

Data/Case Study 2002-01



**Benchmark Sediment Monitoring Program
for Illinois Streams:
Data Report for Water Years 1998 and 1999** ■

by
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Watershed Science Section

Illinois State Water Survey
A Division of the Illinois Department of Natural Resources

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Abstract

The Benchmark Sediment Monitoring Program for Illinois Streams was initiated by the Illinois State Water Survey in 1981 to generate a long-term database of suspended sediment concentrations and instantaneous sediment loads. The program is now part of the Water Survey's Water and Atmospheric Resources Monitoring (WARM) Network, which monitors climate, soil moisture, surface water, groundwater, and sediment throughout Illinois. This report summarizes the suspended sediment data collected for the program during Water Years 1998 and 1999. All the techniques used in the data collection process and laboratory analyses are based on U.S. Geological Survey procedures and techniques. The report appendices present tables of instantaneous suspended sediment measurements, particle size analysis, sediment transport curves, and plots of instantaneous sediment concentrations for the period of record for the current monitoring stations.

Keywords: Benchmark Sediment Monitoring, data collection, Illinois streams, sedimentation, suspended sediment, sediment concentration, particle size distribution.

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Introduction

The Illinois State Water Survey (ISWS) initiated the Benchmark Sediment Monitoring Program in 1981 to monitor and quantify the long-term changes in suspended sediment concentrations and loads in Illinois waterways. The data collected for this program can assist in evaluating the management of the state's land and water resources. This report presents an analysis and summary of the suspended sediment data collected during Water Years 1998 and 1999. A complete overview of the sediment program, including a description of the monitoring sites, can be found in the report *Benchmark Sediment Monitoring Program for Illinois Streams: Program Summary and Site Descriptions* (Allgire and Demissie, 1995). Results from prior water years have been published in reports by Bonini et al. (1983), Davie (1988, 1989, and 1990), and Allgire (1997, 2001a, 2001b).

Acknowledgments

The Benchmark Sediment Monitoring Program is one of several components that comprises the Water and Atmospheric Resources Monitoring (WARM) Network. The data compilation and reporting are part of the author's regular duties for the Illinois State Water Survey.

The author wishes to acknowledge Paul Nelson, who is responsible for the data collection for the monitoring sites in central Illinois. Expressed appreciation goes to the Illinois Division of the U.S. Geological Survey (USGS) for supplying the stream discharge rating tables necessary for data computations.

Patti Hill and Linda Dexter prepared the camera-ready copy of the report, which Eva Kingston edited.

Sediment Monitoring Program

Current Program Status

The purpose of the Benchmark Sediment Monitoring Program is to collect suspended sediment concentrations at selected stream locations throughout Illinois. These data are used to compare changes in suspended sediment concentrations and loads at individual sampling sites over a long period of time.

When the program began in 1981, there were 50 sampling stations strategically distributed, and streamlining of the program reduced the number of stations over the next several years. During the mid-1980s, the number of sampling stations declined to 18. By 1992, the number of sampling stations had dwindled to nine due to equipment shortages, lack of personnel, and bridge reconstruction at various locations. The Benchmark Sediment Monitoring Program currently consists of 15 sampling sites statewide. Figure 1 shows the number of active sampling stations per water year since the beginning of the sediment program in 1981.

Table 1 lists the active Benchmark Sediment Monitoring Program sampling sites for Water Years 1998 and 1999. This table lists the ISWS and USGS identification numbers, the name of each station and the identifying city, the drainage area for each station, and the period of record. Figure 2 depicts the location of each station in Illinois.

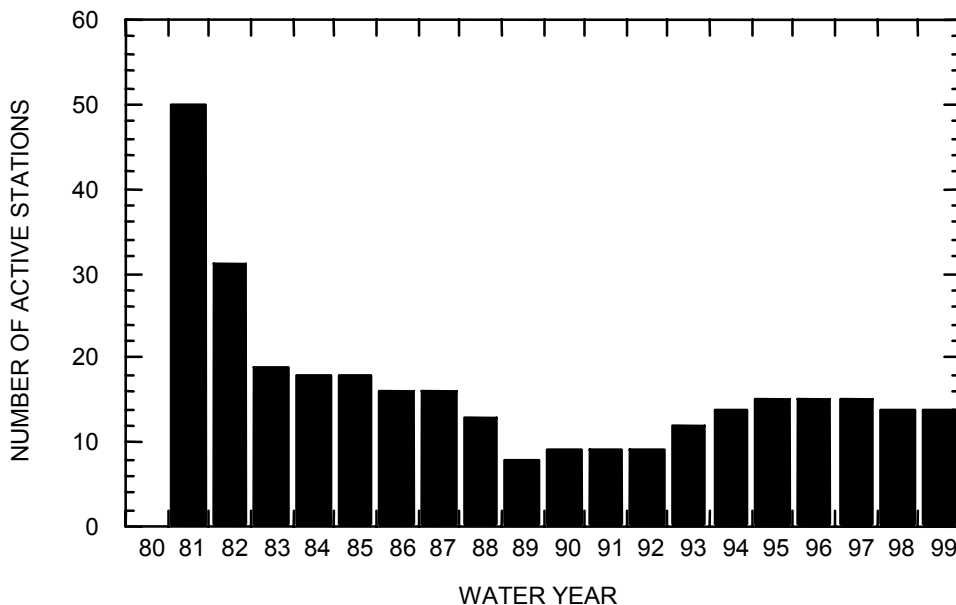


Figure 1. Number of Active Benchmark Sediment Monitoring Stations

Table 1. Benchmark Sediment Monitoring Sites, Water Years 1998 and 1999

<i>ISWS ID</i>	<i>Station Name</i>	<i>USGS ID</i>	<i>Drainage area (sq mi)</i>	<i>Period of record (Water Years)</i>
102	Pecatonica R. at Freeport	05435500	1326	1981 - Present
103	Rock R. at Rockton	05437500	6363	1981 - Present
122	Vermilion R. near Leonore	05555300	1251	1984 - Present
123	Mazon R. near Coal City	05542000	455	1981 - 1997
124	Kankakee R. near Wilmington	05527500	5150	1983 - Present
125	Kankakee R. at Momence	05520500	2294	1982 - 1985, 1988 - 1990 1993 - Present
229	Spoon R. at London Mills	05569500	1062	1981 - 1987, 1994 - Present
242	LaMoine R. at Colmar	05584500	655	1981 - 1988, 1993 - Present
245	LaMoine R. at Ripley	05585000	1293	1983 - 1990, 1993 - Present
249	Sangamon R. at Monticello	05572000	550	1981 - 1994, 1996 - Present
361	Kaskaskia R. at Vandalia	05592500	1904	1981 - 1988, 1990 - Present
367	Silver Crk near Freeburg	05594800	464	1981 - 1988, 1990 - Present
370	Little Wabash R. at Carmi	03381500	3102	1981 - 1985, 1993 - Present
378	Cache R. at Forman	03612000	244	1981 - Present
513	Cache R. at Ullin	-	164	1986 - 1989, 1995-Present

Sediment sampling was temporarily suspended at site #123, Mazon River near Coal City, at the beginning of the 1998 Water Year. The bridge on which this sampling station is located was scheduled for reconstruction. Sampling is suspended at bridge reconstruction sites in consideration of safety for local citizen observers. The bridge replacement schedule was delayed, and no samples were collected for Water Years 1998 and 1999. Sampling at the Mazon River site has been reinstated for Water Year 2002.

Data Collection

The Benchmark Sediment Monitoring Program uses techniques based upon the sediment data collection techniques developed by the USGS. Detailed descriptions of these techniques can be found in the U.S. Department of the Interior series Techniques of Water-Resources Investigations of the U.S. Geological Survey (Guy, 1969; Guy and Norman, 1970; Porterfield, 1972).

All suspended sediment sampling stations, with the exception of the Cache River at Ullin, are located at USGS continuous recording streamgaging stations. The Cache River at Ullin sediment sampling station is located at a continuous streamgaging station maintained by the ISWS.

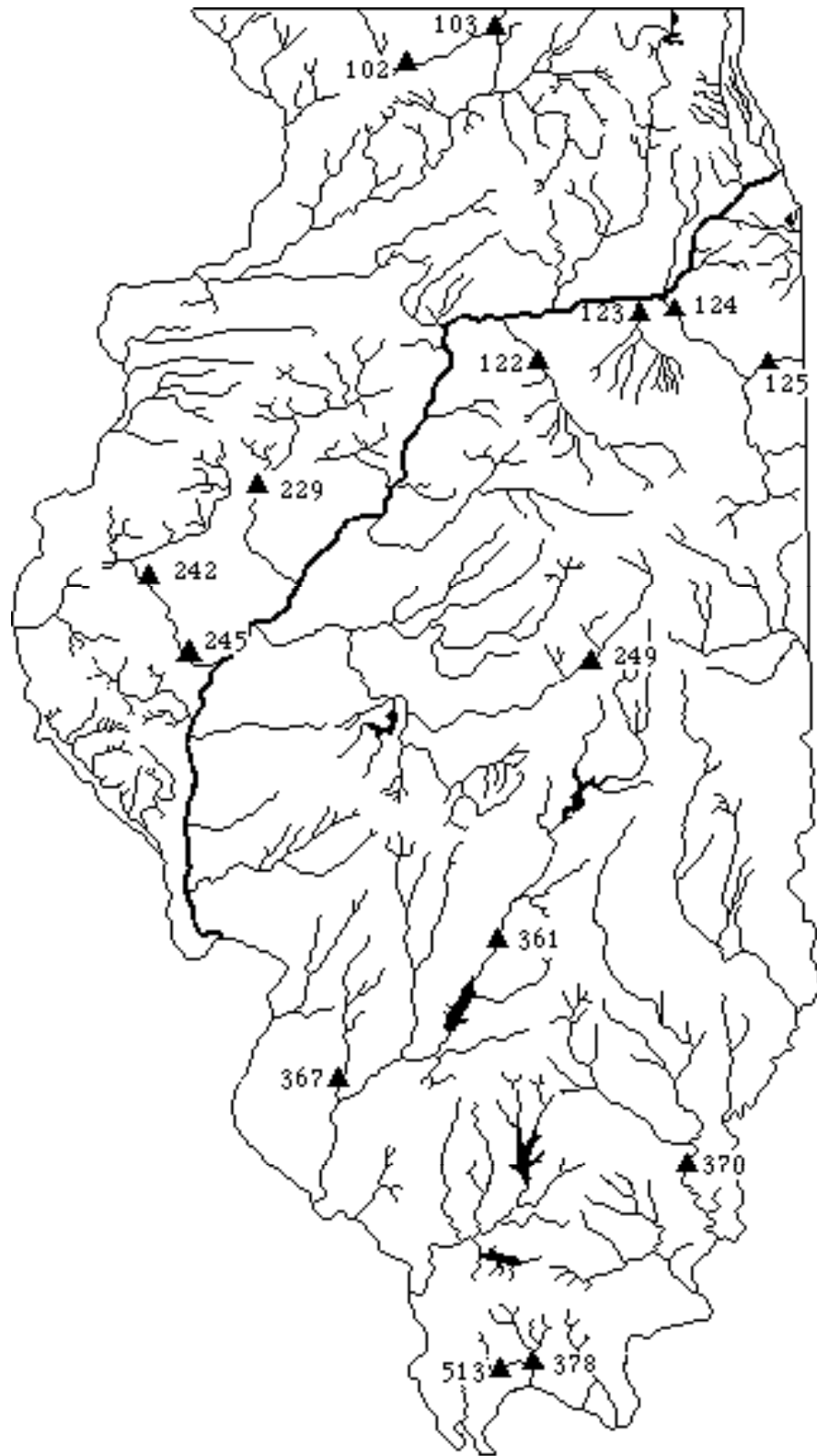


Figure 2. Location of Benchmark Sediment Monitoring stations, Water Years 1998 and 1999

Locating sampling stations at streamgaging stations enables sampling personnel to read the corresponding river stage when they collect a suspended sediment sample. The USGS furnishes the ISWS with updated water discharge rating tables for each station on an annual basis except for the Cache River at Ullin. The rating table for this station is developed and updated annually by ISWS personnel. During analysis of the sediment data, an instantaneous water discharge taken from the rating table can be assigned to each sample based upon the stage of the river at the time of sampling.

Each sampling site is installed on a bridge crossing the river, and consists of a California-style sediment box with a cable-reel and a sediment sampler. Most of the samplers in use on the network are depth-integrated DH 59s. Bridge sampling locations were placed as near to the approximate channel thalweg as possible when the sampling equipment was set up at each site. Single vertical, depth-integrated samples are collected on a weekly basis by local observers who are paid a small per-sample fee. The observers collect their samples at a time each week that is conducive to their own personal schedule. These samples are then collected periodically by ISWS personnel and transported to the ISWS Sediment Laboratory in Champaign.

The observer sampling schedule has changed since the origin of the program in 1981. During Water Year 1981, observers at 10 of the 15 current sampling stations collected daily samples for the months of April through July with weekly samples collected the remaining months of the year. Additionally, during the April to July period of that first year, the observer collected a second sample on days of rising river stages. Budget cuts the following years of the program curtailed the daily spring sampling resulting in only weekly sampling for the program. More detailed information on the sampling and analysis procedures for the sediment monitoring network can be found in the ISWS publication *Statewide Instream Sediment Monitoring Program for Illinois: Annual Report - Water Year 1981* (Bonini et al., 1983).

Most of the sampling sites also have calibration cross-sectional sampling done on approximately a six-week interval by ISWS field staff. Cross-sectional sampling consists of collecting a series of samples at selected intervals across the width of the stream. These samples are analyzed individually. The concentrations for all the samples in a cross section are then computed together to determine the average sediment concentration for the cross section.

Additionally, the SWS technician collects discreet samples from the observer sampling locations at the beginning and end of each cross-section sampling. These discreet additional samples are included in the Appendix A data set and occasionally results in multiple samples on any given day.

These data can then be compared to the single vertical weekly samples to verify that the single vertical samples accurately represent the actual sediment loads in the rivers. In addition, every other cross section is analyzed for particle size. The particle size analysis consists of a sand/fine split and is reported as percent finer than 0.0625 millimeters (mm), with the proportion smaller than 0.0625 mm being fines. Several of

the sites have cross sections collected at irregular intervals or not all due to a shortage of regional personnel and other time commitments.

Data Analysis

The collected suspended sediment samples are analyzed for concentration and percent of sand/fines at the ISWS Sediment Laboratory in Champaign. Once the laboratory analysis has been completed, the sample information and concentrations are screened for quality control. Questionable sample information that cannot be rectified is either discarded or flagged. If no suitable explanation can be deduced for questionable data, the values are marked with an asterisk (*) and left in the data set. Data marked as such should be used cautiously in any further analysis. The abbreviation of the questionable sample component is included in a remarks column adjacent to the information for that particular sample.

Once the samples have been screened for quality control, instantaneous stream discharge is matched with the gage height for each sample. The instantaneous sediment loads are then calculated using the formula:

$$Q_s = C_s (Q_w) K$$

where Q_s is the instantaneous suspended sediment load in tons per day, C_s is the suspended sediment sample concentration in milligrams per liter, Q_w is the instantaneous water discharge in cubic feet per second, and K is a coefficient with a value of 0.0027 that is based on the unit of measurement of water discharge and that assumes a specific weight of 2.65 for sediment (Porterfield, 1972). After these calculations have been completed, the data are formatted and compiled into data sets for inclusion in Appendix A of this report.

Additionally, each data set contains the results of any percent fines/sand computation samples that were performed during the water year (see Appendix B). Appendix C contains graphs of the sediment concentration values over the complete sampling record for each station.

Summary

The Illinois State Water Survey initiated the Benchmark Sediment Monitoring Program in 1981 to monitor and quantify the long-term changes in suspended sediment concentrations and instantaneous sediment loads in Illinois waterways. The program began with 50 monitoring stations distributed throughout Illinois. During Water Years 1998 and 1999 14 stations were actively monitored.

The monitoring program for Water Year 1998 and 1999 involves the collection of suspended sediment samples by trained local private citizens. Calibration samples and particle size data are collected by Water Survey personnel to supplement the weekly data. The suspended sediment sample concentrations are paired with the instantaneous water discharge for calculation of the instantaneous sediment load (in tons per day).

References

- Allgire, R. L., 1997. *Benchmark Sediment Monitoring Program for Illinois Streams: Data Report for Water Years 1992 and 1993*. Illinois State Water Survey Circular 183.
- Allgire, R.L. 2001a. *Benchmark Sediment Monitoring Program for Illinois Streams: Data Report for Water Years 1994 and 1995*. Illinois State Water Survey Data/Case Study 2001-01.
- Allgire, R.L. 2001b. *Benchmark Sediment Monitoring Program for Illinois Streams: Data Report for Water Years 1996 and 1997*. Illinois State Water Survey Data/Case Study 2001-02.
- Allgire, R.L., and M. Demissie. 1995. *Benchmark Sediment Monitoring Program for Illinois Streams: Program Summary and Site Descriptions*. Illinois State Water Survey Circular 181.
- Bonini, A.P., N.G. Bhowmik, R.L. Allgire, and D.K. Davie. 1983. *Statewide Instream Sediment Monitoring Program for Illinois: Annual Report - Water Year 1981*. Illinois State Water Survey Contract Report 318B.
- Davie, D.K. 1988. *Illinois Benchmark Network Instream Suspended Sediment Monitoring Program, Water Year 1984*. Illinois State Water Survey Circular 171-84.
- Davie, D.K. 1989. *Illinois Benchmark Network Instream Suspended Sediment Monitoring Program, Water Year 1985*. Illinois State Water Survey Circular 171-85.
- Davie, D. K. 1990. *Illinois Benchmark Network Instream Suspended Sediment Monitoring Program, Water Year 1986*. Illinois State Water Survey Circular 171-86.
- Guy, H.P. 1969. *Laboratory Theory and Methods for Sediment Analysis*. Book 5, Chapter C1 in *Techniques of Water - Resources Investigations of the U.S. Geological Survey*, U.S. Government Printing Office, Washington D.C.
- Guy, H.P., and V.W. Norman. 1970. *Field Methods for Measurement of Fluvial Sediment*. Book 3, Chapter C2 in *Techniques of Water - Resources Investigations of the U.S. Geological Survey*, U.S. Government Printing Office, Washington D.C.
- Porterfield, G. 1972. *Computation of Fluvial - Sediment Discharge*. Book 3, Chapter C3 in *Techniques of Water - Resources Investigations of the U.S. Geological Survey*, U.S. Government Printing Office, Washington D.C.

Appendix A: Instantaneous Suspended Sediment Measurements

Data Set Parameters

- Date: Day sample was collected by observer or technician.
- Time: Time sample was collected in 24-hour time.
- Gage Ht: Gage height, in feet, at the time of sample collection as read from the U.S. Geological Survey or Illinois State Water Survey streamgaging station.
- Temp (°C): Water temperature, in degrees Celsius, at the time of sample collection.
- Cs (mg/l): Concentration of the collected suspended sediment sample, in milligrams per liter.
- Qw (cfs): Instantaneous water discharge of the stream, in cubic feet per second, at the time of sample collection, taken from the U.S. Geological Survey or Illinois State Water Survey stream discharge rating tables.
- Qs (t/d): Instantaneous sediment load, in tons per day.
- Remarks: Values flagged with an asterisk (*) in column indicate questionable data. For example, *Cs indicates a questionable suspended sediment concentration. Bw indicates backwater conditions at the time of sampling.
- : A dash (-) in any column indicates that data are missing for that parameter.

#102 – Pecatonica River at Freeport, IL (USGS #05435500)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1998							
10/03/97	1610	3.31	19	154.99	578.5	242.1	
10/10/97	1545	3.17	19	166.18	551.2	247.3	
10/27/97	1555	3.44	6	122.18	603.7	199.1	
10/31/97	1535	3.56	9	124.25	627.0	210.3	
11/07/97	1535	3.70	7	115.41	654.1	203.8	
11/14/97	1545	3.43	3	122.77	601.8	199.5	
11/21/97	1610	3.32	2	126.72	580.4	198.6	
11/26/97	1535	3.20	3	73.81	557.0	111.0	
12/19/97	1555	3.23	2	110.31	562.9	167.7	
01/05/98	1555	4.89	2	31.25	882.2	74.4	
02/27/98	1650	5.50	8	104.27	997.8	280.9	
04/03/98	1600	12.44	9	66.56	3416.0	613.9	
04/14/98	1510	11.29	13	163.23	2712.0	1195.2	
04/22/98	1506	11.53	12	65.45	2826.0	499.4	
04/29/98	0947	9.75	12	89.66	2145.0	519.3	
05/06/98	1505	8.62	17	130.95	1833.0	648.1	
05/13/98	1511	8.70	20	189.31	1853.0	947.1	
05/20/98	0554	7.12	20	181.64	1459.0	715.5	
05/26/98	1507	7.75	18	212.44	1614.0	925.8	
06/17/98	1516	7.62	20	240.08	1582.0	1025.5	
06/25/98	1519	10.00	25	140.01	2220.0	839.2	
07/01/98	1509	11.41	24	160.56	2768.0	1200.0	
07/08/98	1509	10.62	24	185.06	2435.0	1216.7	
07/15/98	1507	7.07	26	305.01	1447.0	1191.7	
07/21/98	1509	6.58	26	231.31	1328.0	829.4	
07/21/98	1715	6.56	25	254.00	1323.0	907.3	
07/29/98	1509	5.70	24	225.17	1119.0	680.3	
08/05/98	1520	5.42	24	216.40	1053.0	615.3	
08/12/98	1517	5.78	24	146.29	1137.0	449.1	
08/20/98	1511	5.30	24	183.89	1026.0	509.4	
08/26/98	1516	5.55	24	124.96	1084.0	365.7	
09/02/98	1516	5.04	23	138.93	965.8	362.3	
09/16/98	1517	7.88	22	989.12	1647.0	4398.5	
09/23/98	1506	5.20	16	1006.79	1002.0	2723.8	

#102 – Pecatonica River at Freeport, IL (USGS #05435500)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1999							
10/09/98	1002	6.84	13	587.91	1391.0	2208.0	
10/21/98	0855	8.10	12	86.53	1702.0	397.6	
10/28/98	0959	5.90	13	170.65	1166.0	537.2	
11/04/98	1507	5.31	8	188.34	1028.0	522.7	
11/18/98	1510	5.92	8	39.14	1170.0	123.6	
11/25/98	1506	5.22	7	202.10	1007.0	549.5	
12/02/98	1510	4.97	10	123.87	949.8	317.7	
12/16/98	1510	4.58	4	132.35	861.5	307.9	
02/10/99	1507	6.40	4	33.36	1285.0	115.7	
02/18/99	1509	6.66	3	81.17	1347.0	295.2	
02/24/99	1522	2.00	2	103.03	320.3	89.1	
03/03/99	1520	5.20	3	100.88	1002.0	272.9	
03/10/99	1609	4.42	3	311.60	825.7	694.7	
03/24/99	1508	5.03	8	253.00	963.5	658.2	
03/31/99	1509	4.52	11	108.08	848.0	247.4	
04/07/99	1510	6.55	13	410.76	1321.0	1465.1	
04/14/99	1535	8.98	13	108.40	1925.0	563.4	
04/21/99	1657	6.71	12	121.13	1359.0	444.5	
04/29/99	1659	13.50	13	41.84	4819.0	544.4	
05/03/99	1708	12.90	13	46.31	3983.0	498.0	
05/12/99	1608	8.40	18	195.46	1777.0	937.8	
05/20/99	1717	12.50	20	347.24	3490.0	3272.0	
05/26/99	1516	12.42	20	56.78	3424.0	525.0	
06/09/99	1515	11.50	21	130.25	2810.0	988.2	
06/16/99	1515	11.37	21	125.83	2749.0	933.9	
06/24/99	1509	9.13	23	362.55	1967.0	1925.5	
06/30/99	1605	7.03	23	1080.95	1437.0	4194.0	
07/07/99	1506	7.77	24	307.73	1619.0	1345.2	
07/14/99	1507	5.42	24	491.17	1053.0	1396.4	
07/21/99	1509	7.55	26	292.78	1565.0	1237.2	
07/28/99	1506	7.06	27	474.38	1444.0	1849.5	
08/04/99	1506	6.80	24	333.07	1381.0	1241.9	
08/11/99	1507	5.60	24	258.75	1095.0	765.0	
08/18/99	1506	5.20	23	193.85	1002	524.4	
08/25/99	1507	6.30	23	588.30	1261.0	2003.0	

#102 – Pecatonica River at Freeport, IL (USGS #05435500)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1999 (concluded)							
09/01/99	1508	4.60	23	226.80	866.0	530.3	
09/08/99	1512	4.49	23	235.51	841.3	535.0	
09/15/99	1512	4.27	17	144.14	792.3	308.4	
09/22/99	1328	3.89	16	251.99	708.9	482.3	
09/30/99	1511	5.32	14	1657.21	1030.0	4608.7	

#103 – Rock River at Rockton, IL (USGS #05437500)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1998							
10/03/97	1300	3.06	20	44.75	2521.0	304.6	
10/10/97	1400	2.94	20	67.02	2350.0	425.3	
10/17/97	1130	2.78	13	54.77	2126.0	314.4	
10/24/97	1300	3.05	9	97.20	2506.0	657.7	
11/07/97	1115	3.95	10	20.11	3880.0	210.7	
11/14/97	1330	3.20	6	56.91	2724.0	418.5	
11/21/97	1300	3.14	4	88.14	2637.0	627.5	
11/26/97	1500	3.23	5	48.07	2768.0	359.2	
12/05/97	1000	3.42	3	11.09	3052.0	91.4	
12/12/97	1200	3.35	4	78.87	2947.0	627.5	
01/12/98	1025	3.86	1	47.00	3736.0	474.1	
01/19/98	1045	3.82	1	14.36	3672.0	142.3	
01/23/98	1115	3.51	3	90.22	3189.0	776.8	
01/30/98	0915	3.41	2	96.19	3037.0	788.7	
02/06/98	1330	3.66	5	103.49	3421.0	955.9	
02/13/98	1315	4.24	5	64.57	4353.0	758.9	
02/20/98	1330	4.58	7	83.22	4926.0	1106.8	
02/27/98	1300	4.86	7	32.98	5411.0	481.8	
03/06/98	1330	5.28	6	42.51	6160.0	707.1	
03/13/98	1415	4.84	4	57.86	5376.0	839.8	
03/20/98	1300	5.29	5	39.36	6178.0	656.5	
03/27/98	1500	5.63	14	58.29	6803.0	1070.8	
04/03/98	1330	7.90	10	151.31	11330.0	4628.7	
04/10/98	0950	9.14	9	121.64	14040.0	4611.2	
04/17/98	1315	9.07	12	108.10	13880.0	4051.1	
04/24/98	1430	9.06	15	73.72	13860.0	2758.6	
05/01/98	1040	7.87	14	65.94	11270.0	2006.6	
05/08/98	1350	7.84	16	80.33	11210.0	2431.2	
05/15/98	1300	7.07	23	50.35	9609.0	1306.3	
05/22/98	1515	5.67	20	81.11	6877.0	1506.1	
05/29/98	1300	5.49	24	86.48	6544.0	1527.9	
06/05/98	1300	4.77	18	140.92	5254.0	1999.0	
06/12/98	1430	4.51	21	180.38	4807.0	2341.1	
06/19/98	1330	5.71	24	297.86	6952.0	5590.9	
06/26/98	1400	8.04	28	340.92	11630.0	10705.1	
07/02/98	1330	6.85	26	112.25	9164.0	2777.4	
07/07/98	1300	6.61	24	100.95	8686.0	2367.5	
07/10/98	1300	6.39	26	115.92	8253.0	2583.1	

**#103 – Rock River at Rockton, IL (USGS #05437500)
Instantaneous Suspended Sediment Measurements**

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1998 (concluded)							
07/14/98	1330	5.34	26	77.74	6269.0	1315.9	
07/17/98	1400	4.84	27	145.60	5376.0	2113.4	
07/22/98	0901	4.87	26	108.16	5429.0	1585.5	
07/24/98	1515	4.66	26	113.81	5064.0	1556.0	
07/31/98	1400	3.47	24	194.60	3128.0	1643.5	
08/21/98	1400	4.17	26	77.80	4238.0	890.2	
08/28/98	1345	4.04	25	70.35	4025.0	764.6	
09/04/98	1500	3.67	24	66.99	3436.0	621.5	
09/11/98	1400	3.64	23	86.94	3390.0	795.7	
09/18/98	1330	4.52	23	113.71	4824.0	1481.1	
09/25/98	1330	3.56	19	110.06	3266.0	970.5	
Water Year 1999							
10/02/98	1315	3.34	17	137.98	2932.0	1092.3	
10/09/98	1345	5.01	16	63.72	5676.0	976.6	
10/16/98	1400	4.28	16	40.80	4420.0	487.0	
10/23/98	1300	5.21	12	46.54	6034.0	758.2	
10/30/98	1315	4.68	14	57.46	5098.0	790.9	
11/06/98	1015	3.97	8	23.42	3912.0	247.3	
11/13/98	1330	5.17	8	51.38	5962.0	827.1	
11/20/98	1400	4.51	7	34.10	4807.0	442.6	
11/25/98	1100	4.49	7	27.55	4773.0	355.1	
12/04/98	1345	4.24	12	52.60	4353.0	618.2	
12/11/98	1315	4.22	7	19.45	4320.0	226.8	
12/18/98	1330	4.10	6	16.72	4123.0	186.2	
12/24/98	1015	3.48	1	68.68	3143.0	582.9	
12/31/98	1020	3.89	0	143.81	3784.0	1469.2	
01/22/99	1010	4.37	2	81.70	4570.0	1008.1	
01/29/99	1030	5.77	4	22.78	7065.0	434.6	
02/05/99	1115	6.19	3	39.40	7864.0	836.6	
02/12/99	1310	6.03	5	46.91	7557.0	957.0	
02/19/99	1315	6.05	4	31.43	7595.0	644.4	
02/26/99	1315	5.35	6	21.58	6287.0	366.4	
03/05/99	1415	5.03	4	20.02	5711.0	308.7	
03/12/99	1300	4.50	7	20.70	4790.0	267.7	
03/19/99	1330	4.68	10	28.12	5098.0	387.1	
03/26/99	1430	4.29	10	41.05	4437.0	491.8	
04/02/99	1315	3.86	15	68.66	3736.0	692.6	

#103 – Rock River at Rockton, IL (USGS #05437500)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1999 (concluded)							
04/09/99	1300	5.65	13	85.29	6840.0	1575.2	
04/16/99	1330	6.38	12	73.14	8233.0	1625.7	
04/23/99	1420	8.57	11	324.58	12780.0	11199.9	
04/30/99	1330	9.57	15	101.97	15010.0	4132.7	
05/04/99	0959	8.80	17	79.53	13280.0	2851.8	
05/07/99	1430	6.65	16	87.03	8765.0	2059.7	
05/14/99	1230	6.85	17	79.48	9164.0	1966.6	
05/21/99	1400	8.51	20	130.72	12650.0	4464.6	
05/28/99	1330	8.00	21	59.34	11550.0	1850.5	
06/04/99	1330	6.59	20	184.84	8646.0	4314.9	
06/11/99	1300	6.48	26	149.34	8429.0	3398.7	
06/18/99	1400	7.93	21	73.23	11400.0	2254.1	
06/25/99	1330	6.40	26	119.90	8272.0	2677.9	
07/02/99	1300	5.27	25	151.43	6142.0	2511.3	
07/09/99	1300	4.54	27	144.55	4858.0	1896.0	
07/23/99	1000	5.28	28	92.52	6160.0	1538.7	
07/30/99	0900	5.39	30	81.93	6360.0	1406.9	
08/06/99	1300	5.32	26	77.47	6233.0	1303.7	
08/13/99	1400	5.23	24	60.92	6070.0	998.4	
08/19/99	1400	4.85	23	52.40	5394.0	763.2	
09/03/99	0900	3.86	23	69.09	3736.0	696.9	
09/10/99	1315	2.94	20	158.06	2350.0	1002.9	
09/17/99	1400	3.33	19	57.64	2917.0	454.0	
09/24/99	0830	3.12	16	103.70	2607.0	729.9	

#122 – Vermilion River near Leonore, IL (USGS #5555300)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1998							
10/11/97	1100	2.76	18	57.41	12.3	1.9	
10/12/97	0800	2.76	18	57.56	12.3	1.9	
10/19/97	0900	2.69	19	5.61	8.5	0.1	
10/21/97	1541	2.77	11	98.73	13.0	3.5	
10/21/97	1554	2.77	-	82.73	13.0	2.9	
10/26/97	0800	2.70	18	8.94	9.0	0.2	
11/02/97	1100	2.78	16	57.98	13.6	2.1	
11/09/97	1600	3.14	16	10.21	47.0	1.3	
11/14/97	1100	3.02	15	6.07	33.5	0.5	
11/16/97	1200	3.62	12	9.86	126.8	3.4	
11/28/97	1100	3.91	10	24.90	207.4	13.9	
11/30/97	1100	3.51	-	10.97	102.8	3.0	
12/08/97	1145	3.71	2	8.84	149.1	3.6	
12/08/97	1202	3.71	-	15.26	149.1	6.1	
01/02/98	0830	4.54	-1	25.02	455.7	30.8	
01/10/98	0830	8.20	1	71.23	2777.0	534.1	
01/17/98	1200	5.31	0	103.77	870.5	243.9	
01/18/98	1300	5.24	0	65.89	829.3	147.5	
02/03/98	1430	8.12	4	82.22	2722.0	604.3	
02/04/98	0945	7.13	4	39.24	2036.0	215.7	
02/04/98	1019	7.12	-	67.52	2030.0	370.1	
02/12/98	1230	10.84	3	462.29	4787.0	5975.1	
02/21/98	1730	6.51	4	89.32	1621.0	390.9	
02/28/98	1530	6.52	7	119.00	1628.0	523.1	
03/14/98	0900	7.31	3	106.31	2158.0	619.4	
03/18/98	0948	17.16	5	845.03	11670.0	26626.0	
03/18/98	1019	17.27	-	902.17	11820.0	28791.8	
03/18/98	1530	18.05	5	908.21	12960.0	31780.1	
03/28/98	1300	7.66	16	130.17	2400.0	843.5	
03/30/98	0700	7.42	16	122.00	2234.0	735.9	
04/05/98	0800	5.49	15	111.81	973.5	293.9	
04/12/98	1000	6.21	14	127.33	1420.0	488.2	
04/19/98	1200	5.84	16	125.67	1189.0	403.4	
05/06/98	1043	8.57	17	157.61	3036.0	1291.9	
05/06/98	1104	8.61	-	178.86	3064.0	1479.7	
05/09/98	0800	20.70	15	410.62	17290.0	19169.1	
05/10/98	1600	6.02	18	124.86	1299.0	437.9	
05/23/98	0800	5.48	18	104.64	967.6	273.4	

#122 – Vermilion River near Leonore, IL (USGS #05555300)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1998 (concluded)							
05/25/98	0900	5.48	18	117.55	967.6	307.1	
06/13/98	0845	14.79	21	363.33	8673.0	8508.0	
06/20/98	0950	7.72	22	101.96	2442.0	672.3	
06/21/98	0900	7.49	22	66.33	2283.0	408.9	
06/24/98	1229	5.92	26	139.47	1237.0	465.8	
06/24/98	1248	5.90	-	140.61	1225.0	465.1	
07/08/98	1830	16.22	26	310.25	10370.0	8686.7	
07/18/98	1100	14.42	18	521.62	8259.0	11631.7	
08/01/98	1100	7.49	22	858.92	2283.0	5294.5	
08/03/98	0926	3.54	25	19.67	109.0	5.8	
08/03/98	0944	3.54	-	18.08	109.0	5.3	
08/05/98	1600	9.20	20	520.26	3495.0	4909.4	
08/09/98	0700	3.15	27	232.90	48.3	30.4	
08/22/98	1500	2.95	20	70.69	26.5	5.0	
08/29/98	1600	2.90	25	175.93	22.0	10.5	
09/20/98	0800	2.89	24	78.28	21.2	4.5	
09/22/98	1418	2.83	23	48.88	16.9	2.2	
09/22/98	1435	2.84	-	51.58	17.6	2.4	
09/30/98	1500	2.89	25	52.04	21.2	3.0	
Water Year 1999							
10/10/98	1600	2.91	15	31.48	22.8	1.9	
10/17/98	1700	2.90	16	22.86	22.0	1.4	
10/18/98	1830	3.14	15	34.37	47.0	4.4	
10/25/98	1200	2.78	14	129.39	13.6	4.8	
11/01/98	0800	2.70	12	88.57	9.0	2.2	
11/05/98	0947	2.98	8	22.23	29.4	1.8	
11/05/98	1002	2.98	-	14.21	29.4	1.1	
11/08/98	0900	2.71	13	54.28	9.5	1.4	
11/15/98	0900	2.60	13	30.64	4.8	0.4	
11/26/98	0900	2.90	6	183.87	22.0	10.9	
12/09/98	1014	3.32	7	33.35	71.2	6.4	
12/09/98	1029	3.32	-	12.57	71.2	2.4	
01/27/99	0845	8.87	1	103.43	3252.0	908.2	
02/04/99	0957	7.38	4	38.08	2206.0	226.8	
02/04/99	1014	7.38	-	60.89	2206.0	362.7	
02/06/99	0900	5.77	2	53.58	1146.0	165.8	
02/07/99	1100	5.76	2	11.11	1139.0	34.2	

#122 – Vermilion River near Leonore, IL (USGS #05555300)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1999 (concluded)							
02/27/99	1100	4.45	3	34.97	413.6	39.1	
02/28/99	1030	4.50	3	27.63	437.0	32.6	
03/07/99	0800	4.15	4	9.80	289.8	7.7	
03/11/99	1030	5.10	2	9.52	749.3	19.3	
03/14/99	1600	4.60	4	13.63	484.6	17.8	
03/21/99	0900	4.75	13	30.87	561.7	46.8	
03/28/99	0900	4.58	12	21.81	474.8	28.0	
04/05/99	0850	4.51	14	23.43	441.6	27.9	
04/17/99	1800	16.30	7	792.44	10480.0	22422.8	
04/18/99	1700	15.47	7	373.44	9453.0	9531.2	
04/27/99	1105	7.47	13	46.96	2269.0	287.7	
05/15/99	0800	9.87	16	86.98	4008.0	941.3	
05/16/99	0830	8.53	15	108.20	3007.0	878.4	
05/29/99	1730	4.95	24	22.23	667.5	40.1	
05/31/99	1430	4.85	23	20.33	614.5	33.7	
06/07/99	1037	6.94	25	57.93	1908.0	298.4	
06/07/99	1053	6.92	-	61.28	1895.0	313.6	
06/14/99	1700	16.75	21	539.43	11100.0	16166.8	
06/25/99	0930	6.50	24	119.06	1615.0	519.2	
07/10/99	0930	4.00	24	84.32	238.0	54.2	
07/17/99	0800	3.40	24	57.58	83.6	13.0	
07/18/99	0800	3.35	24	58.63	75.7	12.0	
07/21/99	0956	3.42	-	38.13	86.9	8.9	
07/21/99	1008	3.42	30	33.79	86.9	7.9	
07/29/99	1930	2.85	35	58.99	18.3	2.9	
08/02/99	0700	7.14	22	64.61	2043.0	356.4	
08/08/99	0800	7.01	21	22.19	1957.0	117.2	
08/15/99	1700	6.71	21	22.45	1752.0	106.2	
08/22/99	1800	6.75	20	33.62	1779.0	161.5	
09/01/99	0800	6.61	18	33.79	1686.0	153.8	
09/01/99	1326	2.80	25	34.66	15.0	1.4	
09/01/99	1339	2.80	-	33.74	15.0	1.4	
09/08/99	0830	6.61	18	38.46	1686.0	175.1	
09/18/99	1800	2.60	19	178.46	4.8	2.3	

#124 – Kankakee River near Wilmington, IL (USGS #05527500)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1998							
10/01/97	1015	1.21	16	37.28	1571.0	158.1	
10/04/97	1443	1.25	21	23.59	1677.0	106.8	
10/11/97	1140	1.18	19	32.15	1494.0	129.7	
10/19/97	1610	1.09	15	41.91	1275.0	144.3	
10/29/97	0950	1.37	8	108.72	2015.0	591.5	
11/05/97	1042	1.41	8	88.90	2135.0	512.4	
11/17/97	1554	1.30	2	98.09	1814.0	480.4	
11/26/97	1120	1.45	6	97.28	2258.0	593.1	
12/02/97	1145	1.98	7	17.08	4214.0	194.3	
12/06/97	1545	1.84	3	59.14	3639.0	581.1	
12/11/97	1225	1.73	2	38.60	3216.0	335.1	
12/16/97	1506	1.64	4	82.33	2890.0	642.4	
12/22/97	1359	1.70	4	80.79	3105.0	677.3	
12/30/97	1505	2.37	2	70.70	5881.0	1122.6	
01/04/98	1245	2.59	6	53.86	6928.0	1007.4	
01/09/98	1341	5.69	5	198.01	25990.0	13895.0	
01/16/98	1337	3.82	2	20.57	13730.0	762.5	
01/24/98	1258	2.66	3	67.84	7278.0	1333.1	
02/02/98	1540	3.12	6	58.49	9733.0	1537.1	
02/10/98	1029	2.51	4	74.84	6538.0	1321.1	
02/16/98	1403	2.02	6	45.01	4380.0	532.3	
02/23/98	1545	3.04	9	26.51	9300.0	665.6	
03/01/98	1220	2.65	8	64.55	7227.0	1259.5	
03/08/98	1310	2.35	6	81.63	5790.0	1276.2	
03/14/98	1445	4.31	4	47.39	16760.0	2144.3	
03/22/98	1418	6.78	7	117.61	33850.0	10748.5	
03/30/98	1458	4.75	18	85.36	19620.0	4521.7	
04/06/98	0938	3.85	11	39.13	13910.0	1469.4	
04/12/98	1248	4.02	15	80.62	14920.0	3247.5	
04/23/98	0914	3.85	13	39.75	13910.0	1492.8	
04/29/98	1540	3.13	15	56.28	9788.0	1487.5	
05/04/98	1500	3.97	18	79.26	14620.0	3128.8	
05/08/98	1335	8.21	17	253.99	44900.0	30791.7	
05/14/98	0930	4.95	20	56.93	20960.0	3221.9	
05/26/98	1338	2.72	22	108.25	7583.0	2216.4	
06/02/98	1433	2.04	25	79.11	4460.0	952.7	
06/11/98	1330	3.01	20	64.90	9140.0	1601.5	
06/18/98	1110	4.27	23	92.55	16500.0	4123.1	

#124 – Kankakee River near Wilmington, IL (USGS #05527500)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1998 (concluded)							
06/24/98	1357	3.05	28	62.81	9354.0	1586.4	
06/29/98	1510	2.05	30	33.10	4500.0	402.2	
07/06/98	1516	3.33	26	142.12	10910.0	4186.4	
07/13/98	1140	3.64	26	71.76	12690.0	2458.7	
07/30/98	1410	1.56	29	83.30	2614.0	587.9	
07/30/98	1808	1.67	30	16.54	2996.0	133.8	
08/05/98	1300	3.42	25	128.27	11430.0	3958.4	
08/13/98	1143	2.21	21	109.99	5170.0	1535.4	
08/20/98	1327	1.36	27	119.37	1986.0	640.1	
08/28/98	1420	1.15	26	98.05	1419.0	375.6	
09/04/98	1605	1.11	26	112.22	1322.0	400.6	
09/14/98	1157	1.12	25	98.50	1346.0	358.0	
09/23/98	1114	0.95	21	99.47	967.9	259.9	
09/28/98	1101	0.90	24	13.59	868.5	31.9	
Water Year 1999							
10/06/98	1045	1.09	20	100.43	1275.0	345.7	
10/12/98	1337	1.10	18	113.87	1298.0	399.1	
10/19/98	1329	1.08	17	113.48	1251.0	383.3	
11/03/98	1150	1.06	11	110.90	1205.0	360.8	
11/12/98	1120	1.16	7	67.17	1444.0	261.9	
11/18/98	1440	1.15	10	26.66	1419.0	102.1	
11/24/98	1125	1.03	8	106.25	1138.0	326.5	
12/02/98	1541	1.09	11	130.24	1275.0	448.4	
12/09/98	1540	1.42	8	106.86	2165.0	624.6	
12/16/98	1401	1.28	4	27.11	1759.0	128.8	
12/23/98	1208	1.44	0	14.60	2227.0	87.8	
01/28/99	1503	5.77	2	242.62	26550.0	17392.4	
02/02/99	1525	3.93	4	25.85	14380.0	1003.7	
02/11/99	1405	3.67	10	83.14	12860.0	2886.8	
02/18/99	1126	2.70	3	14.16	7481.0	286.0	
02/24/99	1123	2.22	2	19.58	5213.0	275.5	
03/05/99	1200	2.27	5	36.52	5432.0	535.6	
03/13/99	1607	2.80	4	10.17	8000.0	219.6	
03/20/99	1542	3.13	10	25.46	9788.0	672.9	
03/26/99	1040	2.48	7	10.24	6395.0	176.8	
03/31/99	1105	2.18	13	26.31	5041.0	358.1	
04/07/99	1017	2.08	14	19.47	4623.0	243.0	

**#124 – Kankakee River near Wilmington, IL (USGS #05527500)
Instantaneous Suspended Sediment Measurements**

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Q_w (cfs)</i>	<i>Q_s (t/d)</i>	<i>Remarks</i>
Water Year 1999 (concluded)							
04/17/99	1345	5.60	9	235.45	25360.0	16121.5	
04/22/99	1505	4.87	14	88.72	20420.0	4891.5	
04/30/99	1500	4.36	15	52.04	17080.0	2400.1	
05/11/99	1047	2.82	19	29.41	8106.0	643.7	
05/20/99	1150	2.50	21	51.68	6490.0	905.6	
05/26/99	1448	2.27	19	97.83	5432.0	1434.8	
06/03/99	1415	3.05	21	225.59	9354.0	5697.3	
06/11/99	1033	2.63	26	124.11	7127.0	2388.2	
06/17/99	1028	3.00	19	76.55	9087.0	1878.2	
06/23/99	1442	2.17	25	61.42	4999.0	829.0	
06/30/99	1200	1.99	26	33.98	4257.0	390.6	
07/07/99	1015	2.20	27	38.62	5127.0	534.6	
07/16/99	1212	1.20	28	78.30	1545.0	326.6	
07/22/99	1210	1.24	31	31.03	1650.0	138.3	
07/29/99	1539	1.06	33	35.33	1205.0	114.9	
08/04/99	1419	1.00	29	15.73	1073.0	45.6	
08/12/99	1154	0.86	26	19.88	792.9	42.6	
08/20/99	1405	0.88	25	14.91	830.3	33.4	
08/26/99	1542	0.91	25	16.78	888.0	40.2	
09/03/99	1213	0.78	28	12.44	652.1	21.9	
09/09/99	1444	0.62	24	9.47	419.6	10.7	
09/15/99	1448	0.57	22	9.43	357.5	9.1	
09/22/99	1138	0.86	18	10.84	792.9	23.2	
09/29/99	1210	0.81	19	16.32	703.3	31.0	

#125 – Kankakee River at Momence, IL (USGS #05520500)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1998							
11/12/97	1632	1.81	5	52.14	1504.0	211.7	
11/12/97	1637	1.81	5	86.35	1504.0	350.6	
11/19/97	1621	1.79	3	68.49	1472.0	272.2	
11/26/97	1900	1.89	5	72.49	1633.0	319.6	
12/04/97	1620	2.42	4	44.14	2588.0	308.4	
12/11/97	1745	2.18	3	41.77	2143.0	241.7	
12/21/97	1320	2.13	3	67.71	2053.0	375.3	
01/11/98	1305	4.59	2	56.54	7114.0	1086.0	
01/18/98	1225	4.10	1	34.36	5999.0	556.5	
01/25/98	1050	3.45	2	25.03	4604.0	311.2	
02/04/98	1800	3.67	2	16.97	5066.0	232.1	
02/08/98	1305	2.90	2	18.76	3530.0	178.8	
02/15/98	1555	3.10	8	21.73	3913.0	229.5	
02/22/98	1830	3.13	9	27.85	3972.0	298.6	
03/01/98	1030	2.83	7	21.31	3390.0	195.1	
03/10/98	1830	3.58	1	45.54	4877.0	599.6	
03/18/98	1815	5.61	8	156.41	9630.0	4066.7	
03/25/98	1840	4.54	10	76.05	6997.0	1436.8	
04/07/98	1700	3.91	8	45.44	5580.0	684.6	
04/17/98	1930	3.95	14	31.21	5669.0	477.7	
04/27/98	1900	3.48	14	32.55	4666.0	410.0	
05/04/98	1740	4.05	17	128.73	5889.0	2046.8	
05/13/98	1800	3.86	24	59.92	5471.0	885.0	
05/22/98	1810	2.49	21	55.48	2721.0	407.6	
06/02/98	1800	2.18	21	47.35	2143.0	273.9	
06/12/98	1945	2.86	22	45.72	3449.0	425.7	
06/22/98	1830	2.94	23	41.22	3606.0	401.3	
06/30/98	1915	2.34	25	129.27	2435.0	849.9	
07/08/98	2040	2.95	25	47.44	3625.0	464.4	
07/18/98	1900	1.87	26	46.30	1600.0	200.0	
07/27/98	1845	2.79	25	86.06	3311.0	769.4	
08/05/98	1730	3.14	25	92.66	3992.0	998.7	
08/15/98	0900	2.92	23	77.03	3568.0	742.1	
09/11/98	1700	1.47	23	72.91	1009.0	198.6	
09/18/98	1900	1.37	22	33.91	882.1	80.8	
09/25/98	1700	1.35	22	54.90	857.6	127.1	

#125 – Kankakee River at Momence, IL (USGS #05520500)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1999							
10/02/98	1630	1.38	19	25.56	894.4	61.7	
10/09/98	1845	1.31	18	29.55	809.6	64.6	
10/16/98	1900	1.23	16	19.06	717.5	36.9	
10/23/98	1900	1.29	14	22.84	786.1	48.5	
10/30/98	1730	1.37	12	31.13	882.1	74.1	
11/06/98	1800	1.45	8	76.89	983.3	204.1	
11/13/98	1800	1.37	6	21.11	882.1	50.3	
11/23/98	1900	1.46	5	39.46	996.3	106.2	
12/01/98	1700	1.49	3	34.94	1036.0	97.7	
12/11/98	1630	1.53	2	30.47	1090.0	89.7	
12/18/98	1830	1.58	2	14.67	1159.0	45.9	
12/28/98	1745	2.22	2	23.84	2215.0	142.6	
01/26/99	1630	4.24	1	16.35	6311.0	278.5	
02/14/99	1700	3.11	3	20.29	3933.0	215.5	
02/20/99	1630	3.67	15	45.54	5066.0	622.9	
02/27/99	1600	3.69	15	56.44	5108.0	778.4	
03/06/99	1700	2.79	14	27.78	3311.0	248.3	
03/13/99	1730	2.77	15	52.42	3273.0	463.3	
03/20/99	1615	2.85	16	27.16	3429.0	251.5	
03/27/99	1800	2.35	18	56.47	2454.0	374.1	
04/03/99	1645	2.46	20	45.74	2663.0	328.9	
04/10/99	0800	2.37	21	50.48	2492.0	339.6	
04/17/99	1545	3.74	22	47.12	5213.0	663.2	
04/24/99	1715	4.86	22	34.18	7754.0	715.6	
05/01/99	1645	4.45	22	40.79	6789.0	747.7	
05/08/99	1700	3.62	24	38.58	4961.0	516.7	
05/15/99	1845	3.12	25	42.90	3952.0	457.7	
05/22/99	1815	2.48	25	46.59	2702.0	339.9	
05/29/99	1900	2.27	26	33.14	2305.0	206.2	
06/05/99	1830	2.35	26	44.46	2454.0	294.6	
06/12/99	1815	3.03	26	37.98	3778.0	387.4	
06/19/99	1745	2.17	26	61.33	2125.0	351.9	
06/26/99	1800	1.82	26	41.28	1520.0	169.4	
07/12/99	1800	1.79	26	119.70	1472.0	475.7	
07/19/99	1600	1.46	28	106.63	996.3	286.8	
07/29/99	1500	1.35	31	91.64	857.6	212.2	
08/10/99	1430	1.23	26	84.34	717.5	163.4	
08/23/99	1900	1.15	24	65.53	630.8	111.6	

#125 – Kankakee River at Momence, IL (USGS #05520500)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1999 (concluded)							
08/31/99	1500	1.20	23	82.68	684.4	152.8	
09/08/99	1500	1.05	21	78.13	530.0	111.8	
09/15/99	0930	0.94	18	58.58	428.8	67.8	

**#229 – Spoon River at London Mills, IL (USGS #05569500)
Instantaneous Suspended Sediment Measurements**

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1998							
10/01/97	0800	3.25	5	99.20	182.7	48.9	
10/22/97	0700	3.04	4	83.48	144.0	32.5	
10/22/97	1304	3.02	9	121.45	140.6	46.1	
10/22/97	1316	3.02	-	127.07	140.6	48.2	
10/29/97	0730	4.69	5	95.66	573.2	148.1	
11/05/97	1730	4.11	4	87.77	395.4	93.7	
11/19/97	1600	4.40	5	102.13	482.0	132.9	
11/26/97	1600	4.04	4	58.08	375.9	59.0	
12/03/97	1700	6.05	4	106.84	1053.0	303.8	
12/10/97	0800	5.03	5	74.45	686.0	137.9	
12/23/97	0900	4.64	4	91.58	556.9	137.7	
12/23/97	1404	4.66	3	49.07	563.4	74.6	
12/23/97	1415	4.67	-	59.54	566.7	91.1	
01/07/98	0800	11.81	3	167.06	3654.0	1648.2	
01/13/98	0800	8.88	3	158.20	2191.0	935.8	
01/21/98	0830	6.55	3	163.93	1235.0	546.6	
01/28/98	0730	5.51	3	177.40	856.3	410.1	
02/03/98	1318	10.06	5	368.30	2746.0	2730.7	
02/03/98	1345	10.03	-	174.57	2731.0	1287.3	
02/04/98	0800	9.32	3	169.49	2393.0	1095.1	
03/11/98	0800	11.08	3	149.68	3263.0	1318.7	
03/16/98	1509	7.98	4	160.95	1801.0	782.6	
03/16/98	1523	7.98	-	163.01	1801.0	792.6	
03/18/98	0800	17.91	4	164.89	7535.0	3354.7	
03/25/98	0800	8.99	3	172.97	2241.0	1046.6	
04/01/98	0800	11.40	4	119.68	3433.0	1109.3	
04/08/98	1000	8.86	4	243.87	2182.0	1436.7	
04/15/98	0800	9.37	4	187.41	2416.0	1222.5	
04/22/98	0800	7.59	10	81.83	1641.0	362.5	
04/29/98	0700	6.28	12	179.16	1135.0	549.0	
05/06/98	0800	6.53	16	168.26	1228.0	557.9	
05/08/98	1505	15.85	17	1740.82	6107.0	28704.2	
05/08/98	1526	15.86	-	1698.88	6114.0	28044.8	
05/13/98	0830	7.97	11	118.46	1797.0	574.8	
05/20/98	0730	7.42	13	351.43	1573.0	1492.6	
05/27/98	0700	6.75	17	252.36	1312.0	894.0	
06/04/98	0800	5.29	16	212.72	776.5	446.0	
06/10/98	0830	9.12	19	259.20	2300.0	1609.6	

**#229 – Spoon River at London Mills, IL (USGS #05569500)
Instantaneous Suspended Sediment Measurements**

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1998 (concluded)							
06/17/98	0700	17.17	26	268.78	7009.0	5086.5	
06/25/98	0730	8.01	20	324.14	1813.0	1586.7	
06/25/98	1530	7.69	25	267.55	1681.0	1214.3	
06/25/98	1544	7.68	-	243.18	1677.0	1101.1	
07/01/98	0700	8.82	25	119.77	2164.0	699.8	
07/07/98	0700	6.06	25	310.05	1056.0	884.0	
08/03/98	1444	3.19	26	100.22	171.1	46.3	
08/03/98	1454	3.19	-	70.36	171.1	32.5	
08/27/98	1448	2.91	27	98.34	122.7	32.6	
09/04/98	1538	2.74	28	137.40	97.9	36.3	
09/10/98	1545	2.58	23	102.88	77.4	21.5	
09/17/98	1606	3.08	23	94.53	151.0	38.5	
09/21/98	1448	2.65	22	109.77	86.0	25.5	
09/21/98	1459	2.65	-	105.26	86.0	24.5	
09/24/98	1553	2.80	19	75.04	106.3	21.5	
Water Year 1999							
10/01/98	1600	2.65	19	122.84	86.0	28.5	
10/09/98	1705	3.45	15	88.67	224.6	53.8	
10/15/98	1603	2.94	17	177.97	127.5	61.3	
10/23/98	1438	5.77	12	214.41	950.4	550.2	
10/29/98	1600	5.30	16	255.18	780.1	537.5	
11/04/98	1340	5.19	10	161.16	741.5	322.6	
11/04/98	1352	5.19	-	163.74	741.5	327.8	
11/05/98	1538	4.98	7	157.84	669.1	285.1	
11/15/98	1235	6.65	9	267.88	1273.0	920.7	
11/20/98	1535	5.34	6	172.54	794.3	370.0	
11/27/98	1606	4.56	7	135.82	531.3	194.8	
12/04/98	1522	4.26	13	136.53	439.0	161.8	
12/10/98	1410	6.63	4	156.00	1266.0	533.2	
12/10/98	1454	6.59	6	118.94	1251.0	401.8	
12/10/98	1506	6.58	-	124.74	1247.0	420.0	
12/17/98	1442	5.05	3	166.39	692.8	311.2	
12/26/98	0900	5.28	-1	179.35	773.0	374.3	
01/25/99	1600	17.22	0	411.66	7044.0	7829.2	
02/01/99	1546	9.23	3	271.94	2351.0	1726.2	
02/03/99	1313	10.32	5	253.46	2875.0	1967.5	
02/03/99	1329	10.33	-	223.25	2880.0	1736.0	

**#229 – Spoon River at London Mills, IL (USGS #05569500)
Instantaneous Suspended Sediment Measurements**

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1999 (continued)							
02/08/99	1012	7.40	3	221.74	1565.0	937.0	
02/16/99	1600	6.62	3	239.97	1262.0	817.7	
02/22/99	1600	5.37	1	210.96	805.1	458.6	
03/03/99	1600	4.89	3	165.26	639.2	285.2	
03/10/99	1536	4.93	2	133.75	652.4	235.6	
03/17/99	1426	6.27	11	230.21	1132.0	703.6	
03/18/99	1316	6.96	9	199.43	1394.0	750.6	
03/18/99	1330	6.95	-	195.22	1390.0	732.7	
03/23/99	1610	5.23	8	126.07	755.4	257.1	
04/01/99	1600	4.57	14	127.26	534.5	183.7	
04/07/99	1600	4.53	17	127.94	521.9	180.3	
04/17/99	1845	13.85	8	1078.19	4833.0	14069.3	
04/22/99	1700	7.68	13	261.04	1677.0	1182.0	
04/26/99	1415	7.98	14	275.57	1801.0	1340.0	
04/26/99	1428	7.97	-	274.76	1797.0	1333.1	
04/29/99	1540	13.08	11	998.19	4373.0	11785.7	
05/06/99	1700	7.04	15	236.15	1425.0	908.6	
05/14/99	1940	17.05	17	935.12	6925.0	17484.3	
05/20/99	1948	9.29	17	332.89	2379.0	2138.3	
05/27/99	1600	6.58	19	195.18	1247.0	657.2	
06/03/99	1617	7.56	20	608.78	1629.0	2677.6	
06/09/99	1342	10.33	23	1303.56	2880.0	10136.5	
06/09/99	1355	10.36	-	1278.36	2895.0	9992.3	
06/11/99	1830	8.77	24	1083.11	2142.0	6264.0	
06/18/99	1830	6.40	20	368.01	1179.0	1171.5	
06/25/99	1802	6.07	26	808.98	1060.0	2315.3	
07/03/99	1650	5.59	27	324.88	886.2	777.4	
07/09/99	1800	4.20	27	199.40	421.3	226.8	
07/16/99	1817	3.48	29	99.69	231.4	62.3	
07/20/99	1405	5.07	29	504.60	699.6	953.2	
07/20/99	1416	5.08	-	516.00	703.1	979.6	
07/23/99	1841	3.35	32	125.55	203.0	68.8	
07/29/99	2000	3.63	31	222.16	266.8	160.0	
08/05/99	1520	2.75	27	64.78	99.3	17.4	
08/12/99	1550	3.47	26	174.89	229.1	108.2	
08/20/99	1730	2.63	25	54.18	83.5	12.2	
08/27/99	1456	2.99	26	91.40	135.6	33.5	
09/02/99	1736	2.48	26	48.87	66.1	8.7	

#229 – Spoon River at London Mills, IL (USGS #05569500)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Q_w (cfs)</i>	<i>Q_s (t/d)</i>	<i>Remarks</i>
Water Year 1999 (concluded)							
09/09/99	1700	2.30	21	51.32	48.2	6.7	
09/16/99	1550	2.28	18	98.54	46.5	12.4	
09/23/99	1530	2.29	17	68.14	47.3	8.7	
09/30/99	1545	4.51	15	303.90	515.6	423.1	

#242 – La Moine River at Colmar, IL (USGS #05584500)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1998							
10/05/97	1025	2.83	19	49.10	23.6	3.1	
10/12/97	1340	2.81	20	53.98	22.7	3.3	
10/19/97	1000	2.80	14	71.66	22.2	4.3	
10/25/97	0930	2.95	9	41.50	30.0	3.4	
11/02/97	1615	3.00	10	30.90	33.0	2.8	
11/09/97	0950	3.71	8	32.48	78.8	6.9	
11/15/97	1600	3.10	5	273.96	38.0	28.1	
11/23/97	1320	3.10	6	87.20	38.0	8.9	
11/30/97	1415	5.25	9	100.76	227.4	61.9	
12/05/97	1500	4.23	1	205.92	122.3	68.0	
12/14/97	1514	3.54	0	8.95	66.6	1.6	
12/21/97	0930	4.30	2	15.81	128.7	5.5	
12/23/97	1153	4.06	3	159.62	107.8	46.5	
12/23/97	1210	4.06	-	109.47	107.8	31.9	
12/27/97	1515	4.76	0	78.63	173.8	36.9	
01/03/98	1315	5.97	3	78.10	318.8	67.2	
01/11/98	1345	8.11	0	92.63	620.6	155.2	
02/02/98	1350	9.36	3	309.06	834.0	695.9	
02/03/98	1124	8.86	3	159.47	744.5	320.6	
02/03/98	1149	8.85	-	159.99	742.7	320.8	
02/08/98	1225	6.35	4	35.40	366.5	35.0	
02/15/98	1500	9.40	5	205.82	841.4	467.6	
02/22/98	1100	7.84	8	111.41	578.9	174.1	
03/01/98	1245	15.30	6	655.12	2059.0	3642.0	
03/08/98	1400	13.88	5	1512.87	1736.0	7091.1	*Cs
03/15/98	1330	10.87	3	147.05	1109.0	440.3	
03/16/98	1319	9.62	4	97.12	880.4	230.9	
03/16/98	1340	9.61	-	88.95	878.7	211.0	
03/22/98	1030	12.13	5	258.39	1369.0	955.1	
03/29/98	1730	8.00	15	130.81	603.4	213.1	
04/05/98	1545	11.60	10	222.07	1256.0	753.1	
04/12/98	1230	10.21	13	166.22	983.8	441.5	
04/20/98	1820	8.45	14	103.46	675.2	188.6	
04/26/98	1050	7.39	17	92.25	512.7	127.7	
05/03/98	1110	20.41	14	264.90	4791.0	3426.7	
05/08/98	1258	9.80	17	165.89	911.4	408.2	
05/08/98	1319	9.78	-	172.39	907.9	422.6	
05/10/98	1025	8.21	17	117.97	636.4	202.7	

#242 – La Moine River at Colmar, IL (USGS #05584500)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1998 (concluded)							
05/16/98	1530	7.96	20	191.33	597.2	308.5	
05/24/98	1940	19.50	18	2155.93	3838.0	22341.1	
05/31/98	1025	8.34	22	214.40	657.2	380.4	
06/07/98	1600	6.08	14	64.39	332.7	57.8	
06/14/98	1135	8.81	21	635.26	735.8	1262.0	
06/21/98	1130	11.38	22	336.19	1211.0	1099.2	
06/25/98	1341	8.66	25	189.31	710.1	363.0	
06/25/98	1359	8.65	-	181.39	708.4	346.9	
06/28/98	1430	6.98	28	135.79	452.5	165.9	
07/05/98	1800	7.13	24	182.95	474.4	234.3	
07/12/98	1110	6.88	25	285.30	438.2	337.5	
07/19/98	1030	5.14	25	107.16	215.1	62.2	
07/26/98	1650	4.20	25	113.43	119.7	36.7	
08/02/98	1100	3.64	24	69.09	73.6	13.7	
08/03/98	1314	3.52	25	428.43	65.3	75.5	
08/09/98	1015	3.93	25	107.70	96.7	28.1	
08/16/98	1604	3.15	26	59.05	40.7	6.5	
08/23/98	1800	2.90	24	70.02	27.2	5.1	
08/30/98	1600	2.95	25	128.88	30.0	10.4	
09/06/98	1200	2.77	26	80.05	20.9	4.5	
09/13/98	1100	3.17	24	71.02	41.8	8.0	
09/20/98	1100	2.92	23	93.14	28.3	7.1	
09/21/98	1140	2.83	21	114.60	23.6	7.3	
09/21/98	1150	2.83	21	80.06	23.6	5.1	
09/26/98	1800	2.83	22	162.58	23.6	10.4	
Water Year 1999							
10/04/98	1350	3.17	15	57.51	41.8	6.5	
10/11/98	1210	3.83	14	56.06	88.2	13.4	
10/18/98	1525	13.39	16	1409.16	1627.0	6190.3	
10/25/98	1555	4.73	12	35.37	170.7	16.3	
11/01/98	1150	4.61	14	26.78	158.6	11.5	
11/04/98	1154	11.94	9	187.86	1328.0	673.6	
11/04/98	1204	11.89	9	191.91	1317.0	682.4	
11/08/98	1220	6.57	6	25.81	395.4	27.6	
11/15/98	1155	8.25	10	95.90	642.8	166.4	
11/21/98	1630	5.82	6	17.54	298.1	14.1	
11/28/98	1100	5.21	9	26.99	222.8	16.2	
12/06/98	1115	5.20	13	34.88	221.7	20.9	

#242 – La Moine River at Colmar, IL (USGS #05584500)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1999 (continued)							
12/10/98	1306	8.36	6	69.46	660.5	123.9	
12/10/98	1322	8.35	6	69.16	658.9	123.0	
12/13/98	1215	6.86	4	26.03	435.3	30.6	
12/20/98	0845	5.69	4	10.67	281.0	8.1	
01/26/99	1620	17.78	2	264.93	2802.0	2004.3	
02/01/99	1620	13.78	4	298.86	1713.0	1382.3	
02/03/99	1123	13.35	5	212.05	1619.0	926.9	
02/03/99	1138	13.33	5	210.16	1615.0	916.4	
02/07/99	1130	8.78	5	93.60	730.6	184.6	
02/14/99	1000	7.45	2	98.11	521.3	138.1	
02/21/99	1030	6.15	8	21.25	341.3	19.6	
02/28/99	1211	7.18	15	66.21	481.9	86.1	
03/07/99	1130	6.04	4	18.44	327.8	16.3	
03/14/99	0930	6.65	3	21.21	406.2	23.3	
03/18/99	1130	9.68	9	162.61	890.6	391.0	
03/18/99	1143	9.66	9	161.76	887.2	387.5	
03/21/99	1030	6.76	9	29.96	421.3	34.1	
03/28/99	1120	5.59	9	24.23	268.2	17.5	
04/04/99	1210	7.98	18	380.80	600.3	617.2	
04/11/99	1050	9.43	11	511.09	846.9	1168.7	
04/18/99	1020	20.25	8	284.95	4603.0	3541.4	
04/25/99	1235	9.34	13	190.42	830.3	426.9	
04/26/99	1237	8.59	14	108.87	698.3	205.3	
04/26/99	1250	8.58	14	109.15	696.7	205.3	
05/02/99	1030	8.94	15	157.55	758.4	322.6	
05/09/99	1320	6.78	15	78.16	424.1	89.5	
05/16/99	1130	9.38	18	247.83	837.7	560.5	
05/23/99	1800	7.38	19	197.73	511.3	273.0	
05/30/99	1515	5.62	22	102.35	272.0	75.2	
06/06/99	1635	8.31	24	538.85	652.4	949.2	
06/09/99	1139	7.37	27	289.82	509.9	399.0	
06/09/99	1154	7.61	27	337.34	544.6	496.0	
06/13/99	1730	7.34	24	244.10	505.6	333.2	
06/20/99	1115	5.47	21	99.11	253.3	67.8	
06/27/99	1100	4.73	25	81.60	170.7	37.6	
07/04/99	1720	5.23	28	1032.00	225.1	627.2	
07/13/99	0820	3.80	23	79.02	85.8	18.3	
07/19/99	1730	3.33	30	58.59	51.7	8.2	

#242 – La Moine River at Colmar, IL (USGS #05584500)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1999 (concluded)							
07/20/99	1240	3.27	30	74.07	47.8	9.6	
07/25/99	1715	4.29	32	285.61	127.8	98.6	
08/01/99	1620	3.99	28	90.55	102.1	25.0	
08/08/99	1230	3.34	25	44.88	52.3	6.3	
08/15/99	1445	3.38	24	52.32	55.1	7.8	
08/22/99	1445	2.83	25	68.58	23.6	4.4	
08/29/99	1711	2.72	27	65.02	18.8	3.3	
09/05/99	1130	2.50	24	100.16	10.5	2.8	
09/12/99	1700	2.44	20	64.66	9.3	1.6	
09/19/99	1515	2.39	18	96.01	8.4	2.2	
09/26/99	1700	2.34	19	52.69	7.5	1.1	

#245 – La Moine River at Ripley, IL (USGS #05585000)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1998							
10/06/97	0810	4.62	16	143.48	26.3	10.2	
10/13/97	0810	4.84	18	144.45	42.9	16.7	
10/20/97	0800	4.83	11	127.31	42.1	14.5	
10/22/97	1006	4.83	9	61.46	42.1	7.0	
10/22/97	1028	4.82	9	65.36	41.3	7.3	
10/27/97	0810	4.86	8	141.32	44.6	17.0	
11/03/97	0800	5.03	5	165.26	59.7	26.7	
11/10/97	0800	5.52	6	291.14	112.2	88.2	
11/17/97	0815	5.03	4	20.10	59.7	3.2	
11/24/97	0800	5.01	3	13.22	57.9	2.1	
12/01/97	0810	5.84	3	3.61	152.9	1.5	
12/08/97	0810	5.77	5	143.34	143.6	55.6	
12/15/97	0810	5.56	5	350.62	117.0	110.8	
12/22/97	0800	5.61	4	9.43	123.2	3.1	
12/23/97	1023	5.68	3	24.48	131.9	8.7	
12/29/97	0800	5.94	4	12.86	166.6	5.8	
01/05/98	0815	6.42	4	301.06	238.6	193.9	
01/12/98	0800	9.33	3	310.72	864.7	725.4	
01/19/98	0800	8.37	3	8.56	624.3	14.4	
01/26/98	0810	6.55	2	12.47	259.8	8.7	
02/03/98	0942	10.13	1	195.82	1088.0	575.2	
02/03/98	1011	10.11	1	180.85	1082.0	528.3	
02/09/98	0800	7.78	2	32.09	492.6	42.7	
02/16/98	0810	11.03	3	75.50	1369.0	279.1	
02/23/98	0800	11.48	3	68.03	1519.0	279.0	
03/02/98	0810	14.02	3	68.33	2509.0	462.9	
03/09/98	0800	19.53	4	70.11	5818.0	1101.4	
03/16/98	1147	12.68	4	148.80	1957.0	786.2	
03/16/98	1209	12.66	4	136.82	1950.0	720.4	
03/23/98	0800	23.05	5	106.87	9689.0	2795.8	
03/30/98	0800	11.78	6	91.02	1622.0	398.6	
04/06/98	0745	20.25	5	69.28	6419.0	1200.7	
04/13/98	0800	14.77	7	12.98	2853.0	100.0	
04/20/98	0745	12.02	10	86.61	1707.0	399.2	
04/27/98	0800	9.28	11	95.38	851.4	219.2	
05/04/98	0810	20.41	14	106.51	6562.0	1887.0	
05/08/98	1120	12.41	18	209.82	1853.0	1049.8	
05/08/98	1140	12.39	18	317.33	1846.0	1581.7	

#245 – La Moine River at Ripley, IL (USGS #05585000)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1998 (concluded)							
05/11/98	0800	10.55	22	82.16	1216.0	269.8	
05/18/98	0800	11.32	28	125.14	1465.0	495.0	
05/25/98	0815	17.67	30	124.50	3818.0	1283.5	
06/01/98	0800	11.05	30	131.00	1376.0	486.7	
06/08/98	0815	8.05	32	135.93	551.1	202.3	
06/15/98	0800	17.01	32	97.05	4006.0	1049.7	
06/22/98	0800	16.80	30	126.58	3889.0	1329.1	
06/25/98	1217	12.33	25	366.16	1823.0	1802.3	
06/25/98	1234	12.31	25	367.36	1815.0	1800.2	
06/29/98	0815	20.91	30	116.37	7017.0	2204.6	
07/06/98	0800	12.88	30	90.00	2036.0	494.7	
07/13/98	0815	9.56	32	58.95	926.7	147.5	
07/20/98	0800	7.48	30	71.24	430.6	82.8	
07/27/98	0815	6.67	30	96.79	279.9	73.1	
08/03/98	0800	6.10	28	72.77	189.4	37.2	
08/03/98	1129	5.81	24	123.91	148.9	49.8	
08/03/98	1151	5.80	24	176.16	147.5	70.2	
08/10/98	0815	6.73	28	134.53	290.2	105.4	
08/17/98	0800	5.51	30	97.47	111.0	29.2	
08/24/98	0800	5.37	30	67.30	94.8	17.2	
08/31/98	0800	5.23	30	69.06	79.6	14.8	
09/07/98	0800	5.19	30	69.57	75.5	14.2	
09/14/98	0800	5.15	26	4.36	71.4	0.8	
09/21/98	0800	5.34	23	354.38	91.5	87.5	
09/21/98	0959	5.30	22	114.56	87.1	26.9	
09/21/98	1018	5.29	22	99.42	86.0	23.1	
09/28/98	0800	4.90	22	20.90	48.0	2.7	
Water Year 1999							
10/12/98	0815	7.42	10	321.83	418.6	363.7	
10/19/98	0800	10.46	14	231.33	1188.0	742.0	
10/26/98	0800	13.49	13	250.28	2284.0	1543.4	
11/02/98	0815	9.66	12	288.58	954.2	743.5	
11/04/98	1010	17.26	9	541.74	4164.0	6090.7	
11/04/98	1031	17.24	9	547.65	4151.0	6137.9	
11/09/98	0800	8.53	6	205.09	662.2	366.7	
11/16/98	0815	9.62	2	199.69	943.2	508.5	
11/30/98	0815	12.16	3	187.43	1759.0	890.2	

#245 – La Moine River at Ripley, IL (USGS #05585000)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1999 (continued)							
12/07/98	0815	13.48	3	329.46	2280.0	2028.1	
12/10/98	1143	11.56	6	156.78	1546.0	654.4	
12/10/98	1159	11.53	6	144.89	1536.0	600.9	
12/14/98	0800	12.69	3	159.13	1961.0	842.6	
12/21/98	0800	12.22	3	291.99	1782.0	1404.9	
12/28/98	0815	13.62	4	8.86	2338.0	55.9	*Cs
01/18/99	0800	21.72	3	335.91	7883.0	7149.5	
01/25/99	0815	22.55	5	240.74	8953.0	5819.5	
02/01/99	0800	21.45	2	205.57	7584.0	4209.3	
02/03/99	0959	15.55	5	203.63	3232.0	1777.0	
02/03/99	1020	15.53	5	201.97	3222.0	1757.0	
02/08/99	0815	16.15	3	289.08	3539.0	2762.2	
02/15/99	0810	11.71	4	301.53	1598.0	1301.0	
02/22/99	0800	8.49	1	230.95	652.7	407.0	
03/01/99	0800	11.22	6	467.17	1432.0	1806.3	
03/08/99	0815	9.34	6	319.88	867.3	749.1	
03/15/99	0800	11.06	6	52.32	1379.0	194.8	
03/18/99	1003	13.44	8	370.06	2263.0	2261.1	
03/18/99	1022	13.40	8	356.46	2246.0	2161.6	
03/22/99	0800	9.11	6	180.82	806.9	393.9	
03/29/99	0800	7.49	7	125.51	432.6	146.6	
04/05/99	0815	8.38	8	118.66	626.7	200.8	
04/12/99	0815	10.62	8	68.40	1238.0	228.6	
04/19/99	0800	20.47	8	341.63	6616.0	6102.5	
04/26/99	1114	11.52	14	226.12	1533.0	935.9	
04/26/99	1129	11.50	14	223.34	1526.0	920.2	
05/03/99	0800	11.28	20	80.52	1452.0	315.7	
05/10/99	0800	9.11	22	145.19	806.9	316.3	
05/17/99	0815	11.21	26	280.02	1428.0	1079.6	
05/24/99	0800	9.56	28	69.40	926.7	173.6	
05/31/99	0800	7.37	28	299.68	408.7	330.7	
06/07/99	0800	10.29	30	72.48	1136.0	222.3	
06/09/99	1014	8.13	26	292.16	569.1	448.9	
06/09/99	1029	8.13	26	269.78	569.1	414.5	
06/14/99	0800	8.86	34	59.71	743.2	119.8	
06/21/99	0815	12.46	32	59.56	1872.0	301.0	
06/28/99	0800	10.49	34	58.57	1198.0	189.5	
07/05/99	0800	11.02	34	58.46	1366.0	215.6	

#245 – La Moine River at Ripley, IL (USGS #05585000)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1999 (concluded)							
07/12/99	0815	11.65	32	64.34	1577.0	274.0	
07/19/99	0815	9.92	30	70.92	1027.0	196.6	
07/26/99	0800	6.27	32	61.94	215.0	36.0	
08/02/99	0800	5.78	34	59.85	144.9	23.4	
08/09/99	0800	5.23	34	66.52	79.6	14.3	
08/16/99	0815	5.79	32	64.29	146.2	25.4	
08/23/99	0800	5.36	32	64.63	93.7	16.4	
08/30/99	0800	5.15	30	64.58	71.4	12.5	
09/02/99	1044	4.98	24	212.87	55.1	31.7	
09/06/99	0800	5.16	32	60.40	72.4	11.8	
09/13/99	0815	4.88	30	61.68	46.3	7.7	
09/20/99	0815	5.17	30	129.44	73.4	25.7	
09/27/99	0800	4.72	28	77.47	33.5	7.0	

#249 – Sangamon River at Monticello, IL (USGS #05572000)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1998							
10/06/97	1640	4.35	21	63.62	23.1	4.0	
10/12/97	1720	4.38	19	62.72	24.6	4.2	
10/19/97	1806	4.22	11	97.68	17.3	4.6	
10/22/97	1230	4.35	8	70.74	23.1	4.4	
10/22/97	1706	4.42	10	111.28	26.6	8.0	
10/30/97	1555	4.53	10	52.71	32.4	4.6	
11/08/97	1625	4.70	7	16.52	42.2	1.9	
11/18/97	1610	4.60	2	28.00	36.5	2.8	
11/29/97	1630	6.57	9	70.05	203.7	38.5	
12/08/97	1435	6.72	3	48.09	221.9	28.8	
12/08/97	1450	6.72	3	48.06	221.9	28.8	
12/09/97	1200	6.65	2	128.87	213.3	74.2	
12/17/97	1445	5.85	3	139.13	127.5	47.9	
12/26/97	1245	7.67	3	89.01	353.0	84.8	
01/06/98	1130	8.44	8	63.77	489.3	84.2	
01/24/98	1430	6.95	1	92.83	251.4	63.0	
01/31/98	1715	7.33	4	108.32	304.3	89.0	
02/04/98	1307	7.26	4	104.36	294.2	82.9	
02/04/98	1335	7.26	4	27.62	294.2	21.9	
02/07/98	1720	6.94	3	106.15	250.1	71.7	
02/14/98	1730	8.25	4	95.62	454.4	117.3	
02/21/98	1215	9.64	5	84.52	738.3	168.5	
03/03/98	1400	7.95	5	107.12	402.1	116.3	
03/13/98	1130	10.94	3	58.62	1135.0	179.6	
03/18/98	1245	12.95	8	173.63	2702.0	1266.7	
03/18/98	1309	12.98	8	192.55	2733.0	1420.8	
03/23/98	1200	13.32	6	33.74	3110.0	283.3	
04/02/98	1400	10.52	11	57.44	973.1	150.9	
04/13/98	1145	10.03	13	96.69	828.9	216.4	
04/23/98	1100	8.58	12	64.56	515.9	89.9	
05/02/98	1415	12.13	14	104.68	1931.0	545.8	
05/02/98	1415	12.13	14	82.73	1931.0	431.3	
05/09/98	1200	13.75	17	85.68	3635.0	840.9	
05/14/98	1435	11.09	20	75.98	1208.0	247.8	
05/14/98	1449	11.08	20	71.61	1203.0	232.6	
05/28/98	1615	9.26	21	96.22	654.6	170.1	
06/08/98	0950	7.61	15	69.42	346.7	65.0	
06/18/98	1120	15.22	22	140.39	5884.0	2230.3	

#249 – Sangamon River at Monticello, IL (USGS #05572000)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1998 (concluded)							
06/24/98	1516	12.70	25	92.23	2448.0	609.6	
06/24/98	1532	12.70	25	104.13	2448.0	688.3	
06/25/98	1130	12.80	25	43.65	2547.0	300.2	
07/05/98	1810	9.03	23	92.52	606.2	151.4	
07/16/98	1650	7.07	25	89.86	267.6	64.9	
07/25/98	1805	6.60	24	46.79	207.3	26.2	
08/05/98	1800	6.48	23	82.16	193.1	42.8	
08/06/98	0839	6.61	22	101.15	208.5	56.9	
08/06/98	0855	6.61	22	99.27	208.5	55.9	
08/15/98	1500	4.90	26	50.43	54.5	7.4	
08/22/98	1130	4.75	25	62.23	45.2	7.6	
09/01/98	1800	4.42	24	29.78	26.6	2.1	
09/10/98	1200	4.28	20	39.49	19.8	2.1	
09/19/98	1500	4.15	24	46.47	14.5	1.8	
09/22/98	1103	4.23	21	80.75	17.7	3.9	
09/22/98	1115	4.23	21	73.13	17.7	3.5	
Water Year 1999							
10/01/98	1045	4.24	17	84.25	18.1	4.1	
10/10/98	1200	4.40	13	28.78	25.6	2.0	
10/20/98	1720	4.15	13	27.12	14.5	1.1	
10/29/98	1440	4.26	15	19.74	19.0	1.0	
11/07/98	1415	4.40	5	4.95	25.6	0.3	
11/16/98	1415	4.60	8	10.80	36.5	1.1	
11/23/98	1412	4.38	9	23.57	24.6	1.6	
11/23/98	1424	4.38	9	14.24	24.6	0.9	
11/26/98	1645	4.35	9	17.23	23.1	1.1	
12/05/98	1645	4.28	5	7.64	19.8	0.4	
12/09/98	1310	4.35	8	34.28	23.1	2.1	
12/09/98	1321	4.35	8	32.45	23.1	2.0	
12/15/98	1030	4.30	3	3.05	20.7	0.2	
01/26/99	1500	12.65	2	28.33	2399.0	183.5	
02/03/99	1457	10.34	4	35.29	914.2	87.1	
02/04/99	1306	10.14	5	24.71	855.4	57.1	
02/04/99	1322	10.16	5	24.00	860.3	55.7	
02/04/99	1645	10.05	3	28.39	833.7	63.9	
02/09/99	1546	12.19	6	74.80	1981.0	400.1	
02/09/99	1615	12.15	5	74.49	1948.0	391.8	

#249 – Sangamon River at Monticello, IL (USGS #05572000)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1999 (concluded)							
02/18/99	1200	8.74	3	12.08	547.2	17.9	
03/06/99	1030	9.10	4	17.22	620.7	28.9	
03/11/99	1315	8.21	5	9.03	447.3	10.9	
03/11/99	1332	8.21	5	9.76	447.3	11.8	
03/13/99	1140	8.20	4	12.00	445.5	14.4	
03/23/99	1100	7.27	9	18.34	295.6	14.6	
04/01/99	1400	6.78	12	22.78	229.4	14.1	
04/08/99	1100	6.76	16	31.82	226.9	19.5	
04/19/99	1050	13.05	10	36.31	2808.0	275.3	
04/30/99	1020	8.34	14	47.93	470.8	60.9	
05/03/99	1101	8.34	17	44.89	470.8	57.1	
05/03/99	1120	8.33	17	42.83	469.0	54.2	
05/08/99	1500	7.37	16	33.73	310.2	28.3	
05/15/99	1130	9.00	16	58.40	600.0	94.6	
05/22/99	1430	8.28	21	92.20	459.9	114.5	
06/01/99	1815	6.55	22	51.53	201.3	28.0	
06/07/99	1333	10.52	23	138.91	973.1	365.0	
06/07/99	1346	10.52	23	136.14	973.1	357.7	
06/09/99	1815	8.58	25	96.11	515.9	133.9	
07/27/99	1025	5.73	29	56.87	116.6	17.9	
07/27/99	1037	5.73	-	56.82	116.6	17.9	
09/01/99	1605	4.28	24	79.78	19.8	4.3	
09/01/99	1618	4.28	-	77.28	19.8	4.1	
09/11/99	1205	4.42	19	66.19	26.6	4.8	
09/18/99	1125	4.00	17	50.78	9.4	1.3	
09/25/99	1720	3.90	19	50.27	6.6	0.9	

#361 – Kaskaskia River at Vandalia, IL (USGS #05592500)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1998							
10/02/97	1030	2.45	18	29.33	67.9	5.4	
10/10/97	0730	2.40	16	35.15	61.0	5.8	
10/16/97	0800	2.38	12	35.71	58.3	5.6	
10/23/97	1310	2.36	10	37.70	55.6	5.7	
11/05/97	0930	2.83	10	84.34	128.2	29.2	
11/20/97	1130	2.74	5	92.57	112.6	28.1	
11/26/97	0915	2.71	6	12.59	107.5	3.7	
12/04/97	0845	2.66	4	76.82	99.4	20.6	
12/10/97	1345	2.60	2	90.78	89.9	22.0	
12/16/97	0930	2.84	3	124.63	130.0	43.7	
12/17/97	1259	2.54	2	33.90	80.8	7.4	
12/17/97	1326	2.54	2	43.59	80.8	9.5	
12/23/97	0645	3.14	3	126.37	187.4	63.9	
12/29/97	0900	4.87	5	82.77	584.5	130.6	
01/07/98	0930	6.61	6	122.98	1082.0	359.3	
01/14/98	0815	7.10	5	77.08	1245.0	259.1	
01/20/98	1100	8.89	5	88.42	1927.0	460.0	
01/20/98	1316	8.69	1	81.77	1846.0	407.6	
01/20/98	1342	8.69	1	83.10	1846.0	414.2	
01/28/98	1519	6.97	6	77.29	1200.0	250.4	
02/04/98	0930	7.10	8	62.35	1245.0	209.6	
02/11/98	1000	7.23	8	62.77	1291.0	218.8	
02/19/98	1011	7.40	10	150.45	1353.0	549.6	
02/27/98	1303	7.96	11	132.72	1564.0	560.4	
03/04/98	1245	7.89	6	61.67	1537.0	255.9	
03/04/98	1324	7.87	5	59.07	1530.0	244.0	
03/04/98	1350	7.85	5	59.63	1522.0	245.1	
03/13/98	1412	9.64	5	177.28	2240.0	1072.2	
03/20/98	1726	19.76	4	588.81	9179.0	14592.6	
03/27/98	1040	16.62	14	197.46	6193.0	3301.7	
04/03/98	0825	17.57	8	229.74	6961.0	4317.9	
04/10/98	0720	14.32	9	148.30	4589.0	1837.4	
04/17/98	0740	19.47	11	201.57	8866.0	4825.3	
04/21/98	1253	11.34	14	155.96	3021.0	1272.1	
04/21/98	1318	11.32	14	157.04	3011.0	1276.7	
04/24/98	0700	9.95	12	120.19	2374.0	770.4	
05/01/98	0800	11.59	14	323.11	3144.0	2742.8	
05/08/98	0824	13.79	15	747.16	4270.0	8614.0	

#361 – Kaskaskia River at Vandalia, IL (USGS #05592500)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1998 (concluded)							
05/15/98	0800	9.41	20	115.40	2142.0	667.4	
05/22/98	0945	8.49	18	280.59	1768.0	1339.4	
05/29/98	0730	9.48	21	140.05	2172.0	821.3	
06/02/98	1315	8.64	23	125.66	1827.0	619.9	
06/02/98	1337	8.64	23	141.21	1827.0	696.6	
06/05/98	1605	9.13	18	97.75	2025.0	534.4	
06/12/98	0809	11.19	22	1595.06	2948.0	12696.0	
06/19/98	0626	11.68	21	186.87	3188.0	1608.5	
06/26/98	0835	11.46	24	195.29	3080.0	1624.1	
07/02/98	0639	11.83	23	192.47	3262.0	1695.1	
07/09/98	0704	17.40	25	208.73	6818.0	3842.5	
07/16/98	0721	9.45	23	219.05	2159.0	1276.9	
07/23/98	0711	12.52	24	862.78	3610.0	8409.5	
07/30/98	0652	8.01	25	264.04	1584.0	1129.2	
08/06/98	0653	12.72	23	558.82	3708.0	5594.7	
08/10/98	1238	6.44	26	116.88	1028.0	324.4	
08/10/98	1302	6.44	26	115.12	1028.0	319.5	
08/13/98	0625	8.73	23	188.68	1862.0	948.6	
08/20/98	0627	8.40	24	193.22	1732.0	903.6	
08/27/98	0636	8.64	24	203.64	1827.0	1004.5	
09/03/98	0708	7.89	23	194.22	1537.0	806.0	
09/10/98	0745	4.53	19	111.45	500.5	150.6	
09/17/98	0705	2.85	22	121.53	131.8	43.2	
09/24/98	0702	2.54	17	106.66	80.8	23.3	
Water Year 1999							
10/01/98	0715	2.24	18	71.26	40.9	7.9	
10/08/98	0721	2.50	15	50.64	75.0	10.3	
10/15/98	0740	2.22	13	52.03	38.7	5.4	
10/21/98	0721	2.32	13	40.15	50.5	5.5	
10/21/98	1317	2.34	15	37.64	53.0	5.4	
10/21/98	1343	2.34	15	42.06	53.0	6.0	
10/29/98	0700	2.13	15	57.99	29.7	4.7	
11/05/98	0700	3.03	8	111.57	165.7	49.9	
11/12/98	1047	4.26	8	247.28	434.7	290.2	
11/19/98	0700	2.46	9	47.79	69.3	8.9	
11/26/98	0700	2.37	7	38.36	57.0	5.9	
12/03/98	0745	2.43	11	46.39	65.1	8.2	

#361 – Kaskaskia River at Vandalia, IL (USGS #05592500)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1999 (continued)							
12/10/98	0705	2.37	4	31.07	57.0	4.8	
12/14/98	1306	2.26	6	38.97	43.2	4.6	
12/14/98	1335	2.26	6	49.62	43.2	5.8	
12/17/98	0715	2.28	3	43.65	45.6	5.4	
12/24/98	0730	6.40	3	151.12	1015.0	414.1	
12/31/98	0730	7.48	1	87.12	1382.0	325.1	
01/14/99	0705	9.31	2	281.45	2100.0	1595.8	
01/21/99	0730	11.50	2	418.56	3100.0	3503.3	
01/28/99	0705	13.67	3	231.13	4199.0	2620.4	
02/04/99	0720	17.43	4	217.87	6842.0	4024.9	
02/09/99	1348	24.93	7	278.30	18090.0	13593.1	
02/11/99	0740	18.31	10	193.07	7625.0	3974.9	
02/18/99	0738	12.36	3	148.67	3528.0	1416.2	
02/25/99	0636	11.34	5	61.64	3021.0	502.8	
03/04/99	0707	8.89	6	65.48	1927.0	340.7	
03/11/99	0735	9.39	5	56.31	2133.0	324.3	
03/18/99	0710	7.08	7	58.58	1238.0	195.8	
03/25/99	0610	7.03	6	80.93	1220.0	266.6	
04/01/99	0704	5.40	10	38.18	723.2	74.6	
04/08/99	0705	5.65	15	144.83	792.2	309.8	
04/15/99	0645	5.80	11	166.95	834.8	376.3	
04/22/99	0730	8.98	15	294.60	1963.0	1561.4	
04/29/99	0745	14.04	16	600.49	4420.0	7166.3	
05/06/99	0705	12.19	18	490.15	3442.0	4555.2	
05/11/99	1324	7.53	20	124.39	1401.0	470.5	
05/11/99	1409	7.52	20	125.43	1397.0	473.1	
05/13/99	0720	11.00	17	964.37	2856.0	7436.4	
05/20/99	0600	6.56	18	109.92	1066.0	316.4	
05/27/99	0617	7.39	16	105.03	1349.0	382.5	
06/03/99	0630	15.69	19	1118.00	5530.0	16692.8	
06/08/99	0600	8.31	22	306.00	1698.0	1402.9	
06/08/99	1303	8.17	25	240.79	1644.0	1068.8	
06/08/99	1328	8.17	25	241.90	1644.0	1073.7	
06/17/99	0730	8.65	19	198.95	1831.0	983.6	
06/24/99	0600	7.47	22	129.68	1379.0	482.8	
07/01/99	0630	7.19	23	155.36	1277.0	535.7	
07/08/99	0630	7.28	23	128.66	1309.0	454.7	
07/15/99	0700	7.53	24	187.74	1401.0	710.2	

#361 – Kaskaskia River at Vandalia, IL (USGS #05592500)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1999 (concluded)							
07/20/99	1314	6.52	29	134.99	1053.0	383.8	
07/20/99	1349	6.52	-	140.87	1053.0	400.5	
07/23/99	0600	6.23	26	142.56	962.5	370.5	
07/29/99	0600	7.87	25	213.75	1530.0	883.0	
08/05/99	0600	5.70	23	121.58	806.3	264.7	
08/12/99	0630	3.15	24	128.14	189.4	65.5	
08/19/99	0730	2.73	24	202.75	110.9	60.7	
08/26/99	0715	2.65	25	76.74	97.8	20.3	
09/02/99	0645	2.35	22	96.97	54.3	14.2	
09/09/99	0700	2.31	23	87.45	49.2	11.6	
09/16/99	0745	2.17	18	139.46	33.5	12.6	
09/23/99	0730	2.14	16	59.43	30.7	4.9	
09/30/99	0800	2.17	15	29.22	33.5	2.6	

#367 – Silver Creek near Freeburg, IL (USGS #05594800)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1998							
10/03/97	1000	0.80	20	50.87	8.4	1.2	
10/14/97	1100	0.99	16	32.54	17.4	1.5	
10/21/97	1230	0.82	14	62.75	9.2	1.6	
10/27/97	1030	1.83	10	87.05	78.2	18.4	
11/04/97	1700	1.85	8	50.35	79.9	10.9	
11/11/97	1100	1.23	6	11.73	31.6	1.0	
11/19/97	1100	1.02	5	13.20	19.0	0.7	
11/25/97	1100	1.04	7	8.70	20.1	0.5	
12/01/97	1400	1.32	3	11.27	37.7	1.1	
12/07/97	1400	1.21	2	9.47	30.3	0.8	
12/15/97	1100	1.10	4	12.96	23.5	0.8	
12/17/97	1026	1.26	2	7.15	33.6	0.6	
12/17/97	1043	1.26	2	6.33	33.6	0.6	
12/25/97	1100	5.53	5	493.32	571.5	761.2	
01/01/98	1100	2.72	7	28.65	169.2	13.1	
01/07/98	1100	3.11	10	194.87	215.9	113.6	
01/16/98	1200	3.23	2	47.07	224.6	28.5	
01/20/98	1031	1.99	0	24.07	87.5	5.7	
01/20/98	1053	1.99	0	17.41	87.5	4.1	
01/22/98	1700	2.08	-	61.56	95.9	15.9	
01/29/98	1700	2.62	-	43.96	151.5	18.0	
02/05/98	1100	1.65	-	45.31	58.5	7.2	
02/12/98	1100	2.40	-	53.43	127.7	18.4	
02/19/98	1000	9.35	-	517.89	1402.0	1960.4	
02/28/98	1030	4.40	10	184.57	391.4	195.1	
03/04/98	1029	2.82	5	45.38	174.3	21.4	
03/04/98	1052	2.82	5	44.18	174.3	20.8	
03/09/98	1200	8.85	7	817.50	1281.0	2827.5	
03/21/98	1000	16.62	5	282.06	4565.0	3476.6	
03/30/98	1000	10.25	18	376.65	1630.0	1657.6	
04/06/98	1000	3.85	16	86.70	308.9	72.3	
04/13/98	1000	2.82	15	42.61	174.3	20.1	
04/17/98	0800	11.11	13	364.66	1859.0	1830.4	
04/21/98	1035	10.83	14	76.87	1784.0	370.3	
04/21/98	1054	10.74	14	118.44	1759.0	562.5	
04/24/98	1000	3.47	14	132.42	256.1	91.6	
05/02/98	1200	5.13	15	187.82	511.2	259.2	
05/10/98	1700	2.80	21	74.71	172.0	34.7	

#367 – Silver Creek near Freeburg, IL (USGS #05594800)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1998 (concluded)							
05/26/98	0900	10.16	21	213.64	1607.0	927.0	
06/01/98	0900	10.80	20	743.64	1775.0	3563.9	
06/02/98	1033	2.06	24	139.52	94.0	35.4	
06/02/98	1051	2.06	24	64.73	94.0	16.4	
06/09/98	0900	8.82	18	295.00	1273.0	1014.0	
06/23/98	1700	10.25	28	239.88	1630.0	1055.7	
07/04/98	1330	3.45	25	256.22	253.4	175.3	
07/15/98	0800	2.15	23	88.28	102.6	24.5	
07/31/98	0800	7.95	22	1187.61	1072.0	3437.4	*Cs
08/06/98	0800	8.56	23	870.03	1212.0	2847.1	*Cs
08/10/98	1022	10.77	25	91.07	1767.0	434.5	
08/10/98	1041	10.72	25	90.80	1754.0	430.0	
08/15/98	1330	3.89	25	154.35	314.7	131.2	
08/20/98	0800	2.50	25	84.55	138.4	31.6	
08/27/98	0800	1.68	25	60.47	60.9	9.9	
09/04/98	0800	1.64	23	50.76	57.7	7.9	
09/11/98	0800	1.14	22	118.59	23.5	7.5	
09/23/98	0900	1.17	20	107.85	25.2	7.3	
09/30/98	0900	1.33	20	56.69	35.2	5.4	
Water Year 1999							
10/07/98	0930	1.86	18	115.19	75.9	23.6	
10/14/98	0900	1.70	16	40.30	62.5	6.8	
10/20/98	0830	1.45	14	49.78	43.4	5.8	
10/21/98	1036	1.25	15	28.25	30.1	2.3	
10/21/98	1056	1.25	15	29.73	30.1	2.4	
11/08/98	1500	1.85	8	29.50	75.0	6.0	
11/17/98	0800	1.61	10	17.50	55.3	2.6	
11/25/98	0800	1.49	9	17.99	46.3	2.2	
12/01/98	0800	1.68	12	97.76	60.9	16.1	
12/07/98	0800	1.82	14	186.63	72.5	36.5	
12/14/98	0900	1.56	4	10.68	51.5	1.5	
12/14/98	1034	1.56	6	12.64	51.5	1.8	
12/14/98	1054	1.56	6	15.28	51.5	2.1	
12/21/98	0900	1.53	7	123.74	49.2	16.5	
12/28/98	0900	1.43	3	108.76	42.0	12.3	
01/20/99	0900	10.21	0	548.14	1620.0	2397.6	
01/24/99	1400	10.88	5	150.21	1797.0	728.8	
02/02/99	0900	11.05	5	158.28	1843.0	787.6	

#367 – Silver Creek near Freeburg, IL (USGS #05594800)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1999 (concluded)							
02/07/99	1400	12.15	8	681.10	2151.0	3955.6	
02/09/99	1100	17.74	9	275.94	5662.0	4218.4	
02/09/99	1128	17.76	9	249.41	5683.0	3827.0	
02/12/99	1200	14.95	8	137.86	3222.0	1199.3	
02/20/99	1300	3.57	5	54.36	269.6	39.6	
02/28/99	1800	5.96	8	419.32	660.9	748.2	
03/10/99	0800	8.57	2	401.59	1214.0	1316.3	
03/15/99	1600	3.67	3	61.97	283.4	47.4	
03/21/99	1000	2.75	9	48.90	166.2	21.9	
03/24/99	1028	7.73	9	440.38	1023.0	1216.4	
03/24/99	1057	7.74	9	424.10	1025.0	1173.7	
03/27/99	1100	3.75	9	89.79	294.7	71.4	
04/02/99	0900	4.20	12	200.40	360.6	195.1	
04/07/99	0930	7.56	17	803.64	986.1	2139.7	
04/17/99	1200	7.00	10	434.94	867.0	1018.1	
04/29/99	0930	4.05	15	199.95	338.1	182.5	
05/11/99	0900	2.99	20	72.50	194.6	38.1	
05/11/99	1011	2.96	20	96.81	191.0	49.9	
05/11/99	1051	2.95	20	95.72	189.8	49.1	
05/17/99	0900	6.15	20	176.12	697.0	331.4	
05/24/99	0900	2.45	21	42.71	133.0	15.3	
06/08/99	1014	2.54	26	176.79	142.7	68.1	
06/08/99	1039	2.52	26	171.92	140.5	65.2	
06/21/99	1900	1.90	23	76.69	79.4	16.4	
07/09/99	1300	4.85	28	434.33	463.9	544.0	
07/16/99	1900	2.20	28	75.64	107.4	21.9	
07/20/99	1018	1.16	28	93.38	24.6	6.2	
07/20/99	1041	1.16	-	63.74	24.6	4.2	
07/23/99	1930	0.95	28	96.37	13.6	3.5	
07/30/99	1930	0.90	28	46.14	11.3	1.4	
08/09/99	2030	1.66	23	83.44	59.3	13.3	
08/16/99	1930	0.64	25	33.38	2.4	0.2	
08/23/99	1900	0.58	25	33.56	1.4	0.1	
08/30/99	1830	0.64	25	169.74	2.4	1.1	
09/07/99	1830	0.45	25	276.07	0.1	0.0	
09/17/99	0930	0.25	18	197.25	0.0	0.0	
09/24/99	1800	0.40	19	43.25	0.0	0.0	

#370 – Little Wabash River at Carmi, IL (USGS #03381500)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1998							
10/02/97	1630	2.00	18	15.34	54.4	2.3	
10/09/97	1630	1.85	18	16.07	38.5	1.7	
10/16/97	1630	1.73	12	10.54	27.9	0.8	
10/23/97	1630	1.65	10	10.53	21.8	0.6	
10/29/97	1630	1.76	11	10.85	30.4	0.9	
11/27/97	1600	1.78	16	9.24	32.1	0.8	
12/04/97	1600	2.06	5	10.62	61.6	1.8	
12/11/97	1630	2.25	3	8.63	87.3	2.0	
12/18/97	1025	2.11	4	7.98	67.9	1.5	
12/18/97	1053	2.11	4	7.92	67.9	1.5	
12/18/97	1630	2.05	4	9.06	60.3	1.5	
01/02/98	1630	8.50	12	269.39	2003.0	1456.9	
01/09/98	1600	18.59	4	334.07	6302.0	5684.3	
01/15/98	1630	5.26	0	49.41	936.0	124.9	
01/22/98	1630	6.91	7	67.73	1454.0	265.9	
01/23/98	1049	4.56	4	47.95	718.6	93.0	
01/23/98	1114	4.60	4	47.94	731.1	94.6	
01/29/98	1630	7.20	6	147.98	1550.0	619.3	
02/05/98	1630	4.86	7	143.77	814.0	316.0	
02/12/98	1630	18.39	4	143.96	6206.0	2412.2	
02/19/98	1630	12.65	2	151.79	3621.0	1484.0	
02/26/98	1630	9.50	-2	153.64	2370.0	983.1	
03/05/98	1124	6.73	8	102.41	1394.0	385.5	
03/05/98	1150	6.72	8	98.61	1391.0	370.4	
03/05/98	1630	6.54	5	68.89	1333.0	248.0	
03/12/98	1630	10.35	8	413.40	2694.0	3007.0	
03/19/98	1630	16.70	10	446.04	5408.0	6512.9	
03/26/98	1630	23.75	20	117.93	9623.0	3064.0	
04/02/98	1630	16.40	20	139.98	5270.0	1991.7	
04/09/98	1630	14.14	22	143.37	4257.0	1647.9	
04/16/98	1630	27.10	15	97.63	12390.0	3266.0	
04/23/98	1024	27.03	14	59.43	12330.0	1978.4	
04/23/98	1055	27.03	14	60.36	12330.0	2009.4	
04/23/98	1630	21.35	18	46.04	7942.0	987.2	
04/30/98	1630	25.64	20	55.07	11110.0	1652.0	
05/07/98	1630	29.75	18	103.92	15020.0	4214.5	
05/14/98	1630	23.20	20	106.69	9238.0	2661.0	
05/21/98	1630	21.53	18	122.98	8068.0	2678.9	

#370 – Little Wabash River at Carmi, IL (USGS #03381500)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1998 (concluded)							
05/28/98	1630	17.45	16	115.33	5759.0	1793.3	
06/04/98	1014	8.74	23	82.21	2089.0	463.7	
06/04/98	1040	8.72	23	80.28	2082.0	451.3	
06/11/98	1630	8.30	20	79.08	1931.0	412.3	
06/18/98	1630	19.20	22	78.71	6618.0	1406.4	
06/25/98	1630	18.20	30	80.79	6115.0	1333.8	
07/02/98	1630	17.54	22	126.96	5801.0	1988.5	
07/09/98	1630	17.12	23	130.05	5604.0	1967.7	
07/16/98	1630	15.36	28	166.30	4797.0	2154.0	
07/23/98	1630	13.05	26	179.40	3789.0	1835.3	
07/30/98	1630	11.18	28	177.24	3020.0	1445.2	
08/06/98	1630	21.66	25	64.57	8159.0	1422.5	
08/07/98	1254	19.87	24	188.79	7021.0	3578.7	
08/07/98	1326	19.96	24	185.86	7076.0	3550.9	
08/13/98	1630	19.54	26	58.84	6821.0	1083.6	
09/03/98	1630	2.48	22	25.89	125.0	8.7	
09/10/98	1630	2.35	20	28.73	102.8	8.0	
Water Year 1999							
10/01/98	1630	7.68	19	99.97	1714.0	462.7	
10/08/98	1630	6.51	18	97.86	1323.0	349.6	
10/16/98	1134	2.84	17	46.60	198.3	25.0	
10/16/98	1152	2.84	17	50.14	198.3	26.8	
11/06/98	1630	3.05	4	27.09	249.4	18.2	
11/13/98	1630	3.04	15	41.68	246.9	27.8	
11/20/98	1630	1.65	12	8.62	21.8	0.5	
11/20/98	1630	2.95	13	43.87	224.3	26.6	
12/11/98	1114	4.11	9	49.64	573.7	76.9	
12/11/98	1141	4.10	9	38.90	570.6	59.9	
01/15/99	1630	22.11	7	324.56	8476.0	7427.6	
01/21/99	1630	30.18	3	235.29	15580.0	9897.9	
01/28/99	1630	32.90	2	75.20	23050.0	4680.1	
02/04/99	1630	31.90	1	75.62	19050.0	3889.7	
02/05/99	1120	31.76	6	66.67	18700.0	3366.0	
02/05/99	1156	31.76	6	67.52	18700.0	3408.9	
02/11/99	1630	31.43	11	151.23	17900.0	7309.0	
02/18/99	1630	27.55	0	130.15	12790.0	4494.4	
03/04/99	1630	22.30	1	249.47	8608.0	5798.1	

#370 – Little Wabash River at Carmi, IL (USGS #03381500)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1999 (concluded)							
03/11/99	1630	23.33	5	110.46	9329.0	2782.3	
03/18/99	1354	21.84	8	82.73	8286.0	1850.9	
03/18/99	1422	21.82	8	82.48	8272.0	1842.1	
03/20/99	1630	11.37	7	100.10	3096.0	836.8	
03/28/99	1630	6.43	12	70.26	1297.0	246.0	
04/11/99	1630	26.90	10	63.75	12210.0	2101.8	
04/17/99	1630	21.10	8	96.67	7769.0	2027.7	
04/22/99	1630	9.75	20	90.20	2464.0	600.1	
04/29/99	1630	15.00	17	298.20	4636.0	3732.6	
05/07/99	1044	17.44	20	370.31	5754.0	5753.0	
05/07/99	1132	17.48	20	349.21	5773.0	5443.1	
05/10/99	1630	15.46	25	133.94	4842.0	1751.0	
05/17/99	1630	8.50	19	97.58	2003.0	527.7	
05/24/99	1630	5.25	23	89.58	933.0	225.7	
05/31/99	1630	3.80	27	86.73	472.8	110.7	
06/07/99	1630	15.90	31	155.15	5041.0	2111.6	
06/10/99	1047	15.94	28	157.63	5059.0	2153.1	
06/10/99	1126	15.95	28	157.07	5064.0	2147.5	
06/24/99	1630	4.67	24	71.69	753.1	145.8	
07/01/99	1630	16.84	22	608.29	5473.0	8988.8	
07/08/99	1630	23.95	26	66.09	9765.0	1742.5	
07/13/99	1630	20.65	28	66.65	7488.0	1347.5	
07/20/99	1630	13.51	32	431.89	3985.0	4646.9	
07/22/99	1038	4.26	29	69.95	621.1	117.3	
07/22/99	1109	4.24	-	68.60	614.7	113.9	
07/27/99	1630	4.32	30	42.37	640.5	73.3	
08/04/99	1630	2.50	28	46.15	128.6	16.0	
08/12/99	1630	2.05	30	23.52	60.3	3.8	
08/19/99	1630	1.94	25	25.92	47.7	3.3	
08/26/99	1630	1.86	24	29.28	39.5	3.1	
09/09/99	1630	1.68	21	27.25	24.0	1.8	
09/16/99	1630	1.64	18	18.34	21.1	1.0	
09/23/99	1630	1.60	14	17.76	18.4	0.9	
09/30/99	1630	1.59	15	16.89	17.8	0.8	

#378 – Cache River at Forman, IL (USGS #03612000)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1998							
10/28/97	1400	0.17	11	12.29	9.1	0.3	
11/02/97	1530	0.02	12	7.53	4.5	0.1	
11/10/97	1445	0.43	10	8.73	20.7	0.5	
11/14/97	1600	0.14	5	9.78	8.0	0.2	
11/30/97	1600	0.50	11	19.56	24.8	1.3	
12/03/97	1145	1.55	9	89.81	94.0	22.8	
12/12/97	1156	0.37	3	12.76	17.6	0.6	
12/12/97	1208	0.37	3	15.00	17.6	0.7	
12/17/97	0915	0.30	3	285.04	14.3	11.0	
12/29/97	1615	0.88	3	138.36	46.7	17.4	
01/04/98	1600	0.49	8	25.23	24.2	1.6	
01/08/98	1630	8.40	8	208.22	1165.0	655.0	
01/18/98	1545	1.54	4	11.15	93.2	2.8	
02/01/98	1645	0.97	7	4.74	52.9	0.7	
02/08/98	1600	0.75	6	9.93	38.4	1.0	
02/18/98	1215	11.87	8	293.05	2030.0	1606.2	
02/28/98	0800	7.28	10	158.35	927.5	396.6	
03/06/98	1245	2.17	8	22.91	148.0	9.2	
03/06/98	1300	2.17	8	22.63	148.0	9.0	
03/10/98	1600	2.12	6	19.57	143.2	7.6	
03/16/98	1415	1.33	5	13.01	77.4	2.7	
03/23/98	1430	8.79	10	79.62	1252.0	269.2	
03/30/98	1530	2.66	21	39.65	197.6	21.2	
04/06/98	1730	2.17	15	30.44	148.0	12.2	
04/18/98	1745	6.95	14	109.70	861.0	255.0	
04/22/98	1151	7.17	15	44.38	905.1	108.4	
04/22/98	1204	7.17	15	36.01	905.1	88.0	
04/24/98	1600	6.24	15	33.35	725.1	65.3	
05/13/98	1530	4.99	24	25.55	509.9	35.2	
05/20/98	1500	0.72	25	22.39	36.7	2.2	
05/26/98	0645	0.78	23	50.32	40.3	5.5	
06/02/98	1530	0.36	29	27.52	17.1	1.3	
06/09/98	1330	18.85	21	1224.95	4317.0	14277.9	
06/19/98	1600	14.25	27	153.98	397.7	165.3	new gage datum 6-18-98
06/23/98	1315	12.86	29	85.51	219.5	50.7	
06/30/98	1230	18.12	-	766.06	1104.0	2283.5	
07/09/98	1330	11.07	30	33.29	59.5	5.3	

#378 – Cache River at Forman, IL (USGS #03612000)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1998 (concluded)							
07/15/98	1530	10.60	26	26.84	29.9	2.2	
07/22/98	1445	10.20	31	16.07	10.3	0.4	
07/24/98	1324	10.12	26	19.11	7.4	0.4	
07/31/98	1130	11.78	25	147.51	112.8	44.9	
08/12/98	1730	11.78	27	48.78	112.8	14.9	
08/18/98	1530	10.54	-	24.51	26.8	1.8	
09/01/98	1700	10.04	25	15.27	5.0	0.2	
09/10/98	1530	9.95	25	25.22	3.1	0.2	
09/18/98	1430	9.97	-	19.80	3.4	0.2	
Water Year 1999							
10/01/98	1500	9.95	23	12.26	3.1	0.1	
10/08/98	1230	12.58	18	96.84	189.1	49.4	
10/08/98	1417	12.57	17	102.70	188.0	52.1	
10/08/98	1431	12.57	17	94.81	188.0	48.1	
10/22/98	1515	10.28	15	9.47	13.5	0.3	
10/26/98	1315	10.08	17	28.61	6.1	0.5	
11/07/98	1245	9.96	11	54.88	3.2	0.5	
11/23/98	1630	10.93	11	12.45	50.1	1.7	
12/01/98	1445	10.32	12	9.24	15.2	0.4	
12/08/98	1030	12.17	12	41.72	148.0	16.7	
12/10/98	1323	11.16	8	39.07	65.5	6.9	
12/10/98	1340	11.16	8	31.34	65.5	5.5	
12/21/98	1545	11.15	-	90.73	64.8	15.9	
12/29/98	1500	11.52	3	22.36	91.7	5.5	
01/11/99	1430	12.24	2	26.60	154.7	11.1	
01/24/99	1715	30.38	8	217.75	4909.0	2886.1	
02/01/99	1400	23.75	8	251.96	2577.0	1753.1	
02/03/99	1332	20.34	7	81.51	1624.0	357.4	
02/03/99	1351	20.35	7	73.60	1627.0	323.3	
02/09/99	1030	16.50	12	64.23	773.7	134.2	
02/24/99	1600	11.34	5	13.23	78.1	2.8	
03/25/99	1155	13.27	11	27.69	267.5	20.0	
03/25/99	1209	13.27	11	27.22	267.5	19.7	
04/01/99	1530	11.55	15	17.89	94.0	4.5	
04/06/99	1700	23.66	18	298.73	2549.0	2056.0	
04/09/99	1515	20.67	21	113.90	1709.0	525.6	
04/19/99	1245	15.05	13	37.98	519.5	53.3	

#378 – Cache River at Forman, IL (USGS #03612000)
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1999 (concluded)							
04/28/99	1500	12.97	20	68.99	232.0	43.2	
05/06/99	1300	17.45	19	159.89	962.6	415.6	
05/06/99	1543	17.39	19	161.27	950.2	413.7	
05/06/99	1607	17.42	-	164.57	956.4	425.0	
05/21/99	1430	10.77	-	20.06	39.7	2.1	
06/01/99	1515	10.29	24	32.15	13.9	1.2	
06/07/99	1345	13.79	26	116.13	333.9	104.7	
06/09/99	1445	11.34	27	38.24	78.1	8.1	
06/09/99	1520	11.33	27	39.77	77.4	8.3	
06/15/99	1430	10.64	25	28.28	32.1	2.4	
06/24/99	1300	10.79	25	31.71	40.9	3.5	
07/06/99	1915	10.25	29	26.74	12.2	0.9	
07/17/99	1940	10.05	28	22.12	5.3	0.3	
07/23/99	1447	10.74	30	35.91	37.8	3.7	
07/23/99	1530	10.74	-	32.96	37.8	3.4	
08/02/99	1300	10.00	29	16.54	4.1	0.2	
09/29/99	1300	9.71	19	25.50	0.3	0.0	

#513 – Cache River at Ullin, IL
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1998							
10/02/97	1114	3.97	15	37.83	24.3	2.5	
10/17/97	1059	4.30	12	32.32	37.6	3.3	
10/30/97	1001	4.35	9	10.95	39.7	1.2	
11/07/97	1127	4.64	10	29.90	51.9	4.2	
11/13/97	1119	4.41	15	6.96	42.2	0.8	
11/26/97	1011	4.49	8	9.79	45.6	1.2	
12/12/97	1039	3.99	4	15.36	24.8	1.0	
12/12/97	1049	3.99	4	14.74	24.8	1.0	
12/18/97	1355	3.46	4	9.76	12.0	0.3	
01/08/98	1132	9.16	9	205.05	364.4	201.7	
01/14/98	1109	4.88	4	40.86	62.0	6.8	
01/21/98	1116	4.37	4	15.65	40.5	1.7	
01/21/98	1129	4.37	4	14.41	40.5	1.6	
01/29/98	1004	4.30	5	30.57	37.6	3.1	
02/04/98	1135	4.11	5	21.88	29.6	1.7	
02/11/98	1115	4.09	7	28.77	28.8	2.2	
02/19/98	1124	10.69	8	112.16	509.0	154.1	
02/26/98	0959	6.17	11	126.32	134.8	46.0	
03/06/98	1054	5.24	8	60.16	80.7	13.1	
03/06/98	1106	5.24	8	66.90	80.7	14.6	
03/13/98	0953	4.46	4	18.23	44.3	2.2	
03/25/98	1051	7.76	12	151.09	243.2	99.2	
04/01/98	1010	6.67	16	169.31	165.8	75.8	
04/09/98	1114	4.86	15	134.03	61.1	22.1	
04/15/98	1003	8.41	17	293.14	297.6	235.5	
04/22/98	1035	8.88	15	61.94	339.3	56.8	
04/22/98	1049	8.88	15	68.75	339.3	63.0	
04/30/98	1003	12.21	16	2009.91	792.0	4298.0	
05/06/98	1053	8.50	18	162.71	305.6	134.2	
05/15/98	0955	6.45	24	130.64	152.1	53.7	
05/20/98	1132	5.00	26	79.95	67.0	14.5	
05/29/98	0954	4.43	25	133.83	43.1	15.6	
06/03/98	1004	3.84	25	101.90	21.1	5.8	
06/03/98	1014	3.84	25	94.37	21.2	5.4	
06/11/98	1207	10.72	24	213.18	512.0	294.7	
07/01/98	0938	10.60	25	271.02	500.0	365.9	
07/09/98	1109	6.50	29	140.98	155.2	59.1	
07/15/98	0956	5.56	24	175.46	99.0	46.9	

#513 – Cache River at Ullin, IL
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1998 (concluded)							
07/24/98	1149	3.93	25	63.95	23.3	4.0	
07/24/98	1159	3.93	25	59.03	23.3	3.7	
07/30/98	0951	3.94	24	155.76	23.6	9.9	
08/14/98	1004	5.84	25	193.73	115.0	60.2	
08/20/98	1202	3.94	26	49.91	23.6	3.2	
09/02/98	0941	3.40	23	30.36	10.6	0.9	
09/17/98	1008	3.44	22	52.45	11.6	1.6	
09/22/98	1051	5.16	23	200.11	76.2	41.1	
09/30/98	0953	3.20	23	40.45	5.8	0.6	
Water Year 1999							
10/08/98	1046	6.50	17	284.83	155.2	119.4	
10/08/98	1100	6.49	17	290.78	154.6	121.4	
10/15/98	1114	3.82	16	53.35	20.7	3.0	
10/22/98	1109	3.85	13	19.29	21.4	1.1	
11/05/98	1109	3.54	10	13.65	14.0	0.5	
11/12/98	1105	3.84	9	5.60	21.2	0.3	
11/19/98	1124	3.54	11	8.28	14.0	0.3	
11/23/98	1129	4.38	9	17.90	41.0	2.0	
12/02/98	1004	4.07	10	12.32	27.9	0.9	
12/10/98	1111	4.43	8	22.02	43.1	2.6	
12/10/98	1124	4.43	8	15.55	43.1	1.8	
12/16/98	1043	4.08	6	11.41	28.4	0.9	
12/21/98	1137	4.92	9	195.30	63.6	33.6	
01/22/99	1146	12.35	11	1264.25	820.0	2799.1	
01/29/99	0947	9.68	8	117.88	411.2	130.9	
02/03/99	1103	10.88	8	133.81	528.0	190.8	
02/03/99	1125	10.88	8	126.23	528.0	180.0	
02/10/99	1313	9.28	11	103.50	375.2	104.8	
02/23/99	1132	6.35	5	33.30	145.9	13.1	
03/04/99	1056	5.06	8	39.87	70.4	7.6	
03/11/99	1444	7.08	6	84.52	192.3	43.9	
03/17/99	1019	8.09	10	135.10	269.1	98.2	
03/25/99	1031	6.02	11	120.46	125.4	40.8	
03/25/99	1043	6.02	11	117.65	125.4	39.8	
03/31/99	1001	4.97	12	76.08	65.7	13.5	
04/07/99	1551	11.28	19	142.17	598.8	229.8	
04/09/99	1443	10.07	19	124.08	447.0	149.7	

#513 – Cache River at Ullin, IL
Instantaneous Suspended Sediment Measurements

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
Water Year 1999 (concluded)							
04/13/99	1158	7.94	17	159.79	256.6	110.7	
04/21/99	1436	7.10	18	187.66	193.8	98.2	
04/30/99	0946	5.83	18	109.86	114.5	34.0	
05/06/99	1421	7.67	-	271.76	236.4	173.5	
05/06/99	1438	7.65	-	268.42	234.9	170.3	
05/19/99	1320	4.15	22	66.11	31.3	5.6	
05/26/99	1645	3.88	23	74.04	22.1	4.4	
06/02/99	1648	6.01	23	551.61	124.8	185.9	
06/08/99	1135	4.48	26	139.19	45.2	17.0	
06/08/99	1158	4.48	26	140.85	45.2	17.2	
06/15/99	0956	4.19	23	146.43	33.0	13.0	
06/24/99	1441	4.95	-	103.47	64.9	18.1	
06/29/99	1420	4.13	27	50.61	30.5	4.2	
07/06/99	1425	4.11	31	68.65	29.6	5.5	
07/14/99	1207	3.64	25	76.16	16.4	3.4	
07/23/99	1303	3.21	32	60.76	6.0	1.0	
07/23/99	1329	3.21	-	54.89	6.0	0.9	
07/27/99	1307	3.09	33	76.43	3.2	0.7	
08/02/99	1226	3.01	31	58.72	1.2	0.2	
08/12/99	1250	3.54	32	50.88	14.0	1.9	
08/19/99	1340	3.65	32	65.85	16.6	3.0	
08/26/99	1239	3.77	29	85.74	19.5	4.5	
09/03/99	0958	3.83	26	73.41	20.9	4.1	
09/09/99	1320	3.81	26	74.07	20.4	4.1	
09/17/99	1609	4.09	25	68.70	28.8	5.3	
09/24/99	1446	4.13	22	69.07	30.5	5.7	
09/28/99	1517	4.18	27	61.16	32.6	5.4	

Appendix B: Sand/Fine Analysis

#122 – Vermilion River near Leonore, IL (USGS #05555300)

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>% finer than 0.0625 mm</i>
Water Year 1998						
10/21/97	1545	2.77	11	89.91	13.0	75.60
05/06/98	1050	8.59	17	195.39	3050.0	95.90
09/22/98	1424	2.84	23	77.49	17.6	83.30
Water Year 1999						
11/05/98	0951	2.98	8	27.09	29.4	79.50
02/04/99	1000	7.38	4	41.10	2206.0	92.90
06/07/99	1043	6.93	25	69.46	1901.0	90.40

#229 – Spoon River at London Mills, IL (USGS #05569500)

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>% finer than 0.0625 mm</i>
Water Year 1998						
10/22/97	1310	3.02	9	114.50	140.6	69.80
05/08/98	1511	15.86	17	1830.31	6114.0	93.50
09/21/98	1455	2.65	22	131.73	86.0	87.70
Water Year 1999						
06/09/99	1345	10.35	23	1570.18	2890.0	84.40

#242 – LaMoine River at Colmar, IL (USGS #05584500)

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>% finer than 0.0625 mm</i>
Water Year 1998						
02/03/98	1139	8.86	3	170.27	744.5	97.27
05/08/98	1305	9.79	17	249.94	909.6	80.00
09/21/98	1140	2.83	21	69.91	23.6	98.30
Water Year 1999						
11/04/98	1156	11.92	9	237.14	1324.0	91.10

#245 – LaMoine River at Ripley, IL (USGS #05585000)

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>% finer than 0.0625 mm</i>
Water Year 1998						
10/22/97	1016	4.83	9	88.79	42.1	83.90
02/03/98	0958	10.12	1	207.80	1085.0	97.57
05/08/98	1127	12.40	18	320.77	1850.0	99.10
09/21/98	1009	5.29	22	166.22	86.0	87.50
Water Year 1999						
11/04/98	1014	17.25	9	556.15	4158.0	93.00
02/03/99	1006	15.54	5	221.60	3227.0	92.00
06/09/99	1022	8.13	26	369.80	569.1	93.80

#249 – Sangamon River at Monticello, IL (USGS #05572000)

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>% finer than 0.0625 mm</i>
Water Year 1998						
10/22/97	1713	4.42	10	99.68	26.6	49.10
02/04/98	1325	7.26	4	80.10	294.2	59.57
05/14/98	1440	11.09	20	85.24	1208.0	99.60
09/22/98	1113	4.23	21	65.34	17.7	92.40
Water Year 1999						
02/04/99	1312	10.15	5	31.86	857.8	94.70
06/07/99	1336	10.52	23	152.34	973.1	94.90

#361 – Kaskaskia River at Vandalia, IL (USGS #05592500)

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>% finer than 0.0625 mm</i>
Water Year 1998						
12/17/97	1305	2.54	2	82.19	80.8	91.54
03/04/98	1329	7.86	5	60.58	1526.0	92.86
04/21/98	1257	11.33	14	156.97	3016.0	91.50
08/10/98	1243	6.44	26	121.03	1028.0	98.50
Water Year 1999						
10/21/98	1321	2.34	15	48.81	53.0	98.70
02/09/99	1351	24.93	7	293.54	18090.0	94.60
05/11/99	1334	7.52	20	166.04	1397.0	91.10
07/20/99	1318	6.52	29	148.90	1053.0	98.50

#367 – Silver Creek near Freeburg, IL (USGS #05594800)

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>% finer than 0.0625 mm</i>
Water Year 1998						
12/17/97	1030	1.26	2	7.68	30.7	87.16
03/04/98	1035	2.82	5	49.85	174.3	98.40
04/21/98	1039	10.78	14	117.80	1770.0	99.00
08/10/98	1026	10.75	25	87.35	1762.0	98.60
Water Year 1999						
10/21/98	1040	1.25	15	28.70	30.1	97.80
02/09/99	1104	17.75	9	243.87	5673.0	95.60
05/11/99	1018	2.96	20	100.50	191.0	98.80
07/20/99	1022	1.16	28	52.20	24.6	98.60

#370 – Little Wabash River at Carmi, IL (USGS #03381500)

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>% finer than 0.0625 mm</i>
Water Year 1998						
12/18/97	1034	2.11	4	11.37	67.9	81.74
03/05/98	1129	6.73	8	97.29	1394.0	99.58
04/23/98	1027	27.03	14	66.49	12330.0	98.60
08/07/98	1258	19.92	24	199.73	7051.0	99.20
Water Year 1999						
10/16/98	1137	2.84	17	54.34	198.3	98.80
02/05/99	1125	31.76	6	71.69	18700.0	97.60
05/07/99	1051	17.46	20	344.09	5763.0	99.30
07/22/99	1043	4.25	29	75.29	617.9	99.70

#378 – Cache River at Forman, IL (USGS #03612000)

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>% finer than 0.0625 mm</i>
Water Year 1998						
12/12/97	1159	0.37	3	19.42	17.6	95.00
03/06/98	1248	2.17	8	28.78	148.0	73.48
04/22/98	1153	7.17	15	40.28	905.1	96.80
Water Year 1999						
10/08/98	1420	12.57	17	96.32	188.0	99.80
02/03/99	1336	20.35	7	86.05	1627.0	95.60
05/06/99	1551	17.41	19	163.30	954.3	97.60
07/23/99	1506	10.74	30	41.92	37.8	98.04

#513 – Cache River at Ullin, IL

<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>% finer than 0.0625 mm</i>
Water Year 1998						
12/12/97	1042	3.99	4	19.66	24.8	96.12
03/06/98	1056	5.24	8	66.76	80.7	98.16
04/22/98	1039	8.88	15	83.57	339.3	98.80
07/24/98	1151	3.93	25	55.70	23.3	98.50
Water Year 1999						
10/08/98	1049	6.49	17	260.69	154.6	99.50
02/03/99	1107	10.88	8	126.81	528.0	97.60
05/06/99	1423	7.66	20	256.71	235.7	99.31
07/23/99	1312	3.21	32	66.88	6.0	98.90

**Appendix C: Plots of Instantaneous Sediment
Concentration for Period of Record
for Current Monitoring Sites**

