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Benchmark Sediment Monitoring Program for Illinois Streams: Data Report for Water Years 1996 and 1997

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 transport. The program is now part of the Water Survey's Water and Atmospheric Resources Monitoring (WARM) Network, which monitors the climate, soil moisture, surface water, groundwater, and sediment throughout Illinois. This report summarizes the suspended sediment data collected for the program during Water Years 1996 and 1997. 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 1996 and 1997. A complete overview of the sediment monitoring 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).

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.

Becky Howard and Cynthia Bauer produced the camera-ready copy of the report, Eva Kingston and Agnes Dillon edited it, and Becky Howard and Linda Hascall helped prepare the graphs and maps.

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 throughout the state. Subsequent budget reductions, sampling site evaluations, 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 monitoring program in 1981.

Table 1 lists the active Benchmark Sediment Monitoring Program sampling sites for Water Years 1996 and 1997. 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.

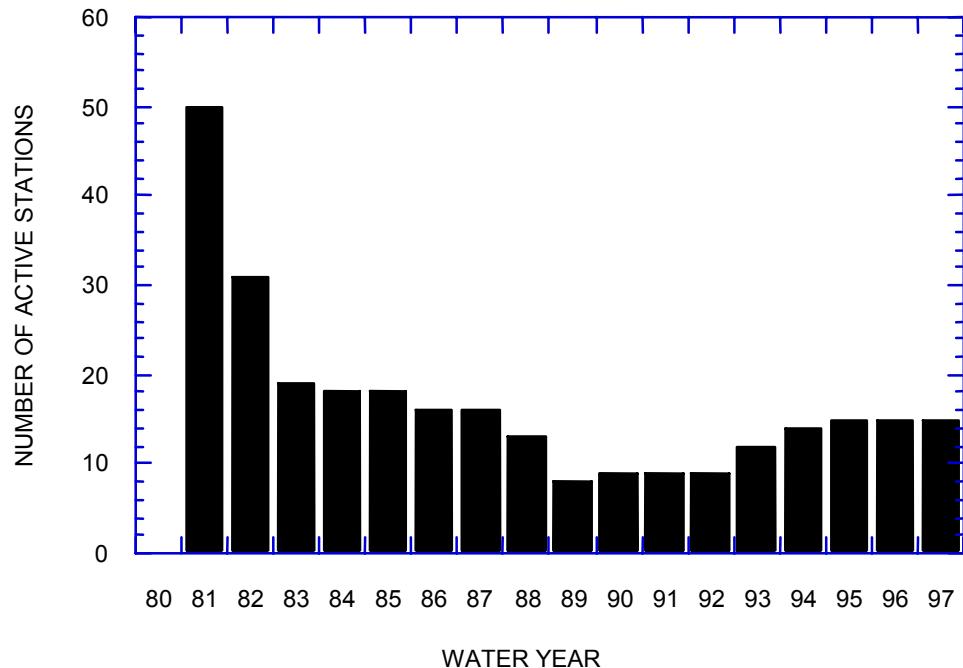


Figure 1. Number of active Benchmark Sediment Monitoring stations

Table 1. Benchmark Sediment Monitoring Sites, Water Years 1996 and 1997

<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 - Present
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 Creek 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	N/A	164	1986 - 1989, 1995 - Present

Sediment sampling was restarted at Sangamon River at Monticello site (#249) in February 1996. Sampling at this site had been temporarily suspended during 1995 due to the Department of Transportation bridge reconstruction. Additionally, the station at Kankakee River at Momence (#125) has a substantially reduced data set for water years 1996 and 1997 due to difficulty in locating a suitable observer.

Data Collection

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

All of the 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

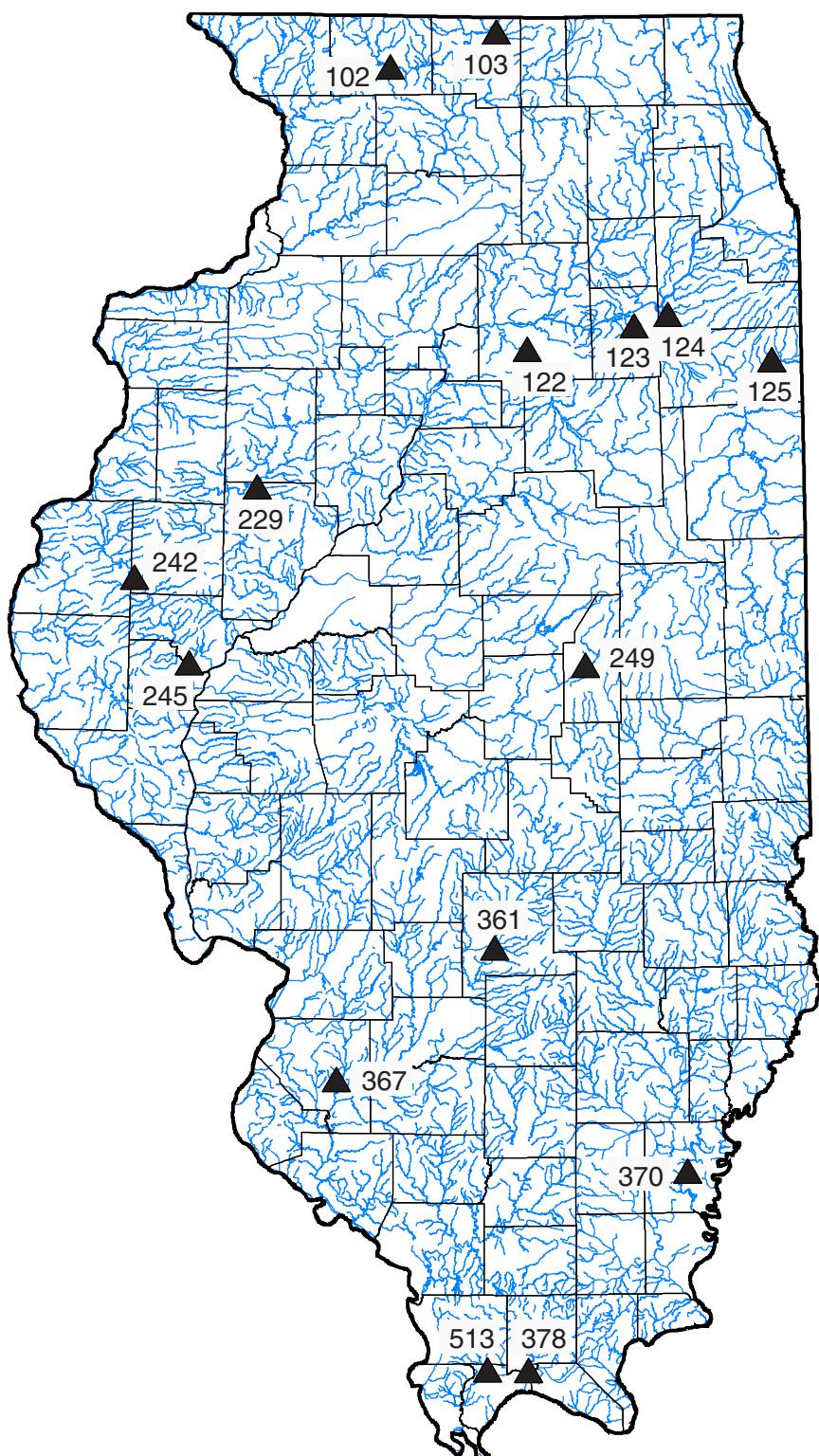


Figure 2. Location of Benchmark Sediment Monitoring stations,
Water Years 1996 and 1997

ISWS. This 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. The ISWS streamgaging station-rating table is developed and updated annually by ISWS personnel. Then, during analysis of the sediment data, an instantaneous water discharge 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. The bridge sampling locations were placed as close 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 personal schedule. These samples are then collected periodically by ISWS personnel and transported to the ISWS Sediment Laboratory in Champaign.

Most of the sampling sites also have cross-sectional sampling done on a periodic basis for calibration. Cross-sectional sampling consists of a series of samples that are collected at selected intervals across the width of the stream. These samples are analyzed individually. The mean concentrations for all the samples in a cross section are then computed to determine the average sediment concentration for the cross section.

These data can be compared to the single vertical weekly samples to verify if the single vertical samples accurately represent the actual sediment loads in the rivers. In addition, alternate collections of cross sections are composited and analyzed for particle size. The particle size analysis consists of a sand/fine split and is reported as percent finer than 0.0625 millimeters. However, some sites are cross-sectioned irregularly, or not all due to a shortage of regional personnel and other time commitments. Prior 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).

Data Analysis

The collected suspended sediment samples are analyzed for concentration and sand/fine split at the ISWS Sediment Laboratory in Champaign. After the analysis has been completed, the sample information is compared to the sample log sheets, 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 remark column adjacent to the information for that particular sample.

When 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:

$$Q_s = C_s (Q_w) K \quad (1)$$

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. 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 analysis of any particle-size samples collected during the water year (see appendix B). Appendix C presents graphs of the sediment load versus water discharge for Water Years 1996 and 1997, and appendix D contains graphs of the sediment concentration values over the complete sampling record for each station.

Summary

The ISWS initiated the Benchmark Sediment Monitoring Program in 1981 to monitor and quantify the long-term changes in suspended sediment concentrations and sediment loads in Illinois waterways. The program began with 50 monitoring stations distributed throughout Illinois. During Water Years 1996 and 1997, 15 stations were monitored.

The monitoring program involves the collection of weekly suspended sediment samples by local private citizens. Calibration samples and particle-size data are collected by ISWS 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., 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 DC.
- 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 DC.
- 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 DC.

Appendix A: Instantaneous Suspended Sediment Measurements

Data Set Parameters

- 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 data column indicates the 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 1996							
10/07/95	1140	6.19	9	142.01	1128.0	432.5	
10/13/95	1510	4.21	12	189.52	752.4	385.0	
10/20/95	1550	3.84	7	159.08	681.2	292.6	
10/30/95	1610	4.41	5	121.05	790.9	258.5	
11/03/95	1640	7.50	2	52.48	1372.0	194.4	
11/17/95	1655	4.49	-	132.40	806.0	288.1	
03/07/96	1655	11.12	3	60.27	2249.0	366.0	
03/22/96	1550	3.77	2	141.98	667.7	256.0	
04/02/96	1545	3.81	6	115.27	675.4	210.2	
04/12/96	1555	3.64	9	99.19	642.5	172.1	
04/15/96	1555	3.98	4	77.84	708.2	148.8	
04/20/96	1310	4.52	7	135.72	811.7	297.4	
04/29/96	1715	4.20	5	117.03	750.5	237.1	
05/07/96	1620	4.24	5	94.20	758.1	192.8	
05/09/96	1630	4.42	7	120.48	792.6	257.8	
05/10/96	1610	7.00	7	230.85	1279.0	797.2	
05/20/96	0630	6.26	14	192.40	1141.0	592.7	
05/21/96	0635	8.48	11	190.97	1553.0	800.7	
05/29/96	0615	12.08	5	448.30	3017.0	3651.8	
06/06/96	0610	9.12	10	158.17	1670.0	713.2	
06/19/96	0650	11.93	14	386.04	2862.0	2983.1	
06/24/96	0650	12.74	15	64.85	3777.0	661.4	
07/05/96	1540	7.39	17	1167.29	1351.0	4257.9	
07/08/96	1600	6.72	18	569.14	1227.0	1885.5	
07/12/96	1635	6.29	21	478.96	1146.0	1482.0	
07/15/96	1615	6.59	21	369.05	1202.0	1197.7	
07/18/96	0655	7.66	22	1258.08	1401.0	4758.9	
08/02/96	1640	7.49	21	253.96	1370.0	939.4	
08/06/96	0655	7.44	22	270.25	1361.0	993.1	
08/16/96	1615	6.13	22	321.80	1116.0	969.6	
08/23/96	1550	6.10	23	218.22	1111.0	654.6	
08/30/96	1800	5.23	22	211.27	946.7	540.0	
09/06/96	1615	4.84	22	201.18	872.7	474.0	
09/13/96	1550	4.70	18	152.70	846.1	348.8	
09/20/96	1620	4.46	17	182.26	800.2	393.8	
09/27/96	1605	4.89	14	128.94	882.2	307.1	

#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 1997							
10/04/96	1630	4.23	13	152.25	756.2	310.8	
10/17/96	1605	4.68	15	131.09	842.2	298.1	
10/24/96	1625	5.03	11	47.06	908.8	115.5	
10/31/96	1555	6.30	7	51.71	1148.0	160.3	
12/12/96	1600	4.25	2	89.87	760.0	184.4	
03/21/97	1620	5.81	9	94.56	1056.0	269.6	
03/28/97	1550	5.93	9	107.74	1079.0	313.9	
04/23/97	1615	4.98	14	119.67	899.3	290.6	
05/02/97	1740	6.07	12	200.18	1105.0	597.2	
05/08/97	0700	6.76	13	708.29	1234.0	2359.9	
05/09/97	1630	7.23	15	244.26	1322.0	871.8	
05/19/97	1610	4.92	16	1243.89	887.9	2982.0	*Cs (mg/l)
05/27/97	0700	4.75	13	949.80	855.6	2194.1	
05/30/97	1540	4.53	15	196.10	813.6	430.8	
06/16/97	1615	7.90	22	548.41	1446.0	2141.1	
06/30/97	0645	5.83	24	275.41	1060.0	788.2	
07/02/97	1645	6.38	25	353.23	1163.0	1109.2	
07/08/97	1555	4.70	23	298.21	846.1	681.3	
07/14/97	0910	4.25	24	281.85	760.0	578.4	
07/18/97	1545	4.03	25	224.34	717.8	434.8	
07/28/97	1605	5.14	26	208.21	929.7	522.7	
08/13/97	1550	4.08	21	516.52	727.4	1014.4	
08/15/97	1550	4.52	22	141.90	811.7	311.0	
08/22/97	1625	3.99	21	191.37	710.1	366.9	
09/05/97	1610	3.37	19	164.27	590.1	261.7	
09/12/97	1520	3.45	19	250.99	605.7	410.5	
09/19/97	1550	4.10	21	134.76	731.2	266.0	
09/27/97	1210	3.66	16	141.18	646.4	246.4	

#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 1996							
10/06/95	0930	3.74	15	40.75	3546.0	390.2	
10/13/95	1000	4.83	17	42.29	5359.0	611.9	
10/20/95	1400	3.88	13	49.38	3768.0	502.3	
10/27/95	1400	4.49	11	34.24	4773.0	441.3	
11/03/95	1300	5.59	7	48.04	6729.0	872.8	
11/10/95	1400	5.52	4	43.17	6599.0	769.2	
11/17/95	1500	5.45	3	46.65	6470.0	815.0	
11/22/95	1300	5.25	4	20.27	6106.0	334.2	
12/01/95	1400	4.88	3	20.28	5446.0	298.1	
12/08/95	0930	4.40	1	75.43	4621.0	941.1	
12/15/95	1300	6.31	2	86.12	8097.0	1882.8	
12/22/95	1300	4.15	1	95.38	4205.0	1082.9	
12/29/95	1330	3.59	3	133.60	3312.0	1194.7	
01/05/96	1400	3.49	1	144.12	3159.0	1229.3	
01/12/96	1100	3.38	2	125.00	2992.0	1009.8	
01/19/96	1130	4.39	1	65.99	4604.0	820.3	
01/26/96	1130	5.21	2	24.08	6034.0	392.3	
02/09/96	1330	6.95	2	17.48	9366.0	442.1	
02/16/96	1130	6.66	2	47.18	8785.0	1119.1	
02/23/96	1130	4.78	3	13.30	5271.0	189.3	
03/01/96	1515	5.31	2	35.23	6215.0	591.2	
03/08/96	1130	4.86	2	37.52	5411.0	548.1	
03/15/96	1500	4.60	8	35.28	4960.0	472.5	
03/22/96	1500	4.48	7	19.86	4756.0	255.1	
03/29/96	1500	4.60	8	21.48	4960.0	287.6	
04/04/96	1100	4.62	9	38.23	4995.0	515.5	
04/12/96	1400	4.23	13	48.79	4337.0	571.3	
04/19/96	1300	4.68	14	51.66	5098.0	711.1	
04/26/96	1400	4.80	13	48.99	5306.0	701.8	
05/03/96	1000	5.19	11	53.30	5998.0	863.2	
05/10/96	1400	5.50	13	49.08	6562.0	869.6	
05/17/96	1500	5.93	17	60.69	7367.0	1207.1	
05/24/96	1330	6.47	17	104.51	8410.0	2373.0	
05/31/96	1300	7.48	16	189.05	10450.0	5333.9	
06/07/96	1330	9.11	17	739.80	13970.0	27904.6	
06/14/96	1500	8.30	24	83.12	12190.0	2735.7	
06/28/96	1300	9.49	25	102.63	14830.0	4109.4	
07/03/96	1130	8.11	26	97.40	11780.0	3097.8	
07/12/96	1330	6.25	22	105.53	7980.0	2273.8	
07/19/96	1500	10.24	23	221.76	16540.0	9903.2	
07/26/96	1515	7.64	22	69.39	10790.0	2021.6	

#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 1996 (concluded)							
08/02/96	1515	5.47	22	256.21	6507.0	4501.3	
08/09/96	1500	5.64	25	118.94	6821.0	2190.4	
08/16/96	1500	4.65	22	92.55	5046.0	1261.0	
08/23/96	1300	4.08	24	114.42	4090.0	1263.5	
08/30/96	1000	3.89	21	95.39	3784.0	974.5	
09/06/96	1400	3.45	24	87.93	3098.0	735.5	
09/13/96	1300	3.18	18	137.76	2695.0	1002.4	
09/20/96	1430	3.35	17	59.66	2947.0	474.7	
09/27/96	1445	3.48	15	57.38	3143.0	486.9	
Water Year 1997							
10/04/96	1430	3.16	14	88.43	2666.0	636.5	
10/11/96	1400	3.24	11	82.50	2783.0	619.9	
10/18/96	1400	3.29	14	51.27	2857.0	395.5	
10/25/96	1300	3.64	12	29.97	3390.0	274.3	
11/01/96	1430	4.69	7	28.50	5115.0	393.6	
11/08/96	1400	4.16	7	22.50	4221.0	256.5	
11/15/96	1300	3.71	3	45.34	3499.0	428.3	
11/22/96	1300	3.72	4	86.04	3514.0	816.3	
11/27/96	1400	3.09	2	116.06	2564.0	803.4	
12/06/96	1430	3.87	3	9.62	3752.0	97.5	
12/13/96	1330	3.92	4	10.20	3832.0	105.6	
12/20/96	0945	3.79	0	48.28	3625.0	472.5	
12/27/96	1330	4.57	1	112.56	4909.0	1491.9	
01/03/97	1415	3.95	4	14.24	3880.0	149.2	
01/10/97	1430	4.39	0	14.98	4604.0	186.2	
01/28/97	1200	6.31	1	26.14	8097.0	571.5	
01/31/97	1330	5.31	2	18.04	6215.0	302.8	
02/07/97	1430	4.53	2	17.37	4841.0	227.1	
02/14/97	1400	3.68	2	7.47	3452.0	69.6	
02/21/97	1400	9.53	3	514.95	14920.0	20744.2	
02/28/97	0900	10.26	3	142.44	16610.0	6388.0	
03/07/97	1500	8.79	4	113.89	13260.0	4077.5	
03/14/97	1400	7.96	3	68.35	11460.0	2114.7	
03/21/97	1500	6.41	8	63.35	8292.0	1418.3	
03/28/97	0930	6.19	9	58.45	7864.0	1241.1	
04/18/97	0800	5.80	9	56.06	7121.0	1077.9	
04/25/97	1500	5.49	15	45.36	6544.0	801.4	
05/02/97	0800	5.21	14	35.01	6034.0	570.4	
05/09/97	0930	5.62	14	31.81	6784.0	582.7	
05/16/97	0930	5.02	13	34.89	5694.0	536.4	

#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>
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Water Year 1997 (concluded)

05/23/97	1500	4.38	19	82.38	4587.0	1020.2	
05/30/97	1500	3.96	16	119.74	3896.0	1259.5	
06/06/97	1400	3.57	21	138.43	3281.0	1226.3	
06/13/97	1430	3.42	24	152.21	3052.0	1254.3	
06/20/97	1430	5.65	24	155.44	6840.0	2870.6	
06/27/97	1400	6.33	27	103.62	8136.0	2276.3	
07/03/97	1300	5.11	25	111.57	5854.0	1763.4	
07/11/97	1430	4.90	25	70.88	5481.0	1048.9	
07/18/97	1300	4.35	28	64.90	4537.0	795.0	
07/25/97	1430	4.66	25	70.22	5064.0	960.1	
08/01/97	1430	4.51	26	86.07	4807.0	1117.0	
08/08/97	1230	4.02	25	61.65	3993.0	664.7	
08/15/97	0900	3.90	21	50.92	3800.0	522.4	
08/22/97	1500	3.77	23	57.51	3593.0	557.9	
08/29/97	1330	4.02	25	53.01	3993.0	571.5	
09/05/97	1400	3.79	20	41.19	3625.0	403.1	
09/12/97	1400	3.21	21	41.51	2739.0	307.0	
09/19/97	1315	3.80	22	57.61	3640.0	566.2	
09/26/97	1330	3.49	19	52.33	3159.0	446.3	

#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 1996							
10/07/95	1400	2.85	15	91.61	18.3	4.5	
10/14/95	1330	2.70	13	126.45	9.0	3.1	
10/17/95	1115	2.81	12	76.12	15.6	3.2	
10/17/95	1151	2.81	12	67.24	15.6	2.8	
10/21/95	1345	3.07	9	243.15	38.7	25.4	
10/28/95	1030	3.00	11	26.41	31.5	2.2	
11/04/95	0930	4.29	4	28.62	300.6	23.2	
11/10/95	0900	3.50	6	10.47	100.8	2.8	
11/15/95	0700	6.03	3	80.78	1034.0	225.5	
11/23/95	0900	4.63	4	19.83	413.5	22.1	
11/28/95	1030	4.50	5	45.91	367.9	45.6	
12/02/95	0900	4.02	5	121.12	225.1	73.6	
12/04/95	1002	3.94	4	114.22	202.5	62.5	
12/04/95	1030	3.94	4	117.43	202.5	64.2	
12/15/95	1330	3.83	1	122.49	172.9	57.2	
12/18/95	1400	3.90	0	131.93	191.4	68.2	
12/27/95	1630	3.80	0	17.87	165.3	8.0	
01/01/96	1330	3.64	0	8.32	128.4	2.9	
01/11/96	1300	3.55	0	111.63	110.2	33.2	
01/17/96	1030	3.72	-	90.34	146.1	35.6	
01/27/96	1200	3.85	-	47.68	178.0	22.9	
01/28/96	1530	3.86	-	44.13	180.7	21.5	
02/25/96	1530	3.78	3	68.38	160.4	29.6	
03/03/96	1100	3.73	1	15.74	148.4	6.3	
03/10/96	1500	4.38	2	39.07	328.5	34.6	
03/17/96	1500	3.78	5	48.12	160.4	20.8	
03/22/96	1000	3.92	4	6.56	196.9	3.5	
03/22/96	1031	3.92	4	14.17	196.9	7.5	
03/28/96	1630	3.95	6	13.83	205.4	7.7	
03/31/96	1100	3.99	6	11.99	217.0	7.0	
04/07/96	1030	4.14	7	97.53	257.1	67.7	
04/14/96	1600	3.89	11	51.23	188.7	26.1	
05/07/96	0948	6.37	12	190.10	1198.0	614.9	
05/07/96	1019	6.40	12	230.77	1213.0	755.8	
05/12/96	1700	9.83	13	372.60	3462.0	3482.8	
05/27/96	1130	13.12	12	870.68	6601.0	15517.9	
05/29/96	1900	19.85	15	139.31	15760.0	5928.0	
06/14/96	1900	5.90	24	706.84	967.6	1846.6	
06/16/96	1500	5.42	25	125.96	735.9	250.3	
06/21/96	0937	5.88	23	93.73	957.3	242.3	
06/21/96	1007	5.86	23	78.04	947.0	199.5	

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

Date	Time	Gage Ht	Temp (°C)	Cs (mg/l)	Qw (cfs)	Qs (t/d)	Remarks
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Water Year 1996 (concluded)

06/23/96	1700	5.31	25	49.69	687.4	92.2
06/30/96	1900	4.98	25	37.98	551.4	56.5
07/07/96	1630	3.79	26	78.11	162.8	34.3
07/17/96	1830	3.67	26	45.11	134.9	16.4
07/23/96	1900	8.90	21	531.88	2751.0	3950.6
08/22/96	1800	3.43	29	85.83	88.5	20.5
08/23/96	1020	3.41	26	15.00	85.2	3.4
08/23/96	1053	3.41	26	12.27	85.2	2.8
08/25/96	2000	3.27	22	23.77	64.2	4.1
09/07/96	1700	3.00	25	37.83	31.5	3.2
09/09/96	1900	2.99	24	83.12	30.4	6.8
09/15/96	0900	3.00	15	18.42	31.5	1.6
09/22/96	0900	2.91	17	23.76	22.8	1.5
09/29/96	1100	2.92	16	11.87	23.7	0.8

Water Year 1997

10/06/96	1100	2.90	14	168.82	22.0	10.0
10/13/96	1000	2.94	15	63.42	25.5	4.4
10/20/96	1200	3.11	16	18.07	43.3	2.1
10/27/96	1300	3.30	16	33.46	68.3	6.2
11/03/96	1500	3.67	7	19.25	134.9	7.0
11/10/96	1700	3.65	5	54.47	130.5	19.2
11/17/96	1200	3.58	7	24.96	116.0	7.8
11/24/96	1300	3.70	5	14.03	141.5	5.4
12/09/96	1014	4.30	-1	11.04	303.6	9.0
12/09/96	1037	4.27	-1	20.79	294.5	16.5
03/05/97	0950	8.56	4	60.51	2509.0	409.9
03/05/97	1018	8.58	4	64.53	2523.0	439.6
03/16/97	1630	6.72	-	70.30	1378.0	261.6
03/23/97	1700	6.19	-	27.85	1110.0	83.5
04/01/97	1700	7.14	-	103.08	1610.0	448.1
04/03/97	1130	4.83	12	94.69	489.6	125.2
04/06/97	1200	7.11	9	72.57	1593.0	312.1
04/14/97	1620	7.26	12	81.84	1679.0	371.0
04/22/97	1006	5.93	10	38.22	983.1	101.4
04/22/97	1530	5.83	14	66.20	931.7	166.5
05/10/97	0900	4.44	15	88.44	347.9	83.1
05/11/97	0930	4.43	15	83.26	344.6	77.5
05/21/97	1600	4.44	19	98.97	347.9	93.0
05/31/97	1624	4.24	18	88.21	285.7	68.0

#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>
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Water Year 1997 (concluded)

06/01/97	1100	4.25	18	64.83	288.6	50.5
06/05/97	0944	4.17	19	90.87	265.5	65.1
06/05/97	1003	4.17	19	111.15	265.5	79.7
06/09/97	1600	5.30	19	202.68	683.1	373.8
06/15/97	1300	7.66	20	268.36	1918.0	1389.7
06/28/97	0800	4.18	27	123.18	268.3	89.2
06/29/97	1030	4.17	27	87.23	265.5	62.5
07/12/97	1100	3.29	28	56.98	66.9	10.3
07/19/97	1000	3.20	28	23.46	55.0	3.5
07/21/97	0900	3.27	27	28.89	64.2	5.0
07/23/97	1002	3.47	24	38.22	95.4	9.8
07/23/97	1020	3.46	24	30.83	93.7	7.8
08/02/97	1900	2.94	29	141.76	25.5	9.8
08/03/97	1955	2.93	29	40.85	24.6	2.7
08/10/97	0700	3.13	21	15.83	45.8	2.0
08/17/97	1200	3.07	20	44.32	38.7	4.6
08/24/97	0800	3.01	19	24.37	32.5	2.1
08/31/97	0800	2.98	18	15.99	29.4	1.3
09/04/97	1224	2.99	20	27.91	30.4	2.3
09/04/97	1241	2.98	20	27.03	29.4	2.1
09/07/97	0900	2.91	16	15.90	22.8	1.0
09/14/97	1600	2.90	17	54.17	22.0	3.2
09/21/97	0700	2.81	19	17.28	15.6	0.7
09/28/97	0800	2.79	18	41.42	14.3	1.6

#123 – Mazon River near Coal City, IL (USGS #05542000)
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 1996							
10/04/95	1229	1.54	5	7.62	67.9	1.4	
11/04/95	1000	1.00	11	7.08	6.3	0.1	
11/11/95	1000	0.95	8	12.44	4.9	0.2	
11/17/95	1000	2.00	8	83.18	172.0	38.6	
11/25/95	1000	1.85	5	89.82	132.2	32.1	
12/02/95	1000	1.65	6	94.39	88.7	22.6	
12/04/95	1000	1.65	6	89.45	88.7	21.4	
12/04/95	1300	1.54	5	7.38	67.9	1.4	
03/09/96	1000	1.60	5	5.39	79.0	1.1	
03/13/96	1000	1.55	5	4.74	69.7	0.9	
03/22/96	1227	1.53	4	9.22	66.1	1.6	
03/22/96	1245	1.53	4	7.25	66.1	1.3	
03/23/96	1000	1.55	7	4.56	69.7	0.9	
03/30/96	1000	1.70	9	6.99	99.0	1.9	
04/06/96	1000	1.75	8	99.51	109.2	29.3	
04/13/96	1000	1.65	14	7.70	88.7	1.8	
04/20/96	1000	2.20	13	50.93	227.4	31.3	
04/27/96	1000	2.60	13	78.18	357.0	75.4	
05/04/96	1000	2.40	13	43.72	287.9	34.0	
05/07/96	1000	2.65	13	104.18	337.0	94.8	
05/07/96	1242	2.61	11	116.11	361.0	113.2	
05/07/96	1311	2.60	11	110.07	357.0	106.1	
05/25/96	1000	3.75	13	99.10	913.5	244.4	
05/31/96	1000	4.85	16	99.51	1614.0	433.6	
06/08/96	1000	2.95	17	122.72	506.8	167.9	
06/15/96	1000	2.50	18	122.96	320.0	106.2	
06/21/96	1154	3.35	22	79.90	698.2	150.6	
06/21/96	1218	3.34	22	81.01	693.2	151.6	
06/22/96	1000	3.05	21	65.03	552.9	97.1	
06/29/96	1000	2.00	24	84.43	172.0	39.2	
07/06/96	1000	1.80	24	92.86	120.0	30.1	
07/13/96	1000	1.50	24	50.30	61.0	8.3	
07/20/96	1000	4.25	20	119.62	1213.0	391.8	
07/27/96	1000	3.20	22	105.93	623.8	178.4	
08/03/96	1000	3.57	22	35.94	813.7	79.0	
08/10/96	1000	2.00	23	13.06	172.0	6.1	

#123 – Mazon River near Coal City, IL (USGS #05542000)
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>
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Water Year 1996 (concluded)

08/17/96	1000	1.50	23	63.94	61.0	10.5
08/22/96	0900	1.30	20	8.37	33.0	0.7
09/07/96	1000	0.80	20	6.63	1.9	0.0
09/14/96	1000	0.80	21	6.45	1.9	0.0
09/22/96	1000	0.75	21	7.83	1.2	0.0
09/28/96	1000	0.85	19	6.57	2.7	0.0

Water Year 1997

10/05/96	1000	0.95	19	5.88	4.9	0.1
10/12/96	1000	1.05	18	6.90	8.4	0.2
10/19/96	1000	1.25	16	8.52	27.2	0.6
10/26/96	1000	1.20	16	7.92	22.0	0.5
11/02/96	1000	1.15	16	6.57	16.4	0.3
11/09/96	1000	1.70	7	64.52	99.0	17.2
11/16/96	1000	1.60	7	16.56	79.0	3.5
11/23/96	1000	1.65	7	2.54	88.7	0.6
11/30/96	1000	1.75	9	2.09	109.2	0.6
12/07/96	1000	1.50	9	25.13	61.0	4.1
12/09/96	1214	1.96	0	12.68	160.9	5.5
12/09/96	1241	1.93	0	31.04	152.8	12.8
12/14/96	1000	1.50	9	36.90	61.0	6.1
02/28/97	1000	6.50	5	36.47	2967.0	292.2
03/01/97	1000	7.10	5	32.30	3538.0	308.6
03/05/97	1000	6.50	5	28.05	2967.0	224.7
03/05/97	1150	3.91	3	38.02	1006.0	103.3
03/05/97	1213	3.87	3	47.82	982.7	126.9
03/15/97	1000	3.50	9	80.72	776.1	169.1
03/22/97	1000	3.00	9	74.48	530.0	106.6
03/29/97	1000	2.50	11	64.06	320.0	55.3
04/05/97	1000	2.50	11	71.27	320.0	61.6
04/12/97	1000	2.15	12	63.96	213.0	36.8
04/19/97	1000	2.05	12	71.21	185.3	35.6
04/22/97	1140	2.62	12	39.75	365.0	39.2
04/22/97	1156	2.63	12	48.05	369.0	47.9
04/26/97	1000	1.85	11	68.61	132.2	24.5
05/03/97	1000	1.80	11	62.61	120.0	20.3

#123 – Mazon River near Coal City, IL (USGS #05542000)
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>
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Water Year 1997 (concluded)

05/10/97	1000	1.80	11	77.04	120.0	25.0	
05/17/97	1000	1.90	11	83.33	145.0	32.6	
05/24/97	1000	2.15	11	84.40	213.0	48.5	
05/31/97	1000	1.95	11	79.69	158.2	34.0	
06/05/97	1134	1.85	21	78.05	132.2	27.9	
06/05/97	1151	1.86	21	77.85	134.7	28.3	
06/07/97	1000	1.95	13	117.14	158.2	50.0	
06/14/97	1000	2.00	13	113.64	172.0	52.8	
06/21/97	1000	3.50	14	103.82	776.1	217.5	
06/28/97	1000	2.50	20	60.81	320.0	52.5	
07/05/97	1000	1.45	20	50.70	53.2	7.3	
07/12/97	1000	1.40	26	17.70	46.0	2.2	
07/19/97	1000	1.40	25	18.86	46.0	2.3	
07/23/97	1156	1.51	25	19.39	62.7	3.3	
07/23/97	1212	1.53	25	26.48	66.1	4.7	
07/28/97	1000	1.55	26	10.32	69.7	1.9	
08/02/97	1000	1.55	26	51.93	69.7	9.8	
08/09/97	1000	1.40	26	27.97	46.0	3.5	
08/16/97	1000	1.65	24	20.26	88.7	4.9	
08/23/97	1000	1.20	24	36.62	22.0	2.2	
08/30/97	1000	1.40	24	6.90	46.0	0.9	
09/06/97	1000	1.30	23	7.29	33.0	0.6	
09/13/97	1000	1.20	22	19.66	22.0	1.2	
09/20/97	1000	1.25	24	7.20	27.2	0.5	
09/27/97	1000	1.05	20	62.79	8.4	1.4	

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

Date	Time	Gage Ht	Temp (°C)	Cs (mg/l)	Qw (cfs)	Qs (t/d)	Remarks
Water Year 1996							
10/08/95	1516	0.95	18	64.36	967.9	168.2	
10/19/95	1752	0.88	17	45.99	830.3	103.1	
10/29/95	1430	1.12	11	98.06	1346.0	356.4	
11/18/95	1510	2.51	5	15.07	6538.0	266.0	
11/26/95	1354	1.95	6	60.30	4087.0	665.4	
12/03/95	1420	1.67	8	81.48	2996.0	659.1	
02/25/96	1645	1.33	4	50.64	1899.0	259.6	
03/05/96	1454	1.99	2	15.74	4257.0	181.0	
04/19/96	1007	1.48	14	78.41	2352.0	497.9	
04/30/96	1220	2.81	11	60.68	8053.0	1319.4	
05/05/96	1656	2.56	14	54.74	6781.0	1002.2	
05/12/96	1314	4.15	13	251.13	15730.0	10665.9	
05/20/96	1600	3.36	22	116.39	11080.0	3481.8	
05/27/96	1420	3.95	15	111.75	14500.0	4375.1	
05/30/96	1045	6.02	16	314.92	28340.0	24097.0	
06/05/96	1058	4.44	19	111.86	17600.0	5315.8	
06/13/96	1428	3.82	23	101.15	13730.0	3749.7	
06/23/96	1515	4.45	25	122.91	17670.0	5864.1	
07/02/96	1611	2.51	28	74.24	6538.0	1310.6	
07/06/96	1136	2.11	26	45.14	4746.0	578.5	
07/13/96	0926	1.51	24	80.64	2449.0	533.2	
07/19/96	1008	5.93	25	363.97	27700.0	27221.5	
07/23/96	1017	5.62	21	182.80	25500.0	12585.5	
07/30/96	1141	4.40	23	62.92	17340.0	2945.6	
08/07/96	1535	3.04	28	41.16	9300.0	1033.5	
08/13/96	1105	2.53	24	30.89	6635.0	553.3	
08/20/96	1000	2.05	25	16.30	4500.0	198.0	
08/26/96	0938	1.66	25	10.84	2961.0	86.6	
09/01/96	1543	1.43	27	33.17	2196.0	196.7	
09/12/96	1345	1.32	22	14.43	1871.0	72.9	
09/19/96	1203	1.32	18	16.05	1871.0	81.1	
09/27/96	1340	1.49	16	12.41	2384.0	79.9	
Water Year 1997							
10/14/96	1348	1.22	17	5.84	1598.0	25.2	
10/20/96	1015	1.39	11	6.10	2075.0	34.2	
10/28/96	1537	1.58	15	7.87	2682.0	57.0	
11/22/96	1601	1.85	5	5.59	3678.0	55.5	
12/07/96	1406	2.53	4	10.80	6635.0	193.5	
12/14/96	1434	3.20	6	118.26	10170.0	3247.2	

#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>
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Water Year 1997 (concluded)

12/23/96	1540	4.84	3	8.29	20220.0	452.6
12/29/96	1332	2.89	2	49.73	8481.0	1138.8
01/03/97	1158	2.69	7	17.37	7430.0	348.4
02/22/97	1410	7.22	4	544.84	37150.0	54650.1
02/26/97	1524	7.30	3	385.11	37760.0	39262.8
03/09/97	1406	4.30	6	31.69	16690.0	1427.9
03/19/97	1539	4.05	7	75.40	15110.0	3076.0
03/24/97	1445	3.98	8	70.42	14680.0	2791.3
03/28/97	1022	2.93	11	72.94	8699.0	1713.2
04/03/97	0941	2.95	12	61.58	8809.0	1464.7
04/13/97	1613	3.12	9	35.78	9733.0	940.4
04/21/97	0949	2.49	12	78.52	6443.0	1366.0
04/29/97	1004	2.20	14	82.10	5127.0	1136.4
05/06/97	0940	3.10	13	115.54	9624.0	3002.2
05/12/97	1550	2.20	16	94.93	5127.0	1314.1
05/21/97	1310	2.58	17	187.66	6879.0	3485.5
05/28/97	1415	3.67	16	195.05	12860.0	6772.4
06/04/97	1456	3.46	19	87.16	11660.0	2743.9
06/11/97	1520	5.36	20	78.71	23710.0	5038.8
06/20/97	1159	4.26	24	85.14	16430.0	3777.0
06/25/97	1350	3.20	27	58.59	10170.0	1608.8
06/30/97	1130	2.70	26	81.96	7481.0	1655.5
07/07/97	1201	2.24	24	57.85	5300.0	827.8
07/14/97	1139	2.11	29	51.80	4746.0	663.7
07/22/97	1421	2.01	26	34.75	4340.0	407.2
07/28/97	1010	2.46	28	42.66	6300.0	725.7
08/04/97	1450	1.65	28	35.55	2925.0	280.7
08/11/97	1621	1.52	23	14.65	2482.0	98.2
08/18/97	1051	3.67	22	150.77	12860.0	5235.1
08/31/97	1550	1.79	26	36.88	3443.0	342.8
09/06/97	1705	1.46	25	41.76	2289.0	258.1
09/13/97	1352	1.42	22	47.07	2165.0	275.1
09/20/97	1642	1.45	23	25.41	2258.0	154.9

#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>
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Water Year 1996

10/06/95	0805	1.32	15	94.92	821.4	210.5
10/18/95	0810	1.22	12	110.18	706.4	210.1
11/18/95	0800	2.85	35	32.76	3429.0	303.3
01/18/96	1000	1.76	-	92.61	1425.0	356.3
03/18/96	0815	1.94	-	82.86	1717.0	384.1
04/29/96	1522	3.24	-	45.69	4187.0	516.5
05/30/96	1600	3.68	-	133.13	5087.0	1828.6
06/22/96	0810	3.99	-	77.82	5758.0	1209.8

Water Year 1997

10/22/96	1839	2.10	13	66.61	2000.0	359.7
10/28/96	0944	2.99	13	96.29	3701.0	962.2
11/06/96	1551	2.92	10	91.32	3568.0	879.7
11/13/96	1700	2.62	5	41.94	2980.0	337.5
11/20/96	1455	2.46	5	99.59	2663.0	716.1
11/27/96	1432	2.52	4	88.25	2779.0	662.1
12/03/96	1426	2.81	3	84.95	3350.0	768.4
12/11/96	1301	3.46	1	44.35	4625.0	553.8
08/12/97	1424	2.43	20	58.34	2606.0	410.5

#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 1996							
10/01/95	0910	3.52	5	77.70	240.5	50.5	*GH
10/11/95	0800	2.60	5	124.93	79.8	26.9	*GH
10/16/95	1407	2.65	13	66.83	86.03	15.5	
10/16/95	1428	2.64	13	76.56	84.77	17.5	
10/18/95	0930	2.59	4	134.94	78.63	28.6	*GH
10/25/95	1015	2.58	4	112.13	77.44	23.4	
11/01/95	0835	3.13	4	100.52	159.9	43.4	
11/08/95	0900	3.28	4	113.19	188.7	57.7	
11/15/95	0930	4.07	2	100.21	384.2	103.9	
11/22/95	0805	3.64	2	125.40	269.3	91.2	
11/29/95	0910	3.50	0	116.80	235.9	74.4	*GH
11/30/95	1455	3.32	4	115.27	196.8	61.2	
11/30/95	1517	3.31	4	136.75	194.7	71.9	
12/06/95	1015	3.33	4	94.01	198.9	50.5	
12/13/95	0900	3.50	3	144.40	235.9	92.0	
12/21/95	1200	3.22	3	129.15	176.8	61.7	*GH
12/27/95	0805	2.92	1	137.51	124.3	46.2	
01/03/96	1600	2.91	2	136.74	122.7	45.3	*GH
01/10/96	1010	2.74	1	121.20	97.9	32.0	
01/17/96	0930	3.13	0	113.64	159.9	49.1	
01/25/96	1530	3.96	0	144.82	353.7	138.3	
01/31/96	0930	3.19	0	146.30	171.1	67.6	*GH
02/07/96	1030	3.20	1	139.24	173.0	65.0	
02/14/96	1030	3.96	0	43.64	353.7	41.7	
02/20/96	0930	3.39	0	141.18	211.5	80.6	
02/28/96	1000	3.56	0	136.41	249.9	92.0	
03/07/96	0830	3.75	0	240.83	297.4	193.4	
03/13/96	1030	3.69	2	255.34	281.9	194.3	
03/18/96	1452	3.25	7	52.48	182.7	25.9	
03/18/96	1519	3.25	7	35.56	182.7	17.5	
03/20/96	0830	3.22	2	235.20	176.8	112.3	
03/27/96	0930	3.24	2	136.60	180.7	66.6	
04/04/96	0800	3.14	2	232.54	161.8	101.6	
04/10/96	0930	3.00	3	202.79	137.2	75.1	
04/18/96	0900	3.31	4	200.51	194.7	105.4	
04/24/96	1100	3.40	7	202.91	213.7	117.1	
05/01/96	0830	3.92	9	189.45	342.5	175.2	
05/07/96	0800	4.05	11	225.29	378.7	230.4	
05/09/96	1424	8.35	17	2765.97	1958.0	14622.6	
05/09/96	1445	8.40	17	2860.63	1979.0	15285.2	
05/15/96	0905	6.85	9	86.15	1351.0	314.3	

#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>
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Water Year 1996 (concluded)

05/22/96	0800	5.71	10	78.41	928.9	196.6	
05/29/96	0730	20.54	12	86.81	9633.0	2257.7	
06/05/96	1100	14.87	11	75.45	5469.0	1114.1	
06/12/96	0900	7.94	11	95.11	1784.0	458.1	*GH
06/19/96	0800	6.97	11	85.83	1398.0	324.0	*GH
06/24/96	1438	5.86	27	297.65	983.1	790.1	
06/24/96	1456	5.88	27	285.46	990.5	763.4	
06/26/96	1030	5.43	13	77.07	826.8	172.1	*GH
07/03/96	0830	4.65	13	66.91	560.1	101.2	
07/10/96	0930	4.04	9	79.30	375.9	80.5	
07/17/96	1030	3.89	10	83.37	334.3	75.2	
07/24/96	0800	5.37	14	124.58	805.1	270.8	
07/30/96	0930	4.05	13	78.38	378.7	80.1	
08/07/96	1015	3.39	15	66.30	211.5	37.9	
08/13/96	0700	2.97	15	67.72	132.3	24.2	
08/21/96	0730	3.28	18	65.93	188.7	33.6	
08/28/96	0830	2.84	18	76.62	112.1	23.2	
09/03/96	0630	2.55	17	80.55	73.9	16.1	
09/03/96	1420	2.60	27	71.35	79.8	15.4	
09/03/96	1432	2.60	27	71.50	79.8	15.4	
09/11/96	0710	2.52	18	83.41	70.5	15.9	
09/18/96	0630	2.50	18	65.04	68.3	12.0	
09/24/96	0600	2.29	19	77.04	47.3	9.8	

Water Year 1997

10/01/96	0630	2.52	18	57.63	70.5	11.0
10/09/96	0600	2.23	17	49.09	42.2	5.6
10/15/96	0700	2.23	18	60.75	42.2	6.9
10/15/96	1407	2.24	18	45.05	43.0	5.2
10/15/96	1424	2.24	18	89.01	43.0	10.3
10/23/96	1000	2.70	4	183.67	92.5	45.9
10/30/96	0930	2.46	5	120.94	63.9	20.9
11/06/96	1100	2.47	8	110.21	65.0	19.3
11/13/96	0900	2.58	4	174.14	77.4	36.4
11/20/96	0800	2.96	4	115.84	130.7	40.9
11/27/96	1030	2.43	4	198.64	60.8	32.6
12/03/96	0900	2.84	4	191.47	112.1	58.0
12/11/96	0930	2.71	3	166.74	93.8	42.2
12/11/96	1438	2.77	2	97.41	102.0	26.8
12/11/96	1453	2.77	2	97.20	102.0	26.8
12/18/96	0800	2.59	3	102.58	78.6	21.8

#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 1997 (continued)							
12/26/96	0730	2.57	3	157.94	76.3	32.5	
01/02/97	0930	2.71	3	118.69	93.8	30.1	
01/08/97	0800	2.86	5	126.34	115.1	39.3	
01/15/97	1430	2.29	4	106.77	47.3	13.6	
01/22/97	0830	2.91	4	158.24	122.7	52.4	
01/29/97	0900	3.64	6	174.18	269.3	126.7	
02/04/97	0830	5.47	4	84.19	841.5	191.3	
02/12/97	0730	3.63	3	174.76	266.8	125.9	
02/19/97	0900	5.39	2	112.65	812.3	247.1	
02/26/97	0700	7.05	3	161.86	1429.0	624.5	
03/03/97	1456	11.84	5	660.76	3670.0	6547.4	
03/03/97	1515	11.77	5	678.64	3632.0	6655.1	
03/05/97	0900	8.53	2	91.68	2036.0	504.0	
03/12/97	0745	5.91	8	166.60	1002.0	450.7	
03/19/97	1100	5.48	9	203.91	845.2	465.3	
03/26/97	0800	5.17	10	124.41	734.4	246.7	
04/02/97	0930	4.48	9	141.99	506.3	194.1	
04/09/97	0715	4.26	10	170.17	439.0	201.7	
04/15/97	0800	9.87	9	185.07	2654.0	1326.2	
04/21/97	1424	6.18	-	58.76	1099.0	174.3	
04/21/97	1441	6.18	-	60.17	1099.0	178.5	
04/23/97	1000	5.76	9	136.36	1099.0	404.6	
04/30/97	1600	4.99	9	111.69	672.4	202.8	
05/07/97	0930	4.70	10	167.41	576.5	260.6	
05/14/97	1400	4.38	11	181.75	475.7	233.4	
05/21/97	0830	4.57	14	188.09	534.5	271.4	
05/28/97	0800	4.92	13	118.24	649.1	207.2	
06/04/97	0920	4.10	15	140.98	392.6	149.4	
06/04/97	1337	4.10	20	169.11	392.6	179.3	
06/04/97	1351	4.10	20	168.09	392.6	178.2	
06/11/97	0800	4.58	6	68.17	537.6	99.0	
06/18/97	0730	6.07	7	95.45	1060.0	273.2	
06/25/97	0800	4.15	7	85.98	406.8	94.4	
07/02/97	0930	4.39	6	79.64	478.9	103.0	
07/10/97	1000	3.43	7	97.68	220.2	58.1	
07/16/97	0730	3.19	5	89.00	171.1	41.1	
07/22/97	1421	6.25	26	1109.75	1124.0	3367.9	
07/22/97	1437	6.25	26	1075.39	1124.0	3263.6	
07/23/97	0730	4.73	5	86.52	586.5	137.0	
07/30/97	0700	2.81	7	112.92	107.7	32.8	
08/06/97	0830	2.90	8	109.09	121.2	35.7	

#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>Qw (cfs)</i>	<i>Qs (t/d)</i>	<i>Remarks</i>
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Water Year 1997 (concluded)

08/13/97	0800	4.53	8	85.59	521.9	120.6	
08/20/97	0630	7.37	8	89.62	1553.0	375.8	
08/27/97	0800	4.01	9	89.40	367.7	88.8	
09/03/97	0700	10.20	8	94.97	2815.0	721.8	
09/09/97	1312	4.13	22	176.93	401.1	191.6	
09/09/97	1321	4.14	22	159.30	403.9	173.7	
09/10/97	0730	4.01	6	83.88	367.7	83.3	
09/17/97	0800	3.84	5	86.81	320.9	75.2	
09/25/97	0900	3.61	6	100.18	261.9	70.8	

#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 1996							
10/01/95	1745	9.67	19	1605.41	888.9	3853.0	
10/08/95	1730	3.17	14	971.23	41.8	109.7	
10/15/95	1630	2.91	14	1142.77	27.7	85.5	
10/22/95	1500	2.35	12	99.27	7.7	2.1	
10/29/95	1415	3.07	11	19.88	36.4	2.0	
11/05/95	1530	5.32	4	41.87	235.4	26.6	
11/13/95	1345	5.73	2	101.84	286.2	78.7	
11/19/95	1655	4.50	5	13.43	148.0	5.4	
11/26/95	1500	4.04	5	52.83	106.2	15.1	
11/30/95	1248	3.70	3	78.66	78.0	16.6	
01/22/96	1410	7.27	0	205.16	495.4	274.4	
02/14/96	1400	5.65	1	45.51	275.8	33.9	
02/27/96	1240	6.75	5	727.10	419.9	824.3	
03/05/96	1315	10.30	1	3969.40	1000.0	10717.4	*Cs (mg/l)
03/12/96	1645	5.02	8	72.82	202.1	39.7	
03/18/96	1255	4.96	7	49.10	195.5	25.9	
03/18/96	1318	4.95	7	42.05	194.3	22.1	
03/20/96	1745	4.65	6	67.74	162.5	29.7	
03/27/96	1745	4.69	5	53.11	166.6	23.9	
04/03/96	1315	5.00	14	42.33	200.0	22.9	
04/09/96	1345	4.35	10	50.28	133.3	18.1	
04/16/96	1255	8.49	10	675.55	681.7	1243.4	
04/22/96	1915	4.36	15	111.04	134.3	40.3	
04/29/96	1715	5.31	11	108.52	234.3	68.7	
05/06/96	1735	7.28	14	321.73	497.0	431.7	
05/09/96	1200	23.15	17	1289.58	11820.0	41155.7	
05/09/96	1242	23.16	17	1280.46	11860.0	41002.8	
05/13/96	1415	17.72	14	376.93	2778.0	2827.2	
05/20/96	1820	7.29	20	184.13	498.5	247.8	
05/27/96	1630	23.10	14	1009.21	11610.0	31635.6	
06/03/96	1320	16.94	19	970.08	2481.0	6498.3	
06/11/96	1835	9.21	18	234.00	806.6	509.6	
06/17/96	1430	7.43	25	310.62	518.5	434.8	
06/24/96	1234	8.96	26	1099.12	762.0	2261.3	
06/24/96	1430	8.57	25	621.17	695.0	1165.6	
07/01/96	1930	4.12	28	82.19	112.8	25.0	
07/07/96	1930	4.16	26	269.27	116.2	84.5	
07/14/96	1840	4.15	22	239.69	115.4	74.7	
07/21/96	1935	21.30	21	1314.33	6171.0	21899.0	
07/28/96	1900	5.71	24	122.76	283.6	94.0	
08/04/96	1745	4.36	23	57.51	134.3	20.9	

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

Date	Time	Gage Ht	Temp (°C)	Cs (mg/l)	Qw (cfs)	Qs (t/d)	Remarks
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Water Year 1996 (concluded)

08/11/96	1400	3.75	24	40.94	81.8	9.0
08/18/96	1535	3.53	23	53.00	66.0	9.4
08/26/96	1600	3.43	25	82.21	58.7	13.0
09/01/96	1000	3.08	22	65.44	37.0	6.5
09/03/96	1210	2.97	25	90.91	31.2	7.6
09/03/96	1224	2.98	25	251.70	31.8	21.6
09/08/96	1430	2.86	23	901.47	25.1	61.0
09/15/96	1000	2.83	16	509.83	23.6	32.5
09/22/96	1300	2.64	17	649.03	15.4	27.0
09/29/96	1615	3.49	16	933.21	63.2	159.3

Water Year 1997

10/06/96	1730	2.66	16	236.44	16.2	10.3	
10/13/96	1300	2.80	15	428.02	22.2	25.6	
10/15/96	1211	2.74	17	56.83	19.6	3.0	
10/15/96	1227	2.73	17	32.33	19.2	1.7	
10/20/96	1845	2.68	14	416.22	17.1	19.2	
10/27/96	1600	3.00	15	385.36	33.0	34.3	
11/03/96	1140	2.77	6	206.38	20.9	11.6	
11/10/96	1620	3.25	4	1870.03	46.6	235.0	*Cs (mg/l)
11/17/96	1500	2.90	6	1256.60	27.2	92.1	*Cs (mg/l)
11/24/96	1130	2.96	4	1083.41	30.6	89.4	*Cs (mg/l)
12/01/96	1610	3.23	4	2482.88	45.3	303.9	*Cs (mg/l)
12/03/96	1545	3.92	6	191.80	95.9	49.6	
12/08/96	1605	3.10	2	354.13	38.0	36.3	
12/11/96	1243	3.07	2	278.77	36.4	27.4	
12/15/96	1608	3.08	4	456.14	37.0	45.5	
01/05/97	1100	3.30	3	462.70	49.7	62.1	
02/19/97	1715	5.35	1	74.18	238.9	47.9	
03/02/97	1030	15.25	6	413.84	2049.0	2289.5	
03/03/97	1303	12.17	6	259.95	1377.0	966.5	
03/03/97	1323	12.20	6	240.71	1384.0	899.5	
03/09/97	1515	11.42	8	1541.01	1219.0	5071.9	*Cs (mg/l)
03/16/97	1230	6.75	9	75.46	419.9	85.6	
03/23/97	1300	5.86	11	68.72	303.6	56.3	
03/30/97	1000	6.33	11	56.95	363.9	56.0	
04/06/97	1400	5.95	14	76.15	316.0	65.0	
04/13/97	1615	18.08	5	376.55	2924.0	2972.8	
04/20/97	0915	8.10	12	281.00	619.0	469.6	
04/21/97	1205	7.68	12	80.17	554.9	120.1	
04/21/97	1230	7.68	12	88.41	554.9	132.5	

#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 1997 (concluded)							
04/27/97	1300	5.00	14	39.59	200.0	21.4	
05/04/97	1500	11.58	13	489.10	1252.0	1653.3	
05/11/97	1815	6.50	16	103.07	386.1	107.4	
05/25/97	1405	4.97	17	69.55	196.6	36.9	
06/01/97	1700	7.43	19	169.68	518.5	237.5	
06/04/97	1140	6.35	19	126.87	366.5	125.5	
06/04/97	1154	6.35	19	133.48	366.5	132.1	
06/08/97	1600	9.36	18	1184.83	834.0	2668.0	*Cs (mg/l)
06/15/97	1525	15.53	20	437.44	2105.0	2486.2	
06/22/97	1400	7.57	23	244.23	538.7	355.2	
06/29/97	1100	5.56	25	136.25	264.4	97.3	
07/06/97	1600	4.80	24	446.42	178.0	214.5	
07/13/97	1545	3.00	27	68.09	33.0	6.1	
07/20/97	1630	3.40	28	35.23	56.5	5.4	
07/22/97	1224	4.05	27	106.94	107.0	30.9	
07/22/97	1239	4.05	27	152.10	107.0	43.9	
07/27/97	1200	3.30	30	72.66	49.7	9.8	
08/03/97	1045	2.82	25	60.07	23.1	3.7	
08/10/97	0945	2.62	22	83.86	14.6	3.3	
08/17/97	1145	3.06	26	124.16	35.9	12.0	
08/24/97	1230	2.75	22	93.90	20.0	5.1	
08/31/97	1410	4.22	23	305.30	121.4	100.1	
09/07/97	1415	2.96	21	78.86	30.6	6.5	
09/09/97	1130	4.55	22	237.04	152.7	97.7	
09/09/97	1142	4.55	22	259.72	152.7	107.1	
09/14/97	1500	2.85	20	132.51	24.6	8.8	
09/21/97	1130	2.95	19	85.50	30.0	6.9	
09/28/97	1030	2.73	18	77.07	19.2	4.0	

#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 1996							
10/02/95	0810	7.89	26	266.95	516.1	372.0	
10/09/95	0800	7.92	24	97.44	522.6	137.5	
10/16/95	0800	7.95	24	96.09	529.1	137.3	
10/16/95	1017	5.36	13	60.84	93.7	15.4	
10/16/95	1056	5.36	13	59.59	93.7	15.1	
10/23/95	0810	6.45	24	96.22	243.4	63.2	
10/30/95	0810	6.32	22	498.45	222.8	299.8	
11/06/95	0800	6.30	20	512.56	219.6	303.9	
11/13/95	0815	6.16	18	206.73	198.3	110.7	
11/20/95	0810	6.16	20	176.66	198.3	94.6	
11/27/95	0745	6.20	20	95.07	204.3	52.4	
11/30/95	1045	6.24	3	52.29	210.4	29.7	
11/30/95	1123	6.24	3	59.09	210.4	33.6	
12/04/95	0800	13.12	1	180.97	2132.0	1041.7	
12/11/95	0820	13.20	6	55.33	2164.0	323.3	
12/18/95	0810	13.44	1	64.95	2263.0	396.8	
12/25/95	0800	12.79	1	68.74	2000.0	371.2	
01/01/96	0730	12.60	2	71.78	1926.0	373.3	
01/08/96	0800	12.45	2	72.74	1869.0	367.1	
01/15/96	0810	11.95	2	76.71	1682.0	348.4	
01/22/96	0800	11.90	1	72.86	1665.0	327.5	
01/29/96	0820	11.64	1	57.68	1574.0	245.1	
02/05/96	0800	11.52	5	74.87	1533.0	309.9	
02/19/96	0810	11.90	5	130.47	1665.0	586.5	
02/26/96	0800	12.12	0	46.96	1744.0	221.1	
03/04/96	0810	12.23	1	67.92	1785.0	327.3	
03/11/96	0800	11.95	2	121.20	1682.0	550.4	
03/18/96	1046	7.42	8	88.24	418.6	99.7	*GH
03/18/96	1128	7.42	8	88.03	418.6	99.5	*GH
03/25/96	0800	12.48	1	47.73	1880.0	242.3	
04/01/96	0800	12.72	2	55.19	1973.0	294.0	
04/08/96	0800	12.62	2	56.64	1934.0	295.7	
04/15/96	0800	11.85	3	65.77	1647.0	292.5	
04/22/96	1142	12.23	3	74.64	1785.0	359.7	
05/09/96	0950	27.93	16	1894.22	21560.0	110266.6	
05/09/96	1026	27.84	16	1864.46	21260.0	107023.8	
05/22/96	0800	10.90	10	190.59	1327.0	682.9	
05/28/96	0750	10.64	11	43.40	1244.0	145.8	
06/04/96	0800	11.68	11	125.90	1588.0	539.8	
06/11/96	0800	11.68	16	55.22	1588.0	236.8	
06/18/96	0815	10.95	13	113.56	1343.0	411.8	

#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 1996 (concluded)							
06/24/96	1048	9.89	26	282.68	1019.0	777.7	
06/24/96	1108	10.11	26	317.99	1082.0	929.0	
06/25/96	0800	11.05	16	53.79	1376.0	199.8	
07/09/96	0815	11.48	17	129.44	1519.0	530.9	
07/16/96	0815	11.72	13	119.72	1602.0	517.9	
07/23/96	0800	10.82	10	45.78	1301.0	160.8	
08/06/96	0800	10.19	14	55.95	1106.0	167.1	
08/20/96	0810	8.21	10	125.54	587.3	199.1	
08/27/96	0800	8.05	9	52.24	551.1	77.7	
09/03/96	1017	5.68	23	81.81	131.9	29.1	
09/03/96	1053	5.68	23	80.55	131.9	28.7	
09/17/96	0800	7.56	2	56.89	446.8	68.6	
Water Year 1997							
10/08/96	0800	8.11	2	158.46	564.6	241.6	
10/15/96	1020	5.47	16	28.05	106.3	8.0	
10/15/96	1041	5.46	16	25.99	105.1	7.4	
10/22/96	0800	8.61	2	135.70	681.5	249.7	
11/05/96	0810	6.58	25	281.64	264.7	201.3	
11/12/96	0800	7.03	24	312.48	343.8	290.1	
11/19/96	0815	7.19	18	288.90	373.8	291.6	
11/26/96	0800	8.34	20	299.02	617.3	498.4	
12/03/96	0800	8.51	14	277.07	657.5	491.9	
12/10/96	0750	8.77	10	230.79	720.8	449.2	
12/11/96	1043	5.82	3	28.00	150.2	11.4	
12/11/96	1106	5.82	3	27.46	150.2	11.1	
12/17/96	0800	9.11	10	279.26	806.9	608.4	
12/24/96	0810	9.38	6	300.58	878.0	712.6	
12/31/96	0800	9.46	12	268.43	899.5	651.9	
01/07/97	0800	9.31	10	287.07	859.4	666.1	
01/14/97	0815	9.46	22	260.02	899.5	631.5	
01/21/97	0810	9.41	20	297.10	886.1	710.8	
01/28/97	0800	9.62	15	293.83	943.2	748.3	
02/04/97	0830	9.94	18	225.60	1033.0	629.2	
02/11/97	0810	9.82	18	293.82	998.8	792.4	
02/18/97	0815	9.71	10	259.41	968.1	678.1	
02/25/97	0800	10.40	12	442.48	1170.0	1397.8	
03/03/97	1127	20.65	5	256.43	6778.0	4692.9	
03/03/97	1145	20.65	5	240.64	6778.0	4403.8	
03/04/97	0800	12.19	18	305.32	1770.0	1459.1	
03/11/97	0800	13.65	20	265.17	2351.0	1683.2	

#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 1997 (concluded)							
03/18/97	0800	13.75	22	294.78	2393.0	1904.6	
03/25/97	0800	9.41	12	299.22	886.1	715.9	
04/01/97	0810	14.58	15	265.57	2764.0	1981.9	
04/08/97	0800	14.07	14	348.82	2531.0	2383.7	
04/15/97	0800	14.01	13	550.04	2504.0	3718.7	
04/21/97	1008	10.30	14	108.05	1139.0	332.3	
04/21/97	1055	10.30	14	106.11	1139.0	326.3	
04/22/97	0810	8.62	16	232.73	684.0	429.8	
04/29/97	0810	8.75	22	274.33	715.8	530.2	
05/06/97	0800	9.48	21	267.53	904.9	653.6	
05/13/97	0810	9.52	22	280.95	915.8	694.7	
05/20/97	0800	9.13	22	310.93	812.1	681.8	
05/27/97	0810	10.39	19	307.17	1167.0	967.9	
06/03/97	0800	11.07	19	271.20	1382.0	1012.0	
06/04/97	0959	8.78	18	125.12	723.2	244.3	
06/04/97	1028	8.77	18	125.33	720.8	243.9	
06/10/97	0800	10.68	17	314.49	1257.0	1067.3	
06/17/97	0815	10.74	23	240.94	1276.0	830.1	
06/24/97	0810	9.41	25	450.09	886.1	1076.8	
07/07/97	0800	7.28	32	139.94	391.1	147.8	
07/14/97	0800	7.42	32	157.25	418.6	177.7	
07/21/97	0810	7.39	35	151.45	412.6	168.7	
07/22/97	1042	5.57	28	83.25	118.2	26.6	
07/22/97	1109	5.57	28	78.48	118.2	25.0	
07/28/97	0815	7.51	32	149.14	436.7	175.9	
08/04/97	0800	7.79	38	138.72	494.7	185.3	
08/11/97	0800	7.92	32	149.96	522.6	211.6	
08/18/97	0810	8.10	32	176.70	562.3	268.3	
08/25/97	0800	9.10	30	165.88	804.3	360.2	
09/01/97	0800	9.18	30	178.26	825.1	397.1	
09/08/97	0800	9.24	32	171.10	840.9	388.5	
09/09/97	1010	6.29	21	142.13	218.1	83.7	
09/09/97	1023	6.32	21	125.05	222.8	75.2	
09/15/97	0815	9.46	30	143.71	899.5	349.0	
09/22/97	0800	9.45	32	134.03	896.8	324.5	
09/29/97	0800	9.48	32	296.38	904.9	724.1	

#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>
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Water Year 1996

02/21/96	1331	5.40	1	13.63	89.1	3.3
03/02/96	1750	6.65	1	10.95	213.3	6.3
03/10/96	1635	6.55	1	90.32	201.3	49.1
03/17/96	1635	6.73	6	88.30	223.1	53.2
03/23/96	1300	6.68	6	80.65	217.0	47.2
03/30/96	1228	5.68	8	37.54	112.2	11.4
04/06/96	1310	6.89	9	88.12	243.5	57.9
04/12/96	1810	6.10	16	45.39	151.8	18.6
04/18/96	1130	5.67	12	33.35	111.3	10.0
04/26/96	1900	7.76	10	99.56	370.6	99.6
05/02/96	1830	8.66	12	112.17	531.4	160.9
05/06/96	1500	8.89	13	128.49	577.3	200.3
05/06/96	1542	8.96	13	139.24	591.7	222.5
05/09/96	1655	12.42	18	167.08	2183.0	984.8
05/15/96	1700	12.74	12	83.23	2487.0	558.9
05/26/96	1330	9.74	15	192.71	761.1	396.0
06/06/96	1800	12.10	17	116.46	1906.0	599.3
06/13/96	1145	10.64	18	175.15	1015.0	480.0
06/21/96	1910	8.90	23	158.82	579.4	248.5
06/27/96	1015	7.30	23	144.97	300.0	117.4
06/28/96	0916	7.13	24	143.54	275.8	106.9
06/28/96	0942	7.13	24	161.87	275.8	120.5
07/03/96	1820	6.35	24	72.43	178.4	34.9
07/10/96	1935	5.50	22	96.12	97.1	25.2
07/18/96	1130	5.16	26	62.88	71.6	12.2
07/28/96	1715	5.52	24	64.48	98.7	17.2
08/02/96	1930	5.74	23	34.01	117.4	10.8
08/09/96	1820	4.65	26	55.30	39.3	5.9
08/16/96	1900	4.34	24	47.01	22.6	2.9
08/24/96	1435	4.85	26	40.64	51.4	5.6
08/26/96	0932	4.45	20	38.26	28.1	2.9
08/26/96	0948	4.45	20	34.54	28.1	2.6
09/04/96	1850	4.20	24	50.92	16.5	2.3
09/17/96	1120	4.10	17	26.23	12.6	0.9
09/24/96	1115	4.09	18	59.49	12.3	2.0

Water Year 1997

10/05/96	1135	4.11	14	28.86	13.0	1.0
10/12/96	1156	4.00	13	125.96	9.4	3.2
10/18/96	1308	4.08	14	58.24	11.9	1.9
10/18/96	1327	4.08	14	83.06	11.9	2.7

#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 1997 (continued)							
10/25/96	0927	4.11	10	65.77	13.0	2.3	
11/07/96	1700	4.70	7	41.13	42.2	4.7	
11/16/96	1615	4.40	4	13.88	25.6	1.0	
11/23/96	1115	4.40	2	60.24	25.6	4.2	
11/30/96	1545	5.35	2	58.42	85.3	13.5	
12/07/96	1645	5.35	2	86.01	85.3	19.8	
12/12/96	0933	5.40	4	9.85	89.1	2.4	
12/12/96	0957	5.40	4	43.37	89.1	10.4	
12/14/96	1645	6.50	4	67.58	195.5	35.7	
01/02/97	1545	6.57	5	102.15	203.7	56.2	
02/08/97	1245	9.58	1	35.42	724.8	69.3	
02/18/97	1245	6.60	4	98.61	207.3	55.2	
02/25/97	1500	12.58	3	51.18	2332.0	322.3	
03/04/97	1427	12.15	7	59.67	1948.0	313.9	
03/04/97	1453	12.14	7	56.74	1939.0	297.0	
03/08/97	1515	9.69	6	94.82	749.7	191.9	
03/20/97	1300	9.59	10	127.35	727.0	250.0	
03/27/97	1130	9.09	10	109.69	618.6	183.2	
04/01/97	1530	8.65	11	98.09	529.5	140.2	
04/09/97	1700	8.99	8	87.31	597.9	140.9	
04/17/97	1345	8.90	11	96.06	579.4	150.3	
04/22/97	1455	7.00	14	43.58	258.1	30.4	
04/22/97	1519	7.00	14	46.93	258.1	32.7	
04/24/97	1145	6.75	12	101.72	225.6	62.0	
05/04/97	1530	10.00	13	147.75	821.8	327.8	
05/14/97	1015	6.80	12	108.14	231.9	67.7	
05/23/97	1715	6.05	18	112.91	146.8	44.8	
06/02/97	1515	10.40	15	80.15	933.6	202.0	
06/06/97	1048	10.17	17	110.26	862.7	256.8	
06/06/97	1106	10.17	17	141.15	862.7	328.8	
06/10/97	1045	11.85	16	103.90	1707.0	478.9	
06/20/97	1115	9.10	23	122.80	620.7	205.8	
06/28/97	1750	8.90	24	147.55	579.4	230.8	
07/05/97	1750	7.58	21	100.00	342.1	92.4	
07/12/97	1225	7.30	23	187.49	300.0	151.9	
07/20/97	1450	5.14	28	82.03	70.2	15.6	
07/23/97	1504	5.14	26	67.97	70.2	12.9	
07/23/97	1520	5.13	26	64.63	69.5	12.1	
07/30/97	1500	4.64	26	63.72	38.7	6.7	
08/09/97	1600	4.34	23	73.78	22.6	4.5	
08/19/97	1130	9.68	20	255.45	747.4	515.5	

#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>
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Water Year 1997 (concluded)

08/27/97	1715	5.07	24	96.24	65.5	17.0	
09/05/97	1105	5.74	19	58.75	117.4	18.6	
09/05/97	1121	5.74	19	65.16	117.4	20.7	
09/10/97	1135	6.05	18	34.47	146.8	13.7	
09/18/97	1245	5.64	22	34.80	108.7	10.2	
09/28/97	1600	4.44	17	64.41	27.6	4.8	

#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 1996							
10/04/95	1040	2.67	18	96.94	143.7	37.6	
10/10/95	1735	2.58	17	88.96	131.0	31.5	
10/19/95	1001	2.48	16	85.10	117.4	27.0	
10/19/95	1315	2.48	18	82.43	117.4	26.1	
10/19/95	1341	2.48	18	66.21	117.4	21.0	
10/31/95	1030	2.47	12	76.11	116.1	23.9	
11/07/95	1405	2.50	7	71.88	120.1	23.3	
11/15/95	1053	2.68	4	54.60	145.1	21.4	
11/22/95	1022	2.46	6	43.91	114.8	13.6	
11/29/95	1015	2.46	5	67.30	114.8	20.9	
12/05/95	1036	2.50	3	55.94	120.1	18.1	
12/05/95	1250	2.45	7	60.14	113.5	18.4	
12/05/95	1320	2.45	7	69.49	113.5	21.3	
12/20/95	1050	6.37	1	90.04	1006.0	244.6	
12/27/95	1030	6.53	1	77.79	1056.0	221.8	
01/03/96	1110	6.91	1	40.22	1180.0	128.1	
01/17/96	1345	6.33	5	81.97	993.3	219.8	
01/23/96	1045	12.68	6	38.98	3688.0	388.1	
01/31/96	1130	8.39	4	40.03	1729.0	186.9	
02/07/96	1015	6.22	3	45.01	959.4	116.6	
02/15/96	1358	5.33	2	44.64	704.3	84.9	
02/15/96	1412	5.33	2	42.40	704.3	80.6	
02/15/96	1444	5.33	2	43.13	704.3	82.0	
02/21/96	0930	4.19	8	86.54	423.5	99.0	
02/27/96	1045	4.36	3	102.29	461.9	127.6	
03/05/96	0855	6.73	4	102.75	1121.0	311.0	
03/12/96	1015	7.86	8	578.21	1526.0	2382.3	
03/19/96	0830	7.56	8	511.11	1412.0	1948.6	
03/27/96	1045	8.45	9	527.25	1752.0	2494.1	
04/02/96	1355	16.70	9	544.10	6256.0	9190.5	
04/02/96	1427	16.68	9	541.70	6240.0	9126.6	
04/03/96	1155	12.60	10	586.61	3649.0	5779.5	
04/10/96	1030	11.50	9	223.36	3100.0	1869.5	
04/14/96	1050	9.46	6	712.42	2163.0	4160.6	
04/24/96	1430	18.12	4	958.03	7451.0	19273.3	
05/07/96	1313	17.04	17	242.70	6526.0	4276.3	
05/07/96	1344	16.93	17	258.45	6438.0	4492.6	
05/09/96	1430	23.42	20	700.13	14770.0	27920.4	
05/15/96	1055	22.49	19	718.67	12970.0	25167.0	
05/22/96	0945	15.63	19	232.00	5489.0	3438.3	
05/30/96	1500	20.05	19	207.26	9496.0	5314.0	

#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 1996 (concluded)							
06/06/96	0935	13.45	19	510.41	4074.0	5614.4	
06/11/96	1215	15.62	19	536.51	5482.0	7941.1	
06/18/96	1313	15.53	24	1027.14	5420.0	15031.2	
06/18/96	1350	15.59	24	958.24	5461.0	14129.0	
06/20/96	0945	13.63	12	128.71	4176.0	1451.2	
06/26/96	1135	14.23	14	145.09	4534.0	1776.1	
07/03/96	0930	11.25	19	132.85	2977.0	1067.9	
07/10/96	1045	9.94	21	121.12	2370.0	775.0	
07/18/96	1505	9.15	25	126.70	2033.0	695.5	
07/24/96	1005	8.79	25	207.11	1886.0	1054.7	
07/31/96	0855	7.90	25	167.22	1541.0	695.7	
08/07/96	1455	7.80	27	145.27	1503.0	589.5	
08/08/96	1315	7.65	26	227.30	1446.0	887.4	
08/08/96	1339	7.65	26	233.11	1446.0	910.1	
08/14/96	1030	7.36	26	135.95	1338.0	491.1	
08/21/96	0945	6.72	26	139.98	1117.0	422.2	
08/28/96	1045	5.48	25	129.43	745.0	260.3	
09/04/96	1230	4.10	23	113.75	403.7	124.0	
09/13/96	1430	2.59	22	118.40	132.4	42.3	
09/18/96	0945	2.57	20	69.05	129.6	24.2	
09/18/96	1312	2.62	19	84.01	136.6	31.0	
09/18/96	1342	2.62	19	57.77	136.6	21.3	
09/25/96	1030	2.49	18	75.57	118.7	24.2	
Water Year 1997							
10/03/96	0855	2.39	14	65.72	105.7	18.8	
10/11/96	1130	2.33	12	76.68	98.2	20.3	
10/17/96	1105	2.21	16	74.65	83.9	16.9	
11/05/96	1319	2.24	11	66.15	87.4	15.6	
11/05/96	1343	2.24	11	64.00	87.4	15.1	
11/27/96	1405	7.21	5	695.48	1284.0	2411.1	
12/04/96	0905	7.14	5	97.97	1259.0	333.0	
12/11/96	1050	6.86	6	102.54	1163.0	322.0	
12/18/96	0930	6.70	5	97.16	1111.0	291.5	
12/23/96	1232	7.45	5	70.50	1371.0	261.0	
12/23/96	1255	7.45	5	71.30	1371.0	263.9	
12/26/96	1011	7.85	6	94.05	1522.0	386.5	
01/03/97	0955	6.15	5	96.85	938.1	245.3	
01/07/97	0922	4.76	5	237.37	557.3	357.2	
01/29/97	1045	5.93	4	231.50	872.5	545.4	
02/05/97	1130	6.49	5	679.46	1044.0	1915.3	*Cs (mg/l)

#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 1997 (continued)							
02/11/97	1303	11.76	2	315.89	3227.0	2752.3	
02/11/97	1336	11.76	2	205.88	3227.0	1793.8	
02/13/97	0935	8.45	5	199.65	1752.0	944.4	
02/19/97	1030	7.68	5	223.90	1457.0	880.8	
03/04/97	1115	14.35	5	204.61	4608.0	2545.7	
03/12/97	1030	18.15	6	148.30	7478.0	2994.3	
03/17/97	0915	16.70	7	138.36	6256.0	2337.1	
03/20/97	1304	16.28	6	133.26	5943.0	2138.4	
03/20/97	1337	16.25	6	135.50	5921.0	2166.2	
03/27/97	1045	17.65	8	251.40	7031.0	4772.4	
04/03/97	0800	11.70	8	179.15	3198.0	1546.9	
04/10/97	1345	6.85	9	153.43	1160.0	480.6	
04/17/97	1130	4.12	10	64.82	408.1	71.4	
04/25/97	0830	5.31	10	156.84	699.0	296.0	
05/02/97	1045	4.80	11	131.49	567.3	201.4	
05/06/97	1252	4.21	14	51.54	427.9	59.5	
05/06/97	1315	4.21	14	47.34	427.9	54.7	
05/08/97	0930	3.30	13	32.76	245.2	21.7	
05/14/97	1530	3.35	14	950.90	254.2	652.6	
05/22/97	0845	3.76	17	218.30	332.5	196.0	
05/29/97	1200	4.26	18	243.10	439.1	288.2	
06/02/97	0830	3.68	19	163.00	316.6	139.3	
06/09/97	1000	7.55	18	795.69	1408.0	3024.9	
06/18/97	1030	7.33	21	647.95	1327.0	2321.5	
06/18/97	1256	7.34	22	217.21	1331.0	780.6	
06/18/97	1321	7.34	22	216.93	1331.0	779.6	
06/26/97	1045	8.74	25	631.92	1866.0	3183.7	
07/03/97	0830	8.23	26	648.54	1667.0	2919.0	
07/09/97	1315	7.94	27	102.73	1557.0	431.9	
07/15/97	0930	7.61	27	373.17	1431.0	1441.8	
07/25/97	0800	3.75	30	108.90	330.5	97.2	
07/31/97	0815	3.26	28	48.44	238.1	31.1	
08/07/97	1256	2.60	23	94.67	133.7	34.2	
08/07/97	1320	2.60	23	82.40	133.7	29.7	
08/08/97	0930	3.18	28	66.29	224.2	40.1	
08/15/97	1450	2.94	27	46.13	184.5	23.0	
08/29/97	0830	2.73	23	70.70	152.4	29.1	
09/03/97	0730	2.76	24	23.40	156.8	9.9	
09/12/97	0745	2.69	22	52.99	146.5	21.0	
09/16/97	1302	2.43	24	64.54	110.9	19.3	
09/16/97	1329	2.43	24	73.18	110.9	21.9	
09/19/97	0805	2.65	21	35.68	140.8	13.6	

#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 1996							
10/06/95	1700	0.35	18	25.09	4.7	0.3	
10/14/95	1700	0.40	16	31.33	6.3	0.5	
10/19/95	1007	0.30	14	27.47	3.4	0.2	
10/24/95	1000	0.44	10	40.46	7.7	0.8	
10/30/95	1600	0.51	10	26.65	10.4	0.7	
11/04/95	1700	0.82	7	27.14	24.9	1.8	
11/14/95	0900	1.11	4	28.05	40.9	3.1	
11/21/95	0900	0.93	4	23.91	30.6	2.0	
11/28/95	1200	0.48	4	19.62	9.2	0.5	
12/05/95	1022	0.61	6	23.15	14.6	0.9	
12/12/95	1200	0.80	2	161.31	23.9	10.4	
12/20/95	1200	5.20	0	486.58	516.9	679.1	
12/24/95	1400	1.05	0	43.14	37.3	4.3	
01/01/96	1600	0.90	0	11.34	29.0	0.9	
01/17/96	1600	1.70	6	26.49	82.6	5.9	
01/23/96	1200	3.25	6	181.71	239.3	117.4	
02/13/96	1800	1.50	11	20.88	67.2	3.8	
02/15/96	1059	1.57	2	15.96	72.4	3.1	
02/15/96	1119	1.57	2	18.64	72.4	3.6	
02/18/96	1800	1.30	-	19.52	53.0	2.8	
02/26/96	1600	1.54	-	13.74	70.2	2.6	
03/04/96	1530	1.35	-	14.26	56.5	2.2	
03/11/96	1600	1.15	-	28.41	43.3	3.3	
03/18/96	1600	1.07	-	20.11	38.5	2.1	
03/25/96	1600	1.03	-	50.78	36.1	5.0	
03/26/96	1800	2.15	-	61.97	121.6	20.3	
04/01/96	1600	2.57	-	88.56	162.9	39.0	
04/02/96	1107	7.02	9	1143.69	844.0	2606.2	
04/02/96	1127	7.03	9	1104.99	846.0	2524.0	
04/11/96	1600	1.61	-	82.34	75.5	16.8	
04/16/96	1300	1.75	-	77.26	86.6	18.1	
04/24/96	1600	14.80	-	279.96	3140.0	2373.5	
04/29/96	1400	18.80	16	852.75	6856.0	15785.5	
05/06/96	1200	12.10	15	295.16	2080.0	1657.6	
05/07/96	1024	11.53	16	253.02	1918.0	1310.3	
05/07/96	1052	11.51	16	259.19	1913.0	1338.7	
05/13/96	0900	10.90	10	182.16	1754.0	862.7	
05/20/96	0900	8.75	20	499.54	1228.0	1656.3	
05/28/96	1730	7.65	21	1559.96	974.4	4104.1	
06/04/96	2000	4.75	22	621.48	445.8	748.0	
06/13/96	1600	7.05	25	1634.57	850.0	3751.3	

#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>
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Water Year 1996 (concluded)

06/17/96	1500	3.45	27	217.06	263.9	154.7
06/18/96	1016	3.59	25	250.48	281.6	190.4
06/18/96	1038	3.59	25	239.77	281.6	182.3
06/25/96	1600	1.75	30	118.79	86.6	27.8
07/02/96	1600	1.65	25	40.85	78.6	8.7
07/09/96	1600	1.60	27	47.19	74.7	9.5
07/12/96	2000	1.45	25	76.81	63.5	13.2
07/17/96	1600	1.40	26	104.67	59.9	16.9
07/24/96	1700	1.30	27	73.79	53.0	10.6
07/30/96	1700	1.90	25	83.59	99.2	22.4
08/06/96	1700	1.55	25	27.18	70.9	5.2
08/08/96	1026	1.02	26	38.66	35.5	3.7
08/08/96	1058	1.02	26	35.82	35.5	3.4
08/13/96	1900	1.05	26	22.37	37.3	2.3
08/20/96	1900	1.00	26	39.38	34.4	3.7
08/27/96	1000	1.05	25	60.28	37.3	6.1
09/03/96	1000	1.00	25	57.82	34.4	5.4
09/10/96	1200	0.90	25	37.99	29.0	3.0
09/18/96	1021	1.26	17	60.20	50.4	8.2
09/18/96	1041	1.26	17	61.93	50.4	8.4
09/19/96	1000	0.85	17	55.01	26.4	3.9
09/28/96	1000	1.90	15	92.86	99.2	24.9

Water Year 1997

10/04/96	1000	1.14	14	22.32	42.7	2.6
10/10/96	1000	0.62	13	20.25	15.1	0.8
10/17/96	1000	1.05	14	47.90	37.3	4.8
10/24/96	1000	2.35	14	65.95	140.7	25.1
10/29/96	1000	1.10	15	126.48	40.3	13.7
11/05/96	1022	0.89	9	14.25	28.5	1.1
11/05/96	1041	0.89	9	16.71	28.5	1.3
11/05/96	1700	0.75	13	94.96	21.2	5.4
11/08/96	1000	6.30	12	614.74	706.4	1172.5
11/14/96	1700	1.81	9	37.15	91.6	9.2
11/19/96	1700	1.43	6	32.81	62.1	5.5
11/26/96	1000	8.35	4	497.61	1132.0	1520.9
12/03/96	1000	3.43	6	37.51	261.4	26.5
12/11/96	1045	2.15	7	20.23	121.6	6.6
12/18/96	1030	2.05	4	127.36	112.5	38.7
12/23/96	1011	1.67	4	9.94	80.2	2.2
12/23/96	1032	1.67	4	11.82	80.2	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 1997 (continued)							
12/26/96	1100	2.85	2	207.65	193.1	108.3	
01/02/97	1600	2.60	4	15.72	166.1	7.1	
01/07/97	1600	2.00	4	12.20	108.0	3.6	
01/18/97	1100	5.40	3	254.08	549.5	377.0	
01/23/97	1100	8.50	4	1324.72	1167.0	4174.1	
01/27/97	1345	10.85	0	317.18	1741.0	1491.0	
02/03/97	1100	6.20	2	198.57	688.1	368.9	
02/10/97	1200	3.50	4	38.52	270.1	28.1	
02/11/97	1025	3.81	2	51.76	310.3	43.4	
02/11/97	1047	3.81	2	50.64	310.3	42.4	
02/17/97	1330	2.85	5	31.20	193.1	16.3	
02/22/97	1100	8.25	9	733.04	1108.0	2193.0	
02/28/97	1000	16.55	7	412.55	4498.0	5010.3	
03/08/97	1100	3.70	10	83.37	295.8	66.6	
03/10/97	1100	3.80	8	291.30	309.0	243.0	
03/15/97	1200	8.85	5	323.16	1253.0	1093.3	
03/20/97	1010	7.69	6	100.47	982.9	266.6	
03/20/97	1039	7.69	6	240.90	982.9	639.3	
03/28/97	1430	3.05	18	74.22	215.7	43.2	
04/04/97	1130	2.35	16	48.88	140.7	18.6	
04/07/97	1000	4.20	14	155.25	364.1	152.6	
04/14/97	0900	2.35	10	36.41	140.7	13.8	
04/23/97	1000	4.05	13	156.43	342.9	144.8	
04/29/97	1200	2.35	16	48.12	140.7	18.3	
05/06/97	1024	2.29	12	37.99	134.9	13.8	
05/06/97	1042	2.28	12	37.83	133.9	13.7	
05/08/97	1200	2.05	16	77.30	112.5	23.5	
05/15/97	1000	1.70	17	59.39	82.6	13.2	
05/20/97	1000	1.50	18	23.84	67.2	4.3	
05/27/97	1100	3.40	18	270.66	257.6	188.2	
06/02/97	0830	4.75	17	292.38	445.8	351.9	
06/08/97	1000	5.35	18	1132.89	541.3	1655.7	
06/14/97	1100	6.75	20	2607.03	791.3	5570.0	
06/18/97	1007	3.79	21	285.38	307.7	237.1	
06/18/97	1031	3.76	21	278.08	303.7	228.0	
06/19/97	1000	3.00	25	173.58	210.0	98.4	
06/24/97	1000	2.25	25	157.21	131.0	55.6	
07/01/97	2000	2.50	26	148.49	155.7	62.4	
07/08/97	1000	1.10	29	167.79	40.3	18.2	
07/19/97	1000	0.85	30	84.15	26.4	6.0	
07/25/97	1000	0.90	30	40.98	29.0	3.2	

#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>
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Water Year 1997 (concluded)

08/04/97	1000	0.95	28	53.69	31.7	4.6
08/07/97	1013	0.94	21	45.50	31.1	3.8
08/07/97	1032	0.94	21	44.12	31.1	3.7
08/16/97	2000	1.75	27	84.74	86.6	19.8
08/22/97	1000	2.85	26	235.84	193.1	123.0
08/29/97	1000	3.00	25	328.21	210.0	186.1
09/06/97	1400	1.00	25	146.03	34.4	13.6
09/12/97	1000	1.25	24	53.52	49.7	7.2
09/16/97	1018	0.90	22	36.86	29.0	2.9
09/16/97	1039	0.90	22	37.57	29.0	2.9
09/19/97	1100	0.90	23	61.60	29.0	4.8
09/26/97	1000	0.95	21	39.11	31.7	3.3

#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 1996							
10/02/95	1240	0.12	20	12.19	1.0	0.0	
10/09/95	1825	0.18	18	11.95	1.8	0.1	
10/16/95	1440	0.12	20	4.02	1.0	0.0	
10/20/95	1352	0.12	13	11.76	1.0	0.0	
10/24/95	1545	0.10	17	4.51	0.8	0.0	
10/30/95	1510	0.15	15	6.54	1.4	0.0	
11/08/95	1515	0.34	10	10.96	4.9	0.1	
11/15/95	1245	1.12	8	55.53	47.3	7.1	
11/22/95	1435	0.34	7	25.01	4.9	0.3	
11/30/95	1510	0.24	8	15.98	2.7	0.1	
12/07/95	1325	0.24	6	16.80	2.7	0.1	
12/07/95	1610	0.24	6	16.51	2.7	0.1	
12/14/95	1630	0.27	7	17.41	3.3	0.2	
12/21/95	0852	3.56	5	63.63	289.7	49.8	
12/28/95	1635	0.80	2	24.92	24.7	1.7	
01/05/96	1505	1.70	2	58.87	90.0	14.3	
01/12/96	1205	1.45	2	23.86	70.4	4.5	
01/19/96	1650	4.07	4	205.69	360.1	200.0	*GH
01/26/96	1410	4.99	6	89.30	501.7	121.0	
02/07/96	1620	1.18	3	16.81	51.2	2.3	
02/12/96	1715	1.11	3	15.50	46.6	2.0	
02/20/96	1615	1.11	8	22.33	46.6	2.8	
02/27/96	1615	1.97	16	63.09	112.9	19.2	
03/04/96	1430	1.31	10	44.90	60.2	7.3	
03/13/96	1725	1.80	11	34.04	98.2	9.0	
03/20/96	1530	7.46	6	131.50	964.8	342.6	
03/29/96	1630	2.48	9	43.21	161.0	18.8	
04/03/96	1340	3.44	12	72.02	273.9	53.3	
04/03/96	1357	3.42	12	71.18	271.4	52.2	
04/10/96	1530	1.57	13	21.24	79.6	4.6	
04/19/96	1710	1.23	21	29.35	54.6	4.3	
04/23/96	1630	12.13	16	780.16	2127.0	4480.4	
04/30/96	1530	16.22	15	314.74	3413.0	2900.3	
05/07/96	1730	12.14	18	161.33	2130.0	927.8	
05/10/96	1255	10.46	23	75.34	1672.0	340.1	
05/10/96	1321	10.45	23	71.41	1669.0	321.8	
05/14/96	1700	9.93	16	54.00	1536.0	224.0	
05/21/96	0955	8.54	24	22.02	1202.0	71.5	
05/28/96	1845	5.38	23	166.30	567.0	254.6	
06/04/96	1915	3.44	22	380.07	273.9	281.1	
06/11/96	1715	7.87	21	223.81	1053.0	636.3	

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

Date	Time	Gage Ht	Temp (°C)	Cs (mg/l)	Qw (cfs)	Qs (t/d)	Remarks
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Water Year 1996 (concluded)

06/18/96	1830	2.62	28	66.46	175.9	31.6	
06/19/96	1405	2.08	27	45.69	122.8	15.1	
06/19/96	1419	2.08	27	45.24	122.8	15.0	
06/26/96	1500	0.76	29	34.24	22.6	2.1	
07/03/96	1845	0.42	28	22.29	7.2	0.4	
07/10/96	2030	0.27	25	24.66	3.3	0.2	
07/18/96	1515	0.77	29	50.97	23.1	3.2	
07/25/96	2030	0.38	26	43.20	6.0	0.7	
08/01/96	1815	0.33	27	29.28	4.6	0.4	
08/08/96	1845	0.14	30	15.40	1.2	0.1	
08/09/96	1332	0.09	28	19.09	0.7	0.0	
08/17/96	1900	0.04	28	23.65	0.3	0.0	
08/22/96	1900	0.04	29	18.83	0.3	0.0	
08/28/96	1600	0.04	28	16.54	0.3	0.0	
09/06/96	1530	0.08	24	175.20	0.6	0.3	
09/16/96	0740	0.22	19	59.66	2.4	0.4	
09/18/96	1520	1.21	20	98.27	53.3	14.1	
09/19/96	1344	0.70	19	39.98	19.5	2.1	
09/26/96	1600	0.25	18	41.36	2.9	0.3	

Water Year 1997

10/11/96	1130	0.20	15	12.73	10.3	0.4	
10/22/96	1430	0.05	15	24.19	5.3	0.3	
11/01/96	1415	0.79	15	26.58	40.9	2.9	
11/07/96	0745	0.59	15	123.10	29.4	9.8	
11/07/96	1324	8.52	14	1671.94	1198.0	5408.1	
11/07/96	1348	8.65	14	1650.88	1227.0	5469.2	
11/17/96	1200	0.72	10	17.38	36.7	1.7	
11/26/96	1600	7.57	6	185.02	988.1	493.6	
12/02/96	1415	5.74	10	72.14	635.2	123.7	
12/11/96	1600	1.39	13	22.89	81.8	5.1	
12/16/96	1300	4.75	6	96.83	472.2	123.5	
12/23/96	1415	2.20	8	17.11	150.8	7.0	
12/27/96	1246	5.50	3	63.99	593.9	102.6	
12/27/96	1313	5.46	3	64.34	587.1	102.0	
01/07/97	1600	2.26	7	42.77	156.6	18.1	
01/21/97	1415	4.14	4	95.58	382.0	98.6	
01/27/97	1530	7.47	4	133.22	966.7	347.7	
02/04/97	1530	10.27	8	509.25	1623.0	2231.6	
02/14/97	1600	1.88	4	20.59	121.5	6.8	
02/20/97	1338	1.43	10	16.57	84.8	3.8	

#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 1997 (concluded)							
02/20/97	1352	1.43	10	17.26	84.8	4.0	
02/24/97	1630	1.97	11	42.32	129.5	14.8	
03/02/97	1200	16.15	-	549.92	3389.0	5032.0	
03/10/97	1230	14.50	-	109.75	2844.0	842.8	
03/18/97	1430	12.94	-	30.16	2363.0	192.4	
03/19/97	1315	14.43	10	256.29	2822.0	1952.8	
03/19/97	1348	14.38	10	240.57	2806.0	1822.6	
03/28/97	1845	8.44	16	437.32	1179.0	1392.1	
04/06/97	1730	13.10	16	274.92	2411.0	1789.6	
04/12/97	1100	9.47	13	448.96	1422.0	1723.7	
04/23/97	1600	3.22	15	58.19	261.4	41.1	
05/01/97	1545	1.80	18	26.71	114.5	8.3	
05/05/97	1242	6.34	12	111.42	743.6	223.7	
05/05/97	1305	6.34	12	109.28	743.6	219.4	
05/08/97	1415	2.95	19	62.02	229.7	38.5	
05/16/97	1315	1.26	18	28.87	72.4	5.6	
05/26/97	1700	5.04	20	658.89	517.9	921.3	
06/02/97	1445	18.03	19	196.86	4054.0	2154.8	
06/09/97	1715	4.35	21	74.32	412.2	82.7	
06/17/97	1530	3.95	23	131.15	355.6	125.9	
06/19/97	1324	3.01	24	60.60	236.6	38.7	
06/19/97	1343	2.97	24	60.95	232.0	38.2	
06/27/97	1330	1.18	29	34.78	66.8	6.3	
07/16/97	1430	1.45	29	59.21	86.3	13.8	
07/28/97	1700	0.26	32	26.26	12.6	0.9	
08/03/97	1430	0.00	28	17.05	4.1	0.2	
08/08/97	1256	-0.07	21	22.09	2.7	0.2	
08/12/97	1900	0.02	26	20.17	4.5	0.2	
08/19/97	1700	0.29	25	125.86	13.9	4.7	
08/29/97	1800	0.06	27	22.67	5.6	0.3	
09/08/97	1615	0.05	24	17.64	5.3	0.3	
09/17/97	1845	-0.03	24	20.20	3.4	0.2	
09/22/97	1630	-0.07	22	12.09	2.7	0.1	

#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 1996							
10/04/95	1141	3.81	17	48.64	7.3	1.0	
10/20/95	1527	3.78	13	49.86	6.8	0.9	
11/02/95	0944	3.58	14	25.98	2.9	0.2	
11/15/95	1149	4.02	5	69.14	14.5	2.7	
11/20/95	1420	3.59	8	30.27	2.9	0.2	
11/29/95	0950	3.49	4	11.38	2.7	0.1	
12/07/95	1404	3.45	4	12.47	2.6	0.1	
12/13/95	1121	3.48	2	35.22	2.7	0.3	
12/28/95	0955	3.67	0	19.47	5.4	0.3	
01/22/96	1048	4.81	3	54.79	37.1	5.5	
01/26/96	1339	6.19	4	94.50	113.3	28.9	
02/08/96	1111	4.07	1	20.36	16.2	0.9	
02/16/96	1529	4.13	4	26.54	18.2	1.3	
02/23/96	1554	3.93	13	23.90	11.4	0.7	
03/15/96	0948	11.15	12	3173.22	539.1	4619.0	
03/19/96	1410	7.71	7	189.01	204.1	104.2	
03/29/96	0951	5.32	8	104.73	63.3	17.9	
04/03/96	1440	5.96	14	233.45	99.7	62.8	
04/03/96	1451	5.96	14	230.02	99.7	61.9	
04/12/96	0933	4.34	14	183.23	25.4	12.6	
04/18/96	1233	4.22	15	144.21	21.3	8.3	
04/24/96	1144	10.72	15	187.16	465.0	235.0	
05/02/96	1155	9.74	16	101.90	358.2	98.5	
05/10/96	1026	9.56	22	123.62	341.8	114.1	
05/10/96	1041	9.56	22	104.50	341.8	96.4	
05/15/96	0947	12.07	16	1079.41	796.0	2319.9	
05/22/96	1103	9.62	23	88.63	347.3	83.1	
05/31/96	0945	6.43	21	94.60	127.6	32.6	
06/06/96	1339	7.37	22	67.89	183.4	33.6	
06/14/96	0940	8.26	24	151.88	242.1	99.3	
06/20/96	1103	5.82	28	223.52	91.4	55.1	
06/20/96	1114	5.82	28	219.50	91.4	54.1	
06/27/96	0934	4.29	25	98.82	23.7	6.3	
07/18/96	1129	3.98	27	147.85	13.1	5.2	
07/31/96	1006	3.61	23	56.34	3.1	0.5	
08/09/96	1408	3.49	27	49.64	2.7	0.4	
08/20/96	1111	3.71	26	67.80	5.9	1.1	
08/30/96	1013	3.59	23	75.84	2.9	0.6	
09/05/96	1121	3.62	24	56.87	3.4	0.5	
09/13/96	0931	3.41	18	71.95	2.6	0.5	
09/19/96	1533	3.91	19	148.60	10.7	4.3	
09/25/96	0906	3.64	16	62.29	3.8	0.6	

#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 1997							
10/03/96	1206	3.61	17	52.90	3.1	0.4	
10/10/96	1328	3.41	13	22.14	2.6	0.2	
10/24/96	1206	4.25	12	37.26	22.3	2.2	
10/31/96	0945	5.38	15	78.05	66.7	14.1	
11/07/96	1153	11.18	13	1471.26	546.9	2172.7	
11/07/96	1207	11.18	13	1431.06	546.9	2113.3	
11/14/96	1151	5.22	5	24.39	57.7	3.8	
11/18/96	1428	4.50	9	21.89	30.5	1.8	
11/27/96	0947	8.98	3	95.33	291.7	75.1	
12/03/96	1211	6.94	6	38.62	157.9	16.5	
12/11/96	1112	5.11	9	26.59	51.6	3.7	
12/27/96	1051	8.65	3	122.81	269.0	89.2	
12/27/96	1108	8.64	3	94.40	268.3	68.4	
12/31/96	0951	7.03	8	92.76	163.2	40.9	
01/07/97	1539	6.14	6	61.01	110.4	18.2	
01/23/97	1223	11.71	5	277.25	160.7	120.3	*Bw
01/29/97	0952	7.99	1	100.89	223.5	60.9	
02/05/97	1442	9.79	6	195.98	362.7	191.9	
02/13/97	1036	7.03	3	54.52	163.2	24.0	
02/13/97	1051	7.03	3	54.43	163.2	24.0	
02/20/97	1143	5.93	9	77.83	97.9	20.6	
02/27/97	0937	10.80	11	1691.57	475.0	2169.4	
03/04/97	1215	11.96	10	216.91	750.4	439.5	
03/14/97	1011	11.92	11	322.62	739.9	644.5	
03/19/97	1101	11.77	10	213.77	700.8	404.5	
03/19/97	1118	11.77	10	212.43	700.8	402.0	
03/28/97	1001	11.31	11	491.32	580.8	770.5	
04/03/97	1157	7.58	12	134.33	195.8	71.0	
04/14/97	0945	10.61	7	106.65	451.3	129.9	
04/25/97	0951	6.68	11	134.68	142.4	51.8	
04/30/97	0937	5.74	14	124.78	86.9	29.3	
05/05/97	1057	8.00	12	229.87	224.1	139.1	
05/05/97	1112	8.00	12	229.87	224.1	139.1	
05/15/97	0923	4.83	14	109.22	37.6	11.1	
05/30/97	1005	4.91	16	149.92	39.7	16.1	
06/02/97	1212	10.46	14	156.20	432.5	182.4	
06/13/97	0945	5.73	19	126.55	86.3	29.5	
06/19/97	1014	6.32	23	201.11	121.0	65.7	

#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>
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Water Year 1997 (concluded)

06/19/97	1028	6.32	23	190.87	121.0	62.4
06/26/97	0959	6.28	25	363.20	118.7	116.4
07/10/97	1104	5.37	24	218.46	66.1	39.0
07/15/97	0940	4.71	25	122.46	35.0	11.6
07/24/97	1117	3.77	27	44.08	6.6	0.8
07/31/97	1006	3.61	22	61.49	3.1	0.5
08/08/97	1047	3.52	20	50.80	2.8	0.4
08/15/97	0937	3.88	23	184.53	9.7	4.8
08/21/97	1111	3.73	22	45.86	6.2	0.8
08/29/97	0946	3.40	24	40.05	2.5	0.3
09/05/97	1127	3.55	19	24.97	2.8	0.2
09/12/97	1003	3.69	18	34.43	5.7	0.5
09/17/97	1106	3.77	22	39.31	6.6	0.7
09/26/97	0943	3.99	17	36.83	13.5	1.3

Appendix B: Particle Size Analysis

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

<i>Date</i>	<i>Time</i>	Gage Ht	Temp (°C)	Cs (mg/l)	Qw (cfs)	%finer than 0.0625 mm
Water Year 1996						
10/16/91	1122	2.81	12	80.74	15.6	76.30
05/06/92	0955	6.39	12	185.40	1208.0	84.30
Water Year 1997						
12/08/92	1021	4.28	-1	37.20	297.5	58.00
04/21/93	0947	5.93	10	45.23	983.1	84.60
07/22/93	1007	3.47	24	35.40	95.4	86.25

#123 – Mazon River near Coal City, IL (USGS #05542000)

<i>Date</i>	<i>Time</i>	Gage Ht	Temp (°C)	Cs (mg/l)	Qw (cfs)	%finer than 0.0625 mm
Water Year 1996						
05/06/92	1252	2.61	11	95.80	361.0	92.50
Water Year 1997						
12/08/92	1227	1.94	0	43.00	155.5	68.00
04/21/93	1144	2.63	12	54.24	369.0	82.00
07/22/93	1209	1.52	25	30.90	64.4	49.40

#229 – Spoon River at London Mills, IL (USGS #05569600)

<i>Date</i>	<i>Time</i>	Gage Ht	Temp (°C)	Cs (mg/l)	Qw (cfs)	%finer than 0.0625 mm
Water Year 1996						
10/15/91	1414	2.65	12	124.70	86.0	95.60
03/17/92	1459	3.25	7	32.89	182.7	96.76
05/08/92	1430	8.38	17	2835.22	1971.0	99.13
09/02/92	1426	2.60	27	87.00	79.8	90.00
Water Year 1997						
12/10/92	1441	2.77	2	78.40	102.0	55.50
04/20/93	1429	6.18	-	126.77	1099.0	89.80
07/21/93	1427	6.25	26	1154.00	1124.0	98.20

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

<i>Date</i>	<i>Time</i>	Gage Ht	Temp (°C)	Cs (mg/l)	Qw (cfs)	% finer than 0.0625 mm
Water Year 1996						
03/17/92	1301	4.96	7	36.22	195.5	99.45
05/08/92	1206	23.16	17	1291.07	11860.0	94.60
09/02/92	1217	2.98	25	57.80	31.8	87.00
Water Year 1997						
12/10/92	1248	3.07	2	12.40	36.4	64.30
04/20/93	1212	7.68	12	78.37	554.9	89.50
07/21/93	1232	4.05	27	111.25	107.0	75.30

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

<i>Date</i>	<i>Time</i>	Gage Ht	Temp (°C)	Cs (mg/l)	Qw (cfs)	% finer than 0.0625 mm
Water Year 1996						
10/15/91	1027	5.36	13	196.70	93.7	94.40
03/17/92	1055	7.42	8	176.99	418.6	88.83
05/08/92	0956	27.88	16	1947.99	21400.0	96.20
09/02/92	1024	5.68	23	100.00	131.9	93.30
Water Year 1997						
12/10/92	1051	5.82	3	42.50	150.2	69.00
04/20/93	1035	10.30	14	109.61	1139.0	97.20
07/21/93	1053	5.57	28	98.10	118.2	87.50

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

<i>Date</i>	<i>Time</i>	Gage Ht	Temp (°C)	Cs (mg/l)	Qw (cfs)	% finer than 0.0625 mm
Water Year 1996						
05/05/92	1510	8.93	13	126.30	585.5	89.50
08/25/92	0942	4.45	20	47.60	28.1	91.10
Water Year 1997						
12/11/92	0944	5.40	4	62.60	89.1	67.00
04/21/93	1502	7.00	14	69.75	258.1	84.00
07/22/93	1512	5.14	26	77.20	70.2	88.90

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

<i>Date</i>	<i>Time</i>	Gage Ht	Temp (°C)	Cs (mg/l)	Qw (cfs)	%finer than 0.0625 mm
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Water Year 1996

02/14/92	1417	5.33	2	46.48	704.3	99.72
04/01/92	1359	16.69	9	539.84	6248.0	92.34
05/06/92	1321	16.99	17	268.47	6486.0	97.80
08/07/92	1321	7.65	26	250.30	1446.0	95.40

Water Year 1997

12/22/92	1238	7.45	5	78.40	1371.0	92.90
03/19/93	1310	16.26	6	147.61	5928.0	87.40
06/17/93	1256	7.34	22	211.61	1331.0	97.40
09/15/93	1308	2.43	24	60.01	110.9	94.00

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

<i>Date</i>	<i>Time</i>	Gage Ht	Temp (°C)	Cs (mg/l)	Qw (cfs)	%finer than 0.0625 mm
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Water Year 1996

02/14/92	1104	1.57	2	13.07	72.4	98.07
04/01/92	1111	7.03	9	1099.42	846.0	99.68
05/06/92	1030	11.52	16	322.10	1916.0	99.10
08/07/92	1046	1.02	26	53.30	35.5	96.20

Water Year 1997

12/22/92	1015	1.67	4	3.58	80.2	83.00
03/27/93	1015	7.69	6	256.75	982.9	98.00
06/17/93	1007	3.77	21	267.70	305.0	99.30
09/15/93	1023	0.90	22	52.83	29.0	84.00

#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 1996						
01/06/92	1101	14.66	7	291.50	4763.0	99.40
02/15/92	1137	4.25	3	36.79	623.8	99.03
04/02/92	1048	21.02	11	374.97	7912.0	99.26
05/08/92	1132	32.93	21	74.20	24440.0	98.70
08/08/92	1029	2.96	27	46.00	271.5	97.10
Water Year 1997						
03/23/93	1125	27.74	8	100.20	13220.0	96.80
06/19/93	1109	25.23	23	96.88	10840.0	96.00
09/17/93	1023	2.07	23	28.74	85.2	80.00

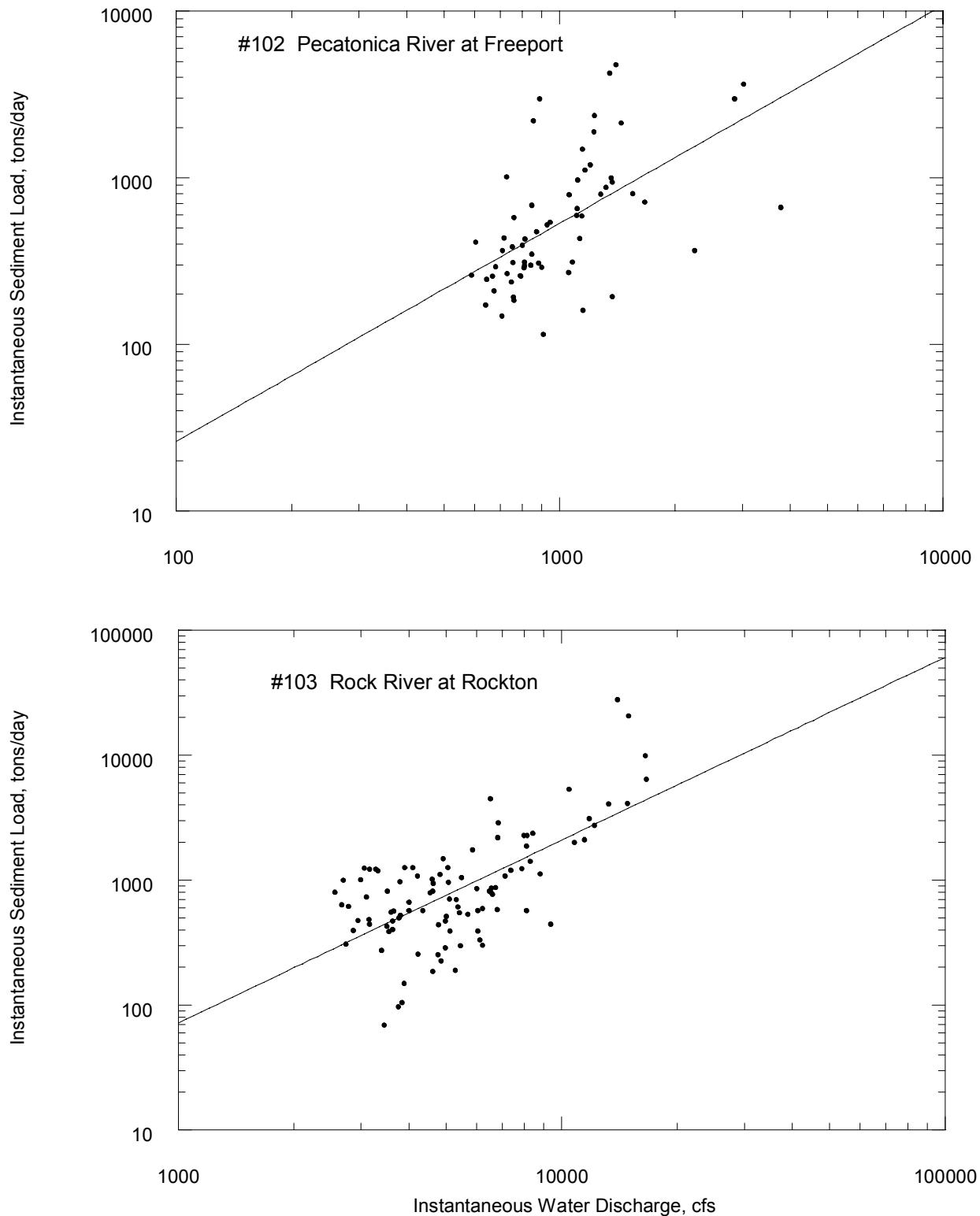
#378 – Cache River at Forman, IL (USGS #03612000)

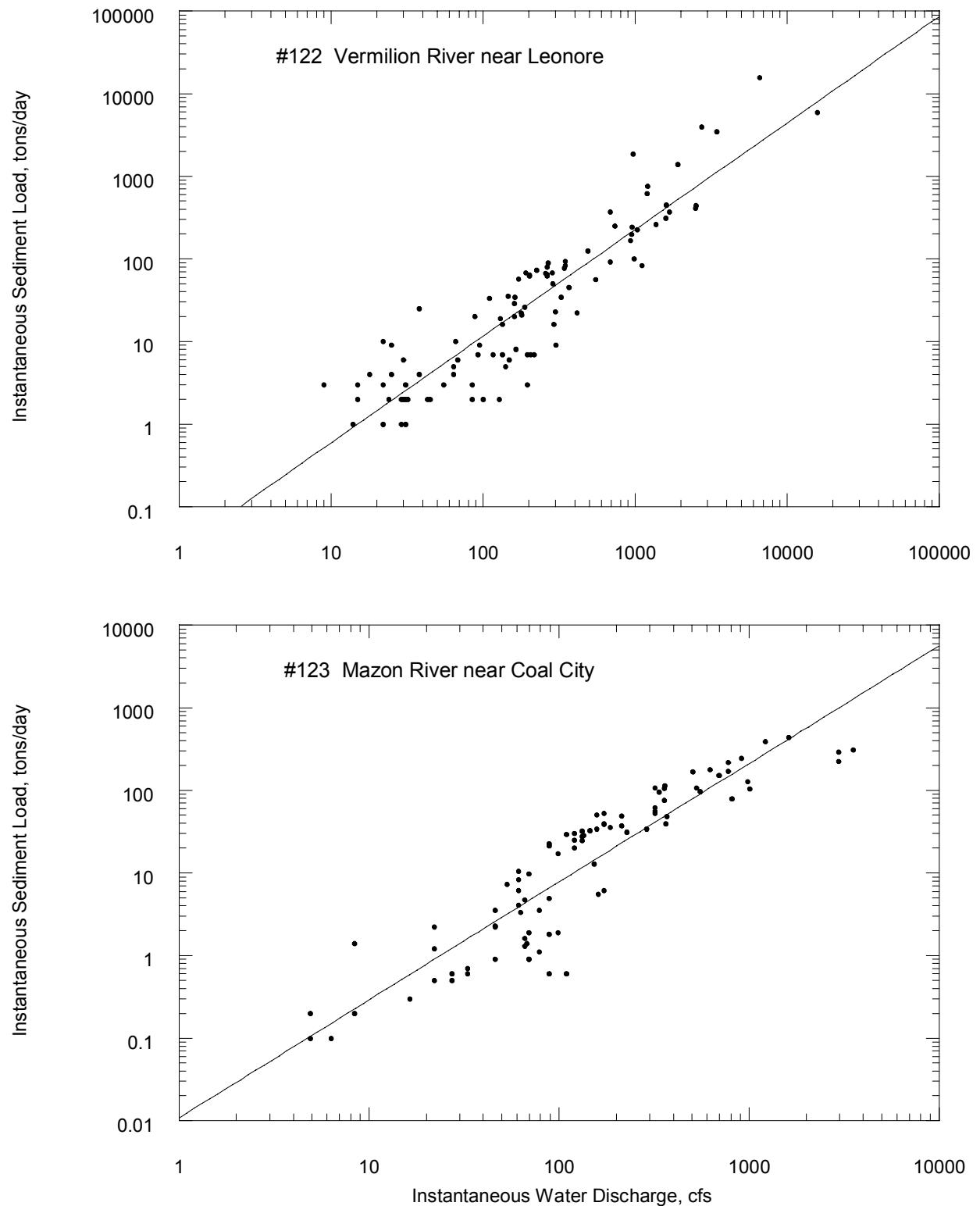
<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>% finer than 0.0625 mm</i>
Water Year 1996						
04/02/92	1344	3.43	12	59.91	272.6	96.82
05/09/92	1300	10.46	23	76.00	1672.0	93.10
Water Year 1997						
11/06/92	1324	8.59	14	1696.40	1214.0	98.80
12/26/92	1251	5.48	3	69.10	590.5	93.90
03/18/93	1324	14.40	10	243.76	2812.0	98.00
06/18/93	1324	2.99	24	66.00	234.3	90.40

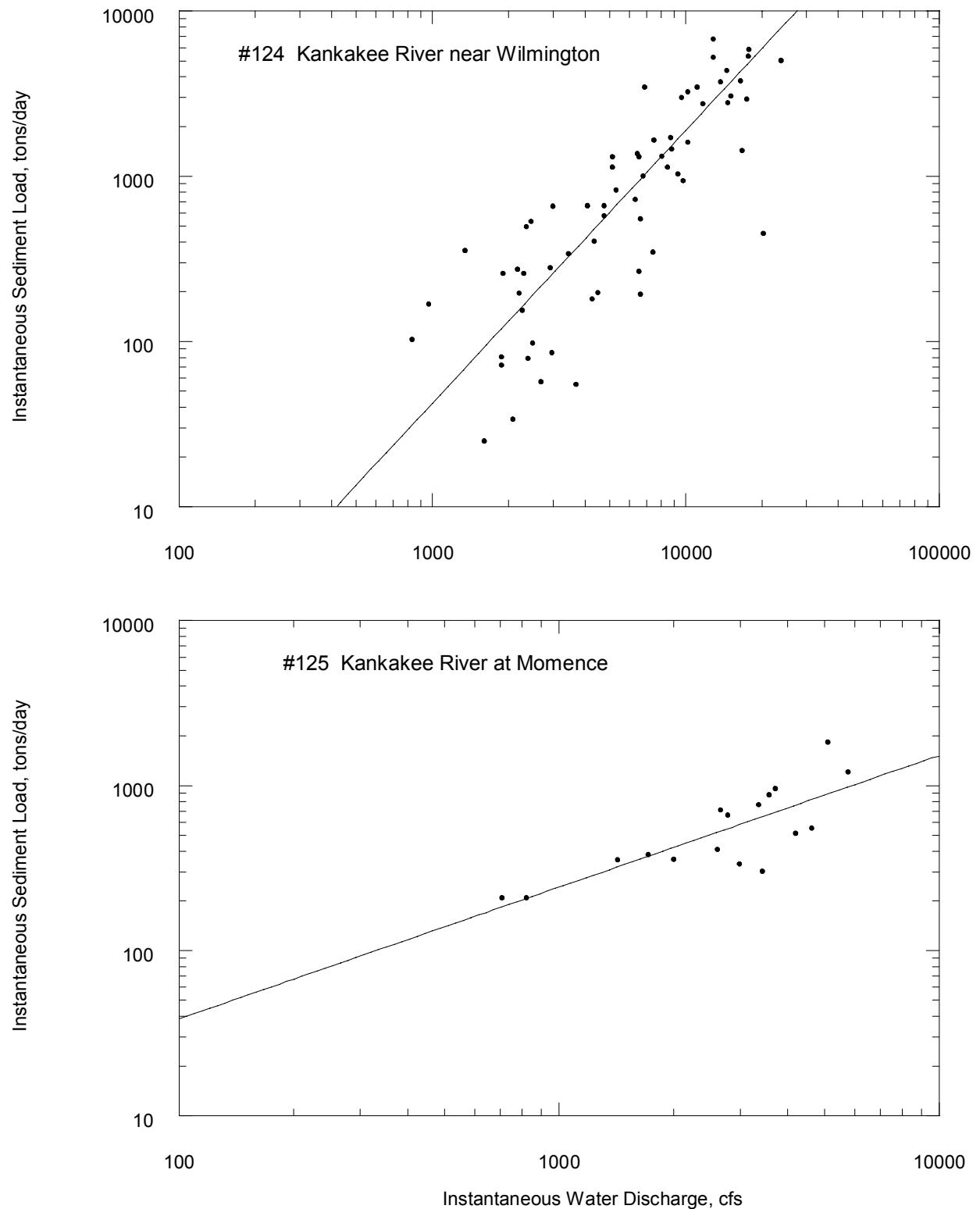
#513 – Cache River at Ullin, IL

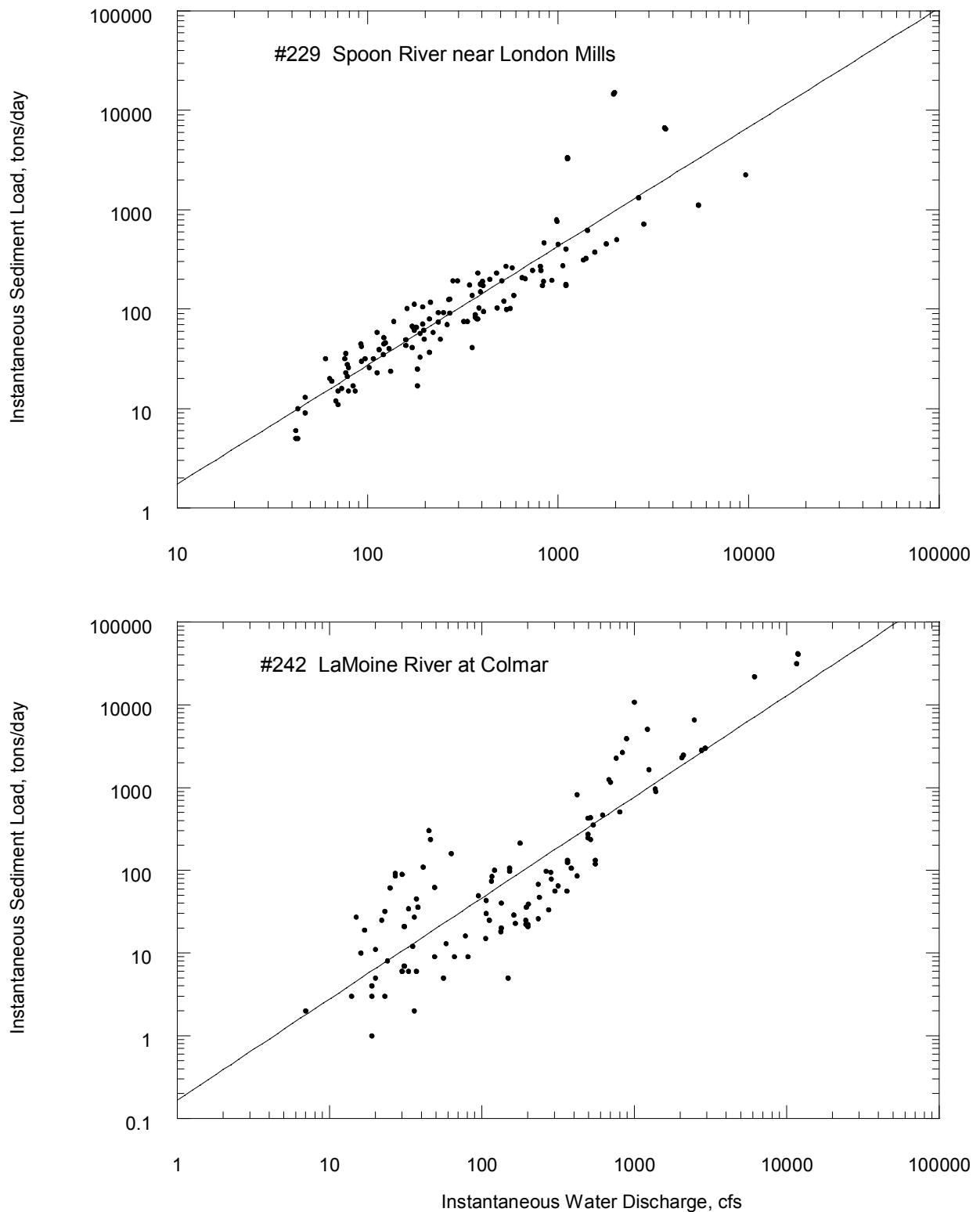
<i>Date</i>	<i>Time</i>	<i>Gage Ht</i>	<i>Temp (°C)</i>	<i>Cs (mg/l)</i>	<i>Qw (cfs)</i>	<i>% finer than 0.0625 mm</i>
Water Year 1996						
04/02/92	1442	5.96	14	239.03	99.7	98.57
05/09/92	1031	9.56	22	157.30	341.8	98.70
Water Year 1997						
11/06/92	1156	11.18	13	1492.77	546.9	99.70
12/26/92	1055	8.64	3	118.10	268.3	96.20
03/18/93	1104	11.77	10	223.76	700.8	97.73
06/18/93	1014	6.32	23	176.46	121.0	98.30

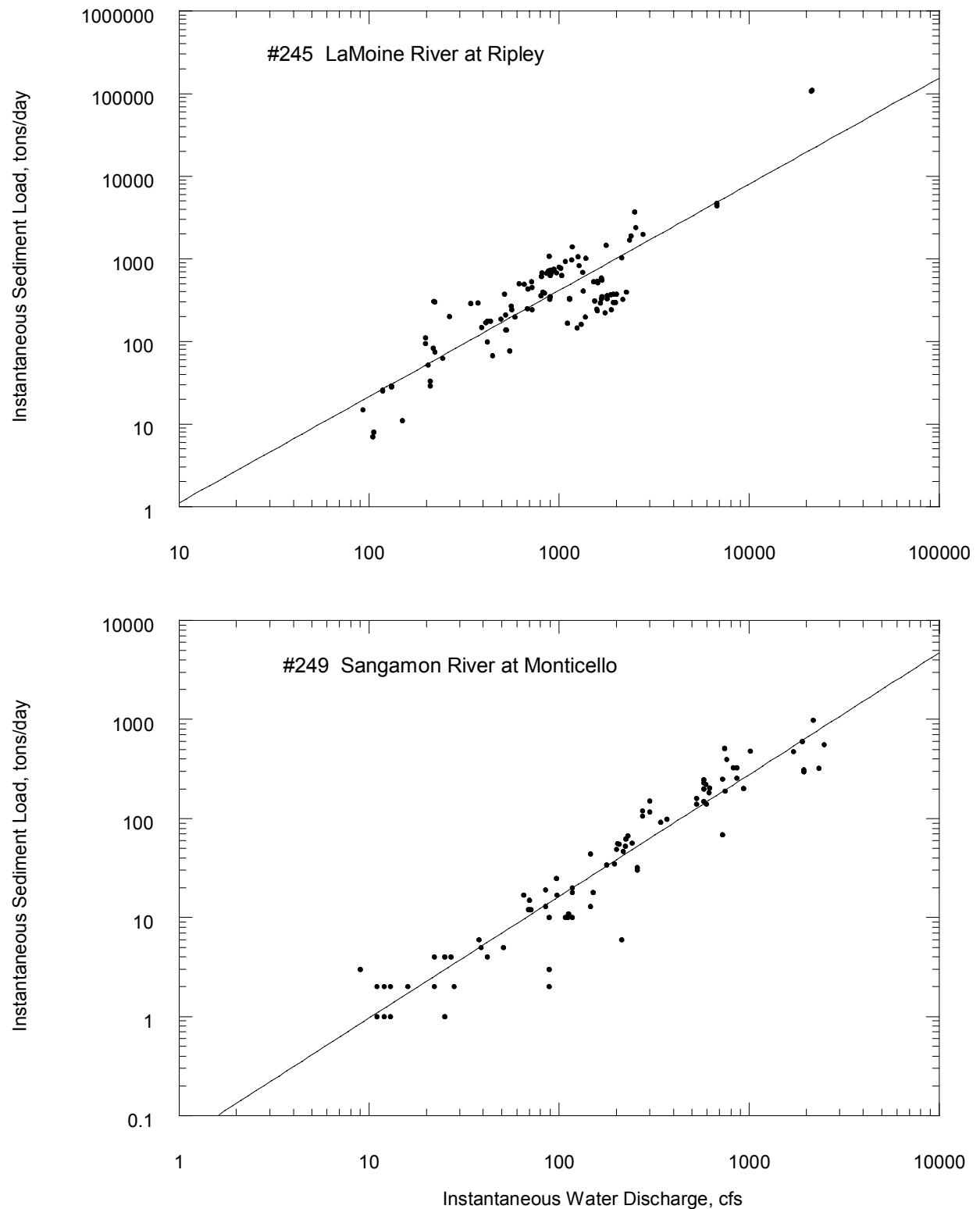
**Appendix C: Sediment Transport Curves Based
on Instantaneous Water Discharge and Sediment Loads
for Water Years 1996 and 1997**

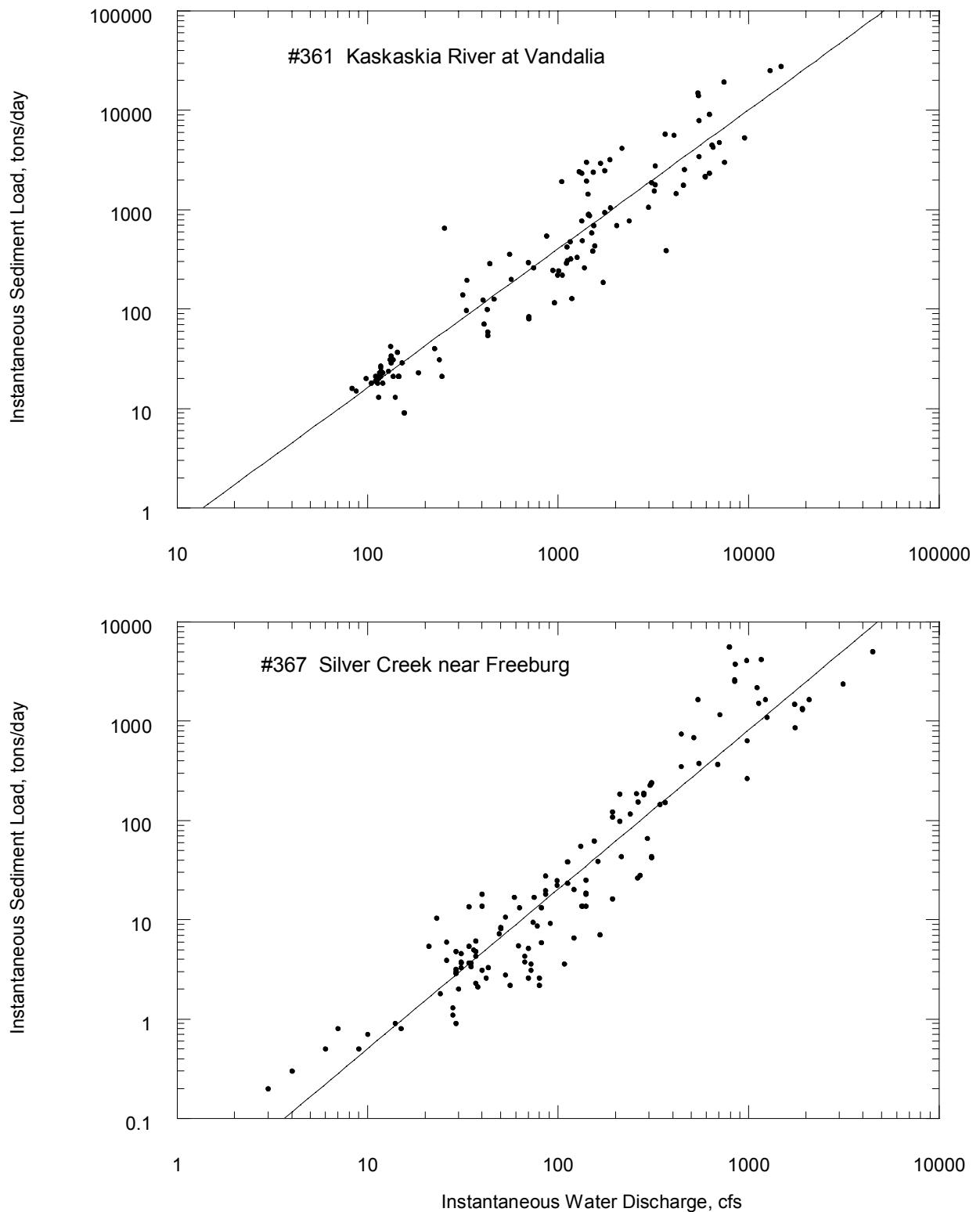


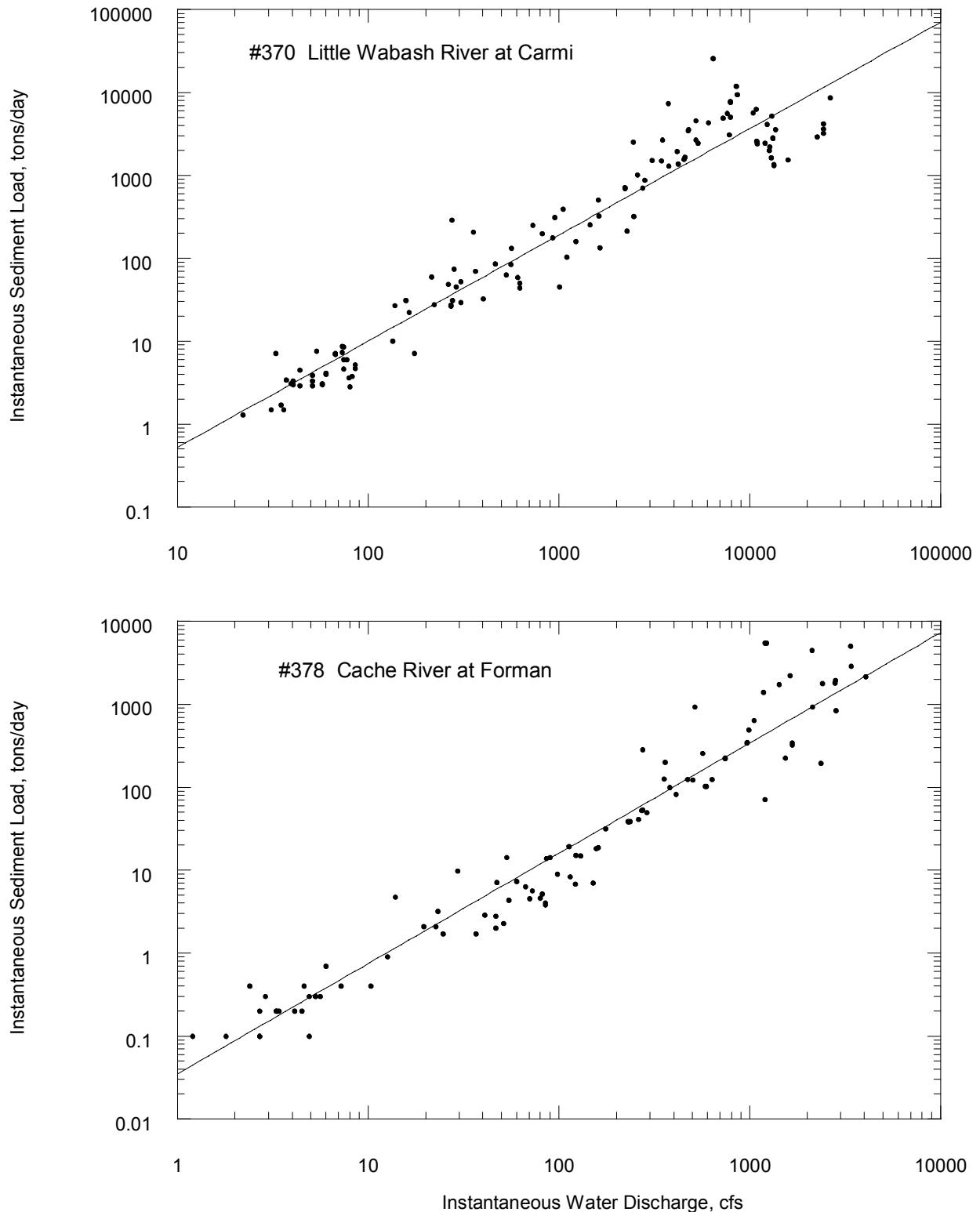


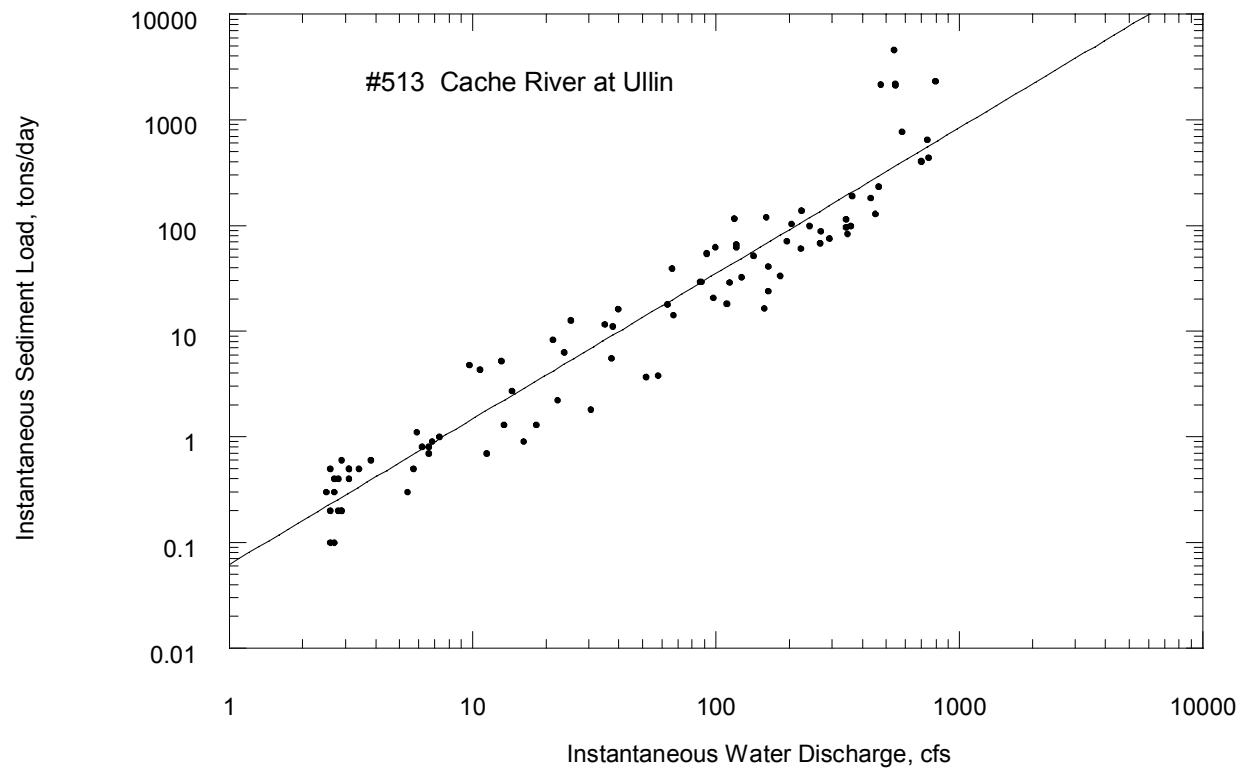












Appendix D: Plots of Instantaneous Sediment Concentration for the Period of Record for Current Monitoring Sites

