12	4.38	2.64

GRANT RIVER BASIN

424824091010600 RATTLESNAKE CREEK RAIN GAGE #4, ON PRIDE ROAD, NEAR NORTH ANDOVER, WI

LOCATION.--Lat 42°48'24", long 91°01'06", in NE 1/4 SE 1/4 sec.24, T.4 N., R.6 W., Grant County, Hydrologic Unit 07060003, on Pride Road, 0.1 mi south of intersection with Fairview Road, near North Andover.

PERIOD OF RECORD.--October 1990 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established on Oct. 16, 1990. Rainfall estimated to be 0.00 for Dec. 7, 15-16, Jan. 7, 11, 28, Feb. 16, and Mar. 5, 9-10 because rcored precipitation interpreted as collector snowmelt.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 2.89 in., June 14, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.54 in., Aug. 6.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY SUM 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	.11	.00	.01	.00
3	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.13	.00
4	.00	.00	.03	.00	.00	.00	.00	.02	.00	.64	.00	.00
5	.00	.05	.09	.00	.00	.00	.00	.00	.00	.15	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.48	.00	2.54	.54
7	.06	.00	.00	.00	.00	.00	.56	.01	.00	.00	.01	.04
8	.00	.13	.00	.00	.00	.00	.05	1.40	.00	.00	.05	.00
9	.00	.07	.00	.00	.00	.00	.04	1.18	.00	.00	.00	.01
10	.00	.00	.00	.00	.00	.00	.59	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	1.02	.00	.00	.00	.01	.00
12	.00	.00	.00	.03	.00	.00	.00	.04	.00	.00	.00	.01
13	.00	.43	.00	.00	.00	.05	.00	.78	.00	.00	.01	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.34	.03	.00
16	.00	.00	.00	.00	.00	.00	.07	.05	.00	.01	.01	.33
17	.03	.05	.00	.20	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.07	1.17	.00	.00	.00	.10	.00
19	.00	.00	.00	.00	.00	.12	.00	.00	.00	.16	.00	.92
20	.00	.90	.00	.00	.00	.60	.48	.00	.00	.00	.01	.18
21	.00	.19	.00	.00	.00	.00	.03	.00	.00	.00	.00	.01
22	.00	.00	.00	.00	.00	.11	.00	.00	.00	.02	.01	.00
23	.00	.00	.00	.00	.00	.01	.00	.18	.55	.01	.00	.00
24	.00	.00	.00	.00	.00	.00	.09	.00	1.32	.00	.00	.04
25	.00	.00	.00	.00	.00	.00	.00	.00	.84	.03	.00	.06
26	.00	.00	.00	.00	.00	.29	.62	.00	.78	.00	.00	.00
27	.00	.86	.00	.00	.00	.45	.05	1.14	.10	1.51	.00	.00
28	.00	.00	.00	.00	.00	.06	.01	.07	.00	.09	1.20	.00
29	.00	.00	.00	.00	---	.00	.29	.00	.02	.01	.24	.15
30	.00	.00	.00	.00	---	.01	.06	.00	.00	.00	.00	.33
31	.00	---	.00	.00	---	.00	---	.02	---	.12	.00	---
TOTAL	0.10	2.68	0.12	0.23	0.00	1.77	5.13	4.89	4.20	3.09	4.36	2.65

05413443 KUENSTER CREEK ON TEXAS ROAD, NEAR NORTH ANDOVER, WI

LOCATION.--Lat 42°47'31", long 90°59'53", in NW 1/4 SW 1/4 sec.29, T.4 N., R.5 W., Grant County, Hydrologic Unit 07060003, on Texas Road, 0.7 mi north of junction with Ramsey Road, near North Andover.

PERIOD OF RECORD.--November 1991 to current year (non-frozen precipitation).

GAGE.--Tipping bucket rain gage with electronic datalogger.

REMARKS.--Gage established on Nov. 15, 1991. Rainfall estimated to be 0.00 for Dec. 7, 15-17, Jan. 6, 11, Feb. 16, and Mar. 5, 10 because recorded precipitation interpreted as collector snowmelt.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 2.41 in., Aug. 6, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.41 in., Aug. 6.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY SUM 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	.01	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.17	.00	.01	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	.01
4	.00	.00	.03	.00	.00	.00	.00	.01	.00	.69	.12	.00
5	.00	.07	.05	.00	.00	.00	.00	.00	.00	.16	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.42	.00	2.41	.46
7	.05	.00	.00	.00	.00	.00	.40	.00	.00	.00	.01	.03
8	.00	.13	.00	.00	.00	.00	.02	1.08	.00	.00	.02	.00
9	.00	.07	.00	.00	.00	.00	.04	1.17	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.64	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.84	.00	.00	.00	.00	.00
12	.00	.00	.00	.02	.00	.00	.00	.01	.00	.00	.00	.01
13	.00	.47	.00	.00	.00	.04	.00	.59	.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	.63	.01	.00
16	.00	.00	.00	.00	.00	.00	.07	.04	.00	.00	.05	.26
17	.04	.07	.00	.17	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.05	1.06	.00	.00	.00	.01	.00
19	.00	.00	.00	.00	.00	.10	.00	.00	.00	.10	.00	.90
20	.00	.82	.00	.00	.00	.62	.35	.00	.00	.00	.00	.18
21	.00	.17	.00	.00	.00	.00	.03	.00	.00	.00	.00	.01
22	.00	.00	.00	.00	.00	.07	.00	.00	.00	.01	.00	.00
23	.00	.00	.00	.00	.00	.01	.00	.14	.04	.01	.00	.00
24	.00	.00	.00	.00	.00	.00	.06	.00	1.08	.00	.00	.01
25	.00	.00	.00	.00	.00	.00	.00	.00	.64	.03	.00	.03
26	.00	.00	.00	.00	.00	.25	.57	.00	.39	.00	.00	.00
27	.00	.70	.00	.00	.00	.40	.04	.92	.04	1.57	.00	.00
28	.00	.00	.00	.00	.00	.05	.00	.06	.00	.00	1.13	.00
29	.00	.00	.00	.00	---	.00	.21	.00	.07	.00	.25	.12
30	.00	.00	.00	.00	---	.00	.08	.00	.00	.00	.00	.19
31	.00	---	.00	.00	---	.00	---	.01	---	.10	.00	---
TOTAL	0.09	2.50	0.08	0.19	0.00	1.59	4.41	4.03	2.85	3.30	4.14	2.21

GRANT RIVER BASIN

054134435 KUENSTER CREEK AT MUSKELLUNGE ROAD NEAR NORTH ANDOVER, WI

LOCATION.--Lat 42°47'27", long 90°57'26", in NW 1/4 SW 1/4 sec.27, T.4 N., R.5 W., Grant County, Hydrologic Unit 07060003, on right bank 50 ft upstream from Muskellunge Road, 1.75 mi southeast of North Andover.

DRAINAGE AREA.--9.59 mi².

WATER-DISCHARGE RECORDS

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

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

REMARKS.--Estimated daily discharges: Ice-affected periods, Dec. 7-20, 25, 26, and Dec. 29 to Mar. 11. Records good except those for ice-affected periods, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	2.6	4.1	2.9	2.9	3.3	3.3	4.6	4.9	4.1	3.8	3.3
2	3.6	2.5	4.2	2.8	2.9	3.1	2.9	4.3	5.0	4.0	3.8	3.5
3	3.6	2.5	4.2	2.8	2.9	3.0	2.8	4.0	5.0	4.2	4.0	3.8
4	3.3	2.5	4.1	2.8	2.9	3.0	2.5	4.0	4.7	4.6	4.0	3.5
5	3.3	2.6	4.2	2.7	2.8	3.0	2.5	3.9	4.6	5.9	3.7	3.2
6	3.2	2.6	4.0	2.8	2.8	3.0	2.6	3.6	5.4	4.5	7.9	3.7
7	3.3	2.4	3.9	2.8	2.8	3.0	2.9	3.6	5.3	3.5	33	4.8
8	3.3	2.4	3.9	2.8	2.8	3.0	3.9	9.5	4.8	3.5	6.0	4.1
9	3.1	2.5	3.9	2.8	2.8	3.0	3.3	13	4.6	3.6	4.8	3.8
10	3.1	2.4	3.9	2.8	2.8	3.1	3.8	20	4.7	3.5	5.1	3.6
11	3.0	2.2	3.7	2.9	2.7	13	12	9.9	4.6	3.5	5.1	3.5
12	2.9	2.2	3.7	2.9	2.7	5.7	14	8.1	4.4	3.5	3.7	3.4
13	2.9	2.5	3.6	2.9	2.7	3.5	7.5	14	4.5	3.6	3.3	3.2
14	3.0	3.3	3.7	2.9	2.7	3.3	5.8	9.6	4.3	3.5	3.2	3.0
15	3.1	3.4	3.7	2.9	2.7	2.9	4.9	7.5	4.1	3.6	2.9	2.9
16	3.2	3.4	3.7	2.9	2.7	2.8	4.6	6.9	4.2	4.1	3.1	3.4
17	3.2	3.5	3.8	3.3	2.7	2.7	4.6	6.5	4.2	3.9	3.3	3.6
18	3.3	3.6	3.8	5.0	3.0	2.6	12	5.8	4.0	3.5	3.2	3.6
19	3.2	3.1	3.7	3.5	5.0	2.6	9.0	5.4	3.8	3.4	3.1	4.9
20	3.1	4.3	3.5	3.3	10	6.2	6.1	5.0	3.7	3.6	2.9	5.4
21	2.9	7.8	3.3	3.1	7.0	5.2	8.9	4.8	3.8	3.6	2.9	4.5
22	2.9	4.7	3.1	3.0	6.0	3.7	6.3	4.8	3.6	3.5	3.2	3.8
23	2.9	4.3	3.0	3.0	5.0	3.6	5.2	5.0	3.7	3.5	3.4	3.5
24	2.9	4.0	2.9	2.9	4.0	3.1	4.8	5.2	5.9	3.3	3.1	3.3
25	2.9	3.9	2.9	2.9	3.5	2.8	4.8	4.7	7.1	3.2	3.3	3.5
26	2.9	3.6	2.9	2.9	3.3	3.2	5.1	4.5	7.7	3.1	3.1	3.6
27	2.8	6.8	3.0	2.9	3.3	4.9	7.5	7.1	7.7	7.6	3.1	3.1
28	2.6	6.9	3.6	2.9	3.3	4.9	5.2	9.1	5.2	13	4.5	3.1
29	2.6	4.7	3.5	2.9	---	4.1	4.8	6.4	4.8	4.3	7.8	3.2
30	2.6	4.5	3.3	2.9	---	3.7	5.4	5.3	4.2	3.8	4.9	3.8
31	2.6	---	2.9	2.9	---	3.4	---	4.9	---	3.6	3.6	---
TOTAL	94.9	107.7	111.7	92.8	100.7	118.4	169.0	211.0	144.5	130.1	152.8	109.6
MEAN	3.06	3.59	3.60	2.99	3.60	3.82	5.63	6.81	4.82	4.20	4.93	3.65
MAX	3.6	7.8	4.2	5.0	10	13	14	20	7.7	13	33	5.4
MIN	2.6	2.2	2.9	2.7	2.7	2.6	2.5	3.6	3.6	3.1	2.9	2.9
CFSM	.32	.37	.38	.31	.38	.40	.59	.71	.50	.44	.51	.38
IN.	.37	.42	.43	.36	.39	.46	.66	.82	.56	.50	.59	.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1995, BY WATER YEAR (WY)

	MEAN	4.25	4.93	4.75	4.40	6.92	12.6	7.10	6.92	7.06	12.1	6.47	5.12
MAX	7.98	6.67	5.97	6.66	11.0	32.2	11.8	14.0	14.0	14.3	32.2	14.3	9.91
(WY)	1994	1994	1994	1992	1992	1993	1993	1993	1993	1993	1993	1993	1993
MIN	2.40	3.59	3.60	2.99	2.77	3.82	5.03	3.04	3.08	3.95	2.18	3.04	3.04
(WY)	1993	1995	1995	1995	1993	1995	1994	1992	1992	1992	1992	1992	1992

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1992 - 1995
ANNUAL TOTAL	1989.6	1543.2	
ANNUAL MEAN	5.45	4.23	6.89
HIGHEST ANNUAL MEAN			12.2
LOWEST ANNUAL MEAN			4.23
HIGHEST DAILY MEAN	(a) 130	33	201
LOWEST DAILY MEAN	2.2	2.2	1.7
ANNUAL SEVEN-DAY MINIMUM	2.4	2.4	1.8
INSTANTANEOUS PEAK FLOW		(c) 59	(d) 834
INSTANTANEOUS PEAK STAGE		(e) 4.26	8.74
INSTANTANEOUS LOW FLOW		.84	.84
ANNUAL RUNOFF (CFSM)	.57	.44	.72
ANNUAL RUNOFF (INCHES)	7.72	5.99	9.76
10 PERCENT EXCEEDS	6.6	6.1	12
50 PERCENT EXCEEDS	4.2	3.6	4.3
90 PERCENT EXCEEDS	2.9	2.8	2.7

(a) Ice affected

(b) Also occurred Aug. 31 and Sept. 1, 1992

(c) Gage height, 4.09 ft

(d) From rating curve extended above 200 ft³/s

(e) Backwater from ice

054134435 KUENSTER CREEK AT MUSKELLUNGE ROAD NEAR NORTH ANDOVER, WI--CONTINUED

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1991 to current year.

DISSOLVED OXYGEN: October 1991 to current year.

SUSPENDED-SOLIDS DISCHARGE: October 1992 to current year.

TOTAL-PHOSPHORUS DISCHARGE: October 1992 to current year.

INSTRUMENTATION.--Continuous water temperature recorder and dissolved oxygen recorder since Oct. 5, 1991. Automatic pump sampler since Oct. 5, 1991.

REMARKS.--Water-quality analyses by the Wisconsin State Laboratory of Hygiene. Samples are point samples unless otherwise indicated.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum observed, 33.5°C, July 13-14, 1995; minimum observed, 0.0°C, on many days.

DISSOLVED OXYGEN: Maximum observed, 19.9 mg/L, Oct. 23, 1991; minimum observed, 0.5 mg/L, June 7, 1993.

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 2,390 tons, Mar. 30, 1993; minimum observed, 0.03 ton, Apr. 4-5, 1995.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 4,950 lbs, Mar. 30, 1993; minimum observed, 0.66 lbs, Apr. 11, 1994.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum observed, 33.5°C, July 13-14; minimum observed, 0.0°C, Jan. 5, Jan. 8 to Mar. 11, and Apr. 4-5.

DISSOLVED OXYGEN: Maximum observed, 16.0 mg/L, May 3; minimum observed, 3.8 mg/L, July 14.

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 88 tons, Aug. 7; minimum observed, 0.03 ton, Apr. 4-5.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 379 lbs, Aug. 7; minimum observed, 0.95 lbs, Nov. 12.

WATER-QUALITY DATA, WATER YEAR 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER PENDEED (MG/L) (31673)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEED (MG/L) (00530)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
OCT 1994									
*04...	0945	3.3	8.3	1.6	--	--	22	0.048	0.142
*19...	1135	3.3	8.4	1.8	--	--	10	<0.027	0.124
NOV									
*01...	1045	2.6	8.3	1.5	--	--	7	<0.027	0.081
DEC									
*06...	1130	4.0	8.2	<1.0	100	--	8	<0.027	0.080
JAN 1995									
*18...	1209	38	8.2	3.5	600	--	26	0.224	0.170
MAR									
12...	1000	5.0	--	--	--	--	86	1.81	0.700
*12...	1001	5.0	--	--	--	--	69	1.85	0.700
*29...	1230	4.2	--	--	--	--	<5	0.027	0.110
APR									
11...	2000	18	--	--	--	--	428	0.405	0.570
*12...	1025	13	--	--	--	--	60	0.470	1.24
*18...	1103	12	8.2	--	--	--	76	0.242	0.330
19...	1107	8.5	8.2	--	--	--	90	0.248	0.350
MAY									
*01...	1213	4.4	8.5	--	--	--	<5	<0.027	0.100
09...	2045	19	8.2	--	--	--	520	0.213	1.19
09...	2115	29	8.0	--	--	--	1140	0.366	2.86
09...	2230	37	7.8	--	--	--	2210	0.692	5.48
09...	2315	47	7.8	--	--	--	3320	0.518	5.12
10...	0130	35	7.8	--	--	--	2380	1.12	5.41
10...	1102	18	8.1	--	--	--	404	0.425	0.877
*10...	1110	18	8.0	--	--	--	184	0.455	0.681
16...	1207	6.7	8.3	--	--	--	44	0.107	0.209
*31...	1515	5.0	8.5	--	--	--	27	0.039	0.139
JUN									
*14...	1130	4.4	--	--	--	--	18	<0.027	0.125
*27...	1310	8.2	8.4	--	--	--	40	0.040	0.288
JUL									
*11...	1120	3.6	8.6	--	--	--	10	<0.027	0.137
*25...	1205	3.1	8.5	--	--	--	9	<0.027	0.135
27...	1615	15	7.8	12	22000	--	470	0.112	0.726
27...	1800	27	8.1	14	25000	--	1040	0.162	1.30
27...	2115	14	8.4	17	1000000	--	596	0.568	1.73
28...	0330	14	8.2	12	750000	--	296	0.259	0.998
*28...	1048	17	8.1	8.6	--	--	170	0.410	0.808
28...	1049	17	8.3	11	320000	--	290	0.350	0.860

* Equal-width increment (EWI) sample

GRANT RIVER BASIN

054134435 KUENSTER CREEK AT MUSKELLUNGE ROAD NEAR NORTH ANDOVER, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
AUG 1995									
06...	2130	18	8.2	8.9	26000	--	335	0.122	0.688
06...	2200	24	8.2	9.7	63000	--	948	0.134	1.40
06...	2300	38	8.0	18	760000	--	1690	0.263	2.53
06...	2315	57	8.0	25	100000	--	3660	0.359	4.11
07...	0115	41	7.9	22	7400000	--	1530	0.591	3.93
07...	0415	51	7.9	18	1200000	--	1630	0.537	2.87
07...	0945	37	7.9	13	860000	--	840	0.569	1.77
*07...	1118	34	7.9	13	480000	--	672	0.515	1.61
07...	1119	34	7.9	13	930000	--	536	0.475	1.42
07...	1730	24	8.0	10	420000	--	356	0.343	1.15
07...	2315	12	7.8	8.4	200000	--	216	0.229	0.980
*08...	1125	5.6	8.0	3.6	20000	--	64	0.097	0.433
08...	1126	5.6	7.9	3.9	26000	--	94	0.102	0.462
*11...	1220	6.1	8.3	--	--	670	27	0.028	0.190
*23...	1615	4.0	8.6	2.0	3000	--	15	<0.027	0.132
SEP									
*07...	1710	4.4	8.4	2.6	--	--	16	0.050	0.149
*20...	1510	5.4	8.3	3.3	130000	--	25	0.156	0.383

* Equal-width increment (EWI) sample

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	16.5	14.5	15.5	10.5	6.0	8.5	5.0	1.0	3.0	.5	.5	.5
2	14.5	11.5	12.5	12.5	8.0	10.5	6.5	3.5	5.0	.5	.5	.5
3	12.5	10.5	11.5	13.0	11.5	12.5	8.5	4.5	6.5	.5	.5	.5
4	15.0	11.5	13.0	12.5	11.5	12.0	8.5	7.0	8.0	.5	.5	.5
5	16.5	12.5	14.0	11.5	10.5	11.0	8.5	4.0	6.5	.5	.0	.5
6	17.0	12.0	14.5	12.0	9.0	10.5	4.0	1.0	2.5	.5	.5	.5
7	18.0	15.0	16.0	12.0	7.0	9.5	1.0	1.0	1.0	.5	.5	.5
8	15.5	11.5	13.5	11.5	9.5	11.0	1.0	1.0	1.0	.5	.0	.0
9	13.5	9.0	11.0	11.0	7.0	9.5	1.5	1.0	1.0	.0	.0	.0
10	13.0	7.0	10.0	8.5	4.5	6.5	1.0	1.0	1.0	.0	.0	.0
11	13.5	7.0	10.5	8.5	4.5	6.5	1.0	1.0	1.0	.0	.0	.0
12	13.5	7.0	10.5	9.5	6.5	8.0	1.0	1.0	1.0	.0	.0	.0
13	14.0	8.0	11.0	12.0	8.5	10.5	1.0	1.0	1.0	.0	.0	.0
14	15.0	8.0	11.5	12.5	7.5	10.5	1.0	1.0	1.0	.0	.0	.0
15	15.0	13.0	14.0	8.5	5.0	6.5	1.0	1.0	1.0	.0	.0	.0
16	16.5	14.0	15.0	7.0	3.0	5.0	1.0	1.0	1.0	.0	.0	.0
17	18.0	16.0	16.5	8.0	4.5	6.5	1.0	.5	1.0	.0	.0	.0
18	19.5	16.0	17.5	8.0	4.5	6.5	1.0	.5	1.0	.0	.0	.0
19	16.0	13.0	14.5	5.5	2.5	4.5	1.0	.5	1.0	.0	.0	.0
20	16.0	11.5	13.5	7.5	5.5	6.5	1.0	.5	1.0	.0	.0	.0
21	15.5	10.0	12.5	8.0	2.5	7.0	3.0	1.0	2.0	.0	.0	.0
22	15.0	10.5	13.0	3.0	1.5	2.0	3.5	1.5	2.5	.0	.0	.0
23	13.0	9.5	11.0	3.0	1.5	2.0	3.0	1.0	2.0	.0	.0	.0
24	10.0	8.0	9.0	5.0	1.5	3.0	3.5	1.5	2.5	.0	.0	.0
25	8.5	7.0	7.5	5.0	2.0	3.5	2.5	.5	1.5	.0	.0	.0
26	11.0	7.5	8.5	4.0	1.5	2.5	1.5	.5	1.0	.0	.0	.0
27	11.5	6.0	9.0	5.0	3.0	3.5	4.0	1.5	2.5	.0	.0	.0
28	12.5	8.5	10.5	4.0	1.5	2.5	3.5	1.5	2.5	.0	.0	.0
29	14.0	11.0	12.0	3.0	1.0	2.0	1.5	.5	1.0	.0	.0	.0
30	12.5	8.5	10.5	3.0	1.0	2.0	1.5	.5	1.0	.0	.0	.0
31	11.5	8.5	10.5	---	---	---	1.5	.5	1.0	.0	.0	.0
MONTH	19.5	6.0	12.3	13.0	1.0	6.7	8.5	.5	2.1	.5	.0	.1

054134435 KUENSTER CREEK AT MUSKELLUNGE ROAD NEAR NORTH ANDOVER, WI--CONTINUED

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	.0	.0	.0	.0	.0	.0	9.5	3.0	6.0	14.0	8.0	10.5
2	.0	.0	.0	.0	.0	.0	12.5	2.5	8.0	15.5	8.5	12.0
3	.0	.0	.0	.5	.0	.0	14.0	5.5	10.0	16.5	9.5	13.0
4	.0	.0	.0	.5	.0	.0	6.5	.0	3.0	16.0	11.0	13.0
5	.0	.0	.0	.0	.0	.0	8.5	.0	4.0	18.5	10.0	14.0
6	.0	.0	.0	.5	.0	.0	14.0	5.5	9.5	19.5	10.0	14.5
7	.0	.0	.0	.0	.0	.0	9.5	5.5	6.5	20.5	13.5	17.0
8	.0	.0	.0	.0	.0	.0	7.5	5.0	6.0	17.0	11.0	13.5
9	.0	.0	.0	.5	.0	.0	6.5	3.0	5.0	14.0	10.5	12.0
10	.0	.0	.0	.5	.0	.0	3.0	.5	2.0	12.0	10.5	11.5
11	.0	.0	.0	6.0	.0	2.5	6.5	2.0	4.0	20.0	10.0	14.5
12	.0	.0	.0	12.0	4.0	8.0	6.0	4.0	5.0	18.5	10.5	15.0
13	.0	.0	.0	11.5	8.5	10.0	13.0	2.5	7.5	15.5	12.5	13.5
14	.0	.0	.0	13.5	6.5	10.0	13.5	5.5	9.5	17.5	11.5	14.0
15	.0	.0	.0	16.0	8.5	12.0	12.0	5.5	8.5	21.0	10.0	15.0
16	.0	.0	.0	15.0	7.0	11.0	11.0	6.5	9.0	20.5	12.5	16.5
17	.0	.0	.0	14.0	7.5	10.5	13.0	8.5	10.5	20.5	12.5	16.5
18	.0	.0	.0	10.0	6.5	7.5	12.0	9.0	10.0	19.0	12.0	15.0
19	.0	.0	.0	12.0	6.5	9.0	15.5	6.5	10.5	21.5	11.0	16.0
20	.0	.0	.0	10.0	4.5	7.5	11.0	7.0	8.5	20.5	13.0	16.5
21	.0	.0	.0	10.0	3.0	6.0	8.0	6.5	7.0	20.5	11.0	15.5
22	.0	.0	.0	10.0	3.5	7.0	15.5	4.5	9.5	21.0	11.5	16.5
23	.0	.0	.0	7.5	4.0	6.0	15.0	7.0	11.0	17.5	12.5	14.5
24	.0	.0	.0	11.0	1.5	6.5	11.0	7.5	9.0	17.5	11.0	13.5
25	2.0	.0	.5	11.0	4.5	8.0	13.0	5.5	9.0	21.0	11.5	16.0
26	1.5	.0	.5	10.5	6.0	8.0	11.0	9.0	10.0	21.0	12.0	16.5
27	2.0	.0	1.0	7.5	6.0	6.5	13.5	7.0	10.0	17.0	13.0	14.0
28	3.5	.0	1.5	6.0	5.0	5.5	16.0	7.5	12.0	16.5	13.0	14.5
29	---	---	---	8.0	4.0	6.0	13.0	10.5	12.0	21.5	12.5	16.5
30	---	---	---	6.5	4.0	5.0	16.5	9.0	12.0	24.5	13.5	19.0
31	---	---	---	6.0	3.0	4.5	---	---	---	23.5	15.5	19.5
MONTH	3.5	.0	.1	16.0	.0	5.1	16.5	.0	8.1	24.5	8.0	14.8
JUNE			JULY			AUGUST			SEPTEMBER			
1	21.5	17.0	19.0	23.5	15.5	19.5	24.0	20.0	21.5	24.5	17.0	21.0
2	19.5	17.0	17.5	24.0	15.0	19.5	22.5	19.0	20.5	23.0	16.5	20.0
3	25.5	15.0	20.0	23.5	17.0	20.5	26.5	20.5	23.0	25.5	18.0	21.5
4	25.0	17.0	21.5	23.0	19.0	21.0	27.5	21.0	24.0	25.0	17.5	21.5
5	25.5	18.5	22.0	24.0	19.0	21.0	29.0	21.0	24.5	24.5	17.5	21.0
6	25.0	19.5	22.0	22.5	17.5	20.0	25.0	20.0	23.0	22.0	19.5	20.5
7	27.5	20.0	23.5	25.0	16.5	20.5	25.5	19.5	22.0	20.0	14.0	17.5
8	23.0	15.0	17.5	25.5	17.0	21.5	25.0	20.5	23.0	19.5	11.0	15.0
9	17.5	14.0	15.5	27.0	19.5	23.0	27.5	20.5	23.5	20.0	12.0	16.0
10	24.0	16.0	19.5	26.5	19.5	23.0	26.5	22.0	24.0	20.5	12.5	16.5
11	23.5	17.0	20.5	30.0	22.5	26.0	29.5	21.0	25.0	20.5	12.5	16.5
12	24.0	16.5	20.5	31.0	22.0	26.5	31.0	23.0	27.0	18.5	15.5	17.0
13	25.0	16.5	20.5	33.5	24.5	29.0	31.0	24.0	27.0	24.0	17.0	20.0
14	26.5	18.5	22.0	33.5	25.5	29.5	27.0	23.5	25.5	22.0	15.0	18.5
15	27.0	18.5	23.0	31.5	25.0	27.5	25.5	21.0	23.0	21.5	13.5	17.5
16	27.0	20.5	23.5	29.0	23.0	25.5	26.0	21.5	23.5	23.5	16.0	19.0
17	28.5	21.5	25.0	27.0	21.0	24.0	28.5	21.0	24.5	20.0	14.0	17.0
18	29.0	22.5	25.5	27.0	19.0	22.5	29.5	23.0	25.5	16.5	13.5	15.0
19	29.5	21.5	25.5	23.0	18.5	21.0	26.5	21.5	24.5	15.0	13.5	14.0
20	29.0	21.0	25.0	27.0	19.0	22.5	26.0	17.0	21.5	15.0	12.0	13.0
21	29.5	21.0	25.5	27.5	19.0	23.0	27.5	18.5	23.0	12.0	10.5	11.5
22	29.5	22.0	25.5	27.0	21.0	24.0	26.5	18.5	22.5	11.5	7.5	9.5
23	27.5	22.5	25.0	27.5	20.5	24.0	28.5	20.0	24.0	13.0	6.0	9.5
24	28.0	21.0	23.5	29.0	20.5	25.0	28.0	22.0	25.0	12.0	7.0	9.5
25	26.5	19.0	22.5	29.0	20.5	25.0	28.5	21.5	24.5	15.5	9.5	12.0
26	22.5	20.0	21.0	28.5	21.0	24.5	27.5	20.0	23.5	18.0	11.0	14.0
27	23.0	19.0	20.5	27.0	20.0	22.5	27.5	21.0	24.0	18.0	10.0	14.0
28	24.5	19.0	21.0	27.0	18.5	22.5	28.0	22.0	24.0	19.5	12.5	15.5
29	25.0	19.5	22.0	30.0	20.5	25.0	24.5	21.0	22.5	16.0	13.0	14.5
30	24.0	18.0	20.5	31.0	21.5	26.5	28.0	20.5	24.0	18.5	14.5	16.0
31	---	---	---	30.0	23.5	26.0	25.0	21.0	23.5	---	---	---
MONTH	29.5	14.0	21.9	33.5	15.0	23.6	31.0	17.0	23.8	25.5	6.0	16.1

GRANT RIVER BASIN

054134435 KUENSTER CREEK AT MUSKELLUNGE ROAD NEAR NORTH ANDOVER, WI--CONTINUED

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	---	---	---	15.4	8.9	13.5
2	---	---	---	---	---	---	---	---	---	15.8	8.0	11.3
3	---	---	---	---	---	---	---	---	---	16.0	7.8	11.0
4	---	---	---	---	---	---	---	---	---	15.7	7.9	10.7
5	---	---	---	---	---	---	---	---	---	15.7	7.4	10.9
6	---	---	---	---	---	---	---	---	---	15.9	6.7	10.7
7	---	---	---	---	---	---	---	---	---	14.4	6.3	9.6
8	---	---	---	---	---	---	---	---	---	9.5	6.5	8.2
9	---	---	---	---	---	---	---	---	---	12.1	6.9	9.7
10	---	---	---	---	---	---	---	---	---	9.6	7.5	9.0
11	---	---	---	---	---	---	---	---	---	10.8	7.7	9.3
12	---	---	---	---	---	---	---	---	---	10.7	8.0	9.2
13	---	---	---	---	---	---	---	---	---	9.0	8.0	8.6
14	---	---	---	---	---	---	---	---	---	10.4	8.5	9.4
15	---	---	---	---	---	---	---	---	---	10.9	7.9	9.5
16	---	---	---	---	---	---	---	---	---	10.2	7.8	8.9
17	---	---	---	---	---	---	---	---	---	10.9	8.1	9.5
18	---	---	---	---	---	---	---	---	---	11.8	8.5	10.0
19	---	---	---	---	---	---	---	---	---	12.1	8.4	10.3
20	---	---	---	---	---	---	---	---	---	12.2	8.6	10.3
21	---	---	---	---	---	---	---	---	---	13.2	8.9	11.0
22	---	---	---	---	---	---	---	---	---	13.8	8.6	11.0
23	---	---	---	---	---	---	---	---	---	13.1	8.6	10.8
24	---	---	---	---	---	---	---	---	---	14.6	9.5	11.9
25	---	---	---	---	---	---	---	---	---	14.1	8.6	11.2
26	---	---	---	---	---	---	---	---	---	14.2	8.3	11.0
27	---	---	---	---	---	---	---	---	---	10.9	8.3	9.5
28	---	---	---	---	---	---	---	---	---	10.9	8.5	9.5
29	---	---	---	---	---	---	---	---	---	12.4	7.7	9.9
30	---	---	---	---	---	---	---	---	---	12.0	6.9	9.4
31	---	---	---	---	---	---	---	---	---	11.8	7.0	9.0
MONTH	---	---	---	---	---	---	---	---	---	16.0	6.3	10.1
JUNE			JULY			AUGUST			SEPTEMBER			
1	11.3	7.1	8.7	11.8	7.3	9.4	9.8	6.6	8.2	---	---	---
2	10.6	7.1	8.7	11.7	7.0	9.2	10.1	7.6	8.7	---	---	---
3	11.8	6.4	9.2	11.5	6.8	8.9	10.4	6.5	8.3	---	---	---
4	12.0	6.4	8.8	11.3	6.8	8.2	10.6	6.4	8.1	---	---	---
5	11.4	6.1	8.5	10.5	6.7	8.0	10.6	6.1	7.9	---	---	---
6	12.7	6.2	8.8	11.2	6.7	8.6	10.2	4.5	7.7	---	---	---
7	12.9	6.8	9.6	11.4	6.2	8.8	6.8	4.5	6.1	---	---	---
8	13.3	7.0	10.2	11.5	6.1	8.5	8.3	6.4	7.2	11.7	8.1	9.8
9	13.7	9.1	11.2	10.7	5.8	8.0	8.8	6.0	7.4	11.7	8.0	9.6
10	13.5	7.7	10.3	10.8	5.4	7.8	8.7	6.3	7.1	11.5	7.9	9.5
11	13.7	7.3	10.1	10.0	4.8	7.2	8.9	5.7	7.2	11.6	7.7	9.4
12	13.3	7.0	9.8	9.1	4.1	6.4	8.5	5.3	6.8	10.8	7.9	8.9
13	13.4	6.4	9.6	8.7	3.9	5.9	8.6	5.2	6.8	10.2	7.0	8.5
14	12.7	5.9	9.0	8.0	3.8	5.5	9.1	5.7	7.3	10.5	7.4	8.7
15	12.5	5.8	8.7	8.7	3.9	5.9	10.2	6.6	7.9	11.0	7.5	9.1
16	12.4	5.4	8.5	9.0	5.1	6.6	9.8	6.7	7.9	10.3	7.0	8.4
17	11.7	5.0	7.9	9.6	5.6	7.4	10.0	5.6	7.8	10.7	7.5	8.9
18	11.2	4.9	7.5	10.2	6.0	7.8	10.4	6.1	7.5	11.0	8.2	9.3
19	11.0	4.9	7.4	9.8	6.0	7.8	9.9	6.2	7.7	9.7	8.7	9.2
20	10.8	5.1	7.6	10.3	6.0	7.9	10.8	7.0	8.8	10.8	8.9	9.7
21	10.8	5.3	7.6	10.1	5.6	7.7	10.9	6.7	8.5	11.9	10.0	10.9
22	10.5	4.9	7.4	10.3	5.7	7.4	11.0	6.8	8.5	12.6	10.6	11.5
23	10.3	5.0	7.2	10.1	5.7	7.6	11.9	6.2	8.5	12.9	10.1	11.6
24	10.4	5.6	7.3	10.3	5.7	7.6	11.5	6.5	8.3	12.7	10.3	11.4
25	9.8	5.9	7.3	10.8	5.8	7.7	10.6	6.2	8.0	12.1	9.3	10.7
26	8.5	6.0	7.2	10.6	5.9	7.9	10.3	6.0	7.8	11.8	8.7	10.1
27	9.2	6.5	7.6	10.8	5.2	7.5	9.8	5.6	7.3	11.9	8.6	10.2
28	10.4	6.7	8.0	7.7	5.8	7.1	---	---	---	11.8	8.0	9.9
29	10.4	6.8	8.3	9.6	5.6	7.5	---	---	---	11.1	8.6	9.8
30	11.1	7.0	8.9	9.8	5.9	7.5	---	---	---	11.2	7.8	9.3
31	---	---	---	9.7	6.0	7.3	---	---	---	---	---	---
MONTH	13.7	4.9	8.6	11.8	3.8	7.6	---	---	---	---	---	---

SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDE(TONS PER DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	1.1	1.8	1.3	1.3	1.4	1.9	2.5	3.6	5.2	3.4	2.6
2	2.2	1.1	1.8	1.2	1.3	1.3	1.7	2.3	3.7	4.8	3.3	2.8
3	2.5	1.1	1.8	1.2	1.3	1.3	1.7	2.2	3.7	4.7	3.3	3.0
4	2.5	1.1	1.8	1.2	1.3	1.3	1.5	2.2	3.4	4.9	3.2	2.8
5	2.5	1.2	1.8	1.2	1.2	1.3	1.5	2.1	3.3	10	2.9	2.5
6	2.4	1.1	1.7	1.2	1.2	1.3	1.6	1.9	3.9	4.4	67	3.0
7	2.5	1.0	1.7	1.2	1.2	1.3	1.7	1.9	3.8	3.2	379	6.2
8	2.4	1.0	1.7	1.2	1.2	1.3	2.8	38	3.4	3.0	16	3.3
9	2.3	1.1	1.7	1.2	1.2	1.3	2.0	140	3.2	3.0	4.9	3.1
10	2.3	1.1	1.7	1.2	1.2	1.3	3.6	229	3.2	2.7	5.3	2.9
11	2.2	.98	1.6	1.3	1.2	35	51	11	3.2	2.6	5.3	2.8
12	2.1	.95	1.6	1.3	1.2	4.5	96	9.2	3.0	2.6	3.7	2.7
13	2.0	1.1	1.6	1.3	1.2	2.1	6.8	48	3.0	2.6	3.2	2.6
14	2.1	1.5	1.6	1.3	1.2	2.0	3.4	12	2.9	2.6	3.0	2.4
15	2.1	1.5	1.6	1.3	1.2	1.7	2.9	8.4	2.7	2.7	2.7	2.3
16	2.2	1.5	1.6	1.3	1.2	1.6	2.7	7.8	2.8	3.1	2.7	2.8
17	2.2	1.5	1.6	1.9	1.2	1.6	2.7	7.1	2.8	2.9	2.9	3.7
18	2.2	1.6	1.6	4.1	1.3	1.6	47	6.1	2.7	2.6	2.6	4.6
19	2.2	1.4	1.6	2.0	3.3	1.5	20	5.5	2.6	2.5	2.5	7.9
20	2.0	3.7	1.5	1.4	18	5.6	5.3	4.9	2.5	2.6	2.3	9.9
21	1.8	14	1.4	1.3	7.5	3.6	10	4.5	2.6	2.6	2.2	4.0
22	1.7	4.5	1.4	1.3	5.1	2.2	3.7	4.3	2.4	2.5	2.4	2.2
23	1.7	1.9	1.3	1.3	3.2	2.1	3.1	4.4	2.5	2.5	2.4	2.1
24	1.6	1.7	1.3	1.3	1.7	1.8	2.9	4.4	10	2.4	2.2	2.0
25	1.6	1.7	1.3	1.3	1.5	1.7	2.8	3.8	16	2.4	2.4	2.1
26	1.5	1.6	1.3	1.3	1.4	1.9	3.7	3.5	20	2.3	2.2	2.1
27	1.4	10	1.3	1.3	1.4	3.1	9.3	8.0	20	39	2.2	1.9
28	1.3	10	1.5	1.3	1.4	3.1	2.8	9.7	7.6	49	5.1	1.9
29	1.3	2.0	1.5	1.3	---	2.5	2.6	4.8	6.7	4.4	18	1.9
30	1.2	1.9	1.4	1.3	---	2.2	2.9	4.0	5.5	3.7	4.3	2.3
31	1.2	---	1.3	1.3	---	2.0	---	3.7	---	3.4	2.9	---
TOTAL	61.2	75.93	48.4	43.6	66.6	96.5	301.6	597.2	156.7	186.9	565.5	96.4
WTR YR 1995	TOTAL 2296.53											

GRANT RIVER BASIN

05413449 RATTLESNAKE CREEK NEAR NORTH ANDOVER, WI

LOCATION.--Lat 42°46'49", long 90°56'32", in SE 1/4 NE 1/4 sec.34, T.4 N., R.5 W., Grant County, Hydrologic Unit 07060003, on right bank 100 ft upstream of Atkinson Road, 2.7 mi southeast of North Andover.

DRAINAGE AREA.--42.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 5, 1987 to current year.

REVISED RECORD.--WDR WI-89-1: 1987-88.

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

REMARKS.--Estimated daily discharges: July 11 and ice-affected periods, Dec. 7-17, Jan. 1 to Feb. 21, Feb. 24, and Mar. 1-10. Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	17	20	17	15	17	23	27	23	23	18	20
2	20	17	20	16	15	16	23	26	25	22	18	19
3	18	17	20	16	15	16	22	25	25	23	20	19
4	17	17	20	16	15	17	20	24	23	24	19	17
5	17	17	20	16	14	16	20	23	23	29	18	18
6	18	17	20	16	14	16	21	22	28	24	43	18
7	18	16	19	16	14	16	21	22	27	19	102	28
8	18	16	19	16	14	16	25	40	25	19	25	20
9	17	17	19	16	14	16	22	48	24	18	22	18
10	16	16	19	16	14	19	23	85	24	18	21	18
11	17	16	18	17	13	75	52	41	23	18	20	17
12	17	16	18	17	13	34	54	36	21	18	20	18
13	17	17	18	17	13	27	36	49	21	19	19	19
14	17	20	18	17	13	24	31	39	21	18	19	18
15	17	17	18	17	13	23	29	32	22	19	20	17
16	17	17	19	17	13	22	28	31	22	22	21	18
17	17	19	19	18	13	21	28	30	22	18	20	18
18	17	19	19	20	20	20	49	27	23	17	20	18
19	17	18	19	17	30	20	39	25	22	16	21	23
20	17	21	19	17	50	32	31	24	22	18	20	23
21	17	32	19	17	35	28	40	23	23	17	19	20
22	17	21	19	17	24	24	31	23	23	17	19	19
23	17	20	19	17	24	23	28	23	25	17	19	18
24	17	20	19	15	22	21	29	23	31	17	18	18
25	17	20	19	15	21	20	28	23	33	16	19	19
26	17	20	19	15	20	20	28	21	38	17	19	19
27	17	28	19	15	19	28	36	30	33	50	19	18
28	17	28	19	15	18	28	28	37	29	44	20	16
29	17	22	18	15	---	26	26	29	27	19	33	17
30	17	21	18	15	---	25	28	24	25	18	23	18
31	17	---	18	15	---	24	---	24	---	18	21	---
TOTAL	536	579	587	506	518	730	899	956	753	652	735	566
MEAN	17.3	19.3	18.9	16.3	18.5	23.5	30.0	30.8	25.1	21.0	23.7	18.9
MAX	20	32	20	20	50	75	54	85	38	50	102	28
MIN	16	16	18	15	13	16	20	21	21	16	18	16
CFSM	.41	.46	.45	.38	.44	.56	.71	.73	.59	.50	.56	.44
IN.	.47	.51	.52	.44	.45	.64	.79	.84	.66	.57	.64	.50

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1995, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
MEAN	16.6	18.8	17.7	19.5	26.2	42.4	24.5	21.8	27.7	29.5	23.1	19.9	
MAX	41.6	35.9	31.5	27.8	53.2	130	49.2	52.3	59.5	131	72.2	53.6	
(WY)	1994	1994	1994	1992	1994	1993	1993	1993	1991	1993	1993	1993	
MIN	8.14	7.96	6.06	6.91	8.35	20.5	9.60	10.7	11.1	7.18	9.23	8.86	
(WY)	1991	1991	1990	1991	1991	1990	1990	1989	1989	1989	1989	1990	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1987 - 1995
ANNUAL TOTAL	9612	8017	
ANNUAL MEAN	26.3	22.0	24.1
HIGHEST ANNUAL MEAN			53.5
LOWEST ANNUAL MEAN			11.9
HIGHEST DAILY MEAN	(a) 600 Feb 19	102 Aug 7	1030 Jun 15 1991
LOWEST DAILY MEAN	16 (b) Jun 18, 19	(a) 13 Feb 11-17	5.0 Aug 15, 16 1990
ANNUAL SEVEN-DAY MINIMUM	16 Nov 6	(a) 13 Feb 11	5.4 Aug 10 1990
INSTANTANEOUS PEAK FLOW		391 Aug 6	(c) 7000 Jun 15 1991
INSTANTANEOUS PEAK STAGE		4.15 Aug 6	11.20 Jun 15 1991
ANNUAL RUNOFF (CFSM)	.62	.52	.57
ANNUAL RUNOFF (INCHES)	8.43	7.03	7.72
10 PERCENT EXCEEDS	28	30	39
50 PERCENT EXCEEDS	21	19	17
90 PERCENT EXCEEDS	17	16	8.1

(a) Ice affected

(b) Also occurred Oct. 10 and Nov. 7, 8, 10-12

(c) On basis of contracted-opening measurement

05413449 RATTLESNAKE CREEK NEAR NORTH ANDOVER, WI--CONTINUED

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: July 1987 to current year.

DISSOLVED OXYGEN: July 1987 to current year.

SUSPENDED-SOLIDS DISCHARGE: October 1991 to September 1994 (discontinued).

TOTAL-PHOSPHORUS DISCHARGE: October 1991 to September 1994 (discontinued).

INSTRUMENTATION.--Continuous water temperature and dissolved oxygen recorder since July 17, 1987. Automatic pump sampler since July 17, 1987.

REMARKS.--Water-quality analyses by the Wisconsin State Laboratory of Hygiene. Samples are point samples unless otherwise indicated. Water-quality sampling discontinued on Feb. 1, 1995.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum observed, 32.0°C, July 10, 1989; minimum observed, 0.0°C, on many days.

DISSOLVED OXYGEN: Maximum observed, 18.3 mg/L, Apr. 29, 1988, May 7, 1989; minimum observed, 0.0 mg/L, Sept. 17, 1987, and June 30, 1991.

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 8,700 tons, July 9, 1993; minimum daily observed, 0.08 ton, May 14, 1992.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 24,700 lb, July 9, 1993; minimum daily observed, 1.9 lb, May 13, 1992.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum observed, 30.5°C, July 13-14; minimum observed, 0.0°C, Dec. 6-19, 26, 30, Jan. 1 to Feb. 24, Feb. 28, and Mar. 1-11..

DISSOLVED OXYGEN: Maximum observed, 13.3 mg/L, May 24; minimum observed, 3.1 mg/L, July 27.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 1994											
*04...	0900	--	17	8.2	1.8	--	26	0.042	0.175	--	--
*19...	1150	--	17	8.5	<1.0	--	14	<0.027	0.051	--	--
NOV											
*01...	1100	--	17	8.2	1.4	--	<5	<0.027	0.090	--	--
DEC											
*06...	1150	--	20	8.2	<1.0	310	7	0.020	0.100	--	--
JAN 1995											
*18...	1253	20	--	7.9	4.4	1400	18	0.337	0.260	--	--
MAR											
11...	1230	--	91	--	--	--	--	--	--	580	98
11...	1315	--	125	--	--	--	--	--	--	1770	99
12...	0947	--	30	--	--	--	--	--	--	261	100
MAY											
09...	2230	--	153	--	--	--	--	--	--	2740	97
09...	2345	--	189	--	--	--	--	--	--	2070	100
10...	0030	--	198	--	--	--	--	--	--	1330	100

* Equal-width increment (EWI) sample

GRANT RIVER BASIN

05413449 RATTLESNAKE CREEK NEAR NORTH ANDOVER, WI--CONTINUED

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	16.5	15.0	15.5	8.0	6.0	7.0	3.0	1.0	2.0	.50	.00	.00
2	15.0	12.5	13.5	10.0	7.0	8.5	4.5	3.0	3.5	.00	.00	.00
3	12.5	11.5	12.0	11.0	9.5	10.5	6.5	3.5	5.0	.00	.00	.00
4	14.0	12.0	13.0	11.0	10.0	10.5	7.5	6.0	6.5	.00	.00	.00
5	15.5	13.0	14.0	10.0	9.0	9.5	7.5	4.5	6.5	.00	.00	.00
6	15.5	13.0	14.0	9.5	8.0	9.0	4.5	.00	2.5	.00	.00	.00
7	17.0	15.0	16.0	9.0	6.5	8.0	.50	.00	.00	.00	.00	.00
8	15.5	12.5	14.0	9.5	8.0	9.0	.50	.00	.00	.00	.00	.00
9	12.5	10.5	11.5	9.5	6.5	8.5	1.0	.00	.50	.00	.00	.00
10	11.5	8.5	10.0	6.5	4.5	5.5	.50	.00	.00	.00	.00	.00
11	11.5	8.0	10.0	6.0	4.0	5.0	.00	.00	.00	.50	.00	.00
12	11.5	8.0	10.0	7.5	5.5	6.5	.50	.00	.00	.50	.00	.50
13	12.0	8.5	10.0	10.0	7.0	8.5	.50	.00	.00	.50	.00	.50
14	12.5	9.0	11.0	10.0	7.5	9.5	.50	.00	.00	1.0	.00	.50
15	14.0	12.5	13.0	7.5	5.0	6.0	.50	.00	.00	1.0	.00	.50
16	15.0	13.5	14.0	5.0	3.0	4.0	.50	.00	.50	1.0	.00	.50
17	16.5	15.0	15.5	6.5	4.0	5.0	1.0	.00	.50	.50	.00	.50
18	17.5	15.5	16.5	6.5	4.5	5.5	.50	.00	.50	.50	.00	.00
19	15.5	13.0	14.0	4.5	3.0	4.0	1.0	.00	.50	.50	.00	.00
20	13.5	11.5	12.5	6.0	4.0	5.0	1.5	.50	1.0	.50	.00	.00
21	13.0	10.0	11.5	7.0	3.5	6.0	2.5	1.5	2.0	.50	.00	.00
22	13.0	10.5	11.5	3.5	1.0	2.0	3.0	2.0	2.5	.00	.00	.00
23	11.5	9.5	10.5	2.0	.50	1.0	3.0	1.5	2.0	.50	.00	.00
24	9.5	7.5	8.5	3.0	1.0	2.0	3.0	1.5	2.5	.50	.00	.00
25	7.5	6.5	7.0	3.0	2.0	2.5	2.5	1.0	1.5	.50	.00	.00
26	8.5	6.5	7.5	2.5	1.5	2.0	1.0	.00	.50	.50	.00	.00
27	8.5	5.5	7.0	3.5	2.5	3.0	3.0	1.0	2.0	.50	.00	.00
28	10.0	7.5	9.0	3.5	1.5	2.5	3.5	2.0	2.5	.50	.00	.00
29	11.5	9.5	10.5	2.0	1.0	1.5	2.0	.50	1.0	.50	.00	.00
30	10.0	8.0	9.0	1.5	.50	1.0	1.5	.00	.50	.50	.00	.00
31	9.5	8.0	9.0	---	---	---	1.5	.50	1.0	.50	.00	.00
MONTH	17.5	5.5	11.6	11.0	.50	5.6	7.5	.00	1.5	1.0	.00	.10
FEBRUARY			MARCH			APRIL			MAY			
1	1.0	.00	.50	.50	.00	.00	8.0	4.0	6.0	12.5	10.0	11.5
2	1.0	.00	.50	.50	.00	.00	10.5	4.5	7.5	14.5	10.0	12.0
3	1.0	.00	.50	1.0	.00	.00	12.5	8.5	10.0	14.5	11.0	13.0
4	.50	.00	.00	1.0	.00	.50	8.5	2.5	5.0	15.0	12.0	13.0
5	.00	.00	.00	1.0	.00	.50	7.0	1.5	4.5	16.5	11.0	14.0
6	.50	.00	.00	1.0	.00	.50	12.0	6.0	8.5	17.5	12.0	14.5
7	.50	.00	.00	1.0	.00	.50	10.0	6.5	8.0	18.5	14.5	16.5
8	.00	.00	.00	.50	.00	.00	7.5	6.0	6.5	17.0	11.5	14.0
9	.50	.00	.00	.50	.00	.00	7.0	5.0	6.0	13.5	11.0	12.0
10	.50	.00	.00	2.0	.00	.50	5.0	2.5	3.5	12.5	11.0	12.0
11	.00	.00	.00	5.5	.00	2.5	6.5	2.5	4.0	18.0	11.0	14.0
12	.00	.00	.00	10.0	4.5	7.0	6.5	5.0	5.5	17.0	12.5	15.0
13	.00	.00	.00	11.0	9.5	10.0	11.5	4.0	7.5	16.0	13.5	14.0
14	.00	.00	.00	11.5	8.0	10.0	12.0	7.5	10.0	16.5	12.5	14.5
15	.00	.00	.00	13.5	9.5	11.0	11.0	8.0	9.5	19.0	12.0	15.5
16	.50	.00	.00	13.0	9.0	10.5	10.5	8.0	9.5	17.5	14.5	16.5
17	.50	.00	.00	12.5	9.0	10.5	12.0	9.5	10.5	18.0	13.5	15.5
18	.50	.00	.00	10.0	7.5	8.5	11.5	10.0	11.0	17.0	12.5	15.0
19	.50	.00	.00	10.5	7.0	8.5	13.5	7.5	10.5	18.5	12.0	15.0
20	.50	.00	.00	9.5	6.0	8.0	11.5	8.0	9.5	19.0	14.5	16.5
21	.50	.00	.00	8.0	4.5	6.0	8.0	7.0	7.5	18.0	13.0	15.5
22	1.0	.00	.50	8.5	5.0	7.0	13.5	6.0	9.0	18.0	13.0	15.5
23	1.5	.00	.50	8.0	5.5	7.0	13.5	9.0	11.0	17.0	12.5	15.0
24	1.0	.00	.50	9.0	3.5	6.0	11.5	8.5	9.5	15.5	11.5	13.0
25	3.0	.50	1.5	10.0	6.0	8.0	11.5	6.5	9.0	18.5	12.5	15.0
26	2.0	1.0	1.5	10.0	7.5	8.5	11.0	10.0	10.5	19.0	13.5	16.0
27	2.5	.50	1.5	8.5	6.5	7.0	12.5	8.0	10.0	17.0	13.0	14.5
28	3.0	.00	1.5	6.5	5.5	6.0	14.5	9.0	12.0	15.5	13.0	14.0
29	---	---	---	7.5	5.0	6.0	13.5	12.0	12.5	19.0	13.5	16.0
30	---	---	---	6.5	5.0	6.0	15.0	10.0	12.5	21.5	15.0	18.0
31	---	---	---	6.0	4.5	5.0	---	---	---	21.5	17.0	19.0
MONTH	3.0	.00	.32	13.5	.00	5.2	15.0	1.5	8.5	21.5	10.0	14.7

05413449 RATTLESNAKE CREEK NEAR NORTH ANDOVER, WI--CONTINUED

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	20.5	18.0	19.0	21.0	16.5	18.5	24.0	20.5	22.0	22.0	18.5	20.0
2	19.0	17.0	17.5	21.5	16.0	18.5	21.0	19.5	20.0	21.0	17.5	19.0
3	22.0	15.5	18.5	21.5	17.0	19.0	24.0	20.0	22.0	22.5	18.0	20.0
4	23.0	18.5	20.5	21.5	19.0	20.0	25.5	21.5	23.0	22.5	18.5	20.5
5	24.0	19.0	21.5	21.5	19.0	20.0	26.0	21.5	23.5	22.0	18.5	20.5
6	23.5	20.0	21.5	21.0	18.5	19.5	24.5	20.0	23.0	21.0	20.0	20.5
7	25.0	20.5	22.5	23.0	17.5	20.0	24.5	19.5	21.5	20.0	15.0	17.5
8	22.5	15.5	18.0	23.0	18.0	20.5	24.0	21.5	22.5	17.0	12.5	14.5
9	16.5	14.5	15.0	24.5	20.0	22.0	25.0	21.0	22.5	17.5	13.0	15.0
10	21.0	15.5	18.0	25.0	20.0	22.5	25.0	22.0	23.5	17.5	13.5	15.5
11	21.5	17.0	19.0	25.5	22.0	23.5	26.5	21.5	23.5	18.0	14.0	16.0
12	21.5	16.5	19.0	28.5	22.5	25.5	28.5	23.5	25.5	17.5	16.0	16.5
13	22.0	16.0	19.0	30.5	24.5	27.5	28.5	24.5	26.5	21.0	16.5	18.5
14	23.5	17.5	20.5	30.5	25.5	28.0	26.5	24.0	25.5	20.0	17.0	18.0
15	24.5	18.5	21.0	29.0	25.0	27.0	24.0	21.5	23.0	19.0	14.5	17.0
16	25.0	19.5	22.0	27.0	23.5	25.0	24.5	22.0	23.0	20.5	16.0	18.0
17	27.0	21.5	23.5	25.5	21.5	23.5	26.0	21.5	23.5	18.5	15.5	17.0
18	27.0	22.0	24.5	25.0	20.0	22.5	27.0	23.0	24.5	16.0	14.0	15.0
19	26.5	21.5	24.0	22.5	20.0	21.0	25.5	22.0	24.5	15.0	13.5	14.0
20	27.5	21.5	24.0	24.5	19.5	21.5	23.5	19.0	21.0	14.0	12.0	13.0
21	27.5	22.0	25.0	25.0	19.5	22.0	24.5	19.5	21.5	12.0	10.5	11.5
22	28.0	22.5	25.0	25.0	21.0	23.0	24.0	20.0	22.0	11.0	9.0	10.0
23	26.0	23.0	24.5	26.0	21.0	23.0	25.5	21.0	23.0	11.0	7.5	9.5
24	25.0	21.5	23.0	26.5	21.0	23.5	26.0	22.0	23.5	11.0	8.5	10.0
25	24.5	20.0	22.0	26.5	21.5	24.0	25.5	21.5	23.5	14.0	10.5	12.0
26	22.5	20.0	21.0	25.5	21.5	23.5	25.0	21.0	23.0	16.0	12.0	13.5
27	21.5	19.0	20.0	24.5	20.5	22.5	25.0	21.5	23.0	15.5	12.0	14.0
28	22.5	19.0	20.5	25.5	19.0	22.0	25.5	22.0	23.5	17.0	13.5	15.0
29	23.0	19.5	21.0	27.0	21.5	24.0	23.0	21.5	22.5	16.0	14.5	15.0
30	22.0	19.0	20.0	28.0	22.5	25.0	25.0	20.5	22.5	17.5	15.0	16.0
31	---	---	---	27.5	24.0	25.5	23.5	21.0	22.5	---	---	---
MONTH	28.0	14.5	21.0	30.5	16.0	22.7	28.5	19.0	23.0	22.5	7.5	15.7

GRANT RIVER BASIN
05413449 RATTLESNAKE CREEK NEAR NORTH ANDOVER, WI--CONTINUED

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	12.9	6.1	7.2
11	---	---	---	---	---	---	---	---	---	9.4	6.1	7.9
12	---	---	---	---	---	---	---	---	---	10.1	6.2	7.9
13	---	---	---	---	---	---	---	---	---	7.6	6.1	6.9
14	---	---	---	---	---	---	---	---	---	10.7	6.4	8.5
15	---	---	---	---	---	---	---	---	---	11.5	7.5	9.2
16	---	---	---	---	---	---	---	---	---	10.8	6.6	8.5
17	---	---	---	---	---	---	---	---	---	11.4	6.5	8.9
18	---	---	---	---	---	---	---	---	---	11.7	7.4	9.1
19	---	---	---	---	---	---	---	---	---	12.0	7.5	9.5
20	---	---	---	---	---	---	---	---	---	11.8	7.4	9.2
21	---	---	---	---	---	---	---	---	---	12.4	7.6	9.6
22	---	---	---	---	---	---	---	---	---	12.2	7.5	9.4
23	---	---	---	---	---	---	---	---	---	11.4	7.4	9.2
24	---	---	---	---	---	---	---	---	---	13.3	9.2	11.0
25	---	---	---	---	---	---	---	---	---	13.1	8.4	10.5
26	---	---	---	---	---	---	---	---	---	13.2	8.1	10.2
27	---	---	---	---	---	---	---	---	---	9.9	8.0	8.9
28	---	---	---	---	---	---	---	---	---	9.6	8.3	8.9
29	---	---	---	---	---	---	---	---	---	12.1	7.9	9.7
30	---	---	---	---	---	---	---	---	---	11.8	7.1	9.4
31	---	---	---	---	---	---	---	---	---	11.2	6.8	8.6
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	JUNE			JULY			AUGUST			SEPTEMBER		
1	10.4	6.7	8.2	12.3	7.8	9.7	8.8	5.8	7.4	10.2	6.6	8.1
2	9.6	7.0	8.2	12.3	7.4	9.6	9.8	7.0	8.1	10.8	7.0	8.5
3	11.3	7.0	9.1	11.4	7.4	9.2	10.3	6.6	8.0	10.9	7.0	8.5
4	11.1	6.8	8.7	11.5	7.0	8.5	10.5	6.5	8.0	11.0	6.9	8.5
5	10.9	6.6	8.4	10.9	6.7	8.2	10.7	6.2	8.0	11.4	6.1	8.4
6	9.7	6.3	7.8	11.8	6.5	9.1	10.2	5.0	7.6	9.7	7.0	8.0
7	10.0	6.0	7.7	12.6	7.3	9.6	6.7	4.9	6.2	8.8	6.8	7.7
8	10.2	6.3	8.4	12.6	7.1	9.4	8.3	6.1	7.1	11.5	8.4	9.7
9	11.7	8.7	9.9	12.0	6.7	8.9	9.3	6.5	7.6	11.6	8.8	9.9
10	12.1	7.8	9.7	11.4	6.4	8.6	9.5	6.5	7.5	12.2	8.7	10.0
11	12.3	7.7	9.6	---	---	---	9.8	6.2	7.8	12.5	8.4	10.0
12	12.0	7.5	9.4	---	---	---	9.9	5.8	7.5	11.7	8.3	9.3
13	12.1	7.1	9.4	---	---	---	9.7	5.8	7.3	11.5	7.7	9.3
14	11.3	6.6	8.8	9.7	4.9	6.8	10.0	5.8	7.5	11.6	7.7	9.3
15	11.4	6.2	8.4	10.0	4.9	6.8	10.6	6.4	7.9	12.2	8.2	9.7
16	11.0	5.8	8.0	9.7	5.3	6.9	10.1	6.5	8.0	11.5	7.7	9.1
17	10.9	5.4	7.7	10.6	4.1	7.7	10.7	6.2	8.0	11.9	6.9	9.4
18	10.4	5.2	7.4	11.4	6.3	8.3	10.4	6.1	7.6	12.2	8.7	9.9
19	10.6	5.2	7.5	10.4	6.4	8.1	9.9	5.9	7.4	10.0	9.0	9.4
20	10.8	5.1	7.3	10.9	6.5	8.4	11.0	7.2	8.7	11.4	8.7	9.7
21	10.0	5.3	7.3	10.8	6.4	8.2	10.8	7.1	8.6	11.9	9.4	10.4
22	9.5	5.0	7.0	10.4	6.2	7.8	10.8	7.0	8.5	12.7	10.1	11.2
23	9.2	4.1	6.5	10.7	6.2	7.9	10.6	6.4	8.2	12.9	10.3	11.5
24	8.6	3.7	6.1	10.5	5.9	7.8	10.5	6.3	7.9	12.8	10.1	11.2
25	8.7	5.5	6.8	10.5	5.8	7.7	10.5	6.5	8.0	12.4	9.3	10.6
26	8.0	5.6	6.8	10.4	5.8	7.6	10.9	6.4	8.1	11.9	8.7	10.0
27	8.8	6.5	7.4	9.8	3.1	6.8	10.6	6.4	8.0	12.4	8.6	10.1
28	11.1	6.9	8.4	7.2	5.2	6.3	10.4	6.3	7.7	12.3	8.3	9.9
29	10.8	7.4	8.7	9.1	5.6	7.0	7.5	5.8	6.5	11.3	8.3	9.4
30	11.5	7.3	9.1	9.3	5.6	7.2	9.4	5.8	7.2	11.6	7.8	9.2
31	---	---	---	9.7	5.6	7.0	9.3	5.7	7.3	---	---	---
MONTH	12.3	3.7	8.1	---	---	---	11.0	4.9	7.7	12.9	6.1	9.5

LOCATION.--Lat 42°43'13", long 90°49'09", in NW 1/4 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.

WATER-DISCHARGE RECORDS

REVISED RECORDS.--WSP 825: 1935-36. WSP 1308: 1935-37(M), 1941(M), 1945-46(M), 1949(M). WSP 1728: 1942(M). WDR WI-76-1: Drainage area.

REMARKS.--Estimated daily discharges: Ice-affected periods, Dec. 10-21 and Jan. 1 to Mar. 11. Records good except those for June 2-14, which are fair, and ice-affected periods, which are poor (see page 11). Data-collection platform and gage-height telemeter at station.

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	133	119	130	110	100	110	149	202	172	145	136	118
2	131	120	130	110	100	100	144	193	174	140	135	116
3	130	121	129	110	100	100	140	186	170	139	135	116
4	129	120	127	110	100	110	133	182	164	142	137	115
5	128	120	128	110	96	110	130	177	161	164	131	114
6	128	122	129	110	96	110	134	170	169	158	135	115
7	130	119	128	110	96	100	131	168	182	142	399	131
8	129	120	135	110	96	96	153	219	163	135	180	117
9	127	125	144	110	96	96	146	283	157	134	150	113
10	124	121	130	110	96	100	145	413	158	133	144	111
11	123	119	120	110	94	220	232	301	156	132	140	110
12	124	119	120	120	94	508	373	268	148	131	135	110
13	124	123	120	120	94	196	288	273	146	131	132	112
14	123	139	120	120	94	169	240	282	144	129	130	110
15	123	127	130	120	96	151	212	239	145	129	129	106
16	123	120	130	120	96	144	196	227	142	159	128	107
17	123	121	130	120	98	138	188	224	140	138	129	110
18	125	125	130	110	110	134	249	211	139	128	129	107
19	125	120	130	110	160	134	371	203	139	126	126	117
20	123	122	130	110	250	159	260	196	137	137	125	140
21	121	178	130	110	330	206	298	189	137	132	121	124
22	122	152	130	110	200	160	269	183	136	128	120	117
23	123	129	129	110	150	153	236	185	137	128	120	114
24	120	128	127	100	140	146	223	188	143	125	120	113
25	120	128	126	100	130	139	215	180	160	122	120	115
26	120	125	123	100	120	138	205	175	216	122	119	116
27	120	140	126	100	110	162	253	183	185	148	118	114
28	120	190	128	100	110	188	225	253	163	441	118	113
29	121	146	126	100	---	170	208	198	159	163	155	111
30	119	133	121	100	---	161	214	181	162	141	139	115
31	118	---	126	100	---	154	---	174	---	135	124	---
TOTAL	3849	3891	3962	3390	3452	4762	6360	6706	4704	4557	4359	3447
MEAN	124	130	128	109	123	154	212	216	157	147	141	115
MAX	133	190	144	120	330	508	373	413	216	441	399	140
MIN	118	119	120	100	94	96	130	168	136	122	118	106
CFSM	.46	.48	.48	.41	.46	.57	.79	.80	.58	.55	.52	.43
IN.	.53	.54	.55	.47	.48	.66	.88	.93	.65	.63	.60	.48

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 1995, BY WATER YEAR (WY)

MEAN	118	129	110	133	202	333	182	165	202	175	148	132
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 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1935 - 1995	
ANNUAL TOTAL	68272		53439			
ANNUAL MEAN	187		146		169	
HIGHEST ANNUAL MEAN					351	
LOWEST ANNUAL MEAN					59.3	
HIGHEST DAILY MEAN	(a) 3500	Feb 20	508	Mar 12	10700	Jun 13 1947
LOWEST DAILY MEAN	118	Oct 31	(a) 94	Feb 11-14	30	(b) Aug 5 1936
ANNUAL SEVEN-DAY MINIMUM	120	Oct 26	(a) 95	Feb 8	31	(c) Aug 3 1936
INSTANTANEOUS PEAK FLOW			996	Mar 12	(d) 25000	Jul 16 1950
INSTANTANEOUS PEAK STAGE			11.44	Mar 12	24.82	Jul 16 1950
INSTANTANEOUS LOW FLOW			(e) 63	Mar 2	(e) 21	Mar 4 1954
ANNUAL RUNOFF (CFSM)	.70		.54		.63	
ANNUAL RUNOFF (INCHES)	9.44		7.39		8.53	
10 PERCENT EXCEEDS	229		207		255	
50 PERCENT EXCEEDS	153		130		113	
90 PERCENT EXCEEDS	123		110		58	

(a) Ice affected

(b) Also occurred Aug. 8, 9, 1936, Sept. 22, 1937, and Feb. 19, 20, 1959

(c) Also occurred Jan. 4, 1959

(d) From rating curve extended above 18,000 ft³/s on basis of slope-area measurement of peak flow

(e) Result of freezeup

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-67, 1978 to current year. National Stream-Quality Accounting Network data collection began in October 1986.

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.

REMARKS.--Sediment records for periods of no ice cover are fair. Records for high-flow periods during ice cover are poor. Monthly and annual load values are fair. Most sediment samples were taken in a single vertical. Concentrations identified by an asterisk are from samples collected by the equal-width increment method.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 13,600 mg/L, July 13, 1979; minimum observed, 7 mg/L, Mar. 2, 1978 and Nov. 30, 1994.

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, 1,620 mg/L, Aug. 7; minimum observed, 7 mg/L, Nov. 30.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 1,170 tons, July 28; minimum daily, 3.4 tons, Nov. 30 to Dec. 2.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT, SUS- PENDE (MG/L) (80154)
OCT 1994					JUN 1995				
03...	1000	--	130	57	01...	0825	--	171	71
07...	0935	--	130	76	*01...	1530	--	171	35
09...	1000	--	127	66	01...	1536	--	171	50
13...	0920	--	124	53	05...	0850	--	159	89
17...	1210	--	123	17	*08...	0935	--	162	67
*17...	1215	--	123	20	12...	1000	--	148	89
28...	1115	--	120	39	15...	0900	--	144	99
31...	0820	--	119	19	19...	0845	--	138	167
NOV					22...	0755	--	134	165
03...	0750	--	120	34	27...	0905	--	196	252
07...	0900	--	119	100	29...	0745	--	155	174
*30...	1250	--	133	7	JUL				
30...	1258	--	133	9	03...	0830	--	138	151
JAN 1995					06...	0705	--	161	164
09...	1050	110	--	19	10...	0825	--	131	126
FEB					13...	0750	--	131	116
23...	1348	150	--	68	17...	0910	--	138	119
MAR					20...	0915	--	140	121
14...	0925	--	172	122	24...	0715	--	126	114
15...	0900	--	152	77	*24...	1423	--	124	93
17...	0925	--	138	51	24...	1435	--	124	89
20...	1250	--	152	78	27...	0740	--	121	132
23...	1005	--	152	44	28...	0800	--	624	1250
27...	0900	--	150	51	31...	0740	--	136	180
31...	0800	--	154	31	AUG				
APR					03...	0850	--	134	173
03...	0825	--	141	30	07...	0810	--	559	1620
06...	0835	--	132	28	10...	0800	--	145	198
*06...	1357	--	135	25	14...	0745	--	130	195
06...	1403	--	135	11	17...	0835	--	128	165
10...	0920	--	142	18	21...	0820	--	121	125
12...	1110	--	425	493	24...	0900	--	120	141
17...	0855	--	187	79	28...	0750	--	118	127
18...	1340	--	224	94	29...	0745	--	147	190
20...	0825	--	261	205	31...	0700	--	125	79
24...	0900	--	222	102	SEP				
28...	0920	--	224	87	09...	0815	--	113	62
MAY					11...	0940	--	110	64
01...	0805	--	203	78	*11...	1402	--	110	25
04...	0900	--	182	72	11...	1415	--	110	31
08...	1325	--	200	61	14...	0825	--	111	80
12...	0855	--	269	145	19...	0810	--	109	60
18...	0915	--	211	131	21...	0845	--	124	76
22...	0815	--	182	107	25...	0910	--	114	32
25...	1025	--	180	79	28...	0935	--	112	30
29...	0950	--	199	94					

* Equal-width increment (EWI) sample

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

[illegible]

05414000 PLATTE RIVER NEAR ROCKVILLE, WI

LOCATION.--Lat 42°43'52", long 90°38'25", in SW 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.--Estimated daily discharges: Ice-affected periods, Dec. 13-19, Jan. 4 to Feb. 20, and Feb. 26 to Mar. 10. Records good except those for ice-affected periods, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	55	59	54	45	44	81	115	89	73	71	51
2	63	55	60	46	45	45	77	111	89	71	69	51
3	62	55	60	44	44	45	74	107	92	71	69	51
4	62	56	59	43	42	45	68	103	87	73	67	50
5	61	56	61	44	41	45	66	100	85	91	65	50
6	62	59	61	44	40	45	68	97	115	79	64	51
7	62	55	61	45	39	44	67	95	138	72	67	55
8	62	56	59	47	39	43	76	131	101	70	64	52
9	61	59	61	48	39	43	74	139	96	70	63	51
10	59	57	57	49	39	50	79	156	94	69	63	51
11	58	55	47	50	39	231	118	142	90	68	62	51
12	58	56	51	52	38	208	155	134	87	67	59	51
13	59	58	52	54	38	106	138	134	85	66	57	52
14	59	70	52	54	39	88	121	133	83	64	57	50
15	59	62	52	54	40	77	110	119	81	66	57	49
16	59	57	52	52	42	72	103	116	78	78	57	50
17	59	57	52	52	44	68	99	113	77	68	57	49
18	59	59	52	52	50	66	143	107	76	64	56	49
19	60	55	54	50	90	66	168	103	75	64	56	58
20	58	57	57	49	120	95	139	100	74	73	54	65
21	57	77	58	48	136	111	145	97	73	67	53	57
22	58	70	59	47	84	90	130	94	72	67	52	54
23	58	60	59	44	78	86	120	97	72	69	52	52
24	57	58	59	40	68	81	117	97	76	65	52	52
25	56	57	59	43	62	75	114	93	90	63	53	53
26	55	56	57	45	56	74	112	89	92	61	52	53
27	55	67	59	45	52	87	140	103	99	165	52	51
28	56	83	59	45	47	100	125	124	83	125	53	51
29	56	68	58	45	---	93	120	104	81	77	61	51
30	54	61	55	45	---	89	122	95	77	70	58	51
31	55	---	59	45	---	85	---	91	---	68	53	---
TOTAL	1824	1806	1760	1475	1536	2497	3269	3439	2607	2314	1825	1562
MEAN	58.8	60.2	56.8	47.6	54.9	80.5	109	111	86.9	74.6	58.9	52.1
MAX	65	83	61	54	136	231	168	156	138	165	71	65
MIN	54	55	47	40	38	43	66	89	72	61	52	49
CFSM	.41	.42	.40	.34	.39	.57	.77	.78	.61	.53	.41	.37
IN.	.48	.47	.46	.39	.40	.65	.86	.90	.68	.61	.48	.41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 1995, BY WATER YEAR (WY)

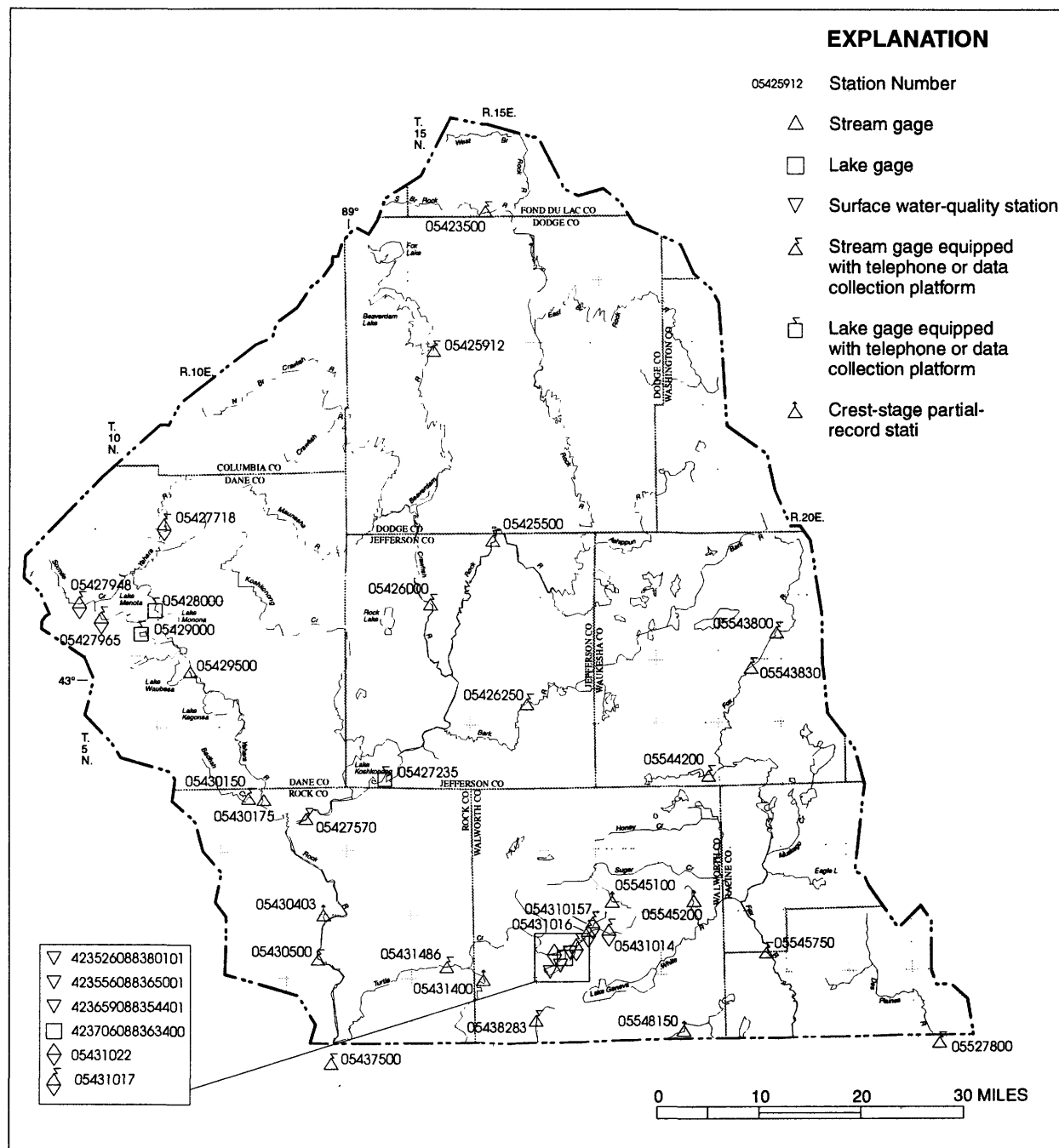
	MEAN	70.5	77.5	64.4	77.9	106	182	113	104	130	107	89.4	78.9
MAX	146	372	155	315	379	483	291	328	586	660	348	202	
(WY)	1962	1962	1973	1946	1938	1959	1993	1960	1947	1993	1943	1942	
MIN	25.3	29.2	23.7	22.1	24.3	33.4	42.0	36.1	34.3	24.0	30.3	33.7	
(WY)	1951	1938	1959	1959	1959	1957	1990	1958	1936	1936	1937	1989	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1935 - 1995
ANNUAL TOTAL	32408	25914	
ANNUAL MEAN	88.8	71.0	100
HIGHEST ANNUAL MEAN			234
LOWEST ANNUAL MEAN			40.8
HIGHEST DAILY MEAN	1680	Feb 20	7830
LOWEST DAILY MEAN	47	Dec 11	7.0
ANNUAL SEVEN-DAY MINIMUM	51	Dec 11	18
INSTANTANEOUS PEAK FLOW		(a) 38	Feb 12, 13
INSTANTANEOUS PEAK STAGE		(a) 39	Feb 7
INSTANTANEOUS LOW FLOW		926	Mar 11
ANNUAL RUNOFF (CFSM)	.63	6.58	Mar 11
ANNUAL RUNOFF (INCHES)	8.49	(c) 12	Feb 5
10 PERCENT EXCEEDS	111	.50	17.26
50 PERCENT EXCEEDS	74	6.79	.00
90 PERCENT EXCEEDS	57		.70
			9.57
			156
			67
			35

(a) Ice affected

(b) From rating curve extended above 7,000 ft³/s on basis of slope-area measurement of peak flow

(c) Result of freezeup



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°44'15", in NW 1/4 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.--Estimated daily discharges: Ice-affected periods, Jan. 2-9, 25-30, Feb. 6-17, and Mar. 1-3. Records good except those for ice-affected periods, which are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	6.6	15	8.0	7.1	5.8	57	39	36	8.0	9.7	277
2	20	6.8	14	7.4	7.0	5.6	50	38	30	7.6	9.4	184
3	20	6.5	12	6.8	7.0	5.6	46	36	26	7.4	14	126
4	18	6.4	12	6.0	6.4	5.9	38	33	22	7.4	16	101
5	15	7.9	13	5.4	5.8	6.1	33	31	21	12	17	89
6	14	10	14	5.2	5.6	6.0	32	29	28	10	14	81
7	12	9.8	13	5.0	5.4	5.7	33	27	79	9.0	40	78
8	11	10	11	5.0	5.2	5.5	37	31	78	8.8	32	74
9	10	10	12	5.2	5.0	5.4	37	48	58	8.5	215	69
10	9.9	9.0	8.6	5.5	5.2	6.2	36	89	46	8.8	281	62
11	9.9	8.4	8.5	6.0	5.0	25	46	101	38	7.3	171	56
12	9.3	8.1	7.4	6.6	4.8	101	82	77	32	7.0	99	52
13	8.9	9.1	7.4	7.1	4.5	123	75	66	28	6.7	59	49
14	8.9	11	7.3	8.5	4.4	99	63	67	24	6.2	73	45
15	8.6	10	7.4	7.9	4.4	76	53	68	21	8.9	63	41
16	8.2	9.9	7.4	8.0	4.5	62	49	58	19	6.6	64	39
17	8.9	9.7	7.5	8.2	4.6	51	46	48	17	6.0	186	36
18	9.4	9.2	7.7	8.3	5.0	42	57	42	15	5.7	175	35
19	9.4	7.7	7.3	7.9	5.6	37	71	38	15	5.6	135	41
20	8.8	7.8	7.9	7.4	7.4	48	66	32	14	6.6	118	47
21	8.5	9.7	8.7	7.2	7.8	59	62	29	13	5.6	82	49
22	11	9.5	8.6	7.0	8.3	52	58	30	13	9.1	61	47
23	9.4	8.4	9.2	7.6	7.8	47	52	32	11	7.2	50	43
24	8.5	8.4	9.6	7.6	7.3	40	47	30	10	6.5	42	40
25	8.2	8.1	10	7.0	7.4	36	44	29	9.8	9.9	37	38
26	8.1	7.3	9.8	6.2	6.5	33	43	27	9.5	7.9	34	36
27	8.4	16	11	6.0	6.7	35	53	33	9.8	19	39	33
28	8.2	23	11	6.0	6.4	38	53	56	9.9	19	75	31
29	7.9	20	11	6.0	---	48	48	61	9.5	10	116	29
30	7.2	17	10	6.2	---	67	43	54	9.1	8.2	275	32
31	6.9	---	9.9	6.7	---	64	---	44	---	10	324	---
TOTAL	335.5	301.3	309.2	208.9	168.1	1240.8	1510	1423	751.6	266.5	2926.1	1960
MEAN	10.8	10.0	9.97	6.74	6.00	40.0	50.3	45.9	25.1	8.60	94.4	65.3
MAX	23	23	15	8.5	8.3	123	82	101	79	19	324	277
MIN	6.9	6.4	7.3	5.0	4.4	5.4	32	27	9.1	5.6	9.4	29
CFSM	.17	.16	.16	.11	.09	.63	.79	.72	.39	.14	1.48	1.03
IN.	.20	.18	.18	.12	.10	.73	.88	.83	.44	.16	1.71	1.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 1995, BY WATER YEAR (WY)

	MEAN	16.7	20.6	17.0	10.5	14.6	67.8	71.8	32.0	23.5	26.4	16.3	15.1
MAX	86.8	106	80.0	40.7	105	176	266	107	129	246	115	76.2	
(WY)	1955	1962	1966	1992	1966	1952	1993	1960	1993	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	

ROCK RIVER BASIN
05423500 SOUTH BRANCH ROCK RIVER AT WAUPUN, WI--CONTINUED

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1949 - 1995	
ANNUAL TOTAL	8820.5		11401.0			
ANNUAL MEAN	24.2		31.2		27.9	
HIGHEST ANNUAL MEAN					94.1 1993	
LOWEST ANNUAL MEAN					2.47 1964	
HIGHEST DAILY MEAN	377	Feb 20	324	Aug 31	1280	Apr 4 1959
LOWEST DAILY MEAN	2.8	Jun 18	(a) 4.4	Feb 14, 15	.00	(b)
ANNUAL SEVEN-DAY MINIMUM	(a) 3.7	Feb 7	(a) 4.6	Feb 11	.00	(c) Sep 7 1958
INSTANTANEOUS PEAK FLOW			386	Aug 9	(d) 1500	Apr 3 1959
INSTANTANEOUS PEAK STAGE			4.99	Aug 9	7.97	Apr 3 1959
INSTANTANEOUS LOW FLOW			3.4	Feb 14	.00	(e)
ANNUAL RUNOFF (CFSM)	.38		.49		.44	
ANNUAL RUNOFF (INCHES)	5.16		6.67		5.96	
10 PERCENT EXCEEDS	48		67		66	
50 PERCENT EXCEEDS	10		12		9.6	
90 PERCENT EXCEEDS	4.9		6.0		.80	

(a) Ice affected

(b) Many days in 1958-59, 1963-64

(c) Also occurred in 1959

(d) From rating curve extended above 650 ft³/s

(e) No flow at times in 1949, 1953-54, 1958-59, 1963-64

05425500 ROCK RIVER AT WATERTOWN, WI

LOCATION.--Lat 43°11'17", long 88°43'34", in SW 1/4 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.

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.--Estimated daily discharges: June 15, 16, Aug. 8 to Sept. 2, and ice-affected period, Jan. 2 to Mar. 5. Records good except those for estimated daily discharges, which are fair (see page 11). Flow partly regulated by powerplant at Watertown. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	154	74	216	204	140	120	600	1010	406	75	73	840
2	161	73	208	120	140	120	610	991	323	77	64	760
3	108	81	213	110	140	120	590	967	261	70	60	701
4	116	142	203	110	130	130	545	946	281	71	64	638
5	98	153	205	100	110	130	517	902	266	75	54	557
6	118	191	214	110	110	128	466	882	242	60	89	472
7	79	199	226	120	100	119	371	763	247	63	102	452
8	88	227	178	120	100	127	330	578	290	68	310	480
9	84	245	203	130	110	146	304	428	431	71	540	518
10	62	246	194	130	100	174	316	580	475	70	800	557
11	69	237	167	140	90	217	320	855	473	65	900	587
12	88	226	204	140	100	346	373	917	460	65	1000	614
13	88	204	217	140	110	466	477	934	436	63	1100	639
14	82	203	218	150	110	568	564	952	404	54	1100	661
15	86	194	225	160	120	583	603	975	360	52	1200	687
16	88	184	228	180	120	554	614	1030	330	54	1200	710
17	82	201	236	190	120	512	633	1180	325	50	1300	737
18	87	171	235	190	120	492	684	1120	325	50	1300	750
19	86	159	219	190	120	475	782	1060	328	71	1400	758
20	89	118	212	180	120	485	809	1000	272	51	1500	753
21	93	131	219	170	120	516	817	955	233	54	1500	706
22	101	142	239	170	130	521	863	899	168	51	1500	544
23	90	164	282	170	140	494	863	865	115	60	1400	356
24	95	173	295	170	150	409	854	809	96	68	1300	224
25	83	165	288	170	140	352	867	623	87	66	1200	231
26	90	159	271	170	130	285	888	395	87	75	1100	211
27	98	170	274	160	130	292	1040	300	84	75	1100	225
28	81	179	263	150	120	311	1150	293	79	78	1000	379
29	88	189	278	150	---	394	1100	328	63	77	980	480
30	71	213	284	150	---	496	1040	402	74	73	940	515
31	72	---	289	140	---	576	---	445	---	68	920	---
TOTAL	2875	5213	7203	4684	3370	10658	19990	24384	8021	2020	27096	16742
MEAN	92.7	174	232	151	120	344	666	787	267	65.2	874	558
MAX	161	246	295	204	150	583	1150	1180	475	78	1500	840
MIN	62	73	167	100	90	119	304	293	63	50	54	211
CFSM	.10	.18	.24	.16	.12	.35	.69	.81	.28	.07	.90	.58
IN.	.11	.20	.28	.18	.13	.41	.77	.94	.31	.08	1.04	.64

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1995, BY WATER YEAR (WY)

	MEAN	342	403	337	283	338	956	1292	691	400	322	241	261
MAX	2981	2034	1148	1055	1627	2448	3875	2634	1785	1625	1540	1552	
(WY)	1987	1986	1986	1946	1938	1985	1979	1993	1993	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 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1931 - 1995

ANNUAL TOTAL	149907	132256	
ANNUAL MEAN	411	362	491
HIGHEST ANNUAL MEAN			1186
LOWEST ANNUAL MEAN			64.5
HIGHEST DAILY MEAN	1910	Mar 17	(a)1500
LOWEST DAILY MEAN	35	Sep 23	50
ANNUAL SEVEN-DAY MINIMUM	55	Sep 19	54
INSTANTANEOUS PEAK FLOW			Jul 16
INSTANTANEOUS PEAK STAGE			(c)5080
ANNUAL RUNOFF (CFSM)	.42	.37	6.32
ANNUAL RUNOFF (INCHES)	5.75	5.08	.51
10 PERCENT EXCEEDS	1410	926	1300
50 PERCENT EXCEEDS	191	213	250
90 PERCENT EXCEEDS	88	74	37

(a) Estimated

(b) Also occurred Sept. 9, 1944

(c) Gage height, 6.19 ft

ROCK RIVER BASIN

05425912 BEAVERDAM RIVER AT BEAVER DAM, WI

LOCATION.--Lat 43°26'57", long 88°50'21", in NE 1/4 SW 1/4 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.

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.--No estimated daily discharge. Records good (see page 11). Flow regulated by dam 0.8 mi upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	10	20	14	24	67	22	185	27	10	5.8	81
2	5.8	5.2	8.1	14	23	77	20	178	55	6.6	4.7	91
3	5.5	7.4	8.2	14	23	74	31	137	71	5.5	8.0	87
4	6.2	8.3	8.8	14	23	71	11	118	70	5.0	6.3	86
5	5.3	11	11	14	22	72	11	99	67	10	6.6	84
6	4.6	18	11	14	22	88	25	77	69	8.9	6.1	77
7	5.8	5.9	56	23	22	132	21	69	106	7.9	16	84
8	8.1	8.6	13	14	21	144	25	49	134	5.5	7.8	73
9	9.8	10	13	15	21	138	26	59	132	6.5	35	70
10	6.4	8.6	13	16	21	132	24	112	130	7.9	23	65
11	5.5	6.4	14	15	20	129	27	160	127	7.7	23	62
12	5.4	7.2	16	15	20	130	35	189	72	7.3	22	60
13	6.0	7.7	15	14	19	132	53	199	29	7.8	22	63
14	5.8	14	12	17	19	132	37	233	14	7.7	26	60
15	5.0	11	12	16	19	130	34	211	13	10	23	49
16	4.8	7.9	13	16	19	128	41	198	11	8.2	33	53
17	5.2	4.8	13	15	19	124	61	206	11	8.1	50	53
18	5.4	16	13	16	19	121	72	157	12	8.2	45	46
19	7.6	8.7	13	16	18	122	92	130	11	6.4	58	49
20	6.8	6.8	13	80	19	134	95	110	11	7.9	66	55
21	5.4	23	13	25	18	111	156	103	9.8	6.2	69	52
22	6.7	18	13	17	18	65	175	59	8.9	9.2	67	53
23	7.8	10	13	43	18	52	167	51	8.4	8.0	71	41
24	7.8	7.3	13	24	18	28	170	48	8.1	7.7	67	39
25	7.0	8.9	13	27	18	19	168	45	7.3	7.0	61	37
26	4.4	6.7	13	27	18	17	189	25	6.7	5.9	64	37
27	6.1	7.6	13	26	34	23	227	18	6.6	11	61	36
28	6.3	18	13	26	45	32	207	23	7.2	7.1	71	34
29	9.7	16	13	25	---	37	197	32	9.6	5.8	70	30
30	8.7	24	13	25	---	29	194	28	13	5.4	65	30
31	9.1	---	13	24	---	23	---	27	---	8.1	73	---
TOTAL	201.2	323.0	439.1	661	600	2713	2613	3335	1257.6	234.5	1226.3	1737
MEAN	6.49	10.8	14.2	21.3	21.4	87.5	87.1	108	41.9	7.56	39.6	57.9
MAX	9.8	24	56	80	45	144	227	233	134	11	73	91
MIN	4.4	4.8	8.1	14	18	17	11	18	6.6	5.0	4.7	30
CFSM	.04	.07	.09	.14	.14	.56	.55	.69	.27	.05	.25	.37
IN.	.05	.08	.10	.16	.14	.64	.62	.79	.30	.06	.29	.41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1995, BY WATER YEAR (WY)

	MEAN	99.5	120	110	82.4	67.0	177	178	97.3	75.9	87.0	65.5	72.8
MAX	446	350	289	281	182	312	527	449	369	561	249	282	
(WY)	1987	1986	1986	1986	1986	1994	1993	1993	1993	1993	1986	1986	
MIN	2.89	6.66	14.2	21.3	20.8	10.9	44.2	4.55	4.86	2.86	3.05	5.13	
(WY)	1989	1989	1995	1995	1988	1988	1994	1989	1985	1988	1988	1988	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1985 - 1995

ANNUAL TOTAL	18420.8	15340.7	
ANNUAL MEAN	50.5	42.0	103
HIGHEST ANNUAL MEAN			244
LOWEST ANNUAL MEAN			39.0
HIGHEST DAILY MEAN	434	233	657
LOWEST DAILY MEAN	4.4	4.4	.64
ANNUAL SEVEN-DAY MINIMUM	5.4	5.4	.77
INSTANTANEOUS PEAK FLOW		394	(a) 758
INSTANTANEOUS PEAK STAGE		8.01	9.35
ANNUAL RUNOFF (CFSM)	.32	.27	.66
ANNUAL RUNOFF (INCHES)	4.36	3.63	8.95
10 PERCENT EXCEEDS	189	127	286
50 PERCENT EXCEEDS	13	20	47
90 PERCENT EXCEEDS	6.1	6.6	6.4

(a) Gage height, 9.32 ft

05426000 CRAWFISH RIVER AT MILFORD, WI

LOCATION.--Lat 43°06'00", long 88°50'58", in SW 1/4 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.

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.--Estimated daily discharges: May 10, Sept. 8-10, 20, and ice-affected periods, Dec. 8-12, 25, 26, 29, 30, Jan. 1 to Mar. 3, and Mar. 8, 9. Records good except those for estimated daily discharges, which are fair (see page 11). 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 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	229	149	277	180	120	230	720	831	567	134	127	662
2	203	104	295	130	120	230	686	816	531	113	122	583
3	186	130	295	130	120	230	661	783	488	88	123	540
4	185	141	297	120	110	226	664	752	440	101	130	496
5	160	147	292	110	100	225	534	726	394	107	144	460
6	131	167	279	110	100	226	532	658	359	125	149	412
7	115	110	205	110	100	219	481	607	363	153	150	389
8	164	163	200	110	100	220	459	547	435	141	250	350
9	173	197	190	110	100	220	461	560	470	148	517	320
10	161	181	200	120	100	236	451	700	524	131	815	300
11	143	163	210	130	100	275	451	792	566	126	953	287
12	139	175	200	130	100	374	459	841	548	109	1040	275
13	138	146	194	130	100	572	551	895	516	105	1040	252
14	135	184	183	140	100	830	569	958	476	103	1010	254
15	126	198	176	140	100	960	569	983	417	110	945	225
16	117	187	177	150	100	1000	562	975	355	113	1050	207
17	117	154	178	160	110	1010	549	1080	318	111	1200	224
18	107	137	182	160	120	978	515	1110	292	110	1170	201
19	126	209	187	160	130	949	593	1100	265	96	1200	194
20	136	193	187	160	140	906	634	1060	241	106	1280	210
21	126	178	186	160	150	897	694	1010	211	94	1280	234
22	119	198	187	150	170	875	714	913	190	97	1250	241
23	137	174	191	150	200	872	710	865	169	118	1180	230
24	146	179	200	150	230	813	694	815	155	119	1100	226
25	150	195	210	140	250	750	693	741	141	127	1010	223
26	139	183	220	140	270	676	681	648	131	156	922	215
27	113	157	230	140	250	630	767	562	119	137	835	223
28	84	137	247	130	250	649	791	534	117	147	801	208
29	135	215	250	130	---	675	820	563	123	136	775	186
30	156	262	250	130	---	706	840	578	140	112	736	158
31	149	---	261	130	---	727	---	582	---	112	717	---
TOTAL	4445	5113	6836	4240	3940	18386	18505	24585	10061	3685	24021	8985
MEAN	143	170	221	137	141	593	617	793	335	119	775	299
MAX	229	262	297	180	270	1010	840	1110	567	156	1280	662
MIN	84	104	176	110	100	219	451	534	117	88	122	158
CFSM	.19	.22	.29	.18	.18	.78	.81	1.04	.44	.16	1.02	.39
IN.	.22	.25	.33	.21	.19	.90	.90	1.20	.49	.18	1.17	.44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1995, BY WATER YEAR (WY)

	MEAN	271	297	253	237	292	1044	979	486	312	268	188	246
MAX	2565	1958	1065	1278	1576	2473	3206	2337	1247	2189	899	1881	
(WY)	1987	1986	1983	1946	1938	1948	1959	1973	1993	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 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1931 - 1995

ANNUAL TOTAL	156859	132802	408
ANNUAL MEAN	430	364	1117
HIGHEST ANNUAL MEAN			1993
LOWEST ANNUAL MEAN			61.8
HIGHEST DAILY MEAN	2570	Mar 12	6130
LOWEST DAILY MEAN	71	Jun 15	1.30
ANNUAL SEVEN-DAY MINIMUM	85	Jun 11	1.5
INSTANTANEOUS PEAK FLOW		(a)100	6140
INSTANTANEOUS PEAK STAGE		1290	11.15
ANNUAL RUNOFF (CFSM)	.56	4.52	.53
ANNUAL RUNOFF (INCHES)	7.66	6.48	7.27
10 PERCENT EXCEEDS	1100	851	1080
50 PERCENT EXCEEDS	210	210	181
90 PERCENT EXCEEDS	121	112	37

(a) Ice affected

ROCK RIVER BASIN
05426250 BARK RIVER NEAR ROME, WI

LOCATION.--Lat 42°57'39" long 88°40'09", in SE 1/4 SW 1/4 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 present.

GAGE.--Water-stage recorder. Elevation of gage is 810 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Ice-affected periods, Dec. 13-15, Jan. 1-13, 21-27, 29, 30, Feb. 4-8, 11-14, and Mar. 1-10. Records good except those for ice-affected periods, which are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	29	72	50	65	36	35	145	74	18	22	87
2	62	29	71	44	65	33	45	146	74	19	22	89
3	39	29	68	43	64	32	60	137	74	20	16	86
4	29	29	65	42	58	34	67	126	74	21	16	84
5	33	35	63	40	54	40	78	115	67	21	23	89
6	36	70	60	38	52	42	93	109	55	19	26	80
7	40	65	66	38	50	42	89	107	60	18	19	65
8	41	70	60	39	49	41	95	104	71	17	24	41
9	40	73	70	40	48	40	99	114	71	19	46	44
10	35	77	66	40	49	43	96	124	71	18	104	46
11	37	76	58	40	49	55	92	132	73	17	112	46
12	40	76	56	40	49	71	90	132	59	17	134	54
13	38	78	56	41	50	87	89	140	39	17	134	57
14	36	83	56	65	54	94	90	147	39	17	142	56
15	34	83	56	75	58	94	92	146	39	19	148	54
16	34	83	58	75	56	93	89	164	40	23	181	53
17	36	80	62	78	51	90	83	150	38	18	356	48
18	36	72	64	77	47	84	85	136	36	18	334	47
19	35	63	61	74	46	78	85	128	30	20	301	47
20	33	68	64	68	43	77	96	115	19	26	277	42
21	33	118	63	66	42	77	100	103	17	24	284	41
22	34	88	61	64	41	85	98	78	17	25	237	42
23	34	67	61	58	41	87	101	63	19	36	215	55
24	32	68	61	62	42	83	98	66	17	26	162	65
25	31	64	61	64	43	78	96	68	17	23	104	57
26	30	60	61	64	41	76	97	59	17	29	99	88
27	30	66	61	62	41	81	123	65	16	27	91	71
28	30	61	60	65	40	87	142	79	16	25	87	56
29	30	65	60	64	---	94	145	76	17	23	80	51
30	28	74	57	64	---	97	145	75	18	21	76	40
31	30	---	57	63	---	88	---	75	---	19	78	---
TOTAL	1106	1999	1915	1743	1388	2139	2793	3424	1274	660	3950	1781
MEAN	35.7	66.6	61.8	56.2	49.6	69.0	93.1	110	42.5	21.3	127	59.4
MAX	62	118	72	78	65	97	145	164	74	36	356	89
MIN	28	29	56	38	40	32	35	59	16	17	16	40
CFSM	.29	.55	.51	.46	.41	.57	.76	.91	.35	.17	1.04	.49
IN.	.34	.61	.58	.53	.42	.65	.85	1.04	.39	.20	1.20	.54

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1995, BY WATER YEAR (WY)

	MEAN	74.4	98.2	86.5	69.1	78.3	133	152	99.0	61.9	59.8	64.3	73.1
MAX	214	214	138	105	118	248	327	180	188	176	127	212	
(WY)	1987	1986	1986	1985	1985	1986	1993	1993	1993	1993	1995	1986	
MIN	23.6	48.6	34.2	40.4	34.5	59.8	85.7	48.1	13.3	7.66	6.04	15.4	
(WY)	1989	1990	1990	1989	1989	1980	1989	1989	1988	1988	1988	1988	

SUMMARY STATISTICS FOR 1994 CALENDAR YEAR FOR 1995 WATER YEAR WATER YEARS 1980 - 1995

	ANNUAL TOTAL	26744	24172	
ANNUAL MEAN	73.3	66.2	88.0	
HIGHEST ANNUAL MEAN			139	1993
LOWEST ANNUAL MEAN			52.9	1989
HIGHEST DAILY MEAN	236	Mar 9	459	Apr 20 1993
LOWEST DAILY MEAN	12	Jun 21	3.6	Aug 4 1988
ANNUAL SEVEN-DAY MINIMUM	14	Jun 17	3.8	Aug 1 1988
INSTANTANEOUS PEAK FLOW			476	Apr 20 1993
INSTANTANEOUS PEAK STAGE			2.56	Apr 20 1993
ANNUAL RUNOFF (CFSM)	.60		.72	
ANNUAL RUNOFF (INCHES)	8.15		9.80	
10 PERCENT EXCEEDS	148		159	
50 PERCENT EXCEEDS	61		76	
90 PERCENT EXCEEDS	29		30	

(a) Also occurred Aug. 3, 4

05427235 LAKE KOSHKONONG NEAR NEWVILLE, WI

LOCATION.--Lat 42°51'27", long 88°56'27", in NW 1/4 NE 1/4 sec.34, T.5 N., R.13 E., Jefferson County, Hydrologic Unit 07090001, 80 ft east of Pottawatomi 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.--No estimated daily gage heights. Records good (see page 11). Lake level regulated by dam at Indianford. Gage-height tele-meter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 12.23 ft, Apr. 25, 1993; minimum, 5.40 ft, Dec. 26, 27, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 8.10 ft, Aug. 23; minimum, 5.45 ft, Jan. 13, 14.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.05	5.70	5.92	5.93	5.93	5.79	7.00	7.50	7.00	6.22	6.22	7.47
2	6.01	5.66	5.92	5.88	5.91	5.77	7.01	7.55	6.92	6.17	6.18	7.34
3	5.97	5.68	5.92	5.85	5.89	5.75	7.05	7.56	6.86	6.14	6.17	7.22
4	5.96	5.70	5.91	5.81	5.87	5.73	7.06	7.55	6.79	6.13	6.17	7.14
5	5.92	5.73	5.91	5.76	5.85	5.71	6.94	7.55	6.70	6.21	6.15	7.05
6	5.88	5.88	5.88	5.72	5.82	5.70	6.93	7.49	6.62	6.25	6.13	6.94
7	5.86	5.87	5.91	5.68	5.79	5.69	6.86	7.43	6.58	6.25	6.13	6.84
8	5.88	5.95	5.86	5.63	5.76	5.66	6.88	7.35	6.50	6.20	6.18	6.73
9	5.89	5.98	5.84	5.59	5.73	5.63	6.81	7.33	6.43	6.21	6.24	6.63
10	5.85	5.95	5.82	5.55	5.71	5.62	6.71	7.38	6.43	6.20	6.39	6.54
11	5.82	5.90	5.79	5.51	5.73	5.64	6.73	7.41	6.43	6.18	6.52	6.45
12	5.84	5.87	5.76	5.48	5.76	5.71	6.75	7.45	6.42	6.16	6.63	6.39
13	5.85	5.84	5.74	5.46	5.77	5.85	6.83	7.50	6.42	6.15	6.72	6.37
14	5.87	5.86	5.72	5.52	5.79	6.05	6.81	7.64	6.41	6.14	6.83	6.32
15	5.87	5.82	5.69	5.63	5.80	6.27	6.80	7.68	6.38	6.17	6.90	6.25
16	5.88	5.79	5.69	5.71	5.80	6.48	6.81	7.71	6.32	6.37	7.00	6.25
17	5.88	5.71	5.69	5.89	5.81	6.66	6.80	7.76	6.28	6.35	7.22	6.24
18	5.88	5.77	5.71	6.00	5.82	6.78	6.81	7.75	6.23	6.30	7.47	6.22
19	5.91	5.74	5.73	6.09	5.83	6.86	6.89	7.76	6.20	6.26	7.68	6.22
20	5.90	5.73	5.73	6.12	5.85	6.98	6.89	7.76	6.19	6.32	7.85	6.27
21	5.88	5.80	5.77	6.12	5.83	7.05	6.95	7.73	6.17	6.29	7.97	6.28
22	5.87	5.79	5.80	6.13	5.82	7.06	6.99	7.66	6.18	6.26	8.05	6.30
23	5.88	5.79	5.84	6.13	5.82	7.08	7.02	7.63	6.19	6.27	8.07	6.26
24	5.87	5.82	5.87	6.11	5.82	7.07	7.05	7.58	6.17	6.25	8.07	6.23
25	5.83	5.86	5.88	6.09	5.82	7.04	7.08	7.52	6.14	6.24	8.03	6.19
26	5.79	5.86	5.90	6.07	5.81	6.98	7.10	7.42	6.13	6.26	7.96	6.14
27	5.76	5.86	5.93	6.05	5.81	6.95	7.26	7.28	6.17	6.25	7.89	6.08
28	5.72	6.01	5.95	6.02	5.81	6.96	7.31	7.27	6.22	6.31	7.85	6.06
29	5.72	5.97	5.94	5.99	---	6.94	7.38	7.21	6.23	6.28	7.81	6.06
30	5.70	5.95	5.93	5.96	---	6.96	7.45	7.11	6.26	6.26	7.69	6.07
31	5.70	---	5.93	5.95	---	6.98	---	7.05	---	6.24	7.58	---
MEAN	5.86	5.83	5.83	5.85	5.81	6.37	6.97	7.50	6.40	6.24	7.09	6.48
MAX	6.05	6.01	5.95	6.13	5.93	7.08	7.45	7.76	7.00	6.37	8.07	7.47
MIN	5.70	5.66	5.69	5.46	5.71	5.62	6.71	7.05	6.13	6.13	6.13	6.06

ROCK RIVER BASIN
05427570 ROCK RIVER AT INDIANFORD, WI

LOCATION.--Lat 42°48'15", long 89°05'25", in SW 1/4 SW 1/4 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 F and M, 250 ft upstream from dam in Indianford, and 1.8 mi upstream from Yahara River.

DRAINAGE AREA.--2,630 mi².

PERIOD OF RECORD.--May 1975 to current year.

REVISED RECORDS.--WDR WI-79-1: Drainage area.

GAGE.--Water-stage recorder. 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.--No estimated daily discharges. Records fair (see page 11). 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 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	890	443	876	938	978	778	1950	2560	1790	455	466	2700
2	851	403	935	896	977	761	1960	2570	1720	425	441	2500
3	795	417	942	856	946	737	1880	2560	1650	359	406	2460
4	752	432	983	811	936	742	1980	2550	1570	407	413	2360
5	692	514	974	766	879	749	1900	2510	1490	390	421	2250
6	634	520	1020	745	851	745	1870	2480	1450	345	400	2010
7	574	485	1000	730	845	718	1920	2430	1460	447	410	2100
8	626	842	846	703	798	706	1930	2460	1490	442	433	1880
9	618	1120	853	692	782	695	2210	2350	1310	469	458	1740
10	610	963	835	685	518	658	1970	2360	1200	409	1100	1660
11	458	909	815	679	379	657	1720	2300	1300	449	1590	1550
12	397	877	799	664	392	717	1550	2340	1280	394	1670	1480
13	403	801	789	602	396	808	1670	2420	1260	372	1770	1350
14	422	810	798	476	414	971	1770	2350	1250	344	1910	1420
15	440	873	701	523	409	1210	1880	2560	1200	399	2040	1320
16	424	838	533	603	431	1440	1810	2570	1120	539	2190	1200
17	386	762	528	872	429	1670	1820	2700	1070	487	2410	1330
18	357	624	545	1100	423	1790	1650	2720	1040	474	2670	1180
19	433	847	550	1220	466	1860	1800	2610	876	465	2930	1140
20	532	876	575	1180	574	1830	1840	2540	775	534	3170	1200
21	533	536	611	1150	817	1970	1770	2580	598	498	3330	1190
22	499	363	758	1170	802	2100	1820	2510	487	453	3410	1110
23	439	446	987	1170	779	2100	1920	2500	493	489	3340	1180
24	521	442	978	1150	782	2070	1870	2470	466	463	3440	1150
25	643	533	994	1140	844	2070	1950	2380	467	446	3340	1080
26	609	640	1000	1110	856	2080	2040	2280	469	498	3280	1010
27	559	650	989	1120	819	2040	2160	2220	458	478	3240	966
28	482	489	1010	1120	793	1970	2250	1980	464	491	3130	689
29	530	930	1040	1040	---	1910	2400	1970	455	506	3120	615
30	584	941	992	979	---	1900	2510	1900	460	462	2940	603
31	514	---	998	934	---	1920	---	1840	---	431	2820	---
TOTAL	17207	20326	26254	27824	19315	42372	57770	74570	31118	13820	62688	44423
MEAN	555	678	847	898	690	1367	1926	2405	1037	446	2022	1481
MAX	890	1120	1040	1220	978	2100	2510	2720	1790	539	3440	2700
MIN	357	363	528	476	379	657	1550	1840	455	344	400	603
CFSM	.21	.26	.32	.34	.26	.52	.73	.91	.39	.17	.77	.56
IN.	.24	.29	.37	.39	.27	.60	.82	1.05	.44	.20	.89	.63

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1995, BY WATER YEAR (WY)

MEAN	1500	1719	1719	1159	1234	2994	3884	2352	1369	1256	1012	1188
MAX	7729	5047	3745	2622	2403	6113	9466	6028	4416	4549	3377	3911
(WY)	1987	1986	1986	1985	1988	1985	1979	1993	1993	1993	1993	1986
MIN	216	297	262	254	283	795	1538	317	185	158	130	182
(WY)	1977	1977	1977	1977	1977	1977	1977	1977	1988	1988	1988	1988

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1975 - 1995
ANNUAL TOTAL	471470	437687	
ANNUAL MEAN	1292	1199	1784
HIGHEST ANNUAL MEAN			3252
LOWEST ANNUAL MEAN			509
HIGHEST DAILY MEAN	4800	3440	11700
LOWEST DAILY MEAN	234	344	39
ANNUAL SEVEN-DAY MINIMUM	311	402	85
INSTANTANEOUS PEAK FLOW		3660	11900
INSTANTANEOUS PEAK STAGE		13.16	(a) 16.23
ANNUAL RUNOFF (CFSM)	.49	.46	.68
ANNUAL RUNOFF (INCHES)	6.67	6.19	9.22
10 PERCENT EXCEEDS	3470	2420	3810
50 PERCENT EXCEEDS	840	934	1280
90 PERCENT EXCEEDS	393	437	348

(a) Datum then in use

LOCATION.--Lat 43°12'32", long 89°21'09", in NW 1/4 NE 1/4 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.--Estimated daily discharges: Ice-affected periods, Jan. 2-12, 22-29, Feb. 5-21, Mar. 2-4, and 8-10. Records good except those for ice-affected periods, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	19	22	20	19	17	27	26	26	18	26	17
2	20	19	22	19	19	16	26	26	25	18	21	17
3	20	19	22	17	19	16	25	25	24	17	20	16
4	19	19	21	17	17	17	24	25	23	18	21	16
5	19	20	22	18	17	18	24	25	23	29	24	16
6	19	26	22	19	17	18	23	25	22	21	20	16
7	19	22	22	18	17	18	24	24	24	20	19	17
8	19	21	22	17	18	17	29	27	25	19	18	17
9	19	22	21	16	18	16	29	60	23	18	18	17
10	19	21	21	17	17	17	28	65	22	18	19	16
11	19	20	20	19	16	71	40	45	22	17	18	16
12	19	20	20	20	16	72	49	35	22	17	17	15
13	19	21	20	20	16	46	35	33	21	17	16	16
14	19	24	20	21	17	34	29	34	21	17	16	15
15	19	22	20	21	18	31	27	30	21	17	15	15
16	19	21	20	20	18	29	26	33	20	19	22	16
17	19	21	21	20	18	27	28	86	20	18	29	14
18	19	21	21	19	18	27	42	43	20	17	19	15
19	19	20	20	19	19	26	39	33	19	17	29	17
20	19	20	20	20	27	35	30	29	19	19	24	18
21	19	23	20	19	25	37	32	27	19	17	19	17
22	19	21	20	18	22	29	30	26	18	18	17	17
23	20	20	20	18	24	28	27	27	18	20	16	16
24	19	20	20	17	22	26	27	27	18	18	15	15
25	20	20	21	17	20	26	26	26	18	18	15	15
26	19	19	20	18	19	25	26	25	22	19	15	15
27	19	35	21	18	19	38	38	32	23	18	15	15
28	19	44	22	18	18	43	32	77	20	18	25	15
29	19	27	22	18	---	36	28	40	19	17	21	15
30	19	23	21	19	---	31	27	31	19	17	22	15
31	19	---	21	19	---	28	---	27	---	18	19	---
TOTAL	594	670	647	576	530	915	897	1094	636	569	610	477
MEAN	19.2	22.3	20.9	18.6	18.9	29.5	29.9	35.3	21.2	18.4	19.7	15.9
MAX	20	44	22	21	27	72	49	86	26	29	29	18
MIN	19	19	20	16	16	16	23	24	18	17	15	14
CFSM	.26	.30	.28	.25	.26	.40	.41	.48	.29	.25	.27	.22
IN.	.30	.34	.33	.29	.27	.46	.45	.55	.32	.29	.31	.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1995, BY WATER YEAR (WY)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
MEAN	15.5	16.8	14.8	14.2	22.3	45.1	23.8	18.2	19.6	23.0	17.8	19.1								
MAX	29.2	30.4	27.0	23.4	74.2	135	47.8	35.3	38.9	95.3	40.3	50.1								
(WY)	1994	1994	1994	1980	1994	1976	1993	1995	1993	1993	1993	1980								
MIN	7.75	8.78	8.54	6.50	4.76	11.8	14.0	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 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1976 - 1995	
ANNUAL TOTAL	10994		8215			
ANNUAL MEAN	30.1		22.5		20.3	
HIGHEST ANNUAL MEAN					39.1	
LOWEST ANNUAL MEAN					10.9	
HIGHEST DAILY MEAN	491	Feb 20	86	May 17	519	Jul 6 1993
LOWEST DAILY MEAN	16	Jun 18	14	Sep 17	4.6	Mar 1 1978
ANNUAL SEVEN-DAY MINIMUM	17	Jun 12	15	Sep 24	4.6	Mar 1 1978
INSTANTANEOUS PEAK FLOW			178	Mar 11	2050	Jul 6 1993
INSTANTANEOUS PEAK STAGE			4.03	Mar 11	6.58	Jul 6 1993
INSTANTANEOUS LOW FLOW			(a)8.3	Feb 4	(a)2.9	Feb 25 1991
ANNUAL RUNOFF (CFSM)			.31		.28	
ANNUAL RUNOFF (INCHES)	5.56		4.15		3.74	
10 PERCENT EXCEEDS	36		30		32	
50 PERCENT EXCEEDS	22		20		14	
90 PERCENT EXCEEDS	19		17		8.0	

(a) Result of freezeup

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.

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.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 3,240 lb, Feb. 20, 1994; minimum daily, 0.81 lb, Jan. 31, 1991.

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, 1,350 mg/L, May 17; minimum observed, 9.0 mg/L, Nov. 15 and Jan. 31.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 160 tons, May 17; minimum daily, 0.38 ton, Feb. 11-12.

TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 2.70 mg/L, May 17; minimum observed, 0.03 mg/L, Jan. 31.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 569 lb, May 17; minimum daily, 2.97 lb, Feb. 4.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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)	PHOS- ORTH, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDED (MG/L) (80154)
OCT 1994						
*05...	1310	--	19	--	--	10
*06...	1215	--	19	0.076	0.049	--
*12...	1505	--	19	--	--	11
*12...	1510	--	19	0.066	0.045	--
*20...	1020	--	19	0.076	0.042	--
*26...	1355	--	19	0.064	0.033	--
NOV						
*03...	1126	--	19	0.040	0.025	--
09...	0915	--	33	0.840	--	1090
*09...	1310	--	22	--	--	52
*09...	1325	--	22	0.120	0.041	--
*15...	1455	--	23	0.070	--	9
*22...	1115	--	21	0.080	--	--
27...	1230	--	29	0.520	0.117	313
27...	1415	--	37	0.410	--	182
27...	1515	--	45	0.400	0.135	163
27...	1600	--	54	0.510	0.191	207
27...	2200	--	58	0.390	0.216	92
28...	0400	--	54	0.340	--	71
*28...	1055	--	45	0.400	0.288	42
29...	0400	--	30	0.160	--	16
DEC						
*28...	1335	--	22	0.040	--	13
JAN 1995						
*19...	0830	--	19	0.040	0.021	--
*31...	1520	--	19	0.030	--	9
FEB						
17...	1915	18	--	--	--	54
17...	1945	18	--	0.100	--	--
20...	1545	27	--	0.790	--	402
20...	1615	27	--	0.830	--	413
20...	1715	27	--	0.830	--	345
20...	2315	27	--	1.80	--	104
21...	0445	25	--	1.80	--	91
21...	1430	25	--	1.10	--	36
*22...	1250	--	21	0.320	0.228	14

* Equal-width increment (EWI) sample

ROCK RIVER BASIN

413

05427718 YAHARA RIVER AT WINDSOR, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDED (MG/L) (80154)
MAR 1995					
11...	1200	28	0.590	--	284
11...	1330	58	0.830	0.326	424
11...	1430	100	1.10	--	837
11...	1500	133	1.90	0.510	1110
11...	1600	172	1.30	0.840	954
11...	1915	145	1.50	--	497
11...	2315	106	1.10	0.590	400
12...	0600	81	1.60	--	313
12...	1205	63	--	--	175
12...	1210	63	0.950	--	98
*12...	1215	62	0.950	--	--
12...	2145	62	0.450	--	65
13...	0945	44	0.290	--	39
*16...	1443	29	0.080	--	28
20...	0745	32	0.140	--	62
20...	1830	42	0.140	--	47
21...	0030	43	0.100	--	45
22...	0030	32	0.170	--	24
*22...	1640	29	0.080	0.040	--
*22...	1641	29	--	--	55
27...	1015	33	0.160	--	94
27...	1715	48	0.060	--	74
27...	2315	49	0.100	--	83
*28...	1308	43	--	--	38
28...	1309	43	--	--	52
*28...	1310	43	0.240	0.123	--
28...	2315	40	0.120	--	39
30...	1115	30	0.080	--	13
APR					
*06...	1317	23	0.040	0.022	13
07...	2330	28	0.280	--	69
09...	0530	30	--	--	38
10...	1130	28	0.060	0.026	--
11...	1130	38	0.130	0.057	--
*11...	1527	39	0.220	0.094	--
11...	2045	47	0.240	0.097	82
12...	0400	56	0.300	0.154	80
12...	1307	47	0.250	0.138	51
13...	1000	35	0.110	--	20
18...	1115	37	0.150	0.037	75
18...	1330	52	0.320	0.063	199
18...	1730	69	0.560	0.264	461
19...	1100	39	0.140	0.088	95
21...	2400	32	--	--	19
27...	0045	33	0.100	--	43
27...	0400	39	0.130	--	46
27...	1200	39	0.140	--	31
28...	0400	34	0.120	--	22
MAY					
*04...	1237	25	0.050	0.025	--
09...	0100	38	0.260	0.064	127
09...	0245	54	0.290	0.156	138
09...	0415	69	0.420	0.114	210
09...	0615	83	0.450	0.158	204
09...	0915	70	0.290	--	108
10...	1150	70	0.240	0.130	62
11...	0715	48	0.200	--	43
*12...	0957	35	0.119	0.049	--
16...	2145	42	0.260	--	164
16...	2245	74	0.550	0.116	1290
17...	0030	98	0.790	0.086	605
17...	0645	104	2.70	--	1350
*17...	0735	105	1.60	--	1310
17...	0740	105	--	--	1230
*17...	0837	105	1.90	0.318	978
17...	0845	105	1.80	--	913
17...	1300	91	1.10	0.228	554
17...	1900	67	0.550	--	278
18...	0845	45	0.270	--	101
19...	1054	33	--	--	45
*19...	1250	33	0.161	0.036	--
*25...	1136	26	0.121	0.032	--
27...	2000	37	0.260	--	139
27...	2145	61	0.490	--	400
27...	2330	79	0.490	--	317
28...	0045	95	0.600	--	314
28...	0615	103	0.740	--	411
28...	1230	76	0.520	--	221
29...	0045	50	0.270	--	109
30...	0045	33	0.180	--	64
31...	0800	28	0.270	--	183

* Equal-width increment (EWI) sample

ROCK RIVER BASIN
05427718 YAHARA RIVER AT WINDSOR, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDED (MG/L) (80154)
JUN 1995					
*01...	1308	26	0.149	0.059	--
07...	1915	38	0.250	--	185
08...	0045	29	0.240	--	130
*08...	1158	24	0.173	0.068	--
*15...	1403	21	0.137	0.051	94
*22...	1232	18	0.132	0.068	--
26...	1600	28	--	--	288
26...	2000	34	--	--	269
*29...	1348	19	0.127	0.060	--
JUL					
05...	0045	25	0.170	--	84
05...	0515	38	0.180	--	163
05...	1200	25	--	--	71
05...	2000	26	0.170	--	80
*06...	1355	21	0.175	0.092	--
*11...	1402	18	0.060	--	40
*13...	1335	17	0.116	0.062	--
*20...	1103	19	0.111	0.060	--
22...	1745	24	0.170	--	54
23...	0045	26	0.200	--	90
*26...	1302	19	--	--	33
*26...	1304	19	0.100	0.055	--
31...	2130	22	0.290	--	146
AUG					
01...	0030	35	0.290	--	203
01...	0830	29	0.260	--	124
01...	1630	23	--	--	77
02...	1015	33	0.330	--	139
*03...	1150	20	0.127	0.074	--
04...	2045	25	0.180	--	83
05...	0445	26	0.260	--	140
05...	2045	22	0.300	--	64
*10...	1148	19	0.127	0.119	--
16...	1745	30	0.570	--	267
16...	1830	44	0.770	--	455
16...	2030	32	0.530	--	164
16...	2130	40	--	--	331
16...	2200	52	0.850	--	--
17...	0200	37	0.450	--	220
*17...	1115	28	0.452	0.270	--
18...	0200	21	0.490	--	171
19...	1000	39	0.390	--	271
19...	1330	46	--	--	377
19...	1400	54	0.260	--	530
19...	1730	40	0.520	--	288
20...	0930	24	0.370	--	112
*23...	1200	16	--	--	33
*24...	1015	15	--	--	40
*24...	1208	15	0.109	0.077	--
28...	0915	33	0.600	--	467
28...	1315	41	0.540	--	288
28...	1345	52	0.980	--	625
28...	1630	38	0.440	--	207
28...	1900	25	0.350	--	105
30...	0730	21	0.240	--	56
30...	0915	28	0.220	--	--
*31...	0901	19	0.164	0.095	--
SEP					
*06...	1518	16	0.070	0.054	--
*13...	1452	16	0.059	0.038	--
19...	1900	21	0.230	--	71
*20...	1629	18	0.111	0.072	--
28...	1335	15	0.048	0.028	--

* Equal-width increment (EWI) sample

05427718 YAHARA RIVER AT WINDSOR, WI--CONTINUED

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.84	.52	.94	.68	.44	.53	.97	1.5	4.0	2.4	7.9	1.6
2	.74	.51	.93	.64	.44	.48	.93	1.4	3.0	2.2	3.4	1.5
3	.65	.51	.91	.57	.44	.47	.89	1.4	2.6	2.1	2.5	1.4
4	.58	.51	.89	.56	.41	.50	.85	1.3	2.2	2.0	2.9	1.4
5	.52	.59	.93	.59	.40	.53	.83	1.3	2.0	7.4	6.0	1.3
6	.51	1.6	.92	.61	.40	.52	.80	1.2	1.7	4.3	2.9	1.3
7	.51	.98	.89	.57	.40	.51	1.2	1.2	3.4	3.5	2.2	1.3
8	.53	.80	.88	.53	.43	.47	4.4	2.4	7.7	2.9	2.1	1.3
9	.54	3.4	.86	.50	.43	.44	2.8	19	6.2	2.5	2.1	1.2
10	.53	1.2	.83	.52	.41	.46	2.2	12	6.0	2.2	2.1	1.1
11	.53	.92	.79	.57	.38	104	6.3	5.1	5.8	1.9	1.9	1.1
12	.53	.79	.81	.60	.38	37	8.0	3.0	5.6	1.8	1.8	1.0
13	.53	.69	.78	.60	.39	5.3	2.1	2.3	5.6	1.7	1.7	1.0
14	.53	.69	.77	.60	.41	3.2	1.5	2.2	5.5	1.7	1.6	.95
15	.53	.55	.77	.60	.44	2.6	1.4	1.8	5.3	1.7	1.5	.94
16	.53	.50	.78	.57	.44	2.2	1.3	18	4.8	1.8	10	.92
17	.53	.50	.80	.55	.98	1.9	1.4	160	4.3	1.6	16	.82
18	.53	.50	.79	.54	1.2	1.7	18	12	4.0	1.5	7.9	.81
19	.53	.49	.76	.53	1.0	1.5	10	4.2	3.6	1.4	20	1.6
20	.54	.48	.75	.55	8.5	4.2	4.1	2.8	3.3	1.6	7.6	1.4
21	.52	.56	.77	.51	3.8	3.4	2.2	2.2	3.0	1.5	3.7	.97
22	.54	.51	.75	.47	.96	3.1	1.5	2.0	2.7	1.8	2.3	.86
23	.56	.49	.73	.47	.79	2.1	1.3	2.0	2.5	3.1	1.5	.80
24	.54	.48	.74	.44	.69	1.7	1.2	2.0	2.3	2.1	1.6	.75
25	.55	.48	.76	.43	.65	1.5	1.1	1.9	2.1	1.8	1.6	.73
26	.53	.46	.74	.45	.60	1.4	1.2	1.7	7.2	1.7	1.5	.70
27	.52	11	.74	.45	.58	6.7	3.4	11	5.5	1.6	1.4	.68
28	.52	5.8	.79	.44	.56	6.6	1.9	56	3.4	1.5	14	.66
29	.52	1.2	.78	.43	---	2.7	1.6	9.5	2.9	1.5	3.9	.63
30	.51	1.0	.73	.45	---	1.2	1.5	7.9	2.7	1.4	3.8	.62
31	.51	---	.72	.44	---	1.0	---	10	---	2.6	2.2	---
TOTAL	17.08	38.71	25.03	16.46	26.95	199.91	86.87	360.3	120.9	68.8	141.6	31.34

WTR YR 1995 TOTAL 1133.95

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.7	4.60	10.7	4.31	3.06	9.08	9.54	9.44	22.3	12.0	31.5	12.9
2	10.0	4.28	9.29	4.10	3.11	8.17	8.39	8.41	18.6	11.8	20.0	11.1
3	9.30	4.12	8.02	3.67	3.16	8.02	7.35	7.55	17.1	11.5	14.6	9.39
4	8.75	4.09	7.00	3.67	2.97	8.36	6.37	6.93	15.4	11.4	16.7	8.16
5	8.23	4.88	7.07	3.89	2.99	8.81	5.68	6.74	14.2	28.1	34.8	7.10
6	7.77	22.5	6.94	4.10	3.04	8.60	5.09	6.66	13.1	19.7	28.8	6.20
7	7.55	14.6	6.64	3.89	3.09	8.42	8.58	6.60	17.0	15.3	22.2	6.19
8	7.59	12.6	6.53	3.67	3.33	7.76	32.3	17.7	25.4	11.7	17.5	6.20
9	7.46	15.9	6.27	3.46	3.39	7.17	16.1	94.2	21.0	9.22	15.2	5.83
10	7.03	12.3	6.01	3.67	3.25	7.48	9.68	87.2	19.6	7.26	13.0	5.48
11	6.80	11.0	5.65	4.10	3.12	438	40.4	44.9	18.5	6.04	11.8	5.23
12	6.67	10.0	5.73	4.32	3.17	396	67.7	23.1	17.6	7.50	10.9	4.93
13	6.73	9.41	5.47	4.40	3.22	72.3	21.7	19.2	17.0	9.96	10.4	4.98
14	6.86	10.0	5.38	4.47	3.48	29.3	12.9	18.3	16.5	10.6	9.87	4.85
15	6.98	8.50	5.29	4.54	3.75	18.5	11.3	14.6	15.7	10.6	9.18	4.92
16	7.12	8.06	5.32	4.37	3.81	13.1	10.6	34.0	14.8	11.5	49.8	4.99
17	7.30	8.12	5.40	4.24	5.30	11.4	10.7	569	14.5	10.8	73.7	4.64
18	7.38	8.28	5.29	4.20	5.92	10.7	62.9	65.7	14.3	10.3	38.7	4.71
19	7.65	8.21	4.99	4.16	6.13	10.2	35.5	30.5	14.1	9.96	56.5	10.4
20	7.77	8.31	4.89	4.30	74.9	22.5	20.2	23.9	13.7	11.3	47.8	12.2
21	7.45	9.75	4.99	3.96	174	25.7	18.9	21.2	13.3	9.98	27.4	9.49
22	7.45	9.14	4.79	3.61	46.0	17.1	15.9	19.6	12.7	12.0	18.3	8.16
23	7.50	8.49	4.62	3.53	28.9	11.4	13.0	19.2	12.6	19.8	12.8	7.03
24	7.11	8.18	4.67	3.26	18.1	10.2	11.2	18.6	12.1	13.6	9.44	6.07
25	7.08	7.83	4.71	3.18	14.5	9.28	9.79	17.0	11.8	11.3	8.86	5.45
26	6.58	7.40	4.57	3.29	11.8	8.50	9.32	15.6	22.5	10.6	8.53	4.90
27	6.20	64.8	4.51	3.21	10.3	17.5	26.6	40.3	21.4	9.62	8.17	4.36
28	5.84	78.7	4.76	3.14	9.77	38.7	18.7	229	16.1	9.47	56.2	4.01
29	5.49	22.0	4.74	3.07	---	20.4	12.5	49.7	13.3	9.29	27.6	3.90
30	5.07	13.9	4.51	3.11	---	13.5	10.6	34.9	12.6	9.11	24.0	4.07
31	4.80	---	4.47	3.08	---	11.0	---	35.3	---	12.9	16.5	---
TOTAL	226.21	419.95	179.22	117.97	457.56	1287.15	549.49	1595.03	488.8	364.21	750.75	197.84

WTR YR 1995 TOTAL 6634.18

ROCK RIVER BASIN
05427948 PHEASANT BRANCH AT MIDDLETON, WI

LOCATION.--Lat 43°06'12", long 89°30'42", in NE 1/4 NW 1/4 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.--Estimated daily discharges: Ice-affected periods, Dec. 8, Jan. 7, 8, 23, 24, Feb. 4, 10, 14, 18-21, and Mar. 1, 2, 10. Records fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	1.9	3.2	2.6	1.9	1.6	3.3	3.4	3.1	1.7	2.6	1.6
2	2.7	1.9	3.1	2.4	1.9	1.6	3.0	3.2	2.9	1.7	2.7	1.5
3	2.6	1.8	3.0	2.2	1.8	1.6	2.9	3.1	2.7	1.7	2.0	1.5
4	2.5	1.9	2.8	1.9	1.7	1.7	2.5	3.0	2.7	2.0	1.9	1.5
5	2.5	3.7	2.9	1.8	1.6	1.7	2.4	2.9	2.6	9.7	1.8	1.5
6	2.5	4.6	2.8	1.8	1.6	1.6	2.4	2.8	4.3	4.3	1.7	1.4
7	2.7	2.4	2.7	1.8	1.6	1.7	4.2	2.7	5.9	2.8	1.7	2.0
8	2.7	2.4	2.6	1.8	1.5	1.6	5.0	6.7	3.8	2.5	1.8	1.5
9	2.4	2.7	2.6	1.8	1.5	1.6	4.7	16	2.3	7.5	2.0	1.4
10	2.4	2.2	2.5	1.8	1.5	2.2	4.5	22	2.3	2.8	1.7	1.4
11	2.2	2.2	2.4	1.9	1.4	31	31	7.1	2.1	2.3	1.6	1.4
12	2.2	2.1	2.3	2.3	1.3	13	23	4.4	2.0	2.1	1.6	1.4
13	2.1	2.8	2.2	2.3	1.3	5.1	7.0	7.3	2.1	2.0	1.6	1.5
14	2.2	2.9	2.2	2.5	1.3	3.9	4.4	5.6	2.2	2.0	1.6	1.4
15	2.0	2.4	2.2	2.3	1.4	3.7	3.6	3.9	2.2	2.8	1.6	1.4
16	2.0	2.3	2.3	2.1	1.4	3.6	3.4	3.5	2.2	3.0	9.7	1.8
17	2.1	2.2	2.4	2.4	1.4	3.4	3.6	3.2	2.1	2.4	11	1.6
18	2.2	2.1	2.4	2.2	1.6	3.1	18	3.1	2.0	2.3	2.8	1.3
19	2.3	2.0	2.3	2.0	4.0	3.1	11	2.9	1.9	2.7	13	4.5
20	2.2	2.3	2.3	2.1	12	8.9	4.4	2.7	2.1	2.5	6.2	2.2
21	2.2	4.1	2.4	2.1	6.0	6.5	7.4	2.6	2.1	2.0	2.9	2.1
22	2.6	2.6	2.4	2.0	3.6	3.8	4.8	2.4	2.0	6.7	2.4	1.6
23	2.2	2.4	2.4	1.9	3.4	3.6	3.9	3.2	1.9	4.0	2.0	1.5
24	2.0	2.3	2.6	1.8	2.7	3.4	3.5	2.8	1.9	4.9	1.9	1.5
25	1.9	2.2	2.7	1.8	2.4	3.1	3.3	2.5	1.9	4.9	1.8	1.5
26	2.0	2.1	2.8	1.8	2.0	3.0	6.8	2.4	3.0	3.6	1.7	1.5
27	1.9	18	3.0	1.8	1.9	14	21	14	2.1	3.5	1.7	1.4
28	2.0	19	3.6	1.8	1.9	12	7.0	33	2.0	2.9	2.7	1.4
29	2.0	4.1	3.5	1.8	---	5.8	4.3	7.9	2.2	2.5	3.1	1.4
30	1.9	3.4	3.0	1.8	---	4.1	3.8	4.1	2.1	2.2	2.2	2.3
31	1.9	---	2.9	1.8	---	3.6	---	3.4	---	2.5	1.7	---
TOTAL	70.0	109.0	82.5	62.4	67.6	158.6	210.1	187.8	74.7	100.5	94.7	50.0
MEAN	2.26	3.63	2.66	2.01	2.41	5.12	7.00	6.06	2.49	3.24	3.05	1.67
MAX	2.9	19	3.6	2.6	12	31	31	33	5.9	9.7	13	4.5
MIN	1.9	1.8	2.2	1.8	1.3	1.6	2.4	2.4	1.9	1.7	1.6	1.3
CFSM	.13	.21	.16	.12	.14	.30	.41	.35	.15	.19	.18	.10
IN.	.15	.24	.18	.14	.15	.35	.46	.41	.16	.22	.21	.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1995, BY WATER YEAR (WY)

	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
MEAN	2.37	3.21	2.45	2.24	5.66	11.7	5.17	2.89	4.10	5.48	3.15	3.85
MAX	6.42	12.3	6.11	7.52	20.4	34.6	14.7	6.15	17.8	32.5	8.78	13.0
(WY)	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977	1976
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 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1974 - 1995

ANNUAL TOTAL	1975.7	1267.9	
ANNUAL MEAN	5.41	3.47	4.38
HIGHEST ANNUAL MEAN			11.0
LOWEST ANNUAL MEAN			2.78
HIGHEST DAILY MEAN	333	33	349
LOWEST DAILY MEAN	1.6 (a) Aug 29	1.3 (b) Feb 12-14	.17 Dec 25-27
ANNUAL SEVEN-DAY MINIMUM	1.7 Sep 2	(c) 1.4 Feb 11	.18 Dec 21
INSTANTANEOUS PEAK FLOW		108 Mar 11	746 Jul 6
INSTANTANEOUS PEAK STAGE		5.74 Mar 11	8.92 Jul 6
INSTANTANEOUS LOW FLOW		1.2 Feb 12	.15 Dec 21
ANNUAL RUNOFF (CFSM)	.32	.20	.26
ANNUAL RUNOFF (INCHES)	4.30	2.76	3.48
10 PERCENT EXCEEDS	5.3	5.7	5.9
50 PERCENT EXCEEDS	2.4	2.4	1.7
90 PERCENT EXCEEDS	1.9	1.6	.76

(a) Also occurred Sept. 7, 8

(b) Also occurred Sept. 18

(c) Ice affected

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 September 1995.

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, 0.07 mg/L, Jan. 3, 1994.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 2,040 lb, July 6, 1993; minimum daily, 0.30 lb, Aug. 20, 21, 1992.

TOTAL ORTHO-PHOSPHORUS CONCENTRATIONS: Maximum observed, 2.40 mg/L, Feb. 29, 1992; minimum observed, 0.03 mg/L, May 22, 1992.

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, 1,610 mg/L, Mar. 11; minimum observed, 4 mg/L, May 11.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 62 tons, Mar. 11; minimum daily, 0.03 ton, May 6, 7.

TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 4.17 mg/L, Mar. 11; minimum observed, 0.09 mg/L, Apr. 6.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 432 lb, Mar. 11; minimum daily, 0.77 lb, Jan. 5, 9.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDE (MG/L) (80154)
OCT 1994					
*06...	1100	2.4	0.162	0.059	--
*12...	0850	2.2	0.159	0.043	--
*12...	1016	2.2	--	--	31
*20...	0831	2.1	0.178	0.038	--
*26...	0755	2.0	0.132	0.030	--
*28...	1214	1.9	--	--	36
NOV					
*03...	0825	1.8	0.106	0.027	--
05...	2130	10	0.230	--	43
06...	0330	6.6	--	--	18
*09...	0800	2.9	0.208	0.082	--
*26...	0937	2.1	--	--	12
27...	1100	13	0.310	0.105	--
27...	1145	25	--	--	235
27...	1220	40	0.550	0.091	--
27...	1445	24	--	--	93
27...	1805	36	0.450	--	--
27...	1935	33	--	--	138
27...	2125	34	0.570	--	--
27...	2255	41	--	--	442
28...	0155	34	1.72	0.750	--
*28...	0941	24	--	--	104
28...	1945	7.4	1.13	--	--
*29...	1000	4.1	--	--	16
DEC					
*27...	1109	2.9	--	--	11
JAN 1995					
*09...	1245	1.8	--	--	13
*19...	0725	2.1	0.280	0.049	--
*25...	0907	1.8	--	--	16

* Equal-width increment (EWI) sample

ROCK RIVER BASIN

05427948 PHEASANT BRANCH AT MIDDLETON, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDE (MG/L) (80154)
FEB 1995						
*02...	1325	--	1.9	--	--	15
*16...	1306	--	1.4	--	--	22
19...	2005	4.0	--	--	--	20
20...	0805	12	--	1.89	--	--
20...	1725	12	--	1.39	--	31
20...	2325	12	--	2.35	--	49
21...	1125	6.0	--	1.48	--	18
21...	1725	6.0	--	--	--	10
*22...	0905	--	3.3	0.870	0.580	--
*23...	1040	--	3.1	0.440	--	12

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDE (MG/L) (80154)
MAR 1995					
*08...	1048	1.7	--	--	19
11...	1305	10	0.390	0.167	53
11...	1410	38	0.740	--	114
11...	1505	77	4.17	--	1610
11...	1725	103	3.12	1.04	997
11...	1855	77	--	--	684
11...	2155	44	1.94	1.02	333
12...	0200	26	--	--	182
12...	1255	8.3	0.870	--	56
12...	1855	9.6	0.630	--	40
*13...	0827	5.0	0.570	0.286	22
13...	0828	5.0	0.580	0.282	23
15...	1253	3.6	--	--	12
20...	0855	7.9	0.210	--	47
20...	1337	6.6	0.200	--	31
20...	1640	17	0.320	--	38
20...	2240	12	--	--	23
*21...	1032	6.2	--	--	15
21...	1040	6.2	0.900	--	--
*22...	0804	3.8	0.450	0.260	19
27...	0735	11	0.200	--	61
27...	0820	22	0.210	--	65
*27...	1217	19	--	--	80
27...	1218	19	--	--	85
27...	2020	23	0.870	--	186
*28...	0946	12	0.630	0.366	--
*28...	1058	12	0.580	--	24
29...	0820	6.2	0.450	--	7
*30...	0715	4.2	0.250	--	10
APR					
*06...	0737	2.4	0.090	0.018	36
07...	2030	10	0.260	--	101
08...	0230	8.3	0.570	--	37
*10...	1013	3.6	0.290	--	26
10...	2245	9.6	0.390	0.101	--
11...	0130	20	--	--	436
11...	0150	36	0.420	0.085	--
11...	0620	41	1.04	--	800
*11...	0922	32	1.13	0.430	--
11...	0933	31	--	--	315
*11...	0934	31	--	--	370
11...	1350	26	0.780	--	168
11...	2155	41	0.530	--	205
12...	0055	41	--	--	193
12...	0225	38	0.880	0.440	--
12...	0955	24	0.770	--	77
13...	0355	8.7	0.440	--	18
13...	1555	6.2	0.330	--	8
18...	0720	11	0.220	--	43
18...	1245	32	0.320	--	101
*18...	1246	32	0.310	--	162
18...	1730	31	0.760	--	154
18...	1900	33	--	--	433
19...	0100	23	0.580	--	92
*19...	0800	12	0.590	--	79
19...	1900	6.2	0.450	--	23
21...	0250	10	0.240	--	31
21...	2050	6.2	0.580	--	20
*24...	0816	3.5	--	--	34
26...	1915	11	0.330	--	80
27...	0145	23	0.280	--	49
27...	0745	29	1.52	--	121
27...	1345	23	0.760	--	55
28...	1345	6.2	0.350	--	8

* Equal-width increment (EWI) sample

05427948 PHEASANT BRANCH AT MIDDLETON, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDEED (MG/L) (80154)
MAY 1995					
*04...	0817	2.9	0.160	0.018	--
08...	0955	11	0.364	--	113
09...	0330	21	0.280	--	51
09...	0725	12	0.555	--	29
*09...	0726	12	0.567	--	29
09...	2130	9.2	0.493	--	18
09...	2300	33	0.496	--	98
*10...	0843	28	--	--	95
10...	1700	18	0.677	--	29
11...	1700	5.3	0.326	--	4
*12...	0814	4.5	0.236	0.083	--
13...	1600	11	0.374	--	157
14...	1000	5.3	0.979	--	12
*18...	1025	3.1	--	--	9
*19...	0740	2.9	0.176	0.022	--
*25...	1236	2.5	0.246	0.022	--
27...	1555	12	0.261	--	54
27...	2015	61	1.12	--	448
27...	2245	41	0.543	--	141
28...	0145	57	2.26	--	701
28...	0615	46	1.19	--	256
29...	1515	6.6	0.445	--	15
JUN					
*01...	0854	3.2	0.215	0.075	--
06...	1710	12	--	--	122
07...	2215	15	--	--	154
08...	0850	4.7	--	--	200
*08...	0857	4.7	0.512	0.155	--
*15...	1015	2.2	0.275	0.071	--
*22...	0922	2.0	0.290	0.122	--
*26...	0722	1.9	--	--	17
*29...	0904	2.0	0.274	0.123	--
JUL					
05...	0030	12	0.425	--	337
05...	0045	29	0.510	--	369
05...	0555	6.2	--	--	55
05...	1520	14	0.475	--	30
*06...	1011	5.0	0.579	0.278	--
*06...	1047	5.0	0.563	--	105
09...	0335	11	0.288	--	29
09...	0420	38	0.427	--	230
09...	0720	12	0.449	--	87
*13...	0911	2.1	0.336	0.228	--
*18...	0703	2.2	--	--	27
19...	1635	6.2	--	--	29
*20...	0925	2.3	0.223	0.128	--
22...	1925	11	0.251	--	14
22...	2010	46	0.816	--	466
22...	2145	29	--	--	175
23...	0145	6.6	0.619	--	89
24...	1025	21	0.608	--	120
25...	2010	22	0.481	--	103
*26...	0837	3.3	0.463	0.274	--
27...	2250	5.7	0.337	--	81
AUG					
*03...	0920	2.0	0.567	0.303	--
*10...	0741	1.8	0.284	0.070	--
16...	1700	16	1.05	--	31
16...	1720	46	4.02	--	812
17...	0100	39	1.35	--	265
*17...	0945	7.4	3.50	2.38	--
17...	1210	5.3	3.04	--	45
19...	1000	24	0.594	--	300
19...	1010	45	0.716	--	386
20...	0715	7.0	1.08	--	217
*24...	0722	2.0	0.359	0.192	--
*31...	0733	1.8	0.439	0.240	--
SEP					
*06...	1047	1.5	0.241	0.122	--
*13...	1326	1.5	0.200	0.091	--
19...	1405	11	0.408	--	70
*20...	1122	2.0	0.307	0.176	--
*21...	0736	2.2	--	--	12
*28...	1230	1.4	0.171	0.051	--
*29...	1012	1.6	--	--	61
30...	2210	6.6	0.546	--	47

* Equal-width increment (EWI) sample

ROCK RIVER BASIN
05427948 PHEASANT BRANCH AT MIDDLETON, WI--CONTINUED

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.35	.14	.13	.08	.08	.06	.09	.06	.08	.11	.16	.06
2	.32	.13	.13	.08	.08	.07	.08	.05	.07	.10	.14	.05
3	.29	.12	.12	.07	.07	.07	.08	.05	.06	.09	.08	.05
4	.27	.11	.11	.06	.07	.07	.08	.04	.06	.13	.07	.05
5	.26	.29	.12	.06	.07	.08	.13	.04	.06	4.5	.07	.05
6	.25	.25	.11	.06	.07	.08	.22	.03	.74	1.3	.06	.05
7	.26	.11	.11	.06	.07	.08	.64	.03	2.0	.42	.06	.08
8	.25	.10	.10	.06	.07	.08	.49	1.0	1.5	.20	.08	.06
9	.22	.11	.10	.06	.07	.08	.45	1.8	.21	2.2	.09	.06
10	.22	.09	.10	.06	.07	.11	1.1	3.6	.15	.18	.06	.05
11	.19	.08	.09	.07	.07	62	26	.15	.13	.14	.06	.05
12	.18	.07	.08	.08	.07	3.9	6.3	.04	.13	.12	.06	.05
13	.17	.12	.08	.08	.07	.32	.25	1.4	.13	.11	.06	.05
14	.17	.14	.08	.09	.07	.17	.09	.31	.13	.10	.05	.05
15	.15	.09	.08	.09	.08	.13	.07	.12	.13	.16	.05	.05
16	.14	.09	.08	.08	.08	.12	.06	.10	.13	.24	7.2	.08
17	.14	.08	.08	.09	.08	.11	.10	.08	.12	.18	4.3	.07
18	.14	.07	.08	.09	.09	.10	7.5	.07	.11	.16	.21	.05
19	.14	.07	.08	.08	.22	.10	2.0	.07	.11	.19	7.5	.62
20	.13	.08	.08	.08	.98	.73	.22	.06	.11	.12	2.6	.16
21	.12	.21	.08	.08	.35	.31	.49	.06	.11	.07	.16	.08
22	.18	.10	.08	.08	.11	.18	.29	.05	.10	3.5	.08	.05
23	.24	.09	.08	.08	.11	.16	.30	.11	.10	.57	.07	.05
24	.21	.08	.08	.08	.09	.14	.30	.10	.09	.70	.06	.05
25	.20	.07	.09	.08	.08	.12	.23	.08	.09	.66	.06	.05
26	.20	.07	.09	.08	.07	.10	1.0	.06	.27	.22	.06	.05
27	.19	8.1	.09	.08	.07	4.3	3.8	8.4	.16	.42	.06	.04
28	.19	8.5	.11	.08	.07	1.3	.25	25	.12	.21	.16	.05
29	.18	.22	.11	.07	---	.13	.09	.62	.13	.11	.18	.14
30	.16	.14	.10	.07	---	.11	.07	.12	.15	.09	.09	.17
31	.15	---	.09	.07	---	.10	---	.09	---	.20	.06	---
TOTAL	6.26	19.92	2.94	2.33	3.48	75.41	52.77	43.79	7.48	17.50	24.00	2.52

WTR YR 1995 TOTAL 258.40

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.06	1.15	1.82	1.12	2.52	2.03	3.29	3.39	3.64	2.66	7.27	3.31
2	3.45	1.09	1.67	1.03	2.42	2.00	2.59	3.06	3.08	2.48	8.69	2.91
3	2.95	1.05	1.59	.94	2.31	2.00	2.15	2.81	2.72	2.45	5.75	2.62
4	2.65	1.06	1.52	.84	2.15	2.04	1.62	2.54	2.49	2.78	3.31	2.34
5	2.36	3.39	1.57	.77	2.01	2.07	1.31	2.28	2.21	33.6	2.63	2.07
6	2.15	5.80	1.51	.80	1.94	1.91	1.19	2.04	6.64	13.6	2.27	1.89
7	2.32	2.58	1.47	.78	1.91	1.98	4.72	1.83	15.6	6.13	2.03	3.19
8	2.31	2.39	1.40	.78	1.76	1.85	11.8	10.4	10.4	4.12	2.45	1.99
9	2.05	2.95	1.42	.77	1.82	1.74	9.24	41.6	5.05	17.6	3.37	1.79
10	2.10	2.12	1.37	.78	1.77	2.41	8.00	76.8	4.10	6.15	2.53	1.69
11	1.90	1.78	1.29	.83	1.61	432	123	15.8	3.48	4.75	2.33	1.62
12	1.89	1.53	1.23	1.68	1.46	80.5	90.9	5.60	3.24	3.99	2.21	1.57
13	1.86	2.09	1.20	2.25	1.54	13.7	14.3	24.3	3.33	3.57	2.02	1.57
14	1.99	2.92	1.18	2.61	1.47	4.81	4.64	25.5	3.40	3.16	1.88	1.48
15	1.82	2.14	1.17	2.55	1.59	3.79	3.12	6.17	3.24	4.40	1.74	1.41
16	1.82	1.93	1.14	2.12	1.58	3.51	2.39	4.17	3.27	5.53	88.7	1.96
17	1.96	1.71	1.17	3.52	1.56	3.14	3.30	3.55	3.17	3.41	120	2.04
18	2.06	1.52	1.11	3.71	2.01	2.74	44.0	3.10	3.11	2.68	16.4	1.57
19	2.22	1.33	1.03	3.09	13.8	2.57	31.7	2.71	2.97	3.15	64.6	11.1
20	2.10	1.44	1.00	3.12	108	14.2	6.66	2.47	3.17	3.04	32.0	3.92
21	1.98	4.19	1.04	3.03	50.9	24.2	12.6	2.23	3.22	2.15	7.21	3.61
22	2.42	2.41	1.05	2.88	16.1	9.32	8.36	2.04	3.05	24.4	5.13	2.20
23	2.21	1.99	1.05	2.74	8.41	6.78	3.92	4.43	2.98	12.0	4.13	1.70
24	1.76	1.74	1.11	2.57	4.93	5.02	3.05	4.29	2.96	15.4	3.69	1.60
25	1.53	1.53	1.18	2.60	3.36	3.72	2.53	3.38	2.95	12.1	3.34	1.56
26	1.45	1.36	1.22	2.53	2.71	2.88	11.5	2.90	5.14	8.37	3.06	1.46
27	1.34	48.7	1.29	2.55	2.54	40.2	91.4	57.6	3.53	6.09	2.90	1.33
28	1.34	142	1.54	2.49	2.44	40.9	15.2	213	3.04	4.44	6.35	1.31
29	1.32	7.83	1.49	2.40	---	13.0	5.08	23.0	3.33	3.17	9.07	1.33
30	1.19	2.86	1.30	2.38	---	5.54	3.88	7.89	3.41	2.58	5.48	3.65
31	1.16	---	1.23	2.42	---	4.06	---	5.04	---	4.63	3.92	---
TOTAL	63.72	256.58	40.36	62.68	246.62	736.61	527.44	565.92	121.92	224.58	426.46	71.79

WTR YR 1995 TOTAL 3344.68

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.--No estimated daily discharges. Records are good except those for periods of flow between 0.00 ft³/s and 0.3 ft³/s, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.05	.20	.07	.04	.01	.11	.10	.00	.19	.38	.07
2	.05	.05	.18	.01	.06	.00	.07	.01	.00	.06	2.2	.02
3	.06	.05	.15	.00	.05	.00	.10	.00	.00	.00	.41	.00
4	.09	.12	.10	.00	.05	.02	.02	.00	.00	1.8	.17	.00
5	.03	3.6	.36	.00	.05	.09	.00	.00	.00	25	.09	.00
6	.01	2.1	.32	.00	.05	.06	.00	.00	3.6	4.0	.00	.01
7	.31	.34	.22	.00	.05	.08	4.0	.00	4.7	.33	.00	1.7
8	.61	.39	.23	.00	.00	.08	2.6	6.1	2.0	.16	.32	.14
9	.16	.72	.20	.00	.02	.04	1.5	17	.38	6.9	.48	.06
10	.05	.19	.15	.07	.05	1.9	4.5	8.1	.25	.40	.08	.04
11	.05	.14	.11	.07	.02	6.5	27	.74	.09	.17	.02	.11
12	.05	.14	.05	.63	.04	2.2	5.9	.22	.00	.04	.03	.00
13	.02	1.6	.00	.31	.00	.71	.62	2.6	.00	.01	.03	.08
14	.00	.67	.00	.49	.00	.37	2.2	.85	.00	.11	.06	.10
15	.00	.23	.00	.17	.07	.30	.18	.23	.00	7.2	.02	.10
16	.00	.10	.04	.06	.03	.22	.30	.18	.00	6.4	4.0	1.8
17	.16	.05	.12	.24	.10	.14	.69	.10	.00	.36	21	.72
18	.50	.07	.07	.14	.46	.10	13	.00	.00	.18	.70	.14
19	.26	.05	.07	.09	1.3	.10	1.7	.00	.00	2.8	7.1	7.9
20	.12	1.0	.10	.05	3.6	3.8	.45	.00	.00	1.6	.99	2.9
21	.07	2.9	.17	.05	.41	.57	2.7	.00	.00	.30	.23	1.0
22	.27	.36	.16	.05	.66	.25	.45	.00	.00	7.0	.13	.90
23	.17	.25	.15	.05	.59	.44	.21	.98	.00	4.0	.02	.12
24	.07	.21	.14	.00	.31	.16	.24	.23	.00	1.6	.00	.03
25	.11	.11	.10	.00	.21	.15	.16	.10	.00	.34	.00	.25
26	.06	.04	.05	.00	.11	.21	4.1	.00	4.1	.18	.00	.12
27	.01	17	.13	.00	.09	8.4	8.5	15	.17	5.3	.00	.01
28	.04	4.9	.20	.01	.04	2.0	.56	11	.06	3.3	8.8	.14
29	.05	.55	.16	.00	---	.54	.22	.98	1.6	.34	3.7	.21
30	.05	.26	.10	.00	---	.29	.14	.30	.67	.16	.32	3.1
31	.05	---	.07	.04	---	.18	---	.11	---	.40	.15	---
TOTAL	3.54	38.24	4.10	2.60	8.46	29.91	82.22	64.93	17.62	80.63	51.43	21.77
MEAN	.11	1.27	.13	.084	.30	.96	2.74	2.09	.59	2.60	1.66	.73
MAX	.61	.17	.36	.63	3.6	8.4	.27	.17	4.7	.25	.21	.7.9
MIN	.00	.04	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
CFSM	.03	.39	.04	.03	.09	.29	.83	.64	.18	.79	.50	.22
IN.	.04	.43	.05	.03	.10	.34	.93	.73	.20	.91	.58	.25

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1995, BY WATER YEAR (WY)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
MEAN	1.01	1.33	.61	.42	1.22	2.32	1.73	1.23	1.92	2.09	1.93	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86
MAX	3.19	3.64	1.99	1.73	3.60	6.97	4.30	2.71	5.00	6.51	4.24	4.97	4.97	4.97	4.97	4.97	4.97	4.97	4.97	4.97
(WY)	1985	1993	1985	1990	1994	1993	1993	1990	1984	1993	1981	1980	1980	1980	1980	1980	1980	1980	1980	1980
MIN	.11	.027	.000	.000	.050	.49	.54	.25	.33	.30	.36	.11	.11	.11	.11	.11	.11	.11	.11	.11
(WY)	1995	1977	1990	1977	1978	1981	1985	1994	1987	1976	1988	1976	1976	1976	1976	1976	1976	1976	1976	1976

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1976 - 1995

ANNUAL TOTAL	493.85	405.45	
ANNUAL MEAN	1.35	1.11	1.48
HIGHEST ANNUAL MEAN			3.09
LOWEST ANNUAL MEAN			.97
HIGHEST DAILY MEAN	60	27	77
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
INSTANTANEOUS PEAK FLOW		302	754
INSTANTANEOUS PEAK STAGE		2.85	4.16
ANNUAL RUNOFF (CFSM)	.41	.34	.45
ANNUAL RUNOFF (INCHES)	5.58	4.58	6.13
10 PERCENT EXCEEDS	2.8	3.4	3.4
50 PERCENT EXCEEDS	.10	.12	.12
90 PERCENT EXCEEDS	.00	.00	.00

(a) Annual seven-day minimum flows are 0.00 for most years

ROCK RIVER BASIN

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.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 65 tons, July 5, 1993; minimum daily, 0.00 ton, on many days.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 1,310 mg/L, July 4; minimum observed, 4 mg/L, Aug. 29.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 25 tons, Apr. 11; minimum daily, 0.00 ton, on many days.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT, SUS- PENDE (MG/L) (80154)
NOV 1994				APR 1995			
05...	1700	6.7	819	10...	1955	6.1	34
05...	2300	13	31	11...	0030	40	1050
06...	0250	3.8	14	11...	0055	102	1070
13...	1950	6.7	59	11...	0105	119	1120
20...	2225	7.2	262	11...	0150	66	1220
20...	2325	19	265	11...	0435	27	96
21...	0430	10	41	11...	0857	18	48
27...	0925	9.1	130	*11...	0858	18	43
27...	1015	29	237	11...	1635	16	48
27...	1120	51	273	11...	1750	31	82
27...	1340	29	111	11...	2350	18	45
27...	1725	46	137	13...	2345	6.4	214
*28...	0840	4.7	24	18...	0605	8.2	86
FEB 1995				18...	1125	44	636
19...	1445	4.7	102	18...	1216	36	960
20...	1240	7.7	240	*18...	1217	35	1040
MAR				19...	0045	5.2	26
10...	1520	6.7	283	21...	0120	8.2	178
11...	1045	6.4	151	26...	1810	6.7	128
11...	1130	18	240	27...	0100	22	48
11...	1730	7.2	83	27...	1300	5.5	18
12...	1520	5.0	58	MAY			
20...	0140	6.4	464	08...	0830	8.2	228
20...	0450	7.2	88	08...	0910	24	160
*20...	1256	0.95	24	08...	2350	37	363
20...	1435	6.7	234	09...	0650	17	19
27...	0620	6.4	113	*09...	0652	17	21
27...	0705	21	200	09...	1620	5.2	13
*27...	1141	16	86	09...	2130	25	123
27...	1142	16	81	09...	2155	44	176
27...	1905	5.2	29	09...	2305	26	332
*28...	1029	2.8	17	10...	1500	4.4	11
APR				27...	1430	9.1	186
07...	1915	11	372	27...	1510	41	318
07...	2005	26	271	27...	1650	8.7	79
07...	2310	29	154	27...	1925	46	286
08...	0225	4.4	30	27...	2010	100	918
08...	2220	7.2	56	28...	0020	32	96
10...	1355	7.2	84	28...	1800	5.0	8

* Equal-width increment (EWI) sample

05427965 SPRING HARBOR STORM SEWER AT MADISON, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT, SUS- PENDEDED (MG/L) (80154)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT, SUS- PENDEDED (MG/L) (80154)
JUN 1995				JUL 1995			
06...	1605	22	1070	22...	1930	52	551
06...	1610	81	777	22...	1940	109	917
06...	1620	32	786	22...	2014	50	263
06...	1630	72	644	23...	0815	4.1	7
06...	1740	7.7	693	24...	0923	18	146
07...	1900	54	399	27...	1721	28	310
07...	1905	87	402	27...	1728	59	158
07...	1915	33	324	27...	1744	22	459
07...	1925	76	470	27...	1752	70	778
07...	1950	40	2300	27...	2117	28	86
07...	2040	9.1	925	28...	0208	9.1	11
08...	0240	4.4	28	AUG			
26...	1338	31	817	02...	0905	18	133
26...	1342	56	360	16...	1614	5.5	817
26...	1429	33	1130	16...	1702	51	394
26...	1700	5.7	115	16...	2307	4.4	7
29...	2023	6.7	390	17...	0003	36	61
29...	2100	39	164	17...	0015	302	846
JUL				17...	0037	169	725
04...	2346	63	130	17...	0252	37	83
04...	2350	130	1310	17...	1752	5.8	8
05...	0007	131	443	19...	0926	24	196
05...	0100	44	338	19...	0931	43	170
05...	1200	9.1	55	19...	1345	12	14
05...	1425	74	402	28...	0950	8.2	212
05...	1442	158	849	28...	1001	96	288
05...	1506	75	1070	28...	1021	149	627
05...	1526	35	538	28...	1040	66	464
05...	1826	22	61	28...	1717	6.1	8
06...	0626	5.5	10	28...	2109	13	29
09...	0331	59	409	29...	0609	5.8	4
09...	0335	113	232	SEP			
09...	0352	63	314	07...	0754	20	196
09...	0357	130	979	*07...	0800	26	120
09...	0423	43	551	07...	0801	26	100
09...	1102	4.1	15	07...	0920	6.1	35
15...	1939	59	368	16...	1935	18	449
15...	1943	96	234	16...	2000	48	326
15...	2002	133	794	16...	2115	4.7	86
15...	2016	71	503	19...	1543	17	16
15...	2340	23	53	20...	0343	5.5	5
16...	1139	4.4	9	21...	2350	5.5	88
19...	1355	14	229	30...	1217	6.1	221
19...	1436	32	211	30...	1818	27	672
19...	1654	5.0	51	30...	1849	30	233
22...	1916	53	588	30...	1918	16	198
22...	1922	114	259				

* Equal-width increment (EWI) sample

05427965 SPRING HARBOR STORM SEWER AT MADISON, WI--CONTINUED

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

[illegible]

05428000 LAKE MENDOTA AT MADISON, WI

LOCATION.--Lat 43°05'42", long 89°22'12", in SE 1/4 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.--No estimated daily gage heights. Records are good (see page 11). 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, 12.20 ft, July 14-15, 1993; minimum observed, 8.02 ft, Feb. 24 to Mar. 10, 1920, current datum.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 10.51 ft, Oct. 1; minimum, 8.99 ft, Nov. 13.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.47	9.21	9.30	9.56	9.73	9.61	9.61	9.91	10.11	9.76	10.05	9.95
2	10.42	9.15	9.32	9.56	9.73	9.60	9.58	9.90	10.08	9.72	10.05	9.91
3	10.37	9.13	9.33	9.56	9.74	9.58	9.59	9.89	10.06	9.70	10.07	9.88
4	10.34	9.12	9.34	9.53	9.73	9.56	9.57	9.88	10.03	9.69	10.07	9.86
5	10.30	9.11	9.38	9.52	9.73	9.56	9.53	9.89	10.00	9.80	10.07	9.84
6	10.26	9.15	9.40	9.54	9.74	9.56	9.51	9.89	9.98	9.86	10.05	9.81
7	10.22	9.10	9.46	9.55	9.74	9.57	9.51	9.88	9.96	9.85	10.05	9.80
8	10.22	9.10	9.46	9.55	9.74	9.55	9.55	9.91	9.96	9.83	10.04	9.77
9	10.18	9.10	9.48	9.55	9.74	9.53	9.57	10.01	9.91	9.87	10.04	9.74
10	10.13	9.07	9.48	9.57	9.73	9.51	9.56	10.14	9.89	9.87	10.06	9.71
11	10.09	9.04	9.48	9.57	9.73	9.51	9.62	10.18	9.85	9.87	10.05	9.68
12	10.06	9.02	9.47	9.58	9.73	9.55	9.70	10.19	9.81	9.87	10.04	9.66
13	10.02	9.00	9.47	9.58	9.73	9.58	9.74	10.19	9.80	9.89	10.03	9.65
14	9.99	9.06	9.47	9.61	9.73	9.61	9.72	10.24	9.79	9.90	10.01	9.63
15	9.95	9.04	9.47	9.62	9.73	9.62	9.70	10.23	9.78	9.89	9.98	9.60
16	9.92	9.03	9.48	9.62	9.74	9.62	9.70	10.24	9.77	9.94	9.98	9.60
17	9.89	9.02	9.50	9.63	9.73	9.62	9.70	10.25	9.77	9.94	10.07	9.60
18	9.86	9.08	9.49	9.63	9.73	9.61	9.76	10.24	9.78	9.91	10.07	9.58
19	9.84	9.05	9.48	9.65	9.74	9.61	9.81	10.23	9.79	9.91	10.09	9.60
20	9.79	9.05	9.49	9.68	9.74	9.65	9.80	10.21	9.78	9.93	10.11	9.65
21	9.74	9.13	9.49	9.68	9.74	9.68	9.84	10.17	9.77	9.92	10.10	9.65
22	9.70	9.12	9.50	9.70	9.73	9.67	9.84	10.13	9.76	9.93	10.07	9.64
23	9.67	9.11	9.51	9.71	9.71	9.68	9.83	10.12	9.75	10.01	10.05	9.61
24	9.62	9.09	9.51	9.71	9.70	9.65	9.82	10.10	9.75	10.01	10.02	9.61
25	9.55	9.11	9.52	9.72	9.69	9.61	9.81	10.07	9.73	10.03	9.99	9.61
26	9.49	9.09	9.52	9.72	9.67	9.57	9.82	10.04	9.74	10.03	9.97	9.61
27	9.42	9.15	9.53	9.72	9.66	9.59	9.91	10.03	9.76	10.01	9.95	9.62
28	9.37	9.28	9.54	9.73	9.63	9.63	9.92	10.15	9.77	10.06	9.97	9.63
29	9.34	9.29	9.53	9.73	---	9.64	9.91	10.17	9.79	10.04	10.00	9.62
30	9.30	9.29	9.54	9.73	---	9.63	9.91	10.16	9.80	10.03	9.99	9.63
31	9.26	---	9.56	9.73	---	9.63	---	10.14	---	10.04	9.98	---
MEAN	9.90	9.11	9.47	9.63	9.72	9.60	9.71	10.09	9.85	9.91	10.03	9.69
MAX	10.47	9.29	9.56	9.73	9.74	9.68	9.92	10.25	10.11	10.06	10.11	9.95
MIN	9.26	9.00	9.30	9.52	9.63	9.51	9.51	9.88	9.73	9.69	9.95	9.58

ROCK RIVER BASIN
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.--No estimated daily gage heights. Records are good (see page 11). 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, 7.27 ft, July 28, 1929; minimum observed, 3.22 ft, Jan. 20, 1965, current datum.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 5.68 ft, Oct. 1; minimum, 3.82 ft, Feb. 13-19.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.67	5.10	4.19	3.85	3.88	4.14	4.82	5.12	5.23	4.77	5.17	5.13
2	5.66	5.09	4.16	3.85	3.88	4.15	4.81	5.09	5.24	4.78	5.18	5.10
3	5.64	5.08	4.12	3.84	3.87	4.17	4.77	5.06	5.23	4.78	5.19	5.10
4	5.63	5.05	4.09	3.83	3.85	4.19	4.72	5.03	5.23	4.80	5.17	5.09
5	5.62	5.02	4.07	3.84	3.85	4.22	4.72	4.98	5.22	4.94	5.15	5.08
6	5.61	5.03	4.05	3.86	3.85	4.24	4.72	4.96	5.23	4.92	5.13	5.06
7	5.60	5.02	4.07	3.87	3.85	4.27	4.74	4.95	5.26	4.89	5.10	5.10
8	5.59	4.99	4.05	3.87	3.84	4.27	4.83	5.02	5.31	4.91	5.07	5.09
9	5.55	4.98	4.02	3.87	3.84	4.29	4.89	5.12	5.28	4.95	5.04	5.06
10	5.52	4.95	4.01	3.89	3.84	4.30	4.91	5.19	5.27	4.96	5.01	5.05
11	5.50	4.92	3.98	3.89	3.83	4.34	4.98	5.20	5.25	4.98	5.00	5.03
12	5.47	4.89	3.97	3.89	3.83	4.39	5.06	5.20	5.23	4.99	5.00	5.02
13	5.44	4.88	3.96	3.89	3.83	4.43	5.07	5.24	5.18	5.00	4.98	5.00
14	5.41	4.87	3.95	3.91	3.83	4.46	5.09	5.21	5.15	5.00	4.97	4.97
15	5.39	4.78	3.95	3.92	3.83	4.47	5.10	5.18	5.12	5.01	4.97	4.94
16	5.36	4.70	3.94	3.92	3.82	4.49	5.09	5.15	5.07	5.09	5.05	4.91
17	5.35	4.65	3.94	3.92	3.82	4.51	5.09	5.10	5.01	5.05	5.22	4.90
18	5.36	4.57	3.93	3.91	3.82	4.51	5.15	5.07	4.97	5.02	5.23	4.89
19	5.36	4.50	3.93	3.92	3.82	4.51	5.18	5.03	4.91	5.04	5.25	4.92
20	5.35	4.46	3.93	3.95	3.85	4.57	5.20	5.02	4.88	5.07	5.25	4.96
21	5.34	4.41	3.92	3.95	3.91	4.60	5.21	5.01	4.88	5.07	5.22	4.95
22	5.33	4.34	3.91	3.95	3.96	4.62	5.19	5.01	4.86	5.09	5.20	4.91
23	5.31	4.29	3.90	3.95	4.00	4.64	5.18	5.03	4.85	5.18	5.18	4.92
24	5.27	4.25	3.90	3.94	4.02	4.69	5.15	5.05	4.83	5.19	5.17	4.91
25	5.23	4.21	3.89	3.93	4.06	4.73	5.13	5.04	4.81	5.20	5.14	4.91
26	5.21	4.18	3.89	3.93	4.08	4.78	5.12	5.04	4.81	5.25	5.13	4.90
27	5.19	4.25	3.89	3.92	4.10	4.88	5.18	5.10	4.84	5.25	5.12	4.89
28	5.17	4.26	3.88	3.91	4.12	4.93	5.19	5.24	4.83	5.24	5.15	4.89
29	5.16	4.24	3.88	3.90	---	4.92	5.18	5.24	4.83	5.20	5.20	4.89
30	5.14	4.21	3.88	3.90	---	4.88	5.15	5.24	4.80	5.18	5.19	4.92
31	5.12	---	3.87	3.89	---	4.85	---	5.23	---	5.17	5.16	---
MEAN	5.40	4.67	3.97	3.90	3.90	4.50	5.02	5.10	5.05	5.03	5.13	4.98
MAX	5.67	5.10	4.19	3.95	4.12	4.93	5.21	5.24	5.31	5.25	5.25	5.13
MIN	5.12	4.18	3.87	3.83	3.82	4.14	4.72	4.95	4.80	4.77	4.97	4.89

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.--Estimated daily discharges: Ice-affected periods, Jan. 4, Feb. 5, 6, 11, and 12. Records fair (see page 11). Flow regulated by dams at outlets of Lake Mendota and Lake Waubesa. The Madison Metropolitan Sewerage District diverted an average of 63 ft³/s of effluent into the Badfish Creek basin during 1995 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 for Lake Waubesa stage.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	275	299	151	104	108	141	282	282	272	22	102	169
2	277	293	145	99	106	144	276	276	261	26	104	161
3	278	292	141	96	106	144	225	270	256	26	107	156
4	283	293	138	94	106	146	195	236	253	21	134	153
5	287	295	137	93	100	154	194	192	250	34	159	150
6	287	303	135	96	100	160	191	186	252	34	145	144
7	289	294	144	99	100	169	198	179	255	39	138	151
8	298	289	137	98	97	172	216	184	257	32	131	153
9	304	290	132	97	95	172	225	203	253	38	120	146
10	302	285	127	97	95	173	235	225	251	35	112	141
11	301	278	123	95	94	177	250	231	252	46	111	137
12	301	274	119	97	92	193	266	255	247	48	106	133
13	301	270	115	97	91	205	270	288	241	46	101	132
14	302	275	113	103	88	212	273	281	234	43	97	133
15	303	268	113	105	89	215	270	273	225	41	92	83
16	305	255	111	106	87	217	265	265	208	47	101	16
17	308	237	114	104	87	216	268	258	197	45	112	19
18	316	223	114	104	86	215	278	249	189	31	141	19
19	327	213	113	111	87	215	283	242	151	23	165	22
20	332	203	111	120	89	228	296	238	89	38	165	31
21	335	204	111	118	95	240	304	234	80	34	160	32
22	334	197	113	122	100	240	302	232	75	27	163	32
23	335	182	114	120	109	242	298	233	74	45	162	27
24	330	169	112	117	116	245	291	237	74	58	160	19
25	326	160	110	116	121	245	287	239	93	105	159	20
26	318	149	107	115	127	247	284	242	45	144	157	21
27	311	147	106	113	132	260	300	244	17	193	154	22
28	302	166	106	111	137	281	300	271	20	169	160	27
29	300	167	105	111	---	292	296	281	20	119	175	24
30	300	162	102	110	---	292	290	284	20	115	175	23
31	300	---	102	109	---	288	---	282	---	109	174	---
TOTAL	9467	7132	3721	3277	2840	6540	7908	7592	5111	1833	4242	2496
MEAN	305	238	120	106	101	211	264	245	170	59.1	137	83.2
MAX	335	303	151	122	137	292	304	288	272	193	175	169
MIN	275	147	102	93	86	141	191	179	17	21	92	16
CFSM	.93	.73	.37	.32	.31	.65	.81	.75	.52	.18	.42	.25
IN.	1.08	.81	.42	.37	.32	.74	.90	.86	.58	.21	.48	.28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1995, BY WATER YEAR (WY)

MEAN	124	153	147	140	156	250	262	179	139	137	114	111
MAX	401	355	375	376	363	599	719	520	396	511	478	422
(WY)	1981	1986	1986	1986	1938	1937	1959	1933	1933	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

ROCK RIVER BASIN
05429500 YAHARA RIVER NEAR MCFARLAND, WI--CONTINUED

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1930 - 1995	
ANNUAL TOTAL	76747		62159		159	
ANNUAL MEAN	210		170		336	
HIGHEST ANNUAL MEAN					63.8	
LOWEST ANNUAL MEAN					853	
HIGHEST DAILY MEAN	461	Mar 22,23	335	Oct 21,23	1.2	Apr 11 1959
LOWEST DAILY MEAN	67	Jun 12	16	Sep 16	2.0	Jun 27 1979
ANNUAL SEVEN-DAY MINIMUM	69	Jun 10	22	Jun 27	2.0	Jun 22 1979
INSTANTANEOUS PEAK FLOW			(a)340	Oct 22	(b)867	Apr 10 1959
INSTANTANEOUS PEAK STAGE			(c)5.35	Oct 1	(d)6.33	Jul 23,24 1950
ANNUAL RUNOFF (CFSM)	.64		.52		.49	
ANNUAL RUNOFF (INCHES)	8.73		7.07		6.62	
10 PERCENT EXCEEDS	367		293		320	
50 PERCENT EXCEEDS	179		154		132	
90 PERCENT EXCEEDS	106		44		38	

(a) Gage height, 4 90 ft

(b) Gage height, 5.82 ft, datum then in use

(c) Backwater from aquatic vegetation

(d) Datum then in use, backwater from aquatic vegetation

05430150 BADFISH CREEK NEAR COOKSVILLE, WI

LOCATION.--Lat 42°50'00", long 89°11'48", in SW 1/4 SE 1/4 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. Elevation of gage is 810 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Ice-affected periods, Jan. 3-6 and Feb. 12. Records good except those for ice-affected periods, which are fair (see page 11). Approximately 64 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 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	87	97	85	88	90	101	116	99	90	105	99
2	89	87	96	82	88	88	97	114	99	85	105	93
3	90	88	92	84	88	88	97	113	97	82	107	91
4	93	89	89	88	84	85	96	111	93	90	105	85
5	91	89	94	90	82	86	95	108	93	115	101	93
6	92	106	96	88	86	86	96	104	98	110	94	95
7	94	94	98	85	86	87	97	102	102	97	94	101
8	92	96	95	83	85	85	150	118	106	92	102	95
9	88	99	95	85	86	85	129	162	96	90	100	90
10	89	93	90	86	85	96	122	219	94	88	101	86
11	91	92	88	87	83	127	151	162	89	95	100	87
12	90	89	89	89	82	133	180	133	90	92	98	89
13	90	89	90	92	85	130	137	142	93	92	93	90
14	89	101	90	109	83	120	122	144	94	92	93	87
15	87	95	90	103	83	113	113	123	92	136	98	83
16	86	93	92	93	84	110	108	117	92	175	140	81
17	91	93	90	96	84	105	108	115	92	101	154	80
18	95	92	88	94	83	101	127	110	91	93	122	79
19	93	88	90	96	91	99	132	107	93	93	116	84
20	93	86	93	94	110	118	119	101	98	139	110	92
21	92	101	92	89	110	126	124	97	98	94	101	85
22	89	94	93	88	98	111	117	97	97	97	104	82
23	86	93	94	90	102	106	111	102	98	153	103	79
24	88	88	93	90	101	104	111	101	92	111	103	77
25	88	80	86	89	96	99	111	98	88	109	101	79
26	86	77	80	87	93	94	115	97	97	108	99	78
27	88	102	90	89	93	117	178	98	106	103	95	77
28	88	121	97	87	92	128	140	131	96	146	102	74
29	84	104	97	85	---	118	123	103	98	105	118	74
30	81	98	95	87	---	110	117	102	101	95	108	75
31	87	---	91	89	---	105	---	100	---	95	106	---
TOTAL	2773	2804	2850	2779	2511	3250	3624	3647	2872	3263	3278	2560
MEAN	89.5	93.5	91.9	89.6	89.7	105	121	118	95.7	105	106	85.3
MAX	95	121	98	109	110	133	180	219	106	175	154	101
MIN	81	77	80	82	82	85	95	97	88	82	93	74

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1995, BY WATER YEAR (WY)

	MEAN	93.5	101	95.7	88.4	101	127	120	102	104	101	91.2	95.1
MAX	139	162	129	122	163	190	193	129	174	171	123	139	
(WY)	1987	1986	1983	1988	1994	1993	1993	1993	1993	1993	1993	1993	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 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1977 - 1995

ANNUAL TOTAL	39313	36211	
ANNUAL MEAN	108	99.2	102
HIGHEST ANNUAL MEAN			136
LOWEST ANNUAL MEAN			80.4
HIGHEST DAILY MEAN	1070	219	1070
LOWEST DAILY MEAN	77	74	35
ANNUAL SEVEN-DAY MINIMUM	85	76	48
INSTANTANEOUS PEAK FLOW		376	1210
INSTANTANEOUS PEAK STAGE		6.18	8.97
10 PERCENT EXCEEDS	128	119	134
50 PERCENT EXCEEDS	96	94	92
90 PERCENT EXCEEDS	88	85	72

ROCK RIVER BASIN
05430175 YAHARA RIVER NEAR FULTON, WI

LOCATION.--Lat 42°49'50", long 89°10'09", in NE 1/4 NE 1/4 sec.10, T.4 N., R.11 E., Rock County, Hydrologic Unit 07090001, on right bank, 700 ft downstream from Badfish Creek, 2,000 ft upstream from bridge on State Highway 59, and 2.8 mi northwest of Fulton.

DRAINAGE AREA.--517 mi².

PERIOD OF RECORD.--July 1977 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 792.7 ft above sea level.

REMARKS.--Estimated daily discharges: Ice-affected periods, Dec. 9, 10, Jan. 2-9, 23-27, 30, 31, Feb. 5-8, 11-14, and Mar. 2, 3. Records good except for ice-affected periods, which are fair (see page 11). Diurnal fluctuation caused by powerplant at Stebbensville 1.5 mi upstream, and additional regulation from other dams and powerplants upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	427	496	381	269	273	261	455	575	467	180	349	222
2	453	496	373	260	271	260	450	532	273	173	281	296
3	398	463	369	260	272	260	446	550	407	167	193	289
4	468	445	369	270	266	267	429	538	382	163	400	282
5	408	549	358	270	260	271	245	528	400	226	286	281
6	567	455	356	260	260	268	172	519	442	195	173	279
7	513	499	337	260	260	270	177	503	446	179	268	271
8	479	497	340	260	260	272	247	504	491	175	377	217
9	482	490	330	270	271	298	389	587	515	174	401	211
10	500	489	320	274	263	330	497	694	480	158	383	308
11	506	487	317	272	260	370	463	629	421	140	235	241
12	504	480	301	268	260	364	464	572	369	144	208	305
13	503	479	296	265	260	396	400	586	385	149	290	217
14	489	490	327	285	260	371	634	698	410	152	322	149
15	480	475	320	288	260	432	550	745	415	189	233	225
16	479	458	313	277	259	351	349	674	405	363	331	280
17	482	450	304	280	256	470	390	663	397	221	548	274
18	482	456	301	274	255	474	484	630	351	154	343	207
19	473	457	297	274	258	452	484	460	312	146	305	150
20	491	458	295	268	271	450	464	566	261	219	325	156
21	511	455	290	266	278	310	530	600	243	244	310	151
22	505	442	284	265	271	491	590	539	219	197	307	149
23	485	452	282	260	276	516	506	400	194	199	302	146
24	481	442	275	260	272	486	518	405	182	160	247	146
25	585	392	266	260	264	456	541	382	177	169	228	147
26	538	303	262	260	259	428	567	208	183	180	343	150
27	608	363	273	260	260	437	670	291	176	183	251	149
28	414	384	278	271	262	470	616	427	164	230	264	148
29	380	368	275	272	---	470	590	389	187	436	324	198
30	406	376	273	270	---	462	627	504	196	231	306	206
31	514	---	274	270	---	459	---	514	---	163	268	---
TOTAL	15011	13546	9636	8318	7397	11872	13944	16412	9950	6059	9401	6450
MEAN	484	452	311	268	264	383	465	529	332	195	303	215
MAX	608	549	381	288	278	516	670	745	515	436	548	308
MIN	380	303	262	260	255	260	172	208	164	140	173	146
CFSM	.94	.87	.60	.52	.51	.74	.90	1.02	.64	.38	.59	.42
IN.	1.08	.97	.69	.60	.53	.85	1.00	1.18	.72	.44	.68	.46

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1995, BY WATER YEAR (WY)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
MEAN	356	407	400	343	359	469	462	366	306	297	282	323							
MAX	596	711	558	542	585	760	1043	858	735	862	760	696							
(WY)	1987	1986	1983	1986	1986	1994	1993	1993	1993	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 1994 CALENDAR YEAR FOR 1995 WATER YEAR WATER YEARS 1977 - 1995

	1994 CALENDAR YEAR	1995 WATER YEAR	WATER YEARS 1977 - 1995
ANNUAL TOTAL	149136	127996	
ANNUAL MEAN	409	351	366
HIGHEST ANNUAL MEAN			629
LOWEST ANNUAL MEAN			262
HIGHEST DAILY MEAN	2430	745	2430
LOWEST DAILY MEAN	133	140	60
ANNUAL SEVEN-DAY MINIMUM	146	148	104
INSTANTANEOUS PEAK FLOW		976	3040
INSTANTANEOUS PEAK STAGE		5.31	8.36
ANNUAL RUNOFF (CFSM)	.79	.68	.71
ANNUAL RUNOFF (INCHES)	10.73	9.21	9.61
10 PERCENT EXCEEDS	679	517	594
50 PERCENT EXCEEDS	367	310	330
90 PERCENT EXCEEDS	208	183	147

05430500 ROCK RIVER AT AFTON, WI

LOCATION.--Lat 42°36'33", long 89°04'14", in NE 1/4 sec.28, T.2 N., R.12 E., Rock County, Hydrologic Unit 07090001, on right bank in Afton, 0.3 mi downstream from highway bridge and 1.1 mi upstream from Bass Creek.

DRAINAGE AREA.--3,340 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.--Estimated daily discharges: Ice-affected period, Dec. 7-21, Jan. 2-15, 25, 26, Feb. 5-19, and Mar. 1-11. Records are good except those for ice-affected periods, which are fair, and periods of discharge below 800 ft³/s, which are poor (see page 11). Diurnal fluctuation caused by powerplants above station. Data-collection platform at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1480	1120	1520	1380	1380	1100	2460	3250	2460	737	815	2760
2	1320	1060	1460	1200	1380	1100	2480	3220	2320	708	1050	2670
3	1370	1070	1480	1200	1360	1100	2430	3220	2170	667	763	2570
4	1290	1010	1470	1200	1350	1100	2440	3190	2170	716	809	2490
5	1340	1110	1490	1100	1200	1100	2360	3120	2030	806	939	2380
6	1200	1290	1490	1100	1200	1100	2130	3060	2010	737	797	2250
7	1350	1120	1400	1100	1200	1100	2100	2990	1990	708	740	2190
8	1240	1190	1300	1000	1100	1100	2220	3020	2130	738	951	2270
9	1290	1550	1300	1000	1100	1100	2400	3080	2130	744	1030	2010
10	1240	1710	1300	1000	860	1100	2540	3320	1990	727	1170	2020
11	1240	1640	1200	1000	700	1200	2410	3200	1900	678	1740	1790
12	1100	1630	1200	1000	720	1280	2180	3090	1750	683	1820	1850
13	1060	1590	1100	920	720	1350	2070	3180	1860	634	1910	1770
14	1050	1590	1100	820	720	1580	2290	3230	1830	621	2070	1570
15	1050	1590	1100	860	740	1610	2680	3340	1860	607	2220	1490
16	1040	1510	900	1060	740	1810	2510	3500	1800	927	2290	1510
17	1030	1530	880	1130	740	2030	2410	3550	1730	1110	2680	1540
18	1030	1410	900	1160	740	2240	2510	3580	1680	708	2990	1510
19	1020	1270	900	1420	820	2320	2370	3420	1540	775	3020	1460
20	1090	1340	920	1590	990	2390	2550	3190	1250	821	3290	1510
21	1130	1330	960	1530	1180	2320	2600	3310	1180	921	3400	1500
22	1140	1250	1060	1520	1230	2380	2650	3270	799	867	3490	1360
23	1110	1070	1100	1480	1230	2810	2660	3160	739	883	3550	1380
24	1060	1040	1240	1550	1240	2710	2610	3110	751	838	3600	1420
25	1190	1080	1260	1500	1280	2640	2630	3030	729	777	3480	1400
26	1330	1060	1260	1500	1320	2600	2730	2840	778	889	3480	1340
27	1200	1190	1270	1530	1300	2650	3030	2690	920	867	3430	1250
28	1290	1070	1400	1510	1270	2570	2990	2810	805	910	3280	1030
29	1010	1280	1430	1440	---	2500	3100	2580	783	834	3320	1000
30	1060	1500	1390	1410	---	2460	3200	2520	763	1020	3180	1020
31	1100	---	1390	1360	---	2440	---	2530	---	816	2970	---
TOTAL	36450	39200	38170	38570	29810	56890	75740	96600	46847	24474	70274	52310
MEAN	1176	1307	1231	1244	1065	1835	2525	3116	1562	789	2267	1744
MAX	1480	1710	1520	1590	1380	2810	3200	3580	2460	1110	3600	2760
MIN	1010	1010	880	820	700	1100	2070	2520	729	607	740	1000
CFSM	.35	.39	.37	.37	.32	.55	.76	.93	.47	.24	.68	.52
IN.	.41	.44	.43	.43	.33	.63	.84	1.08	.52	.27	.78	.58

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 1995, BY WATER YEAR (WY)

	MEAN	1378	1549	1464	1301	1511	3350	4130	2514	1677	1354	1090	1189
MAX	8219	5883	4395	3558	5647	8958	10010	7911	5196	5443	5376	5088	
(WY)	1987	1986	1986	1960	1938	1918	1979	1973	1993	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 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1914 - 1995
ANNUAL TOTAL	671408	605335	
ANNUAL MEAN	1839	1658	1879
HIGHEST ANNUAL MEAN			3925
LOWEST ANNUAL MEAN			557
HIGHEST DAILY MEAN	5790	Mar 21	3600
LOWEST DAILY MEAN	564	May 28	607
ANNUAL SEVEN-DAY MINIMUM	629	Jun 10	671
INSTANTANEOUS PEAK FLOW			3770
INSTANTANEOUS PEAK STAGE			6.60
ANNUAL RUNOFF (CFSM)	.55		.50
ANNUAL RUNOFF (INCHES)	7.48		6.74
10 PERCENT EXCEEDS	4210		3030
50 PERCENT EXCEEDS	1340		1360
90 PERCENT EXCEEDS	790		806

(a) Gage height, 11.81 ft, present datum

(b) Present datum, backwater from ice

ROCK RIVER BASIN

05431014 JACKSON CREEK AT PETRIE ROAD NEAR ELKHORN, WI

LOCATION.--Lat 42°38'29", long 88°31'18", in SW 1/4 SW 1/4 sec.8, T.2 N., R.17 E., Walworth County, Hydrologic Unit 07090001, on left bank 5 ft upstream of Petrie Road bridge, 2.5 mi upstream from Delavan Lake inlet at Mound Road, and 2.5 mi southeast of Elkhorn.

DRAINAGE AREA.--8.96 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1983 to September 1995 (discontinued).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 960 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: May 10-11, 28, June 7, Aug. 9-11, 17-22, and ice-affected periods, Dec. 9-16, Jan. 2-12, 23-31, and Feb. 1 to Mar. 11. Records good except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.09	.80	1.2	.58	.70	3.6	11	2.7	.44	.07	.44
2	.09	.09	.79	1.0	.58	.62	3.2	8.1	2.5	.34	.08	.30
3	.08	.09	.70	.90	.56	.56	2.9	6.4	2.3	.29	.08	.24
4	.07	.12	.66	.70	.54	.52	2.2	5.6	1.8	.37	.08	.17
5	.08	.24	.59	.60	.52	.48	1.8	4.9	1.6	.56	.08	.13
6	.08	1.7	.58	.54	.50	.45	1.9	4.1	7.3	.41	.07	.12
7	.08	.55	.50	.54	.45	.43	1.5	3.6	13	.28	.50	.12
8	.10	.38	.44	.52	.40	.41	7.6	4.5	6.8	.18	.85	.12
9	.12	.55	.40	.50	.37	.40	6.0	12	4.9	.45	24	.12
10	.12	.62	.35	.50	.36	.80	6.2	29	4.0	.39	29	.11
11	.12	.57	.32	.48	.34	3.2	16	19	3.1	.18	9.0	.10
12	.12	.46	.30	.60	.31	4.6	27	12	2.4	.12	3.0	.10
13	.12	.39	.28	1.3	.27	4.3	19	9.2	2.1	.08	1.5	.10
14	.12	.58	.27	23	.23	3.8	11	7.6	1.8	.08	1.1	.07
15	.12	.66	.28	13	.22	3.2	7.7	5.4	1.5	.06	.85	.06
16	.12	.52	.30	5.9	.21	2.9	6.0	4.8	1.2	.06	8.9	.07
17	.12	.47	.62	4.3	.21	2.4	5.4	4.8	1.1	.04	80	.15
18	.12	.38	.73	3.5	.30	2.1	17	3.8	1.1	.04	29	.11
19	.12	.31	.73	2.8	1.0	2.0	17	2.9	1.0	.03	13	.11
20	.11	.31	.73	1.6	2.5	2.7	10	2.6	.95	.05	6.4	.13
21	.11	.31	.76	1.2	5.0	3.4	9.0	2.3	.89	.06	3.4	.17
22	.11	.30	.92	1.1	2.0	2.8	7.0	1.8	.77	.06	2.0	.17
23	.11	.27	1.4	1.0	1.7	2.6	6.0	1.9	.73	.08	1.6	.14
24	.11	.23	2.6	.90	2.5	2.2	5.3	2.5	.68	.12	1.2	.12
25	.11	.23	2.8	.80	1.5	1.9	4.4	2.0	.65	.14	1.0	.12
26	.11	.20	2.4	.74	1.0	1.7	9.3	1.6	.51	.09	.87	.09
27	.11	.95	2.3	.70	.90	4.0	92	2.0	.54	.10	.75	.08
28	.11	2.0	2.5	.66	.80	6.9	43	12	.62	.15	.95	.08
29	.10	1.4	2.0	.64	---	6.1	22	6.1	.78	.12	1.2	.08
30	.09	.88	1.6	.62	---	4.9	15	4.1	.65	.08	.98	.08
31	.09	---	1.5	.60	---	4.1	---	3.2	---	.04	.73	---
TOTAL	3.26	15.85	31.15	72.44	25.85	77.17	386.0	200.8	69.97	5.49	222.24	4.00
MEAN	.11	.53	1.00	2.34	.92	2.49	12.9	6.48	2.33	.18	7.17	.13
MAX	.12	2.0	2.8	23	5.0	6.9	92	29	13	.56	80	.44
MIN	.07	.09	.27	.48	.21	.40	1.5	1.6	.51	.03	.07	.06
CFSM	.01	.06	.11	.26	.10	.28	1.44	.72	.26	.02	.80	.01
IN.	.01	.07	.13	.30	.11	.32	1.60	.83	.29	.02	.92	.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1995, BY WATER YEAR (WY)

	MEAN	2.01	5.37	4.72	2.44	6.21	10.3	9.31	4.36	4.17	2.78	1.33	2.39
MAX	8.56	24.1	12.7	7.67	18.5	24.3	37.8	13.2	26.2	11.8	7.17	13.7	
(WY)	1987	1986	1992	1993	1994	1993	1993	1990	1993	1993	1995	1986	
MIN	.11	.28	.32	.15	.50	2.49	1.03	.33	.11	.063	.063	.086	
(WY)	1995	1990	1990	1991	1989	1995	1989	1989	1988	1991	1991	1994	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1984 - 1995
ANNUAL TOTAL	1038.80	1114.22	
ANNUAL MEAN	2.85	3.05	4.59
HIGHEST ANNUAL MEAN			11.8
LOWEST ANNUAL MEAN			1.89
HIGHEST DAILY MEAN	226	92	285
LOWEST DAILY MEAN	.04	.03	.03
ANNUAL SEVEN-DAY MINIMUM	.06	.05	.04
INSTANTANEOUS PEAK FLOW		144	448
INSTANTANEOUS PEAK STAGE		9.06	9.13
ANNUAL RUNOFF (CFSM)	.32	.34	.51
ANNUAL RUNOFF (INCHES)	4.31	4.63	6.97
10 PERCENT EXCEEDS	3.7	6.9	11
50 PERCENT EXCEEDS	.36	.70	.94
90 PERCENT EXCEEDS	.09	.09	.11

(a) Also occurred Jan. 30 to Feb. 2, July 20, Sept. 11, 1991, and July 19, 1995

(b) Also occurred Aug. 1, 1987

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1983 to September 1985, February 1993 to September 1995 (discontinued).

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: Water years 1984-85, February 1993 to September 1995 (discontinued).

DISSOLVED AMMONIA NITROGEN DISCHARGE: February 1993 to September 1995 (discontinued).

TOTAL AMMONIA PLUS ORGANIC NITROGEN DISCHARGE: Water years 1984-85, February 1993 to September 1995 (discontinued).

DISSOLVED NITRITE PLUS NITRATE DISCHARGE: February 1993 to September 1995 (discontinued).

TOTAL NITRITE PLUS NITRATE DISCHARGE: Water years 1984-85.

TOTAL PHOSPHORUS DISCHARGE: Water years 1984-85, February 1993 to September 1995 (discontinued).

DISSOLVED ORTHO-PHOSPHORUS DISCHARGE: February 1993 to September 1995 (discontinued).

INSTRUMENTATION.--Automatic pumping sampler since October 1983.

REMARKS.--Records good. Samples for dissolved ammonia nitrogen, dissolved nitrite plus nitrate, and dissolved ortho-phosphorus were filtered through a 0.45 mm filter. In water years 1984-85, total nitrite plus nitrate loads were computed using concentrations from unfiltered samples. In the 1994 water year, loads for dissolved ammonia nitrogen, dissolved nitrite plus nitrate, and dissolved ortho-phosphorus were published as total loads, but were, in fact, dissolved loads.

COOPERATION.--Observer furnished by Delavan Lake Sanitary District.

EXTREMES FOR PERIOD OF RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 5,750 mg/L, June 17, 1993; minimum observed, 0 mg/L, Mar. 13, 1995.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 285 tons, Apr. 19, 1993; minimum daily, 0.0 ton, Sept. 4-12, 1993 and many days during 1994 and 1995 water years.

DISSOLVED AMMONIA NITROGEN CONCENTRATIONS: Maximum observed, 3.60 mg/L, Mar. 4, 1993; minimum observed, <0.015 mg/L, on many days during 1995 water year.

DISSOLVED AMMONIA NITROGEN DISCHARGE: Maximum daily, 674 lb, Mar. 23, 1993; minimum daily, 0.01 lb, on many days in 1994 and 1995 water years.

TOTAL AMMONIA PLUS ORGANIC NITROGEN CONCENTRATIONS: Maximum observed, 9.4 mg/L, Nov. 9, 1984; minimum observed, 0.20 mg/L, Sept. 21 and Oct. 25, 1994.

TOTAL AMMONIA PLUS ORGANIC NITROGEN DISCHARGE: Maximum daily, 3,120 lb, Feb. 19, 1994; minimum daily, 0.06 lb, July 19, 1995.

DISSOLVED NITRITE PLUS NITRATE CONCENTRATIONS: Maximum observed, 15 mg/L, Apr. 29, 30, May 1, 1995; minimum observed, <0.05 mg/L, Sept. 21, Oct. 25, 1994, July 10 and Aug. 7, 1995.

DISSOLVED NITRITE PLUS NITRATE DISCHARGE: Maximum daily, 5,640 lb, Feb. 20, 1994; minimum daily, 0.01 lb, July 31, 1995.

TOTAL NITRITE PLUS NITRATE CONCENTRATIONS: Maximum observed, 17 mg/L, June 18, 1984; minimum observed, 0.01 mg/L, on several days during 1984.

TOTAL NITRITE PLUS NITRATE DISCHARGE: Maximum daily, 3,150 lb, Feb. 13, 1984; minimum daily, 0.01 lb, on many days during 1984.

TOTAL PHOSPHORUS CONCENTRATIONS: Maximum observed, 2.00 mg/L, Feb. 19, 1994; minimum observed, <0.01 mg/L, June 5 and Aug. 7, 1985.

TOTAL PHOSPHORUS DISCHARGE: Maximum daily, 1,200 lb, Feb. 19, 1994; minimum daily, 0.01 lb, on several days during 1985, July 25 and Aug. 3, 1994, and many days during 1995 water year.

DISSOLVED ORTHO-PHOSPHORUS CONCENTRATIONS: Maximum observed, 1.00 mg/L, Feb. 19, 1994; minimum observed, 0.01 mg/L, Dec. 15, 1993, Jan. 24, Apr. 18, and May 9, 1994, and many days during 1995 water year.

DISSOLVED ORTHO-PHOSPHORUS DISCHARGE: Maximum daily, 581 lb, Feb. 19, 1994; minimum daily, 0.00 lb, Feb. 10-16 and Aug. 3, 1994, and several days during 1995 water year.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 661 mg/L, June 6; minimum observed, 0 mg/L, Mar. 13.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 34 tons, Apr. 27; minimum daily, 0.0 ton, on many days.

DISSOLVED AMMONIA NITROGEN CONCENTRATIONS: Maximum observed, 0.60 mg/L, Aug. 8; minimum observed, <0.015 mg/L, on many days.

DISSOLVED AMMONIA NITROGEN DISCHARGE: Maximum daily, 30.7 lb, Jan. 14; minimum daily, 0.01 lb, on many days.

TOTAL AMMONIA PLUS ORGANIC NITROGEN CONCENTRATIONS: Maximum observed, 2.7 mg/L, Aug. 8; minimum observed, 0.20 mg/L, Oct. 25.

TOTAL AMMONIA PLUS ORGANIC NITROGEN DISCHARGE: Maximum daily, 767 lb, Aug. 17; minimum daily, 0.06 lb, July 19.

DISSOLVED NITRITE PLUS NITRATE CONCENTRATIONS: Maximum observed, 15.0 mg/L, Apr. 29, 30, May 1; minimum observed, <0.05 mg/L, Oct. 25, July 10, and Aug. 7.

DISSOLVED NITRITE PLUS NITRATE DISCHARGE: Maximum daily, 4,480 lb, Apr. 27; minimum daily, 0.01 lb, July 31.

TOTAL PHOSPHORUS CONCENTRATIONS: Maximum observed, 1.00 mg/L, Aug. 17; minimum observed, 0.01 mg/L, Apr. 3, 8, 9.

TOTAL PHOSPHORUS DISCHARGE: Maximum daily, 270 lb, Aug. 17; minimum daily, 0.01 lb, on many days.

ROCK RIVER BASIN

05431014 JACKSON CREEK AT PETRIE ROAD NEAR ELKHORN, WI--CONTINUED

DISSOLVED ORTHO-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.58 mg/L, Jan. 14; minimum observed, 0.01 mg/L, on many days.

DISSOLVED ORTHO-PHOSPHORUS DISCHARGE: Maximum daily, 120 lb, Aug. 17; minimum daily, 0.00 lb, on several days.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHOPHOS- PHATE (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDED (MG/L) (80154)
OCT 1994									
25...	1115	--	0.11	<0.050	<0.015	0.20	0.020	<0.010	62
NOV									
*06...	0930	--	1.8	5.00	0.050	0.90	0.130	0.090	37
06...	1315	--	1.5	4.90	0.030	0.70	0.120	0.080	17
06...	1915	--	1.0	3.70	<0.015	0.80	0.120	0.060	18
*07...	0815	--	0.58	3.30	0.030	0.70	0.080	0.030	--
*07...	0825	--	0.50	4.70	0.110	0.40	0.050	0.030	5
27...	1515	--	0.90	1.10	<0.015	0.70	0.080	<0.010	67
27...	1815	--	2.2	1.50	0.050	0.60	0.070	0.020	37
27...	2115	--	2.4	--	--	--	--	--	23
28...	0015	--	2.4	3.80	0.050	0.80	0.180	0.090	26
28...	0315	--	2.1	--	--	--	--	--	20
28...	0615	--	2.1	--	--	--	--	--	20
*28...	0805	--	2.1	4.40	0.030	0.70	0.160	0.090	16
28...	1215	--	1.9	--	--	--	--	--	16
28...	1515	--	1.9	4.50	<0.015	0.60	0.110	0.060	19
28...	2115	--	1.9	--	--	--	--	--	22
29...	0015	--	1.8	5.40	<0.015	0.50	0.080	0.050	--
29...	0915	--	1.4	--	--	--	--	--	40
29...	1215	--	1.4	5.50	<0.015	0.40	0.060	0.030	--
29...	2115	--	1.1	--	--	--	--	--	42
30...	0015	--	1.1	5.00	<0.015	0.40	0.050	0.020	--
*30...	1330	--	0.90	4.90	<0.015	0.40	0.050	0.020	112
DEC									
*05...	0805	--	0.58	--	--	--	0.040	--	36
23...	1930	--	1.7	--	--	--	--	--	28
23...	2230	--	2.1	--	--	--	0.150	--	--
24...	0130	--	2.2	--	--	--	--	--	21
24...	0430	--	2.6	--	--	--	0.140	--	--
24...	0730	--	2.7	--	--	--	--	--	14
24...	1030	--	2.6	--	--	--	0.110	--	--
24...	2230	--	2.8	--	--	--	--	--	11
25...	0130	--	2.8	--	--	--	0.090	--	--
25...	0730	--	2.8	--	--	--	--	--	19
25...	1330	--	2.8	--	--	--	0.050	--	--
25...	1930	--	2.8	--	--	--	--	--	6
26...	0730	--	2.4	--	--	--	--	--	5
26...	1330	--	2.3	--	--	--	0.030	--	--
26...	1930	--	2.3	--	--	--	--	--	21
*27...	0930	--	2.3	--	--	--	--	--	25
27...	1330	--	2.3	--	--	--	--	--	24
28...	1330	--	2.6	--	--	--	0.030	--	--
29...	1330	--	1.9	--	--	--	--	--	39
JAN 1995									
*03...	0830	0.90	--	--	--	--	0.020	--	59
12...	2300	0.60	--	4.10	0.060	0.70	0.200	0.100	21
13...	0200	--	1.3	--	--	--	--	--	13
13...	0500	--	1.3	5.20	0.090	0.60	0.130	0.040	7
13...	0800	--	1.3	--	--	--	--	--	2
*13...	0900	--	1.3	5.00	<0.015	0.80	0.090	<0.010	--
14...	0030	--	2.4	4.50	0.080	0.60	0.110	0.080	23
14...	0200	--	5.3	4.30	0.150	1.1	0.310	0.170	39
14...	0345	--	11	4.00	0.240	2.4	0.860	0.440	118
14...	0545	--	19	--	--	--	--	--	176
14...	0845	--	28	4.80	0.410	2.4	0.930	0.580	98
14...	1145	--	32	--	--	--	--	--	85
14...	1445	--	32	6.20	0.220	1.8	0.650	0.420	70
14...	1745	--	29	--	--	--	--	--	46
14...	2045	--	25	--	--	--	--	--	34
14...	2345	--	24	--	--	--	--	--	25
15...	0545	--	16	--	--	--	--	--	16
15...	0845	--	14	9.50	0.070	0.80	0.200	0.150	--
15...	1145	--	13	--	--	--	--	--	9
15...	1745	--	9.7	9.90	0.030	0.80	0.150	0.110	--
15...	2045	--	9.5	--	--	--	--	--	10
16...	0245	--	7.1	--	--	--	--	--	9
*16...	1140	--	5.5	1.90	0.190	0.70	0.080	0.020	8

* Equal-width increment (EWI) sample

05431014 JACKSON CREEK AT PETRIE ROAD NEAR ELKHORN, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDEED (MG/L) (80154)
FEB 1995									
*06...	0800	0.50	--	--	--	--	0.040	--	15
19...	1700	1.0	--	--	--	--	0.300	--	--
19...	2000	1.0	--	--	--	--	--	--	20
20...	1100	2.5	--	--	--	--	--	--	3
20...	1400	2.5	--	--	--	--	0.160	--	--
20...	2000	2.5	--	--	--	--	--	--	13
20...	2300	2.5	--	--	--	--	0.240	--	--
21...	2400	5.0	--	--	--	--	--	--	3
22...	0300	2.0	--	--	--	--	0.090	--	--
23...	0300	1.7	--	--	--	--	--	--	11
23...	0600	1.7	--	--	--	--	0.060	--	--
*27...	0930	0.90	--	7.40	<0.015	0.40	0.030	0.010	4
MAR									
*03...	1315	0.56	--	7.60	0.030	0.30	0.010	0.020	13
*06...	0800	0.45	--	--	--	--	0.020	--	13
11...	0030	3.2	--	--	--	--	0.120	--	19
11...	0330	3.2	--	--	--	--	--	--	10
11...	0630	3.2	--	--	--	--	0.160	--	9
11...	1230	3.2	--	--	--	--	0.190	--	4
11...	1830	3.2	--	--	--	--	0.100	--	11
11...	2130	3.2	--	--	--	--	--	--	11
12...	0030	--	5.2	--	--	--	0.110	--	10
12...	0330	--	5.2	--	--	--	--	--	7
12...	0630	--	4.9	--	--	--	--	--	4
12...	0930	--	4.4	--	--	--	0.070	--	5
*12...	0931	--	4.4	--	--	--	0.060	--	4
12...	1230	--	4.3	--	--	--	--	--	1
12...	1830	--	4.3	--	--	--	0.070	--	--
13...	0030	--	4.3	--	--	--	--	--	9
13...	0330	--	4.5	--	--	--	0.060	--	--
13...	1230	--	4.4	--	--	--	--	--	0
13...	1530	--	4.4	--	--	--	0.040	--	--
14...	1230	--	3.8	--	--	--	--	--	2
15...	0030	--	3.5	--	--	--	--	--	6
15...	0330	--	3.5	--	--	--	0.050	--	--
20...	1615	--	3.0	6.00	<0.015	0.70	0.340	0.120	13
20...	1915	--	3.3	--	--	--	--	--	11
20...	2215	--	3.5	--	--	--	--	--	8
21...	0115	--	3.5	5.50	<0.015	0.50	0.020	<0.010	9
21...	1015	--	3.5	6.10	<0.015	0.50	0.060	0.030	4
27...	1600	--	6.3	5.20	0.240	0.90	0.230	0.080	29
27...	2200	--	6.9	6.00	0.200	0.60	0.120	0.070	3
28...	0700	--	6.9	6.70	0.040	0.60	0.060	<0.010	9
*28...	0840	--	6.9	7.20	0.200	0.70	0.060	0.030	5
28...	1300	--	6.9	7.30	0.190	0.60	0.050	0.030	4
*28...	1415	--	6.9	7.50	0.150	0.50	0.060	0.030	5
28...	1900	--	6.9	--	--	--	--	--	5
29...	0100	--	6.7	8.10	0.030	0.50	0.050	0.030	--
29...	0700	--	6.3	--	--	--	--	--	6
29...	1900	--	5.8	--	--	--	--	--	5
30...	0400	--	5.2	9.00	0.030	0.50	0.020	0.010	--
30...	0700	--	5.1	--	--	--	--	--	7

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDEED (MG/L) (80154)
APR 1995								
*03...	0730	2.9	7.70	0.050	0.50	<0.010	<0.010	--
08...	0245	6.3	6.60	0.020	0.60	<0.010	<0.010	52
08...	0545	9.5	5.90	<0.015	0.80	0.140	0.080	43
08...	0845	9.5	--	--	--	--	--	16
08...	1145	8.5	--	--	--	--	--	9
08...	1745	7.5	8.30	<0.015	0.50	0.080	0.040	8
08...	2345	6.5	--	--	--	--	--	9
09...	0845	6.1	9.30	<0.015	0.50	0.010	<0.010	7
09...	1445	5.9	--	--	--	--	--	4
09...	2345	5.6	8.90	<0.015	0.60	0.010	<0.010	12
10...	0545	5.2	--	--	--	--	--	9
10...	1445	5.1	9.30	<0.015	0.50	0.020	0.010	8
10...	1745	5.9	--	--	--	--	--	13
10...	2045	8.8	--	--	--	--	--	67
10...	2345	13	--	--	--	--	--	37

* Equal-width increment (EWI) sample

ROCK RIVER BASIN

05431014 JACKSON CREEK AT PETRIE ROAD NEAR ELKHORN, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	NITRO-GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHOS, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDED (MG/L) (80154)
APR 1995									
11...	0245	14		10.0	0.020	1.2	0.230	0.140	25
11...	0845	14		--	--	--	--	--	8
*11...	0855	15		--	--	--	--	--	22
11...	1745	14		9.70	0.020	1.0	0.260	0.200	101
11...	2045	18		--	--	--	--	--	65
11...	2330	30		--	--	--	--	--	39
12...	0230	31		12.0	<0.015	0.80	0.280	0.160	122
12...	0530	30		--	--	--	--	--	14
12...	1130	25		13.0	<0.015	0.70	0.110	0.080	5
12...	1730	25		--	--	--	--	--	13
13...	0230	23		13.0	<0.015	0.70	0.060	0.040	6
13...	0830	20		--	--	--	--	--	8
13...	1730	17		13.0	0.410	1.2	0.090	0.050	8
14...	0730	12		--	--	--	--	--	7
15...	0230	8.8		--	--	--	--	--	9
15...	0830	8.1		--	--	--	--	--	5
18...	1200	13		8.40	<0.015	1.7	0.260	0.070	36
18...	1345	24		--	--	--	--	--	75
18...	1645	32		7.70	<0.015	1.5	0.440	0.260	60
18...	1945	28		--	--	--	--	--	40
18...	2245	25		9.20	<0.015	1.1	0.250	0.110	44
19...	0445	20		--	--	--	--	--	28
19...	1030	18		11.0	<0.015	0.70	0.100	0.060	12
*19...	1031	18		11.0	<0.015	0.80	0.090	0.040	21
19...	1645	15		--	--	--	--	--	22
19...	2245	13		--	--	--	--	--	33
20...	0445	11		--	--	--	--	--	26
*20...	0810	11		12.0	<0.015	0.50	0.060	<0.010	--
*20...	0825	10		--	--	--	--	--	20
26...	2000	15		7.30	0.020	1.3	0.250	0.050	79
26...	2330	41		--	--	--	--	--	143
27...	0115	61		7.30	0.090	1.4	0.490	0.310	171
27...	0300	84		--	--	--	--	--	239
27...	0445	115		7.00	0.030	1.7	0.540	0.230	294
*27...	0735	127		7.20	0.020	1.5	0.540	0.200	--
27...	0745	127		7.60	0.030	1.5	0.440	0.210	184
27...	1045	111		9.30	0.020	1.4	0.380	0.190	105
27...	1345	95		--	--	--	--	--	86
27...	1945	76		11.0	<0.015	1.1	0.230	0.030	64
28...	0145	57		--	--	--	--	--	51
28...	0745	48		14.0	<0.015	1.0	0.590	0.200	25
*28...	1050	43		14.0	0.020	0.80	0.160	0.090	--
28...	1945	33		--	--	--	--	--	23
*29...	0900	23		15.0	<0.015	0.80	0.110	0.040	18
29...	1645	20		--	--	--	--	--	11
*30...	0850	15		15.0	<0.015	0.60	0.080	0.030	13
30...	1345	14		--	--	--	--	--	14
MAY 1995									
*01...	0840	--		11	15.0	0.030	0.50	0.050	9
09...	0500	--		11	8.30	0.020	0.90	0.130	--
09...	0800	--		14	--	--	--	--	16
09...	1400	--		14	9.00	<0.015	0.90	0.120	--
09...	1700	--		13	--	--	--	--	10
10...	0345	29		--	--	--	--	--	39
10...	0645	29		--	9.00	0.020	0.90	0.140	--
10...	1245	29		--	--	--	--	--	15
10...	1545	29		--	10.0	<0.015	0.90	0.150	--
10...	1845	29		--	--	--	--	--	15
11...	0045	19		--	12.0	<0.015	0.70	0.080	--
11...	0345	19		--	--	--	--	--	13
11...	1545	19		--	--	--	--	--	13
12...	0345	--		13	--	--	--	--	10
12...	0645	--		13	13.0	<0.015	0.50	0.030	--
12...	2145	--		11	--	--	--	--	8
13...	1545	--		9.7	13.0	0.020	0.50	0.020	3
14...	0945	--		7.5	13.0	0.020	0.50	0.020	10
*17...	1100	--		4.9	12.0	0.050	0.50	0.020	38
*24...	0840	--		2.7	11.0	0.020	0.60	0.020	5

* Equal-width increment (EWI) sample

05431014 JACKSON CREEK AT PETRIE ROAD NEAR ELKHORN, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDED (MG/L) (80154)
MAY 1995									
28...	0045	12	--	7.70	<0.015	1.4	0.140	<0.010	58
28...	0230	12	--	9.00	<0.015	1.6	0.290	0.060	69
28...	0530	12	--	8.70	0.080	1.6	0.200	0.060	37
28...	0830	12	--	--	--	--	--	--	18
28...	1130	12	--	11.0	0.020	1.0	0.110	0.030	12
28...	1730	12	--	--	--	--	--	--	10
28...	2330	12	--	12.0	<0.015	0.70	0.050	<0.010	14
29...	0530	--	7.1	--	--	--	--	--	14
29...	1430	--	5.8	12.0	<0.015	0.70	0.040	<0.010	11
*30...	0830	--	4.3	--	--	--	--	--	15
JUN									
06...	1715	--	7.5	14.0	0.030	0.70	0.060	<0.010	60
06...	1745	--	13	--	--	--	--	--	661
06...	1815	--	20	--	--	--	--	--	488
06...	2115	--	23	9.80	0.320	2.2	0.510	0.130	243
07...	0015	13	--	--	--	--	--	--	180
07...	0315	13	--	5.80	0.090	1.5	0.290	0.130	84
07...	0915	13	--	--	--	--	--	--	38
07...	1515	13	--	13.0	0.060	1.0	0.140	0.050	22
08...	0015	--	8.8	--	--	--	--	--	33
*08...	1355	--	6.1	14.0	0.150	0.70	0.090	0.020	65
*29...	1245	--	0.80	6.30	0.020	0.60	0.050	<0.010	20
JUL									
*05...	0900	--	0.58	3.40	0.030	0.60	0.080	<0.010	13
*10...	0840	--	0.44	<0.050	0.070	0.60	0.070	0.140	11
*20...	1055	--	0.06	0.140	0.040	0.40	0.100	0.090	7
*25...	0855	--	0.15	--	--	--	--	--	4
AUG									
*07...	0815	--	0.05	<0.050	0.030	0.50	0.040	<0.010	7
07...	1700	--	0.94	0.160	<0.015	0.90	0.140	<0.010	32
07...	2000	--	1.6	0.280	0.020	0.60	0.100	<0.010	29
07...	2300	--	1.5	--	--	--	--	--	26
08...	0500	--	0.98	--	--	--	--	--	30
08...	0800	--	1.1	3.10	0.600	2.7	0.540	0.290	46
08...	1400	--	0.87	--	--	--	--	--	17
*09...	0730	24	--	--	--	--	--	--	8
09...	1130	24	--	0.470	<0.015	1.5	0.340	0.090	62
09...	1200	24	--	--	--	--	--	--	96
09...	1300	24	--	0.490	0.070	1.9	0.550	0.120	220
09...	1600	24	--	5.70	0.040	2.3	0.840	0.430	183
09...	1730	24	--	4.40	0.050	1.5	0.570	0.270	133
*09...	1735	24	--	4.10	<0.015	1.5	0.510	0.260	119
09...	1845	24	--	--	--	--	--	--	133
09...	2145	24	--	--	--	--	--	--	114
10...	0045	29	--	7.10	0.020	1.3	0.430	0.290	116
10...	0345	29	--	--	--	--	--	--	69
*10...	0745	29	--	7.50	0.070	1.4	0.370	0.230	25
11...	0645	9.0	--	--	--	--	--	--	17
12...	0645	--	3.4	--	--	--	--	--	18
*12...	0920	--	3.1	--	--	--	--	--	13
14...	0645	--	1.1	--	--	--	--	--	8
16...	1015	--	4.1	3.50	0.090	1.4	0.230	0.080	36
16...	1130	--	6.1	--	--	--	--	--	30
16...	1430	--	6.9	4.30	0.020	1.1	0.370	0.250	14
16...	2030	--	5.5	4.20	<0.015	1.0	0.240	--	18
16...	2200	--	20	--	--	--	--	--	51
16...	2230	--	37	3.50	<0.015	1.5	0.660	0.280	255
16...	2315	--	73	--	--	--	--	--	536
17...	0100	80	--	3.50	0.040	2.5	1.00	0.310	348
17...	0500	80	--	--	--	--	--	--	113
17...	1500	80	--	5.50	<0.015	1.2	0.360	0.250	25
17...	2100	80	--	--	--	--	--	--	27
18...	0600	29	--	6.60	<0.015	1.4	0.310	--	21
18...	2400	29	--	--	--	--	--	--	16
SEP									
06...	1000	--	0.12	0.230	0.030	0.40	0.080	0.050	15
*18...	0855	--	0.11	--	--	--	--	--	48

DATE	TIME	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
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OCT 1995

**02... 1200 <0.050 <0.015 0.30 0.040 <0.010

* Equal-width increment (EWI) sample

** Grab sample

ROCK RIVER BASIN

05431014 JACKSON CREEK AT PETRIE ROAD NEAR ELKHORN, WI--CONTINUED

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.01	.19	.17	.02	.01	.06	.28	.10	.02	.00	.02
2	.00	.01	.15	.15	.02	.02	.05	.18	.09	.01	.00	.01
3	.00	.00	.11	.14	.02	.02	.05	.13	.08	.01	.00	.01
4	.00	.01	.08	.09	.02	.02	.03	.11	.06	.01	.00	.01
5	.00	.01	.06	.06	.02	.02	.03	.09	.05	.02	.00	.01
6	.00	.15	.05	.05	.02	.02	.03	.06	4.9	.01	.00	.00
7	.00	.01	.04	.04	.02	.01	.02	.05	2.1	.01	.04	.01
8	.01	.01	.03	.03	.02	.01	.39	.09	.96	.01	.06	.01
9	.01	.01	.03	.02	.01	.01	.12	.38	.81	.01	8.9	.01
10	.01	.01	.02	.02	.01	.03	.38	1.6	.63	.01	3.7	.01
11	.01	.01	.02	.02	.01	.08	1.8	.65	.47	.01	.43	.01
12	.01	.01	.02	.02	.01	.06	1.7	.30	.34	.00	.12	.01
13	.01	.01	.01	.02	.01	.02	.39	.12	.27	.00	.04	.01
14	.01	.01	.01	4.7	.01	.02	.22	.20	.22	.00	.02	.01
15	.01	.01	.01	.50	.01	.05	.11	.24	.18	.00	.01	.01
16	.01	.01	.01	.13	.01	.05	.06	.33	.13	.00	6.2	.01
17	.01	.01	.02	.09	.01	.04	.05	.45	.12	.00	26	.02
18	.01	.01	.03	.08	.01	.03	2.0	.29	.11	.00	1.5	.01
19	.01	.00	.02	.06	.04	.03	1.2	.17	.09	.00	.52	.01
20	.01	.00	.02	.04	.06	.07	.60	.11	.09	.00	.24	.01
21	.01	.00	.02	.03	.09	.05	.42	.07	.08	.00	.11	.02
22	.02	.00	.04	.03	.03	.03	.29	.04	.06	.00	.06	.02
23	.02	.00	.09	.03	.04	.03	.22	.03	.06	.00	.04	.01
24	.02	.00	.10	.02	.05	.02	.18	.03	.05	.00	.04	.01
25	.02	.00	.08	.02	.03	.02	.13	.03	.04	.00	.03	.01
26	.02	.00	.07	.02	.01	.01	1.8	.02	.03	.00	.03	.01
27	.01	.08	.15	.02	.01	.11	34	.08	.03	.00	.02	.00
28	.01	.11	.21	.02	.01	.10	3.5	.81	.04	.00	.03	.00
29	.01	.14	.20	.02	---	.09	.96	.21	.04	.00	.04	.00
30	.01	.21	.19	.02	---	.09	.50	.16	.03	.00	.03	.00
31	.01	---	.18	.02	---	.07	---	.12	---	.00	.03	---
TOTAL	0.29	0.85	2.26	6.68	0.63	1.24	51.29	7.43	12.26	0.13	48.24	0.29

WTR YR 1995 TOTAL 131.59

NITROGEN, AMMONIA, DISSOLVED, POUNDS PER DAY, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.01	.06	.07	.14	.08	.77	1.6	.19	.05	.01	.05
2	.02	.01	.06	.06	.13	.08	.77	1.1	.17	.05	.01	.04
3	.01	.01	.06	.05	.12	.09	.72	.74	.15	.04	.01	.03
4	.01	.02	.05	.04	.10	.08	.41	.56	.11	.06	.01	.02
5	.01	.06	.05	.03	.09	.07	.23	.42	.09	.09	.01	.02
6	.01	.48	.04	.03	.08	.06	.17	.29	5.9	.06	.01	.02
7	.01	.08	.04	.03	.06	.05	.10	.22	6.0	.04	.08	.02
8	.02	.06	.03	.03	.05	.05	.64	.39	4.6	.02	1.2	.02
9	.02	.08	.03	.03	.04	.04	.49	1.1	3.6	.18	3.4	.02
10	.02	.08	.03	.03	.04	e.11	.54	2.7	2.7	.15	8.4	.02
11	.02	.07	.02	.03	.03	e.24	1.6	1.6	1.9	.06	2.9	.01
12	.02	.06	.02	.08	.03	e.30	2.2	1.0	1.3	.04	.84	.01
13	.02	.04	.02	.34	.02	e.29	16.0	.95	1.0	.02	.36	.01
14	.02	.06	.02	30.7	.02	e.27	14.0	.86	.82	.02	.23	.01
15	.01	.07	.02	5.1	.02	.24	4.3	.82	.63	.02	.15	.01
16	.01	.05	.02	4.6	.01	.20	1.5	.98	.45	.02	1.2	.01
17	.01	.04	.04	4.1	.01	.16	.59	1.2	.39	.01	10.9	.02
18	.01	.03	.05	3.0	.02	.13	1.3	.89	.33	.01	2.3	.01
19	.01	.03	.05	2.2	e.14	.11	1.4	.61	.28	.01	.94	.01
20	.01	.02	.05	1.1	e.64	.19	.82	.47	.24	.01	.43	.01
21	.01	.02	.05	.80	e2.0	.27	.67	.36	.21	.01	.21	.02
22	.01	.02	e.17	.66	e.44	.21	.49	.26	.16	.01	.11	.02
23	.01	.02	e.31	.55	e.34	.18	.39	.23	.14	.02	.09	.01
24	.01	.01	e.74	.45	e.64	.14	.33	.27	.12	.02	.08	.01
25	.01	.01	e.82	.37	e.27	.12	.25	.17	.10	.03	.07	.01
26	.01	.01	e.66	.31	.08	.10	1.4	.11	.07	.02	.06	.01
27	.01	.20	e.62	.27	.07	3.2	12.9	.13	.07	.02	.06	.01
28	.01	.28	e.70	.23	.08	3.9	3.9	1.8	.07	.03	.08	.01
29	.01	.11	e.51	.21	---	.99	1.9	.50	.09	.02	.11	.01
30	.01	.07	.10	.18	---	.82	1.4	.32	.08	.01	.09	.01
31	.01	---	.09	.16	---	.77	---	.24	---	.01	.08	---
TOTAL	0.40	2.11	5.53	55.84	5.71	13.54	72.18	22.89	31.96	1.16	34.43	0.49

WTR YR 1995 TOTAL 246.24

e Estimated

05431014 JACKSON CREEK AT PETRIE ROAD NEAR ELKHORN, WI--CONTINUED

NITROGEN, AMMONIA PLUS ORGANIC, TOTAL(POUNDS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.10	1.7	1.6	1.5	1.3	9.7	29.1	7.6	1.4	.19	1.3
2	.10	.10	1.7	1.3	1.4	1.1	8.5	20.1	6.3	1.1	.19	.84
3	.08	.10	1.5	1.1	1.3	.91	7.7	14.8	5.3	.96	.20	.62
4	.08	.13	1.3	.86	1.2	.82	5.7	12.1	3.7	1.2	.20	.42
5	.08	.46	1.2	.73	1.2	.74	4.3	9.8	2.9	1.8	.20	.31
6	.08	7.8	1.1	.64	1.1	.68	4.5	7.6	55.8	1.2	.18	.25
7	.08	2.1	.96	.63	.97	.63	3.4	6.2	88.2	.73	2.0	.25
8	.10	1.4	.84	.60	.84	.59	25.2	14.0	27.8	.42	9.6	.25
9	.13	1.9	.75	.57	.76	.56	17.2	58.9	18.3	1.6	206	.25
10	.13	2.1	.64	.56	.72	e1.5	21.8	137	14.9	1.3	215	.22
11	.13	1.8	.58	.53	.66	e8.3	87.8	65.6	11.6	.56	59.8	.20
12	.13	1.4	.53	1.1	.59	e12.9	106	32.3	8.8	.36	17.8	.20
13	.13	1.1	.49	4.9	.50	e11.8	97.2	25.0	7.5	.22	7.9	.20
14	.13	1.6	.47	234	.41	e10.2	64.7	20.4	6.5	.21	5.0	.13
15	.13	1.8	.48	64.4	.38	3.9	38.4	14.7	5.5	.17	3.5	.12
16	.13	1.3	.50	22.8	.36	3.4	25.9	13.1	4.2	.16	72.3	.13
17	.13	1.2	1.0	16.0	.35	2.8	19.8	13.1	4.1	.09	767	.29
18	.13	.90	1.2	12.6	e.56	2.4	115	10.5	3.7	.08	210	.20
19	.13	.70	1.2	9.6	e2.8	2.2	73.9	8.4	3.5	.06	88.8	.20
20	.12	.67	1.2	5.3	e9.4	6.7	28.6	7.6	3.3	.11	41.7	.24
21	.11	.64	1.2	4.1	e23.7	9.0	23.3	6.8	3.1	.14	20.3	.30
22	.12	.61	e2.5	3.6	e7.0	6.9	17.5	5.7	2.6	.14	11.3	.31
23	.12	.53	e4.4	3.2	e5.6	5.8	14.4	e5.7	2.5	.17	8.6	.25
24	.11	.43	e9.9	2.8	e9.4	4.5	12.3	e7.8	2.3	.26	6.1	.21
25	.11	.40	e11.0	2.4	e4.8	3.6	9.8	6.1	2.2	.32	4.8	.21
26	.11	.33	e8.9	2.2	2.1	2.9	52.2	4.7	1.7	.22	3.8	.16
27	.11	3.2	e8.4	2.0	1.9	13.5	679	7.7	1.8	.23	3.0	.13
28	.11	7.1	e9.4	1.8	1.6	21.2	210	73.1	2.0	.37	e4.2	.13
29	.11	3.2	e7.0	1.7	---	16.4	92.2	23.1	2.5	.30	e5.5	.13
30	.10	1.9	2.2	1.6	---	13.1	47.4	14.1	2.1	.20	e4.3	.13
31	.10	---	1.9	1.5	---	11.0	---	10.0	---	.09	e3.1	---
TOTAL	3.46	47.00	86.14	406.72	83.10	181.33	1923.4	685.1	312.3	16.17	1782.56	8.58
WTR YR 1995	TOTAL 5535.86											

NITROGEN, NITRITE PLUS NITRATE, DISSOLVED, POUNDS PER DAY, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.04	20.8	16.8	9.5	28.3	159	869	166	12.2	.03	1.6
2	.02	.04	20.0	13.3	9.8	25.3	135	631	150	8.5	.03	.87
3	.02	.04	17.5	11.7	9.7	23.0	120	484	136	6.6	.03	.56
4	.02	.06	16.1	8.9	9.7	21.4	91.1	413	103	7.4	.02	.33
5	.02	.66	14.1	7.5	9.6	19.8	70.5	349	89.0	10.1	.02	.21
6	.02	38.7	13.6	6.6	9.5	18.6	75.8	280	407	6.5	.02	.15
7	.02	9.9	11.4	6.5	8.8	17.9	57.8	239	662	3.9	.83	.14
8	.03	6.7	9.9	6.1	8.1	17.1	297	255	507	2.2	8.5	.13
9	.03	9.8	8.8	5.7	7.7	16.7	294	585	357	1.6	616	.12
10	.03	10.9	7.5	5.6	7.7	e19.0	312	1560	281	.14	1170	.10
11	.03	10.0	6.7	5.3	7.5	e100	855	1290	213	.05	349	.09
12	.03	8.0	6.2	8.4	7.0	e155	1820	826	156	.04	112	.09
13	.03	6.7	5.7	34.2	6.3	e143	1340	649	129	.03	54.0	.08
14	.03	10.0	5.3	744	5.5	e123	750	529	108	.03	37.4	.05
15	.03	11.3	5.4	633	5.4	137	489	372	88.4	.03	28.2	.04
16	.03	8.9	5.7	88.1	5.4	123	363	321	66.0	.03	183	.05
17	.03	8.0	11.5	45.8	5.5	104	304	313	61.7	.02	1960	.10
18	.03	6.4	13.3	38.0	8.1	91.1	765	243	54.9	.02	993	.06
19	.03	5.2	13.1	30.8	e24.9	86.8	1000	185	49.9	.02	425	.06
20	.03	5.2	12.8	18.0	e74.7	95.6	659	162	45.6	.04	202	.07
21	.03	5.2	12.9	14.5	e172	109	564	139	41.1	.04	99.8	.09
22	.03	5.1	e22.5	13.5	e57.2	91.6	426	112	34.2	.04	56.3	.08
23	.03	4.5	e27.9	12.6	e47.0	84.4	352	116	31.4	.05	40.0	.06
24	.03	3.8	e78.3	11.7	e74.7	71.0	304	151	28.1	.07	24.5	.05
25	.03	3.7	e85.6	10.7	e40.5	62.0	244	119	25.8	.08	16.4	.05
26	.03	3.2	e71.1	10.2	e24.9	54.5	402	97.8	19.6	.05	11.2	.04
27	.03	11.1	e67.6	9.9	35.9	124	4480	109	20.0	.05	7.7	.03
28	.03	48.8	e74.7	9.6	32.2	268	3160	640	21.9	.07	7.8	.03
29	.03	39.9	e57.2	9.6	---	277	1800	398	26.5	.06	8.4	.02
30	.03	23.5	23.3	9.6	---	233	1200	259	20.1	.03	5.4	.02
31	.04	---	20.3	9.6	---	188	---	201	---	.01	3.2	---
TOTAL	0.87	305.34	766.8	1855.8	724.8	2928.1	22889.2	12896.8	4099.2	60.00	6419.78	5.37
WTR YR 1995	TOTAL 52952.06											

e Estimated

05431014 JACKSON CREEK AT PETRIE ROAD NEAR ELKHORN, WI--CONTINUED

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

[illegible]

PHOSPHORUS ORTHO WATER, WHOLE, DISSOLVED, LBS/DAY, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

[illegible]

054310157 JACKSON CREEK TRIBUTARY NEAR ELKHORN, WI

LOCATION.--Lat 42°39'03", long 88°33'03", in NW 1/4 NE 1/4 sec.12, T.2 N., R.16 E., Walworth County, Hydrologic Unit 07090001, on left bank 20 ft downstream of 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.--Estimated daily discharges: Ice-affected periods, Dec. 7-16, Jan. 2-11, 19-31, and Feb. 1-18. Records good except those for ice-affected periods, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.21	.18	.43	.50	.40	1.2	1.8	5.4	1.7	.21	3.8	.74
2	.15	.21	.37	.30	.32	1.1	1.6	4.4	1.5	.19	1.8	.66
3	.24	1.9	.37	.25	.27	1.0	1.9	3.9	1.3	.25	2.2	.58
4	.23	2.7	.43	.17	.24	.92	1.4	3.7	1.1	1.5	.33	.54
5	.25	8.7	.87	.13	.22	1.4	1.2	3.5	1.1	1.0	.10	.67
6	.20	8.7	.53	.11	.20	1.9	1.4	3.1	1.7	.24	.07	.69
7	.20	1.5	.78	.10	.18	1.8	2.2	2.8	2.3	.19	15	.97
8	1.7	1.4	.60	.09	.17	1.6	14	7.6	1.7	.13	4.3	.60
9	.16	3.4	.50	.08	.17	1.4	7.8	14	.92	3.7	46	.47
10	.26	.94	.40	.08	.25	3.2	9.0	18	.84	.25	9.5	.39
11	.27	.53	.30	.08	.20	3.8	14	9.3	.74	.24	2.6	.47
12	.31	.36	.25	2.0	.17	3.0	15	6.4	.70	.19	.90	.52
13	.29	.92	.23	2.8	.15	2.8	9.8	6.9	.66	.19	.52	.53
14	.27	2.7	.21	19	.14	2.4	6.6	5.4	.63	.19	.47	.51
15	.24	.63	.20	4.9	.13	2.1	4.8	3.3	.58	.81	1.2	.50
16	.23	.49	.80	3.1	.13	1.9	4.1	3.5	.56	.88	24	1.4
17	.38	.40	1.8	2.6	.15	1.6	4.7	3.8	.48	.11	33	1.3
18	.37	.31	1.6	2.2	1.0	1.3	16	1.7	.46	.12	5.6	.73
19	.39	.23	1.3	1.7	3.2	1.3	9.8	1.3	.52	.42	2.9	2.4
20	.29	.42	1.4	1.5	4.5	4.6	6.6	1.2	.55	.61	1.9	.97
21	.27	1.1	2.3	1.2	2.8	2.9	8.5	.90	.50	.19	1.3	2.3
22	.22	.36	2.5	1.1	2.1	1.7	6.1	.81	.49	.34	1.0	1.2
23	.18	.43	3.0	.90	2.0	1.9	4.4	4.4	.55	.87	.89	1.0
24	.24	.56	2.6	.70	1.7	1.4	4.0	4.3	.42	4.2	.78	1.0
25	.16	.41	1.9	.60	1.5	1.2	3.6	2.4	.37	.95	.78	.99
26	.18	.31	1.4	.50	1.4	1.1	13	2.0	.55	.77	.74	1.4
27	.26	5.7	1.7	.40	1.4	9.5	32	4.9	.96	3.8	.72	1.0
28	.24	2.6	1.6	.35	1.3	7.0	12	11	.47	2.9	5.6	.90
29	.18	.98	1.0	.30	---	4.7	8.9	4.0	.44	.96	3.2	1.7
30	.15	.52	.76	.25	---	3.0	6.8	2.4	.36	.72	1.3	2.6
31	.71	---	.64	.28	---	2.3	---	2.0	---	.82	.92	---
TOTAL	9.43	49.59	32.77	48.27	26.39	77.02	233.0	148.31	25.15	27.94	173.42	29.73
MEAN	.30	1.65	1.06	1.56	.94	2.48	7.77	4.78	.84	.90	5.59	.99
MAX	1.7	8.7	3.0	19	4.5	9.5	32	18	2.3	4.2	46	2.6
MIN	.15	.18	.20	.08	.13	.92	1.2	.81	.36	.11	.07	.39
CFSM	.07	.38	.24	.36	.22	.57	1.79	1.10	.19	.21	1.29	.23
IN.	.08	.43	.28	.41	.23	.66	2.00	1.27	.22	.24	1.49	.25

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1995, BY WATER YEAR (WY)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
MEAN	2.32	4.35	2.98	1.73	3.60	5.69	5.24	3.03	2.30	2.28	1.84	2.67
MAX	7.23	13.3	6.55	4.61	8.81	10.7	14.4	7.11	8.72	5.39	5.59	10.8
(WY)	1986	1986	1985	1993	1985	1986	1993	1990	1993	1992	1995	1986
MIN	.30	.58	.49	.45	.33	2.48	1.28	.79	.54	.44	.30	.27
(WY)	1995	1990	1990	1994	1989	1995	1989	1989	1988	1988	1988	1987

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1984 - 1995	
ANNUAL TOTAL	700.47		881.02			
ANNUAL MEAN	1.92		2.41		3.16	
HIGHEST ANNUAL MEAN					5.74	
LOWEST ANNUAL MEAN					1.70	
HIGHEST DAILY MEAN	113	Feb 19	46	Aug 9	113	Feb 19 1994
LOWEST DAILY MEAN	.05	Jun 19	.07	Aug 6	.05	Jun 19 1994
ANNUAL SEVEN-DAY MINIMUM	.10	Jul 27	.10	Jan 5	.10	Jan 5 1995
INSTANTANEOUS PEAK FLOW			147	Aug 9	210	Apr 19 1993
INSTANTANEOUS PEAK STAGE			9.60	Aug 9	10.00	Apr 19 1993
ANNUAL RUNOFF (CFSM)	.44		.56		.73	
ANNUAL RUNOFF (INCHES)	6.00		7.55		9.89	
10 PERCENT EXCEEDS	3.0		5.6		6.9	
50 PERCENT EXCEEDS	.58		.97		1.3	
90 PERCENT EXCEEDS	.18		.20		.37	

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 (discontinued).

TOTAL AMMONIA PLUS ORGANIC NITROGEN DISCHARGE: Water years 1984-85 and February 1993 to September 1995 (discontinued).

DISSOLVED NITRITE PLUS NITRATE DISCHARGE: February 1993 to September 1995 (discontinued).

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 (discontinued).

INSTRUMENTATION.--Automatic pumping sampler since October 1983.

REMARKS.--Records good. Samples for dissolved ammonia nitrogen, dissolved nitrite plus nitrate, and dissolved ortho-phosphorus were filtered through a 0.45 mm filter. In water years 1984-85, total nitrite plus nitrate loads were computed using concentrations from unfiltered samples. In 1994 water year, loads for dissolved ortho-phosphorus, dissolved ammonia nitrogen, and dissolved nitrite plus nitrate were published as total loads, but were, in fact, dissolved loads.

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, 127 tons, Apr. 19, 1993; minimum daily, 0.00 ton, on several days in 1994 and 1995 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, 3,220 mg/L, Mar. 27; minimum observed, 1 mg/L, May 11.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 26 tons, Aug. 9, 16; minimum daily, 0.00 ton, on several days.

DISSOLVED AMMONIA NITROGEN CONCENTRATIONS: Maximum observed, 0.66 mg/L, May 16; minimum observed, <0.015 mg/L, on many days.

DISSOLVED AMMONIA NITROGEN DISCHARGE: Maximum daily, 32 lb, Apr. 27; minimum daily, 0.02 lb, Jan. 8-11 and July 1-2.

TOTAL AMMONIA PLUS ORGANIC NITROGEN CONCENTRATIONS: Maximum observed, 6.5 mg/L, May 16; minimum observed, <0.20 mg/L, July 24.

TOTAL AMMONIA PLUS ORGANIC NITROGEN DISCHARGE: Maximum daily, 302 lb, Aug. 9; minimum daily, 0.09 lb, Jan. 9-11.

DISSOLVED NITRITE PLUS NITRATE CONCENTRATIONS: Maximum observed, 7.6 mg/L, Apr. 28; minimum observed, 0.30 mg/L, Aug. 7.

DISSOLVED NITRITE PLUS NITRATE DISCHARGE: Maximum daily, 628 lb, Apr. 27; minimum daily, 0.43 lb, Aug. 6.

TOTAL PHOSPHORUS CONCENTRATIONS: Maximum observed, 3.3 mg/L, Mar. 27; minimum observed, 0.01 mg/L, Dec. 27

TOTAL PHOSPHORUS DISCHARGE: Maximum daily, 104 lb, Aug. 9; minimum daily, 0.02 lb, on several days.

054310157 JACKSON CREEK TRIBUTARY NEAR ELKHORN, WI--CONTINUED

DISSOLVED ORTHO-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.30 mg/L, May 23; minimum observed, <0.01mg/L, on many days.

DISSOLVED ORTHO-PHOSPHORUS DISCHARGE: Maximum daily, 38.2 lb, Aug. 9; minimum daily, 0.00 lb, Jan. 8-11 and Aug. 6.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDED (MG/L) (80154)
OCT 1994								
08...	1345	4.7	--	--	--	0.480	--	213
08...	1545	6.5	--	--	--	0.470	--	196
08...	1745	3.8	--	--	--	0.250	--	74
*10...	0825	0.14	--	--	--	0.080	--	100
*25...	1155	0.15	1.50	0.110	0.30	0.030	0.010	132
NOV								
*01...	0950	0.15	1.10	0.140	0.60	0.110	0.040	45
04...	1045	11	1.00	0.540	3.2	0.670	0.180	302
05...	1615	2.3	1.10	0.140	0.70	0.150	0.050	58
05...	1745	12	0.720	0.390	2.2	0.590	0.130	301
05...	2015	25	0.790	0.080	1.2	0.560	0.120	330
05...	2230	49	1.00	0.060	1.9	0.800	0.100	677
06...	0415	15	3.60	0.040	0.90	0.290	0.140	52
*06...	0920	6.5	5.00	0.030	0.80	0.170	0.100	79
06...	2015	2.4	4.80	0.080	0.80	0.190	0.040	70
*07...	0850	1.5	3.40	<0.015	0.60	0.060	<0.010	28
08...	2145	4.3	2.00	<0.015	0.40	0.120	0.080	126
08...	2345	4.9	1.40	0.070	0.40	0.100	0.070	115
09...	0145	4.7	1.20	<0.015	0.40	0.090	0.040	79
09...	0345	7.3	1.10	0.020	0.40	0.110	0.070	114
09...	0745	4.4	1.40	0.040	0.40	0.050	0.070	37
*09...	0820	4.0	1.50	<0.015	0.50	0.120	0.070	31
09...	1545	2.3	2.30	0.150	0.40	0.060	0.020	18
10...	0810	0.95	3.00	0.070	0.30	0.040	0.010	83
*13...	2200	4.0	2.00	0.140	0.50	0.050	<0.010	165
13...	2400	6.3	1.00	0.150	0.60	0.120	0.070	161
14...	0200	6.2	--	--	--	--	--	113
14...	0400	5.4	--	--	--	--	--	96
14...	0600	3.7	0.910	<0.015	0.40	0.060	0.020	80
14...	0800	2.9	--	--	--	--	--	21
14...	1000	2.4	1.30	<0.015	0.40	0.070	0.010	14
*15...	0755	0.64	2.30	0.050	0.40	0.030	<0.010	41
27...	1030	5.4	2.10	0.280	1.3	0.990	0.020	772
27...	1045	9.6	--	--	--	--	--	1810
27...	1115	15	--	--	--	--	--	812
27...	1200	22	1.60	<0.015	3.4	1.20	0.060	805
27...	1400	15	--	--	--	--	--	105
27...	1600	9.8	0.880	<0.015	0.60	0.250	0.090	73
27...	2000	5.4	--	--	--	--	--	62
27...	2200	4.4	0.560	0.140	0.60	0.150	0.050	--
27...	2400	3.8	--	--	--	--	--	52
28...	0400	3.8	1.60	<0.015	0.70	0.150	0.030	--
28...	0600	3.4	--	--	--	--	--	45
*28...	0835	2.7	2.00	0.090	0.60	0.100	0.020	19
*29...	0825	1.0	2.40	0.110	0.50	0.060	0.020	48
*30...	1215	0.64	2.50	0.230	0.40	0.040	0.020	72
DEC								
*05...	0830	0.64	--	--	--	0.020	--	38
22...	1545	2.6	--	--	--	0.040	--	22
22...	1945	3.1	--	--	--	--	--	37
22...	2145	3.1	--	--	--	0.040	--	--
22...	2345	3.2	--	--	--	--	--	16
23...	0545	2.9	--	--	--	--	--	36
23...	1145	2.8	--	--	--	0.040	--	--
23...	1545	3.5	--	--	--	0.060	--	--
23...	1745	3.5	--	--	--	--	--	61
23...	2145	3.1	--	--	--	--	--	40
24...	0145	2.9	--	--	--	0.070	--	--
24...	0345	2.8	--	--	--	--	--	43
*27...	1010	1.6	--	--	--	0.010	--	20

* Equal-width increment (EWI) sample

ROCK RIVER BASIN

054310157 JACKSON CREEK TRIBUTARY NEAR ELKHORN, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDED (MG/L) (80154)
JAN 1995									
*03...	0852	0.25	--	--	--	--	0.060	--	--
12...	1300	--	2.8	1.90	0.520	1.3	0.120	0.030	43
12...	1500	--	3.5	--	--	--	--	--	50
12...	1700	--	3.8	1.30	0.080	1.4	0.250	<0.010	85
12...	1900	--	3.5	--	--	--	--	--	64
12...	2100	--	3.1	1.30	<0.015	1.0	0.140	<0.010	42
*13...	0915	--	1.1	1.90	0.060	0.80	0.050	<0.010	--
13...	2030	--	4.0	--	--	--	--	--	161
13...	2230	--	7.3	1.60	0.190	0.90	0.170	0.050	--
13...	2345	--	12	--	--	--	--	--	681
14...	0100	--	18	3.30	0.240	1.5	0.330	0.220	--
14...	0300	--	24	--	--	--	--	--	358
14...	0500	--	29	4.40	0.200	1.5	0.360	0.250	197
14...	0700	--	28	--	--	--	--	--	126
14...	0900	--	26	--	--	--	--	--	81
14...	1100	--	25	5.90	0.100	1.4	0.330	0.190	--
14...	1300	--	21	--	--	--	--	--	48
14...	1900	--	11	--	--	--	--	--	36
14...	2100	--	9.2	6.80	0.150	1.4	0.270	0.120	--
15...	0300	--	6.5	--	--	--	--	--	22
15...	1500	--	4.4	--	--	--	--	--	2
15...	1900	--	4.0	7.30	0.140	1.3	0.220	0.080	--
16...	0300	--	3.2	--	--	--	--	--	36
*16...	1020	--	3.2	1.20	0.130	1.6	0.610	0.050	33
FEB									
20...	1445	--	6.6	--	--	--	0.340	--	99
20...	1645	--	7.6	--	--	--	0.230	--	82
20...	1845	--	7.1	--	--	--	--	--	58
20...	2045	--	5.8	--	--	--	--	--	71
20...	2245	--	4.7	--	--	--	0.230	--	39
*27...	0950	--	1.3	3.30	0.130	0.60	0.050	0.010	46
MAR									
03...	1200	--	1.2	2.80	0.310	0.60	0.020	0.020	19
*06...	0815	--	1.8	--	--	--	0.020	--	35
10...	1615	--	5.8	--	--	--	0.430	--	165
10...	1815	--	7.3	--	--	--	0.400	--	143
10...	2015	--	6.6	--	--	--	--	--	60
10...	2215	--	5.8	--	--	--	--	--	36
11...	0015	--	5.2	--	--	--	0.130	--	--
11...	0215	--	4.4	--	--	--	--	--	37
11...	1445	--	4.1	--	--	--	0.110	--	26
11...	1645	--	4.7	--	--	--	0.090	--	16
11...	1845	--	4.7	--	--	--	--	--	20
11...	2045	--	4.6	--	--	--	--	--	21
11...	2245	--	4.1	--	--	--	0.070	--	10
*12...	0910	--	2.6	--	--	--	0.050	--	23
20...	0330	--	4.1	2.60	0.510	2.0	0.360	<0.010	137
20...	0530	--	7.1	2.00	0.540	2.0	0.420	0.020	166
20...	0730	--	4.6	--	--	--	--	--	41
20...	1130	--	3.7	2.20	0.050	0.60	0.060	<0.010	12
20...	1600	--	5.8	--	--	--	--	--	95
20...	1800	--	6.6	1.50	0.040	1.1	0.220	0.020	69
20...	2000	--	5.8	--	--	--	--	--	41
20...	2200	--	5.4	1.70	0.030	0.60	0.090	0.010	--
20...	2400	--	4.9	--	--	--	--	--	12
*21...	0800	--	2.9	2.50	0.050	0.60	0.020	<0.010	7
27...	0930	--	13	0.930	0.060	2.2	2.30	<0.010	2400
27...	0945	--	22	0.630	0.200	1.8	3.30	0.030	3220
27...	1145	--	21	0.430	0.260	1.0	0.390	0.050	253
27...	1745	--	12	1.50	0.210	0.50	0.090	0.040	24
*28...	0815	--	6.8	2.70	0.100	0.40	0.060	<0.010	6
28...	1345	--	7.1	3.00	0.150	0.40	0.070	0.020	14
*28...	1350	--	7.1	2.80	0.070	0.40	0.060	<0.010	13
28...	1945	--	6.5	--	--	--	--	--	12
29...	0145	--	5.7	3.90	0.050	0.40	1.80	0.290	--
*29...	0805	--	4.9	3.80	0.050	0.30	0.030	0.010	6

* Equal-width increment (EWI) sample

054310157 JACKSON CREEK TRIBUTARY NEAR ELKHORN, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDED (MG/L) (80154)
APR 1995								
*03...	0750	2.5	3.70	0.140	0.70	0.080	<0.010	--
*09...	1050	8.1	--	--	--	--	--	9
09...	1945	7.4	--	--	--	--	--	9
10...	0845	8.9	2.70	0.070	0.50	0.140	0.040	32
10...	1645	8.4	2.70	<0.015	0.40	0.060	0.020	33
10...	1845	13	--	--	--	--	--	133
10...	2045	14	--	--	--	--	--	64
10...	2245	15	2.20	<0.015	0.60	0.150	0.040	50
11...	0445	12	3.70	<0.015	0.50	0.090	0.030	9
11...	1045	10	--	--	--	--	--	8
11...	1245	9.8	4.90	<0.015	0.50	0.070	0.010	--
11...	1645	12	--	--	--	--	--	36
11...	1845	18	2.40	0.020	1.0	0.350	0.090	120
11...	2045	22	--	--	--	--	--	117
11...	2245	26	2.70	<0.015	1.0	0.260	0.070	79
12...	0045	23	--	--	--	--	--	43
12...	0645	15	--	--	--	--	--	15
12...	0845	14	5.80	<0.015	0.50	0.090	0.050	--
12...	1130	16	4.40	0.090	0.70	0.170	0.060	50
*12...	1131	16	4.40	0.150	0.70	0.150	0.060	45
12...	1245	15	--	--	--	--	--	24
12...	1445	15	5.10	0.030	0.60	0.110	0.050	--
12...	1845	14	--	--	--	--	--	8
13...	0045	12	--	--	--	--	--	12
13...	0245	11	6.50	0.050	0.50	0.070	0.040	--
13...	0645	10	--	--	--	--	--	11
18...	0830	14	1.60	<0.015	2.0	0.620	0.030	416
18...	1030	19	--	--	--	--	--	184
18...	1230	31	1.30	0.230	2.6	0.780	0.100	644
18...	1430	30	1.90	0.120	1.7	0.340	0.100	129
18...	1630	25	--	--	--	--	--	72
18...	2030	17	3.80	0.050	1.0	0.170	0.070	36
19...	0030	13	--	--	--	--	--	20
19...	0630	11	5.40	0.060	0.70	0.090	0.030	16
*19...	0810	10	--	--	--	--	--	9
19...	1230	9.4	--	--	--	--	--	4
19...	1430	9.1	5.70	<0.015	0.40	0.090	<0.010	--
*20...	0805	6.6	5.40	<0.015	0.50	0.070	<0.010	5
21...	0945	10	--	--	--	--	--	29
21...	1545	9.1	--	--	--	--	--	7
*22...	0850	6.3	5.50	0.030	0.40	0.040	<0.010	38
26...	0930	10	2.00	0.030	1.0	0.180	<0.010	115
26...	1130	9.1	--	--	--	--	--	59
26...	1700	13	--	--	--	--	--	202
26...	1745	21	--	--	--	--	--	486
26...	2145	32	1.70	0.100	0.80	0.290	0.090	130
27...	0145	43	--	--	--	--	--	152
27...	0345	54	1.90	0.370	1.0	0.370	0.070	230
27...	0545	54	2.40	0.100	1.0	0.330	0.090	141
27...	0745	44	--	--	--	--	--	76
*27...	0800	42	2.80	0.210	0.70	0.220	0.070	74
27...	1145	27	5.10	0.190	0.70	0.200	0.100	31
27...	1345	26	5.30	0.140	0.70	0.210	0.100	36
27...	1945	19	--	--	--	--	--	20
28...	0345	14	7.50	0.130	0.60	0.120	0.070	11
28...	0945	13	7.60	0.110	0.50	0.080	0.060	11
*28...	1015	13	7.40	0.080	0.40	0.130	0.060	--
28...	1945	11	--	--	--	--	--	8
*29...	0915	9.1	7.50	0.080	0.50	0.060	0.030	2
29...	0945	9.1	--	--	--	--	--	2
*30...	0905	6.9	6.60	0.110	1.2	0.210	0.010	7
MAY								
*01...	0815	5.5	6.60	0.140	0.40	0.050	0.030	7
08...	1045	9.8	2.20	0.350	1.8	0.330	0.120	115
08...	1245	13	1.30	0.460	1.7	0.340	0.180	140
08...	1445	11	--	--	--	--	--	20
08...	1645	9.4	2.20	0.310	1.0	0.090	0.040	9
08...	2245	10	--	--	--	--	--	117
09...	0045	8.9	2.70	0.450	1.1	0.080	0.040	73
09...	0245	14	--	--	--	--	--	159
09...	0445	18	1.70	0.360	1.2	0.180	0.060	--
*09...	0820	14	--	--	--	--	--	11
09...	1645	9.4	--	--	--	--	--	2
09...	1845	8.9	5.40	0.090	0.60	0.040	0.030	--
10...	0015	30	2.70	0.330	0.90	0.110	0.120	77
10...	0415	19	--	--	--	--	--	24
10...	0615	18	4.90	0.190	0.70	0.080	0.070	--
*10...	0810	19	--	--	--	--	--	28
10...	0815	18	4.60	0.140	0.90	0.150	0.070	--

* Equal-width increment (EWI) sample

ROCK RIVER BASIN

054310157 JACKSON CREEK TRIBUTARY NEAR ELKHORN, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDED (MG/L) (80154)
MAY 1995								
10...	1015	18	--	--	--	--	--	15
10...	1215	19	--	--	--	--	--	21
10...	1415	17	--	--	--	--	--	8
10...	2215	13	7.00	0.020	0.70	0.070	0.030	--
11...	0015	12	--	--	--	--	--	5
*11...	0820	9.8	--	--	--	--	--	7
11...	1015	9.6	--	--	--	--	--	1
11...	1815	8.4	--	--	--	--	--	2
11...	2015	7.9	7.30	0.020	0.50	0.040	0.030	--
*2...	0800	6.6	6.80	<0.015	0.50	0.040	<0.010	6
13...	1145	8.4	--	--	--	--	--	16
13...	1345	8.7	3.60	0.030	0.80	0.080	<0.010	12
13...	1545	8.2	--	--	--	--	--	6
13...	2145	7.3	5.50	0.170	0.70	0.040	<0.010	8
*14...	0850	5.7	--	--	--	--	--	8
16...	1945	10	2.70	0.660	6.5	1.10	0.240	470
16...	2145	8.2	--	--	--	--	--	55
16...	2345	6.6	2.80	0.030	0.90	0.100	<0.010	17
17...	0145	5.8	--	--	--	--	--	5
*17...	1200	3.8	5.00	0.040	0.40	0.030	0.010	10
23...	1700	13	1.70	0.510	3.4	1.30	0.300	503
23...	1900	12	--	--	--	--	--	78
23...	2100	10	1.70	0.140	1.0	0.190	0.080	22
24...	0100	7.1	2.90	0.090	0.60	0.110	0.030	8
*24...	0820	4.8	4.30	0.140	0.60	0.040	0.010	4
27...	1700	8.9	2.50	0.020	1.8	0.410	0.070	91
27...	1900	6.9	--	--	--	--	--	27
27...	2100	9.2	2.00	0.180	1.4	0.300	0.150	45
27...	2245	15	1.60	0.020	2.0	0.610	0.060	323
27...	2300	21	--	--	--	--	--	712
27...	2345	28	1.50	0.090	1.5	0.520	0.100	301
28...	0145	22	--	--	--	--	--	54
28...	0345	17	3.60	0.080	1.3	0.230	0.110	43
28...	0745	12	--	--	--	--	--	8
28...	1345	8.4	--	--	--	--	--	3
28...	1945	6.5	7.20	0.020	0.60	0.060	<0.010	6
*29...	0930	4.3	--	--	--	--	--	5
JUN								
06...	1730	6.6	2.90	0.080	1.5	0.180	<0.010	64
07...	2045	8.4	2.60	0.190	2.7	0.670	<0.010	489
07...	2245	6.9	1.60	0.200	1.2	0.240	0.050	65
*08...	1415	1.2	4.70	0.060	0.60	0.060	<0.010	52
*29...	1330	0.42	2.90	0.020	0.40	0.070	0.040	7
JUL								
04...	1200	2.5	2.40	0.190	0.90	0.090	0.010	53
04...	1245	6.2	2.00	0.280	1.5	0.270	0.020	53
04...	1445	5.2	1.20	0.300	1.4	0.210	0.030	45
04...	1645	2.3	--	--	--	--	--	17
04...	1845	1.6	--	--	--	--	--	10
04...	2045	1.4	--	--	0.50	0.090	--	10
05...	0245	2.3	1.70	0.050	0.60	0.080	0.010	14
05...	0445	3.2	1.10	0.100	0.60	0.120	0.030	16
05...	0645	1.8	--	--	--	--	--	14
*05...	0830	1.2	--	--	--	--	--	18
05...	0845	1.1	1.10	0.070	0.60	0.230	0.030	10
09...	0600	14	1.50	0.400	3.7	1.10	0.090	637
09...	0645	21	0.900	0.380	2.0	0.440	0.110	175
09...	0830	11	--	--	--	--	--	49
09...	1030	5.8	0.810	0.190	0.80	0.160	0.080	17
09...	1430	2.4	--	--	--	--	--	14
09...	1830	0.93	1.30	0.120	0.70	0.130	0.080	7
*10...	0815	0.16	2.20	0.150	0.60	0.100	0.050	25
15...	2045	1.2	--	--	--	0.110	--	32
15...	2215	5.0	--	--	--	--	--	173
15...	2245	8.1	--	--	--	0.320	--	167
16...	0045	4.9	--	--	--	--	--	79
16...	0445	1.3	--	--	--	0.100	--	16
*17...	0835	0.09	--	--	--	--	--	12
19...	1700	1.7	--	--	--	--	--	37
19...	1900	2.1	1.30	0.260	1.1	0.110	0.060	27
20...	0500	1.0	--	--	--	--	--	126
20...	0700	2.1	1.20	0.060	0.70	0.080	0.020	24
*20...	0955	0.79	0.920	0.060	0.50	0.080	0.060	8
22...	2300	2.8	1.50	0.080	0.50	0.070	0.040	63
23...	0100	4.1	0.440	0.020	0.60	0.070	0.010	22
23...	0300	1.8	--	--	--	--	--	26
23...	0500	1.1	0.810	0.390	0.60	0.080	0.010	17
24...	1230	15	0.800	0.030	1.4	0.680	<0.010	938
24...	1245	24	0.930	0.020	<0.20	0.020	<0.010	496

* Equal-width increment (EWI) sample

054310157 JACKSON CREEK TRIBUTARY NEAR ELKHORN, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDED (MG/L) (80154)
JUL 1995								
24...	1445	14	--	--	--	--	--	87
24...	1645	7.3	0.390	0.030	0.70	0.110	<0.010	21
24...	2245	2.6	--	--	--	--	--	14
25...	0245	1.7	--	--	--	--	--	22
*25...	0845	1.0	0.810	<0.015	0.60	0.080	0.030	7
25...	1245	0.79	1.30	0.150	0.60	0.140	0.080	--
26...	0215	1.8	1.70	0.020	1.2	0.130	<0.010	33
27...	1915	8.2	1.60	0.020	1.7	1.10	<0.010	904
27...	2015	30	1.10	0.150	2.1	0.520	0.050	325
27...	2330	9.6	0.450	<0.015	0.90	0.170	0.010	34
*28...	0905	2.8	0.700	<0.015	0.70	0.110	<0.010	3
29...	2130	0.79	--	--	--	0.080	--	8
31...	2400	4.4	--	--	--	0.080	--	45
AUG								
01...	0045	9.6	--	--	--	0.190	--	114
01...	0245	7.8	--	--	--	--	--	52
01...	0445	4.7	--	--	--	0.110	--	21
01...	1245	2.8	--	--	--	--	--	7
*02...	0800	1.7	--	--	--	0.060	--	7
*07...	0835	0.07	1.30	0.090	0.40	0.060	<0.010	12
07...	1630	4.7	0.300	<0.015	1.3	0.500	0.170	144
07...	1645	28	--	--	--	--	--	1650
07...	1700	57	0.870	<0.015	1.6	0.720	0.100	885
07...	1715	69	--	--	--	--	--	686
07...	1800	84	--	--	--	--	--	351
07...	1845	82	0.300	0.030	1.2	0.420	<0.010	--
07...	1945	61	--	--	--	--	--	90
07...	2045	41	0.980	0.040	1.0	0.330	0.150	48
07...	2400	15	--	--	--	--	--	20
08...	0400	8.1	--	--	--	--	--	15
*08...	0755	4.9	1.30	<0.015	0.70	0.130	<0.010	9
08...	1800	1.4	--	--	--	--	--	4
*09...	0755	0.35	--	--	--	--	--	10
09...	1015	19	1.50	0.060	2.5	0.990	0.040	654
09...	1115	37	--	--	--	--	--	214
09...	1200	89	0.700	0.120	2.0	0.720	0.080	436
*09...	1201	89	0.680	<0.015	0.90	0.300	0.070	378
09...	1300	117	1.20	0.080	1.4	0.550	0.090	450
09...	1545	138	1.40	0.050	1.0	0.370	0.170	271
*09...	1546	137	<0.050	<0.015	1.1	0.380	<0.010	92
09...	1715	102	--	--	--	--	--	71
09...	1830	77	3.60	0.080	1.2	0.360	0.260	47
09...	2000	55	--	--	--	--	--	31
09...	2330	25	3.70	<0.015	1.0	0.240	0.140	16
10...	0730	11	4.30	<0.015	0.70	0.140	0.070	11
10...	1645	6.3	--	--	--	--	--	8
*11...	0810	2.9	--	--	--	--	--	5
16...	0700	32	1.10	0.040	0.40	0.100	<0.010	1170
16...	0715	47	--	--	--	--	--	621
16...	0745	60	0.870	<0.015	1.6	0.510	0.040	389
16...	0930	39	--	--	--	--	--	87
16...	1045	25	2.00	0.210	1.9	0.370	0.220	40
16...	1445	11	--	--	--	--	--	16
16...	2045	6.5	2.60	<0.015	0.90	0.190	0.070	22
16...	2115	41	--	--	--	--	--	705
16...	2130	68	0.760	0.080	1.2	0.620	0.070	472
16...	2230	102	--	--	--	--	--	461
16...	2315	119	1.30	<0.015	1.2	0.560	0.110	1020
17...	0115	105	--	--	--	--	--	143
17...	0415	61	2.00	<0.015	1.0	0.340	0.250	41
17...	0800	30	3.00	<0.015	1.1	0.280	0.180	--
*17...	0801	30	3.00	0.020	0.90	0.290	0.200	15
17...	1600	14	--	--	--	--	--	9
17...	2400	8.4	3.90	<0.015	0.80	0.170	0.070	15
18...	1600	4.9	--	--	--	--	--	9
*28...	0755	0.63	--	--	--	--	--	43
28...	1145	28	--	--	--	0.790	--	430
28...	1515	7.6	--	--	--	0.260	--	24
28...	2245	8.7	--	--	--	0.480	--	181
*29...	0815	3.4	--	--	--	--	--	6
SEP								
*06...	0920	0.61	2.00	0.130	0.50	0.070	0.040	26
16...	2130	11	--	--	--	2.10	--	1270
*18...	0915	0.67	--	--	--	--	--	60

* Equal-width increment (EWI) sample

ROCK RIVER BASIN
054310157 JACKSON CREEK TRIBUTARY NEAR ELKHORN, WI--CONTINUED

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.02	.07	.02	.03	.09	.03	.10	.02	.00	.33	.02
2	.01	.02	.06	.01	.02	.07	.02	.08	.02	.00	.03	.02
3	.01	e.98	.05	.01	.02	.05	.03	.06	.02	.00	e.06	.02
4	.01	e1.6	.05	.01	.02	.05	.02	.06	.01	.14	e.00	.03
5	.01	10	.09	.01	.01	.08	.02	.05	.01	.03	.00	.04
6	.01	2.9	.05	.00	.01	.16	.02	.04	.12	.01	.00	.05
7	.01	.13	.07	.00	.01	.14	.03	.04	.59	.00	10	.07
8	.63	.23	.05	.00	.01	.10	.34	.94	.17	.00	.15	.04
9	.04	.52	.04	.00	.01	.07	.29	1.6	.09	1.1	26	.03
10	.07	.17	.03	.00	.02	.64	.95	1.1	.06	.01	.29	.02
11	.07	.08	.02	.00	.01	.24	1.8	.09	.04	.01	.04	.03
12	.09	.04	.02	.27	.01	.16	.86	.08	.03	.01	.01	.03
13	.08	.28	.01	1.5	.01	.17	.29	.15	.03	.01	.01	.03
14	.08	.51	.01	7.6	.01	.13	.19	.11	.03	.01	.01	.02
15	.07	.06	.01	.15	.01	.11	.13	.06	.02	.24	e.02	.02
16	.07	.05	.04	.27	.01	.09	.11	.67	.02	.11	26	1.8
17	.12	.04	.10	.23	.01	.07	.13	.09	.02	.00	7.9	.18
18	.12	.03	.09	.19	e.07	.06	6.6	.04	.01	.00	.17	.11
19	.13	.02	.08	.14	e.46	.06	.25	.03	.01	.03	.08	.34
20	.09	.04	.08	.13	.69	.72	.09	.02	.01	.04	.06	.13
21	.09	e.13	.13	.10	.30	.06	.37	.02	.01	.00	.05	.28
22	.08	.03	.16	.09	.23	.03	.52	.01	.01	.02	.05	.13
23	.06	.04	.34	.07	.23	.04	.38	1.4	.01	.05	.05	.10
24	.08	.05	.27	.05	.19	.03	.29	.06	.01	2.0	.05	.10
25	.05	.03	.16	.05	.18	.03	.22	.03	.01	.03	.06	.09
26	.05	.03	.10	.04	.17	.03	5.5	.03	.01	.03	.06	.11
27	.06	4.7	.09	.03	.17	10	8.1	2.0	.01	2.5	.07	.07
28	.05	.24	.08	.03	.13	.20	.34	1.1	.01	.07	2.1	.06
29	.03	.13	.05	.02	---	.09	.08	.05	.01	.02	.22	.10
30	.02	.09	.04	.02	---	.05	.11	.03	.01	.01	.03	.18
31	e.24	---	.03	.02	---	.04	---	.02	---	.02	.02	---
TOTAL	2.54	23.19	2.47	11.06	3.05	13.86	28.11	10.16	1.43	6.50	73.92	4.25

WTR YR 1995 TOTAL 180.54

NITROGEN, AMMONIA, DISSOLVED, POUNDS PER DAY, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	.13	.48	.14	.30	1.3	.95	4.0	.14	.02	e.30	.16
2	.08	.16	.38	.08	.24	1.5	1.0	3.2	.12	.02	e.10	.18
3	.13	e.64	.34	.07	.21	1.7	1.4	2.6	.11	.03	e.13	.20
4	.12	e.83	.37	.05	.18	1.5	1.0	2.4	.09	1.7	.09	.24
5	.14	4.9	e.40	.04	.17	2.3	.94	2.2	.09	.40	.04	.38
6	.11	2.1	.37	.03	.15	3.1	1.1	1.8	.39	.07	.03	.48
7	.11	.17	.50	.03	.14	3.0	1.7	1.6	1.4	.05	2.3	.69
8	e.59	.17	.35	.02	.13	2.6	e2.6	11.8	.98	.03	.47	.43
9	e.11	1.1	.26	.02	.13	2.3	e1.7	17.2	.19	5.5	12.7	.33
10	.15	.38	.19	.02	.20	e2.7	1.8	13.2	.14	.19	.77	.28
11	.15	.18	.13	.02	.16	e3.1	1.2	1.0	.12	.16	.21	.34
12	.18	.11	.10	1.6	.13	e2.5	2.8	.54	.11	.11	.07	.38
13	.17	.54	.08	2.0	.12	e2.4	2.4	2.1	.10	.10	.04	.39
14	.15	.61	.07	15.9	.11	e2.1	1.3	4.5	.09	.09	.04	.38
15	.14	.16	.06	3.8	.10	e1.8	.74	2.3	.08	e.80	e.05	.37
16	.13	.13	e.34	2.2	.10	e1.7	.50	3.4	.08	e.89	6.4	e.83
17	.22	.10	e.62	1.8	.12	e1.4	.45	.73	.07	.03	2.9	e.80
18	.21	.07	e.57	1.6	e.95	e1.2	7.4	.32	.06	.03	.46	.55
19	.23	.05	e.49	1.2	e2.6	e1.2	1.8	.23	.07	.34	.24	e1.2
20	.17	.09	e.51	1.1	e3.6	4.1	.53	.18	.07	.20	.16	.74
21	.16	e.43	e.74	.86	e2.4	.70	e1.7	.12	.06	.05	.11	e1.2
22	.13	e.19	e.78	.79	1.6	.41	.91	.10	.06	.09	.08	.90
23	.11	.08	e.90	.65	1.5	.42	.59	5.3	.07	.62	.07	.78
24	.14	.10	e.81	.51	1.2	.29	.44	2.6	.05	.56	.06	.81
25	.09	.07	e.64	.44	1.1	.22	.34	.87	.04	.20	.06	.78
26	.11	.05	.39	.37	1.0	.20	4.6	.36	.06	.07	.06	1.1
27	.17	1.2	.45	.30	1.0	10.4	32.0	1.4	e.65	1.4	.06	.80
28	.16	.92	.44	.26	1.1	3.4	6.7	3.4	.05	.24	e.54	.72
29	.12	.65	.28	.22	---	1.3	4.1	.38	.05	.10	e.23	1.3
30	.10	.58	.20	.19	---	1.0	4.1	.19	.04	.09	.18	e1.3
31	e.31	---	.17	.21	---	.96	---	.16	---	.12	.16	---
TOTAL	5.00	16.89	12.41	36.52	20.74	62.80	88.79	90.18	5.63	14.30	29.11	19.04

WTR YR 1995 TOTAL 401.41

e Estimated

054310157 JACKSON CREEK TRIBUTARY NEAR ELKHORN, WI--CONTINUED

NITROGEN, AMMONIA PLUS ORGANIC, TOTAL(POUNDS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.56	.57	.88	.54	1.9	3.8	5.1	12.5	3.3	.46	e17.3	2.0
2	.39	.68	.74	.32	1.5	3.5	5.3	9.1	2.8	.40	e7.3	1.8
3	.62	e6.5	.69	.27	1.2	3.3	7.0	7.7	2.5	.53	e9.2	1.6
4	.57	e10.8	.79	.18	1.0	2.9	5.2	7.0	1.9	9.0	e1.0	1.5
5	.61	75.1	e2.1	.14	.92	4.4	4.7	6.4	1.8	3.2	.24	1.8
6	.49	48.9	.88	.12	.80	5.8	5.3	5.3	7.5	.69	.15	1.9
7	.47	4.8	1.2	.11	.70	5.6	8.4	4.7	15.3	.50	95.4	2.6
8	e5.6	2.8	.92	.10	.64	4.8	e54.2	42.3	7.5	.31	17.2	1.6
9	e.19	7.6	.73	.09	.61	4.2	e29.0	67.1	2.3	30.2	302	1.3
10	.57	1.5	.56	.09	.87	e11.2	24.2	76.7	1.8	.82	39.3	1.1
11	.59	.75	.40	.09	.67	e13.4	55.8	29.2	1.6	.74	8.9	1.3
12	.66	.46	.32	11.8	.55	e10.4	53.4	17.4	1.5	.56	2.8	1.4
13	.61	2.1	.28	13.4	.47	8.3	26.2	24.8	1.4	.52	1.5	1.4
14	.55	6.7	.25	148	.42	6.9	16.7	19.2	1.4	.52	1.2	1.4
15	.48	1.3	.23	35.7	.38	6.0	11.6	10.4	1.2	e2.9	2.7	1.3
16	.44	.99	e1.9	26.0	.36	5.2	9.5	34.5	1.2	e3.2	167	e5.5
17	.72	.77	e6.0	21.5	.41	4.4	10.5	11.1	1.0	.25	182	e5.0
18	.69	.56	e5.1	18.0	e2.6	3.7	134	3.4	.99	.26	23.8	2.0
19	.72	.40	e3.8	13.1	e13.8	3.7	30.9	2.6	1.1	1.8	11.7	e10.2
20	.52	.68	e4.2	11.2	e22.4	25.2	17.4	2.2	1.2	1.8	7.5	2.6
21	.47	e3.0	e8.6	8.6	e11.4	9.2	e31.8	1.6	1.1	.41	4.8	e9.7
22	.39	e.60	e9.7	7.6	6.3	5.1	13.9	1.4	1.1	.77	3.7	3.2
23	.31	.58	e12.6	6.0	6.2	5.3	12.5	37.6	1.2	2.7	3.0	2.7
24	.40	.72	e10.2	4.5	5.1	3.6	14.2	13.8	.90	10.9	2.5	2.8
25	.25	.49	e6.5	3.7	4.7	2.9	16.3	6.9	.80	3.1	2.4	2.7
26	.33	.36	1.5	3.0	4.5	2.6	55.4	5.1	1.2	3.2	2.2	3.7
27	.52	44.4	1.8	2.3	4.6	43.6	139	34.4	e3.5	31.8	2.0	2.7
28	.53	8.5	1.7	2.0	4.1	15.5	33.1	64.0	1.0	12.0	e27.0	2.4
29	.44	2.6	1.1	1.6	---	8.4	28.0	10.6	.95	3.4	e14.2	4.5
30	.40	1.1	.82	1.3	---	5.9	34.2	5.1	.78	2.4	3.6	e11.2
31	e1.6	---	.70	1.4	---	5.3	---	4.0	---	2.6	2.5	---
TOTAL	21.69	236.31	87.19	342.75	99.10	244.1	892.8	578.1	71.82	131.94	966.09	94.9

WTR YR 1995 TOTAL 3766.79

e Estimated

NITROGEN, NITRITE PLUS NITRATE, DISSOLVED, POUNDS PER DAY, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.0	5.8	8.1	4.1	19.2	37.1	193	55.8	3.4	18.2	8.0
2	.82	1.3	5.1	4.9	3.4	16.8	32.6	159	44.4	3.0	9.1	7.2
3	1.4	11.1	5.1	4.1	2.9	15.4	37.2	141	37.7	4.0	12.3	6.3
4	1.3	14.6	6.1	2.7	2.7	13.9	27.5	135	27.3	13.1	1.9	5.9
5	1.5	45.8	12.5	2.1	2.5	21.4	24.9	129	26.0	6.8	.63	7.2
6	1.2	155	7.6	1.8	2.4	28.5	28.1	114	32.8	1.7	.43	7.4
7	1.2	29.9	11.4	1.6	2.2	28.0	44.3	107	35.2	1.6	51.6	10.4
8	10.5	19.6	8.9	1.5	2.1	24.1	260	124	29.0	1.3	29.1	6.3
9	1.0	29.9	7.5	1.3	2.2	21.5	127	246	23.0	19.8	493	4.9
10	1.7	15.0	6.1	1.3	3.3	50.4	126	474	20.5	2.8	214	4.0
11	1.7	9.0	4.6	1.3	2.7	58.6	251	361	17.5	2.8	62.3	4.8
12	2.0	6.5	3.9	18.3	2.4	47.6	400	240	16.1	2.2	22.1	5.3
13	1.9	11.1	3.6	28.3	2.2	44.9	346	192	15.0	2.1	13.1	5.3
14	1.8	17.1	3.3	540	2.1	38.1	235	163	14.0	2.2	12.0	5.0
15	1.6	7.6	3.2	181	2.0	33.7	173	103	12.5	9.1	31.4	4.8
16	1.6	6.3	12.9	29.1	2.1	29.9	150	82.5	11.7	9.8	185	13.1
17	2.7	5.3	29.6	17.2	2.4	25.5	176	85.4	9.9	1.2	418	12.4
18	2.7	4.1	25.3	15.4	16.4	21.5	229	46.6	9.3	1.3	115	6.9
19	2.9	3.2	21.6	12.0	52.1	21.7	281	38.7	10.3	3.5	55.7	21.8
20	2.2	5.9	23.2	10.9	75.2	50.0	193	34.3	10.5	3.8	34.7	8.9
21	2.0	15.9	37.2	9.0	47.3	36.2	252	27.4	9.5	1.3	22.0	20.5
22	1.7	5.2	41.1	8.5	36.2	23.6	181	25.4	9.1	2.7	16.4	10.4
23	1.4	6.4	49.0	7.1	35.1	27.3	135	53.6	9.9	3.2	13.2	8.9
24	1.9	8.6	41.3	5.7	28.9	20.7	124	91.3	7.4	14.5	10.8	9.1
25	1.2	6.4	31.3	5.0	26.4	18.2	115	59.9	6.4	5.2	10.2	8.6
26	1.4	5.0	23.2	4.3	24.9	18.0	162	52.2	9.2	8.1	9.1	11.6
27	1.9	37.3	26.8	3.6	24.9	55.9	628	70.8	15.7	21.0	8.2	8.5
28	1.7	24.8	26.2	3.2	21.6	105	495	263	7.5	9.7	60.7	7.5
29	1.2	12.6	16.7	2.8	---	96.3	351	160	6.9	3.9	34.1	13.7
30	.96	6.9	12.3	2.4	---	60.7	246	93.6	5.7	3.1	14.5	21.2
31	4.4	---	10.5	2.8	---	46.2	---	70.6	---	3.8	9.9	---
TOTAL	62.58	528.4	522.9	937.3	432.7	1118.8	5867.7	4136.3	545.8	172.0	1988.66	275.9

WTR YR 1995 TOTAL 16589.04

ROCK RIVER BASIN
054310157 JACKSON CREEK TRIBUTARY NEAR ELKHORN, WI--CONTINUED

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	.09	.08	.10	.29	.20	.55	1.60	.41	.06	2.34	.36
2	.08	.12	.06	.08	.21	.14	.60	1.08	.33	.04	.59	.31
3	.13	e2.90	.05	.08	.16	.11	.78	.87	.28	.05	e1.07	.25
4	.12	e5.20	.05	.05	.13	.10	.53	.76	.20	1.42	e.05	.23
5	.13	29.6	e.21	.04	.11	.15	.43	.66	.19	.85	.03	.26
6	.11	15.6	.06	.03	.09	.20	.44	.53	.82	.19	.02	.26
7	.11	.58	.08	.03	.07	.20	e.64	.49	2.68	.10	34.8	.35
8	3.27	.50	.06	.03	.06	.17	e11.3	6.09	1.10	.05	3.86	.21
9	.13	1.52	.05	.02	.06	.15	e4.57	7.71	.29	6.84	104	.16
10	.11	.21	.04	.02	.08	3.91	4.23	9.84	.25	.14	8.26	.13
11	.11	.10	.03	.02	.06	1.74	13.3	2.59	.21	.11	1.63	.15
12	.12	.07	.03	1.64	.04	.87	10.4	1.39	.20	.08	.47	.16
13	.10	.30	.02	1.75	.04	.71	3.66	2.08	.18	.07	.23	.16
14	.09	1.10	.02	33.4	.03	.57	2.27	2.41	.17	.06	.17	.15
15	.07	.11	.02	6.52	.03	.47	1.54	.94	.15	.96	e.41	.14
16	.07	.08	.09	8.87	.02	.38	1.23	4.73	.13	.74	57.8	7.75
17	.10	.06	.22	7.70	.03	.31	1.33	1.01	.11	.04	62.8	2.05
18	.09	.05	.21	6.09	e.40	.24	28.7	.27	.10	.04	4.35	.38
19	.09	.03	.20	4.20	e2.55	.23	5.04	.22	.11	.19	1.47	1.15
20	.06	.06	.24	3.38	4.80	4.18	2.40	.19	.11	.24	.65	.45
21	.06	e.34	.44	2.46	3.11	.45	e5.22	.15	.10	.07	.39	1.00
22	.04	.05	.54	2.05	1.83	.18	1.32	.13	.10	.11	.37	.49
23	.03	.05	.82	1.53	1.39	.20	.88	10.7	.10	.34	.39	.40
24	.04	.07	.77	1.08	.90	.15	.73	1.35	.08	1.93	.41	.39
25	.03	.05	.33	.84	.64	.13	.62	.48	.06	.52	.50	.36
26	.03	.04	.13	.64	.47	.12	13.6	.36	.09	.39	.57	.47
27	.04	17.3	.10	.47	.37	26.1	44.4	8.60	.16	8.71	.66	.33
28	.04	1.55	.11	.37	.27	6.64	7.22	12.1	.11	2.00	12.1	.28
29	.03	.31	.09	.29	---	7.09	3.92	1.25	.15	.45	5.49	.48
30	.02	.12	.09	.22	---	.60	5.53	.68	.12	.26	.84	.80
31	e.57	---	.10	.22	---	.56	---	.52	---	.21	.47	---
TOTAL	6.13	78.16	5.34	84.22	18.24	57.25	177.38	81.78	9.09	27.26	307.19	20.06

WTR YR 1995 TOTAL 872.10

PHOSPHORUS ORTHO WATER, WHOLE, DISSOLVED, LBS/DAY, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	.03	.04	.03	.05	.09	.10	.79	.09	.03	e.67	.19
2	.02	.04	.03	.02	.04	.10	.09	.58	.08	.02	e.20	.16
3	.04	e.25	.03	.01	.03	.11	.10	.42	.07	.02	e.27	.14
4	.04	e.48	.03	.01	.02	.09	.07	.33	.06	.20	e.02	.12
5	.04	5.04	e.06	.01	.02	.12	.07	.26	.06	.14	.01	.15
6	.03	5.02	.03	.01	.02	.15	.08	.19	.09	.03	.00	.15
7	.03	.11	.04	.01	.02	.13	e.16	.17	.24	.02	4.81	.18
8	e.21	.27	.03	.00	.01	.10	e3.25	2.70	.21	.01	.63	.10
9	.02	.91	.03	.00	.01	.08	e1.26	4.40	.05	1.86	38.2	.07
10	.04	.06	.02	.00	.02	e.30	1.34	6.28	.05	.07	4.28	.05
11	.04	.03	.02	.00	.01	e.39	3.43	1.48	.04	.05	.69	.05
12	.04	.02	.01	.16	.01	e.27	4.41	.41	.04	.04	.17	.05
13	.03	.11	.01	.53	.01	.15	2.03	.37	.04	.03	.07	.04
14	.03	.40	.01	19.9	.01	.13	1.18	.29	.03	.03	.04	.04
15	.02	.03	.01	2.49	.01	.11	.75	.18	.03	.46	e.10	.03
16	.02	.03	.04	.90	.01	.10	.56	.90	.03	.36	12.9	3.65
17	.03	.02	.11	.66	.01	.09	.56	.20	.03	.02	30.8	1.02
18	.03	.02	.11	.55	e.08	.07	6.18	.09	.02	.02	1.63	.19
19	.03	.01	.10	.39	e.66	.07	1.21	.07	.03	.09	.43	.59
20	.02	.02	.12	.33	e1.24	.34	.35	.06	.03	.12	.15	.23
21	.02	e.09	.22	.25	e.52	.15	e1.45	.05	.03	.04	.07	.53
22	.01	.02	.27	.22	.11	.09	.33	.04	.03	.05	.06	.26
23	.01	.02	.40	.17	.11	.10	.24	3.00	.03	.05	.05	.22
24	.01	.03	.36	.13	.09	.08	.21	.36	.02	.24	.04	.22
25	.01	.02	.20	.10	.08	.06	.19	.13	.02	.20	.04	.20
26	.01	.02	.11	.08	.08	.06	3.65	.11	.03	.05	.04	.26
27	.01	1.93	.09	.06	.08	1.88	14.3	1.85	.06	.55	.04	.19
28	.01	.35	.09	.05	.08	1.18	3.90	3.79	.05	.16	e1.28	.16
29	.01	.11	.06	.04	---	1.32	1.30	.22	.08	.05	e.51	.28
30	.01	.05	.04	.03	---	.16	.50	.13	.06	.04	.39	.47
31	e.04	---	.03	.04	---	.12	---	.11	---	.05	.24	---
TOTAL	0.94	15.54	2.75	27.18	3.44	8.19	53.25	29.96	1.73	5.10	98.83	9.99

WTR YR 1995 TOTAL 256.90

e Estimated

ROCK RIVER BASIN

451

05431016 JACKSON CREEK AT MOUND ROAD NEAR ELKHORN, WI

LOCATION.--Lat 42°38'27", long 88°33'39", in SE 1/4 SE 1/4 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.--Estimated daily discharges: Oct. 9, 10, 30, 31, Nov. 29, and ice-affected days, Dec. 13-15, Jan. 6-12, and Jan. 22 to Feb.21. Records fair except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	2.8	3.9	4.9	2.2	4.9	10	23	8.8	1.8	2.5	3.9
2	1.7	2.8	3.6	4.6	2.1	4.4	9.0	19	8.3	1.3	2.1	3.1
3	1.7	2.4	3.3	3.9	2.0	4.0	8.3	16	7.7	1.0	2.4	2.9
4	1.4	7.3	3.2	3.0	2.0	4.0	7.1	14	6.4	2.0	3.4	2.6
5	1.8	8.5	3.2	2.6	1.9	4.3	5.9	12	5.9	4.0	1.7	2.1
6	1.6	35	3.4	2.4	1.7	4.9	5.9	11	7.1	2.4	1.2	1.9
7	1.4	10	3.1	2.2	1.5	4.9	5.8	9.5	25	1.5	10	2.4
8	1.8	6.2	3.7	2.1	1.4	4.4	26	14	18	1.2	28	2.3
9	1.7	10	3.5	2.0	1.3	4.1	20	29	11	3.8	83	1.9
10	1.4	6.8	3.2	2.0	1.3	5.5	19	64	9.2	3.6	95	1.6
11	1.8	5.1	2.8	2.2	1.2	11	36	42	7.7	1.9	29	1.4
12	1.6	4.4	2.4	3.0	1.1	14	57	27	5.6	1.3	15	1.5
13	2.3	3.7	2.2	7.4	1.0	13	40	23	4.6	.98	7.7	1.9
14	2.3	7.6	2.1	59	.90	12	26	21	4.8	.81	4.9	1.5
15	1.9	5.5	2.1	36	1.2	11	19	16	4.4	.73	4.4	1.6
16	1.9	4.3	3.1	20	1.1	9.9	16	14	3.9	2.3	25	1.5
17	1.7	4.0	4.2	14	1.0	8.7	15	16	3.6	1.2	201	5.6
18	1.7	3.3	4.5	12	1.5	7.4	37	12	3.4	.69	74	3.2
19	1.6	3.2	4.1	9.5	3.0	7.0	45	10	3.2	.60	36	3.2
20	1.3	2.9	4.0	9.3	12	9.8	25	8.7	3.1	1.7	23	5.5
21	1.3	3.3	4.5	8.0	11	12	23	7.5	2.5	1.2	15	7.3
22	1.3	3.0	5.2	7.0	10	9.2	20	6.5	2.2	.74	10	6.4
23	1.3	2.9	6.5	6.0	9.6	8.5	16	8.4	2.1	1.6	7.6	4.1
24	1.3	2.7	9.4	5.0	8.7	7.5	13	13	2.0	2.4	5.6	3.8
25	1.2	2.5	9.8	4.0	8.1	6.5	12	9.0	1.8	4.5	4.6	3.1
26	1.1	2.3	8.6	3.3	6.8	6.1	19	7.3	2.2	2.5	4.3	2.4
27	1.2	8.3	8.4	2.9	6.0	15	138	8.0	3.2	1.7	4.3	2.1
28	1.2	11	8.9	2.6	5.5	23	75	31	4.1	5.7	11	1.8
29	1.5	6.0	7.6	2.4	---	19	43	19	2.9	2.8	15	1.7
30	1.8	4.3	6.0	2.2	---	14	30	13	2.4	1.4	7.4	1.6
31	2.1	---	5.5	2.1	---	12	---	10	---	.80	4.8	---
TOTAL	49.6	182.1	146.0	247.6	107.10	282.0	822.0	533.9	177.1	60.15	738.9	85.9
MEAN	1.60	6.07	4.71	7.99	3.82	9.10	27.4	17.2	5.90	1.94	23.8	2.86
MAX	2.3	35	9.8	59	12	23	138	64	25	5.7	201	7.3
MIN	1.1	2.3	2.1	2.0	.90	4.0	5.8	6.5	1.8	.60	1.2	1.4
CFSM	.10	.36	.28	.48	.23	.54	1.63	1.03	.35	.12	1.42	.17
IN.	.11	.40	.32	.55	.24	.62	1.82	1.18	.39	.13	1.64	.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1995, BY WATER YEAR (WY)

	1993	1994	1995	1993	1994	1995	1993	1994	1995	1993	1994	1995
MEAN	2.94	5.20	4.68	4.58	15.0	25.7	37.7	10.4	16.9	9.07	11.2	4.15
MAX	4.28	6.07	4.71	7.99	33.9	48.2	77.4	17.2	41.0	22.6	23.8	7.16
(WY)	1994	1995	1995	1994	1994	1993	1995	1993	1993	1995	1995	1993
MIN	1.60	4.32	4.65	1.18	3.82	9.10	8.32	4.18	3.78	1.94	2.84	2.42
(WY)	1995	1994	1994	1994	1995	1995	1994	1994	1994	1995	1993	1994

ROCK RIVER BASIN

05431016 JACKSON CREEK AT MOUND ROAD NEAR ELKHORN, WI--CONTINUED

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1993 - 1995
ANNUAL TOTAL	2843.85	3432.35	
ANNUAL MEAN	7.79	9.40	8.64
HIGHEST ANNUAL MEAN			9.40 1995
LOWEST ANNUAL MEAN			7.87 1994
HIGHEST DAILY MEAN	439 Feb 20	201 Aug 17	578 Apr 20 1993
LOWEST DAILY MEAN	.63 Sep 18	.60 Jul 19	.60 Jul 19 1995
ANNUAL SEVEN-DAY MINIMUM	.76 Sep 15	1.0 Jul 13	.76 Sep 15 1994
INSTANTANEOUS PEAK FLOW		293 Aug 17	1190 Apr 20 1993
INSTANTANEOUS PEAK STAGE		10.03 Aug 17	11.60 Apr 20 1993
INSTANTANEOUS LOW FLOW			.39 Aug 22,23 1994
ANNUAL RUNOFF (CFSM)	.46	.56	.51
ANNUAL RUNOFF (INCHES)	6.30	7.60	6.99
10 PERCENT EXCEEDS	13	20	27
50 PERCENT EXCEEDS	3.0	4.3	4.5
90 PERCENT EXCEEDS	1.0	1.4	1.2

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1983 to September 1985, February 1993 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: February 1993 to current year.

DISSOLVED AMMONIA NITROGEN DISCHARGE: February 1993 to September 1995 (discontinued).

TOTAL AMMONIA PLUS ORGANIC NITROGEN DISCHARGE: February 1993 to September 1995 (discontinued).

DISSOLVED NITRITE PLUS NITRATE DISCHARGE: February 1993 to September 1995 (discontinued).

TOTAL PHOSPHORUS DISCHARGE: February 1993 to current year.

DISSOLVED ORTHO-PHOSPHORUS DISCHARGE: February 1993 to current year.

INSTRUMENTATION.--Automatic pumping sampler since February 1993.

REMARKS.--Records fair. After Feb. 1, 1993, samples analyzed for dissolved ammonia nitrogen, dissolved nitrite plus nitrate, and dissolved ortho-phosphorus were filtered through a 0.45 mm filter. In 1994 water year, loads for dissolved ammonia nitrogen, dissolved nitrite plus nitrate, and dissolved ortho-phosphorus were published as total loads, but were, in fact, dissolved loads.

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, <0.01 mg/L, July 10, 23, 1985.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 1,050 mg/L, Apr. 20, 1993; minimum observed, 2 mg/L, Sept. 16, 1993, and July 25, 1995.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 887 tons, Apr. 20, 1993; minimum daily, 0.01 ton, Aug. 25-28 and Sept. 11, 1993, many days in 1994 water year, and July 19, 22, 1995.

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, 1.2 mg/L, Apr. 20, 1993; minimum observed, 0.02 mg/L, Dec. 15, 1993, and several days during 1995 water year.

TOTAL PHOSPHORUS DISCHARGE: Maximum daily, 2,630 lb, Apr. 20, 1993; minimum daily, 0.16 lb, Dec. 29, 1993.

DISSOLVED ORTHO-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.58 mg/L, Feb. 20, 1994; minimum observed, <0.01 mg/L, May 13, 1993 and Mar. 21, Apr. 14, 18, 1994, and many days during 1995 water year.

DISSOLVED ORTHO-PHOSPHORUS DISCHARGE: Maximum daily, 609 lb, Feb. 20, 1994; minimum daily, 0.05 lb, Feb. 14, 1995.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 163 mg/L, Aug. 9; minimum observed, 2 mg/L, July 25.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 32 tons, Aug. 9, 17; minimum daily, 0.01 ton, July 19, 22.

DISSOLVED AMMONIA NITROGEN CONCENTRATIONS: Maximum observed, 0.46 mg/L, Sept. 6; minimum observed, <0.015 mg/L, on many days.

DISSOLVED AMMONIA NITROGEN DISCHARGE: Maximum daily, 142 lb, Apr. 27; minimum daily, 0.07 lb, July 31.

TOTAL AMMONIA PLUS ORGANIC NITROGEN CONCENTRATIONS: Maximum observed, 2.1 mg/L, June 26; minimum observed, 0.40 mg/L, Jan. 14 and Mar. 28, 29.

TOTAL AMMONIA PLUS ORGANIC NITROGEN DISCHARGE: Maximum daily, 1,280 lb, Aug. 17; minimum daily, 2.6 lb, July 31.

DISSOLVED NITRITE PLUS NITRATE CONCENTRATIONS: Maximum observed, 13.0 mg/L, Apr. 30; minimum observed, <0.05 mg/L, on several days.

DISSOLVED NITRITE PLUS NITRATE DISCHARGE: Maximum daily, 4,180 lb, Apr. 27; minimum daily, 0.16 lb, July 19.

TOTAL PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.47 mg/L, Jan. 16; minimum observed, 0.02 mg/L, on several days.

TOTAL PHOSPHORUS DISCHARGE: Maximum daily, 339 lb, Aug. 17; minimum daily, 0.27 lb, Dec. 14-15 and Sept. 14-15.

DISSOLVED ORTHO-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.22 mg/L, July 20 and Aug. 17; minimum observed, <0.01 mg/L, on many days.

DISSOLVED ORTHO-PHOSPHORUS DISCHARGE: Maximum daily, 200 lb, Aug. 17; minimum daily, 0.05 lb, Feb. 14.

ROCK RIVER BASIN

05431016 JACKSON CREEK AT MOUND ROAD NEAR ELKHORN, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDED (MG/L) (80154)
OCT 1994									
*03...	1500	--	1.6	--	--	--	0.050	0.060	11
**03...	1505	--	1.5	<0.050	0.250	0.70	0.110	0.050	--
*04...	1015	--	1.4	<0.050	0.340	0.90	0.240	0.120	--
*25...	1015	--	1.2	0.130	0.160	0.80	0.080	0.020	71
NOV									
*01...	1000	--	2.9	0.790	0.200	0.60	0.110	0.090	30
05...	1945	--	9.4	0.400	0.030	0.60	0.100	0.060	12
05...	2330	--	27	0.540	0.130	0.60	0.170	0.120	22
06...	0400	--	51	0.870	<0.015	0.70	0.260	0.140	37
*06...	0945	--	43	1.80	0.050	0.60	0.210	0.170	24
06...	1300	--	34	1.90	0.030	0.70	0.260	0.140	11
07...	0400	--	13	2.40	0.080	0.90	0.240	0.120	15
*07...	0935	--	9.9	1.90	<0.015	0.80	0.150	0.060	10
*07...	0940	--	9.9	2.00	0.060	0.90	0.210	0.120	--
*08...	0820	--	6.2	2.00	<0.015	0.60	0.090	0.020	15
09...	0445	--	9.4	2.40	0.050	0.60	0.070	<0.010	10
*09...	0835	--	12	2.20	0.050	0.60	0.060	<0.010	19
09...	1045	--	12	--	--	--	--	--	13
09...	1945	--	9.4	1.80	0.100	0.50	0.070	0.020	9
*10...	0845	--	6.6	2.10	<0.015	0.60	0.070	<0.010	66
14...	0845	--	8.9	1.80	<0.015	0.50	0.070	<0.010	16
14...	1130	--	8.9	2.00	<0.015	0.50	0.050	<0.010	17
*15...	0815	--	5.5	1.50	<0.015	0.50	0.040	<0.010	27
27...	1445	--	9.9	0.870	0.050	0.80	0.070	0.030	27
27...	1715	--	16	--	--	--	--	--	13
27...	2015	--	18	0.880	<0.015	0.50	0.110	<0.010	16
27...	2315	--	16	--	--	--	--	--	17
28...	0215	--	14	0.910	<0.015	0.50	0.100	0.020	20
28...	0515	--	13	--	--	--	--	--	24
28...	0815	--	12	1.00	<0.015	0.50	0.080	0.010	18
*28...	0930	--	12	1.20	<0.015	0.50	0.110	0.040	17
28...	1115	--	11	--	--	--	--	--	21
28...	1715	--	9.4	1.00	<0.015	0.60	0.100	0.020	17
28...	2345	--	8.9	1.20	<0.015	0.60	0.100	0.030	14
29...	0845	6.0	--	1.40	<0.015	0.60	0.090	0.030	21
*29...	0846	6.0	--	1.30	<0.015	0.70	0.090	0.030	21
*30...	1045	--	3.6	1.80	0.040	0.60	0.080	0.040	58
DEC									
*05...	0840	--	3.1	--	--	--	0.030	--	16
24...	0500	--	8.9	--	--	--	0.030	--	17
24...	0800	--	9.4	--	--	--	--	--	11
24...	1400	--	9.9	--	--	--	--	--	9
24...	1700	--	9.9	--	--	--	0.030	--	--
25...	0200	--	9.9	--	--	--	--	--	7
25...	0500	--	9.9	--	--	--	0.030	--	--
25...	1400	--	9.9	--	--	--	--	--	16
25...	1700	--	9.9	--	--	--	0.020	--	--
25...	2300	--	9.4	--	--	--	--	--	6
26...	0200	--	8.9	--	--	--	0.020	--	--
*27...	1105	--	8.4	--	--	--	0.110	--	59
JAN 1995									
*03...	0905	--	3.9	--	--	--	0.030	--	126
13...	2145	--	9.9	--	--	--	--	--	23
14...	0045	--	13	5.20	0.220	0.80	0.090	0.090	--
14...	0430	--	31	--	--	--	--	--	18
14...	0645	--	45	9.40	0.040	0.60	0.110	0.090	--
14...	0900	--	62	--	--	--	--	--	49
14...	1200	--	77	--	--	--	--	--	28
14...	1500	--	83	5.20	0.150	0.50	0.060	0.040	--
14...	1800	--	79	--	--	--	--	--	28
14...	2100	--	69	--	--	--	--	--	22
14...	2400	--	61	7.30	<0.015	0.40	0.100	0.050	--
15...	0600	--	43	--	--	--	--	--	17
15...	1200	--	36	7.00	0.160	1.3	0.220	0.090	--
15...	1800	--	27	--	--	--	--	--	23
15...	2400	--	23	0.990	<0.015	0.50	0.110	0.050	--
16...	0600	--	22	--	--	--	--	--	88
16...	1200	--	19	4.80	<0.015	0.70	0.080	<0.010	56
*16...	1210	--	19	0.790	0.050	1.0	0.470	0.110	64
FEB									
20...	1730	12	--	--	--	--	0.100	--	31
20...	2030	12	--	--	--	--	0.090	--	17
20...	2330	12	--	--	--	--	0.110	--	19
21...	1115	11	--	--	--	--	0.140	--	13
21...	1415	11	--	--	--	--	0.080	--	36

* Equal-width increment (EWI) sample

** Grab sample

05431016 JACKSON CREEK AT MOUND ROAD NEAR ELKHORN, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDEd (MG/L) (80154)
MAR 1995									
*03...	1045	--	3.9	4.10	0.050	0.50	0.040	0.010	37
*06...	0830	--	5.1	--	--	--	--	--	30
20...	1645	--	11	2.40	0.030	0.70	0.070	<0.010	31
20...	1945	--	12	--	--	--	--	--	27
20...	2245	--	13	2.60	0.020	0.70	0.090	<0.010	27
21...	0145	--	13	--	--	--	--	--	19
21...	0445	--	13	2.70	0.070	0.70	0.040	<0.010	17
21...	0745	--	13	--	--	--	--	--	19
21...	0915	--	12	3.00	0.070	0.70	0.060	0.010	16
*21...	0916	--	12	2.90	0.090	0.60	0.060	0.020	30
27...	1400	--	18	1.50	0.400	0.60	0.190	0.100	27
27...	1700	--	23	2.50	0.240	0.60	0.120	0.050	27
27...	2300	--	26	2.70	0.020	0.50	0.080	<0.010	18
28...	0500	--	25	2.60	0.130	0.50	0.060	<0.010	14
*28...	0900	--	23	3.30	0.080	0.50	0.080	0.020	16
28...	1400	--	22	3.10	0.120	0.50	0.060	0.020	17
*28...	1435	--	22	3.50	0.110	0.40	0.050	0.020	12
28...	2300	--	21	--	--	--	--	--	26
29...	0800	--	19	--	--	--	--	--	18
29...	1100	--	18	4.60	0.040	0.40	0.020	<0.010	--
29...	1700	--	18	--	--	--	--	--	21
30...	0200	--	16	--	--	--	--	--	21
30...	0500	--	15	5.10	0.040	0.50	0.030	<0.010	--

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDEd (MG/L) (80154)
APR 1995								
*03...	0820	8.4	3.90	0.170	0.90	0.060	<0.010	--
08...	0230	15	3.20	0.130	1.1	0.100	<0.010	63
08...	0415	23	--	--	--	--	--	51
08...	0715	30	--	--	--	--	--	73
08...	1015	33	3.90	<0.015	0.80	0.080	<0.010	39
08...	1315	33	--	--	--	--	--	26
08...	1915	25	3.90	<0.015	0.50	0.020	<0.010	26
09...	0115	22	--	--	--	--	--	29
09...	0715	21	4.50	<0.015	0.80	0.100	<0.010	--
09...	1015	21	--	--	--	--	--	24
09...	2215	18	5.20	<0.015	0.80	0.080	<0.010	--
10...	0115	18	--	--	--	--	--	26
10...	1615	18	5.40	<0.015	0.80	0.090	<0.010	53
11...	0115	29	--	--	--	--	--	34
11...	0715	36	5.90	<0.015	0.70	0.070	<0.010	35
11...	1015	36	--	--	--	--	--	45
11...	1315	35	--	--	--	--	--	24
11...	1915	36	6.50	<0.015	0.80	0.090	<0.010	27
12...	0115	56	--	--	--	--	--	24
12...	0415	64	6.80	<0.015	0.80	0.080	0.010	21
12...	1315	56	7.80	<0.015	0.60	0.080	0.050	13
*12...	1316	56	7.80	0.020	0.90	0.090	0.060	22
12...	1915	53	--	--	--	--	--	15
13...	0415	47	9.80	0.020	0.80	0.100	0.040	9
13...	1315	39	--	--	--	--	--	11
13...	2215	34	--	--	--	--	--	33
14...	0415	30	11.0	<0.015	1.0	0.110	0.020	--
14...	0715	28	--	--	--	--	--	55
14...	1615	23	--	--	--	--	--	20
15...	0115	22	--	--	--	--	--	18
15...	0415	22	9.70	<0.015	0.70	0.050	<0.010	--
*15...	0925	19	--	--	--	--	--	28
*17...	0845	15	8.90	0.020	0.60	0.060	<0.010	--
18...	1200	23	6.10	0.090	0.70	0.030	<0.010	72
18...	1345	35	--	--	--	--	--	20
18...	1530	48	6.40	<0.015	0.60	0.070	<0.010	26
18...	1745	64	--	--	--	--	--	24
18...	2045	71	5.90	<0.015	0.70	0.080	<0.010	21
18...	2345	71	--	--	--	--	--	19
19...	0245	62	--	--	--	--	--	11
19...	0845	50	6.50	<0.015	0.80	0.110	0.020	15
*19...	0900	50	6.80	<0.015	0.90	0.130	0.050	19
19...	1745	35	7.10	<0.015	0.60	0.080	0.020	13
19...	2345	30	--	--	--	--	--	10

* Equal-width increment (EWI) sample

ROCK RIVER BASIN

05431016 JACKSON CREEK AT MOUND ROAD NEAR ELKHORN, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHOPHOS- PHATE (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDED (MG/L) (80154)
APR 1995								
20...	0845	25	8.10	<0.015	0.80	0.090	0.010	14
20...	0846	25	8.30	<0.015	0.70	0.060	0.020	--
20...	2000	22	--	--	--	--	--	11
*21...	1015	22	8.50	<0.015	0.60	0.060	<0.010	12
*22...	0905	21	6.90	<0.015	0.50	0.030	<0.010	19
26...	1915	22	6.20	0.040	0.70	0.030	<0.010	20
27...	0015	66	--	--	--	--	--	21
27...	0130	85	--	--	--	--	--	9
27...	0330	114	4.90	0.060	0.60	0.080	<0.010	24
27...	0500	136	--	--	--	--	--	31
27...	0700	161	4.90	0.070	0.70	0.160	0.060	36
*27...	0815	173	4.60	0.170	0.80	0.160	0.030	36
27...	1600	147	5.80	0.270	1.0	0.240	0.090	33
27...	1900	134	--	--	--	--	--	25
27...	2200	119	7.70	0.210	0.90	0.210	0.090	25
28...	1000	75	9.80	0.090	0.90	0.120	0.070	9
28...	1105	73	9.50	0.290	0.90	0.130	0.060	17
28...	2200	56	--	--	--	--	--	15
*29...	0935	43	12.0	<0.015	0.90	0.080	0.030	12
29...	1900	37	--	--	--	--	--	13
*30...	0920	31	13.0	<0.015	0.70	0.060	0.030	11
30...	1600	28	--	--	--	--	--	7
MAY								
*01...	0905	23	11.0	0.120	0.70	0.060	0.040	9
09...	0400	23	5.90	0.200	1.0	0.200	<0.010	--
09...	0700	27	--	--	--	--	--	8
09...	1900	30	--	--	--	--	--	10
10...	0100	48	6.10	0.030	0.90	0.060	0.020	--
10...	0400	64	--	--	--	--	--	10
10...	0700	67	5.70	0.040	0.80	0.090	0.030	--
10...	1000	67	6.00	<0.015	0.80	0.070	0.010	--
10...	1300	67	--	--	--	--	--	12
10...	2200	61	7.30	<0.015	0.80	0.070	0.030	--
11...	0100	54	--	--	--	--	--	5
11...	1300	40	--	--	--	--	--	8
12...	0400	30	--	--	--	--	--	4
12...	0700	28	10.0	<0.015	0.70	0.050	<0.010	--
12...	1600	23	9.40	<0.015	0.50	0.020	<0.010	18
13...	0215	22	--	--	--	--	--	6
14...	0100	23	8.40	0.020	0.50	0.020	<0.010	16
*15...	0830	16	8.20	0.020	0.70	0.030	<0.010	15
*17...	1000	18	6.50	0.020	0.70	0.030	<0.010	9
*22...	0845	7.0	6.10	0.070	0.60	0.020	<0.010	10
*24...	0845	14	4.90	0.070	1.0	0.110	<0.010	12
28...	0200	23	4.70	0.140	0.90	0.040	<0.010	16
28...	0500	34	--	--	--	--	--	11
28...	0800	39	5.70	0.020	0.60	0.040	<0.010	11
28...	1100	39	5.50	0.020	0.50	0.030	<0.010	9
28...	1400	34	5.00	0.030	0.70	0.030	<0.010	9
28...	2000	27	--	--	--	--	--	10
*29...	1010	20	7.40	0.020	0.60	0.040	<0.010	18
*30...	0850	13	--	--	--	--	--	11
JUN								
*05...	0840	6.2	<0.050	<0.015	0.80	0.100	<0.010	12
07...	0300	23	7.40	0.020	1.1	0.080	<0.010	33
07...	0600	29	--	--	--	--	--	58
07...	0900	30	8.50	0.130	1.6	0.140	<0.010	25
07...	1200	28	--	--	--	--	--	21
07...	1500	25	8.10	0.050	1.3	0.090	<0.010	18
*08...	1435	17	8.60	0.080	1.2	0.160	<0.010	--
*08...	1440	17	--	--	--	--	--	44
*12...	0820	6.6	8.10	0.230	0.80	0.060	0.030	21
*19...	0825	3.5	1.60	0.260	1.4	0.250	0.160	8
*26...	0825	2.2	<0.050	<0.015	2.1	0.410	0.020	23
*29...	1130	2.7	0.070	0.040	0.90	0.240	0.140	7
JUL								
*05...	0910	4.2	<0.050	<0.015	0.80	0.170	0.070	5
09...	1300	5.1	<0.050	0.020	1.0	0.220	0.120	6
09...	1600	5.8	0.200	0.060	0.90	0.160	0.080	4
09...	1900	5.8	--	--	--	--	--	5
09...	2200	5.8	0.150	0.140	1.0	0.240	0.140	3
10...	0100	5.5	--	--	--	--	--	5
*10...	0910	3.9	<0.050	0.100	1.0	0.250	0.160	6
*20...	1135	2.9	<0.050	0.100	1.0	0.250	0.220	7
*24...	0850	1.1	<0.050	0.020	0.90	0.170	0.010	5
24...	2100	5.5	<0.050	0.030	0.70	0.030	0.020	4
*25...	0915	5.1	<0.050	<0.015	0.90	0.200	0.070	2
28...	0145	5.1	0.080	<0.015	0.90	0.220	0.100	7
*28...	0940	7.0	0.080	<0.015	0.80	0.140	0.010	2
28...	1345	5.8	--	--	--	0.090	--	4
*29...	0645	3.4	--	--	--	0.300	--	9

* Equal-width increment (EWI) sample

05431016 JACKSON CREEK AT MOUND ROAD NEAR ELKHORN, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDEDED (MG/L) (80154)
AUG 1995								
07...	0905	1.1	<0.050	0.190	1.3	0.300	0.070	8
07...	1630	7.5	0.610	0.130	1.5	0.360	0.060	19
07...	1930	21	--	--	--	--	--	41
07...	2030	31	<0.050	0.030	0.90	0.200	0.020	18
07...	2200	45	--	--	--	--	--	20
08...	0100	57	<0.050	<0.015	0.80	0.210	0.130	14
08...	0400	50	--	--	--	--	--	9
08...	0700	37	<0.050	<0.015	0.70	0.230	0.130	12
08...	1000	27	--	--	--	--	--	9
08...	1600	15	<0.050	<0.015	1.1	0.290	0.090	12
09...	1000	6.2	--	--	--	--	--	43
09...	1300	19	0.440	<0.015	1.1	0.240	0.060	9
09...	1430	45	--	--	--	--	--	46
09...	1530	87	0.180	0.070	0.90	0.280	0.120	72
09...	1630	154	--	--	--	--	--	86
09...	1700	188	0.370	<0.015	1.0	0.280	0.080	100
*09...	1705	193	0.730	<0.015	1.3	0.310	0.070	163
09...	1730	217	--	--	--	--	--	127
09...	1900	246	0.720	<0.015	1.2	0.360	0.100	143
09...	2200	217	--	--	--	--	--	75
10...	0100	175	2.20	<0.015	1.0	0.310	0.190	74
10...	0400	144	--	--	--	--	--	57
10...	0700	119	3.80	0.030	1.1	0.290	0.190	33
10...	1900	56	--	--	--	--	--	10
*11...	0825	31	--	--	--	--	--	10
*14...	0905	5.3	--	--	--	0.120	0.050	--
16...	1130	24	0.310	<0.015	1.0	0.160	<0.010	23
16...	1430	35	--	--	--	--	--	15
16...	2030	37	1.00	0.030	0.90	0.250	0.090	54
17...	0015	97	--	--	--	--	--	56
17...	0145	168	1.00	<0.015	0.90	0.260	0.100	62
17...	0215	193	--	--	--	--	--	43
17...	0400	261	--	--	--	--	--	43
17...	0600	290	1.50	<0.015	1.0	0.320	0.170	53
*17...	0855	274	--	--	--	--	--	98
17...	0900	274	--	--	--	--	--	55
17...	1500	188	3.30	<0.015	1.1	0.350	0.220	28
17...	2100	131	--	--	--	--	--	17
18...	0600	89	4.70	<0.015	1.1	0.270	0.190	9
18...	2400	48	--	--	--	--	--	9
*21...	0835	16	4.70	0.080	0.90	0.160	0.060	16
SEP								
*06...	1015	2.0	0.160	0.460	1.3	0.210	0.100	15
*11...	0815	1.6	--	--	--	0.040	<0.010	15
*18...	0930	3.1	--	--	--	0.210	0.010	--
*25...	0925	3.1	0.170	0.160	1.5	0.190	0.050	41

* Equal-width increment (EWI) sample

ROCK RIVER BASIN

05431016 JACKSON CREEK AT MOUND ROAD NEAR ELKHORN, WI--CONTINUED

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.22	.46	.29	.66	.52	.81	.56	.27	.04	.09	.25
2	.05	.20	.33	.22	.57	.46	.67	.44	.26	.03	.06	.18
3	.05	.16	.23	.16	.48	.40	.59	.35	.25	.02	.08	.15
4	.04	.62	.17	.12	.43	.37	.48	.30	.21	.06	.17	.13
5	.06	.51	.14	.10	.37	.37	.39	.26	.20	.07	.06	.09
6	.06	2.9	.14	.10	.30	.40	.37	.22	.37	.03	.04	.08
7	.06	.39	.13	.09	.23	.40	.38	.19	2.7	.03	.85	.10
8	.08	.19	.16	.08	.20	.36	4.0	.32	1.9	.02	1.3	.09
9	.08	.47	.15	.08	.16	.33	2.1	1.0	1.1	.07	32	.08
10	.07	.96	.14	.08	.15	.48	3.0	2.4	.74	.09	14	.06
11	.10	.56	.12	.09	.12	1.2	4.4	1.0	.51	.05	.85	.06
12	.10	.32	.10	.12	.10	1.5	3.8	.93	.31	.03	.43	.06
13	.16	.18	.09	.39	.08	1.1	2.4	.87	.22	.02	.25	.09
14	.17	.49	.09	6.6	.07	.93	3.6	1.1	.20	.02	.17	.07
15	.16	.39	.09	3.1	.08	.80	1.4	.63	.16	.02	.17	.09
16	.17	.29	.13	4.3	.06	.69	1.1	.42	.12	.08	3.4	.09
17	.16	.26	.17	1.8	.05	.59	.93	.40	.10	.04	32	.59
18	.18	.20	.18	1.1	.07	.48	3.6	.30	.08	.02	2.9	.26
19	.19	.19	.17	.80	.13	.43	2.4	.26	.07	.01	1.3	.27
20	.17	.16	.16	.89	.99	.95	1.2	.23	.08	.03	.91	.49
21	.17	.18	.18	.86	1.1	.92	.80	.20	.07	.02	.65	.67
22	.19	.15	.21	.84	1.4	.66	.90	.19	.08	.01	.44	.61
23	.20	.14	.34	.81	1.3	.54	.64	.31	.08	.05	.32	.41
24	.23	.13	.41	.76	1.1	.42	.43	.44	.09	.04	.23	.40
25	.23	.11	.40	.68	1.0	.32	.31	.32	.10	.03	.19	.33
26	.18	.09	.42	.63	.81	.27	.94	.27	.12	.02	.18	.25
27	.17	.53	1.1	.63	.69	1.2	15	.34	.13	.02	.17	.20
28	.16	.80	1.1	.63	.61	1.4	4.5	1.3	.12	.09	.96	.17
29	.17	.46	.80	.66	---	1.5	1.8	.82	.06	.06	1.4	.14
30	.18	.59	.52	.68	---	1.2	.93	.39	.05	.03	.57	.13
31	.18	---	.39	.69	---	.92	---	.31	---	.02	.34	---
TOTAL	4.22	12.84	9.22	28.38	13.31	22.11	63.87	17.07	10.75	1.17	96.48	6.59
WTR YEAR	TOTAL 286.01											

NITROGEN, AMMONIA, DISSOLVED, POUNDS PER DAY, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	e1.7	.66	.44	.30	1.4	5.2	13.0	.84	.29	e.28	3.3
2	1.7	e1.7	.45	.41	.29	1.3	6.2	11.0	.75	.17	e.23	3.4
3	2.3	e1.6	.30	.35	.29	1.2	7.3	8.1	.67	.11	e.26	3.9
4	2.4	5.1	.29	.27	.29	1.0	5.8	6.2	.54	.17	e.37	4.5
5	3.2	2.7	.29	.23	.29	.97	4.4	5.0	.49	.32	e.19	4.5
6	2.8	7.5	.30	.21	.26	.98	4.0	3.9	.66	.20	e.13	5.1
7	2.3	3.1	.28	.20	.24	.86	3.6	3.1	9.1	.13	2.7	6.3
8	2.8	.58	.33	.19	.23	.68	4.8	7.2	7.3	.10	2.5	5.8
9	2.7	3.6	.31	.18	.22	.55	1.8	17.2	6.4	1.5	8.9	4.5
10	2.1	.80	.29	.18	.22	e1.8	1.7	8.2	6.7	2.1	13.8	3.7
11	2.6	.37	.25	.20	.21	e3.9	3.2	3.7	7.6	.73	4.1	3.2
12	2.3	.30	.21	.27	.20	e5.2	5.6	2.4	6.9	.37	1.7	3.2
13	3.2	.23	.20	1.8	.19	e4.8	4.4	2.4	5.9	.20	.77	3.8
14	3.1	.64	.19	26.8	.17	e4.3	2.4	2.4	6.2	.12	.40	2.9
15	2.5	.45	.19	13.0	.23	e3.9	1.8	1.7	5.8	.08	.30	3.0
16	2.4	.35	.28	1.8	.22	e3.5	1.6	1.6	5.3	.57	3.1	2.6
17	2.0	.33	.37	1.3	.21	e3.0	1.6	2.0	4.9	.69	18.0	4.5
18	2.0	.28	.40	1.1	.32	e2.5	4.9	1.9	4.7	.41	7.5	3.7
19	1.9	.27	.36	.91	e.92	e2.4	4.0	2.0	4.2	.36	5.9	3.6
20	1.5	.24	.35	.92	e4.3	1.2	2.1	2.1	2.7	.92	6.4	5.9
21	1.4	.28	.40	.81	e3.9	4.9	1.8	2.3	1.5	.38	6.3	7.4
22	1.3	.26	.46	.73	e3.5	3.7	1.6	2.4	.86	.11	4.3	6.3
23	1.3	.25	.57	.64	e3.4	2.9	1.2	3.6	.56	.33	3.0	3.8
24	1.3	.24	.84	.55	e3.0	2.2	.93	5.4	.34	.36	2.1	3.4
25	1.2	.22	.87	.45	e2.8	1.6	.78	3.1	.21	.43	1.6	2.7
26	.96	.20	.76	.38	e2.3	1.3	3.0	2.4	.22	.21	1.4	2.1
27	.95	1.1	.75	.34	e2.0	11.5	142	3.1	.67	.15	1.3	1.8
28	.92	.95	.79	.32	e1.8	11.5	59.4	7.2	1.1	.47	1.9	1.6
29	1.0	.64	.67	.30	---	5.1	5.1	2.2	.68	.23	3.0	1.5
30	1.2	.88	.54	.28	---	3.7	3.8	1.3	.47	.12	3.0	1.4
31	e1.5	---	.49	.28	---	4.2	---	1.0	---	.07	3.2	---
TOTAL	59.93	36.86	13.44	55.84	32.30	98.04	296.01	139.1	94.26	12.40	108.63	113.4
WTR YR 1995	TOTAL 1060.21											

e Estimated

05431016 JACKSON CREEK AT MOUND ROAD NEAR ELKHORN, WI--CONTINUED

NITROGEN, AMMONIA PLUS ORGANIC, TOTAL(POUNDS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	e10.0	14.1	11.0	8.4	15.2	41.4	88.2	32.4	9.0	e14.0	e22.1
2	5.2	e10.0	12.9	10.1	8.0	13.6	39.7	70.4	31.7	6.3	e11.7	e17.5
3	6.9	6.3	11.5	8.5	7.6	12.4	39.6	56.2	30.7	4.7	e13.4	e16.3
4	6.6	24.8	11.1	6.4	7.5	11.9	33.3	46.6	26.8	8.6	e19.2	e14.6
5	8.8	29.4	10.9	5.4	7.1	12.3	26.9	40.8	25.4	17.1	e9.5	e11.7
6	7.9	142	11.3	5.0	6.3	13.7	26.4	34.8	33.6	10.3	e6.6	15.3
7	6.8	47.0	10.2	4.5	5.5	13.2	25.7	30.1	203	6.6	61.2	19.3
8	8.6	19.7	12.2	4.2	5.1	11.6	118	55.8	122	5.0	143	18.5
9	8.3	32.6	11.1	3.9	4.7	10.3	95.8	172	67.8	21.5	556	15.0
10	6.8	21.5	10.2	3.9	4.7	e19.3	93.8	319	48.6	19.7	619	13.0
11	8.5	15.0	8.7	4.2	4.3	e37.8	166	196	36.8	9.7	182	11.6
12	8.0	12.1	7.3	5.6	3.9	e47.7	265	99.2	24.9	6.5	87.7	12.0
13	11.4	9.5	6.6	17.7	3.5	e44.4	213	69.4	22.0	4.7	44.0	15.1
14	11.3	22.4	6.2	188	3.1	e41.1	145	68.1	24.7	3.7	26.3	11.9
15	9.4	14.9	6.1	175	4.1	e37.8	80.3	59.1	24.5	3.2	22.6	12.7
16	9.2	11.5	9.0	77.9	3.8	e34.1	56.7	55.9	23.7	e12.9	144	e11.8
17	8.1	10.5	11.9	61.3	3.4	e30.1	47.1	68.8	23.7	7.2	1280	e31.9
18	8.5	8.8	12.6	50.9	5.1	e25.7	146	49.5	23.8	4.2	490	25.7
19	8.0	8.3	11.2	40.0	e10.7	e24.4	200	39.1	24.4	3.7	212	26.2
20	6.6	7.5	10.7	39.0	e41.1	36.5	98.5	31.6	24.9	10.3	123	e31.4
21	6.3	8.6	12.0	33.2	e37.8	43.7	72.6	25.6	21.2	6.5	74.7	e41.8
22	6.3	7.7	13.5	28.9	e34.4	28.3	54.4	20.9	20.0	3.5	51.0	e36.6
23	6.2	7.3	16.6	24.6	e33.1	25.0	42.0	35.7	20.5	9.0	37.3	33.1
24	6.4	6.9	23.8	20.3	e30.1	21.2	34.6	74.0	20.0	10.9	27.5	30.5
25	6.1	6.3	24.5	16.1	e28.1	17.4	30.3	42.6	20.0	21.0	22.4	24.7
26	5.0	5.6	21.0	13.2	e23.7	15.6	61.3	30.9	25.9	11.3	21.1	19.0
27	4.9	28.5	20.4	11.5	e21.0	48.3	692	32.9	44.9	7.7	21.3	15.6
28	4.8	35.1	21.1	10.3	e19.3	62.1	389	127	45.8	25.9	e63.6	13.0
29	5.4	22.4	17.7	9.4	---	46.9	200	64.1	17.5	11.0	e87.2	11.5
30	6.0	15.9	13.9	8.6	---	44.3	117	43.7	12.7	4.9	e42.4	10.3
31	e7.6	---	12.6	8.1	---	40.9	---	36.4	---	2.6	e27.3	---
TOTAL	223.5	608.1	402.9	906.7	375.4	886.8	3651.4	2184.4	1123.9	289.2	4541.0	589.7
WTR YR 1995	TOTAL 15783.0											

NITROGEN, NITRITE PLUS NITRATE, DISSOLVED, POUNDS PER DAY, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.44	e17.0	36.8	31.0	16.5	100	247	1400	39.6	.59	e2.4	e5.1
2	.46	e17.0	33.9	28.5	16.3	93.1	200	1060	17.9	.41	e1.8	e3.4
3	.45	8.3	30.2	24.1	16.1	88.0	175	817	8.2	.30	e2.2	e3.1
4	.37	26.7	29.2	18.1	16.7	87.1	149	653	3.4	.54	e4.0	e2.6
5	.51	22.0	28.8	15.2	16.4	92.9	124	551	1.7	1.1	e1.3	e1.8
6	.48	273	29.8	14.1	15.2	106	126	454	12.6	.64	e.71	1.7
7	.43	113	27.1	12.8	13.9	105	122	377	1050	.41	4.9	2.1
8	.57	66.7	32.4	12.0	13.5	95.1	525	499	825	.31	7.5	2.0
9	.58	112	29.5	11.3	13.0	86.9	509	945	526	2.4	381	1.6
10	.50	75.6	27.3	11.1	13.5	e90.4	556	2170	413	1.3	1530	1.4
11	.65	60.5	23.3	12.1	12.9	e212	1180	1860	343	.51	334	1.3
12	.63	55.5	19.6	16.3	12.2	e285	2340	1360	238	.35	103	1.3
13	.94	48.6	17.8	65.2	11.5	e260	2170	1060	155	.26	33.3	1.7
14	.98	77.0	16.8	2080	10.7	e236	1480	923	129	.22	12.7	1.3
15	.85	45.0	16.5	1100	14.9	e212	991	677	93.8	.20	6.9	1.4
16	.88	33.5	24.4	89.6	14.1	e186	772	532	66.3	e2.1	91.2	e1.0
17	.81	29.7	32.2	62.7	13.3	e159	702	568	48.6	e.71	2510	e9.2
18	.88	24.2	34.3	54.4	20.7	e130	1280	419	35.7	.18	1820	2.8
19	.87	22.3	30.5	44.5	e42.9	e122	1620	347	25.7	.16	898	2.9
20	.74	19.6	29.3	45.5	e236	151	1080	294	15.3	.46	580	e9.0
21	.74	21.9	33.0	40.4	e212	184	1010	250	7.7	.32	366	e14.4
22	.78	19.0	37.1	36.7	e188	152	756	212	4.0	.20	188	e11.6
23	.81	17.6	45.7	32.6	e179	149	594	239	2.4	.44	99.7	3.7
24	.86	16.2	65.8	28.1	e159	139	501	332	1.3	.64	53.1	3.4
25	.86	14.3	67.7	23.3	e145	126	449	253	.77	1.2	31.2	2.9
26	.73	12.5	58.3	19.9	e117	125	636	219	.67	.66	21.3	2.5
27	.74	39.6	56.6	18.2	e101	210	4180	243	1.4	.49	15.6	2.5
28	.75	60.1	58.9	16.9	e90.4	400	3780	894	2.0	2.4	e28.6	2.4
29	.87	44.7	49.4	16.2	---	450	2740	654	1.1	1.0	e47.9	2.5
30	1.0	40.1	39.0	15.4	---	374	2050	248	.84	.45	e14.7	2.6
31	e7.6	---	35.3	15.2	---	290	---	96.1	---	.23	e7.2	---
TOTAL	28.76	1433.2	1096.5	4011.4	1731.7	5496.5	33044	20606.1	4069.98	21.18	9198.21	105.2
WTR YR 1995	TOTAL 80842.73											

e Estimated

05431016 JACKSON CREEK AT MOUND ROAD NEAR ELKHORN, WI--CONTINUED

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

[illegible]

PHOSPHORUS ORTHO WATER, WHOLE, DISSOLVED, LBS/DAY, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

[illegible]

05431017 DELAVAN LAKE INLET AT STATE HIGHWAY 50 AT LAKE LAWN, WI

LOCATION.--Lat 42°37'16", long 88°34'57", in NE 1/4 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. Acoustical velocity meter used to determine discharges equal to or greater than 20 ft³/s for period from Oct. 1, 1985 to May 7, 1987.

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, 1992 to Jan. 31, 1993, and on discharges upstream at Jackson Creek at Mound Road near Elkhorn (05431016) for subsequent periods. Records poor (see page 11).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	3.6	5.1	6.4	2.9	6.4	13	30	11	2.3	3.2	5.1
2	2.2	3.6	4.7	6.0	2.7	5.7	12	25	11	1.7	2.7	4.0
3	2.2	3.1	4.3	5.1	2.6	5.2	11	21	10	1.3	3.1	3.8
4	1.8	9.5	4.2	3.9	2.6	5.2	9.2	18	8.3	2.6	4.4	3.4
5	2.3	11	4.2	3.4	2.5	5.6	7.7	16	7.7	5.2	2.2	2.7
6	2.1	45	4.4	3.1	2.2	6.4	7.7	14	9.2	3.1	1.6	2.5
7	1.8	13	4.0	2.9	1.9	6.4	7.5	12	32	1.9	13	3.1
8	2.3	8.1	4.8	2.7	1.8	5.7	34	18	23	1.6	36	3.0
9	2.2	13	4.5	2.6	1.7	5.3	26	38	14	4.9	101	2.5
10	1.8	8.8	4.2	2.6	1.7	7.1	25	83	12	4.7	118	2.1
11	2.3	6.6	3.6	2.9	1.6	14	47	55	10	2.5	38	1.8
12	2.1	5.7	3.1	3.9	1.4	18	74	35	7.3	1.7	19	1.9
13	3.0	4.8	2.9	9.6	1.3	17	52	30	6.0	1.3	10	2.5
14	3.0	9.9	2.7	77	1.2	16	34	27	6.2	1.1	6.4	1.9
15	2.5	7.1	2.7	47	1.6	14	25	21	5.7	.95	5.7	2.1
16	2.5	5.6	4.0	26	1.4	13	21	18	5.1	3.0	32	1.9
17	2.2	5.2	5.5	18	1.3	11	19	21	4.7	1.6	261	7.3
18	2.2	4.3	5.8	16	1.9	9.6	48	16	4.4	.90	96	4.2
19	2.1	4.2	5.3	12	3.9	9.1	58	13	4.2	.78	47	4.2
20	1.7	3.8	5.2	12	16	13	32	11	4.0	2.2	30	7.1
21	1.7	4.3	5.8	10	14	16	30	9.7	3.2	1.6	19	9.5
22	1.7	3.9	6.8	9.1	13	12	26	8.4	2.9	.96	13	8.3
23	1.7	3.8	8.4	7.8	12	11	21	11	2.7	2.1	9.9	5.3
24	1.7	3.5	12	6.5	11	9.7	17	17	2.6	3.1	7.3	4.9
25	1.6	3.2	13	5.2	11	8.4	16	12	2.3	5.8	6.0	4.0
26	1.4	3.0	11	4.3	8.8	7.9	25	9.5	2.9	3.2	5.6	3.1
27	1.6	11	11	3.8	7.8	19	179	10	4.2	2.2	5.6	2.7
28	1.6	14	12	3.4	7.1	30	97	40	5.3	7.4	14	2.3
29	1.9	7.8	9.9	3.1	---	25	56	25	3.8	3.6	19	2.2
30	2.3	5.6	7.8	2.9	---	18	39	17	3.1	1.8	9.6	2.1
31	2.7	---	7.1	2.7	---	16	---	13	---	1.0	6.2	---
TOTAL	64.4	236.0	190.0	321.9	138.9	366.7	1069.1	694.6	228.8	78.09	945.5	111.5
MEAN	2.08	7.87	6.13	10.4	4.96	11.8	35.6	22.4	7.63	2.52	30.5	3.72
MAX	3.0	45	13	77	16	30	179	83	32	7.4	261	9.5
MIN	1.4	3.0	2.7	2.6	1.2	5.2	7.5	8.4	2.3	.78	1.6	1.8
CFSM	.10	.36	.28	.48	.23	.54	1.63	1.03	.35	.12	1.40	.17
IN.	.11	.40	.32	.55	.24	.63	1.82	1.19	.39	.13	1.61	.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1995, BY WATER YEAR (WY)

	MEAN	15.0	12.5	6.96	16.3	28.1	25.2	12.3	9.90	8.19	5.98	8.02
MAX	25.9	54.5	30.3	19.5	44.1	68.3	100	32.9	53.2	29.3	30.5	37.4
(WY)	1987	1986	1992	1993	1994	1986	1993	1990	1993	1993	1995	1986
MIN	.67	1.14	1.12	1.11	1.31	10.7	3.28	1.44	.76	.61	.50	.61
(WY)	1989	1990	1990	1991	1989	1988	1989	1989	1988	1988	1988	1988

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1984 - 1995

ANNUAL TOTAL	3694.58	4445.49	
ANNUAL MEAN	10.1	12.2	12.9
HIGHEST ANNUAL MEAN			30.3
LOWEST ANNUAL MEAN			5.38
HIGHEST DAILY MEAN	571	261	751
LOWEST DAILY MEAN	.82	.78	.22
ANNUAL SEVEN-DAY MINIMUM	.99	1.4	.25
ANNUAL RUNOFF (CFSM)	.46	.56	.59
ANNUAL RUNOFF (INCHES)	6.30	7.59	8.05
10 PERCENT EXCEEDS	17	26	30
50 PERCENT EXCEEDS	3.9	5.6	4.3
90 PERCENT EXCEEDS	1.3	1.8	.82

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: 1984 and 1985 water years (unpublished), October 1989 to September 1995 (discontinued).

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. Samples are equal-width increment unless otherwise indicated.

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, and many days during 1992 to 1995 water years.

TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 3.8 mg/L, May 27, 1985; minimum observed, 0.01 mg/L, Mar. 7, 1990 and Dec. 15, 1994.

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, 0.64 mg/L, Aug. 2-3, 1995; minimum observed, <0.01 mg/L, Apr. 14, 1994 and on many days during 1995 water year.

DISSOLVED ORTHO-PHOSPHORUS DISCHARGE: Maximum daily, 262 lb, Aug. 17, 1995; minimum daily, 0.14 lb, Jan. 9-10, 1995.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum observed, 45 mg/L, Aug. 18; minimum observed, 0 mg/L, Nov. 16.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 9.8 tons, Aug. 17; minimum daily, 0.00 ton, July 14, 15, 18, 19.

TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.77 mg/L, July 29; minimum observed, 0.01 mg/L, Apr. 17.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 380 lb, Aug. 17; minimum daily, 0.28 lb, Jan. 9, 10.

DISSOLVED ORTHO-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.64 mg/L, Aug. 2, 3; minimum observed, <0.01 mg/L, on many days.

DISSOLVED ORTHO-PHOSPHORUS DISCHARGE: Maximum daily, 262 lb, Aug. 17; minimum daily, 0.14 lb, Jan. 9, 10.

DISSOLVED CHLORIDE CONCENTRATIONS: Maximum observed, 130 mg/L, Aug. 8; minimum observed, 18 mg/L, June 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDED (MG/L) (80154)
OCT 1994								
03...	1430	2.2	--	--	--	0.300	0.300	2
04...	1035	1.8	--	--	--	0.360	--	--
25...	1300	1.6	--	--	--	0.310	--	5
NOV								
06...	1010	45	--	--	--	0.340	--	3
06...	1540	45	--	--	--	0.390	--	3
07...	0325	13	--	--	--	0.390	--	--
09...	1455	13	<0.050	<0.015	0.40	0.300	0.250	--
10...	0920	8.8	--	--	--	0.380	--	5
10...	1500	8.8	--	--	--	0.350	--	4
11...	0915	6.6	--	--	--	0.360	--	5
11...	1500	6.6	--	--	--	0.340	--	3
12...	0650	5.7	--	--	--	0.330	--	1
13...	0845	4.8	--	--	--	0.310	--	4
14...	0925	9.9	--	--	--	0.210	--	1
14...	1530	9.9	--	--	--	0.230	--	2
15...	0840	7.1	--	--	--	0.190	--	3
15...	1505	7.1	--	--	--	0.190	--	3
16...	0815	5.6	--	--	--	0.180	--	0
16...	1310	5.6	--	--	--	0.200	--	1
17...	0825	5.2	--	--	--	0.190	--	--
29...	0915	7.8	--	--	--	0.100	--	5
30...	1545	5.6	--	--	--	0.110	0.090	1
DEC								
27...	1145	11	--	--	--	0.020	--	36
JAN 1995								
16...	1415	26	--	--	--	0.240	0.130	10

ROCK RIVER BASIN

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05431017 DELAVAN LAKE INLET AT STATE HIGHWAY 50 AT LAKE LAWN, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDED (MG/L) (80154)
MAR 1995						
03...	1015	5.2	--	0.150	0.080	7
21...	0920	16	--	0.070	--	4
21...	1215	16	--	0.080	0.010	13
21...	1555	16	--	0.030	--	7
22...	0830	12	--	0.040	--	--
22...	1550	12	--	0.050	--	5
23...	0820	11	--	0.050	--	6
23...	1620	11	--	0.030	--	4
24...	0815	9.7	--	0.030	--	7
25...	0610	8.4	--	0.030	--	6
28...	0945	30	--	0.050	--	9
28...	1455	30	--	0.040	--	8
29...	0945	25	--	0.060	--	5
29...	1530	25	--	0.070	--	8
30...	0930	18	--	0.060	--	5
30...	1630	18	--	0.040	--	10
31...	0955	16	--	0.030	--	6
APR						
01...	0915	13	--	0.040	--	1
10...	1025	25	--	0.080	--	12
10...	1525	25	--	0.100	--	17
11...	0810	47	--	0.070	--	14
11...	1020	47	--	0.060	0.010	--
11...	1535	47	--	0.060	--	7
12...	1005	74	--	0.050	--	7
12...	1450	74	--	0.050	--	7
13...	1045	52	--	0.030	--	5
13...	1525	52	--	0.210	--	--
14...	0650	34	--	0.030	--	7
14...	1445	34	86	0.040	0.010	10
15...	1000	25	80	0.040	<0.010	5
16...	1010	21	--	--	--	3
16...	1040	21	82	0.040	<0.010	--
17...	1000	19	--	<0.010	<0.010	--
19...	0950	58	69	0.100	<0.010	--
19...	1515	58	64	0.050	<0.010	4
20...	0940	32	66	0.040	<0.010	6
20...	1525	32	70	0.040	<0.010	4
21...	1105	30	66	0.030	<0.010	3
21...	1500	30	66	0.030	<0.010	2
22...	0945	26	61	0.040	0.020	5
23...	0915	21	64	0.030	<0.010	1
27...	1420	179	59	0.030	--	3
28...	1150	97	43	0.090	0.020	14
28...	1450	97	45	0.100	0.020	11
MAY						
01...	1000	30	45	0.050	<0.010	4
01...	1300	30	--	--	--	1
01...	1500	30	46	0.040	0.010	--
02...	0925	25	46	0.040	0.010	4
03...	0855	21	47	0.030	0.010	1
08...	0940	18	51	0.060	0.010	2
09...	0940	38	50	0.060	0.030	2
09...	1455	38	51	0.090	0.030	4
10...	0950	83	53	0.060	0.040	2
11...	0950	55	61	0.060	0.020	1
11...	1450	55	63	0.050	0.020	1
12...	0930	35	58	0.050	0.020	8
12...	1425	35	57	0.090	0.010	--
12...	1440	35	--	--	--	17
13...	0920	30	56	0.030	0.010	3
14...	1050	27	57	0.050	0.050	6
14...	1400	27	56	0.060	0.060	9
15...	0940	21	55	0.060	0.050	3
15...	1500	21	57	0.080	0.060	10
16...	0915	18	56	0.090	0.070	8
16...	1445	18	54	0.100	0.060	--
17...	0850	21	53	0.130	0.130	5
18...	0841	16	59	0.190	--	4
22...	1010	8.4	66	0.230	0.190	3
24...	1000	17	69	0.410	0.310	12
24...	1505	17	67	0.390	0.370	3
25...	0955	12	70	0.420	0.350	4
25...	1450	12	72	0.360	0.310	--
26...	1035	9.5	71	0.380	0.320	3
26...	1440	9.5	72	0.400	0.320	3
27...	0650	10	73	0.370	0.300	4
27...	1550	10	--	--	--	3
28...	0745	40	70	0.380	0.310	3
28...	1500	40	73	0.340	0.270	3
29...	1100	25	73	0.240	0.160	4

ROCK RIVER BASIN

05431017 DELAVAN LAKE INLET AT STATE HIGHWAY 50 AT LAKE LAWN, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDE (MG/L) (80154)
MAY 1995						
29...	1550	25	72	0.320	0.250	2
30...	0955	17	72	0.180	0.140	8
30...	1500	17	72	0.180	0.130	2
31...	0910	13	67	0.180	0.130	9
31...	1525	13	67	0.250	0.150	5
JUN						
01...	0840	11	18	0.210	0.140	3
02...	0840	11	70	0.290	0.220	10
05...	1030	7.7	72	0.440	0.360	7
07...	0940	32	67	0.630	0.440	17
12...	1045	7.3	65	0.400	0.340	5
19...	0850	4.2	74	0.460	--	8
26...	0945	2.9	71	0.700	0.550	5
28...	0850	5.3	71	0.670	0.590	7
29...	1115	3.8	69	0.720	0.600	10
JUL						
05...	1040	5.2	70	0.630	0.570	5
05...	1500	5.2	--	0.620	0.530	1
06...	0840	3.1	71	0.510	0.410	4
06...	1355	3.1	70	0.530	0.450	17
10...	1045	4.7	75	0.540	0.560	9
17...	1000	1.6	72	0.570	0.550	2
20...	1240	2.2	--	0.600	0.570	8
24...	1020	3.1	75	0.560	0.530	1
25...	1000	5.8	80	0.620	0.560	8
25...	1420	5.8	--	--	--	4
26...	1015	3.2	--	--	--	5
28...	1110	7.4	84	0.690	0.590	6
28...	1410	7.4	83	0.690	0.590	4
29...	0840	3.6	--	--	--	4
29...	1315	3.6	83	0.770	0.630	--
30...	0840	1.8	--	--	--	5
30...	1340	1.8	83	0.700	0.610	--
31...	0950	1.0	83	0.680	0.590	--
AUG						
01...	0920	3.2	84	0.670	0.630	--
01...	1455	3.2	--	--	--	6
02...	0900	2.7	88	0.760	0.640	--
03...	1500	3.1	87	0.730	0.640	3
07...	1010	13	98	0.720	0.510	7
08...	0910	36	110	0.720	0.440	--
08...	1430	36	130	0.560	0.300	9
10...	1000	118	45	0.350	0.180	15
10...	1450	118	44	0.420	0.120	13
11...	0910	38	43	0.400	0.210	16
12...	1010	19	--	--	--	14
13...	0940	10	45	0.300	0.210	4
14...	1125	6.4	47	0.280	0.210	3
15...	1425	5.7	45	0.290	0.230	--
16...	1420	32	41	0.350	0.290	7
17...	1025	261	48	0.310	0.220	12
17...	1415	261	30	0.210	0.130	13
18...	0930	96	27	0.250	0.150	45
18...	1405	96	26	0.290	0.180	4
19...	0650	47	28	0.210	0.120	6
19...	1325	47	29	0.220	0.150	5
20...	0650	30	30	0.240	0.170	4
21...	1000	19	34	0.220	0.150	13
28...	0925	14	38	0.340	0.130	8
29...	1415	19	40	0.410	0.200	8
30...	1445	9.6	41	0.420	0.230	4
SEP						
06...	1230	2.5	45	0.480	0.320	4
08...	0830	3.0	--	0.360	0.240	8
11...	0930	1.8	--	0.300	0.230	4
17...	0720	7.3	--	0.280	0.200	2
18...	1040	4.2	--	0.300	0.180	3
25...	1030	4.0	--	0.240	0.170	4

05431017 DELAVAN LAKE INLET AT STATE HIGHWAY 50 AT LAKE LAWN, WI--CONTINUED

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.04	.01	.18	.02	.14	.05	.24	.12	.03	.05	.06
2	.01	.04	.01	.13	.02	.12	.04	.18	.27	.01	.03	.05
3	.01	.03	.01	.09	.02	.10	.03	.08	.24	.01	.03	.05
4	.01	.09	.01	.05	.02	.09	.03	.06	.18	.02	.03	.04
5	.01	.10	.01	.04	.02	.10	.02	.05	.15	.05	.01	.03
6	.01	.38	.01	.03	.02	.10	.02	.04	.16	.08	.01	.03
7	.01	.11	.01	.02	.01	.10	.03	.04	1.3	.05	.24	.05
8	.01	.08	.01	.02	.01	.08	1.1	.10	.80	.02	.87	.06
9	.01	.16	.01	.02	.01	.07	.96	.26	.39	.09	3.1	.04
10	.01	.11	.01	.02	.01	.12	.97	.40	.26	.10	4.4	.03
11	.01	.06	.01	.02	.01	.30	1.4	.23	.17	.04	1.5	.02
12	.01	.02	.01	.06	.01	.46	1.4	.89	.10	.02	.61	.02
13	.02	.03	.01	.43	.01	.37	.78	.33	.09	.01	.11	.02
14	.02	.05	.01	6.9	.01	.27	.74	.45	.10	.00	.04	.02
15	.02	.05	.01	2.8	.01	.19	.33	.38	.09	.00	.04	.02
16	.02	.01	.02	.79	.01	.14	.17	.37	.09	.03	.57	.01
17	.02	.01	.07	.45	.01	.09	.24	.28	.09	.01	9.8	.05
18	.02	.01	.15	.37	.02	.07	1.0	.16	.09	.00	5.2	.04
19	.02	.01	.17	.25	.09	.05	.94	.12	.09	.00	.61	.05
20	.02	.01	.19	.23	.60	.10	.40	.09	.08	.04	.46	.13
21	.02	.01	.24	.18	.53	.27	.21	.07	.06	.02	.61	.24
22	.02	.01	.33	.15	.46	.17	.24	.07	.05	.01	.36	.18
23	.02	.01	.46	.12	.40	.16	.04	.19	.04	.01	.22	.09
24	.02	.01	.77	.09	.34	.17	.04	.32	.04	.02	.12	.07
25	.02	.01	.96	.07	.32	.13	.05	.12	.03	.08	.08	.05
26	.02	.01	.93	.05	.24	.11	.12	.09	.04	.04	.06	.04
27	.02	.13	1.0	.04	.20	.35	1.7	.09	.07	.03	.05	.03
28	.02	.19	.92	.04	.17	.65	2.8	.35	.10	.10	.27	.03
29	.02	.08	.59	.03	---	.44	1.3	.23	.09	.04	.38	.03
30	.03	.02	.36	.03	---	.36	.62	.20	.06	.02	.13	.03
31	.03	---	.26	.02	---	.23	---	.21	---	.01	.07	---
TOTAL	0.52	1.88	7.57	13.72	3.60	6.10	17.77	6.69	5.44	0.99	30.06	1.61

WTR YR 1995 TOTAL 95.95

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.85	5.10	2.90	.69	1.50	5.45	2.73	7.51	13.6	7.45	11.9	12.0
2	3.71	4.98	2.53	.65	1.34	4.73	2.46	5.13	17.4	5.03	10.9	9.59
3	3.65	4.25	2.20	.55	1.24	4.10	2.15	3.41	18.3	3.60	12.3	9.29
4	3.42	14.3	2.03	.42	1.19	3.48	1.72	2.61	17.4	7.92	17.3	8.48
5	4.44	18.4	1.93	.37	1.10	3.13	1.37	2.11	18.6	17.0	8.61	6.86
6	4.02	87.5	1.92	.33	.93	2.99	1.31	1.67	26.7	8.87	6.24	6.35
7	3.42	26.4	1.65	.31	.77	2.49	1.47	1.58	106	5.46	50.6	6.91
8	4.34	14.8	1.88	.29	.70	1.85	16.0	5.38	71.0	4.62	122	5.82
9	4.13	22.0	1.67	.28	.64	1.51	12.5	14.7	39.5	14.2	244	4.54
10	3.35	17.0	1.48	.28	.61	2.43	11.8	28.2	30.9	13.7	249	3.59
11	4.25	12.4	1.20	.36	.55	6.04	16.6	16.4	23.5	7.35	80.3	2.92
12	3.86	10.0	.98	1.15	.46	9.34	19.6	11.8	16.0	5.04	35.1	3.04
13	5.47	7.52	.87	6.96	.41	8.32	9.02	6.05	13.2	3.88	16.2	3.95
14	5.43	11.9	.77	112	.37	7.10	6.52	7.67	14.0	3.31	9.79	2.97
15	4.49	7.38	.74	68.5	.47	5.62	5.40	8.01	13.1	2.88	9.02	3.24
16	4.46	5.76	1.16	34.2	.39	4.73	3.85	9.41	12.0	9.17	57.9	2.90
17	3.90	5.28	1.71	22.1	.38	3.62	1.49	15.7	11.2	4.94	380	11.2
18	3.87	4.07	1.93	18.5	.84	2.87	10.6	16.2	10.7	2.82	133	6.82
19	3.67	3.71	1.89	13.1	2.72	2.55	21.1	14.1	10.5	2.48	56.5	7.18
20	2.95	3.13	1.99	12.4	16.3	4.21	6.94	12.5	10.6	7.10	38.0	12.8
21	2.93	3.30	2.38	9.72	14.7	4.73	5.19	11.5	9.03	5.10	22.5	17.6
22	2.91	2.79	2.98	8.34	13.3	2.85	5.19	10.9	8.69	3.00	14.4	14.3
23	2.89	2.53	3.95	6.74	12.0	2.39	3.36	18.9	8.59	6.46	10.3	8.28
24	2.87	2.18	6.05	5.30	10.7	1.57	2.23	36.1	8.78	9.55	7.15	6.96
25	2.67	1.85	6.38	4.00	10.4	1.25	1.82	25.2	8.24	19.4	5.51	5.22
26	2.29	1.71	2.86	3.12	8.12	.95	3.29	19.7	10.9	11.1	4.83	3.94
27	2.56	8.53	1.33	2.60	7.01	3.41	31.8	20.2	15.5	7.93	5.23	3.37
28	2.49	13.3	1.30	2.19	6.21	7.29	43.3	75.4	19.5	28.0	25.0	2.82
29	2.89	4.56	1.07	1.88	---	8.31	24.5	37.0	14.5	14.6	41.0	2.64
30	3.42	3.26	.84	1.66	---	4.97	13.3	17.8	11.0	6.85	21.7	2.48
31	3.92	---	.77	1.46	---	2.83	---	14.8	---	3.67	14.3	---
TOTAL	112.52	329.89	63.34	340.45	115.35	127.11	288.61	477.64	608.93	252.48	1720.58	198.06

WTR YR 1995 TOTAL 4634.96

05431017 DELAVAN LAKE INLET AT STATE HIGHWAY 50 AT LAKE LAWN, WI--CONTINUED

PHOSPHORUS ORTHO WATER, WHOLE, DISSOLVED, LBS/DAY, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

[illegible]

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.

REMARKS.--Lake ice-covered during March measurements. Water-quality analyses done by the U.S. Geological Survey National Water Quality Laboratory.

WATER-QUALITY DATA, NOVEMBER 15 1994 TO AUGUST 18, 1995

(Milligrams per liter unless otherwise indicated)

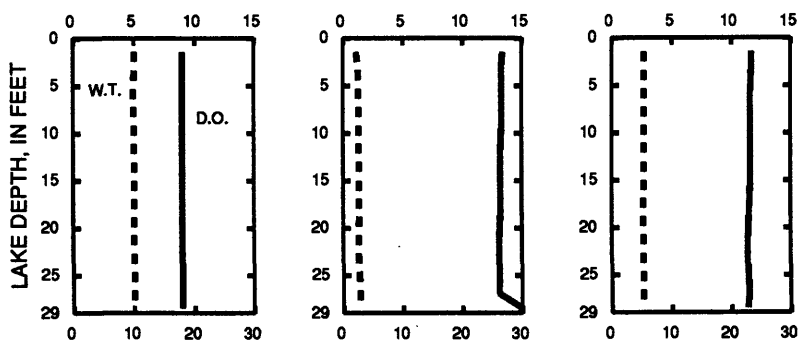
	Nov. 15		Mar. 01		Apr. 14	
Depth of sample (ft)	1.5	29	1.5	29	1.5	29
Lake stage (ft)	5.11		5.00		5.11	
Specific conductance (µS/cm)	573	574	567	611	592	594
pH (units)	8.3	8.3	8.5	8.5	8.5	8.5
Water temperature (°C)	10.0	10.0	2.0	3.0	5.5	5.0
Color (Pt-Co. scale)	---	---	---	---	8	9
Turbidity (NTU)	---	---	---	---	0.50	0.70
Secchi-depth (meters)	5.3		4.9		3.8	
Dissolved oxygen	9.0	9.0	13.4	15.0	11.7	11.4
Hardness, as CaCO ₃	---	---	---	---	250	250
Calcium, dissolved (Ca)	---	---	---	---	45	45
Magnesium, dissolved (Mg)	---	---	---	---	33	33
Sodium, dissolved (Na)	---	---	---	---	24	24
Potassium, dissolved (K)	---	---	---	---	3	3
Alkalinity, as CaCO ₃	---	---	---	---	190	190
Sulfate, dissolved (SO ₄)	---	---	---	---	31	31
Chloride, dissolved (Cl)	---	---	---	---	57	58
Fluoride, dissolved (F)	---	---	---	---	0.1	0.1
Silica, dissolved (SiO ₂)	---	---	---	---	<0.1	<0.1
Solids, dissolved, at 180°C	---	---	---	---	328	335
Nitrogen, NO ₂ + NO ₃ , diss. (as N)	0.12	---	0.28	---	---	---
Nitrogen, ammonia, dissolved (as N)	0.16	---	0.01	---	---	---
Nitrogen, organic, total (as N)	0.54	---	0.69	---	---	---
Nitrogen, amm. + org., total (as N)	0.70	---	0.70	---	0.60	0.70
Nitrogen, total (as N)	0.82	---	0.98	---	---	---
Phosphorus, total (as P)	0.095	0.094	0.084	0.090	0.050	0.052
Phosphorus, ortho, dissolved (as P)	0.067	0.056	0.053	0.047	0.018	0.034
Iron, dissolved (Fe) µg/L	---	---	---	---	4	<3
Manganese, dissolved (Mn) µg/L	---	---	---	---	1	<1
Chlorophyll a, phytoplankton (µg/L)	0.5	---	0.3	---	0.9	---
Additional secchi-depth (meters):						
May 16.....	5.5					
June 15.....	7.4					
July 18.....	2.9					
Aug. 18.....	3.8					

11-15-94

3-1-95

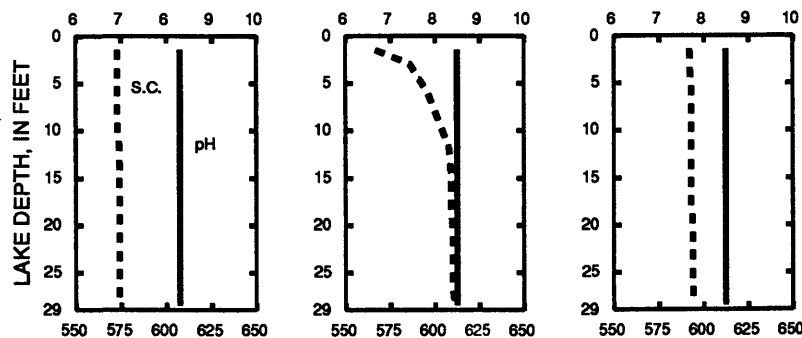
4-14-95

DISSOLVED OXYGEN (D.O.), IN MILLIGRAMS PER LITER



WATER TEMPERATURE (W.T.), IN DEGREES CELSIUS

pH, IN STANDARD UNITS



SPECIFIC CONDUCTANCE (S.C.), IN MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS

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 March measurements. Water-quality analyses done by the U.S. Geological Survey National Water Quality Laboratory.

WATER-QUALITY DATA, NOVEMBER 15, 1994 TO MAY 16, 1995

(Milligrams per liter unless otherwise indicated)

	Nov. 15		Mar. 01		Apr. 14		May 16	
Depth of sample (ft)	1.5	52	1.5	51	1.5	52	1.5	53
Lake stage (ft)	5.11		5.00		5.11		5.00	
Specific conductance (µS/cm)	573	574	602	785	593	595	598	610
pH (units)	8.4	8.3	8.4	7.7	8.4	8.5	8.5	8.1
Water temperature (°C)	10.0	10.0	1.5	3.5	5.5	5.0	13.5	10.0
Color (Pt-Co. scale)	---	---	---	---	9	9	---	---
Turbidity (NTU)	---	---	---	---	0.50	0.50	---	---
Secchi-depth (meters)	5.6		7.6		3.8		5.2	
Dissolved oxygen	8.7	8.5	12.6	2.1	12.2	11.4	10.8	6.7
Hardness, as CaCO ₃	---	---	---	---	250	250	---	---
Calcium, dissolved (Ca)	---	---	---	---	45	45	---	---
Magnesium, dissolved (Mg)	---	---	---	---	33	33	---	---
Sodium, dissolved (Na)	---	---	---	---	24	25	---	---
Potassium, dissolved (K)	---	---	---	---	3	3	---	---
Alkalinity, as CaCO ₃	---	---	---	---	200	200	---	---
Sulfate, dissolved (SO ₄)	---	---	---	---	31	30	---	---
Chloride, dissolved (Cl)	---	---	---	---	58	59	56	---
Fluoride, dissolved (F)	---	---	---	---	0.1	0.1	---	---
Silica, dissolved (SiO ₂)	---	---	---	---	<0.1	<0.1	---	---
Solids, dissolved, at 180°C	---	---	---	---	331	338	---	---
Nitrogen, NO ₂ + NO ₃ , diss. (as N)	0.12	---	0.30	---	---	---	0.25	---
Nitrogen, ammonia, dissolved (as N)	0.17	---	<0.01	---	---	---	---	---
Nitrogen, organic, total (as N)	0.53	---	0.80	---	---	---	1.4	---
Nitrogen, amm. + org., total (as N)	0.70	---	0.80	---	0.70	0.60	1.4	---
Nitrogen, total (as N)	0.82	---	1.1	---	---	---	1.7	---
Phosphorus, total (as P)	0.092	0.091	0.090	0.140	0.049	0.049	0.130	0.087
Phosphorus, ortho, dissolved (as P)	0.070	0.063	0.044	0.110	0.036	0.038	0.025	0.067
Iron, dissolved (Fe) µg/L	---	---	---	---	<3	<3	---	---
Manganese, dissolved (Mn) µg/L	---	---	---	---	<1	1	---	---
Chlorophyll a, phytoplankton (µg/L)	0.8	---	0.2	---	0.8	---	0.4	---

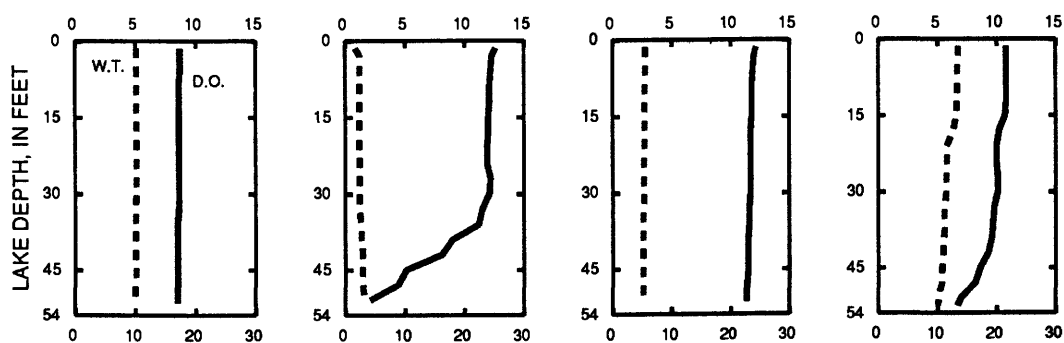
11-15-94

3-1-95

4-14-95

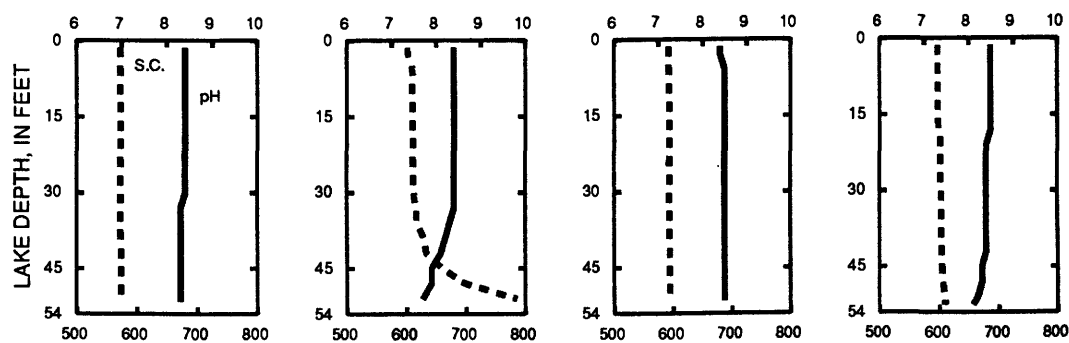
5-16-95

DISSOLVED OXYGEN (D.O.), IN MILLIGRAMS PER LITER



WATER TEMPERATURE (W.T.), IN DEGREES CELSIUS

pH, IN STANDARD UNITS

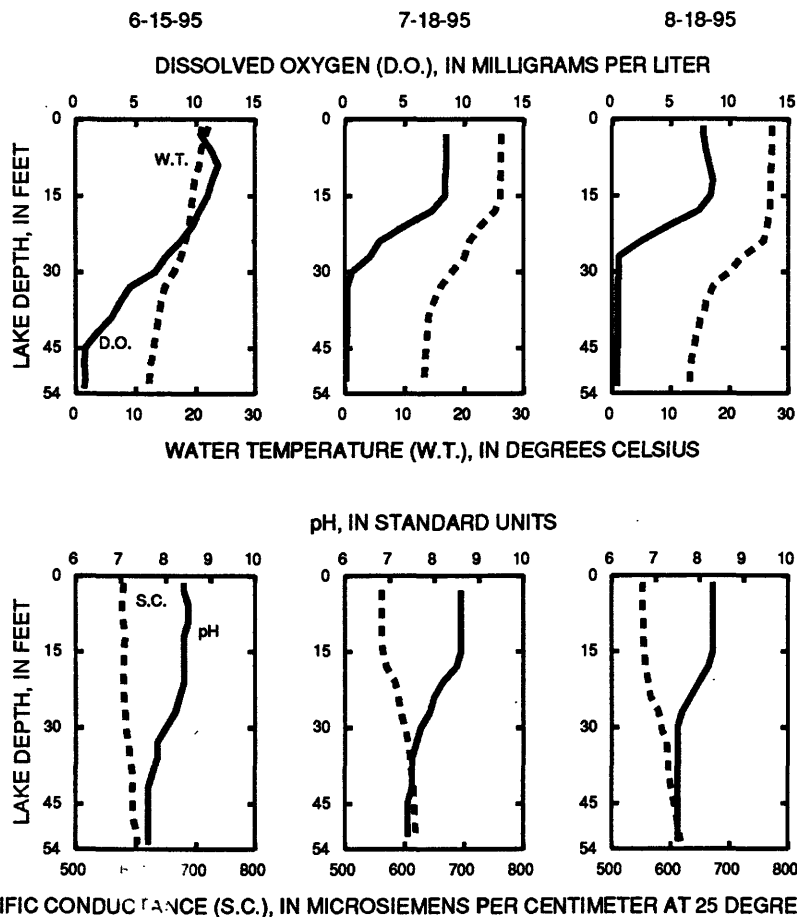


SPECIFIC CONDUCTANCE (S.C.), IN MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS

WATER-QUALITY DATA, JUNE 15 TO AUGUST 18, 1995
(Milligrams per liter unless otherwise indicated)

	June 15		July 18			
Depth of sample (ft)	1.5	53	1.5	27	42	52
Lake stage (ft)	5.00		4.85			
Specific conductance (µS/cm)	580	603	562	594	616	619
pH (units)	8.4	7.6	8.6	7.9	7.5	7.4
Water temperature (°C)	22.0	12.0	26.5	20.0	14.0	13.5
Secchi-depth (meters)	6.3		2.7			
Dissolved oxygen	10.5	0.7	8.5	2.1	0.2	0.1
Chloride, dissolved (Cl)	60	57	58	---	---	58
Nitrogen, NO ₂ + NO ₃ , diss. (as N)	0.01	---	<0.01	---	---	---
Nitrogen, organic, total (as N)	1.0	---	0.50	---	---	---
Nitrogen, amm. + org., total (as N)	1.0	---	0.50	---	---	---
Nitrogen, total (as N)	1.0	---	0.50	---	---	---
Phosphorus, total (as P)	0.026	0.300	0.024	0.100	0.310	0.370
Phosphorus, ortho, dissolved (as P)	<0.001	0.270	<0.001	0.076	0.340	0.390
Chlorophyll a, phytoplankton (µg/L)	1.6	---	4.1	---	---	---

	Aug. 18							
Depth of sample (ft)	1.5	15	21	30	39	45	51	53
Lake stage (ft)	5.16							
Specific conductance (µS/cm)	553	555	562	584	597	606	615	618
pH (units)	8.3	8.3	8.0	7.5	7.5	7.5	7.5	7.5
Water temperature (°C)	27.0	27.0	26.5	20.0	15.5	14.0	13.5	13.0
Secchi-depth (meters)	4.1							
Dissolved oxygen	7.8	8.4	4.8	0.6	0.5	0.5	0.4	0.4
Chloride, dissolved (Cl)	56	---	---	---	---	---	---	56
Nitrogen, NO ₂ + NO ₃ , diss. (as N)	<0.01	---	---	---	---	---	---	---
Nitrogen, organic, total (as N)	0.60	---	---	---	---	---	---	---
Nitrogen, amm. + org., total (as N)	0.60	---	---	---	---	---	---	---
Nitrogen, total (as N)	0.60	---	---	---	---	---	---	---
Phosphorus, total (as P)	0.019	0.020	0.021	0.110	0.310	0.400	0.480	0.530
Phosphorus, ortho, dissolved (as P)	<0.001	---	<0.001	---	---	0.330	---	0.490
Chlorophyll a, phytoplankton (µg/L)	1.6	---	---	---	---	---	---	---



ROCK RIVER BASIN

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.

REMARKS.--Lake ice-covered during March measurements. Water-quality analyses done by the U.S. Geological Survey National Water Quality Laboratory.

WATER-QUALITY DATA, NOVEMBER 15, 1994 TO AUGUST 18, 1995

(Milligrams per liter unless otherwise indicated)

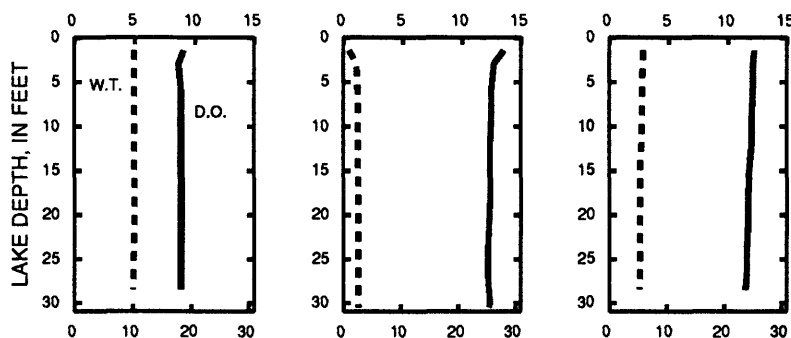
	Nov. 15		Mar. 01		Apr. 14	
Depth of sample (ft)	1.5	29	1.5	31	1.5	29
Lake stage (ft)	5.11		5.00		5.11	
Specific conductance (μS/cm)	574	574	533	609	596	597
pH (units)	8.4	8.4	7.6	8.4	8.5	8.5
Water temperature (°C)	10.0	10.0	1.0	2.5	6.0	5.5
Color (Pt-Co. scale)	---	---	---	---	8	9
Turbidity (NTU)	---	---	---	---	0.40	0.50
Secchi-depth (meters)	4.4		7.5		3.5	
Dissolved oxygen	9.0	8.8	13.5	12.3	12.2	11.5
Hardness, as CaCO ₃	---	---	---	---	250	250
Calcium, dissolved (Ca)	---	---	---	---	45	45
Magnesium, dissolved (Mg)	---	---	---	---	33	33
Sodium, dissolved (Na)	---	---	---	---	25	25
Potassium, dissolved (K)	---	---	---	---	3	3
Alkalinity, as CaCO ₃	---	---	---	---	200	200
Sulfate, dissolved (SO ₄)	---	---	---	---	31	31
Chloride, dissolved (Cl)	---	---	---	---	58	58
Fluoride, dissolved (F)	---	---	---	---	0.1	0.1
Silica, dissolved (SiO ₂)	---	---	---	---	<0.1	<0.1
Solids, dissolved, at 180°C	---	---	---	---	336	325
Nitrogen, NO ₂ + NO ₃ , diss. (as N)	0.13	---	0.31	---	---	---
Nitrogen, ammonia, dissolved (as N)	0.13	---	<0.01	---	---	---
Nitrogen, organic, total (as N)	0.57	---	0.70	---	---	---
Nitrogen, amm. + org., total (as N)	0.70	---	0.70	---	0.50	0.50
Nitrogen, total (as N)	0.83	---	1.0	---	---	---
Phosphorus, total (as P)	0.086	0.087	0.096	0.098	0.047	0.049
Phosphorus, ortho, dissolved (as P)	0.062	0.060	0.019	0.062	0.037	0.036
Iron, dissolved (Fe) μg/L	---	---	---	---	<3	5
Manganese, dissolved (Mn) μg/L	---	---	---	---	<1	<1
Chlorophyll a, phytoplankton (μg/L)	1.6	---	0.3	---	0.9	---
Additional secchi-depth (meters):						
May 16	5.5					
June 15	6.5					
July 18	2.6					
Aug. 18	3.2					

11-15-94

3-1-95

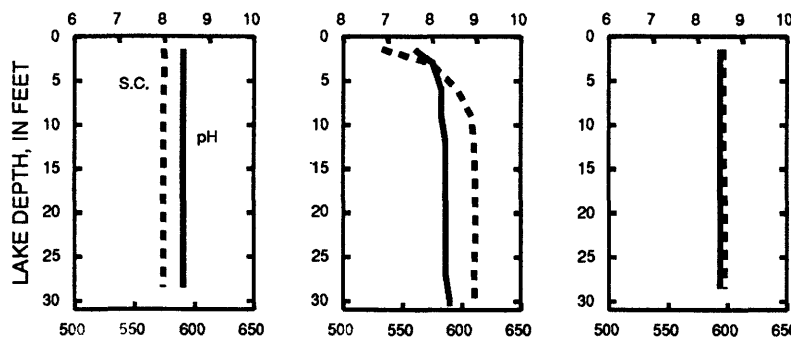
4-14-95

DISSOLVED OXYGEN (D.O.), IN MILLIGRAMS PER LITER



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

471

423706088363400 DELAVAN LAKE NEAR DELAVAN, WI

LOCATION.--Lat 42°36'27", long 88°36'19", in SW 1/4 NE 1/4 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.--No estimated daily gage heights. Records good (see page 11). Lake was ice covered from Jan. 10 to Mar. 19. Lake levels controlled by Delavan Lake Sanitary District. Prior to Mar. 20, 1995, lake levels were controlled by Town of Delavan.

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, 5.22 ft, Apr. 27; minimum, 4.74 ft, Sept. 16.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.98	4.86	5.04	5.03	4.99	5.00	5.00	5.14	5.01	4.96	4.95	4.94
2	4.96	4.86	5.05	5.01	5.00	4.99	4.99	5.13	5.00	4.94	4.94	4.92
3	4.95	4.86	5.05	5.00	5.01	4.99	4.98	5.12	5.00	4.91	4.95	4.89
4	4.94	4.89	5.06	4.98	5.01	4.99	4.96	5.09	4.99	4.91	4.96	4.88
5	4.93	4.94	5.07	4.98	5.00	5.00	4.94	5.06	4.99	4.94	4.96	4.87
6	4.93	5.05	5.09	4.98	5.00	4.99	4.95	5.04	4.99	4.93	4.96	4.86
7	4.92	5.06	5.16	4.98	5.00	5.00	4.95	5.02	5.02	4.91	4.98	4.85
8	4.94	5.06	5.16	4.99	4.99	5.00	4.99	5.04	5.06	4.90	5.02	4.83
9	4.96	5.08	5.17	4.98	4.99	4.99	4.99	5.10	5.05	4.92	5.03	4.82
10	4.95	5.08	5.16	5.00	4.99	4.99	4.99	5.18	5.05	4.93	5.12	4.80
11	4.94	5.08	5.15	4.99	4.99	4.99	5.03	5.17	5.03	4.92	5.11	4.79
12	4.94	5.08	5.14	4.99	4.98	5.01	5.09	5.13	5.01	4.92	5.05	4.78
13	4.93	5.08	5.14	4.99	4.98	5.03	5.11	5.12	5.00	4.91	5.00	4.77
14	4.93	5.12	5.14	5.08	4.98	5.04	5.11	5.11	5.00	4.91	4.95	4.76
15	4.93	5.11	5.13	5.15	4.98	5.04	5.08	5.05	5.00	4.90	4.95	4.75
16	4.92	5.11	5.13	5.18	4.98	5.05	5.07	5.00	4.99	4.90	4.99	4.75
17	4.93	5.11	5.13	5.19	4.98	5.05	5.07	4.99	4.99	4.88	5.15	4.79
18	4.93	5.10	5.12	5.19	4.99	5.04	5.09	4.97	4.98	4.85	5.16	4.77
19	4.93	5.09	5.10	5.19	4.98	5.03	5.13	4.96	4.98	4.82	5.10	4.77
20	4.93	5.09	5.10	5.20	4.99	5.04	5.12	4.96	4.98	4.83	5.07	4.79
21	4.92	5.10	5.11	5.18	5.00	5.03	5.11	4.94	4.97	4.83	5.05	4.79
22	4.92	5.02	5.11	5.17	5.01	5.03	5.09	4.94	4.97	4.82	5.02	4.80
23	4.91	5.00	5.11	5.15	5.02	5.01	5.06	4.95	4.96	4.85	4.98	4.79
24	4.89	5.00	5.09	5.12	5.02	4.99	5.04	4.99	4.95	4.86	4.95	4.78
25	4.87	5.00	5.08	5.09	5.02	4.98	5.03	4.99	4.93	4.86	4.94	4.78
26	4.87	4.99	5.07	5.06	5.00	4.98	5.04	4.98	4.94	4.86	4.93	4.77
27	4.86	5.02	5.06	5.03	5.00	5.00	5.19	4.99	4.99	4.87	4.91	4.77
28	4.85	5.03	5.06	5.02	5.00	5.04	5.19	5.05	5.01	4.91	4.94	4.77
29	4.83	5.03	5.04	5.01	---	5.05	5.18	5.02	4.99	4.90	4.97	4.77
30	4.83	5.04	5.03	4.99	---	5.04	5.17	5.02	4.98	4.90	4.97	4.76
31	4.85	---	5.03	4.99	---	5.02	---	5.01	---	4.89	4.96	---
MEAN	4.92	5.03	5.10	5.06	5.00	5.01	5.06	5.04	4.99	4.89	5.00	4.81
MAX	4.98	5.12	5.17	5.20	5.02	5.05	5.19	5.18	5.06	4.96	5.16	4.94
MIN	4.83	4.86	5.03	4.98	4.98	4.98	4.94	4.94	4.93	4.82	4.91	4.75

05431022 DELAVAN LAKE OUTLET AT BORG ROAD NEAR DELAVAN, WI

LOCATION.--Lat 42°36'53", long 88°37'29", in SW 1/4 SE 1/4 sec.20, T.2 N., R.16 E., Walworth County, Hydrologic Unit 07090001, on right bank 25 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.--Estimated daily discharges: June 15, 18-30, and July 1-6, 9-12. Records good except those for estimated daily discharges, which are poor (see page 11).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	.31	.05	19	5.0	9.1	24	60	11	.13	.20	3.6
2	.19	.13	.06	18	4.1	9.0	23	31	11	.13	.16	2.4
3	.20	.15	.06	18	5.3	8.9	24	47	5.9	.12	.16	2.3
4	.22	.20	.07	14	6.2	8.4	13	51	4.7	.12	.19	1.1
5	.22	.19	.51	7.3	6.0	8.0	2.5	54	4.6	.12	.20	1.7
6	.21	6.5	.97	7.3	5.6	9.8	.16	38	4.8	.12	.15	2.4
7	.19	14	1.0	6.3	4.2	10	.13	29	3.7	.09	4.5	7.2
8	.17	14	5.6	5.9	4.1	9.2	22	22	5.1	.08	23	.36
9	.13	9.9	10	5.5	6.7	8.6	27	30	7.8	.02	17	2.0
10	.13	5.4	10	5.8	5.8	12	24	88	14	.01	67	1.1
11	.14	2.5	9.8	12	3.9	14	22	124	20	.01	92	.28
12	.16	3.8	8.4	20	3.7	15	39	86	8.3	.02	88	.28
13	.16	3.7	7.5	12	3.7	14	53	65	1.2	.04	69	.28
14	.16	7.8	7.5	8.1	3.7	22	51	93	.59	.07	25	.27
15	.16	5.0	14	8.0	3.7	8.9	44	108	.06	.13	7.9	.31
16	.17	.99	25	7.7	3.5	5.6	41	86	.04	.18	27	.29
17	.19	1.4	25	35	3.2	17	43	50	.03	.19	161	.20
18	.20	2.5	25	49	3.3	22	39	17	.03	.21	142	.21
19	.17	8.3	12	49	3.6	21	50	14	.03	.23	87	.23
20	.19	2.5	5.3	49	3.5	49	52	11	.03	.28	45	.22
21	.16	16	8.2	49	3.3	20	51	8.2	.03	.25	33	.23
22	.19	110	18	49	8.7	29	48	8.1	.03	.27	42	.23
23	.19	.17	30	48	12	41	43	4.2	.02	.30	25	.20
24	.19	.14	35	48	15	20	34	3.1	.02	.49	8.8	.20
25	.19	.10	34	47	17	6.7	34	3.9	.02	.41	4.0	.20
26	.20	.09	34	47	17	6.6	45	2.3	.02	.34	4.8	.22
27	.17	.17	24	36	14	8.7	161	2.1	.02	.31	4.5	.24
28	.16	.13	19	25	10	22	151	38	.50	.22	4.5	.23
29	.17	.10	21	25	---	28	71	34	.24	.22	12	.20
30	.17	.06	22	15	---	27	64	6.2	.15	.20	7.0	.20
31	.19	---	20	5.2	---	26	---	8.6	---	.19	8.1	---
TOTAL	5.54	216.23	433.02	751.1	185.8	516.5	1295.79	1222.7	103.96	5.50	1010.16	28.88
MEAN	.18	7.21	14.0	24.2	6.64	16.7	43.2	39.4	3.47	.18	32.6	.96
MAX	.22	110	35	49	17	49	161	124	20	.49	161	7.2
MIN	.13	.06	.05	5.2	3.2	5.6	.13	2.1	.02	.01	.15	.20
AC-FT	11	429	859	1490	369	1020	2570	2430	206	11	2000	57
CFSM	.00	.18	.35	.61	.17	.42	1.09	.99	.09	.00	.82	.02
IN.	.01	.20	.40	.70	.17	.48	1.21	1.14	.10	.01	.94	.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1995, BY WATER YEAR (WY)

[illegible]

05431022 DELAVAN LAKE OUTLET AT BORG ROAD NEAR DELAVAN, WI--CONTINUED

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1984 - 1995	
ANNUAL TOTAL	5928.90		5775.18			
ANNUAL MEAN	16.2		15.8		20.8	
HIGHEST ANNUAL MEAN					42.6	
LOWEST ANNUAL MEAN					11.0	
HIGHEST DAILY MEAN	406	Feb 22	161	(a) Apr 27	406	Feb 22 1994
LOWEST DAILY MEAN	.01	Jun 25, 27, 28	.01	Jul 10, 11	.00	(b) Jun 21-22 1989
ANNUAL SEVEN-DAY MINIMUM	.03	Jun 14	.02	Jun 21	.00	(c) Nov 14 1989
INSTANTANEOUS PEAK FLOW			288	May 1	473	Feb 22 1994
INSTANTANEOUS PEAK STAGE			7.86	Aug 17	8.27	Feb 22 1994
ANNUAL RUNOFF (AC-FT)	11760		11460		15100	
ANNUAL RUNOFF (CFSM)	.41		.40		.52	
ANNUAL RUNOFF (INCHES)	5.54		5.40		7.12	
10 PERCENT EXCEEDS	34		48		58	
50 PERCENT EXCEEDS	1.9		5.6		6.8	
90 PERCENT EXCEEDS	.10		.13		.01	

(a) Also occurred Aug. 17

(b) Also occurred many days during the 1990 and 1991 water years (lake drawn down for lake rehabilitation program)

(c) Also occurred in 1991 water year

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 from January 1984 to present.

REMARKS.--Records good except for period of June 18 to July 6, which is poor. Samples collected using equal-width increment method.

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.

TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 6.00 mg/L, Jan. 5, 1990; minimum observed, <0.01 mg/L, Mar. 9-10, 1990, and several days during 1992, 1994, and 1995 water years.

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, and Dec. 4, 1994, July 10-11, 1995.

EXTREMES FOR CURRENT YEAR.--

DISSOLVED CHLORIDE CONCENTRATIONS: Maximum observed, 71 mg/L, June 5; minimum observed, 40 mg/L, July 5.

TOTAL-PHOSPHORUS CONCENTRATIONS: Maximum observed, 0.60 mg/L, Apr. 30; minimum observed, <0.01 mg/L, Oct. 25, Dec. 5, Mar. 21, 29, Apr. 20, and Sept. 17, 18, 25.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 128 lb, Apr. 30; minimum daily, 0.00 lb, Dec. 4 and July 10, 11.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
OCT 1994				JAN 1995			
*25...	0930	0.19	<0.010	03...	1035	18	0.030
NOV				14...	1020	8.2	0.040
06...	0950	0.19	0.030	15...	1020	7.9	0.040
06...	1520	0.19	0.020	16...	0920	7.6	0.050
07...	0315	23	0.040	16...	1550	7.6	0.040
07...	1015	0.51	0.060	FEB			
08...	0835	11	0.050	06...	0855	5.5	0.120
08...	1515	9.7	0.050	17...	0830	3.3	0.050
09...	0850	15	0.060	17...	1525	3.3	0.070
09...	1445	18	0.060	18...	0910	3.3	0.050
10...	0905	9.0	0.050	18...	1515	3.3	0.070
10...	1450	0.38	0.050	19...	0915	3.6	0.030
11...	0900	0.34	0.050	MAR			
11...	1450	0.71	0.040	03...	1000	9.0	0.050
12...	0750	3.4	0.050	06...	0900	10	0.040
13...	1005	0.60	0.040	12...	0950	14	0.060
14...	0905	0.64	0.040	12...	1415	15	0.060
14...	1520	0.22	0.030	13...	1110	14	0.050
15...	0830	2.5	0.040	14...	0845	79	0.060
15...	1450	6.6	0.040	14...	1410	14	0.050
16...	0750	0.10	0.040	21...	0905	4.3	0.060
16...	1245	0.86	0.040	21...	1545	4.0	<0.010
17...	0810	4.1	0.040	22...	0820	36	0.040
18...	0810	13	0.030	22...	1535	41	0.040
28...	1005	0.13	0.020	23...	0800	42	0.030
28...	1350	0.13	0.050	23...	1610	42	0.010
29...	0900	0.10	0.030	24...	0800	36	0.020
29...	1510	0.10	0.040	25...	0715	6.6	0.020
30...	0850	0.06	0.030	28...	0925	12	0.020
*30...	0945	0.06	0.030	28...	1445	34	0.020
DEC				29...	0930	26	<0.010
05...	0925	0.10	<0.010	29...	1505	30	<0.010
27...	1120	19	0.030	30...	0900	29	0.020
				30...	1510	26	0.020
				31...	0845	26	0.020

* Grab sample

05431022 DELAVAN LAKE OUTLET AT BORG ROAD NEAR DELAVAN, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
APR 1995				
01...	0905	24	--	0.030
03...	0915	20	--	0.020
09...	1120	29	--	0.060
10...	0955	22	--	0.120
10...	1520	38	--	0.070
11...	0755	21	--	0.040
11...	1525	21	--	0.030
12...	0955	50	--	0.060
12...	1435	53	--	0.030
13...	1015	53	--	0.030
13...	1515	53	--	0.040
14...	1015	51	--	0.030
14...	1430	51	56	0.050
15...	0950	44	55	0.050
16...	1025	41	60	0.030
19...	0920	50	58	0.030
19...	1200	51	57	0.050
19...	1455	51	58	0.150
20...	0815	51	56	<0.010
20...	1510	57	57	0.010
21...	1030	54	53	0.030
21...	1435	54	56	0.030
22...	0925	48	56	0.030
23...	0900	44	66	0.030
27...	1025	46	51	0.020
27...	1355	262	52	0.040
28...	1135	78	54	0.040
28...	1440	78	54	0.050
30...	1000	88	--	0.600
MAY				
01...	0950	53	54	0.040
01...	1445	34	53	0.040
02...	0910	14	55	0.020
03...	0810	46	53	0.030
08...	0915	14	54	0.030
09...	0930	30	54	0.030
09...	1445	61	53	0.020
10...	0915	56	53	0.100
11...	0925	259	54	0.030
11...	1425	136	53	0.030
12...	1430	87	55	0.040
13...	0900	65	55	0.020
14...	0945	59	56	0.030
14...	1345	122	57	0.020
15...	0900	114	54	0.020
15...	0905	114	56	0.020
15...	1440	114	55	0.020
16...	0810	78	55	0.060
16...	1420	100	57	0.020
17...	0830	72	52	0.030
17...	1515	33	55	0.020
18...	0810	16	54	0.040
22...	0925	6.2	54	0.030
24...	0920	1.0	53	0.200
24...	1440	4.0	54	0.060
25...	0835	4.7	55	0.060
25...	1430	3.7	54	0.050
26...	1010	3.7	53	0.060
26...	1420	1.2	53	0.070
27...	0850	1.0	54	0.060
28...	1010	1.2	54	0.050
28...	1420	66	51	0.100
29...	1025	63	54	0.060
29...	1530	11	54	0.030
30...	0930	9.7	54	0.030
30...	1445	2.3	55	0.050
31...	0810	3.6	54	0.040
31...	1500	12	54	0.040

ROCK RIVER BASIN

05431022 DELAVAN LAKE OUTLET AT BORG ROAD NEAR DELAVAN, WI--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
JUN 1995					
01...	0810	--	11	55	0.040
02...	0820	--	11	58	0.060
05...	0915	--	3.6	71	0.070
07...	0850	--	2.1	58	0.120
12...	0900	--	4.2	53	0.120
19...	0825	0.03	--	52	0.160
28...	0825	0.50	--	61	0.110
*29...	1000	0.24	--	59	0.100
JUL					
05...	1005	0.12	--	40	0.060
05...	1425	0.12	--	47	0.080
06...	0815	0.12	--	56	0.100
06...	1330	0.12	--	58	0.100
10...	1025	0.01	--	56	0.080
17...	0920	--	0.22	50	0.030
*20...	1315	--	0.31	44	0.030
24...	0945	--	0.37	44	0.020
25...	0940	--	0.40	60	0.060
28...	1045	--	0.19	62	0.070
28...	1400	--	0.19	60	0.100
29...	1215	--	0.22	61	0.090
30...	1330	--	0.25	60	0.090
AUG					
01...	0850	--	0.19	60	0.070
02...	0835	--	0.16	60	0.070
03...	1440	--	0.16	60	0.100
07...	0935	--	0.13	61	0.080
08...	0840	--	24	57	0.040
08...	1415	--	22	58	0.050
09...	0840	--	7.6	59	0.060
10...	0910	--	22	59	0.050
10...	1425	--	98	57	0.030
11...	0840	--	92	56	0.020
12...	0945	--	89	58	0.020
13...	0920	--	82	56	0.020
14...	0945	--	3.1	58	0.030
16...	1355	--	4.0	56	0.020
17...	0920	--	175	54	0.020
17...	1330	--	163	54	0.020
18...	0845	--	148	56	0.020
18...	1335	--	151	54	0.030
19...	0815	--	109	55	0.020
19...	1240	--	75	54	0.020
20...	0805	--	54	55	0.020
21...	0905	--	39	55	0.020
29...	0845	--	1.7	54	0.050
30...	0815	--	7.9	54	0.040
31...	0730	--	15	54	0.040
SEP					
*06...	1145	--	0.71	54	0.040
08...	0810	--	0.28	--	0.010
17...	0920	--	0.19	--	<0.010
18...	1015	--	0.22	--	<0.010
25...	1010	--	0.19	--	<0.010

* Grab sample

05431022 DELAVAN LAKE OUTLET AT BORG ROAD NEAR DELAVAN, WI--CONTINUED

PHOSPHORUS TOTAL, POUNDS PER DAY, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.03	.01	3.05	2.50	2.26	3.62	16.8	2.72	.06	.07	.77
2	.02	.01	.01	2.89	2.14	2.34	2.96	3.87	3.35	.05	.06	.51
3	.02	.02	.01	2.87	2.98	2.36	2.64	7.44	2.03	.05	.08	.50
4	.02	.03	.00	2.37	3.62	2.09	1.37	8.27	1.68	.04	.10	.23
5	.02	.03	.03	1.26	3.72	1.84	.27	8.71	1.87	.05	.10	.36
6	.02	1.00	.06	1.29	3.55	2.15	.02	6.09	2.45	.06	.07	.45
7	.02	3.58	.06	1.13	2.51	2.32	.01	4.75	2.40	.04	1.34	.89
8	.01	3.83	.36	1.09	2.26	2.29	3.29	3.54	3.33	.04	5.98	.02
9	.01	3.11	.69	1.05	3.38	2.29	8.87	4.34	5.03	.01	5.30	.11
10	.01	1.49	.70	1.13	2.72	3.48	11.1	37.1	9.03	.00	12.2	.06
11	.01	.60	.71	2.48	1.70	4.35	4.64	21.9	13.2	.00	10.3	.01
12	.01	.96	.65	4.14	1.48	4.62	7.85	16.6	5.39	.01	9.50	.01
13	.01	.79	.61	2.49	1.36	4.04	9.57	8.09	.84	.01	7.99	.01
14	.01	1.47	.63	1.75	1.26	6.62	11.1	11.5	.41	.02	3.66	.01
15	.01	1.02	1.23	1.79	1.17	2.45	10.9	13.1	.04	.03	1.06	.02
16	.01	.21	2.37	1.84	1.01	1.59	6.94	15.8	.03	.03	2.98	.02
17	.01	.29	2.49	8.02	1.02	4.99	7.05	7.11	.03	.03	17.4	.01
18	.01	.40	2.64	11.7	1.01	6.62	6.30	3.42	.03	.03	18.2	.01
19	.01	1.34	1.26	12.3	.64	6.39	15.7	2.76	.03	.04	9.79	.01
20	.01	.40	.61	13.0	.60	15.7	4.10	2.00	.02	.05	4.85	.01
21	.01	3.53	.99	13.7	.59	5.95	7.34	1.42	.02	.04	3.59	.01
22	.01	28.2	2.26	14.4	1.62	5.91	7.79	1.65	.02	.04	5.17	.01
23	.01	.03	4.05	14.9	2.29	4.64	6.79	1.61	.01	.04	3.41	.01
24	.01	.02	4.87	15.6	2.95	1.96	4.87	1.42	.01	.07	1.34	.01
25	.01	.02	5.03	16.3	3.60	.72	4.45	1.17	.01	.12	.69	.01
26	.01	.01	5.30	17.2	3.76	.71	5.36	.75	.01	.12	.94	.01
27	.01	.02	3.89	13.8	3.23	.94	31.0	.64	.01	.11	.97	.01
28	.01	.02	3.11	10.3	2.47	2.16	37.1	16.9	.29	.10	1.12	.01
29	.01	.02	3.46	10.6	---	1.76	69.4	11.5	.13	.11	2.94	.01
30	.01	.01	3.52	6.89	---	2.72	128	1.15	.07	.10	1.56	.01
31	.02	---	3.19	2.49	---	3.00	---	1.86	---	.08	1.74	---
TOTAL	0.39	52.49	54.80	213.82	61.14	111.26	420.40	243.26	54.49	1.58	134.50	4.12

WTR YR 1995 TOTAL 1352.25

ROCK RIVER BASIN

05431486 TURTLE CREEK AT CARVERS ROCK ROAD NEAR CLINTON, WI

LOCATION.--Lat 42°35'50", long 88°49'45", in SW 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.

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.--Estimated daily discharges: Ice-affected periods, Dec. 7-16, 19, Jan. 2-13, Jan. 18 to Feb. 24, and Mar. 1-10. Records good except those for ice-affected periods, which are fair (see page 11). Some seasonal regulation caused by dams used to maintain levels of Turtle and Delavan Lakes.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	59	75	90	66	74	119	199	111	60	76	59
2	55	57	74	86	64	68	115	168	110	58	73	54
3	54	58	73	80	62	64	111	143	107	58	74	48
4	48	76	70	76	58	66	100	146	94	62	75	50
5	48	115	70	74	56	68	90	145	89	72	68	47
6	50	215	70	74	54	68	81	137	93	65	61	46
7	50	142	68	74	54	66	73	132	99	61	59	50
8	54	124	68	74	54	64	83	132	106	59	63	61
9	61	128	68	72	54	64	107	164	93	62	79	48
10	56	119	66	74	52	74	118	292	95	64	86	47
11	55	91	66	78	52	92	146	328	92	58	101	48
12	55	81	66	100	52	111	188	279	95	56	118	46
13	58	82	66	120	52	123	185	238	82	56	121	46
14	59	90	68	282	52	122	168	221	70	55	119	45
15	58	92	68	285	50	121	155	200	68	53	97	44
16	57	87	76	185	50	120	146	189	63	56	87	45
17	56	78	88	134	50	102	141	196	62	52	166	69
18	56	78	90	130	52	98	152	172	62	50	195	54
19	56	74	84	120	54	100	196	138	62	49	222	50
20	55	80	83	110	60	110	173	124	62	54	202	54
21	54	77	77	100	80	142	189	116	60	54	139	56
22	55	77	79	96	88	120	169	108	59	53	100	65
23	53	113	87	90	90	127	154	112	58	60	82	60
24	51	75	106	86	92	130	134	123	56	59	78	56
25	51	66	113	82	94	106	122	108	55	66	64	54
26	53	63	110	78	93	91	132	105	58	61	54	53
27	53	75	108	76	89	99	350	98	81	63	53	51
28	53	103	108	74	85	132	365	156	78	76	61	48
29	53	83	103	72	---	134	332	158	68	63	103	47
30	53	77	99	68	---	133	256	148	67	58	88	48
31	55	---	97	66	---	126	---	119	---	57	79	---
TOTAL	1680	2735	2544	3206	1809	3115	4850	5094	2355	1830	3043	1549
MEAN	54.2	91.2	82.1	103	64.6	100	162	164	78.5	59.0	98.2	51.6
MAX	61	215	113	285	94	142	365	328	111	76	222	69
MIN	48	57	66	66	50	64	73	98	55	49	53	44
CFSM	.28	.46	.42	.53	.33	.51	.82	.84	.40	.30	.50	.26
IN.	.32	.52	.48	.61	.34	.59	.92	.96	.45	.35	.58	.29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1995, BY WATER YEAR (WY)

	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
MEAN	101	109	105	106	140	234	177	125	109	96.4	85.3	95.8
MAX	312	388	343	315	518	664	757	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 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1939 - 1995	
ANNUAL TOTAL	39819		33810			
ANNUAL MEAN	109		92.6		124	
HIGHEST ANNUAL MEAN					289	1973
LOWEST ANNUAL MEAN					43.0	1958
HIGHEST DAILY MEAN	(a)3600	Feb 20	365	Apr 28	6400	Apr 21 1973
LOWEST DAILY MEAN	46	Sep 21,22	44	Sep 15	16	Sep 13 1958
ANNUAL SEVEN-DAY MINIMUM	51	Oct 2	46	Sep 10	17	Sep 9 1958
INSTANTANEOUS PEAK FLOW			(b)416	Apr 27	(c)16500	Apr 21 1973
INSTANTANEOUS PEAK STAGE			(d)5.72	Jan 23	(e)12.85	Apr 21 1973
INSTANTANEOUS LOW FLOW			(f)18	Feb 5	(f)8.0	Dec 29 1956
ANNUAL RUNOFF (CFSM)	.55		.47		.63	
ANNUAL RUNOFF (INCHES)	7.53		6.40		8.54	
10 PERCENT EXCEEDS	150		150		228	
50 PERCENT EXCEEDS	76		76		82	
90 PERCENT EXCEEDS	55		53		42	

(a) Ice affected

(b) Gage height, 5.14 ft

(c) From rating curve extended above 6,500 ft³/s on basis of slope-area measurement of peak flow

(d) Backwater from ice

(e) Site and datum then in use

(f) Result of freezeup

ROCK RIVER BASIN

05432500 PECATONICA RIVER AT DARLINGTON, WI

LOCATION.--Lat 42°40'40", long 90°07'07", in NE 1/4 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.--Estimated daily discharges: Ice-affected periods, Dec. 11-14, Jan. 2-15, Jan. 22 to Feb. 20, and Feb. 28 to Mar. 11. Records good except those for ice-affected periods, which are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	118	146	110	90	88	177	286	242	157	155	108
2	137	118	143	100	90	98	169	267	236	151	155	105
3	133	118	140	96	90	98	162	255	243	149	148	104
4	132	120	137	96	90	100	152	246	232	155	144	103
5	131	125	137	94	90	100	142	238	216	220	139	101
6	130	137	138	94	88	100	144	229	220	199	134	102
7	130	130	117	94	88	86	144	222	284	165	135	151
8	133	124	117	94	86	84	155	271	247	155	135	140
9	133	128	160	94	86	82	162	386	223	154	132	114
10	128	126	122	96	84	90	164	482	217	154	131	108
11	125	121	110	110	84	180	245	443	207	148	129	106
12	125	120	110	120	82	566	319	372	196	144	126	105
13	124	122	110	120	80	259	292	353	189	140	122	107
14	124	139	120	120	80	206	249	368	184	137	118	106
15	123	139	123	120	82	182	228	324	179	136	117	101
16	122	127	127	122	86	170	216	296	173	165	122	100
17	123	123	134	119	88	160	210	304	169	154	121	100
18	128	123	134	117	92	151	245	276	167	136	118	98
19	130	120	119	119	120	148	381	260	163	132	116	103
20	126	120	133	115	210	167	297	247	160	145	114	130
21	123	153	130	110	324	246	293	234	158	155	111	124
22	123	164	126	100	256	202	297	224	155	144	109	115
23	126	139	132	98	188	181	260	225	156	196	108	109
24	123	132	130	98	171	173	248	235	155	169	107	106
25	120	130	123	96	167	159	254	222	151	149	108	106
26	119	126	124	96	144	153	247	211	167	143	107	107
27	119	154	136	94	131	185	360	222	237	166	106	105
28	119	215	133	94	100	247	362	453	196	312	110	102
29	119	176	129	92	---	221	308	376	178	205	134	100
30	118	153	116	92	---	203	301	288	166	159	128	99
31	117	---	140	90	---	188	---	256	---	149	116	---
TOTAL	3903	4040	3996	3210	3367	5273	7183	9071	5866	5043	3855	3265
MEAN	126	135	129	104	120	170	239	293	196	163	124	109
MAX	140	215	160	122	324	566	381	482	284	312	155	151
MIN	117	118	110	90	80	82	142	211	151	132	106	98
CFSM	.46	.49	.47	.38	.44	.62	.88	1.07	.72	.60	.46	.40
IN.	.53	.55	.54	.44	.46	.72	.98	1.24	.80	.69	.53	.44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1995, BY WATER YEAR (WY)

	MEAN	129	141	123	156	216	386	242	195	226	200	148	140
MAX	302	674	338	546	738	951	731	780	773	1796	610	487	
(WY)	1985	1962	1983	1960	1953	1959	1959	1960	1969	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 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1939 - 1995

ANNUAL TOTAL	69266	58072	
ANNUAL MEAN	190	159	192
HIGHEST ANNUAL MEAN			534
LOWEST ANNUAL MEAN			66.5
HIGHEST DAILY MEAN	(a)3000	Feb 21	566 Mar 12
LOWEST DAILY MEAN	103	Jun 18	(a)80 Feb 13,14
ANNUAL SEVEN-DAY MINIMUM	115	Jun 1	(a)83 Feb 9
INSTANTANEOUS PEAK FLOW			690 Mar 12
INSTANTANEOUS PEAK STAGE			6.48 Mar 12
INSTANTANEOUS LOW FLOW			(d)64 Mar 1
ANNUAL RUNOFF (CFSM)	.70		.58
ANNUAL RUNOFF (INCHES)	9.44		7.91
10 PERCENT EXCEEDS	245		254
50 PERCENT EXCEEDS	146		134
90 PERCENT EXCEEDS	120		96

(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

LOCATION.--Lat 42°47'10" long 89°51'40", in SE 1/4 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.

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.--Estimated daily discharges: Ice-affected periods, Dec. 11-19, Jan. 1 to Feb. 20, and Mar. 2-11. Records good except those for ice-affected periods, which are poor (see page 11). Gage-height telemeter at station.

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	135	121	152	120	90	116	156	215	191	146	135	116
2	133	121	150	110	90	110	153	207	192	143	135	115
3	131	121	148	100	90	100	150	199	228	142	135	114
4	130	122	145	100	90	100	144	193	192	144	132	113
5	129	124	144	100	90	110	139	189	182	206	136	113
6	129	141	145	100	88	100	144	183	186	184	129	113
7	132	129	143	100	88	100	141	179	234	152	127	121
8	134	124	145	100	88	98	181	203	208	145	128	131
9	133	126	157	100	88	96	184	279	193	149	142	117
10	128	124	133	110	86	100	171	278	186	149	132	115
11	126	121	120	120	86	150	241	262	179	142	128	114
12	126	121	120	120	84	266	257	234	173	139	125	115
13	126	122	120	120	84	209	245	234	168	138	123	116
14	126	136	120	120	86	182	216	269	165	136	121	114
15	125	129	120	120	86	166	200	227	161	135	120	112
16	124	123	120	110	86	159	192	210	158	146	125	113
17	124	122	120	110	90	151	190	206	156	138	140	116
18	128	124	120	110	96	146	211	197	154	134	128	112
19	133	121	120	110	150	146	257	191	151	133	123	116
20	128	121	136	110	210	169	209	186	149	183	123	134
21	126	161	134	100	211	226	224	180	148	159	120	122
22	126	154	135	100	146	170	231	175	146	143	118	119
23	129	132	134	100	146	159	201	177	144	187	117	115
24	127	129	135	100	142	152	196	187	144	160	117	114
25	125	128	136	98	133	147	203	175	142	169	117	116
26	124	124	134	96	131	145	197	169	146	148	116	116
27	123	157	135	94	126	168	260	183	162	146	115	114
28	123	307	139	94	125	207	251	302	162	300	118	113
29	123	180	137	92	---	179	224	265	157	156	141	112
30	122	158	133	92	---	167	224	217	158	137	128	113
31	121	---	135	90	---	160	---	199	---	132	119	---
TOTAL	3949	4123	4165	3246	3106	4654	5992	6570	5115	4821	3913	3484
MEAN	127	137	134	105	111	150	200	212	170	156	126	116
MAX	135	307	157	120	211	266	260	302	234	300	142	134
MIN	121	121	120	90	84	96	139	169	142	132	115	112
CFSM	.58	.62	.61	.47	.50	.68	.90	.96	.77	.70	.57	.53
IN.	.66	.69	.70	.55	.52	.78	1.01	1.11	.86	.81	.66	.55

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1995, BY WATER YEAR (WY)

MEAN	110	118	109	124	165	268	194	160	162	147	117	117
MAX	252	311	278	354	597	574	547	584	403	885	303	331
(WY)	1985	1962	1983	1960	1948	1950	1959	1973	1993	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

WATER YEARS 1939 - 1995

ANNUAL TOTAL	62812		53138						
ANNUAL MEAN	172		146			149			
HIGHEST ANNUAL MEAN						338		1993	
LOWEST ANNUAL MEAN						70.4		1958	
HIGHEST DAILY MEAN	(a)1900	Feb 21	307	Nov 28	7560		Feb 28	1948	
LOWEST DAILY MEAN	(a)120	(b)Jan 19	(a)84	Feb 12,13	41		(c)Aug 18	1958	
ANNUAL SEVEN-DAY MINIMUM	(a)120	Dec 11	(a)85	Feb 10	42		Oct 1	1958	
INSTANTANEOUS PEAK FLOW			394	Jul 28	(d)11700		Feb 28	1948	
INSTANTANEOUS PEAK STAGE			6.76	Jul 28	16.54		Jul 6	1993	
INSTANTANEOUS LOW FLOW					(e)18		Nov 29	1966	
ANNUAL RUNOFF (CFSM)	.78		.66			.67			
ANNUAL RUNOFF (INCHES)	10.57		8.94			9.16			
10 PERCENT EXCEEDS	225		207			232			
50 PERCENT EXCEEDS	142		134			109			
90 PERCENT EXCEEDS	124		100			65			

(e) Result of freezeup

ROCK RIVER BASIN

05434500 PECATONICA RIVER AT MARTINTOWN, WI

LOCATION.--Lat 42°30'34", long 89°47'58", in SE 1/4 sec.32, T.1 N., R.6 E., Green County, Hydrologic Unit 07090003, on right bank about 400 ft downstream from highway bridge in Martintown, 0.3 mi upstream from Wisconsin-Illinois State line and 8.8 mi downstream from Skinner Creek.

DRAINAGE AREA.--1,034 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.--Estimated daily discharges: Ice-affected periods, Dec. 10-22 and Jan. 2 to Mar. 12. Records good except those for ice-affected periods, which are fair (see page 11). 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 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	664	532	791	593	400	450	772	1130	1220	721	632	514
2	640	532	730	480	400	440	741	1080	1120	682	618	490
3	622	530	702	460	400	440	717	1030	1130	656	625	475
4	605	533	680	430	400	440	687	988	1110	655	625	469
5	600	545	661	430	400	450	661	950	1050	750	608	462
6	593	614	652	430	390	450	638	917	991	891	594	460
7	587	641	655	430	390	420	632	886	973	858	584	502
8	592	614	632	430	390	410	634	910	1000	743	571	626
9	604	584	597	430	390	400	658	1150	1010	690	586	650
10	598	576	580	480	380	400	699	1540	952	677	588	569
11	584	561	540	500	380	520	807	1680	912	666	580	539
12	565	561	500	520	370	680	1050	1610	881	647	562	529
13	564	553	500	520	370	1120	1180	1490	847	627	545	517
14	570	575	520	520	370	1040	1110	1440	820	612	530	505
15	558	598	540	520	370	858	997	1380	798	598	519	483
16	559	600	540	520	380	774	918	1280	775	596	579	449
17	558	579	540	500	390	728	880	1230	753	640	607	442
18	560	560	540	500	400	693	904	1170	738	629	573	442
19	573	541	540	500	430	672	1020	1100	727	594	556	446
20	575	540	560	500	660	685	1110	1030	714	579	529	470
21	564	604	580	470	820	797	1080	980	701	604	516	501
22	564	686	580	450	900	877	1020	938	689	636	504	511
23	563	702	601	440	880	842	1010	924	678	624	494	486
24	567	645	602	440	860	771	954	942	668	670	486	467
25	562	606	610	430	800	726	913	934	663	687	485	455
26	559	587	606	430	660	690	921	903	671	642	482	452
27	546	620	597	420	580	695	1150	889	744	630	476	465
28	542	901	608	420	520	800	1310	1410	799	814	476	456
29	540	1050	621	410	---	891	1300	1680	815	939	486	450
30	538	929	614	410	---	872	1200	1650	755	837	546	442
31	534	---	600	400	---	815	---	1430	---	678	550	---
TOTAL	17850	18699	18619	14413	14080	20846	27673	36671	25704	21272	17112	14724
MEAN	576	623	601	465	503	672	922	1183	857	686	552	491
MAX	664	1050	791	593	900	1120	1310	1680	1220	939	632	650
MIN	534	530	500	400	370	400	632	886	663	579	476	442
CFSM	.56	.60	.58	.45	.49	.65	.89	1.14	.83	.66	.53	.47
IN.	.64	.67	.67	.52	.51	.75	1.00	1.32	.92	.77	.62	.53

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1995, BY WATER YEAR (WY)

	MEAN	526	584	514	585	800	1428	961	785	785	768	568	567
MAX	1226	2429	1492	2049	2512	3155	2943	3200	2075	5190	1752	1920	1920
(WY)	1987	1962	1983	1960	1953	1950	1960	1973	1993	1993	1993	1965	1965
MIN	187	211	162	147	182	259	327	234	233	181	167	166	166
(WY)	1957	1965	1959	1959	1959	1957	1957	1958	1965	1965	1958	1958	1958

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1940 - 1995
ANNUAL TOTAL	284707	247663	
ANNUAL MEAN	780	679	739
HIGHEST ANNUAL MEAN			1720
LOWEST ANNUAL MEAN			292
HIGHEST DAILY MEAN	(a)3900	Feb 23	14600 Jul 1 1969
LOWEST DAILY MEAN	(a)500	Dec 12,13	132 Nov 7 1949
ANNUAL SEVEN-DAY MINIMUM	526	Dec 11	140 Jan 18 1959
INSTANTANEOUS PEAK FLOW		(a)374	Feb 10 Jul 1 1969
INSTANTANEOUS PEAK STAGE		1690	May 11,29 Jul 1 1969
INSTANTANEOUS LOW FLOW		9.65	May 11,29 Jul 1 1969
ANNUAL RUNOFF (CFSM)	.75	.66	(b).00 Dec 14 1939
ANNUAL RUNOFF (INCHES)	10.24	8.91	9.71
10 PERCENT EXCEEDS	1150	1020	1330
50 PERCENT EXCEEDS	620	604	508
90 PERCENT EXCEEDS	540	436	251

(a) Ice affected

(b) Result of regulation

05436500 SUGAR RIVER NEAR BRODHEAD, WI

LOCATION.--Lat 42°36'42", long 89°23'53", in SW 1/4 sec.26, T.2 N., R.9 E., Green County, Hydrologic Unit 07090004, on left bank at downstream side of highway bridge, 1.2 mi southwest of Brodhead, and 1.9 mi upstream from Sylvester Creek.

DRAINAGE AREA.--523 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.--Estimated daily discharges: Ice-affected periods, Dec. 10-15, 18, 19, Jan. 2-13, Jan. 19 to Feb. 22, and Mar. 1-9. Records good except those for ice-affected periods, which are fair (see page 11). Some regulation from dam and powerplant upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	306	261	419	313	250	270	380	511	465	308	318	243
2	293	261	374	240	250	240	361	470	450	289	304	230
3	303	262	359	230	240	240	352	445	527	283	311	224
4	289	265	349	220	240	270	336	428	514	289	313	220
5	276	277	339	220	240	260	318	412	465	351	305	218
6	273	327	334	220	240	250	313	399	421	404	293	217
7	271	363	339	220	240	240	311	389	406	394	284	223
8	274	352	304	220	240	240	318	408	400	351	278	235
9	277	332	346	220	240	230	372	572	401	320	277	247
10	275	322	300	230	240	254	424	878	403	309	284	239
11	269	311	270	250	230	304	445	1050	388	299	283	228
12	266	303	250	260	230	409	559	1010	374	290	273	225
13	265	300	260	300	230	496	689	821	361	283	262	222
14	263	318	280	340	230	504	723	705	351	274	250	219
15	262	335	290	403	230	451	589	658	340	265	243	214
16	262	325	308	408	230	409	461	601	334	283	278	213
17	265	312	317	364	240	385	427	719	325	356	330	218
18	263	308	320	364	240	367	425	646	320	317	320	219
19	267	296	310	300	240	354	473	579	314	281	320	220
20	267	292	302	280	300	368	558	499	289	278	291	239
21	267	317	300	300	410	427	571	448	295	309	268	261
22	266	360	303	270	440	484	504	412	285	325	257	262
23	265	374	305	260	414	452	490	418	284	325	248	249
24	264	346	314	260	385	393	460	427	281	333	243	241
25	262	325	326	260	346	368	423	433	275	361	241	236
26	262	313	326	250	331	348	422	402	288	357	238	234
27	261	329	321	250	317	354	556	399	326	334	231	231
28	261	403	327	250	301	402	642	483	341	380	229	227
29	262	481	333	250	---	466	670	577	334	410	218	238
30	260	505	327	250	---	456	606	629	331	395	270	230
31	262	---	319	250	---	411	---	557	---	332	267	---
TOTAL	8378	9875	9871	8452	7764	11102	14178	17385	10888	10085	8527	6922
MEAN	270	329	318	273	277	358	473	561	363	325	275	231
MAX	306	505	419	408	440	504	723	1050	527	410	330	262
MIN	260	261	250	220	230	230	311	389	275	265	218	213
CFSM	.52	.63	.61	.52	.53	.68	.90	1.07	.69	.62	.53	.44
IN.	.60	.70	.70	.60	.55	.79	1.01	1.24	.77	.72	.61	.49
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 1995, BY WATER YEAR (WY)												
MEAN	281	305	269	290	420	674	456	360	341	291	253	295
MAX	788	836	597	1168	1690	1698	1159	1368	1014	1248	694	1579
(WY)	1928	1962	1929	1916	1938	1929	1993	1973	1993	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 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1914 - 1995
ANNUAL TOTAL	134735	123427	
ANNUAL MEAN	369	338	353
HIGHEST ANNUAL MEAN			694
LOWEST ANNUAL MEAN			172
HIGHEST DAILY MEAN	(a) 3100	Feb 22	10800
LOWEST DAILY MEAN	226	Aug 3	51
ANNUAL SEVEN-DAY MINIMUM	238	Jul 28	71
INSTANTANEOUS PEAK FLOW		1060	May 11
INSTANTANEOUS PEAK STAGE		3.56	May 11
INSTANTANEOUS LOW FLOW			(b) 14800
ANNUAL RUNOFF (CFSM)	.71	.65	(c) 11.40
ANNUAL RUNOFF (INCHES)	9.58	8.78	35
10 PERCENT EXCEEDS	481	476	.67
50 PERCENT EXCEEDS	303	308	9.16
90 PERCENT EXCEEDS	260	233	149

(a) Ice affected

(b) From rating curve extended above 7,500 ft³/s

(c) From floodmarks

ROCK RIVER BASIN
05437500 ROCK RIVER AT ROCKTON, IL

LOCATION.--Lat 42°26'55", long 89°04'11", in SW 1/4 NE 1/4 sec.24, T.46 N., R.1 E., Winnebago County, Hydrologic Unit 07090005, on right bank 750 ft downstream from State Highway 75 in Rockton, 1.0 mi downstream from Pecatonica River, and at mile 156.1.

DRAINAGE AREA.--6,363 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.

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.--Estimated daily discharges: Jan. 5-12, Feb. 7-17, and Apr. 12 to May 10. Records good except those for estimated daily discharges, which are poor (see page 11). Low flow regulated by powerplant above station. U.S. Army Corps of Engineers satellite 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 painted floodmark.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3750	2320	4430	3500	3190	3000	5000	6400	7000	2700	2680	4450
2	3410	2470	4310	3120	3180	2610	4910	6000	6660	2530	2610	4170
3	3290	2370	4140	2510	3160	2580	4790	5800	6120	2440	2520	4020
4	3120	2490	3940	2580	3200	2680	4710	5400	5920	2510	2370	3900
5	3060	2620	3640	3200	2830	2750	4510	5000	5580	2710	2580	3730
6	2830	4410	3740	3100	2610	2700	4250	4800	5150	2780	2380	3630
7	2960	4390	3820	3000	2500	2660	4120	4600	4930	2810	2230	3550
8	2870	4000	3440	2900	2400	2610	4200	4300	4940	2850	2330	3710
9	2880	4170	3580	2800	2500	2490	4340	4900	4800	2790	2350	3530
10	2820	4280	3430	2900	2400	2490	4700	6200	4670	2690	2550	3490
11	2810	3930	3200	2900	2300	2610	4790	8900	4470	2430	3170	3430
12	2620	3880	2730	3000	2200	2760	4900	9050	4290	2360	3340	3290
13	2550	3760	2900	3150	2200	3220	5400	9370	4250	2300	3370	3300
14	2570	3750	3000	3450	2150	3870	5400	9790	4240	2230	3420	3060
15	2430	3710	3220	4180	2100	4270	5500	9840	4050	2150	3730	2830
16	2430	3720	3320	4180	2100	4470	5200	9940	3980	2350	3840	2810
17	2410	3570	3320	4210	2100	4440	5000	9830	3840	2540	4570	2850
18	2390	3630	3300	4090	2150	4550	4800	9550	3700	2200	4880	2800
19	2410	3190	3180	4090	2220	4540	4700	9040	3560	2200	4910	2770
20	2430	3240	3240	3970	2410	4590	4900	8440	3170	2300	5060	2670
21	2520	3270	2950	3940	2830	4570	4600	8110	3040	2350	5030	2860
22	2510	3120	2990	3680	3200	4630	4500	7570	2590	2300	5090	2790
23	2490	3080	3050	3580	3590	5260	4300	7110	2500	2380	5450	2730
24	2380	3120	3270	3490	3800	5320	4200	6840	2460	2380	5480	2830
25	2430	3120	3400	3600	3770	5130	4100	6660	2440	2290	5290	2780
26	2610	3040	3420	3530	3680	4940	4200	6370	2730	2310	5210	2740
27	2620	3150	3350	3630	3470	4940	5000	6010	2750	2490	5170	2560
28	2620	3380	3580	3540	3230	4900	6800	6630	2910	2600	5010	2470
29	2390	3640	3610	3520	---	4940	7200	6810	2840	2550	4980	2150
30	2390	4350	3610	3360	---	5020	6600	6940	2710	2820	4890	2350
31	2460	---	3550	3330	---	5060	---	7100	---	2690	4540	---
TOTAL	83460	103170	106660	106030	77470	120600	147620	223300	122290	77030	121030	94250
MEAN	2692	3439	3441	3420	2767	3890	4921	7203	4076	2485	3904	3142
MAX	3750	4410	4430	4210	3800	5320	7200	9940	7000	2850	5480	4450
MIN	2380	2320	2730	2510	2100	2490	4100	4300	2440	2150	2230	2150
CFSM	.42	.54	.54	.54	.43	.61	.77	1.13	.64	.39	.61	.49
IN.	.49	.60	.62	.62	.45	.71	.86	1.31	.71	.45	.71	.55

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1995, BY WATER YEAR (WY)

MEAN	3027	3436	3237	3191	3652	7323	7328	5091	3950	3414	2721	2819
MAX	13340	11320	9049	9432	7984	13920	18530	17770	13010	17000	9039	7753
(WY)	1987	1986	1983	1960	1974	1974	1993	1973	1993	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

ROCK RIVER BASIN
05437500 ROCK RIVER AT ROCKTON, IL--CONTINUED

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SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1940 - 1995	
ANNUAL TOTAL	1583410		1382910		4099	
ANNUAL MEAN	4338		3789		9484	1993
HIGHEST ANNUAL MEAN					1568	1958
LOWEST ANNUAL MEAN					29700	Mar 25 1975
HIGHEST DAILY MEAN	15600	Feb 21	9940	May 16	501	Sep 14 1958
LOWEST DAILY MEAN	2210	Sep 16	2100	Feb 15	622	Oct 2 1958
ANNUAL SEVEN-DAY MINIMUM	2300	Feb 6	2140	Feb 12	30000	Mar 25 1975
INSTANTANEOUS PEAK FLOW			10100	May 17	15.54	Mar 25 1975
INSTANTANEOUS PEAK STAGE			7.30	May 17	501	Sep 14 1958
INSTANTANEOUS LOW FLOW			1560	Sep 29		
ANNUAL RUNOFF (CFSM)	.68		.60		.64	
ANNUAL RUNOFF (INCHES)	9.26		8.08		8.75	
10 PERCENT EXCEEDS	8740		5420		8240	
50 PERCENT EXCEEDS	3440		3380		3040	
90 PERCENT EXCEEDS	2400		2400		1270	

ROCK RIVER BASIN

05438283 PISCASAW CREEK NEAR WALWORTH, WI

LOCATION.--Lat 42°31'18", long 88°39'39", in NE 1/4 NE 1/4 sec.25, T.1 N., R.15 E., Walworth County, Hydrologic Unit 07090006, on right bank 0.9 mi upstream from County Trunk Highway B bridge, 3.2 mi southwest of Walworth.

DRAINAGE AREA.--9.58 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.--No estimated daily discharges. Records are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.4	1.4	1.3	1.1	1.3	1.3	2.1	1.7	1.2	1.0	.96
2	1.3	1.4	1.4	1.3	1.1	1.3	1.3	2.0	1.6	1.2	1.1	.96
3	1.3	1.3	1.6	1.3	1.1	1.3	1.3	2.0	1.6	1.3	1.1	.89
4	1.3	1.3	1.6	1.2	1.1	1.2	1.4	1.9	1.5	1.3	1.2	.87
5	1.3	1.5	1.3	1.2	1.1	1.1	1.3	1.7	1.5	1.3	1.1	.87
6	1.3	2.2	1.3	1.2	1.1	1.1	1.4	1.7	1.6	1.1	1.1	.91
7	1.4	1.7	1.3	1.2	1.2	1.1	1.2	1.7	1.7	1.1	1.1	.95
8	1.4	1.5	1.3	1.2	1.2	1.1	1.2	1.8	1.6	1.1	1.1	.94
9	1.4	1.6	1.3	1.1	1.2	1.0	1.2	2.3	1.5	1.1	1.2	.92
10	1.4	1.5	1.3	1.1	1.2	1.1	1.4	2.5	1.4	1.1	1.2	.91
11	1.4	1.4	1.3	1.1	1.2	1.1	1.8	2.4	1.4	1.1	1.1	.91
12	1.4	1.4	1.3	1.1	1.1	1.2	1.9	2.3	1.4	1.1	1.0	.85
13	1.4	1.4	1.2	1.2	1.1	1.1	1.8	2.3	1.4	1.1	.98	.80
14	1.4	1.5	1.2	2.2	1.1	1.1	1.6	2.3	1.3	1.1	.99	.80
15	1.4	1.4	1.2	2.1	1.1	1.1	1.4	2.0	1.3	1.2	1.1	.82
16	1.4	1.4	1.2	1.8	1.1	1.1	1.3	2.0	1.3	1.2	1.2	.85
17	1.5	1.4	1.3	1.5	1.1	1.1	1.2	2.0	1.3	1.2	1.2	.86
18	1.5	1.4	1.3	1.4	1.1	1.1	1.4	1.9	1.2	1.1	.93	.86
19	1.6	1.3	1.3	1.4	1.2	1.1	1.5	1.9	1.1	1.0	.91	.87
20	1.5	1.3	1.3	1.3	1.5	1.1	1.4	1.9	1.1	.97	.88	.86
21	1.5	1.3	1.3	1.3	1.6	1.1	1.4	1.9	1.2	.95	.88	.89
22	1.5	1.2	1.3	1.2	1.5	1.1	1.3	1.9	1.2	.92	.86	.89
23	1.5	1.3	1.3	1.2	1.5	1.1	1.3	1.9	1.2	.95	.87	.90
24	1.5	1.3	1.5	1.2	1.4	1.1	1.3	1.7	1.2	.92	.89	.91
25	1.5	1.2	1.5	1.2	1.4	1.1	1.3	1.7	1.3	.92	.89	.91
26	1.4	1.2	1.5	1.2	1.4	1.1	1.6	1.7	1.3	.94	.89	.90
27	1.3	1.4	1.5	1.2	1.4	1.3	5.4	1.7	1.8	1.0	.91	.90
28	1.4	1.4	1.5	1.1	1.3	1.4	3.6	1.9	1.4	1.0	.98	.89
29	1.3	1.4	1.5	1.1	---	1.4	2.7	1.8	1.2	.95	.99	.91
30	1.3	1.3	1.4	1.1	---	1.3	2.3	1.7	1.2	.92	.97	.99
31	1.4	---	1.4	1.1	---	1.2	---	1.7	---	.95	.96	---
TOTAL	43.5	42.3	42.1	40.1	34.5	35.9	50.5	60.3	41.5	33.29	31.58	26.75
MEAN	1.40	1.41	1.36	1.29	1.23	1.16	1.68	1.95	1.38	1.07	1.02	.89
MAX	1.6	2.2	1.6	2.2	1.6	1.4	5.4	2.5	1.8	1.3	1.2	.99
MIN	1.3	1.2	1.2	1.1	1.1	1.0	1.2	1.7	1.1	.92	.86	.80
CFSM	.15	.15	.14	.14	.13	.12	.18	.20	.14	.11	.11	.09
IN.	.17	.16	.16	.16	.13	.14	.20	.23	.16	.13	.12	.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1995, BY WATER YEAR (WY)

	MEAN	2.23	2.33	2.69	3.06	5.53	6.29	5.49	2.83	6.11	3.01	2.24	2.27
MAX		3.68	3.29	4.54	5.85	12.6	12.0	12.4	4.40	15.0	6.22	4.27	4.48
(WY)		1994	1993	1993	1993	1994	1993	1993	1993	1993	1993	1993	1993
MIN		1.40	1.41	1.36	1.29	1.23	1.16	1.68	1.95	1.38	1.07	1.02	.89
(WY)		1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1992 - 1995

ANNUAL TOTAL	1052.3	482.32	
ANNUAL MEAN	2.88	1.32	3.65
HIGHEST ANNUAL MEAN			6.41
LOWEST ANNUAL MEAN			1.32
HIGHEST DAILY MEAN	165	Feb 20	5.4
LOWEST DAILY MEAN	1.1	Sep 15	.80
ANNUAL SEVEN-DAY MINIMUM	1.2	Sep 9	.83
INSTANTANEOUS PEAK FLOW			7.3
INSTANTANEOUS PEAK STAGE			4.81
INSTANTANEOUS LOW FLOW			.80
ANNUAL RUNOFF (CFSM)	.30		.14
ANNUAL RUNOFF (INCHES)	4.09		1.87
10 PERCENT EXCEEDS	2.6		1.7
50 PERCENT EXCEEDS	1.9		1.3
90 PERCENT EXCEEDS	1.3		.92
			1.1

(a) Also occurred Sept. 12-16, 1995

ILLINOIS RIVER BASIN
05527800 DES PLAINES RIVER AT RUSSELL, IL

487

LOCATION.--Lat 42°29'22", long 87°55'32", in SE 1/4 sec.3, T.46 N., R.11 E., Lake County, Hydrologic Unit 07120004, on right bank at upstream side of Russell Road bridge, 0.3 mi west of Russell, 7.2 mi upstream from Mill Creek, and at mile 109.3.

DRAINAGE AREA.--123 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.--Estimated daily discharges: Jan. 2-13, Jan. 21 to Feb. 23, Mar. 1-3, and Aug. 15-20. Records good except those for June 3-26 and Aug. 21 to Sept. 30, which are fair, and those for estimated daily discharges, which are poor (see page 11). Recording rain gage and gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.72	43	51	43	30	139	723	105	2.8	1.8	164
2	.00	5.9	33	45	38	26	127	579	80	2.0	2.3	152
3	.00	5.4	28	38	34	22	110	456	65	1.4	3.1	109
4	.00	8.7	22	31	29	20	89	384	55	1.6	2.6	59
5	.00	36	19	27	27	20	71	334	46	2.2	2.5	36
6	.00	99	17	24	25	18	60	294	38	3.2	4.0	26
7	.00	154	25	22	23	19	50	256	41	2.4	3.2	21
8	.00	161	22	21	21	24	54	214	44	1.7	2.4	20
9	.00	152	21	20	20	22	78	205	32	1.3	2.5	19
10	.01	136	22	20	22	23	102	246	32	1.1	10	20
11	.36	113	27	20	19	53	142	283	29	.91	17	17
12	.36	85	27	21	17	90	215	300	24	.91	16	13
13	.19	65	22	30	16	112	265	301	21	.97	11	9.4
14	.13	51	19	138	15	119	286	295	17	.97	16	7.6
15	.10	41	17	271	14	119	296	273	12	1.1	13	5.5
16	.07	34	16	309	14	115	296	247	10	3.9	11	8.1
17	.07	29	24	336	14	106	282	219	8.7	11	25	9.6
18	.05	26	42	352	16	94	272	184	7.0	7.5	45	6.2
19	.03	21	59	353	24	83	273	153	6.4	6.2	100	4.1
20	.01	18	57	345	35	77	271	123	4.9	6.7	180	3.7
21	.00	16	49	320	50	79	269	95	4.2	7.3	209	4.8
22	.00	14	46	280	64	83	262	71	3.6	7.0	227	7.6
23	.00	13	50	240	68	84	248	59	3.1	6.2	246	9.4
24	.00	12	71	190	65	78	228	65	3.0	4.9	254	10
25	.00	11	93	140	56	70	205	69	1.5	5.1	255	15
26	.00	10	103	100	53	63	193	65	1.7	7.9	247	11
27	.01	13	103	84	43	65	361	57	1.5	2.6	222	8.7
28	.16	42	94	68	34	91	570	81	2.7	2.8	156	11
29	.12	62	82	59	---	118	727	111	4.2	8.4	113	11
30	.04	56	70	53	---	137	797	128	3.8	5.4	132	8.5
31	.04	---	59	48	---	143	---	126	---	2.6	158	---
TOTAL	1.75	1490.72	1382	4056	899	2203	7338	6996	707.3	120.06	2687.4	807.2
MEAN	.056	49.7	44.6	131	32.1	71.1	245	226	23.6	3.87	86.7	26.9
MAX	.36	161	103	353	68	143	797	723	105	11	255	164
MIN	.00	.72	16	20	14	18	50	57	1.5	.91	1.8	3.7
CFSM	.00	.40	.36	1.06	.26	.58	1.99	1.83	.19	.03	.70	.22
IN.	.00	.45	.42	1.23	.27	.67	2.22	2.12	.21	.04	.81	.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1995, BY WATER YEAR (WY)												
MEAN	44.3	68.7	96.9	64.3	95.5	229	227	109	69.9	58.0	47.3	59.3
MAX	364	390	382	279	327	673	718	300	276	363	417	410
(WY)	1987	1986	1983	1993	1974	1979	1993	1974	1993	1978	1978	1972
MIN	.056	2.75	3.06	1.46	2.35	14.9	33.4	6.15	1.90	.78	.87	.060
(WY)	1995	1972	1977	1977	1977	1968	1977	1977	1988	1988	1988	1994

SUMMARY STATISTICS				FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1967 - 1995	
ANNUAL TOTAL				24342.41		28688.43			
ANNUAL MEAN				66.7		78.6		97.7	
HIGHEST ANNUAL MEAN								206	1993
LOWEST ANNUAL MEAN								9.24	1977
HIGHEST DAILY MEAN				860	Feb 23	797	Apr 30	2100	Mar 21 1979
LOWEST DAILY MEAN				.00	(a)	.00	(a)	.00	(b)
ANNUAL SEVEN-DAY MINIMUM				.00	Sep 15	.00	Oct 1	.00	Jul 27 1988
INSTANTANEOUS PEAK FLOW						805	Apr 30	(c)2120	Mar 21 1979
INSTANTANEOUS PEAK STAGE						7.68	Apr 30	10.75	(d)Mar 6 1976
ANNUAL RUNOFF (CFSM)				.54		.64		.79	
ANNUAL RUNOFF (INCHES)				7.36		8.68		10.79	
10 PERCENT EXCEEDS				181		250		270	
50 PERCENT EXCEEDS				11		27		31	
90 PERCENT EXCEEDS				.02		1.0		2.9	

- (a) Several days
(b) At times in most years
(c) Gage height, 9.69 ft
(d) Also occurred Sept. 27, 1986

ILLINOIS RIVER BASIN

05543800 FOX RIVER, AT WATERTOWN ROAD, NEAR WAUKESHA, WI

LOCATION.--Lat 43°03'12", long 88°11'41", in NW 1/4 SE 1/4 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 current year.

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

REMARKS.--No estimated daily discharges. Records are good (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	35	52	42	36	27	104	152	51	25	20	83
2	25	36	48	37	36	28	90	128	45	22	23	44
3	25	36	45	36	37	26	79	102	43	21	23	34
4	23	44	43	30	35	26	70	85	42	21	23	29
5	22	55	40	25	35	27	60	78	40	27	22	26
6	23	122	38	24	31	27	55	71	41	26	20	23
7	23	92	39	25	28	26	53	64	68	24	25	29
8	28	63	43	25	26	25	77	62	89	22	22	29
9	42	69	43	25	25	25	79	111	94	21	37	24
10	32	61	40	23	26	28	78	176	81	20	62	21
11	27	52	38	24	26	52	76	208	63	20	40	20
12	26	47	37	27	24	98	145	188	52	20	31	18
13	26	44	34	37	22	107	162	163	42	19	26	18
14	27	59	32	92	20	103	147	154	39	20	27	17
15	29	55	32	132	20	95	124	137	34	21	35	16
16	32	47	34	105	21	86	105	123	31	35	50	16
17	33	44	40	95	22	77	89	104	29	35	166	21
18	35	42	44	88	24	69	109	86	29	30	126	23
19	40	38	41	74	27	67	180	73	27	30	100	21
20	40	37	41	61	32	83	166	62	25	39	144	24
21	38	39	41	55	33	114	149	55	26	32	116	27
22	39	38	45	49	33	103	143	49	23	23	78	31
23	38	34	50	49	36	86	123	50	23	22	52	27
24	37	38	60	46	37	72	104	72	22	25	40	25
25	35	36	61	43	38	62	90	60	21	27	36	23
26	35	34	57	41	36	56	84	52	23	36	32	20
27	34	49	54	39	34	59	170	53	22	31	30	19
28	35	86	55	39	31	99	220	105	22	25	55	18
29	34	69	53	38	---	131	199	101	26	22	77	17
30	33	59	49	36	---	128	173	80	29	20	144	18
31	33	---	46	36	---	116	---	62	---	20	169	---
TOTAL	975	1560	1375	1498	831	2128	3503	3066	1202	781	1851	761
MEAN	31.5	52.0	44.4	48.3	29.7	68.6	117	98.9	40.1	25.2	59.7	25.4
MAX	42	122	61	132	38	131	220	208	94	39	169	83
MIN	22	34	32	23	20	25	53	49	21	19	20	16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1995, BY WATER YEAR (WY)

	MEAN	44.4	48.8	56.4	52.5	62.2	124	202	80.3	79.9	113	52.8	54.1
MAX	57.4	52.0	84.6	86.0	109	163	418	100	171	178	59.7	109	
(WY)	1994	1995	1993	1993	1994	1994	1993	1993	1993	1993	1995	1993	
MIN	31.5	45.7	40.4	23.4	29.7	68.6	72.3	41.7	28.5	25.2	48.0	25.4	
(WY)	1995	1994	1994	1994	1995	1995	1994	1994	1994	1995	1993	1995	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1993 - 1995

ANNUAL TOTAL	23655	19531	
ANNUAL MEAN	64.8	53.5	59.8
HIGHEST ANNUAL MEAN			66.2
LOWEST ANNUAL MEAN			53.5
HIGHEST DAILY MEAN	468	Feb 21	1130
LOWEST DAILY MEAN	20	Jun 18	16
ANNUAL SEVEN-DAY MINIMUM	22	Sep 17	18
INSTANTANEOUS PEAK FLOW			224
INSTANTANEOUS PEAK STAGE		7.90	Apr 28
INSTANTANEOUS LOW FLOW		13	Sep 16
10 PERCENT EXCEEDS	166	108	185
50 PERCENT EXCEEDS	39	38	50
90 PERCENT EXCEEDS	23	22	23

ILLINOIS RIVER BASIN
05543830 FOX RIVER AT WAUKESHA, WI

489

LOCATION.--Lat 43°00'17", long 88°14'37", in SW 1/4 sec.3, T.6 N., R.18 E., 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. Datum of gage is 793.04 ft above sea level (levels by City of Waukesha).

REMARKS.--Estimated daily discharges: Ice-affected periods, Jan. 4-12, Feb. 6-15, and Mar. 2-10. Records good except those for ice-affected periods, which are fair (see page 11). There is occasional regulation from mill dam 1.0 mi upstream. Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	28	65	52	52	39	131	197	84	32	29	162
2	55	27	57	45	51	39	116	186	72	29	26	103
3	60	28	52	45	52	38	106	172	66	27	28	80
4	59	36	49	36	48	37	96	156	64	30	29	66
5	56	71	46	32	45	38	83	147	62	34	27	54
6	53	150	47	31	41	38	75	138	59	33	25	49
7	51	127	49	31	39	36	80	128	100	32	27	62
8	58	91	48	31	38	35	107	128	114	30	27	66
9	61	94	49	31	37	35	115	185	120	27	94	51
10	55	86	46	32	36	40	108	262	109	26	85	46
11	49	67	44	33	34	77	121	302	86	27	59	43
12	47	57	43	37	32	134	185	272	73	25	41	41
13	45	53	42	51	31	148	207	239	61	25	33	39
14	43	69	41	141	32	143	187	225	55	24	38	34
15	41	74	42	177	34	135	158	210	51	49	41	31
16	39	62	43	145	37	128	139	195	50	37	129	31
17	40	56	47	127	36	116	126	175	45	34	217	33
18	40	50	53	120	38	106	156	156	43	31	171	35
19	40	46	51	108	40	104	219	139	40	29	290	37
20	41	43	51	91	44	132	205	125	39	45	219	37
21	38	46	53	81	46	159	188	117	39	37	179	41
22	36	49	58	75	46	145	184	105	36	30	123	43
23	34	46	62	73	48	117	166	111	33	28	83	39
24	37	42	74	66	52	98	147	124	32	30	63	38
25	36	41	77	61	51	81	134	112	33	33	54	36
26	34	39	72	59	49	74	136	91	32	37	49	36
27	32	59	69	56	45	91	234	96	31	35	48	38
28	31	102	73	55	42	133	288	146	32	31	86	43
29	31	91	70	53	---	168	254	144	36	28	114	43
30	26	75	62	51	---	162	218	121	41	25	317	37
31	27	---	59	50	---	145	---	100	---	27	253	---
TOTAL	1340	1905	1694	2076	1176	2971	4669	5004	1738	967	3004	1494
MEAN	43.2	63.5	54.6	67.0	42.0	95.8	156	161	57.9	31.2	96.9	49.8
MAX	61	150	77	177	52	168	288	302	120	49	317	162
MIN	26	27	41	31	31	35	75	91	31	24	25	31
CFSM	.34	.50	.43	.53	.33	.76	1.24	1.28	.46	.25	.77	.40
IN.	.40	.56	.50	.61	.35	.88	1.38	1.48	.51	.29	.89	.44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1995, BY WATER YEAR (WY)

	MEAN	75.0	83.3	84.8	63.2	84.5	198	212	121	80.1	72.1	57.8	76.4
MAX	346	303	207	188	213	451	598	371	265	271	146	385	
(WY)	1987	1986	1992	1973	1984	1974	1993	1990	1993	1993	1980	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 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1963 - 1995	
ANNUAL TOTAL	31405		28038			
ANNUAL MEAN	86.0		76.8		102	
HIGHEST ANNUAL MEAN					193	
LOWEST ANNUAL MEAN					31.6	
HIGHEST DAILY MEAN	613	Feb 21	317	Aug 30	2160	Apr 22 1973
LOWEST DAILY MEAN	18	Jun 15, 19	24	Jul 14	3.2	(a) Dec 29-31 1963
ANNUAL SEVEN-DAY MINIMUM	20	Jun 14	26	Jul 8	3.3	Dec 26 1963
INSTANTANEOUS PEAK FLOW			1070	Aug 19	2260	Apr 22 1973
INSTANTANEOUS PEAK STAGE			6.04	Aug 19	7.42	Apr 22 1973
ANNUAL RUNOFF (CFSM)	.68		.61		.81	
ANNUAL RUNOFF (INCHES)	9.27		8.28		11.05	
10 PERCENT EXCEEDS	211		158		225	
50 PERCENT EXCEEDS	52		51		61	
90 PERCENT EXCEEDS	30		31		17	

(a) Also occurred Jan. 1, 1964

ILLINOIS RIVER BASIN

05544200 MUKWONAGO RIVER AT MUKWONAGO, WI

LOCATION.--Lat 42°51'24", long 88°19'40", in NE 1/4 NE 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. 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.--Estimated daily discharges: Jan. 28 to Mar. 2, Apr. 16-24, May 21-31, and June 30 to July 10. Records good except those for estimated daily discharges, which are fair (see page 11). 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 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	25	57	48	38	39	51	87	72	20	12	75
2	59	25	56	43	37	37	44	80	27	17	14	36
3	53	24	52	40	36	35	35	53	27	15	17	24
4	49	24	47	36	35	34	32	41	25	17	19	26
5	46	93	44	35	34	34	33	34	20	20	19	26
6	31	100	42	33	33	33	37	31	12	19	19	24
7	9.5	116	44	32	32	33	34	31	16	18	22	21
8	12	120	44	30	31	32	56	32	21	17	22	21
9	15	112	45	31	30	30	58	41	48	16	90	21
10	16	100	46	30	29	31	53	72	55	15	152	20
11	17	42	47	15	28	34	55	106	49	14	152	20
12	18	19	46	10	28	38	62	108	25	14	149	20
13	20	24	45	13	27	54	68	101	14	14	121	20
14	20	58	23	28	26	77	65	99	15	14	50	19
15	21	73	15	61	25	83	60	62	15	15	25	21
16	22	79	18	73	24	79	56	46	16	28	65	20
17	22	82	21	71	23	73	54	47	17	28	100	18
18	23	78	24	67	22	66	62	46	17	25	103	19
19	26	68	26	62	25	60	72	46	22	24	142	18
20	26	62	29	59	35	52	66	44	23	30	164	18
21	25	61	30	56	45	41	64	43	22	28	71	20
22	24	58	33	53	54	47	62	41	22	26	35	21
23	25	26	57	51	52	49	60	45	21	25	38	20
24	23	9.3	63	49	50	48	58	50	19	27	37	20
25	21	11	36	48	48	47	55	43	20	30	64	21
26	20	12	26	46	46	44	55	37	20	31	59	21
27	21	16	28	44	44	67	68	36	19	28	48	19
28	22	25	30	43	41	80	76	80	20	63	37	26
29	24	52	54	42	---	79	91	84	21	68	36	25
30	23	68	58	41	---	75	93	80	22	58	73	23
31	23	---	52	39	---	70	---	74	---	25	83	---
TOTAL	823.5	1662.3	1238	1329	978	1601	1735	1820	742	789	2038	703
MEAN	26.6	55.4	39.9	42.9	34.9	51.6	57.8	58.7	24.7	25.5	65.7	23.4
MAX	67	120	63	73	54	83	93	108	72	68	164	75
MIN	9.5	9.3	15	10	22	30	32	31	12	14	12	18
CFSM	.36	.75	.54	.58	.47	.70	.78	.79	.33	.34	.89	.32
IN.	.41	.83	.62	.67	.49	.80	.87	.91	.37	.40	1.02	.35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1995, BY WATER YEAR (WY)

	MEAN	48.6	58.0	56.6	46.4	53.3	79.8	79.7	63.4	49.7	44.3	45.5	49.2
MAX	98.7	110	83.7	77.8	83.7	151	150	155	138	80.8	83.5	88.7	
(WY)	1987	1986	1983	1974	1974	1974	1993	1975	1975	1993	1979	1986	
MIN	25.5	29.2	26.2	22.8	31.1	43.9	43.3	16.9	14.4	13.3	18.5	23.4	
(WY)	1990	1977	1990	1977	1978	1981	1977	1977	1988	1988	1991	1995	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1973 - 1995
ANNUAL TOTAL	17493.8	15458.8	
ANNUAL MEAN	47.9	42.4	56.1
HIGHEST ANNUAL MEAN			90.3
LOWEST ANNUAL MEAN			30.8
HIGHEST DAILY MEAN	196	Feb 21	275
LOWEST DAILY MEAN	9.3	Nov 24	1.8
ANNUAL SEVEN-DAY MINIMUM	15	Sep 13	6.8
INSTANTANEOUS PEAK FLOW			(a) 300
INSTANTANEOUS PEAK STAGE			3.55
ANNUAL RUNOFF (CFSM)	.65	.57	.76
ANNUAL RUNOFF (INCHES)	8.78	7.76	10.28
10 PERCENT EXCEEDS	86	75	102
50 PERCENT EXCEEDS	42	35	48
90 PERCENT EXCEEDS	18	18	22

(a) Gage height, 2.50 ft, datum then in use

LOCATION.--Lat 42°36'39", long 88°13'33", in NW 1/4 NW 1/4 sec.26, T.2 N., R.19 E., Kenosha County, Hydrologic Unit 07120006, on right bank 40 ft downstream from bridge on County Trunk Highway JB, 2.2 mi north of New Munster, and 17.0 mi upstream from Fox Chain of Lakes.

PERIOD OF RECORD.--October 1939 to current year. Prior to October 1993, published as "at Wilmot" under station number 05546500.

GAGE.--Water-stage recorder. Datum of gage is 735.72 ft above sea level (Racine County Surveyor bench mark). Prior to Sept. 1, 1965, nonrecording gage at bridge in Wilmot 11 mi downstream at datum 0.50 ft lower, and recording gage Sept. 1, 1965 to Sept. 30, 1993.

REMARKS.--Estimated daily discharges: Ice-affected periods, Dec. 11-21 and Jan. 2 to Mar. 13. Records are good, except for ice-affected periods, which are fair (see page 11). Gage-height telemeter and data-collection platform at station.

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	247	374	396	330	320	722	1480	545	202	188	547
2	97	218	367	380	330	320	683	1290	517	186	188	524
3	94	182	370	330	320	300	615	1140	424	168	185	509
4	100	218	368	310	320	280	534	982	408	172	174	499
5	147	291	359	290	290	240	500	878	356	189	155	478
6	176	486	355	280	280	210	361	763	289	189	165	385
7	192	561	364	270	270	190	280	616	432	197	163	324
8	208	550	352	270	260	180	400	516	527	203	163	375
9	232	674	356	270	250	180	496	804	616	175	233	181
10	248	631	333	260	250	190	597	1180	505	161	486	199
11	291	527	320	260	250	250	735	1430	461	155	563	226
12	221	511	300	260	240	320	1010	1380	418	150	532	231
13	220	459	280	280	240	450	1050	1250	317	141	495	231
14	288	412	270	480	240	652	935	1180	333	136	377	228
15	162	412	270	700	240	656	835	1090	315	158	370	244
16	120	398	260	840	240	599	756	1020	270	158	486	231
17	164	388	260	900	240	569	718	978	225	196	1460	239
18	190	384	270	900	240	481	756	959	239	199	1760	240
19	271	410	280	880	250	484	1040	843	239	184	1470	235
20	226	411	290	840	260	498	1190	670	232	207	1680	269
21	126	385	310	800	280	518	1030	587	219	186	1780	298
22	154	373	326	740	300	534	918	462	206	183	1580	311
23	180	364	349	700	320	528	892	378	198	194	1210	303
24	181	363	384	660	350	522	860	564	187	192	984	295
25	195	354	426	620	360	507	808	606	182	208	803	290
26	204	338	436	580	350	487	751	562	178	205	728	279
27	173	357	433	500	330	487	1300	477	179	192	515	265
28	173	394	434	410	320	506	1830	499	228	238	414	245
29	154	383	445	360	---	603	1810	608	169	237	583	235
30	152	376	417	340	---	740	1680	640	207	197	613	227
31	182	---	409	330	---	723	---	582	---	180	592	---
TOTAL	5627	12057	10767	15436	7950	13524	26092	26414	9621	5738	21095	9143
MEAN	182	402	347	498	284	436	870	852	321	185	680	305
MAX	291	674	445	900	360	740	1830	1480	616	238	1780	547
MIN	94	182	260	260	240	180	280	378	169	136	155	181
CFSM	.22	.50	.43	.61	.35	.54	1.07	1.05	.40	.23	.84	.38
IN.	.26	.55	.49	.71	.36	.62	1.20	1.21	.44	.26	.97	.44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1995, BY WATER YEAR (WY)

	MEAN	386	480	457	420	509	1147	1089	686	491	382	329	342
MAX	1931	1536	1755	1818	1354	2434	3591	2078	1582	1382	902	1763	
(WY)	1987	1986	1983	1960	1974	1979	1993	1973	1993	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	1948	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1940 - 1995
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ANNUAL TOTAL	182292		163464		560		
ANNUAL MEAN	499		448		1240		1993
HIGHEST ANNUAL MEAN					174		1958
LOWEST ANNUAL MEAN					7100		1960
HIGHEST DAILY MEAN	(a) 3600	Feb 21	1830	Apr 28		Apr 1	1958
LOWEST DAILY MEAN	94	Oct 3	94	Oct 3	35	Sep 9	1958
ANNUAL SEVEN-DAY MINIMUM	107	Sep 28	130	Oct 1	41	Sep 7	1958
INSTANTANEOUS PEAK FLOW			1860	Apr 28	(b) 7520	Mar 31	1960
INSTANTANEOUS PEAK STAGE			10.43	Apr 28	(c) 14.10	Feb 21	1994
INSTANTANEOUS LOW FLOW			88	Oct 3	.00	(d) Oct 26	1945
ANNUAL RUNOFF (CFSM)	.62		.55		.69		
ANNUAL RUNOFF (INCHES)	8.36		7.50		9.38		
10 PERCENT EXCEEDS	1150		879		1270		
50 PERCENT EXCEEDS	320		340		357		
90 PERCENT EXCEEDS	173		180		121		

(a) Ice affected

(b) Gage height, 9.25 ft, from graph based on gage readings, site and datum then in use

(c) Backwater from ice

(d) Also occurred Aug. 10, 1990

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 1995 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 .	1959-95	03-13-95	G13.52	E90	09-02-85	35.23	595	
04025200 Pearson Creek near Maple	Lat 46°38'51", long 91°42'55", on common 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	1957-95	05-14-95	11.66	181	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., Bayfield County, Hydrologic Unit 04010301, at box culvert on State Highway 13, 8.0 mi northwest of Red Cliff; drainage area, 1.09 mi ² .	1959-95	05-09-95	11.41	71	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# 1967-95	05-09-95	10.93	140	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, HHydrologic Unit 04010302, on left bank 150 ft downstream from bridge on U.S. Forest Service Road, 4.4 mi southwest of Mellen; drainage area, 82.0 mi ² .	1971-75# 1976-95	06-20-93	C F4.80	C F800	07-02-92	8.65	2,450	
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 bbbox culvert on U.S. Highway 63, 0.8 mi east of Grandview; drainage area. 16.9 mi ² .	1960-95	05-09-95	11.56	145	07-02-92	28.47	1,920	

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 1995 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								
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 Highway 70, 2.2 mi southeast of Alvin; drainage area, 1.22 mi	1960-95	1995	C		05-22-83	11.38	F40
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 confluence of North and South Forks, 4.0 mi southwest of Alvin; drainage area, 27.8 mi ² .	1967-68# 1970-95	05-09-95	2.03	31	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 .	1970-95	05-09-95 03-21-95	11.32 G11.55	350 --	06-10-79	15.06	1,440
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 intersection with State Highway 32 at Wabeno; drainage area, 34.1 mi ² .	1970-95	04-19-95	11.27	88	06-14-81	13.62	420
04071700 North Branch Little River near Coleman	Lat 45°00'37", long 88°02'43", on common boundary of secs. 2 and 3, T.29 N., R.20 E., Oconto County, Hydrologic Unit 04030104, at bridge on U.S. Highway 141, 3.8 mi south of Coleman; drainage area, 21.4 mi ² .	1958-95	04-21-95	11.42	77	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 Stte Hlghway 32, 6.1 mi north of Pulaski; drainage area, 48.80 mi ² .	1961-95	03-20-95	E11.05	E210	05-28-73	17.10	1,700
04073400 Bird Creek at Wautoma	Lat 44°06'00", long 89°18"00", in S 1/2 section 34, T.19 N., R.10 E., Waushara County, Hydrologic Unit 04030201, at concrete culvert on State Highway 21, 0.2 mi west of Wautoma; drainage area, 4.14 mi ² .	1959-95	08-28-95	11.39	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 .	1970-95	08-14-95 03-12-95	9.73 G9.76	78	10-29-74	11.00	158
*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., Langlade County, Hydrologic Unit 04030202, on culvert on State Highway 64, 3.5 mi southeast of Langlade; drainage area, 8.09 mi ² .	1959-65 1966-72# 1973-95	08-14-95	E10.93	48	07-11-82	11.66	80

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 1995 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								
04079700 Spaulding Creek near Big Falls	Lat 44°38'13", long 89°01'20", on common 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# 1967-95	08-13-95	10.70	47	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., Winnebago County, Hydrologic Unit 04030201, at bridge on U.S. Highway 41, 1.0 mi southwest of bridge on Algoma Street at Fox River, at Oshkosh; drainage area, 12.10 mi ² .	1961-95	08-14-95 03-12-95	10.54 G10.61	230	09-11-86	17.47	2,350
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 .	1961-95	1995	B	<100	03-30-79	14.37	1,840
04087100 Honey Creek at Milwaukee	Lat 42°58'41", long 87°59'52", in SE 1/4 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 northwest of mouth of Milwaukee River, at Milwaukee; drainage area, 3.26 mi ² .	1959-95	08-16-95	20.79	500	12-02-82	22.60	1,050
04087200 Oak Creek near South Milwaukee	Lat 42°52'58", long 87°53'31", on common 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; drainage area, 13.8 mi ² .	1958-95	08-16-95	15.41	340	03-30-60	17.49	1,100
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 .	1960-95	04-27-95	15.22	128	09-17-78	17.6	220
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 .	1958-95	08-12-95	E11.13	80	06-12-84	18.89	1,050
05341900 Kinnickinnic 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 .	1959-95	08-13-95	14.78	3,040	08-09-88	15.99	5,200

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 1995 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								
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 .	1970-95	03-21-95	11.75	440	04-16-82	12.83	720
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# 1967-94	08-29-95	E10.98	87	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 .	1961-95	08-25-95	12.02	339	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 .	1970-95	08-25-95	13.08	492	09-15-94	17.66	1,620
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# 1962-95	08-14-95	9.54	2,500	F-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 .	1962-95	03-12-95	E13.20	250	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# 1958-95	03-13-95	8.76	1,540	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# 1958-95	08-15-95	5.65	2,350	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 .	1958-95	03-11-95	11.08	120	07-08-59	14.12	400

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 1995 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								
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 .	1958-95	03-12-95	12.16	430	03-30-67	12.39	1,550
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 .	1962-95	03-11-95	E12.50	E150	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 .	1960-95	08-14-95	11.92	110	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 .	1974-95	03-11-95	13.68	1,730	09-10-75	15.39	5,180
BLACK RIVER BASIN								
05380900 Popler 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# 1967-95	03-13-95	16.82	4,600	06-06-80	20.12	12,500
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 .	1961-95	08-19-95 03-12-95	13.82 G15.43	630	09-22-86	20.62	7,880
05382200 French Creek near Ettrick	Lat 44°11'04", long 91°18'49", in NE 1/4 sec.27, T.20 N., R.8 W., Trempea- leau County, Hydrologic Unit 07040007, at bridge on County Trunk Highways D and T, 2.5 mi west of Ettrick; drainage area, 14.3 mi ² .	1960-95	08-14-95	11.43	1,790	08-14-95	11.43	1,790
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# 1967-95	1995	B	<270	08-27-59	19.59	10,000

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 1995 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								
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 .	1970-95	08-14-95 09-16-94	11.47 11.42	48 F46	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 .	1970-95	05-09-95	10.18	11	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 Stte Highway 47, 3.0 mi northwest of Woodruff; drain- age area, 17.6 mi ² .	1958-95	08-12-95	E9.35	89	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# 1967-95	08-13-95	9.41	60	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 .	1970-95	08-13-95	11.96	65	06-14-81	14.38	310
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; drain- age area, 9.58 mi ² .	1961-95	08-29-95	12.98	335	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 .	1970-95	08-15-95	12.59	220	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; drain- age area, 1.58 mi ² .	1959-95	08-15-95	13.62	185	06-13-90	17.57	390
05396300 Wisconsin River Tributary at Wausua	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 .	1982-95	1995	C		06-12 or 13-90	9.11	740

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 1995 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								
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 .	1959-95	08-15-95	14.46	1,600	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 .	1973-95	08-15-95	14.63	640	06-06-80	21.78	3,700
05401800 Yellow River Tributary near Pitts- ville	Lat 44°28'58", long 90°07'05", on com- mon 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 .	1959-95	08-18-95	11.84	240	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# 1983-95	03-11-95	5.52	167	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 .	1961-95	03-12-95	11.40	120	09-09-65	17.90	2,260
05407200 Crooked Creek near Boscobel	Lat 43°06'27", long 90°42'18", in SE 1/4 sec.2, T.7 N., R.3 W., Grant County, Hydrologic Unit 07070005, at bridge on U.S. Highway 61, 1.6 mi south of Boscobel; drainage area, 12.9 mi ² .	1959-95	1995	B	<130	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# 1967-95	07-27-95	D10.23	E180	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# 191-95	07-27-95	11.09	1,420	06-29-90	15.35	3,800

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 1995 Maximum			Period of Record Maximum		
			Date	Gage height (feet)	Dis-charge (ft ³ /s)	Date	Gage height (feet)	Dis-charge (ft ³ /s)
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 .	1960-95	07-28-95	12.98	440	06-29-69	17.32	7,040
ROCK RIVER BASIN								
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 Janesville; drainage area, 1.42 mi ² .	1982-95	06-27-95	7.56	796	06-29-90	7.62	830
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 .	1962-95	1995	B	<420	04-21-73	18.28	8,400
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 .	1959-95	03-11-95	10.72	55	07-05-93	22.63	3,100
05433500 Yellowstone River near Blanchardville	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# 1966-95	03-12-95	3.84	195	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 .	1961-95	1995	B	<25	03-31-65	15.06	370
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 .	1962-95	08-17-95	11.63	83	04-21-73	17.47	900
05545200 White River Tributary near Burlington	Lat 42°41'03", long 88°22'37", on common boundary of secs.27 and 34, 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 .	1958-95	08-17-95	11.85	40	04-21-73	14.10	290

Station Number and Name	Location and Drainage Area	Period of Record	Water Year 1995 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								
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 .	1962-95	04-27-95	10.42	85	09-25-86	13.63	475

Operated as a continuous-record station
 B Peak did not reach bottom of gage
 C Peak not recorded - bridge replacement
 D Backwater from debris
 E Estimated
 F Revised
 G Backwater from ice

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 MICHIGAN						
Portage Canal	Fox River	Lat 43°32'19", long 89°27'32", in NE 1/4 NW 1/4 sec.8, T.12 N., R.9 E., Columbia County, Hydrologic Unit 04030201, at bridge on U.S. Highway 51, at Portage.	0.05	1965-66 1969-71 1974 1983 1991-94	10/04/94	6.8
CHIPPEWA RIVER BASIN						
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.	--	1992-94	11/26/94 05/08/95 06/20/95 08/10/95	3.59 3.21 2.88 3.02
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.	--	1992-94	11/26/94 05/08/95 06/20/95 08/10/95	3.04 1.79 6.01 4.87
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	1992-94	11/26/94 05/08/95 06/20/95 08/10/95	4.21 2.87 3.82 3.93
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.	--	1991-93	10/05/94 11/26/94 05/08/95 06/20/95 08/10/95	1.95 2.04 2.93 2.55 2.75
WISCONSIN RIVER BASIN						
Black Earth Creek	Blue Mounds Creek	Lat 43°00'01", long 89°37'32", in SE 1/4 NE 1/4 sec.11, T.7 N., R.7 E., Dane County, Hydrologic Unit 07070005, on bridge on private road.	9.53	1985-86	04/21/95 06/21/95 07/26/95 08/30/95	4.87 1.61 2.06 1.87
ROCK RIVER BASIN						
Door Creek	Yahara River	Lat 43°02'54", long 89°13'54", in NE 1/4 NE 1/4 sec.30, T.7 N., R.11 E., Dane County, Hydrologic Unit 07090001, at bridge on town road 2.5 mi southwest of Cottage Grove.	15.3	--	04/21/95 06/21/95 07/26/95 08/30/95	15.4 4.0 12.5 5.41

WATER-QUALITY ANALYSES AT MISCELLANEOUS SITES

Water-quality data in this section are for samples collected at gaging stations and other sites on streams for reconnaissance or other purposes on a non-continuous basis.

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

STREAMS TRIBUTARY TO LAKE MICHIGAN

04077100 WOLF RIVER AT KESHENA, WI (LAT 44 53 00N LONG 088 38 05W)

		DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	
MAY 1995										
31...	1240	525	186	7.8	18.5	10.0	22	10	2.1	
JUL										
18...	1430	163	249	8.4	23.5	8.7	29	14	2.4	
AUG										
10...	1210	393	212	7.7	23.5	8.4	25	12	2.0	
16...	1500	1580	172	7.9	22.0	8.3	21	9.8	1.9	
SEP										
26...	1410	159	251	8.6	12.5	12.1	28	14	2.5	
DATE		POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
MAY 1995										
31...	0.80	92	2.6	4.1	0.20	5.6	117	5	0.070	
JUL										
18...	0.90	124	2.8	5.3	0.20	8.6	148	8	0.060	
AUG										
10...	0.80	105	2.4	6.8	0.20	10	147	15	0.100	
16...	1.0	82	2.1	4.1	0.20	11	139	9	0.070	
SEP										
26...	1.0	123	2.9	5.8	0.10	5.9	141	5	<0.050	
DATE		NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	
MAY 1995										
31...	0.020	0.30	<0.010	<0.010	310	86	100	14		
JUL										
18...	0.020	0.40	0.030	<0.010	240	56	80	17		
AUG										
10...	<0.015	0.50	0.010	<0.010	480	120	80	13		
16...	0.030	0.70	0.020	0.020	530	290	130	15		
SEP										
26...	<0.015	0.30	0.010	<0.010	120	55	30	11		

WATER-QUALITY ANALYSES AT MISCELLANEOUS SITES

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

ST. CROIX RIVER BASIN

05340500 ST. CROIX RIVER AT ST. CROIX FALLS, WI (LAT 45 24 25N LONG 092 38 49W)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	AMETRYN WATER, DISS, REC, (UG/L) (38401)
JUN 1995 12...	1025	6890	15	6.9	17.0	<0.010	0.140	0.020	0.010	<0.050	<0.050	<0.050
DATE	TIME	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DEISO-PROPYL ATRAZIN WATER, DISS, REC (UG/L) (04038)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRO-METRYN, WATER, DISS, REC (UG/L) (04036)	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	PROP-AZINE, WATER, DISS, REC (UG/L) (38535)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)
JUN 1995 12...	0.240	<0.050	<0.050	<0.050	0.160	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050

CHIPPEWA RIVER BASIN

454657091300600 BIG SISSABAGAMA TRIBUTARY NEAR STONE LAKE, WI (LAT 45 46 57N LONG 091 30 06W)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
MAY 1995 01...	1130	80	8.2	9.5	12.4	0.020
JUN 19...	1310	72	7.3	28.0	8.8	<0.008
JUL 18...	1015	74	8.1	22.5	8.6	0.018
AUG 18...	1120	72	7.8	24.5	8.1	0.024

WAUMANDEE CREEK BASIN

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
053781805	EAGLE CR 3 @ SCHAFFNR VLY RD NR FOUNTAIN CTY, WI (LAT 44 13 55N LONG 091 40 52W)								
OCT 1994 20...	0830	3.1	9.0	10.6	8.3	<1.0	24	0.039	0.086
05378181	EAGLE CR 2 @ SCHAFFNR VLY RD NR FOUNTAIN CTY, WI (LAT 44 13 11N LONG 091 40 45W)								
OCT 1994 20...	0730	5.3	9.0	10.6	8.3	<1.0	31	<0.027	0.101
05378182	JOOS VLY CR 4 @ JOOS VLY RD NR FOUNTAIN CITY, WI (LAT 44 13 51N LONG 091 38 13W)								
OCT 1994 19...	1810	2.9	11.5	10.0	8.3	<1.0	15	0.033	0.066

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

WAUMANDEE CREEK BASIN--CONTINUED

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE LAB (STAND-ARD UNITS) (00403)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
053781825 JOOS VLY CR 3 @ JOOS VLY RD NR FOUNTAIN CITY, WI (LAT 44 13 03N LONG 091 39 28W)									
OCT 1994 19...	1740	4.0	12.0	9.6	8.3	<1.0	32	<0.027	0.095
05379430 TROUT RUN AT CNTY TRUNK HIGHWAY J NR ARCADIA, WI (LAT 44 12 49N LONG 091 34 07W)									
OCT 1994 19...	1600	5.8	11.5	9.8	8.2	<1.0	24	0.044	0.164
05379465 BOHRIS VALLEY CREEK @ BRANDHORST RD NR DODGE, WI (LAT 44 08 37N LONG 091 36 41W)									
OCT 1994 19...	1350	2.9	13.0	9.7	8.1	<1.0	19	0.051	0.128
05379472 BOHRIS VALLEY CREEK AT CT HIGHWAY P NR DODGE, WI (LAT 44 08 44N LONG 091 35 50W)									
OCT 1994 19...	1235	6.5	11.5	10.2	8.3	<1.0	14	<0.027	0.133
05379530 PINE CREEK AT WHISTLER PASS ROAD NEAR DODGE, WI (LAT 44 06 42N LONG 091 31 07W)									
OCT 1994 19...	1100	6.3	11.5	9.6	8.1	1.1	60	0.061	0.170

WISCONSIN RIVER BASIN

054064509 BLACK EARTH CREEK LOW FLOW #3 NR CROSS PLAINS, WI (LAT 43 05 49N LONG 089 37 32W)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREP-TOCOCCI, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	
APR 1995												
21...	1325	4.9	565	8.0	7.5	11.6	733	30	51	--	--	
JUN 21...	0827	1.6	621	8.0	19.0	7.9	742	17	1800	--	--	
JUL 26...	1420	2.1	618	8.1	21.0	8.9	--	22	1600	1000	320	
AUG 30...	1250	1.9	626	8.0	21.0	8.9	742	20	1000	--	--	
OCT 23...	1255	1.7	643	8.1	9.5	11.1	727	21	--	--	--	
DATE		CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
APR 1995												
21...	--	--	--	--	265	16	22	0.10	--	0.020	1.60	
JUN 21...	--	--	--	--	315	13	17	<0.10	--	0.060	2.50	
JUL 26...	68	36	8.8	1.9	290	13	19	0.10	353	0.060	2.20	
AUG 30...	--	--	--	--	298	13	20	0.10	--	0.100	2.00	
OCT 23...	--	--	--	--	308	16	20	<0.10	--	0.020	2.60	

WATER-QUALITY ANALYSES AT MISCELLANEOUS SITES

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

WISCONSIN RIVER BASIN--CONTINUED

054064509 BLACK EARTH CREEK LOW FLOW #3 NR CROSS PLAINS,WI (LAT 43 05 49N LONG 089 37 32W)

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ARSENIC TOTAL (UG/L AS AS) (01002)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM 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)
APR 1995 21...	<0.015	0.90	0.070	0.030	<0.010	--	--	--	--	--
JUN 21...	0.080	0.30	0.160	0.070	0.040	--	--	--	--	--
JUL 26...	0.070	0.40	0.140	0.060	0.060	1	20	<1	1	1
AUG 30...	0.030	0.60	0.110	0.070	0.080	--	--	--	--	--
OCT 23...	0.050	0.40	0.050	0.020	0.030	--	--	--	--	--

DATE	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	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- PENDEDED (MG/L) (80154)
APR 1995 21...	--	--	--	--	--	--	--	--	--	17
JUN 21...	--	--	--	--	--	--	--	--	--	86
JUL 26...	3	1000	9	<1	200	140	<0.10	3	<10	51
AUG 30...	--	--	--	--	--	--	--	--	--	--
OCT 23...	--	--	--	--	--	--	--	--	--	--

05407000 WISCONSIN RIVER AT MUSCODA, WI (LAT 43 11 54N LONG 090 26 26W)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	AMETRYN WATER, DISS, REC, (UG/L) (38401)
MAY 1995 30...	1125 10700		23	8.1	18.0	0.020	0.530	<0.015	<0.010	0.230	0.060	<0.050

DATE	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DEISO- PROPYL ATRAZIN WATER, DISS, REC (UG/L) (04038)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRO- METRYN, WATER, DISS, REC (UG/L) (04036)	PROP- CHLOR, WATER, DISS, REC (UG/L) (04024)	PROP- AZINE WATER DISS REC (UG/L) (38535)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)
MAY 1995 30...	0.240	0.490	0.050	<0.050	0.520	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

GRANT RIVER BASIN

05413447 MUSKELLUNGE CREEK @ MUSKELLNGE RD NR BEETOWN, WI (LAT 42 47 38N LONG 090 56 09W)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	PH WATER WHOLE LAB (STAND-ARD (00403)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT 1994									
04...	1045	2.3	12.0	8.2	2.0	--	27	0.071	0.238
19...	1100	2.5	12.0	8.4	<1.0	--	17	0.047	0.198
NOV									
01...	0945	2.3	5.5	8.2	1.8	--	12	0.037	0.141
DEC									
06...	1100	2.1	2.0	8.0	1.2	660	36	0.064	0.180
JAN 1995									
18...	1000	2.4	0.5	8.0	3.0	3100	21	0.576	0.300

ROCK RIVER BASIN

430334088255400 UPPER NEMAHBIN LAKE, OUTLET, NEAR DELAFIELD, WI (LAT 43 03 34 LONG 88 25 54W)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
APR 1995							
25...	1405	41	--	--	--	--	0.012
JUN							
19...	1030	14	634	8.0	25.5	7.8	0.017
JUL							
26...	1050	15	595	8.0	26.5	6.4	0.012
AUG							
23...	1020	40	551	8.2	26.0	10.0	0.009

05427851 YAHARA RIVER AT WESTPORT ROAD NEAR MADISON, WI (LAT 43 07 52N LONG 089 24 15W)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT 1994					MAY 1995				
06...	1340	--	0.255	0.003	09...	0953	--	0.180	<0.002
12...	1310	--	0.118	0.003	09...	1548	--	0.160	<0.002
20...	1050	--	0.119	0.003	10...	1408	--	0.150	0.005
26...	1300	--	0.111	<0.002	12...	0936	--	0.149	0.002
NOV					17...	1327	--	0.147	0.004
03...	1005	--	0.072	<0.002	19...	1127	--	0.123	0.001
09...	1210	--	0.126	0.017	25...	1202	--	0.128	<0.002
22...	1100	--	0.120	--	28...	0911	--	0.241	--
27...	1500	--	0.095	0.019	28...	1226	--	0.169	--
28...	1210	--	0.100	0.018	30...	0951	--	0.146	0.002
DEC					JUN				
09...	1140	--	0.050	--	01...	1158	--	0.120	<0.002
JAN 1995					08...	1114	--	0.160	0.003
19...	0800	--	0.040	0.009	15...	1145	--	0.144	0.002
FEB					22...	1140	--	0.215	0.004
22...	1200	--	0.040	0.015	29...	1306	--	0.249	0.004
MAR					JUL				
11...	1213	--	0.050	0.014	05...	1335	--	0.383	--
11...	1830	--	0.064	0.018	06...	1325	--	0.333	0.007
12...	1155	208	0.053	0.020	13...	1215	--	0.262	0.002
12...	1710	--	0.056	0.022	20...	1037	--	0.384	0.007
22...	1238	98	0.100	0.024	26...	1202	--	0.289	<0.002
28...	1105	151	0.100	0.009	AUG				
APR					01...	1040	--	0.316	--
06...	1145	--	0.100	0.007	03...	1110	--	0.677	0.023
11...	1308	136	0.130	0.003	10...	1112	--	0.229	0.002
12...	0910	--	0.110	0.002	17...	1058	--	0.259	0.004
18...	1430	--	0.180	<0.002	24...	1107	--	0.262	0.005
19...	1115	--	0.209	0.003	28...	1503	--	0.179	0.002
27...	1033	--	0.170	0.003	29...	1125	--	0.200	--
27...	1546	--	0.130	0.002	31...	0849	--	0.181	<0.002
28...	0751	--	0.130	0.002	SEP				
MAY					06...	1418	--	0.202	0.002
04...	1048	--	0.140	0.003	13...	1432	--	0.161	<0.002
08...	1430	--	0.548	0.002	20...	1541	--	0.191	0.003
					28...	1315	--	0.092	0.003

WATER-QUALITY ANALYSES AT MISCELLANEOUS SITES

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

ROCK RIVER BASIN--CONTINUED

05427905 SIXMILE CREEK @ WOODLAND DRIVE NEAR WAUNAKEE, WI (LAT 43 08 27N LONG 089 25 55W)

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)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
OCT 1994					
06...	1155	--	15	0.147	0.080
12...	1140	--	14	0.126	--
20...	0945	--	17	0.174	0.101
26...	1030	--	13	0.113	0.075
NOV					
03...	0945	--	15	0.106	0.059
09...	1045	--	21	0.137	0.074
22...	1050	--	16	0.130	--
27...	1445	--	39	0.178	0.066
28...	1025	--	45	0.580	0.322
DEC					
09...	1020	18	--	0.080	--
JAN 1995					
19...	0930	9.7	--	0.070	0.040
FEB					
22...	0950	18	--	0.340	0.119
MAR					
11...	1105	24	--	0.160	0.062
11...	1800	24	--	0.520	0.152
12...	1130	38	--	0.870	0.560
12...	1750	38	--	0.910	0.540
22...	1118	--	31	0.130	0.057
28...	1022	--	37	0.240	0.123
APR					
06...	1040	--	15	0.070	0.034
11...	1202	--	50	0.580	0.116
12...	0903	--	51	0.160	0.128
18...	1405	--	66	0.180	0.054
19...	1100	--	38	0.300	0.128
27...	1005	--	42	0.310	0.107
27...	1527	--	38	0.260	0.119
28...	0812	--	29	0.200	0.092
MAY					
04...	1032	--	18	0.140	0.053
08...	1423	--	31	0.220	0.046
09...	0943	--	59	0.280	0.116
09...	1529	--	45	0.230	0.117
10...	1356	--	66	0.422	0.184
12...	0917	--	30	0.210	0.098
19...	1012	--	17	0.178	0.056
25...	1219	--	15	0.147	0.085
28...	0905	--	87	0.536	--
28...	1218	--	69	0.654	--
30...	0937	--	42	0.259	0.137
JUN					
01...	1058	--	19	0.305	0.118
08...	1103	--	20	0.292	0.118
15...	1128	--	12	0.195	0.119
22...	1111	--	12	0.249	0.136
29...	1202	--	10	0.210	0.117
JUL					
05...	1325	--	16	0.243	--
06...	1255	--	11	0.225	0.121
13...	1107	--	10	0.175	0.127
20...	1204	--	11	0.180	0.121
20...	1211	--	11	0.208	0.120
26...	1050	--	13	0.228	0.140
26...	1055	--	13	0.241	0.138
AUG					
01...	1030	--	23	0.333	--
03...	1055	--	14	1.55	0.170
10...	1008	--	13	0.299	0.151
24...	1001	--	14	0.345	0.228
28...	1515	--	35	0.287	0.172
29...	1110	--	17	0.301	--
31...	0833	--	17	0.275	0.189
SEP					
06...	1320	--	9.4	0.204	0.174
13...	1421	--	8.6	0.134	0.102
20...	1426	--	11	0.198	0.112
28...	1305	--	7.6	0.121	0.080

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

ROCK RIVER BASIN--CONTINUED

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
		05427933 SPRING CREEK AT NORTH SHORE ROAD NR WESTPORT, WI (LAT 43 07 59N LONG 089 26 16)							
OCT 1994					MAY 1995				
06...	1145	--	0.146	0.087	09...	0937	--	0.380	0.242
12...	1040	5.3	0.297	0.088	09...	1514	--	0.530	0.365
20...	0928	--	0.338	0.089	10...	1346	--	0.680	0.460
26...	1010	4.9	0.120	0.067	12...	0904	--	0.303	0.197
NOV					19...	0923	6.0	0.141	0.071
03...	0926	--	0.116	0.057	25...	1348	--	0.159	0.069
09...	1005	6.5	0.226	0.103	28...	0855	--	0.660	--
22...	1042	--	0.410	--	28...	1214	--	0.765	--
27...	1400	14	0.640	0.104	30...	0927	--	0.277	0.180
28...	1010	21	0.960	0.630	JUN				
DEC					01...	1015	5.6	0.685	0.094
09...	1220	6.7	0.370	--	08...	1037	--	0.506	0.242
JAN 1995					15...	1115	4.2	0.299	0.079
19...	0740	4.5	0.110	0.043	22...	1025	--	0.197	0.122
FEB					29...	1105	3.6	0.604	0.124
22...	0940	5.1	0.290	0.124	JUL				
MAR					05...	1318	--	0.289	--
11...	1105	6.1	0.610	0.312	06...	1200	--	0.219	0.163
11...	1745	18	0.800	0.304	13...	1028	3.4	0.197	0.168
12...	1010	32	1.16	0.570	20...	1009	--	0.157	0.132
12...	1655	--	0.880	0.450	26...	1010	4.6	0.857	0.175
22...	1017	8.8	0.280	0.130	AUG				
28...	1012	--	0.470	0.264	01...	1015	--	0.252	--
APR					03...	1020	--	0.815	0.171
06...	0945	5.4	0.090	0.055	10...	0918	4.0	0.257	0.133
11...	1113	20	0.640	0.360	17...	1030	--	0.540	0.276
12...	0856	--	0.690	0.395	24...	0902	3.6	0.293	0.222
18...	1400	--	0.200	0.104	28...	1523	7.9	0.285	0.191
19...	1055	--	0.420	0.294	29...	1100	--	0.556	--
27...	0956	22	0.480	0.308	31...	0807	--	0.400	0.063
27...	1514	--	0.550	0.362	SEP				
28...	0737	--	0.440	0.320	06...	1240	3.8	0.164	0.150
MAY					13...	1407	--	0.125	0.100
04...	0950	6.1	0.100	0.056	20...	1328	6.5	0.321	0.258
08...	1413	--	0.146	0.052	28...	1250	--	0.104	0.075

05427952 PHEASANT BRANCH AT MOUTH AT MIDDLETON, WI (LAT 43 06 28N LONG 089 29 01W)

OCT 1994					MAY 1995				
06...	1115	--	0.115	0.033	09...	0921	--	0.320	0.193
12...	0920	6.0	0.206	0.024	09...	1602	25	0.390	0.174
20...	0914	--	0.123	0.033	10...	1330	--	0.522	0.248
26...	0820	6.7	0.112	0.019	12...	0856	--	0.173	0.051
NOV					19...	0802	7.9	0.180	0.016
03...	0906	--	0.106	0.021	25...	1304	--	0.136	0.011
09...	0905	9.6	0.243	0.034	28...	0843	--	1.15	--
22...	1030	--	0.320	--	28...	1202	--	0.874	--
27...	1345	--	0.690	0.096	30...	0907	--	0.190	0.079
28...	0855	32	1.09	0.460	JUN				
DEC					01...	0907	7.5	0.143	0.031
09...	0900	7.9	0.170	--	08...	1012	--	0.193	0.079
JAN 1995					15...	1038	5.1	0.137	0.033
19...	1035	6.6	0.140	0.019	22...	0945	--	0.116	0.045
FEB					29...	0927	5.3	0.097	0.047
22...	0920	5.6	0.540	0.320	JUL				
MAR					05...	1305	--	0.220	--
11...	1015	8.5	0.290	0.063	06...	1033	--	0.183	0.084
11...	1700	60	3.09	0.520	13...	0927	5.9	0.090	0.055
12...	0900	22	1.10	0.520	20...	0945	--	0.147	0.094
12...	1805	--	0.470	0.202	26...	0902	11	0.211	0.096
22...	0824	12	0.290	0.093	AUG				
28...	0952	--	0.340	0.158	01...	1010	--	0.160	--
APR					03...	0945	--	0.190	0.076
06...	0753	9.2	0.050	0.017	10...	0802	8.7	0.108	0.053
11...	0938	51	0.640	0.208	17...	1004	--	0.880	0.450
12...	0840	--	0.700	0.296	24...	0744	6.8	0.168	0.061
18...	1335	--	0.210	0.036	28...	1621	--	0.183	0.075
19...	1035	--	0.250	0.137	29...	1040	--	0.266	--
27...	0915	36	0.360	0.170	31...	0753	--	0.166	0.322
27...	1427	--	0.750	0.352	SEP				
28...	0843	--	0.290	0.129	06...	1111	7.1	0.113	0.039
MAY					13...	1346	--	0.097	0.036
04...	0845	8.6	0.090	0.019	20...	1152	5.9	0.139	0.051
08...	1355	--	0.180	0.041	28...	1221	--	0.100	0.026

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

ROCK RIVER BASIN--CONTINUED

05429580 DOOR CREEK NEAR COTTAGE GROVE, WI (LAT 43 02 54N LONG 089 13 54W)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)
APR 1995											
21...	1020	15	663	7.6	6.5	8.7	732	32	140	--	--
JUN 21...	1055	4.0	802	7.8	21.0	8.9	744	20	1300	--	--
JUL 26...	0930	12	480	7.3	19.0	4.4	742	55	--	6000	230
AUG 30...	0935	5.5	796	7.6	18.0	6.4	744	24	4200	--	--
OCT 23...	1000	5.9	816	7.6	7.5	9.4	732	22	--	--	--

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
APR 1995											
21...	--	--	--	--	298	40	26	0.10	--	0.020	3.80
JUN											
21...	--	--	--	--	346	32	32	0.10	--	0.120	5.00
JUL											
26...	51	26	7.6	5.3	183	33	18	0.20	313	0.110	3.30
AUG											
30...	--	--	--	--	341	33	31	0.10	--	0.070	4.10
OCT											
23...	--	--	--	--	355	40	31	0.10	--	0.030	4.40

DATE	NITRO- GEN, AM- MONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ARSENIC TOTAL (UG/L AS AS) (01002)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	CADMIUM 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)
APR 1995										
21...	0.100	0.80	0.070	0.030	0.030	--	--	--	--	--
JUN										
21...	0.150	0.40	0.130	0.040	0.020	--	--	--	--	--
JUL										
26...	0.090	1.2	0.340	0.190	0.200	3	40	<1	2	1
AUG										
30...	0.210	0.80	0.150	0.050	0.060	--	--	--	--	--
OCT										
23...	0.140	0.70	0.060	0.020	0.030	--	--	--	--	--

[illegible]

MISCELLANEOUS WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

ROCK RIVER BASIN--CONTINUED

05430500 ROCK RIVER AT AFTON, WI (LAT 42 36 33N LONG 089 04 14W)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER DISS, REC (UG/L) (46342)	AMETRYN WATER, DISS, REC (UG/L) (38401)
JUN 1995 08...	1100	2180	67	7.6	22.5	0.050	1.00	0.210	0.190	0.050	<0.050	<0.050
DATE	TIME	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DEISO-PROPYL ATRAZIN WATER, DISS, REC (UG/L) (04038)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRO-METRYN, WATER, DISS, REC (UG/L) (04036)	PROP-CHLOR, WATER, DISS, REC (UG/L) (04024)	PROP-AZINE, WATER, DISS, REC (UG/L) (38535)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)
JUN 1995 08...	0.310	0.270	0.130	0.050	0.180	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050

054310158 JACKSON CREEK TRIB #2 AT MARSH RD NR ELKHORN, WI (LAT 42 38 57N LONG 088 33 57W)

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SEDI-MENT, SUS-PENDED (MG/L) (80154)
JAN 1995 16...	1315		0.91	0.680	0.120	1.6	1.00	0.080
APR 12...	1245		3.2	10.0	<0.015	0.50	0.060	13
27...	1125		11	5.50	0.030	0.90	0.220	44
MAY 17...	1245		0.56	8.20	0.020	0.40	<0.010	6

423755088341700 DELAVAN LAKE INLET-BASE SITE-NEAR LAKE LAWN, WI (LAT 42 37 55N LONG 088 34 17W)

DATE	TIME	SAM-PLING DEPTH (FEET) (00003)	TEMPER-ATURE WATER (DEG C) (00010)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT 1994 03...	1200	0.20	13.5	1140	8.9	14.6	0.233	0.200	<10	2
03...	1205	1.20	13.5	1140	8.9	13.6	0.235	0.200	<10	2

GROUND-WATER RECORDS



Figure 6. Location of observation wells in Wisconsin.

GROUND-WATER LEVELS
ADAMS COUNTY

515

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.--Driven observation water-table well, diameter 1 1/4 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 LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 3	13.40	DEC 6	14.14	FEB 20	15.20	APR 25	13.94	JUN 19	14.70	AUG 7	15.12
10	13.24	12	14.14	27	15.68	MAY 1	13.95	21	14.57	14	15.10
17	13.30	JAN 3	14.60	MAR 6	15.75	8	13.94	26	15.07	21	14.60
24	13.45	9	14.76	13	15.80	15	13.70	JUL 3	14.67	28	14.50
31	13.60	17	14.84	20	15.45	22	13.84	10	14.90	SEP 5	14.53
NOV 7	13.84	23	15.00	27	15.30	29	13.50	17	15.19	11	14.70
14	13.85	30	15.10	APR 3	14.83	JUN 5	13.90	24	15.12	18	14.88
22	13.98	FEB 6	15.30	11	14.70	12	14.10	31	15.37	25	14.76
28	13.80	13	15.46	17	14.34						

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, 24.4 ft below land-surface datum, Mar. 24, 1985; lowest water level measured, 32.4 ft below land-surface datum, Apr. 1, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	26.42	NOV 6	27.10	JAN 5	27.60	MAR 14	28.06	JUL 13	28.30	AUG 20	28.30
15	26.66	15	26.56	MAR 13	28.10	MAY 9	27.90				

GROUND-WATER LEVELS
BARRON COUNTY

451514091582101. Local number, BR-33/13W/21-0046.

LOCATION.--Lat 45°15'14", long 91°58'21", Hydrologic Unit 07050007. Owner: Edward Thuftin.

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 4 in., depth 65 ft.

INSTRUMENTATION.--Water level measured monthly by observer.

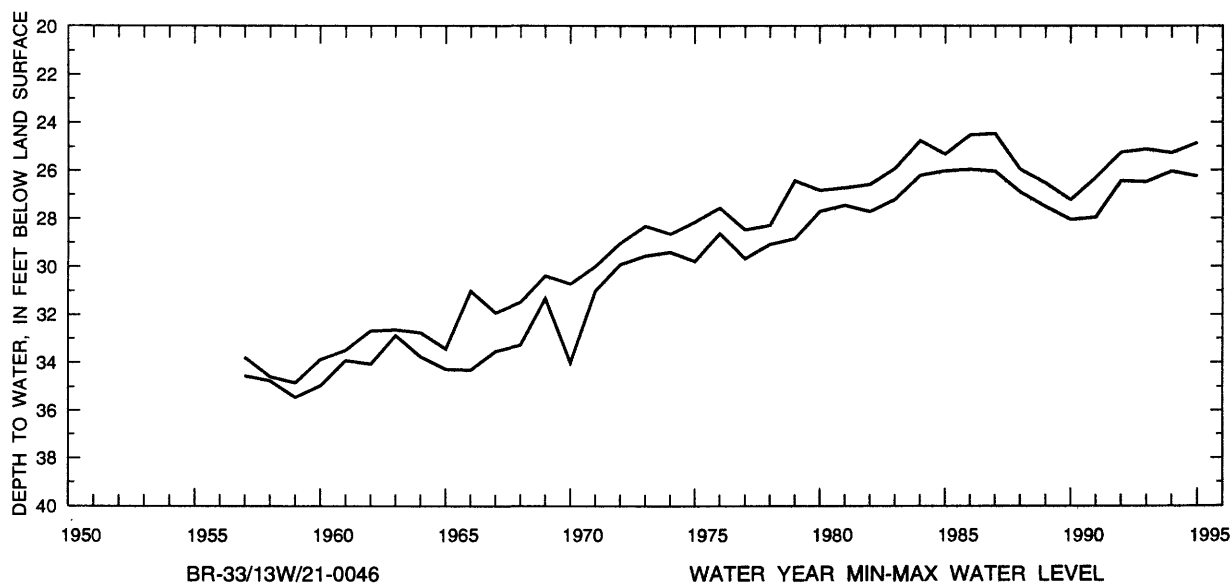
DATUM.--Elevation of land-surface datum is 1,115 ft above sea level. Measuring point: top of casing, 2.00 ft above land-surface datum.

PERIOD OF RECORD.--October 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.47 ft below land-surface datum, Nov. 5, 1986; lowest water level measured, 35.45 ft below land-surface datum, May 13, 1959.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	25.80	JAN 12	25.88	MAR 23	26.26	MAY 8	25.85	JUN 29	25.65	AUG 11	25.13
NOV 16	25.84	FEB 23	26.22	APR 26	26.02	MAY 25	25.82	JUL 27	25.17	SEP 14	24.86
DEC 29	26.02										



GROUND-WATER LEVELS
BROWN COUNTY

517

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 LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 13	117.50	MAR 10	117.00	MAY 5	117.93	JUL 7	119.65	AUG 16	137.15	SEP 22	137.20
FEB 2	117.50	APR 12	117.40	JUN 6	120.00						

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 1/2-46 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 LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 7	32.93	DEC 9	33.08	FEB 10	33.18	APR 14	33.14	JUN 16	32.93	AUG 11	32.79
14	33.12	16	33.11	17	33.18	21	33.21	23	32.88	18	32.83
21	33.06	23	33.12	24	33.17	28	33.31	30	32.87	25	32.81
28	32.98	30	33.14	MAR 3	33.18	MAY 5	33.20	JUL 7	32.89	SEP 1	32.81
NOV 4	33.08	JAN 6	32.98	10	33.16	12	33.24	14	32.82	8	32.83
11	33.11	13	33.06	17	33.09	19	33.00	21	32.81	15	32.81
18	32.89	20	33.14	24	33.25	26	33.10	28	32.78	22	32.76
28	33.03	27	33.14	31	33.29	JUN 2	32.98	AUG 4	32.82	29	32.72
DEC 2	33.06	FEB 3	33.16	APR 7	33.24	9	33.00				

GROUND-WATER LEVELS
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: 1/4-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 LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 3	29.37	NOV 7	29.17	DEC 13	29.38	JAN 23	29.80	FEB 27	30.03	JUN 16	30.19
9	29.37	15	29.68	19	29.47	28	29.89	MAR 15	30.25	JUL 13	30.05
16	29.06	21	28.81	27	29.31	FEB 5	30.01	APR 11	29.95	AUG 14	30.19
24	29.32	29	29.63	JAN 2	29.55	13	30.05	MAY 14	30.03	SEP 15	30.25
NOV 1	29.22	DEC 5	29.62	17	29.40	21	30.11	24	30.57		

CLARK COUNTY

444525090443201. Local number, CK-26/03W/04-0001.

LOCATION.--Lat 44°45'25", long 90°44'32", Hydrologic Unit 07050006. Owner: Wis. Dept. of Natural Resources.

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled domestic artesian well, diameter 6 in., depth 150 ft cased to 53 ft, open end.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--Elevation of land-surface datum is 1,210 ft above sea level. Measuring point: hole in pump base, at land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 50.00 ft below land-surface datum Apr. 28, 1987; lowest water level measured, 70.64 ft below land-surface datum, Sept. 17, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 2	54.09	DEC 21	54.94	FEB 23	55.61	APR 12	55.59	JUN 8	55.82	AUG 4	56.30

GROUND-WATER LEVELS
DANE COUNTY

519

430429089230301. Local number, DN-07/09E/23-0005.

LOCATION.--Lat 43°04'29", long 89°23'03", Hydrologic Unit 07090001. Owner: State of Wisconsin.

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in., depth 346 ft, cased to 265 ft, open end.

INSTRUMENTATION.--Water level measured weekly by observer.

DATUM.--Elevation of land-surface datum is 930 ft above sea level. Measuring point: hole in pump base, 3.50 ft below land-surface datum.

REMARKS.--Water level affected by pumping of nearby wells.

PERIOD OF RECORD.--July 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 83.55 ft below land-surface datum, Dec. 25, 1960 lowest water level measured, 125.80 ft below land-surface datum, Aug. 1, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 3	111.46	DEC 12	120.79	FEB 13	111.46	APR 17	99.81	JUN 12	110.00	AUG 7	113.80
10	120.95	27	105.05	20	112.30	24	104.51	19	117.85	14	113.73
17	115.35	JAN 3	108.68	27	112.69	MAY 1	109.10	26	114.62	21	118.62
24	112.00	9	107.21	MAR 6	110.39	8	108.61	JUL 3	105.38	28	111.47
31	111.10	17	115.04	20	108.33	15	104.58	10	105.36	SEP 5	118.60
NOV 7	108.00	23	111.62	27	109.59	22	108.32	17	114.60	11	116.73
14	111.63	30	114.49	APR 3	106.73	30	106.05	24	113.66	18	121.97
28	108.56	FEB 6	109.49	10	108.22	JUN 5	109.44	31	116.33	25	118.47
DEC 5	116.42										

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, 19.63 ft below land-surface datum, Mar. 23, 1986; lowest water level measured, 32.76 ft below land-surface datum, June 30, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
LOWEST VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.17	26.65	24.87	24.35	24.37	24.32	23.54	25.92	25.79	26.23		
10	26.18	26.89	24.60	24.36	24.37	24.41	23.41	25.92	25.81	26.29		
15	26.36	26.61	24.60	24.27	24.46	24.09	24.32	25.64	26.10	28.37		
20	27.07	26.13	24.52	24.21	24.39	23.87	24.49	25.71	26.84	27.27		
25	26.83	26.22	24.48	24.27	24.36	23.86	24.67	25.70	26.86	28.30		
EOM	26.56	26.43	24.39	24.31	24.41	23.61	24.01	25.68	26.53	28.43		
WTR YEAR 1995	MAX	28.64	JUL 14	MIN	23.33	APR 12						

GROUND-WATER LEVELS
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 domestic artesian well, diameter 6 in., depth 125 ft, cased to 57 ft, open end.

INSTRUMENTATION.--Water level measured monthly by observer.

DATUM.--Elevation of land-surface datum is 880 ft above sea level. Measuring point: 1/4-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 LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	21.11	FEB 7	21.69	MAY 12	18.12	JUL 11	20.17	AUG 17	18.91	SEP 28	19.77
DEC 12	21.36	MAR 8	21.25	JUN 7	18.74	AUG 3	20.76	SEP 7	18.98		

DOOR COUNTY

455757087151701. Local number, DR-29/27E/30-0007.

LOCATION.--Lat 44°57'57", long 87°15'17", Hydrologic Unit 04030102. Owner: Fred Peterson.

AQUIFER.--Silurian dolomite.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 4 in., depth 84 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--Elevation of land-surface datum is 725 ft above sea level. Measuring point: hole in pump base, 1.00 ft above land-surface datum.

REMARKS.--Revised latitude and longitude effective 1994 water year.

PERIOD OF RECORD.--July 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.00 ft below land-surface datum, Mar. 22, 1979; lowest water level measured, 56.12 ft below land-surface datum, Feb. 21, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 15	46.34	DEC 23	46.70	MAR 3	46.26	APR 12	34.95	JUN 9	46.11	AUG 3	46.33

GROUND-WATER LEVELS
DOOR COUNTY

521

445055087213801. Local number, DR-27/26E/05-0265

LOCATION.--Lat 44°50'55", long 87°21'38", Hydrologic Unit 04030102. Owner: U.S. Geol. Survey.

AQUIFER.--Silurian dolomite.

WELL CHARACTERISTICS.--Drilled observation, diameter 6 in., depth 442 ft, cased to 170 ft, open end.

INSTRUMENTATION.--Continuous water-level recorder.

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 LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
LOWEST VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	22.13	26.26	24.66	27.81	29.39	31.16	13.53	11.60	12.57		28.39	
10	23.23	26.42	24.63	28.13	29.61	31.69	14.99	11.55	13.55		30.24	
15	23.76	26.91	26.02	28.04	30.36	16.38	15.68	8.63	15.32		24.14	
20	24.30	26.47	26.24	28.14	31.17	15.76	11.15	9.12	18.22			
25	24.95	26.38	25.97	28.62	30.86	11.31	9.98	9.89				
EOM	25.96	24.76	26.87	29.15	30.85	12.36	9.83	10.90				
WTR YEAR 1995 MAX			31.76	MAR 4	MIN	7.59	MAY 16					

DOUGLAS COUNTY

463217091342801. Local number, DS-47/10W/23-0001.

LOCATION.--Lat 46°32'17", long 91°34'28", Hydrologic Unit 04010301. Owner: Wis. Dept. of Natural Resources.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 8 in., depth 40 ft, cased to 40 ft perforated 37-40 ft.

INSTRUMENTATION.--Water level measured by observer.

DATUM.--Elevation of land-surface datum is 980 ft above sea level. Measuring point: pointer on float gage, 4.33 ft above land-surface datum.

PERIOD OF RECORD.--June 1937 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.81 ft above land-surface datum, Apr. 28, 1978; lowest water level measured, 29.59 ft below land-surface datum, July 29, 1939.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 18	11.57	JAN 19	10.76	FEB 27	12.41	APR 24	10.22	JUL 17	4.24	AUG 21	5.87

GROUND-WATER LEVELS
FLORENCE COUNTY

454622088324802. Local number, FC-38/15E/18-0093.

LOCATION.--Lat 45°46'22", long 88°32'48", Hydrologic Unit 04030108. Owner: U.S. Forest Service.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Augered water-table observation well, diameter 3 in.

DATUM.--Datum of gage is approximately 1,400 ft above sea level.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum observed water level, 65.57 ft, June 20, 1993; minimum observed water level, 62.04 ft, Mar. 10-11, 1990.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64.26	64.22	64.12	63.96	63.79	63.67	63.83	63.99	64.24	64.18	63.91	63.91
2	64.25	64.22	64.11	63.95	63.78	63.66	63.83	63.99	64.23	64.16	63.91	63.89
3	64.23	64.20	64.11	63.93	63.78	63.66	63.83	63.98	64.21	64.14	63.90	63.87
4	64.22	64.20	64.10	63.92	63.78	63.65	63.81	63.98	64.20	64.13	63.94	63.86
5	64.23	64.19	64.11	63.91	63.77	63.65	63.81	63.98	64.20	64.12	64.05	63.85
6	64.22	64.18	64.10	63.90	63.77	63.64	63.81	63.97	64.19	64.12	64.01	63.84
7	64.22	64.17	64.09	63.89	63.77	63.64	63.79	63.97	64.17	64.11	63.98	63.85
8	64.21	64.17	64.07	63.88	63.76	63.64	63.79	63.97	64.16	64.09	63.97	63.85
9	64.20	64.15	64.07	63.86	63.76	63.64	63.79	64.08	64.14	64.09	63.97	63.84
10	64.18	64.14	64.07	63.85	63.76	63.64	63.78	64.11	64.15	64.07	63.95	63.83
11	64.18	64.14	64.06	63.85	63.75	63.64	63.81	64.10	64.17	64.05	63.93	63.82
12	64.17	64.14	64.05	63.85	63.74	63.67	63.93	64.09	64.16	64.04	63.93	63.81
13	64.16	64.15	64.04	63.85	63.74	63.75	63.89	64.09	64.14	64.04	64.07	63.80
14	64.15	64.15	64.03	63.85	63.73	63.86	63.87	64.12	64.12	64.03	64.10	63.78
15	64.15	64.13	64.03	63.85	63.73	63.93	63.86	64.12	64.11	64.10	64.07	63.77
16	64.15	64.13	64.03	63.85	63.72	63.90	63.86	64.14	64.10	64.14	64.03	63.81
17	64.21	64.13	64.04	63.85	63.71	63.85	63.86	64.16	64.08	64.15	64.03	63.82
18	64.31	64.14	64.03	63.84	63.71	63.82	63.93	64.15	64.07	64.13	64.02	63.80
19	64.29	64.11	64.03	63.84	63.70	63.82	64.02	64.14	64.06	64.11	64.00	63.78
20	64.27	64.12	64.02	63.83	63.71	63.91	64.02	64.15	64.04	64.10	63.98	63.81
21	64.25	64.18	64.01	63.83	63.70	63.93	64.02	64.13	64.14	64.08	63.95	63.80
22	64.26	64.17	64.00	63.83	63.70	63.90	64.01	64.13	64.24	64.06	63.92	63.80
23	64.30	64.15	64.00	63.83	63.70	63.89	64.01	64.17	64.21	64.04	63.91	63.79
24	64.29	64.15	64.00	63.82	63.69	63.88	64.02	64.17	64.18	64.02	63.89	63.78
25	64.27	64.13	63.99	63.82	63.69	63.87	64.01	64.16	64.14	63.99	63.90	63.78
26	64.25	64.11	63.99	63.82	63.69	63.86	64.01	64.15	64.13	63.97	63.98	63.78
27	64.25	64.13	63.99	63.81	63.68	63.86	64.02	64.15	64.11	63.96	64.01	63.76
28	64.25	64.15	63.98	63.81	63.67	63.86	64.02	64.21	64.15	63.94	63.99	63.75
29	64.24	64.11	63.97	63.80	---	63.85	64.01	64.28	64.22	63.92	63.97	63.75
30	64.23	64.11	63.96	63.80	---	63.85	64.00	64.27	64.20	63.89	63.96	63.74
31	64.22	---	63.96	63.80	---	63.84	---	64.25	---	63.88	63.94	---
MEAN	64.23	64.15	64.04	63.85	63.73	63.78	63.91	64.11	64.16	64.06	63.97	63.81
MAX	64.31	64.22	64.12	63.96	63.79	63.93	64.02	64.28	64.24	64.18	64.10	63.91
MIN	64.15	64.11	63.96	63.80	63.67	63.64	63.78	63.97	64.04	63.88	63.89	63.74

GROUND-WATER LEVELS
FOREST COUNTY

523

460156088474901. Local number, FR-41/14E/18-0002.

LOCATION.--Lat 46°01'56", long 88°47'49", Hydrologic Unit 04030106. Owner: Wis. Dept. of Transportation.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Driven observation water-table well, diameter 1 1/4 in., depth 18 ft, cased to 15 ft, well point 15-18 ft.

INSTRUMENTATION.--Water level measured monthly by observer.

DATUM.--Elevation of land-surface datum is 1,552 ft above sea level. Measuring point: top of casing, 1.70 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.96 ft below land-surface datum, Apr. 29, 1954; lowest water level measured, 12.50 ft below land-surface datum, Dec. 24, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	11.22	JAN 9	11.46	APR 25	11.10	AUG 7	11.39	SEP 7	11.23	SEP 28	11.49
NOV 30	11.42	MAR 7	10.93	JUN 12	11.04						

GRANT COUNTY

425551090391301. Local number, GR-05/02W/06-0005.

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.

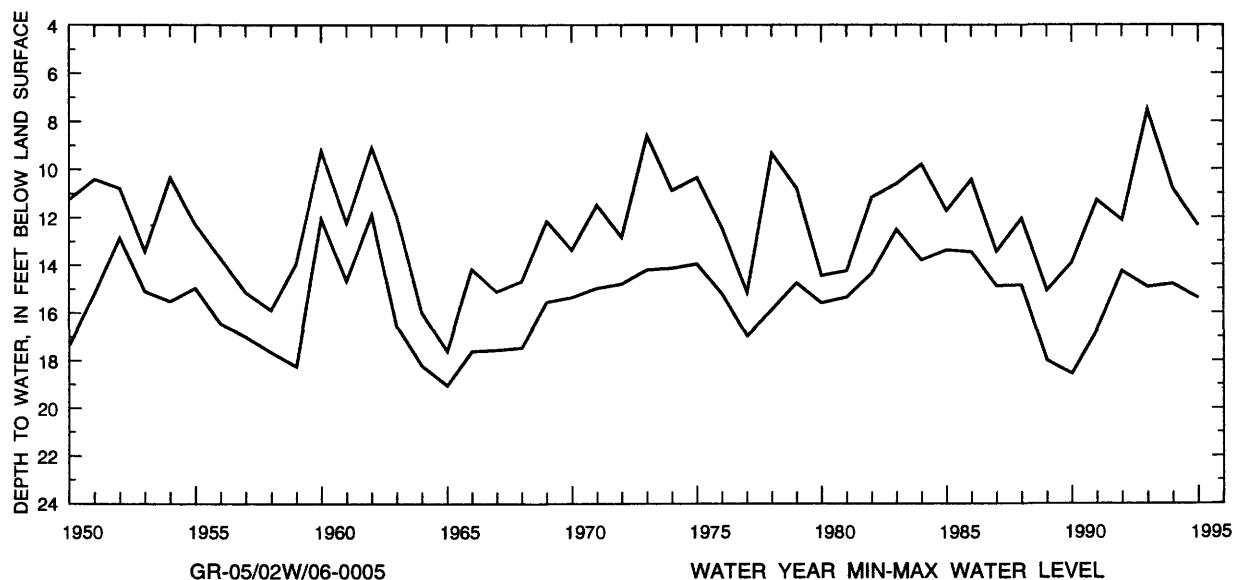
DATUM.--Elevation of land-surface datum is 980 ft above sea level. Measuring point: edge of pump base, 0.50 ft above land-surface datum.

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 LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 17	15.06	DEC 22	15.26	FEB 24	15.02	APR 26	12.80	JUN 16	12.70	SEP 6	14.67
NOV 7	15.15	JAN 20	15.40	MAR 13	14.25	MAY 26	12.35	AUG 7	13.87		



GROUND-WATER LEVELS
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, 119.68 ft below land-surface datum, Feb. 22, 1994; lowest water level measured, 143.94 ft below land-surface datum, Feb. 18, 1960.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	126.55	DEC 21	125.86	FEB 22	127.20	APR 5	127.95	JUN 27	127.43	AUG 22	127.23
DEC 9	127.15	JAN 11	127.15	MAR 15	127.79	MAY 30	125.32	JUL 25	127.20	SEP 12	126.96

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 monthly by observer.

DATUM.--Elevation of land-surface datum is 1,200 ft above sea level. Measuring point: 1/4-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 LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 17	55.68	DEC 21	57.84	FEB 23	58.20	APR 12	57.22	JUN 27	51.66	AUG 22	55.90
NOV 28	56.30	JAN 11	58.12	MAR 15	57.79	MAY 31	50.34	JUL 24	54.40	SEP 13	56.07

**GROUND-WATER LEVELS
JACKSON COUNTY**

525

441051090470901. Local number, JA-20/03W/30-0005.

LOCATION.--Lat 44°10'51", long 90°47'09", Hydrologic Unit 07040007. Owner: Robert Foulker.

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in., depth 190 ft, cased to 54 ft, open end.

INSTRUMENTATION.--Water level measured monthly by observer.

DATUM.--Elevation of land-surface datum is 845 ft above sea level. Measuring point: hole in pump base, at land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.70 ft below land-surface datum, June 30, 1993; lowest water level measured, 22.60 ft below land-surface datum, Dec. 19, 1958.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	19.08	DEC 22	19.52	FEB 28	20.29	APR 19	19.94	JUN 14	19.05	SEP 14	18.32
NOV 9	19.20	JAN 11	19.75	MAR 22	20.29	MAY 3	19.64	AUG 1	19.56		

JUNEAU COUNTY

435515090152901. Local number, JU-17/02E/28-0098.

LOCATION.--Lat 43°55'15", long 90°15'29", Hydrologic Unit 07070003. Owner: Wis. Dept. of Transportation.

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled domestic water-table well, diameter 6 in., depth 71 ft, cased to 42 ft, open end.

INSTRUMENTATION.--Water level measured monthly by observer.

DATUM.--Elevation of land-surface datum is 930 ft above sea level. Measuring point: 1/4-in. hole in pump base, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--July 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.86 ft below land-surface datum, May 24, 1973; lowest water level measured, 13.90 ft below land-surface datum, Jan. 10, 1979.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	10.82	DEC 19	11.15	FEB 24	11.77	APR 19	11.11	JUN 14	11.50	SEP 14	12.35
NOV 9	11.11	JAN 11	11.40	MAR 22	11.41	MAY 3	11.26	AUG 1	12.19		

GROUND-WATER LEVELS KENOSHA COUNTY

423055088020301. Local number, KE-01/21E/29-0288.

LOCATION.--Lat 42°30'55", long 88°02'03", Hydrologic Unit 07120004. Owner: Joe Thomison.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 232 ft, cased to 226 ft, open end.

INSTRUMENTATION.--Water level measured by observer.

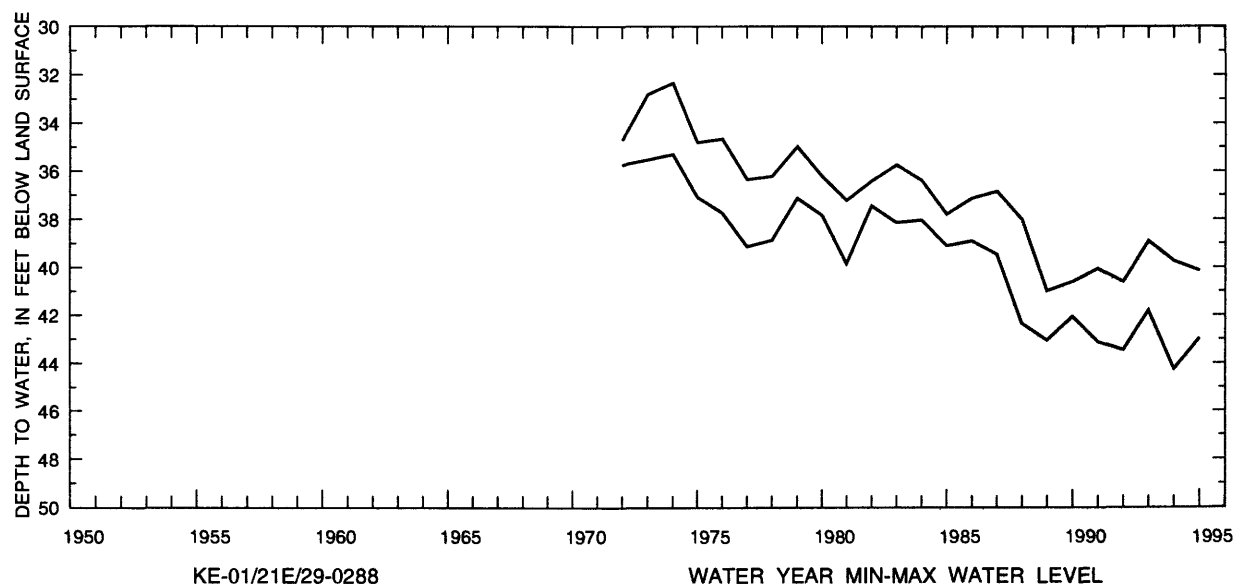
DATUM.--Elevation of land-surface datum is 767 ft above sea level. Measuring point: top of casing, 2.00 ft above land-surface datum.

PERIOD OF RECORD.--February 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.33 ft below land-surface datum, June 11, 1974; lowest water level measured, 44.25 ft below land-surface datum, Aug. 12, 1994.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	41.96	DEC 8	41.41	MAR 2	41.01	MAY 31	40.15	JUL 25	42.97	SEP 14	42.52
NOV 25	41.59	JAN 18	41.16	APR 13	40.41						



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, 18.29 ft below land-surface datum, July 18, 1993; lowest water level, 130.99 ft below land-surface datum, Nov. 6, 1959.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995 LOWEST VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	33.78	34.13	34.32	33.95	34.10	34.13	34.74	30.30	25.39	25.88	27.72	29.63
10		34.78	34.24	33.71	33.81	34.41	34.70		24.81	26.38	27.97	30.05
15	33.95	34.97	34.18	33.51	34.26	34.52	34.06		24.99	26.76	28.35	30.25
20	33.87	34.84	34.12	33.40	34.02	33.97	33.20		25.07	26.96	28.69	30.55
25	34.18	34.92	34.11	33.91	34.00	34.71	32.14	27.47	25.20	27.21	28.84	30.53
EOM	34.16	34.73	33.88	33.54	34.40	34.61	31.26	26.49	25.80	27.64	29.23	30.54
WTR YEAR 1995	MAX	35.13	NOV 22	MIN	24.79	JUN 7						

GROUND-WATER LEVELS
LAFAYETTE COUNTY

527

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 LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	27.07	DEC 21	28.38	FEB 20	28.83	APR 7	28.91	JUN 27	26.26	AUG 22	26.35
NOV 28	28.78	JAN 9	28.64	MAR 15	28.83	MAY 31	27.03	JUL 26	26.32	SEP 13	26.40

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 LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 1	14.10	DEC 18	14.40	FEB 10	14.91	APR 7	14.44	JUN 12	14.25	AUG 8	14.38
6	14.01	25	14.46	15	14.99	24	14.50	19	14.33	14	14.06
7	14.15	JAN 3	14.34	20	15.03	MAY 2	14.32	26	14.46	29	13.29
14	14.19	9	14.55	MAR 7	15.11	9	14.31	JUL 4	14.42	SEP 5	13.33
21	14.33	16	14.51	14	15.05	16	14.26	11	14.35	7	13.14
28	14.30	23	14.66	22	14.91	23	14.28	18	14.36	18	13.22
DEC 4	14.20	31	14.75	28	14.44	JUN 5	14.23	31	14.42	26	13.33
11	14.26	FEB 5	14.84								

GROUND-WATER LEVELS LINCOLN COUNTY

452318089402501. Local number, LN-34/06E/36-0060.

LOCATION.--Lat 45°23'18", long 89°40'25", Hydrologic Unit 07070002. Owner: U.S. Geol. Survey.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Driven observation water-table well, diameter 1 1/4 in., depth 22 ft, cased to 20 ft, well point 20-22 ft.

INSTRUMENTATION.--Water level measured monthly by observer.

DATUM.--Elevation of land-surface datum is 1,435 ft above sea level. Measuring point: top of pipe, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--July 1955 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.03 ft below land-surface datum, May 7, 1952; lowest water level measured, 9.89 ft below land-surface datum, Aug. 3, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 1	7.17	FEB 21	9.02	MAY 5	8.14	JUN 6	8.15	AUG 1	9.40	SEP 6	7.52
DEC 14	8.48										

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.

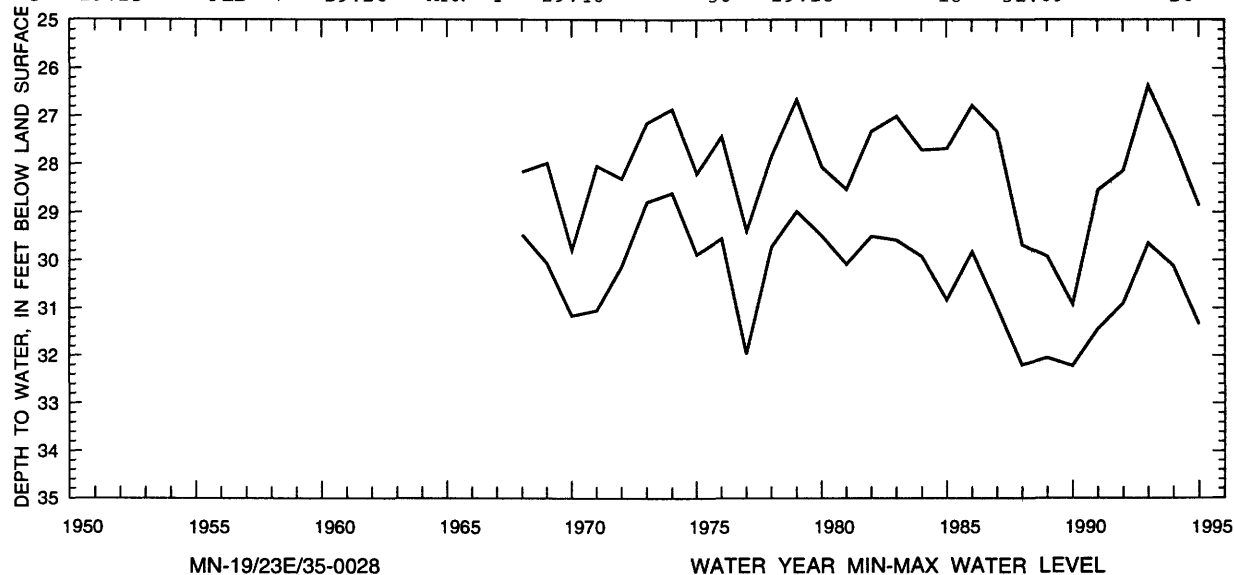
DATUM.--Elevation of land-surface datum is 670 ft above sea level. Measuring point: 1/4-in. hole in pump base, 1.00 ft above land-surface datum.

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 LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	29.15	DEC 13	29.30	FEB 14	29.48	APR 11	29.29	JUN 6	29.59	JUL 25	30.43
18	29.18	20	29.24	21	29.55	18	29.16	8	29.74	26	31.03
25	29.34	23	29.38	28	29.61	25	29.42	13	30.14	AUG 15	30.00
31	29.45	27	29.26	MAR 2	29.65	MAY 2	29.24	20	31.34	22	30.02
NOV 10	29.52	JAN 3	29.28	7	29.90	4	29.18	27	31.09	29	29.97
16	29.46	16	29.30	14	29.65	10	28.87	JUL 1	30.49	SEP 5	30.16
23	29.32	24	29.21	21	29.65	17	29.02	3	31.00	12	30.28
29	29.30	31	29.18	28	29.32	23	29.33	11	30.64	19	30.30
DEC 5	29.23	FEB 7	29.26	APR 4	29.40	30	29.18	18	31.09	26	29.92



GROUND-WATER LEVELS
MARATHON COUNTY

529

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 1/4 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 LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 2	15.07	DEC 4	16.06	FEB 12	17.00	APR 16	17.77	JUN 25	18.59	AUG 14	19.12
9	15.25	11	16.17	19	17.19	23	17.79	JUL 2	18.70	21	19.14
16	15.31	25	16.38	26	17.20	30	18.01	9	18.78	27	19.52
23	15.43	JAN 1	16.45	MAR 5	17.42	MAY 14	18.07	16	18.88	SEP 3	19.59
30	15.55	3	16.54	12	17.49	21	18.17	23	18.92	5	19.13
NOV 6	14.63	15	16.66	19	17.31	28	18.29	30	19.00	10	19.17
13	15.63	22	16.77	26	17.50	JUN 4	18.40	AUG 6	19.08	17	19.25
20	15.80	29	16.88	APR 2	17.59	11	18.44	13	19.15	24	19.26
27	15.84	FEB 5	16.99	9	17.68	18	18.52				

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.

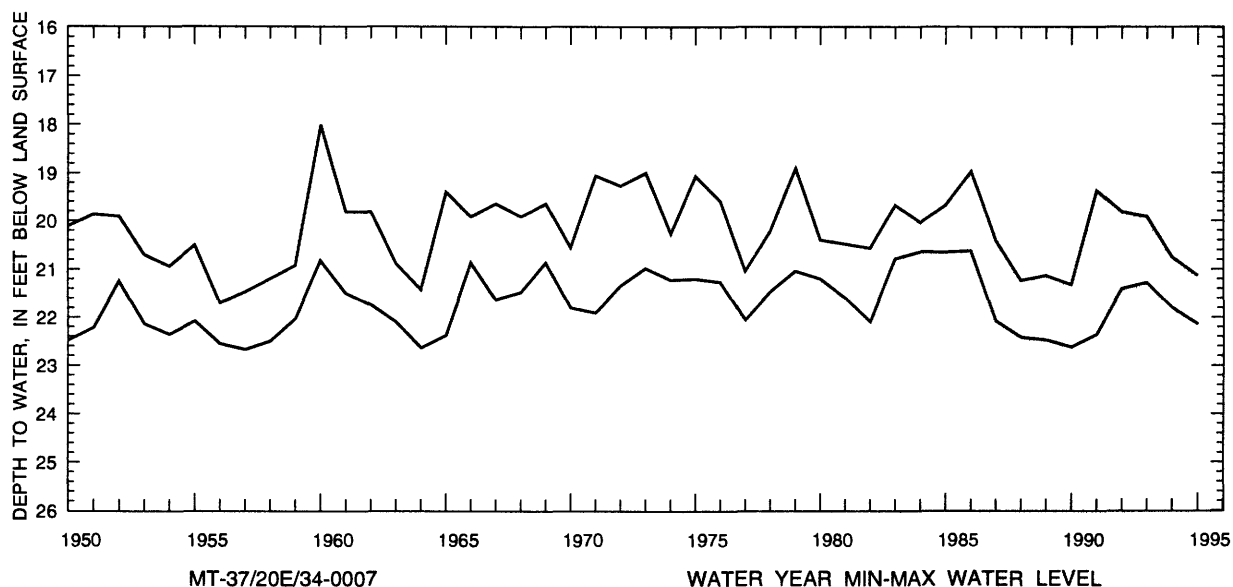
DATUM.--Elevation of land-surface datum is 980 ft above sea level. Measuring point: pointer on float gage, 4.00 ft above land-surface datum.

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 LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	21.40	DEC 20	21.76	FEB 16	22.07	APR 18	21.61	JUN 27	21.39	AUG 22	21.45
11	21.51	28	21.80	21	22.09	25	21.64	JUL 3	21.44	30	21.55
18	21.50	JAN 3	21.84	28	22.12	MAY 2	21.42	12	21.54	SEP 5	21.63
26	21.56	10	21.88	MAR 7	22.15	16	21.32	25	21.45	7	21.66
NOV 1	21.41	17	21.90	14	22.15	23	21.21	AUG 1	21.61	13	21.73
7	21.50	24	21.93	21	21.75	30	21.18	8	21.65	19	21.76
15	21.54	31	21.97	APR 4	21.63	JUN 6	21.13	15	21.56	26	21.79
22	21.66	FEB 7	21.99	11	21.69	20	21.27				



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 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, 18.21 ft below land-surface datum, Feb. 18, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 16	14.82	FEB 7	15.40	MAY 3	15.05	MAY 25	14.92	JUN 21	14.79	AUG 14	15.06
JAN 9	14.91	MAR 11	15.26								

433956089275601. Local number, MO-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 monthly by observer.

DATUM.--Elevation of land-surface datum is 800 ft above sea level. Measuring point: 1/4-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 LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

[illegible]

GROUND-WATER LEVELS
MILWAUKEE COUNTY

531

425819087551201. Local number, ML-06/22E/20-0085.

LOCATION.--Lat 42°58'19", long 87°55'12", Hydrologic Unit 04040003. Owner: City of Milwaukee.

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 16 in., depth 1,834 ft, cased to 705 ft, open end.

INSTRUMENTATION.--Continuous water-level recorder.

DATUM.--Elevation of land-surface datum is 705 ft above sea level. Measuring point: hole in cover on casing, 6.00 ft below land-surface datum.

PERIOD OF RECORD.--Water years 1938, 1944, 1946, 1950, 1952, 1961, 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 110.00 ft below land-surface datum, 1938; lowest water level, 342.30 ft below land-surface datum, Mar. 27, 1992.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
LOWEST VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	335.51	336.07	335.69	335.49	335.68	335.51	335.27	333.68	334.07	333.48	330.00	327.21
10	335.67	336.23	335.69	335.32	335.49	335.37	334.80	333.94	334.02	332.82	329.58	
15	335.82	336.07	335.76	335.05	335.81	335.30	334.60	333.74	333.72	332.45	329.15	
20	335.84	335.92	335.62	334.71		335.93		333.70	333.80	331.98	328.60	
25	336.11	335.72	335.55	335.32	335.38	335.15	334.41	333.40	334.02	331.47	328.05	
EOM	336.21	335.81	335.52	335.26	335.27	335.19	333.90	333.72	334.02	330.47	327.84	
WTR YEAR 1995 MAX 336.32 NOV 7 MIN 327.00 SEP 9												

430412087545801. Local number, ML-07/22E/17-0120.

LOCATION.--Lat 43°04'12", long 87°54'58", Hydrologic Unit 04040003. Owner: Nunn-Bush Shoe Co.

AQUIFER.--Silurian dolomite.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in., depth 400 ft, cased to 215 ft, open end.

INSTRUMENTATION.--Water level measured monthly by observer.

DATUM.--Elevation of land-surface datum is 685 ft above sea level. Measuring point: top of concrete, 8.75 ft below land-surface datum.

REMARKS.--Water level affected by pumping of nearby wells.

PERIOD OF RECORD.--April 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 54.99 ft below land-surface datum, Apr. 28, 1986; lowest water level, 144.20 ft below land-surface datum, Aug. 29, 1991

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	115.25	JAN 11	114.02	MAR 28	113.45	MAY 10	112.40	JUL 13	112.28	SEP 19	112.04
NOV 30	115.00	MAR 2	113.86								

GROUND-WATER LEVELS
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.

INSTRUMENTTION.--Water level measured monthly by observer.

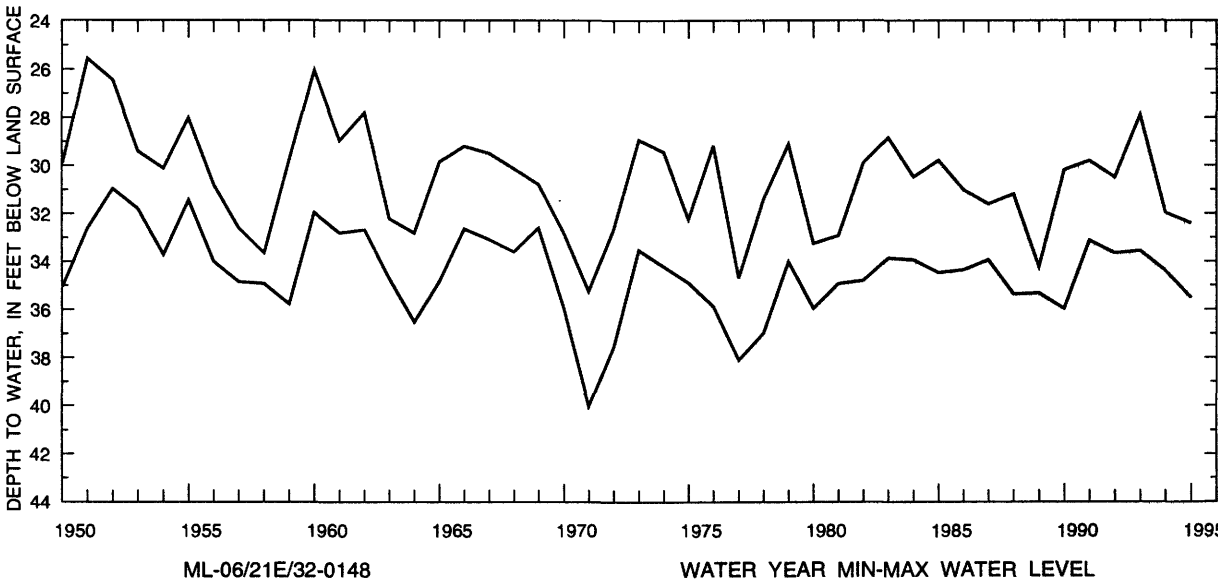
DATUM.--Elevation of land-surface datum is 774 ft above sea level. Measuring point: top of 1/4-in. pipe, at land-surface datum.

PERIOD OF RECORD.--September 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.56 ft below land-surface datum, Mar. 4, 1951; lowest water level measured, 40.03 ft below land-surface datum, Aug. 13, 1971.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	34.28	NOV 15	34.83	JAN 16	35.35	MAR 15	35.37	JUN 5	32.40	AUG 24	33.31
16	34.28	DEC 28	35.21	FEB 16	35.52	MAY 1	33.23	JUL 18	33.62		



GROUND-WATER LEVELS
MONROE COUNTY

533

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 LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
LOWEST VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		6.60	6.62	6.83	6.86	6.91	6.63	6.64	6.53	6.44	6.60	7.01
10		6.69	6.64	6.85	6.84	6.90	6.71	6.62	6.29	6.51	6.91	7.04
15		6.71	6.68	6.74	6.97	6.41	6.32	6.55	6.35	6.53	6.94	7.07
20		6.72	6.65	6.76	6.80	6.57	6.19	6.40	6.37	6.53	6.95	7.05
25		6.53	6.69	6.81	6.88	6.59	6.42	6.55	6.39	6.56	6.97	7.07
EOM	6.58	6.65	6.75		6.91	6.40	6.58	6.40	6.41	6.60	6.99	7.04
WTR YEAR 1995 MAX			7.08	SEP 17	MIN	6.08	MAR 13					

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 LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
LOWEST VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.28	5.68	6.10	6.47	5.18	5.65	5.41	5.04	5.29	3.00	3.28	2.46
10	5.30	5.78	6.14	6.52	5.12	5.78	5.39	5.08	5.39	3.02	3.20	2.56
15	5.47	5.88	6.22	6.59	5.18	5.65	5.38	5.15	5.55	3.11	3.06	2.78
20	5.46	5.94	6.24	6.66	5.15	5.77	5.36	5.22		3.13	2.34	2.79
25	5.45	5.94	6.29	6.22	5.37	5.73	5.16	5.34	3.39	3.26	1.99	2.79
EOM	5.58	5.99	6.38		5.52	5.56	5.06	5.35	3.15	3.26	2.15	2.85
WTR YEAR 1995 MAX			6.71	JAN 23	MIN	1.97	AUG 23					

GROUND-WATER LEVELS
OCONTO COUNTY

445054088025201. Local number, OC-27/20E/03-0020.

LOCATION.--Lat 44°50'54", long 88°02'52", Hydrologic Unit 04030104. Owner: Wis. Dept. of Transportation.

AQUIFER.--Prairie du Chien.

WELL CHARACTERISTICS.--Drilled domestic water-table well, diameter 6 in., depth 100 ft, cased to 88 ft, open end.

INSTRUMENTATION.--Water level measured monthly by observer.

DATUM.--Elevation of land-surface datum is 640 ft above sea level. Measuring point: 1/4-in. hole in pump base, 2.00 ft above land-surface datum.

PERIOD OF RECORD.--February 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.07 ft below land-surface datum, June 20, 1969; lowest water level measured, 13.52 ft below land-surface datum, Aug. 27, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 8	10.74	FEB 23	10.77	MAR 29	10.61	APR 12	10.35	JUN 7	10.59	AUG 2	11.07
DEC 21	10.75										

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.--Continuous water-level recorder.

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 28, 1973; lowest water level, 22.02 ft below land-surface datum, Jan. 20, 1993.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
LOWEST VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.16	16.01	15.92	16.05	16.39	16.65	16.84	16.70	15.99	15.82	16.05	15.97
10	16.19	16.00	15.93	16.12	16.43	16.71	16.82	16.63	15.95	15.84		16.01
15	16.17	15.95	15.95	16.17	16.49	16.76	16.78	16.52	15.88	15.88		16.03
20	16.09	15.94	15.98	16.20	16.50	16.77	16.77	16.40	15.86	15.85		16.08
25	16.05	15.90	16.00	16.26	16.59	16.83	16.77	16.29	15.85	15.88	15.99	16.05
EOM	16.03	15.92	16.03	16.30	16.62	16.83	16.76	16.10	15.84	15.99	15.97	16.08
WTR YEAR 1995	MAX	16.85	APR 3	MIN	15.81	JUL 4						

GROUND-WATER LEVELS
ONEIDA COUNTY

535

454026089425301. Local number, ON-37/06E/27-0023.

LOCATION.--Lat 45°40'26", long 89°42'53", Hydrologic Unit 07070001. Owner: U.S. Geol. Survey.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Driven observation water-table well, diameter 1 1/4 in., depth 37 ft, cased to 35 ft, well point 35-37 ft.

INSTRUMENTATION.--Water level measured monthly by observer.

DATUM.--Elevation of land-surface datum is 1,529 ft above sea level. Measuring point: top of casing, 1.00 ft above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.35 ft below land-surface datum, July 22, 1973; lowest water level measured, 34.29 ft below land-surface datum, June 6, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	31.86	DEC 27	30.79	MAR 27	31.04	MAY 3	31.09	JUN 27	30.71	SEP 6	30.41
NOV 8	30.75	FEB 28	31.04	APR 13	31.10	25	30.97	AUG 1	31.54	25	30.52
28	30.69										

OUTAGAMIE COUNTY

441840088115001. Local number, OU-21/19E/04-0326.

LOCATION.--Lat 44°18'40", long 88°11'50", Hydrologic Unit 04030204. Owner: Outagamie County, Rapid Croche.

AQUIFER.--Sandstone.

WELL CHARACTERISTICS.--Drilled domestic artesian well, diameter 6 in., depth 280 ft, cased to 82 ft.

INSTRUMENTATION.--Water level measured monthly by observer.

DATUM.--Elevation of land-surface datum is 660 ft above sea level. Measuring point: 1/4-in. hole in pump base, 1.50 ft above land-surface datum.

PERIOD OF RECORD.--October 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 46.10 ft below land-surface datum, Apr. 20, 1970; lowest water level measured, 98.73 ft below land-surface datum, July 26, 1995.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 13	94.33	DEC 23	92.78	MAR 2	91.57	MAY 4	91.34	JUN 8	92.48	JUL 26	98.73

GROUND-WATER LEVELS
POLK COUNTY

453013092314601. Local number, PK-35/17W/08-0040.

LOCATION.--Lat 45°30'13", long 92°31'46", Hydrologic Unit 07030005. Owner: Village of Milltown.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 5 in., depth 52 ft.

INSTRUMENTATION.--Water level measured monthly by observer.

DATUM.--Elevation of land-surface datum is 1,250 ft above sea level. Measuring point: hole in pump base, at land-surface datum.

PERIOD OF RECORD.--September 1957 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 29.55 ft below land-surface datum, July 23, 1986; lowest water level measured, 41.38 ft below land-surface datum, July 22, 1959.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 3	33.82	DEC 29	33.75	FEB 22	34.69	MAY 22	34.33	JUN 29	34.15	AUG 31	33.53
27	33.58	JAN 31	34.03	MAR 28	34.60	24	34.33	JUL 31	33.77	SEP 29	32.85
NOV 30	34.19	FEB 21	34.69	APR 26	34.53	30	34.38				

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.

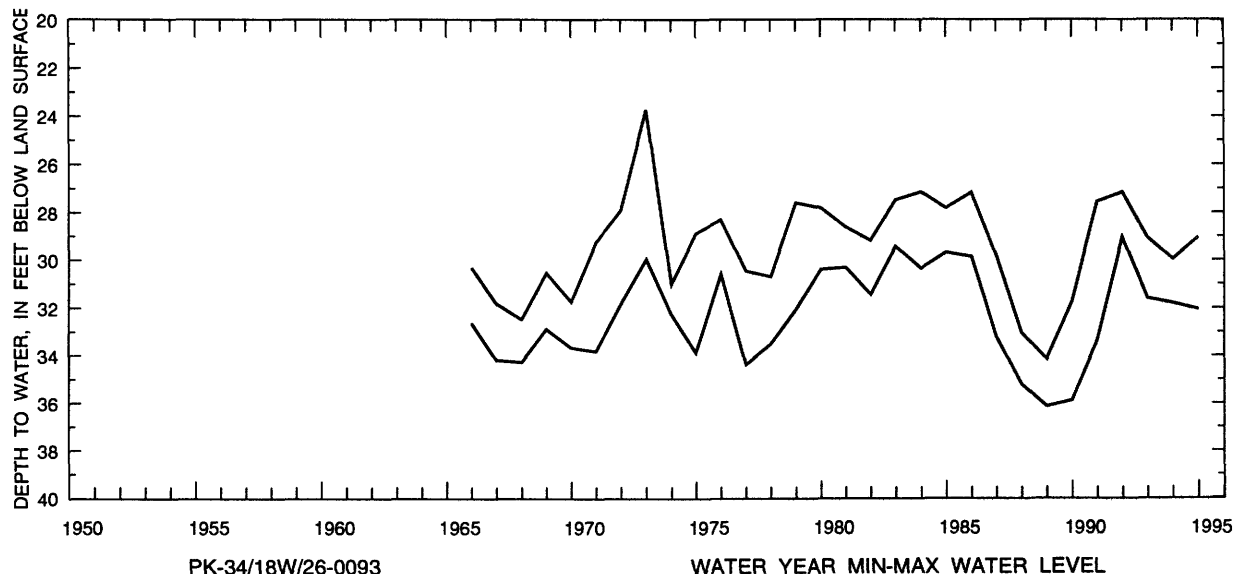
DATUM.--Elevation of land-surface datum is 1,140 ft above sea level. Measuring point: hole in pump base, 2.00 ft above land-surface datum.

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 LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	31.29	DEC 6	30.88	FEB 13	31.77	APR 10	30.76	JUN 12	29.78	AUG 7	29.59
11	30.77	20	31.05	20	31.83	24	30.38	19	29.74	14	29.54
15	30.44	27	31.12	27	31.85	MAY 2	30.04	26	29.72	22	29.06
18	31.43	JAN 3	31.18	MAR 8	32.05	8	30.05	JUL 6	29.68	28	29.36
25	30.48	9	31.22	13	32.02	15	29.58	10	29.69	SEP 5	29.54
NOV 8	30.63	16	31.37	20	31.25	22	29.79	17	29.66	11	29.26
15	30.66	23	31.49	28	31.18	30	29.77	24	29.68	18	29.59
23	30.63	30	31.54	APR 3	30.96	JUN 5	29.79	31	29.69	26	29.54
29	30.83	FEB 6	31.62								



GROUND-WATER LEVELS
PORTAGE COUNTY

537

443127089174101. Local number, PT-24/10E/28-0015.

LOCATION.--Lat 44°31'27", long 89°17'41", Hydrologic Unit 04030202. Owner: Lawrence Krogwold.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Driven unused water-table well, diameter 2 in., depth 52 ft, cased to 50 ft, screened 50-52 ft.

INSTRUMENTATION.--Water level measured bi-monthly by observer.

DATUM.--Elevation of land-surface datum is 1,133 ft above sea level. Measuring point: rim of casing, 1.50 ft above land-surface datum.

PERIOD OF RECORD.--August 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.50 ft below land-surface datum, Aug. 4, 1973; lowest water level measured, 38.81 ft below land-surface datum, Nov. 12, 1959.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1	30.34	DEC 10	30.49	FEB 4	30.69	APR 3	30.79	MAY 27	31.09	JUL 22	31.28
15	30.37	24	30.56	18	30.74	15	30.96	JUN 10	31.15	AUG 5	31.29
29	30.40	JAN 17	30.59	MAR 18	30.83	29	31.00	24	31.18	19	31.30
NOV 12	30.42	21	30.64	APR 1	30.89	MAY 13	31.04	JUL 8	31.25	SEP 2	31.32
26	30.47										

442623089302701. Local number, PT-23/08E/25-0376.

LOCATION.--Lat 44°26'23", long 89°30'27", Hydrologic Unit 07070003. Owner: U. S. Geol. Survey.

AQUIFER.--Sand and gravel.

WELL CHARACTERISTICS.--Driven observation water table well, diameter 1 1/4 in., depth 36 ft, cased to 34 ft, well point 34-36 ft.

INSTRUMENTATION.--Water level measured monthly by observer.

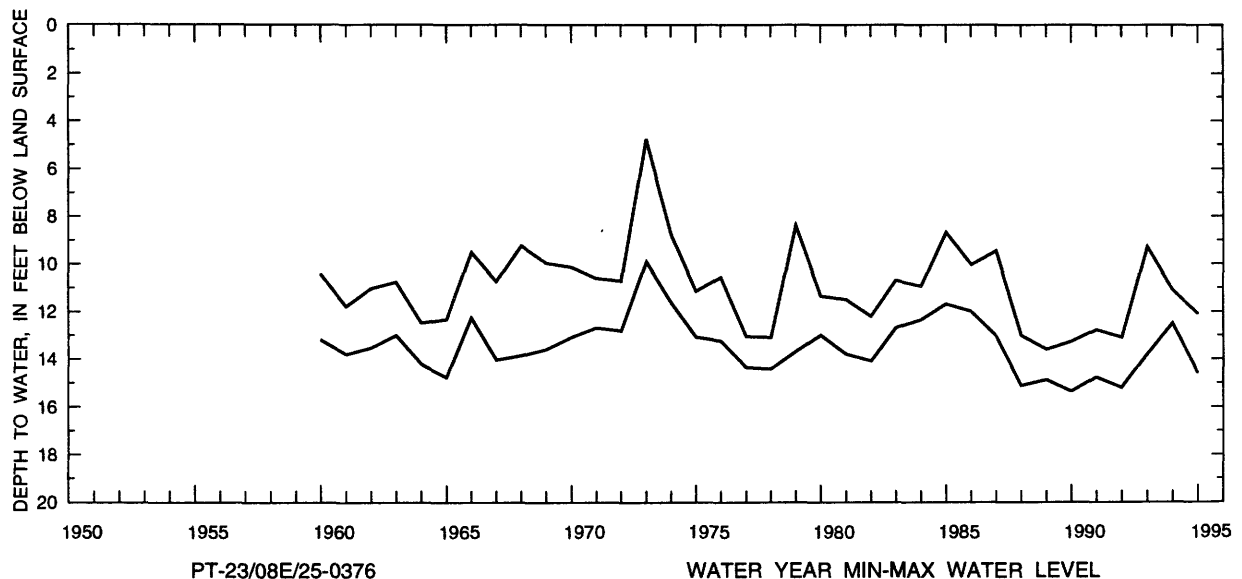
DATUM.--Elevation of land-surface datum is 1,099 ft above sea level. Measuring point: top of casing, 4.20 ft above land-surface datum.

PERIOD OF RECORD.--December 1, 1959, to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.77 ft below land-surface datum, June 5, 1973; lowest water level measured, 15.37 ft below land-surface datum, Feb. 15, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21	12.10	DEC 13	12.70	FEB 22	13.45	APR 19	13.00	JUN 20	14.05	JUL 20	14.60
NOV 17	12.60	JAN 20	13.00	MAR 21	13.45	MAY 19	13.10	JUL 10	13.81		



GROUND-WATER LEVELS 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.

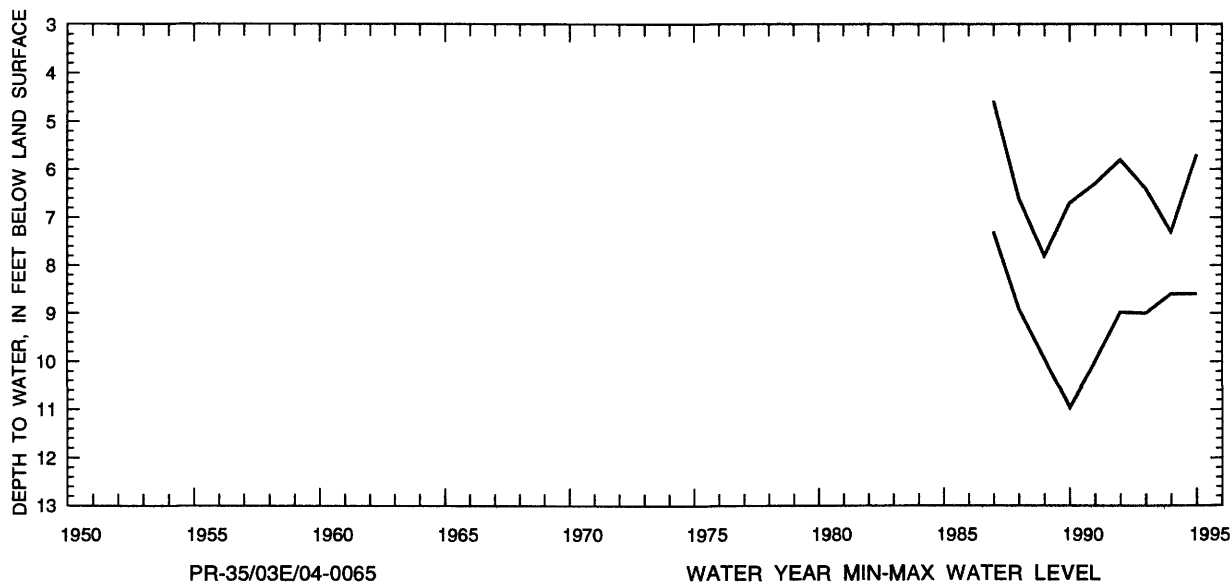
DATUM.--Elevation of land-surface datum is 1,695 ft above sea level. Measuring point: top of casing, 2.00 ft above land-surface datum.

PERIOD OF RECORD.--October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.58 ft above land-surface datum, Oct. 2, 1986; lowest water level measured, 10.96 ft below land-surface datum, Feb. 15, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 11	6.80	DEC 12	7.40	APR 6	7.80	JUN 12	6.80	AUG 6	7.20	SEP 11	5.70
NOV 15	7.30	FEB 5	8.60	MAY 12	6.60	JUL 10	7.50				



GROUND-WATER LEVELS
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 weekly by observer.

DATUM.--Elevation of land-surface datum is 824 ft above sea level. Measuring point: 1/4-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 LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 3	59.75	DEC 1	56.56	FEB 9	56.91	MAR 30	57.08	MAY 25	57.67	JUL 28	60.01
13	57.09	8	55.60	16	57.05	APR 6	60.05	JUN 1	56.74	AUG 10	59.90
20	57.58	22	57.90	23	57.05	20	57.18	22	60.01	17	60.00
27	62.74	JAN 5	56.42	MAR 2	57.90	27	56.98	JUL 6	59.85	24	60.37
NOV 3	55.55	12	56.37	9	57.42	MAY 4	58.73	13	59.20	SEP 7	60.57
10	67.52	19	56.57	16	59.02	11	56.70	20	60.01	21	61.55
25	58.44	FEB 2	56.50	23	57.11	18	56.56				

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 LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 3	12.16	FEB 8	14.04	MAY 16	13.13	JUL 10	13.70	AUG 21	11.38	SEP 7	10.44
NOV 10	11.74	MAR 17	14.88	JUN 30	13.35						

GROUND-WATER LEVELS
SAUK COUNTY

541

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 LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
LOWEST VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	73.57	74.14	74.76	75.29	75.88	76.29	76.56	75.12	73.48	72.80	73.45	74.17
10		74.37	74.77	75.40	75.84	76.45	76.50	74.71	73.24	73.02	73.68	74.29
15	73.72	74.47		75.47	76.09	76.59	76.35	74.74	73.19	73.11	73.72	74.36
20	73.78	74.48		75.42	76.12	76.34	76.06	74.30	73.06	73.12	73.90	74.42
25	73.99	74.53		75.72	76.31	76.72	75.69	74.20	73.00	73.24	73.93	74.38
EOM	74.04	74.66			76.42	76.59	75.41	73.79	73.00	73.41	74.00	74.40
WTR YEAR 1995 MAX 76.72 MAR 25 MIN 72.80 JUL 5												

SHAWANO COUNTY

444203088214601. Local number, SH-26/18E/30-0001.

LOCATION.--Lat 44°42'03", long 88°21'46", Hydrologic Unit 04030103. Owner: Wis. Dept. of Transportation.

AQUIFER.--Prairie du Chien.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in., depth 132 ft.

INSTRUMENTATION.--Water level measured monthly by observer.

DATUM.--Elevation of land-surface datum is 917 ft above sea level. Measuring point: top of plastic pipe, 0.43 ft below land-surface datum.

PERIOD OF RECORD.--April 1947 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 50.77 ft below land-surface datum, July 14, 1993; lowest water level measured, 65.15 ft below land-surface datum, Feb. 22, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 8	56.42	DEC 11	57.18	FEB 23	58.09	JUN 7	56.71	AUG 2	58.64	AUG 3	58.63
15	56.98	JAN 15	57.02	APR 12	57.35						

GROUND-WATER LEVELS
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 LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
LOWEST VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.63	9.71	9.48	9.70	10.06	10.00	9.10			10.19	10.13	8.98
10	9.60	9.81	9.56	9.97	9.98	9.66	9.26			10.14	9.72	9.26
15	9.69	9.70	9.58	10.03	10.04	7.73	8.75			10.01	6.40	9.48
20	9.64	9.69	9.65	10.02	10.11	8.27	8.29			9.86	7.66	9.48
25	9.51	9.42	9.72	9.99	10.03	8.03	8.58			9.82	7.69	9.53
EOM	9.63	9.43	9.85	9.99	9.95	8.87	8.90		10.07	9.96	7.84	9.56
WTR YEAR 1995 MAX 10.22 JUL 4 MIN 6.40 AUG 15												

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 LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	134.07	DEC 10	133.40	FEB 7	134.78	APR 13	135.39	JUN 14	136.01	AUG 1	136.51
NOV 4	131.43	JAN 9	134.39	MAR 25	135.33	MAY 1	135.02	JUL 10	135.66	SEP 12	135.44

GROUND-WATER LEVELS
TREMPEALEAU COUNTY

543

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 LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 6	43.50	DEC 7	43.7	FEB 9	43.90	MAY 18	44.10	AUG 10	44.70	SEP 13	44.90
NOV 10	43.70	JAN 9	43.30	APR 11	43.80	JUN 10	44.30				

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, 10.63 ft below land-surface datum, July 21, 1968; lowest water level measured, 14.92 ft below land-surface datum, Aug. 10, 1977.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 14	13.45	JAN 17	12.26	MAY 23	11.65	AUG 31	12.87	SEP 6	12.87	SEP 20	13.05
DEC 26	12.25	APR 27	13.23	JUN 22	12.65						

**GROUND-WATER LEVELS
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, 222.67 ft below land-surface datum, June 19, 1992.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	214.00	DEC 6	214.04	FEB 10	213.68	APR 29	215.59	JUN 6	218.20	AUG 15	217.75
NOV 3	215.72	JAN 7	213.50	MAR 3	214.13	MAY 2	215.54	JUL 14	217.98	SEP 14	217.91

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.--Continuous water-level recorder.

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, 138.14 ft below land-surface datum, Feb. 2, 1959.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
LOWEST VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	133.93	133.86	133.92	134.18	134.19	134.38	134.35	133.86	134.10	135.23	134.59	134.35
10	133.90	133.90	133.97	134.16	134.15	134.43	134.29	133.68	133.97	135.22	134.40	134.41
15	133.86	133.98	134.09	134.26	134.26	134.45	134.24	133.74	134.43	136.22	134.47	134.49
20	133.81	133.94	134.12			134.23	134.11	133.70	135.26		134.58	134.56
25	133.91	133.94	134.19		134.35	134.39	134.06	133.86	135.73	134.75	134.45	134.47
EOM	133.96	133.93	134.13	134.10	134.39	134.29	133.99	134.11	135.07	134.97	134.27	134.51
WTR YEAR 1995	MAX	136.22	JUL 15	MIN	133.62	MAY 17						

GROUND-WATER LEVELS
WAUPACA COUNTY

545

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, 15.91 ft below land-surface datum, Feb. 23, 1954.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1	13.56	DEC 3	13.82	FEB 4	14.89	APR 10	13.89	JUN 17	13.73	AUG 12	14.26
8	13.70	10	14.02	11	14.79	15	14.20	24	13.76	19	14.42
15	13.73	17	14.30	18	15.19	22	13.67	JUL 1	13.79	28	13.76
22	13.75	23	14.39	25	15.26	MAY 6	13.59	8	13.80	SEP 2	12.99
29	13.88	31	14.43	MAR 4	15.11	13	13.73	15	13.84	9	12.83
NOV 5	13.91	JAN 7	14.49	11	15.08	20	13.79	22	13.86	16	12.95
12	13.93	14	14.79	18	15.14	27	13.69	AUG 1	13.69	23	12.99
19	13.89	20	14.82	25	15.19	JUN 10	13.71	5	13.99	30	13.29
28	13.84	28	14.82	APR 1	14.05						

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 LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
LOWEST VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.48	8.74	9.02	9.36	9.70	9.99	10.12	10.12	9.83	9.97	10.39	10.38
10	8.52	8.78	9.09	9.42	9.76	10.03	10.15	10.03	9.82	10.03	10.45	9.92
15	8.58	8.84	9.15	9.48	9.79	10.07	10.16	9.94	9.82	10.10	10.51	9.92
20	8.60	8.88	9.19	9.53	9.85	10.04	10.16	9.89	9.84	10.16	10.53	9.92
25	8.64	8.93	9.25	9.58	9.89	10.07	10.17	9.86	9.88	10.24	10.52	9.93
EOM	8.70	8.98	9.31	9.64	9.92	10.09	10.16	9.84	9.92	10.32	10.46	9.97
WTR YEAR 1995	MAX	10.53	AUG 16	MIN	8.45	OCT 1						

DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL		DATE	WATER LEVEL
OCT 27	20.82		JAN 27	21.31		MAR 31	20.24		MAY 26	19.33		JUL 28	21.78
NOV 30	20.68		FEB 28	21.82		APR 30	19.10		JUN 30	20.91		AUG 31	19.94
DEC 29	20.92											SEP 20 29	19.96 20.18

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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