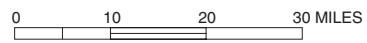


- ◆ 0442405019333300
- ◆ 0442436091331800
- △ 053793305
- △ 053793306

- ◆ 441459091392800
- ◆ 441356091405500
- ◆ 441527091365300
- ◆ 441402091375900
- △ 5378183
- △ 5378185

EXPLANATION

- 05379500 Station number
- △ Stream gage
- ▽ Surface water-quality station
- △ Stream gage equipped with telephone or data collection platform
- △ Crest-stage partial-record station
- ◆ Precipitation gage



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

TREMPEALEAU-BLACK RIVER BASIN

WAUMANDEE CREEK BASIN

441459091392800 EAGLE CREEK RAIN GAGE E3-1006 NEAR FOUNTAIN CITY, WI

LOCATION.--Lat44°14'59", long 91°39'28", in NE ¼ SE ¼ sec.36, T.21 N., R.11 W., Buffalo County, Hydrologic Unit 07040003, on Eagle Valley Road, 3.0 mi west of junction with Glencoe-Waumandee Road, near Fountain City.

PERIOD OF RECORD.--October 1990 to June 1996, October 2002 to current year (non-frozen precipitation).

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

REMARKS.--Rainfall estimated to be 0.00 for Feb. 17, 19, 21 because recorded precipitation interpreted as collector snowmelt. Rainfall data missing for periods Oct. 25-Jan. 13 and June 9-July 1.

EXTREMES FOR PERIOD OF RECORD.-- Maximum daily rainfall, 6.71 in., Aug. 13, 1995.

EXTREMES FOR CURRENT YEAR.-- Maximum daily rainfall, 2.21 in., May 13.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	0.00	0.01	0.00	0.00	0.02	---	0.00	0.00
2	0.00	---	---	---	0.00	0.00	0.00	0.00	0.03	0.00	0.49	0.00
3	0.14	---	---	---	0.00	0.09	0.00	0.00	0.00	0.43	0.19	0.00
4	0.00	---	---	---	0.00	0.01	0.00	0.00	0.00	0.06	0.00	0.00
5	0.00	---	---	---	0.00	0.31	0.00	0.00	0.02	0.26	0.00	0.44
6	0.00	---	---	---	0.00	0.52	0.00	0.00	0.00	0.85	0.00	0.83
7	0.00	---	---	---	0.00	0.14	0.00	0.06	0.00	0.08	0.14	0.00
8	0.00	---	---	---	0.00	0.06	0.00	0.49	1.67	0.00	0.00	0.00
9	0.00	---	---	---	0.00	0.10	0.00	1.40	---	0.00	0.31	0.00
10	0.00	---	---	---	0.00	0.17	0.00	0.12	---	0.00	0.00	0.00
11	0.67	---	---	---	0.00	0.00	0.00	0.00	---	0.23	0.05	0.00
12	0.00	---	---	---	0.00	0.00	0.00	0.13	---	0.00	0.00	0.00
13	0.00	---	---	---	0.00	0.11	0.00	2.21	---	0.00	0.00	0.00
14	0.00	---	---	0.00	0.00	0.01	0.00	0.04	---	0.00	0.00	1.67
15	0.00	---	---	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	1.98
16	0.00	---	---	0.00	0.00	0.00	0.12	0.00	---	0.00	1.09	0.00
17	0.00	---	---	0.00	0.00	0.20	0.01	0.01	---	0.00	0.01	0.00
18	0.00	---	---	0.00	0.00	0.31	0.58	0.00	---	0.00	0.28	0.00
19	0.00	---	---	0.00	0.00	0.00	0.10	0.64	---	0.01	0.00	0.00
20	0.00	---	---	0.00	0.07	0.00	0.53	1.66	---	0.00	0.00	0.00
21	0.00	---	---	0.00	0.00	0.00	0.10	0.63	---	0.35	0.00	0.00
22	0.00	---	---	0.00	0.26	0.00	0.00	0.66	---	0.00	0.02	0.00
23	0.00	---	---	0.00	0.00	0.00	0.00	0.78	---	0.00	0.00	0.21
24	0.00	---	---	0.00	0.00	0.00	0.11	0.01	---	0.00	0.00	0.00
25	---	---	---	0.00	0.00	0.49	0.36	0.06	---	0.00	0.00	0.00
26	---	---	---	0.00	0.00	0.01	0.00	0.00	---	0.00	0.24	0.00
27	---	---	---	0.00	0.00	0.13	0.00	0.32	---	0.00	0.01	0.00
28	---	---	---	0.00	0.00	0.07	0.00	0.00	---	0.00	0.08	0.00
29	---	---	---	0.00	0.18	0.00	0.00	1.08	---	0.29	0.06	0.00
30	---	---	---	0.00	---	0.00	0.00	0.92	---	0.01	0.28	0.00
31	---	---	---	0.00	---	0.00	---	0.01	---	0.00	0.00	---
TOTAL	---	---	---	---	0.51	2.74	1.91	11.23	---	---	3.25	5.13

441356091405500 EAGLE CREEK RAIN GAGE E2-1005 NEAR FOUNTAIN CITY, WI

LOCATION.--Lat44°13'56", long 91°40'55", in SW ¼ SE ¼ 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 June 1996, October 2002 to current year (non-frozen precipitation).

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

REMARKS.--Rainfall estimated to be 0.00 for Dec. 21 and Feb. 18, 19, 21 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, 2.48 in., June 9.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
2	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.02	0.00	0.71	0.00
3	0.11	0.37	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.62	0.19	0.00
4	0.00	0.20	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.04	0.00	0.00
5	0.00	0.00	0.07	0.00	0.00	0.71	0.00	0.00	0.01	0.27	0.01	0.41
6	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.85	0.00	0.72
7	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.30	0.00	0.04	0.12	0.00
8	0.00	0.00	0.27	0.00	0.00	0.05	0.00	0.46	1.68	0.00	0.01	0.00
9	0.00	0.00	0.21	0.00	0.00	0.07	0.00	1.00	2.48	0.00	0.36	0.00
10	0.00	0.01	0.00	0.00	0.00	0.18	0.00	0.11	0.07	0.00	0.01	0.00
11	0.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.23	0.07	0.00
12	0.01	0.27	0.00	0.00	0.00	0.00	0.00	0.15	0.07	0.00	0.00	0.00
13	0.00	0.02	0.00	0.00	0.00	0.06	0.00	1.98	0.05	0.01	0.00	0.00
14	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	1.54
15	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	2.01
16	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	1.35	0.00	1.06	0.00
17	0.00	0.09	0.00	0.02	0.00	0.15	0.00	0.01	0.01	0.00	0.01	0.00
18	0.00	0.26	0.00	0.00	0.00	0.29	0.58	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.71	0.00	0.00	0.00	0.04
20	0.00	0.00	0.00	0.00	0.14	0.00	0.45	1.08	0.00	0.00	0.00	0.10
21	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.60	0.00	0.17	0.00	0.00
22	0.00	0.03	0.00	0.00	0.18	0.00	0.00	0.63	0.00	0.00	0.02	0.00
23	0.00	0.32	0.00	0.00	0.00	0.00	0.00	0.63	0.34	0.00	0.00	0.22
24	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.10	0.00	0.00	0.00
25	0.08	0.00	0.00	0.00	0.00	0.39	0.24	0.06	0.00	0.00	0.00	0.00
26	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00
27	0.06	0.00	0.12	0.00	0.00	0.11	0.00	0.27	0.25	0.00	0.00	0.00
28	0.18	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.05	0.00
29	0.07	0.00	0.00	0.00	0.17	0.00	0.00	0.93	0.00	0.26	0.06	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.79	0.00	0.01	0.43	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.05	---	0.00	0.01	---
TOTAL	1.20	1.64	0.67	0.04	0.49	2.44	1.66	9.81	6.97	2.50	3.37	5.04
CAL YR	2003	TOTAL		21.58								
WTR YR	2004	TOTAL		35.83								

WAUMANDEE CREEK BASIN

441527091365300 JOOS VALLEY CREEK RAIN GAGE J3-1003 NEAR ARCADIA, WI

LOCATION.--Lat44°15'27", long 91°36'53", in NE ¼ NW ¼ sec.32, T.21 N., R.10 W., Buffalo County, Hydrologic Unit 07040003, on Hannon Road, 0.1 mi north of junction with Pausy Pass, near Arcadia.

PERIOD OF RECORD.--October 1990 to June 1996, October 2002 to current year (non-frozen precipitation).

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

REMARKS.--Rainfall estimated to be 0.00 for Dec. 21, 22, Jan. 11, and Feb. 18, 19, 21, 23 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, 2.77 in., June 9.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02	0.00	0.00	0.00
2	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.03	0.00	0.70	0.00
3	0.10	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.14	0.00
4	0.00	0.57	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.28	0.00	0.00
5	0.00	0.00	0.02	0.00	0.00	0.30	0.00	0.00	0.03	0.27	0.00	0.42
6	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.66	0.00	0.58
7	0.00	0.00	0.00	0.00	0.00	0.08	0.01	0.04	0.00	0.06	0.10	0.00
8	0.00	0.00	0.22	0.00	0.00	0.01	0.00	0.46	2.56	0.00	0.01	0.00
9	0.00	0.00	0.06	0.00	0.00	0.23	0.00	1.49	2.77	0.00	0.13	0.00
10	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.10	0.34	0.00	0.00	0.00
11	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63	0.16	0.06	0.00
12	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.25	0.14	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.08	0.00	1.71	0.04	0.00	0.00	0.00
14	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	1.28
15	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.06
16	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	1.79	0.00	0.88	0.00
17	0.00	0.11	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.01	0.00
18	0.00	0.25	0.00	0.00	0.00	0.21	0.48	0.00	0.00	0.00	0.27	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.49	0.00	0.02	0.00	0.00
20	0.00	0.00	0.00	0.00	0.01	0.00	0.36	1.86	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.68	0.00	0.32	0.00	0.00
22	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.59	0.00	0.00	0.01	0.00
23	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.65	0.25	0.00	0.00	0.20
24	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.08	0.00	0.00	0.00
25	0.05	0.01	0.00	0.00	0.00	0.41	0.36	0.03	0.00	0.00	0.00	0.00
26	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.44	0.00
27	0.04	0.00	0.08	0.00	0.00	0.09	0.00	0.37	0.23	0.00	0.00	0.00
28	0.10	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.01	0.00	0.11	0.00
29	0.09	0.00	0.00	0.00	0.17	0.00	0.00	0.97	0.00	0.26	0.04	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	1.76	0.00	0.00	0.24	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.02	---	0.00	0.00	---
TOTAL	1.04	1.45	0.38	0.04	0.31	1.93	1.51	11.50	8.92	2.39	3.14	4.54
CAL YR	2003	TOTAL 19.84										
WTR YR	2004	TOTAL 37.15										

441402091375900 JOOS VALLEY CREEK RAIN GAGE J2-1002 NEAR FOUNTAIN CITY, WI

LOCATION.--Lat44°14'02", long 91°37'59", in NE ¼ SE ¼ 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 June 1996, October 2002 to current year (non-frozen precipitation).

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

REMARKS.--Rainfall estimated to be 0.00 for Dec. 17, 21, 22, Jan. 24, and Feb. 2, 18, 19, 21, 23 because recorded precipitation interpreted as collector snowmelt. 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, 2.67 in., June 8.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.09	0.00	0.00	0.00
2	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.01	0.00	0.58	0.00
3	0.09	0.42	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.37	0.21	0.00
4	0.01	0.28	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.10	0.00	0.00
5	0.00	0.00	0.08	0.00	0.00	0.68	0.00	0.00	0.03	0.31	0.00	0.35
6	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.01	0.00	0.78	0.00	0.71
7	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.22	0.00	0.07	0.14	0.00
8	0.00	0.00	0.26	0.00	0.00	0.05	0.00	0.44	2.67	0.00	0.01	0.00
9	0.00	0.00	0.23	0.00	0.00	0.11	0.00	1.23	2.47	0.00	0.30	0.00
10	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.12	0.21	0.00	0.00	0.00
11	0.61	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.27	0.03	0.00
12	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.28	0.13	0.01	0.01	0.00
13	0.00	0.02	0.00	0.00	0.00	0.10	0.00	1.69	0.09	0.00	0.00	0.00
14	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	1.41
15	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	2.19
16	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	1.17	0.00	1.02	0.00
17	0.00	0.14	0.00	0.02	0.00	0.18	0.00	0.01	0.00	0.00	0.01	0.00
18	0.00	0.26	0.00	0.00	0.00	0.27	0.57	0.00	0.00	0.00	0.08	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.55	0.00	0.02	0.00	0.00
20	0.00	0.00	0.00	0.00	0.14	0.00	0.50	1.39	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.70	0.00	0.32	0.00	0.00
22	0.00	0.03	0.00	0.00	0.21	0.00	0.00	0.62	0.00	0.00	0.02	0.00
23	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.74	0.23	0.00	0.00	0.23
24	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.11	0.00	0.00	0.00
25	0.08	0.00	0.00	0.00	0.00	0.28	0.34	0.05	0.00	0.00	0.00	0.00
26	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.00
27	0.07	0.00	0.09	0.00	0.00	0.13	0.00	0.43	0.22	0.00	0.00	0.00
28	0.16	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.09	0.00
29	0.08	0.00	0.00	0.00	0.18	0.00	0.00	1.03	0.00	0.29	0.06	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.01	1.60	0.00	0.03	0.43	0.00
31	0.01	---	0.00	0.00	---	0.00	---	0.03	---	0.00	0.01	---
TOTAL	1.13	1.81	0.66	0.06	0.53	2.53	1.78	11.18	8.00	2.57	3.27	4.89
WTR YR	2004	TOTAL 38.41										

WAUMANDEE CREEK BASIN

405

05378183 JOOS VALLEY CREEK NEAR FOUNTAIN CITY, WI

LOCATION.--Lat 44°12'53", long 91°39'54" in NE ¼ NE ¼ 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 July 1996, October 2002 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 810 ft above NGVD of 1929, from topographic map.

REMARKS.--Records 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 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	2.4	2.1	2.5	2.1	34	3.5	1.9	6.6	4.8	3.7	3.4
2	2.1	2.5	2.0	2.6	2.2	20	3.4	1.7	5.6	4.6	4.4	3.4
3	2.5	2.8	2.1	e2.1	1.9	5.7	3.2	1.7	4.6	4.9	3.9	3.2
4	2.2	4.1	2.1	e2.0	1.9	5.4	3.2	1.9	4.2	5.0	3.8	3.1
5	2.2	2.9	2.3	e1.6	2.1	9.1	3.3	1.8	4.1	4.5	3.6	3.3
6	2.1	2.6	2.2	1.6	2.2	6.9	3.3	1.8	3.8	7.1	3.6	4.8
7	2.2	2.6	2.3	1.9	2.1	7.9	3.2	1.5	3.4	5.6	3.6	3.4
8	2.2	2.3	2.6	2.0	2.0	3.1	3.0	2.4	4.4	4.8	3.7	3.5
9	2.2	2.5	2.9	2.0	2.1	4.6	2.8	2.1	81	4.6	3.8	3.5
10	2.2	2.8	2.7	2.2	2.1	14	2.8	6.2	17	4.6	3.6	3.5
11	2.9	2.8	2.1	2.3	2.1	7.5	2.8	2.5	16	4.8	3.6	3.4
12	2.8	2.8	2.0	2.2	2.1	2.7	2.7	2.6	14	4.6	3.6	3.3
13	2.3	2.5	2.1	2.2	2.1	3.2	2.7	13	11	4.5	3.5	3.3
14	2.5	2.5	2.4	2.3	2.0	3.2	2.7	5.1	8.7	4.2	3.5	4.2
15	2.5	2.8	2.5	2.1	1.9	2.0	2.5	3.8	7.7	4.1	3.5	19
16	2.3	2.6	2.4	2.2	2.0	3.1	2.5	3.4	14	4.1	4.5	4.3
17	2.4	2.7	2.1	2.3	2.0	5.6	2.4	3.0	10	4.0	3.9	3.7
18	2.5	3.6	2.2	e1.8	2.1	8.8	2.6	2.6	7.4	3.9	3.8	3.5
19	2.4	2.8	2.0	1.9	2.3	6.9	3.5	2.5	6.8	3.9	3.5	3.4
20	2.3	2.7	2.2	2.0	2.5	22	3.1	25	6.5	4.0	3.4	3.0
21	2.3	2.3	2.3	2.1	2.3	3.9	3.6	6.5	6.4	4.1	3.3	2.8
22	2.2	2.3	2.1	1.7	2.3	3.1	2.8	9.8	5.9	3.9	3.6	2.9
23	2.3	3.1	2.0	2.1	2.3	6.7	2.6	8.7	6.0	3.7	3.5	3.0
24	2.3	2.5	1.8	2.2	2.3	9.8	2.4	6.0	5.8	3.6	3.4	2.9
25	2.4	2.7	1.9	2.3	2.4	7.0	3.4	5.0	5.4	3.6	3.3	3.1
26	2.5	2.6	2.0	2.3	2.6	7.1	2.8	4.3	5.2	3.6	3.3	2.8
27	2.4	2.4	2.8	2.2	2.8	5.0	2.4	5.1	5.3	3.6	3.0	2.8
28	2.9	2.2	3.6	2.0	4.2	5.2	2.5	3.7	5.2	3.6	2.9	2.6
29	2.8	2.3	2.8	2.0	5.7	4.4	2.0	8.8	5.0	3.9	3.2	2.7
30	2.8	2.4	2.5	1.9	---	4.0	2.0	24	4.8	3.7	3.7	2.9
31	2.5	---	2.2	2.0	---	3.7	---	11	---	3.7	3.2	---
TOTAL	74.4	80.1	71.3	64.6	68.7	235.6	85.7	179.4	291.8	133.6	110.9	114.7
MEAN	2.40	2.67	2.30	2.08	2.37	7.60	2.86	5.79	9.73	4.31	3.58	3.82
MAX	2.9	4.1	3.6	2.6	5.7	34	3.6	25	81	7.1	4.5	19
MIN	2.1	2.2	1.8	1.6	1.9	2.0	2.0	1.5	3.4	3.6	2.9	2.6
CFSM	0.41	0.45	0.39	0.35	0.40	1.29	0.49	0.98	1.65	0.73	0.61	0.65
IN.	0.47	0.51	0.45	0.41	0.43	1.49	0.54	1.13	1.84	0.84	0.70	0.72

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2004, BY WATER YEAR (WY)

MEAN	3.52	3.93	3.26	2.94	3.45	6.33	5.16	4.92	4.76	3.82	4.56	4.04
MAX	5.01	6.24	4.65	4.15	6.85	8.25	10.0	7.26	9.73	7.99	7.06	5.89
(WY)	(1994)	(1992)	(1994)	(1994)	(1994)	(1995)	(1993)	(1993)	(2004)	(1993)	(1993)	(1993)
MIN	2.40	2.09	1.92	1.89	2.05	3.66	2.86	2.95	2.88	2.66	2.65	2.49
(WY)	(1991)	(1991)	(1991)	(1991)	(1991)	(1991)	(2004)	(1996)	(1995)	(1990)	(2003)	(2003)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1990 - 2004

ANNUAL TOTAL	1,287.5		1,510.8		
ANNUAL MEAN	3.53		4.13		4.31
HIGHEST ANNUAL MEAN					5.81
LOWEST ANNUAL MEAN					3.03
HIGHEST DAILY MEAN	34	Mar 14	81	Jun 9	90
LOWEST DAILY MEAN	1.8	Dec 24	1.5	May 7	1.5
ANNUAL SEVEN-DAY MINIMUM	2.0	Dec 19	1.8	May 1	1.6
MAXIMUM PEAK FLOW			439	Jun 9	(a)1,480
MAXIMUM PEAK STAGE			10.36	Jun 9	12.14
INSTANTANEOUS LOW FLOW			(b)0.42	Dec 19	(b)0.42
ANNUAL RUNOFF (CFSM)	0.599		0.701		0.732
ANNUAL RUNOFF (INCHES)	8.13		9.54		9.95
10 PERCENT EXCEEDS	4.9		6.5		6.1
50 PERCENT EXCEEDS	2.7		2.9		3.6
90 PERCENT EXCEEDS	2.2		2.0		2.3

(a) From rating curve extended above 86 ft³/s on basis of step-backwater method

(b) Result of freezeup

(c) Estimated due to ice effect or missing record

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1990 to June 1996, October 2002 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: July 1990 to June 1996, October 2002 to current year.

SUSPENDED-SOLIDS DISCHARGE: July 1990 to June 1996, October 2002 to current year.

TOTAL-PHOSPHORUS DISCHARGE: July 1990 to June 1996, October 2002 to current year.

DISSOLVED OXYGEN: July 1990 to September 1992.

INSTRUMENTATION.--Water-quality sampler July 1990 to June 1996 and October 2002 to current year; continuous water-temperature recorder July 1990 to June 1996 and October 2002 to current year; dissolved-oxygen recorder July 1990 to September 1992.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Chemical analyses by the Wisconsin State Laboratory of Hygiene. Samples are point samples unless otherwise indicated.

EXTREMES FOR PERIOD OF DAILY 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, 1995, 1996, 2003, and 2004 winter periods.

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 4,570 tons, Aug. 14, 1995; minimum daily, 0.02 ton, many days during 2004 water year.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 7,350 lb, Aug. 14, 1995; minimum daily, 0.22 lb, Nov. 9, 1990, Jan. 5-6, 2004.

DISSOLVED OXYGEN: Maximum observed, 15.8 mg/L, Apr. 26, 1991; minimum observed, 4.3 mg/L, June 28, 1991.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum observed, 23.5°C, June 7, 5; minimum observed, 0.0°C on many days.

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 945 tons, June 9; minimum daily, 0.02 ton, many days.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 2,020 lb, June 9; minimum daily, 0.22 lb, Jan. 5-6.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10.0	5.5	7.5	7.5	5.5	6.5	2.5	0.5	1.5	1.0	0.5	0.5
2	9.5	4.0	6.5	8.5	6.0	7.0	1.0	0.5	0.5	3.5	1.0	2.0
3	11.0	8.0	9.5	6.5	3.5	4.5	3.0	1.0	1.5	3.0	0.0	0.5
4	11.0	6.0	8.5	6.0	4.5	5.0	3.0	1.0	2.0	0.5	0.0	0.5
5	12.5	7.0	9.5	5.5	3.5	4.5	4.5	2.0	3.0	0.5	0.0	0.5
6	13.0	7.5	10.0	4.0	1.0	2.5	3.5	3.0	3.5	0.5	0.0	0.5
7	15.0	8.0	11.5	3.5	0.5	2.0	4.5	2.5	3.5	0.5	0.0	0.5
8	16.5	10.5	13.0	2.5	0.5	1.0	4.0	2.5	3.5	0.5	0.0	0.5
9	16.0	11.5	13.5	2.5	0.5	1.0	4.0	2.5	3.5	0.5	0.5	0.5
10	16.5	12.0	13.5	5.0	2.0	3.5	2.5	0.0	1.5	0.5	0.5	0.5
11	14.0	11.5	12.5	9.0	5.0	6.5	0.5	0.0	0.0	0.5	0.5	0.5
12	13.5	9.0	11.5	5.5	2.0	4.0	0.5	0.0	0.5	1.0	0.5	0.5
13	11.0	9.0	10.0	4.0	1.0	2.0	0.5	0.5	0.5	1.0	0.5	0.5
14	12.5	9.0	10.5	4.5	1.0	2.5	0.5	0.5	0.5	1.0	0.5	0.5
15	11.0	6.5	8.5	6.0	4.5	5.5	0.5	0.5	0.5	0.5	0.5	0.5
16	9.0	5.0	7.0	7.5	6.0	7.0	0.5	0.5	0.5	1.0	0.5	0.5
17	10.0	5.0	7.5	8.0	5.5	7.0	0.5	0.5	0.5	1.5	0.5	1.0
18	13.0	8.0	10.0	10.0	6.5	8.5	1.0	0.5	0.5	1.0	0.0	0.5
19	13.0	7.5	10.0	7.5	4.5	5.5	0.5	0.0	0.5	0.5	0.0	0.5
20	14.0	9.0	11.0	8.0	4.0	5.5	0.5	0.0	0.5	0.5	0.5	0.5
21	13.0	9.5	11.0	6.0	4.0	5.0	1.0	0.5	0.5	0.5	0.0	0.5
22	10.5	6.5	8.5	4.0	3.5	3.5	2.0	0.5	1.0	0.5	0.0	0.0
23	10.0	6.0	8.0	4.5	2.0	3.5	2.0	0.0	1.5	0.5	0.0	0.5
24	8.5	6.0	7.0	2.0	0.5	0.5	0.5	0.0	0.5	0.5	0.0	0.5
25	8.5	5.0	7.0	1.5	0.5	1.0	0.5	0.0	0.5	0.5	0.5	0.5
26	7.5	5.0	6.5	3.0	0.5	1.5	0.5	0.5	0.5	0.5	0.5	0.5
27	7.5	3.5	5.5	4.0	2.5	3.0	2.5	0.5	1.5	0.5	0.5	0.5
28	6.5	6.0	6.5	2.5	1.5	2.0	4.0	2.0	3.0	0.5	0.5	0.5
29	7.0	6.0	6.5	3.0	1.0	2.0	3.0	1.0	2.5	0.5	0.5	0.5
30	8.0	6.0	7.0	5.0	1.5	3.0	1.5	0.0	0.5	0.5	0.0	0.5
31	8.5	6.5	8.0	---	---	---	1.5	0.0	0.5	0.5	0.5	0.5
MONTH	16.5	3.5	9.1	10.0	0.5	3.9	4.5	0.0	1.3	3.5	0.0	0.5

WAUMANDEE CREEK BASIN

05378183 JOOS VALLEY CREEK NEAR FOUNTAIN CITY, WI—Continued

SUSPENDED SOLIDS, DRIED AT 105 DEGREES CELSIUS, WATER, UNFILTERED, TONS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.04	0.05	0.02	0.03	0.03	99	0.05	0.03	0.78	0.15	0.31	0.13
2	0.03	0.05	0.02	0.03	0.04	16	0.05	0.02	0.42	0.14	0.40	0.12
3	0.04	0.07	0.02	e0.03	0.03	0.87	0.04	0.02	0.29	0.16	0.39	0.10
4	0.04	0.11	0.02	e0.02	0.03	0.76	0.04	0.03	0.23	0.18	0.42	0.09
5	0.04	0.09	0.02	e0.02	0.04	2.8	0.03	0.02	0.19	0.17	0.44	0.09
6	0.03	0.08	0.02	0.02	0.04	1.4	0.03	0.02	0.15	0.91	0.49	0.30
7	0.04	0.08	0.02	0.02	0.04	2.0	0.03	0.02	0.11	0.47	0.54	0.08
8	0.04	0.06	0.03	0.03	0.04	0.19	0.02	0.03	10	0.22	0.62	0.07
9	0.04	0.06	0.03	0.03	0.04	0.51	0.02	0.03	945	0.22	0.69	0.07
10	0.04	0.07	0.03	0.03	0.04	7.3	0.02	8.7	9.4	0.24	0.73	0.06
11	0.04	0.06	0.02	0.03	0.04	1.4	0.03	0.14	9.1	0.27	0.77	0.06
12	0.04	0.06	0.02	0.03	0.04	0.19	0.03	0.06	6.2	0.27	0.73	0.05
13	0.03	0.05	0.02	0.03	0.04	0.19	0.03	39	3.2	0.28	0.65	0.05
14	0.03	0.04	0.03	0.03	0.04	0.17	0.03	0.57	0.43	0.28	0.61	0.33
15	0.03	0.04	0.03	0.03	0.04	0.09	0.03	0.22	0.23	0.29	0.57	31
16	0.03	0.04	0.03	0.03	0.04	0.11	0.03	0.15	43	0.28	0.67	0.22
17	0.03	0.04	0.02	0.03	0.04	0.83	0.03	0.10	11	0.27	0.55	0.10
18	0.03	0.04	0.02	e0.03	0.04	2.6	0.03	0.07	1.6	0.26	0.49	0.10
19	0.02	0.03	0.02	0.03	0.05	1.4	0.18	0.05	1.2	0.26	0.42	0.09
20	0.02	0.03	0.02	0.03	0.05	25	0.11	462	1.0	0.26	0.39	0.08
21	0.02	0.03	0.03	0.03	0.05	0.34	0.21	2.2	0.86	0.26	0.35	0.07
22	0.02	0.03	0.02	0.03	0.05	0.19	0.04	11	0.68	0.24	0.35	0.07
23	0.02	0.03	0.02	0.03	0.05	1.3	0.04	6.9	0.60	0.22	0.31	0.07
24	0.02	0.03	0.02	0.03	0.05	3.4	0.03	1.6	0.49	0.22	0.28	0.06
25	0.02	0.03	0.02	0.03	0.06	1.4	0.05	0.76	0.39	0.21	0.26	0.06
26	0.02	0.03	0.02	0.04	0.06	1.5	0.04	0.20	0.33	0.21	0.23	0.06
27	0.03	0.03	0.03	0.03	0.07	0.11	0.03	0.19	0.29	0.21	0.19	0.05
28	0.04	0.02	0.04	0.03	0.11	0.11	0.03	0.11	0.24	0.21	0.17	0.05
29	0.04	0.02	0.03	0.03	0.87	0.09	0.03	7.2	0.20	0.25	0.17	0.05
30	0.04	0.03	0.03	0.03	---	0.07	0.03	284	0.17	0.26	0.18	0.05
31	0.04	---	0.03	0.03	---	0.06	---	12	---	0.28	0.14	---
TOTAL	0.99	1.43	0.75	0.90	2.16	171.38	1.39	837.44	1,047.78	8.15	13.51	33.78
MEAN	0.03	0.05	0.02	0.03	0.07	5.5	0.05	27	35	0.26	0.44	1.1
MAX	0.04	0.11	0.04	0.04	0.87	99	0.21	462	945	0.91	0.77	31
MIN	0.02	0.02	0.02	0.02	0.03	0.06	0.02	0.02	0.11	0.14	0.14	0.05
CAL YR	2003	TOTAL	508.60	MEAN	1.4	MAX	235	MIN	0.02			
WTR YR	2004	TOTAL	2,119.66	MEAN	5.8	MAX	945	MIN	0.02			

e Estimated

05378183 JOOS VALLEY CREEK NEAR FOUNTAIN CITY, WI—Continued

PHOSPHORUS, WATER, UNFILTERED, POUNDS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.52	0.41	0.44	0.34	0.40	458	1.5	0.48	4.9	0.92	1.4	0.89
2	0.49	0.42	0.40	0.36	0.43	189	1.3	0.45	2.9	0.92	2.5	0.90
3	0.56	0.48	0.42	e0.29	0.38	25	1.1	0.46	2.1	2.2	1.3	0.86
4	0.50	0.70	0.41	e0.27	0.37	12	0.92	0.52	1.6	2.4	1.3	0.86
5	0.48	0.50	0.42	e0.22	0.43	36	0.83	0.50	1.4	1.1	1.2	0.94
6	0.46	0.44	0.41	0.22	0.46	20	0.73	0.53	1.1	5.5	1.1	3.2
7	0.46	0.44	0.40	0.26	0.44	26	0.62	0.46	0.89	3.1	1.1	1.0
8	0.45	0.42	0.45	0.28	0.43	3.6	0.52	0.71	18	1.4	1.1	1.0
9	0.46	0.46	0.49	0.28	0.46	8.3	0.48	0.71	2,020	1.4	1.1	1.1
10	0.44	0.55	0.43	0.31	0.46	71	0.49	44	50	1.5	1.1	1.1
11	0.57	0.56	0.33	0.32	0.48	31	0.49	5.6	40	1.7	1.0	1.0
12	0.55	0.59	0.30	0.31	0.48	2.3	0.49	1.6	29	1.7	1.0	1.0
13	0.45	0.54	0.32	0.31	0.48	2.4	0.49	235	16	1.8	0.95	1.0
14	0.48	0.57	0.34	0.33	0.47	2.5	0.50	4.6	4.3	1.8	0.95	1.5
15	0.47	0.66	0.35	0.31	0.45	1.6	0.47	1.9	2.6	1.8	0.94	104
16	0.44	0.64	0.33	0.32	0.48	3.6	0.48	1.3	98	1.8	2.7	2.5
17	0.45	0.68	0.28	0.35	0.48	13	0.47	0.89	49	1.7	1.0	1.8
18	0.48	0.93	0.29	e0.27	0.51	33	0.51	0.60	7.6	1.7	0.96	1.6
19	0.44	0.77	0.26	0.30	0.56	20	1.9	0.45	4.4	1.6	0.87	1.5
20	0.42	0.77	0.29	0.32	0.60	234	1.3	1,650	3.5	1.7	0.85	1.2
21	0.41	0.64	0.30	0.34	0.56	5.9	2.1	17	2.8	1.7	0.81	1.1
22	0.40	0.62	0.28	0.28	0.55	3.6	0.60	71	2.2	1.6	0.87	1.1
23	0.41	0.81	0.26	0.34	0.55	19	0.56	47	2.1	1.4	0.83	1.0
24	0.42	0.64	0.24	0.36	0.56	42	0.53	13	1.9	1.4	0.79	0.98
25	0.42	0.66	0.25	0.39	0.58	20	0.77	6.7	1.6	1.4	0.77	0.96
26	0.44	0.61	0.27	0.40	0.62	21	0.65	4.0	1.4	1.4	0.77	0.84
27	0.42	0.56	0.37	0.41	0.68	4.2	0.57	7.2	1.4	1.4	0.73	0.79
28	0.51	0.50	0.48	0.36	1.0	4.0	0.60	2.4	1.2	1.4	0.70	0.70
29	0.48	0.50	0.39	0.36	8.9	3.0	0.50	48	1.1	1.6	0.81	0.69
30	0.48	0.50	0.35	0.36	---	2.4	0.50	633	0.98	1.4	0.95	0.68
31	0.44	---	0.31	0.37	---	1.9	---	52	---	1.4	0.84	---
TOTAL	14.40	17.57	10.86	9.94	23.25	1,319.3	22.97	2,852.06	2,373.97	53.84	33.29	137.79
MEAN	0.46	0.59	0.35	0.32	0.80	43	0.77	92	79	1.7	1.1	4.6
MAX	0.57	0.93	0.49	0.41	8.9	458	2.1	1,650	2,020	5.5	2.7	104
MIN	0.40	0.41	0.24	0.22	0.37	1.6	0.47	0.45	0.89	0.92	0.70	0.68
CAL YR	2003	TOTAL 2,417.45	MEAN 6.6	MAX 775	MIN 0.24							
WTR YR	2004	TOTAL 6,869.24	MEAN 19	MAX 2020	MIN 0.22							

e Estimated

WAUMANDEE CREEK BASIN

05378183 JOOS VALLEY CREEK NEAR FOUNTAIN CITY, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia water, fltrd, mg/L as N (00608)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)
OCT							
10...	1010	2.1	10	6	<.013	.018	.037
24...	1508	2.4	10	3	<.013	.019	.033
NOV							
06...	1031	2.5	10	12	.023	.023	.031
20...	1002	2.8	10	4	.025	.021	.052
DEC							
18...	1155	2.1	10	4	<.015	.015	.024
JAN							
13...	1118	2.2	10	5	.023	.015	.026
FEB							
16...	1148	2.1	10	7	.024	.015	.045
MAR							
01...	0005	11	50	108	.772	--	1.24
01...	0550	23	50	528	.668	--	1.68
01...	1500	54	50	1,950	2.25	--	3.42
02...	0045	29	50	740	1.85	--	2.19
03...	0045	11	50	32	.997	--	1.23
03...	1158	3.5	10	17	.604	.589	.680
03...	1200	3.5	50	16	.596	--	.655
10...	1420	15	50	209	.598	--	1.09
10...	1725	28	50	314	.355	--	1.07
11...	1204	4.8	10	31	.604	--	.672
18...	1535	28	50	540	--	--	--
20...	1355	35	50	502	--	--	--
24...	1640	26	50	467	.117	.254	.717
25...	1052	4.8	10	8	.080	.135	.176
APR							
08...	1012	3.0	10	3	.013	.014	.031
22...	1256	3.0	10	5	<.015	.020	.039
MAY							
10...	0150	13	50	446	.209	--	.698
10...	1058	4.7	10	1,170	.386	--	2.91
10...	1059	4.7	50	1,090	.393	--	3.13
13...	0955	12	50	463	.204	.183	.897
13...	1050	27	50	1,310	2.49	2.02	7.66
13...	1240	44	50	1,520	.187	.151	1.90
13...	1540	20	50	1,610	.341	1.08	3.95
14...	1356	5.0	10	26	.121	.056	.112
14...	1400	5.0	50	55	.090	.067	.186
20...	0055	11	50	382	.168	.106	.635
20...	0135	27	50	1,110	.189	.302	1.81
20...	0210	92	50	5,370	.124	.109	5.17
20...	0220	230	50	16,300	.420	.059	15.4
20...	0225	267	50	22,300	.463	.106	20.9
20...	0315	184	50	3,730	.306	.476	19.2
20...	0325	122	50	7,340	.270	.482	17.6
20...	0410	54	50	8,020	.215	.550	12.7
20...	1125	8.7	50	928	.161	.445	2.02
20...	1126	8.7	10	783	.140	.163	1.90
30...	1740	27	50	1,110	.229	--	2.07
30...	1835	74	50	2,840	.176	--	3.25
30...	1900	212	50	6,180	.292	--	5.10
30...	1915	237	50	7,780	.683	--	6.55
30...	1940	170	50	8,500	1.57	--	8.65
30...	1950	132	50	7,700	1.86	--	8.87
30...	2045	62	50	5,480	1.88	--	7.72
31...	0305	14	50	725	.756	--	1.58

05378183 JOOS VALLEY CREEK NEAR FOUNTAIN CITY, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia water, fltrd, mg/L as N (00608)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd, mg/L (00665)
JUN							
01...	1248	6.6	10	32	.051	.049	.109
08...	2325	19	50	888	.050	--	.887
08...	2350	78	50	3,270	.110	--	2.77
09...	0030	172	50	3,780	.574	--	3.88
09...	0045	306	50	8,020	.819	--	6.63
09...	0050	354	50	9,160	.790	--	10.3
09...	0100	429	50	4,560	.926	--	11.8
09...	0140	325	50	9,480	.841	--	6.52
09...	1250	22	50	1,480	.137	--	1.73
09...	1505	38	50	1,210	.184	--	1.66
09...	1625	74	50	1,640	.238	--	2.10
09...	1655	183	50	5,160	.180	--	3.85
09...	1720	127	50	12,200	.253	--	5.55
09...	1900	190	50	3,760	.309	--	4.09
09...	1945	138	50	3,070	.391	--	3.65
09...	2240	40	50	1,370	.246	--	2.43
10...	0834	16	10	145	.126	.426	.437
10...	0835	16	50	149	.130	--	.438
16...	1915	55	50	2,040	.173	--	1.69
16...	1925	70	50	2,750	.167	--	2.43
17...	0035	20	50	1,470	.206	--	2.32
17...	1232	9.4	10	91	.044	.366	.358
JUL							
01...	1056	5.0	10	11	<.015	.016	.035
15...	1148	4.3	10	26	.021	.035	.083
28...	1118	3.6	10	105	.022	.032	.068
28...	1119	3.6	70	21	.017	.030	.076
AUG							
11...	1008	3.6	10	81	<.015	.027	.052
25...	0926	3.1	10	29	.016	.023	.043
SEP							
09...	1018	3.4	10	7	<.015	.024	.056
15...	0400	19	50	126	.103	--	.549
15...	0625	47	50	750	.080	--	.990
15...	0650	67	50	1,430	.108	--	1.50
15...	0840	38	50	1,060	.495	--	2.17
16...	1134	4.3	10	11	.031	--	.096

WAUMANDEE CREEK BASIN

413

05378185 EAGLE CREEK AT COUNTY HIGHWAY G NEAR FOUNTAIN CITY, WI

LOCATION.--Lat 44°12'34", long 91°40'42" in SW ¼ NE ¼ 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 July 1996, October 2002 to current year.

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

REMARKS.--Records 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 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	5.3	5.7	5.8	e5.6	72	9.8	4.9	18	9.2	7.0	6.3
2	4.8	5.3	5.5	5.9	e5.8	35	9.3	4.8	16	8.9	8.3	6.3
3	5.2	5.7	5.6	5.5	e5.6	12	8.7	4.6	14	9.8	7.4	6.1
4	5.1	7.5	5.5	e5.2	e5.4	11	8.3	4.6	13	10	7.2	6.0
5	5.0	6.1	5.6	e5.1	e5.6	18	8.0	4.6	13	9.6	6.6	6.1
6	5.2	5.5	5.6	e4.9	e5.5	13	7.9	4.7	12	14	6.4	10
7	5.2	5.3	5.7	e5.0	e5.4	15	7.4	4.7	11	12	6.6	6.9
8	5.0	5.0	6.1	e5.1	e5.3	7.2	7.2	6.3	12	11	6.7	6.7
9	5.1	4.9	6.5	e5.2	e5.2	9.2	7.0	5.5	140	10	6.9	6.5
10	5.8	5.2	6.5	5.2	e5.2	30	6.8	13	33	9.9	6.8	6.4
11	e6.6	5.4	5.9	5.4	e5.2	19	6.7	7.2	29	10	6.8	6.2
12	e6.8	5.7	5.3	5.3	e5.1	7.6	6.5	6.9	25	10	6.6	6.2
13	e6.2	5.5	5.0	5.2	e5.0	7.4	6.3	33	20	9.6	6.3	6.1
14	e6.0	5.4	5.5	5.2	e5.0	8.3	6.3	12	17	9.5	6.2	7.4
15	e5.8	5.7	5.8	5.1	e5.0	6.3	6.1	9.1	15	8.8	6.1	49
16	e5.7	5.5	6.1	5.0	e5.0	8.8	6.1	7.8	25	8.3	8.6	11
17	e5.6	5.5	5.8	5.2	e5.1	15	6.0	7.1	20	8.1	7.4	9.0
18	e5.8	6.6	6.0	e5.1	e5.2	22	6.1	6.5	15	8.0	6.9	8.2
19	e5.7	6.2	6.1	e5.0	e5.3	17	9.1	6.0	14	8.0	6.7	7.8
20	e5.6	6.0	e6.0	e4.9	e5.4	45	8.1	52	13	7.9	6.5	7.4
21	5.8	5.8	6.1	5.3	e5.3	11	9.4	19	12	8.5	6.3	7.1
22	5.9	5.8	6.1	e5.2	e5.2	8.4	7.1	25	12	7.9	6.4	7.0
23	6.2	7.0	6.1	5.1	e5.2	14	5.9	23	12	7.7	6.3	7.1
24	5.8	6.5	e6.0	5.5	e5.3	21	5.7	18	12	7.4	6.3	7.2
25	5.4	6.4	e6.0	5.5	e5.4	18	7.1	16	11	7.3	6.3	7.0
26	5.6	6.3	6.4	5.7	e5.6	20	6.2	14	10	7.2	6.2	6.8
27	5.5	6.2	7.2	5.8	e5.8	14	5.9	15	11	7.2	6.4	6.8
28	5.9	5.9	7.8	5.8	e9.0	16	5.8	13	10	7.1	6.1	6.8
29	6.2	5.8	6.6	e5.7	14	13	5.3	22	9.8	7.5	6.2	6.8
30	5.8	5.9	6.2	e5.6	---	12	5.1	37	9.5	7.2	7.2	6.8
31	5.4	---	5.6	e5.5	---	10	---	25	---	7.1	6.4	---
TOTAL	174.7	174.9	185.9	165.0	166.7	536.2	211.2	432.3	584.3	274.7	208.1	255.0
MEAN	5.64	5.83	6.00	5.32	5.75	17.3	7.04	13.9	19.5	8.86	6.71	8.50
MAX	6.8	7.5	7.8	5.9	14	72	9.8	52	140	14	8.6	49
MIN	4.8	4.9	5.0	4.9	5.0	6.3	5.1	4.6	9.5	7.1	6.1	6.0
CFSM	0.39	0.41	0.42	0.37	0.40	1.21	0.49	0.98	1.36	0.62	0.47	0.59
IN.	0.45	0.45	0.48	0.43	0.43	1.39	0.55	1.12	1.52	0.71	0.54	0.66

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2004, BY WATER YEAR (WY)

	8.24	8.80	7.65	6.82	7.93	13.4	12.1	12.1	11.5	9.46	10.0	9.53
MEAN	8.24	8.80	7.65	6.82	7.93	13.4	12.1	12.1	11.5	9.46	10.0	9.53
MAX	11.9	13.0	10.9	9.65	14.3	17.3	21.2	16.4	21.4	19.7	17.8	14.2
(WY)	(1994)	(1992)	(1994)	(1994)	(1994)	(2004)	(1993)	(1991)	(1993)	(1993)	(1993)	(1993)
MIN	5.64	5.58	4.90	4.70	5.09	7.98	7.04	8.82	7.48	6.05	4.94	4.82
(WY)	(2004)	(1991)	(1991)	(1991)	(1991)	(1991)	(2004)	(1992)	(1995)	(2003)	(2003)	(2003)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1991 - 2004

ANNUAL TOTAL	2,896.7	3,369.0	
ANNUAL MEAN	7.94	9.20	9.93
HIGHEST ANNUAL MEAN			13.5
LOWEST ANNUAL MEAN			7.75
HIGHEST DAILY MEAN	75	Mar 14	140
LOWEST DAILY MEAN	3.9	Sep 11	4.6
ANNUAL SEVEN-DAY MINIMUM	4.2	Sep 5	4.7
MAXIMUM PEAK FLOW			484
MAXIMUM PEAK STAGE			8.54
INSTANTANEOUS LOW FLOW			3.8
ANNUAL RUNOFF (CFSM)	0.555	0.644	0.695
ANNUAL RUNOFF (INCHES)	7.54	8.76	9.44
10 PERCENT EXCEEDS	12	15	14
50 PERCENT EXCEEDS	6.3	6.4	8.1
90 PERCENT EXCEEDS	4.8	5.2	5.6

(a) Also occurred Sept. 11, 2003

(b) From rating curve extended above 380 ft³/s on basis of step-backwater method

(c) Result of freezeup

(e) Estimated due to ice effect or missing record

05378185 EAGLE CREEK, AT COUNTY HIGHWAY G, NEAR FOUNTAIN CITY, WI—Continued

PRECIPITATION QUANTITY

PERIOD OF RECORD.--October 1990 to June 1996, October 2002 to current year (non-frozen precipitation).

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

REMARKS.--Rainfall estimated to be 0.00 for Dec. 18, Jan. 23, 26, 27, and Feb. 1, 2, 6 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, 2.68 in., June 9.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.03	0.00	0.01	0.00
2	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.83	0.00
3	0.10	0.53	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.69	0.22	0.00
4	0.00	0.35	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.03	0.00	0.00
5	0.00	0.00	0.12	0.00	0.00	0.82	0.00	0.00	0.07	0.46	0.00	0.45
6	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	1.00	0.00	0.86
7	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.15	0.00	0.08	0.10	0.00
8	0.00	0.00	0.25	0.00	0.00	0.06	0.00	0.47	1.81	0.00	0.00	0.00
9	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.75	2.68	0.00	0.17	0.00
10	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.14	0.13	0.00	0.00	0.00
11	0.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.31	0.05	0.00
12	0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.23	0.07	0.00	0.00	0.00
13	0.01	0.01	0.00	0.00	0.00	0.05	0.00	1.66	0.10	0.01	0.00	0.00
14	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	1.67
15	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	2.29
16	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	1.64	0.00	1.08	0.00
17	0.00	0.12	0.00	0.00	0.00	0.10	0.00	0.01	0.00	0.00	0.00	0.00
18	0.00	0.26	0.00	0.00	0.00	0.21	0.52	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.67	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.16	0.00	0.46	0.69	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.72	0.00	0.23	0.00	0.00
22	0.00	0.03	0.00	0.00	0.15	0.00	0.00	0.73	0.00	0.00	0.03	0.00
23	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.72	0.11	0.00	0.00	0.18
24	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.10	0.00	0.00	0.00
25	0.08	0.00	0.00	0.00	0.00	0.23	0.32	0.05	0.00	0.00	0.00	0.00
26	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00
27	0.10	0.00	0.08	0.00	0.00	0.07	0.00	0.41	0.20	0.00	0.00	0.00
28	0.17	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.01	0.00	0.07	0.00
29	0.06	0.00	0.00	0.00	0.16	0.00	0.00	1.03	0.00	0.34	0.06	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.01	1.07	0.00	0.11	0.63	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.07	---	0.00	0.01	---
TOTAL	1.31	2.04	0.74	0.01	0.47	1.83	1.67	9.61	7.57	3.26	3.43	5.45
CAL YR	2003	TOTAL		23.45								
WTR YR	2004	TOTAL		37.39								

05378185 EAGLE CREEK, AT COUNTY HIGHWAY G, NEAR FOUNTAIN CITY, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1990 to June 1996, October 2002 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: July 1990 to June 1996, October 2002 to current year.

SUSPENDED-SOLIDS DISCHARGE: July 1990 to June 1996, October 2002 to current year.

TOTAL-PHOSPHORUS DISCHARGE: July 1990 to June 1996, October 2002 to current year.

DISSOLVED OXYGEN: July 1990 to September 1992.

INSTRUMENTATION.--Water-quality sampler July 1990 to June 1996 and October 2002 to current year; continuous water-temperature recorder July 1990 to June 1996 and October 2002 to current year; dissolved-oxygen recorder July 1990 to September 1992.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Chemical analyses by the Wisconsin State Laboratory of Hygiene. Samples are point samples unless otherwise indicated.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum observed, 28.0°C, July 14, 1995; minimum observed, 0.0°C on many days during 1991, 1992, 1993, 1994, 1995, 1996, 2003, and 2004 winter periods.

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 4,750 tons, Aug. 14, 1995; minimum daily, 0.07 ton, Sept. 11, 2003.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 9,370 lb, Aug. 14, 1995; minimum daily, 0.65 lb, Feb. 16, 2004.

DISSOLVED OXYGEN: Maximum observed, 14.9 mg/L, Apr. 12, 1992; minimum observed, 4.2 mg/L, July 21, 1991.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum observed, 21.5°C, July 2, 13; minimum observed, 0.0°C on many days.

SUSPENDED-SOLIDS DISCHARGE: Maximum daily, 1,590 tons, June 9; minimum daily 0.08 ton, Apr. 8-13.

TOTAL-PHOSPHORUS DISCHARGE: Maximum daily, 3,550 lb, June 9; minimum daily, 0.65 lb, Feb. 16.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.5	6.0	7.5	7.0	6.0	6.5	3.0	1.0	2.5	3.0	0.0	1.5
2	9.0	4.5	7.0	8.0	6.5	7.0	1.5	0.5	1.0	4.0	2.0	3.0
3	11.0	8.5	9.5	7.0	4.5	5.5	3.0	1.5	2.0	4.0	1.0	2.0
4	10.5	6.5	8.5	6.0	5.0	5.5	3.0	1.5	2.5	1.5	0.0	1.0
5	11.5	7.0	9.5	6.0	4.0	5.0	4.0	2.5	3.5	1.0	0.0	0.5
6	12.0	7.5	10.0	4.0	2.0	3.5	4.0	3.5	3.5	1.0	0.0	0.5
7	---	---	---	3.0	1.5	2.5	4.0	2.5	3.5	1.5	0.0	0.5
8	---	---	---	2.5	0.5	1.5	4.5	3.0	3.5	1.0	0.0	0.5
9	---	---	---	3.0	0.5	1.5	5.0	3.0	4.0	1.0	0.0	0.5
10	---	---	---	5.0	2.5	3.5	3.5	0.0	2.0	1.0	0.5	1.0
11	14.0	11.5	12.5	7.5	5.0	6.5	1.5	0.0	0.5	1.5	1.0	1.5
12	12.5	10.0	11.5	5.5	3.0	4.5	1.5	0.0	0.5	2.0	1.0	1.5
13	11.0	9.5	10.0	4.0	2.0	3.0	1.5	0.0	0.5	2.0	1.5	1.5
14	11.5	9.5	10.5	4.5	1.5	3.0	1.5	0.0	0.5	2.0	1.0	1.5
15	10.0	7.0	8.5	6.0	4.5	5.5	2.0	0.0	1.0	1.5	0.5	1.0
16	8.5	6.0	7.5	7.5	6.0	6.5	2.5	0.5	1.5	2.0	1.0	1.5
17	9.5	5.5	7.5	8.0	6.0	6.5	2.5	0.0	1.0	3.0	1.5	2.0
18	11.5	8.0	10.0	9.5	7.0	8.5	2.5	0.0	1.0	2.0	0.0	0.5
19	11.5	8.0	10.0	7.0	5.0	6.0	2.5	0.0	1.5	1.0	0.0	0.5
20	12.5	9.0	10.5	7.5	4.5	6.0	2.5	0.0	1.0	1.0	0.0	0.5
21	12.0	10.0	11.0	6.5	5.0	5.5	3.5	0.5	2.0	1.5	0.5	1.0
22	10.0	7.0	8.5	5.0	3.5	4.5	3.5	1.0	2.0	0.5	0.0	0.5
23	9.0	6.5	8.0	5.0	3.0	4.0	3.0	1.0	2.0	0.5	0.0	0.5
24	8.5	6.0	7.0	4.0	1.0	2.0	1.5	0.0	1.0	0.5	0.0	0.5
25	8.0	5.5	7.0	2.5	0.5	1.5	1.5	0.0	1.0	1.5	0.5	1.0
26	7.5	6.0	7.0	3.0	1.0	2.0	2.5	0.5	1.5	1.5	0.5	1.0
27	7.0	4.0	5.5	4.0	3.0	3.5	4.0	1.5	2.5	1.5	0.0	1.0
28	7.0	6.5	6.5	3.0	2.0	2.5	5.0	2.0	3.5	0.5	0.0	0.0
29	7.0	6.0	6.5	3.0	1.5	2.5	4.5	1.0	3.5	0.5	0.0	0.0
30	8.5	6.5	7.5	4.5	2.0	3.5	3.5	0.0	1.5	0.5	0.0	0.0
31	8.0	7.0	8.0	---	---	---	3.5	0.0	1.5	0.5	0.0	0.0
MONTH	14.0	4.0	8.6	9.5	0.5	4.3	5.0	0.0	1.9	4.0	0.0	0.9

WAUMANDEE CREEK BASIN

05378185 EAGLE CREEK, AT COUNTY HIGHWAY G, NEAR FOUNTAIN CITY, WI—Continued

SUSPENDED SOLIDS, DRIED AT 105 DEGREES CELSIUS, WATER, UNFILTERED, TONS PER DAY
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.09	0.25	0.18	0.31	e0.53	450	0.31	0.09	6.3	0.20	0.42	0.14
2	0.10	0.25	0.17	0.33	e0.55	46	0.26	0.09	3.4	0.21	0.49	0.14
3	0.12	0.26	0.17	0.33	e0.53	3.6	0.20	0.09	2.0	0.58	0.43	0.13
4	0.14	0.35	0.17	e0.33	e0.51	2.2	0.17	0.09	1.3	0.62	0.42	0.13
5	0.16	0.28	0.17	e0.34	e0.52	7.7	0.14	0.09	0.95	0.29	0.38	0.13
6	0.19	0.25	0.17	e0.34	e0.51	2.9	0.12	0.09	0.69	1.8	0.36	0.82
7	0.22	0.24	0.17	e0.36	e0.50	4.5	0.09	0.09	0.47	1.1	0.37	0.15
8	0.26	0.22	0.18	e0.39	e0.49	0.51	0.08	0.12	8.2	0.42	0.37	0.15
9	0.30	0.21	0.19	e0.42	e0.48	1.0	0.08	0.11	1,590	0.44	0.38	0.14
10	0.39	0.22	0.19	0.44	e0.48	60	0.08	27	32	0.46	0.37	0.14
11	e0.43	0.23	0.17	0.47	e0.48	11	0.08	0.40	17	0.53	0.36	0.13
12	e0.44	0.23	0.15	0.49	e0.47	0.60	0.08	0.33	11	0.55	0.33	0.13
13	e0.39	0.22	0.14	0.50	e0.46	0.55	0.08	187	5.3	0.57	0.30	0.13
14	e0.37	0.21	0.15	0.51	e0.46	0.78	0.09	4.1	1.3	0.62	0.27	0.61
15	e0.35	0.22	0.16	0.49	e0.46	0.34	0.09	2.0	0.71	0.61	0.25	112
16	e0.33	0.21	0.17	0.48	e0.46	0.92	0.09	1.2	78	0.58	0.51	0.81
17	e0.32	0.20	0.16	0.50	e0.45	4.5	0.09	0.84	15	0.56	0.32	0.52
18	e0.32	0.24	0.16	e0.89	e0.44	23	0.10	0.56	3.1	0.55	0.23	0.44
19	e0.31	0.22	0.17	e0.64	e0.43	5.0	1.0	0.38	1.6	0.54	0.21	0.39
20	e0.30	0.21	e0.18	e0.48	e0.42	69	0.72	965	0.99	0.53	0.19	0.34
21	0.30	0.20	0.19	0.51	e0.40	1.1	1.1	25	0.86	0.56	0.18	0.31
22	0.30	0.20	0.20	e1.1	e0.37	0.54	0.13	69	0.72	0.52	0.17	0.28
23	0.31	0.24	0.21	0.49	e0.36	3.7	0.11	50	0.63	0.50	0.15	0.26
24	0.28	0.22	e0.22	0.52	e0.35	12	0.11	20	0.57	0.48	0.14	0.25
25	0.26	0.21	e0.23	0.53	e0.34	7.7	0.14	13	0.46	0.47	0.14	0.23
26	0.27	0.21	0.26	0.54	e0.34	11	0.12	8.0	0.40	0.46	0.13	0.20
27	0.26	0.20	0.30	0.55	e0.34	1.0	0.11	10	0.37	0.45	0.14	0.19
28	0.28	0.19	0.35	0.55	e0.51	0.94	0.11	6.1	0.32	0.44	0.13	0.18
29	0.30	0.19	0.31	e0.54	1.5	0.67	0.10	43	0.27	0.46	0.13	0.16
30	0.27	0.19	0.30	e0.53	---	0.51	0.10	349	0.23	0.44	0.16	0.15
31	0.26	---	0.29	e0.52	---	0.39	---	41	---	0.43	0.14	---
TOTAL	8.62	6.77	6.23	15.42	14.14	733.65	6.08	1,823.77	1,784.14	16.97	8.57	119.78
MEAN	0.28	0.23	0.20	0.50	0.49	24	0.20	59	59	0.55	0.28	4.0
MAX	0.44	0.35	0.35	1.1	1.5	450	1.1	965	1,590	1.8	0.51	112
MIN	0.09	0.19	0.14	0.31	0.34	0.34	0.08	0.09	0.23	0.20	0.13	0.13
CAL YR	2003	TOTAL	2,097.35	MEAN	5.7	MAX	721	MIN	0.07			
WTR YR	2004	TOTAL	4,544.14	MEAN	12	MAX	1590	MIN	0.08			

e Estimated

05378185 EAGLE CREEK, AT COUNTY HIGHWAY G, NEAR FOUNTAIN CITY, WI—Continued

PHOSPHORUS, WATER, UNFILTERED, POUNDS PER DAY
 WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.2	1.0	0.99	e0.85	1,170	6.0	1.2	17	1.8	2.1	1.6
2	1.1	1.2	0.98	1.0	e0.87	308	4.8	1.1	6.8	1.9	3.5	1.6
3	1.3	1.3	0.98	0.95	e0.83	53	3.7	1.1	4.4	2.2	2.2	1.5
4	1.3	1.7	0.96	e0.90	e0.79	18	3.0	1.1	3.8	2.4	2.1	1.4
5	1.3	1.4	0.97	e0.89	e0.81	62	2.4	1.1	3.5	2.4	1.9	1.4
6	1.5	1.2	0.96	e0.86	e0.79	28	2.0	1.1	3.1	5.6	1.8	5.6
7	1.5	1.2	0.97	e0.89	e0.77	40	1.6	1.1	2.7	3.6	1.8	1.6
8	1.6	1.1	1.0	e0.91	e0.75	6.4	1.3	1.5	16	3.1	1.8	1.5
9	1.7	1.1	1.1	e0.93	e0.73	12	1.3	1.4	3,350	3.2	1.9	1.4
10	2.0	1.1	1.1	0.94	e0.72	198	1.3	116	122	3.3	1.8	1.4
11	e2.2	1.2	0.98	0.97	e0.71	97	1.3	18	47	3.7	1.8	1.3
12	e2.2	1.2	0.86	0.96	e0.68	7.2	1.2	4.7	31	3.7	1.7	1.3
13	e1.9	1.2	0.82	0.95	e0.67	4.9	1.2	368	16	3.8	1.7	1.3
14	e1.8	1.1	0.88	0.95	e0.66	4.7	1.3	13	4.2	4.0	1.7	2.6
15	e1.7	1.2	0.93	0.91	e0.66	2.9	1.3	6.5	3.5	3.8	1.6	287
16	e1.6	1.1	0.96	0.89	e0.65	11	1.3	4.3	164	3.5	3.8	7.0
17	e1.6	1.1	0.91	0.92	e0.69	40	1.3	3.0	70	3.4	2.6	4.8
18	e1.6	1.3	0.94	e1.6	e0.73	103	1.3	2.1	18	3.3	1.9	4.1
19	e1.5	1.2	0.96	e1.1	e0.77	54	7.0	1.5	10	3.2	1.9	3.6
20	e1.4	1.2	e0.95	e0.86	e0.82	611	4.8	2,440	7.5	3.1	1.8	3.2
21	1.4	1.1	0.97	0.90	e0.84	18	7.8	77	5.8	3.2	1.8	2.9
22	1.4	1.1	0.98	e2.0	e0.85	9.4	1.7	187	4.8	3.0	1.8	2.6
23	1.4	1.3	0.98	0.85	e0.89	33	1.4	143	4.3	2.8	1.8	2.5
24	1.3	1.2	e0.98	0.90	e0.94	92	1.4	64	4.0	2.7	1.9	2.4
25	1.2	1.2	e0.98	0.90	e1.0	62	1.7	44	3.4	2.6	1.9	2.1
26	1.3	1.2	1.1	0.91	e1.1	81	1.5	29	3.0	2.5	1.8	1.9
27	1.2	1.1	1.2	0.92	e1.2	16	1.4	36	2.9	2.4	1.8	1.8
28	1.4	1.1	1.3	0.92	e1.9	16	1.4	22	2.6	2.3	1.7	1.7
29	1.4	1.1	1.1	e0.89	11	13	1.2	124	2.2	2.4	1.7	1.6
30	1.3	1.1	1.0	e0.86	---	10	1.2	720	2.0	2.2	1.9	0.81
31	1.2	---	0.95	e0.84	---	7.6	---	163	---	2.2	1.7	---
TOTAL	46.4	35.8	30.75	30.26	34.67	3,189.1	70.1	4,596.8	3,935.5	93.3	61.2	355.51
MEAN	1.5	1.2	0.99	0.98	1.2	103	2.3	148	131	3.0	2.0	12
MAX	2.2	1.7	1.3	2.0	11	1,170	7.8	2,440	3,350	5.6	3.8	287
MIN	1.1	1.1	0.82	0.84	0.65	2.9	1.2	1.1	2.0	1.8	1.6	0.81
CAL YR	2003	TOTAL	6,542.95	MEAN	18	MAX	1800	MIN	0.82			
WTR YR	2004	TOTAL	12,479.39	MEAN	34	MAX	3350	MIN	0.65			

e Estimated

05378185 EAGLE CREEK, AT COUNTY HIGHWAY G, NEAR FOUNTAIN CITY, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Dis-charge, cfs (00060)	Instan- taneous dis- charge, cfs (00061)	Sam- pling method, code (82398)	Residue total at 105 deg. C, sus- pended, mg/L (00530)	Ammonia water, fltrd, mg/L as N (00608)	Phos- phorus, water, fltrd, mg/L (00666)	Phos- phorus, water, unfltrd mg/L (00665)
OCT								
10...	0955	--	6.4	10	25	<.013	.028	.063
24...	1336	--	6.1	10	18	<.013	.024	.042
NOV								
06...	0947	--	5.5	10	17	.032	.027	.042
20...	0938	--	6.0	10	13	.032	.022	.036
DEC								
18...	1025	--	5.9	10	10	.015	.017	.029
JAN								
13...	0944	--	5.1	10	36	.026	.019	.034
FEB								
16...	1014	5.0	--	10	34	.024	.014	.024
MAR								
01...	0420	--	42	50	1,840	1.05	--	2.31
01...	1300	--	55	50	1,170	1.99	--	2.28
01...	1400	--	82	50	2,360	1.89	--	3.31
01...	1515	--	124	50	7,220	1.75	--	6.14
01...	1550	--	136	50	4,180	1.76	--	4.16
01...	2155	--	96	50	1,370	1.66	--	2.51
02...	0940	--	34	50	374	1.27	--	1.54
03...	0958	--	9.5	10	84	.640	.599	.814
03...	1000	--	9.4	50	82	.617	--	.765
10...	1515	--	32	50	666	.357	--	.680
10...	1820	--	64	50	992	.330	--	1.58
10...	2000	--	87	50	1,310	.366	--	1.79
11...	0005	--	54	50	508	.900	--	1.47
11...	1136	--	16	10	85	.538	--	.691
17...	1950	--	31	50	408	--	--	--
18...	1620	--	54	50	1,060	--	--	--
20...	0715	--	40	50	308	--	--	--
20...	1405	--	52	50	716	--	--	--
20...	1500	--	76	50	1,530	--	--	--
20...	2015	--	42	50	508	--	--	--
25...	0944	--	12	10	26	.104	.156	.220
APR								
08...	1038	--	7.4	10	4	.020	.017	.033
22...	1036	--	7.1	10	7	.022	.020	.044
MAY								
10...	1132	--	11	10	1,090	.242	--	2.17
10...	1133	--	11	50	1,090	.240	--	2.17
13...	1015	--	32	50	1,490	.285	.128	1.42
13...	1125	--	70	50	2,010	.875	.456	2.89
13...	1250	--	82	50	2,350	.345	.190	2.35
13...	1310	--	98	50	2,810	.269	.113	2.63
13...	1330	--	110	50	3,030	.250	.075	2.73
13...	1530	--	87	50	3,560	.283	.234	3.92
13...	1605	--	64	50	3,650	.266	.357	3.55
13...	1640	--	47	50	--	.254	.308	1.68
14...	1312	--	12	10	91	.100	.059	.169
14...	1315	--	12	50	107	.096	.060	.219
20...	0145	--	32	50	1,440	.115	.089	1.44
20...	0205	--	46	50	1,780	.202	--	1.95
20...	0220	--	66	50	2,020	.214	--	1.84
20...	0235	--	139	50	5,940	.259	.261	5.75
20...	0245	--	244	50	11,900	.655	--	13.1
20...	0250	--	270	50	9,140	.363	.108	16.0
20...	0255	--	297	50	17,400	.391	.140	19.0
20...	0410	--	263	50	10,100	.444	.186	12.3
20...	0425	--	228	50	9,160	.873	--	11.9
20...	0435	--	204	50	8,900	.841	--	11.6
20...	0520	--	120	50	6,020	.767	--	8.85
20...	0600	--	76	50	3,590	.669	--	8.11
20...	0948	--	27	10	1,700	.283	.271	2.82
20...	0950	--	27	50	1,610	.286	.308	3.22
30...	1815	--	44	50	1,840	.086	--	1.38
30...	1905	--	97	50	5,740	.179	--	3.81
30...	1930	--	190	50	8,120	.307	--	5.92
30...	1940	--	200	50	7,880	.506	--	6.42
30...	2005	--	169	50	7,200	1.18	--	7.00
30...	2045	--	98	50	5,080	1.57	--	7.01
30...	2245	--	70	50	3,800	.873	--	5.05
31...	0205	--	40	50	1,310	.669	--	2.36

05378185 EAGLE CREEK, AT COUNTY HIGHWAY G, NEAR FOUNTAIN CITY, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia water, fltrd, mg/L as N (00608)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)
JUN							
01...	1128	18	10	124	.051	.048	.178
08...	2335	39	50	2,460	.504	--	2.09
09...	0020	116	50	3,820	.253	--	3.01
09...	0055	191	50	4,000	.527	--	3.72
09...	0110	356	50	12,200	.769	--	16.6
09...	0120	453	50	24,500	.846	--	11.6
09...	0130	469	50	12,000	.923	--	10.9
09...	0155	428	50	9,340	.818	--	9.22
09...	0230	280	50	6,920	.632	--	7.12
09...	0405	177	50	3,620	.462	--	5.02
09...	1250	43	50	498	.139	--	.796
09...	1252	42	10	535	.356	.772	.849
09...	1530	83	50	1,030	.218	--	1.25
09...	1655	148	50	2,040	.250	--	2.21
09...	1715	211	50	2,990	.187	--	2.77
09...	1750	191	50	3,140	.217	--	2.36
09...	1752	193	10	3,120	.588	3.26	3.29
09...	1910	253	50	2,790	.241	--	3.21
09...	2110	202	50	2,980	.238	--	3.62
09...	2145	152	50	2,300	.214	--	3.07
10...	0145	47	50	782	.146	--	1.31
10...	1004	30	10	211	.105	--	.434
10...	1005	30	50	229	.092	--	.432
16...	1945	69	50	2,210	.127	--	1.87
16...	2000	91	50	2,830	.141	--	2.30
16...	2205	54	50	2,360	.234	--	2.99
17...	1052	19	10	135	.064	.414	.402
JUL							
01...	1028	9.4	10	8	<.015	.015	.036
15...	1008	8.5	10	26	.026	.036	.081
28...	1042	7.4	10	55	.023	.028	.061
28...	1043	7.4	70	23	.033	.028	.060
AUG							
11...	0946	6.8	10	20	<.015	.028	.048
25...	0832	6.3	10	8	.024	.019	.055
SEP							
09...	0958	6.8	10	8	<.015	.023	.040
15...	0325	37	50	626	.118	--	.752
15...	0430	90	50	1,280	.079	--	1.21
15...	0720	146	50	1,330	.100	--	1.34
15...	1100	67	50	690	.182	--	1.55
16...	1212	11	10	23	.039	--	.106

UPPER MISSISSIPPI RIVER MAIN STEM--Continued

05378500 MISSISSIPPI RIVER AT WINONA, MN

LOCATION.--Lat 44°03'21", long 91°38'16", in sec. 23, T.107 N., R.7 W., Winona County, Hydrologic Unit 07040003, on right bank at Winona pumping station in Winona, 9.5 mi upstream from Trempealeau River, and at mile 725.7 upstream from the Ohio River.

DRAINAGE AREA.--59,200 mi² (approximately).

PERIOD OF RECORD.--June 1928 to current year. Gage-height records collected in this vicinity since 1878 are contained in reports of Mississippi River Commission.

GAGE.--Water-stage recorder. Datum of gage is 639.64 ft above sea level (NGVD of 1929). June 10, 1928 to Apr. 15, 1931, nonrecording gage at site 800 ft upstream. Prior to Oct. 1, 1929, at datum 0.20 ft higher and Oct. 1, 1929 to Apr. 15, 1931, at datum 0.12 ft lower. Apr. 16, 1931 to Nov. 12, 1934, nonrecording gage at present site and datum. Since Mar. 31, 1937, auxiliary water-stage recorder 2.7 mi upstream at tailwater of navigation dam 5A.

REMARKS.-- Records are good to fair except those for estimated daily discharges, which are fair to poor. Some regulation by reservoirs, navigation dams, and power plants at low and medium stages. Daily discharges for some days were based in part on instantaneous discharges obtained from the U.S. Army Corps of Engineers for Lock and Dam 5A.

EXTREMES FOR PERIOD OF RECORD.--Minimum gage height, -3.38 ft, Aug. 31, 1934 (prior to dam construction in 1936); minimum gage height since 1938, after completion of dam, 1.95 ft, Jan. 27, 1944.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10,600	15,100	12,000	13,200	e11,500	17,800	71,900	42,600	59,200	34,200	16,500	14,100
2	10,000	14,900	12,800	13,000	e11,500	24,800	76,500	37,200	64,000	31,100	14,800	13,800
3	9,530	14,800	13,200	12,400	e11,600	27,800	75,400	33,500	69,600	27,500	24,500	13,500
4	11,200	14,500	13,600	e12,200	e11,700	26,400	69,700	31,800	77,600	28,900	22,600	14,700
5	11,100	13,900	14,000	e11,700	e11,200	26,500	65,200	29,400	84,200	29,200	17,200	15,400
6	11,600	13,400	14,500	e11,300	e11,300	27,000	59,700	27,700	86,900	27,700	17,100	14,900
7	11,100	14,100	14,700	e11,000	e12,000	25,000	57,000	26,100	85,100	28,200	19,000	15,400
8	11,000	14,900	14,100	e10,800	e12,400	22,200	53,900	26,100	81,600	28,400	17,900	17,200
9	11,300	15,200	14,700	e10,800	e12,300	20,700	48,400	26,000	82,000	28,700	17,300	19,200
10	11,100	13,600	14,800	e10,800	e12,300	21,000	46,200	26,600	84,500	28,400	18,300	19,600
11	11,100	12,000	13,700	e10,800	e12,300	20,100	43,900	27,500	86,400	28,200	19,100	19,300
12	12,700	11,400	12,800	e10,900	e12,300	21,300	39,800	26,000	91,200	29,300	19,000	19,000
13	14,600	12,300	e10,000	e11,000	e12,300	23,300	38,300	25,000	97,100	31,700	18,800	18,200
14	13,600	13,400	e9,300	e11,100	e12,300	24,900	36,200	26,600	99,100	33,500	18,500	17,000
15	12,900	13,900	e10,000	e11,300	e12,300	25,200	33,100	27,500	96,900	34,200	18,500	26,100
16	12,500	14,200	e10,500	e11,200	e12,100	23,800	29,900	27,800	91,100	33,900	19,200	30,700
17	12,200	15,600	e12,400	e11,300	e12,000	23,200	29,800	30,200	88,600	34,000	20,100	33,200
18	11,200	15,600	e13,400	e11,600	e12,000	23,700	28,900	32,800	84,400	34,000	19,900	38,500
19	11,100	16,000	e14,900	e11,100	e12,100	25,000	28,900	28,600	80,200	33,900	18,300	36,900
20	10,900	15,800	e15,600	e11,200	e12,400	27,500	29,800	29,700	76,000	32,500	15,700	34,200
21	11,100	16,000	e15,300	e11,300	e13,700	27,300	31,400	33,600	72,700	29,500	15,200	35,400
22	12,100	16,200	e15,200	e10,900	e14,100	26,000	37,000	34,300	70,000	27,200	15,300	35,500
23	13,300	16,000	e15,100	e10,800	e13,900	25,600	40,300	34,800	67,400	26,700	15,900	36,200
24	14,400	15,900	14,800	e10,100	e14,000	25,700	43,700	36,100	64,100	25,200	16,100	37,800
25	13,800	15,200	14,600	e10,100	e14,200	26,100	46,900	36,100	59,000	23,900	16,100	37,900
26	12,400	14,100	14,600	e10,100	e14,200	30,500	49,500	40,400	57,000	21,900	16,400	37,600
27	11,200	12,700	14,300	e10,200	e14,300	34,800	49,100	46,700	51,700	20,300	16,000	37,600
28	11,400	12,400	13,200	e11,200	e14,200	39,300	47,000	50,200	47,700	17,600	15,700	37,700
29	11,400	13,200	12,700	e12,100	e14,400	47,600	46,600	50,400	41,400	17,100	15,100	36,100
30	11,700	12,100	13,000	e12,000	---	54,500	44,800	51,300	38,400	20,300	14,700	36,100
31	13,300	---	12,500	e11,800	---	63,400	---	57,900	---	20,200	14,900	---
TOTAL	367,430	428,400	416,300	349,300	366,900	878,000	1,398,800	1,060,500	2,235,100	867,400	543,700	798,800
MEAN	11,850	14,280	13,430	11,270	12,650	28,320	46,630	34,210	74,500	27,980	17,540	26,630
MAX	14,600	16,200	15,600	13,200	14,400	63,400	76,500	57,900	99,100	34,200	24,500	38,500
MIN	9,530	11,400	9,300	10,100	11,200	17,800	28,900	25,000	38,400	17,100	14,700	13,500
AC-FT	728,800	849,700	825,700	692,800	727,700	1,742,000	2,775,000	2,104,000	4,433,000	1,720,000	1,078,000	1,584,000
CFSM	0.20	0.24	0.23	0.19	0.21	0.48	0.79	0.58	1.26	0.47	0.30	0.45
IN.	0.23	0.27	0.26	0.22	0.23	0.55	0.88	0.67	1.40	0.55	0.34	0.50

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

MEAN	22,660	23,070	17,860	15,410	15,690	30,400	62,240	49,770	40,530	32,460	21,860	22,550
MAX	85,950	50,040	40,440	30,480	35,900	86,420	152,600	119,800	100,200	118,800	67,560	69,490
(WY)	(1987)	(1972)	(1992)	(1983)	(1984)	(1983)	(1965)	(2001)	(1993)	(1993)	(1993)	(1986)
MIN	6,774	7,367	6,286	6,742	7,874	9,023	12,810	11,930	8,450	7,063	5,391	6,790
(WY)	(1934)	(1934)	(1934)	(1940)	(1977)	(1934)	(1931)	(1931)	(1934)	(1934)	(1934)	(1933)

05378500 MISSISSIPPI RIVER AT WINONA, MN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1928 - 2004	
ANNUAL TOTAL	10,136,360		9,710,630			
ANNUAL MEAN	27,770		26,530		29,570	
HIGHEST ANNUAL MEAN					56,850	1986
LOWEST ANNUAL MEAN					9,742	1934
HIGHEST DAILY MEAN	119,000	May 17	99,100	Jun 14	264,000	Apr 20, 1965
LOWEST DAILY MEAN	9,200	Sep 5	9,300	Dec 14	2,250	Dec 29, 1933
ANNUAL SEVEN-DAY MINIMUM	9,900	Sep 3	10,500	Jan 22	3,210	Dec 27, 1933
MAXIMUM PEAK FLOW			99,500	Jun 14	268,000	Apr 19, 1965
MAXIMUM PEAK STAGE			11.54	Jun 14	a20.77	Apr 19, 1965
INSTANTANEOUS LOW FLOW			b9,300	Dec 14	c1,940	Dec 12, 1980
ANNUAL RUNOFF (AC-FT)	20,110,000		19,260,000		21,420,000	
ANNUAL RUNOFF (CFSM)	0.469		0.448		0.500	
ANNUAL RUNOFF (INCHES)	6.37		6.10		6.79	
10 PERCENT EXCEEDS	62,000		54,100		60,700	
50 PERCENT EXCEEDS	15,300		18,200		21,300	
90 PERCENT EXCEEDS	11,400		11,200		10,100	

- (a) From highwater mark
(b) Due in part to freezeup
(c) Result of ice jam upstream
(e) Estimated

TREMPEALEAU RIVER BASIN

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053793305 TRAVERSE VALLEY CREEK, NORTH TRIBUTARY, NEAR INDEPENDENCE, WI

LOCATION.--Lat 44°23'55", long 91°33'05" in NE ¼ SE ¼ sec.11, T.22 N., R.10 W., Buffalo County, Hydrologic Unit 07040005, 100 ft upstream of culvert crossing at County Highway X at Bragger family farm, 6.7 mi west-northwest of Independence.

DRAINAGE AREA.--0.65 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 2001 to current year.

GAGE.--Water-stage recorder. Water levels are controlled by a 4.5 ft H flume. Elevation of gage is 970 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated days which are fair (see page 11). Gage-height telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.102	0.092	0.092	0.089	e0.066	1.71	0.113	0.069	0.284	0.154	0.125	0.104
2	0.098	0.092	0.090	0.090	e0.070	1.06	0.109	0.067	0.233	0.151	0.266	0.102
3	0.101	0.100	0.090	0.088	e0.070	0.280	0.103	0.068	0.205	0.164	0.332	0.101
4	0.098	0.115	0.091	0.085	e0.066	0.398	0.102	0.066	0.187	0.162	0.180	0.099
5	0.097	0.096	0.091	e0.070	e0.070	0.187	0.100	0.069	0.180	0.155	0.131	0.103
6	0.098	0.091	0.090	e0.070	e0.072	0.128	0.093	0.061	0.169	0.186	0.123	0.163
7	0.099	0.090	0.091	e0.068	e0.074	0.153	0.092	0.064	0.160	0.165	0.127	0.109
8	0.100	0.088	0.094	e0.068	e0.074	0.121	0.090	0.111	2.29	0.154	0.120	0.108
9	0.101	0.088	0.099	e0.068	e0.072	0.120	0.084	0.148	2.59	0.151	0.122	0.105
10	0.101	0.091	0.099	e0.066	e0.072	1.13	0.083	0.192	0.565	0.142	0.120	0.102
11	0.117	0.093	e0.091	e0.078	e0.070	0.338	0.082	0.102	0.624	0.148	0.123	0.098
12	0.104	0.098	e0.086	e0.074	e0.070	0.111	0.081	0.102	0.387	0.139	0.115	0.099
13	0.101	0.092	e0.086	e0.070	e0.068	0.109	0.078	0.731	0.324	0.136	0.111	0.095
14	0.100	0.091	e0.086	e0.068	e0.068	0.185	0.077	0.209	0.283	0.133	0.109	0.136
15	0.097	0.091	e0.088	e0.066	e0.068	0.106	0.077	0.152	0.263	0.133	0.106	0.496
16	0.095	0.091	e0.088	e0.066	e0.074	0.305	0.079	0.132	0.273	0.130	0.139	0.149
17	0.096	0.096	0.089	e0.066	0.080	0.226	0.077	0.122	0.250	0.129	0.119	0.131
18	0.098	0.109	0.086	e0.064	0.082	0.489	0.081	0.108	0.225	0.128	0.114	0.126
19	0.097	0.098	0.086	e0.062	0.086	0.532	0.093	0.184	0.210	0.131	0.109	0.115
20	0.099	0.096	0.086	e0.062	0.087	1.08	0.095	0.188	0.206	0.127	0.107	0.100
21	0.098	0.094	0.087	e0.066	0.082	0.235	0.092	0.178	0.199	0.133	0.105	0.102
22	0.096	0.094	0.087	e0.062	0.083	0.306	0.079	0.285	0.190	0.125	0.103	0.100
23	0.096	0.109	0.086	e0.062	0.082	0.721	0.072	0.280	0.188	0.119	0.105	0.110
24	0.096	0.101	0.085	e0.062	0.081	1.31	0.074	0.240	0.180	0.117	0.107	0.110
25	0.095	0.097	0.085	e0.060	0.081	1.63	0.087	0.189	0.174	0.115	0.106	0.102
26	0.095	0.094	0.085	e0.060	0.079	0.217	0.079	0.165	0.169	0.114	0.101	0.100
27	0.094	0.093	0.098	e0.060	0.080	0.145	0.078	0.329	0.174	0.113	0.104	0.099
28	0.099	0.093	0.114	e0.058	0.091	0.148	0.074	0.192	0.166	0.112	0.111	0.102
29	0.097	0.093	0.101	e0.058	0.217	0.127	0.071	0.491	0.159	0.127	0.109	0.104
30	0.095	0.093	0.095	e0.058	---	0.118	0.072	0.475	0.157	0.118	0.109	0.106
31	0.094	---	0.091	e0.058	---	0.115	---	0.391	---	0.123	0.107	---
TOTAL MEAN	3.054	2.859	2.813	2.102	2.335	13.840	2.567	6.160	11.664	4.234	3.965	3.676
MAX	0.10	0.10	0.09	0.07	0.08	0.45	0.09	0.20	0.39	0.14	0.13	0.12
MIN	0.117	0.115	0.114	0.090	0.217	1.71	0.113	0.731	2.59	0.186	0.332	0.496
CFSM	0.094	0.088	0.085	0.058	0.066	0.106	0.071	0.061	0.157	0.112	0.101	0.095
IN.	0.15	0.15	0.14	0.10	0.12	0.69	0.13	0.31	0.60	0.21	0.20	0.19
	0.17	0.16	0.16	0.12	0.13	0.79	0.15	0.35	0.67	0.24	0.23	0.21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)

MEAN	0.15	0.14	0.14	0.12	0.14	0.35	0.16	0.20	0.33	0.16	0.14	0.16
MAX	0.18	0.18	0.18	0.17	0.21	0.45	0.21	0.21	0.45	0.22	0.19	0.21
(WY)	(2003)	(2002)	(2002)	(2002)	(2002)	(2004)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)
MIN	0.10	0.10	0.09	0.07	0.08	0.25	0.09	0.20	0.15	0.13	0.12	0.11
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2002)	(2004)	(2004)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 2001 - 2004

ANNUAL TOTAL	55.010	59.320	
ANNUAL MEAN	0.15	0.16	0.18
HIGHEST ANNUAL MEAN			0.22 2002
LOWEST ANNUAL MEAN			0.16 2004
HIGHEST DAILY MEAN	2.49 Mar 15	2.59 Jun 9	4.52 Jun 3, 2002
LOWEST DAILY MEAN	0.080 Dec 24	0.058 Jan 28-31	0.058 Jan 28-31, 2004
ANNUAL SEVEN-DAY MINIMUM	0.09 Dec 19	0.06 Jan 22	0.06 Jan 22, 2004
MAXIMUM PEAK FLOW		158 Jun 8	158 Jun 8, 2004
MAXIMUM PEAK STAGE		5.33 Jun 8	5.33 Jun 8, 2004
INSTANTANEOUS LOW FLOW		0.05 May 6	0.05 May 6, 2004
ANNUAL RUNOFF (CFSM)	0.232	0.249	0.281
ANNUAL RUNOFF (INCHES)	3.15	3.39	3.82
10 PERCENT EXCEEDS	0.18	0.23	0.24
50 PERCENT EXCEEDS	0.12	0.10	0.15
90 PERCENT EXCEEDS	0.09	0.07	0.09

(e) Estimated due to ice effect or missing record

053793305 TRAVERSE VALLEY CREEK, NORTH TRIBUTARY, NEAR INDEPENDENCE, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 2001 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: September 2001 to current year.

INSTRUMENTATION.--Continuous water temperature recorder and water-quality sampler September 2001 to current year.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Mean water temperature estimated May 14-20, 25-28, June 1-8, 14-15, Aug. 2-6, 17-31, and Sept. 3-28. Chemical analyses by the Wisconsin State Laboratory of Hygiene. Samples collected during periods of non-stormflow are grab samples. Samples during storms are composite samples collected by an automatic point sampler. The sample runoff volume is the total flow that occurs between the first and last subsample of each flow-composite sample. The storm runoff volume is the total flow that occurs between the start of the storm and the end of the storm. In most cases, the sample runoff volume is slightly different than the storm runoff volume. If the sample runoff volume and the storm runoff volume are comparable, a storm load (in pounds) can be computed by multiplying the storm volume (in thousands of cubic feet) by the constituent concentration (in mg/L) by a factor of 0.0624.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum temperature, 19.5°C, June 26, 30, and July 21, 2002; minimum, 0.0°C, many days.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum temperature, 18.5°C, Apr. 28 and June 9; minimum, 0.0°C, Jan. 30-31, Feb. 29, Mar. 1-2, 10-11, 18, 20, 24-25.

 TEMPERATURE, WATER, DEGREES CELSIUS
 WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10.0	7.5	8.5	8.5	7.0	7.5	5.0	3.5	4.5	4.5	2.0	3.0
2	10.0	6.5	8.0	9.0	7.0	8.0	4.5	3.0	4.0	5.0	4.0	4.5
3	10.5	8.0	9.5	7.0	6.0	6.5	5.5	4.0	4.5	4.5	2.0	3.0
4	10.5	7.5	8.5	8.0	6.5	7.0	5.5	3.5	4.5	2.5	1.5	2.0
5	11.5	7.5	9.0	7.0	5.5	6.5	6.0	4.5	5.0	2.0	1.0	1.5
6	11.5	7.5	9.5	6.5	4.0	5.5	5.5	5.0	5.0	2.0	1.0	1.5
7	13.0	8.0	10.0	6.0	3.5	4.5	5.5	4.5	5.0	2.0	1.5	1.5
8	13.5	9.5	11.0	5.5	3.0	4.0	5.5	4.0	5.0	3.0	1.5	2.0
9	13.5	9.5	11.0	6.0	3.0	4.5	6.0	4.5	5.5	3.0	1.5	2.5
10	13.5	10.0	11.5	6.5	5.0	6.0	4.5	2.5	3.5	3.5	2.5	3.0
11	12.5	10.0	11.0	8.5	6.0	7.0	2.5	1.5	2.0	4.0	3.0	3.5
12	12.0	9.0	10.5	7.0	5.0	6.0	2.5	1.5	2.0	4.0	3.5	3.5
13	11.0	9.0	10.0	6.5	4.5	5.0	3.0	1.5	2.0	3.5	2.5	3.0
14	11.5	8.5	10.0	7.0	4.5	5.5	4.0	3.0	3.5	3.5	2.0	3.0
15	11.0	8.0	9.0	7.5	6.5	7.0	4.5	3.5	4.0	3.0	1.5	2.5
16	10.0	7.0	8.0	8.0	7.0	7.5	4.5	3.0	4.0	3.0	2.0	2.5
17	10.5	7.5	9.0	8.0	6.5	7.5	4.0	2.5	3.5	4.0	2.5	3.5
18	12.0	9.0	10.0	9.5	6.5	8.0	4.0	3.0	3.5	2.5	1.0	1.5
19	12.0	8.5	10.0	8.0	6.0	7.0	3.5	1.5	2.5	2.5	1.0	1.0
20	12.5	9.0	10.0	8.5	5.5	7.0	4.0	1.5	2.5	2.0	1.0	1.5
21	11.5	8.5	10.0	7.0	5.5	6.0	5.0	3.0	4.0	3.0	0.5	2.0
22	10.5	7.5	9.0	6.0	5.5	6.0	5.0	3.0	4.0	1.5	0.5	1.0
23	10.0	7.5	8.5	6.5	4.5	6.0	4.5	2.0	3.5	1.5	1.0	1.0
24	9.5	7.0	8.0	4.5	3.0	4.0	3.0	1.5	2.0	2.5	1.0	1.5
25	10.0	6.5	8.0	5.5	3.0	4.5	3.0	1.5	2.0	2.5	1.5	2.0
26	8.5	6.5	7.5	5.5	3.5	4.5	4.5	2.0	3.0	3.0	2.0	2.5
27	9.0	6.0	7.5	6.0	4.5	5.5	5.5	4.0	4.5	3.0	1.5	2.0
28	8.0	7.5	8.0	4.5	4.0	4.5	6.0	4.5	5.0	2.0	0.5	1.0
29	8.0	7.5	7.5	5.0	3.5	4.5	4.5	3.5	4.5	1.5	0.5	1.0
30	9.0	7.5	8.0	6.5	4.0	5.0	4.0	2.0	3.0	1.5	0.5	1.0
31	9.0	7.5	8.5	---	---	---	4.0	2.0	2.5	1.5	0.5	1.0
MONTH	13.5	6.0	9.2	9.5	3.0	5.9	6.0	1.5	3.7	5.0	0.5	2.1

053793305 TRAVERSE VALLEY CREEK, NORTH TRIBUTARY, NEAR INDEPENDENCE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DISCRETE SAMPLES

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unfltrd lab, uS/cm 25 degC (90095)	ANC, wat unfltrd end pt, lab, mg/L as CaCO3 (00417)	Chloride, water, fltrd, mg/L (00940)	Residue on evap. at 105degC wat unfltrd mg/L (00500)	Residue total at 105 deg. C, suspended, mg/L (00530)	Residue volatile, suspended, mg/L (00535)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)
OCT 24...	1755	.10	70	--	--	--	5.2	338	21	4	.19	.23	<.013
NOV 20...	1108	.10	70	8.2	498	243	5.5	314	15	4	.20	.31	.016
DEC 17...	1000	.09	70	8.1	495	242	5.4	324	9	<2	.27	.38	<.015
JAN 19...	0835	.06	70	8.1	508	247	5.4	334	20	5	<.14	.16	.006
FEB 16...	0705	.08	70	8.2	495	241	5.1	348	26	7	<.14	.25	<.015
MAR 16...	1045	.09	70	8.3	483	235	4.9	300	3	<2	<.14	<.14	.055
APR 08...	1400	.09	70	8.1	484	239	4.8	304	7	2	<.14	<.14	.017
MAY 21...	1250	.17	70	8.2	491	240	5.0	322	23	3	.28	.33	<.015
JUN 15...	0920	.26	70	8.2	510	250	4.8	338	4	<2	.14	.26	<.015
JUL 12...	1405	.14	70	8.1	488	242	5.3	310	4	<2	.20	.17	.018
AUG 17...	1115	.12	70	8.1	497	244	5.3	314	5	<2	<.14	<.14	<.015
SEP 28...	1025	.10	70	8.3	483	246	5.3	324	13	3	<.14	<.14	<.015

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)
OCT 24...	2.12	.018	.044
NOV 20...	2.16	.018	.034
DEC 17...	2.27	.015	.029
JAN 19...	2.30	.019	.037
FEB 16...	2.21	.011	.036
MAR 16...	2.15	.026	.032
APR 08...	2.02	.019	.027
MAY 21...	1.87	.023	.050
JUN 15...	1.81	.026	.031
JUL 12...	1.59	.014	.019
AUG 17...	1.76	.016	.022
SEP 28...	1.87	.015	.029

053793305 TRAVERSE VALLEY CREEK, NORTH TRIBUTARY, NEAR INDEPENDENCE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
COMPOSITE SAMPLES

Date	Time	End date	End time	Sam- pling method, code (82398)	pH, water, unfltrd lab, std units (00403)	Specif. conduc- tance, wat unf lab, uS/cm 25 degC (90095)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (00417)	Alka- linity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Chlor- ide, water, fltrd, mg/L (00940)	Residue on evap. at 105degC wat unf mg/L (00500)	Residue total at 105 deg. C, sus- pended, mg/L (00530)	Residue vola- tile, sus- pended, mg/L (00535)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
FEB 29-													
MAR 01	0613	20040301	0901	50	7.3	435	175	--	15.1	410	99	27	12
MAR 01-02	0935	20040302	1208	50	7.3	248	98	--	6.6	328	158	33	6.7
MAR 02-07	1403	20040307	2010	50	7.9	324	145	--	5.1	236	26	6	3.2
MAR 09-11	2242	20040311	0510	50	7.7	206	87	--	3.0	328	196	32	3.0
MAR 16-17	1100	20040317	2257	50	7.8	291	131	--	3.6	228	30	10	3.6
MAR 18-19	1405	20040319	0247	50	7.8	202	88	--	2.4	208	68	16	3.3
MAR 19-20	1535	20040320	2151	50	7.7	210	93	--	2.7	222	74	16	2.9
MAR 23-24	1144	20040324	0131	50	7.6	193	86	--	2.4	386	260	42	2.2
MAR 24-25	1043	20040325	0812	50	7.3	161	72	--	2.1	750	618	80	1.6
MAR 25-25	1126	20040325	1642	50	7.8	224	100	--	2.7	278	121	20	1.3
MAR 25-25	1740	20040325	1832	50	7.2	135	73	53	1.9	4,060	4,090	508	1.6
MAR 25-26	1837	20040326	0100	50	7.3	149	62	56	2.1	1,400	1,310	184	1.2
MAY 09-10	2137	20040510	0719	50	7.8	365	167	--	5.1	798	568	104	1.2
MAY 13-13	0831	20040513	1918	50	7.5	252	110	--	3.5	1,370	1,490	192	1.4
MAY 19-20	2159	20040520	0537	50	7.4	309	151	--	3.6	5,490	5,130	630	1.2
MAY 22-22	0253	20040522	0800	50	8.1	374	175	--	4.1	910	685	100	.62
MAY 27-27	0350	20040527	0807	50	7.8	282	133	--	3.1	1,230	1,050	150	.63
MAY 30-31	1738	20040531	0411	50	7.9	355	168	--	4.6	774	535	83	.56
JUN 09-10	1542	20040610	0207	50	8.0	334	159	--	3.3	892	684	84	.49
AUG 02-02	0936	20040802	1321	50	7.7	264	122	--	3.1	988	762	104	.67
AUG 03-04	2230	20040804	0307	50	7.7	222	101	--	2.6	684	538	68	.78
SEP 06-06	0036	20040906	0429	50	8.2	381	182	--	5.2	326	71	7	.28
SEP 14-15	2218	20040915	0752	50	7.8	255	118	--	3.2	550	350	54	.58

053793305 TRAVERSE VALLEY CREEK, NORTH TRIBUTARY, NEAR INDEPENDENCE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Phos- phorus, water, fltrd, mg/L (00666)	Phos- phorus, water, unfltrd mg/L (00665)	Sus- pended sedi- ment concen- tration mg/L (80154)	Runoff volume, thousands of cubic feet (99904)
FEB 29-							
MAR 01	13	7.02	1.29	.098	.411	102	47
MAR							
01-02	8.2	4.32	1.10	.302	.554	162	160
MAR							
02-07	3.6	2.11	1.53	.261	.326	28	130
MAR							
09-11	4.2	1.91	1.27	.240	.462	201	110
MAR							
16-17	4.0	1.99	1.18	.174	.278	31	41
MAR							
18-19	4.0	1.80	.950	.170	.309	71	37
MAR							
19-20	4.1	1.71	.771	.220	.408	79	120
MAR							
23-24	4.3	1.30	.712	.280	.594	259	56
MAR							
24-25	5.0	.875	.604	.275	.814	645	110
MAR							
25-25	2.3	.654	.994	.261	.427	--	18
MAR							
25-25	20	.830	.501	.243	3.26	4,030	33
MAR							
25-26	7.0	.505	1.09	.257	1.36	1,300	74
MAY							
09-10	4.3	.150	2.20	.155	.880	498	15
MAY							
13-13	8.0	.161	2.71	.430	2.18	1,290	54
MAY							
19-20	21	.232	3.09	.269	5.50	5,170	14
MAY							
22-22	5.2	.056	1.89	.247	1.09	693	9.2
MAY							
27-27	5.0	.064	1.45	.249	1.42	1,080	12
MAY							
30-31	3.0	<.015	1.72	.201	.893	556	30
JUN							
09-10	3.3	.037	1.14	.932	.934	707	61
AUG							
02-02	4.2	<.015	1.45	.232	1.09	793	13
AUG							
03-04	3.3	.067	1.25	.389	.963	546	21
SEP							
06-06	.92	<.015	1.24	.074	.192	73	5.1
SEP							
14-15	2.3	<.015	1.12	.347	.781	362	29

Traverse Valley Creek - North Trib. Storm Volumes

Station ID: 053793305

<u>Storm Beginning</u> <u>Date/Time</u>	<u>Storm Ending</u> <u>Date/Time</u>	<u>Storm Volume</u> <u>Thousands of Cubic Feet</u>	<u>Peak Discharge</u> <u>(CFS)</u>	<u>Number of</u> <u>Subsamples</u>
02/29/2004 12:45	03/01/2004 09:05	44.168	1.22	28
03/01/2004 09:05	03/02/2004 11:35	161.724	4.05	35
03/02/2004 11:35	03/07/2004 21:00	142.957	1.53	19
03/09/2004 14:20	03/11/2004 21:50	130.784	5.05	38
03/16/2004 12:05	03/17/2004 22:45	40.815	1.18	11
03/18/2004 11:10	03/19/2004 03:50	39.960	1.80	12
03/19/2004 12:50	03/20/2004 23:10	129.954	3.36	36
03/23/2004 10:00	03/24/2004 01:20	58.389	3.10	17
03/24/2004 09:15	03/25/2004 06:40	112.000	4.97	31
03/25/2004 08:55	03/25/2004 16:55	21.488	1.21	6
03/25/2004 16:55	03/25/2004 18:35	38.284	13.06	10
03/25/2004 18:35	03/26/2004 09:40	84.110	11.01	24
05/09/2004 20:30	05/10/2004 08:00	16.502	2.00	22
05/13/2004 05:05	05/13/2004 21:20	58.458	7.17	46
05/19/2004 21:25	05/20/2004 05:45	14.498	3.62	16
05/22/2004 01:00	05/22/2004 08:05	10.740	1.57	8
05/27/2004 03:07	05/27/2004 07:50	12.813	2.39	10
05/30/2004 16:50	05/31/2004 03:30	29.678	2.97	22
06/09/2004 14:50	06/10/2004 02:00	63.435	8.34	16
08/02/2004 09:10	08/02/2004 14:00	13.651	3.90	44
08/03/2004 22:30	08/04/2004 02:30	20.762	14.24	38
09/05/2004 23:58	09/06/2004 04:20	5.365	0.84	10
09/14/2004 21:21	09/15/2004 10:50	36.487	3.62	23

TREMPEALEAU RIVER BASIN

431

053793306 TRAVERSE VALLEY CREEK, SOUTH TRIBUTARY, NEAR INDEPENDENCE, WI

LOCATION.--Lat 44°23'44", long 91°33'13" in SE ¼ SE ¼ sec.11, T.22 N., R.10 W., Buffalo County, Hydrologic Unit 07040005, 1,300 ft upstream of confluence with north unnamed tributary at Bragger family farm, 6.7 mi west-northwest of Independence.

DRAINAGE AREA.--0.35 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 2001 to current year.

GAGE.--Water-stage recorder. Water levels are controlled by a 3.0 ft H flume. Elevation of gage is 965 ft above NGVD of 1929, from topographic map.

REMARKS.--Records 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 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.014	0.014	0.016	0.015	e0.009	0.571	0.029	0.013	0.052	0.034	0.023	0.021
2	0.013	0.014	0.015	0.016	e0.010	0.465	0.026	0.012	0.045	0.033	0.043	0.021
3	0.014	0.015	0.015	0.015	0.011	0.098	0.024	0.012	0.042	0.035	0.096	0.022
4	0.014	0.018	0.015	0.014	0.010	0.178	0.022	0.013	0.040	0.032	0.045	0.022
5	0.014	0.015	0.015	0.013	0.010	0.057	0.020	0.012	0.038	0.031	0.024	0.023
6	0.014	0.014	0.016	0.013	0.011	0.032	0.020	0.013	0.036	0.036	0.023	0.044
7	0.015	0.013	0.016	0.013	0.012	0.057	0.020	0.012	0.034	0.032	0.026	0.026
8	0.016	e0.013	0.016	0.013	0.011	0.023	0.018	0.018	0.143	0.030	0.026	0.023
9	0.017	e0.013	0.017	0.013	0.010	0.056	0.016	0.028	0.649	0.029	0.025	0.023
10	0.016	0.015	0.016	0.013	0.010	0.502	0.014	0.056	0.181	0.029	0.024	0.024
11	0.019	0.016	e0.015	0.014	0.009	0.088	0.014	0.023	0.153	0.029	0.024	0.024
12	0.017	0.016	e0.014	0.015	0.009	0.024	0.014	0.025	0.118	0.028	0.023	0.023
13	0.016	0.014	e0.014	0.014	0.009	0.021	0.014	0.166	0.082	0.029	0.022	0.023
14	0.016	0.015	0.015	0.013	0.008	0.045	0.016	0.037	0.062	0.028	0.022	0.035
15	0.015	0.015	0.016	0.013	0.008	0.020	0.016	0.026	0.055	0.027	0.024	0.102
16	0.014	0.015	0.016	0.013	0.008	0.097	0.016	0.022	0.068	0.027	0.027	0.028
17	0.014	0.016	0.015	0.013	0.008	0.119	0.016	0.021	0.057	0.027	0.025	0.026
18	0.015	0.018	0.016	0.012	0.009	0.231	0.017	0.022	0.052	0.027	0.025	0.025
19	0.016	0.016	0.016	e0.011	0.010	0.095	0.019	0.021	0.049	0.027	0.023	0.025
20	0.016	0.017	0.016	e0.011	0.010	0.362	0.019	0.036	0.048	0.027	0.023	0.025
21	0.016	0.016	0.017	e0.011	0.010	0.031	0.018	0.029	0.046	0.029	0.022	0.024
22	0.015	0.016	0.017	e0.012	0.009	0.047	0.016	0.044	0.043	0.029	0.023	0.024
23	0.015	0.017	0.016	e0.011	0.010	0.262	0.017	0.049	0.044	0.026	0.024	0.025
24	0.014	0.015	0.015	e0.010	0.009	0.751	0.015	0.043	0.039	0.025	0.023	0.023
25	0.014	0.015	0.015	e0.010	0.010	1.53	0.015	0.036	0.036	0.024	0.024	0.022
26	0.013	0.015	0.016	e0.011	0.012	0.200	0.013	0.034	0.036	0.023	0.024	0.022
27	0.013	0.015	0.020	e0.011	0.017	0.066	0.012	0.053	0.036	0.023	0.023	0.022
28	0.014	0.015	0.020	e0.009	0.065	0.058	0.015	0.036	0.035	0.023	0.023	0.021
29	0.014	0.015	0.018	e0.008	0.123	0.044	0.015	0.080	0.035	0.026	0.022	0.021
30	0.014	0.016	0.016	e0.008	---	0.037	0.013	0.075	0.036	0.024	0.022	0.020
31	0.014	---	0.016	e0.009	---	0.031	---	0.077	---	0.024	0.021	---
TOTAL	0.461	0.457	0.496	0.377	0.457	6.198	0.519	1.144	2.390	0.873	0.844	0.809
MEAN	0.01	0.02	0.02	0.01	0.02	0.20	0.02	0.04	0.08	0.03	0.03	0.03
MAX	0.019	0.018	0.020	0.016	0.123	1.53	0.029	0.166	0.649	0.036	0.096	0.102
MIN	0.013	0.013	0.014	0.008	0.008	0.020	0.012	0.012	0.034	0.023	0.021	0.020
CFSM	0.04	0.04	0.05	0.03	0.05	0.57	0.05	0.11	0.23	0.08	0.08	0.08
IN.	0.05	0.05	0.05	0.04	0.05	0.66	0.06	0.12	0.25	0.09	0.09	0.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)

	2001	2002	2003	2004	2001	2002	2003	2004	2001	2002	2003	2004
MEAN	0.04	0.04	0.03	0.02	0.03	0.15	0.04	0.04	0.08	0.04	0.03	0.04
MAX	0.06	0.05	0.04	0.03	0.05	0.20	0.06	0.06	0.13	0.06	0.05	0.05
(WY)	(2003)	(2002)	(2002)	(2002)	(2002)	(2004)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)
MIN	0.01	0.02	0.02	0.01	0.02	0.06	0.02	0.04	0.03	0.02	0.02	0.02
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2002)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 2001 - 2004

ANNUAL TOTAL	14.160	15.020	
ANNUAL MEAN	0.04	0.04	0.05
HIGHEST ANNUAL MEAN			0.06 2002
LOWEST ANNUAL MEAN			0.04 2004
HIGHEST DAILY MEAN	1.72 Mar 15	1.53 Mar 25	1.72 Mar 15, 2003
LOWEST DAILY MEAN	0.010 Sep 26	0.008 Jan 29-30, Feb 14-17	0.008 Jan 29-30, Feb 14-17, 2004
ANNUAL SEVEN-DAY MINIMUM	0.01 Sep 26	0.01 Oct 1	0.01 Sep 26, 2003
MAXIMUM PEAK FLOW		15 Jun 9	32 Jun 3, 2002
MAXIMUM PEAK STAGE		2.22 Jun 9	3.04 Jun 3, 2002
INSTANTANEOUS LOW FLOW		0.01 Jan 30	0.01 Jan 30, 2004
ANNUAL RUNOFF (CFSM)	0.111	0.117	0.137
ANNUAL RUNOFF (INCHES)	1.51	1.60	1.86
10 PERCENT EXCEEDS	0.04	0.06	0.07
50 PERCENT EXCEEDS	0.02	0.02	0.03
90 PERCENT EXCEEDS	0.01	0.01	0.01

(e) Estimated due to ice effect or missing record

053793306 TRAVERSE VALLEY CREEK, SOUTH TRIBUTARY, NEAR INDEPENDENCE, WI—Continued

PRECIPITATION QUANTITY

PERIOD OF RECORD.--September 2001 to current year.

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

REMARKS.--Rainfall for May 30-Sept. 28 estimated from Traverse Valley Creek Rain Gage #1 near Independence, WI (442405091333300) due to equipment malfunction. Rainfall estimated to be 0.00 for Dec. 21, Feb. 6-7, 12, 19-23, and Mar. 3-9, 11 because recorded precipitation was interpreted as collector snowmelt.

EXTREMES FOR PERIOD OF RECORD.-- Maximum daily rainfall, 2.69 in. (estimated), June 8, 2004.

EXTREMES FOR CURRENT YEAR.-- Maximum daily rainfall, 2.69 in. (estimated), June 8.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	e0.02	e0.00	e0.06	e0.00
2	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	e0.00	e0.00	e1.01	e0.00
3	0.16	0.35	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.33	e0.20	e0.00
4	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.05	e0.63	e0.00
5	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	e0.05	e0.11	e0.22	e0.20
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.65	e0.12	e1.38
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.08	e0.14	e0.00
8	0.00	0.00	0.13	0.00	0.00	0.00	0.00	1.09	e2.69	e0.00	e0.00	e0.00
9	0.00	0.00	0.21	0.00	0.00	0.00	0.00	1.66	e1.67	e0.00	e0.15	e0.00
10	0.00	0.01	0.00	0.00	0.00	0.18	0.00	0.10	e0.20	e0.00	e0.00	e0.00
11	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.85	e0.19	e0.06	e0.00
12	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.37	e0.04	e0.00	e0.00	e0.00
13	0.00	0.00	0.00	0.00	0.00	0.15	0.00	1.77	e0.08	e0.01	e0.00	e0.00
14	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.05	e0.00	e0.00	e0.00	e1.52
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	e0.00	e1.80
16	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	e0.72	e0.00	e0.78	e0.00
17	0.00	0.13	0.00	0.00	0.00	0.10	0.00	0.00	e0.00	e0.00	e0.01	e0.00
18	0.00	0.31	0.00	0.00	0.00	0.28	0.48	0.00	e0.00	e0.00	e0.00	e0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.71	e0.00	e0.04	e0.00	e0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.51	e0.00	e0.00	e0.00	e0.00
21	0.00	0.00	0.00	0.01	0.00	0.00	0.11	0.50	e0.01	e0.14	e0.00	e0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	e0.00	e0.00	e0.01	e0.00
23	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.92	e0.26	e0.00	e0.00	e0.33
24	0.02	0.00	0.00	0.00	0.00	0.00	0.10	0.00	e0.00	e0.00	e0.00	e0.00
25	0.02	0.01	0.00	0.00	0.00	0.72	0.27	0.04	e0.00	e0.00	e0.00	e0.00
26	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	e0.00	e0.00	e0.00
27	0.04	0.00	0.11	0.00	0.00	0.16	0.00	0.93	e0.11	e0.00	e0.00	e0.00
28	0.11	0.00	0.00	0.00	0.00	0.07	0.00	0.00	e0.01	e0.00	e0.15	e0.00
29	0.04	0.00	0.00	0.00	0.11	0.00	0.00	1.15	e0.00	e0.47	e0.06	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	e1.02	e0.00	e0.00	e0.12	0.00
31	0.02	---	0.00	0.00	---	0.00	---	e0.11	---	e0.36	e0.00	---
TOTAL	1.07	1.66	0.48	0.05	0.11	1.72	1.58	11.45	6.71	2.43	3.72	5.23
CAL YR	2003	TOTAL 24.55										
WTR YR	2004	TOTAL 36.21										

e Estimated

053793306 TRAVERSE VALLEY CREEK, SOUTH TRIBUTARY, NEAR INDEPENDENCE, WI—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 2001 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 2001 to current year.

INSTRUMENTATION.--Continuous water temperature recorder and water-quality sampler September 2001 to current year.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Chemical analyses by the Wisconsin State Laboratory of Hygiene. Samples collected during periods of non-stormflow are grab samples. Samples during storms are composite samples collected by an automatic point sampler. The sample runoff volume is the total flow that occurs between the first and last subsample of each flow-composite sample. The storm runoff volume is the total flow that occurs between the start of the storm and the end of the storm. In most cases, the sample runoff volume is slightly different than the storm runoff volume. If the sample runoff volume and the storm runoff volume are comparable, a storm load (in pounds) can be computed by multiplying the storm volume (in thousands of cubic feet) by the constituent concentration (in mg/L) by a factor of 0.0624.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum temperature, 20.0°C, July 2, 12, 2004; minimum, 0.0°C, many days.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum temperature, 20.0°C, July 2, 12; minimum, 0.0°C, Mar. 1.

 TEMPERATURE, WATER, DEGREES CELSIUS
 WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.0	7.0	8.0	8.0	7.0	7.5	5.5	4.0	5.0	5.5	3.5	4.5
2	9.0	6.5	8.0	8.5	7.0	8.0	6.0	4.0	5.0	6.0	5.0	5.5
3	10.0	8.0	9.0	7.5	6.5	7.0	6.0	4.5	5.0	5.0	3.0	4.0
4	9.5	7.5	8.5	8.0	6.5	7.5	6.5	4.5	5.5	4.0	2.5	3.5
5	10.0	7.5	8.5	7.0	6.0	7.0	6.5	5.0	6.0	3.0	1.5	2.0
6	10.0	7.5	8.5	6.5	5.0	6.0	6.0	5.5	6.0	3.0	1.5	2.5
7	11.0	8.0	9.0	6.0	4.5	5.5	6.5	5.5	6.0	4.0	2.5	3.0
8	11.0	9.0	10.0	6.0	4.0	5.0	6.5	5.0	6.0	4.5	2.5	3.5
9	11.5	9.0	10.0	6.5	4.0	5.5	6.5	5.5	6.0	4.5	2.5	3.5
10	11.0	9.0	10.0	7.0	6.0	6.5	5.5	3.0	4.5	4.5	3.5	4.0
11	11.0	9.5	10.0	8.0	6.0	7.0	4.0	2.5	3.0	5.0	4.0	4.5
12	10.5	8.5	9.5	7.5	5.5	6.5	4.0	2.5	3.0	5.0	3.5	4.0
13	10.0	8.5	9.5	6.5	5.0	5.5	4.5	2.5	3.5	4.0	2.5	3.5
14	10.0	8.0	9.5	7.0	5.0	6.5	5.5	4.5	5.0	4.5	2.5	3.5
15	9.5	7.5	8.5	7.5	7.0	7.5	5.5	5.0	5.0	4.5	2.5	3.5
16	9.0	7.0	8.0	8.0	7.0	7.5	5.5	4.5	4.5	4.5	3.0	4.0
17	9.5	7.5	8.5	8.5	6.5	7.5	5.5	4.0	4.5	5.0	3.0	4.5
18	10.5	8.5	9.5	9.0	7.0	8.0	5.5	4.5	5.0	3.0	1.0	1.5
19	10.0	8.0	9.0	8.0	6.5	7.0	5.0	3.0	4.0	3.0	1.0	2.0
20	11.0	8.5	9.5	8.5	6.0	7.0	5.0	3.0	4.5	3.5	2.0	3.0
21	10.5	8.0	9.5	7.0	6.0	6.5	5.5	4.5	5.0	4.5	1.0	3.0
22	9.5	7.5	8.5	6.5	6.5	6.5	6.0	4.5	5.0	2.0	0.5	1.0
23	9.5	7.5	8.5	7.0	5.0	6.5	5.5	3.0	4.5	3.0	1.5	2.5
24	9.5	7.0	8.0	5.0	4.0	4.5	4.5	3.0	3.5	3.0	1.5	2.5
25	9.0	7.5	8.0	6.5	4.0	5.5	4.5	3.0	3.5	3.5	2.0	2.5
26	8.0	6.5	7.5	6.5	4.5	5.5	5.5	3.5	4.5	4.0	2.5	3.5
27	8.5	6.0	7.5	6.5	5.5	6.0	6.0	5.5	5.5	3.5	2.0	3.0
28	8.5	8.0	8.0	5.5	5.0	5.5	6.0	5.0	5.5	2.0	1.0	1.5
29	8.0	7.5	8.0	6.0	5.0	5.5	5.5	4.5	5.0	2.0	1.0	1.5
30	9.0	8.0	8.5	7.0	5.0	6.0	5.5	3.5	4.5	1.5	0.0	1.0
31	8.5	7.5	8.5	---	---	---	5.0	3.0	3.5	2.5	0.0	1.5
MONTH	11.5	6.0	8.8	9.0	4.0	6.5	6.5	2.5	4.7	6.0	0.0	3.0

053793306 TRAVERSE VALLEY CREEK, SOUTH TRIBUTARY, NEAR INDEPENDENCE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DISCRETE SAMPLES

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unfltrd lab, uS/cm 25 degC (90095)	ANC, wat unfltrd end pt, lab, mg/L as CaCO3 (00417)	Chloride, water, fltrd, mg/L (00940)	Residue on evap. at 105degC wat unfltrd mg/L (00500)	Residue total at 105 deg. C, suspended, mg/L (00530)	Residue volatile, suspended, mg/L (00535)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)
OCT 24...	1810	.01	70	8.2	519	260	4.9	334	8	<2	<.14	<.14	<.013
NOV 20...	1058	.02	70	8.1	519	258	5.8	360	34	6	.32	.60	.028
DEC 17...	1100	.01	70	8.1	516	257	5.4	328	15	<2	.26	.28	.012
JAN 19...	0936	.01	70	8.1	517	257	4.9	330	11	2	<.14	<.14	.018
FEB 16...	0810	.01	70	8.3	513	255	5.0	342	5	3	.15	<.14	.019
MAR 16...	1115	.02	70	8.2	519	256	5.8	310	<2	<2	<.14	<.14	.028
APR 08...	1200	.02	70	7.9	516	256	6.3	312	<2	<2	<.14	<.14	.017
MAY 21...	1240	.03	70	8.2	528	262	6.9	336	5	<2	.20	.26	<.015
JUN 15...	1035	.05	70	8.2	557	271	7.9	348	4	<2	.17	.26	<.015
JUL 12...	1435	.03	70	7.9	531	267	6.2	350	5	<2	.17	.14	<.015
AUG 17...	1155	.02	70	8.0	527	265	5.9	314	<2	<2	<.14	<.14	<.015
SEP 28...	1205	.02	70	8.2	505	262	5.5	324	3	<2	<.14	<.14	<.015

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)
OCT 24...	1.48	.024	.062
NOV 20...	1.54	.030	.128
DEC 17...	1.52	.022	.039
JAN 19...	1.46	.022	.058
FEB 16...	1.46	.021	.028
MAR 16...	1.37	.049	.062
APR 08...	1.35	.027	.038
MAY 21...	1.17	.028	.052
JUN 15...	1.85	.049	.053
JUL 12...	1.43	.026	.041
AUG 17...	1.31	.021	.032
SEP 28...	1.30	.022	.033

053793306 TRAVERSE VALLEY CREEK, SOUTH TRIBUTARY, NEAR INDEPENDENCE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
COMPOSITE SAMPLES

Date	Time	End date	End time	Sam- pling method, code (82398)	pH, water, unfltrd lab, std units (00403)	Specif. conduc- tance, wat unf lab, uS/cm 25 degC (90095)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (00417)	Alka- linity, wat flt fxd end lab, mg/L as CaCO3 (29801)	Chlor- ide, water, fltrd, mg/L (00940)	Residue on evap. at 105degC wat unf mg/L (00500)	Residue total at 105 deg. C, sus- pended, mg/L (00530)	Residue vola- tile, sus- pended, mg/L (00535)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
FEB 28-29	1459	20040229	0321	50	7.5	293	110	--	10.6	292	68	17	3.4
FEB 29- MAR 01	1449	20040301	0852	50	7.5	246	97	--	6.9	270	66	12	2.8
MAR 01-02	1102	20040302	1009	50	7.4	184	70	--	4.8	196	45	9	2.7
MAR 02-07	1237	20040307	1559	50	7.8	261	114	--	4.5	200	13	3	2.0
MAR 09-11	1726	20040311	0750	50	7.7	177	75	--	2.9	230	93	17	1.5
MAR 16-17	1130	20040317	2204	50	7.9	197	88	--	2.8	178	32	8	1.2
MAR 18-18	1353	20040318	2355	50	7.7	161	69	--	2.5	240	107	15	1.5
MAR 19-20	1808	20040320	2222	50	7.7	191	84	--	2.5	182	33	7	1.9
MAR 23-23	1241	20040323	2246	50	7.4	168	73	--	2.5	228	179	32	1.9
MAR 24-25	1028	20040325	0232	50	7.6	141	60	--	2.1	312	157	24	1.5
MAR 25-25	0501	20040325	1617	50	7.8	199	87	--	2.5	184	57	10	1.1
MAR 25-25	1700	20040325	1812	50	7.2	127	55	51	2.0	1,570	727	85	1.7
MAY 09-10	2204	20040510	0450	50	7.9	343	156	--	5.4	526	238	35	.91
MAY 13-13	0917	20040513	2042	50	7.9	330	147	--	7.6	840	634	82	.86
MAY 19-20	2220	20040520	0313	50	8.2	437	213	--	5.7	338	52	8	.58
MAY 27-27	0338	20040527	0705	50	8.2	397	192	--	5.7	338	86	13	.49
MAY 30-31	1739	20040531	0357	50	8.2	508	239	--	10.6	350	19	4	.41
JUN 08-09	2328	20040609	0047	50	7.2	162	77	--	2.8	4,720	4,450	490	1.2
JUN 09-10	1528	20040610	0249	50	8.2	431	204	--	6.0	484	197	27	.46
AUG 02-02	0929	20040802	1234	50	7.8	226	101	--	3.2	596	434	64	.79
AUG 03-04	2223	20040804	0306	50	8.1	351	164	--	7.5	380	129	21	.70
SEP 06-06	0027	20040906	0343	50	8.3	401	183	--	10.9	324	37	7	.64
SEP 14-15	2205	20040915	1235	50	8.0	355	174	--	5.7	288	43	9	.47

053793306 TRAVERSE VALLEY CREEK, SOUTH TRIBUTARY, NEAR INDEPENDENCE, WI—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Phos- phorus, water, fltrd, mg/L (00666)	Phos- phorus, water, unfltrd mg/L (00665)	Sus- pended sedi- ment concen- tration mg/L (80154)	Runoff volume, thousands of cubic feet (99904)
FEB 28-29	4.2	1.43	1.39	1.76	2.04	66	5.3
FEB 29- MAR 01	3.4	1.12	1.01	1.33	1.55	70	19
MAR 01-02	3.2	1.34	.811	1.15	1.28	48	56
MAR 02-07	2.2	.857	.796	.808	.855	14	54
MAR 09-11	2.2	.500	.595	.534	.672	93	52
MAR 16-17	1.7	.263	.522	.391	.490	33	17
MAR 18-18	2.2	.320	.554	.464	.638	98	18
MAR 19-20	2.6	.707	.511	.410	.567	39	36
MAR 23-23	3.1	.897	.532	.461	.674	98	21
MAR 24-25	3.0	.846	.521	.451	.757	179	65
MAR 25-25	1.6	.546	.750	.382	.480	46	20
MAR 25-25	7.1	.582	.539	.361	1.93	1,550	22
MAY 09-10	2.0	.082	1.98	.199	.622	273	4.2
MAY 13-13	4.2	.043	1.89	.179	.884	821	13
MAY 19-20	1.0	.058	.874	.088	.191	--	.90
MAY 27-27	.99	.032	.876	.097	.260	94	1.5
MAY 30-31	.51	.030	1.39	.065	.112	23	4.5
JUN 08-09	17	.283	1.93	5.94	5.86	4,560	34
JUN 09-10	1.3	<.015	1.26	.434	.425	221	16
AUG 02-02	2.9	.067	1.07	.394	1.21	440	1.8
AUG 03-04	1.5	.054	.744	.158	.509	147	7.9
SEP 06-06	1.1	.054	.808	.228	.384	51	1.5
SEP 14-15	.85	<.015	.689	.327	.475	42	8.3

Traverse Valley Creek - South Trib. Storm Volumes

Station ID: 053793306

<u>Storm Beginning</u> <u>Date/Time</u>	<u>Storm Ending</u> <u>Date/Time</u>	<u>Storm Volume</u> <u>Thousands of Cubic Feet</u>	<u>Peak Discharge</u> <u>(CFS)</u>	<u>Number of</u> <u>Subsamples</u>
02/28/2004 13:45	02/29/2004 12:50	6.463	0.26	12
02/29/2004 12:50	03/01/2004 09:00	19.241	0.70	36
03/01/2004 09:00	03/02/2004 11:50	59.409	1.13	29
03/02/2004 11:50	03/07/2004 21:00	55.884	0.70	18
03/09/2004 14:20	03/11/2004 19:00	54.622	2.05	38
03/16/2004 12:00	03/18/2004 03:01	18.516	0.43	11
03/18/2004 12:05	03/19/2004 05:10	19.518	1.21	14
03/19/2004 14:02	03/21/2004 03:10	37.878	1.10	27
03/23/2004 11:59	03/24/2004 04:35	22.481	1.28	17
03/24/2004 09:50	03/25/2004 03:55	65.940	3.15	25
03/25/2004 04:59	03/25/2004 16:55	20.676	1.01	16
03/25/2004 16:55	03/25/2004 23:50	108.251	14.19	16
05/09/2004 20:30	05/10/2004 05:15	4.476	0.45	19
05/13/2004 05:15	05/13/2004 22:00	13.470	1.37	47
05/19/2004 21:25	05/20/2004 04:34	1.348	0.10	4
05/27/2004 03:07	05/27/2004 06:47	1.555	0.21	8
05/30/2004 17:01	05/31/2004 04:50	5.089	0.19	22
06/08/2004 23:15	06/09/2004 02:45	43.485	15.11	48
06/09/2004 14:50	06/10/2004 02:00	15.768	1.11	10
08/02/2004 09:10	08/02/2004 12:30	1.840	0.40	12
08/03/2004 22:30	08/04/2004 03:10	7.862	3.73	48
09/06/2004 00:00	09/06/2004 03:55	1.633	0.23	10
09/14/2004 21:21	09/15/2004 10:50	8.096	0.62	25

TREMPEALEAU RIVER BASIN

442405091333300 TRAVERSE VALLEY CREEK TRIBUTARY, RAIN GAGE #1, NEAR INDEPENDENCE, WI

LOCATION.--Lat 44°24'05", long 91°33'33", in NE ¼ NW ¼ sec.11, T.22 N., R.10 W., Buffalo County, Hydrologic Unit 07040005, at hilltop of point 0.5 mi northwest of Bragger family farm and 7.0 mi west-northwest of Independence.

PERIOD OF RECORD.--May 2002 to current year.

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

REMARKS.--Rainfall estimated to be 0.00 for Feb. 19-23 and Mar. 3-9 because recorded precipitation interpreted as collector snowmelt.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 2.69 in., June 8, 2004.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.69 in., June 8.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.02	0.00	0.06	0.00
2	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	1.01	0.00
3	0.15	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.20	0.00
4	0.00	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.63	0.00
5	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.05	0.11	0.22	0.20
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.12	1.38
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.14	0.00
8	0.00	0.00	0.13	0.00	0.00	0.00	0.00	1.14	2.69	0.00	0.00	0.00
9	0.00	0.00	0.08	0.00	0.00	0.00	0.00	1.75	1.67	0.00	0.15	0.00
10	0.00	0.02	0.00	0.00	0.00	0.16	0.00	0.09	0.20	0.00	0.00	0.00
11	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85	0.19	0.06	0.00
12	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.38	0.04	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.14	0.00	1.77	0.08	0.01	0.00	0.00
14	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	1.52
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.80
16	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.72	0.00	0.78	0.00
17	0.00	0.21	0.00	0.00	0.00	0.15	0.01	0.00	0.00	0.00	0.01	0.00
18	0.00	0.38	0.00	0.00	0.00	0.34	0.47	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.97	0.00	0.04	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.45	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.56	0.01	0.14	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.01	0.00
23	0.00	0.35	0.00	0.00	0.00	0.00	0.00	0.87	0.26	0.00	0.00	0.33
24	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00
25	0.02	0.04	0.00	0.00	0.00	0.89	0.26	0.05	0.00	0.00	0.00	0.00
26	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.06	0.00	0.14	0.00	0.00	0.20	0.00	0.95	0.11	0.00	0.00	0.00
28	0.08	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.01	0.00	0.15	0.00
29	0.05	0.00	0.00	0.00	0.12	0.00	0.00	1.27	0.00	0.47	0.06	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.01	1.02	0.00	0.00	0.12	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.11	---	0.36	0.00	---
TOTAL	0.89	1.76	0.36	0.07	0.12	2.02	1.74	12.04	6.71	2.43	3.72	5.23
CAL YR	2003	TOTAL	24.48									
WTR YR	2004	TOTAL	37.09									

TREMPEALEAU RIVER BASIN

05379400 TREMPEALEAU RIVER AT ARCADIA, WI

441

LOCATION.--Lat 44°15'15", long 91°30'19" in SW ¼ sec.32, T.21 N., R.9 W., Trempealeau County, Hydrologic Unit 07040005, on upstream side of River Street bridge, 300 ft north of State Highway 95 and 93 bridge, on left bank in village of Arcadia.

DRAINAGE AREA.--552 mi².

PERIOD OF RECORD.--July 1960 to September 1977, July 2001 to current year.

REVISED RECORDS.--WDR WI-70-1: 1968-69: 1975-77(M).

GAGE.--Water-stage recorder. Datum of gage is 719.59 ft above NGVD of 1929. July 1960 to September 1977, non-recording gage at site 300 ft downstream at datum 0.02 ft higher.

REMARKS.--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 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	228	249	274	e260	e220	e1,500	423	327	2,930	411	351	316
2	230	248	e240	e260	e230	e2,200	396	322	1,970	402	396	314
3	238	253	e250	e260	e230	2,200	377	315	1,100	408	431	309
4	243	299	e250	e250	e220	1,300	365	310	719	624	389	302
5	243	333	e250	e240	e220	1,020	358	304	619	791	360	297
6	240	318	254	e190	e220	773	361	299	589	689	348	328
7	239	290	251	e200	e220	690	365	292	572	865	345	319
8	236	254	256	e200	e220	581	360	330	537	773	346	293
9	232	250	e260	e200	e220	473	362	377	1,620	588	340	284
10	230	267	e250	e200	e230	660	358	671	2,470	521	339	278
11	231	262	262	e200	e230	1,620	354	539	2,300	496	341	273
12	248	268	e200	e200	e230	792	348	421	2,080	478	345	269
13	260	275	e230	e200	e230	622	344	939	1,840	460	332	266
14	252	272	e250	e210	e230	583	343	1,200	1,280	437	326	271
15	241	269	e260	e210	e220	496	341	685	891	419	316	815
16	236	266	e270	e210	e230	461	340	512	741	405	329	1,070
17	237	268	e260	e210	e230	643	340	439	785	394	351	657
18	237	320	e260	e210	e230	868	346	394	741	384	350	514
19	239	366	e250	e210	e230	980	383	360	648	381	328	412
20	241	344	e250	e220	e240	877	406	757	591	679	316	374
21	237	303	e250	e220	e240	882	437	776	559	529	310	356
22	237	286	e250	e220	e240	608	421	863	530	443	308	345
23	237	289	e250	e220	e240	547	387	962	508	407	307	339
24	238	286	e240	e220	e250	703	353	1,160	521	381	308	333
25	239	270	e240	e230	e260	901	362	928	505	366	315	324
26	239	278	e250	e230	e280	1,080	373	706	471	357	316	316
27	242	284	e260	e220	e300	770	362	702	451	351	317	309
28	248	273	e280	e220	e350	655	347	697	447	345	326	305
29	251	267	e280	e210	e600	592	340	802	443	344	329	304
30	251	286	e270	e220	---	519	332	1,150	426	339	325	303
31	249	---	e260	e220	---	457	---	2,340	---	340	321	---
TOTAL	7,449	8,493	7,857	6,770	7,290	27,053	10,984	20,879	29,884	14,807	10,461	11,195
MEAN	240	283	253	218	251	873	366	674	996	478	337	373
MAX	260	366	280	260	600	2,200	437	2,340	2,930	865	431	1,070
MIN	228	248	200	190	220	457	332	292	426	339	307	266
CFSM	0.44	0.51	0.46	0.40	0.46	1.58	0.66	1.22	1.80	0.87	0.61	0.68
IN.	0.50	0.57	0.53	0.46	0.49	1.82	0.74	1.41	2.01	1.00	0.70	0.75

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2004, BY WATER YEAR (WY)

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
MEAN	317	317	277	252	295	711	644	465	433	338	325	357	
MAX	634	625	402	565	663	1,437	1,839	1,203	996	654	1,060	817	
(WY)	(1973)	(1973)	(1973)	(1973)	(1976)	(1973)	(1965)	(1973)	(2004)	(1968)	(1975)	(1972)	
MIN	175	190	148	157	153	250	259	228	165	139	124	190	
(WY)	(1965)	(1965)	(1968)	(1968)	(1968)	(1964)	(1964)	(1964)	(1964)	(1964)	(1964)	(1977)	

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1960 - 2004

ANNUAL TOTAL	129,808	163,122	
ANNUAL MEAN	356	446	393
HIGHEST ANNUAL MEAN			703
LOWEST ANNUAL MEAN			206
HIGHEST DAILY MEAN	(a)1,500	Mar 17	2,930
LOWEST DAILY MEAN	(a)200	(b)Jan 13	(a)190
ANNUAL SEVEN-DAY MINIMUM	(a)211	Jan 12	(a)199
MAXIMUM PEAK FLOW			(c)3,080
MAXIMUM PEAK STAGE			(f)8.27
INSTANTANEOUS LOW FLOW			(a)190
ANNUAL RUNOFF (CFSM)	0.644	0.807	0.712
ANNUAL RUNOFF (INCHES)	8.75	10.99	9.68
10 PERCENT EXCEEDS	581	787	623
50 PERCENT EXCEEDS	270	326	299
90 PERCENT EXCEEDS	229	230	190

- (a) Ice affected
- (b) Also occurred Dec. 12
- (c) Gage height, 7.86 ft
- (d) Based on calculation by USACE
- (e) Estimated due to ice effect or missing record
- (f) Result of ice jam
- (g) Also occurred Aug. 9, 19, 1964

05379500 TREMPEALEAU RIVER AT DODGE, WI

LOCATION.--Lat 44°07'54", long 91°33'10" (revised) in NE ¼ SE ¼ sec.10, T.19 N., R.10 W., Trempealeau County, Hydrologic Unit 07040005, near left bank on downstream side of County Trunk Highways J and P 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 NGVD of 1929. Prior to July 14, 1977, nonrecording gage at same site and datum. Prior to Sept. 16, 1966, datum 2.00 ft higher.

REMARKS.--Records fair except those for estimated daily discharges, which are poor (see page 11). Gage-height telemeter and data-collection platform at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	296	302	319	e330	e280	e1,000	551	383	1,720	540	416	385
2	293	302	e270	e330	e290	e1,400	512	376	2,280	524	430	377
3	302	307	e300	e330	e280	e1,800	485	370	2,820	518	523	372
4	315	343	e290	e310	e280	2,910	465	364	1,960	563	503	360
5	314	369	e310	e300	e280	2,260	452	362	1,080	894	454	364
6	311	365	313	e240	e280	1,580	447	360	865	852	425	398
7	307	345	314	e250	e280	1,210	441	354	806	912	414	403
8	301	319	317	e250	e280	968	435	378	747	921	412	376
9	295	316	e310	e250	e280	770	432	433	1,540	778	409	361
10	292	317	e300	e250	e290	769	426	710	2,100	645	407	355
11	294	321	318	e250	e290	1,330	420	763	2,370	607	405	351
12	311	322	e260	e250	e290	1,460	413	616	2,720	582	403	343
13	314	338	e290	e250	e290	1,000	406	753	2,540	553	401	336
14	313	330	e310	e260	e290	851	400	1,340	2,250	525	388	343
15	303	328	e330	e260	e270	738	396	1,220	1,950	502	380	931
16	297	321	e340	e260	e280	642	395	793	1,340	486	397	1,270
17	295	322	e320	e260	e290	737	396	637	1,170	472	431	1,040
18	295	352	e320	e260	e290	923	396	554	1,040	464	428	728
19	293	388	e310	e260	e290	1,180	442	507	890	457	411	566
20	292	389	e320	e270	e300	1,080	469	868	790	589	392	476
21	290	360	e310	e280	e300	1,090	516	1,020	736	699	381	445
22	288	342	e310	e280	e300	889	512	1,100	698	548	375	419
23	289	346	e310	e280	e300	718	476	1,170	663	501	372	402
24	290	353	e310	e280	e300	758	432	1,250	671	470	372	401
25	292	336	e310	e280	e300	948	433	1,260	678	450	373	393
26	293	364	e310	e290	e320	1,090	446	1,020	635	437	377	386
27	294	342	e320	e270	e360	1,130	441	857	606	429	378	380
28	301	330	e350	e270	e430	861	419	903	600	423	379	373
29	304	330	e350	e260	e700	781	400	909	580	423	388	369
30	309	327	e340	e270	---	700	391	1,240	560	419	398	368
31	305	---	e330	e270	---	617	---	1,540	---	416	390	---
TOTAL	9,288	10,126	9,711	8,450	9,010	34,190	13,245	24,410	39,405	17,599	12,612	14,071
MEAN	300	338	313	273	311	1,103	442	787	1,314	568	407	469
MAX	315	389	350	330	700	2,910	551	1,540	2,820	921	523	1,270
MIN	288	302	260	240	270	617	391	354	560	416	372	336
CFSM	0.47	0.52	0.49	0.42	0.48	1.72	0.69	1.22	2.04	0.88	0.63	0.73
IN.	0.54	0.59	0.56	0.49	0.52	1.98	0.77	1.41	2.28	1.02	0.73	0.81

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

MEAN	380	393	327	284	340	808	684	499	522	429	371	413
MAX	1,314	856	953	679	878	2,325	2,146	1,320	1,516	1,332	1,050	1,239
(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)

TREMPEALEAU RIVER BASIN

05379500 TREMPEALEAU RIVER AT DODGE, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1914 - 2004	
ANNUAL TOTAL	152,453		202,117		455	
ANNUAL MEAN	418		552		813	
HIGHEST ANNUAL MEAN					1973	
LOWEST ANNUAL MEAN					237	
HIGHEST DAILY MEAN	2,000	Mar 18	2,910	Mar 4	12,900	Apr 4, 1956
LOWEST DAILY MEAN	(a)230	Feb 9-16	(a)240	Jan 6	(a)98	Jan 10, 1938
ANNUAL SEVEN-DAY MINIMUM	(a)230	Feb 9	(a)249	Jan 6	(a)106	Jan 7, 1938
MAXIMUM PEAK FLOW			3,130	Mar 4	17,400	Apr 4, 1956
MAXIMUM PEAK STAGE			10.19	Mar 4	(b)10.35	Apr 4, 1956
ANNUAL RUNOFF (CFSM)	0.650		0.859		0.708	
ANNUAL RUNOFF (INCHES)	8.82		11.69		9.62	
10 PERCENT EXCEEDS	687		1,050		741	
50 PERCENT EXCEEDS	321		388		350	
90 PERCENT EXCEEDS	258		280		200	

(a) Ice affected

(b) Datum then in use

(c) Estimated due to ice effect or missing record

05381000 BLACK RIVER AT NEILLSVILLE, WI

LOCATION.--Lat 44°33'35", long 90°36'54", in NW ¼ SW ¼ sec.15, T.24N., R.2 W., Clark County, Hydrologic Unit 07040007, on right bank at downstream side of bridge on Business 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 September 1999, October 2000 to current year. Monthly discharge for some periods published in WSP 1308. Unfinalized 2000 water year records in District data files.

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 and crest-stage gage. Datum of gage is 962.34 ft above NGVD of 1929. 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.--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 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	70	e120	e60	e32	e210	3,390	462	4,940	103	49	47
2	55	76	e120	e54	e32	e280	2,630	399	3,470	100	55	46
3	61	79	116	e50	e32	e350	2,110	346	2,390	93	69	45
4	59	103	106	e47	e32	e340	1,720	304	1,640	94	57	40
5	56	112	90	e38	e32	e1,200	1,450	271	1,190	92	55	39
6	54	105	87	e29	e32	e1,100	1,240	247	803	110	54	44
7	55	97	83	e28	e32	e950	1,080	229	571	109	54	44
8	52	e95	82	e29	e32	e820	984	386	442	106	57	45
9	55	e90	e70	e29	e32	e760	899	435	3,120	109	55	45
10	54	87	e55	e29	e32	e780	789	867	3,640	108	53	47
11	55	92	e47	e29	e32	e760	685	715	3,560	101	60	47
12	66	92	e44	e30	e32	e1,000	589	748	3,660	96	163	48
13	64	90	e52	e30	e32	e960	505	1,000	2,790	91	124	43
14	62	88	e60	e30	e26	e800	442	1,100	1,850	88	97	43
15	56	88	e65	e30	e27	e700	394	1,180	1,150	84	80	324
16	58	93	e65	e30	e29	e700	366	1,000	764	76	72	597
17	73	100	e67	e30	e31	e670	368	787	1,230	70	71	613
18	69	123	e68	e30	e32	e640	392	606	641	67	69	399
19	63	149	e67	e30	e32	e600	571	491	422	64	63	240
20	60	158	e66	e30	e32	e580	822	499	319	60	65	197
21	58	187	e66	e31	e32	e570	958	438	261	58	61	162
22	56	175	e65	e32	e33	e580	938	470	219	55	56	118
23	54	160	e63	e32	e33	e660	856	1,660	197	52	52	98
24	54	140	e62	e32	e34	e1,500	708	2,220	219	50	49	84
25	54	148	e62	e32	e38	e2,900	619	1,990	171	50	49	73
26	54	145	e63	e33	e42	7,260	678	1,530	147	47	57	66
27	54	128	e65	e33	e44	7,380	761	1,180	137	46	67	59
28	57	136	e65	e32	e53	8,070	697	1,110	130	41	56	55
29	59	140	e63	e32	e150	11,200	599	1,380	120	39	52	53
30	61	123	e60	e30	---	8,690	526	3,290	111	37	51	50
31	65	---	e60	e30	---	5,010	---	7,110	---	39	48	---
TOTAL	1,805	3,469	2,224	1,041	1,084	68,020	28,766	34,450	40,304	2,335	2,020	3,811
MEAN	58.2	116	71.7	33.6	37.4	2,194	959	1,111	1,343	75.3	65.2	127
MAX	73	187	120	60	150	11,200	3,390	7,110	4,940	110	163	613
MIN	52	70	44	28	26	210	366	229	111	37	48	39
CFSM	0.08	0.15	0.10	0.04	0.05	2.93	1.28	1.48	1.79	0.10	0.09	0.17
IN.	0.09	0.17	0.11	0.05	0.05	3.38	1.43	1.71	2.00	0.12	0.10	0.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1905 - 2004, BY WATER YEAR (WY)

MEAN	396	452	192	107	133	1,246	1,987	876	830	306	255	518
MAX	2,101	2,345	1,133	615	1,348	3,960	5,025	3,538	4,689	1,538	1,293	4,304
(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

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1905 - 2004	
ANNUAL TOTAL	176,561		189,329		605	
ANNUAL MEAN	484		517		1,213	1942
HIGHEST ANNUAL MEAN					160	1931
LOWEST ANNUAL MEAN					38,200	Sep 10, 1938
HIGHEST DAILY MEAN	11,800	Apr 17	11,200	Mar 29	1.0	(b)Aug 10, 1936
LOWEST DAILY MEAN	(a)13	Feb 3-9	(a)26	Feb 14	48,800	Sep 10, 1938
ANNUAL SEVEN-DAY MINIMUM	(a)13	Feb 3	(a)29	Jan 6	23.80	Sep 10, 1938
MAXIMUM PEAK FLOW			11,800	Mar 29	0.60	Aug 15, 1936
MAXIMUM PEAK STAGE			12.84	Mar 29	0.812	
INSTANTANEOUS LOW FLOW			(a)		11.03	
ANNUAL RUNOFF (CFSM)	0.646		0.691		1,500	
ANNUAL RUNOFF (INCHES)	8.77		9.40		150	
10 PERCENT EXCEEDS	1,030		1,160		36	
50 PERCENT EXCEEDS	74		84			
90 PERCENT EXCEEDS	21		32			

(a) Ice affected

(b) Also occurred Aug. 11, 14-16, 1936

(c) Estimated due to ice effect or missing record

05382000 BLACK RIVER NEAR GALESVILLE, WI

LOCATION.--Lat 44°03'37", long 91°17'14" in NW ¼ SW ¼ sec.1, T.18 N., R.8 W., LaCrosse County, Hydrologic Unit 07040007, on left bank 1,000 ft upstream from bridge on U.S. Highway 53, 3.5 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 NGVD of 1929. 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 1,030 ft downstream at same datum.

REMARKS.--Records good except 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 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	379	422	525	e520	e420	e1,500	12,900	1,390	9,670	1,500	694	523
2	370	421	e500	e510	e440	e1,900	8,850	1,270	19,400	1,430	650	506
3	379	431	e480	e490	e420	e2,700	5,980	1,190	16,500	1,390	675	495
4	393	486	e500	e490	e420	e3,400	4,630	1,070	11,600	1,430	747	489
5	386	516	e500	e430	e420	e3,800	3,830	1,020	7,880	1,410	677	491
6	375	547	509	e310	e420	e4,000	3,240	984	5,390	1,890	625	501
7	378	563	487	e340	e420	2,480	2,690	897	4,120	2,180	581	495
8	380	583	457	e360	e420	2,070	2,520	e860	3,300	2,200	577	486
9	378	524	421	e370	e420	1,880	2,230	e820	3,340	2,070	581	480
10	373	516	e380	e380	e420	1,660	2,130	e1,400	5,800	1,880	580	474
11	378	542	e350	e390	e400	1,640	2,010	1,930	9,210	1,690	583	457
12	401	541	e330	e390	e400	2,180	1,760	2,740	15,800	1,480	578	444
13	401	498	e390	e390	e400	2,340	1,650	2,950	22,400	1,380	566	438
14	408	505	e440	e390	e320	1,970	1,510	3,790	20,300	1,300	550	471
15	411	522	e480	e390	e350	1,680	1,410	4,530	15,900	1,170	542	995
16	405	520	e490	e390	e380	1,450	1,350	4,850	10,600	1,040	572	1,200
17	405	490	e500	e390	e400	1,320	1,260	4,640	7,200	1,020	620	1,290
18	405	500	e500	e390	e400	1,360	1,160	3,850	6,690	997	650	1,590
19	401	513	e500	e390	e400	1,470	1,230	2,910	7,730	1,020	590	1,360
20	407	612	e500	e410	e400	1,280	1,310	2,620	6,490	1,030	564	1,010
21	409	656	e490	e420	e420	1,170	1,730	3,050	4,720	1,030	555	811
22	401	659	e490	e420	e430	1,380	1,870	3,840	3,630	934	540	710
23	398	608	e480	e420	e440	1,490	1,960	4,580	2,880	849	537	668
24	394	614	e460	e420	e440	1,330	1,940	5,560	2,500	805	541	667
25	387	672	e460	e440	e470	1,710	1,890	7,420	2,420	780	538	658
26	393	635	e480	e440	e510	3,260	1,660	9,720	2,370	756	538	654
27	406	549	e520	e420	e580	5,000	1,610	9,050	2,090	743	560	602
28	423	535	e570	e420	e700	7,100	1,630	6,730	1,890	734	554	559
29	428	524	e560	e400	e900	9,590	1,690	5,300	1,770	716	574	539
30	427	530	e540	e420	---	10,700	1,600	5,150	1,620	705	574	509
31	430	---	e520	e420	---	13,300	---	6,440	---	702	551	---
TOTAL	12,309	16,234	14,809	12,760	12,960	98,110	81,230	112,551	235,210	38,261	18,264	20,572
MEAN	397	541	478	412	447	3,165	2,708	3,631	7,840	1,234	589	686
MAX	430	672	570	520	900	13,300	12,900	9,720	22,400	2,200	747	1,590
MIN	370	421	330	310	320	1,170	1,160	820	1,620	702	537	438
CFSM	0.19	0.26	0.23	0.20	0.21	1.52	1.30	1.75	3.77	0.59	0.28	0.33
IN.	0.22	0.29	0.26	0.23	0.23	1.75	1.45	2.01	4.21	0.68	0.33	0.37

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2004, BY WATER YEAR (WY)

MEAN	1,273	1,390	976	721	769	2,971	4,662	2,561	2,397	1,268	941	1,490
MAX	5,231	4,401	3,468	2,661	3,664	9,521	12,210	7,993	11,880	4,361	4,421	9,373
(WY)	(1987)	(1935)	(1992)	(1932)	(1984)	(1973)	(1967)	(1960)	(1993)	(1978)	(1995)	(1938)
MIN	277	337	320	268	263	406	1,269	591	427	322	293	306
(WY)	(1959)	(1949)	(1959)	(1959)	(1959)	(1934)	(2000)	(1934)	(1988)	(1933)	(1964)	(1948)

BLACK RIVER BASIN

05382000 BLACK RIVER NEAR GALESVILLE, WI—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1932 - 2004	
ANNUAL TOTAL	493,217		673,270			
ANNUAL MEAN	1,351		1,840		1,787	
HIGHEST ANNUAL MEAN					3,456	
LOWEST ANNUAL MEAN					699	
HIGHEST DAILY MEAN	16,500	Apr 20	22,400	Jun 13	62,000	Apr 1, 1967
LOWEST DAILY MEAN	329	Sep 11	(a)310	Jan 6	180	Dec 20, 1932
ANNUAL SEVEN-DAY MINIMUM	(a)340	Feb 9	(a)363	Jan 6	218	Aug 10, 1933
MAXIMUM PEAK FLOW			23,600	Jun 13	(b)65,500	Apr 1, 1967
MAXIMUM PEAK STAGE			13.86	Jun 13	16.64	Jun 21, 1993
INSTANTANEOUS LOW FLOW					180	Dec 20, 1931
ANNUAL RUNOFF (CFSM)	0.650		0.884		0.859	
ANNUAL RUNOFF (INCHES)	8.82		12.04		11.67	
10 PERCENT EXCEEDS	3,240		4,630		3,960	
50 PERCENT EXCEEDS	490		596		882	
90 PERCENT EXCEEDS	378		399		390	

(a) Ice affected

(b) Gage height, 14.63 ft, at location 1,000 ft downstream

(c) Estimated due to ice effect or missing record

LA CROSSE RIVER BASIN

05382325 LA CROSSE RIVER AT SPARTA, WI

448

LOCATION.--Lat 43°56'15", long 90°48'38", in SE ¼ NE ¼ sec.23, T.17 N., R.4 W., Monroe County, Hydrologic Unit 07040006, on left bank, 800 ft downstream from bridge on South Water Street, in Sparta, 0.35 mi downstream from Beaver Creek.

DRAINAGE AREA.--167 mi².

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 760.73 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are 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 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	111	115	111	96	276	137	119	363	202	155	143
2	101	111	112	113	101	247	131	114	242	199	163	140
3	108	123	114	113	e98	150	129	111	190	199	178	138
4	107	163	114	109	e88	135	128	111	180	210	188	136
5	106	142	115	102	e94	306	126	109	175	207	163	135
6	105	127	115	81	e100	283	127	109	180	255	156	141
7	105	121	115	100	e98	175	125	106	173	239	155	138
8	105	115	115	107	e96	149	124	153	165	225	155	137
9	105	113	116	104	e100	140	123	138	324	224	152	136
10	104	116	122	104	e100	139	119	179	693	230	151	135
11	113	118	114	109	e100	145	118	153	966	210	152	134
12	120	122	93	109	102	133	118	146	605	203	152	134
13	113	124	105	108	100	132	120	227	379	197	150	132
14	110	119	109	107	99	151	118	216	279	192	147	134
15	110	121	117	103	91	135	117	180	235	187	146	200
16	112	122	124	106	98	131	117	156	327	184	152	160
17	109	119	117	108	105	132	117	146	1,480	183	162	136
18	110	138	113	101	102	137	117	141	712	180	153	129
19	108	132	112	90	104	147	140	134	374	182	148	126
20	108	125	106	103	109	138	136	145	286	183	145	123
21	107	120	114	102	106	135	143	195	251	205	143	122
22	107	119	113	85	105	130	133	312	237	196	142	121
23	108	123	112	99	113	131	125	360	228	182	142	122
24	109	121	108	e100	111	133	121	311	245	177	142	124
25	110	118	104	100	112	141	125	219	233	165	144	124
26	110	118	109	e98	122	155	126	186	221	162	145	122
27	111	118	113	e94	134	151	121	171	217	159	162	122
28	113	117	124	e92	158	157	121	164	221	157	151	121
29	114	116	123	e90	194	154	118	202	215	157	146	121
30	114	116	117	e94	---	145	118	261	206	156	152	122
31	113	---	114	e96	---	139	---	516	---	155	147	---
TOTAL	3,376	3,668	3,514	3,138	3,136	4,952	3,738	5,790	10,602	5,962	4,739	4,008
MEAN	109	122	113	101	108	160	125	187	353	192	153	134
MAX	120	163	124	113	194	306	143	516	1,480	255	188	200
MIN	101	111	93	81	88	130	117	106	165	155	142	121
CFSM	0.65	0.73	0.68	0.61	0.65	0.96	0.75	1.12	2.12	1.15	0.92	0.80
IN.	0.75	0.82	0.78	0.70	0.70	1.10	0.83	1.29	2.36	1.33	1.06	0.89

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	146	145	134	126	137	167	186	180	218	170	152	150	
MAX	184	179	160	142	168	213	324	279	353	288	205	216	
(WY)	(1996)	(1996)	(1995)	(1995)	(1994)	(1996)	(1993)	(1993)	(2004)	(1993)	(1998)	(1994)	
MIN	109	122	113	101	108	133	125	153	129	110	97.5	100	
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2000)	(2004)	(2000)	(2003)	(2003)	(2003)	(2003)	

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1992 - 2004

ANNUAL TOTAL	43,957	56,623	
ANNUAL MEAN	120	155	159
HIGHEST ANNUAL MEAN			211
LOWEST ANNUAL MEAN			126
HIGHEST DAILY MEAN	291	Mar 17	1,480
LOWEST DAILY MEAN	85	(a)Aug 21	81
ANNUAL SEVEN-DAY MINIMUM	87	Aug 18	(c)94
MAXIMUM PEAK FLOW			2,260
MAXIMUM PEAK STAGE			11.01
ANNUAL RUNOFF (CFSM)	0.721	0.926	11.01
ANNUAL RUNOFF (INCHES)	9.79	12.61	0.954
10 PERCENT EXCEEDS	152	220	207
50 PERCENT EXCEEDS	114	126	146
90 PERCENT EXCEEDS	97	103	116

(a) Also occurred Aug. 24

(b) Regulation at dam upstream

(c) Ice affected

(e) Estimated due to ice effect or missing record

05383075 LA CROSSE RIVER NEAR LA CROSSE WI

LOCATION.--Lat 43°51'39", long 91°12'37", in NE ¼ SE ¼ sec.16, T.16 N., R.7 W., La Crosse County, Hydrologic Unit 07040006, on left bank just downstream from Great River State Trail, 3.9 mi northeast of post office in La Crosse.

DRAINAGE AREA.--471 mi².

PERIOD OF RECORD.--October 1999 to current year. Published as "at La Crosse" prior to October 2000.

GAGE.--Water-stage recorder. Elevation of gage is 650 ft above NGVD of 1929, from topographic map.

REMARKS.--Records 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 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	228	229	227	269	e200	934	300	269	813	515	304	321
2	229	247	251	248	e210	1,160	324	242	1,050	509	326	302
3	227	325	241	e250	e200	964	275	243	827	530	530	264
4	218	454	296	246	e200	761	260	245	676	425	718	268
5	218	313	248	231	e210	1,030	293	230	587	524	622	267
6	229	353	227	e200	e210	1,000	299	253	527	641	432	233
7	220	349	238	e210	e210	991	292	250	504	675	376	388
8	229	296	271	e220	e210	842	242	277	500	590	430	269
9	221	240	290	e220	e210	549	254	421	658	606	240	229
10	228	307	243	e220	e210	525	252	397	773	577	348	285
11	233	250	e240	e230	e210	408	248	483	1,310	531	340	284
12	226	323	e210	223	e210	445	282	492	1,560	552	267	264
13	236	259	e220	220	e210	348	240	584	1,670	504	327	249
14	243	312	226	222	e210	372	283	532	1,230	490	322	230
15	246	265	225	e220	e200	378	288	620	856	368	311	578
16	244	299	226	220	e210	493	234	602	886	457	301	372
17	230	319	225	223	e210	286	231	485	978	287	321	554
18	237	367	e230	e220	e220	339	224	367	1,150	343	311	378
19	237	336	e230	e200	e220	378	319	431	1,690	507	345	302
20	234	326	e230	e210	e220	376	343	291	1,210	354	301	350
21	224	268	e240	e210	e220	318	463	417	951	423	282	219
22	232	285	e240	e200	e220	349	298	806	633	504	301	319
23	231	287	234	e200	e230	361	320	881	706	356	300	258
24	231	250	e230	e210	e240	360	282	1,020	586	340	268	242
25	229	280	e230	e210	e240	283	258	858	595	442	291	307
26	229	279	242	e210	e270	372	312	752	596	338	310	303
27	230	279	291	e210	358	494	316	716	550	351	282	223
28	232	281	253	e210	436	378	252	517	543	344	384	233
29	230	280	288	e210	598	480	244	555	530	355	308	283
30	228	267	280	e210	---	319	295	625	521	299	344	281
31	230	---	227	e210	---	465	---	754	---	317	316	---
TOTAL	7,139	8,925	7,549	6,792	7,002	16,758	8,523	15,615	25,666	14,054	10,858	9,055
MEAN	230	298	244	219	241	541	284	504	856	453	350	302
MAX	246	454	296	269	598	1,160	463	1,020	1,690	675	718	578
MIN	218	229	210	200	200	283	224	230	500	287	240	219

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2004, BY WATER YEAR (WY)

MEAN	313	318	290	269	303	424	395	434	571	364	310	307
MAX	365	330	321	308	356	541	561	504	856	463	354	385
(WY)	(2003)	(2000)	(2002)	(2001)	(2002)	(2004)	(2001)	(2004)	(2004)	(2000)	(2000)	(2001)
MIN	230	298	244	219	241	356	284	344	336	289	225	230
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2000)	(2004)	(2002)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2000 - 2004	
ANNUAL TOTAL	110,412		137,936			
ANNUAL MEAN	302		377		358	
HIGHEST ANNUAL MEAN					377	
LOWEST ANNUAL MEAN					320	
HIGHEST DAILY MEAN	900	Mar 17	1,690	Jun 19	1,690	Jun 19, 2004
LOWEST DAILY MEAN	196	Sep 10	(a)200	(b)Jan 6	196	Sep 10, 2003
ANNUAL SEVEN-DAY MINIMUM	205	Aug 18	(a)206	Jan 19	205	Aug 18, 2003
MAXIMUM PEAK FLOW			1,870	Jun 13	2,070	Jun 29, 1998
MAXIMUM PEAK STAGE			8.67	Jun 13	9.18	Jun 29, 1998
INSTANTANEOUS LOW FLOW			135	Oct 21	124	Oct 28, 1999
10 PERCENT EXCEEDS	411		635		515	
50 PERCENT EXCEEDS	270		289		316	
90 PERCENT EXCEEDS	226		220		240	

- (a) Ice affected
- (b) Also occurred Jan. 19, 22, 23, Feb. 1, 3, 4, 15
- (e) Estimated due to ice effect or missing record

05389500 MISSISSIPPI RIVER AT MCGREGOR, IA

LOCATION.--Lat 43°01'37"(revised), long 91°10'21", in SE¼ SE¼ 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 NGVD of 1929. Prior to June 1, 1937, and since June 2, 1939, auxiliary water-stage recorder; June 1, 1937 to June 1, 1939, auxiliary nonrecording gage 14.1 mi upstream in tailwater of dam 9, at datum 5.30 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Minor flow regulation caused by navigation dams. U.S. Geological Survey satellite and telephone modem data collection platform at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1828, that of Apr. 24, 1965.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17,800	18,000	16,600	16,600	e13,500	e20,700	69,000	53,400	72,800	50,400	26,400	17,300
2	12,900	19,500	15,900	16,900	e13,600	e29,700	74,700	50,500	75,300	44,200	25,100	17,900
3	e13,400	21,500	15,000	16,800	e14,200	43,200	80,400	43,900	77,700	39,000	19,700	16,800
4	12,500	22,600	15,600	e15,100	e15,500	45,800	83,500	37,400	81,700	37,100	31,500	16,500
5	13,200	21,100	17,200	e14,300	e15,600	48,000	83,400	36,300	87,100	34,500	34,300	16,900
6	15,700	16,900	18,300	e13,900	e15,600	49,200	82,300	34,000	91,200	37,400	23,600	17,500
7	16,100	16,200	18,300	e14,600	e15,400	49,300	79,400	32,200	94,000	41,700	22,400	19,400
8	16,100	17,000	18,400	e14,600	e15,100	45,700	75,000	30,800	95,300	42,200	25,500	19,800
9	13,500	17,500	19,800	e14,500	e14,800	36,100	69,500	37,300	96,600	42,300	25,000	20,000
10	12,500	17,400	20,600	e13,700	e14,800	29,500	62,700	38,200	97,600	43,400	23,500	23,200
11	12,400	17,600	18,500	e13,300	e15,000	26,900	56,300	35,900	101,000	44,100	23,000	24,500
12	13,100	16,100	19,000	e13,100	e15,000	26,200	51,300	34,200	102,000	41,800	23,700	24,600
13	16,300	17,100	16,900	e13,100	e14,800	28,100	47,200	36,300	103,000	39,800	24,400	23,300
14	18,500	17,400	13,900	e13,100	e14,800	31,000	44,100	38,600	106,000	42,600	24,800	21,300
15	20,400	18,700	9,590	e13,100	e14,900	35,400	43,600	37,400	110,000	43,700	24,800	25,700
16	17,200	19,000	9,620	e13,200	e14,800	35,300	40,600	37,900	113,000	43,700	23,800	38,400
17	13,100	19,100	11,900	e13,300	e15,000	32,200	37,900	40,600	114,000	43,500	22,800	44,500
18	11,500	22,300	14,500	e13,500	e15,300	30,700	35,100	45,400	114,000	42,600	24,400	48,500
19	13,800	23,900	19,600	e13,400	e15,200	30,500	33,800	44,900	110,000	41,800	25,800	51,600
20	9,990	e22,200	22,300	e13,300	e15,300	33,200	36,400	41,200	106,000	41,300	23,300	50,900
21	12,700	e19,200	22,200	e13,400	e15,600	36,100	40,000	42,800	101,000	42,700	20,300	48,500
22	12,900	e18,600	21,100	e13,400	e15,800	35,600	40,800	55,500	96,300	42,700	17,400	45,700
23	14,000	e19,600	19,400	e13,400	e16,700	34,400	44,300	63,200	91,200	38,100	17,600	43,800
24	15,900	e21,100	19,500	e13,300	e20,100	33,400	46,900	65,700	87,500	31,700	18,400	42,700
25	18,700	e17,900	19,400	e13,200	e20,100	32,900	50,500	59,900	83,500	28,800	19,500	43,300
26	18,700	17,900	19,000	e13,100	e18,700	35,500	52,800	58,600	79,300	29,900	20,400	44,900
27	16,600	18,400	18,500	e13,100	e18,800	37,600	53,500	59,500	75,200	28,700	23,500	45,100
28	11,900	18,500	18,100	e13,000	e18,000	42,800	53,800	61,300	71,800	24,000	24,300	44,800
29	10,900	17,300	17,500	e13,100	e18,400	52,800	54,100	66,300	65,300	19,400	21,100	43,900
30	12,900	15,800	17,200	e13,100	---	58,800	54,000	69,000	57,400	16,900	17,700	42,700
31	16,800	---	16,500	e13,300	---	63,800	---	71,100	---	22,900	17,000	---
TOTAL	451,990	565,400	539,910	428,800	460,400	1,170,400	1,676,900	1,459,300	2,756,800	1,162,900	715,000	984,000
MEAN	14,580	18,850	17,420	13,830	15,880	37,750	55,900	47,070	91,890	37,510	23,060	32,800
MAX	20,400	23,900	22,300	16,900	20,100	63,800	83,500	71,100	114,000	50,400	34,300	51,600
MIN	9,990	15,800	9,590	13,000	13,500	20,700	33,800	30,800	57,400	16,900	17,000	16,500
AC-FT	896,500	1,121,000	1,071,000	850,500	913,200	2,321,000	3,326,000	2,895,000	5,468,000	2,307,000	1,418,000	1,952,000
CFSM	0.22	0.28	0.26	0.20	0.24	0.56	0.83	0.70	1.36	0.56	0.34	0.49
IN.	0.25	0.31	0.30	0.24	0.25	0.65	0.92	0.80	1.52	0.64	0.39	0.54

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 2004, BY WATER YEAR (WY)

MEAN	28,700	29,290	22,420	19,400	20,170	39,220	75,590	62,390	50,650	41,690	28,310	28,800
MAX	114,600	64,840	59,200	35,700	48,540	103,800	164,800	138,700	112,600	142,200	84,430	72,890
(WY)	(1987)	(1983)	(1992)	(1983)	(1984)	(1983)	(1965)	(2001)	(1993)	(1993)	(1993)	(1986)
MIN	9,874	10,870	9,506	7,665	9,934	13,190	27,780	18,240	13,420	11,220	10,330	10,650
(WY)	(1937)	(1938)	(1937)	(1940)	(1940)	(1940)	(1990)	(1977)	(1988)	(1988)	(1964)	(1940)

MISSISSIPPI RIVER MAIN STEM

05389500 MISSISSIPPI RIVER AT MCGREGOR, IA—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1936 - 2004	
ANNUAL TOTAL	11,940,440		12,371,800			
ANNUAL MEAN	32,710		33,800		37,270	
HIGHEST ANNUAL MEAN					64,720	
LOWEST ANNUAL MEAN					17,400	
HIGHEST DAILY MEAN	113,000	May 20	114,000	Jun 17	276,000	Apr 24, 1965
LOWEST DAILY MEAN	9,510	Sep 7	9,590	Dec 15	6,200	Dec 9, 1936
ANNUAL SEVEN-DAY MINIMUM	11,500	Aug 25	12,600	Oct 17	6,490	Dec 7, 1936
MAXIMUM PEAK FLOW			115,000	Jun 16	276,000	Apr 24, 1965
MAXIMUM PEAK STAGE			17.30	Jun 18	25.38	Apr 24, 1965
ANNUAL RUNOFF (AC-FT)	23,680,000		24,540,000		27,000,000	
ANNUAL RUNOFF (CFSM)	0.485		0.501		0.552	
ANNUAL RUNOFF (INCHES)	6.58		6.82		7.50	
10 PERCENT EXCEEDS	68,500		70,000		75,800	
50 PERCENT EXCEEDS	20,400		23,600		27,800	
90 PERCENT EXCEEDS	13,700		13,400		13,400	

(a) Also June 18

(e) Estimated

05389500 MISSISSIPPI RIVER AT MCGREGOR, IA—Continued

MISSISSIPPI RIVER BASIN

05389500 MISSISSIPPI RIVER AT MCGREGOR, IA—Continued

WATER-QUALITY RECORDS

LOCATION.--Samples collected from right bank dock 1.2 mi upstream from discharge station. Prior to April 1981, and March 7 to Sept. 30, 1997, samples collected at bridge on U.S. Highway 18, 1.2 mi upstream from gage. April 1981 to March 6, 1997, samples collected from right bank dock, 0.3 mi downstream from discharge station.

PERIOD OF RECORD.--July 1975 to September 30, 2004 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1975 to September 30, 2004 (discontinued).

WATER TEMPERATURES: July 1975 to September 30, 2004 (discontinued).

SUSPENDED-SEDIMENT DISCHARGE: July 1975 to September 30, 2004 (discontinued).

REMARKS.--Records of specific conductance are obtained from suspended-sediment samples at time of analysis.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 633 microsiemens Nov. 3, 1996; minimum daily, 190 microsiemens Sept. 29, 1980.

WATER TEMPERATURES: Maximum daily, 31.0°C June 28, 2002; minimum daily, 0.0°C on many days during winter periods.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,350 mg/L Mar. 19, 1986; minimum daily mean, 1 mg/L on many days in 1977-92 and 1999.

SEDIMENT LOADS: Maximum daily, 363,000 tons Mar. 19, 1986; minimum daily, 31 tons Dec. 25, 1976.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 504 microsiemens July 25; minimum daily, 246 microsiemens May 22.

WATER TEMPERATURES: Maximum daily, 29.0°C, July 20; minimum daily, 0.0°C many days Dec.- Feb.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 445 mg/L May 22; minimum daily mean, 2 mg/L Feb. 15, 16, 25.

SEDIMENT LOADS: Maximum daily, 66,700 tons May. 22; minimum daily, 84 tons Feb 16.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Suspnd. sediment, sieve diameter percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
OCT					
22...	1230	20,800	97	17	955
NOV					
25...	1200	21,700	100	44	2,580
MAR					
10...	1300	35,300	100	29	2,760
APR					
20...	1250	38,300	98	29	3,000
MAY					
19...	1150	53,900	94	34	4,950
JUN					
21...	1200	147,000	97	27	10,700
AUG					
03...	1230	21,700	99	11	644

05389500 MISSISSIPPI RIVER AT MCGREGOR, IA—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, LABORATORY, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
 WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
 DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	427	---	---	404	---	---	328	467	484	434
2	---	---	430	---	474	397	---	275	348	---	470	---
3	---	400	428	---	390	404	---	285	---	---	470	---
4	---	405	---	---	373	---	---	288	---	---	449	---
5	---	402	---	416	---	---	254	---	---	472	---	---
6	407	408	---	442	---	351	280	---	---	480	---	430
7	410	---	---	452	---	---	306	---	316	470	---	430
8	409	---	---	---	418	---	---	---	318	---	450	---
9	---	---	423	---	514	364	---	296	350	---	452	428
10	---	342	---	---	452	374	---	287	---	---	---	---
11	---	372	416	---	---	---	356	---	349	471	---	---
12	---	414	422	446	---	---	362	302	---	---	---	428
13	406	---	---	443	---	394	364	---	352	466	---	426
14	---	---	435	444	---	---	---	---	363	478	---	426
15	360	---	440	---	426	404	---	---	358	---	456	---
16	391	---	438	---	434	413	---	304	---	---	460	---
17	---	416	366	---	463	---	---	---	---	---	462	---
18	---	416	---	---	---	---	---	310	---	486	---	---
19	384	419	---	459	---	---	318	287	---	488	---	380
20	382	---	---	468	---	430	320	301	388	486	---	378
21	383	---	---	467	---	394	318	---	416	---	---	---
22	392	---	424	---	---	440	321	246	405	---	442	396
23	---	---	449	---	456	---	---	256	---	---	444	---
24	---	416	---	---	---	---	---	292	---	---	---	---
25	---	413	440	472	455	---	308	314	---	504	---	---
26	388	419	---	474	456	---	294	333	---	---	436	432
27	390	---	---	465	---	---	266	---	---	---	---	444
28	---	---	---	441	---	---	---	---	448	---	---	---
29	400	---	448	---	---	440	---	348	454	498	---	---
30	408	---	444	---	---	439	---	---	---	---	437	---
31	---	---	354	---	---	406	---	319	---	488	434	---

05389500 MISSISSIPPI RIVER AT MCGREGOR, IA—Continued

 TEMPERATURE, WATER, DEGREES CELSIUS
 WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
 DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	1.0	---	---	1.0	---	---	19.0	25.0	26.0	26.0
2	---	---	1.0	---	0.0	1.0	---	15.0	20.0	---	28.0	---
3	---	8.0	1.0	---	0.0	1.0	---	15.0	---	---	29.0	---
4	---	7.0	---	---	0.0	---	---	16.0	---	---	27.0	---
5	---	6.0	---	0.0	---	---	10.0	---	---	27.0	---	---
6	12.0	6.0	---	0.0	---	1.0	12.0	---	---	26.0	---	25.0
7	14.0	---	---	0.0	---	---	12.0	---	24.0	24.0	---	25.0
8	15.0	---	---	---	0.0	---	---	---	25.0	---	26.0	---
9	---	---	1.0	---	0.0	1.0	---	18.0	25.0	---	26.0	25.0
10	---	4.0	---	---	0.0	2.0	---	19.0	---	---	---	---
11	---	4.0	0.0	---	---	---	12.0	---	23.0	25.0	---	---
12	---	4.0	0.0	0.0	---	---	12.0	21.0	---	---	---	25.0
13	15.0	---	---	0.0	---	1.0	12.0	---	23.0	27.0	---	25.0
14	---	---	0.0	0.0	---	---	---	---	24.0	27.0	---	26.0
15	14.0	---	1.0	---	0.0	1.0	---	---	24.0	---	23.0	---
16	12.0	---	1.0	---	0.0	1.0	---	19.0	---	---	23.0	---
17	---	5.0	1.0	---	0.0	---	---	---	---	---	23.0	---
18	---	6.0	---	---	---	---	---	20.0	---	27.0	---	---
19	14.0	5.0	---	0.0	---	---	17.0	17.6	---	28.0	---	22.0
20	14.0	---	---	0.0	---	7.0	14.3	22.0	23.0	29.0	---	22.0
21	13.0	---	---	0.0	---	6.0	15.0	---	21.1	---	---	---
22	13.0	---	1.0	---	---	6.0	15.0	20.0	22.0	---	23.0	22.0
23	---	---	1.0	---	0.0	---	---	21.0	---	---	24.0	---
24	---	3.0	---	---	---	---	---	19.0	---	---	---	---
25	---	3.0	0.0	0.0	0.0	---	15.0	20.0	---	26.0	---	---
26	10.0	2.0	---	0.0	0.0	---	14.0	19.0	---	---	25.0	21.0
27	9.0	---	---	0.0	---	---	14.0	---	---	---	---	20.0
28	---	---	---	0.0	---	---	---	---	22.0	---	---	---
29	9.0	---	0.0	---	---	12.0	---	20.0	23.0	28.0	---	---
30	9.0	---	1.0	---	---	11.0	---	---	---	---	25.0	---
31	---	---	1.0	---	---	11.0	---	20.0	---	27.0	25.0	---

05389500 MISSISSIPPI RIVER AT MCGREGOR, IA—Continued

SUSPENDED-SEDIMENT
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Day	Mean concentration (mg/l)	Load (tons/day)	Mean concentration (mg/l)	Load (tons/day)	Mean concentration (mg/l)	Load (tons/day)	Mean concentration (mg/l)	Load (tons/day)	Mean concentration (mg/l)	Load (tons/day)	Mean concentration (mg/l)	Load (tons/day)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	21	1,010	23	1,100	18	828	6	278	6	230	50	2,790
2	24	836	25	1,300	21	894	6	291	4	165	42	3,370
3	28	1,010	26	1,520	20	797	7	298	6	222	38	4,390
4	28	932	22	1,370	18	752	7	277	9	381	51	6,320
5	24	859	19	1,080	17	765	7	270	10	404	69	8,990
6	21	881	16	709	15	747	7	259	9	383	85	11,300
7	21	893	21	935	14	679	6	248	9	358	76	10,100
8	19	814	29	1,310	12	617	7	264	8	326	60	7,380
9	20	713	36	1,710	12	625	8	294	7	288	43	4,290
10	22	701	43	2,010	15	835	8	307	6	248	29	2,310
11	24	790	42	1,990	19	935	9	327	5	215	22	1,600
12	26	914	26	1,100	17	853	10	354	4	182	20	1,390
13	28	1,250	20	920	11	516	12	424	4	148	18	1,360
14	39	1,960	19	880	7	253	10	347	3	116	23	1,890
15	50	2,770	18	885	7	173	8	283	2	89	28	2,640
16	40	1,900	16	842	6	156	7	242	2	84	18	1,730
17	30	1,060	16	804	12	397	6	201	3	113	15	1,320
18	27	829	20	1,210	16	623	4	160	3	124	15	1,290
19	32	1,200	24	1,540	18	960	3	116	3	123	16	1,300
20	29	786	23	1,370	19	1,150	3	111	3	124	17	1,490
21	24	806	22	1,110	17	1,040	4	137	3	126	20	1,960
22	21	723	21	1,050	15	842	4	159	3	128	29	2,800
23	26	986	20	1,060	6	308	5	177	3	135	33	3,050
24	30	1,280	20	1,140	6	328	5	194	3	141	34	3,040
25	27	1,350	33	1,720	9	488	6	210	2	119	35	3,090
26	22	1,110	25	1,210	8	427	6	216	4	212	36	3,440
27	19	866	23	1,140	7	332	8	283	14	711	37	3,740
28	17	556	22	1,090	5	242	13	456	27	1,310	38	4,380
29	16	463	21	963	3	160	12	424	39	1,940	39	5,600
30	18	643	19	831	3	149	10	354	---	---	47	7,510
31	21	938	---	---	5	242	8	298	---	---	61	10,500
TOTAL	---	31,829	---	35,899	---	18,113	---	8,259	---	9,145	---	126,360

