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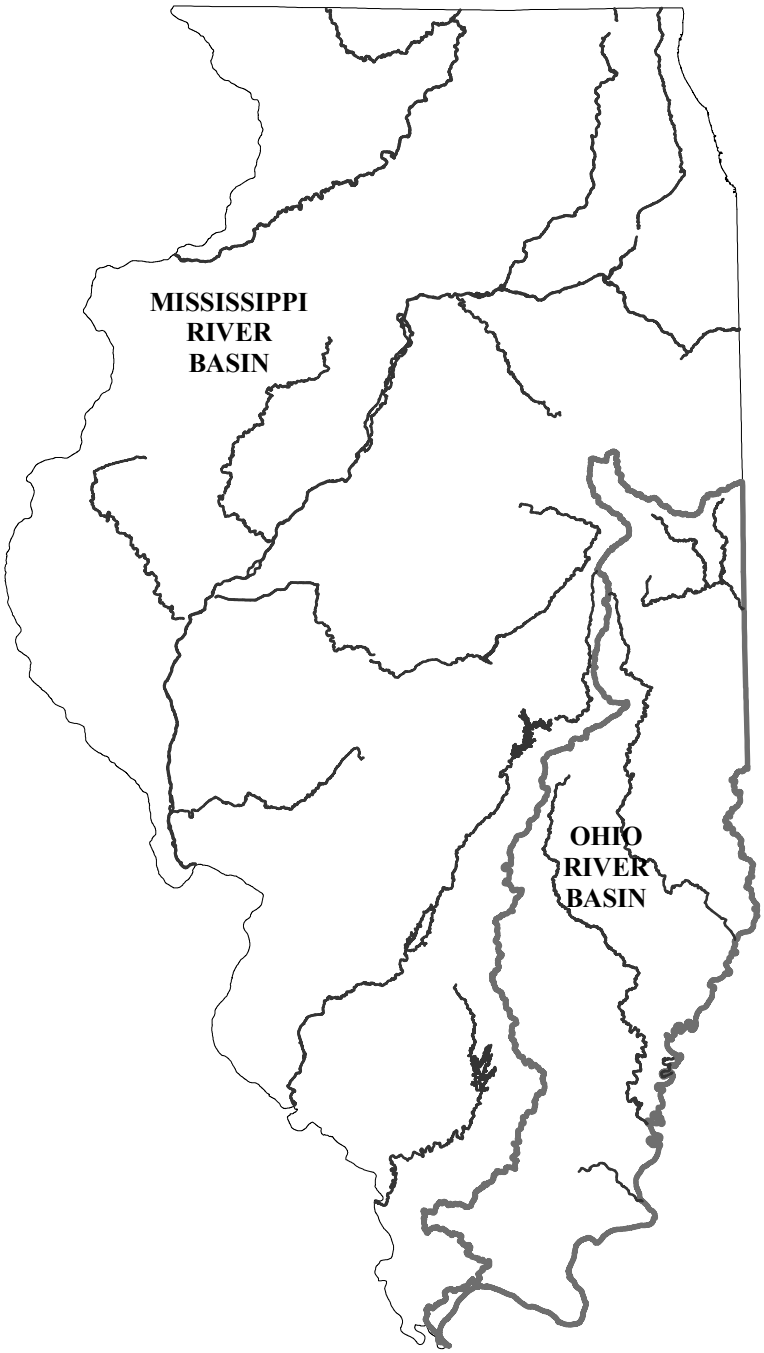
BASELINE LOADINGS OF NITROGEN, PHOSPHORUS, AND SEDIMENTS FROM ILLINOIS WATERSHEDS



BASELINE LOADINGS OF NITROGEN, PHOSPHORUS, AND SEDIMENTS FROM ILLINOIS WATERSHEDS

October 1980 - September 1996

Prepared by
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Illinois Environmental Protection Agency
Bureau of Water
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EXECUTIVE SUMMARY

The purpose of this report was to evaluate baseline loadings of nutrients and sediment to the Mississippi River from the state of Illinois and to identify the sources of those loads. During the course of preparing this information, it was deemed appropriate to include similar information on the portion of Illinois which drains into the Ohio River basin. The Illinois EPA's Ambient Water Quality Monitoring Network was selected as the data set to conduct this analysis because it provided a statewide network with consistent sampling and analysis methods over an extended period of time. The network consists of 209 stations on streams ranging in size from agricultural drainage ditches to the Mississippi River. The time period for data selected was from October 1980 through September 1996. Parameter selection included nitrogen measured as total ammonia-N, total nitrate+nitrite-N and total Kjeldahl nitrogen, total and dissolved phosphorus, total suspended solids and stream flow. To determine loads and yields, total ammonia-N and total nitrate+nitrite-N were added together as inorganic nitrogen. Nitrates and total Kjeldahl nitrogen were added together to determine total nitrogen. For this report, baseline loads were determined from the mean load calculated from the samples collected over the period of record. Baseline yields were determined by dividing the baseline load by the drainage area.

The analysis began with a review of parameter concentrations to evaluate spatial and temporal variability within the state. Mean concentrations of ammonia, along with total and dissolved phosphorus, were typically highest in streams influenced by point source discharges but otherwise showed limited spatial variability. Nitrate concentrations were highest in central and eastern Illinois but were significantly lower in the streams of southern Illinois. Total suspended solids concentrations were highest in tributaries to the Illinois River in the western and lower portion of the watershed along with some of the smaller direct tributaries to the Mississippi River such as Bear Creek and Bay Creek. Significant variability in concentrations over time, both seasonally and annually, were present in all six of the chemical parameters.

The sources of baseline loadings of nutrients and sediments to the Mississippi River from Illinois followed flow volumes. The Illinois River basin accounted for 72 percent of the baseline inorganic nitrogen loading, 56 percent of the baseline phosphorus loading and 57 percent of the baseline sediment loading to the Mississippi River from Illinois. At the beginning of the Illinois River, the Kankakee River was the primary source of baseline inorganic nitrogen and suspended solids loads, while the Des Plaines River was the primary source of baseline phosphorus loads. Further downstream, the Sangamon River had the highest baseline loads of inorganic nitrogen and phosphorus. The Spoon River and Mackinaw River had the highest baseline loads of suspended solids to the Illinois River. When viewed by yields (amount per area) within the Illinois River basin, the Vermilion River had the highest baseline yields of inorganic nitrogen (43.7 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$), the Chicago Sanitary and Ship Canal the highest baseline yields of phosphorus (8.9 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$) and the Mackinaw River, the highest baseline yield of suspended solids (3,510 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$).

The Rock River basin was the second largest contributor of baseline loadings to the Mississippi River from Illinois and accounted for 19 percent of the baseline inorganic nitrogen loading, 21 percent of the baseline total phosphorus loading and 16 percent of the suspended solids loading. The Kaskaskia River was the third largest contributor of baseline inorganic nitrogen loads, 3.2 percent and total phosphorus, 10.8 percent, however, the smaller direct tributaries when combined, accounted for a larger percentage of the baseline loads than the Kaskaskia River.

Sources of baseline loadings of nutrients and sediments to the Ohio River watershed from Illinois did not follow flow volumes. Four basins, the Vermilion River, Little Vermilion River, Brouilletts Creek and Embarras River, accounted for 84 percent of the baseline inorganic nitrogen load from Illinois to the Ohio River basin via the Wabash River. This was due primarily to the high concentrations of nitrates in these streams. The Little Wabash River basin, which had the highest mean discharge of any of the Ohio River tributaries, accounted for only 12.7 percent of the inorganic nitrogen load. Unlike the other basins in the Ohio River drainage, nitrogen loads from the Little Wabash River were due primarily to organic nitrogen. Total phosphorus and total suspended solids loads from Illinois to the Ohio River basin were more evenly distributed with the Little Wabash River basin accounting for 38 percent of the phosphorus load and 26 percent of the sediment load, the Embarras River basin, contributing 29 percent of the phosphorus load and 25 percent of the sediment load and the Vermilion River basin 20 percent of the phosphorus load and 38 percent of the sediment load from Illinois.

In addition to the statewide baseline loads, an effort was made to better delineate the export of nutrient loads from Illinois on an annual basis. These loads were calculated using a regression equation from 21 stations located at the farthest downstream monitoring station within their watersheds, to estimate the export of nutrients from Illinois during the 1996 water year. A regression model with seven estimated parameters was designed for each station based on the relationship between concentration and flow. The USGS daily flow data was then used to estimate daily loads. Regression models were also developed for four border stations: two on the Mississippi River at Keokuk, Iowa and Thebes, Illinois; the Wabash River at Hutsonville, Illinois and the Ohio River at Olmstead, Illinois, for purpose of comparison.

Results of where the nutrient loads were coming from, based on the regression model, were similar to those presented in the statewide baseline section. The majority of total nitrogen loads leaving the state of Illinois into the Mississippi River basin were coming from the Illinois River basin (69.4 percent) followed by the Rock River basin (19 percent), the Kaskaskia River basin (4.6 percent) and the smaller direct tributaries (7 percent). Distributions of phosphorus loads were the Illinois River basin (56 percent), Rock River basin (19 percent), Kaskaskia River basin (13 percent) and the direct tributaries (12 percent). Loads of total and inorganic nitrogen leaving the state of Illinois into the Mississippi River basin during the 1996 water year were equivalent to 23 and 26 percent of the total load on the Mississippi River at Thebes, Illinois, respectively. Loads of phosphorus leaving Illinois during the 1996 water year were equivalent to 25 percent of the total phosphorus load on the Mississippi River at Thebes, Illinois. The export

of inorganic nitrogen, total nitrogen and phosphorus from Illinois to the Mississippi River basin, were lower during the1996 water year, than the 16 year mean. However, loads of those constituents on the Mississippi River at both Thebes, Illinois, and Keokuk, Iowa, were higher during the 1996 water year than the long term mean. These percentage assume that there is no loss of nitrogen or phosphorus due to transformation, respiration or settling out into sediments.

If nutrient loads are going to continue to receive more attention, an effort will be needed to either maintain the current level of stream gaging activities or to add additional stream gage sites. Development of regression equations to predict flows at ungaged sites will also be necessary. In addition, two monitoring efforts would go a long way toward better delineating sources of loads within the state of Illinois. The first would be to increase the number of Illinois EPA AWQMN stations where total Kjeldahl nitrogen is analyzed. For example, only three of the major tributaries to the Illinois River, the Fox River, the Sangamon River and the LaMoine River, had TKN data allowing for the calculation of total nitrogen. Second, in order to better delineate the effects of point source loadings, the Illinois EPA should collect total nitrate + nitrite nitrogen, TKN and total phosphorus in addition to total ammonia-N as part of routine effluent monitoring.

1. INTRODUCTION

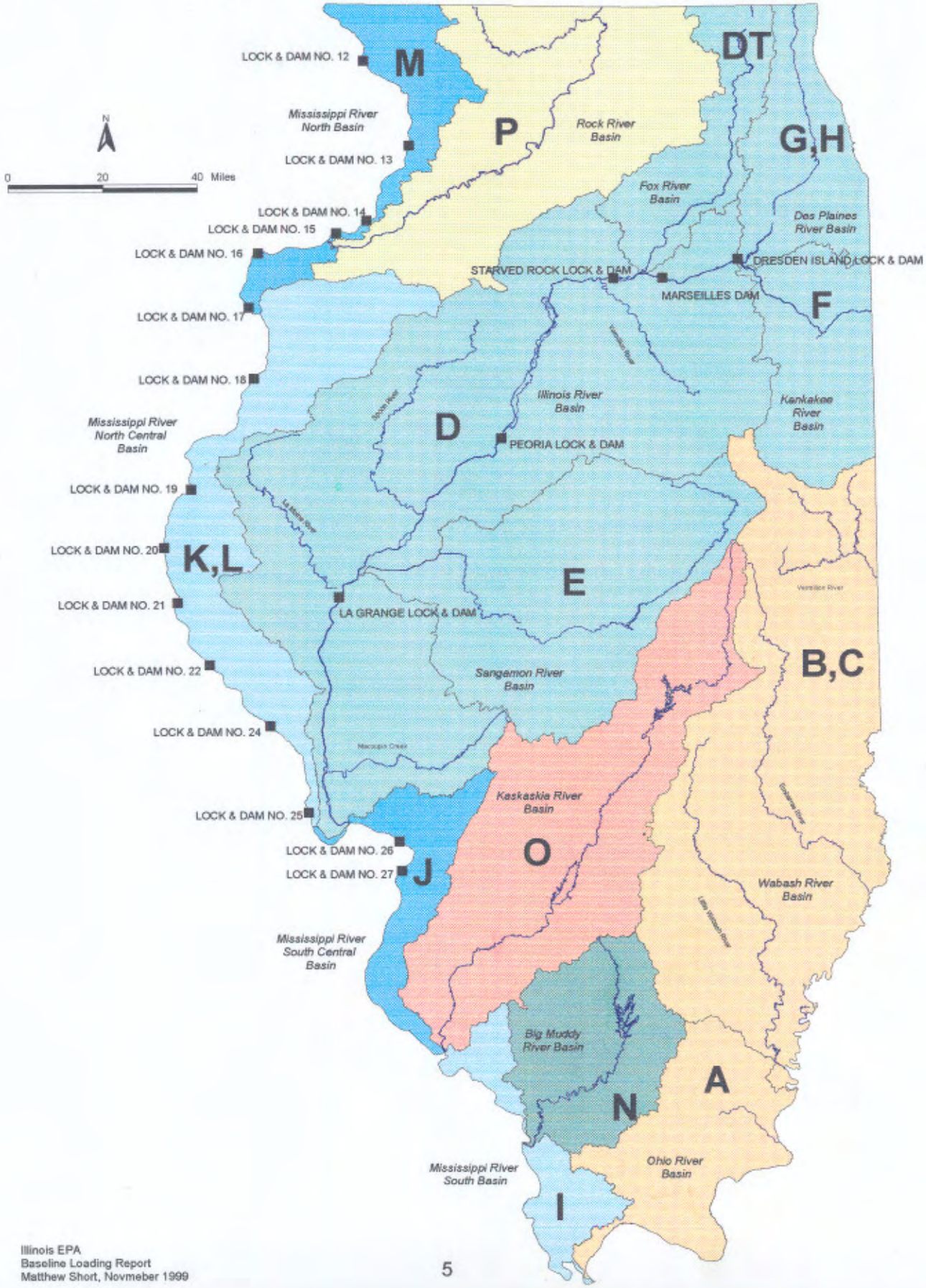
In 1998 the Illinois Environmental Protection Agency (Illinois EPA) received a grant from the United States Environmental Protection Agency (USEPA) (#82 591010) to establish baseline loadings of nutrients and sediments to the Mississippi River from the state of Illinois. This study was prompted by concerns over the 'Gulf Hypoxia' issue. The Gulf Hypoxia issue deals with a zone in the Gulf of Mexico where benthic oxygen levels are depleted. High nutrient loads from the Mississippi River have been suspected as a cause of this phenomenon. This report focuses on the parameters necessary for determining nutrient and sediment loadings from Illinois: total ammonia-N (NH_4 + NH_3); total nitrate+nitrite-N; total Kjeldahl nitrogen; total and dissolved phosphorus; total suspended solids, and stream flow. The data source for the analysis was the Illinois EPA's stream Ambient Water Quality Monitoring Network (AWQMN). For this report, baseline loadings refers to mean loadings calculated over a 16 year period of record (October 1980 through September 1996) from long term monitoring stations operated by the Illinois EPA . Baseline yields refers to mean loadings for the 16 year period of record, divided by the drainage area at the station. For purposes of loadings, nitrogen in this report is referred to as either inorganic nitrogen or total nitrogen. Inorganic nitrogen loads were based on adding the baseline load of total ammonia-N with total nitrate + nitrite-N. Total nitrogen loads were based on adding loads of total nitrate + nitrite-N with total Kjeldahl nitrogen.

Overview of Watersheds in Illinois

Illinois has approximately 55,754 square miles of surface area (Ryan, 1991). The majority of the state, 44,790 miles^2 (80.3 percent), drains to the Mississippi River (Figure 1-1). The Mississippi River comprises the entire western border of Illinois, and consists of 580.5 navigable miles. River miles on the Mississippi River are measured along the main channel and begin with mile 0.0 at the confluence with the Ohio River at the southern tip of Illinois. The Illinois portion of the Mississippi River contains a series of 15 locks and dams numbered 12 through 27 (there is no number 23) to allow commercial navigation on the river. Dam 27 is located on the Mississippi River below the confluence with the Missouri River at the beginning of the Chain of Rocks Canal. The lock works (27) are located at the downstream end of the canal. The United States Army Corps of Engineers maintains the locks and dams along with a nine foot navigation channel on the Mississippi River. Three major tributaries flow from the state of Illinois into the Mississippi River including, from north to south, the Rock River, the Illinois River and the Kaskaskia River. There are also numerous smaller tributaries. Most of the general watershed information presented here, such as historical flows, stream lengths and drainage areas, was based on data found in publications by the United States Geological Survey (Healy, 1979 and Wicker et al., 1997).

The Rock River is located in northwestern Illinois and stretches 162.8 miles from its mouth near the city of Rock Island, at Mississippi River mile 479.1, to the Illinois-Wisconsin

Figure 1-1. Illinois EPA major river basin code delineations.



border. The Rock River drains a total of 10,915 mi^2 in Illinois and Wisconsin. The Illinois portion of the Rock River drainage consists of 7,452 mi^2: 68.27 percent of the total Rock River basin, or 13.4 percent of the total surface area of Illinois. There are 19 AWQMN stations in this watershed including five stations on the Rock River. Major tributaries to the Rock River include the Green River, Pecatonica River and Kishwaukee River.

The Illinois River stretches 273 miles from its mouth at Mississippi River mile 217.5 near Grafton, Illinois, to the confluence of the Des Plaines River and Kankakee River which form the Illinois River. The Illinois River drains a total of 28,906 mi^2 in Illinois, Indiana and Wisconsin. The Illinois portion of the drainage consists of 26,879 mi^2 or 93 percent of the total watershed. The remaining 1,920 mi^2 are located primarily in Indiana with 113 mi^2 located in Wisconsin. The Illinois River forms the largest drainage within the state of Illinois, covering 48.2percent of the surface area. A series of seven locks and dams have been constructed to control water levels on the Illinois River and Des Plaines River to allow for commercial navigation. Major tributaries to the Illinois River (from upstream to downstream) include the Fox River, Vermilion River, Mackinaw River, Sangamon River, Spoon River and LaMoine River. There are 94 AWQMN stations in the Illinois River watershed including eight on the Illinois River.

The Kaskaskia River stretches 279.9 miles from its mouth at Mississippi River mile 117.6 to the agricultural drainage ditches west of Champaign, Illinois where it begins. The Kaskaskia River drains a total of 5,801 mi^2 covering 10.4 percent of the states surface area. Two large flood control reservoirs, Lake Carlyle and Lake Shelbyville, are located on the Kaskaskia River. The dams are located at river miles 94.2 and 197.9 upstream from the mouth, and have surface areas of 24,580 and 11,000 acres respectively. There are 26 AWQMN stations in this watershed including nine on the Kaskaskia River. Major tributaries to the Kaskaskia River include Silver Creek and Shoal Creek.

The smaller direct tributaries to the Mississippi River encompass 4,658 mi^2 in Illinois, nearly equaling in size the Kaskaskia River watershed. The Big Muddy River basin in southwestern Illinois, is the largest of these tributaries and drains 2,387 mi^2. The next largest direct tributary in terms of area is Henderson Creek which drains 604 mi^2 , followed by Edwards River (451 mi^2) and Bear Creek (392 mi^2). Drainage areas for the remaining direct tributaries is less than 300 mi^2.

The state of Illinois comprises a relatively small portion of the total drainage area of the Mississippi River. The United State Geological Survey (USGS) gaging station on the Mississippi River at Keokuk, Iowa, drains 119,000 mi^2 and has a mean discharge of 65,840 cubic feet per second (cfs). There are approximately 11,041 mi^2 of Illinois which drain into the Mississippi River upstream from the confluence with the Illinois River indicating that the Illinois portion of the drainage at Keokuk is approximately 9 percent. At the USGS station on the Mississippi River near Thebes, Illinois, 43.7 miles upstream from the confluence with the Ohio River, the Mississippi River drains 713,200 mi^2 and has a mean discharge of 205,100 cfs. The Illinois portion of the Mississippi River watershed at Thebes is approximately 6.3 percent of the

total area. By contrast, the Missouri River flows into the Mississippi River at river mile 195 just above St. Louis, Missouri, and drains 524,200 mi^2 or 73.5 percent of the of the watershed at Thebes. In regard to daily mean flows, the Illinois River has the highest mean daily discharge at 21,950 cfs, followed by the Rock River 9,659 cfs and Kaskaskia River 3,735 cfs.

The Ohio River basin is the other major drainage from the state of Illinois. The Ohio River, along with its tributary the Wabash River, forms the south and southeastern borders of the state of Illinois. Total drainage to the Ohio River basin from Illinois consists of 10,977 mi^2 or 19.7 percent of the state's total surface area. The Wabash River and its major tributaries, the Vermilion River, Embarras River, and Little Wabash River, drain the majority of this area: 8,599 mi^2 (78.3 percent). Direct tributaries to the Ohio River drain the remaining 2,378 mi^2 (21.7 percent). The largest tributary that drains directly to the Ohio River from Illinois is the Saline River, which has a drainage area of 1,177 mi^2. There are 37 AWQMN stations in the Ohio River watershed. In comparison to the Ohio River as a whole, the Ohio River at Metropolis, Illinois, located 37 miles upstream from the confluence with the Mississippi River, has a drainage area of 203,000 mi^2 and a mean discharge of 277,700 cfs. The Illinois portion of the Ohio River basin, in terms of surface area, is approximately 5.4 percent of the total.

A comparatively small amount of the state of Illinois, 670 $miles^2$, drains directly into Lake Michigan. However, water from Lake Michigan is pumped/diverted to the Des Plaines River at Lockport via the Chicago Sanitary and Ship Canal, and ultimately to the Illinois River, at the rate of 3200 cubic feet per second (cfs) (Changnon and Changnon, 1996).

2. DATA SOURCES

Historically, stream water quality data in Illinois has been collected by the Illinois State Water Survey (ISWS), the Illinois Department of Public Health, the Illinois EPA and the United States Geological Survey (USGS). This has resulted in a rich data set covering streams ranging in size from small agricultural drainage ditches to the Mississippi River. Since October 1977, the Illinois EPA has operated the most widespread, active long term monitoring network in Illinois which is known as the ambient water quality monitoring network (AWQMN). The current AWMQN network was preceded by a 538 station network operated by the Illinois EPA between water years 1972 and 1977 (note water years run from October 1 through September 30). Evaluation of the older data was presented in a series of reports prepared by the Illinois Water Information System Group, headed by Ronald Flemal and Donovan Wilkin (Peckham, 1980). Of the 538 original stations, 108 were incorporated into the current network. The change in stations in October 1977 reflected in part, the adoption of USGS sampling methodologies. Older stream water quality data, (i.e., from 1945 through 1971), has also been collected by the Illinois State Water Survey and the Illinois Department of Public Health at many of these stations (Winget, 1976). The Illinois EPA ambient water quality network was chosen as the basis for this study because it provided a statewide network, included the parameters necessary for the analysis, along with a consistent sampling method and analysis over an extended period of time.

The goals of Illinois EPA surface water monitoring programs are to identify causes of pollution (toxics, nutrients, sedimentation) and sources (point or nonpoint) of surface water impairments, determine the overall effectiveness of pollution control programs and identify long term resource quality trends. The AWQMN is utilized by the Illinois EPA to provide baseline water quality information, to characterize and define trends in the physical, chemical and biological conditions of the state's waters, identify new or existing water quality problems and to act as a triggering mechanism for special studies or other appropriate actions. Additional uses of the data collected by the Illinois EPA through the AWQMN program includes the establishment of water quality based effluent limits for NPDES permits. The AWQMN is integrated with other Illinois EPA stream monitoring programs, both chemical and biological, which are more localized geographically (specific watersheds or point source receiving stream) and cover a shorter span of time (e.g. one year) to evaluate compliance with water quality standards and to determine designated use supports as required in Section 305(b) of the Clean Water Act.

Description of Illinois EPA Ambient Monitoring

The present AWQMN was initiated in October 1977 and has consisted of 209 stations through September 1996 (Figure 2-1). It was operated in cooperation with the USGS through September 1992. Data collected by the Illinois EPA from 1978 through the 1992 water years were published by the USGS as part of the series, "Water Resources Data: Illinois Volumes 1 and 2." Results of concurrent and split samples collected by the two agencies during this time period have also been published (Melching and Coupe, 1995). More recent data, since October

Figure 2-1. Locations of Illinois EPA Ambient Water Quality Monitoring Network (AWQMN) stations. 1977 - 1998.

1992, have not been published by the USGS but are available upon request from the Illinois EPA or through STORET. Although no longer a cooperator with the USGS, the Illinois EPA has continued to transfer ambient water quality data to the USGS for inclusion in their databases.

As of September 1996, the AWQMN consisted of 202 stations throughout Illinois sampled nine times a year on a six week rotation and one station on the Mississippi River near Fulton, which was sampled quarterly, for a total of 203. Samples were collected randomly in regard to flow events and spills and therefore provide a good unbiased estimator of baseline loadings and concentrations. Active main stem sites in the AWQMN include nine stations on the Sangamon and Kaskaskia Rivers, eight stations on the Illinois River, seven stations on the Des Plaines River, six stations on the Fox River, five stations each on the Little Wabash and Rock Rivers, and four stations each on the Embarras River, Spoon River, and Big Muddy River. There are two stations each on the Mississippi River, Kankakee River, La Moine River, Vermilion River (Illinois), Mackinaw River, Green River and Macoupin Creek. The Illinois EPA AWQMN program included six different streams named Sugar Creek and two different Indian Creeks, Vermilion Rivers, Salt Creeks and Little Vermilion Rivers. There were six inactive stations at the beginning of this project (Table 2-1). However, more recent water quality data has been collected from the Mississippi River at Thebes (I 84) by the USGS and from the Wabash River at New Harmony (B 07) by ORSANCO.

Table 2-1. List of Inactive Illinois EPA AWMQN stations.

IEPA Station Code	Stream Name	21ILAMB Period of Record
A 06	Ohio River	1972-91
B 07	Wabash River	1974-87 (sampled by ORSANCO)
GI 01	Sanitary and Ship Canal	1987-92
I 84	Mississippi River	1983-95 (sampled by Missouri USGS)
J 05	Mississippi River	1989-95 (replaced J 83)
J 83	Mississippi River	1975-89

AWQMN station descriptions are located in Appendix Table A-1, and include the Illinois EPA stream code, corresponding USGS stream code, the stream name, county, drainage area, latitude and longitude and limited parameter information. The Illinois EPA utilized an alpha-numeric stream coding system consisting of four alphabetic characters, which indicate the stream being sampled, and two numeric characters which represent the station number on the stream. The state is divided into 14 major basins using this system (Table 2-2, Figure 1-1). The few streams which drain directly into Lake Michigan utilize the letter “Q” as a basin identifier. Letter designations are added alphabetically to major tributaries as one moves upstream from the mouth. For minor, direct tributaries, the second letter is always “Z.” Therefore, the letter farthest to the right designates the stream name within a watershed. Station numbers reflect

primarily the stations establishment over time (the oldest stations are “01") and are not necessarily related to upstream-downstream position within the watershed drainage. For example station code DJBZ01 indicates:

D - Illinois River
J - Spoon River
B - Big Creek
Z - Slug Run
01 - station number “1" on Slug Run

Table 2-2 . List of Illinois EPA major basin designation codes.

A	Ohio River	I	Mississippi River (South)
B,C	Wabash River	J	Mississippi River (South Central)
D	Illinois River	K,L	Mississippi River (North Central)
DT	Fox River	M	Mississippi River (North)
E	Sangamon River	N	Big Muddy River
F	Kankakee River	O	Kaskaskia River
G,H	Des Plaines River	P	Rock River

Sample collection and analysis

AWQMN water quality samples were collected utilizing the equal width increment, equal transit rate method developed by the USGS (Guy and Norman, 1970). This method requires equal spacing of intervals across the stream cross section which varies with stream width, and an equal transit rate or constant speed of lowering and raising the sampler. The sampler utilized was dependent on water velocity and stream depth (Illinois EPA, 1987). Samples were composited in a churn splitter before being transferred to the appropriate collection bottles. Samples for dissolved parameters were obtained utilizing a 0.45 µm pore size filter. A summary of laboratory methods for the parameters used in this study is provided in Table 2-3. A universal parameter group (ASN01) is collected from all stations in the network and includes the following (STORET code) parameters: (20) air temperature, (10) water temperature, (299) field dissolved oxygen, (400) field pH, (94) field conductivity, (535) volatile and (530) total suspended solids, (610) total ammonia-N, (612) calculated unionized ammonia, (630) total nitrate +nitrite-N, (76) turbidity, (665) total and (666) dissolved phosphorus, (31616) fecal coliform, (900) hardness (calc.), along with total and dissolved metals (Table 2-4). Additional parameters, collected at selected stations, include (680) total organic carbon, (625) total Kjeldahl N, (940) total chloride, (945) total sulfate, (1002) total arsenic, (32730) phenol, (951) total fluoride, (720) total cyanide, (410) total alkalinity, (70508) total acidity and (71900) total mercury (Appendix Table A-2). Chemical oxygen demand, COD (335) and oil&grease(556), were dropped from the network in 1990. Total and dissolved phosphorus were added to all stations in 1984, although some stations may contain older data. Subnetworks for the monitoring of pesticides and industrial solvents were established in 1985 and 1988 respectively.

Table 2-3. Summary of Illinois EPA laboratory methods for analysis of selected water quality parameters.

Parameter	Preservative	Analysis Method	Unit of Measure	Reporting Limits
Total Nitrate+ Nitrite-Nitrogen	10 ml 20% H_2SO_4/l at 4 °C	Automated Cadmium reduction method with Flow Injection Analysis	mg/L	low at 0.02 mg/L high at 2 mg/L
Total Ammonia-Nitrogen	10 ml 20% H_2SO_4/l at 4 °C	Automated Phenate method on Continuous Flow Analyzer	mg/L	low at 0.01 mg/L high at 0.05 mg/L
Total Kjeldahl Nitrogen	10 ml 20% H_2SO_4/l at 4 °C	Block digestion, Automated Phenate method for ammonia	mg/L	0.1 mg/L
Total Phosphorus	10 ml 20% H_2SO_4/l at 4 °C	Digestion to orthophosphate, followed by ascorbic acid reduction method using Continuous Flow Analyzer	mg/L	low at 0.001 mg/L mid at 0.01 mg/L high at 0.1 mg/L
Total Suspended Solids	cool at 4 °C	Filtration on glass fiber filter, determination of increase in weight upon drying at 103-05 °C	mg/L	1 mg/L

Note: analysis methods have been consistent over the study period, October 1980 through September 1996.

Table 2-4. List of metals and their STORET codes, analyzed at all Illinois EPA AWQMN stations.

Total	Metal	Dissolved	Total	Metal	Dissolved
1105	Aluminum	1106	1051	Lead	1049
1007	Barium	1005	927	Magnesium	925
1022	Boron	1020	1055	Manganese	1056
1012	Beryllium	1010	1067	Nickel	1065
1027	Cadmium	1025	937	Potassium	935
916	Calcium	915	1077	Silver	1075
1034	Chromium	1030	929	Sodium	930
1042	Copper	1040	1082	Strontium	1080
1037	Cobalt	1035	1087	Vanadium	1085
1045	Iron	1046	1092	Zinc	1090

Data Storage

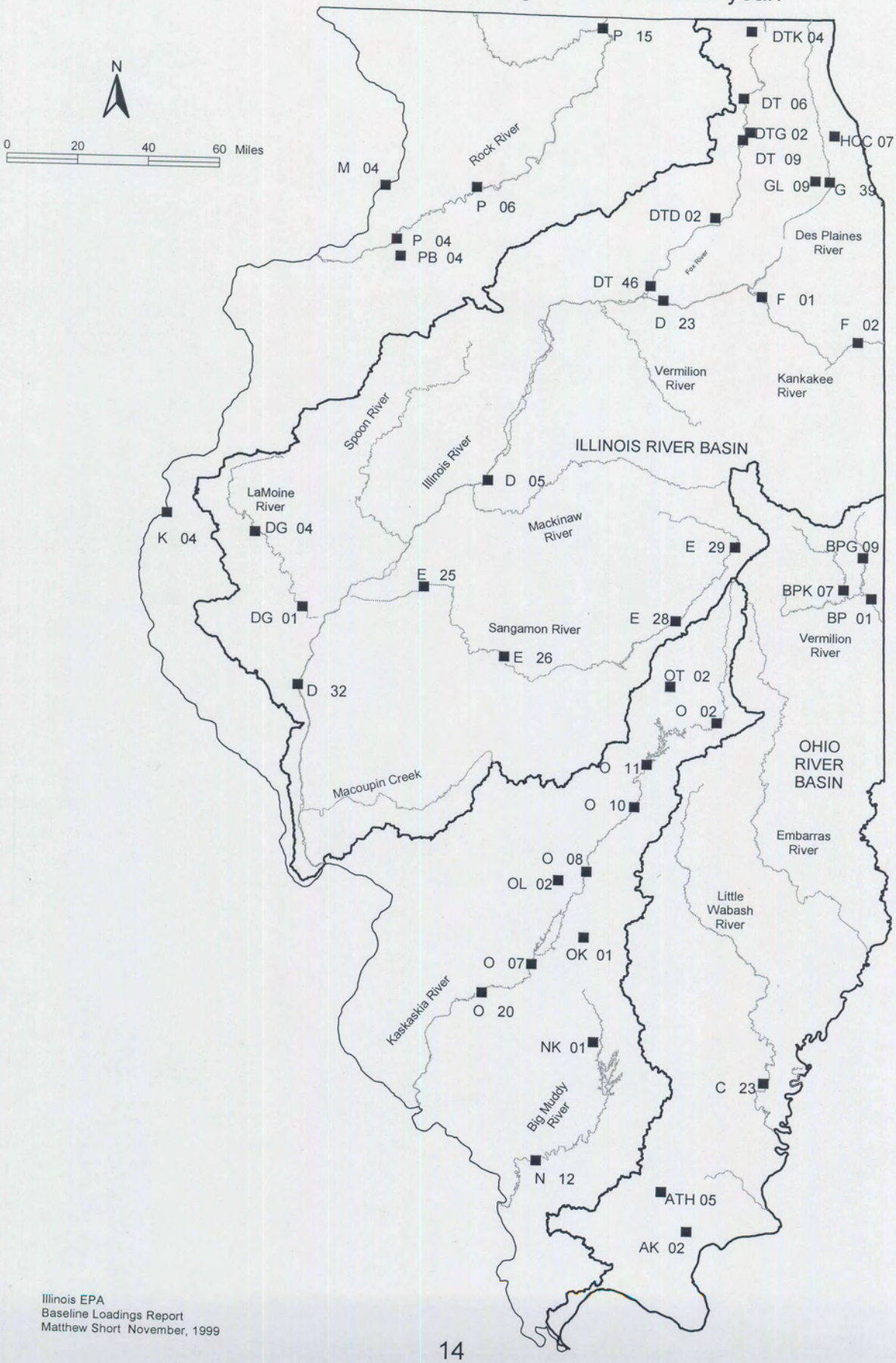
The Illinois EPA stores chemical data in a USEPA database known as STO (storage) RET (retrieval). Water quality data collected from AWQMN stations between October 1977 and December 1998 was stored in two separate STORET files: 21ILAMB and 21ILL. The 21ILAMB file contains data from the parameter groups for all 209 stations beginning in October 1977 or later depending on when the station was established. The primary station code for these stations is the USGS number. The unique Illinois EPA code is a secondary code. Nitrogen data in the 21ILAMB file includes total ammonia-N (610) and total nitrate + nitrite-N (630) at all stations for the period of record. Total Kjeldahl nitrogen or TKN (625) was available from 76 active stations along with all six of the inactive stations. USGS flow data in cubic feet per second (60 or 61) is also stored with the chemical data. USGS flow data through the 1996 water year was available at 98 of the active AWQMN stations. The combination of TKN, total nitrate+nitrite-N and flow, which are the parameters necessary to calculate total nitrogen loads, were available from 43 active stations (Figure 2-2).

The 21ILL file in STORET contains a mixture of stream water quality and biological data from the AWQMN, special surveys and intensive surveys totaling 2,164 stations. Of these, 153 stations corresponded with current AWQMN stations. In relation to nutrient data needed for this study, 31 of the ambient stations in 21ILL contain only biological data (fish, macroinvertebrate, instream habitat); 44 have both biological and nutrient water quality data; and 78 contained only older ambient nutrient water quality data, collected prior to 1977. Total ammonia-N results from the 1972 to1977 ambient data is stored under a different STORET code (81213) than the more current ammonia data (610). Samples of total Kjeldahl nitrogen and stream flow data occur sporadically in the older data set. Other nutrient parameter codes stored with the older (pre-1977) data include total PO_4 (650), ortho P (660), dissolved NH_4 (71846) and dissolved NO_3 (71851). Metals data collected between 1972 and 1977 also utilized different STORET codes. The codes were referred to as “Illinois” codes and ranged between 81209 (Boron Illinois) and 81222 (Nickel Illinois). Metals data stored under these codes was reported in mg/L, rather than µg/L, which was used after 1977. The 21ILL file was also used to store industrial solvent and pesticide data collected as part of the post-1977 AWQMN. A portion of the Illinois State Water Survey data set is also available in STORET under file 21ILLSWS.

Data calculations

Although the current network was started in October 1977, several stations were phased in over the next several years. In order to utilize a consistent period of record for this study, an October 1980 begin date was selected. The end date, September 1996, was based on the availability of USGS flow data at the beginning of the project. This resulted in a 16 year period of record for the analysis. Prior to calculations, the chemical data set was reviewed for outliers and zero values. Some of the older water quality data, prior to1982, contained zero values. Discussions with Illinois EPA laboratory personnel indicated that these zero values indicated less

Figure 2-2. Illinois EPA AWQMN stations with TKN and flow data through the 1996 water year.



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than detection limits. These values were replaced with the appropriate detection limit value prior to calculations. Values reported at the detection limit, particularly total ammonia-N, were not adjusted for the initial summaries. Stream flow data, which is necessary for load calculations, were based on USGS data which had been stored with the water quality data. Most of the data was transferred to STORET using a computer program which accessed the data from WATSTORE after it had been verified by the USGS. The data contained both daily mean flows, particularly for post 1992 data, and instantaneous flows at the time of the sample, primarily in the pre-1992 water year data. On some ungaged tributaries, the USGS also supplied calculated flows based on relationships with adjacent watersheds and historical data through the 1992 water year. Due to the large volume of flow data, a thorough check to verify the accuracy of the flow numbers was not practical. However, zero flow values were verified and left in the analysis where they indicated no flow conditions. Flow values used in the regression analysis (Section 5) were based on a retrieval of USGS historical flow data via the Internet. Flow values from these stations were verified against the USGS daily mean flows.

Summary statistics of concentrations and loads (in pounds per day) were calculated using a STORET "MEAN" program. Data summaries of individual stations which include the number of samples, minimum, maximum, mean, standard deviation, variance, sum and percentiles (10th, 25th, 50th, 75th, 85th, 90th, 95th) are provided for both concentrations and loads, and are located in Appendix B and C respectively. Baseline yields were calculated by dividing the mean load by the drainage area. Box plots are used throughout the report to show comparisons over time. The box ends represent the 25th and 75th percentiles of the data, the "tails" represent the 10th and 90th percentiles of the data. Means are represented by solid lines. In order to illustrate spatial variability, mean concentrations were extrapolated from watersheds where AWQMN stations were located to watersheds that were either upstream or adjacent that were unmonitored. Maps were generated using ArcView based on coverages developed by the Illinois EPA.

Testing for significant differences between monthly and annual means on the data set as a whole was done using SAS PROC GLM procedure within STORET (SAS, 1985). The GLM procedure uses the method of least squares to fit general linear models. An ANOVA F-test was used to determine if the monthly or annual means were significantly different from each other. Data was grouped by calendar year rather than water year for this analysis and therefore included data from January 1980 through December 1996. The null hypothesis (H_o) was that there were no significant differences between the means at the $p < 0.05$ level. Although the Anova F-test can indicate that a significant difference exist, it does not indicate which means differ from each other. A "MEANS" statement was added to the GLM in order to provide a clearer separation of means through multiple comparison methods. Although there is no general agreement on what method works best, both the Tukey studentized range test and Duncan multiple range tests were used. In addition to testing the statewide data set, the PROC GLM method was applied to individual stations within selected watersheds to test for significant differences in means of the constituents. These included the main stem Illinois River stations, the Sangamon River basin and the Kaskaskia River basin.

3. SPATIAL COMPARISONS OF SELECTED PARAMETER CONCENTRATIONS

Total Ammonia Nitrogen

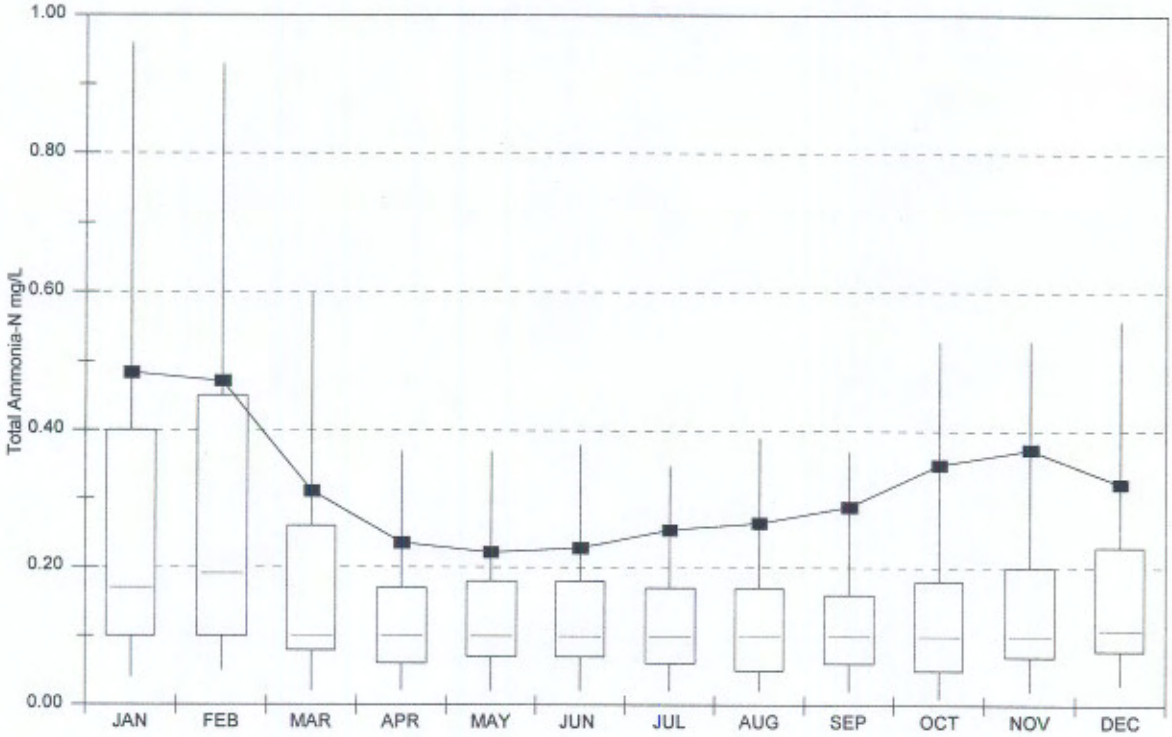
Total ammonia as nitrogen, which includes both NH_4-N and NH_3-N, ("ammonia") concentrations were examined from 29,681 samples collected between October 1980 and September 1996. Prior to 1990, the reported detection limit of ammonia was either 0.01 or 0.10 mg/L, depending on which Illinois EPA laboratory conducted the analysis. On samples collected after June1990, the detection limit reported in the data was standardized to 0.01 mg/L. The summary statistics generated for total ammonia-N were based on the detection level reported in the data. The statewide mean was 0.32 mg/L (±0.0058) (mean ± standard error of the mean) Table 3-1. Concentrations were less than or equal to 0.10mg/L, the higher reported detection level, in 54 percent of the samples. The maximum value, 34 mg/L, was collected on the Sangamon River near Niantic, Illinois (E 05) in September 1982. This station had nine other samples which exceeded the 15 mg/L general use water quality standard maximum for ammonia in the early 1980s. Other stations which exceeded the 15 mg/L maximum included Saline Branch near Mayview (BPJC06), Casey Fork near Mt. Vernon (NJ 07), Silver Creek near Troy (ND 06), Richland Creek near Hecker (OC 04), and Canteen Creek near Horseshoe Lake (JNA 01). Elevated ammonia concentrations at these stations were the result of wastewater treatment plant discharges in these instances. Spatial distributions of ammonia concentrations primarily reflected the effects of urban areas and their associated wastewater treatment plants (Figure 3-1).

Table 3-1. Statewide summary statistics for nutrient parameters and total suspended solids collected between October 1980 and September 1996, Illinois EPA AWQMN data.

Statewide:	Total Ammonia-N	T. Nitrates+ nitrites-N	Total Kjeldahl-N	Total Phosphorus	Dissolved Phosphorus	TSS
Mean	0.31574	3.8872	1.3886	0.3791	0.2522	80.628
Std Error	0.0058	0.0223	0.0134	0.0041	0.0038	1.3210
Median	0.100	2.70	1.10	0.200	0.090	36.0
95thPercentil	1.00	11.5	3.30	1.30	1.07	255
99thPercentil	4.60	15.0	7.20	3.00	2.70	850
Number	29,681	29,550	11,751	26,224	25,555	29,641

Statewide, mean ammonia concentrations showed statistically significant differences in both monthly and annual comparisons (Figure 3-2, Table 3-2). Mean ammonia concentrations were significantly higher in the months of January and February and reflected a steady decline into the month of June when the concentration began increasing. Efforts within the state of

Figure 3-2. Comparison of statewide total ammonia-N concentrations from Illinois EPA AWQMN data, October 1980 through September 1996.



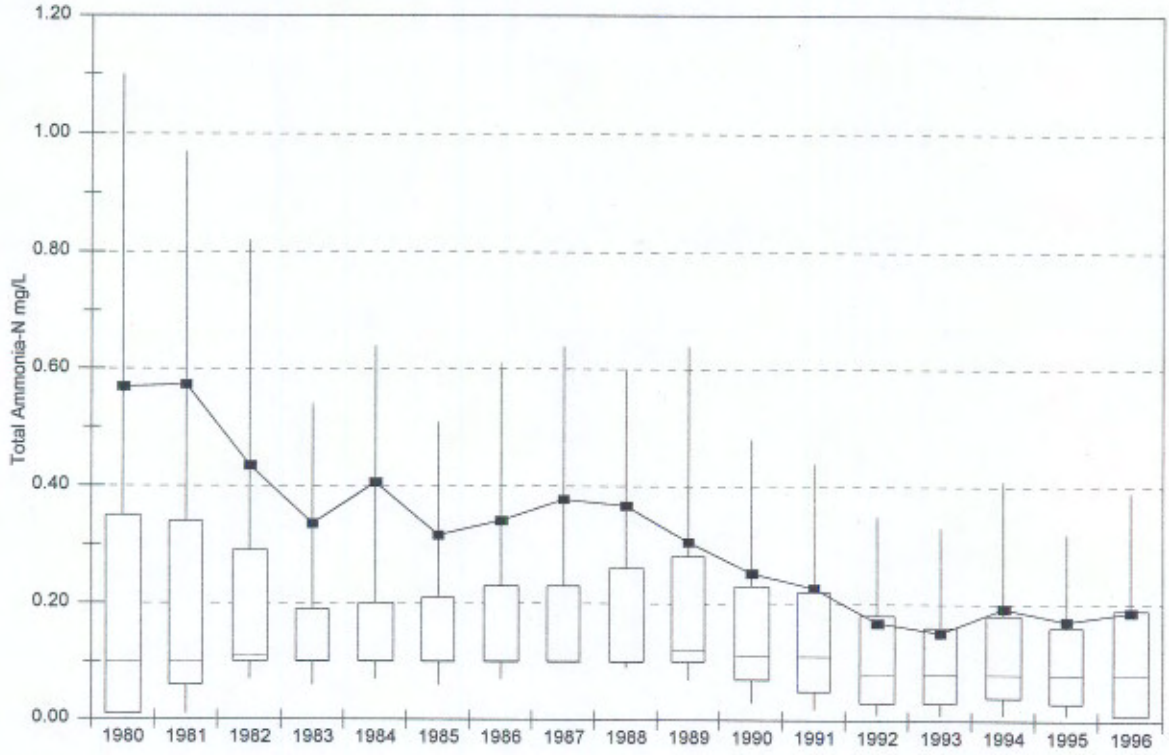
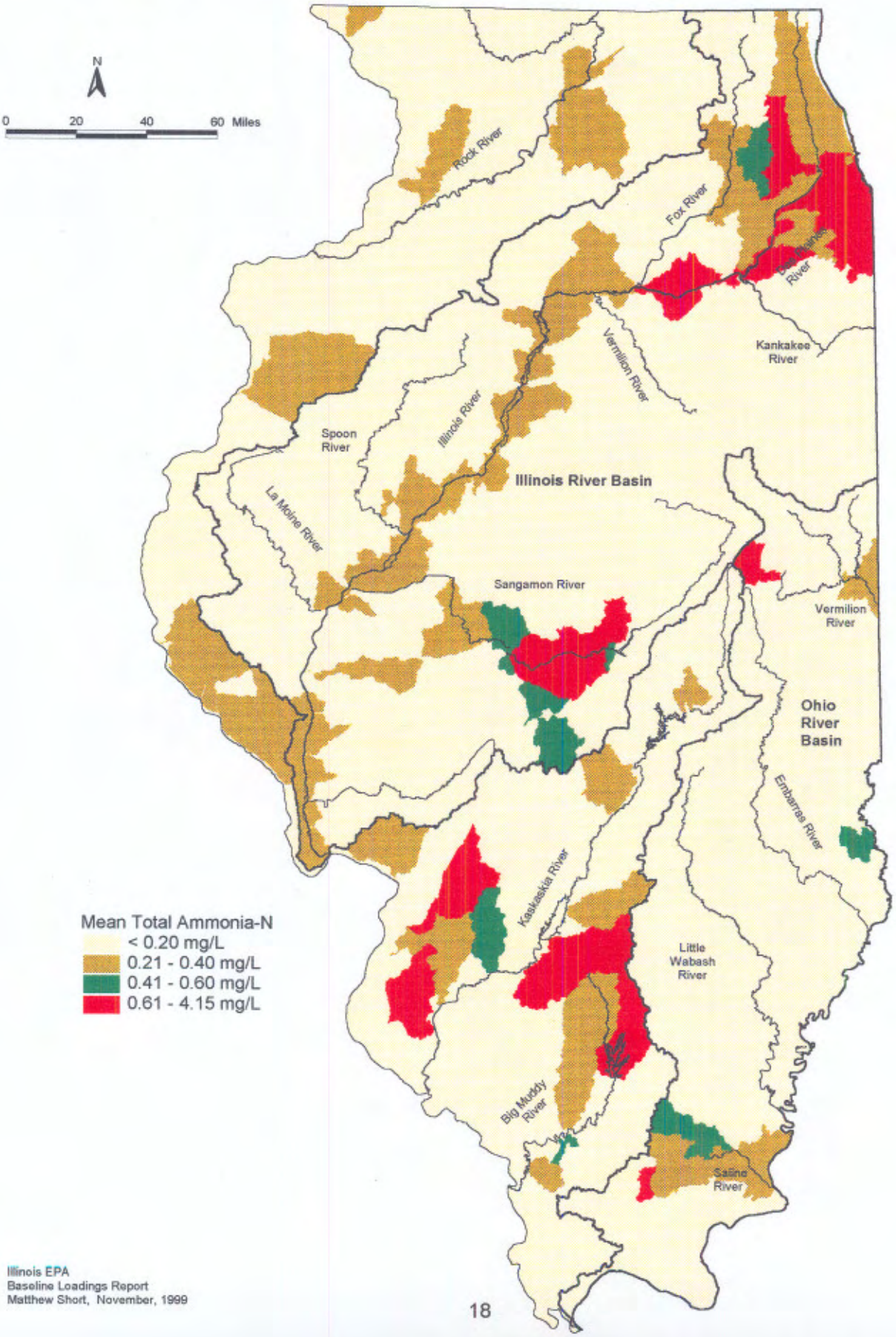


Figure 3-1. Distribution of mean total ammonia-N concentrations by watershed.



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Illinois to reduce ammonia discharges to streams through improved wastewater treatment, were reflected in the significant decline in the overall statewide mean concentration over the 16 year period of record. Because the variability in the detection level in the pre-1990 data could have affected the declining trend, ammonia concentrations were normalized to a consistent detection level. All values at or less than 0.10 mg/L (the highest reported detection limit) were set equal to 0.10 mg/L. The adjusted data followed the same declining trend line as the unadjusted data (Figure 3-2).

At individual stations, mean concentrations of ammonia ranged from less than 0.10 mg/L at 25 stations to 4.15 mg/L on the Cal-Sag Channel (H 01). Of the 203 active stations, 107 had mean ammonia concentrations between 0.11 and 0.20 mg/L; 28 had mean concentrations between 0.21 and 0.30 mg/L; and 15 had mean concentrations between 0.31 and 0.40 mg/L. Streams which had highest mean concentrations of ammonia included the Chicago Sanitary and Ship Canal, 2.3 mg/L (GI 02); the Sangamon River near Niantic, 2.8 mg/L (E 05) and Roby, 1.5 mg/L (E 16); Casey Fork near Mt. Vernon, 2.3 mg/L (NJ 07); and Canteen Creek southeast of

Table 3-2. Summary of results from PROC GLM procedure in SAS. The null hypothesis (H_o) was that there was no significant difference in means between years or months.

	Parameter	F - value	Pr > F
By Month	Total Ammonia	19.71	0.0001
	TKN	4.63	0.0001
	Total Nitrates	164.59	0.0001
	Total Phosphorus	33.62	0.0001
	Dis. Phosphorus	41.48	0.0001
	TSS	53.41	0.0001
By Year	Total Ammonia	34.26	0.0001
	TKN	13.30	0.0001
	Total Nitrates	32.21	0.0001
	Total Phosphorus	10.85	0.0001
	Dis. Phosphorus	13.72	0.0001
	TSS	17.34	0.0001

Horseshoe Lake, 2.2 mg/L (JNA 01). In general, stations with mean ammonia concentrations greater than 0.40 mg/L were downstream from the influences of urban areas or wastewater treatment plants. The exception to this was Sugar Creek near Creal Springs (ATHG01) a

tributary to the South Fork Saline River in the Ohio River basin, where the mean ammonia concentration was 0.88 mg/L. This stream, impacted by acid mine runoff from abandoned strip mines, is often acidic and generally devoid of aquatic life. These factors probably affected this stream's ability to assimilate or nitrify ammonia.

In the Rock River basin, mean total ammonia-N concentrations at individual stations ranged from 0.07 on the Green River (PB 02) to 0.28 on the Kyte River (PL 03) and Kilbuck Creek (PQB 02). On the five Rock River stations, mean total ammonia-N concentrations ranged from 0.15 to 0.21 mg/L.

The farthest downstream station on the Des Plaines River (G 23) exhibited a mean total ammonia-N concentration of 1.73 mg/L. On the Des Plaines River at Lockport (G 11), upstream from the confluence with the Chicago Sanitary and Ship Canal, the mean total ammonia-N concentration was 0.30 mg/L. The elevated ammonia concentrations on the Des Plaines River, below the confluence with the Chicago Sanitary and Ship Canal, affected levels in the Illinois River at Marseilles (D 23) which had a mean value of 0.62 mg/L. In contrast, the mean total ammonia-N concentration in the Kankakee River near Wilmington (F 01), which along with the Des Plaines River form the Illinois River, was 0.10 mg/L. Concentrations of total ammonia-N in the Illinois River decreased with distance from Chicago due to the oxidation of total ammonia-N to nitrate+nitrite, along with dilution from the Fox River, Vermilion River and other tributaries. The mean total ammonia-N concentration on the Illinois River at Hennepin (D 16) was 0.38 mg/L (Figure 3-3).

On the nine Kaskaskia River stations, mean ammonia concentrations ranged from 0.10 to 0.20 mg/L. On tributaries to the Kaskaskia River, mean ammonia concentrations were less than 0.25 mg/L with the exception of Richland Creek 1.57 mg/L (OC 04); Crooked Creek 0.69 mg/L (OJ 07 and OJ 08); and Sugar Creek 0.57 mg/L (OH 01). These stations were downstream of Bellville, Salem, Centralia and Trenton respectively.

On the smaller direct tributaries to the Mississippi River, mean ammonia concentrations were less than 0.25 mg/L with the exception of Canteen Creek (see above); Harding Ditch 0.35 mg/L (JMAC02) and Henderson Creek 0.31 mg/L (LD 02). On the Mississippi River, ammonia concentrations were similar near Fulton, 0.14 mg/L (M 04), Keokuk, 0.15 mg/L (K 04) and Thebes, 0.14 mg/L (I 84).

In the Ohio River drainage, mean ammonia concentrations were less than 0.20 mg/L on 27 of the 35 stations sampled. Following Sugar Creek (ATHG01 see above) mean ammonia concentrations were 0.87 mg/L on Saline Branch near Mayview (BPJC06); 0.52 mg/L on Middle Fork Saline River near Harrisburg (ATG 03); and 0.46 mg/L on Sugar Creek (BF 01) near Palestine, Illinois (Figure 3-4).

Figure 3-3. Mean total ammonia-N concentrations (mg/L) on the Illinois River and the farthest downstream monitoring station on major tributaries. Illinois EPA AWQMN data, October 1980 - September 1996.

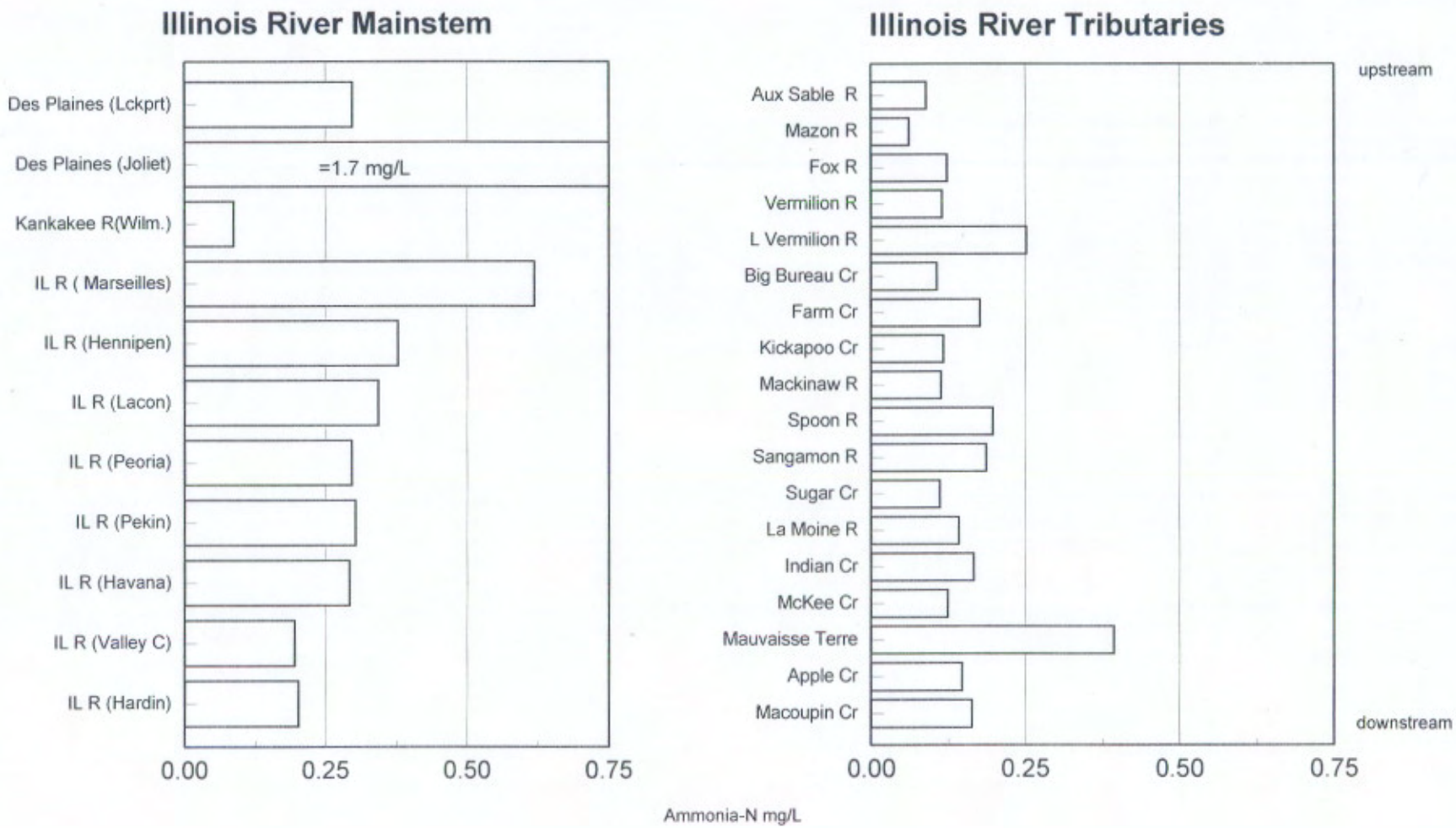
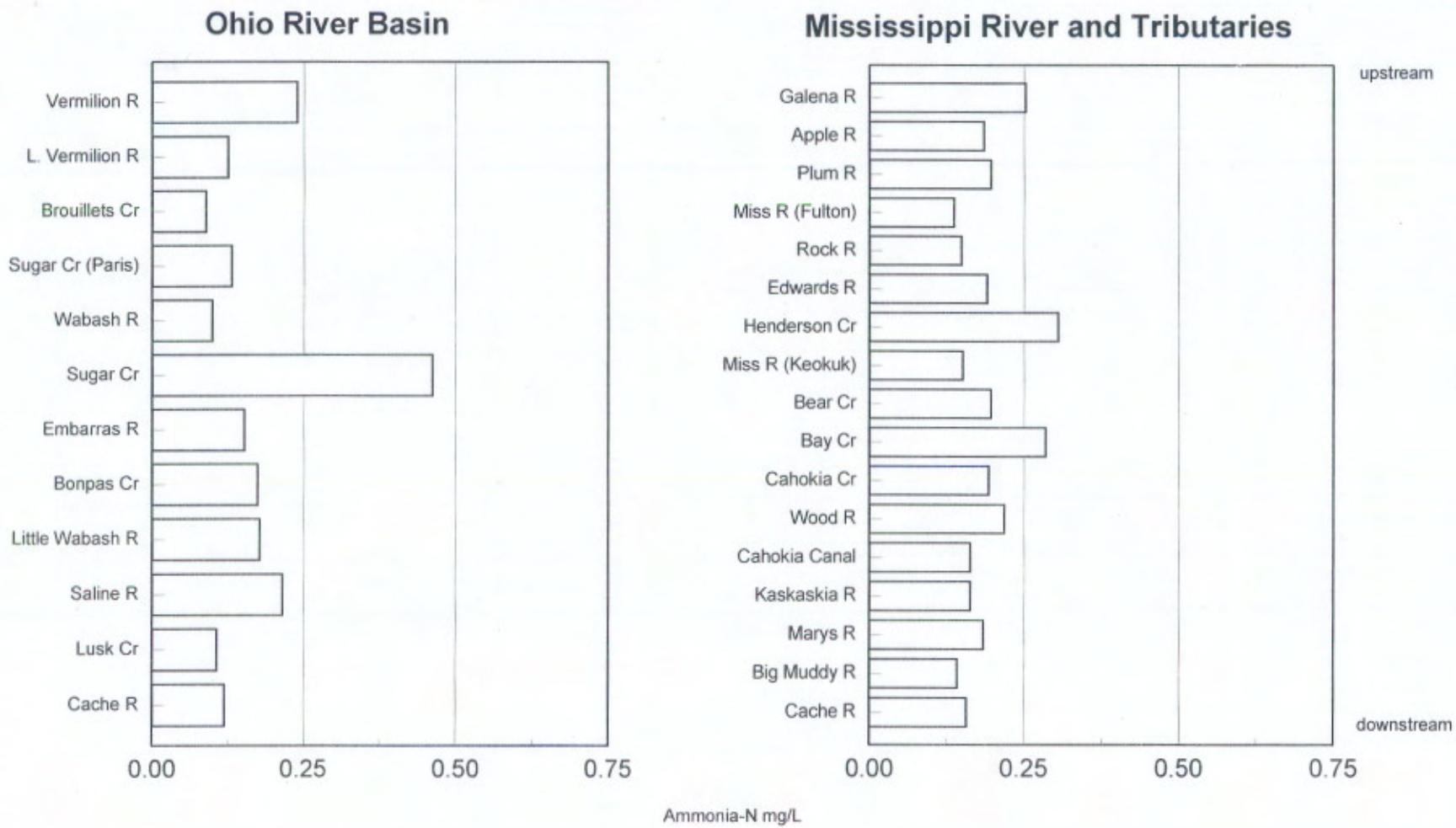


Figure 3-4. Mean total ammonia-N concentrations (mg/L) at the farthest downstream monitoring station on tributaries to the Ohio River, the Mississippi River and its tributary stations. Illinois EPA AWQMN data October 1980 - September 1996.



Total Nitrate+Nitrite Nitrogen

Total nitrate+nitrite-N ("nitrates") concentrations were examined from 29,550 samples collected between October 1980 and September 1996. The statewide mean was 3.89 (±0.0223) mg/L (Table 3-1). Concentrations were less than or equal to 1.0 mg/L in 30.6 percent of the samples. The maximum value in the data set, 88 mg/L, occurred from one sample on Yellow Creek (PWN 01) in the Rock River basin and may be an error. The next highest value was 34 mg/L from the Sangamon River near Monticello on August 1, 1991. Approximately 8.6 percent of the samples in the data set were equal to or greater than 10 mg/L.

Several studies have shown that nitrate concentrations in Illinois streams generally show significant seasonal variations at individual stations. The highest concentrations tend to occur in the spring and the lowest levels in the late summer, generally August or September (Crown and Flemal, 1978, and Short, 1995). Significant differences between monthly means were also evident in the statewide data set (Table 3-2). The pattern which exists at individual stations also held true for the statewide data set (Figure 3-5). Significant variations in the statewide annual mean also occurred (Table 3-2, Figure 3-5). The lowest annual means occurred during 1987 and 1988, corresponding with below average rainfall conditions during this time span. Annual mean concentrations peaked in 1990. Unlike mean ammonia concentrations, mean nitrate concentrations did not show significant spatial distributions based on the influence of wastewater treatment plant discharges. The spatial pattern of mean nitrates reflected a broader geographical influence. Means were generally highest (≥6.0 mg/L) in a band across the northern and central portions of the state. In contrast, most of the streams in the southern third of Illinois, such as the Big Muddy River and its tributaries, had low mean nitrate concentrations, generally ≤1.0 mg/L (Figure 3-6).

On the Rock River basin, mean nitrate concentrations at individual stations ranged from 3.5 mg/L on the Kishwaukee River (PQ 10) to 9.9 mg/L on Yellow Creek (PWN 01) (note excluding the 88 mg/L sample from the Yellow Creek data set would decrease the mean to 9.3 mg/L). In addition to Yellow Creek, high mean nitrate concentrations were present on Elkhorn Creek, 9.5 mg/L (PH 16); Kilbuck Creek 9.1 mg/L (PQB 02); South Branch Kishwaukee River 8.3 mg/L (PQC 06); Kyte River, 7.5 mg/L (PL 03); and Rock Creek, 7.3 mg/L (PE 05). On the five Rock River stations, mean nitrates ranged from 3.6 to 4.3 mg/L and were highest where the Rock River enters Illinois from Wisconsin (P 20).

On the Illinois River mean nitrate values ranged from 4.1 mg/L at the downstream station near Hardin (D 01) to 4.7 mg/L near Hennepin (D 16). Although mean nitrates on the Illinois River appeared similar, statistically, they were significantly different at the 95 percent level ($F=2.24$, $p=0.029$). Mean nitrate concentrations on the farthest downstream stations on the Des Plaines River (G 23) and Kankakee River (F 01), which form the Illinois River, were similar at 3.5 mg/L and 3.6 mg/L respectively (Figure 3-7). The increase in mean nitrate concentrations in the Illinois River at Marseilles over the lower stations on the Kankakee and Des Plaines Rivers was probably due to the oxidation of high total ammonia-N levels in the Des

Figure 3-5. Comparisons of statewide concentrations of total nitrate+nitrite-N from Illinois EPA AWQMN data. October 1980 through September 1996.

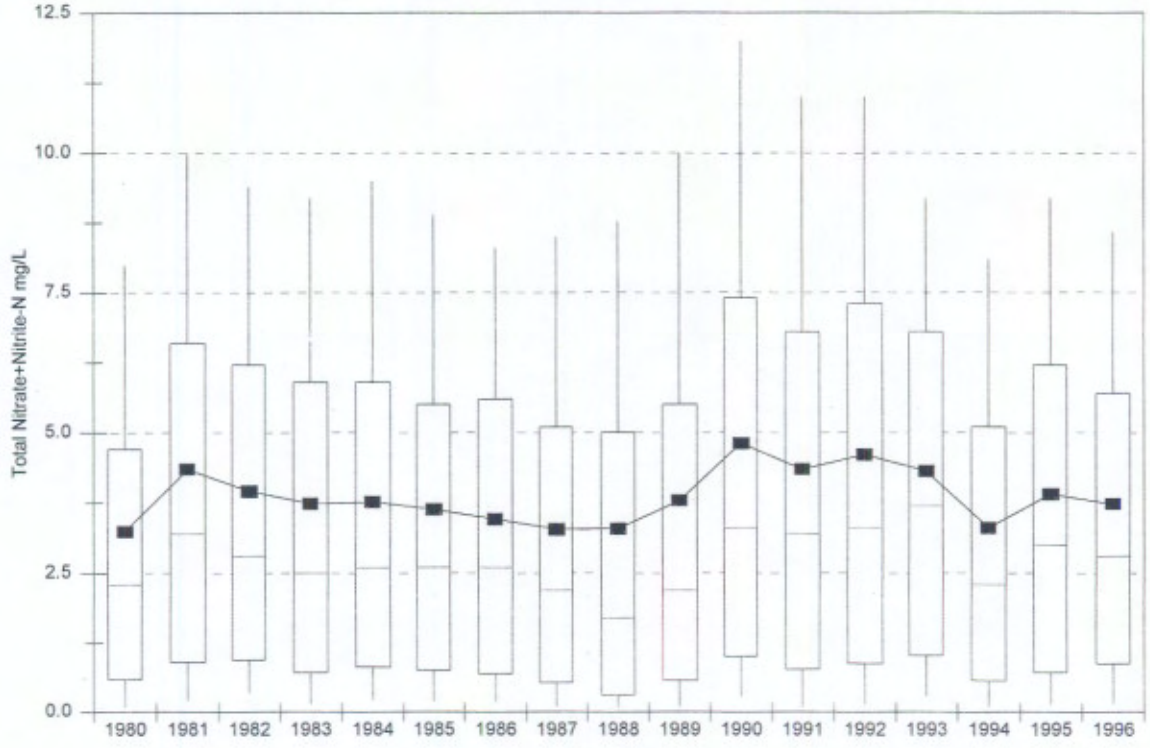
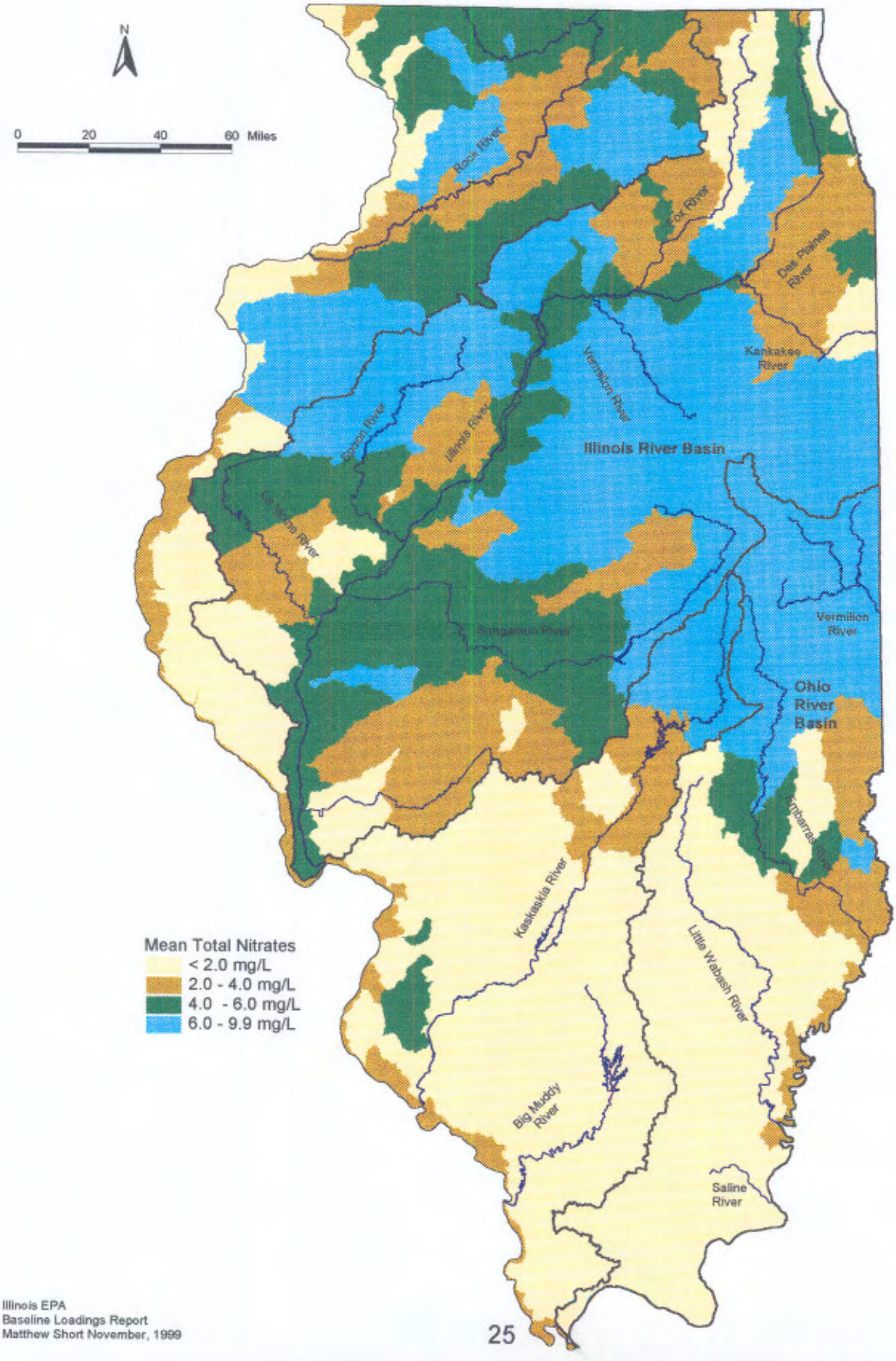


Figure 3-6. Distribution of mean total nitrate + nitrite-N concentrations by watershed.



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Plaines to nitrate+nitrite-N. Although the smaller direct tributaries which flow into the Illinois River in this stretch have high nitrate concentrations, their influence, due to flow volume, is considered minimal. The Mazon River (DV 04), where mean nitrate concentrations were 8.8 mg/L, makes up only 3 percent of the flow volume of the Illinois River at Marseilles. Mean nitrate concentration on the Aux Sable River (DW 01), another small tributary, was 9.2 mg/L.

On tributaries to the Illinois River, the highest mean nitrate concentrations occurred in the tributaries located between the Des Plaines/Kankakee confluence and the bend at Hennipin (D 16). These included the Mazon and Aux Sable Rivers previously mentioned along with Bureau Creek, 8.9 mg/L (DQ 01) and its tributary West Bureau Creek, 9.9 mg/L (DQD 01); and the Vermilion River, 8.9 mg/L at DS 07 and 8.6 mg/L at DS 06. Mean nitrate concentrations on the Fox River were significantly lower than other tributaries in this reach. Concentrations ranged from 2.0 mg/L where the Fox River enters Illinois from Wisconsin (DT 35) to 3.1 mg/L near Dayton (DT 46) before it enters the Illinois River. Mean nitrate concentrations on tributaries to the Fox River ranged from1.1 mg/L on Poplar Creek near Elgin (DTG 02) to 4.5 mg/L on Somonauk Creek (DTB 01)

Other Illinois River tributaries which had high mean nitrate concentrations included the upper Mackinaw River, 9.6 mg/L (DK 13); and Indian Creek, 8.2 mg/L (DJL 01) a tributary to the Spoon River (DJ). Mean total nitrates exceeded 6.0 mg/L on stations located in the upper Sangamon River (E 28 and E 29) and tributaries Sugar Creek (EID 04) and Kickapoo Creek (EIE 04); the Spoon River (DJ 06 and DJ 02); Mauvaisse Terre Creek (DD 04); the Iroquois River (FL), a tributary to the Kankakee; the DuPage River (GB), West Branch and East Branch Du Page River, Salt Creek (GL) which are all tributaries to the Des Plaines River. There were two Illinois River tributaries which had mean nitrate concentrations that were less than 1.0 mg/L: McKee Creek (DE 01) a direct tributary to the Illinois River, 0.88 mg/L; and Slug Run (DJBZ01), a tributary to the Spoon River, 0.26 mg/L (Figure 3-7). On Slug Run, low nitrate concentrations are probably related to the fact that the watershed is an old strip mine area. McKee Creek, on the other hand, is a primarily agricultural watershed in west central Illinois.

Mean nitrate concentrations on the Kaskaskia River changed significantly from upstream to downstream ($F=167.61$, $p<0.0001$) Figure 3-8. Upstream from Lake Shelbyville, which is formed by a dam on the Kaskaskia River, mean nitrate concentrations on the Kaskaskia River were 7.2 mg/L near Allenville; 7.4 mg/L near Cooks Mill; and 7.8 mg/L near Hayes. The tributaries to Lake Shelbyville also exhibited high mean concentrations of nitrates: West Okaw River, 9.3 mg/L (OT 01); Jonathon Creek, 7.7 mg/L (OU 01); and Asa Creek 8.7 mg/L (OZZT01). Mean nitrate concentrations on the Kaskaskia River immediately below Lake Shelbyville (O 11) were 4.1 mg/L. Further downstream on the Kaskaskia River below Lake Carlyle (stations O 30, O 20, and O 07) mean nitrate concentrations were approximately 1.0 mg/L (Figure 3-8). Mean nitrate concentrations at the remaining tributary stations in the Kaskaskia River basin were less than 1.8 mg/L with the exception of Richland Creek, 4.6 mg/L (OC 04). Kelly et al. (1989) noted that one factor in the change of nitrate concentrations on the Kaskaskia River may have been due to a change from two physiographic regions: the

Figure 3-7. Mean total nitrate+nitrite concentrations (mg/L) on the Illinois River and the farthest downstream monitoring station on major tributaries. Illinois EPA AWQMN data, October 1980 - September 1996.

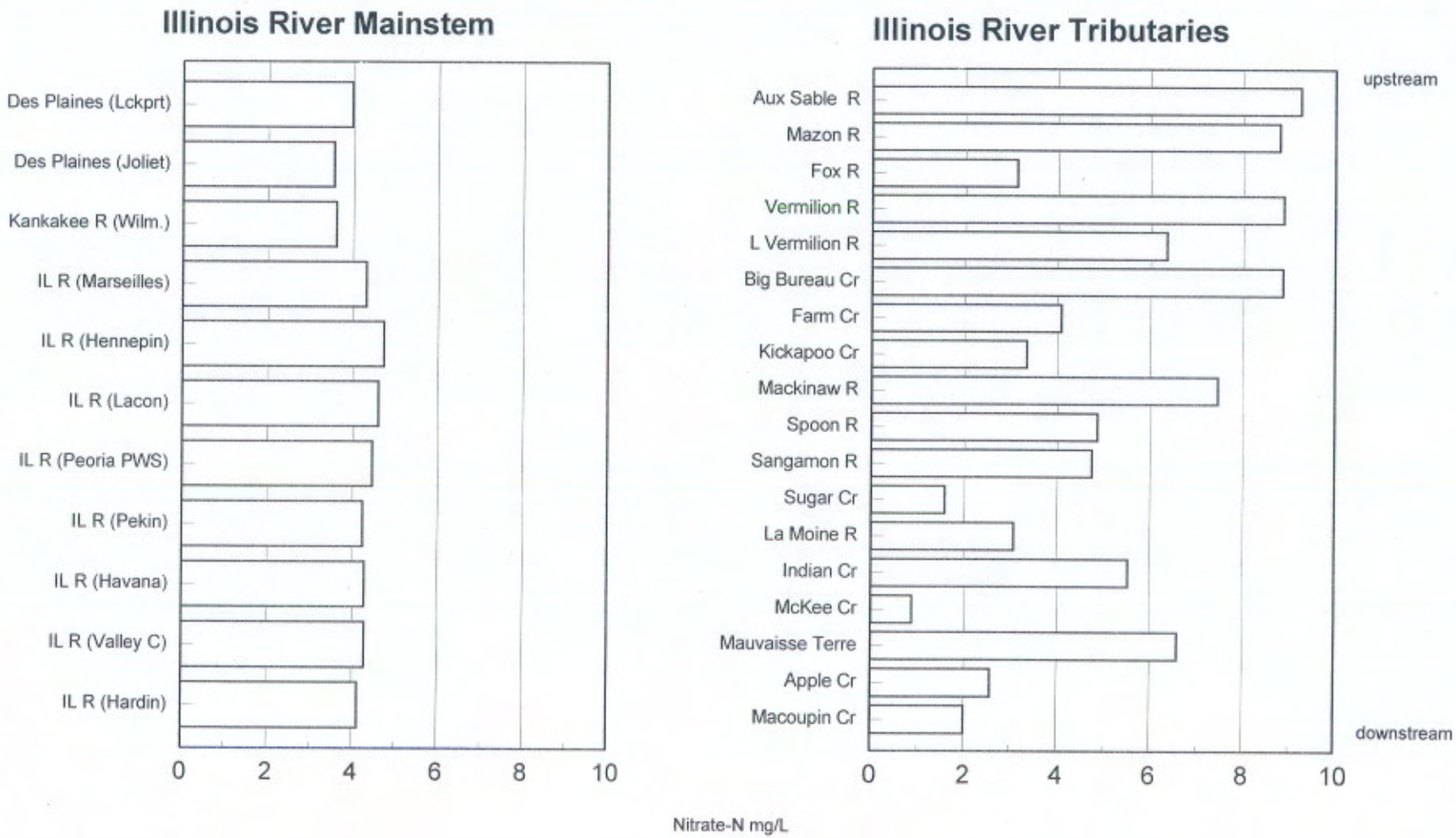


Figure 3-8. Comparisons of nitrates and TKN concentrations from Illinois EPA AWQMN stations on the Kaskaskia River, October 1980 through September 1996.

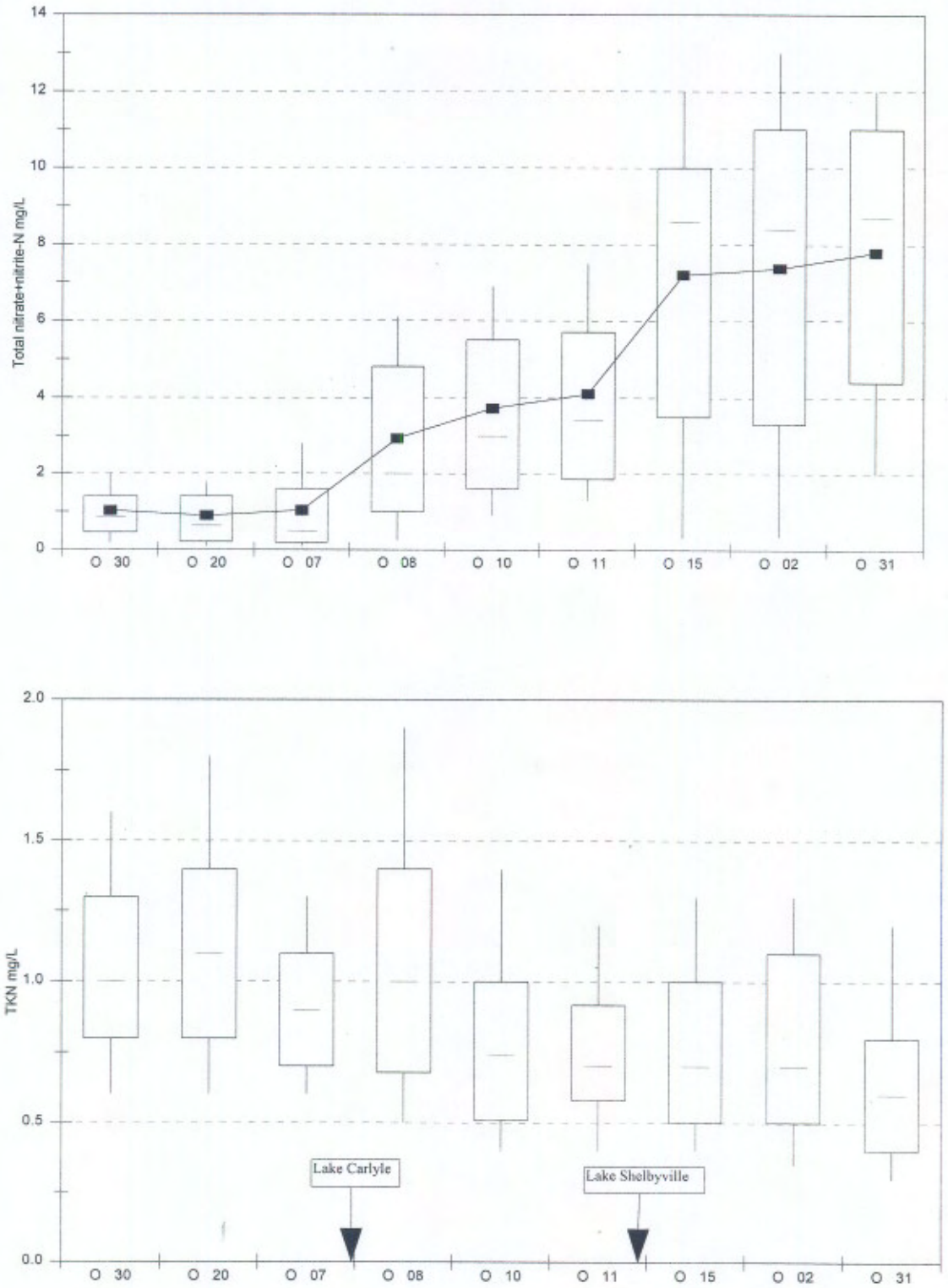
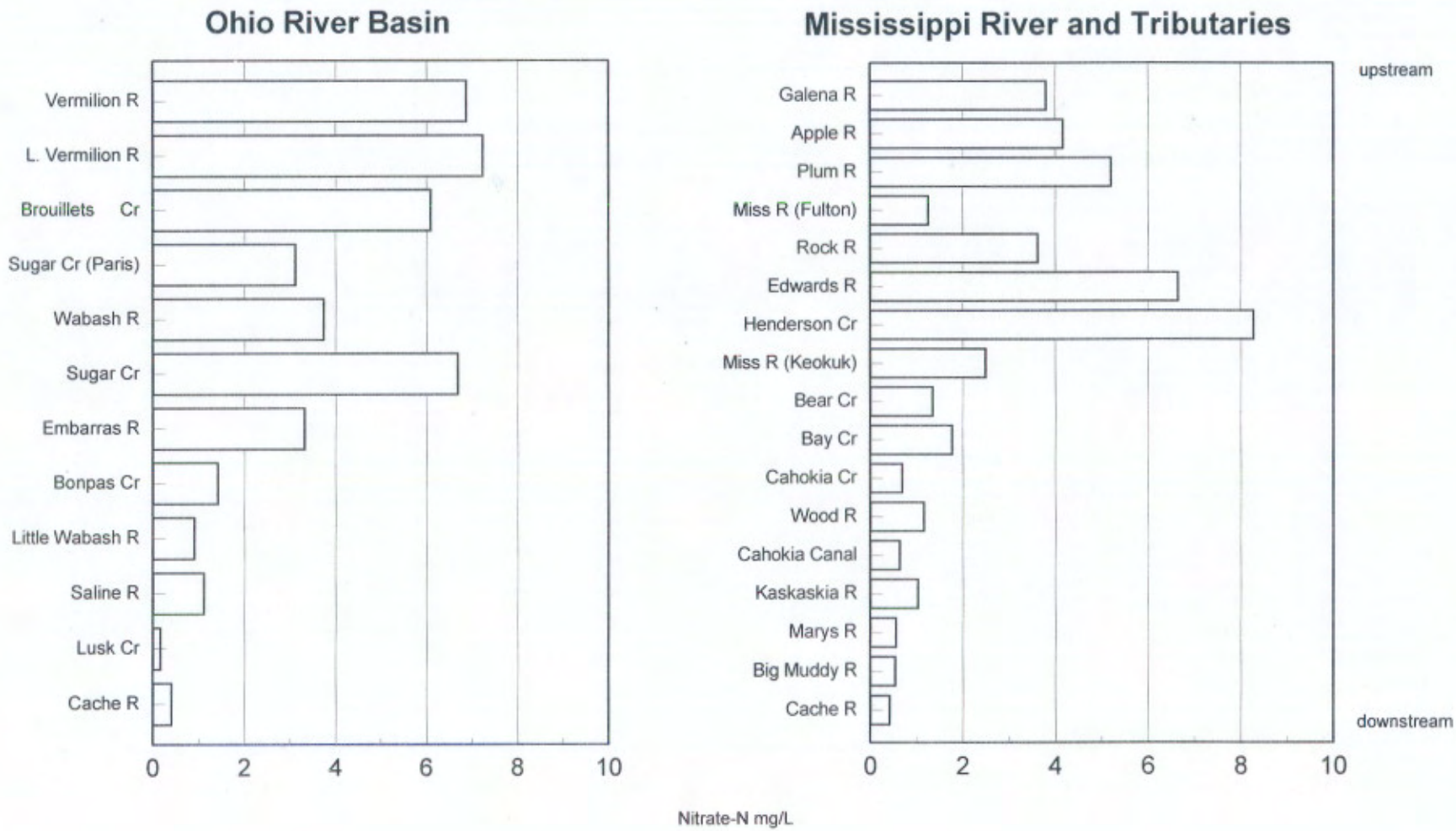


Figure 3-9. Mean total nitrate+nitrite-N concentrations (mg/L) at the farthest downstream monitoring station on tributaries to the Ohio River, the Mississippi River and its tributary stations. Illinois EPA AWQMN data October 1980 - September 1996.



Bloomington Ridged Plain in the upper portions of the watershed above Lake Shelbyville to the Springfield Plain below (see Leighton et al. 1948 for a description of physiographic regions).

Mean nitrate concentrations on direct tributaries to the Mississippi River ranged from 0.54 mg/L on the Big Muddy (N 12) to 8.1 mg/L on Henderson Creek (LD 01). Mean nitrate concentrations were notably higher on the northern tributaries (i.e., means >3.5 mg/L) than the southern tributaries (means <1.8 mg/L). The break occurred between Henderson Creek and Bear Creek (Figure 3-9). On the Mississippi River, nitrate concentrations were higher at Keokuk, 2.5 mg/L (K 04) and Thebes, 1.3 mg/L (I 84) than the farthest upstream station at Fulton, 1.2 mg/L (M 04).

High mean nitrate concentrations were present on two tributaries in the Wabash River basin: Saline Branch, 9.7 mg/L (BPJC06); and the upper Embarras River station near Camargo, 8.0 mg/L (BE 14). Similar to the Kaskaskia River, the Embarras River showed significant variation from upstream to downstream, with decreasing mean nitrate concentrations moving downstream. The Embarras River, like the Kaskaskia River, also flows from the Bloomington Ridged Plain to the Springfield Plain. The North Fork Embarras River had a mean nitrate concentration of 1.1 mg/L. Mean nitrate concentrations were significantly lower in the Cache River, Lusk Creek, Saline River, Little Wabash River and Bonpas Creek drainages (≤1.5 mg/L) than the Embarras River near Billet, BE 01 (≥3.3 mg/L), or Vermilion River (≥6.2 mg/L). Concentrations were also lower on Sugar Creek, 3.1 mg/L (BM 02) than other streams in the area probably due to the effects of the twin lakes at Paris (Figure 3-9).

Total Nitrogen

Total Kjeldahl nitrogen (TKN), which is a measure of total ammonia-N plus organic nitrogen, was analyzed in 11,751 samples collected between October 1980 and September 1996. TKN was routinely collected from 82 of the 209 stations and the statewide mean was 1.39 mg/L (± 0.0134) Table 3-1. Individual station means of TKN ranged from 0.27 mg/L on Lusk Creek (AK 02) to 5.77 mg/L on the Calumet-Sag Channel (H 01). TKN concentrations were significantly correlated with total ammonia-N ($r = 0.738$, $p < 0.0001$). As with the other forms of nitrogen, mean TKN had statistically significant variability between months and years. There was a general decline over time although not as dramatic as the decline in mean ammonia concentrations. Seasonally, September and December had significantly lower TKN concentrations than the other months (Figure 3-10).

Mean concentrations of total Kjeldahl nitrogen and total nitrate plus nitrite nitrogen were added together to estimate total nitrogen concentrations at 78 stations. Four inactive stations were not included due to limited periods of record: A 06 on the Ohio River, B 07 on the Wabash River and the two Mississippi River stations near Elsah, J 05 and J 83. Measures of total nitrogen were significantly correlated with mean nitrate concentrations ($r = 0.767$, $p < 0.0001$) and to a lesser extent, mean ammonia ($r = 0.2538$, $p < 0.025$) (Figure 3-11).

Ammonia comprised greater than 20 percent of the total nitrogen at nine of the 78 stations (Table 3-3). Seven of these stations were affected by point source discharges and included the Des Plaines River at Joliet (G 23); the Chicago Sanitary and Ship Canal (GI 01 and 02); the Cal-Sag Channel (H 01); the Little Calumet River (HB 42); Middle Fork Saline River (ATG 03) and Casey Fork (NJ 07). Point sources were not a factor on the other two stations where ammonia comprised greater than 20 percent of the total nitrogen: Lusk Creek (AK 02) and South Fork Saline River (ATH 05). On Lusk Creek, the overall mean concentration of total nitrogen was very low: 0.43 mg/L, although ammonia comprised 24.4 percent of the total. Ammonia concentrations on the South Fork Saline river were affected by it's tributary, Sugar Creek (ATHG01) which was impacted by acid mine runoff.

On the four Illinois River stations where TKN data was available, nitrates were the primary form of nitrogen and comprised 70 to 75 percent of the total nitrogen. Ammonia comprised 3 to 5 percent of the total nitrogen at the downstream stations at Peoria (D 30) Pekin (D 05) and Valley City (D 32) but was slightly higher, 10.4 percent, near Marseilles (D 23).

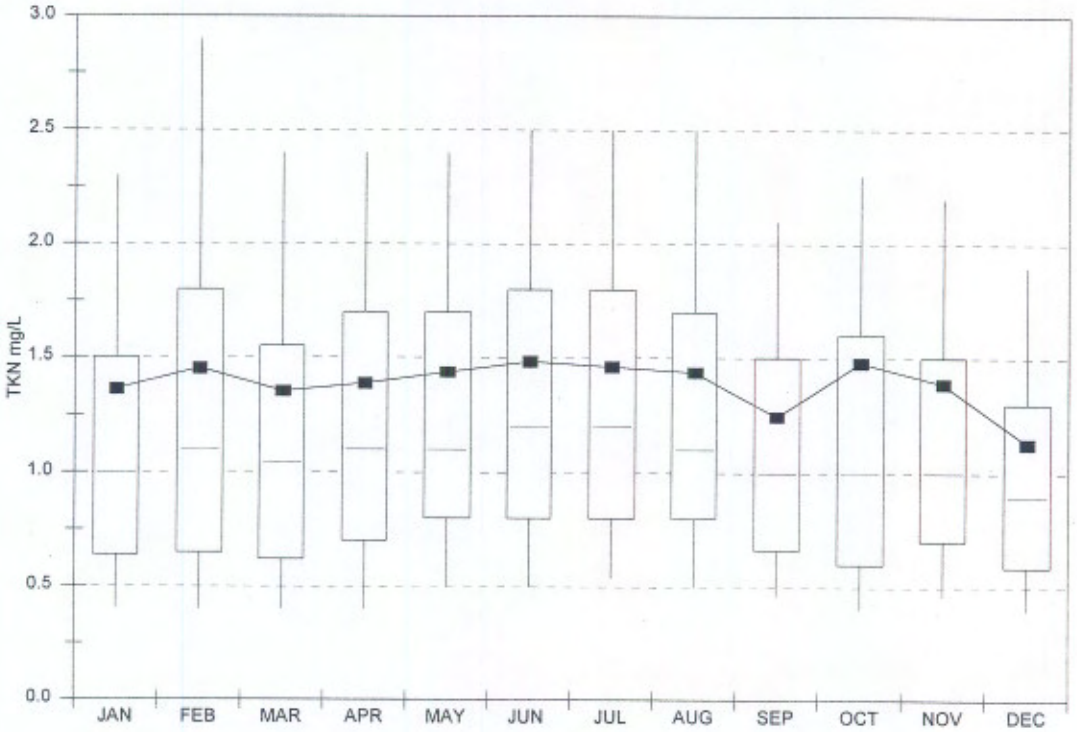
On the Mississippi River, mean total nitrogen concentrations were higher at Thebes, 3.5 mg/L and Keokuk, 3.7 mg/L (K 04) than at Fulton, 2.5 mg/L (M 04) due primarily to the higher concentrations of nitrates. Nitrates comprised 62 percent of the total nitrogen on the Mississippi River at Thebes, 67 percent of the total nitrogen at Keokuk (K 04) and 50 percent of the total nitrogen at Fulton (M 04).

"Organic" nitrogen (nitrogen that was neither nitrate or ammonia) comprised greater than 50 percent of the nitrogen at stations located primarily in southern Illinois. This included the North Fork Saline River (ATF 04); South Fork Saline River (ATH 05); the Little Wabash (C 23); the Big Muddy River (N 08, N 10, N 12), and its tributaries Cedar Creek (NA 01), Kinkaid Creek (NB 01), Crab Orchard Creek (ND 02) and Rayse Creek (NK 01); the Kaskaskia River at Okawville (O 20) and its tributaries East Fork Kaskaskia (OK 01), North Fork Kaskaskia (OKA 01) and Hickory Creek (ON 01) Table 3-3.

Table 3-3. Breakdown of mean total nitrogen by station, Illinois EPA AWQMN data.

Station:	Mean Total N mg/L	Composition of total N			Station:	Mean Total N mg/L	Composition of Total N		
		Nitrate	Ammonia	Other			Nitrate	Ammonia	Other
AK 02	0.434	37.81%	24.44%	37.76%	GL 09	9.505	77.34%	8.08%	14.58%
ATF 04	1.984	45.07%	6.10%	48.84%	H 01	7.806	26.04%	53.21%	20.74%
ATG 03	2.575	50.88%	20.16%	28.97%	HB 42	5.787	48.07%	22.02%	29.91%
ATH 05	0.998	23.14%	27.85%	49.01%	HCC 07	5.660	71.79%	5.78%	22.43%
BE 09	7.299	88.44%	1.42%	10.13%	I 84	3.476	62.43%	4.11%	33.45%
BP 01	7.918	86.80%	3.02%	10.18%	K 04	3.698	67.36%	4.08%	28.56%
BPG 09	7.518	89.21%	1.22%	9.56%	M 04	2.508	49.80%	5.46%	44.73%
BPK 07	7.072	87.97%	1.24%	10.79%	N 08	1.615	29.91%	12.69%	57.40%
C 23	2.189	41.25%	8.08%	50.67%	N 10	1.000	15.90%	8.40%	75.69%
D 05	5.979	70.95%	5.07%	23.99%	N 12	1.596	33.52%	8.90%	57.58%
D 23	5.977	72.13%	10.36%	17.51%	NA 01	1.106	24.04%	19.71%	56.25%
D 30	6.032	74.03%	4.91%	21.06%	NB 01	0.679	28.12%	13.99%	57.89%
D 32	5.676	75.63%	3.44%	20.93%	ND 01	2.142	45.90%	18.96%	35.15%
DG 01	4.441	69.26%	3.20%	27.54%	ND 02	1.057	18.27%	16.09%	65.64%
DG 04	5.294	76.29%	2.68%	21.03%	NJ 07	4.988	34.24%	46.91%	18.85%
DT 06	3.207	43.46%	5.61%	50.93%	NK 01	2.294	32.31%	12.82%	54.88%
DT 09	3.699	49.44%	6.30%	44.26%	O 02	8.216	89.68%	1.36%	8.96%
DT 22	3.428	49.18%	4.40%	46.42%	O 07	2.022	51.08%	6.68%	42.24%
DT 35	3.460	58.35%	3.90%	37.75%	O 08	4.054	72.28%	3.60%	24.12%
DT 38	3.605	47.61%	4.97%	47.43%	O 10	4.621	80.51%	2.34%	17.16%
DT 46	5.094	61.42%	2.41%	36.17%	O 11	4.882	83.85%	4.06%	12.09%
DTB 01	5.493	82.23%	1.84%	15.93%	O 15	8.326	86.40%	1.20%	12.40%
DTD 02	4.204	78.20%	2.24%	19.57%	O 20	2.116	41.92%	6.05%	52.04%
DTG 02	2.017	55.97%	4.86%	39.17%	O 30	2.155	47.56%	7.56%	44.87%
DTK 04	4.365	70.44%	3.57%	25.99%	O 31	8.521	91.38%	1.31%	7.30%
E 06	6.385	85.49%	1.66%	12.85%	OK 01	1.656	31.52%	13.16%	55.32%
E 25	6.002	79.26%	3.10%	17.64%	OKA 01	2.106	30.73%	11.68%	57.59%
E 26	6.776	73.78%	8.38%	17.84%	OL 02	1.774	47.69%	8.12%	44.19%
E 28	7.911	87.01%	1.61%	11.38%	ON 01	1.313	32.22%	10.05%	57.73%
E 29	8.426	89.05%	1.04%	9.90%	OT 02	10.083	92.00%	1.25%	6.75%
EO 02	5.470	71.06%	7.95%	20.99%	OU 01	9.016	85.43%	3.52%	11.06%
EOA 01	2.879	70.81%	4.48%	24.70%	OZZT01	9.794	88.42%	2.22%	9.36%
EOD 01	2.398	70.76%	3.75%	25.49%	P 04	5.326	68.03%	2.80%	29.17%
F 01	4.548	79.23%	1.91%	18.86%	P 06	5.561	67.78%	2.81%	29.42%
F 02	2.666	64.66%	4.01%	31.33%	P 14	5.618	70.79%	3.68%	25.53%
G 15	6.090	70.54%	5.96%	23.50%	P 15	5.647	75.47%	2.94%	21.59%
G 23	6.551	54.13%	26.44%	19.43%	P 20	5.754	69.52%	2.62%	27.86%
G 39	6.622	74.61%	4.73%	20.66%	PB 04	5.067	80.61%	2.41%	16.98%
GI 01	6.963	54.95%	28.36%	16.69%					
GI 02	7.038	48.66%	33.02%	18.32%					

Figure 3-10. Comparison of statewide TKN concentrations from Illinois EPA AWQMN data October 1980 through September 1996.



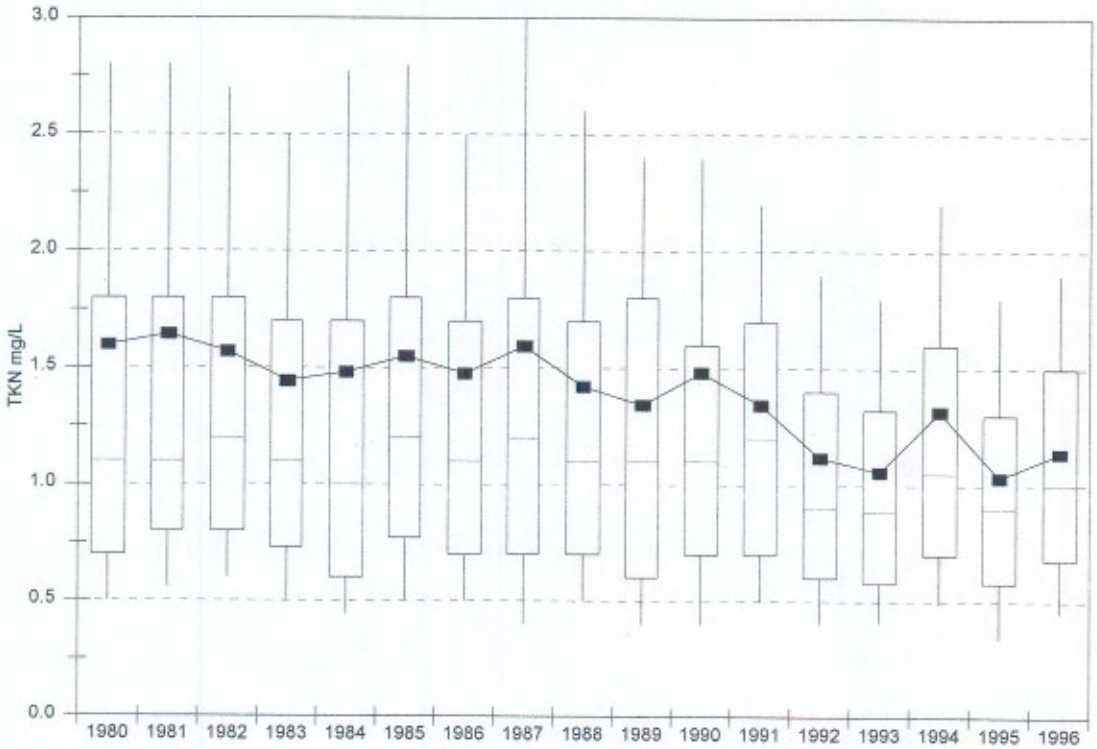
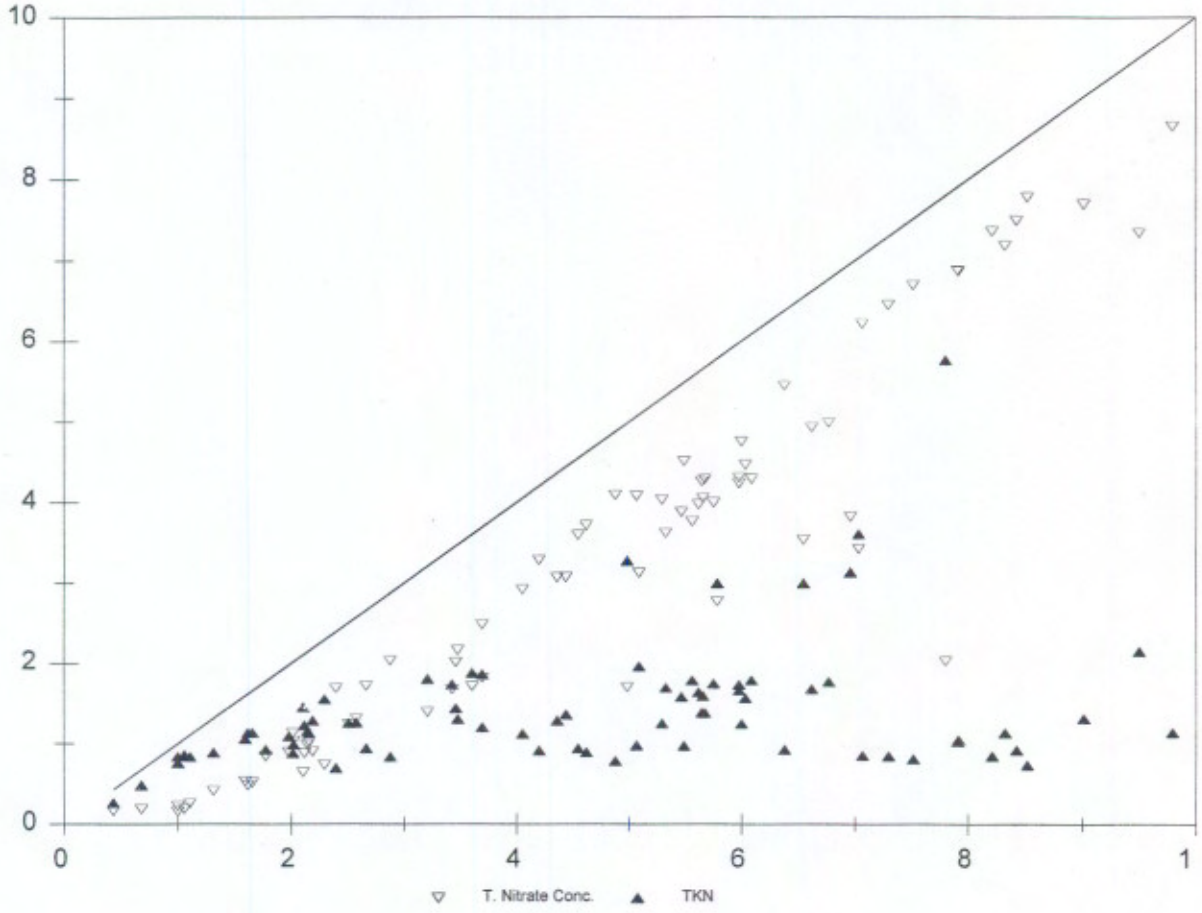


Figure 3-11. Relationship of nitrates and TKN to total nitrogen concentrations from 78 IEPA AWQMN stations, October 1980 - September 1996.



Total Phosphorus

Total phosphorus concentrations were examined from 26,224 samples collected between October 1980 and September 1996. The statewide mean was 0.38 mg/L (± 0.004) Table 3-1. Concentrations were less than ≤0.05 mg/L, the state general use standard for streams above lakes, in 11 percent of the samples. The maximum value, 28 mg/L, was found in one sample from June 1985 on Mauvaisse Terre Creek (DD 04) which is downstream from the city of Jacksonville. Similar to total ammonia-N, mean total phosphorus concentrations were highest in streams below urban areas and their associated wastewater treatment plants (Figure 3-12). Dissolved phosphorus (i.e., after filtration through a 0.45 µm pore diameter filter,) was also evaluated in terms of its relationship to total phosphorus. There were 24,492 pairs of samples in the data set. Dissolved phosphorus was significantly correlated with total phosphorus ($r = 0.965$, $p < 0.0001$). The statewide mean dissolved phosphorus concentration was 0.25 mg/L (±0.004).

Total phosphorus concentrations had statistically significant variation between both months and years (Table 3-2). Mean concentrations were lowest during April and increased during the late summer and fall months, August - November (Figure 3-13). Highest mean annual concentrations of phosphorus occurred during 1988 and 1989 and lowest concentrations occurred during 1982 and 1993 (Figure 3-13). Total phosphorus concentrations at a number of stations increased during low flow periods due to point source inputs. No overall trend was apparent in the statewide data set.

At individual stations, mean total phosphorus ranged from 0.02 mg/L on Lusk Creek (AK 02) to 2.68 mg/L on Mauvaisse Terre Creek (DD 04). Of the 203 active stations, 11 had mean total phosphorus concentrations less than 0.10 mg/L; 61 stations had mean concentrations between 0.10 and 0.20 mg/L; 62 stations had mean concentrations between 0.21 and 0.30 mg/L; and 23 stations had mean concentrations between 0.31 and 0.40 mg/L. Streams which had the highest mean concentrations of total phosphorus (i.e., Mauvaisse Terre Creek) were generally downstream from urban areas or wastewater treatment plants. High mean total phosphorus concentrations were present at: Saline Branch, 2.43 mg/L (BPJC06) and Sugar Creek, 1.13 mg/L (BF 01) in the Wabash River drainage; Canteen Creek, 2.25 mg/L (JNA 01); Sangamon River, 1.66 mg/L (E 05) and 1.18 mg/L (E 16); in the Kaskaskia River basin, Richland Creek, 1.28 mg/L (OC 04); Silver Creek 1.02 mg/L (OD 06); and Sugar Creek, 0.99 mg/L (OH 01). In the Des Plaines River basin: Salt Creek, 1.61 mg/L (GL 09); Du Page River, 1.16 mg/L (GB 10) and 0.98 mg/L (GB 11); West Branch Du Page River, 1.50 mg/L (GBK 09) and 1.29 mg/L (GBK 05); East Branch Du Page River, 1.36 mg/L (GBL 10); Calumet-Sag Channel, 1.19 mg/L (H 01) and Thorn Creek, 2.63 mg/L (HBD 04). Dissolved phosphorus comprised 80 percent or more of the total phosphorus concentrations at 10 of these stations: BPJC06, BF 01, E 05, GB 10, GB 11, GBK 05, GBK 09, GBL 10, GL 09, and HBD 04 (Table 3-4).

In the Rock River basin, mean total phosphorus concentrations ranged from 0.10 mg/L on Kilbuck Creek (PQB 02) to 0.48 mg/L on the Kyte River (PL 03). On the five Rock River stations there was no significant variation in means between stations and mean total phosphorus

Table 3-4. Ratio of dissolved phosphorus to total phosphorus (mg/L). Illinois EPA AWQMN data.

Note this is a corrected copy. The original report table incorrectly indicated the concentrations were mean values, they are median values. MBS. May 2000.

Station	Median Total P	Median Diss. P	Percent Diss. P	Station	Median Total P	Median Diss. P	Percent Diss. P	Station	Median Total P	Median Diss. P	Percent Diss. P
AD 02	0.14	0.05	35.2%	DT 22	0.12	0.03	25.0%	KI 02	0.15	0.05	33.3%
AK 02	0.01	0.01	100.0%	DT 35	0.11	0.03	27.3%	LD 02	0.50	0.33	66.0%
AT 06	0.09	0.02	22.2%	JQ 05	0.19	0.07	36.8%	LF 01	0.15	0.07	46.7%
ATF 04	0.10	0.03	30.0%	JR 02	0.17	0.10	58.8%	M 04	0.17	0.07	41.2%
ATG 03	0.19	0.07	36.8%	K 04	0.19	0.10	52.6%	MJ 01	0.18	0.09	50.0%
ATGC01	0.02	0.01	50.0%	KCA 01	0.22	0.05	22.7%	MN 03	0.14	0.09	64.3%
ATH 02	0.06	0.02	33.3%	DT 38	0.24	0.10	41.7%	MQ 01	0.22	0.16	70.5%
ATH 05	0.01	0.01	100.0%	DT 46	0.26	0.08	30.8%	N 08	0.14	0.04	28.6%
ATHG01	0.14	0.03	21.4%	DTB 01	0.07	0.04	57.1%	N 10	0.05	0.01	20.0%
B 06	0.20	0.08	40.0%	DTD 02	0.10	0.05	50.0%	N 11	0.16	0.05	31.3%
BC 02	0.19	0.05	26.3%	DTG 02	0.06	0.03	50.0%	N 12	0.20	0.07	35.0%
BE 01	0.22	0.08	36.4%	DTK 04	0.12	0.05	41.7%	NA 01	0.09	0.02	22.2%
BE 07	0.17	0.08	47.1%	DV 04	0.07	0.04	57.1%	NB 01	0.02	0.01	50.0%
BE 09	0.19	0.12	63.2%	DW 01	0.08	0.05	62.5%	NC 07	0.17	0.06	35.3%
BE 14	0.09	0.05	55.6%	DZZP03	0.26	0.18	67.3%	ND 01	0.23	0.08	34.8%
BEF 05	0.15	0.05	33.3%	E 05	0.64	0.53	82.7%	ND 02	0.05	0.01	20.0%
BF 01	0.93	0.83	89.2%	E 06	0.11	0.06	54.5%	ND 04	0.07	0.02	28.6%
BM 02	0.20	0.13	65.0%	E 09	0.13	0.07	53.8%	NE 05	0.25	0.11	44.0%
BN 01	0.05	0.03	60.0%	E 16	0.44	0.32	72.7%	NG 02	0.08	0.02	25.0%
BO 07	0.11	0.07	63.6%	E 24	0.44	0.27	61.4%	NH 06	0.18	0.04	22.2%
BP 01	0.31	0.21	67.7%	E 25	0.23	0.18	78.3%	NJ 07	0.23	0.10	43.0%
BPG 09	0.08	0.05	62.5%	E 26	0.38	0.24	63.2%	NK 01	0.14	0.04	28.6%
BPJ 03	0.50	0.44	88.0%	E 28	0.17	0.08	48.5%	O 02	0.20	0.14	70.0%
BPJ 07	0.27	0.20	74.1%	E 29	0.11	0.05	45.5%	O 07	0.15	0.07	46.7%
BPJC06	1.90	1.80	94.7%	EI 02	0.21	0.11	52.4%	O 08	0.15	0.05	33.3%
BPK 07	0.05	0.03	60.0%	EI 06	0.15	0.07	46.7%	O 10	0.10	0.02	20.0%
C 09	0.25	0.07	28.6%	EID 04	0.51	0.37	72.5%	O 11	0.03	0.01	33.3%
C 19	0.23	0.08	35.6%	EIE 04	0.07	0.03	42.9%	O 15	0.18	0.11	61.1%
C 21	0.17	0.07	42.4%	EIE 05	0.08	0.03	37.5%	O 20	0.23	0.09	37.0%
C 22	0.22	0.05	23.3%	EIG 01	0.09	0.02	22.2%	O 30	0.22	0.09	40.9%
C 23	0.21	0.07	33.3%	EL 01	0.19	0.09	47.4%	O 31	0.14	0.10	71.4%
CA 03	0.18	0.04	22.2%	EO 01	0.22	0.06	27.3%	OC 04	0.94	0.72	76.5%
CA 05	0.12	0.02	16.7%	EO 02	0.23	0.02	8.7%	OD 06	0.65	0.38	58.5%
CA 06	0.14	0.04	28.6%	EOA 01	0.10	0.04	40.0%	OD 07	0.53	0.30	56.3%
CD 01	0.20	0.06	30.0%	EOD 01	0.03	0.01	33.3%	OH 01	0.85	0.52	61.2%
D 01	0.28	0.14	50.0%	EOH 01	0.23	0.13	54.3%	OI 08	0.22	0.08	36.4%
D 05	0.35	0.19	54.3%	F 01	0.08	0.05	58.8%	OI 09	0.39	0.22	56.4%
D 09	0.33	0.20	60.6%	F 02	0.07	0.02	28.6%	OJ 07	0.32	0.16	50.8%
D 16	0.32	0.22	68.8%	FL 02	0.12	0.06	50.0%	OJ 08	0.51	0.30	58.8%
D 23	0.41	0.29	70.7%	FL 04	0.13	0.06	46.2%	OK 01	0.19	0.07	37.8%
D 30	0.32	0.17	53.1%	FLI 02	0.08	0.04	50.0%	OKA 01	0.29	0.12	41.4%
D 31	0.32	0.16	50.0%	G 07	0.59	0.49	83.1%	OL 02	0.16	0.08	49.4%
D 32	0.29	0.15	51.7%	G 08	0.16	0.09	56.3%	ON 01	0.12	0.04	33.3%
DA 04	0.27	0.17	63.0%	G 11	0.66	0.50	76.3%	OQ 01	0.20	0.09	45.0%
DA 06	0.21	0.09	42.9%	G 15	0.56	0.46	82.1%	OT 02	0.07	0.04	57.1%
DB 01	0.21	0.09	43.5%	G 22	0.58	0.48	82.8%	OU 01	0.09	0.04	47.1%
DD 04	1.13	0.83	72.8%	G 23	0.62	0.50	80.6%	OZC 01	0.18	0.08	44.4%
DE 01	0.10	0.02	20.0%	G 39	0.77	0.62	81.0%	OZZT01	0.04	0.02	47.6%
DF 04	0.15	0.07	46.7%	GB 10	1.11	0.95	86.0%	P 04	0.27	0.11	40.7%
DG 01	0.18	0.04	22.2%	GB 11	0.96	0.80	83.3%	P 06	0.28	0.13	47.5%
DG 04	0.16	0.05	31.3%	GBK 05	1.22	0.99	81.7%	P 14	0.29	0.17	57.9%
DH 01	0.10	0.03	30.0%	GBK 09	1.42	1.24	87.5%	P 15	0.26	0.14	53.8%
DJ 02	0.13	0.06	46.2%	GBL 10	1.20	1.00	83.1%	P 20	0.28	0.15	53.6%
DJ 06	0.17	0.09	52.9%	GG 02	0.38	0.31	82.2%	PB 02	0.06	0.03	50.0%
DJ 08	0.17	0.05	29.4%	GI 01	0.77	0.59	76.6%	PB 04	0.11	0.04	38.1%
DJ 09	0.14	0.06	42.9%	GI 02	0.58	0.50	86.2%	PE 05	0.23	0.14	60.9%
DJB 18	0.41	0.20	47.6%	GL 09	1.62	1.35	83.3%	PH 16	0.16	0.11	68.8%
DJBZ01	0.04	0.02	50.0%	GLA 02	0.81	0.69	84.8%	PL 03	0.37	0.38	100.0%
DJL 01	0.14	0.07	54.1%	H 01	0.98	0.66	67.6%	PQ 02	0.12	0.08	66.7%
DK 12	0.09	0.04	44.0%	HB 42	0.43	0.26	60.6%	PQ 10	0.09	0.05	55.6%
DK 13	0.08	0.04	50.0%	HBD 04	2.02	1.83	90.3%	PQ 12	0.15	0.10	66.7%
DL 01	0.08	0.03	37.5%	HCC 07	0.73	0.61	83.6%	PQB 02	0.06	0.03	52.6%
DQ 03	0.19	0.15	78.9%	HCCC02	0.14	0.08	57.1%	PQC 06	0.26	0.19	73.9%
DQD 01	0.08	0.05	64.9%	I 84	0.26	0.10	38.5%	PQF 07	0.08	0.04	53.3%
DR 01	0.15	0.08	53.3%	II 03	0.21	0.11	52.4%	PW 01	0.27	0.16	59.3%
DS 06	0.09	0.03	33.3%	IX 04	0.17	0.03	17.6%	PW 08	0.26	0.13	50.0%
DS 07	0.22	0.14	63.6%	JMAC02	0.47	0.26	55.3%	PWN 01	0.21	0.14	66.7%
DT 06	0.14	0.03	21.4%	JN 02	0.22	0.05	22.7%				
DT 09	0.19	0.09	44.5%	JNA 01	1.40	1.00	71.4%				

concentrations were approximately 0.30 mg/L.

Mean total phosphorus concentrations at the farthest downstream Des Plaines River station, 0.68 mg/L (G 23) were significantly higher than the Kankakee River near Wilmington 0.12 mg/L (F 01). On the Illinois River, mean total phosphorus concentrations were significantly higher at the farthest upstream station, Marseilles, 0.43 mg/L (D 23) than the other stations ($F=15.61$, $p<0.0001$). Mean total phosphorus concentrations at the other Illinois River stations ranged from 0.31 mg/L near Valley City (D 32) to 0.36 mg/L near Pekin (D 05) (Figure 3-14).

Tributaries to the Illinois River generally had mean total phosphorus concentrations that were less than the statewide mean, 0.38 mg/L. Exceptions to this included Mauvaisse Terre Creek, 2.68 mg/L (DD 04); Big Creek, 0.61 mg/L (DJB 18) downstream from Canton in the Spoon River drainage; Big Bureau Creek, 0.46 mg/L (DQ 03); Sugar Creek in the Sangamon River basin, 0.73 mg/L (EID 04) downstream of Bloomington/Normal and the entire main stem Sangamon River downstream of Decatur to the mouth. Mean concentrations of total phosphorus on the Sangamon River downstream from Lake Decatur ranged from 0.41 mg/L near Oakford (E 25) to 1.66 mg/L near Niantic (E 05).

On the Kaskaskia River mean total phosphorus concentrations were lowest, 0.06 mg/L, immediately downstream from the Lake Shelbyville dam (O 11). Concentrations at the other eight main stem stations ranged from 0.14 mg/L near Cowden (O 10) to 0.30 mg/L near Okawville (O 20). Like nitrates, total phosphorus concentrations dropped significantly downstream of Lake Shelbyville and Lake Carlyle, however, unlike nitrates, total phosphorus concentrations increased overall in the lower portion of the watershed (Figure 3-15).

Mean total phosphorus concentrations on direct tributaries to the Mississippi River ranged from 0.21 mg/L on the Big Muddy River and 0.23 mg/L on the Apple River (MN 03) to 2.25 mg/L on Canteen Creek (JNA 01). Mean total phosphorus concentrations were also elevated on Henderson Creek, 0.76 (LD 02) and Harding Ditch, 0.63 mg/L (JMAC02). On the Mississippi River, mean total phosphorus concentrations were variable with a slight increasing concentration moving downstream. At Fulton (M 04), the mean total phosphorus concentration was 0.18 mg/L, at Keokuk, 0.21 mg/L (K 04) and at Thebes, 0.29 mg/L (I 84). The increase in phosphorus concentrations on the Mississippi River probably reflected the increasing suspended sediment concentrations from upstream to downstream (Figure 3-16).

In the Ohio River drainage, mean total phosphorus concentrations were highest on Sugar Creek near Palestine, 1.13 mg/L (BF 01) and Saline Branch near Mayview, 2.43 mg/L (BPJC06). Mean total phosphorus concentrations on Salt Fork Vermilion River near Oakwood, 0.86 mg/L (BPJ 03) were affected by phosphorus levels in Saline Branch. Other stations in the Ohio River basin had means that were less than 0.41 mg/L with the exception of Sugar Creek (ATHG01) near Stonefort (0.65 mg/L) Figure 3-16.

Figure 3-12. Distribution of mean total phosphorus concentrations by watershed.

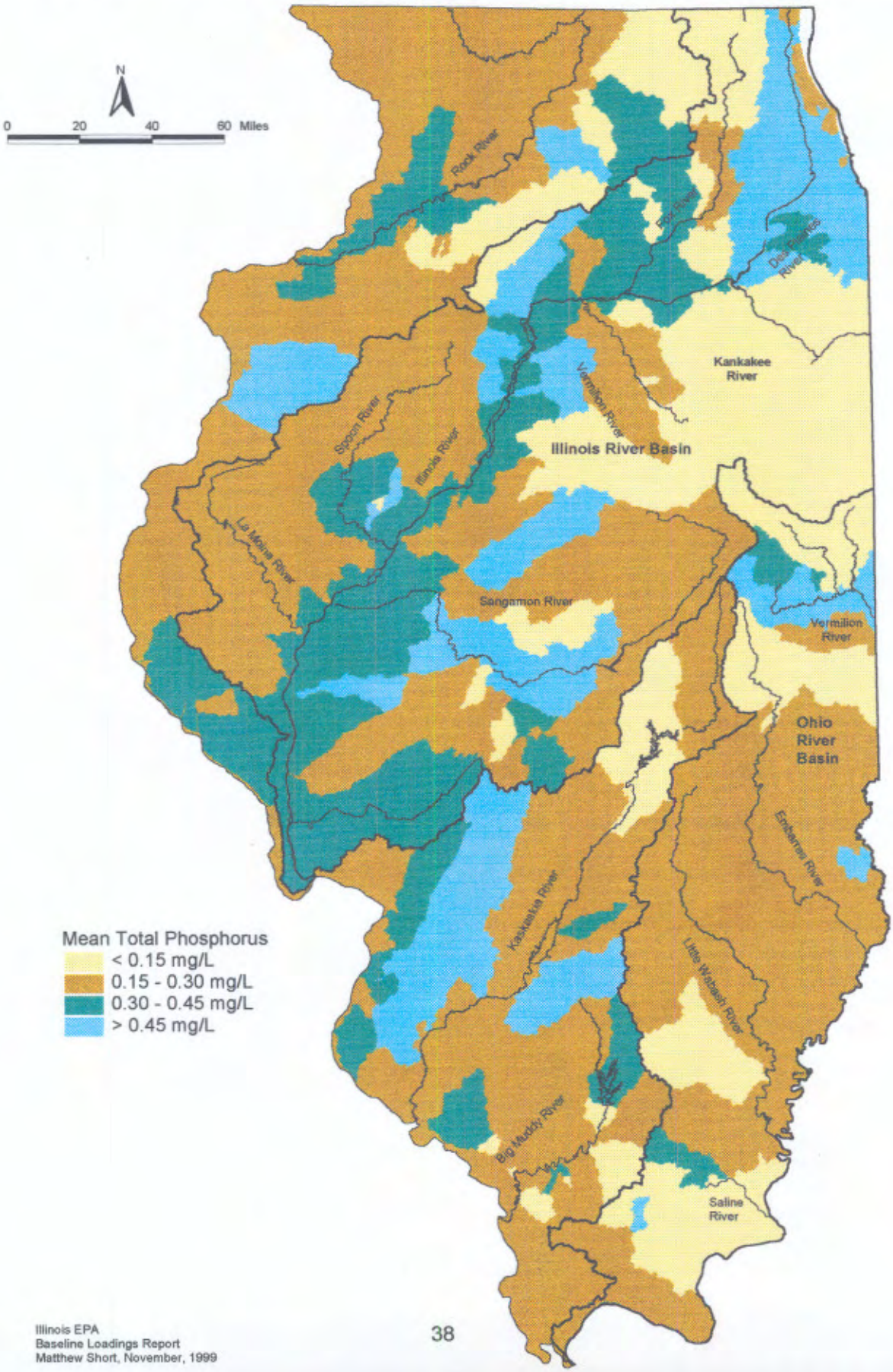


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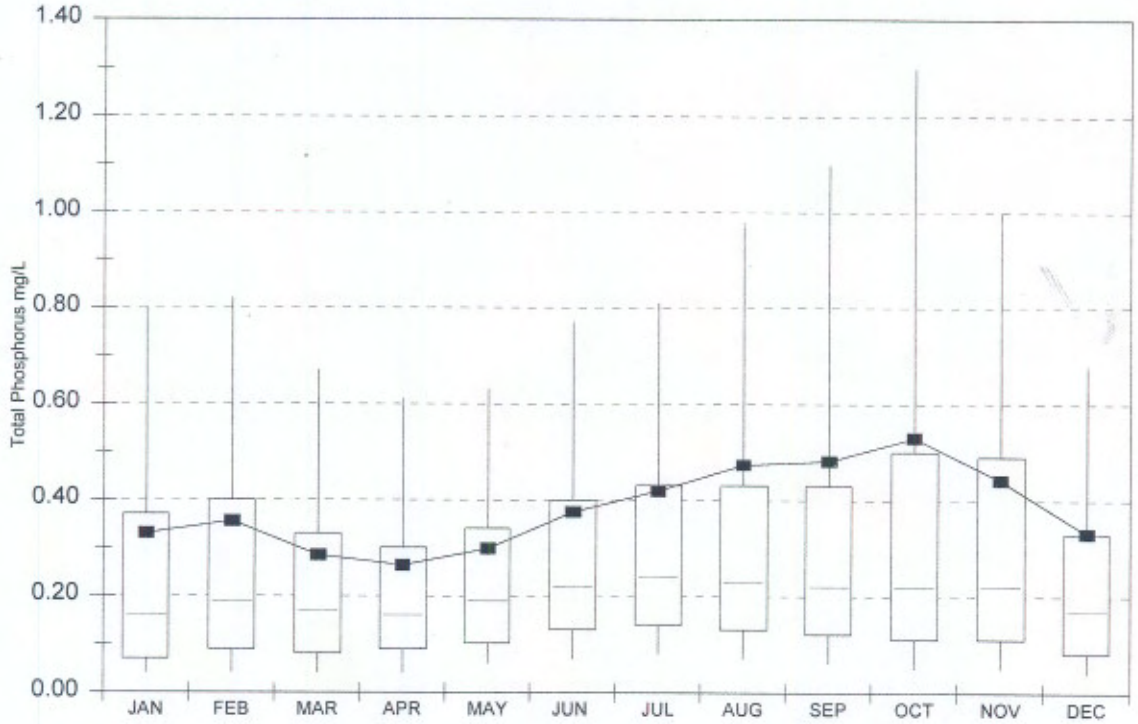
Figure 3-13. Comparison of statewide total phosphorus concentrations from Illinois EPA AWQMN data, October 1980 through September 1996.



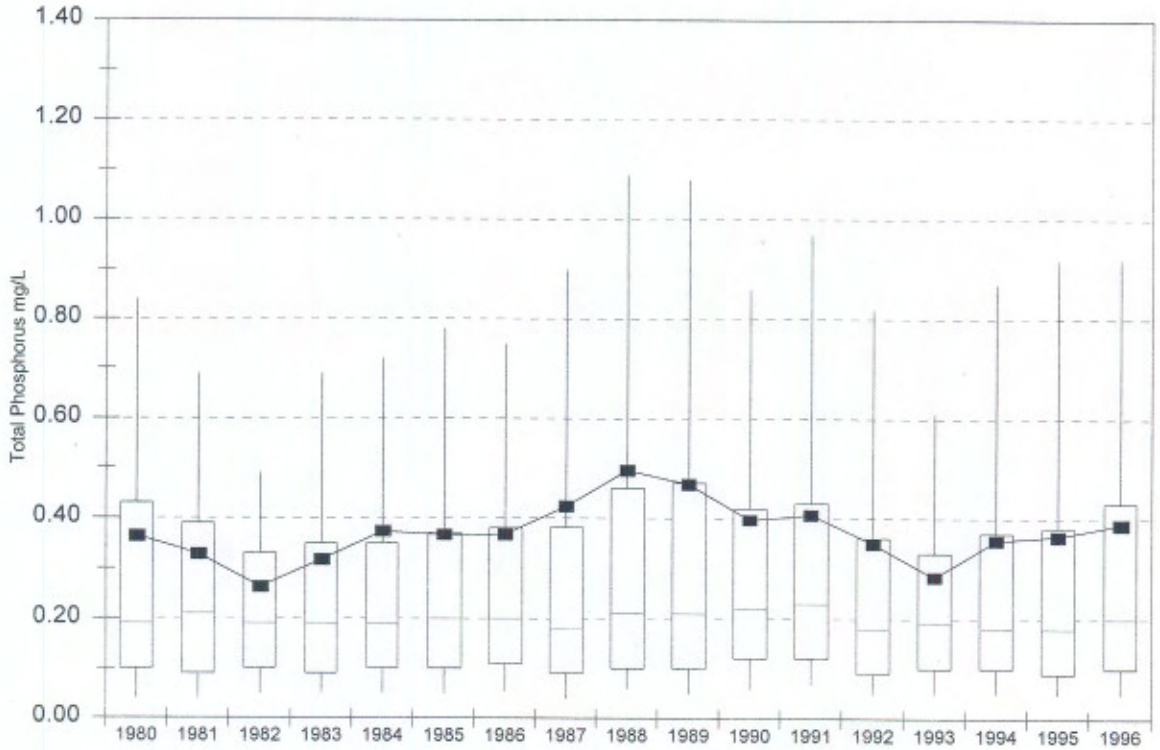


Figure 3-14. Mean total phosphorus concentrations (mg/L) on the Illinois River and the farthest downstream monitoring station on major tributaries. Illinois EPA AWQMN data, October 1980 - September 1996.

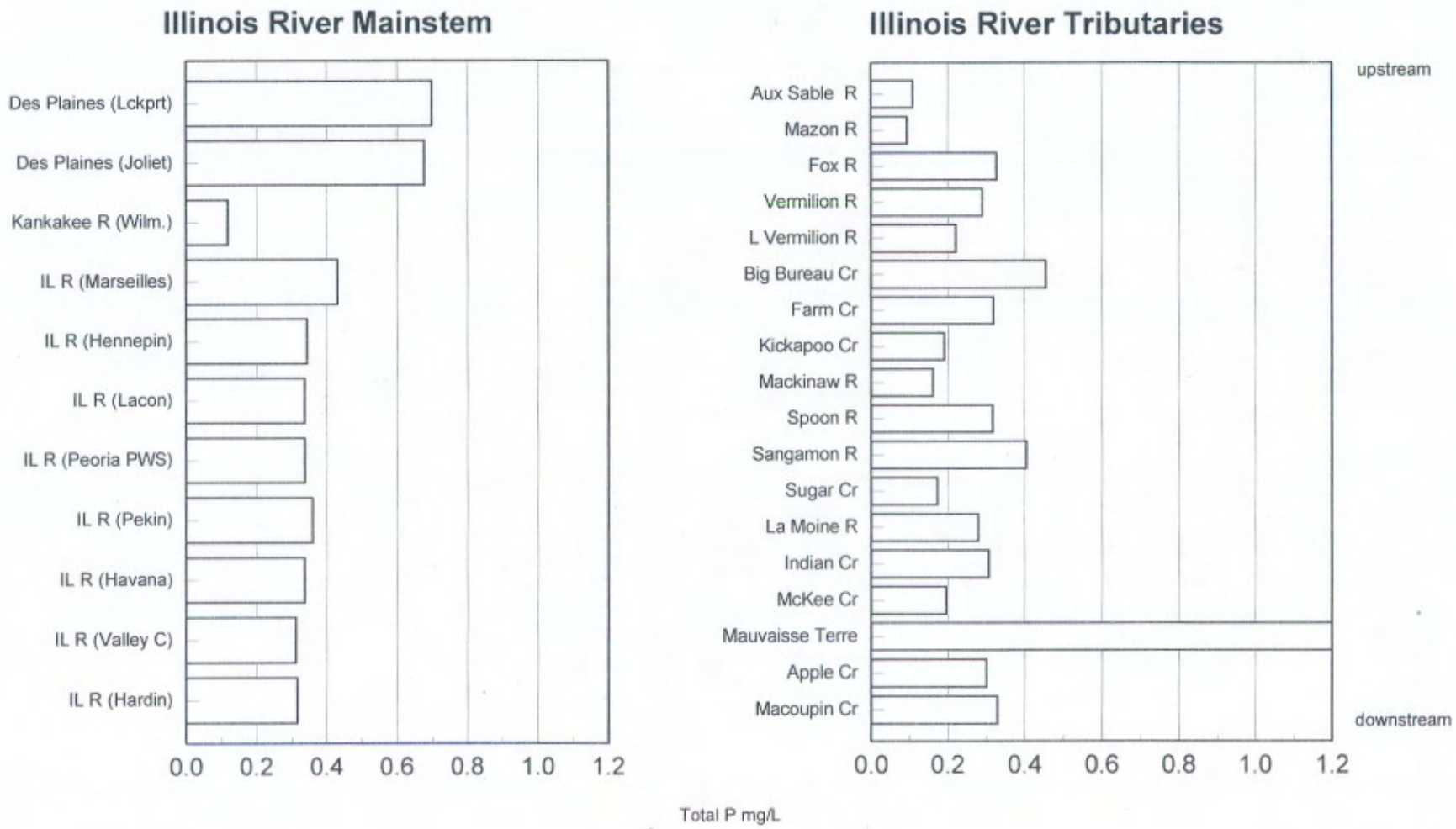


Figure 3-15. Comparisons of total phosphorus and TSS concentrations from Illinois EPA AWQMN stations on the Kaskaskia River, October 1980 through September 1996.

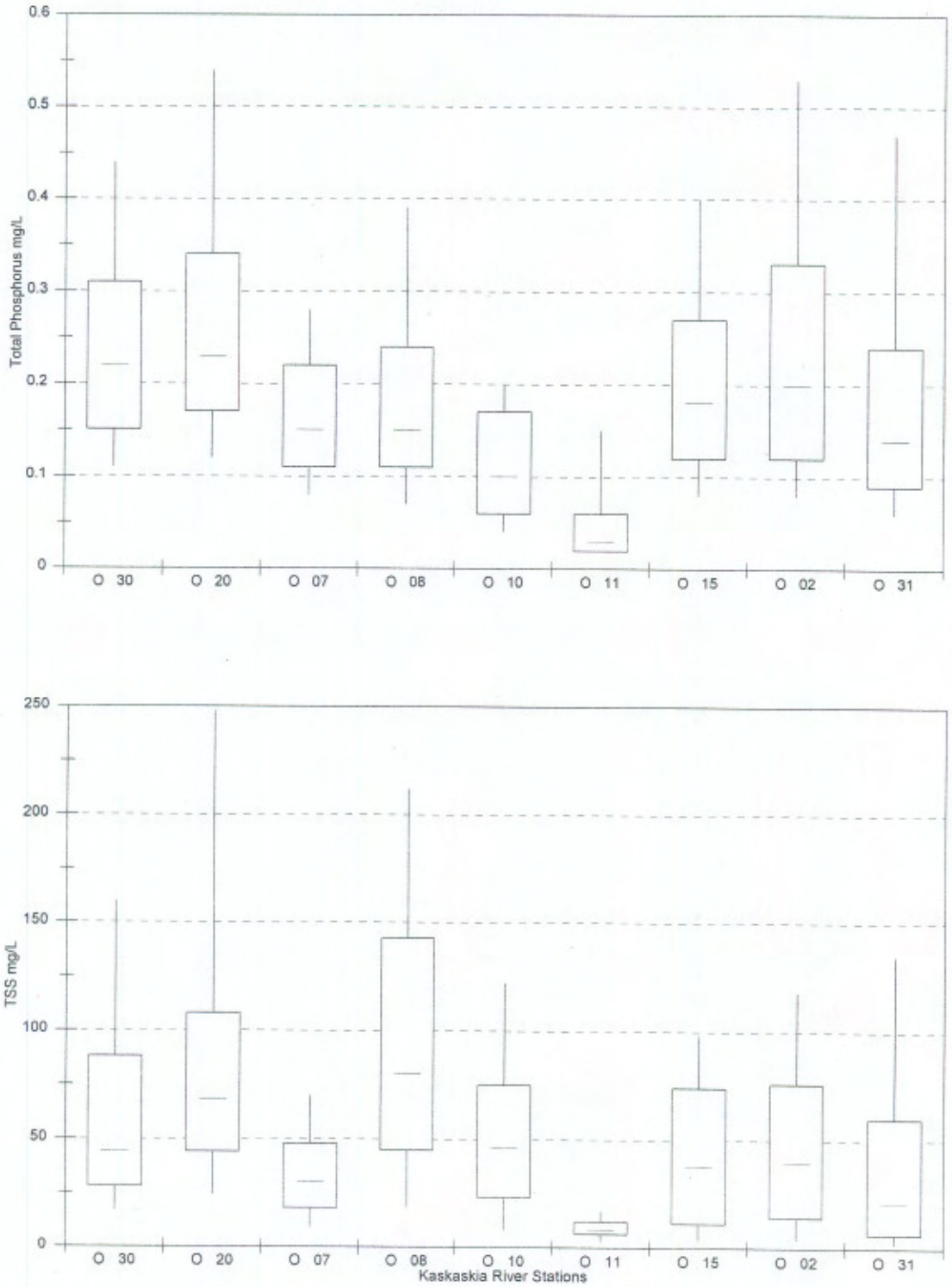
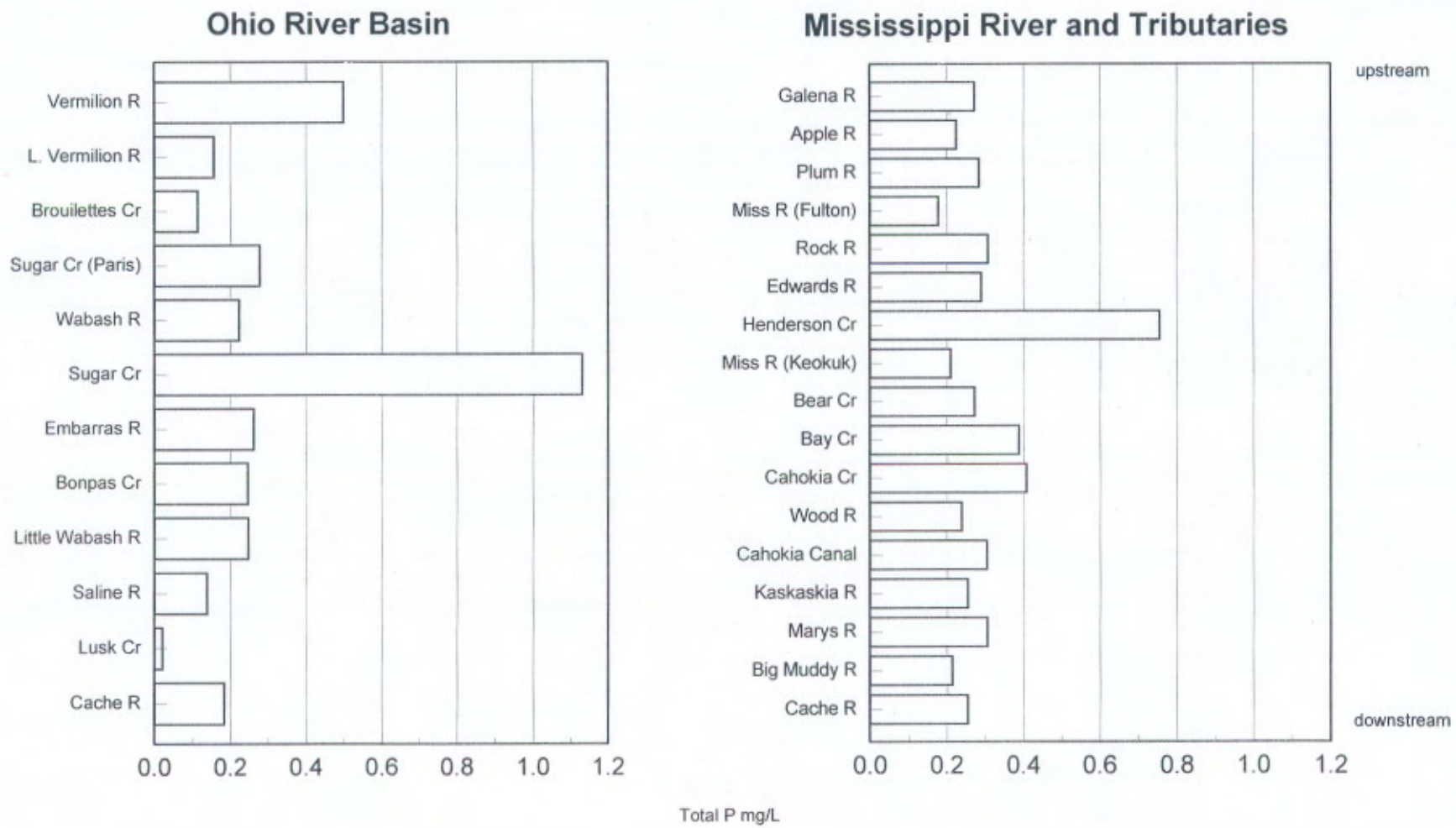


Figure 3-16. Mean total phosphorus concentrations (mg/L) at the furthest downstream monitoring station on tributaries to the Ohio River, the Mississippi River and its tributary stations. Illinois EPA AWQMN data, October 1980 - September 1996.



Total Suspended Solids

Total suspended solids (TSS) concentrations were examined from 29,641 samples collected between October 1980 and September 1996. The statewide mean was 80.6 mg/L (± 1.32) Table 3-1. The statewide mean was skewed due to a relatively small portion of values (0.76 percent) which equaled or exceeded 1000 mg/L. Half of the samples, or the median value, had TSS concentrations which were equal to or less than 36 mg/L. The statewide TSS mean value (80.6 mg/L) was greater than the concentration in 77.5 percent of the samples. TSS concentrations ranged from 1.0 mg/L in one percent of the samples to a maximum of 12,300 mg/L. TSS concentrations showed significant variations between months (Table 3-2). Mean concentrations rose steadily from January to June and declined sharply into August and the fall months (Figure 3-17). Changes in annual means were also significant (Table 3-2). The highest mean concentrations of TSS occurred during 1981 and the lowest concentrations occurred during 1987 through 1989 (Figure 3-17).

At individual stations mean TSS concentrations ranged from 9.1 mg/L on Kinkaid Creek (NB 01), downstream from Lake Kinkaid in the Big Muddy River basin, to 308 mg/L on the Spoon River (DJ 08) a tributary to the Illinois River. Concentrations were lowest at stations located downstream from lakes such as on the Kaskaskia River, 10.4 mg/L below Lake Shelbyville (O 11); Crab Orchard Creek, 13.1 mg/L below Crab Orchard Lake (ND 01); the Sangamon River, 26.9 mg/L downstream from Lake Decatur (E 06); Clear Creek, 19.2 mg/L downstream from Lake Sangchris (EOD 01); and the Big Muddy River below Rend Lake (N 10) 14.7 mg/L. Mean TSS concentrations were also low on the Chicago Sanitary and Ship Canal,17.0 mg/L (GI 02) and downstream in the Des Plaines River, 27.3 mg/L (G 23). Flows at these two stations are dominated by municipal wastewater treatment plant discharges and to a lesser extent, the Lake Michigan diversion. In most of the remaining basins, mean TSS concentrations tended to be highest at the farthest downstream station within a basin. This was due in part to the fact that particles which are deposited in the river bed from upstream areas become resuspended in the water column during high flows. In addition, streams in west central Illinois had higher mean TSS concentrations possibly due to more erodible soils (Figure 3-18).

In the Rock River basin, mean TSS concentrations ranged from 15.1 mg/L on the Kishwaukee River (PQ 10) to 93.8 mg/L on the Rock River (P 04). Mean TSS concentrations were significantly higher on the Pecatonica River, 88.5 mg/L (PW 01) than the other tributaries in the basin. On the Rock River, mean TSS concentrations ranged from 52.6 (P 14) to 93.8 mg/L and may have been effected by dams on the stream.

Total suspended solids was the only parameter reviewed that had lower mean concentrations on the Des Plaines River, 27.3 mg/L (G 23) than the Kankakee River near Wilmington (F 01), 45.3 mg/L. Mean TSS concentrations on the Illinois River showed a significant increase from upstream to downstream (Figure 3-19). Concentrations at Hardin, near the mouth, were 149 mg/L (D 01) and at Valley City (D 32) and were significantly higher than the other stations ($F=29.12$, $p<0.0001$). TSS concentrations on the upper end of the Illinois

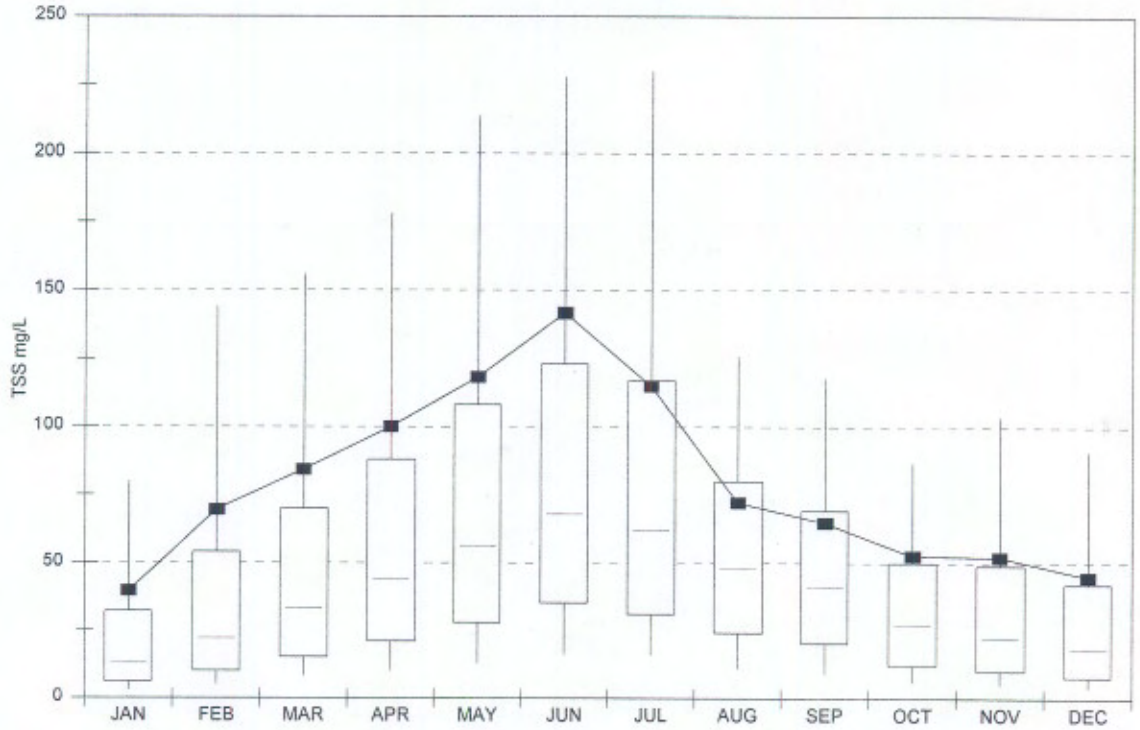
River near Marseilles (D 23) were 43 mg/L. Mean TSS concentrations on tributaries to the Illinois River ranged from 34.4 mg/L on both the Mazon River (DV 04) and Aux Sable Creek (DW 01) to 308 mg/L on the Spoon River (DJ 08). Mean TSS concentrations exceeded 100 mg/L in all of the central and western tributaries to the Illinois River, but were less than 100 mg/L in the northern tributaries (Fox River, Vermilion River, Big Bureau Creek). The lower stations on Kickapoo Creek (DL 01), Mackinaw River (DK 12), Spoon River (DJ 08), LaMoine River (DG 01), Indian Creek (DF 04), McKee Creek (DE 01) and Macoupin Creek (DA 06) had mean TSS concentrations which exceeded 200 mg/L.

On the Kaskaskia River mean total suspended solids concentrations were lowest immediately downstream from the Lake Shelbyville dam, 10.4 mg/L (O 11). Upstream from Lake Shelbyville, mean TSS concentrations ranged between 51.7 and 65.3 mg/L. Unlike nitrates and to an extent total phosphorus, mean TSS concentrations were lower upstream of Lake Shelbyville than the downstream stations. Mean TSS concentrations dropped again below Lake Carlyle and the highest concentration was near Vandalia, 127.2 mg/L (O 08) Figure 3-15. Mean TSS concentrations on tributaries to the Kaskaskia River were highest on Silver Creek ranging between 134.8 at OD 07 to 152.2 mg/L at OD 06.

Mean total suspended solids concentrations on the small direct tributaries to the Mississippi River ranged from 37.1 mg/L on the Big Muddy River (N 12) to 224.5 mg/L on Bear Creek near Marcelline (KI 02). Mean TSS concentrations on Bear Creek, Bay Creek (KCA 01), Edwards River (LF 01), Henderson Creek (LD 02), Cahokia Creek (JQ 05) and Cahokia Canal (JQ 02) exceeded 155 mg/L (Figure 3-20). On the Mississippi River, mean TSS concentrations increased from upstream to downstream. At Fulton (M 04), mean TSS concentrations were 49.7 mg/L, at Keokuk, 71.8 mg/L (K 04) and at Thebes, 196.5 mg/L (I 84).

In the Ohio River basin, mean total suspended solids concentrations ranged from 9.5 mg/L on Lusk Creek (AK 02) to 131.2 on the Embarras River near Billet (BE 01). With the exception of the Little Vermilion River (44.4 mg/L), mean TSS concentrations were between 50 to 100 mg/L (Figure 3-20).

Figure 3-17. Comparison of statewide concentrations of TSS from Illinois EPA AWQMN data October 1980 through September 1996.



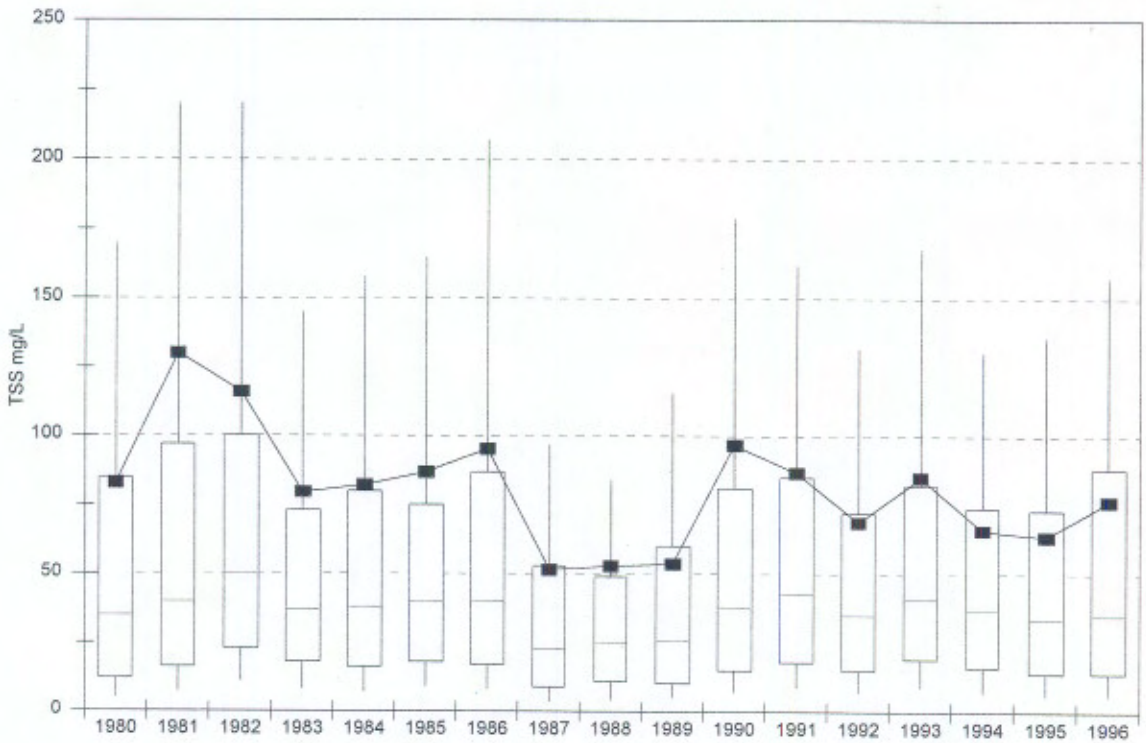


Figure 3-18 Distribution of mean total suspended solids concentrations by watershed.

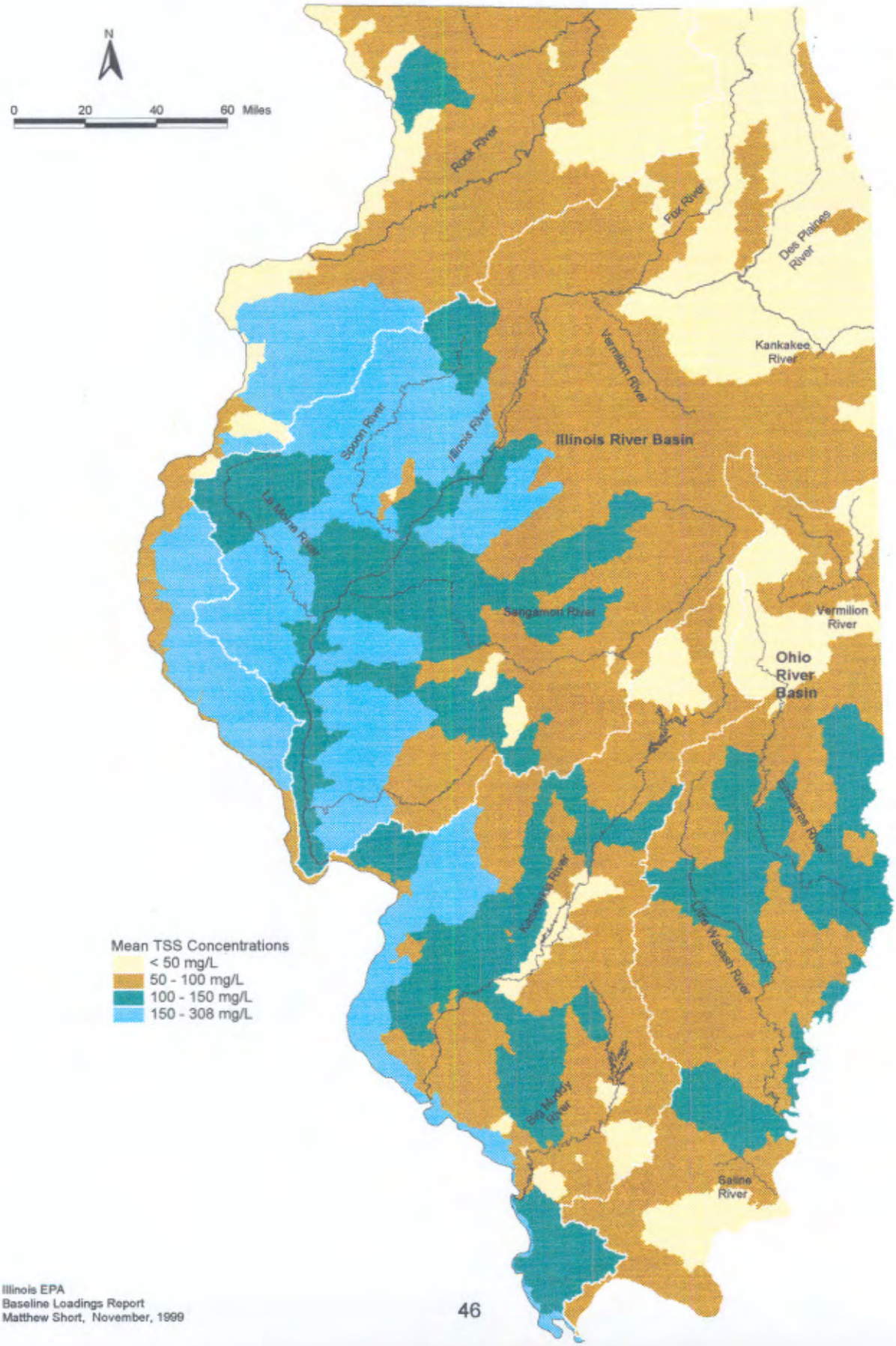


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Figure 3-19. Mean total suspended solids concentrations (mg/L) on the Illinois River and the farthest downstream monitoring station on major tributaries. Illinois EPA AWQMN data, October 1980 - September 1996.

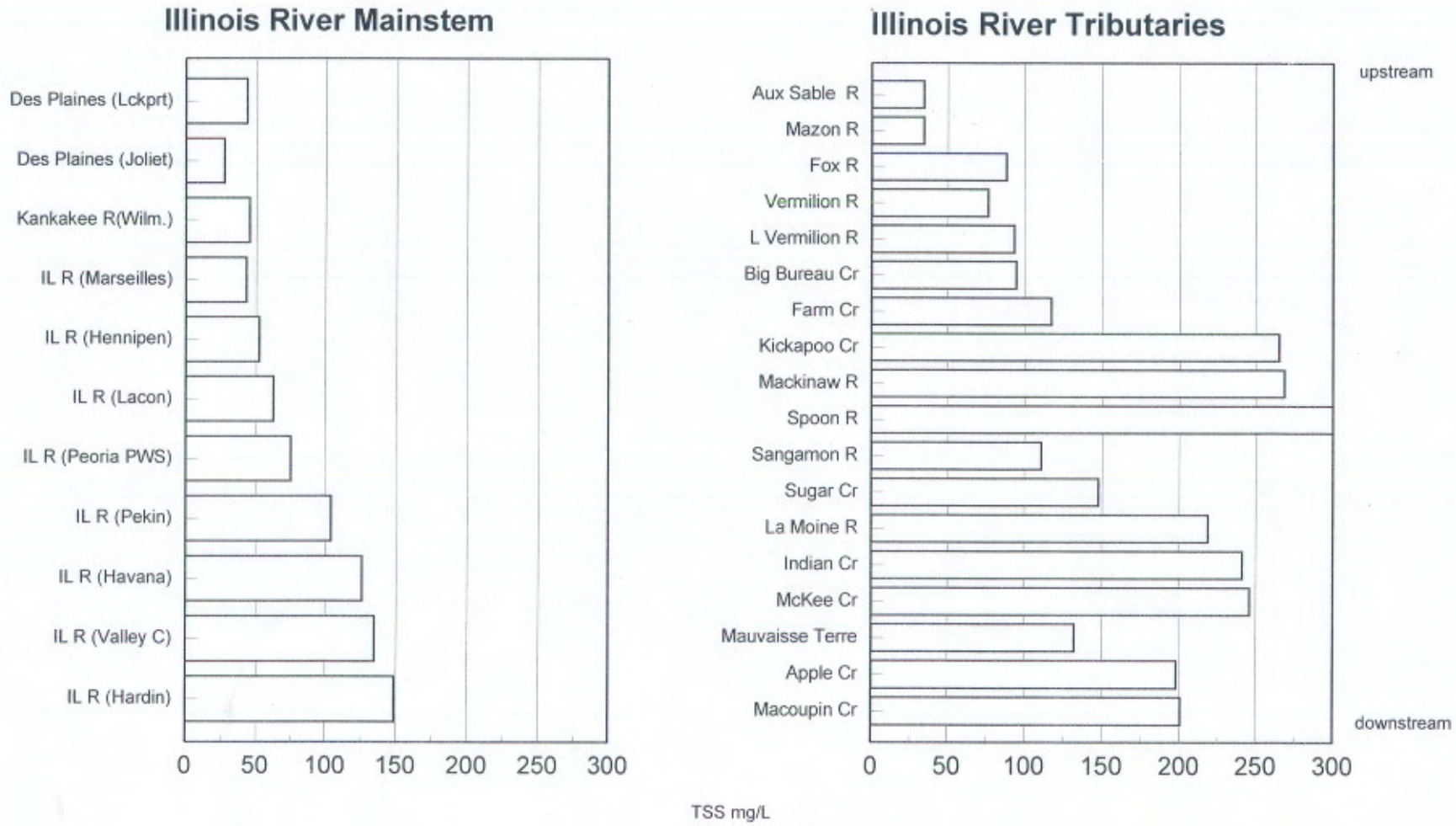
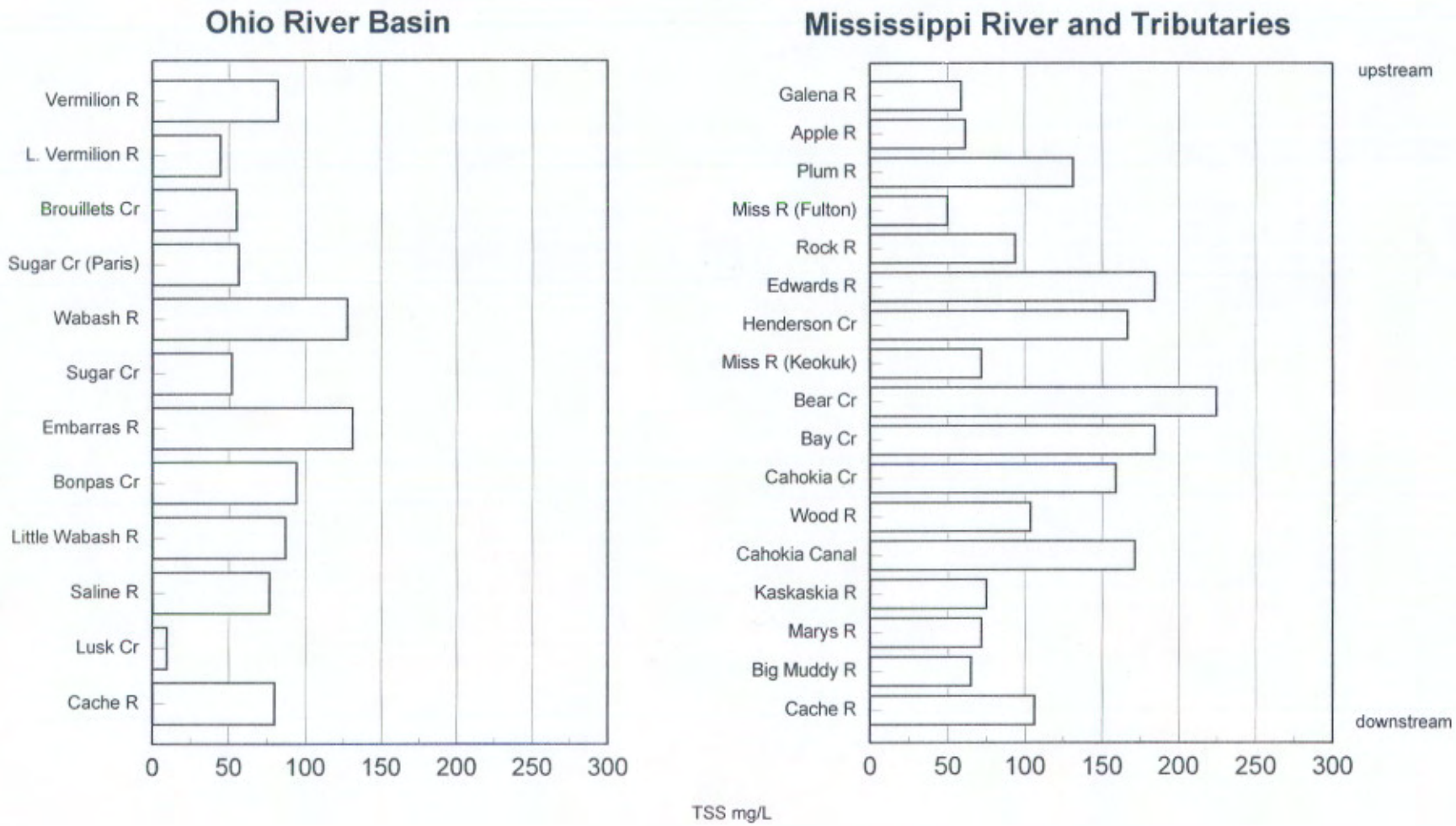


Figure 3-20. Mean total suspended solids concentrations (mg/L) at the farthest downstream monitoring station on tributaries to the Ohio River, the Mississippi River and its tributaries. Illinois EPA AWQMN data, October 1980 - September 1996.



4. EVALUATION OF BASELINE LOADS

Baseline loads were calculated for inorganic nitrogen, which was based on adding total ammonia-N plus total nitrate+nitrite-N concentrations, total nitrogen, based on adding total nitrates+nitrite-N and TKN, total and dissolved phosphorus, and total suspended solids. As stated in the introduction, baseline loads were based on the mean load for a station over the 16 year period of record. Yields were based on the baseline load divided by drainage area. Because TKN was not universally available at all the stations, data on total nitrogen baseline loads was also limited. Although the initial period of record (October 1980 through September 1996) for the baseline loads was the same as the concentration analysis, the ending date was not consistent due to two factors. First, over time the USGS had reduced the number of active stream gaging stations that they maintain and secondly the USGS discontinued providing the Illinois EPA with estimations of flows at ungaged stations in 1992. The period of flow record available for each station is listed in Appendix Table A-1. Stations where loads were based on less than a 16 year period (October 1980 through September 1996) are marked in the report figures and tables with an asterisk (*). Of the 209 stations, 98 stations had 16 years of flow data, 57 stations had between 10 and 15 years of flow data associated with the water quality samples and the remaining 54 stations had no or insufficient flow data to be included in the analysis. This resulted in a minimum sample size of 46, for total phosphorus on Pond Creek (NG 02) near Frankfort, Illinois. Other methods utilized for calculating baseline loads include multiplying the mean concentration of a constituent by the mean stream flow (USEPA, 1992), and extrapolation of loadings from monitored tributaries based on regression analysis to adjacent streams (Robertson, 1997).

The accuracy of loading estimates is dependent on several factors: the frequency of sampling, the flow regime of the stream, and the relation (if any) between flow and constituent concentrations. Recognizing the limitations of the data is important for the proper interpretation of the information. Traditionally, loading studies in streams have been done on suspended sediment (Simmons, 1976) and are generally based on daily samples (Holmes, 1997). Water quality sampling methods used by the Illinois EPA, which were developed and utilized by the USGS, were intended to provide a consistent sample of suspended particles in the water column at a variety of flow conditions. Although the USGS has collected daily samples at a number of stations, the data set does not exist for continuous periods of record on a statewide scale. The Illinois State Water Survey has also maintained a stream sediment sampling program with weekly samples since 1981. This program initially consisted of 50 stations but was reduced to 31 stations after just one year and as of 1994 consisted of 15 stations (Allgire and Demissie, 1995). Collections of daily or even weekly stream nutrient data is even more limited. This usually occurs when a specific reach of a stream is monitored by a municipality for either a public water supply (Lucey and Goolsby, 1993) or to track the effects of treated wastewater on a receiving stream. Data of this type is usually not readily available. Since the goal of this report was to estimate baseline loadings, use of the AWQMN facilitated a more appropriate portrayal of loadings at the state level. However, localized studies and monitoring programs, such as the

ISWS stream sediment program, provide more detailed and accurate information on loads from specific areas (Keefer and Demissie, 1996, and Demissie and Keefer, 1996).

Results

Summaries of STORET load data, in pounds per day by station along with the number of samples, are presented in Appendix C. Baseline loads were then converted to $Kg \cdot day^{-1}$, and baseline yields to $Kg \cdot Ha^{-1} \cdot Yr^{-1}$, and are listed by station in Tables 4-1 and 4-2 respectively. As with concentrations, the discussion is by parameter and watershed. Inorganic and total nitrogen loads are discussed together as are total and dissolved phosphorus. Loads, which reflect concentration multiplied by flow, and yields, which reflect loads divided by area, are also discussed by watershed.

Nitrogen

On the five Rock River stations, baseline loads of inorganic nitrogen ranged from 59,363 $Kg \cdot day^{-1}$ at the farthest upstream station near Rockton (P 15) to 82,690 $Kg \cdot day^{-1}$ at the farthest downstream station near Joslin (P 04). The only other stations in Illinois (excluding stations on the border streams: Mississippi River, Ohio River and Wabash River) which exceeded the baseline loads of inorganic nitrogen on the Rock River were the farthest downstream station on the Kankakee River (F 01) and the eight stations on the Illinois River. Yields of inorganic nitrogen on the Rock River were similar at all five stations and ranged from11 to13 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$. Baseline loads of inorganic nitrogen were lower on the tributaries to the Rock River, due primarily to lower flow volumes, and ranged from 1,678 $Kg \cdot day^{-1}$ on the Kishwaukee River near Garden Prairie to 18,859 $Kg \cdot day^{-1}$on the Pecatonica River at Harrison. However, yields of inorganic nitrogen on the tributaries to the Rock River were significantly higher than the Rock River. Yields of inorganic nitrogen were highest on Elkhorn Creek near Penrose (28.8 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$); Kilbuck Creek near Rockford (25.6 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$); and the South Branch Kishwaukee River near Kirkland (30.4 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$). Yields of inorganic nitrogen on the Green River (PB) and Pecatonica River (PW)were similar to each other and ranged from 14 to 16, $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ (Figure 4-1).

Baseline loads of total nitrogen were available from the five Rock River mainstem stations and ranged from 76,560 $Kg \cdot day^{-1}$ (P 15) to 115,116 $Kg \cdot day^{-1}$ (P 04). The only other station in the Rock River basin where total nitrogen loadings were available was on the Green River near Geneseo (PB 04): 14,450 $Kg \cdot day^{-1}$ (Figure 4-2). Nitrogen in the form of nitrates comprised 68 to 74 percent of the baseline total nitrogen load from these six stations(Figure 4-3).

Baseline loads of inorganic nitrogen on the Illinois River ranged from 133,655 $Kg \cdot day^{-1}$ at the farthest upstream station near Marseilles (D 23) to 383,580 $Kg \cdot day^{-1}$ at the farthest downstream station near Hardin (D 01). On the two tributaries which form the Illinois River,

Table 4-1. Summary of baseline loads by station in Kg/day, IEPA AWQMN data October 1980 - September 1996

	InorganicN kg/day	Total N kg/day	TPHO kg/day	DPHO kg/day	TSS kg/day
AD 02	363		175	40.8	106096
AK 02	37	59	3	1.2	2786
ATH 05	157	481	65	5.3	76733
B 06	148601		8724	3015.6	5375160
BC 02	912		213	103.8	70550
BE 07	16474		1757	692.9	851861
*BE 09	18657	20965	501	237.6	316598
BE 14	4074		141	88.5	36515
BEF 05	968		380	141.8	124150
*BM 02	451		37	21.6	9868
*BN 01	3798		406	118.7	197437
*BO 07	4833		160	72.7	59276
BP 01	24320	32468	1496	618.0	1469210
BPG 09	5321	5943	85	50.3	45509
*BPJ 03	16425		642	511.0	205247
*BPJ 07	3047		115	56.2	49605
*BPJC06	2887		254	232.6	39307
BPK 07	7310	8844	205	99.8	230364
*C 09	5562		1550	567.4	384717
*C 19	2295		1020	419.7	426993
C 21	1058		242	91.0	131236
C 22	4086		1240	447.7	400182
C 23	7603	18298	2854	1211.4	1010621
CA 05	1212		388	152.4	133652
*D 01	383885		24902	10265.8	13875624
D 05	214010	269270	14319	7809.4	4453445
*D 09	202664		11016	7168.3	2391833
*D 16	203277		10695	7272.1	2178187
D 23	133655	163530	10845	6750.4	1811678
*D 30	222109	274037	12922	6983.8	2930710
*D 31	290770		15920	7542.1	8296344
D 32	346423	426090	20183	10086.9	9412200
*DA 04	1306		379	127.9	161119
DA 06	5176		1406	423.6	1089547
*DD 04	2112		292	221.3	95444
*DF 04	4115		140	33.6	316104
DG 01	10073	16024	1684	308.9	1349914
DG 04	6603	13118	1514	175.2	1064146
DJ 08	27256		2540	369.7	2663539
DJ 09	16696		990	242.0	761141
*DJB 18	161		23	13.6	3639
*DJBZ01	4		1	0.2	206
DJL 01	1342		42	13.0	100561
DK 12	22548		1012	279.1	2717971
DK 13	16153		204	111.5	275874
DQ 03	5169		163	95.5	181334
*DQD 01	2170		41	18.5	173086
DS 06	13456		324	124.1	199063
DS 07	38772		1665	602.8	1092722
DT 06	5117	9098	398	145.7	86821
*DT 35	3799	5908	316	199.6	47439
*DT 38	8787	14915	891	347.9	229798
DT 09	6918	11717	603	265.5	111802
DT 46	27403	40907	2636	888.2	1627063
DTD 02	727	903	30	14.0	8981
DTG 02	99	178	9	6.7	2870
DTK 04	1312	1731	60	35.0	13175
DV 04	10243		183	101.1	74424
*E 05	24662		1991	1666.2	310288
E 09	15667		316	177.7	122292
*E 16	23598		863	575.4	312394
*E 24	38784		2750	1336.7	1191154
E 25	74986	90134	3845	1936.8	2035757
E 26	35497	42293	1973	963.3	787450
E 28	13061	14846	415	177.7	206435
E 29	6742	7754	156	65.2	62492
EI 02	28703		1570	555.9	1163938
EI 06	3538		114	45.2	59245
*EID 04	7646		769	324.0	451514
EIE 04	4408		231	69.2	124274
*EIE 05	5625		377	101.0	328233
EIG 01	4246		172	48.8	123174
EL 01	1558		57	21.9	41240
EO 01	9527		630	225.5	287512
*EO 02	6260	8347	570	212.1	170251
*EOH 01	3619		344	123.5	161096
F 01	80803	100014	2834	1054.7	1468303
F 02	14242	20228	684	223.3	243048
FL 02	47289		1484	674.0	772481
FL 04	15093		275	162.4	77440
FLI 02	9973		325	129.7	193777
G 08	906		43	30.0	5675
*G 11	7694		1095	886.2	81069
G 22	3389		355	267.9	38029
*G 15	4466	6013	503	407.0	61121
G 07	2800		216	181.5	13347
G 39	7135	9687	1141	800.9	91246
*GB 10	3261		561	470.7	44097
GB 11	5147		790	554.1	88222
GBK 05	1288		216	173.9	17526
GBK 09	605		110	92.3	6511
*GBL 10	798		135	114.1	10422
GG 02	918		167	53.0	124251
GI 02	45705	56766	4665	3757.0	135545
GL 09	2257	2917	448	369.0	35581
GLA 02	258		47	34.1	10368
*HB 42	686	1153	109	51.2	20937
HBD 04	1044		498	434.6	23119
HCC 07	1022	1460	172	141.2	21407
HCCC02	91		9	4.9	3111
*II 03	309		73	21.9	59945
JQ 05	740		528	110.7	332957
K 04	612140	852831	47844	21294.8	19019448
*KCA 01	832		315	30.3	391607
KI 02	1576		1193	110.7	1692382
LD 02	7319		414	185.4	348607
LF 01	6883		626	122.1	482177
M 04	213658	369048	24766	9965.5	8096760
MJ 01	2865		166	57.3	131208
MN 03	2064		131	69.0	43108
*N 08	134	331	58	13.4	25938
N 11	795		282	104.8	109187
N 12	4542	10682	1587	586.0	466301
*ND 02	189	649	60	16.3	9148
ND 04	49		17	4.3	10814
*NE 05	626		178	90.8	65988
*NG 02	20		3	1.1	1980
*NJ 07	222	416	53	16.5	27825
NK 01	356	784	113	30.7	80183
O 02	10184	11249	211	222.0	90464
O 07	9638	14082	992	524.0	210361
O 08	17597	22938	1211	415.5	676771
O 10	13458	16349	485	203.5	235071
O 11	10622	11884	178	134.5	20571
O 20	13361	25218	3233	1361.1	1134907
OC 04	867		345	117.4	216357
OD 07	1192		532	239.2	216391
OD 06	655		289	100.2	104366
*OH 01	551		361	160.5	129094
OI 08	2153		748	309.9	358353
*OI 09	930		191	74.2	148192
OJ 08	463		233	116.5	72092
*OJ 07	239		87	42.0	19944
OK 01	218	623	110	26.2	58785
OL 02	328	776	108	37.9	66789
*ON 01	95	210	26	10.0	11976
OT 02	3065	3373	81	43.8	31317
*OZZT01	336	356	2	1.1	899
P 04	82690	115116	7031	2781.5	2372328
P 06	74480	103864	5435	2432.1	1664258
*P 14	62818	84779	4122	2280.4	860933
P 15	59363	76560	4478	2391.7	962086
*P 20	67025	93740	4842	2244.2	1336306
*PB 02	3221		418	80.5	197941
PB 04	11391	14560	825	229.3	499414
PH 16	2986		187	75.5	158913
*PL 03	2427		92	79.3	15502
*PQ 02	6435		156	105.9	28255
*PQ 10	1678		37	27.7	5887
PQ 12	15618		448	275.5	110528
*PQB 02	2473		29	22.1	9155
PQC 06	8330		309	183.0	86599
*PQF 07	853		19	11.7	3905
*PW 01	18859		971	569.3	384059
PW 08	15091		854	504.8	255416

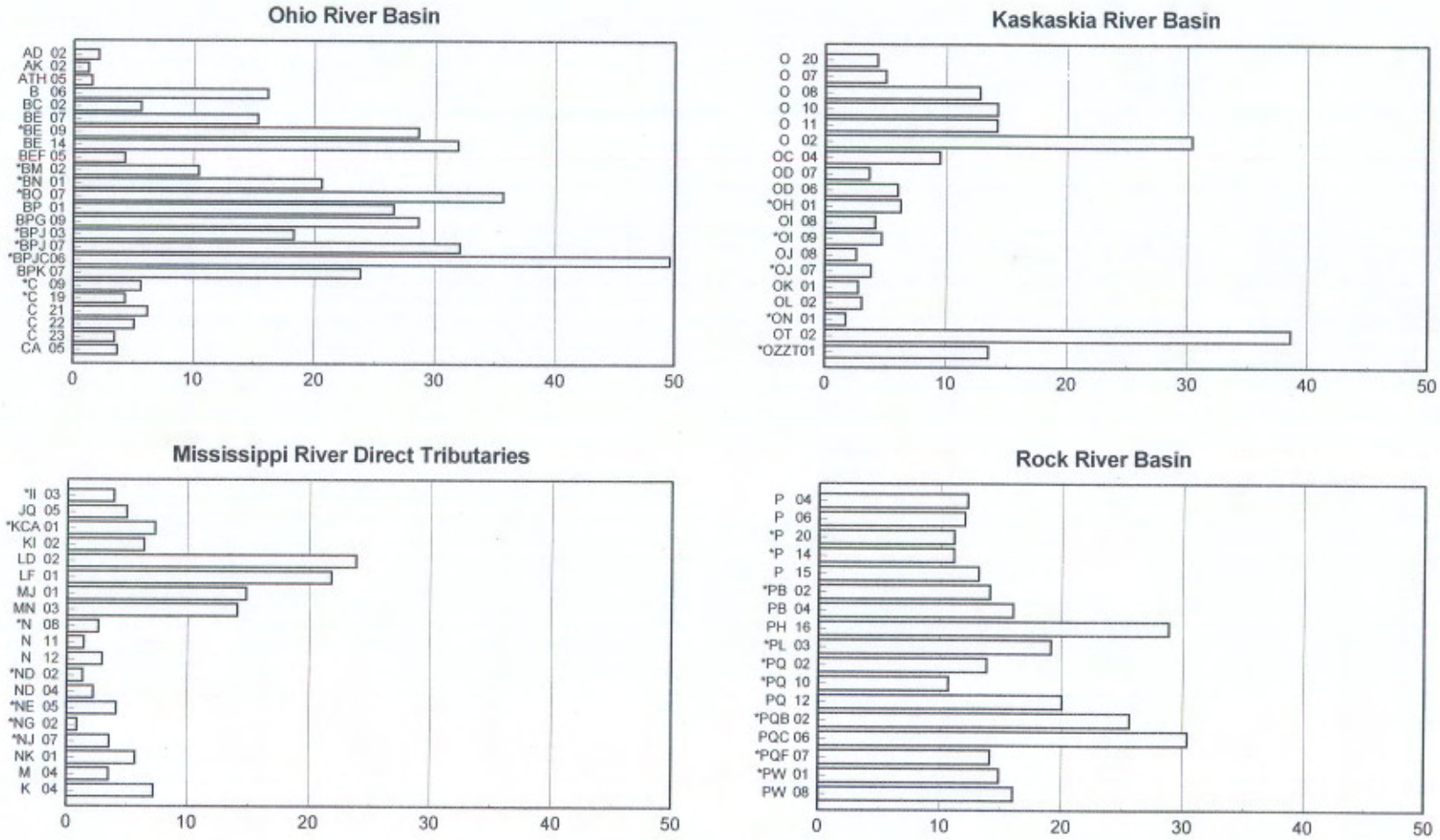
* indicates loads based on less than 16 years of flow data

Table 4-2. Summary of baseline yields in Kg/Ha/Yr, IEPA AWQMN data October 1980 - September 1996.

	Inorganic Nitrogen	Total Nitrogen	Total Phos.	Diss. Phos	TSS		Inorganic Nitrogen	Total Nitrogen	Total Phos.	Diss. Phos	TSS
AD 02	2.10		1.01	0.24	613.20	FL 02	31.89		1.00	0.45	520.99
AK 02	1.20	1.92	0.11	0.04	91.59	FL 04	31.03		0.57	0.33	159.20
ATH 05	1.51	4.62	0.63	0.05	736.14	FLI 02	31.53		1.03	0.41	612.72
B 06	16.14		0.95	0.33	583.73	G 08	10.38		0.49	0.34	65.07
BC 02	5.64		1.32	0.64	436.37	*G 11	15.50		2.21	1.79	163.32
BE 07	15.32		1.63	0.64	792.43	G 22	13.27		1.39	1.05	148.97
*BE 09	28.63	32.17	0.77	0.36	485.83	*G 15	14.18	19.10	1.60	1.29	194.13
BE 14	31.92		1.11	0.69	286.08	G 07	17.02		1.31	1.10	81.13
BEF 05	4.29		1.69	0.63	550.57	G 39	15.97	21.68	2.55	1.79	204.25
*BM 02	10.43		0.85	0.50	228.14	*GB 10	20.90		3.60	3.02	282.67
*BN 01	20.60		2.20	0.64	1070.90	GB 11	22.40		3.44	2.41	383.99
*BO 07	35.68		1.18	0.54	437.66	GBK 05	20.19		3.39	2.72	274.62
BP 01	26.59	35.49	1.63	0.68	1606.15	GBK 09	29.44		5.33	4.49	316.61
BPG 09	28.64	31.99	0.46	0.27	244.96	*GBL 10	19.75		3.35	2.82	257.85
*BPJ 03	18.28		0.71	0.57	228.45	GG 02	12.10		2.20	0.70	1637.61
*BPJ 07	32.07		1.21	0.59	522.05	GI 02	87.1	108.2	8.9	7.2	258.3
*BPJC06	49.58		4.37	4.00	675.18	GL 09	27.92	36.09	5.54	4.56	440.16
BPK 07	23.86	28.87	0.67	0.33	752.01	GLA 02	20.18		3.66	2.67	812.29
*C 09	5.66		1.58	0.58	391.16	*HB 42	10.75	18.06	1.71	0.80	328.07
*C 19	4.34		1.93	0.79	808.27	HBD 04	14.16		6.75	5.89	313.49
C 21	6.22		1.42	0.53	771.14	HCC 07	14.41	20.59	2.43	1.99	301.88
C 22	5.09		1.55	0.56	498.99	HCCC02	6.42		0.62	0.34	219.38
C 23	3.47	8.36	1.30	0.55	461.53	*II 03	3.86		0.91	0.27	748.11
CA 05	3.68		1.18	0.46	406.21	JQ 05	4.92		3.51	0.74	2214.85
*D 01	18.87		1.22	0.50	682.05	K 04	7.25	10.11	0.57	0.25	225.39
D 05	20.69	26.04	1.38	0.76	430.61	*KCA 01	7.29		2.76	0.27	3430.18
*D 09	22.06		1.20	0.78	260.41	KI 02	6.37		4.82	0.45	6838.57
*D 16	22.47		1.18	0.80	240.81	LD 02	23.89		1.35	0.61	1138.01
D 23	22.82	27.92	1.85	1.15	309.35	LF 01	21.81		1.98	0.39	1528.05
*D 30	22.53	27.80	1.31	0.71	297.34	M 04	3.52	6.08	0.41	0.16	133.39
*D 31	22.41		1.23	0.58	639.33	MJ 01	14.80		0.86	0.30	677.78
D 32	18.39	22.62	1.07	0.54	499.68	MN 03	14.06		0.90	0.47	293.68
*DA 04	6.06		1.76	0.59	747.42	*N 08	2.63	6.48	1.14	0.26	508.03
DA 06	8.41		2.28	0.69	1770.19	N 11	1.41		0.50	0.19	193.93
*DD 04	20.40		2.82	2.14	921.91	N 12	2.95	6.95	1.03	0.38	303.18
*DF 04	35.39		1.21	0.29	2718.19	*ND 02	1.32	4.55	0.42	0.11	64.18
DG 01	10.99	17.48	1.84	0.34	1472.31	ND 04	2.20		0.74	0.19	481.07
DG 04	14.22	28.24	3.26	0.38	2291.14	*NE 05	4.15		1.18	0.60	436.90
DJ 08	23.50		2.19	0.32	2295.98	*NG 02	0.86		0.14	0.05	84.60
DJ 09	22.17		1.31	0.32	1010.72	*NJ 07	3.56	6.67	0.85	0.26	445.90
*DJB 18	5.52		0.79	0.47	124.57	NK 01	5.71	12.56	1.81	0.49	1284.97
*DJBZ01	0.79		0.12	0.05	40.72	O 02	30.36	33.54	0.63	0.66	269.72
DJL 01	30.18		0.94	0.29	2261.81	O 07	4.97	7.26	0.51	0.27	108.51
DK 12	29.12		1.31	0.36	3510.06	O 08	12.79	16.67	0.88	0.30	491.96
DK 13	29.35		0.37	0.20	501.35	O 10	14.27	17.34	0.51	0.22	249.25
DQ 03	37.19		1.17	0.69	1304.71	O 11	14.21	15.90	0.24	0.18	27.52
*DQD 01	35.18		0.66	0.30	2805.65	O 20	4.29	8.10	1.04	0.44	364.33
DS 06	34.44		0.83	0.32	509.49	OC 04	9.47		3.77	1.28	2365.23
DS 07	43.71		1.88	0.68	1231.81	OD 07	3.62		1.62	0.73	657.68
DT 06	5.14	9.14	0.40	0.15	87.27	OD 06	6.00		2.65	0.92	955.72
*DT 35	2.37	3.69	0.20	0.12	29.65	*OH 01	6.26		4.11	1.83	1468.17
*DT 38	7.15	12.14	0.73	0.28	187.11	OI 08	4.13		1.43	0.59	687.57
DT 09	6.27	10.62	0.55	0.24	101.33	*OI 09	4.67		0.96	0.37	743.72
DT 46	14.63	21.84	1.41	0.47	868.49	OJ 08	2.57		1.29	0.65	400.27
DTD 02	14.65	18.20	0.60	0.28	180.93	*OJ 07	3.79		1.38	0.66	316.02
DTG 02	3.97	7.13	0.37	0.27	114.97	OK 01	2.72	7.77	1.38	0.33	733.64
DTK 04	9.63	12.71	0.44	0.26	96.77	OL 02	3.04	7.20	1.00	0.35	619.66
DV 04	31.75		0.57	0.31	230.67	*ON 01	1.72	3.79	0.48	0.18	216.53
*E 05	33.00		2.66	2.23	415.16	OT 02	38.59	42.47	1.02	0.55	394.32
E 09	23.55		0.48	0.27	183.86	*OZZT01	13.54	14.33	0.10	0.04	36.22
*E 16	26.33		0.96	0.64	348.54	P 04	12.21	17.00	1.04	0.41	350.36
*E 24	17.86		1.27	0.62	548.42	P 06	12.00	16.73	0.88	0.39	268.14
E 25	20.76	24.96	1.06	0.54	563.70	*P 14	11.09	14.96	0.73	0.40	151.95
E 26	19.12	22.78	1.06	0.52	424.18	P 15	13.16	16.97	0.99	0.53	213.23
E 28	32.14	36.54	1.02	0.44	508.07	*P 20	11.12	15.55	0.80	0.37	221.65
E 29	39.62	45.56	0.92	0.38	367.21	*PB 02	14.11		1.83	0.35	866.91
EI 02	22.44		1.23	0.43	909.88	PB 04	16.02	20.47	1.16	0.32	702.19
EI 06	14.89		0.48	0.19	249.40	PH 16	28.84		1.81	0.73	1534.97
*EID 04	32.38		3.25	1.37	1912.14	*PL 03	19.12		0.73	0.62	122.13
EIE 04	27.39		1.44	0.43	772.05	*PQ 02	13.86		0.34	0.23	60.83
*EIE 05	25.92		1.74	0.47	1512.70	*PQ 10	10.66		0.24	0.18	37.40
EIG 01	27.98		1.13	0.32	811.71	PQ 12	20.04		0.57	0.35	141.83
EL 01	20.15		0.74	0.28	533.56	*PQB 02	25.64		0.30	0.23	94.93
EO 01	15.44		1.02	0.37	466.05	PQC 06	30.36		1.13	0.67	315.57
*EO 02	15.71	20.94	1.43	0.53	427.21	*PQF 07	14.14		0.31	0.19	64.71
*EOH 01	18.49		1.76	0.63	823.13	*PW 01	14.87		0.77	0.45	302.92
F 01	22.13	27.39	0.78	0.29	402.07	PW 08	16.05		0.91	0.54	271.64
F 02	8.76	12.44	0.42	0.14	149.41						

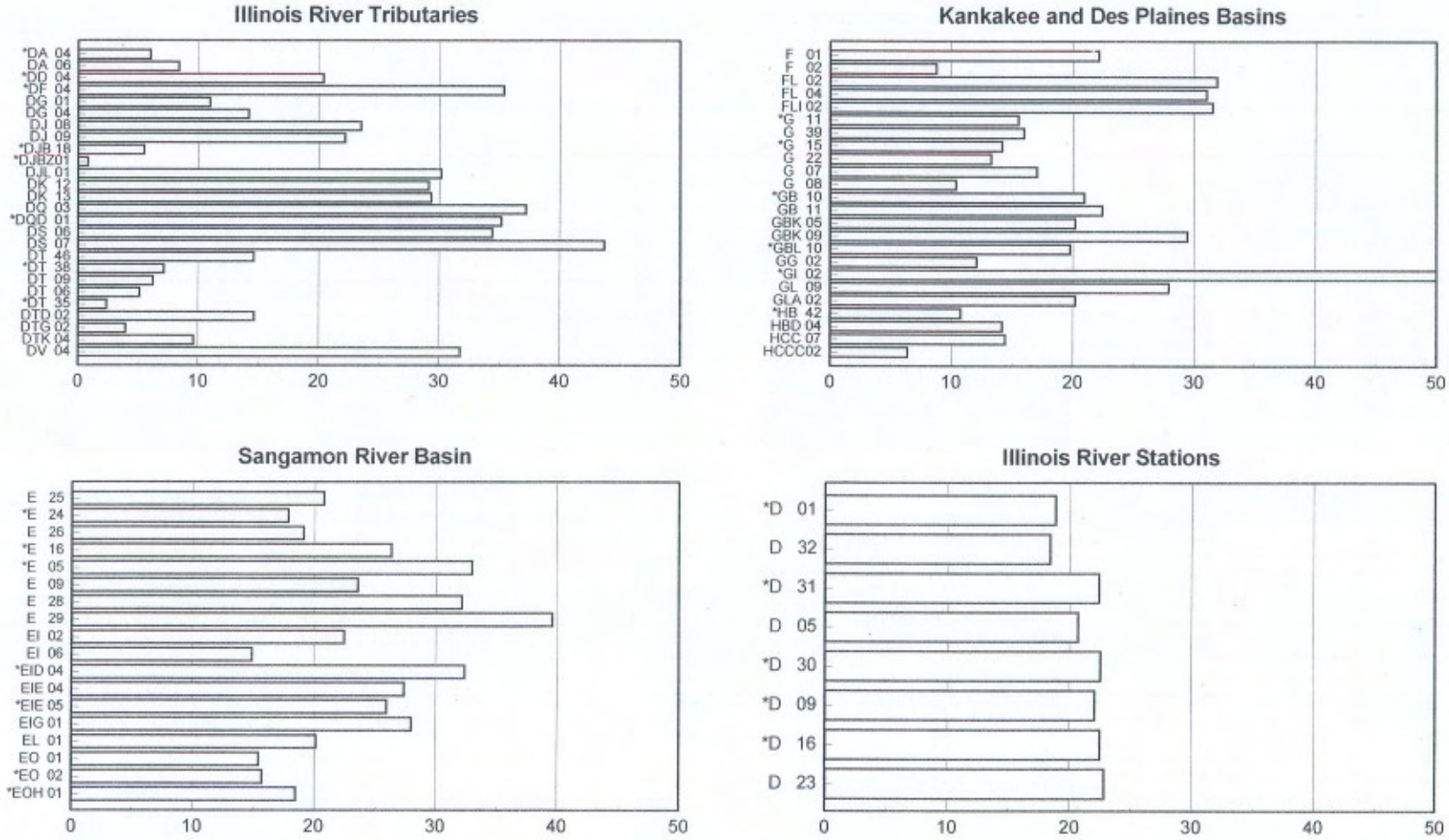
* indicates loads based on less than 16 years of flow data

Figure 4-1. Comparisons of baseline yields of inorganic-N (Kg/Hectare/Year) Illinois EPA AWQMN data October 1980 - September 1996.



* indicates less than 16 years of flow data

Figure 4-1 (cont) . Comparisons of baseline yields of inorganic-N(Kg/Hectare/Year). Illinois EPA AWQMN data October 1980 - September 1996. The value for the Sanitary and Ship Canal (GI 02) is 87.1 Kg/Ha/Yr.



* indicates less than 16 years of flow data

baseline loads of inorganic nitrogen were 80,803 $Kg \cdot day^{-1}$ on the Kankakee River near Wilmington (F 01) and estimated to be, based on combining the three farthest downstream stations on the Des Plaines River, Salt Creek and the Chicago Sanitary and Ship Canal (G 11, GB 11, and GI 02 respectively) 59,000 $Kg \cdot day^{-1}$ from the Des Plaines River basin. Baseline loadings on the Chicago Sanitary and Ship Canal (GI 02) at 45,705 $Kg \cdot day^{-1}$ made up the bulk of the inorganic nitrogen load from the Des Plaines River basin. Baseline loads on the Iroquois River, a tributary to the Kankakee River, were 47,289 $Kg \cdot day^{-1}$ and comprised the majority of the loading of inorganic nitrogen to the Kankakee River. The Mazon River (DV 04), which is also upstream from the station on the Illinois River at Marseilles, had a baseline loading of 10,243 $Kg \cdot day^{-1}$.

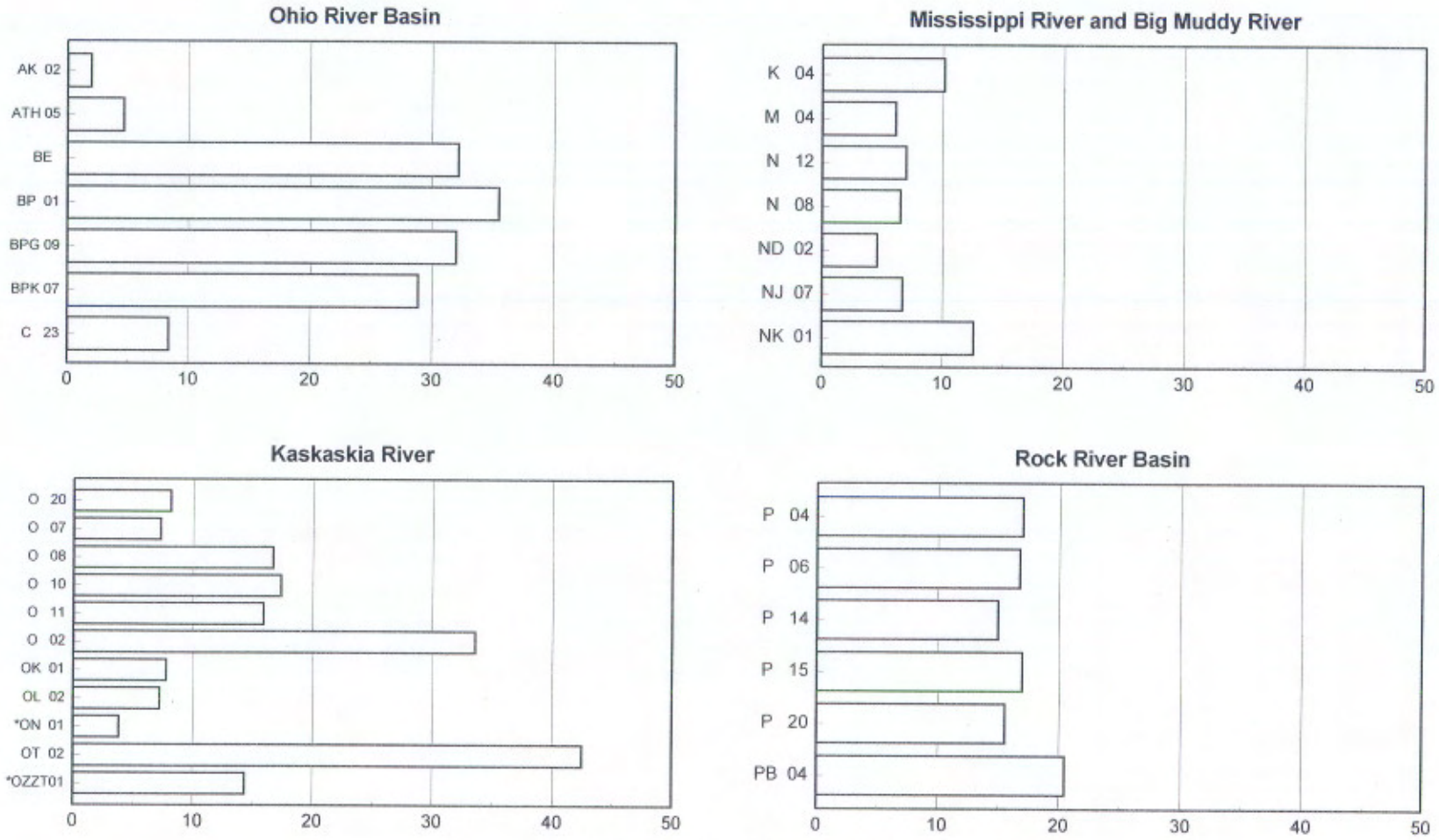
Yields of inorganic nitrogen on the Illinois River ranged from 18.9 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ near Hardin (D 01) to 22.8 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ at Marseilles (D 23). Yields of inorganic nitrogen from the Kankakee River were 22.1 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ at the farthest downstream station near Wilmington (F 01). Yields were much lower on the upper Kankakee River near Momence (F 02), 8.76 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ indicating that the majority of inorganic nitrogen in the Kankakee River was coming from the Iroquois River. Both monitoring stations on the Iroquois River had yields of inorganic nitrogen that were greater than 31 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ (Figure 4-1).

Baseline loads of inorganic nitrogen to the Illinois River from its major tributaries ranged from 2,112 $Kg \cdot day^{-1}$ on Mauvaisse Terre Creek (DD 04) to 74,986 $Kg \cdot day^{-1}$ on the Sangamon River near Oakford (E 25). Baseline loads of inorganic nitrogen were greater than 22,000 $Kg \cdot day^{-1}$ at the farthest downstream stations on the Spoon River, Mackinaw River, Vermilion River and Fox River (Table 4-8). Yields of inorganic nitrogen ranged from 8.41 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ on Macoupin Creek (DA 06) to 43.71 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ on the Vermilion River (DS 07). Yields on Big Bureau Creek, 37.19 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$, and Indian Creek (DF 04), 35.39 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ were also considered high (Figure 4-2).

Baseline loads of total nitrogen were available from 26 of the 94 stations in the Illinois River basin. Baseline loads of total nitrogen on the Illinois River ranged from 163,530 $Kg \cdot day^{-1}$ at Marseilles (D 23) to 426,090 $Kg \cdot day^{-1}$ at Valley City (D 32). Baseline loads from the farthest downstream station on tributaries to the Illinois River were 100,014 $Kg \cdot day^{-1}$ for the Kankakee River; 40,907 $Kg \cdot day^{-1}$ for the Fox River (DT 46); 90,1834 $Kg \cdot day^{-1}$ on the Sangamon River (E 25); and 16,024 $Kg \cdot day^{-1}$ from the La Moine River (DG 01). Yields of total nitrogen on the Illinois River ranged from 22.6 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ at Valley City (D 32) to 27.9 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ at Marseilles (D 23). Yields from the farthest downstream station on tributaries were 21.8 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ on the Fox River; 25 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ on the Sangamon River ; and 17.5 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ on the La Moine River (Figure 4-2).

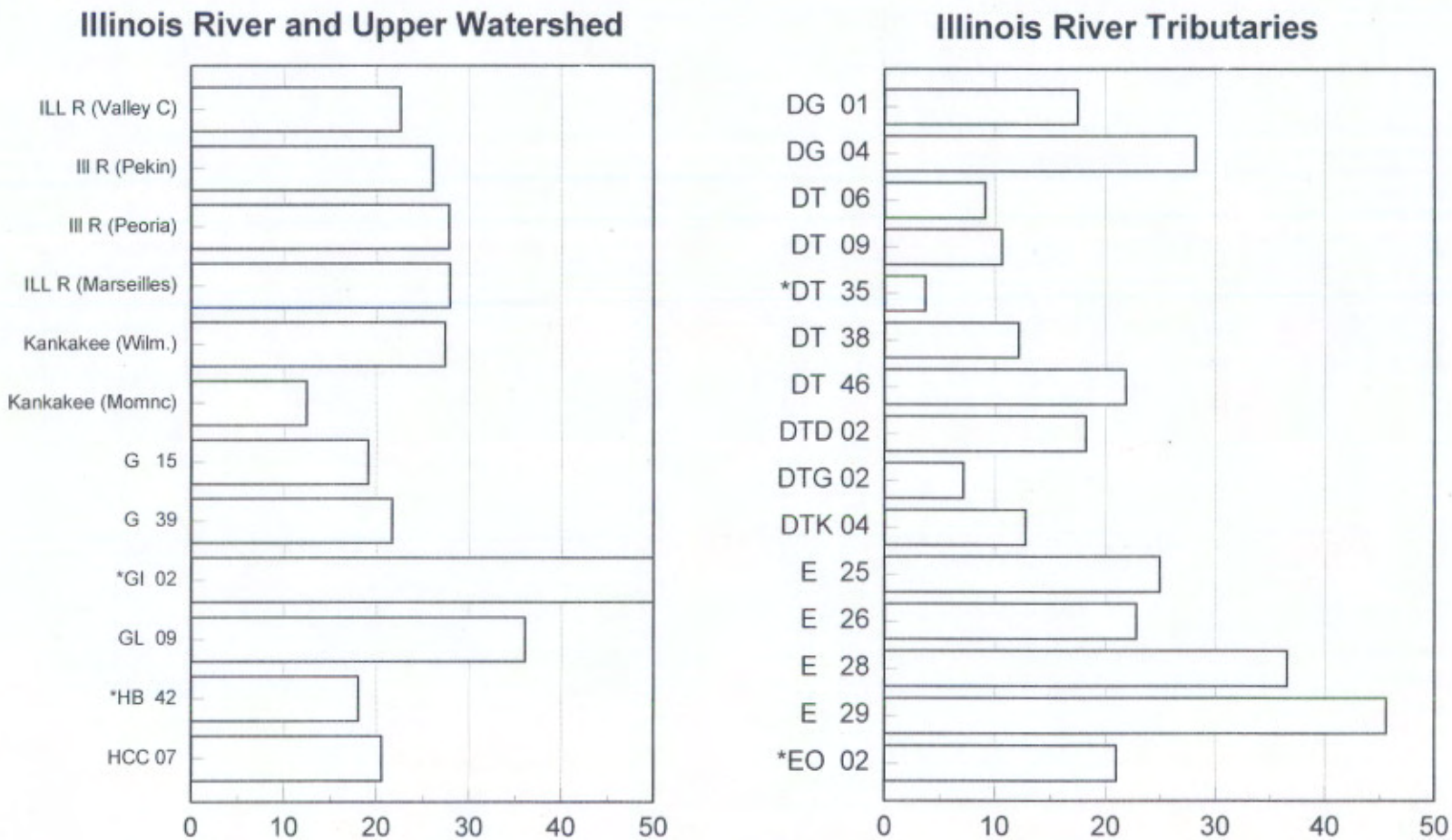
Nitrogen in the form of ammonia comprised between 5 and 10 percent of the total nitrogen baseline loads on the Illinois River at Marseilles (D 23), the Des Plaines River (G 15 and G 39), Salt Creek (GL 09), North Branch Chicago River (HCC 07) and the Fox River near Elgin (DT 09). On the Little Calumet River (HB 42), ammonia comprised 18.3 percent of the

Figure 4-2. Comparisons of baseline yields of total nitrogen (TKN + nitrates) (Kg/Hectare/Year). Illinois EPA AWQMN Data 1980-1996.



* indicates less than 16 years of flow data

Figure 4-2 (cont). Comparisons of baseline yields of total nitrogen (TKN + nitrates) Kg/Hectare/Year. Illinois EPA AWQMN Data 1980-1996.



* indicates less than 16 years of flow data

baseline total nitrogen load. Ammonia comprised less than 5 percent of the total nitrogen load at the remaining Illinois River basin stations. Nitrogen in the form of nitrates comprised approximately 76 percent of the baseline total nitrogen load on the Illinois River. On the mainstem Sangamon River, nitrates comprised approximately 84 percent of the baseline total nitrogen loading. On the La Moine River and Fox River, nitrates comprised approximately 53 and 58 percent of the baseline total nitrogen loading respectively (Figure 4-3).

On the six Kaskaskia River stations, baseline loads of inorganic nitrogen ranged from 9,638 Kg $\cdot$day^{-1} downstream from the Lake Carlyle dam (O 07) to 17,597 Kg $\cdot$day^{-1} upstream from Lake Carlyle (O 08). Yields of inorganic nitrogen ranged from 4.3 to 5.0 Kg$\cdot$Ha$^{-1}\cdot$Yr^{-1} downstream of Lake Carlyle (O 20 and O 07) but were significantly higher upstream of Lake Shelbyville, 30.4 Kg$\cdot$Ha$^{-1}\cdot$Yr^{-1} , near Cooks Mill (O 02). Yields on tributaries upstream of Lake Shelbyville were also significantly higher than the other tributaries in the watershed. Yields of inorganic nitrogen on the West Okaw River (OT 02) and Asa Creek (OZZT01)were 38.6 and 13.5 Kg$\cdot$Ha$^{-1}\cdot$Yr^{-1} respectively (Figure 4-1).

Baseline loads of total nitrogen were available from 11 of the 26 AWQMN stations in the Kaskaskia River basin. On the Kaskaskia River loads ranged from 11,249 Kg $\cdot$day^{-1} near Cooks Mill (O 02) to 25,218 Kg $\cdot$day^{-1} at Okawville (O 20) Figure 4-2. Nitrogen in the form of nitrates comprised 80 percent or more of this load on the stations upstream from Lake Shelbyville and two main stem sites between Lake Shelbyville and Lake Carlyle (O 10 and O 08). Nitrogen in the form of organic nitrogen comprised 45 percent or more of the baseline nitrogen loads on the lower Kaskaskia River (O 20) East Fork Kaskaskia River, Hurricane Creek and Hickory Creek (Figure 4-3).

On the smaller direct tributaries to the Mississippi River, baseline loads of inorganic nitrogen ranged from 309 Kg$\cdot$day^{-1} on Mary's River (II 03) to 7,319 Kg$\cdot$day^{-1} on Henderson Creek (LD 02). Yields of inorganic nitrogen ranged from 3.9 Kg$\cdot$Ha$^{-1}\cdot$Yr^{-1} on Mary's River to 14.8 Kg$\cdot$Ha$^{-1}\cdot$Yr^{-1} on the Plum River (MJ 01). Yields on the Mississippi River at Fulton (M 04) and Keokuk, Iowa (K 04) were 3.5 and 7.3 Kg$\cdot$Ha$^{-1}\cdot$Yr^{-1} respectively. Out of the 19 stations, baseline loads of total nitrogen were limited to five stations in the Big Muddy River basin and the two Mississippi River stations.

In the Ohio River basin, baseline loads of inorganic nitrogen were available from 24 stations and ranged from 37 Kg$\cdot$day^{-1} on Lusk Creek (AK 02) in southern Illinois to 24,320 Kg$\cdot$day^{-1} on the Vermilion River near Danville (BP 01). Baseline loads on the Wabash River at Hutsonville, Indiana (B 06) were 148,601 Kg $\cdot$day^{-1}. Baseline loads of inorganic nitrogen on the Embarras River did not follow the usual pattern of increasing in the downstream portions due to an increase in flow volumes. Baseline loads were higher in the upstream portions south of Charleston (BE 09) 18,657 Kg$\cdot$day^{-1} versus 16,474 Kg$\cdot$day^{-1} at BE 07 near Ste. Marie. This was due to a decrease in nitrate concentrations between the two stations.

Yields of inorganic nitrogen in the Ohio River basin were highest on Saline Branch

(BPJC06), 49.6 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ and were greater than 25 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ on the upper Embarras River (BE 14 and BE 09), Little Vermilion River (BO 07), Vermilion River (BP 01) and its tributaries North Fork Vermilion River (BPG 09) and Salt Fork Vermilion River (BPJ 07). Yields of inorganic nitrogen were less than 6.5 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ in the Little Wabash River basin, Bonpas Creek, Lusk Creek, Cache River, South Fork Saline River and North Fork Embarras River (Figure 4-2).

Baseline loads of total nitrogen were available from seven stations in the Ohio River drainage. Nitrates were the predominant form of nitrogen loads on the Embarras River, Vermilion River and its tributaries North Fork Vermilion River and Middle Fork Vermilion River. Nitrogen in the form of ammonia and organic compounds was more prevalent on the Little Wabash, Lusk Creek and South Fork Saline River (Figure 4-3).

Figure 4-3. Comparison of total nitrogen loading composition on the Illinois River and its tributary stations. Illinois EPA AWQMN data October 1980 - September 1996.

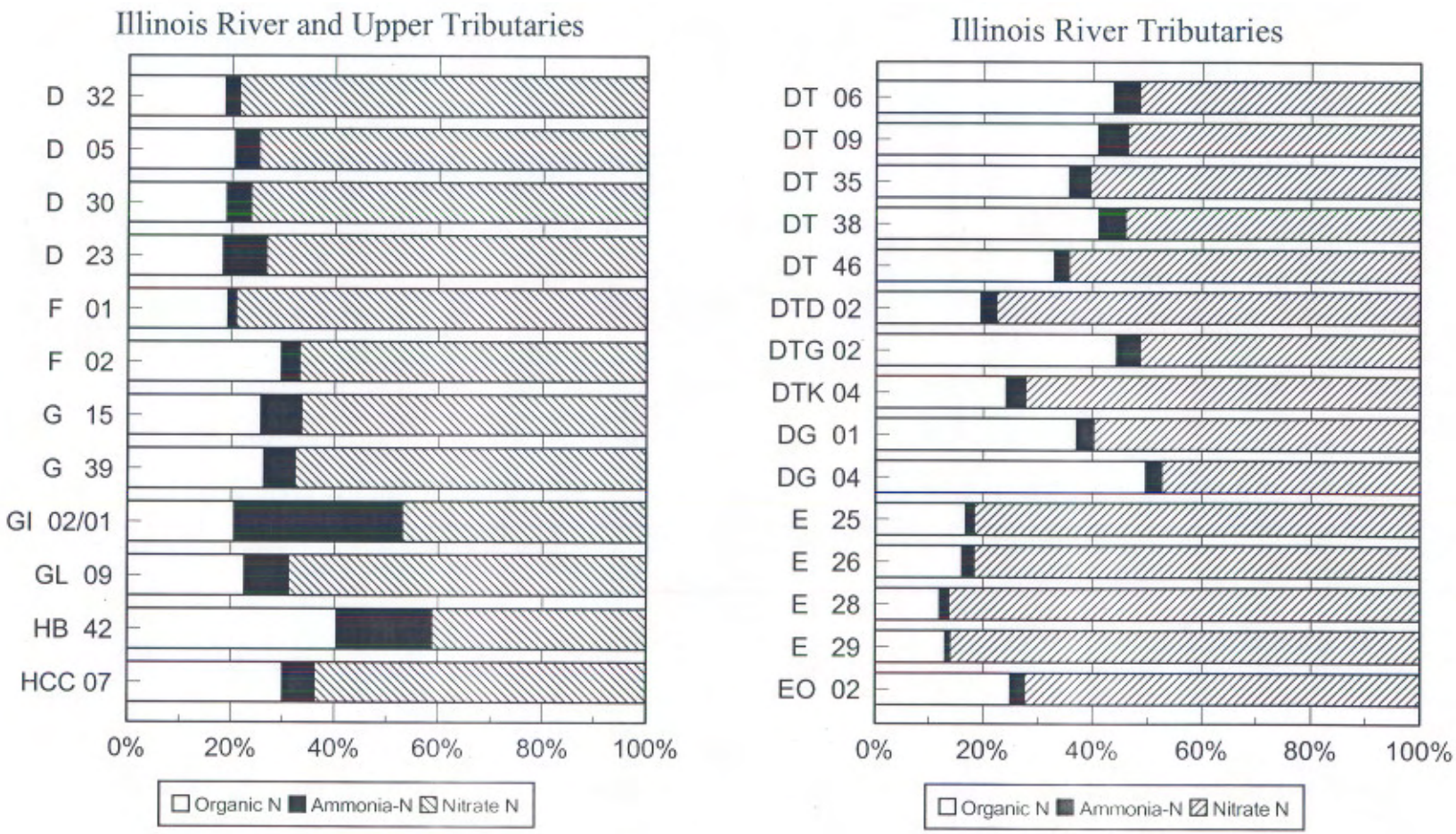
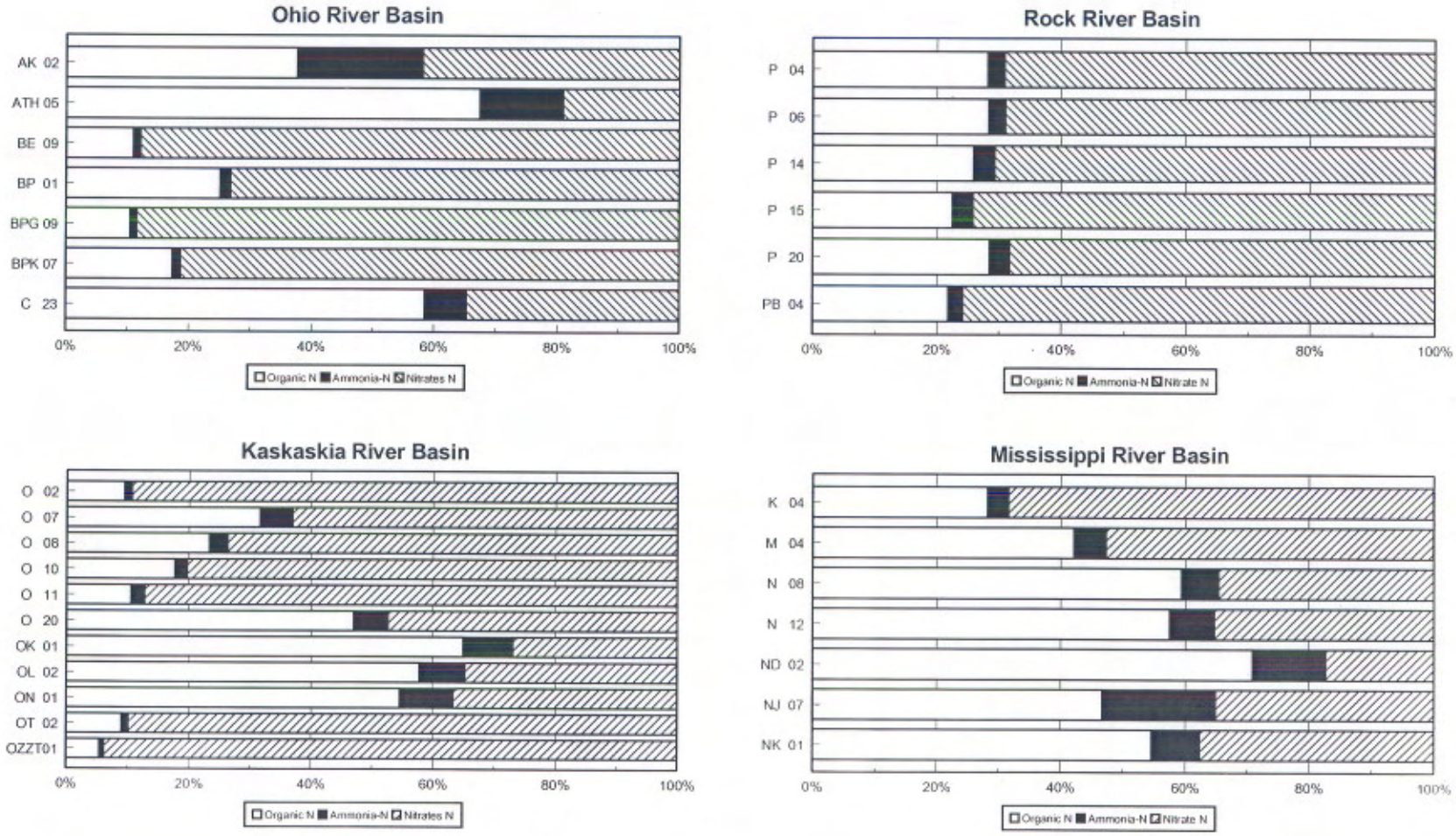


Figure 4-3 (cont). Comparison of total nitrogen loading composition on stations not in the Illinois River basin. Illinois EPA AWQMN data October 1980 - September 1996.



Phosphorus

Since phosphorus can become bound to sediment particles (e.g., clay), baseline loads of total phosphorus can be affected by the suspended solids load in the river. Loads of dissolved phosphorus provide a distinct view of the differences between phosphorus that is dissolved into the water and that which is bound to sediments or organic matter. Streams in agricultural areas can have high total phosphorus loads but correspondingly low dissolved phosphorus loads reflecting that a significant portion of the phosphorus was attached to sediment particles. In contrast, streams which are dominated by point sources generally have high total phosphorus loads along with high dissolved phosphorus loads. For example, Bear Creek (KI 02) in western Illinois near Marcelline had a baseline load of total phosphorus of 1,193 $Kg \cdot day^{-1}$ and yield of 4.82 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$. The baseline load and yield of dissolved phosphorus was approximately one-tenth this amount: 110.7 $Kg \cdot day^{-1}$ and 0.45 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ respectively, indicating that the total phosphorus load in Bear Creek was primarily attached to sediment particles. The Sangamon River near Niantic (E 05) is representative of phosphorus characteristics on a stream influenced by point sources. Baseline total phosphorus loads and yields were 1,991 $Kg \cdot day^{-1}$ and 2.66 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ respectively. The baseline load and yield of dissolved phosphorus was approximately 80 percent of this amount: 1666.2 $Kg \cdot day^{-1}$ and 2.23 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ respectively. The following discussion focuses on total phosphorus loads. Dissolved phosphorus loads were utilized primarily to help identify the sources of phosphorus (Tables 4-1).

Baseline loads of total phosphorus on the five Rock River stations ranged from 4,122 $Kg \cdot day^{-1}$ near Byron (P 14) to 7,031 $Kg \cdot day^{-1}$ near Joslin (P 04). The only other stations in Illinois (excluding the border streams) which exceeded these baseline loads of total phosphorus on the Rock River were the eight Illinois River stations. Yields of total phosphorus on the five Rock River stations ranged between 0.73 and 1.04 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$. As with inorganic nitrogen, baseline loads of total phosphorus were lower on the tributaries and ranged from 19 $Kg \cdot day^{-1}$ Coon Creek (PQF 07) to 971 $Kg \cdot day^{-1}$ on the Pecatonica River at Harrison (PW 01). Yields were somewhat higher on the Green River (1.16 to 1.83 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$) and Elkhorn Creek (1.81 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$) than the main stem or other tributaries (Tables 4-1, 4-2 and Figure 4-4).

On the Illinois River, baseline loadings of total phosphorus ranged from 24,902 $Kg \cdot day^{-1}$ near Hardin (D 01) to 10,845 $Kg \cdot day^{-1}$ at Marseilles (D 23). On the two tributaries which form the Illinois River, baseline loads of total phosphorus were 2,834 $Kg \cdot day^{-1}$ on the Kankakee River near Wilmington (F 01) and estimated to be (based on combining three stations) 6,600 $Kg \cdot day^{-1}$ from the Des Plaines River. Baseline loadings on the Chicago Sanitary and Ship Canal (GI 02) at 4,665 $Kg \cdot day^{-1}$, made up the bulk of the total phosphorus load on the Des Plaines River. Baseline loads of total phosphorus on the Iroquois River, a tributary to the Kankakee River, were 1,484 $Kg \cdot day^{-1}$ and comprised the majority of the total phosphorus loading into the Kankakee River. The Mazon River (DV 04), which is also upstream from the Illinois River at Marseilles, had a baseline loading of 183 $Kg \cdot day^{-1}$ (Figure 4-4).

Yields of total phosphorus on the Illinois River ranged from 1.16 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ near

Hennipin (D 16), to 1.85 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ near Marseilles (D 23). Yields of total phosphorus in the Des Plaines River basin were significantly higher, due primarily to point source discharges and to a lesser extent urban runoff, than in the Kankakee River basin. Where the Des Plaines River enters Illinois from Wisconsin (G 08), yields of total phosphorus were 0.49 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$. But near Riverside (G 39), the yield had increased to 2.55 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$. On the Chicago Sanitary and Ship Canal (GI 02) total phosphorus yields were 8.9 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$. Yields of total phosphorus on the Kankakee River near Wilmington (F 01) were 0.78 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ (Figure 4-4).

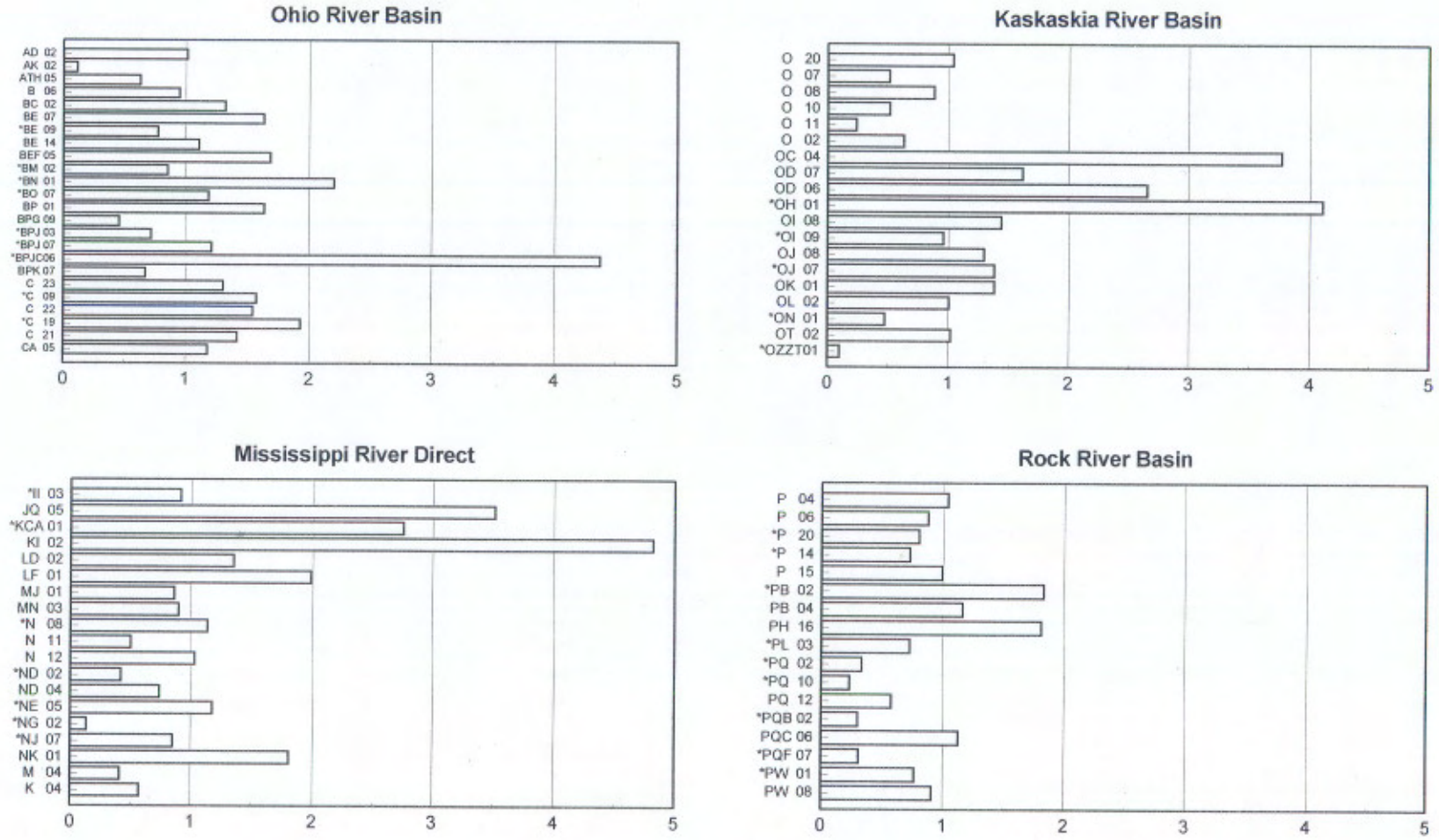
Baseline loads of total phosphorus to the Illinois River from its major tributaries ranged from 1 $Kg \cdot day^{-1}$ on Slug Run (DJBZ01), a tributary to Big Creek in the Spoon River basin, to 3,845 $Kg \cdot day^{-1}$ on the Sangamon River near Oakford (E 25). The Spoon River and Fox River both contributed over 2,500 $Kg \cdot day^{-1}$ of total phosphorus to the Illinois River, followed by the Vermilion River and La Moine River at just over 1,650 $Kg \cdot day^{-1}$. Yields of total phosphorus were highest in the upper La Moine River (DG 04) 3.26 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$. However, yields of dissolved phosphorus at this station were only 0.34 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ indicating that the total phosphorus load was primarily attached to sediment particles. Streams in the Illinois River basin where baseline phosphorus loads were significantly influenced by point source discharges, (based on high proportions of dissolved phosphorus loads) included Mauvaisse Terre Creek (2.82 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$); the Sangamon River near Decatur (see above) and Sugar Creek (EID 04) a tributary to Salt Creek in the Sangamon River basin (3.25 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$).

On the six Kaskaskia River stations, baseline loads of total phosphorus ranged from 178 $Kg \cdot day^{-1}$ downstream of the Lake Shelbyville dam (O 11) to 3,233 $Kg \cdot day^{-1}$ near Okawville (O 20). Baseline loads on tributaries to the Kaskaskia River ranged from 2 $Kg \cdot day^{-1}$ on Asa Creek (OZZT01) to 532 $Kg \cdot day^{-1}$ on Silver Creek (OD 07). Yields of total phosphorus in the Kaskaskia River basin were highest on streams receiving urban runoff or point source discharges and included Sugar Creek (OH 01) 4.11 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$, Richland Creek (OC 04) 3.77 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$, and Silver Creek (OD 06) 2.65 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$.

On the smaller direct tributaries to the Mississippi River, baseline loads of total phosphorus ranged from 3 $Kg \cdot day^{-1}$ on Pond Creek (NG 02) in the Big Muddy basin, to 1,587 $Kg \cdot day^{-1}$ on the Big Muddy River (N 12). On the Mississippi River, loads of total phosphorus increased from 24,766 $Kg \cdot day^{-1}$ at Fulton (M 04) to 47,844 $Kg \cdot day^{-1}$ at Keokuk (K 04). Yields of total phosphorus also increased from 0.41 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ at Fulton (M 04) to 0.57 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ at Keokuk (K 04) (Tables 4-1 and 4-2).

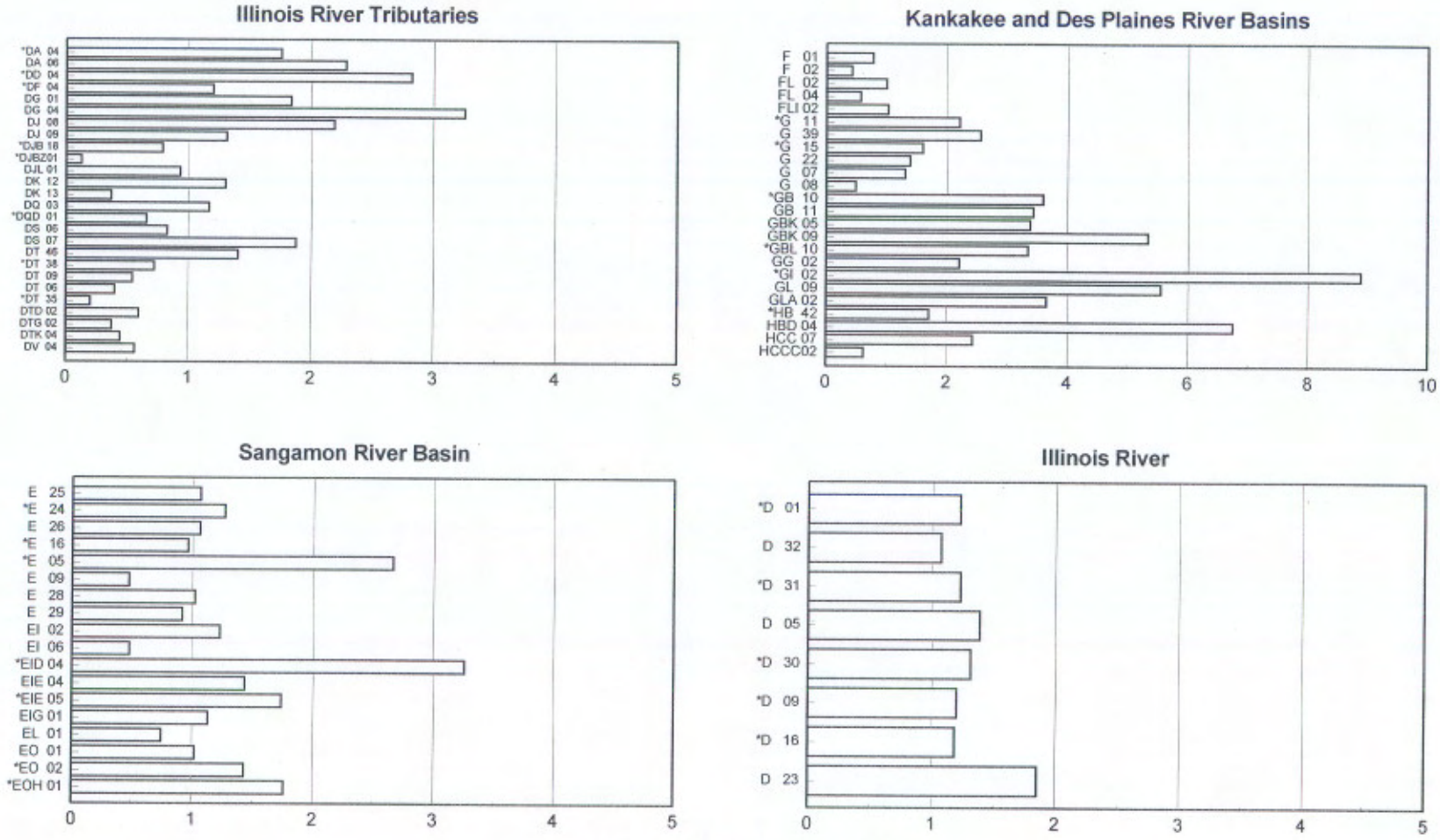
In the Ohio River basin, baseline loads of total phosphorus ranged from 3 $Kg \cdot day^{-1}$ on Lusk Creek to 2,854 $Kg \cdot day^{-1}$ on the Little Wabash River (C 23). Baseline loads of total phosphorus on the Wabash River at Hutsonville, Illinois were 3,016 $Kg \cdot day^{-1}$. As with other watersheds, yields of total phosphorus were highest on streams which received urban runoff or wastewater treatment plant discharges. Yields ranged from 0.11 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ on Lusk Creek to 4.37 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ on Saline Branch . Yields of dissolved phosphorus were less than 0.7 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ with the exception of Saline Branch (BPJC06) which was 4.0 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$(Figure 4-4).

Figure 4-4. Comparisons of baseline yields of total phosphorus(Kg/Hectare/Year). Illinois EPA AWQMN data October 1980 - September 1996.



* indicates less than 16 years of flow data

Figure 4-4 (cont) . Comparisons of baseline yields of total phosphorus (Kg/Hectare/Year). Illinois EPA AWQMN data October 1980 - September 1996.



* indicates less than 16 years of flow data

Total Suspended Solids

Baseline loads of total suspended solids on the Rock River ranged from 860,933 $Kg \cdot day^{-1}$ near Byron (P 14), to 2,372,328 $Kg \cdot day^{-1}$ near Joslin (P 04). Unlike nitrogen and phosphorus, the maximum baseline suspended solids loadings on the Rock River were exceeded on two streams in addition to the Illinois River main stem: the Spoon River (DJ 08) and Mackinaw River (DK 12). Yields of total suspended solids on the five Rock River stations ranged from 152 to 350 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$. Yields on two tributaries to the Rock River were significantly higher: the Green River, PB 04 (702 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$) and Elkhorn Creek, PH 16 (1,535 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$) (Figure 4-5).

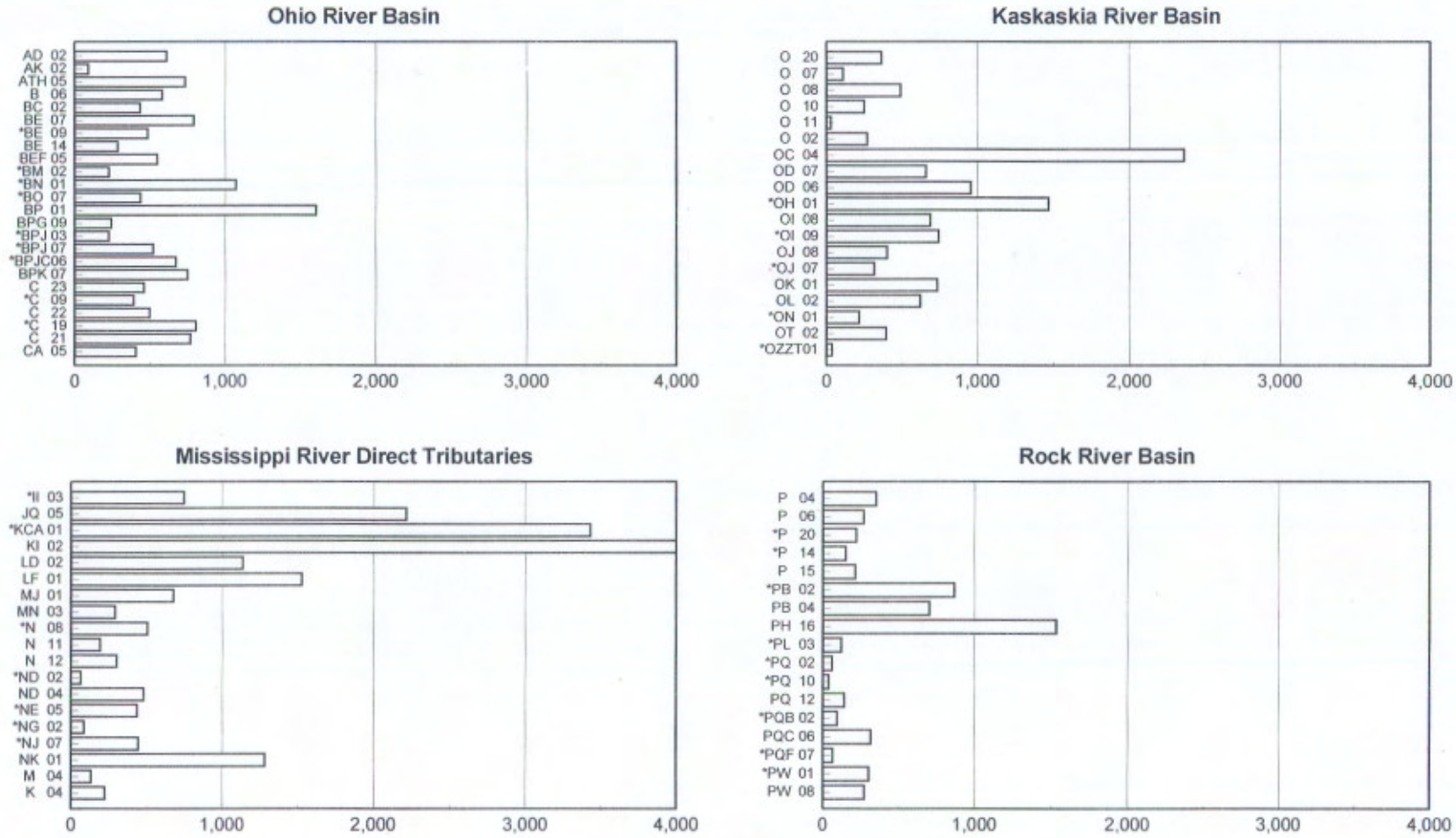
On the Illinois River, baseline loads of total suspended solids ranged from 1,811,678 $Kg \cdot day^{-1}$ near Marseilles (D 23), to13,875,624 $Kg \cdot day^{-1}$ near Hardin (D 01). The Kankakee River near Wilmington (F 01) had a baseline loading of 1,468,303 $Kg \cdot day^{-1}$. The Iroquois River (FL 02) was a major contributor to the loads in the Kankakee River with a baseline loading of 772,481 $Kg \cdot day^{-1}$. The Des Plaines River (based on combining three stations: G 11, GB 11 and GI 02) was estimated to have a baseline load of 304,836 $Kg \cdot day^{-1}$. On major tributaries to the Illinois River, the largest contributors of baseline loadings of suspended sediments were the Spoon River at DJ 08 (2,663,539 $Kg \cdot day^{-1}$) and the Mackinaw River at DK 12 (2,717,971 $Kg \cdot day^{-1}$). The Sangamon River (E 25) was also a large contributor of baseline loadings with 2,035,757 $Kg \cdot day^{-1}$. Two other tributaries to the Illinois River, the Fox River and Vermilion River, contributed more than 1,000,000 $Kg \cdot day^{-1}$ of total suspended solids.

Yields of total suspended solids in the Illinois River basin were generally lower on stations in the Fox River watershed when compared with the other watersheds. Yields were less than 180 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ with the exception of the farthest downstream station on the Fox River. Yields of total suspended solids were greater than 1,500 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ on Macoupin Creek, Indian Creek (DF 04), La Moine River, Spoon River and its tributary Indian Creek (DJL 01), Mackinaw River, two tributaries to the Sangamon River (Sugar Creek and Kickapoo Creek) and West Bureau Creek (Figure 4-5).

On the six Kaskaskia River stations, baseline loads of total suspended solids ranged from 20,571 $Kg \cdot day^{-1}$ below Lake Shelbyville (O 11), to 1,134,907 $Kg \cdot day^{-1}$ at the farthest downstream station near Okawville (O 20). Baseline loadings exceeded 200,000 $Kg \cdot day^{-1}$ from stations on Richland Creek (OC 04), Silver Creek (OD 07) and Shoal Creek(OI 08). Yields of total suspended solids were highest on Richland Creek (OC 04) 2,365 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ and Sugar Creek near Albers (OH 01) 1,468 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$(Figure 4-5).

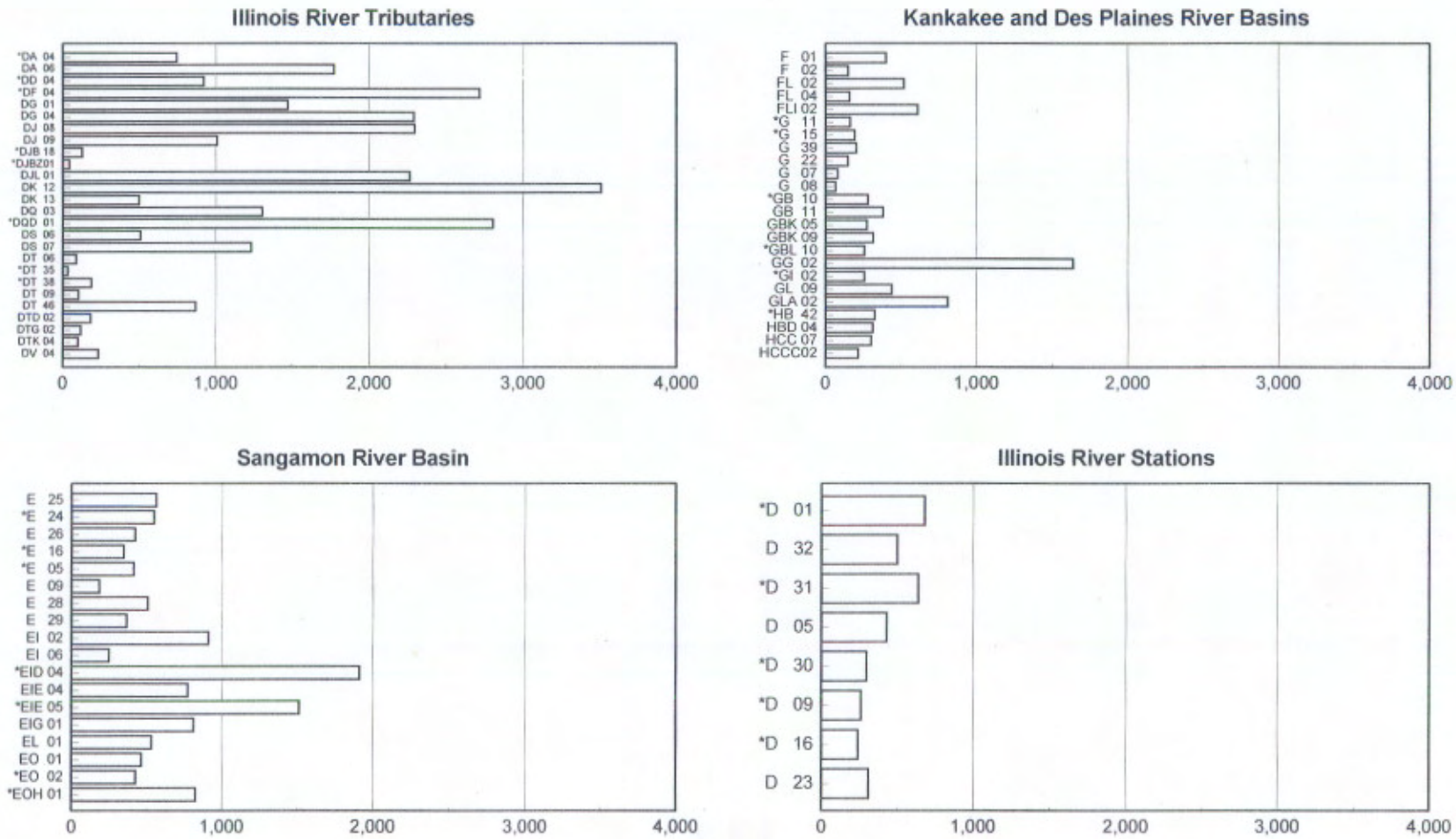
On the smaller direct tributaries to the Mississippi River, baseline loadings of total suspended solids ranged from 59,945 $Kg \cdot day^{-1}$ on Marys River (II 03) to 1,692,382 $Kg \cdot day^{-1}$ on Bear Creek near Marcelline (KI 02). Yields from Bear Creek were the highest of any of the stations reviewed, 6,839 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$. The values on Bear Creek were affected by a sample collected during the highest flow event recorded on Bear Creek. On the Mississippi River, loads

Figure 4-5. Comparisons of baseline yields of TSS (Kg/Hectare/Year). Illinois EPA AWQMN data October 1980 - September 1996.



* indicates less than 16 years of flow data

Figure 4-5 (cont). Comparisons of baseline yields of TSS (Kg/Hectare/Year). Illinois EPA AWQMN data October 1980 - September 1996.



* indicates less than 16 years of flow data

of total suspended solids increased from 8,096,760 $Kg \cdot day^{-1}$ at Fulton (M 04) to 19,019,448 $Kg \cdot day^{-1}$ at Keokuk (K 04). Yields of total phosphorus also increased from 133 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ at Fulton (M 04) to 225 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ at Keokuk (K 04) Tables 4-1 and 4-2.

In the Ohio River basin, baseline loads of total suspended solids ranged from 2,786 $Kg \cdot day^{-1}$ on Lusk Creek (AK 02) to 1,469,210 $Kg \cdot day^{-1}$ on the Vermilion River at Danville (BP 01). The extremes of yields also occurred at these two stations and ranged from 91 to 1,606 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ respectively. Baseline loads of TSS on the Wabash River at Hutsonville, Illinois, were 5,375160 $Kg \cdot day^{-1}$. Baseline loads on the Little Wabash River and Embarras River exceeded 850,000 $Kg \cdot day^{-1}$. TSS yields were highest on the Vermilion River and Brouillets Creek where they exceeded 1000 $Kg \cdot Ha^{-1} \cdot Yr^{-1}$ (Table 4-2).

Discussion

Baseline loadings to the Mississippi River from Illinois streams generally followed the pattern of flow (Figure 4-6). Streams with the highest mean flows had the highest baseline loads (Figure 4-7). The Illinois River had the highest baseline loadings of inorganic nitrogen, phosphorus and suspended sediment, followed by the Rock River. The Kaskaskia River was the third largest source of baseline loadings of inorganic nitrogen and total phosphorus to the Mississippi River from Illinois. However, baseline loads of both inorganic nitrogen and total phosphorus from the Kaskaskia River were exceeded by the combined baseline loads of the smaller direct tributaries. Baseline loads of inorganic nitrogen on the Kaskaskia River were significantly effected by the two large reservoirs. Bear Creek had the third highest baseline loading of total suspended solids due primarily to a sample collected during a record flow event.

In the upper portions of the Illinois River, the Des Plaines River drainage was the major source of baseline loadings of total phosphorus (Figure 4-8). The high dissolved phosphorus loadings indicated that the majority of the phosphorus leaving the Des Plaines River was coming from point sources. In contrast, baseline loadings of inorganic nitrogen to the upper portion of the Illinois River were slightly higher on the Kankakee River than the Des Plaines River. The Kankakee River was also the primary source of baseline total suspended solids loadings in the upper Illinois River. Both the Kankakee River and Des Plaines River were influenced by their two tributaries, the Iroquois River and the Chicago Sanitary and Ship Canal respectively. Further downstream on the Illinois River, the Sangamon River basin was the largest contributor of baseline loads of inorganic nitrogen and phosphorus to the Illinois River (Figure 4-8). Baseline loads of total suspended solids to the Illinois River were highest in the Spoon River and Mackinaw River basins (Figure 4-9)

In the Ohio River basin, baseline loadings did not follow the flow pattern (Figure 4-6). Although the Little Wabash River has roughly double the daily mean flow of either the Vermilion River or Embarras River, it contributed less than half as much baseline loadings of inorganic nitrogen due to significantly lower concentrations of nitrates (Table 4-10). The

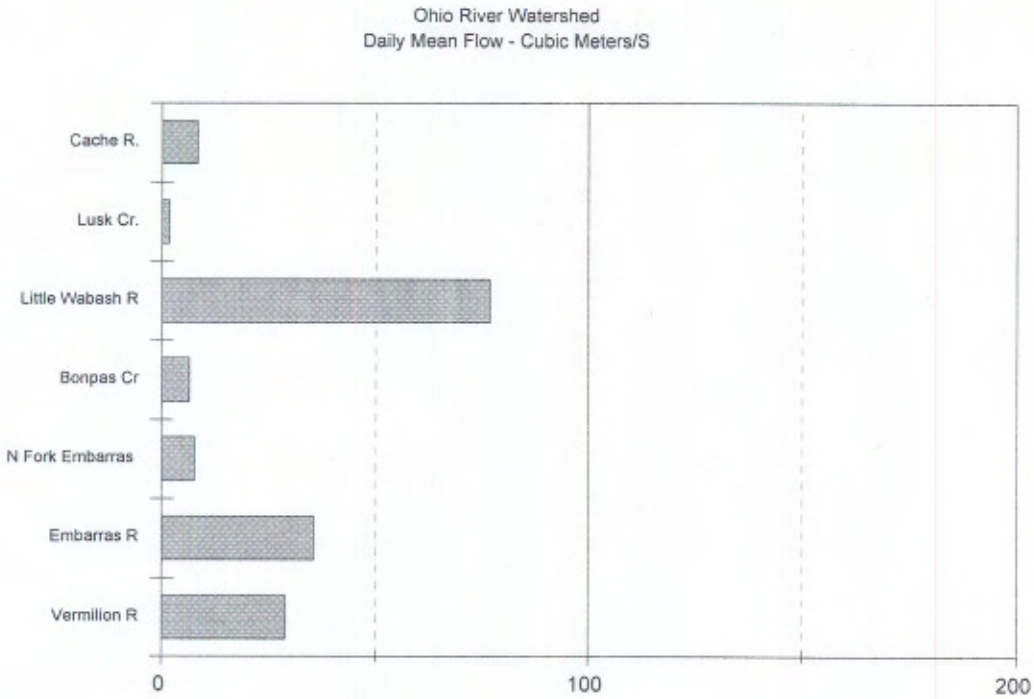
Vermilion River had the highest baseline loadings of inorganic nitrogen followed by the Embarras River. The Little Vermilion River, with a drainage area of 495 Km^2 (191 $miles^2$) and Brouillets Creek, with a drainage area of 670 Km^2 (260 $miles^2$), had a combined inorganic nitrogen load that was slightly higher than the entire Little Wabash River watershed, 7,998 Km^2 (3,088 $miles^2$), due to much higher concentrations of nitrates in these streams. Conversely, the Little Wabash River had the highest baseline loads of total phosphorus followed by the Embarras River and then the Vermilion River. Baseline loads of total suspended solids were also highest on the Vermilion River. TSS loads were similar on the Embarras River and Little Wabash River (Figure 4-10).

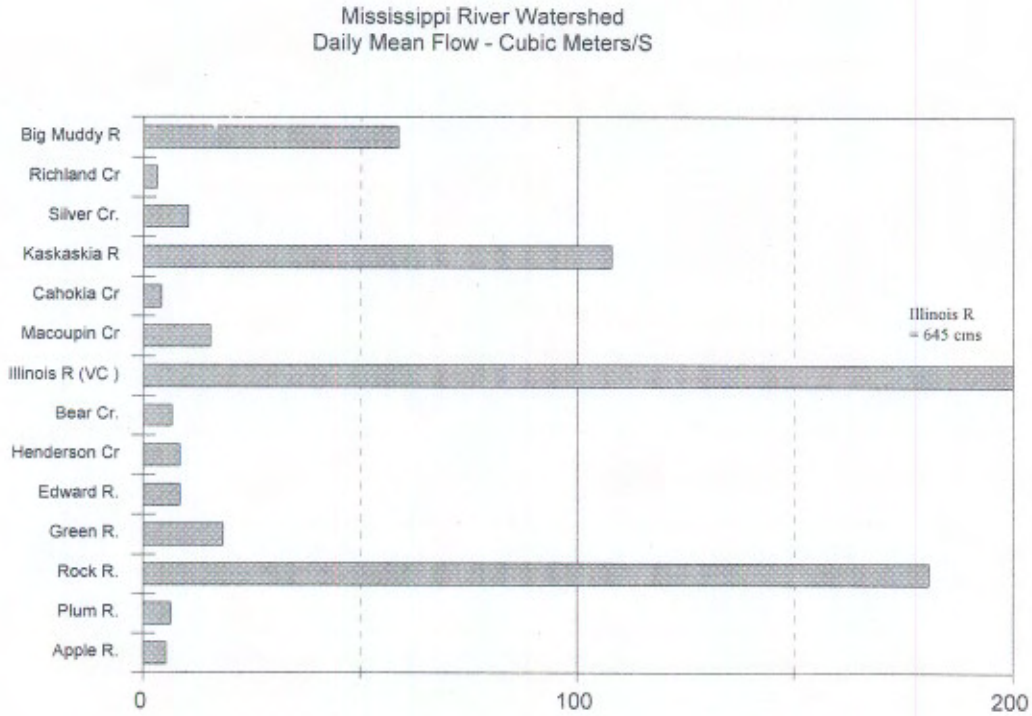
Determining the effects of point source versus nonpoint sources, which includes agriculture, aerial deposition and natural effects, on loads is difficult for a variety of reasons. Point source discharges in Iliinois are required by their NPDES permits to routinely monitor flow and total ammonia-N in their effluents, but not other forms of nitrogen (nitrates and TKN) or phosphorus. Sewage treatment lagoons, which may have little, if any, discharge during the summer months, are not required to report even ammonia. This makes estimations of point source loads versus nonpoint or background loads impractical. Tetra Tech (1998) attempted to determine point source loads in the Mississippi River basin based on subsampling of six different effluent flow categories. They concluded that a flow-weighted load average was not a defensible method due to the lack of data. They relied on a census approach rather than a statistical approach to estimate loads from point sources. Other studies have used models in an attempt to determine the percentages of loads due to point sources versus nonpoint sources (Lovejoy, 1992). Although the Illinois EPA collects a wide range of parameters from effluents through several programs (Table 4-3), the author was unable to accurately delineate portions of loads attributed to point sources within specific watersheds.

Table 4-3. Summary of effluent nutrient concentrations collected during facility related stream surveys by the Illinois EPA between 1987 and 1996.

	Water Temperature C	Total Ammonia-N	Total $NO_3 + NO_2$-N	TKN	Total Phosphorus
Mean	20.82	3.15	10.54	3.39	3.53
Standard error	0.17	0.43	0.39	1.02	0.15
Median	21.4	0.24	10.0	1.3	3.10
Maximum value	36	146.2	120	380	64
Minimum value	5	0.01	0.01	0.1	0.01
Number	664	666	666	207	665

Figure 4-6. Comparison of daily mean flows from the farthest downstream USGS gaging station on selected tributaries to the Ohio River and Mississippi River.





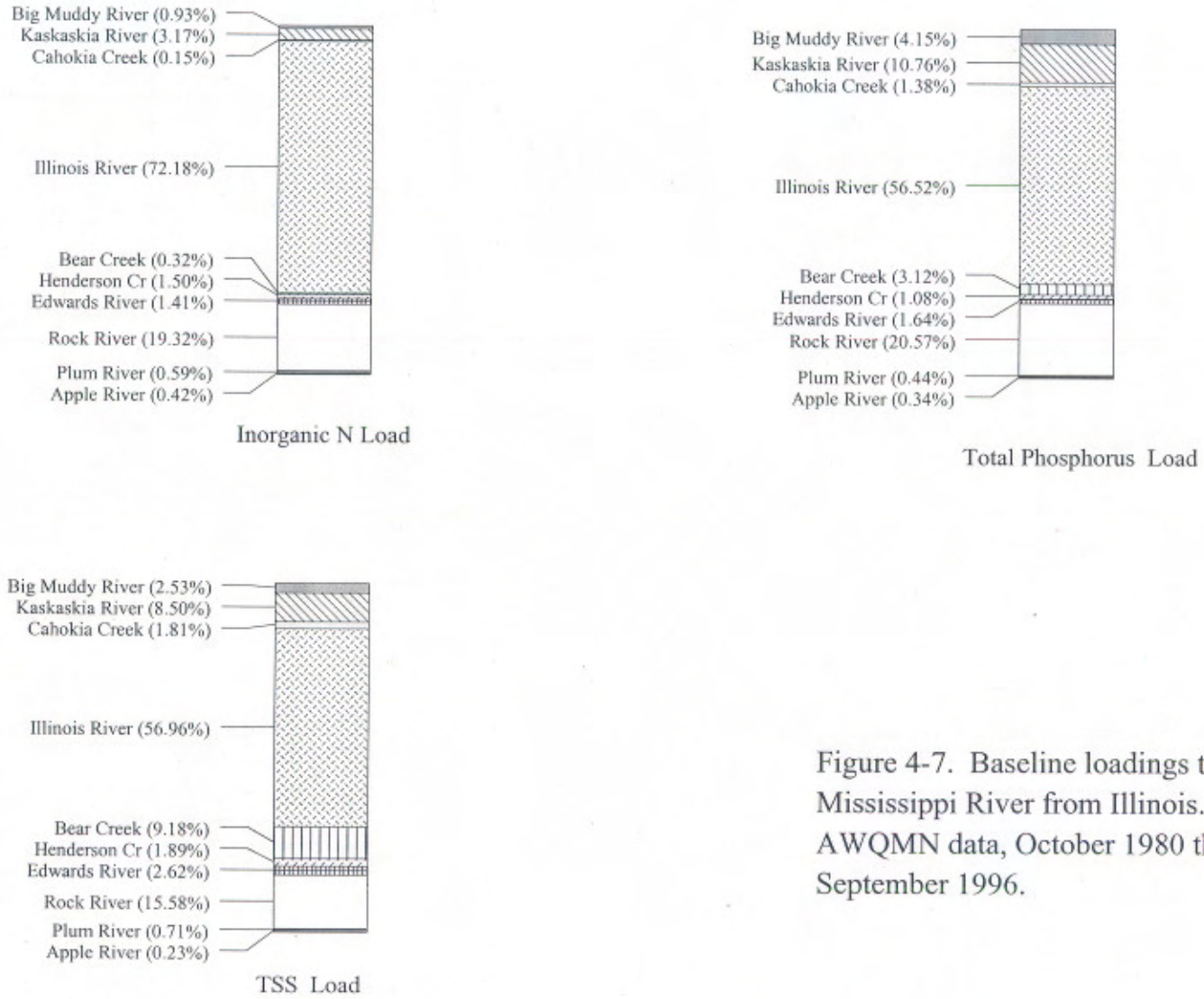


Figure 4-7. Baseline loadings to the Mississippi River from Illinois. Illinois EPA AWQMN data, October 1980 through September 1996.

Figure 4-8. Comparisons of Illinois River tributaries and their baseline inorganic nitrogen and total phosphorus loads, Illinois EPA AWQMN data October 1980 through September 1996.

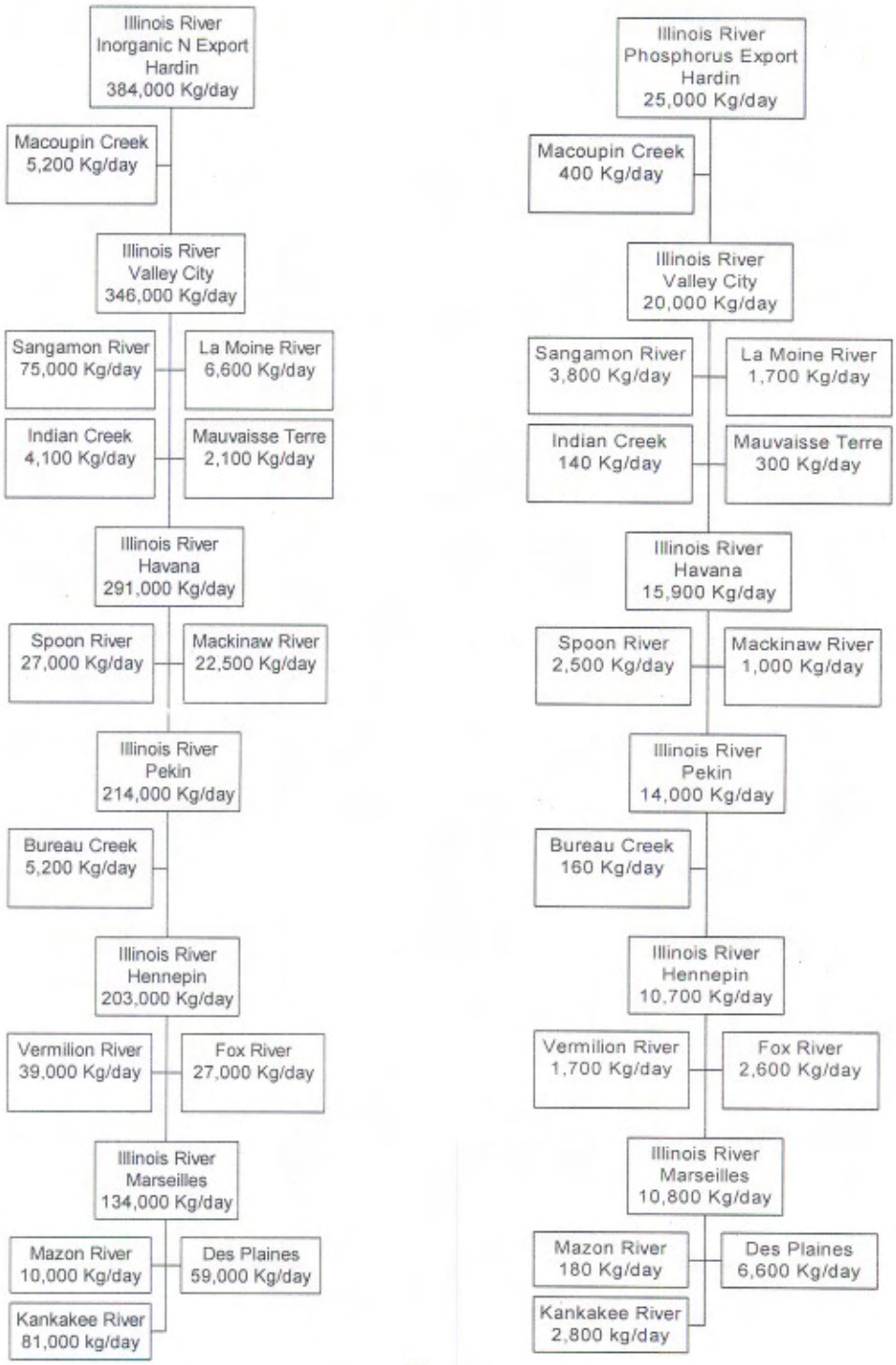
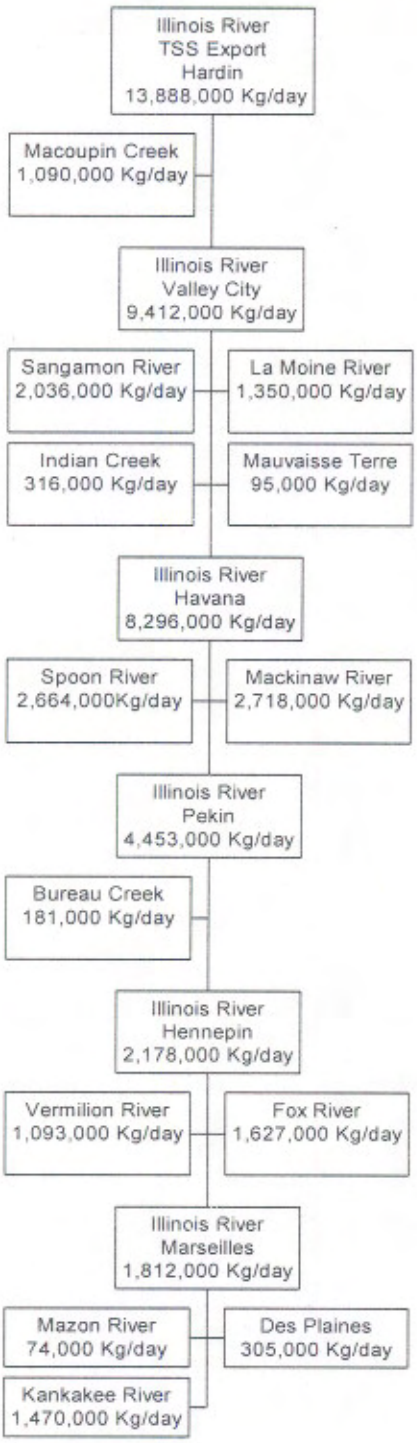


Figure 4-9. Comparisons of Illinois River tributaries and their baseline loads for total suspended solids loads, Illinois EPA AWQMN data October 1980 through September 1996.



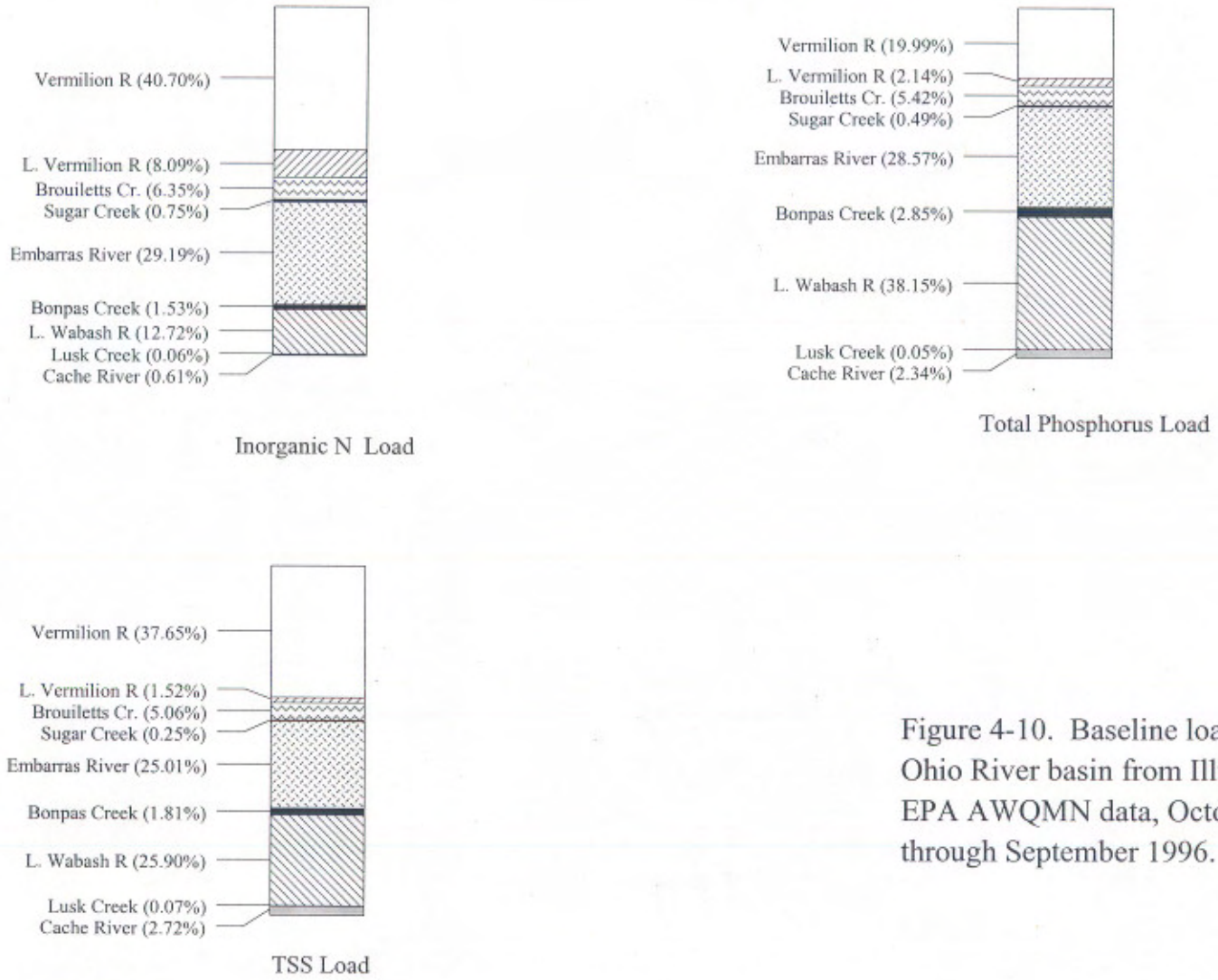


Figure 4-10. Baseline loadings to the Ohio River basin from Illinois. Illinois EPA AWQMN data, October 1980 through September 1996.

5. EXPORT OF NUTRIENTS FROM ILLINOIS -- 1996 Water Year

Introduction

In January 1998, water quality specialists from the Illinois EPA, Illinois State Water Survey, IDNR Office of Water Resources, and Department of Agriculture convened a workgroup know as the Illinois Nutrient and Sediment Assessment workgroup or INAS. One of the goals of the group was to evaluate loadings by year for comparison with a national nutrient loadings assessment being conducted by the USGS and NOAA. The national assessment was being driven by "hypoxia" or anoxic conditions in the Gulf of Mexico (Rablais et al., 1998). The national assessment was based in part on the assumption that nutrients from the Mississippi River watershed were significant contributors to the water quality problems in the Gulf of Mexico (Winstanley, 1999).

Twenty-one Illinois EPA AWQMN stations, which were located at the farthest downstream USGS gage station within their respective watersheds, were selected to develop these nutrient loading estimates (Figure 5-1, Table 5-1). The drainage area from the 21 stations covered 48,195 miles^2 of the surface area of Illinois (86.4 percent). The period of record was the same as the baseline loading project, October 1980 through September 1996. Daily mean flow data for the period October 1980 through September 1996, was available from the USGS (via the Internet) at all the stations except for the Plum River. Estimates of flow on Plum River from October 1980 to September 1994 were based on a relationship with Apple River. Regression analysis of daily flow data from the Plum River collected from October 1994 through September 1996 (n = 731 samples) with the Apple River during this same time frame, resulted in the following equation:

1.036 * Apple River flow = Plum River flow. The R squared value was 0.755.

Loadings at four additional stations located along streams bordering Illinois were also calculated for comparisons. These stations included two sites on the Mississippi River: Keokuk, Iowa (K 04) and Thebes, Illinois (I 84); the Ohio River near Olmstead, Illinois (A 06) and the Wabash River near Hutsonville, Illinois (B 06).

Data Analysis Methods

Although the baseline loadings previously presented provide a reasonable estimator of flux from the state of Illinois, and how loadings are distributed statewide, a method was needed to separate loads into individual years. Since ambient water quality samples collected by the Illinois EPA were based on a fixed sampling cycle independent of flow events they could be characterized as fixed load. For constituents whose concentrations were significantly correlated with flow, a fixed sampling network would tend to underestimate the actual loads particularly if

Figure 5-1. Illinois EPA AWQMN stations used to estimate nutrient export from Illinois during the 1996 water year.

Illinois EPA
Baseline Loadings Report
Matthew Short, November 1999

Table 5-1. Summary of USGS flow data from Wicker et al. 1997.

Stream Name	IEPA Station Code	USGS Station Code	1996 total m^3/s	1996 Daily mean m^3/s	1980-96 Daily Mean m^3/s	1980-96 Maximum m^3/s	1980-96 Maximum Date	Historical Daily mean m^3/s	Historical Maximum m^3/s	Historical Maximum Date	Drainage Area Station Km^2	Drainage Area Total Km^2
Vermilion River	BP 01	03339000	9348.3	25.5	37.0	1277.1	04/13/94	28.8	1277.1	04/13/94	3341.1	3600.0
Wabash River at Hutsonville, IL*	B 06	03341920	120352.1	328.8	384.6	3256.5	03/01/85	344.1	5663.4	05/21/43	33633.7	
Embarras River	BE 07	03345500	18064.5	49.4	41.1	835.4	05/09/96	35.6	1081.7	05/30/27	3926.4	6319.6
N Fork Embarras	BEF 05	03346000	3782.9	10.3	9.0	410.6	11/15/93	7.6	574.8	01/04/50	823.6	
Bonpas Creek	BC 02	03378000	2995.2	8.2	7.1	179.2	05/18/90	6.5	209.8	05/09/61	590.5	717.4
Little Wabash R	C 23	03381495	35921.7	98.1	93.1	951.5	05/23/90	76.9	1302.6	05/13/61	7790.7	8295.8
Lusk Creek	AK 02	3384450	563.8	1.5	1.7	132.2	08/24/85	1.7	132.2	08/24/85	111.4	228.2
Ohio River at Olmstead, IL**	A 06	03612500	3784394.3	10338.5	8301.5	33697.2	01/01/91	7818.3	52386.5	02/01/37	203100.0	
Cache River	AD 02	03612000	2425.2	6.6	8.6	201.9	02/02/82	8.4	248.6	01/26/29	632.0	632.0
Apple River	MN 03	05418950	2072.8	5.7	6.1	211.0	02/02/94	5.1	255.1	02/21/37	536.1	678.6
Plum River	MJ 01	05420100	2611.7	7.1	6.5	218.6	02/02/94				707.1	774.4
Rock River	P 04	05446500	100106.1	273.5	219.5	1226.1	03/26/93	181.0	1265.8	03/22/48	24731.9	28269.9
Green River	PB 04	05447500	7949.2	21.7	22.7	263.6	08/27/87	18.4	286.0	03/19/79	2597.8	
Edward River	LF 01	5466500	3606.7	9.9	10.5	222.3	06/20/90	8.4	396.4	04/22/73	1118.9	1564.4
Henderson Cr	LD 02	05469000	3326.9	9.1	9.5	730.6	07/25/93	8.3	730.6	07/25/93	1152.6	1168.1
Bear Creek	KI 02	05495500	3129.9	8.6	8.9	580.5	03/04/85	6.6	580.5	03/04/85	903.9	1015.3
Illinois River (VC)	D 32	05586100	227490.3	621.6	755.4	3398.0	03/10/85	645.0	3483.0	05/27/43	68774.9	74866.5
Macoupin Creek	DA 06	05587000	5472.2	15.0	17.1	869.3	04/11/94	15.3	926.0	05/19/43	2248.1	
Cahokia Creek	JQ 05	05587900	1264.4	3.5	4.5	199.9	07/18/95	4.3	217.5	04/12/79	549.1	681.2
Kaskaskia River	O 20	05594100	38709.6	105.8	113.8	1379.0	05/19/95	108.0	1379.0	05/19/95	11377.9	15024.6
Silver Creek	OD 07	05594800	3513.4	9.6	11.3	424.8	05/19/95	10.4	424.8	05/19/95	1201.8	
Richland Creek	OC 04	05595200	1181.5	3.2	3.7	376.6	05/17/95	3.2	376.6	05/17/95	334.1	
Big Muddy River	N 12	05599500	26500.8	72.4	64.8	948.6	05/02/96	58.6	948.6	05/02/96	5617.7	6182.3
Mississippi River at Keokuk, IA	K 04	05474500	898201.1	2454.2	2390.2	12289.6	07/10/93	1864.4	12289.6	07/10/93	308210	
Mississippi River at Thebes, IL	I 84	07022000	17839.71	6654.5	7015.0	27694.0	08/07/93	5807.8	27694.0	08/07/93	1847188	

*Wabash River flows based on USGS gage at Riverton, Indiana.
**Ohio River flows based on USGS gage at Metropolis, Illinois.

high flow events were missed. By utilizing the relationship between daily flow values from USGS gage stations and concentration of a parameter, it was reasoned that a more accurate estimate of loads in a given year or season could be calculated.

Correlation analysis, which measures the closeness of a relationship between two variables (Snedecor and Cochran, 1980), was performed at each station between concentrations of total ammonia-N, total Kjedahl nitrogen, total nitrate + nitrite nitrogen, total phosphorus, dissolved phosphorus, total suspended solids and flow. Because of the known influence of seasonality, particularly on nitrate concentrations, correlations between the parameters and water temperature were also conducted. A PROC CORR statement in SAS was utilized to calculate a Pearson correlation coefficient (SAS 1985). The null hypothesis (H_o)was that there was no significant correlation at the $P < 0.05$ level.

The first method reviewed to calculate annual loads was based on flow weighted averages where the mean concentration was multiplied by the mean flow over the averaging period. This method works well when there is a poor relationship between concentration and flow. The main weakness of this method is that it fails to address seasonal variability which can be an important factor particularly with nitrates. A computer program developed by Walker (1996) was used to calculate flow weighted loadings. Comparisons were also made between daily flows during the 16 year period of record and flows on days when water quality samples were collected at the 21 interior stations. The data was stratified into three layers to increase precision:

less than 0.5 * Qmean;
between > 0.5 * Qmean and < 2 * Qmean; and,
greater than 2 * Qmean;

where Qmean was the mean flow during the 16 year period of record.

The second method used to calculate annual loads was based on a regression equation developed by Cohn et al. (1992) (see also Langland, 1995). This method estimates concentrations at various flow rates and time of the year. The regression equation has seven estimated parameters: a constant; a quadratic fit to the logarithm of discharge (β_1 and β_2); a quadratic fit to time (β_3 and β_4); and a sinusoidal (first-order Fourier) function to remove the effects of seasonality (β_5 and β_6). It can be written as:

$$\log [C] = \beta_0 + \beta_1 \log(Q/Q') + \beta_2 [\log(Q/Q')]^2 + \beta_3 [T - T'] + \beta_4 [T - T']^2 + \beta_5 \mathrm{Sin}(2\pi T) + \beta_6 \mathrm{Cos}(2\pi T) + \epsilon$$

Where C is the concentration in mg/L, Q is the discharge in cubic feet per second, T is time measured in decimal years, Q' and T' are centering variables for discharge and time respectively. Errors, denoted by ϵ, were assumed to be independent and normally distributed with zero mean and variance. A variation of the Cohn method where log [C] was replaced with log [Q_L] (flow) was also reviewed (Robertson, 1997). The regression model, using concentrations, was selected

as the primary method to estimate loads from Illinois since it was believed that it could be directly compared to the national assessment. Loads were calculated using the formula: $L_d = Q_d * C_{it} * K$; where L_d was the load in tons per day; Q_d was the daily mean discharge in cubic feet per second; C_{it} was the estimated constituent concentration based on the discharge and time of year in mg/L; and K = 0.0027 is the conversion factor to tons per day. Daily loads based on the regression equation were then added together to provide annual and period of record loads. Loads were converted from tons to kilograms for the purpose of this report.

Because of errors due to the re-transformation of logarithmic estimates of concentrations and loads in these models, two methods were evaluated to estimate correcting factors that could be applied to remove the bias (Gilroy et al., 1990). The Quasi-Maximum Likelihood Estimator (QLME) assumes a normal distribution of the log transformed data. The Duan Smearing Estimator (DSE), uses a non-parametric procedure to correct for the bias in the median estimate. The QLME and DSE give similar results if the distribution of the residuals are fairly normal, the number of samples is larger than 30 and the variance is small. When these conditions are not met, the DSE provides estimates that are closer to the true values. The Duan Smearing Estimator was selected as the method for this data set.

In order to evaluate the accuracy of the regression models, load data from the 1997 water year was compared with loads predicted by the regression equation using the same mean daily flows. A paired *t-test* was used and the null hypothesis (H_o) was that there were no significant differences between the actual means and the predicted means at the $P < 0.05$ level. Only 17 of the stations had flow data available at the time of the comparison. Sample sizes were small and included nine samples from all sites except the Rock River and Green River where only eight samples were available. In addition, the values were graphed to visually inspect any differences. Comparisons between annual mean loads based on the regression equation and those calculated from the baseline loading portion of the report and the flow weighted method were also conducted. The relative percent difference (RPD) was calculated as the sum of two times the mean annual load based on the regression equation minus the load from the other method divided by the mean annual load based on the regression equation plus the load from the other method divided by the number of samples: $\sum(2*(a-b)/(a+b))/n$.

In order to calculate the amount of inorganic nitrogen (nitrates plus ammonia) and phosphorus leaving Illinois on average over the period studied or specifically the 1996 water year, several adjustments to the data were necessary. Since stations were not located at the mouth of the rivers, the load was increased by the ratio of drainage area at the monitoring station to the drainage area at the mouth (Table 5-1). On basins which had multiple stations, the loads and areas were combined before calculating the overall flux from that watershed. These included adding the Green River with the Rock River; Macoupin Creek with the Illinois River at Valley City; Silver Creek and Richland Creek to the Kaskaskia River; and the North Fork Embarras River with the Embarras River. Loads of total nitrogen (TKN plus nitrates) were calculated at stations where the data was available.

Results and Discussion

Correlation coefficients for the 21 stations are presented in Table 5-2. Total suspended solids concentrations were significantly correlated with flow at 16 of the 21 stations. Flows on three of the five streams where there was a lack of significant correlation between total suspended solids concentrations and flow, the Illinois River, Kaskaskia River and the Big Muddy River, were affected by either navigation dams or large reservoirs. Total phosphorus concentrations were significantly correlated with flow at 13 of the 21 stations. This correlation was negative (both total and dissolved phosphorus concentrations increased with a decrease in flow) on the Illinois River probably due to the effects of point sources on phosphorus concentrations. Dissolved phosphorus also had significant negative correlations with flow on streams where point sources could affect concentrations during low flows and included the Vermilion River, Henderson Creek, Illinois River and Richland Creek. Dissolved phosphorus concentrations were positively correlated with flow at 10 additional stations (Table 5-2).

The number of statistically significant correlations between the concentrations of the three measures of nitrogen and flow were lower than those for either phosphorus or total suspended solids. Only six of the 21 stations had a significant positive correlation between nitrate concentrations and stream flow. On the Kaskaskia River basin tributary stations, Silver Creek and Richland Creek, nitrates had a significant negative correlation with stream flow. The negative correlation between nitrates and flow were probably due to the influence of point source discharges on nitrogen concentrations in those streams. Nitrate concentrations were also checked against water temperature since nitrates show strong seasonal variations in concentration. Significant negative correlations occurred between nitrates and water temperature at 14 of the 21 interior stations (i.e., as temperature goes up, concentrations of nitrates decrease). This indicates that seasonality may be more of a factor in nitrate concentrations than flow. The Green River was the only stream where concentrations from all six parameters were significantly correlated with flow (Table 5-2).

Since the chemical data was collected independent of flow events (i.e., high flows, spills) comparisons of sampling frequency with flow data was an important consideration. High flow events can account for the majority of loading in a given year, particularly on small streams or streams with rapid and easily altered flow profiles. Comparisons with flow data indicated that AWQMN sampling occurred at approximately the same frequency as flow events. With the exception of the stations on the Illinois River, Rock River and Green River, flows in the higher tier (ie. > 2 * Qmean) accounted for 15 percent or less of the samples collected and flow events, but represented 50 to 70 percent of the flow volume (Figure 5-2 and Table 5-3). Mean flows during the 16 year study period were higher than long term daily mean flows. This was reflected in the fact that maximum historical flows occurred at eight of the 21 stations over the 16 year study period (Table 5-1). Water quality samples corresponding with these record flow events occurred on Bear Creek, Vermilion River and Big Muddy River. Rainfall was also above long term averages in Illinois during much of the 16 year period (Figure 5-3).

Table 5-2. Summary of Pearson correlation coefficients of concentrations versus flow (cfs) or water temperature for data collected between October 1980 and September 1996 from the Illinois EPA AWQMN.

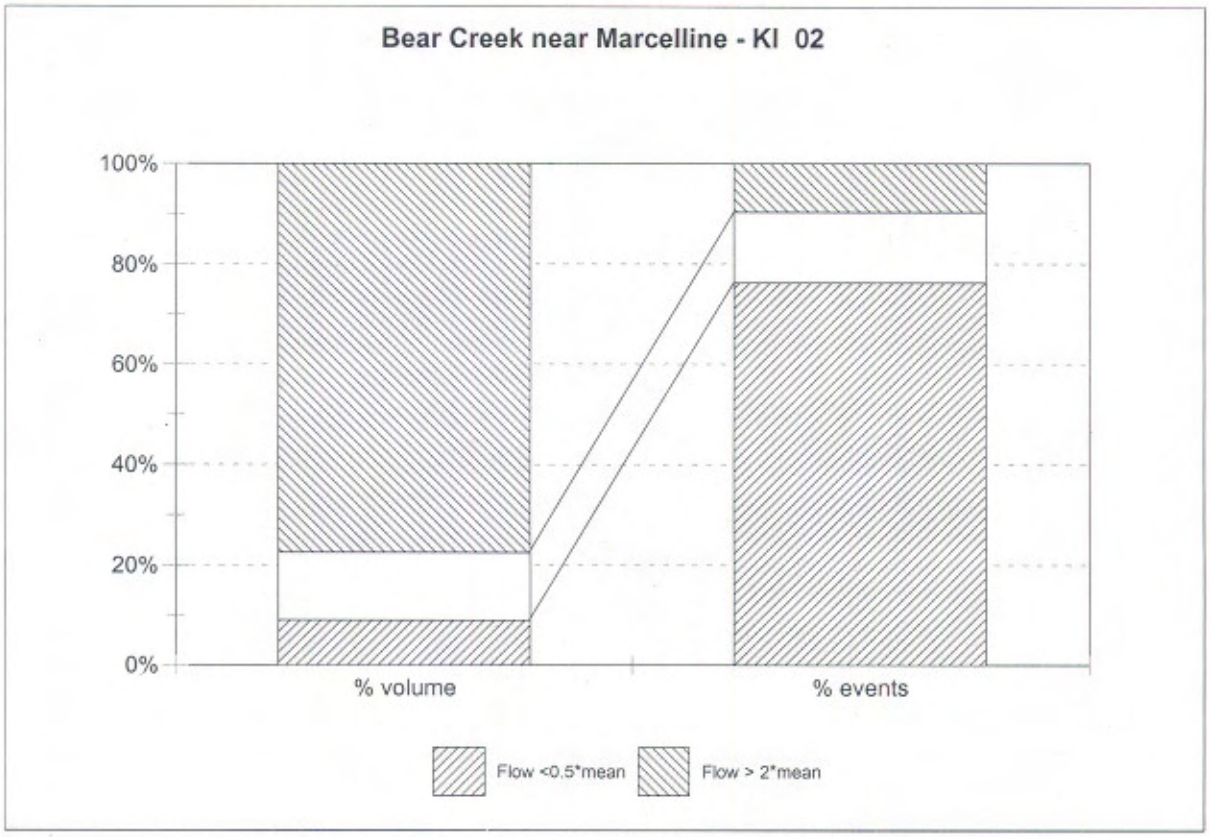
Stream Name	IEPA Code	USGS Code		Pearson Correlation with flow						with Temperature	
				NH_3-N	TKN	NO_3+NO_2-N	TPHO	DPHO	TSS	NO_3+NO_2-N	TSS
Vermillion River	BP 01	03339000		-0.0548	0.6523	0.0262	-0.0639	-0.2360	0.8511	-0.2785	-0.0297
			p value	0.5080	0.0001	0.7516	0.4558	0.0055	0.0001	0.0006	0.7221
			n	148	137	148	139	137	146	148	146
Embarras River	BE 07	03345500		0.0919		-0.0141	0.5201	0.4119	0.3566	-0.2945	0.1153
			p value	0.2803		0.8689	0.0001	0.0001	0.0001	0.0004	0.1782
			n	140		140	108	107	138	140	138
N Fk Embarras River	BEF 05	03346000		0.0821		-0.0209	0.4362	0.3990	0.1928	-0.3868	0.1917
			p value	0.3299		0.8038	0.0001	0.0001	0.0208	0.0001	0.0205
			n	143		144	112	112	144	146	146
Bonpas Creek	BC 02	03378000		0.0732		0.0288	0.4275	0.4049	0.1409	-0.2751	0.2602
			p value	0.3814		0.7306	0.0001	0.0001	0.0920	0.0008	0.0017
			n	145		145	111	111	144	144	143
Little Wabash R	C 23	03381495		-0.1510	0.0950	-0.1237	0.2237	0.3056	0.0935	-0.2128	0.0586
			p value	0.0955	0.2610	0.1822	0.0075	0.0002	0.2901	0.0181	0.5147
			n	123	142	118	142	141	130	123	126
Lusk Creek	AK 02	03384450		0.0005	0.0878	0.0785	0.1281	-0.0450	0.4848	-0.0797	0.0704
			p value	0.9950	0.2934	0.3478	0.1246	0.6073	0.0001	0.3404	0.3967
			n	145	145	145	145	133	147	145	147
Cache River	AD 02	03612000		0.0946		0.0295	0.5354	0.1280	0.2746	-0.2585	0.0751
			p value	0.2579		0.7258	0.0001	0.1788	0.0009	0.0018	0.3708
			n	145		144	112	112	144	144	144
Apple River	MN 03	05418950		0.0628		0.3578	0.3401	0.1621	0.4416	-0.1788	0.1863
			p value	0.4646		0.0001	0.0002	0.0907	0.0001	0.0314	0.0249
			n	138		138	115	110	138	145	145
Plum River	MJ 01	05420100		0.4394		0.0503	0.1593	0.2331	0.2470	-0.0904	0.0555
			p value	0.0001		0.5915	0.1406	0.0308	0.0078	0.2830	0.5114
			n	116		116	87	86	115	143	142
Rock River	P 04	05446500		0.0667	0.0396	0.3986	0.2038	0.2170	0.2953	-0.3647	0.5125
			p value	0.4545	0.6389	0.0001	0.0112	0.0090	0.0005	0.0001	0.0001
			n	128	143	127	154	144	136	129	132
Green River	PB 04	05447500		0.3445	0.7082	0.5562	0.4776	0.3758	0.7035	-0.0879	-0.0506
			p value	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.2985	0.5472
			n	144	141	143	144	133	144	143	144
Edwards River	LF 01	05466500		0.3016		0.1304	0.5245	0.2736	0.6431	-0.1399	0.0877
			p value	0.0003		0.1232	0.0001	0.0035	0.0001	0.0955	0.2961
			n	143		141	113	112	142	143	144
Henderson Creek	LD 02	05469000		-0.0197		0.0384	-0.1751	-0.2902	0.4242	-0.1697	0.0867
			p value	0.8152		0.6486	0.0625	0.0018	0.0001	0.0427	0.2998
			n	144		143	114	113	145	143	145
Bear Creek	KI 02	05495500		0.0560		0.0082	0.5063	0.0340	0.4344	-0.2717	0.1041
			p value	0.5052		0.9227	0.0001	0.7219	0.0001	0.0009	0.2178
			n	144		144	113	112	141	145	142
Illinois R at VC	D 32	05586100		-0.1657	-0.1684	0.4912	-0.2199	-0.3362	0.0063	-0.4362	0.0550
			p value	0.0487	0.0350	0.0001	0.0056	0.0001	0.9374	0.0001	0.5219
			n	142	157	143	157	152	157	142	138
Macoupin Creek	DA 06	05587000		0.1186		0.0925	0.5404	0.4153	0.2993	-0.4172	-0.0102
			p value	0.1538		0.2668	0.0001	0.0001	0.0003	0.0001	0.9035
			n	146		146	115	114	144	146	144
Cahokia Creek	JQ 05	05587900		0.1261		0.3855	0.3041	0.0455	0.6403	-0.3265	0.0558
			p value	0.1279		0.0001	0.0010	0.6305	0.0001	0.0001	0.5036
			n	147		147	114	114	146	147	146
Kaskaskia River	O 20	05594100		0.2439	0.1158	0.5865	0.1026	0.2504	-0.0328	-0.1881	0.1366
			p value	0.0063	0.1610	0.0001	0.2146	0.0023	0.7037	0.0405	0.1287
			n	124	148	121	148	146	137	119	125
Silver Creek	OD 07	05594800		-0.0180		-0.1822	0.0049	-0.1367	0.2010	-0.1150	0.1650
			p value	0.8287		0.0267	0.9568	0.1301	0.0150	0.1642	0.0465
			n	148		148	125	124	146	148	146
Richland Creek	OC 04	05595200		-0.1156		-0.2082	-0.0004	-0.1994	0.7336	0.0284	0.0468
			p value	0.1646		0.0114	0.9964	0.0252	0.0001	0.7327	0.5734
			n	146		147	126	126	147	147	147
Big Muddy River	N 12	05599500		-0.0388	-0.0989	0.0509	0.1315	0.0581	-0.0033	-0.1389	0.2475
			p value	0.6715	0.2368	0.5824	0.1137	0.4907	0.9706	0.1254	0.0062
			n	122	145	119	146	143	129	123	121
Total Significant Correlations at p<=0.01				4	3	8	13	14	16	14	6

Table 5-3. Comparison of flows when IEPA ambient data was collected with total flows.

Station	Flow (cfs) minimum	Flow (cfs) maximum	WATER SAMPLES Number	WATER SAMPLES Percent of samples	FLOW DATA Number	FLOW DATA Percent of volume	FLOW DATA Percent of events
Vermilion River #03339000							
	0	538.78	78	52.7%	3181	10.7%	54.4%
	538.78	2335.1	51	34.5%	1940	33.4%	33.2%
	2335.1	44336.46	19	12.8%	723	55.9%	12.4%
			148		5844		
Embarras River #03345500							
	0	648.32	72	51.8%	3198	10.4%	54.7%
	648.32	2593.27	52	37.4%	1864	31.1%	31.9%
	2593.27	29000.57	15	10.8%	782	58.3%	13.4%
			139		5844		
North Fork Embarras River #0							
	0	141.78	99	68.8%	4180	10.0%	71.5%
	141.78	567.13	31	21.5%	1020	16.5%	17.5%
	567.13	14254.52	14	9.7%	644	73.6%	11.0%
			144		5844		
Bonpas Creek #0337800							
	0	112.67	105	77.8%	4312	6.4%	73.8%
	112.67	450.69	11	8.1%	695	12.8%	11.9%
	450.69	6222.83	19	14.1%	837	80.8%	14.3%
			135		5844		
Little Wabash River #0338149							
	0	1469.07	75	63.6%	3591	7.2%	61.4%
	1469.07	5876.28	17	14.4%	1133	22.3%	19.4%
	5876.28	33031.15	26	22.0%	1120	70.5%	19.2%
			118		5844		
Lusk Creek #03384450							
	0	27.1617	95	69.3%	4157	7.9%	71.1%
	27.1617	108.646	29	21.2%	1117	18.7%	19.1%
	108.646	4590.93	13	9.5%	570	73.5%	9.8%
			137		5844		
Cache River #03612000							
	0	135.112	95	66.0%	3735	7.2%	63.9%
	135.112	540.449	28	19.4%	1164	22.0%	19.9%
	540.449	7009.29	21	14.6%	945	70.8%	16.2%
			144		5844		
Apple River #05418950							
	0	96.35	67	48.6%	2444	12.4%	41.8%
	96.35	385.38	61	44.2%	2885	44.6%	49.4%
	385.38	7323.87	10	7.2%	515	43.0%	8.8%
			138		5844		
Rock River #05446500							
	0	3464.19	22	17.3%	1177	7.7%	20.1%
	3464.19	13856.78	95	74.8%	4223	71.1%	72.3%
	13856.78	42566.93	10	7.9%	443	21.2%	7.6%
			127		5843		
Green River #05447500							
	0	358.29	59	41.3%	2207	10.6%	37.8%
	358.29	1433.16	67	46.9%	3005	51.1%	51.4%
	1433.16	9152.38	17	11.9%	631	38.3%	10.8%
			143		5843		
Edwards River #05466500							
	0	165.79	68	48.2%	3087	11.9%	52.8%
	165.79	663.17	58	41.1%	2118	34.6%	36.2%
	663.17	7717.1	15	10.6%	639	53.5%	10.9%
			141		5844		
Henderson Creek #05469000							
	0	149.77	74	52.1%	3145	11.9%	53.8%
	149.77	599.08	53	37.3%	2095	35.3%	35.8%
	599.08	25363.21	15	10.6%	604	52.8%	10.3%
			142		5844		
Bear Creek #05495500							
	0	140.04	111	77.6%	4461	9.1%	76.3%
	140.04	560.17	18	12.6%	818	13.5%	14.0%
	560.17	24183.52	14	9.8%	565	77.4%	9.7%
			143		5844		
Illinois River #05586100							
	0	11920.31	47	32.9%	1997	11.7%	34.2%
	11920.31	47681.23	78	54.5%	3135	56.6%	53.6%
	47681.23	117968.4	18	12.6%	712	31.7%	12.2%
			143		5844		
Macoupin Creek #05587000							
	0	269.26	99	67.8%	4095	9.9%	70.1%
	269.26	1077.04	27	18.5%	1121	19.2%	19.2%
	1077.04	30180.25	20	13.7%	628	71.0%	10.7%
			146		5844		
Cahokia Creek #05587900							
	0	69.99	102	69.9%	4198	9.1%	71.1%
	69.99	279.95	30	20.5%	1164	19.1%	19.7%
	279.95	6940.47	14	9.6%	543	71.7%	9.2%
			146		5905		
Kaskaskia River #05594100							
	0	1795.34	70	47.3%	2853	8.0%	48.8%
	1795.34	7181.37	50	33.8%	2064	37.3%	35.3%
	7181.37	47875.5	28	18.9%	927	54.7%	15.9%
			148		5844		
Silver Creek #05594800							
	0	178.39	109	73.6%	4038	9.9%	69.1%
	178.39	713.55	24	16.2%	970	16.2%	16.6%
	713.55	14746.05	15	10.1%	836	73.9%	14.3%
			148		5844		
Richland Creek #05595200							
	0	58.9	116	79.5%	4249	14.1%	72.7%
	58.9	235.61	20	13.7%	1062	16.5%	18.2%
	235.61	13074.83	10	6.8%	533	69.4%	9.1%
			146		5844		
Big Muddy River #05599500							
	0	1020.45	70	58.8%	3093	9.7%	52.9%
	1020.45	4081.79	33	27.7%	1919	34.0%	32.8%
	4081.79	32932.84	16	13.4%	830	56.3%	14.2%
			119		5842		

Breakdowns of flow are based on less than half the mean, and greater than 2 times the mean.

Figure 5-2. Comparison of Illinois EPA sampling frequency with flow frequency.



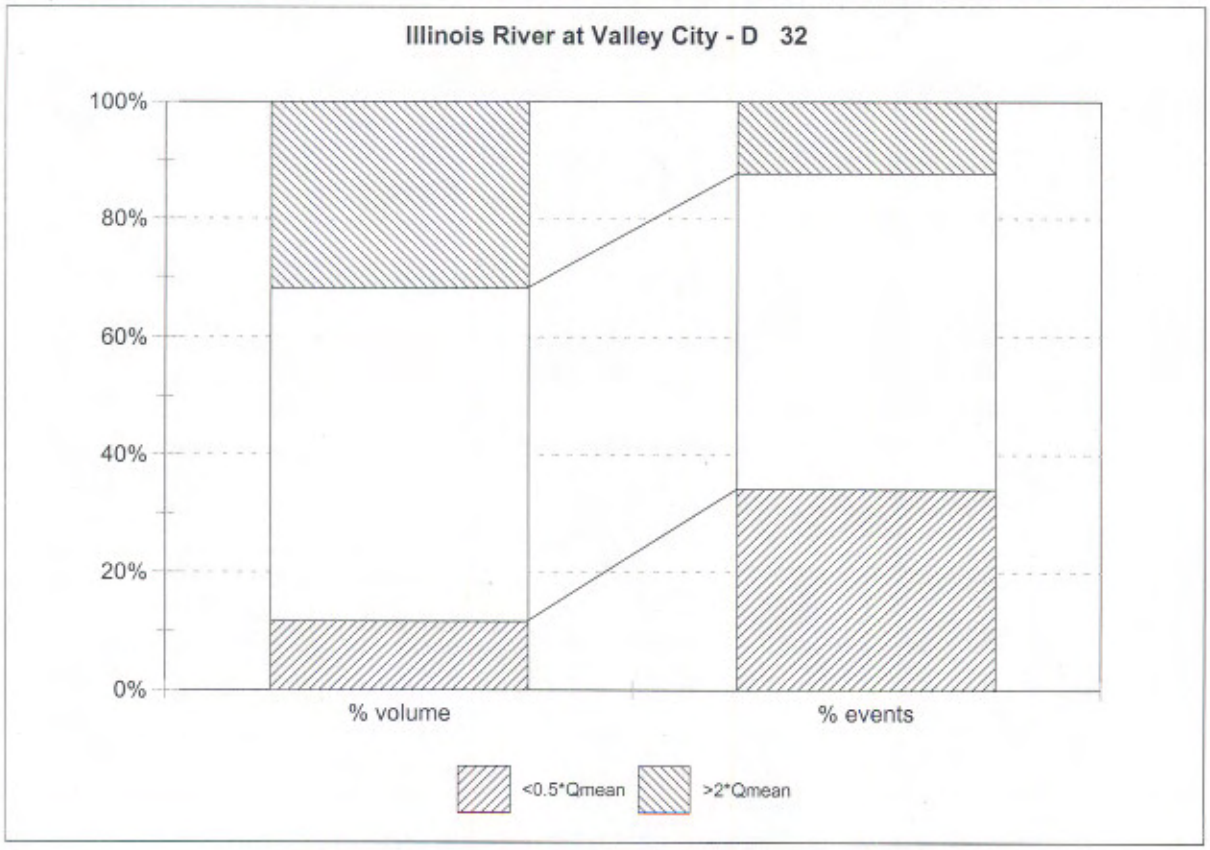
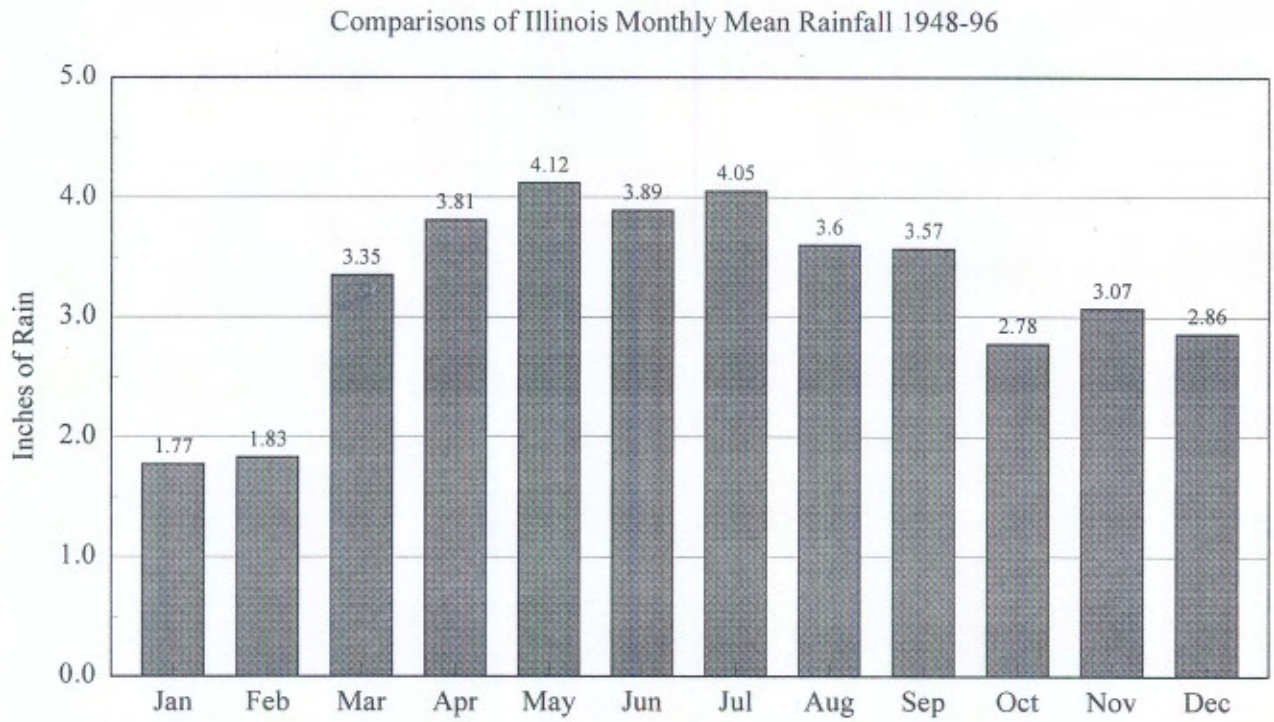
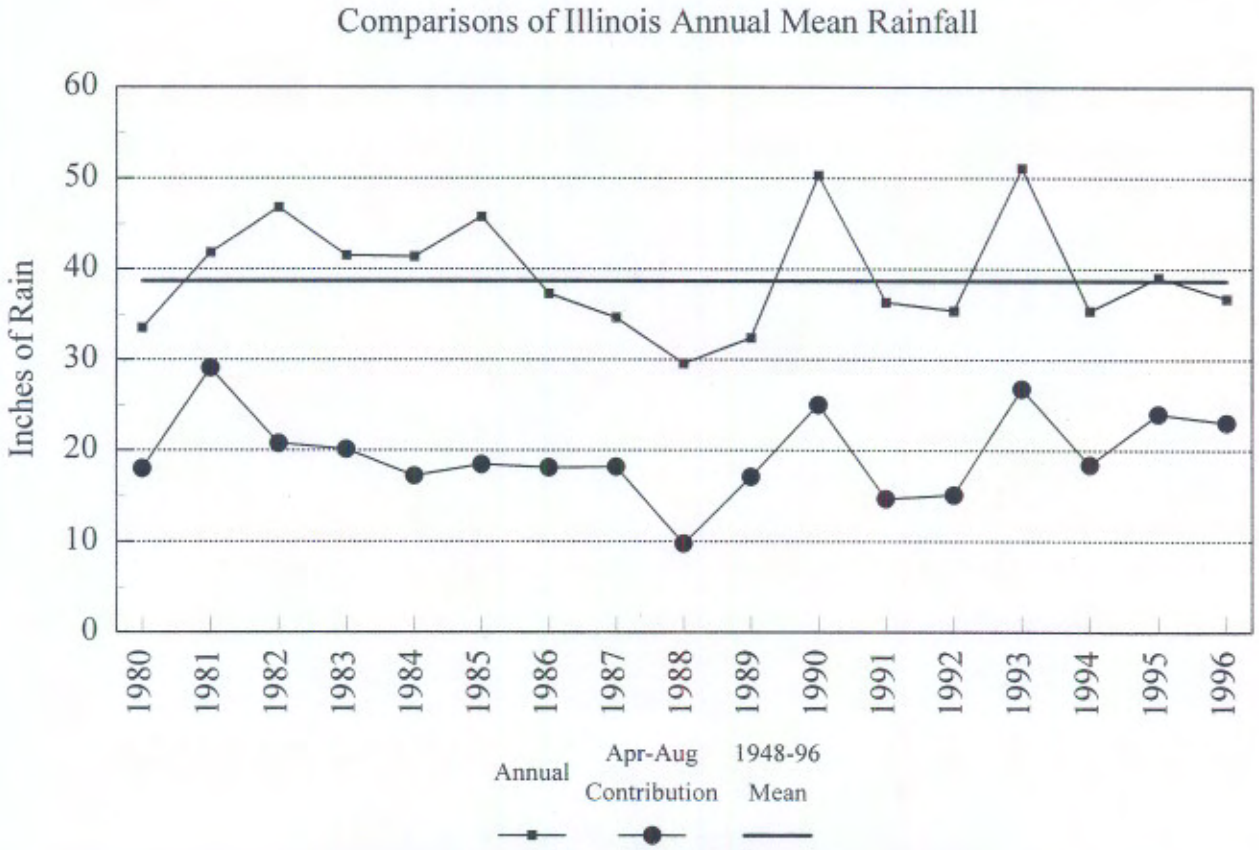


Figure 5-3. Illinois statewide rainfall data.





Although the chemical data set was scanned for outliers which were removed as appropriate, the same consideration had not been given to flow values. The rationale was that including extreme flow events, which can account for a significant portion of the loads, would improve the results of the regression analysis. However, after the initial calculations of loads using the Cohn [C] method, it appeared that two stations, Bear Creek (KI 02) and the Vermilion River (BP 01), had fluxes which were disproportionate to their drainage area. For example, the flux of suspended sediment from Bear Creek was greater than that from the Illinois River at Valley City. A closer inspection of the effects of these extreme flow events on the regression equations was necessary.

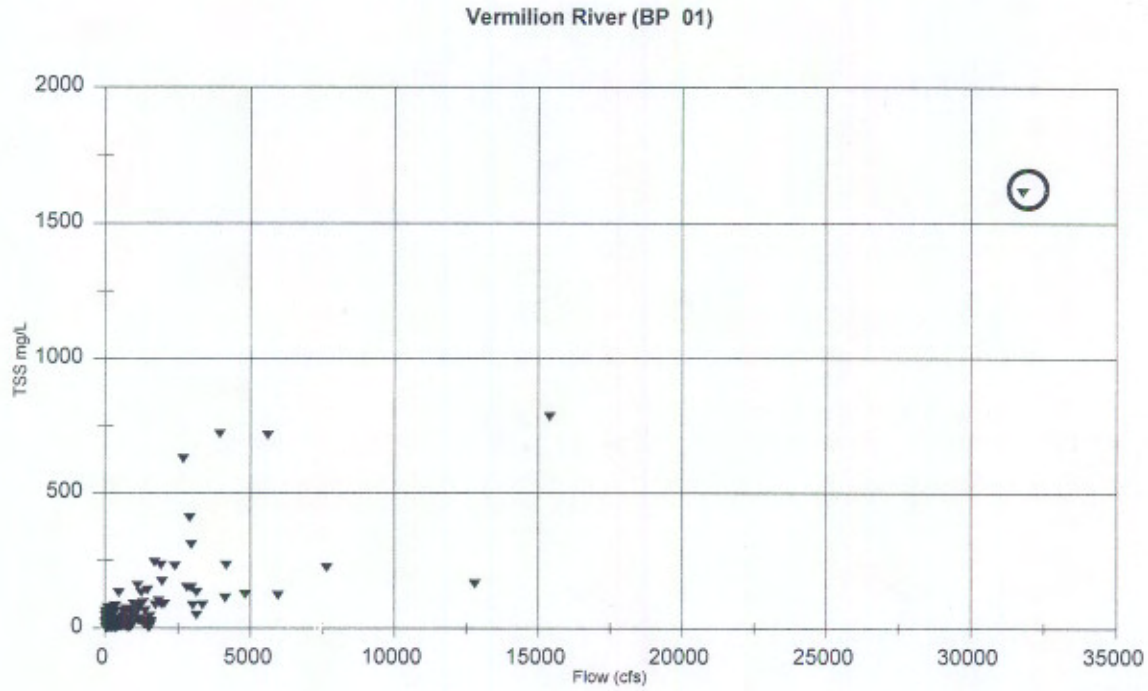
On Bear Creek, the maximum daily flow occurred on March 4, 1985, and corresponded with the collection of a water quality sample by the Illinois EPA . The instantaneous flow was 24,600 cfs and the daily mean flow value was 20,500 (Figure 5-4). This was the highest daily mean flow ever recorded for Bear Creek and contained the highest concentration of total phosphorus, 1.7 mg/L in the data set. During this high flow event, total suspended solids concentrations were 2500 mg/L; however, lower flows had resulted in higher concentrations of suspended solids in Bear Creek (i.e., 4,620 mg/L TSS occurred at 3,480 cfs). For the 16 year period of record on Bear Creek, the 95th percentile of flow was 1,500 cfs and the 99th percentile was 5,270 cfs. Removal of the high flow record from the regression equation resulted in loads of inorganic nitrogen showing an 11.7 percent decrease. Loads of both phosphorus (82.3 percent) and TSS (93.8 percent) showed more significant decreases.

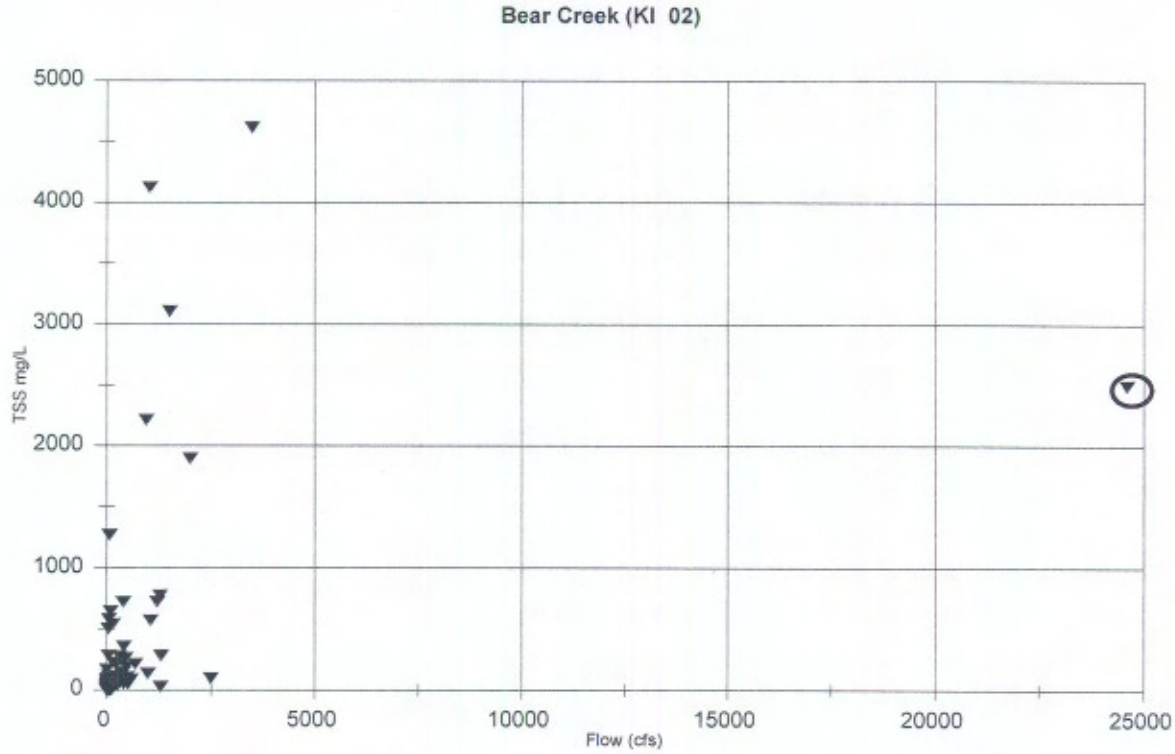
Bear Creek (KI 02)	Inorganic- N	T Phosphorus	TSS
Cohn-C with max flow	958,910 Kg·year^{-1}	942,581 Kg·year^{-1}	5,512,753,210 Kg·year^{-1}
Cohn-C w/o max flow	845,329 Kg·year^{-1}	166,108 Kg·year^{-1}	341,047,688 Kg·year^{-1}

On the Vermilion River near Danville record flows occurred during April, 1994, with the maximum value 45,100 cfs on April 13. The Illinois EPA collected a sample from this station on April 12, 1994, when the daily mean flow was 31,800 cfs (2nd highest on record) Figure 5-4. Total suspended solids concentrations were 1,615 mg/L on that date, more than double the previous high of 716 mg/L which occurred at a flow of 5,620 cfs. For the 16 year period of record, the 95th percentile of flow on the Vermilion River at Danville was 5,070 cfs and the 99th percentile was 11,200 cfs. Removal of the high flow record from the regression equation, resulted in loads of nitrogen showing an 8.7 percent increase and loads of phosphorus showing a 16.8 percent decrease. Loads of total suspended solids showed the most dramatic decrease, 70.9 percent.

Vermilion River (BP 01)	Inorganic-N	T Phosphorus	TSS
Cohn-C with max flow	9,141,854 Kg·year^{-1}	450,878 Kg·year^{-1}	2,103,955,560 Kg·year^{-1}
Cohn-C w/o max flow	9,937,650 Kg·year^{-1}	409,873 Kg·year^{-1}	612,636,877 Kg·year^{-1}

Figure 5-4. Flow outliers from Bear Creek(KI) and the Vermilion River (BP).





The wastewater treatment plant at Danville has a significant effect on phosphorus and nitrogen concentrations at this site particularly during low flow conditions.

Other stations where maximum flow events occurred during ambient water quality sampling were also examined to evaluate the effect of these events on predicted loads. On the Big Muddy River the maximum flow, 33,500 cfs, occurred on May 2, 1996. The Illinois EPA sampled the site on May 1, 1996, when the flow was 29,200 cfs. Total suspended solids concentrations in this sample were 176 mg/L. Higher concentrations of total suspended solids had occurred on the Big Muddy River at lower flows (243 mg/L at 2,850 cfs and 314 mg/L TSS at 3,230 cfs). For the 16 year period of record the 95th percentile of flows was 9,160 cfs and the 99th percentile was 17,300 cfs. Removal of the high flow record from the regression equation resulted in only minor changes in the calculated loads on the Big Muddy River. Inorganic-N loads increased 1.2 percent; phosphorus loads decreased 3.7 percent and TSS loads decreased 4.2 percent . The number of reservoirs (i.e., Rend Lake, Crab Orchard Lake, etc.) on both the Big Muddy and its tributaries affect the concentrations of parameters at this station.

Big Muddy River (N 12)	Inorganic N	T Phosphorus	TSS
With max flow	1,389,830 Kg·year^{-1}	445,435 Kg·year^{-1}	129,671,539 Kg·year^{-1}
Without max flow	1,406,711 Kg·year^{-1}	428,670 Kg·year^{-1}	124,157,722 Kg·year^{-1}

The response of the calculated loads to the removal of the maximum recorded flow events from the regression equation was mixed due to the relationship between the flow and concentration of the parameter at the three stations. On combinations where there was a significant correlation (at $p<0.05$) between flow and concentration, removal of the high flow resulted in a decrease in estimated loads of 70 percent or more. These included total suspended solids and total phosphorus on Bear Creek, and total suspended solids on the Vermilion River (Table 5-3). Because of the effects that samples collected during record high flow events had on Bear Creek and the Vermilion River loads, the samples on those dates were removed from the regression equations. Record high flows on the Big Muddy River were left in the data set as they had little effect on the outcome. On the remaining streams, removal of the highest sampled flow event had no significant effect on the regression equation results and were therefore left in.

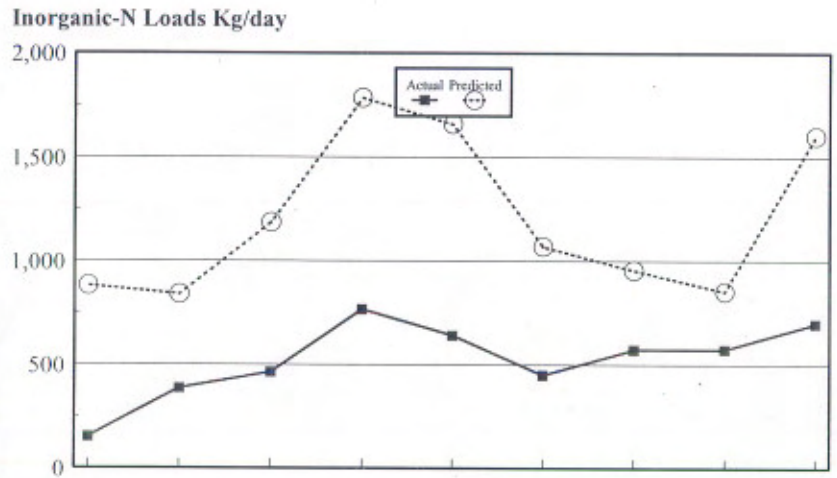
The regression coefficients from the Cohn [c] method, results of an F-test to determine if the regression model was significant, coefficients of determination (r^2) values, which indicate the fit of the regression model and the results of a *t-test* to evaluate the significance of each of the seven regression coefficients are presented in Appendix D. The F-values on all the equations exceeded the F-critical value (2.08 at the $p \leq 0.05$ level for v1 = 7 and v2 = 125; Snedecor and Cochran, 1980) indicating that all the equations could be used with some assurance of validity. Coefficients of determination (C.O.D.) values for inorganic nitrogen ranged from 0.134 on Henderson Creek to 0.798 on the Green River. For total phosphorus, C.O.D. values ranged from 0.109 on the Illinois River at Valley City to 0.633 the Vermilion River near Danville. Total suspended solids C.O.D. values were also lowest on the Illinois River, 0.135, but were highest on

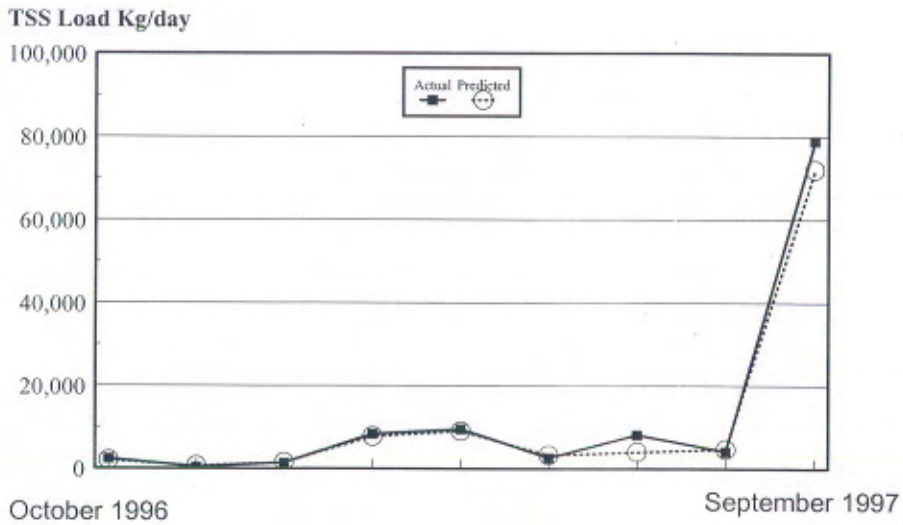
Table 5-4. Summary of RPD and paired t-test of 1997 water year AWQMN data actual loads versus loads predicted by the regression equation.

Station	IEPA Code	USGS Sta. #		Inorganic N	Total P	TSS
Vermilion River	BP 01	03339000	RPD	12.8%	38.0%	37.4%
			t	0.331	1.485	-1.371
			p	0.749	0.176	0.208
Embarras River	BE 07	03345500	RPD	14.2%	-10.3%	-46.5%
			t	-0.961	1.439	0.462
			p	0.365	0.188	0.656
Bonpas Creek	BC 02	03378000	RPD	13.4%	15.9%	-39.8%
			t	-1.133	0.131	0.747
			p	0.301	0.900	0.476
Little Wabash R	C 23	03381495	RPD	-22.5%	-10.8%	-46.5%
			t	-0.031	0.798	-0.029
			p	0.976	0.448	0.977
Lusk Creek	AK 02	03384450	RPD	-1.8%	-9.3%	-45.7%
			t	-0.887	1.024	-0.880
			p	0.404	0.353	0.405
Cache River	AD 02	03612000	RPD	5.7%	35.8%	-45.3%
			t	0.317	2.39	0.390
			p	0.759	0.044	0.707
Rock River	P 04	05446500	RPD	-32.3%	-19.7%	3.5%
			t	1.744	0.478	-0.346
			p	0.125	0.647	0.740
Green River	PB 04	05447500	RPD	-15.4%	7.1%	29.9%
			t	1.029	0.788	0.338
			p	0.338	0.456	0.745
Edwards River	LF 01	05466500	RPD	-59.2%	52.7%	34.5%
			t	1.472	1.598	-1.486
			p	0.179	0.149	0.175
Bear Creek	KI 02	05495500	RPD	35.5%	64.7%	-42.1%
			t	-1.653	1.995	-0.164
			p	0.137	0.081	0.873
Illinois River (Valley City)	D 32	05586100	RPD	-3.0%	3.9%	-27.8%
			t	0.481	0.777	0.182
			p	0.643	0.460	0.860
Macoupin Creek	DA 06	05587000	RPD	15.7%	31.7%	-32.3%
			t	0.998	1.03	-1.039
			p	0.348	0.333	0.329
Cahokia Creek	JQ 05	05587900	RPD	38.8%	30.3%	1.3%
			t	-0.928	-0.657	0.759
			p	0.381	0.530	0.469
Kaskaskia River	O 20	05594100	RPD	27.2%	-29.9%	-48.4%
			t	-1.769	-2.042	1.589
			p	0.115	0.075	0.151
Silver Creek	OD 07	05594800	RPD	-28.0%	-8.4%	-35.9%
			t	1.515	-0.150	0.670
			p	0.168	0.884	0.522
Richland Creek	OC 04	05595200	RPD	-80.1%	-77.4%	1.2%
			t	7.546	-6.188	-1.424
			p	0.0001	0.0001	0.192
Big Muddy River	N 12	05599500	RPD	23.2%	-26.3%	11.7%
			t	-1.035	-1.378	-1.073
			p	0.331	0.206	0.314

Negative values reflect actual means that were greater than predicted means.

Figure 5-5. Comparison of load data from Richland Creek (OC 04) for the 1997 water year.





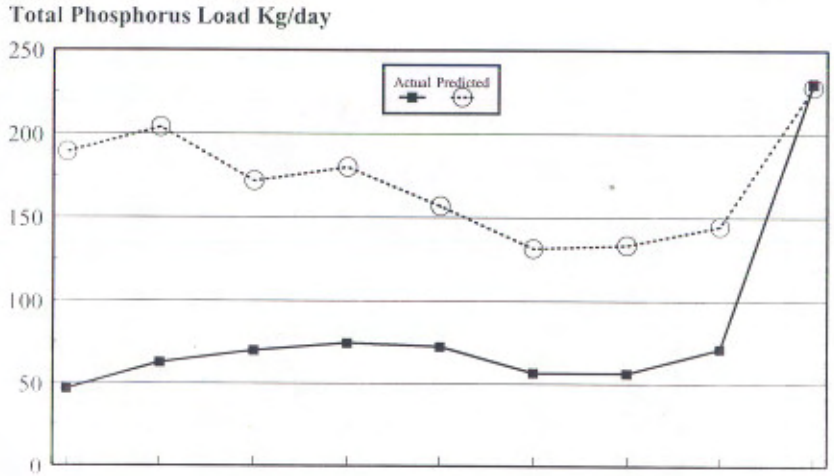


Figure 5-6. Comparison of load data from the Illinois River (D 32) for the 1997 water year.

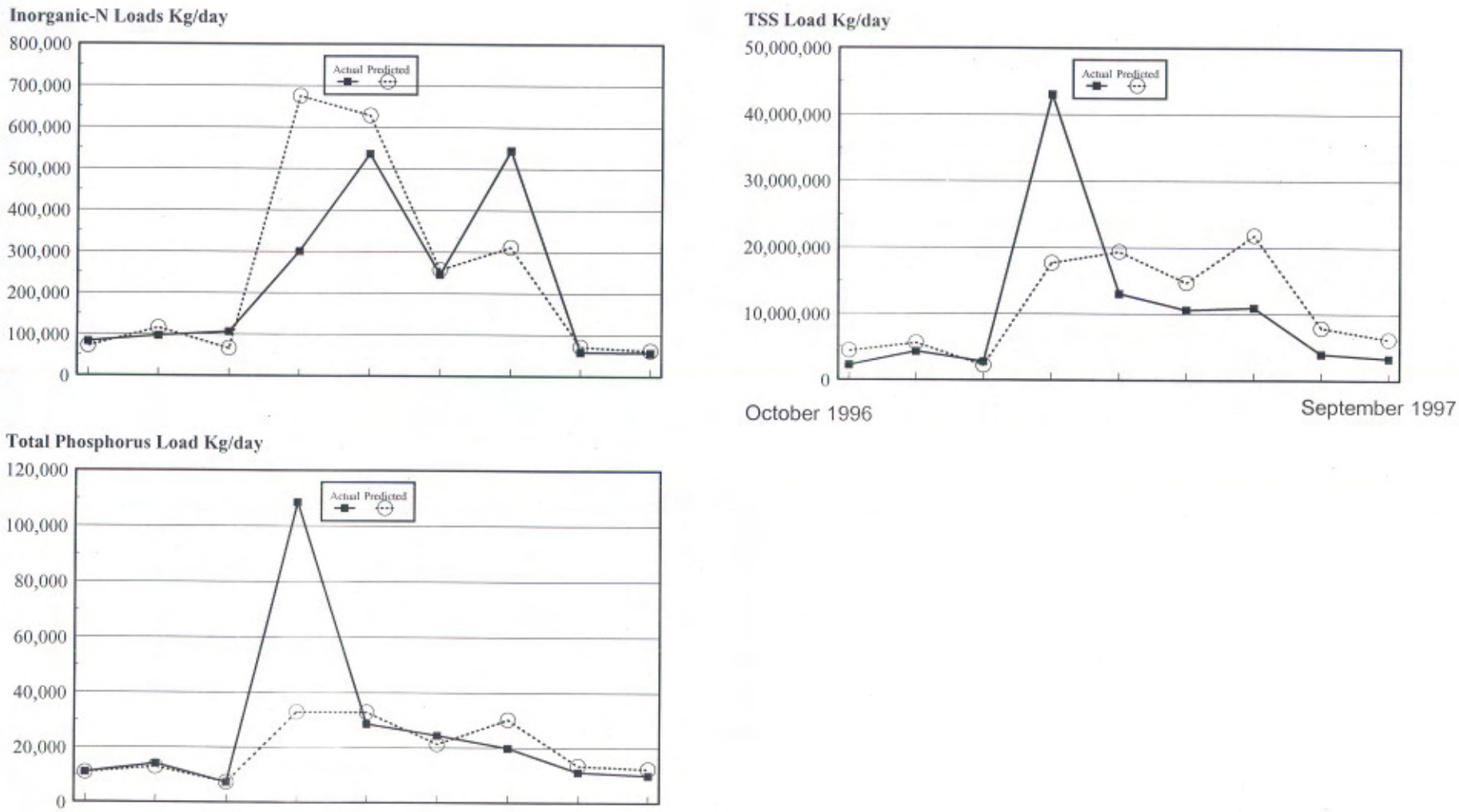


Figure 5-7. Comparison of load data from the Vermilion River (BP 01) for the 1997 water year.

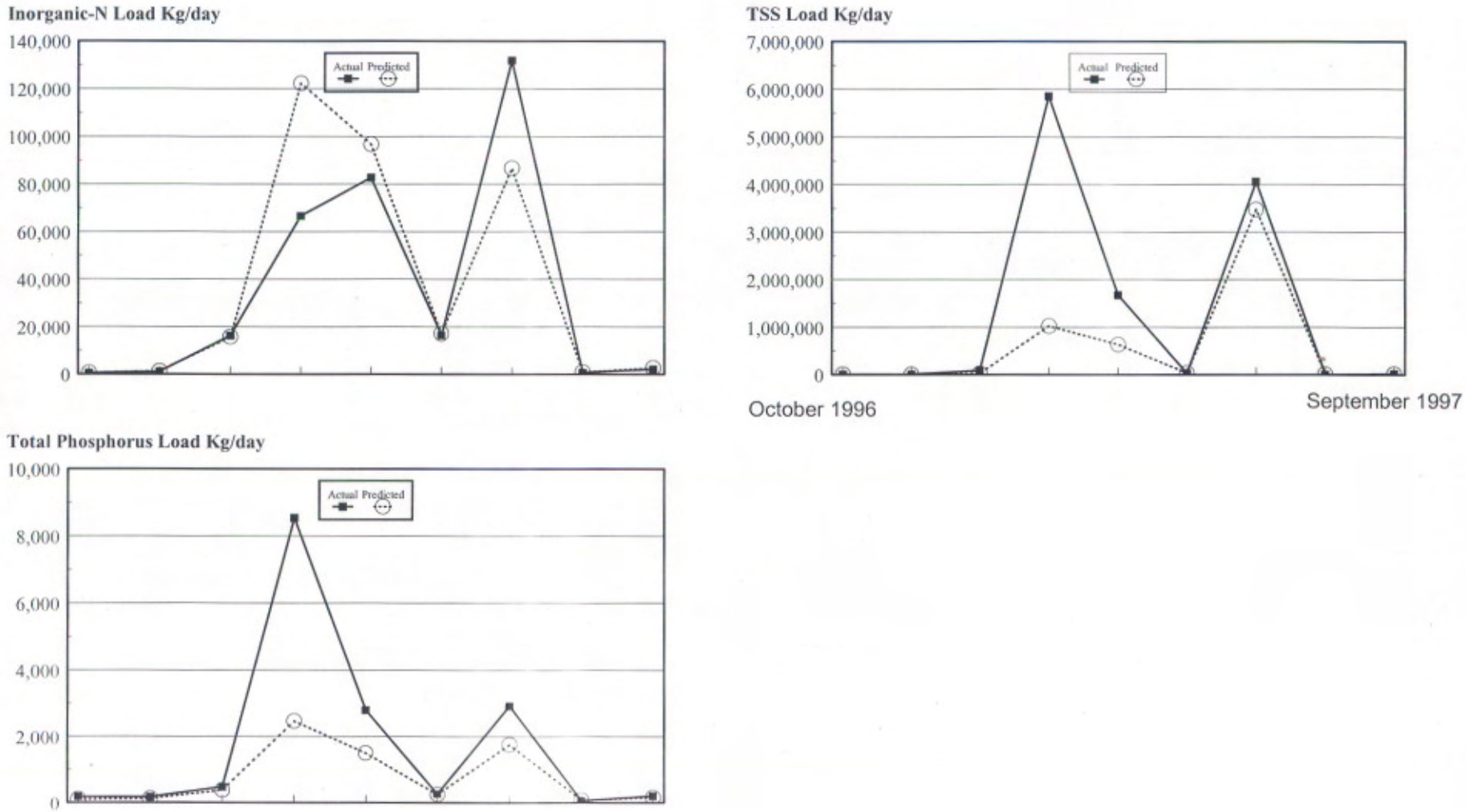
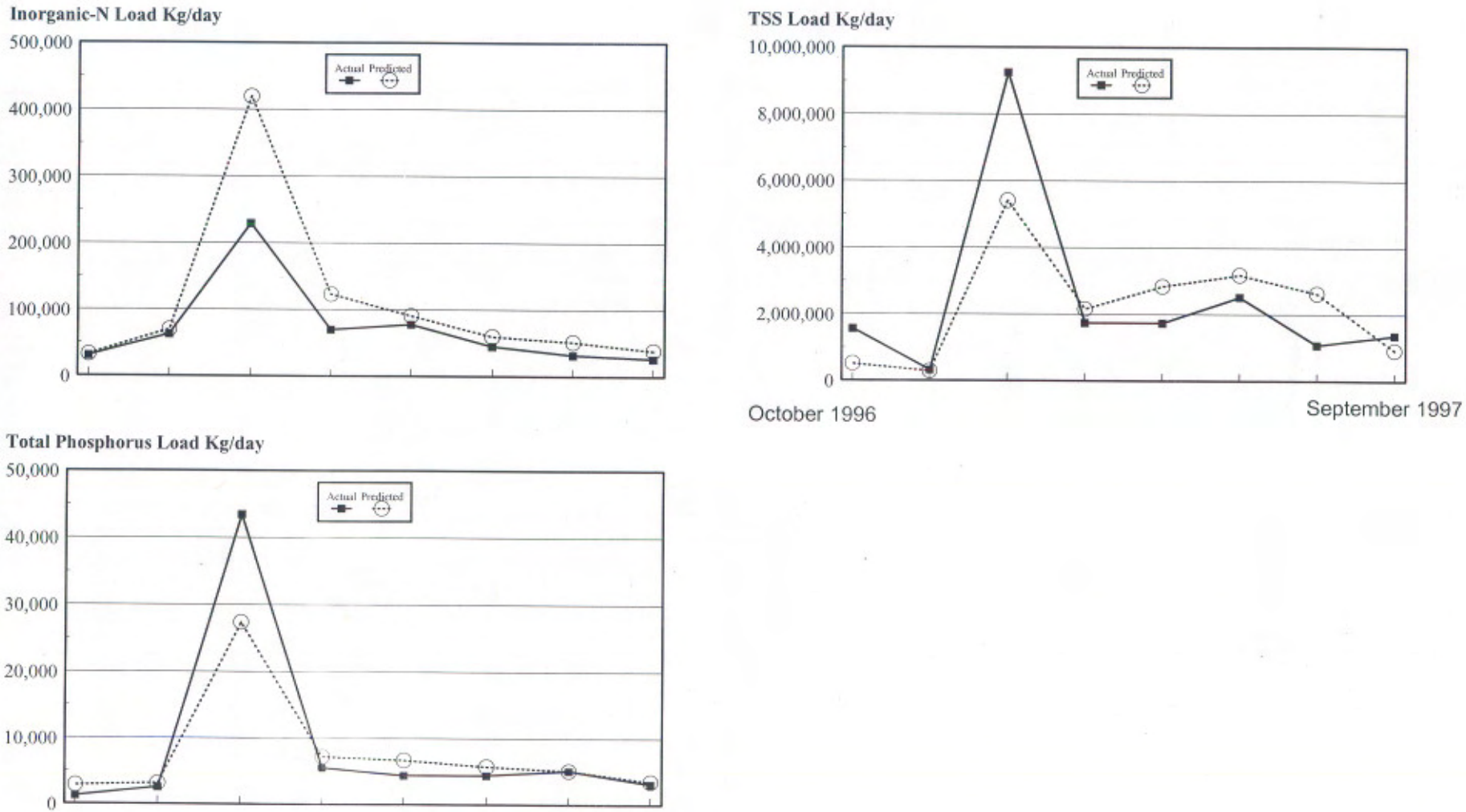


Figure 5-8. Comparison of load data from the Rock River (P 04) for the 1997 water year.



the Green River, 0.727. Higher C.O.D. values indicate a better fit of the regression model.

Results of the comparison between 1997 water year loads and those predicted by the regression equation are summarized in Table 5-4. Results of the paired *t-test* indicated that only three predicted loads, inorganic nitrogen and phosphorus loads on Richland Creek and total phosphorus loads on the Cache River, were significantly different from the actual loads at the $p<0.05$ level. Graphs of the comparisons indicated that predicted values were higher than the actual loads at these stations (Figure 5-5). At the other stations, statistically, the predicted loads on sampling dates for the 1997 water year were not significantly different from the actual loads on those dates. (Figures 5-6 through 5-8).

Flux of nutrients from Illinois to the Mississippi River

Although the strength of the regression equations was variable from site to site, a decision was made to calculate loads and yields of inorganic nitrogen, total nitrogen, total phosphorus and total suspended solids by station for the 1996 water year and the 16 year mean based on the Cohn [c] regression models (Tables 5-5 and 5-6) to facilitate comparisons with the national assessment. Results of the nutrient loads from stations within the same watershed were then combined and increased by the ratio of the total drainage area, to estimate overall export from the state of Illinois to both the Mississippi River (Table 5-7) and the Ohio River basin (Table 5-8). In general, loads follow a pattern of increasing on main stem rivers the further one goes downstream in the watershed, due primarily to increased flows.

Results of the loadings using the regression model were similar to those presented in the baseline loading section of this report in regard to the distributions of where the loads were coming from. The Illinois River watershed was the primary source of inorganic nitrogen (72 percent) total nitrogen (69.4 percent) and phosphorus (56 percent) loadings to the Mississippi River from the state of Illinois followed by the Rock River basin (18 percent for inorganic N, 19 percent for total nitrogen and 19 percent for total phosphorus). The Kaskaskia River was the third largest single source of inorganic nitrogen (4.2 percent), total nitrogen (4.6 percent) and phosphorus (13 percent) loadings to the Mississippi River from the state of Illinois. Loads of inorganic nitrogen and phosphorus from the smaller tributaries, when combined, accounted for 5.7 percent and 11.2 percent of the total export from Illinois to the Mississippi River respectively.

When compared with the Mississippi River at Keokuk, Iowa, loads of total nitrogen, inorganic nitrogen and phosphorus from the Rock River basin on average, were equivalent to approximately 17 percent, 15 percent and 15 percent respectively of the total load. When loads from the other smaller tributaries in the northern third of Illinois were combined with the loads from the Rock River, Illinois contribution was equivalent to 20 percent of the inorganic nitrogen load and 18 percent of the phosphorus load in the Mississippi River at Keokuk, Iowa.

Table 5-5 . Summary of loads at monitoring stations for 16 year means and 1996 water year using regression method by Cohn et al. 1992.

Station	IEPA Code	USGS Sta. #	Inorganic-N NH_3-N + (NO_3+NO_2-N) 16 yr mean Kg/year	Inorganic-N 1996 Kg/year	Total Phosphorus 16 yr mean Kg/year	Total Phosphorus 1996 Kg/year	TSS 16 yr mean Kg/year	TSS 1996 Kg/year	Total N TKN + (NO_3+NO_2-N) 16 yr mean Kg/year	Total N 1996 Kg/year
Vermilion River	BP 01	03339000	9937650	6719630	409873	171444	612636877	346493246	11156292	6786110
Embarras River	BE 07	03345500	6323876	4197377	672585	878561	425417989	851219239		
N Fk Embarras River	BEF 05	03346000	585600	453520	217642	290994	112610099	214213891		
Bonpas Creek	BC 02	03378000	526628	521098	90411	106253	38482741	77140390		
Little Wabash R	C 23	03381495	2450193	2937696	1050883	1224574	344821158	621548265	6055121	6427078
Lusk Creek	AK 02	03384450	16736	6454	1425	805	1229970	877669	27453	23418
Cache River	AD 02	03612000	168017	79728	59767	33078	49420884	49139887		
Apple River	MN 03	05418950	743094	772543	43409	28500	14300612	10377238		
Plum River	MJ 01	05420100	1158305	1750150	58673	42685	129836234	120921398		
Rock River	P 04	05446500	28324521	40035524	2292669	3344123	839642202	1789844276	38427880	52955862
Green River	PB 04	05447500	4238191	3516675	316010	351105	199318875	272165442	5134214	4392978
Edwards River	LF 01	05466500	2462712	2428707	253367	231206	535504871	772535296		
Henderson Creek	LD 02	05469000	2623435	3291794	228862	180887	129140121	70426413		
Bear Creek	KI 02	05495500	845329	906293	166108	189605	341047688	1101354408		
Illinois River (Valley City)	D 32	05586100	124178441	78608621	6965977	6443805	3183734860	3258850459	150374382	97138524
Macoupin Creek	DA 06	05587000	2006305	1413874	347927	201909	337252338	295985314		
Cahokia Creek	JQ 05	05587900	390501	113699	209500	147290	329203063	392036987		
Kaskaskia River	O 20	05594100	5571216	5411753	1221898	1444205	370498015	447926733	9397310	9184272
Silver Creek	OD 07	05594800	584171	688118	225352	172082	113841207	159679494		
Richland Creek	OC 04	05595200	494047	548721	147723	217172	38722063	74286673		
Big Muddy River	N 12	05599500	1389740	903677	445305	631244	129671198	167616900	3137839	2767776
Mississippi River										
Keokuk, Iowa	K 04	05474500	201716827	210464957	18427046	18280080	7802585885	7300853482	266902595	267019805
Thebes, Illinois	I 84	07022000	523310155	630830592	68166101	58479019	44113231411	10241149464	849832392	844049808
Ohio River										
Olmstead, Illinois	A 06	03612500	344960986	366024355	42272798	44681414	no data		471540878	522758578
Wabash River										
Hutsonville, Illinois	B 06	03341920	57407616	42697368	3384763	3714984	1907534059	2054666477	no data	

Table 5-6 . Summary of yields at monitoring stations for 16 year means and 1996 water year using regression method by Cohn et al. 1992.

Station	IEPA Code	USGS Sta. #	Inorganic-N NH_3-N + (NO_3+NO_2-N) 16 yr mean Kg/Km/Yr	Inorganic-N 1996 Kg/Km/Yr	Total Phosphorus 16 yr mean Kg/Km/Yr	Total Phosphorus 1996 Kg/Km/Yr	TSS 16 yr mean Kg/Km/Yr	TSS 1996 Kg/Km/Yr	Total N TKN + (NO_3+NO_2-N) 16 yr mean Kg/Km/Yr	Total N 1996 Kg/Km/Yr
Vermilion River	BP 01	03339000	2974	2011	123	51	183364	103706	3339	2031
Embarras River	BE 07	03345500	1611	1069	171	224	108347	216791		
N Fk Embarras River	BEF 05	03346000	711	551	264	353	136726	260088		
Bonpas Creek	BC 02	03378000	892	882	153	180	65167	130631		
Little Wabash R	C 23	03381495	315	377	135	157	44260	79781	777	825
Lusk Creek	AK 02	03384450	150	58	13	7	11044	7881	247	210
Cache River	AD 02	03612000	266	126	95	52	78202	77758		
Apple River	MN 03	05418950	1386	1441	81	53	26674	19356		
Plum River	MJ 01	05420100	1638	2475	83	60	183626	171017		
Rock River	P 04	05446500	1145	1619	93	135	33950	72370	1554	2141
Green River	PB 04	05447500	1631	1354	122	135	76727	104769	1976	1691
Edwards River	LF 01	05466500	2201	2171	226	207	478607	690453		
Henderson Creek	LD 02	05469000	2276	2856	199	157	112047	61105		
Bear Creek	KI 02	05495500	935	1003	184	210	377302	1218432		
Illinois River (Valley City)	D 32	05586100	1806	1143	101	94	46292	47384	2186	1412
Macoupin Creek	DA 06	05587000	892	629	155	90	150015	131659		
Cahokia Creek	JQ 05	05587900	711	207	382	268	599553	713988		
Kaskaskia River	O 20	05594100	490	476	107	127	32563	39368	826	807
Silver Creek	OD 07	05594800	486	573	188	143	94729	132871		
Richland Creek	OC 04	05595200	1479	1642	442	650	115896	222342		
Big Muddy River	N 12	05599500	247	161	79	112	23083	29837	559	493
Mississippi River										
Keokuk, Iowa	K 04	05474500	384	400	35	35	14840	13886	571	508
Thebes, Illinois	I 84	07022000	283	342	37	32	23881	5544	460	457
Ohio River										
Olmstead, Illinois	A 06	03612500	1119	1188	137	145			1530	1696
Wabash River										
Hutsonville, Illinois	B 06	03341920	1707	1269	101	110	56715	61089		

Export from the portion of Illinois draining into the Mississippi River was compared with loads calculated for the Mississippi River at Thebes, Illinois. The 16 year mean flux of inorganic nitrogen from Illinois was equivalent to 35.3 percent of the 16 year mean annual load on the Mississippi River at Thebes, Illinois. Fluxes of total nitrogen were limited to four of the basins during the 16 year period of record, and were comprised primarily of inorganic nitrogen on the Rock River (74.7 percent), Illinois River (81.2 percent) and Kaskaskia River (70.7 percent) watersheds. In the Big Muddy River basin, inorganic nitrogen comprised less than half (44.3 percent) of the export of total nitrogen. Estimates of total nitrogen loads were made on streams where TKN data was not available based on the average of the ratio between inorganic nitrogen and total nitrogen loads on the watersheds where it was available. Based on this information, the export of total nitrogen from Illinois was equivalent to approximately 28 percent of the total nitrogen load to the Mississippi River at Thebes. The export of phosphorus from

Table 5-7 . Export of nutrients from Illinois to the Mississippi River; 16 year mean and 1996 water year based on the Cohn regression model and adjusted for watershed area. All values are in Kg·year^{-1}.

Stream	Mean Flux Inorganic-n 1980-96	Flux of Inorganic-N 1996	Mean Flux Phosphorus 1980-96	Flux of Phosphorus 1996	*Mean flux of total nitrogen	Flux of total nitrogen 1996
Apple River	940,535	977,808	54,942	36,072		
Plum River	1,268,621	1,916,832	64,260	46,751		
Rock River	33,682,905	45,050,442	2,698,420	3,822,348	45,060,677	59,321,702
Edwards River	2,495,918	2,461,454	256,783	234,323		
Henderson Creek	2,946,667	3,697,373	257,060	203,174		
subtotal:	41,334,646	54,103,909	3,331,465	4,342,667		
Mississippi River Keokuk, Iowa	201,716,424	210,464,773	18,426,882	18,280,498	300,034,451	267,020,152
Bear Creek	981,076	955,339	175,098	199,866		
Illinois River	133,013,527	84,353,099	7,709,713	7,005,363	163,693,494	105,742,375
Cahokia Creek	484,442	141,051	259,899	182,723		
Kaskaskia River	7,736,335	7,735,355	1,855,683	2,133,152	10,933,372	10,685,512
Big Muddy River	1,529,418	994,503	490,061	694,688	3,453,215	3,045,958
subtotal:						
Illinois total:	184,989,445	148,283,256	13,821,920	14,558,458	223,146,787	178,799,441
Mississippi River at Thebes, IL	523,309,943	630,830,353	68,166,250	58,479,058	849,832,416	844,049,879

* note: total nitrogen data was not available at all stations

Illinois was equivalent to 20.3 percent of the total load at the Mississippi River at Thebes (Table 5-7). The export of inorganic nitrogen, total nitrogen and phosphorus from Illinois to the Mississippi River were lower during the1996 water year, than the 16 year mean. However, loads of those constituents on the Mississippi River at both Thebes, Illinois, and Keokuk, Iowa, were higher during the 1996 water year than the long term mean. Percentages assume that there was no loss of nitrogen or phosphorus due to transformation, respiration or settling out into sediments as it traveled downstream.

Flux of nutrients from Illinois to the Ohio River

Flux of inorganic nitrogen, phosphorus and total nitrogen from Illinois to the Ohio River during the 1996 water year and the 16 year mean based on the regression model are presented in Table 5-8. As with the Mississippi River watershed, the distribution of loads in the Ohio River watershed were similar to those in the baseline loading section of this report. The Vermilion River and Embarras River basins contributed the majority of the 16 year annual mean inorganic nitrogen load from Illinois (45.8 percent and 39.4 percent respectively). However, when total nitrogen loads were compared, the Little Wabash River and Vermilion River had approximately

Table 5-8. Export of nutrients from Illinois to the Ohio River basin; 16 year mean and 1996 water year based on the Cohn regression model and adjusted for watershed area. Values are in Kg·year^{-1}.

Stream	Mean Flux Inorganic-N 1980-96	Flux of Inorganic-N 1996	Mean Flux Phosphorus 1980-96	Flux of Phosphorus 1996	Mean flux of total nitrogen	Flux of total nitrogen 1996
Vermilion River	10,707,706	7,240,326	441,633	184,729	12,020,778	7,311,957
Wabash River Hutsonville, IL	57,407,392	42,696,989	3,384,959	3,714,897		
Embarras River	9,192,546	6,187,673	1,184,382	1,556,007		
Bonpas Creek	639,807	633,088	109,842	129,088		
Little Wabash River	2,609,031	3,128,137	1,119,009	1,303,959	6,447,654	6,843,724
Lusk Creek	34,289	13,224	2,919	1,650	56,247	47,979
Cache River	168,017	79,728	59,767	33,078		
Illinois total:	23,351,395	17,282,175	2,917,551	3,208,510	*18,524,679	*14,203,659
Ohio River at Olmstead, IL	344,960,958	366,024,419	42,272,783	44,681,131	471,540,844	522,758,809

* note total nitrogen is lower than inorganic nitrogen due to the absence of TKN data at all stations.

equal values for the 1996 water year: 7,200,000 Kg/Year^{-1}. The makeup of the total nitrogen load from these two watersheds was significantly different. The majority of the nitrogen flux from the Vermilion River basin was coming from inorganic nitrogen, primarily in the form of nitrates (99 percent). However, inorganic nitrogen made up only 36.5 percent of the total nitrogen flux in the Little Wabash River basin for the 1996 water year. The majority of nitrogen flux on the Little Wabash River came from organic nitrogen. Long term mean export from the two watersheds indicated that the Vermilion River basin typically has twice the nitrogen load as the Little Wabash River basin.

When compared with the Ohio River at Olmstead, the average total flux of inorganic nitrogen from the portion of Illinois which drains to the Ohio River basin over the 16 year period of record, was equivalent to 6.8 percent of the total load. Estimates of the percentage of total nitrogen load from Illinois were equivalent to approximately 6.4 percent of the total nitrogen load in the Ohio River. The total nitrogen load was estimated by basing the total nitrogen load from the Embarras River and Bonpas Creek watersheds as being similar to the ratio of inorganic to total nitrogen load on the Vermilion River. The ratio of inorganic nitrogen load to total nitrogen load from the Cache River was estimated to be similar to that of the Lusk Creek watershed. Mean phosphorus loads were highest on the Little Wabash River and Embarras River. The total flux of phosphorus from Illinois was equivalent to approximately 6.9 percent of the total on the Ohio River at Olmstead. These percentages assume that there was no loss of nitrogen or phosphorus due to transformation, respiration or settling out into sediments as it traveled downstream.

Yields

Yields of inorganic nitrogen, total nitrogen, total phosphorus and total suspended solids by station for the 1996 water year and the 16 year mean based on the regression model are presented in Table 5-6. Yields were also calculated on the large river stations based on their total drainage area.

Inorganic nitrogen yields on streams draining into the Mississippi River, were highest on two of the smaller tributaries, Edwards River and Henderson Creek exceeding 2,200 $Kg \cdot Km^{-1} \cdot Yr^{-1}$ for the 16 year mean. Yields of inorganic nitrogen on the Illinois River were the third highest at 1,806 $Kg \cdot Km^{-1} \cdot Yr^{-1}$ for the 16 year mean and were lower, 1,143 $Kg \cdot Km^{-1} \cdot Yr^{-1}$, during the 1996 water year. Yields of inorganic nitrogen on the Kaskaskia River and its tributary Silver Creek were less than 500 $Kg \cdot Km^{-1} \cdot Yr^{-1}$ but were nearly three times higher on Richland Creek due to the influence of point source discharges. Inorganic nitrogen yields decreased from north to south on both the tributaries and the Mississippi River itself. Inorganic nitrogen yields on the Mississippi River decreased from 384 $Kg \cdot Km^{-1} \cdot Yr^{-1}$ near Keokuk, Iowa, to 283 $Kg \cdot Km^{-1} \cdot Yr^{-1}$ near Thebes, Illinois. Total nitrogen yields on the Mississippi River also decreased from 571 to 460 $Kg \cdot Km^{-1} \cdot Yr^{-1}$ at the two stations respectively.

Mean yields of phosphorus over the 16 year period of record on tributaries to the Mississippi River ranged from 79 $Kg \cdot Km^{-1} \cdot Yr^{-1}$ on the Big Muddy River, to 442 $Kg \cdot Km^{-1} \cdot Yr^{-1}$ on Richland Creek. Phosphorus yields exceeded 150 $Kg \cdot Km^{-1} \cdot Yr^{-1}$ on the Edwards River, Henderson Creek, Bear Creek, Macoupin Creek and Silver Creek. Yields of phosphorus from the Rock River, Kaskaskia River and Illinois River were approximately 100 $Kg \cdot Km^{-1} \cdot Yr^{-1}$. On the Mississippi River mainstem, there was no significant differences between mean phosphorus yields over the 16 year period of record. Yields were 35 $Kg \cdot Km^{-1} \cdot Yr^{-1}$ at Keokuk, Iowa and 37 $Kg \cdot Km^{-1} \cdot Yr^{-1}$ at Thebes, Illinois.

Yields of inorganic nitrogen in the Ohio River watershed were substantially higher on the Vermilion River (2,974 $Kg \cdot Km^{-1} \cdot Yr^{-1}$) and Embarras River (1,611 $Kg \cdot Km^{-1} \cdot Yr^{-1}$), reflecting the higher nitrate concentrations in these two streams when compared with other Illinois streams in the Ohio River drainage. The higher nitrate concentrations in streams in east central Illinois probably affected inorganic nitrogen yields on the Wabash River at Hutsonville, Illinois, which were 1707 $Kg \cdot Km^{-1} \cdot Yr^{-1}$. Streams in Indiana are also sources of inorganic nitrogen to the Wabash River. For example, median nitrate concentrations in the White River basin ranged between 2 and 6 mg/L and were considered much higher than most other streams monitored in the United States (Fenelon, 1998). With the exception of the Little Wabash River, yields from Illinois tributaries to the Ohio River watershed were lower in 1996 than the 16 year mean. Yields of inorganic nitrogen on both the Ohio River and Wabash River were higher than the Mississippi River (Table 5-6).

In the Ohio River basin, mean phosphorus yields over the 16 year period of record ranged from 13 $Kg \cdot Km^{-1} \cdot Yr^{-1}$ on Lusk Creek to 264 $Kg \cdot Km^{-1} \cdot Yr^{-1}$ on the North Fork Embarras River. Yields of phosphorus on both the Ohio River and Wabash River were higher than the Mississippi River (Table 5-6).

Comparison of Loads by Method

Results of four different methods to calculate mean annual loads were compared against each other from the 21 interior stations: baseline load, flow weighted mean, Cohn [c] and Cohn [L]. As noted above, high flow events had a significant effect on calculated loads on Bear Creek and the Vermilion River, using the regression models. For this comparison, the high flow events were removed from the regression calculations but remained in the flow weighted and baseline loads. Relative percent differences (RPD) were based on the following formula: $RPD = (2 * (method_a - method_b))/(method_a + method_b)$.

The four methods resulted in significant differences in mean annual load estimates on some streams. Although (r^2) values on the Illinois River were relatively low for both total phosphorus and total suspended solids loads using the Cohn [C] method (0.109 and 0.135 respectively), indicating a poor fit of the regression model, annual mean estimates of loads based on the four methods were within ± 9 percent of each other. Annual mean load estimates on the

Rock River were also within ± 9 percent irregardless of which method was used to calculate them. The Green River was the next most consistent stream for comparison, with all of the mean annual loads being within ±14 percent. The closeness of the loading results on these three streams reflects, in part, the flow pattern shown in Table 5-3. These were the only three streams where high flow events (2*Qmean) accounted for less than 40 percent of the total flow volume. Chemical sampling at these stations also appeared to occur over a broader range of conditions when flows were at the upper portion of the hydrograph. This suggests that the method used to arrive at the estimated load, based on the available data, was not critical at these three stations.

Results of annual mean loads calculated using the flow weighted averaging method and the Cohn [C] method were the most similar. Thirteen of the twenty-one stations had annual means that were within ± 10 percent of each other for inorganic nitrogen: Vermilion River, Embarras River, Little Wabash River, Lusk Creek, Cache River, Plum River, Rock River, Green River, Edwards River, Henderson Creek, Illinois River, Kaskaskia River and Silver Creek. For total phosphorus loads, 11 of the 21 stations were within ± 10 percent of each other: Vermilion River, Bonpas Creek, Little Wabash River, Rock River, Green River, Edwards River, Bear Creek, Illinois River, Kaskaskia River, Silver Creek, Richland Creek and Big Muddy River. For total suspended solids loads, 10 of the 21 stations were within ± 10 percent of each other: Lusk Creek, Cache River, Rock River, Green River, Henderson Creek, Bear Creek, Illinois River, Kaskaskia River, Silver Creek and the Big Muddy River.

When compared with baseline loads, loads using the Cohn [C] method were within ± 10 percent at eight of the 21 stations for inorganic nitrogen: Embarras River, Apple River, Rock River, Green River, Edwards Creek, Henderson Creek, Illinois River, and Macoupin Creek; nine stations for total phosphorus: Embarras River, Little Wabash River, Cache River, Plum River, Rock River, Green River, Illinois River, Cahokia Creek and Kaskaskia River; and five stations for total suspended solids: Little Wabash River, Apple River, Rock River, Henderson Creek and the Illinois River.

The largest percent of variation resulted on comparisons between the regression method using Cohn [L] with the other three methods. On the Apple River, Henderson Creek, Bear Creek, Richland Creek and Lusk Creek annual mean loads for inorganic nitrogen, total phosphorus and total suspended sediment, were between 100 and 130 percent less than those based on the regression method using concentrations (Cohn [C]). Similar results occurred when the Cohn [L] method was compared to the flow weighted averages and baseline loads (Table 5-10). The dissimilarity of the Cohn [L] method with the others may be a reflection of the flow regimen on these streams.

It is not clear how much the limitations of the chemical data influenced the results of the estimated annual loads using the various methods. Since there were a total of 5844 sampling days available, the chemical samples accounted for only 2.6 percent of the total. Comparing the regression models with their accompanying greater detail of analysis highlighted several facts about the data and uses of loading information in general. Fixed monitoring stations sampled on

a routine frequency, and therefore random to events such as floods and droughts, provide a good estimator of concentrations at different flow regimes. However, the effects of stream flow modifications (e.g., dams or reservoirs), highly variable flow regimens or where parameter concentrations are affected by point source discharges, require additional sampling to better characterize loads. In addition, the lack of correlation between the various forms of nitrogen and stream flow suggests that a flow weighted method may be more appropriate than a regression model to characterize these loads.

Table 5-10. Comparison of results from four methods to estimate loadings in Illinois streams.

			Inorganic Nitrogen				Total Phosphorus			
Stream Name	IEPA Code	USGS Sta. #	Cohn-C Kg/yr	Cohn-L Kg/yr	Weighted Kg/yr	Baseline Kg/yr	Cohn-C Kg/yr	Cohn-L Kg/yr	Weighted Kg/yr	Baseline Kg/yr
Vermilion River	BP 01	03339000	9937650	6474974	9352325	8882933	409873	270081	420034	546247
Embarras River	BE 07	03345500	6323876	9899145	5705957	6017078	672585	1084932	568403	641649
N Fk Embarras River	BEF 05	03346000	585600	845939	343231	353559	217642	874999	125869	138904
Bonpas Creek	BC 02	03378000	526628	420611	386305	333195	90411	50488	97855	77781
Little Wabash R	C 23	03381495	2450193	2954270	2636529	2776851	1050883	1253519	930749	1042485
Lusk Creek	AK 02	03384450	16736	3998	17663	13340	1425	340	1634	1234
Cache River	AD 02	03612000	168017	265876	153352	132608	59767	21546	79584	63917
Apple River	MN 03	05418950	743094	178896	981242	754010	43409	10309	61860	48009
Plum River	MJ 01	05420100	1158305	520944	1126865	1046512	58673	11587	74759	60794
Rock River	P 04	05446500	28324521	26062892	28896726	29350936	2292669	2409096	2302119	2533539
Green River	PB 04	05447500	4238191	3703100	4183738	4089350	316010	284140	302036	294748
Edwards River	LF 01	05466500	2462712	2088939	2524794	2513861	253367	215059	237736	228739
Henderson Creek	LD 02	05469000	2623435	577570	2632941	2673317	228862	52638	160406	151100
Bear Creek	KI 02	05495500	845329	189558	635040	575473	166108	26705	177811	435778
Illinois River	D 32	05586100	124178441	113679332	121570125	126530895	6965977	6951860	6994675	7371700
Macoupin Creek	DA 06	05587000	2006305	1463144	1387220	1890495	347927	263766	421763	513636
Cahokia Creek	JQ 05	05587900	390501	303363	240471	270364	209500	164306	144991	192724
Kaskaskia River	O 20	05594100	5571216	2888290	5482520	4879948	1221898	1161844	1173613	1180750
Silver Creek	OD 07	05594800	584171	447789	568027	435276	225352	179478	242711	194214
Richland Creek	OC 04	05595200	494047	161338	338918	316489	147723	49849	150334	125912
Big Muddy River	N 12	05599500	1389740	1509248	1133629	1658833	445305	528429	472346	579521
		Totals:	195018710	174639217	190297617	195495325	15425365	15864974	15141288	16423381

			Total Suspended Solids				Total Nitrogen			
Stream Name	IEPA Code	USGS Sta. #	Cohn-C Kg/yr	Cohn-L Kg/yr	Weighted Kg/yr	Baseline Kg/yr	Cohn-C Kg/yr	Cohn-L Kg/yr	Weighted Kg/yr	Baseline Kg/yr
Vermilion River	BP 01	03339000	612636696	479219024	249665069	536629099	11014406		11859056	11144222
Embarras River	BE 07	03345500	425417989	667166995	297173562	311142157				
N Fk Embarras River	BEF 05	03346000	112610099	163594618	45379420	45345739				
Bonpas Creek	BC 02	03378000	38482741	30743767	29703626	25768469				
Little Wabash R	C 23	03381495	344821158	412601604	288238160	363496216	6055121		6683178	6162751
Lusk Creek	AK 02	03384450	1229970	290977	1323224	1017670	27453		21383	28314
Cache River	AD 02	03612000	49420884	61760057	44739229	38751613				
Apple River	MN 03	05418950	14300612	3442803	20490154	15745152				
Plum River	MJ 01	05420100	129836234	58511039	51242320	47923679				
Rock River	P 04	05446500	839642202	910265978	767051261	842138224	38427880		40988970	40886359
Green River	PB 04	05447500	199318875	179217402	182863838	176280754	5134214		5228724	5333792
Edwards River	LF 01	05466500	535504871	454387687	172716836	176115076				
Henderson Creek	LD 02	05469000	129140121	28108221	118373625	127328715				
Bear Creek	KI 02	05495500	341046418	76597528	328079808	618142379				
Illinois River	D 32	05586100	3183734860	3448194881	3205543672	3437806050	150374382		155629397	148254231
Macoupin Creek	DA 06	05587000	337252338	246102042	293187461	397957115				
Cahokia Creek	JQ 05	05587900	329203063	255830126	107483023	121612513				
Kaskaskia River	O 20	05594100	370498015	425765525	354173374	414524855	9397310		9210868	9665792
Silver Creek	OD 07	05594800	113841207	87258544	102852622	79036901				
Richland Creek	OC 04	05595200	38722063	12645273	84831988	79024475				
Big Muddy River	N 12	05599500	129671198	157706278	123349626	170316367	3137839		3901728	3000292
		Totals:	8276331615	8159410366	6868461899	8026103216	223568606		233523303	224475753

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7. APPENDIX

APPENDIX TABLE A-1. ILLINOIS EPA AMBIENT WATER QUALITY MONITORING NETWORK (AWQMN) through April 1997.

IEPA Station Code	USGS Station Code	Stream Name	Description	Drainage Area (sq. mi.)	County	21ILAMB Latitude	21ILAMB Longitude	Parameter Group Code	Years of Record (to present)	21ILAMB Record T. Amm-N	Number of T. Amm-N Samples	USGS Flow Data		21ILL Pesticide Data	Pesticide # samples	Industrial Solvents Subnetwork	Industrial Solvents # samples
Ohio River Basin (A)																	
A 06	03612500	Ohio River	North end of Dam 53, E of Olmsted	203,100	Pulaski	371213.0	890227.0	CORE1	1972-91	1972-91	79	1978	1990	1990	1		
AD 02	03612000	Cache River	Co. Rd. Br., 1 mi NE of Belknap	244	Johnson	372011.0	885526.0	ASN04	72-	1974-	184	1977	1996	1995	3		
AK 02	03384450	Lusk Creek	Co. Rd. Br., 2.8 mi SE of Eddyville	43	Pope	372820.0	883250.0	CORE1	61,64,68-	1974-	183	1977	1996	1985-94	43	1988-97	61
AT 06	03382530	Saline River	Peabody Br., 1.3 mi E of Gibsonia	1,062	Gallatin	373853.0	881430.0	ASN14	78-	1978-	181						
ATF 04	03382325	North Fork Saline River	Rt. 45 Br., 5.1 mi NE of Eldorado	173	Saline	375318.0	882306.0	CORE1	72-	1977-	184	1991	1992				
ATG 03	03382205	Middle Fork Saline River	Co. Rd. Br., 2.7 mi SE of Harrisburg	233	Saline	374228.0	882931.0	CORE1	72-	1977-	185	1991	1992	1985-91	30		
ATGC01	03382185	Bankston Creek	Rt. 34 Br., 2.5 mi N of Harrisburg	78	Saline	374605.0	883225.0	ASN14	72-77,79-	1979-	172	1991	1992				
ATH 02	03382055	South Fork Saline River	Co. Rd. Br., 3.4 mi S of Crab Orchard	75	Williamson	373722.5	884843.5	ASN16	82-	1983-	124	1991	1992				
ATH 05	03382100	South Fork Saline River	Rt. 45 Br., 3.8 mi SW of Carrier Mills	147	Saline	373816.0	884040.0	CORE1	63-	1977-	189	1977	1996	1991-94	13		
ATHG01	03382090	Sugar Creek	Co. Rd. Br., 5.1 mi NE of Creal Springs	92	Williamson	373919.0	884548.0	ASN14	68-	1977-	185	1978	1988				
Wabash River Basin (B,C)																	
B 06	03341920	Wabash River	IN. Rt. 154 br. at Hutsonville	12,986	Crawford	390637.0	873918.0	ASN05	69-	1969-	181	1977	1997				
B 07	03378500	Wabash River	Rt. 14 br. near New Harmony, IN.	29,234	White	380755.0	875625.0	CORE1	1974-87	1974-87	59	1977	1985				
BC 02	03378000	Bonpas Creek	Rt. 15 br., 0.6 mi NE of Browns	228	Edwards- Wabash	382311.0	875832.0	ASN05	78-	1978-	182	1977	1996				
BE 01	03346550	Embarras River	Co. Rd. Br., 1.3 mi E of Billet	2,403	Lawrence	383954.0	873735.0	ASN05	58-59,61-	1977-	180	1991	1992				
BE 07	03345500	Embarras River	Co. Rd. Br. at N edge of Ste. Marie	1,516	Jasper	385610.0	880110.0	ASN05	72-	1977-	175	1977	1996	1985-96	51		
BE 09	03344000	Embarras River	Ryan Br., Co. Rd., 9 mi S of Charleston	919	Cumberland	392040.0	881015.0	ASN23	71-	1978-	186	1977	1991				
BE 14	03343395	Embarras River	Co. Rd. Br. W edge of Carmargo	180	Douglas	394759.0	881013.0	ASN16	78-	1978-	174	1978	1996	1996	3		
BEF 05	03346000	North Fork Embarras River	Co. Rd. Br., 2.8 mi W of Oblong	318	Crawford	390037.0	875647.0	ASN05	78-	1978-	177	1977	1996				
BF 01	03342050	Sugar Creek	Twp. Rd. Br., NE of Palestine near ICRR	36	Crawford	390016.0	873550.0	ASN17	72-77,79-	1979-	167					1988-97	62
BM 02	03341540	Sugar Creek	Co Rd. Br. 1 mi from the Indiana line	61	Edgar	392953.0	873311.0	ASN05	78-	1978-	183	1977	1992				
BN 01	03341414	Brouiletts Creek	IN. Rt. 71 Br., 0.5 mi N of Blanford, IN.	260	Vermillion, IN	394053.0	873116.0	ASN16	72-	1978-	187	1977	1992				
BO 07	03339147	Little Vermilion River	Co. Rd. Br. 4 mi SE of Georgetown	191	Vermilion	395629.0	873305.0	ASN16	78-	1978-	182	1978	1992	1997	2		
BP 01	03339000	Vermilion River	Grape Creek Road 3.5 mi SE of Danville	1,290	Vermilion	400603.0	873552.0	CORE1	06-07,58-	1978-	192	1977	1996	1997	2	1988-97	62
BPG 09	03338780	North Fork Vermilion River	2 mi W of Bismark on Co. Rd.	262	Vermilion	401613.0	873834.0	ASN23	78-	1978-	186	1978	1996				
BPJ 03	03338097	Salt Fork Vermilion River	Co. Rd. Br. 3.0 mi S of Oakwood	489	Vermilion	400456.0	874653.0	ASN16	58-	1978-	187	1978	1992				
BPJ 07	03336900	Salt Fork Vermilion River	Co. Rd. Br. 2.5 mi N of St. Joseph	134	Champaign	400855.0	880200.0	ASN16	59-62,77-	1977-	189	1977	1992	1985-97	54		
BPJC06	03337700	Saline Branch	Co. Rd. Br. 1.0 mi N of Mayview	82	Champaign	400759.0	880615.0	ASN07	77-	1977-	191	1977	1992				
BPK 07	03336645	Middle Fork Vermilion River	Kickapoo St. Park Br. upstream of I-74 Br.	432	Vermilion	400812.0	874445.0	ASN18	77-	1977-	188	1978	1996				
C 09	03379600	Little Wabash River	W. Salem-Mt. Erie Rd. Br., SW edge of Blood	1,387	Edwards	383108.0	880755.0	ASN05	72-	1977-	185	1977	1992				
C 19	03378900	Little Wabash River	Co. Rd. Br., NE edge of Louisville	745	Clay	384623.0	882950.0	ASN05	71-	1978-	178	1977	1992	1985-97	50		
C 21	03378635	Little Wabash River	US 40 Br., 2.2 mi SW of Effingham	240	Effingham	390613.0	883533.0	ASN07	79-	1979-	167	1977	1996				
C 22	03379500	Little Wabash River	Co. Rd. Br., 5 mi SE of Clay City	1,131	Clay	383805.0	881750.0	ASN05	79-	1979-	172	1977	1996				
C 23	03381495	Little Wabash River	Main St. Br. in Carmi	3,088	White	380532.0	880922.0	CORE1	82-	1979-	148	1979	1996	1987,89	3		
CA 03	03381400	Skillet Fork	Winters Br., Co. Rd., 4 mi N of Carmi	1,058	White	380912.0	880955.0	ASN05	58-59, 61-	1977-	187						
CA 05	03380500	Skillet Fork	Rt. 15 Br., 1 mi N of Wayne City	464	Wayne	382125.0	883500.0	ASN05	78-	1978-	183	1977	1996	1996,97	6		
CA 06	03380350	Skillet Fork	Co. Rd. Br., 7.5 mi SE of Iuka	208	Marion	383110.0	884339.0	ASN05	79-	1979-	174	1977	1992				
CD 01	03379950	Elm Creek	Price Br., Co. Rd., 6 mi NE of Fairfield	265	Wayne	382628.0	881529.0	ASN05	72-77, 79-	1979-	171	1980	1983				
Illinois River Basin (D)																	
D 01	05587060	Illinois River	Rt. 100 Br. at Hardin	28,690	Calhoun- Greene	390937.0	903655.0	ASN02	59-	1977-	191	1977	1992	1991-97	26		
D 05	05563800	Illinois River	Rt. 9 Br. at Pekin	14,585	Peoria- Tazewell	403423.0	893917.0	CORE1	59-	1977-	192	1977	1996			1988-97	56
D 09	05558995	Illinois River	Rt. 17 Br. at Lacon	12,953	Marshall	410130.0	892502.0	ASN02	59-61,63-	1977-	177	1977	1992				
D 16	05556200	Illinois River	Rt. 26 Br. at Hennepin	12,756	Putnam	411527.0	892049.0	ASN02	67-69,72-	1977-	179	1977	1992			1988-97	58
D 23	05543500	Illinois River	Marseilles, downstream from Nabisco Bldg.	8,259	La Salle	411940.0	884310.0	CORE1	68-70,75-	1977-	202	1977	1996	1985-97	52	1988-97	31
D 30	05559900	Illinois River	Peoria PWS intake	13,900	Peoria	404330.0	893258.0	CORE1	70-72,77-	1977-	193	1977	1992			1988-97	58

APPENDIX TABLE A-1. ILLINOIS EPA AMBIENT WATER QUALITY MONITORING NETWORK (AWQMN) through April 1997.

IEPA Station Code	USGS Station Code	Stream Name	Description	Drainage Area (sq. mi.)	County	21ILAMB Latitude	21ILAMB Longitude	Parameter Group Code	Years of Record (to present)	21ILAMB Record T. Amm-N	Number of T. Amm-N Samples	USGS Flow Data		21ILL Pesticide Data	Pesticide # samples	Industrial Solvents Subnetwork	Industrial Solvents # samples
D 31	05570520	Illinois River	Illinois Power intake near Havana	18,300	Mason	401649.0	900453.0	ASN02	78-	1978-	188	1978	1992				
D 32	05586100	Illinois River	Norfolk Southern RR Br., 0.5 mi E of Valley City	26,564	Scott	394210.0	903840.0	CORE1	75-	1975-	182	1977	1996	1993-94	10		
DA 04	05586690	Macoupin Creek	Macoupin Station - Plainview Rd. Br.	304	Macoupin	391204.0	895845.0	ASN13	72-77,79-	1979-	170	1979	1990				
DA 06	05587000	Macoupin Creek	Rt. 267 Br., 3.5 mi NW of Kane	868	Greene	391403.0	902340.0	ASN13	78-	1978-	187	1977	1996	1985-97	54		
DB 01	05586600	Apple Creek	Co. Rd. Br., 6 mi N of Eldred	404	Greene	392211.0	903246.0	ASN02	59,61-	1978-	181						
DD 04	05586040	Mauvaise Terre Creek	Co. Rd. Br., 1.5 mi NE of Merritt	146	Scott	394353.0	902426.0	ASN02	78-	1978-	178	1978	1992				
DE 01	05585830	McKee Creek	Rt. 104 Br. at Chambersburg	341	Pike	394904.0	903909.0	ASN02	59,62-77,78-	1979-	169						
DF 04	05585275	Indian Creek	Co. Rd. Br., SW edge of Arenzville	164	Cass	395240.0	902238.0	ASN02	78-	1978-	179	1978	1992				
DG 01	05585000	La Moine River	US Rt. 24 Br. at Ripley	1,293	Brown- Schuyler	400131.0	903755.0	CORE1	59,62,64-	1975-	273	1977	1996	1985-97	53		
DG 04	05584500	La Moine River	Rt. 61 Br. at Colmar	655	McDonough	401945.0	905355.0	ASN22	75-	1975-	272	1977	1996	1985-96	52		
DH 01	05583915	Sugar Creek	Rt. 100 Br., 2.0 mi NE of Frederick	162	Schuyler	400549.0	902416.0	ASN13	59,71-77,78-	1979-	173	1979	1989				
DJ 02	05568915	Spoon River	US 150 Br., 1 mi S and 4 mi W of Williamsfield	762	Knox	405427.0	900512.0	ASN13	59-62,64-77,79	1979-	168	1981,91	1992				
DJ 06	05568775	Spoon River	Rt. 17 Br., 2.0 mi W of Wyoming	197	Stark	410345.0	894743.0	ASN13	72-77,79-	1979-	169	1991	1992	1985-91	37		
DJ 08	05570000	Spoon River	Rt. 95 Br., 0.4 mi NE of Seville	1,636	Fulton	402910.0	902034.0	ASN13	77-	1977-	183	1977	1996	1985-97	44		
DJ 09	05569500	Spoon River	Co. Rd. Br. at N edge of London Mills	1,062	Fulton	404251.0	901600.0	ASN13	79-	1978-	186	1978	1996	1991-96	17		
DJB 18	05570370	Big Creek	Co. Rd. Br. 2.0 mi SW of Bryant	41	Fulton	402732.0	900800.0	ASN13	72-	1979-	162	1977	1992				
DJBZ01	05570380	Slug Run	Private Rd. 2.5 mi NW of Bryant	7	Fulton	402824.0	900837.0	ASN13	75-	1977-	149	1977	1992				
DJL 01	05568800	Indian Creek	Co. Rd. Br. 3 mi S; 3 mi W of Wyoming	63	Stark	410106.0	895007.0	ASN13	77-	1977-	185	1977	1996				
DK 12	05568005	Mackinaw River	Co. Rd. Br. 4 mi SSW of South Pekin	1,092	Tazewell	402651.0	894128.0	ASN13	78-	1978-	179	1978	1996				
DK 13	05567510	Mackinaw River	Co. Rd. Br. 4 mi SE of Deer Creek	776	Tazewell	403512.0	891642.0	ASN13	78-	1978-	173	1978	1996	1985-97	55		
DL 01	05563525	Kickapoo Creek	US 24 Br. N of Bartonville	304	Peoria	403918.0	893852.0	ASN13	59-62,64-77,79-	1979	171						
DQ 03	05556500	Big Bureau Creek	Rt. 6 Br. near W edge of Princeton	196	Bureau	412155.0	892955.0	ASN13	77-	1977-	191	1977	1996	1985-94	47		
DQD 01	05557000	West Bureau Creek	US 6/34 Br. at E edge of Wyanet	87	Bureau	412154.0	893408.0	ASN13	72-77,79-	1979-	163	1979	1992				
DR 01	05555950	Little Vermilion River	US 6 Br. in LaSalle	125	La Salle	412000.0	890451.0	ASN07	71-77,78	1979-	167						
DS 06	05554490	Vermilion River	Co. Rd. Br. 0.5 mi E of McDowell	551	Livingston	404950.0	883429.0	ASN13	78-	1978-	184	1978	1996				
DS 07	05555300	Vermilion River	Co. Rd. Br. 3 mi NE of Leonore	1,251	La Salle	411230.0	885551.0	ASN13	77-	1977-	188	1977	1996	1985-96	48		
DV 04	05542000	Mazon River	Rt. 113 Br. 4 mi W of Coal City	455	Grundy	411710.0	882135.0	ASN13	78-	1978-	187	1977	1995				
DW 01	05541710	Aux Sable Creek	US 6 Br. 6 mi NE of Morris	172	Grundy	412502.0	882051.0	ASN13	68,72-77,79-	1979-	169						
DZZP03	05562010	Farm Creek	Camp St. Br. N of E. Peoria, read gage at 05562000 Main St. E	61	Tazewell	404016.0	893448.0	ASN07	79-	1979-	165	1979	1980				
Fox River Basin (DT)																	
DT 06	05550000	Fox River	Rt. 62, Algonquin Rd. Br.	1,403	McHenry	420959.0	881725.0	ASN09	59-	1977-	201	1977	1996	1991-95	12		
DT 09	05551000	Fox River	State St. Br. in South Elgin	1,556	Kane	415940.0	881740.0	ASN09	60,63-67,69-	1977-	188	1978	1996			1988-97	51
DT 22	05549600	Fox River	Rt. 176 Br. 5 mi. ENE of Crystal Lake	1,278	McHenry	421646.5	881337.5	ASN09	64,67,69-71,79-	1979-	165	1991	1992				
DT 35	05546700	Fox River	Rt. 173 Br. near Wisconsin line	2,256	Lake	422845.0	881042.0	CORE1	71-	1977-	193	1977	1992				
DT 38	05551540	Fox River	Mill St. Br. in Montogomery	1,732	Kane	414402	882002	CORE1	64,71-	1977-	187	1977	1992			1988-97	55
DT 46	05552500	Fox River	Co. Hwy. 18 Br. at Dayton	2,642	La Salle	412314.0	884721.0	CORE1	78-	1978-	204	1977	1996				
DTB 01	05551995	Somonauk Creek	E-W Twp. Rd. Br. 1 mi N of Sheridan	83	La Salle	413237.0	884112.0	ASN03	68,69,71-77,79-	1979-	169	1991	1992				
DTD 02	05551700	Blackberry Creek	US Rt. 47 Br. N of Yorkville	70	Kendall	414018.0	882629.0	ASN03	77-	1977-	189	1977	1996				
DTG 02	05550500	Poplar Creek	US Rt. 20 Br., Villa St. in Elgin	35	Cook	420135.0	881520.0	ASN09	77-	1977-	185	1977	1996				
DTK 04	05548280	Nippersink Creek	Winn Rd. Br. 0.6 mi W of Spring Grove	192	McHenry	422637.0	881451.0	ASN03	76-	1977-	190	1977	1996				
Sangamon River Basin (E)																	
E 05	05573650	Sangamon River	Lincoln Trail Br 5 mi. SE of Niantic	1,054	Macon	394748.0	890615.0	ASN17	58-	1977-	217	1977	1992				
E 06	05573504	Sangamon River (L. Decatur)	City of Decatur Public Water Supply Intake near dam	927	Macon	394944.0	885735.0	ASN09	58,60-77,79-	1979-	170	1991	1992				
E 09	05573540	Sangamon River	Rt. 48 Br. at Decatur	938	Macon	394952.0	885835.0	ASN12	64-65,67-68, 71-	1978-	201	1978	1996			1988-97	56
E 16	05573800	Sangamon River	Co. Rd. Br., 4.5 mi. S Mechanicsburg	1,264	Christian- Sangamon	394432.0	892357.0	ASN17	65,67-68, 71,78-	1978-	196	1977	1992				
E 24	05578000	Sangamon River	Rt. 123 Br., E of Petersburg	3,063	Menard	400037.0	895042.0	ASN17	78-	1978-	188	1977	1992			1988-97	34
E 25	05583000	Sangamon River	Rt. 97 Br. near Oakford	5,093	Menard- Mason	400725.0	895905.0	CORE1	76-	1977-	164	1977	1996	1985-96	42		

APPENDIX TABLE A-1. ILLINOIS EPA AMBIENT WATER QUALITY MONITORING NETWORK (AWQMN) through April 1997.

IEPA Station Code	USGS Station Code	Stream Name	Description	Drainage Area (sq. mi.)	County	21ILAMB Latitude	21ILAMB Longitude	Parameter Group Code	Years of Record (to present)	21ILAMB Record T. Amm-N	Number of T. Amm-N Samples	USGS Flow Data		21ILL Pesticide Data	Pesticide # samples	Industrial Solvents Subnetwork	Industrial Solvents # samples
E 26	05576500	Sangamon River	Old Rt. 36, W of Riverton	2,618	Sangamon	395034.0	893252.0	CORE1	77-	1977-	186	1977	1996	1996-97	4		
E 28	05572125	Sangamon River	Co. Rd. Br. (Allerton Park) 4.5 mi. SW of Monticello	573	Piatt	400008.0	883807.0	CORE1	78-	1978-	173	1978	1996	1985-97	55		
E 29	05570910	Sangamon River	Rt. 136 Br. 0.75 mi. E of Fisher	240	Champaign	401840.0	881920.0	ASN03	79-	1979-	174	1978	1996				
EI 02	05582000	Salt Creek	Rt. 29 Br., 4 mi. N of Greenview	1,804	Mason	400801.0	894408.0	ASN01	58-	1977-	194	1977	1996	1985-96,97	50		
EI 06	05578500	Salt Creek	Co. Rd. Br., 2 mi. NE of Kenney	335	De Witt	400654.0	890257.0	ASN01	78-	1978-	189	1977	1996				
EID 04	05581500	Sugar Creek	Twp. Rd., 2.6 mi. SE of Hartsburg	333	Logan	401320.0	892412.0	ASN12	78-	1978-	193	1977	1992	1997	2		
EIE 04	05580000	Kickapoo Creek	Co. Rd. Bridge, 0.75 mi. N of Waynesville	227	De Witt	401520.0	890740.0	ASN01	78-	1978-	189	1977	1996				
EIE 05	05580500	Kickapoo Creek	Co. Rd. Br., 1.75 mi. N of Lincoln	306	Logan	401130.0	892140.0	ASN13	78-	1978-	184	1978	1992	1997	2		
EIG 01	05579500	Lake Fork	Rt. 54 Br., 2 mi. NE of Cornland	214	Logan	395700.0	892310.0	ASN01	72-	1977-	192	1977	1996				
EL 01	05577505	Spring Creek	Bruns Lane Br. NW edge of Springfield, gage at Rt. 97 Br.	109	Sangamon	394916.0	894116.0	ASN12	79-	1979-	168	1979	1996	1989	15		
EO 01	05576022	South Fork Sangamon River	Rt. 29 Br., 1.5 mi. NW of Rochester	870	Sangamon	394550.0	893343.0	ASN13	72-	1977-	185	1977	1996				
EO 02	05575500	South Fork Sangamon River	Rt. 104 Br., 1 mi. E of Kincaid	562	Christian	393444.0	892331.0	ASN21	72-	1977-	189	1977	1992	1996-97	5		
EOA 01	05576250	Sugar Creek	Rt. 29 Br., 1 mi SE of Springfield	270	Sangamon	394648.0	893520.0	ASN09	72-77, 79-	1979-	173						
EOD 01	05575570	Clear Creek (L. Sangchris)	New City Rd. Lake Sangchris at dam	Not Avail.	Christian	393900.0	892840.0	ASN03	72-77, 79-	1979-	163						
EOH 01	05574500	Flat Branch	Old Rt. 29 Br., 1 mi E of Taylorville	276	Christian	393314.0	891512.0	ASN13	72-77, 79-	1979-	171	1977	1992				
Kankakee River Basin (F)																	
F 01	05527500	Kankakee River	I-55 Br.; 3 mi. NW of Wilmington	5,150	Will	412100.0	881140.0	CORE1	59-	1977-	199	1977	1996	1985-1994	48		
F 02	05520500	Kankakee River	Hwy. 1 Bridge at Momence	2,294	Kankakee	410936.0	873947.0	CORE1	59-71, 75-	1977-	200	1977	1996				
FL 02	05526000	Iroquois River	Co. Rd. Br.; 5 mi. W of St. Anne	2,091	Kankakee	410032.0	874927.0	ASN01	59-	1978-	193	1977	1996				
FL 04	05525000	Iroquois River	US 52 Bridge at Iroquois	686	Iroquois	404925.0	873455.0	ASN01	72-	1978-	175	1977	1996				
FLI 02	05525500	Sugar Creek	Co. Rd. Bridge 1 mi. W of Milford	446	Iroquois	403750.0	874325.0	ASN01	78-	1978-	180	1977	1996				
Des Plaines River - Lake Michigan Basin (G,H)																	
G 07	05528000	Des Plaines River	Rt. 120, Belvidere Rd. Br., E of Grayslake	232	Lake	422039.0	875618.0	ASN10	59-61, 72-	1977-	191	1977	1996			1988-97	53
G 08	05527800	Des Plaines River	Russell Rd. Br., 1 mi dns of WI State Line	123	Lake	422922.0	875532.0	ASN06	59-60, 64-	1977-	190	1977	1996				
G 11	05534050	Des Plaines River	Division St. Br. at Lockport	700	Will	413547.0	880407.0	ASN10	64,66-	1977-	199	1978	1992			1988-97	59
G 15	05530590	Des Plaines River	Irving Park Rd. Br. at Schiller Park	444	Cook	415711.0	875115.0	CORE1	67-	1978-	183	1978	1992	1985-91	36	1988-97	60
G 22	05529000	Des Plaines River	Central Ave. Br. at Des Plaines	360	Cook	420455.0	875325.0	ASN10	77-	1977-	191	1977	1996				
G 23	05537980	Des Plaines River	Rt. 53 (Ruby St. Br.) in Joliet	739	Will	413212.0	880457.0	CORE1	82-	1982-	144	1991	1992			1988-97	58
G 39	05532500	Des Plaines River	Barry Point Rd. at Riverside	630	Cook	414920.0	874915.0	NWQA1	87-	1987-	104	1987	1996				
GB 10	05540290	Du Page River	Plainfield-Naperville Rd. Bridge	220	Will	414124.0	880958.0	ASN06	68-	1977-	190	1977	1992			1988-96	53
GB 11	05540500	Du Page River	At Rt. 52	324	Will	413120.0	881135.0	ASN10-	64-76,78-	1977-	203	1978	1996			1996	1
GBK 05	05540095	West Br. Du Page River	Rt. 56 Butterfield Rd. Br. near Warrenville	90	Du Page	414922.0	881023.0	ASN10	64-	1977-	189	1977	1996				
GBK 09	05539900	West Br. Du Page River	Rt. 64/St. Charles Rd. Br. N of West Chicago	29	Du Page	415439.0	881044.0	ASN10	64-77,79-	1979-	169	1977	1996			1988-96	53
GBL 10	05540210	East Br. Du Page River	Rt. 34 Br. near Lisle	57	Du Page	414802.0	880453.0	ASN10	77-	1977-	186	1978	1992				
GG 02	05539000	Hickory Creek	Washington St. Br. at Joliet	107	Will	413110.0	880410.0	ASN10	67-77,79-	1979-	168	1977	1996				
GI 01	05536995	Sanitary & Ship Canal	135th St. Br. at Romeoville	Not Avail.	Will	413827.0	880336.0	NWQA1	1987-92	1987-92	61	1987	1992				
GI 02	05537000	Sanitary & Ship Canal	Division St. Br. at Lockport	740	Will	413411.0	880442.0	CORE1	64-	1977-	189	1977	1992			1988-97	51
GL 09	05531500	Salt Creek	Wolf Road Br.	114	Cook	414935.0	875400.0	CORE1	77-	1977-	200	1977	1996			1988-97	57
GLA 02	05532000	Addison Creek	Washington Boulevard Br. in Bellwood	18	Cook	415248.0	875207.0	ASN10	79-	1979-	179	1977	1996	1990	1		
H 01	05536700	Calumet Sag Channel	Rt. 83 Br., 3 mi NE of Lemont	389	Cook	414145.0	875611.0	CORE1	65-	1978-	183					1988-97	58
HB 42	05536195	Little Calumet River	Holman Ave. Br. at IN State Line, N of Munster, IN	90	Lake	413407.0	873118.0	CORE1	77-	1977-	165	1977	1992			1988-97	61
HBD 04	05536275	Thorn Creek	Thornton-Lansing Rd. Br. in Thornton	104	Cook	413405.0	873630.0	ASN10	72-77,79-	1979-	170	1977	1996			1988-97	60
HCC 07	05536000	North Br. Chicago River	Touhy Ave. Br. in Niles	100	Cook	420044.0	874745.0	CORE1	72-	1978-	183	1977	1996			1988-97	55
HCCC02	05534500	North Br. Chicago River	Lake-Cook Co. Line Rd. Bridge	20	Lake-Cook	420910.0	874907.0	ASN10	64-	1977-	188	1977	1996			1988-97	52
Mississippi River South Basin (I)																	
I 84	07022000	Mississippi River	At Thebes, Ill.	713,200	Alexander- Pulaski	371300.0	892750.0	(USGS)	1983-95	1983-95	85	1983	1985	1993,94	2		

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II 03	05595540	Marys River	Co. Rd. Br., 0.3 mi. E of Welge	113	Randolph	375722.0	894222.0	ASN13	72-	1978-	183	1978	1992				
IX 04	05600150	Cache River	Co. Rd. Br., 0.7 mi. E of Sandusky	234	Alexander- Pulaski	371212.0	891529.0	ASN13	78-	1978-	180			1995-96	6		
Mississippi River South Central Basin (J)																	
J 05	05587555	Mississippi River	RM 214.6 near Elsah (Historically J83)	Not Avail.	Jersey	385707.0	902212.0	CORE1	1989-95	1989-95	26	1989	1991	1993,94	10		
J 83	05587550	Mississippi River	Corps of Engs. Lock and Dam 26	171,500	Madison	385141.0	900815.0	CORE1	1975-89	1975-89	100	1977	1989	1987	1		
JMAC02	05589785	Harding Ditch (Cahokia Canal #1)	Lake Drive at Frank Holten State Park	Not Avail.	St Clair	383542.0	900518.0	ASN07	78-	1978-	178					1988-97	61
JN 02	05589490	Cahokia Canal	Sand Prairie Ln. Br. SE of Horseshoe Lake	Not Avail.	Madison	384001.0	900356.0	ASN07	72-	1978-	179						
JNA 01	05589510	Canteen Creek	Sand Prairie Ln. Br. SE of Horseshoe Lake	Not Avail.	Madison	383958.0	900356.0	ASN07	72-	1978-	179					1988-97	62
JQ 05	05587900	Cahokia Creek	Rt. 143 Br. NW of Edwardsville	212	Madison	384928.0	895829.0	ASN13	78-	1978-	181	1977	1996				
JR 02	05587700	Wood River	Rt. 3 Br. at Milton Rd. junction in Alton	121	Madison	385303.0	900720.0	ASN07	72-	1977-	183					1988-97	64
Mississippi River North Central Basin (K,L)																	
K 04	05474500	Mississippi River	At Keokuk, Iowa	119,000	Lee	402337.0	912227.0	CORE1	72-	1983-	79	1983	1996	1993,94	10		
KCA 01	05513000	Bay Creek	Twp. Road Br. at W edge of Nebo	161	Pike	392635.0	904745.0	ASN02	72-	1978-	181	1977	1992	1985-97	55		
KI 02	05495500	Bear Creek	Co. Rd. Br., 2.2 mi. NE of Marcelline	349	Adams	400834.0	912014.0	ASN02	78-	1978-	186	1977	1996	1985-97	56		
LD 02	05469000	Henderson Creek	Rt. 94 Br., 1 mi. S of Bald Bluff	432	Henderson	410005.0	905115.0	ASN13	72-	1977-	182	1977	1996	1985-94,96	48		
LF 01	05466500	Edwards River	Rt. 17 Br., 2 mi. NE of New Boston	445	Mercer	411115.0	905805.0	ASN02	59,71-	1978-	184	1978	1996	1986-94,96	49		
Mississippi River North Basin (M)																	
M 04	05420500	Mississippi River	Rt. 136 Br. at Fulton	85,600	Whiteside	414653.0	901504.0	CORE1	67-	1983-	71	1983	1996	1987,93,94	4		
MJ 01	05420100	Plum River	US 52 Br. at E edge of Savanna	273	Carroll	420550.0	900738.0	ASN02	72-	1977-	186	1978	1996	1985-91	33		
MN 03	05418950	Apple River	US 20 Br., 2 mi. W of Elizabeth	207	Jo Daviess	421907.0	901518.0	ASN02	72-	1977-	190	1977	1996	1985-94	44		
MQ 01	05416000	Galena River	US 20 Br. at Galena	196	Jo Daviess	422450.0	902540.0	ASN13	72-77,79-	1979-	173	1991	1992				
Big Muddy River Basin (N)																	
N 08	05595700	Big Muddy River	Rt. 15 Br., 3.0 mi. W of Mt.Vernon	72	Jefferson	381836.0	885918.0	ASN15	72-	1977-	179	1977	1992	1995	3		
N 10	05595950	Big Muddy River	Dam Access Rd. Br., 2.5 mi. NW of Benton	488	Franklin	380230.0	885730.0	ASN15	77-	1978-	175	1978	1979				
N 11	05597000	Big Muddy River	Rt. 149 Br., 0.7 mi. W of Plumfield	794	Franklin	375405.0	890050.0	ASN13	78-	1978-	181	1977	1996	1985-95	47		
N 12	05599500	Big Muddy River	Rt. 127 Br. S of Murphysboro	2,169	Jackson	374530.0	891938.0	CORE1	75-	1977-	171	1977	1996	1987,89	3		
NA 01	05599565	Cedar Creek (Cedar L.)	Rt. 127 Br., 6 mi. NNE of Alto Pass	35	Jackson	374015.0	891920.0	ASN15	79-	1979-	161						
NB 01	05599540	Kinkaid Creek (Kinkaid L.)	9.5 miles W. of Murphysboro	60	Jackson	374638.0	892714.0	ASN15	73-77,79-	1979-	165						
NC 07	05599200	Beaucoup Creek	Co. Rd. Br., 2.0 mi. W of Vergennes	478	Jackson	375412.0	892236.0	ASN13	78-	1978-	184	1978	1988	1995	3		
ND 01	05598245	Crab Orchard Creek	Dillinger Rd. Br. 3.2 mi. NE of Carbondale	272	Jackson	374618.0	891049.0	ASN21	72-	1977-	187	1978	1988	1995	3	1988-97	60
ND 02	05598050	Crab Orchard Creek	Crab Orchard Lake 150 Yrds DNS from Dam	201	Williamson	374251.0	890904.0	ASN15	72-	1978-	177	1978	1990				
ND 04	05597500	Crab Orchard Creek	Rt. 13 Br., 1.3 mi. E of Marion	32	Williamson	374352.0	885321.0	ASN13	72-	1977-	184	1977	1996	1995	3		
NE 05	05597280	Little Muddy River	Co. Rd. Br., 1.3 mi. E of Elkville	213	Jackson	375301.0	891231.0	ASN13	78-	1978-	184	1978	1992	1995	3		
NG 02	05597040	Pond Creek	Rt. 37 Br., 0.5 mi. S of W. Frankfort	33	Franklin	375306.0	885554.0	ASN13	68-	1978-	182	1978	1992	1995	3		
NH 06	05596400	Middle Fork Big Muddy River	Co. Rd. Br.; 2.7 mi. SSE of Benton	152	Franklin	375658.0	885400.0	ASN13	78-	1978-	183			1995	3		
NJ 07	05595830	Casey Fork	Rt. 37 Br., 3 mi. S of Mt. Vernon	88	Jefferson	381610.0	885355.0	CORE1	58,62-	1977-	180	1977	1994	1995	3	1988-97	58
NK 01	05595730	Rayse Creek	Twp. Rd. Br., 2.4 mi. N of Waltonville	88	Jefferson	381514.0	890223.0	ASN15	72-	1977-	179	1977	1996	1995	3		
Kaskaskia River Basin (O)																	
O 02	05591200	Kaskaskia River	Local Rd. Br. in Cooks Mills	473	Coles	393501.0	882450.0	CORE1	61-68,70-71, 77-	1977-	191	1977	1996	1997	2		
O 07	05593010	Kaskaskia River	Rt. 127 Br., 2.3 mi. S of Carlyle	2,734	Clinton	383428.0	892209.0	ASN20	58-60,62-	1977-	189	1977	1996				
O 08	05592500	Kaskaskia River	US Rt. 51 Br. at SE edge of Vandalia	1,940	Fayette	385735.0	890520.0	CORE1	58-62,64,71-	1977-	183	1977	1996	1985-94,96-	50		
O 10	05592100	Kaskaskia River	Rt. 128 Br., 2 mi. SE of Cowden	1,330	Shelby	391350.0	885033.0	ASN03	58,60-61,71-	1977-	188	1977	1996				
O 11	05592000	Kaskaskia River	Rt. 16 Br. at Shelbyville near dam	1,054	Shelby	392425.0	884650.0	ASN03	59-68,70-	1977-	188	1977	1996				
O 15	05591300	Kaskaskia River	Rt. 121 Br., 1 mi. N of Allenville	506	Moultrie	393422.0	883156.0	ASN20	74-	1980-	161	1991	1992				

APPENDIX TABLE A-1. ILLINOIS EPA AMBIENT WATER QUALITY MONITORING NETWORK (AWQMN) through April 1997.

IEPA Station Code	USGS Station Code	Stream Name	Description	Drainage Area (sq. mi.)	County	21ILAMB Latitude	21ILAMB Longitude	Parameter Group Code	Years of Record (to present)	21ILAMB Record T. Amm-N	Number of T. Amm-N Samples	USGS Flow Data		21ILL Pesticide Data	Pesticide # samples	Industrial Solvents Subnetwork	Industrial Solvents # samples
O 20	05594100	Kaskaskia River	Rt. 160-177 Br., 4.3 mi. NW of Okawville	4,393	Washington	382702.0	893739.0	CORE1	72-	1977-	164	1977	1996	1996	3		
O 30	05595400	Kaskaskia River	Co. Rd. Br., 2.7 mi. W of Ellis Grove	5,790	Randolph	380058.0	895714.0	CORE1	78-	1978-	183			1987	1		
O 31	05590420	Kaskaskia River	Co. Rd. 6 Br. 4 mi. W of Hayes	113	Douglas	395153.0	882152.0	ASN03	79-	1979-	165						
OC 04	05595200	Richland Creek	Rt. 156 Br., 1.6 mi. NE of Hecker	129	St. Clair	381926.0	895815.0	ASN17	78-	1978-	180	1977	1996				
OD 06	05594450	Silver Creek	Rt. 40 Br., 2.7 mi. SE of Troy	154	Madison	384300.0	894945.0	ASN17	72-	1977-	182	1977	1996	1996	3		
OD 07	05594800	Silver Creek	Rt. 460 Br., 2.2 mi. SE of Freeburg	464	St. Clair	382422.0	895226.0	ASN17	78-	1978-	178	1977	1996	1985-94,96	46		
OH 01	05594090	Sugar Creek	Rt. 161 Br., 0.5 mi. W of Albers	124	Clinton	383229.0	893736.0	ASN13	72-	1977-	179	1977	1992	1996	3		
OI 08	05594000	Shoal Creek	Rt. 50 Br., 1.4 mi. E of Breese	735	Clinton	383635.0	892940.0	ASN13	78-	1978-	177	1977	1996	1996	3		
OI 09	05593785	Shoal Creek	Co. Rd. Br. 3 miles NW of Panama	281	Montgomery	390348.0	893243.0	ASN13	82-	1982-	135	1982	1992	1996	3		
OJ 07	05593505	Crooked Creek	Co. Rd. Br., 3.1 mi. S of Odin	89	Marion	383350.0	890301.0	ASN17	72-	1978-	184	1978	1992	1996	3		
OJ 08	05593520	Crooked Creek	Hoyleton Rd. Br., 2.2 mi SW of Hoffman	254	Washington	383025.0	891624.0	ASN17	79-	1979-	173	1977	1996				
OK 01	05592900	East Fork Kaskaskia River	Rt. 51 Br., 5.2 mi. N of Sandoval	113	Marion	384120.0	890555.0	ASN22	72-	1977-	180	1977	1996	1997	3		
OKA 01	05592930	North Fork Kaskaskia River	Old Patoka Rd. Bridge	39	Marion	384625.0	890510.0	ASN22	77-	1977-	176			1997	3		
OL 02	05592800	Hurricane Creek	Rt. 140 Br., 1.0 mi E of Mulberry Grove	152	Fayette	385521.0	891414.0	ASN20	78-	1978-	181	1977	1996	1997	3		
ON 01	05592600	Hickory Creek	Co. Rd. Br., 2.7 mi. S of Bluff City	78	Fayette	385530.0	890220.0	ASN22	77-	1977-	180	1977	1992	1997	3		
OQ 01	05592195	Beck Creek	Co. Line Rd. Br., 2 mi W of Herrick	97	Fayette	391259.0	890114.0	ASN12	58,60-62,64,71-	1979-	172	1980	1988				
OT 02	05591700	West Okaw River	Rt. 32 Br., NW of Lovington	112	Moultrie	394352.0	883943.0	ASN20	77-	1980-	150	1980	1996				
OU 01	05591400	Jonathan Creek	Rt. 121 Br., 2.5 mi. E of Sullivan	55	Moultrie	393604.0	883246.0	ASN20	77-	1980-	160						
OZC 01	05595280	Plum Creek	Co. Rd. Br., 2.5 mi S of Baldwin	61	Randolph	380848.0	895035.0	ASN13	72-77, 79-	1979-	171						
OZZT01	05591500	Asa Creek	Co. Rd. Br., 0.8 mi. N of Sullivan	35	Moultrie	393711.0	883617.0	ASN03	78-	1978-	185	1977	1990				
Rock River Basin (P)																	
P 04	05446500	Rock River	Rt. 92 Br., 2 mi. E of Joslin	9,549	Rock Island	413335.0	901055.0	CORE1	59,61-	1977-	170	1977	1996	1987	1		
P 06	05443500	Rock River	US Rt. 30 Br., 2 mi. W of Rock Falls	8,753	Whiteside	414700.0	894458.0	ASN09	06-07,59,61-	1977-	186	1977	1996				
P 14	05440700	Rock River	Rt. 72 Br. at Byron	7,990	Ogle	420724.0	891520.0	ASN09	64,71-	1977-	185	1978	1992			1988-97	58
P 15	05437500	Rock River	Rt. 75 Br. at Rockton	6,363	Winnebago	422655.0	890411.0	CORE1	72-	1977-	190	1977	1996				
P 20	05442200	Rock River	Rt. 2 Br., near Grand Detour; County Line	8,502	Ogle	415323.0	892510.0	ASN09	77-	1977-	180	1978	1992			1988-97	52
PB 02	05447100	Green River	Rt. 88 Br., 1 mi. S of Deer Grove	322	Whiteside	413538.0	894122.0	ASN01	59,61-62,64,72-	1977-	187	1978	1992				
PB 04	05447500	Green River	Rt. 82 Br., N of Geneseo	1,003	Henry	412920.0	900930.0	CORE1	77-	1977-	180	1977	1996	1985-96	50		
PE 05	05446100	Rock Creek	Rt 2 Br. 3 mi NE of Erie	237	Whiteside	414047.0	900134.0	ASN01	64-77,79-	1979-	159						
PH 16	05444000	Elkhorn Creek	2 mi NW of Penrose Co. Rd. Br.	146	Whiteside	415410.0	894140.0	ASN01	79-	1979-	166	1977	1996	1985-96	49		
PL 03	05442020	Kyte River	Honey Cr. Rd. Br. 1 mi E. of Daysville	179	Ogle	415910.0	891741.0	ASN01	79-	1979-	171	1980	1990				
PQ 02	05438600	Kishwaukee River	Perryville Rd. Br., near S. Branch	655	Winnebago	421206.0	885843.0	ASN12	64,71-	1977-	195	1978	1992				
PQ 10	05438201	Kishwaukee River	Co. Rd. Br., 0.5 mi. N of Garden Prairie	222	Boone	421540.0	884300.0	ASN12	72-	1977-	193	1978	1992				
PQ 12	05440000	Kishwaukee River	Blackhawk Rd. Br.	1,099	Winnebago	421145.0	885955.0	ASN12	78-	1978-	183	1977	1996				
PQB 02	05440520	Kilbuck Creek	US 251 Br., 4 mi S. of Rockford	136	Winnebago	420936.0	890432.0	ASN01	58-77,79-	1979-	173	1980	1990				
PQC 06	05439500	South Br. Kishwaukee River	Co. Rd. Br., 0.5 mi. N of Rt 72; 2 mi. W of Kirkland	387	De Kalb	420640.0	885400.0	ASN01	77-	1977-	195	1977	1996				
PQF 07	05438250	Coon Creek	Riley-Harmon Rd. 0.8 mi SW of Riley	85	McHenry	421058.0	883828.0	ASN01	79-	1979-	170	1977	1992	1988	5		
PW 01	05435800	Pecatonica River	Rt. 75 Br. at Harrison	1,788	Winnebago	422539.0	891144.0	ASN01	58-	1977-	189	1977	1992				
PW 08	05435500	Pecatonica River	Rt. 75 Br., west-bound at Freeport	1,326	Stephenson	421813.0	893657.0	ASN12	77-	1977-	181	1977	1996				
PWN 01	05435680	Yellow Creek	Hollywood Road at SE edge of Freeport	192	Stephenson	421645.0	893424.0	ASN01	72-77,79-	1979-	168						
									Total:	209	36878			78	1657	32	1730

Appendix Table A-2. Illinois EPA AWQMN Parameters and Code Numbers

ASN01 Universal Ambient Stream Network (UASN)
ASN02 UASN + 71900 Mercury (Illinois - Mississippi River Basins)
ASN03 UASN + 625 Total Kjeldahl N (Fox River and Lake Watersheds)
ASN04 UASN + 940 Chloride, 720 Cyanide and 71900 Mercury (Ohio River Basin)
ASN05 UASN + 940 Chloride and 71900 Mercury (Wabash River Basin)
ASN06 UASN + 720 Cyanide (Des Plaines - Lake Michigan Basin)
ASN07 UASN + 71900 Mercury, 940 Chloride, and 945 Sulfate(Illinois, Mississippi and Wabash Basins - Urban)
ASN09 UASN + 625 Total Kjeldahl N, 940 Chloride, and 945 Sulfate(Fox River and Lake Watersheds - Urban)
ASN10 UASN + 720 Cyanide, 940 Chloride, and 945 Sulfate (Des Plaines - Lake Michigan Basin - Urban)
ASN12 UASN + 940 Chloride, 945 Sulfate (Urban)
ASN13 UASN + 410 Alkalinity, 70508 Total Acidity, 945 Sulfate and 71900 Mercury (Mining)
ASN14 UASN + 940 Chloride, 720 Cyanide, 410 Alkalinity, 70508 Total Acidity, 945 Sulfate and 71900 Mercury (Ohio River Basin - Mining)
ASN15 UASN + 625 Total Kjeldahl N, 410 Alkalinity, 70508 Total Acidity, 945 Sulfate, 71900 Mercury (Lake Watersheds - Mining)
ASN16 UASN + 940 Chloride, 410 Alkalinity, 70508 Total Acidity, 945 Sulfate, 71900 Mercury (Wabash River Basin - Mining)
ASN17 UASN + 940 Chloride, 945 Sulfate, 410 Alkalinity, 70508 Total Acidity and 71900 Mercury (Mining - Urban)
ASN18 UASN + 625 Total Kjeldahl N, 410 Alkalinity, 70508 Total Acidity, 940 Chloride, 945 Sulfate, 71900 Mercury (Wabash River Basin - Lake Watershed - Mining)
ASN20 UASN + 625 Total Kjeldahl N, 71900 Mercury (Lake Watershed - Illinois and Mississippi Basins)
ASN21 UASN + 940 Chloride, 945 Sulfate, 410 Alkalinity, 70508 Total Acidity, 71900 Mercury, 625 Total Kjeldahl N
ASN22 UASN + 410 Alkalinity, 70508 Total Acidity, 71900 Mercury, 945 Sulfate and 625 Total Kjeldahl N (Mining - Lake Watershed)
ASN23 UASN + 940 Chloride, 71900 Mercury, 625 Total Kjeldahl N, (Wabash Basin - Lake Watershed)

CORE1 CORE Ambient - UASN + 720 Cyanide, 1002 Arsenic, 32730 Phenol, 951 Fluoride, 71900 Mercury, 940 Chloride, 945 Sulfate, 70508 Total Acidity, 410 Alkalinity, 625 Total Kjeldahl N.

CORE2 Water Organics - 39516 PCBS, 39330 Aldrin, 39380 Dieldrin, 39370 Total DDT, 39327 O, p DDE, 39320 p, p' DDE, 39315 o, p DDD, 39310 p, p' DDD, 39305 o, p DDT, 39300 p, p' DDT, 39350 Total Chlordane, 39065 Chlordane trans isomer, 39068 Nonachlor cis isomer, 39071 Nonachlor trans isomer, 39390 Endrin, 39480 Methoxychlor, 39337 Hexachlorocyclohexane, 39340 gamma BHC-Lindane, 39700 Hexachlorobenzene, 39032 Pentachlorophenol, 39062 Chlordane cis isomer.

PEST1 Pesticide Subnetwork - 77825 Alachlor, 39630 Atrazine, 81410 Butylate, 39640 Captan, 81403 Chloropyrifos, 81757 Cyanazine, 39570 Diazinon, 81294 Fonofos, 39530 Malathion, 39600 Methyl Parathion, 39356 Metolachlor, 81408 Metribuzin, 46314 Phorate, 82088 Terbufos, 81284 Trifluralin + CORE2.

IND01 Industrial Subnetwork - 32106 Chloroform, 32101 Dichlorobromomethane, 32105 Chlorodibromomethane, 32104 Bromoform, 34423 Methylene Chloride, 34501 1,1-Dichloroethylene, 34496 1,1-Dichloroethane, 34546 Trans-1,2-Dichloroethylene, 34531 1,2-Dichloroethane, 34506 1,1,1-Trichloroethane, 32102 Carbon Tetrachloride, 39180 Trichloroethylene, 34475 Tetrachloroethylene, 34301 Chlorobenzene, 34716 Dichlorobenzene (total), 78124 Benzene, 78131 Toluene, 78113 Ethylbenzene, 81551 Xylenes, 77093 CIS-1,2-Dichloroethylene.

Appendix B. Summary of Illinois EPA ambient water quality data for ammonia, nitrates, TKN, total and dissolved phosphorus, total and volatile suspended solids. October 1980 through September 1996.

```
1STORET RETRIEVAL DATE 99/01/19
                                                          03612500        A   06
                                                         37 12 13.0 089 02 27.0 2
                                                         OHIO RIVER AT DAM 53 NEAR GRAND CHAIN
                                                         17153   ILLINOIS         PULASKI
                                                         OHIO RIVER               052191
 /TYPA/AMBNT/STREAM                                      OHIO R MAIN STEM AND MINOR TRIBS
                                                         21ILAMB   870314             05140206006 0005.340 ON
                                                         0000 FEET DEPTH

                      00610     00625     00630     00665     00666     00530     00535
   DATE              NH3+NH4-  TOT KJEL  NO2&NO3   PHOS-TOT  PHOS-DIS  RESIDUE   RESIDUE
   FROM              N TOTAL      N      N-TOTAL                       TOT NFLT  VOL NFLT
    TO                 MG/L      MG/L      MG/L     MG/L P    MG/L P     MG/L      MG/L
 80/10/01
 STATION  PCTL(010.0).0300000   .400000   .320000  .0400000  .0100000   9.00000   2.00000
          PCTL(025.0).0899999   .500000   .550000  .0800000  .0300000   18.0000   4.00000
          PCTL(050.0) .100000   .600000   .890001   .120000  .0400000   63.0000   8.00000
          PCTL(075.0) .100000   .800000   1.50000   .150000  .0500000   114.000   12.0000
          PCTL(085.0) .120000   .900000   1.80000   .220000  .0600001   154.000   14.0000
          PCTL(090.0) .150000   1.10000   1.90000   .260000  .0699999   156.000   16.0000
          PCTL(095.0) .310000   1.60000   2.30000   .340000  .0899999   202.000   24.0000
          NUMBER           32        55        29        53        54        20        20
          MAXIMUM     .330000   2.40000   2.40000   .420000   .150000   208.000   27.0000
          MINIMUM    .0100000   .100000   .230000  .0200000  .0100000   7.00000   1.00000
          SUM         3.33999   39.1198   31.3099   7.27498   2.38999   1639.00   191.000
          MEAN        .104375   .711270   1.07965   .137264  .0442590   81.9500   9.55000
          VARIANCE   .0047868   .170313   .373835  .0076409  .0006551   4058.37   46.2605
          STAND DEV  .0691863   .412690   .611421  .0874119  .0255952   63.7053   6.80151
 96/09/30
1STORET RETRIEVAL DATE 99/01/19
                                                          03612000        AD  02
                                                         37 20 11.0 088 55 26.0 2
                                                         CACHE RIVER AT FORMAN, IL
                                                         17087   ILLINOIS         JOHNSON
                                                         OHIO RIVER               052100
 /TYPA/AMBNT/STREAM                                      OHIO R MAIN STEM AND MINOR TRIBS
                                                         21ILAMB   870314             05140206
                                                         0000 FEET DEPTH

                      00610     00625     00630     00665     00666     00530     00535
   DATE              NH3+NH4-  TOT KJEL  NO2&NO3   PHOS-TOT  PHOS-DIS  RESIDUE   RESIDUE
   FROM              N TOTAL      N      N-TOTAL                       TOT NFLT  VOL NFLT
    TO                 MG/L      MG/L      MG/L     MG/L P    MG/L P     MG/L      MG/L
 80/10/01
 STATION  PCTL(010.0).0100000   .327000   .100000  .0799999  .0300000   10.0000   2.00000
          PCTL(025.0).0600000   .327000   .180000   .100000  .0400000   21.0000   3.00000
          PCTL(050.0) .100000   .600000   .320000   .140000  .0500000   42.0000   5.00000
          PCTL(075.0) .100000   .700000   .530000   .200000  .0799999   80.0000   10.0000
          PCTL(085.0) .180000   .700000   .680000   .240000  .0899999   112.000   14.0000
          PCTL(090.0) .200000   .700000   .800000   .300000   .100000   164.000   21.0000
          PCTL(095.0) .430000   .700000   .940000   .410000   .130000   230.000   40.0000
          NUMBER          145         3       144       112       112       144       143
          MAXIMUM     .780000   .700000   1.90000   .960000   .280000   1100.00   140.000
          MINIMUM    .0100000   .327000  .0100000  .0400000  .0100000   3.00000   1.00000
          SUM         17.3499   1.62700   58.1491   20.5298   6.89496   11554.0   1464.00
          MEAN        .119654   .542333   .403813   .183301  .0615622   80.2361   10.2378
          VARIANCE   .0141281  .0372771   .101931  .0197568  .0014355   21350.2   254.084
          STAND DEV   .118862   .193073   .319266   .140559  .0378881   146.117   15.9400
 96/09/30
1STORET RETRIEVAL DATE 99/01/19
                                                          03384450        AK  02
                                                         37 28 20.0 088 32 50.0 2
                                                         LUSK CREEK NEAR EDDYVILLE, IL
                                                         17151   ILLINOIS         POPE
                                                         OHIO RIVER               052100
 /TYPA/AMBNT/STREAM                                      OHIO R MAIN STEM AND MINOR TRIBS
                                                         21ILAMB   870314             05140203
                                                         0000 FEET DEPTH

                      00610     00625     00630     00665     00666     00530     00535
   DATE              NH3+NH4-  TOT KJEL  NO2&NO3   PHOS-TOT  PHOS-DIS  RESIDUE   RESIDUE
   FROM              N TOTAL      N      N-TOTAL                       TOT NFLT  VOL NFLT
    TO                 MG/L      MG/L      MG/L     MG/L P    MG/L P     MG/L      MG/L
 80/10/01
 STATION  PCTL(010.0).0100000   .100000  .0200000  .0100000  .0100000   1.00000   1.00000
          PCTL(025.0).0200000   .118000  .0899999  .0100000  .0100000   2.00000   1.00000
          PCTL(050.0) .100000   .240000   .100000  .0100000  .0100000   4.00000   1.00000
          PCTL(075.0) .100000   .400000   .140000  .0200000  .0100000   10.0000   3.00000
          PCTL(085.0) .100000   .400000   .250000  .0300000  .0100000   20.0000   5.00000
          PCTL(090.0) .100000   .500000   .300000  .0400000  .0100000   25.0000   6.00000
          PCTL(095.0) .140000   .500000   .380000  .0500000  .0200000   32.0000   9.00000
          NUMBER          145       145       145       145       133       147       146
          MAXIMUM     4.80000   1.50000   3.50000   .360000   .340000   105.000   18.0000
          MINIMUM    .0100000  .0000000  .0100000  .0010000  .0010000   1.00000   1.00000
          SUM         15.3999   39.1174   23.8194   3.03495   1.79696   1392.60   385.000
          MEAN        .106206   .269775   .164272  .0209307  .0135110   9.47346   2.63698
          VARIANCE    .156049  .0305664   .103880  .0011104  .0008878   212.044   9.94318
          STAND DEV   .395031   .174832   .322304  .0333223  .0297965   14.5617   3.15328
 96/09/30
```

1STORET RETRIEVAL DATE 99/01/19

03382530 AT 06
37 38 53.0 088 14 30.0 2
SALINE RIVER NEAR GIBSONIA, IL
17059 ILLINOIS GALLATIN
OHIO RIVER 052100
/TYPA/AMBNT/STREAM OHIO R MAIN STEM AND MINOR TRIBS
21ILAMB 870314 05140204
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0699999	.480000	.100000	.0400000	.0100000	10.0000	2.00000
PCTL(025.0)	.100000	.480000	.410000	.0520000	.0100000	17.0000	4.00000
PCTL(050.0)	.140000	.680000	.940000	.0899999	.0200000	31.0000	6.00000
PCTL(075.0)	.260000	.840000	1.60000	.140000	.0500000	58.0000	10.0000
PCTL(085.0)	.380000	1.46000	1.95000	.240000	.0699999	90.0000	14.0000
PCTL(090.0)	.490000	1.46000	2.10000	.310000	.0899999	117.300	17.0000
PCTL(095.0)	.620000	1.46000	2.40000	.470000	.110000	430.000	34.0000
NUMBER	147	4	147	113	113	147	146
MAXIMUM	1.10000	1.46000	8.20000	.840000	.270000	1012.00	80.0000
MINIMUM	.0100000	.480000	.0100000	.0100000	.0060000	3.00000	1.00000
SUM	31.6044	3.46000	163.959	15.6420	4.52396	11309.3	1447.00
MEAN	.214996	.864999	1.11537	.138424	.0400350	76.9340	9.91096
VARIANCE	.0356981	.179034	1.02870	.0218320	.0017498	24204.2	170.013
STAND DEV	.188939	.423124	1.01425	.147757	.0418306	155.577	13.0389
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

03382325 ATF 04
37 53 18.0 088 23 06.0 2
NORTH FORK SALINE RIVER NEAR TEXAS CITY, IL
17165 ILLINOIS SALINE
OHIO RIVER 052100
/TYPA/AMBNT/STREAM OHIO R MAIN STEM AND MINOR TRIBS
21ILAMB 870314 05140204
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.400000	.0400000	.0400000	.0100000	10.0000	2.00000
PCTL(025.0)	.0799999	.600000	.100000	.0600000	.0200000	23.0000	3.00000
PCTL(050.0)	.100000	.800000	.700000	.100000	.0300000	50.0000	7.00000
PCTL(075.0)	.110000	1.20000	1.20000	.170000	.0500000	112.000	12.0000
PCTL(085.0)	.190000	1.40000	1.60000	.220000	.0799999	140.000	19.0000
PCTL(090.0)	.260000	1.60000	2.20000	.310000	.110000	191.000	23.0000
PCTL(095.0)	.330000	2.30000	2.50000	.680000	.190000	295.000	32.0000
NUMBER	146	147	147	147	134	147	147
MAXIMUM	.660000	14.0000	5.80000	6.80000	3.20000	2980.00	295.000
MINIMUM	.0100000	.100000	.0100000	.0100000	.0010000	4.00000	1.00000
SUM	17.6799	160.202	131.449	31.2044	9.85095	17398.8	2001.80
MEAN	.121095	1.08981	.894212	.212275	.0735145	118.359	13.6177
VARIANCE	.0111805	1.81182	1.07780	.359989	.0788691	87294.4	888.947
STAND DEV	.105738	1.34604	1.03817	.599991	.280836	295.456	29.8152
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

03382205 ATG 03
37 42 28.0 088 29 31.0 2
MIDDLE FORK SALINE RIVER NEAR PANKEYVILLE, IL
17165 ILLINOIS SALINE
OHIO RIVER 052100
/TYPA/AMBNT/STREAM OHIO R MAIN STEM AND MINOR TRIBS
21ILAMB 870314 05140204
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0699999	.500000	.450000	.0799999	.0100000	4.00000	1.00000
PCTL(025.0)	.100000	.700000	.740000	.130000	.0300000	13.0000	3.00000
PCTL(050.0)	.220000	.910000	1.10000	.190000	.0699999	30.0000	6.00000
PCTL(075.0)	.470000	1.40000	1.70000	.380000	.180000	90.0000	11.0000
PCTL(085.0)	.790000	2.10000	2.00000	.570000	.370000	149.000	16.0000
PCTL(090.0)	1.50000	2.60000	2.60000	.780000	.670000	218.000	24.0000
PCTL(095.0)	2.20000	3.50000	3.20000	1.10000	1.20000	328.000	27.0000
NUMBER	148	146	148	147	133	148	148
MAXIMUM	4.80000	6.20000	4.30000	2.90000	2.60000	1200.00	102.000
MINIMUM	.0100000	.100000	.180000	.0300000	.0100000	2.00000	1.00000
SUM	76.7880	184.679	193.929	50.7142	30.0434	12640.2	1465.60
MEAN	.518838	1.26492	1.31033	.344995	.225890	85.4067	9.90269
VARIANCE	.655027	.955043	.713369	.178039	.168528	25528.7	166.909
STAND DEV	.809337	.977263	.844612	.421947	.410522	159.777	12.9193
96/09/30							

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1STORET RETRIEVAL DATE 99/01/19
                                                                 03382185        ATGC01
                                                                37 46 05.0 088 32 25.0 2
                                                                BANKSTON FORK NEAR DORRIS HEIGHTS, IL
                                                                17165   ILLINOIS         SALINE
                                                                OHIO RIVER               052100
 /TYPA/AMBNT/STREAM                                             OHIO R MAIN STEM AND MINOR TRIBS
                                                                21ILAMB   870314             05140204
                                                                0000 FEET DEPTH

                      00610     00625     00630     00665     00666     00530     00535
   DATE              NH3+NH4-  TOT KJEL  NO2&NO3   PHOS-TOT  PHOS-DIS  RESIDUE   RESIDUE
   FROM              N TOTAL      N      N-TOTAL                       TOT NFLT  VOL NFLT
    TO                 MG/L      MG/L      MG/L     MG/L P    MG/L P     MG/L      MG/L

 80/10/01
 STATION  PCTL(010.0).0200000   .490000   .120000  .0100000  .0100000   4.00000   1.00000
          PCTL(025.0) .100000   .490000   .360000  .0100000  .0100000   9.00000   2.00000
          PCTL(050.0) .120000   .650000   .600000  .0200000  .0100000   20.0000   4.00000
          PCTL(075.0) .290000   .750000   .920000  .0500000  .0100000   50.0000   8.00000
          PCTL(085.0) .390000   .940000   1.10000  .0899999  .0200000   76.0000   12.0000
          PCTL(090.0) .480000   .940000   1.30000   .140000  .0200000   122.000   16.0000
          PCTL(095.0) .600000   .940000   1.59000   .230000  .0300000   241.000   30.0000
          NUMBER          147         4       146       115       113       147       145
          MAXIMUM     2.20000   .940000   4.40000   .650000   .330000   772.000   72.0000
          MINIMUM    .0100000   .490000  .0100000  .0100000  .0010000   1.00000   1.00000
          SUM         34.6096   2.83000   102.848   6.42494   1.73597   7717.29   1098.70
          MEAN        .235439   .707500   .704439  .0558691  .0153626   52.4986   7.57724
          VARIANCE   .0925720  .0354919   .323037  .0087319  .0009530   10117.9   111.785
          STAND DEV   .304257   .188393   .568364  .0934446  .0308700   100.588   10.5728
 96/09/30
1STORET RETRIEVAL DATE 99/01/19
                                                                 ATH 02
                                                                37 37 22.5 088 48 43.5 2
                                                                S FORK SALINE R 3.4 MI S CRAB ORCHARD T10SR4ESE6
                                                                17199   ILLINOIS         WILLIAMSON
                                                                OHIO RIVER               052100
 /TYPA/AMBNT/STREAM                                             SALINE RIVER SOUTH FORK
                                                                21ILAMB   870425             05140204029          ON
                                                                0000 FEET DEPTH

                      00610     00625     00630     00665     00666     00530     00535
   DATE              NH3+NH4-  TOT KJEL  NO2&NO3   PHOS-TOT  PHOS-DIS  RESIDUE   RESIDUE
   FROM              N TOTAL      N      N-TOTAL                       TOT NFLT  VOL NFLT
    TO                 MG/L      MG/L      MG/L     MG/L P    MG/L P     MG/L      MG/L

 80/10/01
 STATION  PCTL(010.0).0200000   .480000   .100000  .0300000  .0100000   7.00000   2.00000
          PCTL(025.0).0600000   .480000   .120000  .0400000  .0100000   12.0000   2.00000
          PCTL(050.0) .100000   .580000   .190000  .0600000  .0200000   34.0000   4.00000
          PCTL(075.0) .100000   .690000   .320000   .110000  .0400000   56.0000   6.00000
          PCTL(085.0) .150000   3.14000   .470000   .200000  .0500000   67.0000   9.00000
          PCTL(090.0) .200000   3.14000   .540000   .250000  .0779999   90.0000   13.0000
          PCTL(095.0) .330000   3.14000   .630000   .320000   .130000   160.000   20.0000
          NUMBER          121         4       122       120       113       121       121
          MAXIMUM     1.50000   3.14000   1.30000   .800000   .280000   1312.00   96.0000
          MINIMUM    .0100000   .480000  .0100000  .0100000  .0090000   2.00000   1.00000
          SUM         15.2799   4.89000   32.1696   12.9440   3.62495   7112.00   862.000
          MEAN        .126280   1.22250   .263685   .107866  .0320792   58.7769   7.12397
          VARIANCE   .0287333   1.64149  .0503919  .0167949  .0015671   18209.8   159.560
          STAND DEV   .169509   1.28121   .224481   .129595  .0395871   134.944   12.6317
 96/09/30
1STORET RETRIEVAL DATE 99/01/19
                                                                 03382100        ATH 05
                                                                37 38 16.0 088 40 40.0 2
                                                                SOUTH F SALINE RIVER NR CARRIER MILLS, IL
                                                                17165   ILLINOIS         SALINE
                                                                OHIO RIVER               052100
 /TYPA/AMBNT/STREAM                                             OHIO R MAIN STEM AND MINOR TRIBS
                                                                21ILAMB   870314             05140204
                                                                0000 FEET DEPTH

                      00610     00625     00630     00665     00666     00530     00535
   DATE              NH3+NH4-  TOT KJEL  NO2&NO3   PHOS-TOT  PHOS-DIS  RESIDUE   RESIDUE
   FROM              N TOTAL      N      N-TOTAL                       TOT NFLT  VOL NFLT
    TO                 MG/L      MG/L      MG/L     MG/L P    MG/L P     MG/L      MG/L

 80/10/01
 STATION  PCTL(010.0) .100000   .300000  .0899999  .0100000  .0100000   1.00000   1.00000
          PCTL(025.0) .140000   .470000   .100000  .0100000  .0100000   3.00000   1.00000
          PCTL(050.0) .210000   .670000   .180000  .0100000  .0100000   12.0000   3.00000
          PCTL(075.0) .330000   .900000   .300000  .0600000  .0100000   53.0000   11.0000
          PCTL(085.0) .430000   1.10000   .360000   .100000  .0100000   84.0000   16.0000
          PCTL(090.0) .500000   1.20000   .400000   .130000  .0100000   110.700   19.0000
          PCTL(095.0) .710000   1.50000   .510000   .220000  .0200000   156.000   22.0000
          NUMBER          150       141       151       150       137       150       149
          MAXIMUM     2.00000   5.74000   2.20000   2.10000   .200000   1808.00   140.000
          MINIMUM    .0100000   .100000  .0100000  .0020000  .0010000   1.00000   1.00000
          SUM         41.6892   108.182   34.8393   10.2549   1.68596   7620.69   1182.00
          MEAN        .277928   .767249   .230724  .0683661  .0123063   50.8046   7.93288
          VARIANCE   .0639193   .352950  .0513418  .0427083  .0003129   24134.1   177.847
          STAND DEV   .252823   .594096   .226587   .206660  .0176892   155.351   13.3359
 96/09/30
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1STORET RETRIEVAL DATE 99/01/19

03382090 ATHG01
37 39 19.0 088 45 48.0 2
SUGAR CREEK NEAR STONEFORT, IL
17199 ILLINOIS WILLIAMSON
OHIO RIVER 052100
/TYPA/AMBNT/STREAM OHIO R MAIN STEM AND MINOR TRIBS
21ILAMB 870314 05140204
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.100000	.540000	.0300000	.0500000	.0100000	18.0000	5.00000
PCTL(025.0)	.160000	.540000	.100000	.0799999	.0100000	30.0000	8.00000
PCTL(050.0)	.350000	.850000	.170000	.140000	.0300000	51.0000	13.0000
PCTL(075.0)	1.10000	.880000	.380000	.760000	.520000	82.0000	19.0000
PCTL(085.0)	1.70000	1.00000	.500000	1.70000	1.20000	102.000	22.0000
PCTL(090.0)	2.40000	1.00000	.570000	2.00000	1.40000	117.000	28.0000
PCTL(095.0)	3.60000	1.00000	.730000	2.80000	2.30000	160.000	38.0000
NUMBER	147	5	146	115	113	147	147
MAXIMUM	7.90000	1.00000	3.50000	5.20000	3.90000	335.000	77.0000
MINIMUM	.0300000	.540000	.0100000	.0100000	.0010000	7.00000	1.00000
SUM	130.288	4.03000	41.1993	75.2523	49.0084	9612.19	2223.60
MEAN	.886312	.806000	.282187	.654368	.433703	65.3890	15.1265
VARIANCE	1.61532	.0294802	.135553	1.05443	.609548	2796.77	115.907
STAND DEV	1.27095	.171698	.368175	1.02685	.780735	52.8845	10.7660
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

03341920 B 06
39 06 37.0 087 39 18.0 2
WABASH RIVER AT HUTSONVILLE, IL
17033 ILLINOIS CRAWFORD
OHIO RIVER 051791
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120111013 0002.230 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000		.880000	.120000	.0170000	30.0000	4.00000
PCTL(025.0)	.0400000		2.10000	.150000	.0400000	48.0000	7.00000
PCTL(050.0)	.100000		3.80000	.200000	.0799999	68.0000	11.0000
PCTL(075.0)	.100000		5.20000	.250000	.100000	127.000	18.0000
PCTL(085.0)	.140000		6.00000	.320000	.110000	218.000	24.0000
PCTL(090.0)	.180000		6.40000	.360000	.130000	275.000	38.0000
PCTL(095.0)	.220000		7.20000	.430000	.140000	460.000	44.0000
NUMBER	144		145	113	114	144	144
MAXIMUM	.600000		8.50000	.880000	.170000	1000.00	70.0000
MINIMUM	.0100000		.100000	.0799999	.0100000	3.00000	2.00000
SUM	14.3839		542.883	25.2417	8.45395	18402.0	2322.00
MEAN	.0998883		3.74402	.223378	.0741574	127.792	16.1250
VARIANCE	.0071776		4.07175	.0133317	.0015924	23487.3	202.516
STAND DEV	.0847205		2.01786	.115463	.0399051	153.256	14.2308
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

03378500 B 07
38 07 55.0 087 56 25.0 2
WABASH RIVER AT NEW HARMONY, IND.
18129 INDIANA POSEY
OHIO RIVER 051791
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120113006 0016.620 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.500000	.100000	.0799999	.0100000	1.00000	1.00000
PCTL(025.0)	.0400000	.700000	.990001	.140000	.0200000	42.0000	9.00000
PCTL(050.0)	.100000	1.10000	1.90000	.180000	.0600001	92.0000	18.0000
PCTL(075.0)	.100000	1.30000	3.20000	.330000	.110000	123.000	32.0000
PCTL(085.0)	.130000	1.80000	3.50000	.400000	.110000	280.000	37.0000
PCTL(090.0)	.200000	1.90000	3.60000	.420000	.120000	351.000	48.0000
PCTL(095.0)	.360000	2.10000	3.80000	.490000	.130000	496.000	48.0000
NUMBER	27	43	27	43	43	16	16
MAXIMUM	.360000	2.60000	4.60000	.620001	.350000	496.000	48.0000
MINIMUM	.0100000	.200000	.100000	.0100000	.0100000	1.00000	1.00000
SUM	2.82999	49.1998	52.7398	9.80999	3.03999	2141.00	336.000
MEAN	.104814	1.14418	1.95333	.228139	.0706973	133.812	21.0000
VARIANCE	.0072798	.306754	1.71595	.0190962	.0035495	19120.6	223.867
STAND DEV	.0853219	.553854	1.30994	.138189	.0595780	138.277	14.9622
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

03378000 BC 02
38 23 11.0 087 58 32.0 2
BONPAS CREEK AT BROWNS, IL
17185 ILLINOIS WABASH
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120113024 0010.410 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0400000	1.20000	.100000	.0899999	.0200000	13.0000	2.00000
PCTL(025.0)	.100000	1.20000	.300000	.140000	.0300000	33.0000	6.00000
PCTL(050.0)	.130000	1.20000	1.10000	.190000	.0500000	80.0000	10.0000
PCTL(075.0)	.230000	1.20000	2.20000	.280000	.0899999	120.000	18.0000
PCTL(085.0)	.300000	1.20000	2.50000	.380000	.140000	150.000	22.0000
PCTL(090.0)	.370000	1.20000	2.80000	.480000	.170000	175.000	24.0000
PCTL(095.0)	.420000	1.20000	4.40000	.610000	.240000	216.000	28.0000
NUMBER	146	1	146	112	112	145	145
MAXIMUM	1.00000	1.20000	8.00000	1.30000	1.10000	1145.00	152.000
MINIMUM	.0100000	1.20000	.0100000	.0400000	.0100000	2.00000	1.00000
SUM	25.4055	1.20000	206.499	27.5926	9.90596	13676.4	1955.60
MEAN	.174010	1.20000	1.41438	.246363	.0884460	94.3199	13.4869
VARIANCE	.0200925		1.87462	.0368081	.0174373	11883.1	234.758
STAND DEV	.141748		1.36917	.191854	.132050	109.009	15.3218
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

03346550 BE 01
38 39 54.0 087 37 35.0 2
EMBARRAS RIVER NEAR BILLETT, IL
17101 ILLINOIS LAWRENCE
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120112004 0001.700 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0300000		.140000	.120000	.0300000	22.0000	3.00000
PCTL(025.0)	.0899999		1.00000	.140000	.0500000	40.0000	7.00000
PCTL(050.0)	.100000		3.30000	.220000	.0799999	64.0000	10.0000
PCTL(075.0)	.130000		5.00000	.330000	.120000	150.000	18.0000
PCTL(085.0)	.180000		6.10000	.380000	.150000	220.000	28.0000
PCTL(090.0)	.260000		6.70000	.480000	.160000	350.000	32.0000
PCTL(095.0)	.350000		7.10000	.610000	.200000	480.000	44.0000
NUMBER	147		146	114	114	147	147
MAXIMUM	2.40000		10.0000	1.10000	.310000	984.000	90.0000
MINIMUM	.0100000		.0500000	.0600000	.0100000	7.00000	1.00000
SUM	22.2926		484.571	29.7926	10.7570	19286.0	2293.00
MEAN	.151651		3.31898	.261338	.0943592	131.197	15.5986
VARIANCE	.0597699		5.58812	.0281199	.0033786	24451.8	249.036
STAND DEV	.244479		2.36392	.167690	.0581259	156.371	15.7809
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

03345500 BE 07
38 56 10.0 088 01 10.0 2
EMBARRAS RIVER AT STE. MARIE, IL
17079 ILLINOIS JASPER
OHIO RIVER 051791
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120112013 0005.110 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	1.20000	.120000	.0899999	.0200000	11.0000	2.00000
PCTL(025.0)	.0600000	1.20000	1.30000	.120000	.0600000	28.0000	5.00000
PCTL(050.0)	.100000	1.20000	4.00000	.170000	.0799999	67.0000	9.00000
PCTL(075.0)	.110000	1.20000	6.80000	.250000	.120000	147.000	19.0000
PCTL(085.0)	.150000	1.20000	7.60000	.360000	.160000	225.000	27.0000
PCTL(090.0)	.180000	1.20000	8.50000	.490000	.194000	310.000	36.0000
PCTL(095.0)	.220000	1.20000	9.30000	.630000	.260000	432.000	44.0000
NUMBER	141	1	141	109	108	139	139
MAXIMUM	.750000	1.20000	13.0000	.960000	.464000	830.000	105.000
MINIMUM	.0100000	1.20000	.0100000	.0200000	.0100000	1.00000	1.00000
SUM	15.5129	1.20000	614.571	25.3167	10.9610	16621.0	2022.00
MEAN	.110021	1.20000	4.35866	.232263	.101490	119.575	14.5467
VARIANCE	.0113277		9.82172	.0338969	.0063321	21407.8	241.424
STAND DEV	.106432		3.13396	.184111	.0795742	146.314	15.5378
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

03344000 BE 09
39 20 40.0 088 10 15.0 2
EMBARRAS RIVER NEAR DIONA, IL
17035 ILLINOIS CUMBERLAND
OHIO RIVER 051791
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120112018 0019.980 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.300000	1.10000	.0899999	.0500000	5.00000	1.00000
PCTL(025.0)	.0400000	.500000	4.10000	.121000	.0699999	12.0000	2.00000
PCTL(050.0)	.100000	.700000	7.00000	.190000	.120000	34.0000	4.00000
PCTL(075.0)	.100000	.980000	8.80000	.280000	.170000	84.0000	10.0000
PCTL(085.0)	.140000	1.30000	9.90000	.350000	.240000	127.000	16.0000
PCTL(090.0)	.180000	1.60000	10.3000	.420000	.280000	202.000	20.0000
PCTL(095.0)	.240000	1.80000	11.0000	.700000	.560000	276.000	28.0000
NUMBER	146	146	145	137	141	145	145
MAXIMUM	.830000	2.70000	13.0000	1.50000	1.40000	725.000	56.0000
MINIMUM	.0100000	.100000	.310000	.0600000	.0100000	1.00000	1.00000
SUM	15.2299	123.155	936.010	33.4333	23.6235	10188.0	1198.00
MEAN	.104314	.843528	6.45524	.244039	.167543	70.2620	8.26207
VARIANCE	.0106740	.250654	10.8291	.0383138	.0339239	11229.5	106.278
STAND DEV	.103315	.500654	3.29076	.195739	.184184	105.969	10.3091
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

03343395 BE 14
39 47 59.0 088 10 13.0 2
EMBARRAS RIVER AT CAMARGO, IL
17041 ILLINOIS DOUGLAS
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120112023 0012.260 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000		.410000	.0380000	.0200000	4.00000	1.00000
PCTL(025.0)	.0300000		4.80000	.0500000	.0300000	10.0000	2.00000
PCTL(050.0)	.100000		9.20000	.0899999	.0500000	30.0000	4.00000
PCTL(075.0)	.100000		11.0000	.164000	.0899999	60.0000	9.00000
PCTL(085.0)	.100000		12.0000	.210000	.120000	80.0000	12.0000
PCTL(090.0)	.140000		13.0000	.230000	.140000	98.0000	16.0000
PCTL(095.0)	.210000		14.0000	.320000	.200000	120.000	17.0000
NUMBER	142		139	111	111	140	140
MAXIMUM	1.20000		17.0000	.790000	.490000	344.000	48.0000
MINIMUM	.0100000		.0100000	.0100000	.0100000	1.00000	1.00000
SUM	13.8999		1109.09	13.9890	8.45096	6082.00	932.000
MEAN	.0978868		7.97908	.126027	.0761347	43.4428	6.65714
VARIANCE	.0160718		19.8546	.0141008	.0058872	2359.82	54.2269
STAND DEV	.126775		4.45585	.118747	.0767278	48.5780	7.36389
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

03346000 BEF 05
39 00 37.0 087 56 47.0 2
NORTH FORK EMBARRAS RIVER NEAR OBLONG, IL
17033 ILLINOIS CRAWFORD
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120112010 0009.450 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000		.100000	.0799999	.0200000	8.00000	2.00000
PCTL(025.0)	.100000		.220000	.110000	.0300000	17.0000	3.00000
PCTL(050.0)	.100000		.970000	.150000	.0500000	35.0000	6.00000
PCTL(075.0)	.160000		1.70000	.210000	.0799999	82.0000	11.0000
PCTL(085.0)	.200000		2.00000	.270000	.120000	130.000	16.0000
PCTL(090.0)	.270000		2.60000	.440000	.130000	175.000	22.0000
PCTL(095.0)	.380000		2.80000	.560000	.230000	313.000	32.0000
NUMBER	145		146	114	114	146	146
MAXIMUM	.700000		3.70000	.890000	.367000	865.000	82.0000
MINIMUM	.0100000		.0100000	.0400000	.0100000	1.00000	1.00000
SUM	19.3867		160.979	22.3727	8.16996	11300.0	1441.00
MEAN	.133702		1.10260	.196252	.0716662	77.3972	9.86986
VARIANCE	.0113158		.847145	.0229627	.0039936	13506.3	139.700
STAND DEV	.106376		.920405	.151535	.0631945	116.217	11.8195
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

03342050 BF 01
39 00 16.0 087 35 50.0 2
SUGAR CREEK AT PALESTINE, IL
17033 ILLINOIS CRAWFORD
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120111011 0006.500 OFF
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0300000		2.20000	.410000	.330000	4.00000	1.00000
PCTL(025.0)	.100000		3.60000	.660000	.550000	6.00000	2.00000
PCTL(050.0)	.130000		6.20000	.930000	.830000	13.0000	3.00000
PCTL(075.0)	.270000		9.00000	1.30000	1.20000	32.0000	6.00000
PCTL(085.0)	.450000		10.0000	1.80000	1.70000	51.0000	9.00000
PCTL(090.0)	.670000		12.6000	2.10000	1.90000	86.0000	14.0000
PCTL(095.0)	1.20000		14.0000	2.60000	2.50000	217.000	32.0000
NUMBER	147		147	115	109	147	144
MAXIMUM	13.0000		21.0000	5.60000	5.50000	1170.00	90.0000
MINIMUM	.0100000		.0100000	.0799999	.100000	1.00000	1.00000
SUM	67.8890		983.339	130.117	109.229	7628.00	1027.00
MEAN	.461830		6.68938	1.13145	1.00210	51.8911	7.13194
VARIANCE	2.13758		14.6283	.575765	.546160	22261.4	160.968
STAND DEV	1.46205		3.82470	.758792	.739027	149.202	12.6873
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

03341540 BM 02
39 29 53.0 087 33 11.0 2
SUGAR CREEK NEAR ELBRIDGE, IL
17045 ILLINOIS EDGAR
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120111025 0009.890 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000		1.50000	.0899999	.0600000	2.00000	1.00000
PCTL(025.0)	.0600000		2.20000	.140000	.0899999	4.00000	1.00000
PCTL(050.0)	.100000		3.00000	.200000	.130000	12.0000	2.00000
PCTL(075.0)	.140000		4.00000	.280000	.210000	33.0000	5.00000
PCTL(085.0)	.180000		4.60000	.370000	.270000	50.0000	8.00000
PCTL(090.0)	.250000		4.80000	.420000	.350000	94.0000	15.0000
PCTL(095.0)	.310000		5.60000	.620000	.580000	180.000	25.0000
NUMBER	144		145	112	113	143	143
MAXIMUM	1.60000		7.70000	4.10000	3.90000	1010.00	104.000
MINIMUM	.0100000		.0100000	.0100000	.0100000	1.00000	1.00000
SUM	18.8897		451.354	30.9745	23.6755	8084.00	994.000
MEAN	.131179		3.11279	.276558	.209517	56.5314	6.95105
VARIANCE	.0280956		1.73375	.166716	.144056	24790.7	213.314
STAND DEV	.167618		1.31672	.408309	.379547	157.451	14.6053
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

03341414 BN 01
39 40 53.0 087 31 16.0 2
BROUILLETTS CREEK NEAR ST. BERNICE, IN
18165 INDIANA VERMILLION
OHIO RIVER 051791
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120111024 0014.200 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000		.450000	.0200000	.0100000	2.00000	1.00000
PCTL(025.0)	.0300000		3.10000	.0300000	.0100000	6.00000	1.00000
PCTL(050.0)	.100000		6.80000	.0500000	.0300000	17.0000	2.00000
PCTL(075.0)	.100000		8.70000	.130000	.0699999	40.0000	5.00000
PCTL(085.0)	.110000		9.50000	.200000	.0899999	76.0000	11.0000
PCTL(090.0)	.140000		10.2000	.250000	.120000	125.000	15.0000
PCTL(095.0)	.170000		12.0000	.380000	.150000	194.000	27.0000
NUMBER	144		145	112	113	144	144
MAXIMUM	.770000		14.0000	1.00000	.537000	1048.00	146.000
MINIMUM	.0100000		.0100000	.0100000	.0100000	1.00000	1.00000
SUM	12.6999		882.881	12.6820	5.84295	7941.00	1163.00
MEAN	.0881939		6.08883	.113232	.0517075	55.1458	8.07639
VARIANCE	.0073517		13.5410	.0260546	.0042879	20496.9	382.001
STAND DEV	.0857422		3.67982	.161414	.0654819	143.167	19.5448
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

03339147 BO 07
39 56 29.0 087 33 05.0 2
LITTLE VERMILION RIVER NEAR GEORGETOWN, IL
17183 ILLINOIS VERMILION
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120108023 0018.680 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	1.70000	.570000	.0300000	.0200000	3.00000	1.00000
PCTL(025.0)	.0200000	1.70000	4.40000	.0600000	.0300000	6.00000	1.00000
PCTL(050.0)	.100000	1.70000	7.50000	.110000	.0699999	18.0000	3.00000
PCTL(075.0)	.100000	1.70000	10.0000	.160000	.110000	36.0000	6.00000
PCTL(085.0)	.150000	1.70000	11.0000	.200000	.150000	58.0000	8.00000
PCTL(090.0)	.180000	1.70000	12.3000	.310000	.180000	79.0000	12.0000
PCTL(095.0)	.420000	1.70000	13.0000	.540000	.220000	126.000	17.0000
NUMBER	148	1	148	116	114	145	143
MAXIMUM	1.70000	1.70000	18.0000	1.50000	1.30000	1055.00	95.0000
MINIMUM	.0100000	1.70000	.0100000	.0100000	.0100000	1.00000	1.00000
SUM	18.4898	1.70000	1071.13	18.5019	10.6250	6434.00	893.000
MEAN	.124931	1.70000	7.23736	.159499	.0932013	44.3724	6.24475
VARIANCE	.0444548		16.1717	.0456113	.0179341	13639.6	144.468
STAND DEV	.210843		4.02140	.213568	.133918	116.789	12.0195
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

03339000 BP 01
40 06 03.0 087 35 52.0 2
VERMILION RIVER NEAR DANVILLE, IL
17183 ILLINOIS VERMILION
OHIO RIVER 051791
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120109001 0016.060 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.400000	2.80000	.160000	.110000	4.00000	1.00000
PCTL(025.0)	.0699999	.520000	4.50000	.210000	.150000	13.0000	2.00000
PCTL(050.0)	.100000	.800000	6.90000	.310000	.210000	31.0000	5.00000
PCTL(075.0)	.180000	1.20000	9.10000	.590000	.480000	74.0000	12.0000
PCTL(085.0)	.310000	1.50000	10.0000	.950000	.800000	127.000	15.0000
PCTL(090.0)	.490000	1.80000	11.0000	1.10000	1.00000	166.000	22.0000
PCTL(095.0)	1.00000	2.60000	12.0000	1.50000	1.40000	245.000	46.0000
NUMBER	149	138	149	140	138	147	147
MAXIMUM	5.60000	7.70000	16.0000	2.30000	2.00000	1615.00	135.000
MINIMUM	.0100000	.100000	.100000	.0400000	.0200000	2.00000	1.00000
SUM	35.6791	144.219	1024.16	69.8593	54.9634	12094.0	1575.00
MEAN	.239457	1.04507	6.87355	.498995	.398285	82.2721	10.7143
VARIANCE	.318387	1.02430	10.1496	.197561	.167148	32069.2	329.137
STAND DEV	.564258	1.01208	3.18585	.444478	.408837	179.079	18.1421
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

03338780 BPG 09
40 16 13.0 087 38 34.0 2
NORTH FORK VERMILION RIVER NEAR BISMARCK, IL
17183 ILLINOIS VERMILION
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120109002 0011.300 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.200000	1.10000	.0300000	.0200000	3.00000	1.00000
PCTL(025.0)	.0400000	.400000	3.10000	.0500000	.0300000	8.00000	2.00000
PCTL(050.0)	.100000	.520000	7.10000	.0799999	.0500000	19.0000	3.00000
PCTL(075.0)	.100000	.900000	9.60000	.130000	.0799999	40.0000	6.00000
PCTL(085.0)	.120000	1.20000	11.0000	.160000	.100000	54.0000	8.00000
PCTL(090.0)	.150000	1.50000	12.0000	.210000	.120000	80.0000	13.0000
PCTL(095.0)	.200000	2.20000	13.7000	.260000	.190000	156.000	26.0000
NUMBER	143	141	143	112	139	140	140
MAXIMUM	.500000	10.0000	16.0000	2.20000	1.90000	304.000	60.0000
MINIMUM	.0100000	.100000	.100000	.0200000	.0100000	1.00000	1.00000
SUM	13.2099	114.323	959.144	13.5950	10.8879	4975.00	847.000
MEAN	.0923770	.810803	6.70730	.121383	.0783305	35.5357	6.05000
VARIANCE	.0054912	1.02854	17.1477	.0456263	.0273554	2747.07	76.1630
STAND DEV	.0741029	1.01417	4.14098	.213603	.165395	52.4125	8.72714
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

03338097 BPJ 03
40 04 56.0 087 46 53.0 2
SALT FORK NEAR OAKWOOD, IL
17183 ILLINOIS VERMILION
OHIO RIVER 051791
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120109009 0004.390 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.700000	3.40000	.230000	.150000	4.00000	1.00000
PCTL(025.0)	.0300000	.700000	5.60000	.290000	.220000	7.00000	2.00000
PCTL(050.0)	.100000	.700000	7.80000	.500000	.440000	17.0000	3.00000
PCTL(075.0)	.100000	.700000	10.0000	1.20000	1.20000	61.0000	8.00000
PCTL(085.0)	.120000	.700000	11.0000	1.80000	1.70000	108.000	12.0000
PCTL(090.0)	.150000	.700000	12.0000	2.20000	2.10000	132.000	15.0000
PCTL(095.0)	.210000	.700000	12.0000	2.70000	2.60000	178.000	22.0000
NUMBER	144	1	142	113	115	140	140
MAXIMUM	5.80000	.700000	18.0000	3.10000	2.90000	900.000	110.000
MINIMUM	.0100000	.700000	.160000	.130000	.0600000	1.00000	1.00000
SUM	22.4792	.700000	1123.51	97.7633	89.5623	7544.00	1092.00
MEAN	.156106	.700000	7.91205	.865162	.778803	53.8857	7.80000
VARIANCE	.299012		10.2563	.646630	.603215	9859.63	208.938
STAND DEV	.546820		3.20255	.804133	.776669	99.2957	14.4547
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

03336900 BPJ 07
40 08 55.0 088 02 00.0 2
SALT FORK NEAR ST. JOSEPH, IL
17019 ILLINOIS CHAMPAIGN
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120109012 0002.440 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.600000	1.31000	.110000	.0699999	4.00000	1.00000
PCTL(025.0)	.0400000	.600000	3.80000	.160000	.100000	8.00000	1.00000
PCTL(050.0)	.100000	.600000	7.20000	.270000	.200000	23.0000	4.00000
PCTL(075.0)	.100000	.600000	9.70000	.500000	.390000	47.0000	7.00000
PCTL(085.0)	.160000	.600000	10.3000	.700000	.590000	70.0000	9.00000
PCTL(090.0)	.190000	.600000	11.0000	.860000	.740000	80.0000	12.0000
PCTL(095.0)	.330000	.600000	13.0000	1.30000	1.30000	160.000	20.0000
NUMBER	144	1	144	141	142	142	142
MAXIMUM	1.10000	.600000	20.0000	2.80000	2.60000	1105.00	95.0000
MINIMUM	.0100000	.600000	.0400000	.0669999	.0400000	1.00000	1.00000
SUM	16.6298	.600000	994.761	58.5992	48.5933	7025.00	941.000
MEAN	.115485	.600000	6.90806	.415597	.342206	49.4718	6.62676
VARIANCE	.0187812		15.2451	.188636	.165731	12593.3	138.647
STAND DEV	.137044		3.90450	.434323	.407101	112.220	11.7748
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

03337700 BPJC06
40 07 59.0 088 06 15.0 2
SALINE BRANCH NEAR MAYVIEW, IL
17019 ILLINOIS CHAMPAIGN
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120109013 0004.260 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000		5.10000	.420000	.330000	2.00000	1.00000
PCTL(025.0)	.0600000		8.10000	.810000	.760000	4.00000	1.00000
PCTL(050.0)	.100000		9.80000	1.90000	1.80000	11.0000	3.00000
PCTL(075.0)	.370000		12.0000	3.50000	3.30000	37.0000	6.00000
PCTL(085.0)	.980000		13.0000	4.80000	4.20000	63.0000	8.00000
PCTL(090.0)	2.00000		13.0000	5.20000	5.10000	88.0000	11.0000
PCTL(095.0)	6.20000		14.0000	6.30000	5.90000	164.000	22.0000
NUMBER	146		140	112	113	145	143
MAXIMUM	17.0000		19.0000	8.30000	8.20000	575.000	65.0000
MINIMUM	.0100000		.100000	.0280000	.0200000	1.00000	1.00000
SUM	126.859		1354.61	272.554	255.329	5572.00	871.000
MEAN	.868896		9.67582	2.43351	2.25955	38.4275	6.09091
VARIANCE	5.54245		11.7881	3.66588	3.32702	5792.13	104.576
STAND DEV	2.35424		3.43338	1.91465	1.82401	76.1060	10.2262
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

03336645 BPK 07
40 08 12.0 087 44 45.0 2
MIDDLE FORK VERMILION RIVER ABOVE OAKWOOD, IL
17183 ILLINOIS VERMILION
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120109006 0002.700 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.200000	.100000	.0200000	.0100000	4.00000	1.00000
PCTL(025.0)	.0300000	.400000	3.00000	.0300000	.0100000	7.00000	2.00000
PCTL(050.0)	.100000	.550000	6.80000	.0500000	.0300000	20.0000	3.00000
PCTL(075.0)	.100000	.800000	9.00000	.100000	.0679999	49.0000	7.00000
PCTL(085.0)	.100000	1.10000	10.00000	.170000	.0899999	110.000	10.0000
PCTL(090.0)	.110000	1.70000	11.0000	.220000	.100000	146.000	16.0000
PCTL(095.0)	.170000	2.30000	12.0000	.420000	.160000	280.000	32.0000
NUMBER	143	142	143	112	140	140	140
MAXIMUM	.570000	7.90000	17.0000	1.02000	.380000	1930.00	240.000
MINIMUM	.0100000	.100000	.0100000	.0100000	.0010000	2.00000	1.00000
SUM	12.5799	120.831	889.530	10.9959	6.82894	11279.0	1406.00
MEAN	.0879715	.850923	6.22049	.0981780	.0487781	80.5640	10.0428
VARIANCE	.0058527	1.16516	16.4132	.0204013	.0031331	55306.8	806.629
STAND DEV	.0765027	1.07943	4.05133	.142833	.0559741	235.174	28.4012
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

03379600 C 09
38 31 08.0 088 07 55.0 2
LITTLE WABASH RIVER AT BLOOD, IL
17047 ILLINOIS EDWARDS
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120114003 0014.210 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0300000	.500000	.100000	.110000	.0200000	18.0000	4.00000
PCTL(025.0)	.100000	.500000	.250000	.150000	.0300000	43.0000	7.00000
PCTL(050.0)	.100000	1.20000	.820000	.240000	.0699999	73.0000	12.0000
PCTL(075.0)	.230000	1.60000	1.30000	.360000	.140000	125.000	18.0000
PCTL(085.0)	.320000	1.60000	1.70000	.440000	.200000	160.000	24.0000
PCTL(090.0)	.370000	1.60000	2.10000	.520000	.230000	202.000	25.0000
PCTL(095.0)	.420000	1.60000	2.50000	.680000	.270000	260.000	31.0000
NUMBER	148	3	148	114	114	147	147
MAXIMUM	.950000	1.60000	4.40000	.880000	.400000	664.000	175.000
MINIMUM	.0100000	.500000	.0100000	.0600000	.0100000	4.00000	1.00000
SUM	25.2096	3.30000	138.789	32.9236	10.8080	14378.0	2245.00
MEAN	.170335	1.10000	.937764	.288803	.0948066	97.8095	15.2721
VARIANCE	.0234282	.310000	.647714	.0307888	.0071822	8257.41	300.720
STAND DEV	.153063	.556777	.804807	.175467	.0847479	90.8703	17.3413
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

03378900 C 19
38 46 23.0 088 29 50.0 2
LITTLE WABASH RIVER AT LOUISVILLE, IL
17025 ILLINOIS CLAY
OHIO RIVER 051791
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120114007 0018.070 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0300000	.800000	.100000	.120000	.0200000	14.0000	2.00000
PCTL(025.0)	.100000	.800000	.180000	.160000	.0400000	29.0000	5.00000
PCTL(050.0)	.100000	1.00000	1.07000	.220000	.0799999	56.0000	9.00000
PCTL(075.0)	.200000	1.20000	1.60000	.430000	.170000	120.000	16.0000
PCTL(085.0)	.250000	1.20000	1.90000	.530000	.210000	190.000	24.0000
PCTL(090.0)	.290000	1.20000	2.10000	.570000	.250000	236.000	30.0000
PCTL(095.0)	.370000	1.20000	2.30000	.710000	.360000	308.000	40.0000
NUMBER	146	3	147	114	114	147	147
MAXIMUM	.960000	1.20000	4.30000	.840000	.570000	3180.00	330.000
MINIMUM	.0100000	.800000	.0100000	.0400000	.0100000	1.00000	1.00000
SUM	22.8396	3.00000	154.279	33.7476	13.1820	17324.0	2242.00
MEAN	.156435	1.00000	1.04952	.296032	.115631	117.850	15.2517
VARIANCE	.0207863	.0400009	.677653	.0345946	.0118742	80080.3	874.668
STAND DEV	.144174	.200002	.823197	.185996	.108969	282.985	29.5748
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

03378635 C 21
39 06 13.0 088 35 33.0 2
LITTLE WABASH RIVER NEAR EFFINGHAM, IL
17049 ILLINOIS EFFINGHAM
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120114012 0012.150 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0300000	.400000	.100000	.0699999	.0300000	6.00000	2.00000
PCTL(025.0)	.100000	.400000	.200000	.110000	.0400000	15.0000	3.00000
PCTL(050.0)	.100000	.500000	1.30000	.160000	.0699999	29.0000	5.00000
PCTL(075.0)	.170000	.900000	2.50000	.250000	.130000	60.0000	10.0000
PCTL(085.0)	.230000	2.30000	3.00000	.340000	.160000	103.000	16.0000
PCTL(090.0)	.290000	2.30000	3.10000	.500000	.210000	192.000	24.0000
PCTL(095.0)	.440000	2.30000	3.80000	.610000	.320000	324.000	32.0000
NUMBER	144	4	145	114	113	143	143
MAXIMUM	1.60000	2.30000	6.60000	.910000	.440000	1010.00	146.000
MINIMUM	.0100000	.400000	.0100000	.0600000	.0100000	1.00000	1.00000
SUM	22.5796	4.10000	223.849	25.3686	11.5610	11307.0	1475.00
MEAN	.156803	1.02500	1.54379	.222531	.102309	79.0699	10.3147
VARIANCE	.0313818	.769166	1.65320	.0308029	.0078509	24709.4	275.457
STAND DEV	.177149	.877021	1.28577	.175507	.0886054	157.192	16.5969

96/09/30

1STORET RETRIEVAL DATE 99/01/19

03379500 C 22
38 38 05.0 088 17 50.0 2
LITTLE WABASH RIVER BELOW CLAY CITY, IL
17025 ILLINOIS CLAY
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120114005 0012.370 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	.500000	.100000	.100000	.0200000	18.0000	3.00000
PCTL(025.0)	.100000	.500000	.280000	.150000	.0300000	46.0000	7.00000
PCTL(050.0)	.100000	1.10000	.820000	.210000	.0500000	78.0000	12.0000
PCTL(075.0)	.210000	1.20000	1.50000	.360000	.130000	131.000	18.0000
PCTL(085.0)	.320000	1.20000	1.70000	.460000	.210000	177.000	24.0000
PCTL(090.0)	.380000	1.20000	2.00000	.540000	.230000	210.000	30.0000
PCTL(095.0)	.480000	1.20000	2.30000	.704000	.260000	310.000	35.0000
NUMBER	147	3	147	114	114	147	147
MAXIMUM	1.20000	1.20000	4.20000	1.08200	.360000	810.000	265.000
MINIMUM	.0100000	.500000	.0100000	.0400000	.0100000	2.00000	1.00000
SUM	26.4496	2.80000	142.089	32.3976	10.4130	15836.0	2421.00
MEAN	.179929	.933333	.966592	.284189	.0913417	107.728	16.4694
VARIANCE	.0342095	.143333	.618841	.0368263	.0072100	11653.8	729.087
STAND DEV	.184958	.378593	.786664	.191902	.0849120	107.953	27.0016

96/09/30

1STORET RETRIEVAL DATE 99/01/19

03381495 C 23
38 05 32.0 088 09 22.0 2
LITTLE WABASH R AT MAIN ST AT CARMI, IL
17193 ILLINOIS WHITE
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120114001 0024.980 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0400000	.800000	.190000	.0899999	.0200000	17.0000	2.00000
PCTL(025.0)	.100000	.953000	.360000	.130000	.0300000	38.0000	6.00000
PCTL(050.0)	.140000	1.20000	.680000	.210000	.0699999	64.0000	9.00000
PCTL(075.0)	.230000	1.50000	1.30000	.290000	.110000	110.000	14.0000
PCTL(085.0)	.290000	1.80000	1.65000	.370000	.150000	164.000	20.0000
PCTL(090.0)	.360000	1.90000	1.80000	.430000	.170000	180.000	24.0000
PCTL(095.0)	.420000	2.00000	2.00000	.510000	.200000	255.000	30.0000
NUMBER	130	148	124	148	145	150	150
MAXIMUM	.970001	3.50000	3.20000	1.60000	.740000	500.000	50.0000
MINIMUM	.0100000	.270000	.0100000	.0400000	.0010000	1.00000	1.00000
SUM	23.1976	190.372	111.949	36.5234	12.7899	13410.0	1768.60
MEAN	.178443	1.28630	.902816	.246780	.0882065	89.3999	11.7906
VARIANCE	.0186895	.249079	.453229	.0346342	.0081261	6567.38	82.0281
STAND DEV	.136709	.499078	.673223	.186103	.0901449	81.0394	9.05694

96/09/30

1STORET RETRIEVAL DATE 99/01/19

03381400 CA 03
38 09 12.0 088 09 55.0 2
SKILLET FORK NEAR CARMI, IL
17193 ILLINOIS WHITE
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120115001 0002.810 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0300000	1.10000	.0799999	.0899999	.0100000	23.0000	4.00000
PCTL(025.0)	.100000	1.10000	.110000	.120000	.0300000	40.0000	6.00000
PCTL(050.0)	.120000	1.20000	.560000	.180000	.0400000	74.0000	11.0000
PCTL(075.0)	.190000	1.60000	1.15000	.270000	.0699999	116.000	18.0000
PCTL(085.0)	.290000	1.60000	1.40000	.340000	.110000	166.000	22.0000
PCTL(090.0)	.400000	1.60000	1.60000	.490000	.140000	188.000	26.0000
PCTL(095.0)	.520000	1.60000	1.90000	.670000	.190000	324.000	48.0000
NUMBER	146	3	146	114	114	144	144
MAXIMUM	.980000	1.60000	5.50000	1.40000	.780000	1565.00	120.000
MINIMUM	.0100000	1.10000	.0100000	.0200000	.0010000	1.00000	1.00000
SUM	25.6835	3.90000	105.679	27.9037	8.24896	17041.0	2284.00
MEAN	.175914	1.30000	.723829	.244769	.0723592	118.340	15.8611
VARIANCE	.0266421	.0700001	.527562	.0465149	.0101367	40889.4	354.750
STAND DEV	.163224	.264575	.726335	.215673	.100681	202.211	18.8348
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

03380500 CA 05
38 21 25.0 088 35 00.0 2
SKILLET FORK AT WAYNE CITY, IL
17191 ILLINOIS WAYNE
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120115001 0032.140 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	.900000	.0300000	.0500000	.0100000	14.0000	2.00000
PCTL(025.0)	.100000	.900000	.100000	.0699999	.0100000	20.0000	4.00000
PCTL(050.0)	.100000	1.10000	.410000	.120000	.0200000	39.0000	7.00000
PCTL(075.0)	.190000	1.40000	.800000	.180000	.0500000	66.0000	11.0000
PCTL(085.0)	.230000	1.40000	.990000	.230000	.0699999	94.0000	14.0000
PCTL(090.0)	.270000	1.40000	1.15000	.280000	.100000	116.000	18.0000
PCTL(095.0)	.450000	1.40000	1.60000	.390000	.140000	183.000	28.0000
NUMBER	148	3	148	114	114	147	147
MAXIMUM	.900000	1.40000	3.80000	.720000	.250000	430.000	68.0000
MINIMUM	.0100000	.900000	.0100000	.0200000	.0010000	3.00000	1.00000
SUM	23.3995	3.40000	82.9391	17.0479	4.76496	8767.99	1377.00
MEAN	.158105	1.13333	.560399	.149543	.0417979	59.6462	9.36734
VARIANCE	.0232255	.0633349	.342305	.0136980	.0024935	4879.51	73.5215
STAND DEV	.152399	.251664	.585068	.117038	.0499347	69.8535	8.57447
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

03380350 CA 06
38 31 10.0 088 43 39.0 2
SKILLET FORK NEAR IUKA, IL
17121 ILLINOIS MARION
OHIO RIVER 051791
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120115004 0005.870 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0300000	.800000	.100000	.0799999	.0200000	14.0000	3.00000
PCTL(025.0)	.100000	.800000	.100000	.100000	.0200000	25.0000	4.00000
PCTL(050.0)	.100000	.900000	.320000	.140000	.0400000	38.0000	7.00000
PCTL(075.0)	.150000	1.10000	.620000	.200000	.0799999	67.0000	12.0000
PCTL(085.0)	.210000	1.10000	.860000	.279000	.106000	95.0000	16.0000
PCTL(090.0)	.290000	1.10000	.970000	.332000	.120000	130.000	18.0000
PCTL(095.0)	.440000	1.10000	1.00000	.430000	.140000	205.000	24.0000
NUMBER	149	3	149	115	115	149	149
MAXIMUM	1.70000	1.10000	2.50000	.660000	.370000	600.000	115.000
MINIMUM	.0100000	.800000	.0100000	.0500000	.0100000	4.00000	1.00000
SUM	22.5197	2.80000	63.4812	20.1108	6.44697	9152.00	1467.00
MEAN	.151139	.933333	.426048	.174876	.0560606	61.4228	9.84563
VARIANCE	.0338387	.0233340	.141321	.0138071	.0029655	5070.98	123.442
STAND DEV	.183953	.152755	.375927	.117504	.0544564	71.2108	11.1105
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

03379950 CD 01
38 26 28.0 088 15 29.0 2
ELM RIVER NEAR TOMS PRAIRIE, IL
17191 ILLINOIS WAYNE
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120114023 0003.090 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0300000	.900000	.0600000	.0899999	.0200000	15.0000	3.00000
PCTL(025.0)	.0899999	.900000	.100000	.140000	.0340000	29.0000	5.00000
PCTL(050.0)	.100000	.900000	.370000	.200000	.0600000	49.0000	8.00000
PCTL(075.0)	.150000	1.30000	.920000	.310000	.110000	90.0000	14.0000
PCTL(085.0)	.260000	1.30000	1.20000	.350000	.140000	114.000	18.0000
PCTL(090.0)	.340000	1.30000	1.60000	.420000	.180000	127.000	22.0000
PCTL(095.0)	.470000	1.30000	2.10000	.586000	.220000	173.000	26.0000
NUMBER	147	3	147	115	114	146	146
MAXIMUM	1.20000	1.30000	3.80000	.660000	.440000	1072.00	120.000
MINIMUM	.0100000	.900000	.0100000	.0500000	.0100000	1.00000	1.00000
SUM	23.0145	3.10000	92.8491	27.0726	9.45496	10784.6	1712.20
MEAN	.156561	1.03333	.631627	.235414	.0829381	73.8671	11.7274
VARIANCE	.0299326	.0533333	.483791	.0187795	.0055708	10374.5	200.124
STAND DEV	.173010	.230940	.695551	.137038	.0746380	101.855	14.1465
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05587060 D 01
39 09 37.0 090 36 55.0 2
ILLINOIS RIVER AT HARDIN, IL
17013 ILLINOIS CALHOUN
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130011
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	.760000	2.00000	.190000	.0899999	32.0000	5.00000
PCTL(025.0)	.100000	.870000	2.90000	.240000	.120000	62.0000	8.00000
PCTL(050.0)	.110000	.930000	4.20000	.280000	.140000	94.0000	12.0000
PCTL(075.0)	.240000	1.42000	5.20000	.350000	.180000	190.000	20.0000
PCTL(085.0)	.340000	1.50000	5.70000	.390000	.200000	252.000	24.0000
PCTL(090.0)	.490000	1.60000	6.20000	.450000	.210000	292.000	34.0000
PCTL(095.0)	.700000	1.80000	6.90000	.500000	.220000	402.000	52.0000
NUMBER	151	14	151	121	121	150	150
MAXIMUM	1.60000	1.80000	9.00000	1.30000	.510000	1315.00	186.000
MINIMUM	.0100000	.760000	.660000	.100000	.0100000	6.00000	1.00000
SUM	30.5394	16.1400	623.662	38.1704	18.2138	22306.6	2616.40
MEAN	.202248	1.15286	4.13021	.315458	.150527	148.711	17.4427
VARIANCE	.0518332	.115883	2.66474	.0267708	.0033666	27316.7	406.855
STAND DEV	.227669	.340417	1.63240	.163618	.0580221	165.278	20.1707
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05563800 D 05
40 34 23.0 089 39 17.0 2
ILLINOIS RIVER AT PEKIN
17179 ILLINOIS TAZEWELL
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130003018 0003.810 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0699999	.900000	1.70000	.226000	.110000	39.0000	5.00000
PCTL(025.0)	.100000	1.20000	2.90000	.280000	.150000	59.0000	8.00000
PCTL(050.0)	.200000	1.50000	4.30000	.350000	.190000	86.0000	12.0000
PCTL(075.0)	.400000	1.80000	5.40000	.420000	.240000	123.000	18.0000
PCTL(085.0)	.460000	2.10000	6.10000	.480000	.270000	166.000	21.0000
PCTL(090.0)	.650000	2.20000	6.50000	.530000	.300000	182.000	24.0000
PCTL(095.0)	1.00000	2.70000	7.30000	.590000	.380000	229.000	31.0000
NUMBER	155	154	154	154	140	155	144
MAXIMUM	1.70000	27.4000	9.20000	.870000	.720000	527.000	93.0000
MINIMUM	.0100000	.100000	.0100000	.0500000	.0200000	9.00000	1.00000
SUM	47.0392	267.527	653.250	55.3522	28.7335	16100.0	2076.00
MEAN	.303479	1.73719	4.24189	.359430	.205239	103.871	14.4167
VARIANCE	.0864763	4.65465	3.38633	.0152356	.0091861	5601.96	112.888
STAND DEV	.294069	2.15746	1.84020	.123433	.0958440	74.8462	10.6249
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05558995 D 09
41 01 30.0 089 25 02.0 2
ILLINOIS RIVER AT LACON
17123 ILLINOIS MARSHALL
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130001018 0007.610 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0600000	.700000	2.50000	.210000	.120000	29.0000	6.00000
PCTL(025.0)	.120000	1.30000	3.10000	.260000	.160000	41.0000	9.00000
PCTL(050.0)	.220000	1.40000	4.50000	.330000	.200000	56.0000	11.0000
PCTL(075.0)	.420000	1.70000	5.90000	.400000	.250000	76.0000	14.0000
PCTL(085.0)	.670000	1.70000	6.50000	.414000	.290000	91.0000	18.0000
PCTL(090.0)	.930000	1.70000	7.10000	.451000	.310000	110.000	21.0000
PCTL(095.0)	1.00000	1.70000	7.70000	.520000	.390000	130.000	24.0000
NUMBER	135	11	135	111	109	135	124
MAXIMUM	1.80000	1.70000	9.20000	.830000	.610000	190.000	28.0000
MINIMUM	.0100000	.700000	.300000	.120000	.0709999	8.00000	1.00000
SUM	46.3392	15.3000	622.253	37.3645	23.3407	8428.00	1538.00
MEAN	.343254	1.39091	4.60928	.336617	.214135	62.4296	12.4032
VARIANCE	.107160	.110908	3.18780	.0129248	.0074166	1055.56	30.0312
STAND DEV	.327353	.333029	1.78544	.113687	.0861195	32.4894	5.48008
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05556200 D 16
41 15 27.0 089 20 49.0 4
ILLINOIS RIVER AT HENNEPIN
17155 ILLINOIS PUTNAM
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130001025 0006.240 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0600000	.600000	2.50000	.210000	.140000	20.0000	5.00000
PCTL(025.0)	.110000	1.10000	3.40000	.260000	.180000	30.0000	8.00000
PCTL(050.0)	.220000	1.20000	4.70000	.320000	.220000	38.0000	10.0000
PCTL(075.0)	.570000	1.60000	5.80000	.390000	.290000	56.0000	13.0000
PCTL(085.0)	.850000	1.60000	6.60000	.450000	.330000	74.0000	15.0000
PCTL(090.0)	.990000	1.60000	7.00000	.490000	.370000	95.0000	21.0000
PCTL(095.0)	1.10000	1.70000	8.00000	.600000	.430000	150.000	24.0000
NUMBER	137	11	137	113	111	136	125
MAXIMUM	1.80000	1.70000	10.0000	.810000	.630000	440.000	68.0000
MINIMUM	.0100000	.600000	1.63000	.130000	.0799999	5.00000	1.00000
SUM	51.7592	14.0000	648.442	38.7466	26.4907	7101.00	1431.00
MEAN	.377804	1.27273	4.73315	.342890	.238655	52.2132	11.4480
VARIANCE	.129334	.0941802	2.89940	.0142811	.0099710	2565.82	56.8138
STAND DEV	.359631	.306888	1.70276	.119504	.0998550	50.6539	7.53749
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05543500 D 23
41 19 40.0 088 43 10.0 2
ILLINOIS RIVER AT MARSEILLES, IL
17099 ILLINOIS LA SALLE
UPPER MISSISSIPPI RIVER 071791
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07120005001 0005.420 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.100000	1.00000	2.60000	.280000	.160000	10.0000	2.00000
PCTL(025.0)	.210000	1.20000	3.20000	.340000	.220000	19.0000	5.00000
PCTL(050.0)	.400000	1.50000	4.20000	.410000	.290000	28.0000	7.00000
PCTL(075.0)	.860000	2.00000	5.30000	.490000	.370000	54.0000	12.0000
PCTL(085.0)	1.40000	2.30000	5.90000	.560000	.430000	80.0000	16.0000
PCTL(090.0)	1.50000	2.40000	6.20000	.620000	.504000	96.0000	17.0000
PCTL(095.0)	1.80000	3.00000	6.90000	.670000	.580000	122.000	22.0000
NUMBER	164	181	161	181	171	175	175
MAXIMUM	3.20000	5.20000	8.30000	.970000	.950000	416.000	80.0000
MINIMUM	.0100000	.100000	.340000	.170000	.0899999	1.00000	1.00000
SUM	101.569	301.516	698.261	78.2589	53.6212	7651.59	1632.80
MEAN	.619323	1.66584	4.33702	.432369	.313574	43.7234	9.33028
VARIANCE	.321864	.452660	2.15381	.0175235	.0193652	2252.77	84.1227
STAND DEV	.567330	.672800	1.46759	.132376	.139159	47.4633	9.17185
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05559900 D 30
40 43 30.0 089 32 58.0 2
ILLINOIS RIVER AT WATER COMPANY AT PEORIA, IL
17143 ILLINOIS PEORIA
UPPER MISSISSIPPI RIVER 071790
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130001
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0699999	.980000	2.00000	.210000	.120000	27.0000	4.00000
PCTL(025.0)	.100000	1.20000	3.00000	.260000	.140000	45.0000	6.00000
PCTL(050.0)	.180000	1.50000	4.40000	.320000	.170000	64.0000	10.0000
PCTL(075.0)	.410000	1.80000	5.70000	.390000	.230000	86.0000	13.0000
PCTL(085.0)	.600000	1.90000	6.40000	.430000	.250000	106.000	20.0000
PCTL(090.0)	.700000	2.10000	7.00000	.480000	.277000	133.000	22.0000
PCTL(095.0)	.940000	2.50000	7.40000	.550000	.320000	180.000	30.0000
NUMBER	151	150	153	152	150	152	141
MAXIMUM	1.40000	9.80000	9.80000	.860000	.530000	427.000	68.0000
MINIMUM	.0100000	.400000	.300000	.100000	.0400000	8.00000	1.00000
SUM	44.7191	234.966	683.240	51.2532	27.8886	11417.8	1667.40
MEAN	.296153	1.56644	4.46562	.337192	.185924	75.1170	11.8255
VARIANCE	.0832118	.689483	3.56447	.0150688	.0048856	3152.65	91.1519
STAND DEV	.288465	.830351	1.88798	.122755	.0698968	56.1484	9.54735
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05570520 D 31
40 16 49.0 090 04 53.0 2
ILLINOIS RIVER AT POWER COMPANY AT HAVANA, IL
17125 ILLINOIS MASON
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130003005 0007.380 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0699999		2.00000	.210000	.120000	35.0000	5.00000
PCTL(025.0)	.100000		2.70000	.270000	.140000	58.0000	8.00000
PCTL(050.0)	.190000		4.20000	.320000	.160000	98.0000	13.0000
PCTL(075.0)	.400000		5.60000	.386000	.210000	138.000	18.0000
PCTL(085.0)	.550000		6.30000	.440000	.240000	171.000	24.0000
PCTL(090.0)	.700000		6.70000	.490000	.250000	194.000	28.0000
PCTL(095.0)	.820000		7.00000	.530000	.320000	290.000	40.0000
NUMBER	145		145	113	113	144	144
MAXIMUM	1.60000		9.20000	.710000	.364000	1045.00	113.000
MINIMUM	.0100000		1.10000	.130000	.0500000	3.00000	1.00000
SUM	42.3493		621.472	37.9226	20.0339	18122.4	2417.40
MEAN	.292064		4.28601	.335598	.177291	125.850	16.7875
VARIANCE	.0751956		3.25053	.0106387	.0036852	21343.3	301.163
STAND DEV	.274218		1.80292	.103144	.0607057	146.094	17.3540
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05586100 D 32
39 42 10.0 090 38 40.0 2
ILLINOIS RIVER AT VALLEY CITY
17149 ILLINOIS PIKE
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130011
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0300000	.770000	1.95000	.200000	.100000	31.0000	4.00000
PCTL(025.0)	.0799999	1.00000	2.80000	.240000	.120000	54.0000	7.00000
PCTL(050.0)	.100000	1.30000	4.20000	.290000	.150000	103.000	13.0000
PCTL(075.0)	.240000	1.60000	5.80000	.360000	.190000	175.000	20.0000
PCTL(085.0)	.380000	1.80000	6.20000	.430000	.210000	228.000	24.0000
PCTL(090.0)	.440000	2.00000	6.80000	.460000	.230000	304.000	28.0000
PCTL(095.0)	.670000	2.40000	7.30000	.510000	.300000	362.000	35.0000
NUMBER	142	158	143	158	153	158	157
MAXIMUM	1.20000	4.50000	8.80000	.860000	.370000	832.000	72.0000
MINIMUM	.0100000	.290000	.180000	.0200000	.0600000	1.00000	1.00000
SUM	27.6894	218.529	613.861	49.2692	24.6846	21244.6	2319.00
MEAN	.194996	1.38309	4.29273	.311830	.161337	134.459	14.7707
VARIANCE	.0396276	.354520	3.40284	.0127875	.0034047	14157.3	123.793
STAND DEV	.199067	.595416	1.84468	.113082	.0583499	118.984	11.1262
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05586690 DA 04
39 12 04.0 089 58 45.0 2
MACOUPIN CREEK NEAR MACOUPIN, IL
17117 ILLINOIS MACOUPIN
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130012
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0400000		.140000	.160000	.0899999	8.60000	2.00000
PCTL(025.0)	.100000		.740000	.200000	.120000	20.0000	4.00000
PCTL(050.0)	.100000		2.20000	.270000	.170000	41.0000	7.00000
PCTL(075.0)	.200000		3.70000	.460000	.240000	81.0000	14.0000
PCTL(085.0)	.260000		4.60000	.670000	.300000	148.000	20.0000
PCTL(090.0)	.330000		5.30000	.820000	.420000	192.000	29.0000
PCTL(095.0)	.410000		6.00000	1.20000	.860000	276.000	36.0000
NUMBER	145		145	114	114	142	142
MAXIMUM	1.80000		6.70000	2.04000	1.50000	1650.00	140.000
MINIMUM	.0100000		.0100000	.130000	.0350000	1.00000	1.00000
SUM	25.6296		350.185	45.8275	27.9555	12924.6	1760.40
MEAN	.176756		2.41507	.401995	.245223	91.0183	12.3972
VARIANCE	.0497143		3.37394	.115033	.0674379	32810.0	307.992
STAND DEV	.222967		1.83683	.339165	.259688	181.135	17.5497
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05587000 DA 06
39 14 03.0 090 23 40.0 2
MACOUPIN CREEK NEAR KANE, IL
17061 ILLINOIS GREENE
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130012
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000		.100000	.120000	.0230000	8.00000	2.00000
PCTL(025.0)	.100000		.510000	.150000	.0400000	29.0000	5.00000
PCTL(050.0)	.100000		1.60000	.210000	.0899999	66.0000	10.0000
PCTL(075.0)	.200000		3.20000	.360000	.140000	166.000	20.0000
PCTL(085.0)	.280000		4.10000	.520000	.180000	320.000	34.0000
PCTL(090.0)	.330000		4.50000	.800000	.250000	423.000	48.0000
PCTL(095.0)	.490000		4.90000	.950000	.340000	800.000	80.0000
NUMBER	146		146	115	114	144	143
MAXIMUM	.810000		5.80000	2.30000	.650000	3860.00	240.000
MINIMUM	.0100000		.0100000	.0699999	.0100000	2.00000	1.00000
SUM	23.7896		291.978	37.7935	13.1420	28917.2	2996.40
MEAN	.162943		1.99985	.328639	.115280	200.814	20.9538
VARIANCE	.0209413		2.69152	.104696	.0121956	215685	1202.84
STAND DEV	.144711		1.64059	.323568	.110434	464.419	34.6819
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05586600 DB 01
39 22 11.0 090 32 46.0 2
APPLE CREEK NEAR ELDRED, IL
17061 ILLINOIS GREENE
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130011
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000		.220000	.100000	.0400000	9.00000	2.00000
PCTL(025.0)	.100000		1.10000	.140000	.0699999	32.0000	5.00000
PCTL(050.0)	.100000		2.50000	.205000	.0899999	83.0000	10.00000
PCTL(075.0)	.150000		3.80000	.300000	.120000	169.000	18.0000
PCTL(085.0)	.220000		4.50000	.400000	.140000	214.000	24.0000
PCTL(090.0)	.270000		4.80000	.550000	.170000	276.000	36.0000
PCTL(095.0)	.400000		5.00000	.802000	.210000	440.000	80.0000
NUMBER	145		145	114	113	144	144
MAXIMUM	1.30000		6.90000	2.50000	.640000	4490.00	280.000
MINIMUM	.0100000		.0100000	.0500000	.0200000	1.00000	1.00000
SUM	21.3796		372.412	34.2385	11.8870	28498.6	3008.60
MEAN	.147446		2.56836	.300338	.105194	197.907	20.8930
VARIANCE	.0271276		2.71061	.105175	.0056477	298170	1779.81
STAND DEV	.164705		1.64639	.324307	.0751510	546.049	42.1878
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05586040 DD 04
39 43 53.0 090 24 26.0 2
MAUVAISE TERRE CREEK NEAR MERRITT
17171 ILLINOIS SCOTT
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130011
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000		2.00000	.290000	.200000	10.00000	2.00000
PCTL(025.0)	.0899999		4.40000	.517000	.340000	20.0000	4.00000
PCTL(050.0)	.130000		6.90000	1.13400	.800000	60.0000	8.00000
PCTL(075.0)	.320000		8.70000	3.00000	2.60000	105.000	14.0000
PCTL(085.0)	.500000		9.80000	5.40000	5.30000	187.000	22.0000
PCTL(090.0)	1.10000		10.2000	7.50000	7.20000	272.000	34.0000
PCTL(095.0)	2.10000		11.0000	12.0000	10.0000	396.000	40.0000
NUMBER	147		147	115	114	146	146
MAXIMUM	5.40000		13.0000	28.0000	27.0000	3360.00	310.000
MINIMUM	.0100000		.280000	.0799999	.0200000	5.00000	1.00000
SUM	57.7992		969.899	308.521	276.343	19291.0	2308.00
MEAN	.393192		6.59795	2.68279	2.42406	132.130	15.8082
VARIANCE	.568825		8.81180	16.1366	14.7884	110980	1119.47
STAND DEV	.754205		2.96847	4.01704	3.84557	333.136	33.4584
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05585830 DE 01
39 49 04.0 090 39 09.0 2
MCKEE CREEK AT CHAMBERSBURG, IL
17149 ILLINOIS PIKE
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130011
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000		.100000	.0500000	.0100000	8.00000	2.00000
PCTL(025.0)	.0600000		.150000	.0699999	.0100000	23.0000	3.00000
PCTL(050.0)	.100000		.680000	.100000	.0200000	50.0000	7.00000
PCTL(075.0)	.150000		1.30000	.170000	.0600000	92.0000	13.0000
PCTL(085.0)	.200000		1.65000	.220000	.0699999	240.000	28.0000
PCTL(090.0)	.220000		1.80000	.370000	.0799999	590.000	46.0000
PCTL(095.0)	.310000		2.20000	.690000	.120000	1510.00	100.000
NUMBER	144		144	114	114	144	144
MAXIMUM	1.00000		7.50000	2.20000	1.70000	5580.00	370.000
MINIMUM	.0100000		.0100000	.0100000	.0100000	1.00000	1.00000
SUM	17.8598		126.189	22.2656	5.92595	35402.0	3111.00
MEAN	.124027		.876313	.195312	.0519820	245.847	21.6042
VARIANCE	.0165486		1.02576	.102354	.0252711	435577	2451.58
STAND DEV	.128641		1.01280	.319928	.158969	659.982	49.5135
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05585275 DF 04
39 52 40.0 090 22 38.0 4
INDIAN CREEK AT ARENZVILLE
17017 ILLINOIS CASS
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130011
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000		.160000	.0699999	.0300000	8.00000	2.00000
PCTL(025.0)	.0699999		1.30000	.100000	.0500000	15.0000	3.00000
PCTL(050.0)	.100000		5.50000	.150000	.0699999	56.0000	7.00000
PCTL(075.0)	.160000		8.50000	.300000	.120000	190.000	16.0000
PCTL(085.0)	.260000		9.80000	.450000	.200000	396.000	26.0000
PCTL(090.0)	.300000		10.0000	.600000	.220000	550.000	56.0000
PCTL(095.0)	.390000		12.0000	.930000	.320000	1230.00	110.000
NUMBER	148		148	115	114	148	147
MAXIMUM	5.00000		16.0000	5.20000	4.40000	4000.00	340.000
MINIMUM	.0100000		.0100000	.0600000	.0200000	2.00000	1.00000
SUM	24.5494		818.299	35.2744	16.2359	35682.9	3145.00
MEAN	.165874		5.52905	.306734	.142420	241.101	21.3945
VARIANCE	.171843		15.8157	.313075	.172875	300258	2126.69
STAND DEV	.414539		3.97689	.559531	.415782	547.958	46.1160
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05585000 DG 01
40 01 31.0 090 37 55.0 2
LA MOINE RIVER AT RIPLEY, IL
17009 ILLINOIS BROWN
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130010
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.500000	.100000	.0699999	.0100000	7.00000	2.00000
PCTL(025.0)	.0899999	.700000	.890000	.110000	.0200000	28.0000	4.00000
PCTL(050.0)	.100000	1.00000	3.10000	.180000	.0400000	79.0000	12.0000
PCTL(075.0)	.140000	1.50000	4.80000	.330000	.0799999	222.000	24.0000
PCTL(085.0)	.180000	2.08000	5.33000	.470000	.100000	328.000	35.0000
PCTL(090.0)	.260000	2.70000	5.60000	.620000	.120000	447.000	52.0000
PCTL(095.0)	.530000	3.90000	6.30000	.910000	.170000	984.000	96.0000
NUMBER	150	152	150	150	134	151	150
MAXIMUM	.960000	10.0000	11.0000	1.90000	.490000	3770.00	392.000
MINIMUM	.0100000	.158000	.0100000	.0200000	.0100000	1.00000	1.00000
SUM	21.3096	207.529	461.352	41.8292	8.34795	33019.9	3677.00
MEAN	.142064	1.36532	3.07568	.278861	.0622981	218.675	24.5133
VARIANCE	.0245939	1.48749	5.09214	.0874417	.0038516	191257	2337.68
STAND DEV	.156824	1.21963	2.25658	.295705	.0620610	437.330	48.3495
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05584500 DG 04
40 19 45.0 090 53 55.0 2
LA MOINE RIVER AT COLMAR, IL
17109 ILLINOIS MCDONOUGH
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130010
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	.460000	.100000	.0600000	.0200000	6.00000	1.00000
PCTL(025.0)	.0899999	.600000	.910000	.100000	.0300000	19.0000	3.00000
PCTL(050.0)	.100000	.900000	4.40000	.160000	.0500000	56.0000	9.00000
PCTL(075.0)	.150000	1.50000	6.00000	.270000	.0899999	146.000	19.0000
PCTL(085.0)	.200000	1.80000	7.20000	.410000	.110000	223.000	32.0000
PCTL(090.0)	.240000	2.40000	7.90000	.520000	.130000	338.000	36.0000
PCTL(095.0)	.410000	3.30000	9.10000	.820000	.200000	550.000	58.0000
NUMBER	147	147	147	147	115	145	145
MAXIMUM	1.00000	7.60000	14.0000	2.10000	.640000	1560.00	150.000
MINIMUM	.0100000	.100000	.0100000	.0210000	.0100000	1.00000	1.00000
SUM	20.8496	184.503	593.760	37.4962	7.83896	20092.0	2367.00
MEAN	.141834	1.25512	4.03919	.255076	.0681648	138.565	16.3241
VARIANCE	.0237071	1.31061	9.55177	.0838776	.0054674	54054.0	512.985
STAND DEV	.153971	1.14482	3.09059	.289616	.0739417	232.495	22.6492
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05583915 DH 01
40 05 49.0 090 24 16.0 2
SUGAR CREEK NEAR FREDERICK, IL
17169 ILLINOIS SCHUYLER
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130003
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000		.100000	.0300000	.0100000	4.00000	1.00000
PCTL(025.0)	.0500000		.110000	.0500000	.0100000	11.0000	2.00000
PCTL(050.0)	.100000		1.20000	.100000	.0300000	35.0000	5.00000
PCTL(075.0)	.120000		2.60000	.150000	.0600000	83.0000	11.0000
PCTL(085.0)	.160000		3.40000	.210000	.0699999	130.000	19.0000
PCTL(090.0)	.230000		3.70000	.300000	.0899999	190.000	24.0000
PCTL(095.0)	.280000		4.30000	.890000	.130000	540.000	60.0000
NUMBER	148		148	115	114	147	147
MAXIMUM	.660000		5.80000	2.00000	.390000	4380.00	400.000
MINIMUM	.0100000		.0100000	.0200000	.0080000	1.00000	1.00000
SUM	16.4799		233.429	19.9467	5.01095	21705.0	2544.00
MEAN	.111350		1.57722	.173449	.0439557	147.653	17.3061
VARIANCE	.0102945		2.10836	.0847489	.0024057	234415	2543.97
STAND DEV	.101462		1.45202	.291117	.0490484	484.164	50.4378
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05568915 DJ 02
40 54 27.0 090 05 12.0 4
SPOON R RT 150 2.5 MI SE DAHINDA
17095 ILLINOIS KNOX
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130005
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000		.100000	.0699999	.0200000	8.00000	2.00000
PCTL(025.0)	.0500000		3.90000	.0899999	.0400000	28.0000	4.00000
PCTL(050.0)	.100000		7.80000	.130000	.0600000	60.0000	8.00000
PCTL(075.0)	.110000		9.40000	.200000	.0899999	118.000	17.0000
PCTL(085.0)	.170000		10.0000	.240000	.110000	216.000	26.0000
PCTL(090.0)	.230000		11.0000	.340000	.120000	370.000	50.0000
PCTL(095.0)	.340000		12.0000	.450000	.140000	692.000	90.0000
NUMBER	144		143	114	114	144	144
MAXIMUM	.920000		16.0000	1.30000	.290000	4450.00	367.000
MINIMUM	.0100000		.0100000	.0300000	.0100000	2.00000	1.00000
SUM	16.8399		963.210	21.0137	7.98296	24636.0	2895.00
MEAN	.116943		6.73573	.184331	.0700259	171.083	20.1041
VARIANCE	.0155175		14.2169	.0353403	.0019115	192141	1632.46
STAND DEV	.124569		3.77052	.187990	.0437206	438.339	40.4037
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05568775 DJ 06
41 03 45.0 089 47 43.0 4
SPOON R RT 17 2 MI W WYOMING
17175 ILLINOIS STARK
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130005
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000		.870000	.0799999	.0330000	6.00000	1.00000
PCTL(025.0)	.0400000		4.40000	.120000	.0600000	13.0000	2.00000
PCTL(050.0)	.100000		8.40000	.170000	.0899999	42.0000	6.00000
PCTL(075.0)	.130000		10.0000	.230000	.130000	87.0000	13.0000
PCTL(085.0)	.200000		12.0000	.290000	.180000	118.000	16.0000
PCTL(090.0)	.250000		12.0000	.320000	.210000	142.000	25.0000
PCTL(095.0)	.490000		13.0000	.410000	.260000	236.000	35.0000
NUMBER	145		143	113	112	145	145
MAXIMUM	2.20000		18.0000	1.00000	.380000	3530.00	420.000
MINIMUM	.0100000		.0100000	.0200000	.0100000	2.00000	1.00000
SUM	19.4196		1085.29	21.7897	11.9680	16154.0	2003.00
MEAN	.133928		7.58945	.192829	.106857	111.407	13.8138
VARIANCE	.0439505		16.6658	.0187682	.0050254	152437	1511.79
STAND DEV	.209644		4.08237	.136997	.0708900	390.432	38.8817
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05570000 DJ 08
40 29 10.0 090 20 34.0 4
SPOON R RT 95 0.4 MI NE SEVILLE
17057 ILLINOIS FULTON
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130005
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000		.100000	.0679999	.0100000	9.00000	2.00000
PCTL(025.0)	.0799999		2.10000	.110000	.0200000	33.0000	5.00000
PCTL(050.0)	.100000		5.10000	.170000	.0500000	74.0000	11.0000
PCTL(075.0)	.120000		7.40000	.360000	.100000	270.000	29.0000
PCTL(085.0)	.180000		8.30000	.610000	.120000	525.000	50.0000
PCTL(090.0)	.250000		8.90000	.770000	.130000	604.000	64.0000
PCTL(095.0)	.550000		9.80000	1.10000	.150000	1208.00	112.000
NUMBER	143		143	111	109	142	142
MAXIMUM	7.10000		13.0000	1.80000	.340000	4390.00	380.000
MINIMUM	.0100000		.0100000	.0240000	.0040000	2.00000	1.00000
SUM	28.2192		696.589	35.1065	7.12096	43734.7	4167.59
MEAN	.197337		4.87125	.316275	.0653298	307.991	29.3492
VARIANCE	.384506		10.2596	.142141	.0028030	479880	2886.26
STAND DEV	.620085		3.20306	.377016	.0529436	692.734	53.7239
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05569500 DJ 09
40 42 51.0 090 16 00.0 4
SPOON R N EDGE LONDON MILLS
17057 ILLINOIS FULTON
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130005
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000		.100000	.0600000	.0100000	8.00000	2.00000
PCTL(025.0)	.0600000		3.20000	.100000	.0400000	24.0000	4.00000
PCTL(050.0)	.100000		7.20000	.140000	.0600000	65.0000	7.00000
PCTL(075.0)	.110000		8.60000	.210000	.0899999	148.000	18.0000
PCTL(085.0)	.190000		9.40000	.320000	.110000	257.000	28.0000
PCTL(090.0)	.270000		10.0000	.480000	.140000	476.000	40.0000
PCTL(095.0)	.440000		11.0000	.740000	.180000	652.000	65.0000
NUMBER	147		147	115	113	147	147
MAXIMUM	1.50000		15.0000	2.00000	.370000	1880.00	346.000
MINIMUM	.0100000		.0100000	.0100000	.0030000	2.00000	1.00000
SUM	20.1197		895.799	26.4696	8.17596	23648.0	2852.00
MEAN	.136868		6.09387	.230170	.0723535	160.871	19.4013
VARIANCE	.0348902		12.8379	.0934604	.0039229	85065.1	1534.02
STAND DEV	.186789		3.58300	.305713	.0626329	291.659	39.1666
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05570370 DJB 18
40 27 32.0 090 08 00.0 2
BIG CREEK NEAR BRYANT, IL
17057 ILLINOIS FULTON
UPPER MISSISSIPPI RIVER 071791
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130005
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0400000		1.10000	.120000	.0500000	7.00000	2.00000
PCTL(025.0)	.100000		1.50000	.200000	.0899999	12.0000	3.00000
PCTL(050.0)	.100000		1.90000	.410000	.190000	33.0000	6.00000
PCTL(075.0)	.290000		2.70000	.640000	.440000	68.0000	12.0000
PCTL(085.0)	.480000		3.20000	.820000	.620000	107.000	16.0000
PCTL(090.0)	.640000		3.50000	1.24500	1.00000	144.000	20.0000
PCTL(095.0)	.870000		4.30000	1.70000	1.40000	340.000	39.0000
NUMBER	143		144	107	104	141	141
MAXIMUM	9.50000		11.0000	8.70000	3.60000	1056.00	155.000
MINIMUM	.0100000		.100000	.0100000	.0100000	1.00000	1.00000
SUM	51.7294		318.286	65.2315	39.5495	10347.0	1460.20
MEAN	.361744		2.21032	.609640	.380283	73.3829	10.3560
VARIANCE	1.06187		1.76868	.931417	.276135	16842.5	276.193
STAND DEV	1.03047		1.32992	.965099	.525485	129.779	16.6190
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05570380 DJBZ01
40 28 24.0 090 08 37.0 2
SLUG RUN NEAR BRYANT,IL
17057 ILLINOIS FULTON
UPPER MISSISSIPPI RIVER 071791
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130005
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000		.0300000	.0200000	.0100000	4.00000	1.00000
PCTL(025.0)	.0200000		.0799999	.0300000	.0100000	6.00000	1.00000
PCTL(050.0)	.100000		.100000	.0400000	.0200000	10.0000	2.00000
PCTL(075.0)	.100000		.160000	.0699999	.0400000	21.0000	4.00000
PCTL(085.0)	.130000		.250000	.210000	.0600000	34.0000	6.00000
PCTL(090.0)	.150000		.460000	.300000	.120000	50.0000	9.00000
PCTL(095.0)	.200000		1.30000	.400000	.160000	164.000	18.0000
NUMBER	133		132	100	98	132	132
MAXIMUM	.640000		4.40000	1.10000	1.00000	568.000	44.0000
MINIMUM	.0100000		.0100000	.0100000	.0070000	1.00000	1.00000
SUM	12.3399		33.8194	10.2890	4.51096	4404.60	626.400
MEAN	.0927814		.256208	.102890	.0460302	33.3682	4.74545
VARIANCE	.0071154		.310806	.0260363	.0117080	6656.08	61.9115
STAND DEV	.0843530		.557500	.161358	.108203	81.5848	7.86839
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05568800 DJL 01
41 01 06.0 089 50 07.0 2
INDIAN CREEK NEAR WYOMING, IL
17175 ILLINOIS STARK
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130005
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000		1.43000	.0600000	.0300000	7.00000	2.00000
PCTL(025.0)	.0799999		5.50000	.0899999	.0500000	14.0000	2.00000
PCTL(050.0)	.100000		9.20000	.130000	.0729999	34.0000	5.00000
PCTL(075.0)	.130000		11.0000	.190000	.110000	88.0000	12.0000
PCTL(085.0)	.250000		12.0000	.240000	.140000	150.000	22.0000
PCTL(090.0)	.340000		13.0000	.290000	.150000	192.000	25.0000
PCTL(095.0)	.450000		13.4000	.380000	.220000	316.000	48.0000
NUMBER	145		143	112	112	145	145
MAXIMUM	4.80000		18.0000	1.70000	.400000	2890.00	270.000
MINIMUM	.0100000		.0200000	.0300000	.0200000	2.00000	1.00000
SUM	25.4097		1172.65	19.9708	10.3800	16083.0	1939.00
MEAN	.175239		8.20036	.178311	.0926781	110.917	13.3724
VARIANCE	.178239		16.8739	.0463147	.0044230	118660	896.996
STAND DEV	.422184		4.10779	.215209	.0665056	344.471	29.9499
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05568005 DK 12
40 26 51.0 089 41 28.0 2
MACKINAW RIVER BELOW GREEN VALLEY
17179 ILLINOIS TAZEWELL
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130004
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000		.720000	.0500000	.0100000	6.00000	1.00000
PCTL(025.0)	.0400000		2.50000	.0699999	.0100000	22.0000	3.00000
PCTL(050.0)	.100000		7.80000	.0909999	.0400000	53.0000	8.00000
PCTL(075.0)	.100000		11.0000	.150000	.0699999	132.000	14.0000
PCTL(085.0)	.150000		13.0000	.240000	.0899999	227.000	26.0000
PCTL(090.0)	.200000		13.1000	.340000	.110000	560.000	54.0000
PCTL(095.0)	.320000		16.0000	.510000	.170000	756.000	80.0000
NUMBER	146		144	115	115	147	147
MAXIMUM	.880000		19.0000	1.40000	.360000	12300.0	340.000
MINIMUM	.0100000		.0100000	.0100000	.0040000	1.00000	1.00000
SUM	16.4699		1072.60	18.5488	6.18095	39453.5	3076.60
MEAN	.112807		7.44862	.161294	.0537474	268.391	20.9292
VARIANCE	.0162351		25.6306	.0410341	.0031819	.1248E+07	2200.93
STAND DEV	.127417		5.06267	.202569	.0564079	1117.34	46.9141
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05567510 DK 13
40 35 12.0 089 16 42.0 2
MACKINAW RIVER BELOW CONGERVILLE
17179 ILLINOIS TAZEWELL
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130004
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000		1.00000	.0300000	.0100000	6.00000	1.00000
PCTL(025.0)	.0400000		5.20000	.0500000	.0200000	13.0000	2.00000
PCTL(050.0)	.100000		11.0000	.0799999	.0400000	30.0000	5.00000
PCTL(075.0)	.100000		13.0000	.120000	.0699999	72.0000	10.0000
PCTL(085.0)	.110000		15.0000	.150000	.0799999	125.000	15.0000
PCTL(090.0)	.140000		16.0000	.180000	.100000	192.000	20.0000
PCTL(095.0)	.200000		18.0000	.260000	.130000	222.000	28.0000
NUMBER	144		143	115	114	145	145
MAXIMUM	.700000		21.0000	.910000	.220000	1350.00	173.000
MINIMUM	.0100000		.0699999	.0100000	.0080000	1.00000	1.00000
SUM	13.1899		1374.91	11.9240	5.90596	10420.8	1391.00
MEAN	.0915967		9.61477	.103687	.0518066	71.8675	9.59309
VARIANCE	.0066160		30.6306	.0097424	.0017294	18454.2	320.271
STAND DEV	.0813388		5.53449	.0987034	.0415855	135.846	17.8961
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05563525 DL 01
40 39 18.0 089 38 52.0 2
KICKAPOO CREEK AT BARTONVILLE, IL
17143 ILLINOIS PEORIA
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130003
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000		.140000	.0300000	.0100000	6.00000	1.00000
PCTL(025.0)	.0600000		.850000	.0500000	.0100000	18.0000	3.00000
PCTL(050.0)	.100000		3.00000	.0799999	.0300000	41.0000	6.00000
PCTL(075.0)	.100000		5.00000	.160000	.0600000	109.000	12.0000
PCTL(085.0)	.170000		5.90000	.330000	.0699999	219.000	21.0000
PCTL(090.0)	.230000		7.30000	.440000	.0699999	430.000	42.0000
PCTL(095.0)	.300000		8.20000	.800000	.100000	968.000	80.0000
NUMBER	145		145	115	114	146	146
MAXIMUM	.900000		12.0000	1.80000	.300000	8990.00	560.000
MINIMUM	.0100000		.0100000	.0020000	.0010000	1.00000	1.00000
SUM	16.9698		485.233	21.9087	4.74595	38693.7	3394.00
MEAN	.117033		3.34643	.190511	.0416312	265.026	23.2465
VARIANCE	.0140583		7.15701	.0958091	.0020395	901025	4950.62
STAND DEV	.118568		2.67526	.309530	.0451614	949.224	70.3607
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05556500 DQ 03
41 21 55.0 089 29 55.0 2
BIG BUREAU CREEK AT PRINCETON, IL
17011 ILLINOIS BUREAU
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130001
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.500000	2.40000	.0769999	.0600000	7.00000	2.00000
PCTL(025.0)	.0200000	.500000	4.70000	.118000	.0799999	11.0000	4.00000
PCTL(050.0)	.0500000	.500000	9.10000	.190000	.150000	27.0000	7.00000
PCTL(075.0)	.100000	.500000	12.0000	.490000	.400000	61.0000	11.0000
PCTL(085.0)	.180000	.500000	14.0000	.820000	.880000	93.0000	16.0000
PCTL(090.0)	.270000	.500000	15.0000	1.31000	1.26000	127.000	19.0000
PCTL(095.0)	.450000	.500000	16.0000	1.76000	1.67000	360.000	56.0000
NUMBER	146	1	141	117	109	146	146
MAXIMUM	.860000	.500000	19.0000	5.19000	5.07000	2200.00	280.000
MINIMUM	.0100000	.500000	.600000	.0300000	.0200000	1.00000	1.00000
SUM	15.4699	.500000	1249.59	53.2544	45.7973	13801.0	2038.00
MEAN	.105958	.500000	8.86236	.455166	.420159	94.5274	13.9589
VARIANCE	.0215838		21.1327	.464655	.473132	75636.3	916.108
STAND DEV	.146914		4.59703	.681656	.687846	275.020	30.2673
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05557000 DQD 01
41 21 54.0 089 34 08.0 2
WEST BUREAU CREEK AT WYANET, IL
17011 ILLINOIS BUREAU
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130001
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000		.500000	.0300000	.0200000	4.00000	2.00000
PCTL(025.0)	.0200000		6.10000	.0400000	.0300000	8.00000	3.00000
PCTL(050.0)	.0400000		10.8000	.0749999	.0500000	14.0000	5.00000
PCTL(075.0)	.100000		14.0000	.150000	.0909999	38.0000	8.00000
PCTL(085.0)	.260000		15.0000	.210000	.120000	63.0000	11.0000
PCTL(090.0)	.340000		16.0000	.235000	.160000	102.000	15.0000
PCTL(095.0)	.520000		17.0000	.350000	.260000	190.000	29.0000
NUMBER	140		136	112	105	140	140
MAXIMUM	1.90000		22.0000	1.20000	.540000	2700.00	350.000
MINIMUM	.0100000		.100000	.0100000	.0100000	1.00000	1.00000
SUM	18.0997		1347.95	14.4460	8.23996	11693.0	1811.00
MEAN	.129284		9.91142	.128982	.0784757	83.5213	12.9357
VARIANCE	.0622713		29.2101	.0302125	.0060455	112372	1814.39
STAND DEV	.249542		5.40464	.173817	.0777528	335.218	42.5956
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05555950 DR 01
41 20 00.0 089 04 51.0 2
LITTLE VERMILION RIVER AT LA SALLE, IL
17099 ILLINOIS LA SALLE
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130001
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0500000	.600000	.900000	.0600000	.0200000	6.00000	2.00000
PCTL(025.0)	.0799999	.700000	2.90000	.0899999	.0400000	10.0000	4.00000
PCTL(050.0)	.150000	.900000	6.60000	.150000	.0799999	25.0000	8.00000
PCTL(075.0)	.260000	1.10000	9.60000	.220000	.120000	65.0000	13.0000
PCTL(085.0)	.340000	1.20000	11.0000	.300000	.170000	122.000	18.0000
PCTL(090.0)	.390000	1.20000	12.0000	.460000	.200000	210.000	25.0000
PCTL(095.0)	.700000	3.10000	12.0000	.670000	.244000	470.000	49.0000
NUMBER	146	10	143	117	113	147	137
MAXIMUM	3.70000	3.10000	17.0000	1.75000	.470000	1835.00	290.000
MINIMUM	.0100000	.600000	.100000	.0400000	.0020000	1.00000	1.00000
SUM	36.7894	11.0000	908.811	25.8315	11.0950	13673.0	2071.00
MEAN	.251982	1.10000	6.35532	.220782	.0981854	93.0136	15.1168
VARIANCE	.196325	.524443	15.7926	.0699324	.0064492	54978.6	1141.72
STAND DEV	.443086	.724185	3.97399	.264447	.0803067	234.475	33.7894
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05554490 DS 06
40 49 50.0 088 34 29.0 2
VERMILION RIVER AT MC DOWELL
17105 ILLINOIS LIVINGSTON
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130002
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000		.100000	.0300000	.0100000	7.00000	1.00000
PCTL(025.0)	.0500000		2.60000	.0500000	.0200000	17.0000	3.00000
PCTL(050.0)	.100000		9.80000	.0899999	.0300000	52.0000	7.00000
PCTL(075.0)	.100000		13.0000	.140000	.0600000	95.0000	15.0000
PCTL(085.0)	.110000		14.0000	.180000	.0899999	122.000	19.0000
PCTL(090.0)	.150000		15.0000	.220000	.100000	146.000	24.0000
PCTL(095.0)	.170000		16.0000	.460000	.150000	220.000	40.0000
NUMBER	146		143	116	112	145	145
MAXIMUM	.270000		23.0000	.880000	.620000	448.000	116.000
MINIMUM	.0100000		.100000	.0100000	.0010000	2.00000	1.00000
SUM	12.6599		1233.43	14.3810	6.23396	10232.2	1767.00
MEAN	.0867118		8.62540	.123974	.0556603	70.5669	12.1862
VARIANCE	.0023530		32.6439	.0187826	.0061613	6293.16	294.666
STAND DEV	.0485082		5.71348	.137050	.0784936	79.3294	17.1658
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05555300 DS 07
41 12 30.0 088 55 51.0 2
VERMILION RIVER NEAR LEONORE, IL
17099 ILLINOIS LA SALLE
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130002
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	.900000	.700000	.0939999	.0400000	4.00000	2.00000
PCTL(025.0)	.0300000	.900000	5.10000	.140000	.0799999	11.0000	4.00000
PCTL(050.0)	.0699999	.900000	9.60000	.220000	.140000	28.0000	7.00000
PCTL(075.0)	.120000	.900000	13.0000	.380000	.240000	74.0000	15.0000
PCTL(085.0)	.180000	.900000	14.0000	.440000	.260000	110.000	20.0000
PCTL(090.0)	.260000	.900000	15.0000	.550000	.330000	210.000	29.0000
PCTL(095.0)	.380000	.900000	17.0000	.860000	.440000	320.000	40.0000
NUMBER	144	1	141	113	108	143	143
MAXIMUM	.900000	.900000	23.0000	1.17000	1.09000	876.000	132.000
MINIMUM	.0100000	.900000	.100000	.0600000	.0100000	1.00000	1.00000
SUM	16.5199	.900000	1251.69	32.7234	19.1107	10873.0	1951.00
MEAN	.114721	.900000	8.87725	.289588	.176951	76.0349	13.6434
VARIANCE	.0222067		28.2140	.0473052	.0243466	19328.4	394.794
STAND DEV	.149019		5.31168	.217498	.156034	139.027	19.8694
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05550000 DT 06
42 09 59.0 088 17 25.0 2
FOX RIVER AT ALGONQUIN, IL
17111 ILLINOIS MCHENRY
UPPER MISSISSIPPI RIVER 071692
/TYPA/AMBNT/STREAM FOX RIVER
21ILAMB 870314 07120006001 0013.900 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0300000	1.00000	.100000	.0799999	.0100000	3.00000	1.00000
PCTL(025.0)	.0400000	1.27000	.200000	.100000	.0200000	9.00000	5.00000
PCTL(050.0)	.100000	1.70000	1.10000	.140000	.0300000	32.0000	12.0000
PCTL(075.0)	.200000	2.21000	2.20000	.190000	.0600000	49.0000	20.0000
PCTL(085.0)	.360000	2.50000	2.60000	.260000	.0799999	57.0000	24.0000
PCTL(090.0)	.500000	2.90000	2.80000	.282000	.100000	63.0000	26.0000
PCTL(095.0)	.750000	3.20000	3.40000	.360000	.160000	84.0000	32.0000
NUMBER	157	156	157	157	154	157	157
MAXIMUM	1.00000	4.00000	9.50000	.490000	.460000	184.000	60.0000
MINIMUM	.0100000	.640000	.0100000	.0440000	.0010000	1.00000	1.00000
SUM	28.3695	282.897	218.929	25.3475	7.66094	5286.00	2159.00
MEAN	.180697	1.81344	1.39445	.161449	.0497463	33.6688	13.7516
VARIANCE	.0466021	.484972	1.93391	.0073486	.0039878	849.904	117.547
STAND DEV	.215875	.696399	1.39065	.0857239	.0631490	29.1531	10.8419
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05551000 DT 09
41 59 40.0 088 17 40.0 2
FOX RIVER AT SOUTH ELGIN, IL
17089 ILLINOIS KANE
UPPER MISSISSIPPI RIVER 071600
/TYPA/AMBNT/STREAM FOX RIVER
21ILAMB 870314 07120007006 0031.320 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0400000	1.10000	.500000	.110000	.0200000	6.00000	3.00000
PCTL(025.0)	.0799999	1.40000	.900000	.140000	.0400000	15.0000	7.00000
PCTL(050.0)	.150000	1.80000	1.60000	.190000	.0849999	30.0000	13.0000
PCTL(075.0)	.290000	2.20000	2.50000	.270000	.120000	44.0000	18.0000
PCTL(085.0)	.420000	2.50000	2.70000	.340000	.160000	52.0000	21.0000
PCTL(090.0)	.570000	2.80000	3.10000	.362000	.210000	56.0000	23.0000
PCTL(095.0)	.680000	3.20000	3.50000	.460000	.270000	70.0000	26.0000
NUMBER	144	143	144	144	141	144	144
MAXIMUM	1.30000	4.20000	10.0000	.700000	.440000	122.000	50.0000
MINIMUM	.0100000	.690000	.100000	.0600000	.0010000	1.00000	1.00000
SUM	33.5693	267.438	263.399	32.3874	14.1069	4701.00	1900.00
MEAN	.233120	1.87020	1.82916	.224912	.100049	32.6458	13.1944
VARIANCE	.0522428	.449186	1.96749	.0125187	.0069548	483.281	65.6123
STAND DEV	.228567	.670213	1.40267	.111887	.0833953	21.9837	8.10015
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05549600 DT 22
42 16 46.5 088 13 37.5 4
FOX RIVER AT BURTONS BRIDGE, IL
17111 ILLINOIS MCHENRY
UPPER MISSISSIPPI RIVER 071600
/TYPA/AMBNT/STREAM FOX RIVER
21ILAMB 870314 07120006001 0027.210 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	1.00000	.100000	.0699999	.0100000	6.00000	3.00000
PCTL(025.0)	.0400000	1.20000	.300000	.0799999	.0200000	12.0000	6.00000
PCTL(050.0)	.0799999	1.60000	1.10000	.120000	.0300000	30.0000	13.0000
PCTL(075.0)	.210000	2.10000	2.40000	.160000	.0500000	44.0000	20.0000
PCTL(085.0)	.310000	2.40000	2.70000	.180000	.0600000	51.0000	23.0000
PCTL(090.0)	.390000	2.60000	2.90000	.200000	.0699999	64.0000	25.0000
PCTL(095.0)	.480000	2.90000	3.20000	.290000	.110000	71.0000	30.0000
NUMBER	144	140	144	144	141	144	144
MAXIMUM	.780000	4.50000	27.0000	.830000	.700000	112.000	44.0000
MINIMUM	.0100000	.600000	.0100000	.0300000	.0010000	1.00000	1.00000
SUM	21.7696	243.939	242.829	19.5577	5.91495	4556.00	2005.00
MEAN	.151178	1.74242	1.68631	.135817	.0419500	31.6389	13.9236
VARIANCE	.0263730	.447933	7.01922	.0079607	.0041147	483.731	88.6305
STAND DEV	.162397	.669278	2.64938	.0892229	.0641462	21.9939	9.41438
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05546700 DT 35
42 28 45.0 088 10 42.0 2
FOX RIVER NEAR CHANNEL LAKE, IL
17097 ILLINOIS LAKE
UPPER MISSISSIPPI RIVER 071600
/TYPA/AMBNT/STREAM FOX RIVER
21ILAMB 870314 07120006007 0003.560 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	.900000	.400000	.0500000	.0100000	4.00000	2.00000
PCTL(025.0)	.0400000	1.00000	1.00000	.0699999	.0200000	10.0000	5.00000
PCTL(050.0)	.0799999	1.40000	1.90000	.110000	.0300000	29.0000	10.0000
PCTL(075.0)	.170000	1.80000	2.60000	.150000	.0500000	43.0000	15.0000
PCTL(085.0)	.210000	2.00000	3.00000	.180000	.0799999	51.0000	17.0000
PCTL(090.0)	.330000	2.10000	3.40000	.207000	.0899999	56.0000	19.0000
PCTL(095.0)	.470000	2.30000	4.20000	.240000	.130000	78.0000	21.0000
NUMBER	148	145	148	146	145	147	147
MAXIMUM	1.20000	2.80000	10.0000	1.94000	1.80000	140.000	33.0000
MINIMUM	.0100000	.400000	.100000	.0100000	.0040000	1.00000	1.00000
SUM	19.9447	208.979	298.888	21.0635	8.94194	4590.00	1550.00
MEAN	.134761	1.44124	2.01951	.144271	.0616686	31.2245	10.5442
VARIANCE	.0273467	.230253	2.06324	.0398074	.0271491	605.219	44.2908
STAND DEV	.165368	.479847	1.43640	.199518	.164770	24.6012	6.65513
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05551540 DT 38
41 44 02.0 088 20 02.0 2
FOX RIVER AT MONTGOMERY, IL
17089 ILLINOIS KANE
UPPER MISSISSIPPI RIVER 071600
/TYPA/AMBNT/STREAM FOX RIVER
21ILAMB 870314 07120007006 0010.410 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0300000	1.10000	.400000	.140000	.0300000	6.00000	3.00000
PCTL(025.0)	.0500000	1.40000	.800000	.190000	.0600000	19.0000	7.00000
PCTL(050.0)	.120000	1.80000	1.59000	.240000	.100000	41.0000	16.0000
PCTL(075.0)	.230000	2.30000	2.50000	.330000	.150000	63.0000	22.0000
PCTL(085.0)	.320000	2.60000	2.70000	.360000	.200000	76.0000	26.0000
PCTL(090.0)	.430000	2.70000	3.00000	.420000	.230000	83.0000	28.0000
PCTL(095.0)	.610000	2.90000	3.20000	.520000	.260000	104.000	36.0000
NUMBER	145	144	146	145	142	146	145
MAXIMUM	.960000	4.00000	12.0000	1.20000	.740000	364.000	77.0000
MINIMUM	.0100000	.560000	.100000	.0799999	.0100000	1.00000	1.00000
SUM	25.9995	271.958	250.589	39.6964	17.3438	7058.00	2407.00
MEAN	.179307	1.88860	1.71636	.273768	.122140	48.3424	16.6000
VARIANCE	.0355530	.376367	1.81823	.0196813	.0101626	2335.94	154.131
STAND DEV	.188555	.613488	1.34842	.140290	.100810	48.3316	12.4149
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05552500 DT 46
41 23 14.0 088 47 21.0 4
FOX RIVER AT DAYTON, IL
17099 ILLINOIS LA SALLE
UPPER MISSISSIPPI RIVER 071600
/TYPA/AMBNT/STREAM FOX RIVER
21ILAMB 870314 07120007001 0005.040 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0120000	1.00000	.100000	.150000	.0200000	5.00000	2.00000
PCTL(025.0)	.0200000	1.30000	1.30000	.180000	.0400000	15.0000	6.00000
PCTL(050.0)	.0500000	1.70000	2.90000	.260000	.0799999	50.0000	17.0000
PCTL(075.0)	.150000	2.40000	4.60000	.340000	.140000	80.0000	25.0000
PCTL(085.0)	.220000	3.00000	5.20000	.400000	.190000	108.000	33.0000
PCTL(090.0)	.310000	3.30000	5.80000	.430000	.240000	146.000	39.0000
PCTL(095.0)	.510000	3.70000	7.40000	.540000	.290000	210.000	52.0000
NUMBER	165	164	165	165	163	164	164
MAXIMUM	1.20000	7.20000	14.0000	4.38000	2.60000	2500.00	300.000
MINIMUM	.0100000	.100000	.0100000	.0899999	.0100000	1.00000	1.00000
SUM	20.3157	322.325	516.251	53.9331	20.0056	14418.0	3422.00
MEAN	.123125	1.96540	3.12879	.326867	.122734	87.9146	20.8658
VARIANCE	.0302621	1.07138	5.09966	.167698	.0466007	49919.9	771.798
STAND DEV	.173960	1.03508	2.25824	.409509	.215872	223.428	27.7812
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05551995 DTB 01
41 32 37.0 088 41 12.0 2
SOMONAUK CREEK AT SHERIDAN, IL
17099 ILLINOIS LA SALLE
UPPER MISSISSIPPI RIVER 071600
/TYPA/AMBNT/STREAM FOX RIVER
21ILAMB 870314 07120007
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.310000	1.00000	.0300000	.0100000	4.00000	2.00000
PCTL(025.0)	.0200000	.500000	2.00000	.0500000	.0200000	7.00000	3.00000
PCTL(050.0)	.0400000	.700000	4.00000	.0699999	.0400000	17.0000	6.00000
PCTL(075.0)	.0899999	1.00000	6.30000	.141000	.0699999	34.0000	10.0000
PCTL(085.0)	.180000	1.40000	7.40000	.230000	.120000	56.0000	12.0000
PCTL(090.0)	.230000	1.70000	8.60000	.400000	.150000	90.0000	16.0000
PCTL(095.0)	.400000	2.70000	9.80000	.570000	.240000	170.000	22.0000
NUMBER	148	138	148	147	135	148	148
MAXIMUM	.930000	5.80000	13.0000	1.10000	.480000	930.000	120.000
MINIMUM	.0100000	.0300000	.400000	.0100000	.0020000	1.00000	1.00000
SUM	15.0209	134.679	668.531	21.4416	8.67094	6252.00	1287.00
MEAN	.101493	.975937	4.51710	.145861	.0642291	42.2432	8.69594
VARIANCE	.0250010	.762420	7.96732	.0329819	.0062311	9452.53	168.621
STAND DEV	.158117	.873166	2.82264	.181609	.0789371	97.2241	12.9854
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05551700 DTD 02
41 40 18.0 088 26 29.0 2
BLACKBERRY CREEK NEAR YORKVILLE, IL
17093 ILLINOIS KENDALL
UPPER MISSISSIPPI RIVER 071600
/TYPA/AMBNT/STREAM FOX RIVER
21ILAMB 870314 07120007
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.410000	1.20000	.0400000	.0190000	5.00000	2.00000
PCTL(025.0)	.0300000	.600000	1.90000	.0600000	.0300000	10.0000	4.00000
PCTL(050.0)	.0600000	.800000	3.10000	.100000	.0500000	28.0000	7.00000
PCTL(075.0)	.0899999	1.10000	4.20000	.150000	.0699999	48.0000	12.0000
PCTL(085.0)	.140000	1.30000	5.20000	.190000	.0799999	66.0000	16.0000
PCTL(090.0)	.180000	1.40000	5.60000	.230000	.0899999	88.0000	19.0000
PCTL(095.0)	.260000	1.80000	6.10000	.320000	.140000	130.000	27.0000
NUMBER	146	142	146	146	141	146	146
MAXIMUM	1.60000	3.70000	10.0000	.610000	.420000	340.000	70.0000
MINIMUM	.0100000	.100000	.600000	.0200000	.0080000	1.00000	1.00000
SUM	13.7399	130.149	479.863	18.3228	8.06495	5928.00	1375.00
MEAN	.0941091	.916543	3.28673	.125499	.0571982	40.6027	9.41781
VARIANCE	.0276268	.291388	3.27972	.0097034	.0024029	2171.90	76.3553
STAND DEV	.166213	.539804	1.81100	.0985056	.0490193	46.6036	8.73815
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05550500 DTG 02
42 01 35.0 088 15 20.0 2
POPLAR CREEK AT ELGIN, IL
17089 ILLINOIS KANE
UPPER MISSISSIPPI RIVER 071600
/TYPA/AMBNT/STREAM FOX RIVER
21ILAMB 870314 07120006001 0001.170 OFF
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	.540000	.400000	.0200000	.0100000	2.00000	1.00000
PCTL(025.0)	.0300000	.600000	.600000	.0300000	.0200000	5.00000	2.00000
PCTL(050.0)	.0600000	.800000	.900000	.0600000	.0300000	9.00000	4.00000
PCTL(075.0)	.120000	1.00000	1.30000	.100000	.0500000	19.0000	7.00000
PCTL(085.0)	.150000	1.20000	1.80000	.120000	.0699999	32.0000	9.00000
PCTL(090.0)	.170000	1.30000	2.10000	.140000	.0799999	47.0000	11.0000
PCTL(095.0)	.280000	1.70000	2.70000	.170000	.120000	56.0000	13.0000
NUMBER	142	139	142	142	135	141	141
MAXIMUM	.980000	2.90000	4.20000	.640000	.680000	240.000	42.0000
MINIMUM	.0100000	.100000	.210000	.0010000	.0010000	1.00000	1.00000
SUM	13.9599	123.449	160.299	10.5009	5.93095	2492.00	765.000
MEAN	.0983093	.888123	1.12887	.0739502	.0439329	17.6737	5.42553
VARIANCE	.0169457	.172750	.513496	.0050720	.0041849	671.621	24.7033
STAND DEV	.130176	.415632	.716586	.0712180	.0646911	25.9157	4.97025
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05548280 DTK 04
42 26 37.0 088 14 51.0 2
NIPPERSINK CREEK NEAR SPRING GROVE, IL
17111 ILLINOIS MCHENRY
UPPER MISSISSIPPI RIVER 071600
/TYPA/AMBNT/STREAM FOX RIVER
21ILAMB 870314 07120006025 0001.040 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0300000	.800000	1.70000	.0600000	.0200000	6.00000	3.00000
PCTL(025.0)	.0500000	.900000	2.20000	.0799999	.0300000	12.0000	5.00000
PCTL(050.0)	.0899999	1.20000	2.80000	.120000	.0500000	24.0000	9.00000
PCTL(075.0)	.190000	1.50000	3.80000	.160000	.0699999	37.0000	14.0000
PCTL(085.0)	.270000	1.70000	4.40000	.190000	.110000	49.0000	16.0000
PCTL(090.0)	.350000	1.90000	4.70000	.260000	.120000	57.0000	19.0000
PCTL(095.0)	.460000	2.20000	4.90000	.290000	.170000	91.0000	22.0000
NUMBER	148	146	148	147	144	147	147
MAXIMUM	1.10000	3.70000	7.60000	1.23000	1.21000	310.000	68.0000
MINIMUM	.0100000	.390000	.900000	.0300000	.0050000	1.00000	1.00000
SUM	23.0796	188.409	455.174	21.9227	10.2529	4669.00	1556.00
MEAN	.155943	1.29047	3.07550	.149134	.0712009	31.7619	10.5850
VARIANCE	.0338246	.275627	1.42337	.0184862	.0128908	1294.71	68.9979
STAND DEV	.183915	.525002	1.19305	.135964	.113538	35.9820	8.30650
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05542000 DV 04
41 17 10.0 088 21 35.0 2
MAZON RIVER NEAR COAL CITY, IL
17063 ILLINOIS GRUNDY
UPPER MISSISSIPPI RIVER 071500
/TYPA/AMBNT/STREAM KANKAKEE RIVER
21ILAMB 870314 07120005005 0010.970 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.400000	.100000	.0300000	.0100000	4.00000	1.00000
PCTL(025.0)	.0200000	.500000	4.30000	.0440000	.0200000	9.00000	3.00000
PCTL(050.0)	.0400000	.900000	9.60000	.0699999	.0400000	20.0000	5.00000
PCTL(075.0)	.0699999	1.00000	12.0000	.100000	.0699999	40.0000	9.00000
PCTL(085.0)	.0899999	1.00000	13.0000	.140000	.0799999	57.0000	13.0000
PCTL(090.0)	.140000	1.30000	15.0000	.170000	.100000	84.0000	16.0000
PCTL(095.0)	.210000	1.30000	17.0000	.220000	.130000	131.000	20.0000
NUMBER	148	9	144	115	107	149	140
MAXIMUM	.520000	1.30000	25.0000	.910000	.830000	372.000	32.0000
MINIMUM	.0100000	.400000	.0799999	.0010000	.0010000	1.00000	1.00000
SUM	9.08994	7.50000	1265.43	10.7010	6.47096	5133.00	995.000
MEAN	.0614185	.833333	8.78772	.0930517	.0604763	34.4496	7.10714
VARIANCE	.0053441	.0800001	28.9928	.0107288	.0107686	2177.20	38.2259
STAND DEV	.0731032	.282843	5.38450	.103580	.103772	46.6604	6.18271
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05541710 DW 01
41 25 02.0 088 20 51.0 2
AUX SABLE CREEK NEAR MORRIS, IL
17063 ILLINOIS GRUNDY
UPPER MISSISSIPPI RIVER 071500
/TYPA/AMBNT/STREAM KANKAKEE RIVER
21ILAMB 870314 07120005014 0005.010 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000		.100000	.0220000	.0100000	5.00000	2.00000
PCTL(025.0)	.0200000		5.60000	.0400000	.0200000	11.0000	4.00000
PCTL(050.0)	.0400000		9.90000	.0799999	.0500000	20.0000	6.00000
PCTL(075.0)	.0799999		13.0000	.130000	.0899999	41.0000	9.00000
PCTL(085.0)	.100000		15.0000	.170000	.110000	60.0000	11.0000
PCTL(090.0)	.180000		16.0000	.210000	.130000	70.0000	13.0000
PCTL(095.0)	.270000		18.0000	.290000	.161000	93.0000	20.0000
NUMBER	147		144	113	103	146	146
MAXIMUM	1.60000		22.0000	.770000	.370000	358.000	50.0000
MINIMUM	.0100000		.0799999	.0100000	.0010000	1.00000	1.00000
SUM	13.0999		1331.59	12.2280	6.54196	5029.00	1088.00
MEAN	.0891151		9.24716	.108212	.0635141	34.4452	7.45205
VARIANCE	.0348131		31.9328	.0125159	.0040030	2184.47	48.2908
STAND DEV	.186583		5.65091	.111874	.0632693	46.7383	6.94916
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05562010 DZZP03
40 40 16.0 089 34 48.0 2
FARM CR AT CAMP ST BRIDGE AT EAST PEORIA, IL
17179 ILLINOIS TAZEWELL
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130001003 0000.710 OFF
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000		.310000	.0600000	.0200000	4.00000	1.00000
PCTL(025.0)	.100000		1.60000	.130000	.0600000	7.00000	2.00000
PCTL(050.0)	.100000		3.70000	.260000	.170000	20.0000	3.00000
PCTL(075.0)	.200000		5.90000	.430000	.320000	51.0000	8.00000
PCTL(085.0)	.290000		7.30000	.550000	.380000	114.000	12.0000
PCTL(090.0)	.400000		7.60000	.590000	.460000	170.000	16.0000
PCTL(095.0)	.630000		8.80000	.850000	.670000	340.000	36.0000
NUMBER	140		141	110	110	141	141
MAXIMUM	1.00000		15.0000	1.40000	.920000	6230.00	550.000
MINIMUM	.0100000		.0100000	.0030000	.0010000	1.00000	1.00000
SUM	24.6696		575.089	34.9654	23.9566	16529.5	1606.50
MEAN	.176211		4.07865	.317867	.217787	117.230	11.3936
VARIANCE	.0379465		8.96834	.0632846	.0386391	302705	2271.40
STAND DEV	.194799		2.99472	.251564	.196568	550.186	47.6592
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05573650 E 05
39 47 48.0 089 06 15.0 2
SANGAMON RIVER NEAR NIANTIC
17115 ILLINOIS MACON
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130006003 0023.140 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0400000	1.40000	.230000	.230000	.150000	6.00000	2.00000
PCTL(025.0)	.100000	1.40000	2.80000	.310000	.210000	13.0000	4.00000
PCTL(050.0)	.320000	1.50000	5.80000	.630000	.520000	32.0000	6.00000
PCTL(075.0)	1.60000	3.20000	8.00000	2.10000	2.10000	59.0000	10.00000
PCTL(085.0)	7.90000	3.20000	9.30000	3.60000	3.30000	84.0000	13.0000
PCTL(090.0)	10.0000	3.20000	9.60000	5.20000	5.00000	104.000	18.0000
PCTL(095.0)	16.0000	3.20000	12.0000	5.80000	5.50000	146.000	28.0000
NUMBER	172	3	172	128	126	172	168
MAXIMUM	34.0000	3.20000	15.0000	12.6000	12.4000	1230.00	140.000
MINIMUM	.0100000	1.40000	.100000	.140000	.0400000	1.00000	1.00000
SUM	483.143	6.10000	961.716	212.122	191.534	9073.99	1514.40
MEAN	2.80897	2.03333	5.59137	1.65720	1.52011	52.7558	9.01428
VARIANCE	32.7011	1.02333	12.4062	4.24870	3.99388	10630.2	166.197
STAND DEV	5.71849	1.01160	3.52225	2.06124	1.99847	103.103	12.8917
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05573504 E 06
39 49 44.0 088 57 35.0 2
SANGAMON R. AT L DECATUR WATER INTAKE AT DECATUR
17115 ILLINOIS MACON
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130006004 0003.460 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.500000	.110000	.0600000	.0100000	8.00000	2.00000
PCTL(025.0)	.0600000	.610000	.990000	.0799999	.0200000	12.0000	3.00000
PCTL(050.0)	.100000	.810000	6.00000	.110000	.0600000	18.0000	5.00000
PCTL(075.0)	.100000	1.10000	8.30000	.160000	.100000	31.0000	7.00000
PCTL(085.0)	.130000	1.20000	9.80000	.200000	.140000	39.0000	9.00000
PCTL(090.0)	.160000	1.50000	11.0000	.270000	.150000	47.0000	11.0000
PCTL(095.0)	.220000	1.60000	11.0000	.320000	.220000	66.0000	16.0000
NUMBER	150	126	150	147	145	150	149
MAXIMUM	.970000	4.50000	16.0000	.740000	.710000	292.000	36.0000
MINIMUM	.0100000	.100000	.0100000	.0100000	.0010000	1.00000	1.00000
SUM	15.9699	116.742	818.779	20.7657	11.7589	4037.20	907.400
MEAN	.106466	.926526	5.45852	.141263	.0810961	26.9146	6.08993
VARIANCE	.0126051	.262114	15.7106	.0109128	.0087776	1016.10	29.4537
STAND DEV	.112273	.511971	3.96366	.104464	.0936890	31.8764	5.42713
96/09/30							

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1STORET RETRIEVAL DATE 99/01/19
                                                                 05573540        E   09
                                                                39 49 52.0 088 58 35.0 2
                                                                SANGAMON RIVER AT RT 48 AT DECATUR
                                                                17115   ILLINOIS         MACON
                                                                UPPER MISSISSIPPI RIVER  071700
 /TYPA/AMBNT/STREAM                                             ILLINOIS RIVER
                                                                21ILAMB   870314             07130006004 0002.470 ON
                                                                0000 FEET DEPTH

                      00610     00625     00630     00665     00666     00530     00535
   DATE              NH3+NH4-  TOT KJEL  NO2&NO3   PHOS-TOT  PHOS-DIS  RESIDUE   RESIDUE
   FROM              N TOTAL      N      N-TOTAL                        TOT NFLT  VOL NFLT
    TO                 MG/L      MG/L      MG/L     MG/L P    MG/L P     MG/L      MG/L

 80/10/01
 STATION  PCTL(010.0).0100000   .900000   .100000  .0699999  .0100000   7.00000   2.00000
          PCTL(025.0).0600000   .900000   .660000   .100000  .0400000   14.0000   3.00000
          PCTL(050.0) .100000   .900000   5.90000   .130000  .0699999   25.0000   6.00000
          PCTL(075.0) .240000   1.50000   8.30000   .250000   .130000   39.0000   8.00000
          PCTL(085.0) .740000   1.50000   9.60000   .410000   .200000   50.0000   11.0000
          PCTL(090.0) 1.10000   1.50000   10.0000   .440000   .330000   63.0000   13.0000
          PCTL(095.0) 2.20000   1.50000   12.0000   .850000   .500000   82.0000   16.0000
          NUMBER          169         2       169       124       123       169       165
          MAXIMUM     19.0000   1.50000   15.0000   1.30000   1.10000   260.000   33.0000
          MINIMUM    .0100000   .900000  .0300000  .0100000  .0100000   1.00000   1.00000
          SUM         80.9787   2.40000   876.765   28.0775   16.2539   5547.79   1108.20
          MEAN        .479164   1.20000   5.18796   .226431   .132146   32.8272   6.71636
          VARIANCE    2.53111   .180001   15.5240  .0545918  .0312006   1180.25   28.6864
          STAND DEV   1.59095   .424266   3.94005   .233649   .176637   34.3548   5.35597
 96/09/30
1STORET RETRIEVAL DATE 99/01/19
                                                                 05573800        E   16
                                                                39 44 32.0 089 23 57.0 2
                                                                SANGAMON RIVER AT ROBY, IL
                                                                17167   ILLINOIS         SANGAMON
                                                                UPPER MISSISSIPPI RIVER  071700
 /TYPA/AMBNT/STREAM                                             ILLINOIS RIVER
                                                                21ILAMB   870314             07130006003 0005.380 ON
                                                                0000 FEET DEPTH

                      00610     00625     00630     00665     00666     00530     00535
   DATE              NH3+NH4-  TOT KJEL  NO2&NO3   PHOS-TOT  PHOS-DIS  RESIDUE   RESIDUE
   FROM              N TOTAL      N      N-TOTAL                        TOT NFLT  VOL NFLT
    TO                 MG/L      MG/L      MG/L     MG/L P    MG/L P     MG/L      MG/L

 80/10/01
 STATION  PCTL(010.0).0200000   1.00000   1.10000   .200000   .130000   7.00000   2.00000
          PCTL(025.0).0799999   1.00000   2.90000   .300000   .200000   18.0000   4.00000
          PCTL(050.0) .140000   1.60000   5.90000   .440000   .320000   37.0000   7.00000
          PCTL(075.0) .640000   3.30000   8.20000   1.60000   1.40000   70.0000   12.0000
          PCTL(085.0) 2.40000   3.30000   9.20000   2.70000   2.50000   87.0000   17.0000
          PCTL(090.0) 5.50000   15.0000   9.40000   3.20000   2.98000   130.000   19.0000
          PCTL(095.0) 9.10000   15.0000   10.0000   4.50000   4.00000   183.000   22.0000
          NUMBER          151         6       152       123       121       152       150
          MAXIMUM     21.0000   15.0000   14.0000   7.80000   7.50000   720.000   110.000
          MINIMUM    .0100000   1.00000  .0100000   .130000  .0300000   1.00000   1.00000
          SUM         226.029   23.8000   859.259   145.681   125.893   9034.69   1514.80
          MEAN        1.49688   3.96666   5.65302   1.18440   1.04044   59.4387   10.0987
          VARIANCE    13.6321   29.8587   10.2305   2.05627   1.91214   6524.52   170.676
          STAND DEV   3.69217   5.46431   3.19852   1.43397   1.38280   80.7745   13.0643
 96/09/30
1STORET RETRIEVAL DATE 99/01/19
                                                                 05578000        E   24
                                                                40 00 37.0 089 50 42.0 2
                                                                SANGAMON RIVER AT PETERSBURG, IL
                                                                17129   ILLINOIS         MENARD
                                                                UPPER MISSISSIPPI RIVER  071700
 /TYPA/AMBNT/STREAM                                             ILLINOIS RIVER
                                                                21ILAMB   870314             07130008
                                                                0000 FEET DEPTH

                      00610     00625     00630     00665     00666     00530     00535
   DATE              NH3+NH4-  TOT KJEL  NO2&NO3   PHOS-TOT  PHOS-DIS  RESIDUE   RESIDUE
   FROM              N TOTAL      N      N-TOTAL                        TOT NFLT  VOL NFLT
    TO                 MG/L      MG/L      MG/L     MG/L P    MG/L P     MG/L      MG/L

 80/10/01
 STATION  PCTL(010.0).0200000   1.30000   1.70000   .240000   .140000   12.0000   3.00000
          PCTL(025.0) .100000   1.30000   3.00000   .290000   .170000   42.0000   6.00000
          PCTL(050.0) .100000   1.50000   5.20000   .430000   .270000   68.0000   12.0000
          PCTL(075.0) .210000   2.30000   7.00000   .870000   .610000   121.000   20.0000
          PCTL(085.0) .430000   2.30000   7.80000   1.10000   .920000   188.000   26.0000
          PCTL(090.0) .540000   2.30000   8.10000   1.50000   1.30000   225.000   30.0000
          PCTL(095.0) .940000   2.30000   8.40000   1.98000   1.80000   308.000   44.0000
          NUMBER          145         3       145       120       119       144       144
          MAXIMUM     5.80000   2.30000   10.0000   5.00000   3.10000   935.000   150.000
          MINIMUM    .0100000   1.30000   .300000   .130000  .0899999   5.00000   1.00000
          SUM         44.6289   5.10000   729.900   85.8743   60.3655   15043.0   2274.00
          MEAN        .307786   1.70000   5.03379   .715619   .507273   104.465   15.7917
          VARIANCE    .530136   .280003   5.92160   .482958   .299156   13976.4   309.774
          STAND DEV   .728105   .529153   2.43343   .694952   .546952   118.222   17.6004
 96/09/30
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1STORET RETRIEVAL DATE 99/01/19

05583000 E 25
40 07 25.0 089 59 05.0 2
SANGAMON RIVER NEAR OAKFORD, IL
17125 ILLINOIS MASON
UPPER MISSISSIPPI RIVER 071791
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130008
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.520000	1.00000	.190000	.100000	9.00000	2.00000
PCTL(025.0)	.0600000	.800000	2.10000	.230000	.130000	26.0000	5.00000
PCTL(050.0)	.100000	1.10000	5.00000	.328000	.180000	77.0000	10.0000
PCTL(075.0)	.140000	1.50000	7.20000	.460000	.290000	141.000	20.0000
PCTL(085.0)	.230000	1.80000	7.60000	.680000	.410000	194.000	26.0000
PCTL(090.0)	.340000	1.90000	8.10000	.730000	.590000	250.000	34.0000
PCTL(095.0)	.580000	2.50000	8.80000	.950001	.700000	392.000	50.0000
NUMBER	123	144	123	143	134	146	146
MAXIMUM	3.30000	7.80000	12.0000	1.50000	1.30000	683.000	178.000
MINIMUM	.0100000	.100000	.0100000	.130000	.0190000	2.00000	1.00000
SUM	22.8396	179.287	585.052	57.8442	34.6195	16193.6	2316.80
MEAN	.185688	1.24505	4.75652	.404505	.258354	110.915	15.8685
VARIANCE	.145374	.752348	8.08119	.0678241	.0479818	16592.4	412.696
STAND DEV	.381279	.867380	2.84274	.260431	.219047	128.811	20.3149

96/09/30

1STORET RETRIEVAL DATE 99/01/19

05576500 E 26
39 50 34.0 089 32 52.0 2
SANGAMON RIVER AT RIVERTON, IL
17167 ILLINOIS SANGAMON
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130008
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.700000	1.50000	.200000	.110000	13.0000	3.00000
PCTL(025.0)	.0899999	.960000	2.60000	.280000	.150000	31.0000	6.00000
PCTL(050.0)	.110000	1.30000	5.10000	.380000	.240000	57.0000	9.00000
PCTL(075.0)	.270000	1.90000	6.70000	1.00000	.740000	100.000	15.0000
PCTL(085.0)	.500000	2.30000	7.80000	1.70000	1.50000	140.000	22.0000
PCTL(090.0)	1.00000	2.70000	8.30000	2.30000	1.80000	186.000	27.0000
PCTL(095.0)	3.70000	4.70000	9.30000	3.20000	2.80000	254.000	38.0000
NUMBER	144	143	145	145	135	146	144
MAXIMUM	9.20000	11.0000	12.0000	5.40000	4.20000	2320.00	210.000
MINIMUM	.0100000	.229000	.300000	.0799999	.0200000	4.00000	1.00000
SUM	81.7890	254.106	724.880	124.422	86.9704	13864.4	2226.40
MEAN	.567979	1.77696	4.99917	.858083	.644225	94.9616	15.4611
VARIANCE	1.98739	2.77235	6.91777	1.01396	.768591	39866.5	731.423
STAND DEV	1.40975	1.66504	2.63017	1.00696	.876693	199.666	27.0448

96/09/30

1STORET RETRIEVAL DATE 99/01/19

05572125 E 28
40 00 08.0 088 38 07.0 2
SANGAMON RIVER AT ALLERTON PARK NEAR MONTICELLO
17147 ILLINOIS PIATT
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130006
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.300000	.610000	.0600000	.0400000	5.00000	1.00000
PCTL(025.0)	.0500000	.600000	3.20000	.0899999	.0500000	14.0000	3.00000
PCTL(050.0)	.100000	.800000	7.30000	.160000	.0799999	42.0000	6.00000
PCTL(075.0)	.110000	1.10000	9.70000	.260000	.140000	76.0000	10.0000
PCTL(085.0)	.160000	1.30000	11.0000	.320000	.180000	116.000	14.0000
PCTL(090.0)	.190000	1.60000	12.0000	.440000	.220000	148.000	24.0000
PCTL(095.0)	.290000	2.02000	13.0000	.510000	.320000	234.000	32.0000
NUMBER	142	142	139	134	140	140	140
MAXIMUM	2.00000	12.0000	34.0000	1.20000	1.10000	716.000	480.000
MINIMUM	.0100000	.100000	.100000	.0200000	.0200000	1.00000	1.00000
SUM	18.0997	145.898	956.912	27.5655	16.4639	10131.0	1785.00
MEAN	.127463	1.02745	6.88426	.205713	.117599	72.3643	12.7500
VARIANCE	.0403055	1.44857	22.4651	.0318486	.0150966	11755.4	1737.73
STAND DEV	.200762	1.20357	4.73973	.178462	.122868	108.422	41.6861

96/09/30

1STORET RETRIEVAL DATE 99/01/19

05570910 E 29
40 18 40.0 088 19 20.0 2
SANGAMON RIVER AT FISHER
17019 ILLINOIS CHAMPAIGN
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130006
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.200000	.100000	.0400000	.0200000	4.00000	1.00000
PCTL(025.0)	.0400000	.400000	2.80000	.0600000	.0300000	13.0000	2.00000
PCTL(050.0)	.100000	.640000	8.20000	.110000	.0500000	37.0000	5.00000
PCTL(075.0)	.100000	1.00000	12.0000	.150000	.0799999	64.0000	10.00000
PCTL(085.0)	.110000	1.50000	13.0000	.220000	.110000	93.0000	13.0000
PCTL(090.0)	.140000	2.00000	13.0000	.270000	.160000	116.000	18.0000
PCTL(095.0)	.180000	2.40000	14.0000	.450000	.230000	146.000	34.0000
NUMBER	146	145	143	145	140	143	143
MAXIMUM	.400000	7.50000	20.0000	4.10000	4.10000	608.000	96.0000
MINIMUM	.0100000	.100000	.0100000	.0100000	.0010000	1.00000	1.00000
SUM	12.9099	133.768	1072.95	24.0177	14.7750	7971.00	1324.00
MEAN	.0884241	.922540	7.50315	.165639	.105535	55.7412	9.25874
VARIANCE	.0039276	.999213	25.0978	.126756	.124610	6145.79	204.447
STAND DEV	.0626704	.999606	5.00977	.356028	.353002	78.3951	14.2985
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05582000 EI 02
40 08 01.0 089 44 08.0 2
SALT CREEK NEAR GREENVIEW, IL
17125 ILLINOIS MASON
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130009
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.400000	1.10000	.110000	.0600000	7.00000	2.00000
PCTL(025.0)	.0600000	.700000	2.80000	.140000	.0699999	19.0000	3.00000
PCTL(050.0)	.100000	.900000	5.40000	.210000	.110000	56.0000	8.00000
PCTL(075.0)	.100000	1.20000	7.50000	.280000	.170000	132.000	14.0000
PCTL(085.0)	.140000	1.50000	8.20000	.430000	.210000	203.000	22.0000
PCTL(090.0)	.180000	1.50000	8.60000	.510000	.280000	302.000	36.0000
PCTL(095.0)	.300000	2.80000	9.30000	.730000	.390000	462.000	48.0000
NUMBER	148	10	148	129	128	147	147
MAXIMUM	.630000	2.80000	12.0000	1.10000	.620000	1170.00	190.000
MINIMUM	.0100000	.400000	.220000	.0799999	.0100000	3.00000	1.00000
SUM	15.5599	11.4000	771.599	34.3685	18.1688	17322.0	2134.00
MEAN	.105135	1.14000	5.21351	.266422	.141944	117.837	14.5170
VARIANCE	.0096220	.435998	7.91224	.0394878	.0109530	34978.1	576.429
STAND DEV	.0980916	.660301	2.81287	.198715	.104656	187.024	24.0089
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05578500 EI 06
40 06 54.0 089 02 57.0 2
SALT CREEK NEAR ROWELL, IL
17039 ILLINOIS DE WITT
UPPER MISSISSIPPI RIVER 071791
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130009009 0024.360 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.700000	1.20000	.0699999	.0200000	6.00000	2.00000
PCTL(025.0)	.0500000	.700000	1.60000	.0899999	.0400000	16.0000	3.00000
PCTL(050.0)	.100000	.800000	2.90000	.150000	.0699999	36.0000	5.00000
PCTL(075.0)	.100000	.900000	4.40000	.340000	.200000	70.0000	8.00000
PCTL(085.0)	.120000	.900000	5.60000	.440000	.320000	91.0000	11.0000
PCTL(090.0)	.170000	.900000	5.90000	.470000	.400000	113.000	14.0000
PCTL(095.0)	.230000	1.10000	6.30000	.540000	.440000	178.000	20.0000
NUMBER	149	10	149	131	126	147	147
MAXIMUM	.810000	1.10000	28.0000	1.00000	.890000	564.000	70.0000
MINIMUM	.0100000	.700000	.560000	.0200000	.0100000	1.00000	1.00000
SUM	14.9199	8.10000	510.111	29.3784	18.2658	8518.00	1087.00
MEAN	.100134	.810000	3.42356	.224263	.144967	57.9455	7.39456
VARIANCE	.0092349	.0165559	7.78231	.0361363	.0266266	6194.07	74.2816
STAND DEV	.0960983	.128670	2.78968	.190095	.163177	78.7024	8.61868
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05581500 EID 04
40 13 20.0 089 24 12.0 2
SUGAR CREEK NEAR HARTSBURG, IL
17107 ILLINOIS LOGAN
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130009
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.600000	3.30000	.200000	.140000	6.00000	2.00000
PCTL(025.0)	.0600000	.800000	5.20000	.320000	.190000	14.0000	2.00000
PCTL(050.0)	.100000	1.10000	7.60000	.510000	.370000	44.0000	5.00000
PCTL(075.0)	.120000	2.90000	10.0000	.930000	.730000	100.000	12.0000
PCTL(085.0)	.190000	4.40000	12.0000	1.20000	1.00000	158.000	22.0000
PCTL(090.0)	.290000	4.40000	12.0000	1.50000	1.30000	215.000	30.0000
PCTL(095.0)	.630000	5.00000	13.0000	2.10000	1.90000	354.000	60.0000
NUMBER	151	12	151	131	128	151	151
MAXIMUM	3.00000	5.00000	18.0000	3.40000	3.30000	948.000	116.000
MINIMUM	.0100000	.600000	.520000	.120000	.0100000	2.00000	1.00000
SUM	26.6694	24.6000	1174.56	95.1452	74.8952	13993.0	1878.00
MEAN	.176618	2.05000	7.77855	.726300	.585119	92.6688	12.4371
VARIANCE	.129829	2.72092	11.6039	.353853	.325045	23460.8	368.807
STAND DEV	.360317	1.64952	3.40645	.594855	.570127	153.169	19.2044
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05580000 EIE 04
40 15 20.0 089 07 40.0 2
KICKAPOO CREEK AT WAYNESVILLE, IL
17039 ILLINOIS DE WITT
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130009
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.400000	.380000	.0200000	.0100000	5.00000	1.00000
PCTL(025.0)	.0300000	.600000	2.10000	.0500000	.0100000	14.0000	2.00000
PCTL(050.0)	.100000	.800000	6.60000	.0699999	.0300000	34.0000	5.00000
PCTL(075.0)	.100000	1.90000	9.80000	.110000	.0400000	90.0000	11.0000
PCTL(085.0)	.120000	1.90000	11.0000	.170000	.0699999	144.000	16.0000
PCTL(090.0)	.150000	5.00000	12.0000	.260000	.0899999	202.000	24.0000
PCTL(095.0)	.200000	5.00000	13.0000	.310000	.130000	372.000	40.0000
NUMBER	150	7	148	124	121	148	148
MAXIMUM	.940000	5.00000	18.0000	1.10000	.750000	2150.00	190.000
MINIMUM	.0100000	.400000	.100000	.0100000	.0010000	1.00000	1.00000
SUM	14.3799	10.4000	929.910	15.4619	5.86495	13896.0	1682.00
MEAN	.0958662	1.48571	6.28318	.124693	.0484707	93.8918	11.3649
VARIANCE	.0118348	2.64809	18.5182	.0348063	.0078076	46128.5	469.362
STAND DEV	.108788	1.62729	4.30328	.186565	.0883606	214.775	21.6648
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05580500 EIE 05
40 11 30.0 089 21 40.0 2
KICKAPOO CREEK NEAR LINCOLN, IL
17107 ILLINOIS LOGAN
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130009
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.400000	.250000	.0300000	.0100000	6.00000	1.00000
PCTL(025.0)	.0500000	.600000	2.10000	.0500000	.0100000	17.0000	2.00000
PCTL(050.0)	.100000	.900000	6.80000	.0799999	.0300000	41.0000	5.00000
PCTL(075.0)	.100000	2.70000	9.30000	.120000	.0500000	89.0000	10.0000
PCTL(085.0)	.130000	3.60000	10.0000	.220000	.0899999	152.000	19.0000
PCTL(090.0)	.170000	3.60000	11.0000	.350000	.100000	266.000	32.0000
PCTL(095.0)	.240000	6.40000	12.0000	.650000	.240000	484.000	72.0000
NUMBER	151	11	149	130	129	153	153
MAXIMUM	.700000	6.40000	16.0000	1.60000	.930000	3130.00	1230.00
MINIMUM	.0100000	.400000	.0100000	.0100000	.0080000	1.00000	1.00000
SUM	15.0799	18.7000	906.759	20.1987	7.60395	19531.9	4141.00
MEAN	.0998670	1.70000	6.08563	.155375	.0589453	127.660	27.0653
VARIANCE	.0084929	3.44000	16.4505	.0626237	.0117580	111168	14333.6
STAND DEV	.0921568	1.85472	4.05592	.250247	.108434	333.419	119.723
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05579500 EIG 01
39 57 00.0 089 23 10.0 2
LAKE FORK NEAR CORNLAND, IL
17107 ILLINOIS LOGAN
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130009
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.200000	.160000	.0400000	.0100000	8.00000	2.00000
PCTL(025.0)	.0600000	.600000	1.90000	.0600000	.0200000	23.0000	3.00000
PCTL(050.0)	.100000	.800000	6.60000	.0899999	.0200000	54.0000	6.00000
PCTL(075.0)	.100000	1.40000	8.50000	.140000	.0400000	123.000	12.0000
PCTL(085.0)	.120000	1.40000	9.70000	.200000	.0600000	168.000	18.0000
PCTL(090.0)	.160000	1.90000	10.0000	.250000	.0699999	217.000	21.0000
PCTL(095.0)	.210000	1.90000	11.4000	.430000	.120000	332.000	40.0000
NUMBER	148	7	148	127	125	147	147
MAXIMUM	.540000	1.90000	18.0000	2.50000	.240000	1680.00	200.000
MINIMUM	.0100000	.200000	.0100000	.0300000	.0100000	3.00000	1.00000
SUM	14.0299	6.40000	870.190	18.8638	4.86696	15630.0	1992.00
MEAN	.0947968	.914285	5.87966	.148534	.0389356	106.326	13.5510
VARIANCE	.0050344	.314762	15.5617	.0628456	.0016016	36782.3	781.440
STAND DEV	.0709534	.561036	3.94483	.250690	.0400205	191.787	27.9542
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05577505 EL 01
39 49 16.0 089 41 16.0 2
SPRING CR AT BURNS LANE BRIDGE AT SPRINGFIELD,IL
17167 ILLINOIS SANGAMON
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130008
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.880000	.100000	.0500000	.0200000	9.00000	2.00000
PCTL(025.0)	.0799999	.880000	.940000	.110000	.0500000	22.0000	4.00000
PCTL(050.0)	.100000	.880000	6.50000	.190000	.0899999	44.0000	8.00000
PCTL(075.0)	.180000	.900000	9.60000	.300000	.130000	100.000	16.0000
PCTL(085.0)	.300000	.900000	11.0000	.440000	.190000	154.000	21.0000
PCTL(090.0)	.360000	.900000	11.8000	.540000	.230000	190.000	26.0000
PCTL(095.0)	.650000	.900000	13.0000	.830000	.383000	240.000	36.0000
NUMBER	143	2	142	117	115	144	144
MAXIMUM	2.10000	.900000	14.0000	1.47500	.860000	1252.00	100.000
MINIMUM	.0100000	.880000	.0100000	.0300000	.0100000	1.00000	1.00000
SUM	26.6295	1.78000	850.249	30.1065	13.9850	12157.0	1790.00
MEAN	.186220	.890000	5.98767	.257321	.121608	84.4235	12.4306
VARIANCE	.0835078	.0002003	19.6735	.0564667	.0197073	16254.8	202.862
STAND DEV	.288977	.0141517	4.43548	.237627	.140383	127.495	14.2430
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05576022 EO 01
39 45 50.0 089 33 43.0 2
SOUTH FORK SANGAMON RIVER BELOW ROCHESTER
17167 ILLINOIS SANGAMON
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130007
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.500000	.170000	.110000	.0300000	12.0000	2.00000
PCTL(025.0)	.100000	.900000	.700000	.158000	.0550000	33.0000	5.00000
PCTL(050.0)	.100000	1.20000	4.20000	.220000	.0799999	65.0000	8.00000
PCTL(075.0)	.170000	3.60000	6.30000	.310000	.140000	116.000	15.0000
PCTL(085.0)	.290000	3.60000	7.20000	.400000	.180000	156.000	22.0000
PCTL(090.0)	.380000	3.60000	7.70000	.460000	.200000	196.000	25.0000
PCTL(095.0)	.820000	4.20000	8.30000	.710000	.330000	266.000	35.0000
NUMBER	145	10	145	127	126	145	145
MAXIMUM	1.50000	4.20000	11.0000	1.30000	1.30000	2120.00	272.000
MINIMUM	.0100000	.500000	.0500000	.0600000	.0100000	1.00000	1.00000
SUM	26.8795	20.1000	569.513	35.7794	15.0849	15165.0	2199.20
MEAN	.185376	2.01000	3.92768	.281727	.119722	104.586	15.1669
VARIANCE	.0580229	1.87878	8.32901	.0504705	.0231156	39309.9	881.607
STAND DEV	.240879	1.37069	2.88600	.224656	.152038	198.267	29.6919
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05575500 EO 02
39 34 44.0 089 23 31.0 2
SOUTH FORK SANGAMON RIVER AT KINCAID, IL
17021 ILLINOIS CHRISTIAN
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130007
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0899999	.700000	.300000	.100000	.0100000	20.0000	4.00000
PCTL(025.0)	.100000	.960000	1.70000	.160000	.0100000	37.0000	6.00000
PCTL(050.0)	.190000	1.20000	4.00000	.230000	.0200000	60.0000	12.0000
PCTL(075.0)	.470000	1.90000	5.90000	.354000	.0969999	94.0000	17.0000
PCTL(085.0)	.730000	2.30000	6.80000	.470000	.165000	142.000	22.0000
PCTL(090.0)	1.10000	2.80000	7.40000	.570000	.200000	170.000	30.0000
PCTL(095.0)	1.90000	3.60000	8.20000	.880000	.230000	225.000	43.0000
NUMBER	144	144	143	144	142	144	144
MAXIMUM	4.80000	6.70000	9.10000	1.50000	.490000	1128.00	84.0000
MINIMUM	.0100000	.100000	.100000	.0100000	.0030000	10.0000	1.00000
SUM	62.7091	227.969	555.902	44.0323	9.68393	13053.0	2106.00
MEAN	.435480	1.58312	3.88742	.305780	.0681966	90.6458	14.6250
VARIANCE	.448368	1.19635	6.59251	.0624552	.0078889	14113.5	188.320
STAND DEV	.669603	1.09378	2.56759	.249910	.0888196	118.800	13.7230
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05576250 EOA 01
39 46 48.0 089 35 20.0 2
SUGAR CREEK NEAR SPRINGFIELD, IL
17167 ILLINOIS SANGAMON
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130007
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	.500000	.140000	.0500000	.0100000	8.00000	2.00000
PCTL(025.0)	.100000	.700000	.500000	.0799999	.0200000	13.0000	3.00000
PCTL(050.0)	.100000	.800000	1.20000	.100000	.0400000	28.0000	5.00000
PCTL(075.0)	.140000	1.00000	3.10000	.130000	.0699999	46.0000	7.00000
PCTL(085.0)	.190000	1.10000	4.40000	.160000	.100000	59.0000	10.0000
PCTL(090.0)	.230000	1.20000	5.00000	.190000	.120000	67.0000	11.0000
PCTL(095.0)	.360000	1.30000	6.10000	.240000	.140000	89.0000	14.0000
NUMBER	147	147	147	147	144	145	145
MAXIMUM	.700000	1.50000	8.50000	.820000	.720000	186.000	41.0000
MINIMUM	.0100000	.100000	.0100000	.0200000	.0100000	1.00000	1.00000
SUM	18.9198	123.529	299.807	17.2899	8.33394	5040.00	868.400
MEAN	.128706	.840335	2.03950	.117618	.0578746	34.7586	5.98896
VARIANCE	.0120810	.0803607	3.89506	.0063144	.0047886	842.576	27.2482
STAND DEV	.109914	.283480	1.97359	.0794631	.0691994	29.0272	5.21998
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05575570 EOD 01
39 39 00.0 089 28 40.0 2
SANGCHRIS LAKE NEAR NEW CITY, IL
17021 ILLINOIS CHRISTIAN
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130007
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.400000	.100000	.0200000	.0100000	5.00000	2.00000
PCTL(025.0)	.0300000	.500000	.150000	.0200000	.0100000	8.00000	2.00000
PCTL(050.0)	.100000	.700000	.800000	.0300000	.0100000	12.0000	3.00000
PCTL(075.0)	.100000	.800000	3.00000	.0400000	.0100000	19.0000	5.00000
PCTL(085.0)	.100000	.970000	3.70000	.0500000	.0200000	24.0000	6.00000
PCTL(090.0)	.130000	1.00000	4.50000	.0699999	.0200000	29.0000	7.00000
PCTL(095.0)	.150000	1.20000	5.40000	.0899999	.0300000	54.0000	10.0000
NUMBER	144	144	144	144	142	144	144
MAXIMUM	.630000	2.80000	6.30000	.620000	.620000	359.000	22.0000
MINIMUM	.0100000	.100000	.0100000	.0100000	.0010000	2.00000	1.00000
SUM	13.0399	101.002	244.419	6.22395	2.53494	2768.40	598.000
MEAN	.0905550	.701404	1.69735	.0432219	.0178517	19.2250	4.15278
VARIANCE	.0061001	.102140	3.25810	.0031671	.0027137	1188.31	11.7947
STAND DEV	.0781031	.319593	1.80502	.0562766	.0520935	34.4718	3.43434
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05574500 EOH 01
39 33 14.0 089 15 12.0 2
FLAT BRANCH NEAR TAYLORVILLE, IL
17021 ILLINOIS CHRISTIAN
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130007
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	.700000	.200000	.0899999	.0500000	7.00000	2.00000
PCTL(025.0)	.0699999	.700000	1.30000	.150000	.0799999	21.0000	4.00000
PCTL(050.0)	.100000	1.10000	5.30000	.230000	.120000	57.0000	8.00000
PCTL(075.0)	.120000	1.20000	7.20000	.310000	.190000	100.000	14.0000
PCTL(085.0)	.190000	1.20000	8.50000	.390000	.250000	123.000	17.0000
PCTL(090.0)	.240000	1.40000	9.20000	.470000	.300000	151.000	22.0000
PCTL(095.0)	.310000	1.40000	10.0000	.720000	.380000	236.000	48.0000
NUMBER	145	6	144	121	118	143	143
MAXIMUM	7.60000	1.40000	12.0000	1.20000	.670000	410.000	78.0000
MINIMUM	.0100000	.700000	.0799999	.0500000	.0100000	2.00000	1.00000
SUM	24.9194	6.50000	689.251	32.6435	18.1398	10947.0	1726.00
MEAN	.171858	1.08333	4.78646	.269781	.153727	76.5524	12.0699
VARIANCE	.397842	.0616661	10.8831	.0370245	.0126770	6301.07	201.263
STAND DEV	.630747	.248327	3.29895	.192417	.112592	79.3793	14.1867
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05527500 F 01
41 21 00.0 088 11 40.0 4
KANKAKEE RIVER NEAR WILMINGTON, IL
17197 ILLINOIS WILL
UPPER MISSISSIPPI RIVER 071500
/TYPA/AMBNT/STREAM KANKAKEE RIVER
21ILAMB 870314 07120001
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.500000	.530000	.0300000	.0100000	5.00000	2.00000
PCTL(025.0)	.0300000	.600000	1.20000	.0600000	.0200000	9.00000	3.00000
PCTL(050.0)	.0799999	.800000	3.00000	.0799999	.0440000	21.0000	6.00000
PCTL(075.0)	.100000	1.10000	5.60000	.150000	.0699999	39.0000	10.00000
PCTL(085.0)	.120000	1.30000	6.30000	.200000	.0799999	82.0000	15.0000
PCTL(090.0)	.150000	1.60000	7.00000	.250000	.100000	121.000	23.0000
PCTL(095.0)	.210000	2.10000	8.80000	.290000	.110000	185.000	31.0000
NUMBER	164	157	164	164	142	161	152
MAXIMUM	.810000	5.40000	11.0000	.830000	.180000	725.000	115.000
MINIMUM	.0100000	.400000	.100000	.0100000	.0010000	1.00000	1.00000
SUM	14.3099	148.289	590.922	19.2917	7.29995	7286.00	1403.00
MEAN	.0872556	.944517	3.60318	.117632	.0514081	45.2546	9.23026
VARIANCE	.0084097	.335053	6.72066	.0109372	.0011779	6135.03	151.106
STAND DEV	.0917044	.578837	2.59242	.104581	.0343201	78.3264	12.2925
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05520500 F 02
41 09 36.0 087 39 47.0 4
KANKAKEE RIVER AT MOMENCE, IL
17091 ILLINOIS KANKAKEE
UPPER MISSISSIPPI RIVER 071500
/TYPA/AMBNT/STREAM KANKAKEE RIVER
21ILAMB 870314 07120001036 0011.150 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	.400000	.650000	.0400000	.0100000	4.00000	1.00000
PCTL(025.0)	.0699999	.600000	.860000	.0500000	.0130000	8.00000	2.00000
PCTL(050.0)	.100000	.700000	1.40000	.0699999	.0200000	20.0000	6.00000
PCTL(075.0)	.110000	1.00000	2.20000	.110000	.0300000	38.0000	10.00000
PCTL(085.0)	.140000	1.30000	2.80000	.140000	.0400000	51.0000	11.0000
PCTL(090.0)	.160000	1.50000	3.70000	.180000	.0500000	70.0000	14.0000
PCTL(095.0)	.270000	2.00000	4.40000	.250000	.0699999	85.0000	19.0000
NUMBER	159	158	159	157	147	159	159
MAXIMUM	.790000	11.0000	6.50000	.670000	.600000	588.000	70.0000
MINIMUM	.0100000	.200000	.100000	.0200000	.0070000	1.00000	1.00000
SUM	17.0518	148.889	274.188	15.5539	4.91393	5570.60	1140.40
MEAN	.107244	.942337	1.72445	.0990696	.0334281	35.0352	7.17232
VARIANCE	.0091959	.932270	1.51855	.0084037	.0033985	4228.80	69.3446
STAND DEV	.0958951	.965541	1.23229	.0916717	.0582965	65.0292	8.32734
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05526000 FL 02
41 00 32.0 087 49 27.0 2
IROQUOIS RIVER NEAR CHEBANSE, IL
17091 ILLINOIS KANKAKEE
UPPER MISSISSIPPI RIVER 071500
/TYPA/AMBNT/STREAM KANKAKEE RIVER
21ILAMB 870314 07120002001 0005.550 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0300000	.600000	.530000	.0500000	.0300000	4.00000	1.00000
PCTL(025.0)	.0699999	.700000	3.30000	.0799999	.0400000	15.0000	3.00000
PCTL(050.0)	.100000	.900000	6.70000	.120000	.0600000	38.0000	7.00000
PCTL(075.0)	.110000	1.20000	9.10000	.180000	.0899999	83.0000	11.0000
PCTL(085.0)	.180000	1.50000	10.2000	.230000	.110000	124.000	15.0000
PCTL(090.0)	.220000	1.90000	12.0000	.270000	.130000	164.000	22.0000
PCTL(095.0)	.300000	2.60000	14.0000	.400000	.190000	190.000	30.0000
NUMBER	158	51	158	137	126	157	156
MAXIMUM	3.20000	5.00000	25.0000	.650000	.430000	540.000	78.0000
MINIMUM	.0100000	.400000	.100000	.0200000	.0100000	1.00000	1.00000
SUM	20.9635	57.8798	1035.91	20.4207	9.52895	10477.6	1567.60
MEAN	.132680	1.13490	6.55639	.149056	.0756266	66.7362	10.0487
VARIANCE	.0691633	.586963	17.1347	.0118366	.0032915	7376.78	153.854
STAND DEV	.262989	.766135	4.13941	.108796	.0573719	85.8882	12.4038
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05525000 FL 04
40 49 25.0 087 34 55.0 2
IROQUOIS RIVER AT IROQUOIS, IL
17075 ILLINOIS IROQUOIS
UPPER MISSISSIPPI RIVER 071591
/TYPA/AMBNT/STREAM KANKAKEE RIVER
21ILAMB 870314 07120002
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0400000	.800000	.410000	.0400000	.0240000	5.00000	1.00000
PCTL(025.0)	.0699999	.800000	2.90000	.0699999	.0400000	13.0000	3.00000
PCTL(050.0)	.100000	.800000	6.40000	.130000	.0600000	37.0000	6.00000
PCTL(075.0)	.120000	.800000	8.80000	.180000	.0899999	70.0000	12.0000
PCTL(085.0)	.160000	.800000	9.90000	.210000	.110000	85.0000	15.0000
PCTL(090.0)	.200000	.800000	11.0000	.240000	.140000	96.0000	18.0000
PCTL(095.0)	.270000	.800000	13.0000	.290000	.170000	131.000	20.0000
NUMBER	139	1	137	114	114	138	138
MAXIMUM	.650000	.800000	17.0000	.530000	.420000	240.000	85.0000
MINIMUM	.0100000	.800000	.100000	.0200000	.0100000	1.00000	1.00000
SUM	15.4699	.800000	837.029	15.9129	8.54796	6525.19	1202.80
MEAN	.111294	.800000	6.10970	.139587	.0749820	47.2840	8.71594
VARIANCE	.0066357		15.8344	.0071210	.0029533	1761.02	87.9409
STAND DEV	.0814598		3.97924	.0843858	.0543445	41.9646	9.37768
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05525500 FLI 02
40 37 50.0 087 43 25.0 2
SUGAR CREEK AT MILFORD, IL
17075 ILLINOIS IROQUOIS
UPPER MISSISSIPPI RIVER 071500
/TYPA/AMBNT/STREAM KANKAKEE RIVER
21ILAMB 870314 07120002010 0014.660 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0300000		.600000	.0400000	.0200000	5.00000	1.00000
PCTL(025.0)	.0500000		3.00000	.0500000	.0300000	15.0000	3.00000
PCTL(050.0)	.100000		7.30000	.0799999	.0400000	31.0000	5.00000
PCTL(075.0)	.130000		10.5000	.150000	.0799999	69.0000	10.0000
PCTL(085.0)	.170000		12.0000	.190000	.100000	104.000	13.0000
PCTL(090.0)	.230000		13.0000	.260000	.120000	150.000	20.0000
PCTL(095.0)	.340000		13.0000	.420000	.160000	210.000	38.0000
NUMBER	140		140	114	113	139	139
MAXIMUM	1.80000		19.0000	1.23000	1.01000	1930.00	250.000
MINIMUM	.0100000		.100000	.0100000	.0100000	2.00000	1.00000
SUM	19.2297		993.912	15.4490	7.52796	9714.79	1498.40
MEAN	.137355		7.09937	.135517	.0666190	69.8906	10.7799
VARIANCE	.0406238		19.6655	.0306867	.0109685	30095.2	584.385
STAND DEV	.201554		4.43458	.175176	.104730	173.480	24.1741
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05528000 G 07
42 20 39.0 087 56 18.0 2
DES PLAINES RIVER NEAR GURNEE, IL
17097 ILLINOIS LAKE
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004011 0043.570 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0500000	.700000	2.90000	.150000	.120000	7.00000	3.00000
PCTL(025.0)	.0699999	.700000	4.00000	.270000	.260000	11.0000	4.00000
PCTL(050.0)	.140000	1.80000	5.30000	.590000	.490000	21.0000	6.00000
PCTL(075.0)	.300000	2.80000	7.70000	1.01000	.967000	35.0000	9.00000
PCTL(085.0)	.650000	2.80000	9.30000	1.45000	1.40000	46.0000	12.0000
PCTL(090.0)	1.10000	3.60000	10.2000	1.74000	1.66000	55.0000	13.0000
PCTL(095.0)	2.30000	3.60000	12.0000	2.15000	2.00000	78.0000	17.0000
NUMBER	152	6	150	127	123	151	151
MAXIMUM	5.60000	3.60000	16.0000	2.67600	2.47000	124.000	108.000
MINIMUM	.0100000	.700000	.300000	.0899999	.0400000	1.00000	1.00000
SUM	66.8439	13.1000	913.893	96.6203	85.8382	4136.00	1184.00
MEAN	.439763	2.18333	6.09262	.760789	.697872	27.3907	7.84106
VARIANCE	.772898	1.04967	9.34286	.399282	.359258	536.882	86.2146
STAND DEV	.879146	1.02453	3.05661	.631887	.599381	23.1707	9.28518
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05527800 G 08
42 29 22.0 087 55 32.0 2
DES PLAINES RIVER AT RUSSELL, IL
17097 ILLINOIS LAKE
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004012 0006.130 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0270000	.890000	.100000	.0799999	.0400000	5.00000	2.00000
PCTL(025.0)	.0400000	.890000	1.00000	.120000	.0600000	10.0000	4.00000
PCTL(050.0)	.0899999	1.30000	2.50000	.160000	.0899999	28.0000	8.00000
PCTL(075.0)	.170000	2.30000	4.10000	.240000	.132000	55.0000	12.0000
PCTL(085.0)	.290000	3.00000	4.60000	.304000	.160000	67.0000	16.0000
PCTL(090.0)	.430000	3.00000	5.40000	.320000	.180000	87.0000	21.0000
PCTL(095.0)	.610000	3.00000	5.90000	.420000	.220000	140.000	27.0000
NUMBER	147	4	147	122	119	146	146
MAXIMUM	1.40000	3.00000	9.70000	.700000	.750000	320.000	74.0000
MINIMUM	.0100000	.890000	.0100000	.0500000	.0200000	1.00000	1.00000
SUM	24.6364	7.49000	393.094	23.6227	12.7170	6139.00	1529.00
MEAN	.167594	1.87250	2.67411	.193628	.106865	42.0479	10.4726
VARIANCE	.0491194	.915688	4.06436	.0121929	.0074436	2776.14	122.458
STAND DEV	.221629	.956916	2.01603	.110422	.0862765	52.6891	11.0661
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05534050 G 11
41 35 47.0 088 04 07.0 2
DES PLAINES RIVER AT LOCKPORT, IL
17197 ILLINOIS WILL
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004010 0003.080 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0400000	1.20000	2.30000	.330000	.250000	10.0000	4.00000
PCTL(025.0)	.0699999	1.40000	2.90000	.440000	.340000	17.0000	6.00000
PCTL(050.0)	.170000	1.60000	3.60000	.650000	.500000	36.0000	9.00000
PCTL(075.0)	.330000	2.10000	4.90000	.920000	.740000	66.0000	17.0000
PCTL(085.0)	.500000	2.40000	5.60000	1.03000	.890000	75.0000	20.0000
PCTL(090.0)	.760000	2.80000	6.10000	1.10000	.930000	86.0000	22.0000
PCTL(095.0)	1.30000	3.00000	6.80000	1.31000	1.06000	100.000	24.0000
NUMBER	155	32	155	134	125	154	144
MAXIMUM	1.90000	3.10000	8.40000	1.64000	1.50000	242.000	45.0000
MINIMUM	.0100000	.540000	.200000	.200000	.120000	1.00000	1.00000
SUM	46.0491	57.5098	615.561	93.5391	70.6603	6710.00	1699.00
MEAN	.297091	1.79718	3.97136	.698053	.565282	43.5714	11.7986
VARIANCE	.144732	.379247	2.25473	.0985398	.0799512	1174.33	60.0361
STAND DEV	.380437	.615830	1.50157	.313911	.282756	34.2685	7.74830
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05530590 G 15
41 57 11.0 087 51 15.0 2
DES PLAINES RIVER NEAR SCHILLER PARK, IL
17031 ILLINOIS COOK
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004011 0011.290 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01								
STATION	PCTL(010.0)	.100000	1.10000	2.40000	.230000	.150000	11.0000	3.00000
	PCTL(025.0)	.150000	1.40000	3.20000	.360000	.300000	19.0000	6.00000
	PCTL(050.0)	.250000	1.70000	4.10000	.560000	.460000	40.0000	10.0000
	PCTL(075.0)	.440000	2.00000	5.10000	.820000	.730000	64.0000	16.0000
	PCTL(085.0)	.570000	2.30000	5.90000	1.00000	.850000	82.0000	17.0000
	PCTL(090.0)	.680000	2.50000	6.40000	1.10000	.940000	86.0000	20.0000
	PCTL(095.0)	1.10000	2.90000	7.10000	1.20000	1.10000	110.000	22.0000
	NUMBER	151	146	151	149	135	151	151
	MAXIMUM	3.20000	5.70000	16.0000	1.66000	1.90000	180.000	34.0000
	MINIMUM	.0300000	.590000	.700000	.0600000	.0300000	4.00000	1.00000
	SUM	54.8091	261.979	648.690	91.4961	71.7603	6878.99	1640.00
	MEAN	.362974	1.79437	4.29596	.614068	.531558	45.5562	10.8609
	VARIANCE	.156744	.418755	3.25913	.102441	.109532	1117.66	41.9339
	STAND DEV	.395909	.647113	1.80531	.320064	.330957	33.4315	6.47564
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05529000 G 22
42 04 55.0 087 53 25.0 2
DES PLAINES RIVER NEAR DES PLAINES, IL
17031 ILLINOIS COOK
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004011 0022.100 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01								
STATION	PCTL(010.0)	.0600000	.620000	2.50000	.210000	.160000	9.00000	3.00000
	PCTL(025.0)	.100000	.620000	3.10000	.330000	.265000	15.0000	6.00000
	PCTL(050.0)	.180000	1.30000	4.20000	.580000	.480000	33.0000	9.00000
	PCTL(075.0)	.350000	2.60000	5.30000	.860000	.710000	56.0000	13.0000
	PCTL(085.0)	.400000	2.60000	6.30000	1.01000	.890000	71.0000	16.0000
	PCTL(090.0)	.650000	2.60000	7.20000	1.22000	1.10000	84.0000	17.0000
	PCTL(095.0)	.900000	2.60000	7.90000	1.60000	1.40000	97.0000	21.0000
	NUMBER	149	3	149	119	114	148	148
	MAXIMUM	1.70000	2.60000	11.0000	1.79000	1.67000	310.000	52.0000
	MINIMUM	.0100000	.620000	.400000	.122000	.0699999	2.00000	2.00000
	SUM	42.4191	4.52000	665.891	76.6183	61.6945	6205.00	1496.00
	MEAN	.284692	1.50667	4.46907	.643851	.541180	41.9256	10.1081
	VARIANCE	.0985819	1.01213	3.47303	.158040	.133868	1498.29	46.0835
	STAND DEV	.313978	1.00605	1.86361	.397542	.365880	38.7077	6.78848
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05537980 G 23
41 32 12.0 088 04 57.0 2
DES PLAINES RIVER AT ROUTE 53 AT JOLIET, IL
17197 ILLINOIS WILL
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004006 0002.650 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01								
STATION	PCTL(010.0)	.450000	1.40000	2.00000	.390000	.280000	10.0000	2.00000
	PCTL(025.0)	.660000	1.80000	2.70000	.470000	.380000	13.0000	4.00000
	PCTL(050.0)	1.30000	2.60000	3.40000	.620000	.500000	19.0000	7.00000
	PCTL(075.0)	2.40000	3.79000	4.40000	.857000	.690000	27.0000	10.0000
	PCTL(085.0)	3.10000	4.70000	4.90000	.996000	.840000	36.0000	12.0000
	PCTL(090.0)	3.90000	5.50000	5.20000	1.04000	.910000	48.0000	14.0000
	PCTL(095.0)	4.40000	6.20000	5.80000	1.20000	.990000	60.0000	18.0000
	NUMBER	140	136	140	140	135	140	130
	MAXIMUM	5.70000	8.30000	7.20000	1.59000	1.50000	420.000	68.0000
	MINIMUM	.0400000	.140000	1.20000	.220000	.140000	6.00000	1.00000
	SUM	242.529	408.632	496.393	94.7922	75.1723	3825.00	1102.00
	MEAN	1.73235	3.00465	3.54566	.677087	.556832	27.3214	8.47692
	VARIANCE	1.76978	2.51847	1.53285	.0727486	.0621888	1540.42	57.2437
	STAND DEV	1.33033	1.58697	1.23808	.269719	.249377	39.2482	7.56595
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05532500 G 39
41 49 20.0 087 49 15.0 4
DES PLAINES R BARRY PT RD RIVERSIDE T39NR12ESW36
17031 ILLINOIS COOK
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM DES PLAINES RIVER
21ILAMB 870523 07120004011 0000.450 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01								
STATION	PCTL(010.0)	.100000	1.10000	2.50000	.350000	.230000	6.00000	2.00000
	PCTL(025.0)	.150000	1.30000	3.50000	.520000	.390000	15.0000	4.00000
	PCTL(050.0)	.250000	1.60000	4.80000	.760000	.620000	28.0000	6.00000
	PCTL(075.0)	.430000	2.00000	6.20000	1.06000	.900000	49.0000	12.0000
	PCTL(085.0)	.540000	2.20000	7.10000	1.24000	1.08000	61.0000	13.0000
	PCTL(090.0)	.590000	2.50000	7.20000	1.30000	1.11000	76.0000	16.0000
	PCTL(095.0)	.680000	2.80000	8.10000	1.50000	1.40000	94.0000	19.0000
	NUMBER	100	99	100	100	97	100	100
	MAXIMUM	1.40000	3.80000	11.0000	2.90000	2.70000	257.000	43.0000
	MINIMUM	.0100000	.110000	1.40000	.230000	.100000	1.00000	1.00000
	SUM	31.3296	166.449	494.115	82.8214	66.6235	3846.00	844.000
	MEAN	.313296	1.68131	4.94115	.828214	.686840	38.4600	8.44000
	VARIANCE	.0528852	.372738	3.81792	.177321	.158738	1670.94	47.6833
	STAND DEV	.229968	.610523	1.95395	.421095	.398419	40.8771	6.90531
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05540290 GB 10
41 41 24.0 088 09 58.0 2
DU PAGE RIVER NEAR NAPERVILLE, IL
17197 ILLINOIS WILL
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004017 0023.050 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01								
STATION	PCTL(010.0)	.0799999	.960000	3.40000	.600000	.433000	9.00000	3.00000
	PCTL(025.0)	.160000	.960000	4.60000	.810000	.650000	14.0000	5.00000
	PCTL(050.0)	.330000	1.11000	5.90000	1.10000	.950000	27.0000	9.00000
	PCTL(075.0)	.750000	2.20000	7.90000	1.46000	1.38000	61.0000	14.0000
	PCTL(085.0)	1.00000	2.20000	8.90000	1.65000	1.60000	77.0000	19.0000
	PCTL(090.0)	1.30000	2.20000	10.0000	1.80000	1.72000	94.0000	20.0000
	PCTL(095.0)	1.80000	2.20000	11.0000	1.96000	1.80000	118.000	22.0000
	NUMBER	146	4	146	124	121	145	145
	MAXIMUM	4.40000	2.20000	14.0000	2.40000	2.30000	444.000	57.0000
	MINIMUM	.0100000	.960000	1.30000	.0699999	.0600000	4.00000	1.00000
	SUM	87.7989	6.47000	937.491	144.231	125.523	6501.00	1561.00
	MEAN	.601362	1.61750	6.42117	1.16315	1.03738	44.8344	10.7655
	VARIANCE	.588091	.456160	6.27371	.220697	.236498	3045.02	65.5558
	STAND DEV	.766871	.675396	2.50474	.469784	.486311	55.1817	8.09665
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05540500 GB 11
41 31 20.0 088 11 35.0 2
DU PAGE RIVER AT SHOREWOOD, IL
17197 ILLINOIS WILL
UPPER MISSISSIPPI RIVER 071391
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004017 0009.560 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01								
STATION	PCTL(010.0)	.0300000	.600000	4.00000	.450000	.350000	6.00000	2.00000
	PCTL(025.0)	.0600000	.800000	4.80000	.670000	.530000	9.00000	3.00000
	PCTL(050.0)	.160000	1.30000	5.90000	.960000	.800000	24.0000	8.00000
	PCTL(075.0)	.380000	1.50000	7.50000	1.23000	1.11000	60.0000	13.0000
	PCTL(085.0)	.540000	2.15000	8.30000	1.40000	1.30000	85.0000	19.0000
	PCTL(090.0)	.760000	3.00000	8.70000	1.53000	1.40000	128.000	26.0000
	PCTL(095.0)	1.10000	4.00000	9.10000	1.60000	1.53000	165.000	34.0000
	NUMBER	159	49	159	136	131	160	160
	MAXIMUM	3.40000	4.40000	13.0000	2.70000	2.20000	685.000	110.000
	MINIMUM	.0100000	.200000	1.70000	.260000	.170000	1.00000	1.00000
	SUM	50.8230	71.1897	979.188	133.361	110.143	8207.99	1786.00
	MEAN	.319641	1.45285	6.15841	.980597	.840788	51.2999	11.1625
	VARIANCE	.226993	.908862	3.45715	.178854	.169110	6619.98	166.376
	STAND DEV	.476438	.953343	1.85934	.422911	.411230	81.3633	12.8987
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05540095 GBK 05
41 49 22.0 088 10 23.0 2
WEST BR DU PAGE RIVER NEAR WARRENVILLE, IL
17043 ILLINOIS DU PAGE
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004019 0011.420 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.140000	.870000	3.30000	.560000	.430000	12.0000	3.00000
PCTL(025.0)	.260000	.870000	4.70000	.740000	.620000	19.0000	6.00000
PCTL(050.0)	.440000	1.65000	6.20000	1.21000	.980000	37.0000	9.00000
PCTL(075.0)	.700000	2.60000	8.20000	1.66000	1.51000	60.0000	14.0000
PCTL(085.0)	1.00000	3.40000	9.10000	1.94000	1.70000	78.0000	17.0000
PCTL(090.0)	1.10000	3.40000	9.90000	2.06000	1.85000	95.0000	20.0000
PCTL(095.0)	1.70000	3.40000	11.0000	2.20000	2.13000	130.000	28.0000
NUMBER	149	5	149	124	124	148	148
MAXIMUM	3.50000	3.40000	14.0000	2.89000	2.66000	357.000	79.0000
MINIMUM	.0500000	.870000	2.10000	.260000	.140000	4.00000	1.00000
SUM	85.7291	9.81000	971.089	155.964	134.891	7426.00	1744.00
MEAN	.575363	1.96200	6.51737	1.25778	1.08783	50.1756	11.7838
VARIANCE	.248368	1.05407	6.44112	.339614	.327332	2648.27	120.538
STAND DEV	.498366	1.02668	2.53794	.582764	.572130	51.4614	10.9790
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05539900 GBK 09
41 54 39.0 088 10 44.0 2
W BRANCH DU PAGE RIVER NR WEST CHICAGO, IL
17043 ILLINOIS DU PAGE
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004019 0021.180 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.100000	1.00000	3.80000	.700000	.520000	11.0000	4.00000
PCTL(025.0)	.180000	1.00000	5.50000	.980000	.840000	18.0000	6.00000
PCTL(050.0)	.330000	1.20000	7.30000	1.41500	1.24000	33.0000	9.00000
PCTL(075.0)	.560000	1.70000	9.60000	1.97000	1.76000	59.0000	12.0000
PCTL(085.0)	.740000	2.70000	10.4000	2.16000	2.02000	79.0000	15.0000
PCTL(090.0)	.870000	2.70000	11.0000	2.30000	2.20000	97.0000	18.0000
PCTL(095.0)	1.20000	2.70000	12.0000	2.50000	2.50000	133.000	22.0000
NUMBER	146	5	146	122	119	146	146
MAXIMUM	2.00000	2.70000	16.0000	3.00000	3.60000	555.000	72.0000
MINIMUM	.0300000	1.00000	1.60000	.250000	.200000	4.00000	2.00000
SUM	62.7893	7.65000	1106.49	183.342	158.113	7089.00	1550.00
MEAN	.430063	1.53000	7.57870	1.50280	1.32868	48.5548	10.6164
VARIANCE	.121160	.504499	8.12171	.383769	.418724	3218.43	77.8381
STAND DEV	.348081	.710281	2.84986	.619491	.647089	56.7312	8.82259
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05540210 GBL 10
41 48 02.0 088 04 53.0 2
E BR DUPAGE RIVER AT RT 34 BRIDGE AT LISLE, IL
17043 ILLINOIS DU PAGE
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004018 0011.640 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0899999	.900000	2.60000	.530000	.420000	12.0000	3.00000
PCTL(025.0)	.160000	.900000	3.80000	.850000	.640000	16.0000	6.00000
PCTL(050.0)	.310000	1.40000	6.60000	1.20000	.993000	26.0000	9.00000
PCTL(075.0)	.840000	3.00000	10.0000	1.72000	1.47000	43.0000	12.0000
PCTL(085.0)	1.40000	3.20000	12.0000	2.10000	1.80000	59.0000	15.0000
PCTL(090.0)	1.90000	3.20000	13.0000	2.50000	2.34000	73.0000	16.0000
PCTL(095.0)	4.60000	3.20000	17.0000	2.76000	2.76000	96.0000	20.0000
NUMBER	144	4	141	123	118	145	145
MAXIMUM	12.0000	3.20000	22.0000	4.79000	4.67000	300.000	52.0000
MINIMUM	.0300000	.900000	1.40000	.190000	.150000	5.00000	1.00000
SUM	139.769	8.50000	1045.99	167.256	140.075	5358.00	1388.00
MEAN	.970618	2.12500	7.41839	1.35981	1.18708	36.9517	9.57241
VARIANCE	3.53832	1.31584	20.3796	.587409	.598598	1258.12	40.2326
STAND DEV	1.88104	1.14710	4.51437	.766426	.773691	35.4700	6.34292
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05539000 GG 02
41 31 10.0 088 04 10.0 2
HICKORY CREEK AT JOLIET, IL
17197 ILLINOIS WILL
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004005 0001.830 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0799999	1.10000	1.70000	.190000	.120000	4.00000	2.00000
PCTL(025.0)	.110000	1.14000	2.10000	.270000	.170000	7.00000	3.00000
PCTL(050.0)	.190000	1.20000	2.60000	.374000	.310000	16.0000	6.00000
PCTL(075.0)	.390000	1.30000	3.40000	.560000	.450000	35.0000	10.0000
PCTL(085.0)	.550000	1.50000	4.00000	.640000	.530000	54.0000	14.0000
PCTL(090.0)	.740000	2.60000	4.10000	.680000	.610000	71.0000	17.0000
PCTL(095.0)	1.30000	2.60000	4.40000	.740000	.680000	142.000	22.0000
NUMBER	145	8	145	122	113	145	145
MAXIMUM	4.30000	2.60000	12.0000	1.87000	1.63000	1560.00	140.000
MINIMUM	.0300000	1.10000	.200000	.120000	.0899999	1.00000	1.00000
SUM	56.0093	11.2400	411.994	52.9084	38.8474	6524.00	1299.00
MEAN	.386271	1.40500	2.84134	.433676	.343783	44.9931	8.95862
VARIANCE	.384530	.248200	1.70703	.0619624	.0517817	19925.1	176.068
STAND DEV	.620105	.498197	1.30653	.248923	.227556	141.156	13.2691
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05536995 GI 01
41 38 27.0 088 03 36.0 4
SAN & SHIP CANAL 135TH ST ROMEOVILLE T36NR10ENW2
17197 ILLINOIS WILL
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM DES PLAINES RIVER
21ILAMB 870523 07120004007 0006.550 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.650000	1.40000	2.30000	.450000	.320000	1.00000	1.00000
PCTL(025.0)	1.00000	2.00000	2.70000	.590000	.390000	8.00000	2.00000
PCTL(050.0)	1.60000	2.60000	3.70000	.770000	.590000	14.0000	4.00000
PCTL(075.0)	2.40000	3.80000	4.70000	.990000	.780000	21.0000	6.00000
PCTL(085.0)	3.00000	4.80000	5.20000	1.10000	.940000	34.0000	8.00000
PCTL(090.0)	4.10000	5.60000	5.30000	1.20000	1.00000	43.0000	9.00000
PCTL(095.0)	4.60000	6.00000	6.20000	1.40000	1.20000	55.0000	13.0000
NUMBER	61	61	61	61	61	61	61
MAXIMUM	7.40000	8.60000	6.80000	3.10000	1.30000	375.000	60.0000
MINIMUM	.430000	1.30000	1.30000	.314000	.180000	1.00000	1.00000
SUM	120.470	191.360	233.400	51.7917	38.3107	1456.00	354.000
MEAN	1.97491	3.13704	3.82622	.849044	.628045	23.8688	5.80328
VARIANCE	2.06039	2.63297	1.63726	.179657	.0765652	2342.22	64.9273
STAND DEV	1.43540	1.62264	1.27956	.423860	.276704	48.3964	8.05775
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05537000 GI 02
41 34 11.0 088 04 42.0 2
CHICAGO SANITARY AND SHIP CANAL AT LOCKPORT, IL
17197 ILLINOIS WILL
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004010 0001.100 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.670000	1.50000	1.80000	.360000	.270000	6.00000	2.00000
PCTL(025.0)	1.00000	2.16000	2.50000	.450000	.370000	8.00000	4.00000
PCTL(050.0)	2.10000	3.28000	3.40000	.580000	.500000	14.0000	6.00000
PCTL(075.0)	3.10000	4.70000	4.20000	.780000	.720000	20.0000	8.00000
PCTL(085.0)	4.20000	5.90000	4.80000	1.02000	.900000	26.0000	10.00000
PCTL(090.0)	4.70000	6.40000	5.10000	1.11000	1.02000	32.0000	11.0000
PCTL(095.0)	5.20000	6.90000	5.80000	1.26000	1.15000	37.0000	14.0000
NUMBER	144	143	145	144	129	145	145
MAXIMUM	6.80000	10.8000	6.70000	4.15000	3.41000	138.000	24.0000
MINIMUM	.180000	.800000	.700000	.230000	.160000	2.00000	1.00000
SUM	334.774	516.671	496.593	99.6352	74.7832	2462.00	928.000
MEAN	2.32482	3.61308	3.42478	.691911	.579715	16.9793	6.40000
VARIANCE	2.38606	3.39065	1.64364	.174924	.135483	229.757	15.5334
STAND DEV	1.54469	1.84137	1.28205	.418239	.368080	15.1577	3.94124
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05531500 GL 09
41 49 35.0 087 54 00.0 2
SALT CREEK AT WESTERN SPRINGS, IL
17031 ILLINOIS COOK
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004016 0006.410 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01								
STATION	PCTL(010.0)	.100000	1.30000	2.40000	.630000	.460000	12.0000	4.00000
	PCTL(025.0)	.210000	1.50000	4.90000	1.00000	.760000	22.0000	6.00000
	PCTL(050.0)	.480000	1.90000	6.90000	1.62000	1.35000	41.0000	9.00000
	PCTL(075.0)	.940000	2.60000	9.60000	2.20000	1.94000	61.0000	14.0000
	PCTL(085.0)	1.50000	3.10000	10.7000	2.46000	2.31000	82.0000	16.0000
	PCTL(090.0)	1.90000	3.50000	12.0000	2.60000	2.50000	92.0000	19.0000
	PCTL(095.0)	2.70000	3.90000	13.0000	2.87000	2.80000	110.000	24.0000
	NUMBER	156	152	156	139	131	156	147
	MAXIMUM	4.60000	5.70000	23.0000	3.95000	3.77000	385.000	71.0000
	MINIMUM	.0100000	.100000	1.30000	.260000	.120000	4.00000	1.00000
	SUM	119.819	327.375	1146.76	223.138	186.645	7743.99	1655.00
	MEAN	.768070	2.15378	7.35102	1.60531	1.42477	49.6410	11.2585
	VARIANCE	.721902	.827543	13.2551	.566960	.608776	2001.68	79.8779
	STAND DEV	.849648	.909694	3.64076	.752967	.780241	44.7401	8.93744
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05532000 GLA 02
41 52 48.0 087 52 07.0 2
ADDISON CREEK AT BELLWOOD, IL
17031 ILLINOIS COOK
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004016 0002.470 OFF
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01								
STATION	PCTL(010.0)	.0899999	.720000	1.90000	.350000	.250000	10.0000	4.00000
	PCTL(025.0)	.150000	1.10000	2.90000	.510000	.420000	17.0000	5.00000
	PCTL(050.0)	.250000	1.30000	4.60000	.807000	.690000	26.0000	8.00000
	PCTL(075.0)	.400000	1.90000	7.20000	1.07000	.910000	45.0000	11.0000
	PCTL(085.0)	.520000	2.00000	8.50000	1.27000	1.09000	62.0000	17.0000
	PCTL(090.0)	.710000	2.20000	9.00000	1.40000	1.31000	95.0000	22.0000
	PCTL(095.0)	1.20000	2.80000	9.40000	1.54500	1.40100	200.000	41.0000
	NUMBER	156	13	158	134	116	158	149
	MAXIMUM	2.60000	2.80000	12.0000	2.20000	2.00000	338.000	78.0000
	MINIMUM	.0300000	.720000	1.00000	.160000	.100000	4.00000	1.00000
	SUM	56.9291	19.2100	823.291	113.167	83.5453	7298.00	1741.00
	MEAN	.364930	1.47769	5.21070	.844531	.720218	46.1898	11.6846
	VARIANCE	.161316	.334609	7.10903	.157037	.144143	3891.53	182.569
	STAND DEV	.401642	.578454	2.66628	.396278	.379662	62.3822	13.5118
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05536700 H 01
41 41 45.0 087 56 11.0 2
CALUMET SAG CHANNEL AT SAG BRIDGE, IL
17031 ILLINOIS COOK
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01								
STATION	PCTL(010.0)	.800000	1.60000	.300000	.480000	.340000	14.0000	4.00000
	PCTL(025.0)	1.80000	2.90000	.700000	.650000	.480000	19.0000	6.00000
	PCTL(050.0)	3.50000	5.02000	1.70000	.977000	.660000	29.0000	9.00000
	PCTL(075.0)	5.80000	8.40000	2.50000	1.46000	1.20000	42.0000	11.0000
	PCTL(085.0)	7.40000	9.50000	3.10000	1.70000	1.40000	60.0000	14.0000
	PCTL(090.0)	8.30000	10.2000	4.20000	2.09000	1.64000	68.0000	15.0000
	PCTL(095.0)	10.9000	12.5000	6.00000	2.51000	2.01000	113.000	21.0000
	NUMBER	150	146	149	133	130	149	148
	MAXIMUM	13.0000	23.0000	15.0000	7.95000	3.53000	370.000	68.0000
	MINIMUM	.280000	.500000	.100000	.250000	.0100000	4.00000	1.00000
	SUM	623.198	842.889	302.848	157.922	114.974	6177.99	1493.00
	MEAN	4.15465	5.77321	2.03254	1.18738	.884417	41.4630	10.0878
	VARIANCE	8.96263	12.4336	3.94509	.775119	.344323	2597.99	60.1623
	STAND DEV	2.99376	3.52613	1.98623	.880409	.586790	50.9705	7.75643
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05536195 HB 42
41 34 07.0 087 31 18.0 2
L CALUMET R S HOLMAN AV IND ST LINE N MUNSTER IN
18089 INDIANA LAKE
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM DES PLAINES RIVER
21ILAMB 870314 07120003006 0011.700 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.180000	1.30000	1.00000	.240000	.100000	14.0000	4.00000
PCTL(025.0)	.320000	1.60000	1.60000	.310000	.130000	22.0000	7.00000
PCTL(050.0)	.640000	2.10000	2.40000	.429000	.260000	42.0000	10.0000
PCTL(075.0)	1.90000	3.60000	3.40000	.640000	.470000	79.0000	16.0000
PCTL(085.0)	2.60000	5.00000	4.20000	.800000	.650000	114.000	21.0000
PCTL(090.0)	3.30000	5.90000	5.00000	.990000	.730000	130.000	23.0000
PCTL(095.0)	4.80000	8.70000	6.60000	1.29000	.980000	170.000	30.0000
NUMBER	131	132	132	126	128	131	130
MAXIMUM	7.10000	12.7000	9.70000	2.32000	2.76000	642.000	50.0000
MINIMUM	.0899999	.700000	.100000	.150000	.0600000	8.00000	1.00000
SUM	166.969	396.652	367.296	67.8263	48.7092	8101.00	1652.00
MEAN	1.27457	3.00494	2.78255	.538304	.380541	61.8397	12.7077
VARIANCE	2.20227	5.17788	3.06812	.121217	.151308	5243.13	76.8752
STAND DEV	1.48400	2.27550	1.75161	.348163	.388983	72.4095	8.76785
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05536275 HBD 04
41 34 05.0 087 36 30.0 2
THORN CREEK AT THORNTON, IL
17031 ILLINOIS COOK
LAKE MICHIGAN 084900
/TYPA/AMBNT/STREAM CALUMET-BURNS DITCH COMPLEX
21ILAMB 870314 07120003006 0005.860 OFF
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.120000	.820000	2.10000	.710000	.520000	7.00000	2.00000
PCTL(025.0)	.220000	.820000	3.10000	1.11000	.971000	13.0000	5.00000
PCTL(050.0)	.440000	1.30000	4.60000	2.02000	1.79000	24.0000	7.00000
PCTL(075.0)	.850000	1.56000	6.60000	3.50000	3.00000	47.0000	11.0000
PCTL(085.0)	1.20000	1.60000	7.30000	4.89000	4.02000	75.0000	13.0000
PCTL(090.0)	1.50000	1.60000	8.00000	5.14000	4.80000	87.0000	17.0000
PCTL(095.0)	2.10000	1.60000	9.10000	6.29000	5.50000	131.000	25.0000
NUMBER	148	4	148	119	114	147	147
MAXIMUM	5.60000	1.60000	12.5000	18.1100	17.4700	350.000	54.0000
MINIMUM	.0200000	.820000	1.10000	.0799999	.0899999	3.00000	1.00000
SUM	101.689	5.28000	742.289	312.629	270.160	6076.00	1359.00
MEAN	.687088	1.32000	5.01546	2.62713	2.36982	41.3333	9.24490
VARIANCE	.611630	.128802	5.59672	4.94031	4.57033	2321.43	67.6109
STAND DEV	.782068	.358890	2.36574	2.22268	2.13783	48.1812	8.22258
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05536000 HCC 07
42 00 44.0 087 47 45.0 2
NORTH BRANCH CHICAGO RIVER AT NILES, IL
17031 ILLINOIS COOK
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120003
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.120000	1.10000	1.60000	.320000	.230000	8.00000	3.00000
PCTL(025.0)	.190000	1.30000	2.30000	.450000	.380000	14.0000	5.00000
PCTL(050.0)	.280000	1.50000	3.60000	.730000	.604000	24.0000	7.00000
PCTL(075.0)	.400000	1.80000	5.40000	1.10000	.980000	40.0000	12.0000
PCTL(085.0)	.530000	2.10000	6.50000	1.23000	1.15000	59.0000	14.0000
PCTL(090.0)	.610000	2.26000	7.00000	1.50000	1.29000	77.0000	18.0000
PCTL(095.0)	.810000	2.50000	8.80000	1.63000	1.56000	129.000	23.0000
NUMBER	148	145	149	128	128	149	149
MAXIMUM	1.20000	4.20000	9.80000	2.06000	1.90000	250.000	47.0000
MINIMUM	.0100000	.200000	.500000	.170000	.130000	2.00000	1.00000
SUM	48.4192	231.509	605.452	105.294	92.3822	5510.99	1398.00
MEAN	.327157	1.59661	4.06344	.822611	.721736	36.9865	9.38254
VARIANCE	.0465106	.284758	4.95315	.189062	.172024	1892.77	57.8594
STAND DEV	.215663	.533627	2.22557	.434813	.414758	43.5060	7.60654
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05534500 HCCC02
42 09 10.0 087 49 07.0 2
NORTH BR CHICAGO RIVER AT DEERFIELD, IL
17097 ILLINOIS LAKE
LAKE MICHIGAN 082600
/TYPA/AMBNT/STREAM LAKE MICHIGAN-WESTERN SHORE
21ILAMB 870314 07120003
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0600000	.780000	.200000	.0620000	.0300000	10.00000	3.00000
PCTL(025.0)	.100000	.780000	.400000	.0899999	.0400000	15.0000	5.00000
PCTL(050.0)	.160000	.780000	.600000	.140000	.0799999	25.0000	7.00000
PCTL(075.0)	.280000	.780000	.900000	.210000	.116000	46.0000	11.0000
PCTL(085.0)	.420000	.780000	1.20000	.260000	.150000	66.0000	13.0000
PCTL(090.0)	.530000	.780000	1.32000	.280000	.187000	73.0000	16.0000
PCTL(095.0)	.800000	.780000	1.50000	.350000	.240000	120.000	20.0000
NUMBER	148	1	148	125	111	148	148
MAXIMUM	5.50000	.780000	17.0000	1.07000	.740000	500.000	64.0000
MINIMUM	.0100000	.780000	.100000	.0400000	.0100000	4.00000	1.00000
SUM	40.3793	.780000	138.759	21.6587	11.0320	6142.00	1359.00
MEAN	.272833	.780000	.937562	.173270	.0993869	41.5000	9.18243
VARIANCE	.235874		2.96129	.0189025	.0094335	3505.93	64.5719
STAND DEV	.485668		1.72084	.137486	.0971263	59.2109	8.03567
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

07022000 I 84
37 13 00.0 089 27 50.0 2
MISSISSIPPI RIVER AT THEBES ILL
17003 ILLINOIS ALEXANDER
UPPER MISSISSIPPI RIVER 072291
/TYPA/AMBNT/STREAM MISSISSIPPI RIVER-CAPE GIRARDEAU AREA
21ILAMB 870314 07140105036 0028.050 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0400000	.660000	.820000	.160000	.0699999	32.0000	6.00000
PCTL(025.0)	.0799999	.900000	1.24000	.200000	.0800000	70.0000	8.00000
PCTL(050.0)	.100000	1.20000	2.00000	.260000	.100000	117.000	13.0000
PCTL(075.0)	.170000	1.50000	2.70000	.320000	.120000	250.000	22.0000
PCTL(085.0)	.230000	1.80000	3.30000	.380000	.140000	350.000	36.0000
PCTL(090.0)	.260000	2.20000	4.00000	.470000	.150000	434.000	44.0000
PCTL(095.0)	.410000	2.60000	4.40000	.600000	.160000	792.000	70.0000
NUMBER	85	109	73	108	108	72	72
MAXIMUM	.570000	5.00000	7.10000	1.00000	.240000	866.000	84.0000
MINIMUM	.0100000	.100000	.340000	.0899999	.0200000	2.00000	1.00000
SUM	12.1600	142.324	158.870	31.2076	11.4980	14151.0	1451.00
MEAN	.143058	1.30573	2.17630	.288959	.106463	196.542	20.1528
VARIANCE	.0114237	.461224	1.55838	.0220874	.0011817	43859.7	352.244
STAND DEV	.106882	.679135	1.24835	.148618	.0343761	209.427	18.7682
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05595540 II 03
37 57 22.0 089 42 22.0 2
MARYS RIVER AT WELGE, IL
17157 ILLINOIS RANDOLPH
UPPER MISSISSIPPI RIVER 072100
/TYPA/AMBNT/STREAM BIG MUDDY RIVER
21ILAMB 870314 07140105
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0600000	.510000	.140000	.130000	.0600000	12.0000	2.00000
PCTL(025.0)	.100000	.510000	.300000	.170000	.0799999	20.0000	4.00000
PCTL(050.0)	.120000	.510000	.500000	.210000	.110000	42.0000	7.00000
PCTL(075.0)	.200000	1.50000	.680000	.300000	.170000	74.0000	12.0000
PCTL(085.0)	.280000	1.50000	.790000	.400000	.210000	91.0000	14.0000
PCTL(090.0)	.300000	1.50000	.960000	.560000	.270000	120.000	20.0000
PCTL(095.0)	.470000	1.50000	1.12000	.760000	.380000	212.000	30.0000
NUMBER	147	2	148	114	114	147	147
MAXIMUM	2.00000	1.50000	2.90000	3.30000	1.10000	1080.00	76.0000
MINIMUM	.0100000	.510000	.0200000	.0600000	.0300000	4.00000	1.00000
SUM	27.0195	2.01000	81.5291	34.7186	17.5498	10559.0	1484.00
MEAN	.183806	1.00500	.550872	.304549	.153946	71.8299	10.0952
VARIANCE	.0428161	.490053	.139487	.123329	.0204336	15781.6	133.689
STAND DEV	.206921	.700038	.373480	.351182	.142946	125.625	11.5624
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05600150 IX 04
37 12 12.0 089 15 29.0 2
CACHE RIVER AT SANDUSKY
17003 ILLINOIS ALEXANDER
UPPER MISSISSIPPI RIVER 072200
/TYPA/AMBNT/STREAM MISSISSIPPI RIVER-CAPE GIRARDEAU AREA
21ILAMB 870314 07140108
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0899999	.100000	.100000	.100000	.0200000	17.0000	2.00000
PCTL(025.0)	.100000	.100000	.150000	.130000	.0200000	30.0000	4.00000
PCTL(050.0)	.120000	.600000	.370000	.170000	.0300000	53.0000	6.00000
PCTL(075.0)	.190000	.600000	.560000	.250000	.0600000	108.000	11.0000
PCTL(085.0)	.220000	.600000	.740000	.340000	.0799999	169.000	16.0000
PCTL(090.0)	.260000	.600000	.840000	.400000	.0899999	198.000	25.0000
PCTL(095.0)	.290000	.600000	.920000	.460000	.130000	380.000	34.0000
NUMBER	145	3	145	114	114	143	143
MAXIMUM	1.30000	.600000	1.30000	4.60000	.650000	2100.00	160.000
MINIMUM	.0100000	.100000	.0100000	.0500000	.0100000	5.00000	1.00000
SUM	22.7197	1.30000	60.1091	29.1056	5.69696	15199.0	1540.00
MEAN	.156688	.433333	.414546	.255312	.0499733	106.287	10.7692
VARIANCE	.0163267	.0833338	.0790656	.198676	.0043027	42246.7	262.277
STAND DEV	.127776	.288676	.281186	.445731	.0655950	205.540	16.1950
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05587555 J 05
38 57 07.0 090 22 12.0 4
MISSISSIPPI R NEAR ELSAH RM 214.6 T6N R11W NW19
17083 ILLINOIS JERSEY
UPPER MISSISSIPPI RIVER 072200
/TYPA/AMBNT/STREAM MISSISSIPPI RIVER SOUTH CENTRAL
21ILAMB 890520 07110009
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.500000	.810000	.110000	.0200000	27.0000	5.00000
PCTL(025.0)	.0100000	.870000	1.57000	.130000	.0500000	35.0000	7.00000
PCTL(050.0)	.0500000	1.20000	2.80000	.160000	.0899999	79.0000	10.0000
PCTL(075.0)	.130000	1.40000	3.90000	.200000	.110000	118.000	14.0000
PCTL(085.0)	.150000	1.70000	4.10000	.220000	.120000	169.000	21.0000
PCTL(090.0)	.240000	1.80000	4.60000	.250000	.130000	208.000	22.0000
PCTL(095.0)	.250000	1.90000	5.30000	.320000	.130000	254.000	112.000
NUMBER	26	26	23	26	26	17	16
MAXIMUM	.410000	2.20000	5.30000	.400000	.280000	254.000	112.000
MINIMUM	.0100000	.480000	.200000	.0899999	.0100000	27.0000	5.00000
SUM	2.27999	30.8399	64.6999	4.66999	2.28599	1650.00	276.000
MEAN	.0876919	1.18615	2.81304	.179615	.0879227	97.0588	17.2500
VARIANCE	.0093065	.186188	2.09260	.0044999	.0027342	4405.56	663.533
STAND DEV	.0964701	.431495	1.44658	.0670816	.0522895	66.3744	25.7591
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05587550 J 83
38 51 41.0 090 08 15.0 2
MISSISSIPPI RIVER BELOW ALTON,ILL
17119 ILLINOIS MADISON
UPPER MISSISSIPPI RIVER 072293
/TYPA/AMBNT/STREAM MISSISSIPPI RIVER-CAPE GIRARDEAU AREA
21ILAMB 870314 07110009003 0000.820 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0400000	.900000	.440000	.100000	.0400000	18.0000	4.00000
PCTL(025.0)	.0700000	1.10000	1.30000	.150000	.0699999	30.0000	9.00000
PCTL(050.0)	.100000	1.40000	1.50000	.200000	.100000	59.0000	9.00000
PCTL(075.0)	.140000	1.80000	2.80000	.270000	.140000	100.0000	14.0000
PCTL(085.0)	.200000	2.10000	3.20000	.340000	.150000	202.000	32.0000
PCTL(090.0)	.320000	2.30000	3.70000	.400000	.180000	270.000	42.0000
PCTL(095.0)	.370000	2.50000	4.20000	.480000	.210000	420.000	46.0000
NUMBER	44	65	28	65	65	16	16
MAXIMUM	.530000	7.00000	5.90000	.870000	.450000	420.000	46.0000
MINIMUM	.0100000	.500000	.200000	.0600000	.0200000	18.0000	4.00000
SUM	5.96998	100.940	58.7399	15.1800	7.10998	1673.00	255.000
MEAN	.135681	1.55292	2.09785	.233538	.109384	104.562	15.9375
VARIANCE	.0129505	.740192	1.64405	.0187636	.0042059	12350.4	177.396
STAND DEV	.113800	.860344	1.28221	.136980	.0648525	111.132	13.3190
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05589785 JMAC02
38 35 42.0 090 05 18.0 2
HARDING DITCH AT EAST ST LOUIS
17163 ILLINOIS ST CLAIR
UPPER MISSISSIPPI RIVER 072200
/TYPA/AMBNT/STREAM MISSISSIPPI RIVER-CAPE GIRARDEAU AREA
21ILAMB 870314 07140101
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0799999	.500000	.600000	.220000	.0600000	8.00000	2.00000
PCTL(025.0)	.100000	.500000	.920000	.320000	.140000	16.0000	4.00000
PCTL(050.0)	.200000	.900000	1.30000	.470000	.260000	36.0000	6.00000
PCTL(075.0)	.360000	1.20000	1.89000	.740000	.500000	96.0000	12.0000
PCTL(085.0)	.520000	2.50000	2.50000	1.00000	.790000	145.000	18.0000
PCTL(090.0)	.800000	2.50000	3.90000	1.20000	.860000	196.000	21.0000
PCTL(095.0)	1.20000	2.50000	6.80000	1.70000	1.40000	274.000	30.0000
NUMBER	147	4	147	115	115	146	145
MAXIMUM	3.40000	2.50000	12.1000	4.90000	3.00000	932.000	68.0000
MINIMUM	.0100000	.500000	.0100000	.140000	.0200000	1.00000	1.00000
SUM	51.7290	5.10000	275.968	72.3454	47.6476	11862.8	1476.00
MEAN	.351898	1.27500	1.87734	.629091	.414327	81.2520	10.1793
VARIANCE	.228120	.749167	3.73199	.339799	.201474	15985.0	114.648
STAND DEV	.477619	.865545	1.93183	.582922	.448859	126.432	10.7074
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05589490 JN 02
38 40 01.0 090 03 56.0 2
CAHOKIA CANAL NEAR COLLINSVILLE
17119 ILLINOIS MADISON
UPPER MISSISSIPPI RIVER 071800
/TYPA/AMBNT/STREAM MISSISSIPPI-ST. LOUIS AREA
21ILAMB 870314 07140101007 0006.300 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0300000	.300000	.0300000	.0899999	.0200000	14.0000	2.00000
PCTL(025.0)	.100000	.300000	.100000	.130000	.0300000	25.0000	4.00000
PCTL(050.0)	.100000	.600000	.510000	.220000	.0500000	66.0000	10.0000
PCTL(075.0)	.180000	.700000	.830000	.370000	.100000	158.000	17.0000
PCTL(085.0)	.250000	1.00000	.980000	.450000	.140000	288.000	22.0000
PCTL(090.0)	.330000	1.00000	1.20000	.580000	.160000	330.000	28.0000
PCTL(095.0)	.500000	1.00000	1.40000	.680000	.170000	416.000	40.0000
NUMBER	148	4	148	116	116	147	147
MAXIMUM	1.60000	1.00000	13.3000	2.30000	1.90000	5810.00	500.000
MINIMUM	.0100000	.300000	.0100000	.0600000	.0100000	4.00000	1.00000
SUM	23.7095	2.60000	93.3591	35.2475	9.93295	25201.4	2551.80
MEAN	.160199	.650000	.630804	.303858	.0856288	171.438	17.3592
VARIANCE	.0324679	.0833339	1.29364	.0999761	.0316831	259320	1952.45
STAND DEV	.180189	.288676	1.13738	.316190	.177997	509.235	44.1866
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05589510 JNA 01
38 39 58.0 090 03 56.0 2
CANTEEN CREEK NEAR COLLINSVILLE
17119 ILLINOIS MADISON
UPPER MISSISSIPPI RIVER 071800
/TYPA/AMBNT/STREAM MISSISSIPPI-ST. LOUIS AREA
21ILAMB 870314 07140101
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0500000	.800000	1.40000	.460000	.210000	8.00000	2.00000
PCTL(025.0)	.110000	.800000	2.10000	.710000	.520000	14.0000	3.00000
PCTL(050.0)	.350000	2.40000	3.40000	1.40000	1.00000	33.0000	5.00000
PCTL(075.0)	1.80000	4.30000	6.70000	3.40000	2.60000	77.0000	10.0000
PCTL(085.0)	4.30000	4.30000	9.80000	4.70000	4.30000	138.000	20.0000
PCTL(090.0)	9.40000	4.30000	13.3000	5.60000	4.80000	230.000	22.0000
PCTL(095.0)	12.0000	4.30000	16.0000	7.10000	7.00000	440.000	40.0000
NUMBER	148	3	148	115	115	146	145
MAXIMUM	21.0000	4.30000	24.0000	9.50000	8.60000	1484.00	125.000
MINIMUM	.0100000	.800000	.0899999	.170000	.0200000	3.00000	1.00000
SUM	331.619	7.50000	805.054	258.797	222.208	15182.2	1633.00
MEAN	2.24067	2.50000	5.43956	2.25041	1.93225	103.988	11.2621
VARIANCE	17.0365	3.07000	25.9097	4.68556	4.31604	50471.9	351.111
STAND DEV	4.12753	1.75214	5.09016	2.16461	2.07751	224.660	18.7380
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05587900 JQ 05
38 49 28.0 089 58 29.0 2
CAHOKIA CREEK AT EDWARDSVILLE, IL
17119 ILLINOIS MADISON
UPPER MISSISSIPPI RIVER 071800
/TYPA/AMBNT/STREAM MISSISSIPPI-ST. LOUIS AREA
21ILAMB 870314 07140101
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.400000	.0500000	.110000	.0300000	11.0000	2.00000
PCTL(025.0)	.0899999	.400000	.100000	.140000	.0500000	25.0000	5.00000
PCTL(050.0)	.100000	1.00000	.570000	.190000	.0699999	58.0000	10.00000
PCTL(075.0)	.200000	1.20000	1.00000	.330000	.120000	130.000	20.0000
PCTL(085.0)	.270000	2.80000	1.30000	.580000	.170000	240.000	26.0000
PCTL(090.0)	.400000	2.80000	1.50000	.850000	.210000	308.000	30.0000
PCTL(095.0)	.590000	2.80000	2.00000	1.50000	.380000	648.000	64.0000
NUMBER	147	4	147	114	114	146	145
MAXIMUM	3.70000	2.80000	3.80000	7.50000	5.00000	3170.00	280.000
MINIMUM	.0100000	.400000	.0100000	.0400000	.0200000	4.00000	1.00000
SUM	28.4295	5.40000	100.299	46.3975	18.1367	23181.0	2557.00
MEAN	.193398	1.35000	.682307	.406996	.159094	158.774	17.6345
VARIANCE	.129734	1.05000	.458468	.628463	.239678	120582	847.927
STAND DEV	.360186	1.02470	.677103	.792756	.489569	347.249	29.1192
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05587700 JR 02
38 53 03.0 090 07 20.0 2
WOOD RIVER AT EAST ALTON, IL
17119 ILLINOIS MADISON
UPPER MISSISSIPPI RIVER 071800
/TYPA/AMBNT/STREAM MISSISSIPPI-ST. LOUIS AREA
21ILAMB 870314 07110009002 0002.680 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0300000	1.10000	.220000	.0699999	.0400000	4.00000	1.00000
PCTL(025.0)	.100000	1.10000	.700000	.100000	.0699999	7.00000	2.00000
PCTL(050.0)	.150000	1.20000	1.10000	.170000	.100000	18.0000	4.00000
PCTL(075.0)	.240000	1.30000	1.60000	.230000	.130000	60.0000	10.0000
PCTL(085.0)	.360000	1.50000	1.90000	.310000	.150000	132.000	15.0000
PCTL(090.0)	.440000	1.50000	2.00000	.350000	.170000	242.000	26.0000
PCTL(095.0)	.620000	1.50000	2.30000	.640000	.200000	436.000	48.0000
NUMBER	147	4	147	115	114	146	145
MAXIMUM	2.60000	1.50000	3.20000	1.90000	.390000	2532.00	200.000
MINIMUM	.0100000	1.10000	.0100000	.0200000	.0140000	1.00000	1.00000
SUM	32.0594	5.10000	169.259	27.4496	12.1160	15138.4	1691.40
MEAN	.218091	1.27500	1.15142	.238692	.106280	103.688	11.6648
VARIANCE	.0694119	.0291662	.456941	.0865108	.0036535	89855.9	572.111
STAND DEV	.263461	.170781	.675974	.294127	.0604441	299.760	23.9188
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05474500 K 04
40 23 37.0 091 22 27.0 2
MISSISSIPPI RIVER AT KEOKUK, IOWA
19111 IOWA LEE
UPPER MISSISSIPPI RIVER 071192
/TYPA/AMBNT/STREAM MISSISSIPPI-DES MOINES-SKUNK RIVERS
21ILAMB 870314 07080104001 0003.290 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	.500000	.300000	.120000	.0400000	8.00000	3.00000
PCTL(025.0)	.0699999	.800000	1.10000	.140000	.0699999	27.0000	5.00000
PCTL(050.0)	.100000	1.10000	2.50000	.190000	.100000	52.0000	8.00000
PCTL(075.0)	.170000	1.40000	3.30000	.260000	.123000	88.0000	13.0000
PCTL(085.0)	.280000	1.60000	3.90000	.280000	.140000	105.000	14.0000
PCTL(090.0)	.320000	1.60000	4.60000	.300000	.160000	166.000	22.0000
PCTL(095.0)	.490000	1.80000	5.50000	.400000	.190000	272.000	33.0000
NUMBER	75	80	78	81	80	73	73
MAXIMUM	.860000	8.00000	9.60000	.830000	.270000	388.000	44.0000
MINIMUM	.0100000	.100000	.100000	.0799999	.0100000	2.00000	1.00000
SUM	11.3200	96.5605	194.279	17.0359	8.06597	5238.00	778.000
MEAN	.150933	1.20701	2.49076	.210320	.100825	71.7534	10.6575
VARIANCE	.0233949	.880167	2.76640	.0118788	.0025440	5470.64	77.8673
STAND DEV	.152954	.938172	1.66325	.108990	.0504385	73.9638	8.82424
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05513000 KCA 01
39 26 35.0 090 47 45.0 2
BAY CREEK AT NEBO, IL
17149 ILLINOIS PIKE
UPPER MISSISSIPPI RIVER 071200
/TYPA/AMBNT/STREAM MISSISSIPPI-SALT RIVERS
21ILAMB 870314 07110004
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0300000		.100000	.0799999	.0200000	13.0000	2.00000
PCTL(025.0)	.100000		.270000	.120000	.0200000	25.0000	4.00000
PCTL(050.0)	.170000		1.67000	.220000	.0500000	67.0000	10.0000
PCTL(075.0)	.350000		2.70000	.340000	.0899999	145.000	20.0000
PCTL(085.0)	.480000		3.20000	.560000	.170000	224.000	26.0000
PCTL(090.0)	.630000		3.60000	.780000	.200000	380.000	48.0000
PCTL(095.0)	1.00000		3.90000	1.20000	.290000	820.000	60.0000
NUMBER	143		142	113	112	142	142
MAXIMUM	2.60000		6.80000	5.80000	.730000	3970.00	390.000
MINIMUM	.0100000		.0100000	.0400000	.0100000	3.00000	1.00000
SUM	40.7794		251.489	43.8005	9.52596	26177.1	2936.40
MEAN	.285171		1.77105	.387615	.0850531	184.346	20.6788
VARIANCE	.121747		2.00127	.466970	.0110958	179528	1635.43
STAND DEV	.348922		1.41466	.683352	.105337	423.707	40.4404
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05495500 KI 02
40 08 34.0 091 20 14.0 2
BEAR CREEK NEAR MARCELLINE, IL
17001 ILLINOIS ADAMS
UPPER MISSISSIPPI RIVER 071200
/TYPA/AMBNT/STREAM MISSISSIPPI-SALT RIVERS
21ILAMB 870314 07110001
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	1.60000	.100000	.0500000	.0100000	6.00000	2.00000
PCTL(025.0)	.0899999	1.60000	.140000	.0899999	.0200000	16.0000	3.00000
PCTL(050.0)	.100000	1.60000	1.20000	.150000	.0500000	43.0000	8.00000
PCTL(075.0)	.250000	1.60000	2.10000	.310000	.110000	91.0000	14.0000
PCTL(085.0)	.360000	1.60000	2.50000	.502000	.190000	214.000	25.0000
PCTL(090.0)	.430000	1.60000	2.80000	.653000	.220000	508.000	50.0000
PCTL(095.0)	.600000	1.60000	3.40000	.840000	.330000	782.000	100.000
NUMBER	146	1	146	115	113	143	142
MAXIMUM	1.30000	1.60000	5.30000	2.00000	.520000	4620.00	535.000
MINIMUM	.0100000	1.60000	.0100000	.0200000	.0100000	1.00000	1.00000
SUM	28.5795	1.60000	195.989	31.3205	10.2310	32108.0	3350.60
MEAN	.195750	1.60000	1.34239	.272352	.0905393	224.531	23.5957
VARIANCE	.0509108		1.34430	.102765	.0117520	433393	3431.24
STAND DEV	.225634		1.15944	.320570	.108406	658.326	58.5768
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05469000 LD 02
41 00 05.0 090 51 15.0 2
HENDERSON CREEK NEAR OQUAWKA, IL
17071 ILLINOIS HENDERSON
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07080104
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0300000		3.80000	.220000	.131000	10.0000	2.00000
PCTL(025.0)	.0799999		5.90000	.320000	.190000	23.0000	4.00000
PCTL(050.0)	.100000		8.20000	.500000	.330000	59.0000	8.00000
PCTL(075.0)	.240000		10.0000	.920000	.710000	124.000	17.0000
PCTL(085.0)	.490000		12.0000	1.20000	.990000	250.000	32.0000
PCTL(090.0)	.800000		12.0000	1.40000	1.20000	468.000	48.0000
PCTL(095.0)	1.50000		14.0000	2.40000	2.30000	732.000	64.0000
NUMBER	144		143	114	113	145	144
MAXIMUM	2.80000		20.0000	4.00000	3.70000	2260.00	235.000
MINIMUM	.0100000		1.00000	.130000	.0799999	2.00000	1.00000
SUM	43.9595		1182.89	86.1003	63.7304	24153.0	2784.00
MEAN	.305274		8.27197	.755266	.563986	166.572	19.3333
VARIANCE	.294417		12.2584	.501647	.402086	109247	1211.31
STAND DEV	.542602		3.50120	.708271	.634103	330.526	34.8039
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05466500 LF 01
41 11 15.0 090 58 05.0 2
EDWARDS RIVER NEAR NEW BOSTON, IL
17131 ILLINOIS MERCER
UPPER MISSISSIPPI RIVER 071000
/TYPA/AMBNT/STREAM MISSISSIPPI-IOWA-CEDAR RIVERS
21ILAMB 870314 07080104
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000		.630000	.0699999	.0300000	6.00000	2.00000
PCTL(025.0)	.0699999		4.30000	.100000	.0450000	20.0000	3.00000
PCTL(050.0)	.100000		7.10000	.150000	.0699999	46.0000	7.00000
PCTL(075.0)	.130000		9.10000	.280000	.110000	165.000	18.0000
PCTL(085.0)	.220000		10.0000	.500000	.140000	408.000	40.0000
PCTL(090.0)	.550000		11.0000	.590000	.170000	540.000	60.0000
PCTL(095.0)	.720000		12.0000	.960000	.280000	970.000	90.0000
NUMBER	145		143	114	113	144	144
MAXIMUM	2.00000		17.0000	4.60000	.660000	1820.00	501.000
MINIMUM	.0100000		.100000	.0400000	.0100000	1.00000	1.00000
SUM	27.5295		951.312	33.0336	10.9949	26543.0	3113.00
MEAN	.189859		6.65253	.289768	.0973004	184.326	21.6180
VARIANCE	.0909494		13.6785	.236784	.0085986	105121	2441.40
STAND DEV	.301578		3.69844	.486605	.0927285	324.224	49.4105
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05420500 M 04
41 46 53.0 090 15 04.0 2
MISSISSIPPI RIVER AT CLINTON, IOWA
19045 IOWA CLINTON
UPPER MISSISSIPPI RIVER 070891
/TYPA/AMBNT/STREAM MISSISSIPPI-WAPSIPINICON & TRIBS
21ILAMB 870314 07080101
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	.780000	.100000	.0800000	.0200000	21.0000	5.00000
PCTL(025.0)	.0400000	.900000	.400000	.130000	.0500000	30.0000	7.00000
PCTL(050.0)	.0799999	1.10000	1.30000	.170000	.0699999	41.0000	10.0000
PCTL(075.0)	.130000	1.40000	1.80000	.220000	.0899999	67.0000	12.0000
PCTL(085.0)	.180000	1.70000	2.00000	.240000	.110000	82.0000	14.0000
PCTL(090.0)	.280000	1.70000	2.20000	.270000	.130000	92.0000	16.0000
PCTL(095.0)	.500000	2.40000	2.60000	.320000	.150000	102.000	18.0000
NUMBER	70	78	74	78	77	70	70
MAXIMUM	1.20000	3.20000	4.00000	.520000	.310000	182.000	24.0000
MINIMUM	.0100000	.300000	.100000	.0400000	.0100000	3.00000	2.00000
SUM	9.56998	98.1896	92.4496	13.9050	5.83097	3482.00	713.000
MEAN	.136714	1.25884	1.24932	.178269	.0757268	49.7428	10.1857
VARIANCE	.0366858	.252082	.705079	.0063859	.0020130	962.659	18.2694
STAND DEV	.191535	.502078	.839690	.0799115	.0448662	31.0267	4.27427
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05420100 MJ 01
42 05 50.0 090 07 38.0 2
PLUM RIVER AT SAVANNA, IL
17015 ILLINOIS CARROLL
UPPER MISSISSIPPI RIVER 070800
/TYPA/AMBNT/STREAM MISSISSIPPI-WAPSIPINICON & TRIBS
21ILAMB 870314 07060005
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0300000	1.40000	3.20000	.0699999	.0400000	7.00000	2.00000
PCTL(025.0)	.0600000	1.40000	4.10000	.110000	.0600000	23.0000	5.00000
PCTL(050.0)	.100000	1.40000	5.10000	.180000	.0899999	56.0000	8.00000
PCTL(075.0)	.160000	1.70000	6.00000	.260000	.130000	110.000	14.0000
PCTL(085.0)	.310000	1.70000	6.80000	.390000	.170000	179.000	24.0000
PCTL(090.0)	.450000	1.70000	7.60000	.480000	.200000	276.000	30.0000
PCTL(095.0)	.660000	1.70000	8.00000	.670000	.290000	340.000	40.0000
NUMBER	143	2	143	113	111	142	143
MAXIMUM	3.80000	1.70000	9.40000	5.29100	1.09000	2785.00	230.000
MINIMUM	.0100000	1.40000	1.50000	.0400000	.0200000	1.00000	1.00000
SUM	27.9995	3.10000	743.992	32.1376	12.8830	18654.0	2249.00
MEAN	.195801	1.55000	5.20274	.284403	.116063	131.366	15.7273
VARIANCE	.140703	.0450020	2.47443	.277114	.0149275	110975	970.228
STAND DEV	.375103	.212137	1.57303	.526416	.122178	333.129	31.1485
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05418950 MN 03
42 19 07.0 090 15 18.0 2
APPLE RIVER NEAR ELIZABETH, IL
17085 ILLINOIS JO DAVIESS
UPPER MISSISSIPPI RIVER 070800
/TYPA/AMBNT/STREAM MISSISSIPPI-WAPSIPINICON & TRIBS
21ILAMB 870314 07060005
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0400000		1.60000	.0699999	.0500000	7.00000	2.00000
PCTL(025.0)	.0500000		2.50000	.100000	.0699999	18.0000	3.00000
PCTL(050.0)	.100000		4.10000	.140000	.0899999	41.0000	7.00000
PCTL(075.0)	.160000		5.50000	.220000	.130000	66.0000	10.0000
PCTL(085.0)	.260000		6.00000	.310000	.170000	93.0000	14.0000
PCTL(090.0)	.480000		6.20000	.380000	.196000	113.000	17.0000
PCTL(095.0)	.640000		7.20000	.800000	.370000	180.000	25.0000
NUMBER	145		145	115	110	145	145
MAXIMUM	2.30000		14.0000	2.17000	1.77000	758.000	64.0000
MINIMUM	.0100000		.600000	.0300000	.0300000	1.00000	1.00000
SUM	26.8495		603.592	25.9046	14.8700	8911.00	1296.00
MEAN	.185169		4.16270	.225257	.135181	61.4551	8.93793
VARIANCE	.0888043		4.09898	.0770281	.0348908	9854.25	81.8364
STAND DEV	.298000		2.02459	.277539	.186791	99.2686	9.04635

96/09/30

1STORET RETRIEVAL DATE 99/01/19

05416000 MQ 01
42 24 50.0 090 25 40.0 2
GALENA RIVER AT GALENA, IL
17085 ILLINOIS JO DAVIESS
UPPER MISSISSIPPI RIVER 070891
/TYPA/AMBNT/STREAM MISSISSIPPI-WAPSIPINICON & TRIBS
21ILAMB 870314 07060005
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0500000		1.50000	.0799999	.0400000	7.00000	2.00000
PCTL(025.0)	.0899999		2.60000	.140000	.0739999	15.0000	4.00000
PCTL(050.0)	.140000		3.60000	.220000	.150000	33.0000	7.00000
PCTL(075.0)	.220000		4.80000	.350000	.250000	53.0000	10.0000
PCTL(085.0)	.270000		5.30000	.410000	.320000	79.0000	15.0000
PCTL(090.0)	.380000		5.50000	.450000	.350000	98.0000	18.0000
PCTL(095.0)	.760000		6.50000	.630000	.484000	162.000	24.0000
NUMBER	146		146	114	112	146	145
MAXIMUM	3.20000		20.0000	1.68000	.730000	800.000	120.000
MINIMUM	.0100000		.100000	.0400000	.0200000	1.00000	1.00000
SUM	36.7195		554.292	31.1615	20.6687	8574.00	1475.00
MEAN	.251503		3.79652	.273347	.184542	58.7260	10.1724
VARIANCE	.180906		4.26315	.0551721	.0191880	12555.9	215.144
STAND DEV	.425330		2.06474	.234887	.138521	112.053	14.6678

96/09/30

1STORET RETRIEVAL DATE 99/01/19

05595700 N 08
38 18 36.0 088 59 18.0 2
BIG MUDDY RIVER NEAR MT. VERNON, IL
17081 ILLINOIS JEFFERSON
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140106
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	.500000	.0899999	.0699999	.0100000	11.0000	2.00000
PCTL(025.0)	.100000	.700000	.100000	.100000	.0200000	21.0000	4.00000
PCTL(050.0)	.110000	.960000	.230000	.140000	.0400000	40.0000	7.00000
PCTL(075.0)	.190000	1.30000	.500000	.240000	.0689999	79.0000	12.0000
PCTL(085.0)	.250000	1.50000	.690000	.340000	.100000	118.000	16.0000
PCTL(090.0)	.320000	1.80000	1.10000	.440000	.120000	170.000	22.0000
PCTL(095.0)	.380000	2.20000	1.40000	.560000	.170000	272.000	36.0000
NUMBER	148	146	148	147	146	148	148
MAXIMUM	6.50000	8.10000	6.70000	1.30000	.600000	585.000	57.0000
MINIMUM	.0100000	.300000	.0100000	.0200000	.0100000	2.00000	1.00000
SUM	30.3593	165.275	71.4792	29.9613	9.08794	10334.0	1560.70
MEAN	.205130	1.13202	.482968	.203818	.0622462	69.8243	10.5453
VARIANCE	.294619	.743455	.700765	.0330810	.0067578	7485.92	113.505
STAND DEV	.542788	.862238	.837117	.181882	.0822058	86.5212	10.6539

96/09/30

1STORET RETRIEVAL DATE 99/01/19

05595950 N 10
38 02 30.0 088 57 30.0 2
REND LAKE NEAR BENTON, IL
17055 ILLINOIS FRANKLIN
UPPER MISSISSIPPI RIVER 072100
/TYPA/AMBNT/STREAM BIG MUDDY RIVER
21ILAMB 870314 07140106
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.500000	.0100000	.0300000	.0100000	6.00000	2.00000
PCTL(025.0)	.0200000	.600000	.0600000	.0400000	.0100000	8.00000	3.00000
PCTL(050.0)	.100000	.700000	.100000	.0500000	.0100000	12.0000	4.00000
PCTL(075.0)	.100000	.800000	.190000	.0699999	.0200000	20.0000	6.00000
PCTL(085.0)	.100000	1.00000	.260000	.0799999	.0300000	22.0000	7.00000
PCTL(090.0)	.120000	1.10000	.350000	.0899999	.0400000	27.0000	7.00000
PCTL(095.0)	.130000	1.30000	.470000	.110000	.0430000	30.0000	8.00000
NUMBER	148	145	148	147	146	147	138
MAXIMUM	1.10000	8.60000	2.10000	.140000	.100000	84.0000	20.0000
MINIMUM	.0100000	.100000	.0100000	.0100000	.0010000	4.00000	1.00000
SUM	12.4899	121.911	23.5495	8.13995	2.79796	2163.00	638.000
MEAN	.0843913	.840767	.159118	.0553738	.0191641	14.7143	4.62319
VARIANCE	.0095086	.695357	.0468318	.0006059	.0002206	97.2879	7.66721
STAND DEV	.0975119	.833881	.216407	.0246152	.0148539	9.86346	2.76897
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05597000 N 11
37 54 05.0 089 00 50.0 2
BIG MUDDY RIVER AT PLUMFIELD, IL
17055 ILLINOIS FRANKLIN
UPPER MISSISSIPPI RIVER 072100
/TYPA/AMBNT/STREAM BIG MUDDY RIVER
21ILAMB 870314 07140106
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	.330000	.110000	.0899999	.0200000	12.0000	3.00000
PCTL(025.0)	.0699999	.330000	.190000	.120000	.0300000	30.0000	5.00000
PCTL(050.0)	.100000	1.00000	.300000	.160000	.0500000	64.0000	9.00000
PCTL(075.0)	.120000	1.10000	.460000	.200000	.0699999	100.000	13.0000
PCTL(085.0)	.150000	1.10000	.540000	.220000	.0899999	118.000	16.0000
PCTL(090.0)	.180000	1.60000	.630000	.290000	.110000	135.000	18.0000
PCTL(095.0)	.230000	1.60000	.840000	.340000	.140000	155.000	22.0000
NUMBER	148	6	148	115	113	147	147
MAXIMUM	3.20000	1.60000	1.20000	.720000	.270000	910.000	106.000
MINIMUM	.0100000	.330000	.0100000	.0100000	.0100000	1.00000	1.00000
SUM	18.9197	5.79000	51.8092	19.7118	6.77497	11177.0	1583.00
MEAN	.127836	.965000	.350062	.171407	.0599555	76.0339	10.7687
VARIANCE	.0701572	.173830	.0499480	.0090002	.0016154	7041.47	141.247
STAND DEV	.264872	.416929	.223491	.0948694	.0401926	83.9135	11.8848
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05599500 N 12
37 45 30.0 089 19 38.0 4
BIG MUDDY RIVER AT MURPHYSBORO, IL
17077 ILLINOIS JACKSON
UPPER MISSISSIPPI RIVER 072191
/TYPA/AMBNT/STREAM BIG MUDDY RIVER
21ILAMB 870314 07140106
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0300000	.690000	.100000	.120000	.0300000	17.0000	3.00000
PCTL(025.0)	.0899999	.850000	.200000	.160000	.0500000	35.0000	6.00000
PCTL(050.0)	.100000	1.00000	.400000	.200000	.0699999	60.0000	9.00000
PCTL(075.0)	.170000	1.30000	.640000	.250000	.100000	86.0000	14.0000
PCTL(085.0)	.220000	1.40000	.760000	.300000	.130000	105.000	16.0000
PCTL(090.0)	.250000	1.40000	.800001	.330000	.160000	123.000	18.0000
PCTL(095.0)	.350000	1.60000	1.07000	.370000	.210000	160.000	23.0000
NUMBER	129	150	126	152	147	151	152
MAXIMUM	1.20000	2.20000	12.0000	.560000	.300000	341.000	46.0000
MINIMUM	.0100000	.0000000	.0100000	.0100000	.0100000	2.00000	1.00000
SUM	18.4398	159.128	67.8293	32.4785	12.1249	10278.8	1576.80
MEAN	.142944	1.06085	.538328	.213674	.0824825	68.0714	10.3737
VARIANCE	.0173818	.106679	1.15295	.0077170	.0030880	2530.57	47.1856
STAND DEV	.131840	.326618	1.07376	.0878466	.0555702	50.3048	6.86918
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05599565 NA 01
37 40 15.0 089 19 20.0 2
CEDAR CREEK NEAR POMONA, IL
17077 ILLINOIS JACKSON
UPPER MISSISSIPPI RIVER 072100
/TYPA/AMBNT/STREAM BIG MUDDY RIVER
21ILAMB 870314 07140106
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0500000	.400000	.0300000	.0400000	.0100000	7.00000	1.00000
PCTL(025.0)	.100000	.500000	.100000	.0600000	.0100000	12.0000	2.00000
PCTL(050.0)	.130000	.700000	.130000	.0899999	.0200000	22.0000	4.00000
PCTL(075.0)	.250000	1.00000	.250000	.130000	.0300000	37.0000	8.00000
PCTL(085.0)	.430000	1.20000	.310000	.210000	.0400000	55.0000	11.0000
PCTL(090.0)	.520000	1.45000	.350000	.250000	.0500000	67.0000	13.0000
PCTL(095.0)	.640000	1.90000	.390000	.450000	.100000	94.0000	20.0000
NUMBER	144	143	144	144	143	142	142
MAXIMUM	1.40000	5.60000	14.0000	1.10000	.620000	512.000	57.0000
MINIMUM	.0100000	.200000	.0100000	.0200000	.0010000	2.00000	1.00000
SUM	31.4295	120.163	38.2974	19.8877	4.58194	5273.00	965.000
MEAN	.218260	.840303	.265954	.138109	.0320416	37.1338	6.79577
VARIANCE	.0476953	.416207	1.34198	.0283147	.0041182	3567.15	64.9154
STAND DEV	.218392	.645141	1.15844	.168270	.0641731	59.7256	8.05701
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05599540 NB 01
37 46 38.0 089 27 14.0 2
KINKAID CREEK NEAR MURPHYSBORO, IL
17077 ILLINOIS JACKSON
UPPER MISSISSIPPI RIVER 072100
/TYPA/AMBNT/STREAM BIG MUDDY RIVER
21ILAMB 870314 07140106
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.200000	.0200000	.0100000	.0100000	2.00000	1.00000
PCTL(025.0)	.0300000	.300000	.100000	.0100000	.0100000	4.00000	1.00000
PCTL(050.0)	.100000	.400000	.120000	.0200000	.0100000	6.00000	2.00000
PCTL(075.0)	.100000	.560000	.250000	.0300000	.0100000	11.0000	3.00000
PCTL(085.0)	.100000	.600000	.300000	.0400000	.0100000	17.0000	4.00000
PCTL(090.0)	.140000	.700000	.360000	.0500000	.0200000	20.0000	6.00000
PCTL(095.0)	.180000	.900000	.410000	.0600000	.0300000	25.0000	8.00000
NUMBER	146	143	146	145	145	146	146
MAXIMUM	1.00000	5.50000	1.50000	.570000	.550000	54.0000	18.0000
MINIMUM	.0100000	.100000	.0100000	.0100000	.0010000	1.00000	1.00000
SUM	13.8199	69.8053	27.8595	4.50195	2.43694	1329.00	393.000
MEAN	.0946570	.488149	.190819	.0310479	.0168065	9.10273	2.69178
VARIANCE	.0142787	.273938	.0447421	.0030355	.0022618	72.2720	6.42159
STAND DEV	.119493	.523391	.211523	.0550950	.0475579	8.50130	2.53409
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05599200 NC 07
37 54 12.0 089 22 36.0 2
BEAUCOUP CREEK NEAR VERGENNES, IL
17077 ILLINOIS JACKSON
UPPER MISSISSIPPI RIVER 072100
/TYPA/AMBNT/STREAM BIG MUDDY RIVER
21ILAMB 870314 07140106
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0300000	.700000	.100000	.0799999	.0200000	11.0000	2.00000
PCTL(025.0)	.0899999	.700000	.240000	.110000	.0400000	37.0000	5.00000
PCTL(050.0)	.100000	.900000	.500000	.170000	.0600000	69.0000	9.00000
PCTL(075.0)	.160000	.980000	.780000	.240000	.0899999	117.000	14.0000
PCTL(085.0)	.200000	.980000	.930000	.300000	.140000	158.000	17.0000
PCTL(090.0)	.270000	1.50000	1.30000	.340000	.160000	198.000	21.0000
PCTL(095.0)	.340000	1.50000	1.60000	.440000	.180000	272.000	30.0000
NUMBER	147	6	146	116	114	146	146
MAXIMUM	.980000	1.50000	6.40000	1.10000	.230000	1364.00	124.000
MINIMUM	.0100000	.700000	.0100000	.0400000	.0100000	1.00000	1.00000
SUM	19.4697	5.87000	95.8691	23.5437	8.47696	15318.0	1796.00
MEAN	.132447	.978333	.656638	.202963	.0743592	104.918	12.3014
VARIANCE	.0131762	.0739371	.564864	.0250804	.0026903	21753.9	214.957
STAND DEV	.114788	.271914	.751574	.158368	.0518685	147.492	14.6614
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05598245 ND 01
37 46 18.0 089 10 49.0 2
CRAB ORCHARD CREEK NEAR CARBONDALE, IL
17077 ILLINOIS JACKSON
UPPER MISSISSIPPI RIVER 072100
/TYPA/AMBNT/STREAM BIG MUDDY RIVER
21ILAMB 870314 07140106
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0699999	.600000	.130000	.0899999	.0200000	13.0000	2.00000
PCTL(025.0)	.100000	.800000	.290000	.130000	.0310000	24.0000	4.00000
PCTL(050.0)	.110000	.900000	.580000	.230000	.0799999	41.0000	6.00000
PCTL(075.0)	.270000	1.20000	1.20000	.410000	.270000	80.0000	10.0000
PCTL(085.0)	.410000	1.40000	1.60000	.560000	.420000	105.000	15.0000
PCTL(090.0)	.700000	1.60000	2.40000	.790000	.530000	135.000	18.0000
PCTL(095.0)	3.10000	3.40000	3.70000	1.30000	1.00000	200.000	22.0000
NUMBER	148	137	148	137	133	147	147
MAXIMUM	4.60000	5.80000	5.50000	2.10000	1.80000	350.000	93.0000
MINIMUM	.0100000	.200000	.0200000	.0200000	.0010000	6.00000	1.00000
SUM	60.1389	158.747	145.419	48.7752	29.4235	8958.99	1302.70
MEAN	.406344	1.15874	.982561	.356023	.221229	60.9455	8.86190
VARIANCE	.742813	.799485	1.25980	.144516	.112089	3174.81	87.3581
STAND DEV	.861866	.894139	1.12241	.380153	.334797	56.3454	9.34655
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05598050 ND 02
37 42 51.0 089 09 04.0 2
CRAB ORCHARD C BL CRAB ORCHARD LK NR CARTERVILLE
17199 ILLINOIS WILLIAMSON
UPPER MISSISSIPPI RIVER 072100
/TYPA/AMBNT/STREAM BIG MUDDY RIVER
21ILAMB 870314 07140106
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.470000	.0200000	.0300000	.0100000	4.00000	1.00000
PCTL(025.0)	.0600000	.600000	.100000	.0400000	.0100000	6.00000	2.00000
PCTL(050.0)	.100000	.800000	.100000	.0500000	.0100000	11.0000	4.00000
PCTL(075.0)	.150000	.900000	.180000	.0699999	.0300000	16.0000	6.00000
PCTL(085.0)	.230000	1.10000	.250000	.0899999	.0500000	21.0000	8.00000
PCTL(090.0)	.300000	1.10000	.320000	.120000	.0600000	23.0000	9.00000
PCTL(095.0)	.490000	1.60000	.410000	.190000	.100000	29.0000	14.0000
NUMBER	142	140	142	141	142	141	141
MAXIMUM	3.00000	6.20000	5.90000	.590000	.304000	101.000	27.0000
MINIMUM	.0100000	.100000	.0100000	.0100000	.0040000	1.00000	1.00000
SUM	24.1098	120.904	27.3396	10.2239	3.82795	1848.00	672.000
MEAN	.169787	.863601	.192532	.0725102	.0269574	13.1064	4.76595
VARIANCE	.0969267	.349160	.258112	.0056069	.0013177	117.782	17.9234
STAND DEV	.311331	.590898	.508048	.0748792	.0362997	10.8527	4.23360
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05597500 ND 04
37 43 52.0 088 53 21.0 2
CRAB ORCHARD CREEK NEAR MARION, IL
17199 ILLINOIS WILLIAMSON
UPPER MISSISSIPPI RIVER 072100
/TYPA/AMBNT/STREAM BIG MUDDY RIVER
21ILAMB 870314 07140106
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0400000	.300000	.100000	.0300000	.0100000	7.00000	2.00000
PCTL(025.0)	.100000	.400000	.100000	.0400000	.0100000	15.0000	3.00000
PCTL(050.0)	.100000	.700000	.220000	.0699999	.0200000	28.0000	6.00000
PCTL(075.0)	.150000	.900000	.430000	.110000	.0300000	43.0000	9.00000
PCTL(085.0)	.190000	2.20000	.590000	.150000	.0500000	64.0000	12.0000
PCTL(090.0)	.210000	2.20000	.760000	.180000	.0600000	86.0000	14.0000
PCTL(095.0)	.300000	2.30000	1.10000	.220000	.0899999	115.000	17.0000
NUMBER	145	12	145	123	117	142	142
MAXIMUM	.470000	2.30000	2.80000	.550000	.130000	750.000	136.000
MINIMUM	.0100000	.300000	.0100000	.0100000	.0100000	3.00000	1.00000
SUM	18.0698	10.7000	50.8492	11.3090	3.18096	6524.99	1181.00
MEAN	.124619	.891666	.350684	.0919426	.0271877	45.9506	8.31689
VARIANCE	.0063666	.444470	.152409	.0065273	.0006940	6680.86	187.736
STAND DEV	.0797910	.666685	.390396	.0807917	.0263431	81.7365	13.7017
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05597280 NE 05
37 53 01.0 089 12 31.0 2
LITTLE MUDDY RIVER NEAR ELKVILLE, IL
17077 ILLINOIS JACKSON
UPPER MISSISSIPPI RIVER 072100
/TYPA/AMBNT/STREAM BIG MUDDY RIVER
21ILAMB 870314 07140106
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0400000	.320000	.100000	.150000	.0500000	13.0000	2.00000
PCTL(025.0)	.100000	.320000	.190000	.210000	.0699999	31.0000	5.00000
PCTL(050.0)	.110000	1.10000	.380000	.250000	.110000	62.0000	9.00000
PCTL(075.0)	.210000	1.30000	.620000	.300000	.150000	95.0000	14.0000
PCTL(085.0)	.270000	1.80000	.840000	.380000	.180000	134.000	18.0000
PCTL(090.0)	.340000	1.80000	1.10000	.440000	.210000	186.000	24.0000
PCTL(095.0)	.530000	1.80000	1.90000	.480000	.330000	242.000	30.0000
NUMBER	147	5	147	115	115	147	147
MAXIMUM	2.60000	1.80000	4.30000	.840000	.650000	380.000	63.0000
MINIMUM	.0100000	.320000	.0100000	.0799999	.0300000	3.00000	1.00000
SUM	29.8794	5.62000	80.5631	31.5105	14.8849	11683.0	1658.00
MEAN	.203261	1.12400	.548048	.274005	.129434	79.4761	11.2789
VARIANCE	.0950279	.283882	.395752	.0147789	.0084238	5026.90	84.2162
STAND DEV	.308266	.532805	.629088	.121568	.0917813	70.9006	9.17694
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05597040 NG 02
37 53 06.0 088 55 54.0 2
POND CREEK AT WEST FRANKFORT, IL
17055 ILLINOIS FRANKLIN
UPPER MISSISSIPPI RIVER 072100
/TYPA/AMBNT/STREAM BIG MUDDY RIVER
21ILAMB 870314 07140106
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0400000	.600000	.0699999	.0300000	.0100000	8.00000	2.00000
PCTL(025.0)	.100000	.600000	.100000	.0400000	.0100000	13.0000	3.00000
PCTL(050.0)	.130000	.800000	.220000	.0799999	.0200000	24.0000	5.00000
PCTL(075.0)	.240000	1.10000	.460000	.130000	.0300000	42.0000	9.00000
PCTL(085.0)	.310000	1.10000	.800000	.180000	.0400000	60.0000	12.0000
PCTL(090.0)	.360000	2.40000	1.10000	.220000	.0600000	88.0000	16.0000
PCTL(095.0)	.490000	2.40000	1.40000	.300000	.120000	158.000	21.0000
NUMBER	145	6	145	114	114	145	144
MAXIMUM	1.90000	2.40000	3.00000	.670000	.210000	712.000	140.000
MINIMUM	.0100000	.600000	.0100000	.0100000	.0080000	1.00000	1.00000
SUM	27.9294	6.50000	58.3491	12.4560	3.33895	6219.00	1148.00
MEAN	.192617	1.08333	.402407	.109263	.0292890	42.8896	7.97221
VARIANCE	.0418761	.445669	.242020	.0113273	.0013719	5282.09	166.614
STAND DEV	.204636	.667584	.491955	.106430	.0370393	72.6780	12.9079
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05596400 NH 06
37 56 58.0 088 54 00.0 2
MIDDLE FORK BIG MUDDY RIVER NEAR BENTON, IL
17055 ILLINOIS FRANKLIN
UPPER MISSISSIPPI RIVER 072100
/TYPA/AMBNT/STREAM BIG MUDDY RIVER
21ILAMB 870314 07140106
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0500000	.820000	.0400000	.0899999	.0200000	16.0000	3.00000
PCTL(025.0)	.100000	.820000	.100000	.130000	.0300000	40.0000	6.00000
PCTL(050.0)	.130000	1.40000	.370000	.180000	.0400000	64.0000	9.00000
PCTL(075.0)	.230000	1.80000	.690000	.240000	.0699999	90.0000	15.0000
PCTL(085.0)	.280000	1.80000	.930000	.280000	.0899999	108.000	18.0000
PCTL(090.0)	.320000	1.90000	1.10000	.290000	.106000	120.000	21.0000
PCTL(095.0)	.360000	1.90000	1.30000	.338000	.130000	150.000	31.0000
NUMBER	148	6	148	115	115	147	147
MAXIMUM	.710000	1.90000	2.30000	1.70000	.280000	2725.00	235.000
MINIMUM	.0100000	.820000	.0100000	.0200000	.0100000	3.00000	1.00000
SUM	25.0894	8.57000	71.0191	23.2657	6.27496	12716.0	1885.00
MEAN	.169523	1.42833	.479859	.202310	.0545648	86.5033	12.8231
VARIANCE	.0146148	.206818	.193294	.0268963	.0019024	50094.9	435.571
STAND DEV	.120892	.454773	.439652	.164001	.0436165	223.819	20.8703
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05595830 NJ 07
38 16 10.0 088 53 55.0 2
CASEY FORK AT RTE 37 NEAR MOUNT VERNON, IL
17081 ILLINOIS JEFFERSON
UPPER MISSISSIPPI RIVER 072100
/TYPA/AMBNT/STREAM BIG MUDDY RIVER
21ILAMB 870314 07140106
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0699999	.590000	.420000	.0899999	.0300000	8.00000	2.00000
PCTL(025.0)	.110000	.900000	.690000	.125000	.0500000	20.0000	4.00000
PCTL(050.0)	.270000	1.40000	1.16000	.230000	.0989999	38.0000	6.00000
PCTL(075.0)	3.80000	4.00000	2.10000	.410000	.160000	65.0000	10.0000
PCTL(085.0)	6.90000	7.50000	3.00000	.600000	.260000	88.0000	17.0000
PCTL(090.0)	8.70000	9.50000	3.80000	.730000	.410000	122.000	22.0000
PCTL(095.0)	11.0000	12.0000	5.70000	.850000	.630000	224.000	28.0000
NUMBER	146	144	146	146	145	146	146
MAXIMUM	18.0000	23.0000	6.90000	2.30000	2.00000	558.000	74.0000
MINIMUM	.0100000	.0000000	.0100000	.0300000	.0100000	4.00000	1.00000
SUM	341.708	472.351	249.379	48.8931	25.4815	8896.69	1437.30
MEAN	2.34047	3.28021	1.70808	.334885	.175734	60.9363	9.84452
VARIANCE	13.6306	16.5097	2.31256	.109928	.0752959	6857.40	120.150
STAND DEV	3.69196	4.06322	1.52071	.331554	.274401	82.8094	10.9613
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05595730 NK 01
38 15 14.0 089 02 23.0 2
RAYSE CREEK NEAR WALTONVILLE, IL
17081 ILLINOIS JEFFERSON
UPPER MISSISSIPPI RIVER 072100
/TYPA/AMBNT/STREAM BIG MUDDY RIVER
21ILAMB 870314 07140106
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0400000	.550000	.0799999	.0600000	.0100000	11.0000	2.00000
PCTL(025.0)	.100000	.751000	.100000	.100000	.0200000	20.0000	4.00000
PCTL(050.0)	.100000	1.00000	.470000	.140000	.0400000	38.0000	7.00000
PCTL(075.0)	.190000	1.60000	.950000	.290000	.0899999	74.0000	14.0000
PCTL(085.0)	.320000	2.00000	1.30000	.420000	.130000	146.000	21.0000
PCTL(090.0)	.440000	2.40000	1.60000	.520000	.170000	224.000	34.0000
PCTL(095.0)	.600000	3.40000	2.80000	.745000	.240000	520.000	50.0000
NUMBER	148	146	148	147	147	147	147
MAXIMUM	9.70000	24.0000	6.00000	2.50000	2.20000	2000.00	115.000
MINIMUM	.0100000	.100000	.0100000	.0100000	.0100000	2.00000	1.00000
SUM	43.5794	226.688	109.699	35.6604	12.5819	17296.7	1999.70
MEAN	.294456	1.55266	.741210	.242588	.0855913	117.665	13.6034
VARIANCE	.836113	5.33175	.864720	.0874325	.0397697	72695.2	347.093
STAND DEV	.914392	2.30906	.929903	.295690	.199423	269.621	18.6304
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05591200 O 02
39 35 01.0 088 24 50.0 2
KASKASKIA RIVER AT COOKS MILLS, IL
17029 ILLINOIS COLES
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140201
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.350000	.360000	.0799999	.0600000	4.00000	1.00000
PCTL(025.0)	.0500000	.500000	3.30000	.120000	.0799999	14.0000	3.00000
PCTL(050.0)	.100000	.700000	8.40000	.200000	.140000	40.0000	6.00000
PCTL(075.0)	.100000	1.10000	11.0000	.330000	.240000	76.0000	12.0000
PCTL(085.0)	.140000	1.20000	11.0000	.420000	.310000	97.0000	15.0000
PCTL(090.0)	.190000	1.30000	13.0000	.530000	.460000	118.000	18.0000
PCTL(095.0)	.280000	1.60000	14.0000	.650000	.590000	145.000	26.0000
NUMBER	152	150	150	151	149	150	150
MAXIMUM	1.50000	5.30000	17.0000	1.60000	1.50000	768.000	84.0000
MINIMUM	.0100000	.100000	.0100000	.0500000	.0100000	1.00000	1.00000
SUM	16.9598	127.210	1105.15	39.4112	29.5913	8107.59	1371.60
MEAN	.111578	.848068	7.36767	.261001	.198599	54.0506	9.14400
VARIANCE	.0212013	.347142	20.6018	.0423062	.0362758	5270.53	145.892
STAND DEV	.145607	.589188	4.53892	.205685	.190462	72.5984	12.0786
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05593010 O 07
38 34 28.0 089 22 09.0 2
KASKASKIA RIVER BELOW CARLYLE
17027 ILLINOIS CLINTON
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140202
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	.600000	.100000	.0799999	.0200000	9.00000	2.00000
PCTL(025.0)	.0799999	.700000	.200000	.110000	.0400000	18.0000	4.00000
PCTL(050.0)	.100000	.900000	.500000	.150000	.0699999	30.0000	6.00000
PCTL(075.0)	.150000	1.10000	1.60000	.220000	.120000	48.0000	9.00000
PCTL(085.0)	.200000	1.30000	2.10000	.250000	.150000	61.0000	12.0000
PCTL(090.0)	.220000	1.30000	2.80000	.280000	.160000	70.0000	17.0000
PCTL(095.0)	.290000	1.50000	3.50000	.320000	.190000	94.0000	20.0000
NUMBER	146	145	146	144	145	145	144
MAXIMUM	1.80000	5.80000	5.90000	.730000	.450000	550.000	60.0000
MINIMUM	.0100000	.100000	.0100000	.0400000	.0100000	1.00000	1.00000
SUM	19.6896	143.427	150.799	25.0646	12.4860	6421.19	1160.90
MEAN	.134861	.989153	1.03287	.174060	.0861099	44.2841	8.06180
VARIANCE	.0292708	.283628	1.34820	.0105540	.0044703	4413.51	68.8745
STAND DEV	.171087	.532567	1.16112	.102733	.0668606	66.4343	8.29907
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05592500 O 08
38 57 35.0 089 05 20.0 2
KASKASKIA RIVER AT VANDALIA, IL
17051 ILLINOIS FAYETTE
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140202
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	.500000	.260000	.0699999	.0100000	18.0000	3.00000
PCTL(025.0)	.0799999	.680000	.990000	.110000	.0200000	45.0000	6.00000
PCTL(050.0)	.100000	1.00000	2.00000	.150000	.0500000	80.0000	9.00000
PCTL(075.0)	.150000	1.40000	4.80000	.240000	.0899999	143.000	15.0000
PCTL(085.0)	.200000	1.70000	5.50000	.290000	.100000	193.000	19.0000
PCTL(090.0)	.260000	1.90000	6.10000	.390000	.120000	212.000	24.0000
PCTL(095.0)	.330000	2.30000	6.90000	.480000	.150000	278.000	47.0000
NUMBER	149	149	148	149	148	149	149
MAXIMUM	3.20000	5.40000	18.0000	1.50000	.730000	1800.00	140.000
MINIMUM	.0100000	.100000	.100000	.0400000	.0010000	2.00000	1.00000
SUM	21.6895	167.444	433.724	30.8584	9.36494	18951.0	2184.00
MEAN	.145567	1.12378	2.93056	.207103	.0632765	127.188	14.6577
VARIANCE	.0730198	.508123	7.21484	.0345336	.0052191	40146.1	410.510
STAND DEV	.270222	.712828	2.68605	.185832	.0722436	200.365	20.2611
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05592100 O 10
39 13 50.0 088 50 33.0 2
KASKASKIA RIVER NEAR COWDEN, IL
17173 ILLINOIS SHELBY
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140201
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.400000	.910000	.0400000	.0100000	8.00000	2.00000
PCTL(025.0)	.0600000	.510000	1.60000	.0600000	.0100000	23.0000	3.00000
PCTL(050.0)	.100000	.740000	3.00000	.100000	.0200000	46.0000	5.00000
PCTL(075.0)	.100000	1.00000	5.50000	.170000	.0699999	75.0000	8.00000
PCTL(085.0)	.130000	1.30000	6.50000	.220000	.100000	108.000	12.0000
PCTL(090.0)	.170000	1.40000	6.90000	.270000	.130000	122.000	15.0000
PCTL(095.0)	.250000	1.90000	8.30000	.410000	.170000	203.000	18.0000
NUMBER	145	145	145	145	142	144	144
MAXIMUM	1.40000	7.70000	12.0000	1.50000	.220000	690.000	60.0000
MINIMUM	.0100000	.100000	.0100000	.0200000	.0010000	1.00000	1.00000
SUM	15.6199	130.612	539.891	20.7467	6.97393	9397.00	1045.40
MEAN	.107724	.900773	3.72339	.143080	.0491122	65.2569	7.25972
VARIANCE	.0171547	.600931	6.31775	.0280971	.0027581	6450.75	61.6241
STAND DEV	.130976	.775197	2.51351	.167622	.0525175	80.3166	7.85010
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05592000 O 11
39 24 21.0 088 47 01.0 4
KASKASKIA RIVER AT SHELBYVILLE, IL
17173 ILLINOIS SHELBY
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140201
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.400000	1.30000	.0200000	.0100000	3.00000	1.00000
PCTL(025.0)	.100000	.580000	1.85000	.0200000	.0100000	6.00000	2.00000
PCTL(050.0)	.100000	.700000	3.20000	.0300000	.0100000	8.00000	2.00000
PCTL(075.0)	.210000	.918000	5.70000	.0600000	.0200000	12.0000	3.00000
PCTL(085.0)	.330000	1.10000	7.10000	.120000	.0699999	15.0000	4.00000
PCTL(090.0)	.510000	1.20000	7.50000	.150000	.110000	17.0000	5.00000
PCTL(095.0)	.720000	1.40000	8.70000	.190000	.140000	23.0000	6.00000
NUMBER	146	145	146	146	139	146	146
MAXIMUM	1.60000	2.80000	13.0000	.290000	.220000	124.000	20.0000
MINIMUM	.0100000	.100000	.100000	.0100000	.0010000	2.00000	1.00000
SUM	28.9595	114.297	597.730	8.26295	4.34193	1524.80	396.800
MEAN	.198352	.788256	4.09404	.0565955	.0312369	10.4438	2.71781
VARIANCE	.0632479	.135585	6.42164	.0032760	.0020098	133.362	5.03045
STAND DEV	.251491	.368219	2.53409	.0572366	.0448305	11.5482	2.24287
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05591300 O 15
39 34 22.0 088 31 56.0 2
KASKASKIA RIVER AT ALLENVILLE, IL
17139 ILLINOIS MOULTRIE
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140201
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.400000	.330000	.0799999	.0500000	4.00000	1.00000
PCTL(025.0)	.0500000	.500000	3.50000	.120000	.0699999	11.2000	2.00000
PCTL(050.0)	.100000	.700000	8.60000	.180000	.110000	38.0000	6.00000
PCTL(075.0)	.100000	1.00000	10.0000	.270000	.180000	74.0000	10.0000
PCTL(085.0)	.120000	1.20000	11.0000	.340000	.210000	92.0000	13.0000
PCTL(090.0)	.160000	1.30000	12.0000	.400000	.270000	98.0000	16.0000
PCTL(095.0)	.280000	1.60000	13.0000	.570000	.310000	132.000	22.0000
NUMBER	145	145	144	145	141	145	145
MAXIMUM	.530000	47.0000	17.0000	1.50000	.610000	544.000	52.0000
MINIMUM	.0100000	.100000	.0600000	.0400000	.0100000	1.00000	1.00000
SUM	14.4799	164.196	1035.97	33.0153	19.8427	7502.19	1125.60
MEAN	.0998615	1.13239	7.19425	.227692	.140728	51.7393	7.76276
VARIANCE	.0065886	14.9164	19.0896	.0365372	.0106847	3744.31	65.7695
STAND DEV	.0811702	3.86218	4.36916	.191147	.103367	61.1907	8.10984
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05594100 O 20
38 27 02.0 089 37 39.0 2
KASKASKIA RIVER NEAR VENEDY STATION, IL
17189 ILLINOIS WASHINGTON
UPPER MISSISSIPPI RIVER 072091
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140204
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.600000	.100000	.120000	.0300000	24.0000	4.00000
PCTL(025.0)	.0500000	.800000	.210000	.170000	.0500000	44.0000	6.00000
PCTL(050.0)	.100000	1.10000	.630000	.230000	.0799999	70.0000	10.0000
PCTL(075.0)	.140000	1.40000	1.40000	.340000	.150000	108.000	16.0000
PCTL(085.0)	.240000	1.60000	1.70000	.400000	.190000	158.000	21.0000
PCTL(090.0)	.260000	1.80000	1.80000	.540000	.230000	248.000	24.0000
PCTL(095.0)	.380000	2.20000	2.30000	.690001	.250000	460.000	44.0000
NUMBER	124	148	121	148	146	152	152
MAXIMUM	1.10000	7.00000	4.30000	2.30000	.530000	1420.00	96.0000
MINIMUM	.0100000	.0000000	.0100000	.0100000	.0100000	8.00000	1.00000
SUM	15.9199	181.914	107.369	43.7024	16.1349	17359.4	2066.60
MEAN	.128387	1.22915	.887349	.295286	.110513	114.207	13.5960
VARIANCE	.0195596	.636188	.690192	.0631546	.0071297	25973.2	171.502
STAND DEV	.139855	.797614	.830778	.251306	.0844374	161.162	13.0959
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05595400 O 30
38 00 58.0 089 57 14.0 2
KASKASKIA RIVER AT ROOTS, IL
17157 ILLINOIS RANDOLPH
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140204
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0300000	.600000	.180000	.110000	.0370000	17.0000	3.00000
PCTL(025.0)	.100000	.800000	.460000	.150000	.0600000	28.0000	5.00000
PCTL(050.0)	.120000	1.03000	.870000	.220000	.0899999	44.0000	7.00000
PCTL(075.0)	.220000	1.30000	1.40000	.310000	.140000	88.0000	14.0000
PCTL(085.0)	.260000	1.50000	1.72000	.380000	.160000	136.000	19.0000
PCTL(090.0)	.320000	1.60000	2.00000	.443000	.180000	160.000	24.0000
PCTL(095.0)	.430000	1.90000	2.60000	.480000	.220000	260.000	30.0000
NUMBER	146	147	147	147	147	146	146
MAXIMUM	.520000	3.34000	3.60000	.900000	.400000	482.000	100.000
MINIMUM	.0100000	.100000	.0100000	.0500000	.0100000	6.00000	1.00000
SUM	23.8295	166.116	150.728	37.4714	15.4489	10954.0	1651.00
MEAN	.163216	1.13004	1.02536	.254907	.105095	75.0273	11.3082
VARIANCE	.0129840	.227303	.581730	.0239395	.0045362	6840.87	139.332
STAND DEV	.113947	.476763	.762712	.154724	.0673514	82.7095	11.8039

96/09/30

1STORET RETRIEVAL DATE 99/01/19

05590420 O 31
39 51 53.0 088 21 52.0 2
KASKASKIA RIVER NEAR TUSCOLA, IL
17041 ILLINOIS DOUGLAS
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07140201
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.300000	2.00000	.0600000	.0400000	2.00000	1.00000
PCTL(025.0)	.0500000	.400000	4.40000	.0899999	.0600000	6.00000	1.00000
PCTL(050.0)	.100000	.600000	8.70000	.140000	.100000	20.0000	3.00000
PCTL(075.0)	.100000	.800000	11.0000	.240000	.180000	60.0000	7.00000
PCTL(085.0)	.150000	1.00000	12.0000	.380000	.249000	80.0000	10.0000
PCTL(090.0)	.200000	1.20000	12.0000	.470000	.320000	135.000	12.0000
PCTL(095.0)	.300000	1.70000	14.0000	.570000	.370000	163.000	22.0000
NUMBER	143	141	142	143	124	142	142
MAXIMUM	.900000	6.00000	16.0000	1.70000	.690000	468.000	56.0000
MINIMUM	.0100000	.100000	.100000	.0140000	.0130000	1.00000	1.00000
SUM	16.0499	103.515	1105.72	31.4083	17.5178	6589.00	875.000
MEAN	.112237	.734150	7.78677	.219638	.141273	46.4014	6.16197
VARIANCE	.0155311	.396067	15.0591	.0532966	.0145977	4472.95	85.8388
STAND DEV	.124624	.629338	3.88061	.230861	.120821	66.8801	9.26492

96/09/30

1STORET RETRIEVAL DATE 99/01/19

05595200 OC 04
38 19 26.0 089 58 15.0 2
RICHLAND CREEK NEAR HECKER, IL
17163 ILLINOIS ST CLAIR
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140204
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0899999	1.20000	.810000	.440000	.230000	13.0000	3.00000
PCTL(025.0)	.180000	1.20000	1.90000	.590000	.380000	20.0000	4.00000
PCTL(050.0)	.550000	3.20000	3.70000	.920000	.700000	39.0000	7.00000
PCTL(075.0)	1.80000	7.10000	6.20000	1.60000	1.30000	98.0000	14.0000
PCTL(085.0)	2.60000	8.80000	8.20000	2.20000	1.70000	140.000	16.0000
PCTL(090.0)	4.50000	8.80000	11.0000	2.50000	2.10000	178.000	24.0000
PCTL(095.0)	5.30000	8.80000	13.0000	3.40000	2.60000	354.000	36.0000
NUMBER	146	5	147	126	126	147	147
MAXIMUM	21.0000	8.80000	17.0000	4.80000	4.40000	2152.00	160.000
MINIMUM	.0100000	1.20000	.100000	.240000	.0010000	1.00000	1.00000
SUM	228.949	22.7000	677.094	160.928	122.832	16423.0	1818.00
MEAN	1.56814	4.54000	4.60608	1.27721	.974859	111.721	12.3673
VARIANCE	7.45852	10.5580	13.9664	.937193	.768811	75808.0	390.261
STAND DEV	2.73103	3.24931	3.73717	.968087	.876818	275.333	19.7550

96/09/30

1STORET RETRIEVAL DATE 99/01/19

05594450 OD 06
38 43 00.0 089 49 45.0 2
SILVER CREEK NEAR TROY, IL
17119 ILLINOIS MADISON
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140204
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01								
STATION	PCTL(010.0)	.100000	1.10000	.610000	.300000	.150000	15.0000	3.00000
	PCTL(025.0)	.140000	1.10000	1.00000	.460000	.240000	35.0000	6.00000
	PCTL(050.0)	.340000	1.20000	1.50000	.650000	.380000	70.0000	10.0000
	PCTL(075.0)	.700000	1.60000	2.20000	1.30000	.720000	114.000	19.0000
	PCTL(085.0)	1.20000	1.60000	2.80000	1.80000	1.30000	168.000	28.0000
	PCTL(090.0)	3.00000	1.60000	3.30000	2.20000	1.90000	305.000	38.0000
	PCTL(095.0)	6.60000	1.60000	4.30000	2.90000	2.50000	620.000	52.0000
	NUMBER	145	4	145	123	123	145	145
	MAXIMUM	18.0000	1.60000	9.70000	5.40000	5.30000	2360.00	240.000
	MINIMUM	.0200000	1.10000	.100000	.140000	.0699999	2.00000	1.00000
	SUM	174.929	5.50000	263.319	125.762	88.1483	22072.0	2726.00
	MEAN	1.20641	1.37500	1.81599	1.02246	.716653	152.221	18.8000
	VARIANCE	7.79199	.0691674	1.85586	.853676	.738414	101377	907.175
	STAND DEV	2.79141	.262997	1.36230	.923946	.859310	318.398	30.1193
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05594800 OD 07
38 24 22.0 089 52 26.0 2
SILVER CREEK NEAR FREEBURG, IL
17163 ILLINOIS ST CLAIR
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140204
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01								
STATION	PCTL(010.0)	.0500000	1.00000	.690000	.320000	.160000	15.0000	3.00000
	PCTL(025.0)	.100000	1.00000	1.20000	.400000	.200000	33.0000	5.00000
	PCTL(050.0)	.110000	1.20000	1.70000	.533000	.300000	62.0000	9.00000
	PCTL(075.0)	.260000	1.40000	2.20000	.780000	.500000	110.000	18.0000
	PCTL(085.0)	.400000	3.00000	2.60000	.940000	.640000	152.000	22.0000
	PCTL(090.0)	.490000	3.00000	3.20000	1.27000	.740000	228.000	26.0000
	PCTL(095.0)	.580000	3.00000	4.00000	1.40000	1.10000	322.000	52.0000
	NUMBER	148	5	148	125	124	146	145
	MAXIMUM	1.20000	3.00000	5.40000	3.30000	1.70000	2584.00	180.000
	MINIMUM	.0100000	1.00000	.100000	.130000	.0699999	4.00000	1.00000
	SUM	30.8293	7.80000	272.188	84.3623	49.9825	19679.0	2332.00
	MEAN	.208306	1.56000	1.83911	.674898	.403084	134.788	16.0827
	VARIANCE	.0453039	.668001	1.02814	.202123	.0873053	99246.3	630.479
	STAND DEV	.212847	.817313	1.01397	.449581	.295475	315.034	25.1093
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05594090 OH 01
38 32 29.0 089 37 36.0 2
SUGAR CREEK AT ALBERS, IL
17027 ILLINOIS CLINTON
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140204
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01								
STATION	PCTL(010.0)	.100000	1.30000	.440000	.450000	.280000	17.0000	4.00000
	PCTL(025.0)	.130000	1.30000	.690000	.610000	.360000	31.0000	6.00000
	PCTL(050.0)	.270000	1.40000	1.20000	.850000	.520000	64.0000	11.0000
	PCTL(075.0)	.610000	1.70000	1.90000	1.20000	.880000	100.000	16.0000
	PCTL(085.0)	.790000	2.60000	2.20000	1.55500	.980000	148.000	22.0000
	PCTL(090.0)	1.00000	2.60000	2.40000	1.70000	1.30000	190.000	28.0000
	PCTL(095.0)	1.70000	2.60000	2.80000	2.00000	1.30000	454.000	44.0000
	NUMBER	146	4	146	121	121	145	145
	MAXIMUM	9.60000	2.60000	4.10000	3.30000	2.70000	1148.00	100.0000
	MINIMUM	.0100000	1.30000	.0699999	.320000	.130000	5.00000	1.00000
	SUM	83.4589	7.00000	198.149	120.101	80.8903	15345.6	2151.60
	MEAN	.571636	1.75000	1.35719	.992572	.668515	105.832	14.8386
	VARIANCE	1.09511	.350001	.664111	.277287	.186062	25325.7	235.676
	STAND DEV	1.04647	.591609	.814930	.526581	.431350	159.140	15.3517
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05594000 OI 08
38 36 35.0 089 29 40.0 2
SHOAL CREEK NEAR BREESE, IL
17027 ILLINOIS CLINTON
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140203
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.800000	.100000	.120000	.0300000	16.0000	3.00000
PCTL(025.0)	.100000	.800000	.410000	.160000	.0500000	27.0000	5.00000
PCTL(050.0)	.100000	1.20000	.780000	.220000	.0799999	58.0000	9.00000
PCTL(075.0)	.220000	1.50000	1.36000	.340000	.140000	102.000	13.0000
PCTL(085.0)	.280000	1.70000	1.50000	.420000	.170000	129.000	20.0000
PCTL(090.0)	.320000	1.70000	1.70000	.450000	.200000	240.000	29.0000
PCTL(095.0)	.370000	1.70000	2.10000	.660000	.230000	410.000	36.0000
NUMBER	147	5	147	122	121	146	146
MAXIMUM	1.20000	1.70000	3.80000	1.00600	.480000	1400.00	140.000
MINIMUM	.0100000	.800000	.0100000	.0200000	.0200000	3.00000	1.00000
SUM	24.3395	6.30000	134.269	34.0684	12.2040	16207.0	1930.60
MEAN	.165575	1.26000	.913395	.279249	.100859	111.007	13.2233
VARIANCE	.0267432	.123001	.446307	.0354751	.0058971	38115.0	302.702
STAND DEV	.163534	.350715	.668062	.188348	.0767922	195.231	17.3983
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05593785 OI 09
39 03 48.0 089 32 43.0 2
SHOAL CREEK NEAR WALSHVILLE, IL
17135 ILLINOIS MONTGOMERY
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140203
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0300000	.770000	.830000	.230000	.120000	5.00000	2.00000
PCTL(025.0)	.100000	.770000	1.20000	.290000	.150000	13.0000	3.00000
PCTL(050.0)	.100000	.800000	1.85000	.390000	.220000	32.0000	5.00000
PCTL(075.0)	.170000	.900000	2.30000	.530000	.390000	73.0000	11.0000
PCTL(085.0)	.300000	1.30000	2.60000	.640000	.530000	110.000	16.0000
PCTL(090.0)	.350000	1.30000	2.90000	.780000	.670000	140.000	20.0000
PCTL(095.0)	.660000	1.30000	3.60000	.920000	.790000	245.000	30.0000
NUMBER	131	4	131	121	119	130	130
MAXIMUM	1.60000	1.30000	5.50000	1.90000	1.40000	4760.00	450.000
MINIMUM	.0100000	.770000	.0100000	.140000	.0500000	1.00000	1.00000
SUM	24.2796	3.77000	248.389	55.0994	37.6645	12244.0	1501.00
MEAN	.185340	.942500	1.89610	.455367	.316509	94.1846	11.5462
VARIANCE	.0570333	.0598917	.814034	.0756660	.0577300	176008	1571.81
STAND DEV	.238816	.244728	.902238	.275075	.240271	419.533	39.6461
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05593505 OJ 07
38 33 50.0 089 03 01.0 2
CROOKED CREEK NEAR ODIN, IL
17121 ILLINOIS MARION
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140202004 0024.090 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0600000	1.00000	.400000	.160000	.0600000	11.0000	2.00000
PCTL(025.0)	.100000	1.00000	.660000	.220000	.0899999	17.0000	4.00000
PCTL(050.0)	.140000	1.00000	1.10000	.310000	.160000	31.0000	6.00000
PCTL(075.0)	.370000	1.60000	1.87000	.520000	.350000	50.0000	10.0000
PCTL(085.0)	1.10000	1.60000	2.20000	.850000	.560000	70.0000	16.0000
PCTL(090.0)	2.10000	1.60000	2.90000	1.20000	.840000	85.0000	21.0000
PCTL(095.0)	4.00000	1.60000	4.10000	1.80000	1.30000	166.000	28.0000
NUMBER	148	4	148	124	124	145	145
MAXIMUM	8.00000	1.60000	7.20000	3.36000	3.20000	342.000	116.000
MINIMUM	.0100000	1.00000	.0799999	.0899999	.0200000	3.00000	1.00000
SUM	101.219	5.20000	217.928	65.6603	43.5884	6812.00	1353.00
MEAN	.683912	1.30000	1.47249	.529519	.351519	46.9793	9.33103
VARIANCE	2.02731	.120001	1.73495	.356888	.274143	3145.44	147.404
STAND DEV	1.42384	.346412	1.31717	.597401	.523586	56.0842	12.1410
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05593520 OJ 08
38 30 25.0 089 16 24.0 2
CROOKED CREEK NEAR HOFFMAN, IL
17189 ILLINOIS WASHINGTON
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140202004 0008.250 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0400000	1.70000	.330000	.290000	.120000	14.0000	3.00000
PCTL(025.0)	.100000	1.70000	.620000	.390000	.180000	31.0000	5.00000
PCTL(050.0)	.180000	3.80000	.930000	.510000	.300000	61.0000	9.00000
PCTL(075.0)	.560000	4.50000	1.50000	.880000	.600000	97.0000	13.0000
PCTL(085.0)	1.20000	8.20000	2.10000	1.20000	.940000	122.000	17.0000
PCTL(090.0)	1.90000	8.20000	2.80000	1.50000	1.20000	144.000	21.0000
PCTL(095.0)	4.20000	8.20000	4.20000	2.10000	1.70000	190.000	35.0000
NUMBER	148	5	148	123	123	147	147
MAXIMUM	6.50000	8.20000	11.0000	7.70000	7.00000	1190.00	93.0000
MINIMUM	.0100000	1.70000	.0600000	.150000	.0699999	4.00000	1.00000
SUM	102.349	19.9000	211.139	104.870	74.1924	12122.4	1707.60
MEAN	.691547	3.98000	1.42661	.852604	.603190	82.4653	11.6163
VARIANCE	1.53970	7.12702	2.74497	1.10608	.887144	14307.1	142.456
STAND DEV	1.24085	2.66965	1.65680	1.05171	.941883	119.612	11.9355
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05592900 OK 01
38 41 20.0 089 05 55.0 2
EAST FORK KASKASKIA RIVER NEAR SANDOVAL, IL
17121 ILLINOIS MARION
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140202
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	.520000	.0500000	.0799999	.0200000	6.00000	2.00000
PCTL(025.0)	.100000	.700000	.100000	.110000	.0400000	12.0000	3.00000
PCTL(050.0)	.100000	.900000	.280000	.180000	.0699999	22.0000	4.00000
PCTL(075.0)	.180000	1.20000	.610000	.320000	.120000	56.0000	10.0000
PCTL(085.0)	.260000	1.70000	1.00000	.390000	.170000	93.0000	16.0000
PCTL(090.0)	.360000	2.00000	1.22000	.460000	.227000	166.000	26.0000
PCTL(095.0)	.770000	2.90000	1.70000	.620000	.250000	380.000	46.0000
NUMBER	148	148	148	148	147	148	148
MAXIMUM	4.70000	5.10000	5.40000	1.02000	.410000	825.000	140.000
MINIMUM	.0100000	.100000	.0100000	.0200000	.0100000	1.00000	1.00000
SUM	32.2295	167.861	77.1992	35.5343	13.6619	10084.0	1659.00
MEAN	.217767	1.13420	.521616	.240097	.0929383	68.1351	11.2094
VARIANCE	.219245	.523093	.472774	.0356334	.0062980	16873.5	373.255
STAND DEV	.468236	.723251	.687586	.188768	.0793596	129.898	19.3198
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05592930 OKA 01
38 46 25.0 089 05 10.0 2
NORTH FORK KASKASKIA RIVER NEAR PATOKA, IL
17121 ILLINOIS MARION
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140202
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.720000	.0300000	.120000	.0300000	8.00000	2.00000
PCTL(025.0)	.100000	.900000	.100000	.190000	.0600000	14.0000	4.00000
PCTL(050.0)	.150000	1.20000	.300000	.290000	.120000	28.0000	6.00000
PCTL(075.0)	.280000	1.80000	.820000	.490000	.230000	46.0000	12.0000
PCTL(085.0)	.370000	2.20000	1.20000	.580000	.280000	92.0000	19.0000
PCTL(090.0)	.600000	2.60000	1.60000	.670000	.330000	170.000	26.0000
PCTL(095.0)	.950000	3.00000	1.94000	.754000	.460000	304.000	44.0000
NUMBER	147	148	146	148	147	147	147
MAXIMUM	1.70000	7.65000	8.50000	1.30000	.820000	4660.00	310.000
MINIMUM	.0100000	.200000	.0100000	.0500000	.0100000	2.00000	1.00000
SUM	36.0993	215.872	94.4091	52.1573	24.0356	14587.0	2139.00
MEAN	.245573	1.45860	.646638	.352414	.163507	99.2313	14.5510
VARIANCE	.0832217	.787490	1.11836	.0511934	.0185732	161888	1263.48
STAND DEV	.288482	.887406	1.05752	.226260	.136284	402.353	35.5455
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05592800 OL 02
38 55 21.0 089 14 14.0 2
HURRICANE CREEK NEAR MULBERRY GROVE, IL
17051 ILLINOIS FAYETTE
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140202
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.300000	.100000	.0600000	.0200000	8.00000	2.00000
PCTL(025.0)	.100000	.490000	.330000	.110000	.0500000	17.0000	3.00000
PCTL(050.0)	.100000	.700000	.730000	.160000	.0789999	46.0000	6.00000
PCTL(075.0)	.150000	1.10000	1.10000	.260000	.120000	91.0000	13.0000
PCTL(085.0)	.190000	1.70000	1.40000	.390000	.150000	146.000	20.0000
PCTL(090.0)	.280000	2.00000	1.60000	.530000	.180000	213.000	26.0000
PCTL(095.0)	.480000	2.40000	2.10000	.630000	.270000	330.000	36.0000
NUMBER	148	148	148	148	147	147	147
MAXIMUM	.960000	5.90000	5.30000	1.20000	.610000	1575.00	140.000
MINIMUM	.0100000	.100000	.0100000	.0200000	.0100000	2.00000	1.00000
SUM	21.2596	137.329	125.209	33.0754	14.5609	12897.0	1633.00
MEAN	.143646	.927899	.846007	.223482	.0990539	87.7346	11.1088
VARIANCE	.0213718	.568629	.540910	.0365941	.0074770	23927.9	246.659
STAND DEV	.146191	.754075	.735466	.191296	.0864697	154.687	15.7054

96/09/30

1STORET RETRIEVAL DATE 99/01/19

05592600 ON 01
38 55 30.0 089 02 20.0 2
HICKORY CREEK NEAR BLUFF CITY, IL
17051 ILLINOIS FAYETTE
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140202
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.370000	.0799999	.0400000	.0100000	7.00000	1.00000
PCTL(025.0)	.0899999	.490000	.100000	.0799999	.0200000	11.0000	2.00000
PCTL(050.0)	.100000	.700000	.220000	.120000	.0400000	23.0000	5.00000
PCTL(075.0)	.160000	1.10000	.540000	.230000	.0899999	52.0000	10.00000
PCTL(085.0)	.210000	1.40000	.770000	.350000	.130000	99.0000	18.0000
PCTL(090.0)	.250000	1.80000	.950000	.430000	.160000	200.000	26.0000
PCTL(095.0)	.350000	2.40000	1.40000	.550000	.222000	362.000	40.0000
NUMBER	148	147	148	148	147	147	147
MAXIMUM	.810000	3.00000	3.00000	.850000	.490000	3080.00	300.000
MINIMUM	.0100000	.100000	.0100000	.0200000	.0010000	1.00000	1.00000
SUM	19.5797	130.822	62.6591	26.9296	10.2219	12124.0	1871.00
MEAN	.132295	.889946	.423372	.181957	.0695369	82.4761	12.7279
VARIANCE	.0147648	.418944	.273515	.0268569	.0062092	72830.1	1048.80
STAND DEV	.121511	.647258	.522986	.163881	.0787987	269.871	32.3852

96/09/30

1STORET RETRIEVAL DATE 99/01/19

05592195 OQ 01
39 12 59.0 089 01 14.0 2
BECK CREEK AT HERRICK, IL
17051 ILLINOIS FAYETTE
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140201
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0400000	.900000	.290000	.0899999	.0400000	5.00000	1.00000
PCTL(025.0)	.100000	.900000	.800000	.130000	.0600000	10.0000	2.00000
PCTL(050.0)	.120000	.900000	1.15000	.200000	.0899999	27.0000	5.00000
PCTL(075.0)	.270000	2.10000	1.80000	.260000	.140000	62.0000	8.00000
PCTL(085.0)	.360000	2.10000	2.10000	.350000	.160000	103.000	14.0000
PCTL(090.0)	.500000	2.10000	2.30000	.430000	.190000	162.000	20.0000
PCTL(095.0)	.730000	2.10000	2.80000	.570000	.270000	340.000	38.0000
NUMBER	146	2	146	146	120	145	145
MAXIMUM	3.20000	2.10000	4.40000	.860000	.430000	1260.00	162.000
MINIMUM	.0100000	.900000	.0100000	.0200000	.0100000	1.00000	1.00000
SUM	33.8993	3.00000	188.459	33.7984	13.0429	11104.0	1436.40
MEAN	.232187	1.50000	1.29082	.231496	.108691	76.5793	9.90620
VARIANCE	.114252	.720002	.646424	.0216912	.0050717	25560.2	378.234
STAND DEV	.338012	.848529	.804005	.147279	.0712161	159.876	19.4482

96/09/30

1STORET RETRIEVAL DATE 99/01/19

05591700 OT 02
39 43 18.0 088 39 46.0 4
W OKAW R TWP RD BR 1 MI NW LOVINGTON T15NR5ENE28
17139 ILLINOIS MOULTRIE
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140201
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.100000	.790000	.0200000	.0100000	4.00000	1.00000
PCTL(025.0)	.0400000	.300000	6.50000	.0400000	.0200000	10.0000	2.00000
PCTL(050.0)	.100000	.500000	9.80000	.0699999	.0400000	26.0000	4.00000
PCTL(075.0)	.100000	.900000	12.8000	.150000	.0699999	62.0000	8.00000
PCTL(085.0)	.130000	1.30000	14.0000	.190000	.100000	76.0000	11.0000
PCTL(090.0)	.170000	1.80000	14.0000	.250000	.110000	115.000	15.0000
PCTL(095.0)	.380000	2.20000	16.0000	.450000	.160000	148.000	25.0000
NUMBER	133	134	130	134	127	133	133
MAXIMUM	1.80000	8.20000	20.0000	.940000	.380000	547.000	67.0000
MINIMUM	.0100000	.100000	.0100000	.0100000	.0100000	1.00000	1.00000
SUM	16.7399	108.030	1206.00	16.1399	7.11795	6473.00	951.000
MEAN	.125864	.806195	9.27694	.120447	.0560469	48.6691	7.15037
VARIANCE	.0439377	.951123	22.5474	.0232745	.0038195	5035.96	107.477
STAND DEV	.209613	.975255	4.74841	.152560	.0618022	70.9645	10.3671
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05591400 OU 01
39 36 04.0 088 32 46.0 2
JONATHAN CREEK NEAR SULLIVAN, IL
17139 ILLINOIS MOULTRIE
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140201
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	.200000	.100000	.0200000	.0100000	5.00000	1.00000
PCTL(025.0)	.100000	.400000	1.10000	.0400000	.0200000	11.0000	2.00000
PCTL(050.0)	.100000	.700000	9.40000	.0799999	.0400000	31.0000	4.00000
PCTL(075.0)	.290000	1.30000	12.0000	.180000	.0799999	56.0000	10.0000
PCTL(085.0)	.390000	1.70000	13.0000	.240000	.100000	80.0000	15.0000
PCTL(090.0)	.510000	1.90000	14.0000	.290000	.130000	90.0000	19.0000
PCTL(095.0)	.780000	2.50000	16.0000	.420000	.170000	140.000	26.0000
NUMBER	144	142	140	144	143	144	144
MAXIMUM	14.0000	28.4000	20.0000	5.90000	4.00000	344.000	84.0000
MINIMUM	.0100000	.100000	.0100000	.0100000	.0100000	1.00000	1.00000
SUM	45.5792	186.578	1078.27	25.8464	13.0649	6438.00	1174.00
MEAN	.316522	1.31393	7.70194	.179489	.0913631	44.7083	8.15278
VARIANCE	1.41551	10.8001	30.7815	.260479	.115336	2373.01	123.207
STAND DEV	1.18975	3.28635	5.54811	.510371	.339612	48.7135	11.0999
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05595280 OZC 01
38 08 48.0 089 50 35.0 2
PLUM CREEK NEAR BALDWIN, IL
17157 ILLINOIS RANDOLPH
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140204
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.700000	.100000	.0899999	.0300000	10.0000	2.00000
PCTL(025.0)	.0699999	.700000	.100000	.120000	.0500000	17.0000	4.00000
PCTL(050.0)	.100000	1.00000	.350000	.180000	.0799999	37.0000	6.00000
PCTL(075.0)	.160000	1.30000	.720000	.250000	.130000	79.0000	11.0000
PCTL(085.0)	.210000	1.60000	.880000	.330000	.160000	120.000	19.0000
PCTL(090.0)	.280000	1.60000	1.00000	.370000	.209000	180.000	22.0000
PCTL(095.0)	.360000	1.60000	1.60000	.760000	.300000	222.000	37.0000
NUMBER	146	5	146	124	124	146	146
MAXIMUM	.690000	1.60000	4.10000	1.70000	.500000	1594.00	210.000
MINIMUM	.0100000	.700000	.0100000	.0500000	.0100000	1.00000	1.00000
SUM	19.3197	5.39000	75.1591	30.9536	13.0659	12010.0	1785.00
MEAN	.132327	1.07800	.514788	.249626	.105370	82.2602	12.2260
VARIANCE	.0137367	.138421	.349668	.0642727	.0087058	32782.6	497.113
STAND DEV	.117204	.372050	.591327	.253521	.0933051	181.060	22.2960
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05591500 OZZT01
39 37 11.0 088 36 17.0 2
ASA CREEK AT SULLIVAN, IL
17139 ILLINOIS MOULTRIE
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140201
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.200000	.100000	.0100000	.0100000	4.00000	1.00000
PCTL(025.0)	.100000	.330000	2.20000	.0200000	.0100000	8.00000	2.00000
PCTL(050.0)	.100000	.720000	9.80000	.0400000	.0200000	16.0000	3.00000
PCTL(075.0)	.180000	1.30000	13.0000	.120000	.0600000	41.0000	7.00000
PCTL(085.0)	.300000	1.80000	15.0000	.220000	.0899999	57.0000	11.0000
PCTL(090.0)	.400000	2.10000	16.0000	.310000	.110000	71.0000	12.0000
PCTL(095.0)	.800000	3.00000	18.0000	.430000	.260000	83.0000	16.0000
NUMBER	144	140	139	144	136	144	144
MAXIMUM	4.70000	17.2000	23.0000	.810000	.720000	152.000	62.0000
MINIMUM	.0100000	.100000	.0200000	.0050000	.0010000	1.00000	1.00000
SUM	31.1393	158.788	1203.78	15.6649	7.46894	4124.39	846.600
MEAN	.216245	1.13420	8.66030	.108784	.0549187	28.6416	5.87916
VARIANCE	.215110	2.99725	36.3885	.0216362	.0091249	859.810	65.8060
STAND DEV	.463800	1.73126	6.03229	.147093	.0955241	29.3225	8.11209
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05446500 P 04
41 33 35.0 090 10 55.0 2
ROCK RIVER NEAR JOSLIN, IL
17161 ILLINOIS ROCK ISLAND
UPPER MISSISSIPPI RIVER 070992
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090005
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	.930000	1.70000	.160000	.0200000	14.0000	4.00000
PCTL(025.0)	.0300000	1.20000	2.50000	.210000	.0500000	36.0000	10.00000
PCTL(050.0)	.100000	1.70000	3.60000	.270000	.110000	80.0000	17.0000
PCTL(075.0)	.170000	2.00000	4.70000	.360000	.180000	120.000	24.0000
PCTL(085.0)	.280000	2.40000	5.00000	.400000	.210000	150.000	27.0000
PCTL(090.0)	.380000	2.50000	5.60000	.450000	.240000	166.000	30.0000
PCTL(095.0)	.600000	2.70000	6.40000	.560000	.280000	266.000	40.0000
NUMBER	131	146	130	157	147	151	151
MAXIMUM	1.20000	3.70000	7.80000	1.90000	.350000	680.000	72.0000
MINIMUM	.0100000	.400000	.100000	.0300000	.0010000	2.00000	1.00000
SUM	19.5597	248.609	471.034	48.2352	17.8198	14164.8	2745.40
MEAN	.149311	1.70280	3.62334	.307231	.121223	93.8065	18.1814
VARIANCE	.0346589	.350785	2.33134	.0310040	.0066410	7477.40	156.046
STAND DEV	.186169	.592271	1.52687	.176080	.0814924	86.4720	12.4919
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05443500 P 06
41 47 00.0 089 44 58.0 2
ROCK RIVER AT COMO, IL
17195 ILLINOIS WHITESIDE
UPPER MISSISSIPPI RIVER 070991
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090005006 0001.530 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	1.10000	1.80000	.180000	.0200000	12.0000	5.00000
PCTL(025.0)	.0300000	1.40000	2.60000	.220000	.0699999	33.0000	10.00000
PCTL(050.0)	.0699999	1.80000	3.50000	.280000	.130000	64.0000	16.0000
PCTL(075.0)	.190000	2.10000	4.70000	.360000	.180000	94.0000	23.0000
PCTL(085.0)	.330000	2.40000	5.30000	.380000	.210000	117.000	26.0000
PCTL(090.0)	.410000	2.40000	5.80000	.420000	.230000	150.000	28.0000
PCTL(095.0)	.640000	2.70000	6.30000	.510000	.260000	186.000	34.0000
NUMBER	142	140	142	142	138	141	141
MAXIMUM	1.20000	3.50000	18.0000	.640000	.470000	380.000	62.0000
MINIMUM	.0100000	.700000	.200000	.140000	.0100000	1.00000	1.00000
SUM	22.2196	250.859	535.202	42.0184	18.2998	10493.0	2369.00
MEAN	.156476	1.79185	3.76903	.295904	.132607	74.4184	16.8014
VARIANCE	.0408928	.310080	3.65325	.0104100	.0065944	3820.87	96.9318
STAND DEV	.202220	.556848	1.91135	.102029	.0812056	61.8132	9.84540
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05440700 P 14
42 07 24.0 089 15 20.0 2
ROCK RIVER AT BYRON, IL
17141 ILLINOIS OGLE
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090005013 0001.290 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0400000	1.00000	2.40000	.170000	.0500000	12.0000	5.00000
PCTL(025.0)	.0699999	1.30000	3.00000	.220000	.110000	25.0000	8.00000
PCTL(050.0)	.120000	1.60000	3.70000	.290000	.168000	48.0000	13.0000
PCTL(075.0)	.230000	1.93000	4.70000	.360000	.220000	67.0000	18.0000
PCTL(085.0)	.370000	2.10000	5.30000	.400000	.250000	89.0000	20.0000
PCTL(090.0)	.460000	2.30000	6.20000	.430000	.290000	98.0000	22.0000
PCTL(095.0)	.640000	2.50000	7.10000	.470000	.360000	111.000	26.0000
NUMBER	140	139	140	140	135	140	140
MAXIMUM	1.40000	3.70000	11.0000	.790000	.480000	230.000	52.0000
MINIMUM	.0100000	.600000	1.10000	.100000	.0100000	2.00000	1.00000
SUM	28.9595	228.129	556.792	41.8653	22.7736	7360.00	1912.00
MEAN	.206853	1.64122	3.97709	.299038	.168694	52.5714	13.6571
VARIANCE	.0573278	.260935	2.71567	.0112653	.0084499	1534.66	57.4212
STAND DEV	.239432	.510818	1.64793	.106138	.0919235	39.1748	7.57768
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05437500 P 15
42 26 55.0 089 04 11.0 2
ROCK RIVER AT ROCKTON, IL
17201 ILLINOIS WINNEBAGO
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090005
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	.700000	2.40000	.130000	.0600000	8.00000	3.00000
PCTL(025.0)	.0400000	.960000	3.20000	.190000	.0899999	25.0000	7.00000
PCTL(050.0)	.0899999	1.30000	4.20000	.260000	.140000	57.0000	12.0000
PCTL(075.0)	.150000	1.60000	5.20000	.340000	.210000	90.0000	19.0000
PCTL(085.0)	.300000	1.90000	5.80000	.382000	.240000	128.000	21.0000
PCTL(090.0)	.380000	2.10000	6.20000	.430000	.270000	141.000	25.0000
PCTL(095.0)	.660000	2.70000	6.50000	.470000	.340000	157.000	28.0000
NUMBER	144	143	144	144	143	144	144
MAXIMUM	1.60000	5.10000	11.0000	3.40000	.840000	330.000	50.0000
MINIMUM	.0100000	.200000	1.20000	.0699999	.0100000	1.00000	1.00000
SUM	23.9296	198.049	613.791	42.2953	23.5586	9600.00	1941.00
MEAN	.166178	1.38496	4.26244	.293718	.164745	66.6666	13.4792
VARIANCE	.0589165	.562842	2.35498	.0822876	.0126426	3212.67	81.4261
STAND DEV	.242727	.750228	1.53459	.286858	.112439	56.6804	9.02364
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05442200 P 20
41 53 23.0 089 25 10.0 2
ROCK RIVER AT GRAND DETOUR, IL
17141 ILLINOIS OGLE
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090005
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	1.10000	2.20000	.180000	.0300000	16.0000	6.00000
PCTL(025.0)	.0300000	1.40000	3.00000	.220000	.0899999	34.0000	10.0000
PCTL(050.0)	.0600000	1.60000	3.80000	.280000	.150000	56.0000	14.0000
PCTL(075.0)	.190000	2.10000	4.80000	.340000	.200000	74.0000	19.0000
PCTL(085.0)	.280000	2.30000	5.60000	.380000	.240000	97.0000	23.0000
PCTL(090.0)	.340000	2.50000	6.00000	.420000	.270000	116.000	25.0000
PCTL(095.0)	.550000	2.80000	7.10000	.450000	.310000	147.000	30.0000
NUMBER	136	134	136	136	132	136	136
MAXIMUM	1.20000	4.60000	9.80000	1.10000	.430000	596.000	80.0000
MINIMUM	.0100000	.400000	.600000	.0689999	.0100000	2.00000	1.00000
SUM	20.5397	235.029	543.792	40.4514	20.0157	9075.00	2127.00
MEAN	.151027	1.75395	3.99847	.297437	.151634	66.7279	15.6397
VARIANCE	.0449665	.377979	2.62985	.0164806	.0077435	4799.58	94.0397
STAND DEV	.212053	.614800	1.62168	.128377	.0879974	69.2790	9.69741
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05447100 PB 02
41 35 38.0 089 41 22.0 2
GREEN RIVER NR DEER GROVE, IL
17195 ILLINOIS WHITESIDE
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090007
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000		.400000	.0300000	.0100000	4.00000	2.00000
PCTL(025.0)	.0200000		1.80000	.0400000	.0200000	10.0000	3.00000
PCTL(050.0)	.0400000		4.30000	.0600000	.0300000	18.0000	5.00000
PCTL(075.0)	.0699999		6.40000	.100000	.0400000	41.0000	10.0000
PCTL(085.0)	.100000		7.20000	.150000	.0500000	87.0000	14.0000
PCTL(090.0)	.150000		8.30000	.170000	.0699999	102.000	17.0000
PCTL(095.0)	.240000		9.30000	.240000	.110000	240.000	82.0000
NUMBER	142		142	120	113	141	139
MAXIMUM	1.20000		13.0000	1.76000	.490000	860.000	120.000
MINIMUM	.0100000		.100000	.0100000	.0100000	1.00000	1.00000
SUM	9.97995		618.153	14.7980	4.53396	8518.00	1627.00
MEAN	.0702812		4.35319	.123316	.0401235	60.4113	11.7050
VARIANCE	.0132676		8.95907	.0568469	.0027186	19812.6	478.629
STAND DEV	.115185		2.99317	.238426	.0521406	140.757	21.8776
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05447500 PB 04
41 29 20.0 090 09 30.0 2
GREEN RIVER NEAR GENESEO, IL
17073 ILLINOIS HENRY
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090007
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	.480000	.800000	.0500000	.0200000	6.00000	3.00000
PCTL(025.0)	.0500000	.570000	2.00000	.0689999	.0300000	12.0000	4.00000
PCTL(050.0)	.0799999	.800000	3.90000	.100000	.0400000	33.0000	7.00000
PCTL(075.0)	.130000	1.06000	6.00000	.180000	.0689999	71.0000	14.0000
PCTL(085.0)	.180000	1.30000	6.80000	.250000	.0899999	122.000	18.0000
PCTL(090.0)	.240000	1.30000	7.40000	.320000	.110000	160.000	24.0000
PCTL(095.0)	.340000	1.70000	8.40000	.720000	.160000	220.000	32.0000
NUMBER	144	141	143	144	133	144	142
MAXIMUM	1.40000	8.20000	11.0000	3.09000	.860000	1670.00	155.000
MINIMUM	.0100000	.200000	.100000	.0300000	.0010000	2.00000	1.00000
SUM	17.5398	138.519	584.184	30.7883	9.10895	12773.0	1881.00
MEAN	.121804	.982406	4.08520	.213808	.0684882	88.7014	13.2465
VARIANCE	.0245267	1.04685	6.41015	.153893	.0119411	45584.5	492.456
STAND DEV	.156610	1.02316	2.53183	.392292	.109275	213.505	22.1913
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05446100 PE 05
41 40 47.0 090 01 34.0 2
ROCK CREEK NEAR ERIE, IL
17195 ILLINOIS WHITESIDE
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090005
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0600000		4.20000	.100000	.0699999	10.0000	2.00000
PCTL(025.0)	.0899999		5.40000	.150000	.100000	18.0000	5.00000
PCTL(050.0)	.130000		7.10000	.230000	.140000	40.0000	8.00000
PCTL(075.0)	.220000		8.90000	.310000	.190000	73.0000	12.0000
PCTL(085.0)	.290000		10.0000	.400000	.230000	112.000	14.0000
PCTL(090.0)	.380000		11.0000	.540000	.280000	159.000	18.0000
PCTL(095.0)	.600000		12.0000	1.33600	.450000	452.000	54.0000
NUMBER	138		136	117	112	138	138
MAXIMUM	1.70000		20.0000	2.02000	.760000	1500.00	225.000
MINIMUM	.0100000		2.10000	.0899999	.0500000	2.00000	1.00000
SUM	28.9295		994.792	36.9915	18.8447	12155.0	1767.00
MEAN	.209634		7.31465	.316166	.168257	88.0797	12.8043
VARIANCE	.0723974		7.21322	.113493	.0152233	31111.1	513.092
STAND DEV	.269068		2.68574	.336887	.123383	176.383	22.6515
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05444000 PH 16
41 54 10.0 089 41 40.0 2
ELKHORN CREEK NEAR PENROSE, IL
17195 ILLINOIS WHITESIDE
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090005
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	.800000	6.50000	.0600000	.0500000	7.00000	2.00000
PCTL(025.0)	.0300000	.800000	7.50000	.100000	.0699999	15.0000	3.00000
PCTL(050.0)	.0500000	.800000	9.00000	.160000	.110000	31.0000	6.00000
PCTL(075.0)	.110000	1.00000	12.0000	.270000	.200000	78.0000	11.0000
PCTL(085.0)	.180000	1.00000	13.0000	.320000	.234000	130.000	18.0000
PCTL(090.0)	.220000	1.00000	13.0000	.370000	.290000	167.000	22.0000
PCTL(095.0)	.390000	1.00000	14.0000	.740000	.360000	330.000	31.0000
NUMBER	144	2	141	120	113	144	144
MAXIMUM	1.90000	1.00000	16.0000	2.32000	2.25000	3100.00	470.000
MINIMUM	.0100000	.800000	2.20000	.0400000	.0300000	2.00000	1.00000
SUM	16.9798	1.80000	1346.89	30.5065	18.1618	14133.0	2018.00
MEAN	.117916	.900000	9.55243	.254221	.160724	98.1457	14.0139
VARIANCE	.0548849	.0200014	7.09796	.128835	.0499236	86044.8	1703.37
STAND DEV	.234275	.141426	2.66420	.358936	.223436	293.334	41.2719
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05442020 PL 03
41 59 10.0 089 17 41.0 2
KYTE RIVER AT DAYSVILLE, IL
17141 ILLINOIS OGLE
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090005
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	.470000	3.60000	.180000	.140000	4.00000	1.00000
PCTL(025.0)	.0400000	.470000	5.60000	.260000	.200000	9.00000	3.00000
PCTL(050.0)	.100000	.870000	7.70000	.370000	.380000	15.0000	6.00000
PCTL(075.0)	.240000	.900000	9.10000	.580000	.560000	35.0000	8.00000
PCTL(085.0)	.600000	1.50000	10.0000	.750000	.770000	47.0000	10.0000
PCTL(090.0)	.760000	1.50000	10.6000	.970000	.940000	70.0000	11.0000
PCTL(095.0)	1.00000	1.50000	12.0000	1.19000	1.10000	98.0000	16.0000
NUMBER	144	4	143	127	109	144	144
MAXIMUM	3.00000	1.50000	15.0000	2.46000	1.56000	240.000	28.0000
MINIMUM	.0100000	.470000	2.00000	.0699999	.0600000	1.00000	1.00000
SUM	40.4394	3.74000	1075.39	60.6884	47.8665	4164.00	940.000
MEAN	.280829	.935000	7.52021	.477861	.439142	28.9166	6.52778
VARIANCE	.236571	.180300	7.09276	.128124	.103217	1314.47	25.6775
STAND DEV	.486386	.424618	2.66322	.357944	.321274	36.2556	5.06730
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05438600 PQ 02
42 12 06.0 088 58 43.0 2
KISHWAUKEE R AB SOUTH BRANCH NR PERRYVILLE, IL
17201 ILLINOIS WINNEBAGO
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090006
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.750000	2.20000	.0699999	.0370000	4.00000	1.00000
PCTL(025.0)	.0300000	.750000	2.90000	.0899999	.0500000	7.00000	3.00000
PCTL(050.0)	.0500000	.820000	3.80000	.120000	.0799999	14.0000	5.00000
PCTL(075.0)	.110000	.840000	4.90000	.170000	.120000	27.0000	9.00000
PCTL(085.0)	.160000	.880000	5.30000	.220000	.150000	35.0000	11.0000
PCTL(090.0)	.200000	.880000	6.50000	.240000	.180000	53.0000	13.0000
PCTL(095.0)	.270000	.880000	7.40000	.290000	.230000	68.0000	15.0000
NUMBER	147	5	147	120	113	147	147
MAXIMUM	.760000	.880000	9.40000	.635000	.300000	114.000	27.0000
MINIMUM	.0100000	.750000	.400000	.0420000	.0100000	1.00000	1.00000
SUM	13.1599	4.11000	595.092	17.3169	10.6810	3134.00	914.000
MEAN	.0895233	.822000	4.04824	.144308	.0945217	21.3197	6.21768
VARIANCE	.0124754	.0022206	2.76550	.0064322	.0034937	473.987	20.5140
STAND DEV	.111693	.0471236	1.66298	.0802011	.0591072	21.7712	4.52923
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05438201 PQ 10
42 15 40.0 088 43 00.0 2
KISHWAUKEE R AT GP ROAD AT GARDEN PRAIRIE, IL
17007 ILLINOIS BOONE
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090006
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	1.50000	1.90000	.0520000	.0300000	3.00000	1.00000
PCTL(025.0)	.0400000	1.50000	2.60000	.0699999	.0400000	6.00000	3.00000
PCTL(050.0)	.0699999	1.50000	3.10000	.0899999	.0500000	11.0000	5.00000
PCTL(075.0)	.130000	2.40000	4.00000	.120000	.0799999	20.0000	8.00000
PCTL(085.0)	.180000	2.40000	4.50000	.150000	.0899999	28.0000	10.00000
PCTL(090.0)	.240000	2.40000	5.20000	.180000	.110000	32.0000	11.0000
PCTL(095.0)	.300000	2.40000	6.10000	.200000	.150000	38.0000	13.0000
NUMBER	148	2	148	121	116	147	147
MAXIMUM	1.20000	2.40000	9.10000	.900000	.310000	82.0000	22.0000
MINIMUM	.0100000	1.50000	.900000	.0200000	.0140000	1.00000	1.00000
SUM	17.1298	3.90000	510.982	13.2680	7.53996	2227.00	843.000
MEAN	.115742	1.95000	3.45258	.109652	.0649995	15.1496	5.73469
VARIANCE	.0250910	.405000	2.03279	.0086303	.0022612	197.978	14.5935
STAND DEV	.158401	.636396	1.42576	.0928995	.0475516	14.0704	3.82015
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05440000 PQ 12
42 11 45.0 088 59 55.0 2
KISHWAUKEE RIVER NEAR PERRYVILLE, IL
17201 ILLINOIS WINNEBAGO
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090006
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0100000	.640000	2.10000	.0899999	.0500000	5.00000	2.00000
PCTL(025.0)	.0300000	.710000	3.80000	.110000	.0699999	9.00000	3.00000
PCTL(050.0)	.0500000	.830000	5.30000	.150000	.100000	16.0000	5.00000
PCTL(075.0)	.120000	1.10000	7.50000	.220000	.140000	32.0000	10.0000
PCTL(085.0)	.150000	1.86000	8.40000	.300000	.190000	49.0000	13.0000
PCTL(090.0)	.200000	2.10000	9.30000	.320000	.210000	76.0000	17.0000
PCTL(095.0)	.300000	2.10000	10.0000	.400000	.270000	108.000	20.0000
NUMBER	143	8	144	119	112	143	142
MAXIMUM	1.80000	2.10000	14.0000	.980000	.790000	500.000	68.0000
MINIMUM	.0100000	.640000	.100000	.0100000	.0220000	1.00000	1.00000
SUM	14.3099	9.13000	813.001	22.4407	14.2260	4566.00	1113.00
MEAN	.100069	1.14125	5.64584	.188577	.127017	31.9300	7.83803
VARIANCE	.0323340	.299529	7.23831	.0158696	.0111774	2738.19	60.7892
STAND DEV	.179817	.547292	2.69041	.125975	.105723	52.3278	7.79674
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05440520 PQB 02
42 09 36.0 089 04 32.0 2
KILLBUCK CREEK NEAR NEW MILFORD, IL
17201 ILLINOIS WINNEBAGO
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090006
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0500000	.740000	4.00000	.0200000	.0100000	4.00000	1.00000
PCTL(025.0)	.100000	.740000	6.50000	.0300000	.0200000	7.00000	2.00000
PCTL(050.0)	.200000	.860000	9.00000	.0570000	.0300000	13.0000	5.00000
PCTL(075.0)	.370000	1.07000	12.0000	.120000	.0600000	34.0000	9.00000
PCTL(085.0)	.520000	1.07000	13.0000	.160000	.0799999	59.0000	10.0000
PCTL(090.0)	.600000	1.07000	14.0000	.180000	.120000	78.0000	13.0000
PCTL(095.0)	.760000	1.07000	15.0000	.250000	.170000	124.000	16.0000
NUMBER	146	3	144	121	115	146	146
MAXIMUM	2.40000	1.07000	20.0000	1.03000	.910000	600.000	104.000
MINIMUM	.0100000	.740000	2.20000	.0170000	.0010000	1.00000	1.00000
SUM	41.3195	2.67000	1315.39	12.0729	6.85395	4732.00	1016.00
MEAN	.283010	.890000	9.13467	.0997763	.0595996	32.4109	6.95890
VARIANCE	.0809977	.0279002	13.4655	.0206456	.0128256	3674.22	94.4121
STAND DEV	.284601	.167034	3.66954	.143686	.113250	60.6153	9.71659
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05439500 PQC 06
42 06 40.0 088 54 00.0 2
SOUTH BR KISHWAUKEE RIVER NR FAIRDALE, IL
17037 ILLINOIS DE KALB
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090006
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	1.00000	2.90000	.140000	.0799999	4.00000	2.00000
PCTL(025.0)	.0400000	1.00000	5.90000	.189000	.120000	9.00000	3.00000
PCTL(050.0)	.0799999	1.70000	8.60000	.253000	.190000	19.0000	7.00000
PCTL(075.0)	.150000	3.20000	11.0000	.380000	.270000	41.0000	12.0000
PCTL(085.0)	.220000	3.70000	12.0000	.490000	.360000	58.0000	15.0000
PCTL(090.0)	.340000	3.70000	13.0000	.570000	.410000	92.0000	20.0000
PCTL(095.0)	.470000	3.70000	15.0000	.710000	.560000	117.000	25.0000
NUMBER	147	4	143	122	113	146	146
MAXIMUM	1.60000	3.70000	18.0000	2.40000	.870000	1510.00	185.000
MINIMUM	.0100000	1.00000	.100000	.0899999	.0100000	1.00000	1.00000
SUM	20.5395	9.60000	1193.51	40.0215	25.3755	6677.00	1470.00
MEAN	.139725	2.40000	8.34625	.328045	.224562	45.7328	10.0685
VARIANCE	.0414182	1.59333	14.6345	.0678874	.0248702	18519.9	293.043
STAND DEV	.203515	1.26227	3.82550	.260552	.157703	136.088	17.1185
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05438250 PQF 07
42 10 58.0 088 38 28.0 2
COON CREEK AT RILEY, IL
17111 ILLINOIS MCHENRY
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090006
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000	.480000	1.30000	.0400000	.0180000	3.00000	1.00000
PCTL(025.0)	.0400000	.480000	2.80000	.0500000	.0200000	6.00000	3.00000
PCTL(050.0)	.0899999	.630000	4.90000	.0749999	.0400000	15.0000	5.00000
PCTL(075.0)	.160000	1.00000	6.70000	.110000	.0600000	23.0000	7.00000
PCTL(085.0)	.210000	1.30000	7.40000	.150000	.100000	39.0000	10.0000
PCTL(090.0)	.260000	1.30000	8.10000	.200000	.111000	47.0000	12.0000
PCTL(095.0)	.360000	1.30000	8.60000	.280000	.190000	66.0000	14.0000
NUMBER	146	5	146	121	117	145	145
MAXIMUM	1.20000	1.30000	12.0000	1.20000	.390000	635.000	85.0000
MINIMUM	.0100000	.480000	.300000	.0100000	.0050000	1.00000	1.00000
SUM	18.9098	4.02000	709.651	12.9560	6.79196	3660.00	928.000
MEAN	.129519	.803999	4.86063	.107074	.0580509	25.2413	6.40000
VARIANCE	.0239106	.114330	6.09515	.0167037	.0044175	3273.06	61.3667
STAND DEV	.154631	.338128	2.46883	.129243	.0664643	57.2107	7.83369
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05435800 PW 01
42 25 39.0 089 11 44.0 2
PECATONICA RIVER AT HARRISON, IL
17201 ILLINOIS WINNEBAGO
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090003
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0300000	1.09000	3.60000	.139000	.0899999	9.00000	3.00000
PCTL(025.0)	.0500000	1.09000	4.60000	.200000	.110000	31.0000	6.00000
PCTL(050.0)	.100000	1.09000	5.30000	.270000	.160000	65.0000	10.0000
PCTL(075.0)	.190000	1.60000	6.30000	.330000	.200000	116.000	18.0000
PCTL(085.0)	.380000	1.60000	6.70000	.400000	.230000	156.000	22.0000
PCTL(090.0)	.600000	1.60000	7.00000	.490000	.250000	215.000	27.0000
PCTL(095.0)	.770000	1.60000	7.40000	.626000	.340000	244.000	34.0000
NUMBER	145	2	144	119	118	145	145
MAXIMUM	1.50000	1.60000	8.50000	.840000	.423000	444.000	62.0000
MINIMUM	.0100000	1.09000	1.80000	.0799999	.0500000	1.00000	1.00000
SUM	28.6895	2.69000	773.392	34.6245	19.9727	12852.0	1930.00
MEAN	.197858	1.34500	5.37077	.290962	.169261	88.6344	13.3103
VARIANCE	.0682108	.130050	1.72689	.0206572	.0059820	6999.31	113.285
STAND DEV	.261172	.360624	1.31411	.143726	.0773432	83.6619	10.6435
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05435500 PW 08
42 18 13.0 089 36 57.0 2
PECATONICA RIVER AT FREEPORT, IL
17177 ILLINOIS STEPHENSON
UPPER MISSISSIPPI RIVER 070991
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090003
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0200000		3.10000	.100000	.0699999	12.0000	3.00000
PCTL(025.0)	.0400000		4.20000	.180000	.100000	28.0000	7.00000
PCTL(050.0)	.0799999		5.00000	.260000	.130000	70.0000	12.0000
PCTL(075.0)	.160000		5.80000	.360000	.190000	130.000	20.0000
PCTL(085.0)	.320000		6.20000	.400000	.230000	166.000	24.0000
PCTL(090.0)	.460000		6.60000	.440000	.268000	190.000	28.0000
PCTL(095.0)	1.20000		7.90000	.490000	.280000	257.000	36.0000
NUMBER	138		138	115	114	139	139
MAXIMUM	1.90000		15.0000	.970000	.770000	386.000	48.0000
MINIMUM	.0100000		1.30000	.0600000	.0400000	1.00000	1.00000
SUM	27.1596		710.790	31.8415	18.2018	12303.0	1932.00
MEAN	.196808		5.15065	.276883	.159665	88.5108	13.8993
VARIANCE	.117014		3.50886	.0218170	.0104912	6043.29	100.598
STAND DEV	.342074		1.87320	.147706	.102426	77.7386	10.0299
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05435680 PWN 01
42 16 45.0 089 34 24.0 2
YELLOW CREEK NEAR FREEPORT, IL
17177 ILLINOIS STEPHENSON
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090003
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00530 RESIDUE TOT NFLT MG/L	00535 RESIDUE VOL NFLT MG/L
80/10/01							
STATION PCTL(010.0)	.0300000	.700000	4.40000	.110000	.0699999	10.00000	2.00000
PCTL(025.0)	.0400000	.700000	6.50000	.140000	.100000	16.0000	4.00000
PCTL(050.0)	.0799999	.700000	9.40000	.210000	.140000	41.0000	8.00000
PCTL(075.0)	.140000	.700000	12.0000	.290000	.200000	78.0000	13.0000
PCTL(085.0)	.310000	.700000	13.0000	.370000	.244000	102.000	16.0000
PCTL(090.0)	.480000	.700000	14.0000	.500000	.340000	135.000	19.0000
PCTL(095.0)	.900000	.700000	16.2000	.860000	.561000	160.000	25.0000
NUMBER	143	1	138	119	115	143	143
MAXIMUM	2.30000	.700000	88.0000	1.70000	1.13000	840.000	81.0000
MINIMUM	.0100000	.700000	1.20000	.0600000	.0300000	1.00000	1.00000
SUM	26.7295	.700000	1365.29	33.0035	21.2677	9276.00	1512.00
MEAN	.186920	.700000	9.89343	.277340	.184936	64.8671	10.5734
VARIANCE	.113178		57.8876	.0622308	.0277478	9109.78	121.767
STAND DEV	.336419		7.60839	.249461	.166577	95.4452	11.0348
96/09/30							

Appendix C. Summary of Illinois EPA AWQMN station loads in pounds per day, for ammonia, nitrates, TKN, total and dissolved phosphorus, total and volatile suspended solids. October 1980 through September 1996.

```
                                                          03612500        A   06
                                                          37 12 13.0 089 02 27.0 2
                                                          OHIO RIVER AT DAM 53 NEAR GRAND CHAIN
                                                          17153   ILLINOIS         PULASKI
                                                          OHIO RIVER               052191
 /TYPA/AMBNT/STREAM                                       OHIO R MAIN STEM AND MINOR TRIBS
                                                          21ILAMB   870314             05140206006 0005.340 ON
                                                          0000 FEET DEPTH

                      00610     00625     00630     00665     00666     00530     00535
   DATE              NH3+NH4-  TOT KJEL  NO2&NO3   PHOS-TOT  PHOS-DIS  RESIDUE   RESIDUE
   FROM              N TOTAL      N      N-TOTAL                       TOT NFLT  VOL NFLT
    TO                 LB/D      LB/D      LB/D     LB/D P    LB/D P     LB/D      LB/D
 80/10/01
 STATION  PCTL(010.0) 5053.96    213054   97001.5   22783.3   6062.59  .2728E+07   909390
          PCTL(025.0) 28479.1    317154    284619   42958.7   19849.1  .2237E+08 .3290E+07
          PCTL(050.0) 86408.1    690403  .1184E+07   144014   50971.2  .1616E+09 .1190E+08
          PCTL(075.0)  285870  .2170E+07 .3566E+07   428804    110842  .4459E+09 .2286E+08
          PCTL(085.0)  357067  .2856E+07 .3927E+07   499894    145632  .4986E+09 .5540E+08
          PCTL(090.0)  457122  .3231E+07 .4252E+07   738731    165319  .4986E+09 .5540E+08
          PCTL(095.0)  554048  .3262E+07 .4617E+07 .1044E+07   206582  .7427E+09 .8569E+08
          NUMBER           26        49        23        47        48        11        11
          MAXIMUM      820555  .4504E+07 .4757E+07 .1223E+07   543692  .7427E+09 .8569E+08
          MINIMUM     2810.16   60626.0   65501.9   12125.2   4665.61  .2728E+07   909390
          SUM        .4754E+07 .6247E+08 .4129E+08 .1243E+08 .3769E+07 .2482E+10 .2266E+09
          MEAN         182881  .1274E+07 .1795E+07   264635   78540.0  .2256E+09 .2060E+08
          VARIANCE   .4159E+11 .1330E+13 .2879E+13 .9362E+11 .8219E+10 .6047E+17 .7072E+15
          STAND DEV    203943  .1153E+07 .1696E+07   305976   90659.5  .2459E+09 .2659E+08
 96/09/30
1STORET RETRIEVAL DATE 99/01/19
                                                           03612000        AD  02
                                                          37 20 11.0 088 55 26.0 2
                                                          CACHE RIVER AT FORMAN, IL
                                                          17087   ILLINOIS         JOHNSON
                                                          OHIO RIVER               052100
 /TYPA/AMBNT/STREAM                                       OHIO R MAIN STEM AND MINOR TRIBS
                                                          21ILAMB   870314             05140206
                                                          0000 FEET DEPTH

                      00610     00625     00630     00665     00666     00530     00535
   DATE              NH3+NH4-  TOT KJEL  NO2&NO3   PHOS-TOT  PHOS-DIS  RESIDUE   RESIDUE
   FROM              N TOTAL      N      N-TOTAL                       TOT NFLT  VOL NFLT
    TO                 LB/D      LB/D      LB/D     LB/D P    LB/D P     LB/D      LB/D

 80/10/01
 STATION  PCTL(010.0) .490833   51.1491   1.18663   .970878   .539377   229.235   37.7564
          PCTL(025.0) 2.48113   51.1491   12.7617   7.71309   3.02051   1294.50   215.751
          PCTL(050.0) 24.2720   55.0164   117.800   46.2785   14.8868   10383.0   1752.98
          PCTL(075.0) 181.231   132.147   576.054   264.294   105.718   93204.3   12556.7
          PCTL(085.0) 375.406   132.147   1271.69   795.149   237.596    312839   31407.9
          PCTL(090.0) 537.651   132.147   1663.17   1076.06   302.914    429884   46224.6
          PCTL(095.0) 800.975   132.147   2853.09   2364.63   460.843    961386   98468.6
          NUMBER          145         3       144       112       112       144       143
          MAXIMUM     4271.86   132.147   6066.91   6135.95   776.703  .8388E+07   543692
          MINIMUM    .0863002   51.1491   .194176   .296657  .0809065   30.2051   5.07014
          SUM         29229.1   238.313   86230.0   43208.8   10082.9  .3368E+08 .2877E+07
          MEAN        201.580   79.4376   598.820   385.792   90.0263    233898   20123.0
          VARIANCE     259962   2087.47  .1114E+07   773100   22536.1  .7675E+12 .3376E+10
          STAND DEV   509.864   45.6889   1055.48   879.261   150.120    876112   58105.4
 96/09/30
1STORET RETRIEVAL DATE 99/01/19
                                                           03384450        AK  02
                                                          37 28 20.0 088 32 50.0 2
                                                          LUSK CREEK NEAR EDDYVILLE, IL
                                                          17151   ILLINOIS         POPE
                                                          OHIO RIVER               052100
 /TYPA/AMBNT/STREAM                                       OHIO R MAIN STEM AND MINOR TRIBS
                                                          21ILAMB   870314             05140203
                                                          0000 FEET DEPTH

                      00610     00625     00630     00665     00666     00530     00535
   DATE              NH3+NH4-  TOT KJEL  NO2&NO3   PHOS-TOT  PHOS-DIS  RESIDUE   RESIDUE
   FROM              N TOTAL      N      N-TOTAL                       TOT NFLT  VOL NFLT
    TO                 LB/D      LB/D      LB/D     LB/D P    LB/D P     LB/D      LB/D
 80/10/01
 STATION  PCTL(010.0).0070119  .0582527  .0129450  .0064725  .0043150   1.29450   .539377
          PCTL(025.0) .264295   1.18663   .285870  .0755127  .0442289   21.5751   5.93314
          PCTL(050.0) 1.77994   8.49519   4.53077   .647252   .420714   156.419   105.718
          PCTL(075.0) 15.6419   42.0714   28.0476   2.64295   2.15751   1165.05   302.051
          PCTL(085.0) 28.4791   105.718   72.8159   5.28589   3.99139   2653.74   825.247
          PCTL(090.0) 39.9139   168.286   109.386   11.5966   7.96120   9676.41   1359.23
          PCTL(095.0) 81.9853   416.507   272.331   26.3755   16.0195   25415.4   3883.51
          NUMBER          145       145       145       145       133       147       146
          MAXIMUM     1449.84   1229.78   1359.23   266.452   40.9926    215211   24595.6
          MINIMUM    .0000000  .0000000  .0000000  .0000000  .0000000  .0000000  .0000000
          SUM         3828.94   10867.9   7846.23   1080.12   366.236    902946    141139
          MEAN        26.4065   74.9508   54.1119   7.44912   2.75365   6142.48   966.706
          VARIANCE    16069.8   39967.4   26484.8   850.938   40.1711  .6823E+09 .1133E+08
          STAND DEV   126.767   199.919   162.741   29.1708   6.33807   26121.9   3367.21
 96/09/30
```

1STORET RETRIEVAL DATE 99/01/19

03382325 ATF 04
37 53 18.0 088 23 06.0 2
NORTH FORK SALINE RIVER NEAR TEXAS CITY, IL
17165 ILLINOIS SALINE
OHIO RIVER 052100
/TYPA/AMBNT/STREAM OHIO R MAIN STEM AND MINOR TRIBS
21ILAMB 870314 05140204
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.949303	10.7875	.474651	1.42395	.949303	593.315	53.9377
	PCTL(025.0)	3.34414	26.9688	2.15751	3.23626	1.77994	1091.70	107.875
	PCTL(050.0)	10.2482	233.011	367.855	24.6765	8.73790	3344.14	427.187
	PCTL(075.0)	36.4079	349.516	997.848	34.9516	16.1813	32330.3	3495.16
	PCTL(085.0)	96.1170	614.890	1165.05	79.8278	39.9139	34843.8	4099.26
	PCTL(090.0)	169.634	997.848	1332.26	81.9853	40.9926	77832.0	8980.63
	PCTL(095.0)	169.634	997.848	1332.26	81.9853	40.9926	77832.0	8980.63
	NUMBER	9	9	9	9	9	9	9
	MAXIMUM	169.634	997.848	1332.26	81.9853	40.9926	77832.0	8980.63
	MINIMUM	.949303	10.7875	.474651	1.42395	.949303	593.315	53.9377
	SUM	360.605	2649.74	5090.35	276.155	134.661	166621	19068.0
	MEAN	40.0673	294.416	565.594	30.6839	14.9623	18513.4	2118.67
	VARIANCE	3263.81	107789	297541	943.487	235.165	.6778E+09	.8887E+07
	STAND DEV	57.1298	328.313	545.473	30.7162	15.3351	26036.4	2981.25
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

03382205 ATG 03
37 42 28.0 088 29 31.0 2
MIDDLE FORK SALINE RIVER NEAR PANKEYVILLE, IL
17165 ILLINOIS SALINE
OHIO RIVER 052100
/TYPA/AMBNT/STREAM OHIO R MAIN STEM AND MINOR TRIBS
21ILAMB 870314 05140204
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	2.96657	38.8351	49.8384	19.5794	3.47359	474.652	237.326
	PCTL(025.0)	10.5718	41.5320	61.1654	22.6538	16.6128	1165.05	323.626
	PCTL(050.0)	126.214	511.868	983.824	62.9992	33.8189	10787.5	1208.20
	PCTL(075.0)	183.388	1014.57	1402.38	119.903	58.2527	89860.1	9250.32
	PCTL(085.0)	224.435	1057.18	2510.80	132.147	70.1190	99612.1	13527.6
	PCTL(090.0)	237.865	1121.90	2804.76	225.783	84.1428	314133	33657.1
	PCTL(095.0)	237.865	1121.90	2804.76	225.783	84.1428	314133	33657.1
	NUMBER	9	9	9	9	9	9	9
	MAXIMUM	237.865	1121.90	2804.76	225.783	84.1428	314133	33657.1
	MINIMUM	2.96657	38.8351	49.8384	19.5794	3.47359	474.652	237.326
	SUM	975.139	4635.94	10193.6	802.700	354.284	550644	61909.7
	MEAN	108.349	515.104	1132.62	89.1889	39.3649	61182.7	6878.85
	VARIANCE	9169.85	209183	.1003E+07	4186.43	722.298	.1045E+11	.1227E+09
	STAND DEV	95.7593	457.365	1001.59	64.7026	26.8756	102236	11079.0
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

03382185 ATGC01
37 46 05.0 088 32 25.0 2
BANKSTON FORK NEAR DORRIS HEIGHTS, IL
17165 ILLINOIS SALINE
OHIO RIVER 052100
/TYPA/AMBNT/STREAM OHIO R MAIN STEM AND MINOR TRIBS
21ILAMB 870314 05140204
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.188782		8.09874	.242720	.188782	145.632	24.2720
	PCTL(025.0)	3.94284		22.4974	.377564	.242720	358.686	75.5128
	PCTL(050.0)	58.9000		141.964	2.48113	1.40238	2853.30	620.283
	PCTL(075.0)	66.9906		189.861	6.04102	1.72601	7853.33	1812.31
	PCTL(085.0)	74.2183		294.877	12.6214	4.15320	17028.1	2907.24
	PCTL(090.0)	113.593		462.785	18.2741	4.20714	22297.8	4627.85
	PCTL(095.0)	113.593		462.785	18.2741	4.20714	22297.8	4627.85
	NUMBER	9		9	9	9	9	9
	MAXIMUM	113.593		462.785	18.2741	4.20714	22297.8	4627.85
	MINIMUM	.188782		8.09874	.242720	.188782	145.632	24.2720
	SUM	404.376		1372.03	47.7618	15.3668	57061.8	11359.3
	MEAN	44.9306		152.447	5.30687	1.70743	6340.19	1262.14
	VARIANCE	1608.08		22125.8	38.2949	2.25695	.6456E+08	.2539E+07
	STAND DEV	40.1008		148.747	6.18829	1.50232	8035.34	1593.47
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

ATH 02
37 37 22.5 088 48 43.5 2
S FORK SALINE R 3.4 MI S CRAB ORCHARD T10SR4ESE6
17199 ILLINOIS WILLIAMSON
OHIO RIVER 052100
/TYPA/AMBNT/STREAM SALINE RIVER SOUTH FORK
21ILAMB 870425 05140204029 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.204963		1.43474	.819853	.204963	505.936	72.2765
	PCTL(025.0)	2.96657		3.61382	1.32687	.221144	582.527	75.5128
	PCTL(050.0)	5.17802		14.3474	2.91264	1.08415	906.693	102.482
	PCTL(075.0)	11.3269		24.5956	4.53077	1.51025	1348.44	355.989
	PCTL(085.0)	54.2074		41.7478	5.17802	2.69688	3085.24	404.533
	PCTL(090.0)	196.603		305.827	262.137	87.3791	120146	13106.9
	PCTL(095.0)	196.603		305.827	262.137	87.3791	120146	13106.9
	NUMBER	9		9	8	9	9	9
	MAXIMUM	196.603		305.827	262.137	87.3791	120146	13106.9
	MINIMUM	.204963		1.43474	.819853	.204963	505.936	72.2765
	SUM	284.559		428.556	282.040	95.9551	129192	14432.6
	MEAN	31.6176		47.6173	35.2549	10.6617	14354.7	1603.63
	VARIANCE	4103.24		9545.24	8406.29	828.230	.1574E+10	.1862E+08
	STAND DEV	64.0565		97.6997	91.6858	28.7790	39679.6	4315.54
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

03382100 ATH 05
37 38 16.0 088 40 40.0 2
SOUTH F SALINE RIVER NR CARRIER MILLS, IL
17165 ILLINOIS SALINE
OHIO RIVER 052100
/TYPA/AMBNT/STREAM OHIO R MAIN STEM AND MINOR TRIBS
21ILAMB 870314 05140204
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	5.39377	12.9450	4.09926	.464403	.463864	59.3315	47.4652
	PCTL(025.0)	12.6214	37.2170	10.0971	.620283	.593315	204.963	86.3003
	PCTL(050.0)	45.3077	113.593	28.6949	2.03884	1.61813	1941.76	496.227
	PCTL(075.0)	138.512	422.871	133.765	31.3378	7.11978	29719.7	6699.06
	PCTL(085.0)	271.846	943.910	302.051	93.2043	18.7703	117735	18640.9
	PCTL(090.0)	452.429	2019.43	468.934	283.173	30.1620	245017	33053.0
	PCTL(095.0)	591.804	4184.48	1018.34	573.573	58.2527	496443	64158.9
	NUMBER	146	138	147	146	135	146	146
	MAXIMUM	2127.30	35913.9	4649.43	8133.80	371.954	.1131E+08	875948
	MINIMUM	1.61813	3.07445	.307445	.0323626	.0307445	19.9569	16.1813
	SUM	20864.1	118362	29889.6	20996.3	1568.19	.2469E+08	.2518E+07
	MEAN	142.904	857.692	203.331	143.810	11.6162	169165	17250.1
	VARIANCE	65028.4	.1077E+08	316467	509562	1297.33	.9510E+12	.6010E+10
	STAND DEV	255.007	3283.25	562.553	713.836	36.0185	975228	77530.2
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

03382090 ATHG01
37 39 19.0 088 45 48.0 2
SUGAR CREEK NEAR STONEFORT, IL
17199 ILLINOIS WILLIAMSON
OHIO RIVER 052100
/TYPA/AMBNT/STREAM OHIO R MAIN STEM AND MINOR TRIBS
21ILAMB 870314 05140204
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	1.48868		.183388	.379721	.0258901	36.2461	9.70878
	PCTL(025.0)	6.47252		.550164	1.72601	.490833	150.378	47.6809
	PCTL(050.0)	12.8372		7.22765	4.80045	1.72601	1682.86	388.351
	PCTL(075.0)	24.2720		48.3821	10.6797	3.23626	6418.58	1434.74
	PCTL(085.0)	36.6776		84.0349	19.4176	5.66345	10819.9	3452.01
	PCTL(090.0)	53.3444		144.661	21.8448	8.03671	14563.2	3883.52
	PCTL(095.0)	97.0878		394.284	152.698	19.6873	128588	27324.8
	NUMBER	72		70	42	41	71	71
	MAXIMUM	1240.55		2481.11	755.120	377.560	541400	98436.3
	MINIMUM	.0000000		.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	2950.61		7002.57	1753.69	512.241	.1663E+07	308116
	MEAN	40.9807		100.037	41.7545	12.4937	23431.1	4339.66
	VARIANCE	22166.9		125600	20756.5	3446.92	.7696E+10	.2395E+09
	STAND DEV	148.886		354.402	144.071	58.7105	87732.1	15476.9
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

03341920 B 06
39 06 37.0 087 39 18.0 2
WABASH RIVER AT HUTSONVILLE, IL
17033 ILLINOIS CRAWFORD
OHIO RIVER 051791
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120111013 0002.230 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	522.656		14671.1	2450.17	299.354	548816	129990
	PCTL(025.0)	1445.53		70011.1	4557.19	1121.36	.1514E+07	233011
	PCTL(050.0)	3646.19		227186	8653.76	3733.03	.4002E+07	543692
	PCTL(075.0)	9029.17		422008	23840.4	8381.92	.1270E+08	.1366E+07
	PCTL(085.0)	12675.4		533444	34174.9	11273.0	.1985E+08	.2073E+07
	PCTL(090.0)	18009.8		783337	49514.8	16213.7	.3035E+08	.3484E+07
	PCTL(095.0)	28047.6		.1065E+07	70766.2	28257.9	.5926E+08	.5102E+07
	NUMBER	135		136	113	114	135	135
	MAXIMUM	100734		.1640E+07	172687	52179.3	.1273E+09	.1798E+08
	MINIMUM	142.396		916.941	1354.38	114.887	43042.3	28694.9
	SUM	.1053E+07		.4349E+08	.2173E+07	757879	.1600E+10	.1794E+09
	MEAN	7800.97		319802	19232.7	6648.06	.1185E+08	.1328E+07
	VARIANCE	.1582E+09		.1147E+12	.7110E+09	.8430E+08	.4366E+15	.5169E+13
	STAND DEV	12580.8		338716	26665.1	9181.96	.2089E+08	.2273E+07

96/09/30

1STORET RETRIEVAL DATE 99/01/19

03378500 B 07
38 07 55.0 087 56 25.0 2
WABASH RIVER AT NEW HARMONY, IND.
18129 INDIANA POSEY
OHIO RIVER 051791
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120113006 0016.620 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	1019.42	37747.8	7368.96	3684.48	669.906	550165	550165
	PCTL(025.0)	1600.33	40582.8	55016.4	6684.50	2011.88	550165	550165
	PCTL(050.0)	5501.64	111327	193690	13894.3	5690.43	.2344E+07	636410
	PCTL(075.0)	14536.2	158577	487813	51391.9	18058.3	.9118E+07	.1910E+07
	PCTL(085.0)	28263.4	508740	494986	116214	23673.3	.8729E+08	.9976E+07
	PCTL(090.0)	65243.1	705937	997632	125136	31283.9	.8729E+08	.9976E+07
	PCTL(095.0)	112234	810576	.1300E+07	127951	34293.6	.8729E+08	.9976E+07
	NUMBER	15	28	15	28	28	4	4
	MAXIMUM	112234	.1045E+07	.1300E+07	152762	35296.8	.8729E+08	.9976E+07
	MINIMUM	1019.42	22626.9	7368.96	1677.46	340.347	550165	550165
	SUM	264745	.6059E+07	.4731E+07	.1169E+07	313838	.9930E+08	.1307E+08
	MEAN	17649.7	216403	315418	41752.7	11208.5	.2482E+08	.3268E+07
	VARIANCE	.9599E+09	.7340E+11	.1390E+12	.2248E+10	.1259E+09	.1747E+16	.2038E+14
	STAND DEV	30983.1	270928	372836	47417.1	11222.6	.4180E+08	.4515E+07

96/09/30

1STORET RETRIEVAL DATE 99/01/19

03378000 BC 02
38 23 11.0 087 58 32.0 2
BONPAS CREEK AT BROWNS, IL
17185 ILLINOIS WABASH
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120113024 0010.410 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.0323626	12.2978	.118663	.0819852	.0237326	18.5006	4.74652
	PCTL(025.0)	.707662	12.2978	3.24705	2.80476	.701190	604.102	131.069
	PCTL(050.0)	14.3474	12.2978	177.994	13.3765	4.09926	4487.62	504.857
	PCTL(075.0)	97.0878	12.2978	1210.36	108.738	45.3077	54822.3	6006.50
	PCTL(085.0)	356.798	12.2978	2616.52	475.730	165.049	166554	17718.5
	PCTL(090.0)	656.314	12.2978	5323.11	1009.71	460.682	394910	51780.2
	PCTL(095.0)	1184.74	12.2978	9902.96	3963.34	2008.64	594609	97519.3
	NUMBER	145	1	145	111	111	144	144
	MAXIMUM	5119.76	12.2978	33225.6	6407.79	4010.81	.4174E+07	665483
	MINIMUM	.0000000	12.2978	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	33979.1	12.2978	257632	52111.5	25399.9	.2239E+08	.2902E+07
	MEAN	234.339	12.2978	1776.77	469.473	228.828	155534	20159.3
	VARIANCE	457256		.2037E+08	.1681E+07	476810	.2933E+12	.4926E+10
	STAND DEV	676.208		4514.04	1296.66	690.514	541626	70186.2

96/09/30

1STORET RETRIEVAL DATE 99/01/19

03346550 BE 01
38 39 54.0 087 37 35.0 2
EMBARRAS RIVER NEAR BILLETT, IL
17101 ILLINOIS LAWRENCE
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120112004 0001.700 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	27.5082		311.490	169.095	50.1620	55178.3	7119.78
	PCTL(025.0)	71.7371		3349.53	440.132	71.1977	110033	16504.9
	PCTL(050.0)	351.134		35393.9	860.845	430.423	376216	52049.9
	PCTL(075.0)	910.199		43312.0	1310.69	946.607	473654	75243.0
	PCTL(085.0)	964.406		48781.2	2250.28	1205.51	811709	80367.1
	PCTL(090.0)	5621.38		118674	24983.9	3747.59	.1274E+08	.1124E+07
	PCTL(095.0)	5621.38		118674	24983.9	3747.59	.1274E+08	.1124E+07
	NUMBER	9		9	9	9	9	9
	MAXIMUM	5621.38		118674	24983.9	3747.59	.1274E+08	.1124E+07
	MINIMUM	27.5082		311.490	169.095	50.1620	55178.3	7119.78
	SUM	8631.09		341674	32368.0	7410.49	.1536E+08	.1474E+07
	MEAN	959.010		37963.8	3596.44	823.387	.1706E+07	163802
	VARIANCE	.3174E+07		.1214E+10	.6468E+08	.1361E+07	.1718E+14	.1304E+12
	STAND DEV	1781.68		34848.5	8042.40	1166.69	.4144E+07	361244
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

03345500 BE 07
38 56 10.0 088 01 10.0 2
EMBARRAS RIVER AT STE. MARIE, IL
17079 ILLINOIS JASPER
OHIO RIVER 051791
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120112013 0005.110 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	19.4176	711.978	37.3410	26.5050	11.3647	7509.74	1618.13
	PCTL(025.0)	59.3315	711.978	2145.64	163.377	30.2051	35868.6	7173.71
	PCTL(050.0)	310.303	711.978	18719.6	600.596	296.064	209656	25998.0
	PCTL(075.0)	699.949	711.978	48673.4	1613.81	853.294	951030	88835.3
	PCTL(085.0)	1138.09	711.978	70000.3	3473.59	1256.42	.1847E+07	226808
	PCTL(090.0)	1758.37	711.978	91969.1	7808.02	2813.39	.4876E+07	476378
	PCTL(095.0)	4436.37	711.978	138944	18144.6	8280.51	.1094E+08	936359
	NUMBER	140	1	140	108	107	138	138
	MAXIMUM	24574.0	711.978	272283	91068.3	31909.5	.6186E+08	.9829E+07
	MINIMUM	.0000000	711.978	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	150604	711.978	.4933E+07	418271	163447	.2592E+09	.3051E+08
	MEAN	1075.74	711.978	35242.3	3872.88	1527.54	.1878E+07	221131
	VARIANCE	.8325E+07		.2254E+10	.1428E+09	.2004E+08	.3802E+14	.8159E+12
	STAND DEV	2885.34		47484.8	11953.6	4476.64	.6166E+07	903288
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

03344000 BE 09
39 20 40.0 088 10 15.0 2
EMBARRAS RIVER NEAR DIONA, IL
17035 ILLINOIS CUMBERLAND
OHIO RIVER 051791
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120112018 0019.980 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	9.70878	106.797	243.259	70.1190	50.9711	2330.11	453.077
	PCTL(025.0)	38.2957	334.414	3373.26	148.868	113.701	10393.8	1726.01
	PCTL(050.0)	162.352	912.626	14021.6	293.097	204.370	52103.8	6084.17
	PCTL(075.0)	690.402	4344.68	54315.3	836.034	496.227	359548	35976.5
	PCTL(085.0)	1089.54	12492.0	88484.8	2394.29	1067.97	.1518E+07	130529
	PCTL(090.0)	1644.02	17529.7	126376	3072.83	1483.29	.2482E+07	218340
	PCTL(095.0)	2621.37	33398.2	165341	6256.77	1779.94	.4665E+07	528158
	NUMBER	106	106	105	97	102	105	105
	MAXIMUM	3883.51	52993.8	396119	10810.7	4883.51	.6952E+07	.1023E+07
	MINIMUM	2.26538	16.4510	10.1996	13.8188	12.1737	97.0879	59.3315
	SUM	56701.9	596115	.4262E+07	107047	53426.4	.7328E+08	.7777E+07
	MEAN	534.924	5623.72	40595.7	1103.57	523.788	697968	74071.1
	VARIANCE	640231	.1111E+09	.3788E+10	.4147E+07	664299	.2229E+13	.2955E+11
	STAND DEV	800.145	10540.4	61551.4	2036.57	815.045	.1493E+07	171902
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

03343395 BE 14
39 47 59.0 088 10 13.0 2
EMBARRAS RIVER AT CAMARGO, IL
17041 ILLINOIS DOUGLAS
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120112023 0012.260 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.970878		13.1392	4.53077	2.25459	388.351	134.844
	PCTL(025.0)	4.74652		699.032	10.3560	6.36465	1488.68	366.776
	PCTL(050.0)	30.0972		3521.05	22.6538	13.5923	9493.03	1380.81
	PCTL(075.0)	92.5570		10614.9	66.3434	33.9807	33711.0	4207.14
	PCTL(085.0)	156.959		18964.5	156.797	99.2453	78964.7	8781.06
	PCTL(090.0)	228.049		24272.0	213.324	172.654	125135	17421.9
	PCTL(095.0)	391.587		37918.2	524.490	295.147	228739	43150.2
	NUMBER	142		139	111	111	140	140
	MAXIMUM	3898.62		98964.8	13835.0	12297.8	.3996E+07	614890
	MINIMUM	.0000000		.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	18173.1		.1230E+07	34565.7	21661.8	.1127E+08	.1677E+07
	MEAN	127.980		8853.17	311.403	195.152	80500.3	11983.0
	VARIANCE	208651		.1767E+09	.2949E+07	.1497E+07	.1345E+12	.3195E+10
	STAND DEV	456.783		13294.7	1717.49	1223.63	366763	56530.2
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

03346000 BEF 05
39 00 37.0 087 56 47.0 2
NORTH FORK EMBARRAS RIVER NEAR OBLONG, IL
17033 ILLINOIS CRAWFORD
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120112010 0009.450 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.755127		.755127	1.74758	.582527	263.216	61.4890
	PCTL(025.0)	5.33983		19.4176	10.0270	2.94500	1321.47	345.201
	PCTL(050.0)	41.7478		412.623	37.1091	13.4844	9466.06	1510.26
	PCTL(075.0)	125.135		1601.95	149.947	56.0952	70119.0	7853.33
	PCTL(085.0)	231.986		2272.93	482.580	167.854	149515	18527.6
	PCTL(090.0)	549.032		4228.17	899.573	333.497	348222	49541.8
	PCTL(095.0)	987.060		8414.28	3296.46	1113.27	.1897E+07	179807
	NUMBER	143		144	112	112	144	144
	MAXIMUM	7489.03		29843.7	32243.9	16451.0	.8028E+07	.1316E+07
	MINIMUM	.0539377		.0539377	.0647251	.0102482	8.63003	2.04963
	SUM	41610.0		265398	93900.8	35011.6	.3941E+08	.4474E+07
	MEAN	290.979		1843.04	838.400	312.604	273699	31076.1
	VARIANCE	973540		.1803E+08	.1400E+08	.2686E+07	.9005E+12	.1559E+11
	STAND DEV	986.681		4246.24	3742.41	1638.92	948952	124866
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

03341540 BM 02
39 29 53.0 087 33 11.0 2
SUGAR CREEK NEAR ELBRIDGE, IL
17045 ILLINOIS EDGAR
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120111025 0009.890 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	1.02482		30.8523	2.89106	2.76161	64.7252	20.4963
	PCTL(025.0)	3.88351		80.9066	14.2396	13.6462	255.665	81.9853
	PCTL(050.0)	11.8663		272.925	35.5989	29.6657	981.666	258.901
	PCTL(075.0)	37.3788		1529.13	97.0878	68.8245	5728.18	1264.84
	PCTL(085.0)	53.9377		1723.85	118.663	83.8192	22999.0	2028.06
	PCTL(090.0)	103.830		2325.79	141.586	107.875	26904.1	3754.06
	PCTL(095.0)	183.928		3055.03	297.089	124.596	160195	20954.8
	NUMBER	75		76	60	61	75	75
	MAXIMUM	453.077		8381.92	841.428	323.626	511330	61489.0
	MINIMUM	.0000000		.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	2787.31		72749.8	4861.33	2898.89	.1631E+07	209043
	MEAN	37.1641		957.234	81.0222	47.5227	21755.4	2787.24
	VARIANCE	4704.53		.2069E+07	18861.6	2978.38	.5363E+10	.7901E+08
	STAND DEV	68.5895		1438.75	137.338	54.5746	73235.6	8888.79
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

03341414 BN 01
39 40 53.0 087 31 16.0 2
BROUILLETTS CREEK NEAR ST. BERNICE, IN
18165 INDIANA VERMILLION
OHIO RIVER 051791
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120111024 0014.200 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	1.83388		18.1231	.755128	.323626	172.601	75.5128
	PCTL(025.0)	7.55127		815.538	7.55127	4.47683	1294.50	382.958
	PCTL(050.0)	50.7014		3897.00	22.2223	16.6667	6407.80	1343.05
	PCTL(075.0)	104.639		10267.0	80.5829	39.8060	30744.5	3505.95
	PCTL(085.0)	142.396		12340.9	140.777	63.1071	50701.4	5307.47
	PCTL(090.0)	223.302		15145.7	452.807	124.596	118404	13592.3
	PCTL(095.0)	446.604		39061.7	1038.84	297.736	675246	121036
	NUMBER	92		93	65	66	92	92
	MAXIMUM	5825.27		116505	50097.3	13980.6	.3145E+08	.5825E+07
	MINIMUM	.0539377		.593314	.107875	.0447683	31.8232	4.85439
	SUM	15074.5		763354	58152.7	17270.7	.4004E+08	.7312E+07
	MEAN	163.853		8208.10	894.657	261.678	435266	79481.5
	VARIANCE	395391		.2372E+09	.3850E+08	.2952E+07	.1080E+14	.3711E+12
	STAND DEV	628.802		15403.6	6205.05	1718.32	.3286E+07	609190
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

03339147 BO 07
39 56 29.0 087 33 05.0 2
LITTLE VERMILION RIVER NEAR GEORGETOWN, IL
17183 ILLINOIS VERMILION
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120108023 0018.680 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	2.10357	2154.81	23.3011	3.77564	2.42720	253.507	64.7252
	PCTL(025.0)	8.09065	2154.81	961.170	14.2396	10.5178	1483.29	329.020
	PCTL(050.0)	42.6108	2154.81	4082.00	31.9311	21.0357	6558.82	1051.79
	PCTL(075.0)	107.875	2154.81	10787.5	75.5128	48.5439	30291.4	3430.44
	PCTL(085.0)	210.357	2154.81	17740.1	151.025	72.2765	58306.7	8872.75
	PCTL(090.0)	316.075	2154.81	26763.9	189.645	123.841	187876	16871.7
	PCTL(095.0)	735.171	2154.81	44948.4	361.382	187.595	289106	28910.6
	NUMBER	86	1	86	61	61	83	83
	MAXIMUM	3128.39	2154.81	137649	15329.1	6882.45	.3941E+07	625677
	MINIMUM	.0000000	2154.81	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	13206.3	2154.81	903018	21555.4	9777.43	.1084E+08	.1338E+07
	MEAN	153.562	2154.81	10500.2	353.368	160.286	130679	16131.6
	VARIANCE	155853		.3517E+09	.3906E+07	773865	.3380E+12	.5922E+10
	STAND DEV	394.782		18754.0	1976.42	879.696	581450	76957.3
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

03339000 BP 01
40 06 03.0 087 35 52.0 2
VERMILION RIVER NEAR DANVILLE, IL
17183 ILLINOIS VERMILION
OHIO RIVER 051791
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120109001 0016.060 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	39.5363	363.108	1329.02	347.898	302.914	4476.83	1245.96
	PCTL(025.0)	99.0296	771.309	4734.65	543.692	466.291	12988.2	2642.95
	PCTL(050.0)	299.354	1858.37	21311.9	893.640	759.227	56445.8	9514.61
	PCTL(075.0)	738.946	4433.67	61040.8	1595.15	1155.35	369322	50485.7
	PCTL(085.0)	1225.73	10433.7	99639.0	2778.33	1743.27	.1118E+07	163431
	PCTL(090.0)	2215.76	21747.7	148760	4168.30	2621.37	.2423E+07	259980
	PCTL(095.0)	3624.61	37864.2	193183	8036.72	3637.56	.6457E+07	787491
	NUMBER	148	137	148	139	137	146	146
	MAXIMUM	53171.8	.1320E+07	480261	140648	24013.0	.2770E+09	.2315E+08
	MINIMUM	7.11978	92.5570	212.730	85.5991	64.5095	507.014	253.507
	SUM	183821	.2631E+07	.7751E+07	458290	186662	.4729E+09	.4625E+08
	MEAN	1242.04	19205.4	52373.8	3297.05	1362.50	.3239E+07	316832
	VARIANCE	.2352E+08	.1397E+11	.6548E+10	.1754E+09	.7282E+07	.5560E+15	.4135E+13
	STAND DEV	4850.00	118232	80920.6	13245.5	2698.69	.2358E+08	.2033E+07
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

03338780 BPG 09
40 16 13.0 087 38 34.0 2
NORTH FORK VERMILION RIVER NEAR BISMARCK, IL
17183 ILLINOIS VERMILION
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120109002 0011.300 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	2.69688	36.6776	85.0598	7.11977	5.17802	724.923	204.963
	PCTL(025.0)	10.2482	88.9971	396.442	14.7250	10.1942	2152.11	496.227
	PCTL(050.0)	38.8351	313.378	5221.17	33.9807	25.2968	7173.71	1494.07
	PCTL(075.0)	131.069	947.577	15857.7	102.266	77.4545	55911.8	7896.48
	PCTL(085.0)	181.231	2490.30	20971.0	223.518	108.738	121576	13721.7
	PCTL(090.0)	281.015	3954.71	27700.8	474.652	225.190	223626	33543.8
	PCTL(095.0)	766.994	7839.84	45685.2	1109.50	543.692	494285	78317.5
	NUMBER	140	139	140	112	138	137	137
	MAXIMUM	2146.72	32869.6	121020	4293.44	2146.72	.2683E+07	896445
	MINIMUM	.598708	5.93314	7.55127	1.32147	.792884	76.5915	52.8589
	SUM	20228.0	210601	.1622E+07	20998.7	15314.8	.1374E+08	.2463E+07
	MEAN	144.486	1515.11	11586.6	187.488	110.977	100329	17984.6
	VARIANCE	98211.0	.1517E+08	.2867E+09	258142	85314.8	.1051E+12	.6938E+10
	STAND DEV	313.386	3895.94	16934.1	508.077	292.087	324201	83299.2
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

03338097 BPJ 03
40 04 56.0 087 46 53.0 2
SALT FORK NEAR OAKWOOD, IL
17183 ILLINOIS VERMILION
OHIO RIVER 051791
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120109009 0004.390 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	18.8782	94.3909	809.605	284.791	259.440	1898.61	442.289
	PCTL(025.0)	37.2170	94.3909	2535.07	456.313	396.442	4611.67	970.879
	PCTL(050.0)	141.856	94.3909	14765.4	728.159	674.221	24595.6	4261.08
	PCTL(075.0)	456.852	94.3909	58252.7	1412.63	1067.97	107983	21197.5
	PCTL(085.0)	815.538	94.3909	67314.2	2396.99	1970.88	344759	41165.3
	PCTL(090.0)	1262.14	94.3909	92783.6	3145.65	2342.51	553401	77670.2
	PCTL(095.0)	1698.07	94.3909	138836	4857.63	4488.69	.1520E+07	237326
	NUMBER	88	1	86	67	69	85	85
	MAXIMUM	6472.52	94.3909	302051	10652.7	10652.7	.1752E+08	.5663E+07
	MINIMUM	1.34844	94.3909	94.0673	94.0673	22.9235	539.377	134.844
	SUM	40402.0	94.3909	.3074E+07	94877.0	77726.8	.3846E+08	.8533E+07
	MEAN	459.113	94.3909	35752.1	1416.08	1126.48	452485	100389
	VARIANCE	768184		.2571E+10	.3985E+07	.2382E+07	.4057E+13	.3818E+12
	STAND DEV	876.461		50713.8	1996.41	1543.65	.2014E+07	617966
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

03336900 BPJ 07
40 08 55.0 088 02 00.0 2
SALT FORK NEAR ST. JOSEPH, IL
17019 ILLINOIS CHAMPAIGN
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120109012 0002.440 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	5.12408	550.165	120.820	39.6981	36.2461	485.439	103.560
	PCTL(025.0)	9.16939	550.165	359.225	67.3143	57.2818	1294.50	269.688
	PCTL(050.0)	27.5082	550.165	2474.66	95.1460	81.9314	7497.34	1035.60
	PCTL(075.0)	106.796	550.165	7659.15	149.947	113.701	38058.4	5436.92
	PCTL(085.0)	177.994	550.165	12686.1	237.542	145.848	89482.6	10194.2
	PCTL(090.0)	208.199	550.165	18409.5	280.907	174.758	130421	14455.3
	PCTL(095.0)	314.564	550.165	31229.9	957.663	226.970	234176	34951.6
	NUMBER	107	1	107	105	105	106	106
	MAXIMUM	1084.15	550.165	52168.5	5508.12	1516.73	.3352E+07	601945
	MINIMUM	.701190	550.165	33.9807	17.4758	15.5341	103.560	48.5439
	SUM	10177.3	550.165	708643	26585.6	13000.6	.1159E+08	.1758E+07
	MEAN	95.1147	550.165	6622.83	253.196	123.815	109358	16590.1
	VARIANCE	34477.2		.1068E+09	463897	36477.3	.1792E+12	.5540E+10
	STAND DEV	185.680		10334.5	681.100	190.990	423320	74437.7
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

03337700 BPJC06
40 07 59.0 088 06 15.0 2
SALINE BRANCH NEAR MAYVIEW, IL
17019 ILLINOIS CHAMPAIGN
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120109013 0004.260 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	5.12408		289.106	217.477	203.669	181.231	97.0879
	PCTL(025.0)	23.7865		1003.24	310.681	307.445	539.377	215.751
	PCTL(050.0)	49.6227		3295.59	453.077	427.187	4304.23	927.729
	PCTL(075.0)	209.278		6343.07	638.622	574.976	28781.2	4487.62
	PCTL(085.0)	781.557		12340.9	782.097	768.612	50744.6	7335.53
	PCTL(090.0)	1159.66		17777.9	815.538	862.464	102611	12211.5
	PCTL(095.0)	1359.23		23732.6	1087.38	1296.12	626863	56958.2
	NUMBER	94		88	64	64	93	93
	MAXIMUM	2865.17		36677.6	3168.30	2131.62	.2574E+07	290994
	MINIMUM	.539377		7.01190	13.4844	10.3830	16.1813	10.7875
	SUM	28074.8		533726	35901.7	32824.1	.8058E+07	.1146E+07
	MEAN	298.668		6065.07	560.963	512.877	86655.8	12326.1
	VARIANCE	271583		.5678E+08	230128	130373	.1123E+12	.2077E+10
	STAND DEV	521.136		7535.40	479.717	361.072	335181	45574.4
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

03336645 BPK 07
40 08 12.0 087 44 45.0 2
MIDDLE FORK VERMILION RIVER ABOVE OAKWOOD, IL
17183 ILLINOIS VERMILION
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120109006 0002.700 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	3.51134	42.0714	8.63003	2.72925	.970878	841.428	167.207
	PCTL(025.0)	10.2482	100.324	995.151	5.28590	4.42289	2135.93	453.077
	PCTL(050.0)	52.3195	375.406	6971.44	33.6571	32.1469	14476.9	2006.48
	PCTL(075.0)	196.333	1522.34	18410.0	156.419	115.696	85938.9	11650.5
	PCTL(085.0)	280.476	2783.72	27767.1	359.225	228.156	366577	45307.7
	PCTL(090.0)	469.797	9592.27	40582.7	898.926	707.662	860846	77670.2
	PCTL(095.0)	1283.72	18396.0	75081.2	2718.46	1449.84	.2454E+07	255535
	NUMBER	142	141	142	112	139	139	139
	MAXIMUM	4673.16	66898.8	129127	8802.63	3703.90	.1686E+08	.2097E+07
	MINIMUM	.453076	7.01190	.453076	.507014	.253507	56.0952	28.0476
	SUM	36310.0	513054	.2252E+07	50551.7	30567.4	.7059E+08	.8069E+07
	MEAN	255.704	3638.68	15859.6	451.354	219.910	507857	58057.1
	VARIANCE	425202	.1108E+09	.6012E+09	.1795E+07	312797	.4067E+13	.6037E+11
	STAND DEV	652.075	10528.8	24519.9	1339.85	559.283	.2016E+07	245712
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

03379600 C 09
38 31 08.0 088 07 55.0 2
LITTLE WABASH RIVER AT BLOOD, IL
17047 ILLINOIS EDWARDS
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120114003 0014.210 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	4.42289	91.6941	8.09605	8.30640	1.45632	2748.66	566.346
	PCTL(025.0)	19.4176	91.6941	47.1955	32.3626	7.11978	13770.3	2071.21
	PCTL(050.0)	170.227	116.505	1019.42	190.292	34.9516	71197.7	11305.3
	PCTL(075.0)	1699.04	34261.2	10248.2	3195.81	1278.32	.1192E+07	115858
	PCTL(085.0)	3667.76	34261.2	27837.2	8576.09	3063.66	.2598E+07	361598
	PCTL(090.0)	5770.79	34261.2	40291.4	10968.2	3357.62	.3071E+07	466885
	PCTL(095.0)	14563.2	34261.2	57707.9	13646.2	4746.51	.3992E+07	752970
	NUMBER	97	3	97	63	63	96	96
	MAXIMUM	25674.3	34261.2	83064.0	50399.4	14962.3	.5501E+07	.2135E+07
	MINIMUM	.755128	91.6941	1.02482	.647252	.107875	194.176	43.1502
	SUM	194033	34469.4	995368	215233	78810.3	.8142E+08	.1435E+08
	MEAN	2000.34	11489.8	10261.5	3416.39	1250.96	848141	149538
	VARIANCE	.1975E+08	.3889E+09	.3494E+09	.5998E+08	.7960E+07	.1871E+13	.1018E+12
	STAND DEV	4444.86	19720.6	18694.7	7744.72	2821.45	.1368E+07	319214
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

03378900 C 19
38 46 23.0 088 29 50.0 2
LITTLE WABASH RIVER AT LOUISVILLE, IL
17025 ILLINOIS CLAY
OHIO RIVER 051791
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120114007 0018.070 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	3.02051	129.450	4.80045	8.09065	1.18663	1165.05	256.204
	PCTL(025.0)	9.96769	129.450	22.6538	21.5751	6.47252	3236.26	755.128
	PCTL(050.0)	93.3122	366.776	755.128	148.329	42.1253	25242.8	4795.06
	PCTL(075.0)	323.626	2157.51	3452.01	543.692	317.154	187379	20647.4
	PCTL(085.0)	738.946	2157.51	5124.08	1751.90	771.848	613164	81338.0
	PCTL(090.0)	946.606	2157.51	9196.37	3740.58	1190.94	.1246E+07	202320
	PCTL(095.0)	3014.04	2157.51	20825.3	9378.69	2740.03	.4000E+07	411005
	NUMBER	102	3	102	75	75	102	102
	MAXIMUM	26407.9	2157.51	65286.2	57443.6	29935.4	.2349E+08	.9546E+07
	MINIMUM	.107875	129.450	.107875	.0431502	.0107875	11.8663	2.15751
	SUM	87992.8	2653.73	428031	168649	69395.9	.9601E+08	.1822E+08
	MEAN	862.675	884.578	4196.38	2248.65	925.279	941342	178690
	VARIANCE	.1033E+08	.1229E+07	.1051E+09	.6773E+08	.1463E+08	.1140E+14	.9891E+12
	STAND DEV	3215.09	1108.76	10251.9	8229.89	3825.85	.3376E+07	994547
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

03378635 C 21
39 06 13.0 088 35 33.0 2
LITTLE WABASH RIVER NEAR EFFINGHAM, IL
17049 ILLINOIS EFFINGHAM
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120114012 0012.150 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.177994	.0970878	.177994	.167207	.0809065	36.1382	6.47252
	PCTL(025.0)	2.89106	.0970878	12.9450	3.78643	1.62892	841.428	180.691
	PCTL(050.0)	24.7574	11.4348	429.128	26.9688	9.70878	5720.09	1019.42
	PCTL(075.0)	80.2593	183.388	1717.92	103.237	57.2009	29277.4	4466.04
	PCTL(085.0)	210.681	1525.90	3348.45	228.049	111.975	76375.7	10614.9
	PCTL(090.0)	354.802	1525.90	5660.22	570.067	276.263	421253	37152.3
	PCTL(095.0)	1234.96	1525.90	8336.61	4310.16	1059.88	.2542E+07	203884
	NUMBER	142	4	143	114	113	141	141
	MAXIMUM	9172.10	1525.90	43736.4	18827.0	4923.97	.6603E+07	926866
	MINIMUM	.0000000	.0970878	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	41356.5	1720.82	291945	60701.1	22667.5	.4079E+08	.4029E+07
	MEAN	291.243	430.204	2041.57	532.466	200.597	289321	28579.3
	VARIANCE	.1224E+07	540607	.2591E+08	.4479E+07	515980	.1001E+13	.1112E+11
	STAND DEV	1106.67	735.260	5090.85	2116.45	718.317	.1000E+07	105473
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

03379500 C 22
38 38 05.0 088 17 50.0 2
LITTLE WABASH RIVER BELOW CLAY CITY, IL
17025 ILLINOIS CLAY
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120114005 0012.370 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	3.50595	48.5439	6.47252	9.01838	2.04963	3203.90	560.952
	PCTL(025.0)	16.2352	48.5439	51.2408	35.4910	5.50164	10291.3	1833.88
	PCTL(050.0)	141.317	88.9971	1065.81	231.716	54.0456	62157.8	9579.33
	PCTL(075.0)	973.575	3430.44	5935.30	1191.11	460.843	550165	59763.0
	PCTL(085.0)	2274.01	3430.44	12318.8	4470.35	1550.71	.1587E+07	226161
	PCTL(090.0)	3417.49	3430.44	22653.8	9562.07	3236.26	.2922E+07	417478
	PCTL(095.0)	6461.73	3430.44	33257.4	13056.2	5341.18	.5055E+07	522980
	NUMBER	146	3	146	114	114	146	146
	MAXIMUM	51731.6	3430.44	94649.8	71564.5	20776.8	.2170E+08	.2654E+07
	MINIMUM	.436895	48.5439	.334414	.323626	.0539377	97.0879	26.9688
	SUM	232185	3567.98	.1082E+07	311682	112515	.1288E+09	.1733E+08
	MEAN	1590.31	1189.33	7417.20	2734.05	986.970	882236	118760
	VARIANCE	.2680E+08	.3767E+07	.2639E+09	.6185E+08	.6682E+07	.5343E+13	.1029E+12
	STAND DEV	5177.66	1940.96	16245.3	7864.60	2585.00	.2311E+07	320789
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

03381495 C 23
38 05 32.0 088 09 22.0 2
LITTLE WABASH R AT MAIN ST AT CARMI, IL
17193 ILLINOIS WHITE
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120114001 0024.980 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	24.8113	215.751	49.8924	27.6161	7.11978	9451.50	1434.74
	PCTL(025.0)	84.1428	668.827	203.884	101.673	32.3626	26758.5	4865.18
	PCTL(050.0)	465.158	3361.39	3446.78	614.242	135.923	155875	28910.6
	PCTL(075.0)	4288.04	40248.3	14644.1	8116.54	3193.11	.3118E+07	404533
	PCTL(085.0)	6041.02	67422.1	38533.1	15134.9	5857.63	.4954E+07	606691
	PCTL(090.0)	8468.21	75512.7	48031.5	20906.3	7702.30	.7214E+07	825247
	PCTL(095.0)	12168.3	139011	70118.9	31332.4	14606.9	.1071E+08	.1082E+07
	NUMBER	123	142	118	142	141	130	130
	MAXIMUM	22880.4	171144	108954	48630.2	39077.8	.1848E+08	.2075E+07
	MINIMUM	2.96657	29.1264	1.45632	7.55128	1.92558	647.252	110.572
	SUM	335518	.3735E+07	.1655E+07	893502	376560	.2896E+09	.3353E+08
	MEAN	2727.79	26305.7	14032.8	6292.26	2670.64	.2228E+07	257980
	VARIANCE	.2116E+08	.1759E+10	.5048E+09	.1132E+09	.2979E+08	.1314E+14	.1581E+12
	STAND DEV	4600.52	41949.6	22469.2	10643.8	5458.45	.3625E+07	397658
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

03381400 CA 03
38 09 12.0 088 09 55.0 2
SKILLET FORK NEAR CARMI, IL
17193 ILLINOIS WHITE
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120115001 0002.810 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.215751		.0755127	.539377	.269688	312.839	43.1502
	PCTL(025.0)	.302051		.269688	1.35923	.302051	385.115	83.0640
	PCTL(050.0)	4.90833		35.0595	58.8999	4.90833	17260.1	2696.89
	PCTL(075.0)	119.202		1024.82	107.875	21.5751	31904.2	4584.70
	PCTL(085.0)	210.357		1833.88	155.880	36.6776	33441.4	4908.33
	PCTL(090.0)	15666.7		36666.8	14333.4	4333.35	.7933E+07	733337
	PCTL(095.0)	15666.7		36666.8	14333.4	4333.35	.7933E+07	733337
	NUMBER	9		9	9	9	9	9
	MAXIMUM	15666.7		36666.8	14333.4	4333.35	.7933E+07	733337
	MINIMUM	.215751		.0755127	.539377	.269688	312.839	43.1502
	SUM	16022.7		39618.1	14723.3	4406.73	.8037E+07	749165
	MEAN	1780.30		4402.01	1635.93	489.636	893069	83240.5
	VARIANCE	.2712E+08		.1468E+09	.2267E+08	.2077E+07	.6970E+13	.5943E+11
	STAND DEV	5207.93		12116.5	4761.87	1441.44	.2640E+07	243794
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

03380500 CA 05
38 21 25.0 088 35 00.0 2
SKILLET FORK AT WAYNE CITY, IL
17191 ILLINOIS WAYNE
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120115001 0032.140 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.189861	12.4596	.210357	.269688	.0809065	80.9066	21.5751
	PCTL(025.0)	3.61382	12.4596	3.66776	3.36409	.679615	1262.14	296.657
	PCTL(050.0)	36.1382	196.333	130.475	30.0972	4.47683	8117.62	1483.29
	PCTL(075.0)	207.660	582.527	1000.00	205.826	46.1167	83150.3	11477.9
	PCTL(085.0)	628.644	582.527	2061.50	723.250	188.690	380396	46386.4
	PCTL(090.0)	1135.93	582.527	4509.19	1660.20	691.805	959228	88349.9
	PCTL(095.0)	2861.93	582.527	10726.0	4719.55	1758.37	.2003E+07	172169
	NUMBER	146	3	146	114	114	145	145
	MAXIMUM	12474.7	582.527	41812.5	20047.0	12850.7	.6504E+07	783499
	MINIMUM	.0000000	12.4596	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	69492.0	791.320	320560	97399.6	38292.5	.4272E+08	.5103E+07
	MEAN	475.972	263.773	2195.61	854.383	335.899	294647	35199.7
	VARIANCE	.2016E+07	84655.4	.4380E+08	.8475E+07	.1896E+07	.7593E+12	.1122E+11
	STAND DEV	1420.03	290.956	6618.34	2911.30	1377.02	871436	105972
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

03380350 CA 06
38 31 10.0 088 43 39.0 2
SKILLET FORK NEAR IUKA, IL
17121 ILLINOIS MARION
OHIO RIVER 051791
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120115004 0005.870 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01							
STATION PCTL(010.0)	.0151025		.0377564	.258901	.0647252	11.8663	3.66776
PCTL(025.0)	.167207		.809065	2.88567	.539377	256.743	43.4738
PCTL(050.0)	10.7875		19.6333	35.0595	10.0324	2858.70	593.314
PCTL(075.0)	80.9065		264.187	45.0919	11.2190	31413.3	6823.12
PCTL(085.0)	306.366		1416.94	92.5570	51.8881	423950	45954.9
PCTL(090.0)	706.583		4380.82	260.519	79.2884	455019	141209
PCTL(095.0)	1661.28		5776.73	260.519	79.2884	.1224E+07	265805
NUMBER	38		38	9	9	38	38
MAXIMUM	2398.18		5980.61	260.519	79.2884	.1695E+07	268502
MINIMUM	.0005394		.0053938	.258901	.0647252	.863003	.269688
SUM	7358.32		27513.8	495.789	172.665	.5451E+07	.1072E+07
MEAN	193.640		724.048	55.0877	19.1850	143467	28229.9
VARIANCE	235480		.2604E+07	6761.07	758.607	.1242E+12	.4655E+10
STAND DEV	485.263		1613.79	82.2257	27.5428	352524	68234.6

96/09/30

1STORET RETRIEVAL DATE 99/01/19

03379950 CD 01
38 26 28.0 088 15 29.0 2
ELM RIVER NEAR TOMS PRAIRIE, IL
17191 ILLINOIS WAYNE
OHIO RIVER 051700
/TYPA/AMBNT/STREAM WABASH RIVER
21ILAMB 870314 05120114023 0003.090 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01							
STATION PCTL(010.0)	.0080907		.0809065			32.3626	6.47252
PCTL(025.0)	.863003		.323626			174.758	101.942
PCTL(050.0)	17.7994		71.1978			6084.17	792.884
PCTL(075.0)	265.373		707.123			32362.6	12297.8
PCTL(085.0)	525.893		871.094			81553.7	21575.1
PCTL(090.0)	563.648		2750.82			258739	30582.7
PCTL(095.0)	809.065		3079.30			436895	48543.9
NUMBER	26		26			25	25
MAXIMUM	839.810		6116.53			625677	79612.0
MINIMUM	.0000000		.0000000			.0000000	.0000000
SUM	4606.98		18181.1			.1670E+07	245252
MEAN	177.191		699.272			66800.1	9810.06
VARIANCE	71174.5		.1874E+07			.2307E+11	.3507E+09
STAND DEV	266.785		1368.96			151894	18729.3

96/09/30

1STORET RETRIEVAL DATE 99/01/19

05587060 D 01
39 09 37.0 090 36 55.0 2
ILLINOIS RIVER AT HARDIN, IL
17013 ILLINOIS CALHOUN
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130011
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01							
STATION PCTL(010.0)	3392.68		106365	10728.2	5758.39	.1828E+07	309225
PCTL(025.0)	7082.02		192784	14757.3	8058.29	.3322E+07	528590
PCTL(050.0)	17740.1		550488	40776.9	19104.7	.1578E+08	.1796E+07
PCTL(075.0)	48759.7		.1349E+07	72147.0	33818.9	.3759E+08	.4077E+07
PCTL(085.0)	61284.0		.1637E+07	87109.3	39077.8	.5803E+08	.6576E+07
PCTL(090.0)	72681.0		.2081E+07	126538	43117.8	.7864E+08	.8750E+07
PCTL(095.0)	199947		.2389E+07	147735	51025.0	.1139E+09	.1971E+08
NUMBER	99		99	69	69	98	98
MAXIMUM	469905		.2898E+07	327510	78317.5	.3049E+09	.4271E+08
MINIMUM	419.096		25417.6	4621.38	531.826	339268	83603.4
SUM	.4209E+07		.7957E+08	.3788E+07	.1561E+07	.2998E+10	.3937E+09
MEAN	42519.7		803787	54899.4	22631.8	.3059E+08	.4017E+07
VARIANCE	.5532E+10		.5492E+12	.3499E+10	.3162E+09	.1929E+16	.5007E+14
STAND DEV	74380.0		741118	59154.6	17784.3	.4392E+08	.7076E+07

96/09/30

1STORET RETRIEVAL DATE 99/01/19

05563800 D 05
40 34 23.0 089 39 17.0 2
ILLINOIS RIVER AT PEKIN
17179 ILLINOIS TAZEWELL
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130003018 0003.810 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	3532.92	46602.2	62265.7	11475.2	6507.04	.2340E+07	325784
	PCTL(025.0)	7475.76	63581.7	123480	14741.2	8105.76	.3233E+07	430423
	PCTL(050.0)	14293.5	112190	283065	22783.3	12815.6	.5281E+07	734416
	PCTL(075.0)	36321.6	189321	646389	41796.3	20339.9	.1140E+08	.1665E+07
	PCTL(085.0)	56116.8	253939	779130	47734.8	26440.2	.1410E+08	.2242E+07
	PCTL(090.0)	74973.3	293799	.1036E+07	56505.1	29854.5	.2112E+08	.3586E+07
	PCTL(095.0)	103884	380530	.1365E+07	76107.1	34692.7	.3330E+08	.5070E+07
	NUMBER	135	134	134	134	121	135	125
	MAXIMUM	143884	982799	.1943E+07	219613	135923	.7475E+08	.7518E+07
	MINIMUM	316.614	5933.14	403.993	1877.03	2222.23	674761	58252.7
	SUM	.3713E+07	.2001E+08	.5953E+08	.4229E+07	.2083E+07	.1325E+10	.1707E+09
	MEAN	27508.3	149333	444295	31566.6	17216.5	.9818E+07	.1365E+07
	VARIANCE	.9487E+09	.1752E+11	.1731E+12	.7759E+09	.2649E+09	.1514E+15	.2317E+13
	STAND DEV	30802.0	132374	416068	27855.2	16278.7	.1230E+08	.1522E+07
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05558995 D 09
41 01 30.0 089 25 02.0 2
ILLINOIS RIVER AT LACON
17123 ILLINOIS MARSHALL
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130001018 0007.610 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	4310.70	55474.9	87918.4	10965.0	7416.43	.1003E+07	242396
	PCTL(025.0)	7033.47	55566.6	125540	13937.5	9250.32	.1980E+07	483552
	PCTL(050.0)	17897.6	66936.6	280908	18987.7	12380.9	.3961E+07	755128
	PCTL(075.0)	42341.1	215751	541750	28651.7	18295.7	.6280E+07	.1100E+07
	PCTL(085.0)	53263.5	220389	869044	37864.2	21488.8	.8582E+07	.1585E+07
	PCTL(090.0)	62891.3	220389	.1059E+07	44412.3	24595.6	.1090E+08	.1834E+07
	PCTL(095.0)	87810.5	286517	.1295E+07	64579.6	34773.6	.1790E+08	.2980E+07
	NUMBER	96	10	96	72	71	96	86
	MAXIMUM	150163	286517	.1915E+07	80809.4	95793.3	.3299E+08	.4614E+07
	MINIMUM	914.244	55474.9	21035.7	8004.35	4571.22	399678	167638
	SUM	.2729E+07	.1236E+07	.4016E+08	.1748E+07	.1122E+07	.5062E+09	.8822E+08
	MEAN	28427.3	123640	418363	24284.8	15803.1	.5273E+07	.1025E+07
	VARIANCE	.8874E+09	.7194E+10	.1518E+12	.2276E+09	.1619E+09	.2891E+14	.8387E+12
	STAND DEV	29789.6	84818.6	389647	15088.5	12724.9	.5377E+07	915840
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05556200 D 16
41 15 27.0 089 20 49.0 4
ILLINOIS RIVER AT HENNEPIN
17155 ILLINOIS PUTNAM
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130001025 0006.240 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	3398.07	44617.3	96656.3	10261.1	7551.28	754642	215211
	PCTL(025.0)	6418.58	46440.3	139008	12339.9	9812.34	.1293E+07	355126
	PCTL(050.0)	21116.6	54692.8	280368	20113.4	13176.8	.2286E+07	611114
	PCTL(075.0)	46488.9	209063	570930	26591.3	18613.9	.4776E+07	.1042E+07
	PCTL(085.0)	63883.8	248545	771309	34433.8	24401.4	.6815E+07	.1259E+07
	PCTL(090.0)	72503.0	248545	971849	40949.5	25501.7	.1133E+08	.1708E+07
	PCTL(095.0)	96764.1	276377	.1205E+07	54746.8	37281.7	.1553E+08	.3284E+07
	NUMBER	97	10	97	73	72	96	86
	MAXIMUM	151651	276377	.2087E+07	93851.5	53398.3	.7119E+08	.1100E+08
	MINIMUM	853.294	44617.3	64563.4	8243.30	4832.28	285061	81445.9
	SUM	.3001E+07	.1150E+07	.4046E+08	.1721E+07	.1154E+07	.4610E+09	.8585E+08
	MEAN	30940.5	115007	417202	23578.4	16032.0	.4802E+07	998285
	VARIANCE	.9381E+09	.8468E+10	.1426E+12	.2591E+09	.8245E+08	.7602E+14	.2002E+13
	STAND DEV	30628.8	92024.7	377628	16096.9	9080.46	.8719E+07	.1415E+07
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05543500 D 23
41 19 40.0 088 43 10.0 2
ILLINOIS RIVER AT MARSEILLES, IL
17099 ILLINOIS LA SALLE
UPPER MISSISSIPPI RIVER 071791
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07120005001 0005.420 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	2699.58	27572.9	65938.8	9320.43	7173.17	276700	69687.5
	PCTL(025.0)	8839.85	40518.0	92546.2	12572.9	9228.74	499463	136301
	PCTL(050.0)	23193.2	73139.5	166975	17322.6	12986.0	982206	254047
	PCTL(075.0)	41456.5	115135	340185	25298.9	16758.4	.3417E+07	664513
	PCTL(085.0)	53139.4	150702	476593	34288.2	21979.6	.6489E+07	.1471E+07
	PCTL(090.0)	61467.4	181554	605828	49234.4	26084.3	.1056E+08	.1751E+07
	PCTL(095.0)	78495.5	257477	720392	61791.0	29935.4	.1495E+08	.2741E+07
	NUMBER	163	180	160	180	170	164	164
	MAXIMUM	164132	974179	.1596E+07	226497	50097.3	.1125E+09	.1623E+08
	MINIMUM	413.163	4077.69	6675.33	6253.53	5002.72	23409.0	23409.0
	SUM	.4896E+07	.1726E+08	.4233E+08	.4303E+07	.2529E+07	.6550E+09	.1246E+09
	MEAN	30041.2	95903.0	264613	23908.1	14881.8	.3994E+07	760364
	VARIANCE	.8196E+09	.9520E+10	.5964E+11	.5257E+09	.6308E+08	.1016E+15	.2703E+13
	STAND DEV	28629.7	97570.8	244232	22930.0	7942.29	.1008E+08	.1644E+07
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05559900 D 30
40 43 30.0 089 32 58.0 2
ILLINOIS RIVER AT WATER COMPANY AT PEORIA, IL
17143 ILLINOIS PEORIA
UPPER MISSISSIPPI RIVER 071790
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130001
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	3926.66	45760.7	82346.6	10150.5	5400.78	.1468E+07	226538
	PCTL(025.0)	5992.48	64563.4	138081	13592.3	7078.78	.2491E+07	372170
	PCTL(050.0)	15426.2	115696	273464	23193.2	11175.9	.5534E+07	692560
	PCTL(075.0)	39158.8	190292	710683	34498.5	18333.4	.8093E+07	.1262E+07
	PCTL(085.0)	47573.0	220174	883499	40330.3	24191.0	.1057E+08	.1652E+07
	PCTL(090.0)	70011.0	230422	.1020E+07	46340.0	27900.9	.1176E+08	.2135E+07
	PCTL(095.0)	91607.7	300972	.1468E+07	61273.2	37190.0	.1807E+08	.2636E+07
	NUMBER	115	115	117	116	114	117	106
	MAXIMUM	316377	889810	.1838E+07	181258	80097.4	.2944E+08	.3902E+07
	MINIMUM	339.807	25070.2	17799.4	5933.14	1699.04	525893	105718
	SUM	.3273E+07	.1643E+08	.5395E+08	.3304E+07	.1755E+07	.7560E+09	.1025E+09
	MEAN	28467.9	142947	461190	28488.1	15396.4	.6461E+07	967070
	VARIANCE	.1582E+10	.1465E+11	.1807E+12	.5412E+09	.1664E+09	.3061E+14	.6390E+12
	STAND DEV	39775.3	121057	425165	23264.4	12901.4	.5532E+07	799393
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05570520 D 31
40 16 49.0 090 04 53.0 2
ILLINOIS RIVER AT POWER COMPANY AT HAVANA, IL
17125 ILLINOIS MASON
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130003005 0007.380 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	4271.86		70550.5	12513.5	6343.07	.2201E+07	319851
	PCTL(025.0)	9228.74		137433	15857.7	8198.53	.4082E+07	487597
	PCTL(050.0)	20776.8		337111	24315.1	11650.5	.7227E+07	.1003E+07
	PCTL(075.0)	38214.8		.1040E+07	44552.5	22438.1	.1578E+08	.2658E+07
	PCTL(085.0)	64994.9		.1336E+07	55145.9	28317.3	.2427E+08	.3354E+07
	PCTL(090.0)	77659.4		.1415E+07	59439.3	29903.0	.3986E+08	.3781E+07
	PCTL(095.0)	123690		.1601E+07	109893	34023.9	.6224E+08	.6094E+07
	NUMBER	101		101	69	69	100	100
	MAXIMUM	309047		.2709E+07	191522	65291.6	.2238E+09	.1891E+08
	MINIMUM	371.091		33225.6	9061.53	2966.57	158577	96872.1
	SUM	.3678E+07		.6106E+08	.2421E+07	.1147E+07	.1829E+10	.2042E+09
	MEAN	36423.0		604605	35096.8	16627.2	.1829E+08	.2042E+07
	VARIANCE	.2430E+10		.3409E+12	.9406E+09	.1390E+09	.1176E+16	.8438E+13
	STAND DEV	49303.8		583943	30670.4	11792.5	.3429E+08	.2904E+07
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05586100 D 32
39 42 10.0 090 38 40.0 2
ILLINOIS RIVER AT VALLEY CITY
17149 ILLINOIS PIKE
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130011
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01							
STATION PCTL(010.0)	2996.78	45942.0	76396.2	11534.0	6834.98	.2050E+07	305827
PCTL(025.0)	6229.80	69579.6	187703	18689.4	9611.69	.4296E+07	545634
PCTL(050.0)	13818.8	151295	512570	34131.8	17661.9	.1271E+08	.1464E+07
PCTL(075.0)	31769.3	263162	.1239E+07	59978.7	31111.3	.2632E+08	.2886E+07
PCTL(085.0)	48921.5	330962	.1487E+07	70609.8	36785.5	.3595E+08	.4058E+07
PCTL(090.0)	63727.4	396442	.1715E+07	84013.4	43473.8	.5219E+08	.5164E+07
PCTL(095.0)	79644.3	516507	.2255E+07	113248	51942.0	.7771E+08	.7060E+07
NUMBER	142	157	143	157	152	157	156
MAXIMUM	243211	.1035E+07	.3033E+07	294177	117714	.1314E+09	.1776E+08
MINIMUM	388.891	.0000000	8038.87	.0000000	.0000000	48328.2	48328.2
SUM	.3637E+07	.3159E+08	.1055E+09	.6985E+07	.3380E+07	.3258E+10	.3456E+09
MEAN	25618.5	201252	738100	44494.3	22237.4	.2075E+08	.2215E+07
VARIANCE	.1011E+10	.3042E+11	.4745E+12	.1435E+10	.2735E+09	.5685E+15	.6013E+13
STAND DEV	31806.1	174429	688902	37888.8	16538.6	.2384E+08	.2452E+07
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05586690 DA 04
39 12 04.0 089 58 45.0 2
MACOUPIN CREEK NEAR MACOUPIN, IL
17117 ILLINOIS MACOUPIN
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130012
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01							
STATION PCTL(010.0)	.970878		1.88782	2.10357	1.29450	107.875	32.3626
PCTL(025.0)	2.69688		21.0357	12.5405	7.28159	446.604	90.6153
PCTL(050.0)	26.9688		362.461	65.2646	46.2785	4627.85	744.340
PCTL(075.0)	67.9615		1747.58	201.565	130.745	35550.3	4266.47
PCTL(085.0)	194.715		3737.34	305.179	253.076	68641.1	8716.33
PCTL(090.0)	674.868		5631.09	1981.99	573.735	277024	31769.3
PCTL(095.0)	1833.34		16168.9	5679.64	1393.75	.2190E+07	375536
NUMBER	80		80	53	53	78	78
MAXIMUM	5825.27		26343.2	14951.5	4927.21	.1210E+08	.1026E+07
MINIMUM	.0000000		.0000000	.0000000	.0000000	.0000000	.0000000
SUM	22525.8		207774	44225.4	14942.2	.2770E+08	.3169E+07
MEAN	281.572		2597.18	834.441	281.929	355201	40630.9
VARIANCE	774210		.3230E+08	.6613E+07	651775	.2374E+13	.2312E+11
STAND DEV	879.892		5683.86	2571.69	807.326	.1541E+07	152056
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05587000 DA 06
39 14 03.0 090 23 40.0 2
MACOUPIN CREEK NEAR KANE, IL
17061 ILLINOIS GREENE
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130012
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01							
STATION PCTL(010.0)	3.18232		6.79615	8.89971	1.94176	690.403	165.049
PCTL(025.0)	10.7875		58.9000	23.5708	6.14890	4908.33	863.003
PCTL(050.0)	84.9519		1359.23	136.462	45.7392	34369.1	5695.82
PCTL(075.0)	339.807		6844.69	505.936	252.968	225557	32362.6
PCTL(085.0)	792.884		16809.1	2028.06	404.533	.1605E+07	128776
PCTL(090.0)	1569.59		36742.3	3014.04	1435.35	.5412E+07	431501
PCTL(095.0)	6846.85		55048.8	24067.0	6796.15	.1487E+08	.1197E+07
NUMBER	146		146	115	114	144	143
MAXIMUM	22569.7		130713	71208.5	22227.7	.6995E+08	.4293E+07
MINIMUM	.183388		.593314	.652646	.118663	49.6227	12.4057
SUM	132539		.1533E+07	356526	106471	.3459E+09	.3072E+08
MEAN	907.802		10502.9	3100.22	933.956	.2402E+07	214853
VARIANCE	.8318E+07		.5240E+09	.1016E+09	.1010E+08	.7238E+14	.4740E+12
STAND DEV	2884.11		22892.7	10083.5	3178.77	.8507E+07	688503
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05586040 DD 04
39 43 53.0 090 24 26.0 2
MAUVAISE TERRE CREEK NEAR MERRITT
17171 ILLINOIS SCOTT
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130011
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	3.23626		51.2408	112.730	86.0846	486.518	118.663
	PCTL(025.0)	11.8663		242.720	163.971	151.025	2330.11	323.626
	PCTL(050.0)	67.4221		1514.57	355.989	318.448	7659.15	1067.97
	PCTL(075.0)	202.374		4528.07	659.119	537.219	79935.6	8133.80
	PCTL(085.0)	322.871		8446.64	1225.46	929.131	260196	23732.6
	PCTL(090.0)	404.533		12675.4	1598.61	1102.49	618666	70097.4
	PCTL(095.0)	550.164		24207.2	2840.79	1628.16	.1234E+07	165049
	NUMBER	96		96	65	64	95	95
	MAXIMUM	1294.50		39482.4	3624.61	3495.16	.4064E+07	345201
	MINIMUM	.970878		7.55128	33.6571	8.41428	107.875	29.6657
	SUM	14201.2		432729	41864.5	31228.1	.1998E+08	.2154E+07
	MEAN	147.929		4507.58	644.069	487.939	210415	22674.1
	VARIANCE	42511.6		.5789E+08	642636	333110	.4029E+12	.3935E+10
	STAND DEV	206.183		7608.73	801.645	577.156	634780	62733.0
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05585275 DF 04
39 52 40.0 090 22 38.0 4
INDIAN CREEK AT ARENZVILLE
17017 ILLINOIS CASS
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130011
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.755127		2.50271	.744340	.345201	69.9032	21.5751
	PCTL(025.0)	3.55989		32.7510	5.09172	1.66128	350.056	92.7728
	PCTL(050.0)	20.2266		1510.26	31.1760	17.0874	8274.04	1272.93
	PCTL(075.0)	155.341		6407.80	110.356	45.3077	188431	15037.8
	PCTL(085.0)	317.747		14462.8	399.031	162.568	.1168E+07	51348.7
	PCTL(090.0)	352.752		23252.5	1597.09	258.901	.1779E+07	144143
	PCTL(095.0)	671.524		31941.9	2168.29	361.383	.5717E+07	388028
	NUMBER	94		94	65	65	94	94
	MAXIMUM	2696.88		253507	3358.70	846.606	.1380E+08	.2977E+07
	MINIMUM	.0539377		.140238	.228696	.107875	11.8663	2.15751
	SUM	14880.0		837930	20080.9	4820.71	.6550E+08	.7180E+07
	MEAN	158.298		8914.14	308.937	74.1648	696879	76383.6
	VARIANCE	159176		.7906E+09	549107	23545.4	.3997E+13	.1129E+12
	STAND DEV	398.968		28119.1	741.017	153.445	.1999E+07	336077
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05585000 DG 01
40 01 31.0 090 37 55.0 2
LA MOINE RIVER AT RIPLEY, IL
17009 ILLINOIS BROWN
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130010
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	4.96227	99.2453	9.70878	13.5923	1.40238	2017.27	598.708
	PCTL(025.0)	25.2428	302.051	249.192	49.8384	8.41428	11132.7	2211.45
	PCTL(050.0)	216.020	1407.77	7443.40	235.168	82.5678	84401.6	11154.3
	PCTL(075.0)	530.423	5644.04	21525.4	1439.92	381.339	906843	85782.4
	PCTL(085.0)	1089.54	16144.1	32670.1	3556.65	535.062	.4214E+07	282202
	PCTL(090.0)	3155.35	50269.9	50431.7	13646.2	1693.64	.7736E+07	.1062E+07
	PCTL(095.0)	7683.96	80906.5	95146.0	23812.4	3893.22	.1769E+08	.1988E+07
	NUMBER	147	148	147	147	133	148	147
	MAXIMUM	25883.6	265050	242720	67961.5	13637.6	.5612E+08	.1155E+08
	MINIMUM	.970878	7.28159	.970878	1.74758	.431502	224.381	86.3003
	SUM	162944	.2105E+07	.3101E+07	545630	90576.8	.4405E+09	.5048E+08
	MEAN	1108.46	14227.5	21098.0	3711.77	681.029	.2976E+07	343462
	VARIANCE	.8625E+07	.1294E+10	.1612E+10	.9733E+08	.3977E+07	.7275E+14	.1394E+13
	STAND DEV	2936.92	35978.6	40160.3	9865.77	1994.27	.8529E+07	.1181E+07
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05584500 DG 04
40 19 45.0 090 53 55.0 2
LA MOINE RIVER AT COLMAR, IL
17109 ILLINOIS MCDONOUGH
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130010
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01							
STATION PCTL(010.0)	2.48113	29.6657	4.69258	4.66022	.701190	809.066	258.901
PCTL(025.0)	11.3269	112.190	146.710	24.2720	3.66776	5043.17	916.941
PCTL(050.0)	127.832	817.156	5255.69	130.260	34.7359	31499.6	4902.94
PCTL(075.0)	322.871	2390.52	13978.0	544.177	165.319	282202	30534.1
PCTL(085.0)	559.496	5851.16	25188.9	1192.72	291.911	945376	90680.0
PCTL(090.0)	1281.02	11461.8	35728.3	2991.38	397.575	.1852E+07	150195
PCTL(095.0)	2420.72	37378.8	49363.8	11407.8	1611.66	.5721E+07	484145
NUMBER	147	147	147	147	115	145	145
MAXIMUM	40323.8	.1382E+07	230422	288027	17281.6	.2208E+09	.2880E+08
MINIMUM	.269688	3.50595	.280476	.107875	.0269688	39.9139	21.0357
SUM	124190	.2235E+07	.2015E+07	490555	44422.3	.3402E+09	.4032E+08
MEAN	844.829	15206.7	13713.1	3337.11	386.281	.2346E+07	278097
VARIANCE	.1504E+08	.1317E+11	.7283E+09	.5763E+09	.3137E+07	.3395E+15	.5752E+13
STAND DEV	3878.62	114784	26988.0	24007.2	1771.35	.1842E+08	.2398E+07
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05583915 DH 01
40 05 49.0 090 24 16.0 2
SUGAR CREEK NEAR FREDERICK, IL
17169 ILLINOIS SCHUYLER
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130003
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01							
STATION PCTL(010.0)	.0000000		.0000000	.0000000	.0000000	.0000000	.0000000
PCTL(025.0)	.0000000		.0000000	.0000000	.0000000	.0000000	.0000000
PCTL(050.0)	.0000000		.0000000	.0000000	.0000000	.0000000	.0000000
PCTL(075.0)	16.1813		485.439	.0000000	.0000000	7767.03	970.878
PCTL(085.0)	44.2289		10571.8	.0000000	.0000000	135276	14239.5
PCTL(090.0)	55.5558		13527.6	.0000000	.0000000	177779	22222.3
PCTL(095.0)	183.388		19903.0	485.434	53.9371	264292	33333.5
NUMBER	30		30	18	18	30	30
MAXIMUM	539.371		27777.9	485.434	53.9371	698817	61920.4
MINIMUM	.0000000		.0000000	.0000000	.0000000	.0000000	.0000000
SUM	1029.57		92474.0	485.434	53.9371	.1653E+07	182764
MEAN	34.3191		3082.47	26.9686	2.99651	55112.3	6092.12
VARIANCE	10675.4		.5225E+08	13091.5	161.623	.1967E+11	.1977E+09
STAND DEV	103.322		7228.42	114.418	12.7131	140265	14063.5
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05568915 DJ 02
40 54 27.0 090 05 12.0 4
SPOON R RT 150 2.5 MI SE DAHINDA
17095 ILLINOIS KNOX
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130005
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01							
STATION PCTL(010.0)	6.25677		2815.55	151.025	40.4533	2804.76	1251.35
PCTL(025.0)	14.8329		6364.65	175.297	64.7252	25890.1	2912.64
PCTL(050.0)	107.875		14956.4	381.043	210.627	107875	12945.0
PCTL(075.0)	223.302		27508.2	671.255	317.963	347251	38511.5
PCTL(085.0)	508.902		37202.4	778.321	329.290	.1470E+07	170012
PCTL(090.0)	981.666		37621.5	15776.8	1577.68	.2285E+07	188253
PCTL(095.0)	1792.89		45539.3	15776.8	1577.68	.1050E+08	.1079E+07
NUMBER	21		21	9	9	21	21
MAXIMUM	5218.47		89331.5	15776.8	1577.68	.1905E+08	.1759E+07
MINIMUM	5.60952		2187.71	151.025	40.4533	1812.31	560.952
SUM	10128.9		440899	18942.9	3000.01	.3585E+08	.3445E+07
MEAN	482.331		20995.2	2104.76	333.335	.1707E+07	164075
VARIANCE	.1355E+07		.4086E+09	.2633E+08	228743	.2101E+14	.1884E+12
STAND DEV	1164.10		20215.9	5132.24	478.271	.4584E+07	434081
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05568775 DJ 06
41 03 45.0 089 47 43.0 4
SPOON R RT 17 2 MI W WYOMING
17175 ILLINOIS STARK
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130005
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	10.7875		1240.57	18.8782	16.1813	1618.13	134.844
	PCTL(025.0)	12.6754		3237.88	32.3626	21.5751	5933.14	1699.04
	PCTL(050.0)	42.0714		6661.30	98.1666	63.1071	23786.5	3775.64
	PCTL(075.0)	66.9906		8880.84	169.904	101.403	110761	12675.4
	PCTL(085.0)	169.904		15210.4	202.806	107.606	155907	12972.0
	PCTL(090.0)	2601.95		65048.9	6793.99	1517.81	.7010E+07	758904
	PCTL(095.0)	2601.95		65048.9	6793.99	1517.81	.7010E+07	758904
	NUMBER	9		9	9	9	9	9
	MAXIMUM	2601.95		65048.9	6793.99	1517.81	.7010E+07	758904
	MINIMUM	10.7875		1240.57	18.8782	16.1813	1618.13	134.844
	SUM	3035.18		119581	7641.35	2020.78	.7378E+07	804028
	MEAN	337.242		13286.8	849.039	224.531	819857	89336.3
	VARIANCE	723535		.3923E+09	.4973E+07	236384	.5392E+13	.6306E+11
	STAND DEV	850.609		19809.1	2230.21	486.193	.2322E+07	251129
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05570000 DJ 08
40 29 10.0 090 20 34.0 4
SPOON R RT 95 0.4 MI NE SEVILLE
17057 ILLINOIS FULTON
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130005
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	22.6538		56.0952	35.0595	6.25677	10976.3	2394.83
	PCTL(025.0)	63.1071		2330.11	108.007	16.8825	29169.5	5393.77
	PCTL(050.0)	302.051		22575.6	411.652	163.971	239807	27562.2
	PCTL(075.0)	1229.78		66855.7	3132.70	863.003	.2780E+07	286949
	PCTL(085.0)	1999.47		113512	9261.64	1378.11	.7264E+07	661654
	PCTL(090.0)	4543.71		125998	13631.1	2646.18	.1342E+08	.1166E+07
	PCTL(095.0)	7831.75		173399	27562.1	4089.34	.4134E+08	.3168E+07
	NUMBER	143		143	111	109	142	142
	MAXIMUM	119202		.1290E+07	126214	8899.72	.1148E+09	.1402E+08
	MINIMUM	1.99569		1.51025	9.43909	2.15751	1510.26	539.377
	SUM	326783		.8265E+07	621589	88849.1	.8338E+09	.7423E+08
	MEAN	2285.19		57804.0	5599.90	815.130	.5872E+07	522792
	VARIANCE	.1108E+09		.1648E+11	.2456E+09	.2568E+07	.2874E+15	.2475E+13
	STAND DEV	10529.8		128411	15673.7	1602.63	.1695E+08	.1573E+07
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05569500 DJ 09
40 42 51.0 090 16 00.0 4
SPOON R N EDGE LONDON MILLS
17057 ILLINOIS FULTON
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130005
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	16.5589		32.3626	28.6409	4.53077	4908.33	1165.05
	PCTL(025.0)	48.0045		3648.34	81.9853	28.6949	21575.1	4487.61
	PCTL(050.0)	155.341		15372.2	290.724	147.250	120211	13484.4
	PCTL(075.0)	550.164		43490.0	792.237	281.501	657781	75728.5
	PCTL(085.0)	1037.11		64018.6	1918.46	614.890	.1634E+07	169149
	PCTL(090.0)	1593.32		94067.3	3189.34	870.123	.4325E+07	399786
	PCTL(095.0)	5501.64		120518	21793.0	3631.09	.1407E+08	.1405E+07
	NUMBER	147		147	115	113	147	147
	MAXIMUM	25081.0		339808	27508.2	9805.87	.2736E+08	.3357E+07
	MINIMUM	.647252		2.42720	5.63649	.728159	399.139	102.482
	SUM	143266		.5267E+07	251025	60289.5	.2467E+09	.2552E+08
	MEAN	974.599		35832.6	2182.83	533.535	.1678E+07	173652
	VARIANCE	.8640E+07		.3098E+10	.3620E+08	.2014E+07	.2166E+14	.2413E+12
	STAND DEV	2939.55		55662.1	6017.35	1419.46	.4654E+07	491308
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05570370 DJB 18
40 27 32.0 090 08 00.0 2
BIG CREEK NEAR BRYANT, IL
17057 ILLINOIS FULTON
UPPER MISSISSIPPI RIVER 071791
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130005
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	1.51025		18.6085	9.70878	5.98708	120.820	43.1502
	PCTL(025.0)	4.36086		48.3282	17.5189	12.4596	679.615	124.596
	PCTL(050.0)	11.3269		129.450	36.6776	26.0519	1736.79	361.922
	PCTL(075.0)	33.9807		407.769	61.1653	35.5989	6796.15	970.879
	PCTL(085.0)	69.0402		755.128	81.1913	44.4447	12297.8	2861.93
	PCTL(090.0)	91.9097		1003.24	91.6940	46.6022	30097.2	4444.46
	PCTL(095.0)	112.892		1445.53	177.455	65.5882	37778.0	6170.47
	NUMBER	87		88	71	71	86	86
	MAXIMUM	185.006		2111.12	267.477	235.708	93981.0	11326.9
	MINIMUM	.593314		1.02482	.231932	.231932	32.3626	14.0238
	SUM	2530.17		28744.1	3610.94	2128.98	689994	114687
	MEAN	29.0824		326.637	50.8583	29.9857	8023.18	1333.57
	VARIANCE	1614.76		197548	2551.80	957.258	.2280E+09	.5697E+07
	STAND DEV	40.1841		444.464	50.5154	30.9396	15101.0	2386.97
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05570380 DJBZ01
40 28 24.0 090 08 37.0 2
SLUG RUN NEAR BRYANT,IL
17057 ILLINOIS FULTON
UPPER MISSISSIPPI RIVER 071791
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130005
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.0916939		.100324	.0501621	.0248113	6.04102	2.37326
	PCTL(025.0)	.248113		.409926	.107875	.0647252	23.7326	6.04102
	PCTL(050.0)	.895366		1.29450	.399139	.210357	86.8397	20.4963
	PCTL(075.0)	2.53507		4.58470	1.48544	.485439	345.201	69.0402
	PCTL(085.0)	4.61167		9.30425	2.60519	.647252	699.032	126.754
	PCTL(090.0)	6.32689		15.8577	3.23626	.744340	981.666	210.357
	PCTL(095.0)	7.01190		21.5751	6.68288	2.58901	2416.41	309.602
	NUMBER	89		89	70	70	89	89
	MAXIMUM	10.3560		189.861	13.3981	6.04102	6645.12	776.703
	MINIMUM	.0000000		.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	174.971		610.113	96.4116	35.6988	40342.0	6461.13
	MEAN	1.96596		6.85520	1.37731	.509982	453.280	72.5970
	VARIANCE	5.56604		478.457	5.96827	1.02677	.1178E+07	17549.4
	STAND DEV	2.35925		21.8737	2.44300	1.01330	1085.42	132.474
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05568800 DJL 01
41 01 06.0 089 50 07.0 2
INDIAN CREEK NEAR WYOMING, IL
17175 ILLINOIS STARK
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130005
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	1.40238		22.6538	2.89106	1.51025	213.591	58.2527
	PCTL(025.0)	4.04533		285.870	6.69906	4.95148	841.428	161.813
	PCTL(050.0)	14.0238		1533.99	13.9375	10.0108	4077.69	647.252
	PCTL(075.0)	30.2590		3322.56	32.3626	18.8782	18986.1	2281.56
	PCTL(085.0)	54.4770		4983.84	46.8718	25.4586	54369.2	5911.57
	PCTL(090.0)	75.5128		6105.21	88.6735	33.2256	103560	12340.9
	PCTL(095.0)	97.1957		10086.3	135.491	75.9443	168717	18554.6
	NUMBER	145		143	112	112	145	145
	MAXIMUM	2632.16		59223.6	4942.31	1162.90	.1881E+08	.1776E+07
	MINIMUM	.0539377		.129449	.593315	.237326	33.2256	5.93314
	SUM	9556.05		413571	10268.0	3205.34	.3214E+08	.2900E+07
	MEAN	65.9038		2892.10	91.6781	28.6191	221696	20002.1
	VARIANCE	82351.3		.3432E+08	236154	12813.5	.2915E+13	.2382E+11
	STAND DEV	286.969		5859.02	485.957	113.197	.1707E+07	154339
96/09/30								

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1STORET RETRIEVAL DATE 99/01/19
                                                                 05568005        DK  12
                                                                40 26 51.0 089 41 28.0 2
                                                                MACKINAW RIVER BELOW GREEN VALLEY
                                                                17179   ILLINOIS         TAZEWELL
                                                                UPPER MISSISSIPPI RIVER  071700
 /TYPA/AMBNT/STREAM                                             ILLINOIS RIVER
                                                                21ILAMB   870314             07130004
                                                                0000 FEET DEPTH

                      00610     00625     00630     00665     00666     00530     00535
   DATE              NH3+NH4-  TOT KJEL  NO2&NO3   PHOS-TOT  PHOS-DIS  RESIDUE   RESIDUE
   FROM              N TOTAL      N      N-TOTAL                       TOT NFLT  VOL NFLT
    TO                 LB/D      LB/D      LB/D     LB/D P    LB/D P     LB/D      LB/D
 80/10/01
 STATION  PCTL(010.0) 4.31501            105.718   11.2190   1.72601   1618.13   431.501
          PCTL(025.0) 34.0886            1941.76   34.9516   8.30641   10086.3   2119.75
          PCTL(050.0) 105.718            18446.7   128.372   64.1859    108819   14649.5
          PCTL(075.0) 520.822            64509.5   631.071   353.022    583390   59331.5
          PCTL(085.0) 760.521             105179   1555.56   592.236  .1715E+07   180152
          PCTL(090.0) 1078.75             142719   2679.62   849.519  .4666E+07   545850
          PCTL(095.0) 5720.09             206312   14865.2   1872.18  .1932E+08 .1833E+07
          NUMBER          135                134       106       106       136       136
          MAXIMUM     40725.1             347019   53333.6   12889.0  .3204E+09 .1388E+08
          MINIMUM    .0000000            .0000000  .0000000  .0000000  .0000000  .0000000
          SUM          151097            .6510E+07   236427   65224.2  .8150E+09 .5158E+08
          MEAN        1119.24            48589.2   2230.44   615.323  .5992E+07   379298
          VARIANCE   .1847E+08           .4949E+10 .5565E+08 .3743E+07 .1059E+16 .2503E+13
          STAND DEV   4298.16            70352.1   7460.55   1934.87  .3254E+08 .1582E+07
 96/09/30
1STORET RETRIEVAL DATE 99/01/19
                                                                 05567510        DK  13
                                                                40 35 12.0 089 16 42.0 2
                                                                MACKINAW RIVER BELOW CONGERVILLE
                                                                17179   ILLINOIS         TAZEWELL
                                                                UPPER MISSISSIPPI RIVER  071700
 /TYPA/AMBNT/STREAM                                             ILLINOIS RIVER
                                                                21ILAMB   870314             07130004
                                                                0000 FEET DEPTH

                      00610     00625     00630     00665     00666     00530     00535
   DATE              NH3+NH4-  TOT KJEL  NO2&NO3   PHOS-TOT  PHOS-DIS  RESIDUE   RESIDUE
   FROM              N TOTAL      N      N-TOTAL                       TOT NFLT  VOL NFLT
    TO                 LB/D      LB/D      LB/D     LB/D P    LB/D P     LB/D      LB/D

 80/10/01
 STATION  PCTL(010.0) 3.45201            54.3368   4.74652   .970878   841.428   204.963
          PCTL(025.0) 13.9699            1870.56   15.5341   10.7875   5534.01   1024.82
          PCTL(050.0) 67.4221            13980.6   76.5915   47.4652   25965.6   3559.89
          PCTL(075.0) 265.050            42087.6   273.140   141.209    172061   20172.7
          PCTL(085.0) 485.439            72578.5   412.947   243.313    448115   51958.2
          PCTL(090.0) 638.191            95901.1   697.738   315.535  .1048E+07  95901.1
          PCTL(095.0) 1717.38             159871   2898.07   770.230  .2191E+07   210357
          NUMBER          144                143       115       114       145       145
          MAXIMUM     15442.4             269138   12131.1   8986.02  .3589E+08 .4600E+07
          MINIMUM     .296657            1.55880  .0916940  .0916940   142.935   28.5870
          SUM         57035.8            .5035E+07  51718.8   28024.2  .8818E+08 .1063E+08
          MEAN        396.082            35214.2   449.729   245.826    608188   73325.7
          VARIANCE   .2109E+07           .3058E+10 .2148E+07   914030  .1003E+14 .1638E+12
          STAND DEV   1452.43            55306.6   1465.71   956.049  .3167E+07   404789
 96/09/30
1STORET RETRIEVAL DATE 99/01/19
                                                                 05556500        DQ  03
                                                                41 21 55.0 089 29 55.0 2
                                                                BIG BUREAU CREEK AT PRINCETON, IL
                                                                17011   ILLINOIS         BUREAU
                                                                UPPER MISSISSIPPI RIVER  071700
 /TYPA/AMBNT/STREAM                                             ILLINOIS RIVER
                                                                21ILAMB   870314             07130001
                                                                0000 FEET DEPTH

                      00610     00625     00630     00665     00666     00530     00535
   DATE              NH3+NH4-  TOT KJEL  NO2&NO3   PHOS-TOT  PHOS-DIS  RESIDUE   RESIDUE
   FROM              N TOTAL      N      N-TOTAL                       TOT NFLT  VOL NFLT
    TO                 LB/D      LB/D      LB/D     LB/D P    LB/D P     LB/D      LB/D

 80/10/01
 STATION  PCTL(010.0) 1.98491   264.295   89.1050   27.9937   21.5481   491.588   183.928
          PCTL(025.0) 5.50164   264.295   744.340   36.9150   30.2590   2246.51   641.859
          PCTL(050.0) 18.9861   264.295   4002.18   55.3401   47.2494   7184.50   2152.11
          PCTL(075.0) 67.6379   264.295   13106.9   144.175   104.855   49660.4   7357.10
          PCTL(085.0) 167.638   264.295   24272.0   335.276   190.939    148933   16877.1
          PCTL(090.0) 222.223   264.295   27470.5   474.490   328.480    262137   37459.7
          PCTL(095.0) 445.525   264.295   44444.7   1162.36   589.647    660219   93360.7
          NUMBER          146         1       141       117       109       146       146
          MAXIMUM     10668.9   264.295    124337   15968.8   4875.96  .2313E+08 .2944E+07
          MINIMUM     .485439   264.295   14.8868   13.4790   11.0033   75.5128   12.9450
          SUM         31078.1   264.295  .1576E+07  42005.6   22939.2  .5836E+08 .7512E+07
          MEAN        212.864   264.295   11182.1   359.022   210.452    399766   51454.5
          VARIANCE   .1093E+07           .3335E+09 .2689E+07   461125  .5026E+13 .7845E+11
          STAND DEV   1045.47            18264.5   1639.97   679.062  .2241E+07   280097
 96/09/30
```

1STORET RETRIEVAL DATE 99/01/19

05557000 DQD 01
41 21 54.0 089 34 08.0 2
WEST BUREAU CREEK AT WYANET, IL
17011 ILLINOIS BUREAU
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130001
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01							
STATION PCTL(010.0)	.269688		5.33983	.355989	.177994	60.4102	35.5989
PCTL(025.0)	3.08523		287.812	2.39321	1.17045	451.458	196.873
PCTL(050.0)	6.47252		1930.97	9.06153	8.41428	1823.09	819.853
PCTL(075.0)	18.9861		5124.08	32.8265	32.4597	8365.73	2076.60
PCTL(085.0)	58.6842		8306.40	70.2484	49.1912	27292.5	4315.01
PCTL(090.0)	83.0209		11165.1	105.448	63.6465	57562.3	8932.08
PCTL(095.0)	320.390		21143.6	166.128	119.094	92287.3	13764.9
NUMBER	104		100	76	70	104	104
MAXIMUM	8764.87		48543.9	2947.48	1092.89	.1820E+08	.2292E+07
MINIMUM	.0215751		.0539377	.0431501	.0269688	4.31501	1.07875
SUM	13768.6		465239	6833.46	2852.60	.3968E+08	.4964E+07
MEAN	132.390		4652.39	89.9140	40.7514	381582	47738.6
VARIANCE	756571		.5978E+08	153954	19087.2	.5814E+13	.9427E+11
STAND DEV	869.811		7732.32	392.370	138.156	.2411E+07	307043
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05554490 DS 06
40 49 50.0 088 34 29.0 2
VERMILION RIVER AT MC DOWELL
17105 ILLINOIS LIVINGSTON
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130002
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01							
STATION PCTL(010.0)	3.18232		7.55127	6.40779	.809065	1143.48	290.724
PCTL(025.0)	11.3269		818.774	18.5546	9.81666	5933.14	1213.60
PCTL(050.0)	75.7285		10520.5	65.3725	36.6668	33446.8	5501.64
PCTL(075.0)	210.087		33463.0	212.946	102.482	137865	18511.4
PCTL(085.0)	378.103		53851.4	441.750	267.962	406119	49191.2
PCTL(090.0)	544.770		85782.5	709.604	322.547	716055	76187.0
PCTL(095.0)	1156.42		129343	2330.11	1165.05	.1423E+07	155341
NUMBER	146		143	116	112	145	145
MAXIMUM	6652.67		438621	41816.8	14255.7	.1777E+08	.2851E+07
MINIMUM	.0000000		.0000000	.0000000	.0000000	.0000000	.0000000
SUM	39150.2		.4203E+07	82773.6	30651.0	.6363E+08	.9843E+07
MEAN	268.152		29396.8	713.566	273.669	438852	67887.6
VARIANCE	480770		.2785E+10	.1587E+08	.1906E+07	.3224E+13	.8687E+11
STAND DEV	693.376		52780.7	3984.11	1380.85	.1795E+07	294737
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05555300 DS 07
41 12 30.0 088 55 51.0 2
VERMILION RIVER NEAR LEONORE, IL
17099 ILLINOIS LA SALLE
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130002
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01							
STATION PCTL(010.0)	5.50164	1504.86	154.262	42.1793	14.7034	2427.20	1008.63
PCTL(025.0)	42.8805	1504.86	5258.92	207.121	116.505	7351.71	3236.26
PCTL(050.0)	264.295	1504.86	28047.6	513.487	385.115	47249.4	12060.5
PCTL(075.0)	587.921	1504.86	88393.0	1208.20	827.404	403886	73139.5
PCTL(085.0)	1065.81	1504.86	182525	2340.90	1281.56	.1339E+07	211651
PCTL(090.0)	2364.63	1504.86	229289	4382.98	1834.96	.2737E+07	399625
PCTL(095.0)	4902.93	1504.86	367262	15455.8	5790.75	.1178E+08	.1264E+07
NUMBER	143	1	140	113	108	142	142
MAXIMUM	12168.3	1504.86	718288	79773.8	24013.0	.6616E+08	.1032E+08
MINIMUM	.647252	1504.86	4.74652	9.70878	1.94176	431.501	332.256
SUM	119617	1504.86	.1184E+08	414723	143512	.3422E+09	.5280E+08
MEAN	836.484	1504.86	84640.8	3670.11	1328.82	.2409E+07	371896
VARIANCE	.3391E+07		.1818E+11	.1597E+09	.1215E+08	.8383E+14	.2108E+13
STAND DEV	1841.57		134857	12639.9	3486.58	.9156E+07	.1452E+07
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05550000 DT 06
42 09 59.0 088 17 25.0 2
FOX RIVER AT ALGONQUIN, IL
17111 ILLINOIS MCHENRY
UPPER MISSISSIPPI RIVER 071692
/TYPA/AMBNT/STREAM FOX RIVER
21ILAMB 870314 07120006001 0013.900 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	77.3467	3106.81	183.388	252.428	36.6776	9126.26	7659.15
	PCTL(025.0)	188.782	5130.55	733.552	388.891	64.9410	47260.2	22006.6
	PCTL(050.0)	447.359	7641.89	5555.58	640.133	134.844	101360	47195.5
	PCTL(075.0)	1388.90	12072.3	16159.7	970.878	319.311	239807	89105.0
	PCTL(085.0)	2045.32	14511.4	21359.3	1334.96	444.986	293421	128156
	PCTL(090.0)	2325.79	18425.1	28047.6	1966.03	621.362	443152	159224
	PCTL(095.0)	3635.40	27616.1	32966.7	2381.89	1402.38	875085	264079
	NUMBER	156	155	156	156	153	156	156
	MAXIMUM	6675.33	34174.9	72643.2	5705.53	6103.59	.1219E+07	335115
	MINIMUM	25.6204	1057.18	38.0261	137.433	2.56204	2373.26	2373.26
	SUM	147745	.1506E+07	.1612E+07	136908	49141.7	.2985E+08	.1102E+08
	MEAN	947.083	9722.39	10334.5	877.614	321.188	191405	70654.1
	VARIANCE	.1256E+07	.4729E+08	.1731E+09	700694	437193	.5945E+11	.5055E+10
	STAND DEV	1120.93	6876.98	13157.6	837.074	661.206	243827	71100.7
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05551000 DT 09
41 59 40.0 088 17 40.0 2
FOX RIVER AT SOUTH ELGIN, IL
17089 ILLINOIS KANE
UPPER MISSISSIPPI RIVER 071600
/TYPA/AMBNT/STREAM FOX RIVER
21ILAMB 870314 07120007006 0031.320 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	194.176	4470.35	1721.69	577.673	114.132	23732.6	14320.5
	PCTL(025.0)	427.187	6094.96	3300.99	733.553	228.696	77130.8	32039.0
	PCTL(050.0)	793.963	8336.60	8621.40	992.022	407.769	134089	56634.6
	PCTL(075.0)	1872.72	14865.2	20242.8	1467.10	641.858	253507	102735
	PCTL(085.0)	2538.31	17087.5	27912.8	1995.69	771.309	334414	145632
	PCTL(090.0)	3155.35	23565.4	34660.3	2598.72	932.043	493206	190939
	PCTL(095.0)	4441.23	33657.1	40971.1	3668.84	1757.29	.1030E+07	327186
	NUMBER	143	142	143	143	140	143	143
	MAXIMUM	6731.42	52351.9	77832.0	6515.13	6099.27	.2066E+07	546280
	MINIMUM	26.3216	2524.28	185.546	204.100	13.7002	3667.76	3020.51
	SUM	194833	.1695E+07	.1986E+07	190150	81948.1	.3524E+08	.1239E+08
	MEAN	1362.47	11942.1	13888.8	1329.72	585.344	246478	86659.5
	VARIANCE	.1799E+07	.8645E+08	.2202E+09	.1060E+07	587342	.1262E+12	.8587E+10
	STAND DEV	1341.51	9298.00	14840.3	1029.87	766.382	355258	92671.1
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05549600 DT 22
42 16 46.5 088 13 37.5 4
FOX RIVER AT BURTONS BRIDGE, IL
17111 ILLINOIS MCHENRY
UPPER MISSISSIPPI RIVER 071600
/TYPA/AMBNT/STREAM FOX RIVER
21ILAMB 870314 07120006001 0027.210 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	57.4436	2144.02	191.479	134.305	28.5870	31337.8	20064.8
	PCTL(025.0)	85.7610	3581.46	285.870	142.935	38.2958	57174.0	22006.6
	PCTL(050.0)	755.128	5738.97	14325.8	422.871	72.2765	86731.8	32551.4
	PCTL(075.0)	869.476	8694.75	18338.8	504.857	84.1428	99676.8	36246.1
	PCTL(085.0)	978.160	10097.1	18511.4	586.842	334.414	107012	43365.9
	PCTL(090.0)	3300.99	12470.4	56850.3	601.945	440.132	126214	67314.2
	PCTL(095.0)	3300.99	12470.4	56850.3	601.945	440.132	126214	67314.2
	NUMBER	9	9	9	9	9	9	9
	MAXIMUM	3300.99	12470.4	56850.3	601.945	440.132	126214	67314.2
	MINIMUM	57.4436	2144.02	191.479	134.305	28.5870	31337.8	20064.8
	SUM	7390.53	59094.1	130545	3415.60	1178.27	728563	306204
	MEAN	821.170	6566.01	14505.0	379.511	130.919	80951.4	34022.7
	VARIANCE	998419	.1176E+08	.3197E+09	30470.7	22149.2	.8649E+09	.2157E+09
	STAND DEV	999.209	3429.94	17882.2	174.559	148.826	29410.0	14687.2
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05546700 DT 35
42 28 45.0 088 10 42.0 2
FOX RIVER NEAR CHANNEL LAKE, IL
17097 ILLINOIS LAKE
UPPER MISSISSIPPI RIVER 071600
/TYPA/AMBNT/STREAM FOX RIVER
21ILAMB 870314 07120006007 0003.560 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01							
STATION PCTL(010.0)	33.6571	1694.18	382.958	102.266	21.5751	10571.8	7443.40
PCTL(025.0)	72.9238	2209.29	2239.49	158.577	37.3249	23743.4	12028.1
PCTL(050.0)	243.151	3883.52	5378.12	271.846	87.2173	66213.8	25032.5
PCTL(075.0)	667.964	6622.47	9648.37	558.417	254.154	157444	55124.3
PCTL(085.0)	987.060	9344.71	13603.1	816.185	355.989	216829	66224.6
PCTL(090.0)	1133.12	10679.7	18932.1	1295.37	770.230	252930	74757.6
PCTL(095.0)	1601.95	13025.9	28479.1	1926.65	1114.89	344123	102697
NUMBER	111	108	111	109	108	111	111
MAXIMUM	4765.93	22168.4	56634.6	24401.8	22640.9	513271	166128
MINIMUM	7.55128	717.371	56.6346	40.9926	5.66345	1758.37	1758.37
SUM	55483.7	556196	874201	75854.4	47517.0	.1160E+08	.3959E+07
MEAN	499.853	5149.96	7875.68	695.912	439.972	104584	35669.5
VARIANCE	532373	.1658E+08	.8291E+08	.5532E+07	.4808E+07	.1222E+11	.9818E+09
STAND DEV	729.639	4073.07	9105.71	2352.20	2192.84	110564	31334.9
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05551540 DT 38
41 44 02.0 088 20 02.0 2
FOX RIVER AT MONTGOMERY, IL
17089 ILLINOIS KANE
UPPER MISSISSIPPI RIVER 071600
/TYPA/AMBNT/STREAM FOX RIVER
21ILAMB 870314 07120007006 0010.410 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01							
STATION PCTL(010.0)	81.1223	4660.21	849.519	700.111	166.991	39158.8	15242.8
PCTL(025.0)	254.856	6585.79	2769.70	932.043	286.409	98652.0	40318.4
PCTL(050.0)	768.612	10291.3	9320.43	1383.50	597.382	202266	80906.5
PCTL(075.0)	1978.43	19061.6	23840.5	2261.07	1030.75	489323	144499
PCTL(085.0)	2661.82	26699.1	32632.3	2988.15	1371.10	852647	213162
PCTL(090.0)	3859.24	31866.4	41596.7	3647.27	1576.60	.1115E+07	416831
PCTL(095.0)	6731.42	38511.5	61456.6	4621.38	1889.98	.1665E+07	557716
NUMBER	100	99	101	100	97	101	100
MAXIMUM	11154.3	70194.5	179289	13778.9	3119.76	.9463E+07	.1455E+07
MINIMUM	44.5525	3559.89	175.297	518.881	43.9053	3883.51	3344.14
SUM	159129	.1494E+07	.1795E+07	196529	74388.5	.5116E+08	.1526E+08
MEAN	1591.29	15100.7	17780.0	1965.29	766.892	506609	152635
VARIANCE	.4690E+07	.1595E+09	.6294E+09	.3319E+07	408158	.1147E+13	.4800E+11
STAND DEV	2165.75	12630.7	25089.2	1821.97	638.873	.1071E+07	219095
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05552500 DT 46
41 23 14.0 088 47 21.0 4
FOX RIVER AT DAYTON, IL
17099 ILLINOIS LA SALLE
UPPER MISSISSIPPI RIVER 071600
/TYPA/AMBNT/STREAM FOX RIVER
21ILAMB 870314 07120007001 0005.040 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01							
STATION PCTL(010.0)	80.9066	6271.87	463.325	969.045	114.564	39374.5	18446.7
PCTL(025.0)	146.441	10132.7	6962.81	1367.32	304.208	141209	50971.1
PCTL(050.0)	487.057	15631.1	28694.8	1941.76	884.578	317283	126408
PCTL(075.0)	2195.16	23662.4	67725.1	3495.16	1601.95	797415	210627
PCTL(085.0)	3775.64	36310.8	112298	6307.26	2437.98	.1800E+07	418125
PCTL(090.0)	4441.76	54072.6	151101	9765.42	2811.77	.3297E+07	689324
PCTL(095.0)	7645.13	100594	265805	20923.5	6657.80	.6756E+07	.1363E+07
NUMBER	165	164	165	165	163	164	164
MAXIMUM	61489.0	939810	466992	220594	34520.1	.3263E+09	.3915E+08
MINIMUM	15.3722	717.371	28.5870	133.226	6.58040	987.060	987.060
SUM	386948	.5266E+07	.9581E+07	958692	319161	.5882E+09	.8827E+08
MEAN	2345.14	32115.2	58067.3	5810.25	1958.04	.3587E+07	538246
VARIANCE	.4132E+08	.6666E+10	.6642E+10	.3441E+09	.1981E+08	.6673E+15	.9609E+13
STAND DEV	6428.33	81651.1	81498.8	18551.0	4451.25	.2583E+08	.3099E+07
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05551995 DTB 01
41 32 37.0 088 41 12.0 2
SOMONAUK CREEK AT SHERIDAN, IL
17099 ILLINOIS LA SALLE
UPPER MISSISSIPPI RIVER 071600
/TYPA/AMBNT/STREAM FOX RIVER
21ILAMB 870314 07120007
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	2.37326	29.6657	59.3315	4.15320	1.77994	652.646	237.326
	PCTL(025.0)	3.72170	70.1190	142.396	6.95796	2.31932	841.428	280.476
	PCTL(050.0)	6.95796	172.601	1402.38	11.1651	4.31502	6763.78	1245.96
	PCTL(075.0)	21.3593	480.585	1708.75	32.0390	5.33983	10145.7	3203.90
	PCTL(085.0)	39.6442	566.346	3833.35	56.6346	5.66345	20388.5	3964.42
	PCTL(090.0)	260.843	1402.38	4757.30	221.576	112.190	56375.7	7011.90
	PCTL(095.0)	260.843	1402.38	4757.30	221.576	112.190	56375.7	7011.90
	NUMBER	9	9	9	9	9	9	9
	MAXIMUM	260.843	1402.38	4757.30	221.576	112.190	56375.7	7011.90
	MINIMUM	2.37326	29.6657	59.3315	4.15320	1.77994	652.646	237.326
	SUM	354.100	3258.38	14228.2	369.149	144.877	107951	19288.1
	MEAN	39.3444	362.042	1580.91	41.0165	16.0974	11994.5	2143.12
	VARIANCE	7040.82	185160	.2828E+07	4863.46	1300.29	.3162E+09	.5139E+07
	STAND DEV	83.9096	430.302	1681.71	69.7385	36.0596	17784.3	2267.14
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05551700 DTD 02
41 40 18.0 088 26 29.0 2
BLACKBERRY CREEK NEAR YORKVILLE, IL
17093 ILLINOIS KENDALL
UPPER MISSISSIPPI RIVER 071600
/TYPA/AMBNT/STREAM FOX RIVER
21ILAMB 870314 07120007
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	1.56419	32.3626	64.7252	4.02915	2.15751	533.983	194.176
	PCTL(025.0)	3.72170	72.4923	223.302	6.95796	4.04533	1423.96	453.077
	PCTL(050.0)	9.70878	138.080	601.945	17.6916	7.60522	4757.30	1348.44
	PCTL(075.0)	26.8610	365.050	1400.22	52.5892	18.8782	15539.5	3840.36
	PCTL(085.0)	51.7802	539.377	2582.54	70.0812	27.1846	32092.9	6003.26
	PCTL(090.0)	81.9853	737.868	3796.13	100.108	39.1587	42880.5	9190.98
	PCTL(095.0)	201.943	1893.21	4598.73	284.683	142.342	82524.6	20194.3
	NUMBER	146	142	146	146	141	146	146
	MAXIMUM	1540.68	7703.38	20981.8	1279.29	874.438	395579	69385.4
	MINIMUM	.970878	9.70878	26.6992	.825247	.461167	107.875	75.5128
	SUM	8170.63	63014.4	225931	9565.64	4348.11	.2890E+07	601506
	MEAN	55.9632	443.763	1547.47	65.5180	30.8377	19798.9	4119.90
	VARIANCE	36669.4	.1033E+07	.9242E+07	31093.6	8717.46	.2557E+10	.8533E+08
	STAND DEV	191.493	1016.68	3040.22	176.334	93.3673	50575.8	9237.46
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05550500 DTG 02
42 01 35.0 088 15 20.0 2
POPLAR CREEK AT ELGIN, IL
17089 ILLINOIS KANE
UPPER MISSISSIPPI RIVER 071600
/TYPA/AMBNT/STREAM FOX RIVER
21ILAMB 870314 07120006001 0001.170 OFF
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.404532	5.50164	10.0324	.307445	.280476	43.1502	25.8901
	PCTL(025.0)	1.05718	19.6765	18.1231	1.00464	.554803	138.080	69.0402
	PCTL(050.0)	3.88351	56.0952	56.0952	3.02051	1.60842	533.983	269.688
	PCTL(075.0)	20.3884	189.860	196.333	16.1813	6.95796	2945.00	1170.45
	PCTL(085.0)	30.2051	323.788	299.894	29.3421	11.7045	9304.25	2135.93
	PCTL(090.0)	40.9926	509.819	446.604	39.4284	19.3097	11844.7	3398.08
	PCTL(095.0)	78.5333	679.615	789.648	70.1190	58.9000	25296.8	5420.74
	NUMBER	142	139	142	142	135	141	141
	MAXIMUM	180.691	3894.84	3074.45	859.551	913.273	322332	56408.0
	MINIMUM	.0442289	1.57498	2.80476	.0970878	.0485439	8.63003	4.31502
	SUM	2367.34	26467.4	28639.5	2929.75	2008.91	892050	206864
	MEAN	16.6714	190.413	201.686	20.6320	14.8808	6326.60	1467.12
	VARIANCE	844.494	169702	159727	5819.34	6487.29	.7853E+09	.2533E+08
	STAND DEV	29.0602	411.948	399.659	76.2846	80.5437	28024.0	5033.33
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05548280 DTK 04
42 26 37.0 088 14 51.0 2
NIPPERSINK CREEK NEAR SPRING GROVE, IL
17111 ILLINOIS MCHENRY
UPPER MISSISSIPPI RIVER 071600
/TYPA/AMBNT/STREAM FOX RIVER
21ILAMB 870314 07120006025 0001.040 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	8.09065	241.641	437.974	22.2763	7.82097	3203.90	1213.60
	PCTL(025.0)	21.3593	385.115	789.108	36.4079	13.1608	5307.47	2281.57
	PCTL(050.0)	58.1448	660.197	1706.59	61.7047	24.7574	11629.0	4757.30
	PCTL(075.0)	133.981	1057.18	3401.85	108.738	45.3077	21898.7	8532.94
	PCTL(085.0)	204.370	1813.92	5048.57	179.181	72.2765	48786.7	13980.6
	PCTL(090.0)	255.557	2627.84	6796.15	272.601	144.661	74326.1	24503.9
	PCTL(095.0)	433.443	3741.12	8983.86	433.497	258.361	108997	34223.5
	NUMBER	129	127	129	128	126	128	128
	MAXIMUM	2201.20	7003.81	16643.0	2693.54	2649.74	620338	136074
	MINIMUM	1.56419	154.262	188.782	10.6797	2.69688	647.252	469.258
	SUM	17020.9	134165	355961	17054.4	9728.03	.3717E+07	.1157E+07
	MEAN	131.945	1056.41	2759.39	133.237	77.2066	29045.8	9046.30
	VARIANCE	72364.5	.1399E+07	.9037E+07	76656.4	67179.8	.4026E+10	.2220E+09
	STAND DEV	269.007	1183.02	3006.21	276.869	259.191	63455.9	14900.9
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05542000 DV 04
41 17 10.0 088 21 35.0 2
MAZON RIVER NEAR COAL CITY, IL
17063 ILLINOIS GRUNDY
UPPER MISSISSIPPI RIVER 071500
/TYPA/AMBNT/STREAM KANKAKEE RIVER
21ILAMB 870314 07120005005 0010.970 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.755128	56.0952	3.34414	1.22870	.323626	364.079	140.238
	PCTL(025.0)	4.74652	75.5128	758.364	8.89972	5.37219	1870.56	674.221
	PCTL(050.0)	27.5082	313.378	8198.53	32.5352	25.0271	9385.16	2756.22
	PCTL(075.0)	126.430	577.133	26461.8	175.405	113.269	68112.5	14045.4
	PCTL(085.0)	279.397	690.942	41089.7	326.323	228.426	202450	47896.7
	PCTL(090.0)	436.895	9223.35	74434.0	930.425	478.967	368934	57842.8
	PCTL(095.0)	824.276	9223.35	105195	1855.56	882.744	691158	180152
	NUMBER	139	9	135	106	98	140	131
	MAXIMUM	1871.64	9223.35	154801	9718.49	7475.76	.4614E+07	396982
	MINIMUM	.0323626	56.0952	.323626	.269688	.0873790	21.0357	16.1813
	SUM	21166.3	11833.9	.3027E+07	42762.9	21839.5	.2297E+08	.3287E+07
	MEAN	152.276	1314.88	22428.7	403.424	222.852	164075	25096.2
	VARIANCE	103637	.8843E+07	.1190E+10	.1703E+07	682624	.2688E+12	.3945E+10
	STAND DEV	321.927	2973.85	34503.1	1305.15	826.211	518531	62810.6
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05573650 E 05
39 47 48.0 089 06 15.0 2
SANGAMON RIVER NEAR NIANTIC
17115 ILLINOIS MACON
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130006003 0023.140 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	194.176	13721.7	30.2051	442.289	377.564	979.293	453.076
	PCTL(025.0)	1014.57	13721.7	1471.42	925.032	789.108	5582.55	3171.54
	PCTL(050.0)	2456.32	13721.7	19582.1	1834.96	1451.46	85955.1	21440.2
	PCTL(075.0)	4493.01	13721.7	68252.7	3800.99	2922.34	484857	81230.1
	PCTL(085.0)	5978.45	13721.7	108631	5887.30	4116.52	890619	127293
	PCTL(090.0)	6607.37	13721.7	127261	14514.6	8986.02	.1288E+07	159008
	PCTL(095.0)	8802.63	13721.7	185761	16688.3	15903.0	.1728E+07	243906
	NUMBER	108	1	108	67	67	108	107
	MAXIMUM	17492.0	13721.7	577673	36893.4	35598.9	.2627E+08	.2990E+07
	MINIMUM	.0000000	13721.7	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	355730	13721.7	.5516E+07	294023	246116	.7387E+08	.1002E+08
	MEAN	3293.80	13721.7	51075.5	4388.41	3673.37	684057	93697.5
	VARIANCE	.9886E+07		.6829E+10	.5360E+08	.4809E+08	.7065E+13	.1002E+12
	STAND DEV	3144.35		82638.6	7321.76	6935.35	.2658E+07	316575
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05573504 E 06
39 49 44.0 088 57 35.0 2
SANGAMON R. AT L DECATUR WATER INTAKE AT DECATUR
17115 ILLINOIS MACON
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130006004 0003.460 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	1.14887	12.6754	2.78858	2.68070	1.53183	651.028	191.479
	PCTL(025.0)	3.29559	19.1479	270.551	4.30962	2.04963	937.977	202.806
	PCTL(050.0)	32.7941	491.912	3171.54	16.3970	3.99139	3279.41	1639.71
	PCTL(075.0)	83.8192	679.615	3951.48	147.250	90.6153	41262.3	9061.53
	PCTL(085.0)	229.235	5043.17	42179.3	412.623	325.514	48705.7	9169.41
	PCTL(090.0)	3581.46	16116.6	85955.0	3581.46	2148.88	.1683E+07	214888
	PCTL(095.0)	3581.46	16116.6	85955.0	3581.46	2148.88	.1683E+07	214888
	NUMBER	8	8	8	8	8	8	8
	MAXIMUM	3581.46	16116.6	85955.0	3581.46	2148.88	.1683E+07	214888
	MINIMUM	1.14887	12.6754	2.78858	2.68070	1.53183	651.028	191.479
	SUM	3969.42	22997.9	139849	4193.59	2579.47	.1786E+07	237957
	MEAN	496.178	2874.73	17481.1	524.199	322.433	223303	29744.7
	VARIANCE	.1559E+07	.3144E+08	.9662E+09	.1545E+07	557169	.3483E+12	.5610E+10
	STAND DEV	1248.95	5607.76	31085.2	1243.35	746.437	590239	74903.4
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05573540 E 09
39 49 52.0 088 58 35.0 2
SANGAMON RIVER AT RT 48 AT DECATUR
17115 ILLINOIS MACON
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130006004 0002.470 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	1.40238	8543.73	.916940	.308524	.215751	105.718	25.8901
	PCTL(025.0)	14.7250	8543.73	10.3560	5.74975	3.11760	523.196	226.538
	PCTL(050.0)	81.5538	8543.73	6783.20	84.1428	31.3378	22977.4	5474.67
	PCTL(075.0)	522.117	8543.73	49180.4	544.770	289.322	162514	25582.7
	PCTL(085.0)	938.516	8543.73	87778.1	1180.70	750.813	311490	54369.2
	PCTL(090.0)	1240.57	8543.73	103776	1613.81	919.637	436679	77778.1
	PCTL(095.0)	2480.05	8543.73	124418	3914.26	2718.46	.1171E+07	183388
	NUMBER	159	1	159	115	114	159	155
	MAXIMUM	7119.77	8543.73	307445	10517.3	4410.48	.8105E+07	872928
	MINIMUM	.0000000	8543.73	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	79014.8	8543.73	.5412E+07	80187.2	44649.0	.4286E+08	.6314E+07
	MEAN	496.949	8543.73	34042.3	697.280	391.658	269603	40737.1
	VARIANCE	.1177E+07		.2930E+10	.2715E+07	802991	.8312E+12	.1418E+11
	STAND DEV	1084.93		54132.6	1647.88	896.097	911714	119114
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05573800 E 16
39 44 32.0 089 23 57.0 2
SANGAMON RIVER AT ROBY, IL
17167 ILLINOIS SANGAMON
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130006003 0005.380 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	40.4533	1542.62	273.464	415.051	288.836	1240.57	566.346
	PCTL(025.0)	263.216	1542.62	740.025	640.780	496.334	7076.62	2243.81
	PCTL(050.0)	1156.96	3702.28	11542.7	1048.55	815.538	56634.6	10787.5
	PCTL(075.0)	3172.61	8630.03	55922.6	2292.35	1591.16	455019	54045.6
	PCTL(085.0)	4315.01	8630.03	100130	3111.13	2265.38	.1317E+07	155448
	PCTL(090.0)	6407.79	9665.63	216037	4211.45	2808.00	.2485E+07	236463
	PCTL(095.0)	9029.17	9665.63	258221	7952.03	4148.88	.4307E+07	382850
	NUMBER	106	6	107	79	78	107	106
	MAXIMUM	22478.0	9665.63	315363	12093.9	5810.71	.7872E+07	.3249E+07
	MINIMUM	.539377	1542.62	44.1750	18.3388	14.0238	92.7728	46.3864
	SUM	258288	33357.2	.5305E+07	150259	98952.1	.7369E+08	.1043E+08
	MEAN	2436.68	5559.53	49587.6	1902.01	1268.62	688700	98397.8
	VARIANCE	.1250E+08	.1093E+08	.6437E+10	.5162E+07	.1429E+07	.2165E+13	.1134E+12
	STAND DEV	3536.80	3307.17	80235.0	2272.14	1195.45	.1471E+07	336894
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05578000 E 24
40 00 37.0 089 50 42.0 2
SANGAMON RIVER AT PETERSBURG, IL
17129 ILLINOIS MENARD
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130008
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	94.9303	7923.44	1121.90	939.811	679.615	8511.37	2535.07
	PCTL(025.0)	383.173	7923.44	3365.71	1592.24	1234.09	60712.3	14617.1
	PCTL(050.0)	1051.78	7923.44	35048.7	2330.11	1669.91	318448	45307.7
	PCTL(075.0)	3176.93	48463.0	121020	5890.00	2983.83	.2267E+07	263432
	PCTL(085.0)	4714.15	48463.0	214456	7857.64	4583.62	.4256E+07	572818
	PCTL(090.0)	6450.94	48463.0	238620	8757.32	5592.26	.5840E+07	823305
	PCTL(095.0)	12621.4	48463.0	289478	25523.8	8414.28	.1085E+08	.1580E+07
	NUMBER	98	2	98	73	73	97	97
	MAXIMUM	17540.5	48463.0	528697	67357.3	31273.1	.7161E+08	.7276E+07
	MINIMUM	.0000000	7923.44	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	253213	56386.5	.8126E+07	442533	215115	.2547E+09	.3465E+08
	MEAN	2583.80	28193.2	82919.9	6062.10	2946.78	.2626E+07	357310
	VARIANCE	.1394E+08	.8217E+09	.1266E+11	.1301E+09	.1691E+08	.6102E+14	.8876E+12
	STAND DEV	3734.01	28665.8	112542	11409.3	4113.07	.7811E+07	942145
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05583000 E 25
40 07 25.0 089 59 05.0 2
SANGAMON RIVER NEAR OAKFORD, IL
17125 ILLINOIS MASON
UPPER MISSISSIPPI RIVER 071791
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130008
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	113.809	1877.03	1752.98	929.077	624.760	25372.3	5598.73
	PCTL(025.0)	245.416	4271.86	5393.77	1708.75	1208.20	109763	19849.1
	PCTL(050.0)	1434.74	12703.4	79256.0	3194.19	2478.70	689971	113701
	PCTL(075.0)	3632.16	34261.2	249198	8932.09	4571.76	.5124E+07	552322
	PCTL(085.0)	5890.00	54903.2	362057	18563.2	7598.74	.9528E+07	.1143E+07
	PCTL(090.0)	6580.39	82006.8	462786	21893.3	10636.5	.1312E+08	.1598E+07
	PCTL(095.0)	11715.3	120389	673628	30097.3	15650.6	.1830E+08	.2196E+07
	NUMBER	123	144	123	143	134	146	146
	MAXIMUM	52449.0	.1203E+07	912626	112611	35480.2	.6170E+08	.1785E+08
	MINIMUM	17.7994	341.426	30.2051	297.197	130.152	4271.86	1585.77
	SUM	376169	.5249E+07	.1995E+08	.1212E+07	572153	.6552E+09	.9559E+08
	MEAN	3058.29	36453.5	162255	8477.04	4269.80	.4488E+07	654768
	VARIANCE	.3286E+08	.1121E+11	.4363E+11	.1740E+09	.2838E+08	.7574E+14	.3330E+13
	STAND DEV	5732.91	105890	208887	13193.5	5327.56	.8703E+07	.1824E+07
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05576500 E 26
39 50 34.0 089 32 52.0 2
SANGAMON RIVER AT RIVERTON, IL
17167 ILLINOIS SANGAMON
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130008
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	45.3076	742.182	771.309	638.622	449.301	12103.6	2292.35
	PCTL(025.0)	158.415	1953.08	1760.53	968.290	672.064	47346.5	10873.8
	PCTL(050.0)	706.044	5511.35	27890.6	1720.61	1363.81	236571	35598.9
	PCTL(075.0)	2623.53	16747.6	113269	4255.14	2468.73	.1294E+07	163108
	PCTL(085.0)	4410.48	32092.9	170443	7018.91	3452.01	.2963E+07	363971
	PCTL(090.0)	5703.37	55771.5	251242	12284.8	4383.51	.4256E+07	526324
	PCTL(095.0)	6742.21	78727.4	357283	18248.0	7098.20	.1042E+08	.1190E+07
	NUMBER	140	139	141	141	131	142	140
	MAXIMUM	20631.2	184737	435061	38425.2	18511.4	.4454E+08	.9126E+07
	MINIMUM	3.99139	235.492	172.601	51.0250	18.5546	927.729	463.864
	SUM	284594	.2364E+07	.1074E+08	613159	278205	.2466E+09	.4594E+08
	MEAN	2032.81	17013.6	76224.4	4348.64	2123.70	.1736E+07	328158
	VARIANCE	.9938E+07	.8529E+09	.1195E+11	.4067E+08	.6504E+07	.2170E+14	.1303E+13
	STAND DEV	3152.52	29205.1	109339	6377.47	2550.44	.4658E+07	.1141E+07
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05572125 E 28
40 00 08.0 088 38 07.0 2
SANGAMON RIVER AT ALLERTON PARK NEAR MONTICELLO
17147 ILLINOIS PIATT
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130006
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	5.01621	51.7802	28.5870	16.9904	11.8663	776.703	258.901
	PCTL(025.0)	14.5632	129.450	498.384	41.8017	30.7445	4584.70	1175.84
	PCTL(050.0)	83.6034	643.153	8106.83	120.389	73.7868	35987.2	4180.17
	PCTL(075.0)	302.051	2558.26	32848.1	478.157	200.325	194014	26753.1
	PCTL(085.0)	681.557	8467.14	73862.2	1253.51	621.362	629992	107681
	PCTL(090.0)	895.365	12058.3	82039.2	2261.07	869.476	990296	156311
	PCTL(095.0)	1726.01	16624.1	125998	3961.18	1786.42	.1848E+07	207121
	NUMBER	141	141	138	133	140	140	140
	MAXIMUM	27427.3	149327	243529	32912.8	7618.70	.2181E+08	.3047E+07
	MINIMUM	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	77287.8	632185	.3897E+07	121697	54843.1	.6371E+08	.8899E+07
	MEAN	548.141	4483.58	28245.0	915.013	391.736	455103	63566.5
	VARIANCE	.5956E+07	.1961E+09	.2084E+10	.1039E+08	948454	.3862E+13	.7482E+11
	STAND DEV	2440.69	14005.5	45658.1	3223.56	973.886	.1965E+07	273537
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05570910 E 29
40 18 40.0 088 19 20.0 2
SANGAMON RIVER AT FISHER
17019 ILLINOIS CHAMPAIGN
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130006
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	1.24057	11.1651	1.72601	2.31932	1.13269	284.791	80.9066
	PCTL(025.0)	5.93314	45.8470	256.743	8.57609	6.31071	1618.13	285.870
	PCTL(050.0)	38.8351	286.948	5072.84	40.5611	21.0357	13894.3	2006.48
	PCTL(075.0)	135.923	996.769	15793.0	138.836	70.1190	77621.7	10226.6
	PCTL(085.0)	227.293	2832.25	25825.4	483.281	242.396	132147	20172.7
	PCTL(090.0)	388.351	4004.87	42287.1	755.667	394.392	264893	33225.6
	PCTL(095.0)	755.127	6982.23	60599.0	1380.37	1030.21	648061	120389
	NUMBER	145	144	142	144	139	142	142
	MAXIMUM	2126.22	94353.1	189321	8986.02	2642.95	.4149E+07	607878
	MINIMUM	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	21819.6	342828	.2089E+07	49455.3	19968.1	.1956E+08	.3351E+07
	MEAN	150.480	2380.75	14712.8	343.439	143.655	137770	23602.2
	VARIANCE	111008	.8356E+08	.6960E+09	.1097E+07	128195	.1884E+12	.6064E+10
	STAND DEV	333.178	9141.38	26383.0	1047.63	358.042	434104	77876.8
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05582000 EI 02
40 08 01.0 089 44 08.0 2
SALT CREEK NEAR GREENVIEW, IL
17125 ILLINOIS MASON
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130009
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	42.2872	517.802	958.743	215.967	148.544	5609.52	1963.33
	PCTL(025.0)	104.639	927.729	3624.61	383.497	267.315	42071.4	6472.52
	PCTL(050.0)	335.762	4358.16	27465.1	819.853	485.439	249192	34196.5
	PCTL(075.0)	965.485	10356.0	93204.3	2144.02	1061.49	.1718E+07	171738
	PCTL(085.0)	1699.04	33657.1	134521	3539.39	1359.23	.2645E+07	267963
	PCTL(090.0)	2679.62	33657.1	164478	5270.79	2567.97	.4412E+07	514565
	PCTL(095.0)	3765.39	271846	242374	10571.8	3866.25	.8696E+07	903565
	NUMBER	147	10	147	128	127	146	146
	MAXIMUM	34951.6	271846	419560	70874.1	33009.9	.7131E+08	.8228E+07
	MINIMUM	5.07014	517.802	124.596	107.875	18.2309	1391.59	431.501
	SUM	172621	340746	.9129E+07	443098	155629	.3747E+09	.4279E+08
	MEAN	1174.29	34074.6	62104.8	3461.70	1225.43	.2566E+07	293093
	VARIANCE	.1157E+08	.7074E+10	.6405E+10	.1020E+09	.1020E+08	.7579E+14	.1006E+13
	STAND DEV	3402.23	84107.5	80036.0	10100.2	3194.07	.8706E+07	.1003E+07
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05578500 EI 06
40 06 54.0 089 02 57.0 2
SALT CREEK NEAR ROWELL, IL
17039 ILLINOIS DE WITT
UPPER MISSISSIPPI RIVER 071791
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130009009 0024.360 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	3.82958	56.6346	81.8774	21.3593	13.4844	517.802	177.994
	PCTL(025.0)	8.09065	336.032	200.648	36.6776	21.4672	3322.56	560.952
	PCTL(050.0)	53.5601	441.750	2254.59	94.1752	40.9926	20539.5	3139.17
	PCTL(075.0)	200.486	3926.66	8495.18	242.720	119.742	126969	15188.9
	PCTL(085.0)	302.590	7767.03	15771.9	404.533	199.030	240859	25242.8
	PCTL(090.0)	409.387	7767.03	20750.9	598.061	275.729	323626	37217.0
	PCTL(095.0)	857.609	8630.03	34174.9	1097.09	386.733	416852	60113.6
	NUMBER	148	10	148	130	125	146	146
	MAXIMUM	2278.87	8630.03	83064.0	3463.88	863.003	.2224E+07	237002
	MINIMUM	.377564	56.6346	33.2256	2.42720	6.47252	76.5915	38.2958
	SUM	24471.2	23645.7	.1129E+07	32714.2	12449.1	.1906E+08	.2310E+07
	MEAN	165.346	2364.57	7634.75	251.648	99.5929	130611	15825.8
	VARIANCE	84737.3	.1071E+08	.1789E+09	214895	20008.1	.1058E+12	.1263E+10
	STAND DEV	291.097	3273.11	13377.7	463.568	141.450	325362	35542.8
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05581500 EID 04
40 13 20.0 089 24 12.0 2
SUGAR CREEK NEAR HARTSBURG, IL
17107 ILLINOIS LOGAN
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130009
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	11.3269	110.033	509.711	136.505	116.505	2200.66	474.652
	PCTL(025.0)	26.2137	207.121	1339.81	201.727	188.890	5663.46	776.703
	PCTL(050.0)	72.8159	379.721	6599.82	377.780	305.503	21602.0	4336.59
	PCTL(075.0)	176.053	19201.8	15892.7	702.269	477.672	186657	17637.6
	PCTL(085.0)	503.778	24245.0	27314.0	1200.11	704.858	519149	53398.3
	PCTL(090.0)	818.073	24245.0	34412.2	1351.14	906.800	843586	104488
	PCTL(095.0)	1695.80	63840.6	72546.1	6144.58	1346.50	.1941E+07	201511
	NUMBER	100	11	100	85	82	99	99
	MAXIMUM	12880.3	63840.6	155341	64401.6	15563.7	.3300E+08	.4025E+07
	MINIMUM	.323626	110.033	19.0939	66.8288	2.37326	93.8515	6.47252
	SUM	57914.5	116526	.1627E+07	144015	58579.7	.9854E+08	.1136E+08
	MEAN	579.145	10593.3	16276.5	1694.29	714.387	995401	114783
	VARIANCE	.3538E+07	.3833E+09	.8378E+09	.5213E+08	.3767E+07	.2111E+14	.2994E+12
	STAND DEV	1881.03	19579.3	28945.6	7220.58	1940.99	.4595E+07	547217
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05580000 EIE 04
40 15 20.0 089 07 40.0 2
KICKAPOO CREEK AT WAYNESVILLE, IL
17039 ILLINOIS DE WITT
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130009
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	1.02482	25.8901	11.0680	1.48868	.409926	305.827	75.5128
	PCTL(025.0)	6.47252	216.830	215.211	6.20283	2.96657	1553.41	307.445
	PCTL(050.0)	30.4208	388.351	4174.78	21.6829	8.73790	11985.0	1510.26
	PCTL(075.0)	73.8946	5636.49	11921.3	127.617	45.9549	111209	11920.2
	PCTL(085.0)	169.904	5636.49	20131.7	262.137	106.365	272774	26817.8
	PCTL(090.0)	298.006	34250.4	24757.4	493.314	232.148	426119	53020.8
	PCTL(095.0)	418.556	34250.4	34822.2	1200.55	364.079	.1440E+07	147077
	NUMBER	149	7	147	123	120	147	147
	MAXIMUM	7960.12	34250.4	95901.1	28835.1	6291.29	.1022E+08	.1310E+07
	MINIMUM	.0863002	25.8901	.792884	.0970878	.0323626	27.5082	4.85439
	SUM	25242.4	43185.7	.1403E+07	62635.1	18314.1	.4027E+08	.4584E+07
	MEAN	169.412	6169.39	9548.53	509.229	152.617	273972	31186.7
	VARIANCE	521044	.1573E+09	.2279E+09	.7721E+07	529089	.1082E+13	.1532E+11
	STAND DEV	721.834	12543.7	15098.0	2778.76	727.385	.1040E+07	123779
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05580500 EIE 05
40 11 30.0 089 21 40.0 2
KICKAPOO CREEK NEAR LINCOLN, IL
17107 ILLINOIS LOGAN
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130009
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	3.39807	48.5439	19.9569	4.20714	1.01403	997.848	210.357
	PCTL(025.0)	17.2601	129.450	319.311	10.0108	5.44770	3452.01	614.890
	PCTL(050.0)	54.4770	359.225	4732.49	29.6657	10.6797	13106.9	1769.16
	PCTL(075.0)	132.687	5519.44	15102.6	146.926	67.9615	142185	12405.7
	PCTL(085.0)	296.657	23991.5	24067.0	379.290	147.088	416701	45755.3
	PCTL(090.0)	457.391	23991.5	35534.1	1328.75	294.176	753035	175341
	PCTL(095.0)	765.915	61747.9	50377.8	3158.59	689.323	.6662E+07	749734
	NUMBER	109	10	107	88	87	110	110
	MAXIMUM	5412.11	61747.9	128641	22848.0	4950.40	.1560E+08	.3051E+07
	MINIMUM	.323626	48.5439	3.39807	.593315	.124057	231.932	32.3626
	SUM	27289.5	93780.1	.1300E+07	73142.0	19374.0	.7959E+08	.1308E+08
	MEAN	250.363	9378.01	12150.8	831.160	222.690	723618	118975
	VARIANCE	562911	.3934E+09	.3753E+09	.1028E+08	682238	.5920E+13	.1911E+12
	STAND DEV	750.274	19834.5	19373.8	3206.89	825.977	.2433E+07	437221
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05579500 EIG 01
39 57 00.0 089 23 10.0 2
LAKE FORK NEAR CORNLAND, IL
17107 ILLINOIS LOGAN
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130009
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	2.53507	23.7326	6.45634	2.61598	.722765	453.077	129.450
	PCTL(025.0)	8.63003	200.109	249.192	7.28159	2.53507	2912.64	388.351
	PCTL(050.0)	34.5201	746.498	4509.19	41.4241	13.7002	29126.4	2912.64
	PCTL(075.0)	93.3122	1974.12	10248.2	146.117	33.3335	148803	13996.8
	PCTL(085.0)	158.037	1974.12	16666.7	348.545	80.0435	280390	31607.5
	PCTL(090.0)	226.538	2059.88	26993.6	591.966	143.474	506777	42621.6
	PCTL(095.0)	348.222	2059.88	42680.9	1059.66	524.274	953694	152644
	NUMBER	147	7	147	126	124	146	146
	MAXIMUM	5436.92	2059.88	102018	12233.1	3473.59	.7771E+07	966995
	MINIMUM	.188782	23.7326	.453076	.545849	.0992453	76.0522	23.1932
	SUM	22480.3	6747.60	.1353E+07	47668.3	13349.9	.3964E+08	.5402E+07
	MEAN	152.927	963.942	9208.83	378.320	107.660	271548	37000.4
	VARIANCE	373399	663312	.2184E+09	.2070E+07	170807	.8105E+12	.1878E+11
	STAND DEV	611.064	814.440	14780.1	1439.00	413.288	900328	137043
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05577505 EL 01
39 49 16.0 089 41 16.0 2
SPRING CR AT BURNS LANE BRIDGE AT SPRINGFIELD,IL
17167 ILLINOIS SANGAMON
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130008
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.118663	5.69582	.0431501	.0323626	.0809065	11.8663	4.74652
	PCTL(025.0)	1.72601	5.69582	43.1502	3.30099	1.72601	799.357	154.801
	PCTL(050.0)	14.0238	5.69582	1302.60	21.0896	12.4057	6996.80	1035.60
	PCTL(075.0)	41.5320	334.953	4466.04	70.1190	35.4910	42718.6	5954.72
	PCTL(085.0)	91.1547	334.953	7011.90	136.193	61.1653	73355.2	9816.66
	PCTL(090.0)	120.820	334.953	9546.97	174.758	90.6153	103506	16871.7
	PCTL(095.0)	207.121	334.953	14023.8	625.677	294.338	304176	39050.9
	NUMBER	142	2	141	116	114	143	143
	MAXIMUM	835.387	334.953	33797.3	3550.39	783.175	.4220E+07	337111
	MINIMUM	.0000000	5.69582	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	7089.75	340.649	477112	14676.4	5496.34	.1300E+08	.1543E+07
	MEAN	49.9278	170.324	3383.77	126.521	48.2135	90917.6	10793.1
	VARIANCE	11161.2	54205.0	.3072E+08	188152	14867.1	.1588E+12	.1594E+10
	STAND DEV	105.647	232.820	5542.74	433.765	121.931	398516	39933.2
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05576022 EO 01
39 45 50.0 089 33 43.0 2
SOUTH FORK SANGAMON RIVER BELOW ROCHESTER
17167 ILLINOIS SANGAMON
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130007
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.511869	90.6153	2.20066	1.56419	.819853	226.538	53.9377
	PCTL(025.0)	12.4057	382.958	56.0952	17.5298	6.31071	2767.00	596.551
	PCTL(050.0)	103.021	1574.98	4786.43	134.790	48.3282	53641.0	6601.97
	PCTL(075.0)	585.763	31488.8	26699.2	1178.54	315.535	357607	39827.6
	PCTL(085.0)	1111.12	34174.9	49374.6	2356.00	854.373	915053	128156
	PCTL(090.0)	1348.44	34174.9	58560.1	4045.33	1467.10	.1719E+07	226538
	PCTL(095.0)	2384.05	144175	98436.2	8591.19	2265.38	.3453E+07	449840
	NUMBER	145	10	145	127	126	145	145
	MAXIMUM	18155.4	144175	160195	21683.0	8582.56	.1555E+08	.2259E+07
	MINIMUM	.0000000	90.6153	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	87299.9	225547	.2958E+07	176295	62652.2	.9190E+08	.1189E+08
	MEAN	602.068	22554.7	20400.7	1388.15	497.240	633845	82021.1
	VARIANCE	.3316E+07	.1995E+10	.1030E+10	.1045E+08	.1644E+07	.3034E+13	.6108E+11
	STAND DEV	1821.16	44667.2	32103.5	3233.37	1282.20	.1742E+07	247144
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05575500 EO 02
39 34 44.0 089 23 31.0 2
SOUTH FORK SANGAMON RIVER AT KINCAID, IL
17021 ILLINOIS CHRISTIAN
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130007
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	18.1231	66.8827	7.01190	7.33553	.420714	1434.74	350.595
	PCTL(025.0)	48.0585	196.333	51.3487	34.9516	2.21144	4854.39	1094.94
	PCTL(050.0)	157.714	591.157	2297.75	105.718	8.68397	25900.9	5339.83
	PCTL(075.0)	470.606	3069.06	15611.7	589.000	199.354	174936	21958.0
	PCTL(085.0)	724.923	7985.47	32751.0	2189.87	768.612	330994	48004.6
	PCTL(090.0)	1251.35	13139.2	43236.4	3346.29	1173.68	.1491E+07	200217
	PCTL(095.0)	2278.33	28781.1	67033.7	4942.85	2480.05	.2878E+07	422872
	NUMBER	106	106	105	106	104	106	106
	MAXIMUM	6353.86	66602.2	153830	22200.7	16386.3	.5180E+07	888030
	MINIMUM	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	51171.1	538849	.1398E+07	133155	48624.9	.3978E+08	.6086E+07
	MEAN	482.746	5083.48	13317.8	1256.18	467.547	375332	57419.0
	VARIANCE	874104	.1520E+09	.6046E+09	.1151E+08	.3018E+07	.8769E+12	.2132E+11
	STAND DEV	934.935	12332.0	24588.8	3394.01	1737.39	936431	146019
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05574500 EOH 01
39 33 14.0 089 15 12.0 2
FLAT BRANCH NEAR TAYLORVILLE, IL
17021 ILLINOIS CHRISTIAN
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07130007
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.0000000	185.006	.0000000	.0000000	.0000000	.0000000	.0000000
	PCTL(025.0)	.809065	185.006	2.53507	2.60519	1.61274	430.962	94.9302
	PCTL(050.0)	21.0357	228.156	813.381	25.0271	12.5135	6720.64	981.666
	PCTL(075.0)	97.6272	370.012	5372.19	95.1460	30.2051	33527.6	4617.07
	PCTL(085.0)	310.681	4388.37	13864.1	698.925	154.046	120044	18640.9
	PCTL(090.0)	461.707	4388.37	27370.7	887.275	543.692	257865	36375.6
	PCTL(095.0)	1030.43	4388.37	43883.7	1416.84	932.043	640024	63107.1
	NUMBER	86	4	85	62	60	84	84
	MAXIMUM	7255.70	4388.37	86160.0	22330.2	5892.69	.1178E+08	.2170E+07
	MINIMUM	.0000000	185.006	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	25100.1	5171.54	653381	47003.0	16331.5	.2983E+08	.5045E+07
	MEAN	291.862	1292.88	7686.83	758.112	272.191	355149	60067.4
	VARIANCE	.1099E+07	.4264E+07	.2817E+09	.1073E+08	930916	.2647E+13	.8382E+11
	STAND DEV	1048.80	2065.17	16786.8	3276.98	964.840	.1627E+07	289526
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05527500 F 01
41 21 00.0 088 11 40.0 4
KANKAKEE RIVER NEAR WILMINGTON, IL
17197 ILLINOIS WILL
UPPER MISSISSIPPI RIVER 071500
/TYPA/AMBNT/STREAM KANKAKEE RIVER
21ILAMB 870314 07120001
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	157.498	3663.45	3205.52	327.941	145.632	53937.7	16990.4
	PCTL(025.0)	471.955	6990.32	13980.6	815.538	338.729	104639	36246.1
	PCTL(050.0)	1419.64	18123.1	73894.6	1655.89	706.044	411653	108738
	PCTL(075.0)	4039.93	50178.2	252806	5488.70	2364.63	.1742E+07	352968
	PCTL(085.0)	6742.21	69417.8	378642	11068.0	4379.74	.2998E+07	618126
	PCTL(090.0)	8457.43	94390.9	418017	13203.9	5090.64	.6560E+07	.1031E+07
	PCTL(095.0)	12297.8	151673	669906	18284.9	6742.21	.1033E+08	.2213E+07
	NUMBER	163	157	163	163	142	160	150
	MAXIMUM	49601.1	.1004E+07	.1531E+07	154451	33495.3	.1349E+09	.2139E+08
	MINIMUM	58.7921	1378.11	418.017	37.9182	10.1403	5447.71	5393.77
	SUM	582258	.7209E+07	.2845E+08	.1018E+07	330179	.5180E+09	.8576E+08
	MEAN	3572.14	45923.5	174565	6248.24	2325.21	.3237E+07	571754
	VARIANCE	.3969E+08	.9961E+10	.5868E+11	.2471E+09	.1892E+08	.1494E+15	.3971E+13
	STAND DEV	6300.57	99809.1	242249	15722.2	4350.85	.1222E+08	.1992E+07
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05520500 F 02
41 09 36.0 087 39 47.0 4
KANKAKEE RIVER AT MOMENCE, IL
17091 ILLINOIS KANKAKEE
UPPER MISSISSIPPI RIVER 071500
/TYPA/AMBNT/STREAM KANKAKEE RIVER
21ILAMB 870314 07120001036 0011.150 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	167.207	2269.16	2744.89	276.053	78.7490	25350.7	10733.6
	PCTL(025.0)	427.187	4083.08	5868.42	435.816	121.899	81122.3	21359.3
	PCTL(050.0)	1089.54	8737.91	17864.2	828.483	226.538	240778	61553.7
	PCTL(075.0)	1860.85	16893.3	43419.8	1544.99	499.463	442613	100324
	PCTL(085.0)	2919.11	25296.8	58468.5	2571.75	787.490	656961	169580
	PCTL(090.0)	3398.07	31068.1	79504.1	3429.36	1169.37	891914	218340
	PCTL(095.0)	5087.40	45113.5	104337	6116.53	1581.99	.1850E+07	303561
	NUMBER	157	156	157	155	147	157	157
	MAXIMUM	17539.5	195794	149709	13136.0	5825.27	.1059E+08	.1261E+07
	MINIMUM	51.2947	570.661	186.085	83.9271	18.6085	4029.15	4029.15
	SUM	242748	.2300E+07	.4686E+07	233780	72376.3	.8412E+08	.1584E+08
	MEAN	1546.16	14743.9	29851.1	1508.26	492.356	535820	100948
	VARIANCE	.3814E+07	.4372E+09	.1108E+10	.4166E+07	646026	.1669E+13	.2620E+11
	STAND DEV	1953.09	20911.6	33296.8	2041.21	803.757	.1291E+07	161874
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05526000 FL 02
41 00 32.0 087 49 27.0 2
IROQUOIS RIVER NEAR CHEBANSE, IL
17091 ILLINOIS KANKAKEE
UPPER MISSISSIPPI RIVER 071500
/TYPA/AMBNT/STREAM KANKAKEE RIVER
21ILAMB 870314 07120002001 0005.550 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	36.1382	252.968	214.402	50.9711	27.5082	7011.90	1650.49
	PCTL(025.0)	101.942	957.933	8155.38	144.014	83.2798	26699.2	6375.43
	PCTL(050.0)	544.770	3926.66	43193.3	544.771	288.027	182579	28824.3
	PCTL(075.0)	1461.71	10970.9	132147	1969.80	912.626	934471	142719
	PCTL(085.0)	3527.52	27788.7	235136	5298.83	3276.71	.2081E+07	251458
	PCTL(090.0)	5738.97	53392.9	309117	8321.50	5264.32	.3374E+07	487812
	PCTL(095.0)	7718.48	181231	437381	18813.5	6990.32	.6734E+07	.1653E+07
	NUMBER	156	50	156	135	125	155	155
	MAXIMUM	33160.9	241102	664512	40987.2	17260.1	.3921E+08	.4500E+07
	MINIMUM	10.6257	69.0402	14.0238	10.1187	5.50164	685.009	242.720
	SUM	290645	.1077E+07	.1597E+08	441674	185726	.2639E+09	.3860E+08
	MEAN	1863.11	21554.9	102389	3271.66	1485.81	.1703E+07	249052
	VARIANCE	.1672E+08	.2778E+10	.1954E+11	.5841E+08	.9311E+07	.2432E+14	.4856E+12
	STAND DEV	4090.20	52710.0	139813	7643.18	3051.42	.4931E+07	696879
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05525000 FL 04
40 49 25.0 087 34 55.0 2
IROQUOIS RIVER AT IROQUOIS, IL
17075 ILLINOIS IROQUOIS
UPPER MISSISSIPPI RIVER 071591
/TYPA/AMBNT/STREAM KANKAKEE RIVER
21ILAMB 870314 07120002
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	15.1025	638.622	81.9853	33.7111	16.9904	5582.55	1434.74
	PCTL(025.0)	48.0585	638.622	2235.18	65.6961	30.7445	13754.1	3020.51
	PCTL(050.0)	186.624	638.622	14202.3	164.618	86.9476	58738.2	8252.47
	PCTL(075.0)	428.805	638.622	37794.1	553.832	286.948	194176	30636.6
	PCTL(085.0)	940.134	638.622	69984.1	1315.00	776.703	331933	57120.0
	PCTL(090.0)	1412.63	638.622	96656.3	1796.12	1240.57	510358	71845.0
	PCTL(095.0)	1839.27	638.622	143043	2524.28	1471.42	763326	151026
	NUMBER	138	1	136	113	113	137	137
	MAXIMUM	8759.48	638.622	208955	6569.61	3695.27	.2213E+07	536411
	MINIMUM	3.23626	638.622	12.4596	11.2136	4.85439	668.827	323.626
	SUM	68703.6	638.622	.4457E+07	68616.0	40450.1	.2338E+08	.4461E+07
	MEAN	497.852	638.622	32776.3	607.221	357.966	170723	32568.9
	VARIANCE	959939		.2157E+10	.1273E+07	457534	.9039E+11	.4426E+10
	STAND DEV	979.765		46447.0	1128.53	676.413	300657	66530.6
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05525500 FLI 02
40 37 50.0 087 43 25.0 2
SUGAR CREEK AT MILFORD, IL
17075 ILLINOIS IROQUOIS
UPPER MISSISSIPPI RIVER 071500
/TYPA/AMBNT/STREAM KANKAKEE RIVER
21ILAMB 870314 07120002010 0014.660 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	5.93314		33.4413	5.82527	3.45201	679.615	194.176
	PCTL(025.0)	19.4176		759.442	16.3970	8.63003	3279.41	641.859
	PCTL(050.0)	65.8040		7888.39	60.9496	29.6118	30933.3	4012.97
	PCTL(075.0)	252.428		28131.2	249.030	133.981	116214	18123.1
	PCTL(085.0)	509.711		47761.8	1178.54	368.934	447295	68231.1
	PCTL(090.0)	966.563		67033.7	1510.25	620.283	867426	147573
	PCTL(095.0)	1654.16		77886.0	4190.96	966.563	.1392E+07	226484
	NUMBER	139		139	113	112	138	138
	MAXIMUM	5609.52		234198	24917.6	8868.98	.1457E+08	.1887E+07
	MINIMUM	.631071		3.18232	1.07875	.539377	138.080	34.5201
	SUM	44460.7		.3011E+07	80876.1	32021.7	.5895E+08	.8305E+07
	MEAN	319.861		21666.7	715.718	285.908	427198	60185.6
	VARIANCE	546774		.1097E+10	.6786E+07	.1034E+07	.2835E+13	.5118E+11
	STAND DEV	739.442		33125.6	2605.04	1016.88	.1683E+07	226241
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05528000 G 07
42 20 39.0 087 56 18.0 2
DES PLAINES RIVER NEAR GURNEE, IL
17097 ILLINOIS LAKE
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004011 0043.570 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	22.0066	339.807	2157.51	216.722	170.049	3484.38	1143.48
	PCTL(025.0)	51.1329	339.807	2609.51	302.051	267.747	6601.97	2114.36
	PCTL(050.0)	123.841	1149.95	3610.05	417.909	373.788	16424.0	4595.49
	PCTL(075.0)	391.965	1525.36	6203.37	550.596	497.305	35954.9	10614.9
	PCTL(085.0)	706.044	1525.36	10194.8	676.648	555.558	58441.5	15615.0
	PCTL(090.0)	1139.16	2261.61	12572.9	776.703	634.307	71801.8	17961.3
	PCTL(095.0)	1574.98	2261.61	19689.4	903.187	776.703	116074	29342.1
	NUMBER	152	6	150	127	123	151	151
	MAXIMUM	2853.84	2261.61	34789.8	2553.63	1574.98	224057	195147
	MINIMUM	3.39807	339.807	1165.05	89.3208	51.3487	1165.05	237.326
	SUM	53163.1	7099.81	873455	60340.2	49203.2	.4443E+07	.1448E+07
	MEAN	349.757	1183.30	5823.03	475.119	400.026	29425.7	9594.53
	VARIANCE	271910	501378	.3345E+08	89394.3	42414.7	.1401E+10	.3433E+09
	STAND DEV	521.450	708.080	5783.68	298.989	205.948	37437.4	18529.6
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05527800 G 08
42 29 22.0 087 55 32.0 2
DES PLAINES RIVER AT RUSSELL, IL
17097 ILLINOIS LAKE
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004012 0006.130 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.831719	75.6746	2.77240	5.66345	2.02266	485.439	161.813
	PCTL(025.0)	6.95796	75.6746	100.486	13.5923	5.66345	1537.22	554.479
	PCTL(050.0)	28.9645	126.214	586.842	31.1760	16.6128	5889.99	1569.59
	PCTL(075.0)	75.5128	291.263	2006.48	87.3791	54.4123	15857.7	4681.79
	PCTL(085.0)	120.065	1449.74	3996.78	166.128	113.701	21531.9	7378.67
	PCTL(090.0)	149.623	1449.74	6947.17	238.620	161.382	27443.5	9147.83
	PCTL(095.0)	246.226	1449.74	8673.18	308.739	256.743	38835.1	13592.3
	NUMBER	146	4	146	122	119	145	145
	MAXIMUM	1300.98	1449.74	18693.7	1884.04	2018.62	121425	47702.5
	MINIMUM	.0000000	75.6746	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	10182.7	1942.89	281357	11437.4	7869.60	.1814E+07	524363
	MEAN	69.7443	485.722	1927.10	93.7488	66.1311	12511.5	3616.29
	VARIANCE	19654.8	421507	.9744E+07	40749.9	39611.6	.3973E+09	.3171E+08
	STAND DEV	140.195	649.236	3121.60	201.866	199.027	19934.0	5631.36
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05534050 G 11
41 35 47.0 088 04 07.0 2
DES PLAINES RIVER AT LOCKPORT, IL
17197 ILLINOIS WILL
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004010 0003.080 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	72.8159	2114.36	4731.41	1033.99	752.431	16634.4	8802.63
	PCTL(025.0)	187.703	2977.36	7296.69	1318.24	1141.86	44228.9	17184.6
	PCTL(050.0)	598.493	4368.95	11326.9	1957.40	1639.70	105340	33468.3
	PCTL(075.0)	1587.93	7225.49	16909.5	2602.82	2184.48	211625	58252.7
	PCTL(085.0)	2258.37	9184.51	22006.6	3169.38	2675.31	313982	77023.0
	PCTL(090.0)	3149.96	10356.0	29687.3	3640.80	3058.27	372170	89612.0
	PCTL(095.0)	8894.32	15010.9	38511.5	5879.21	4854.39	566346	148437
	NUMBER	112	31	112	91	82	111	101
	MAXIMUM	25890.1	23301.1	94067.3	12578.3	9436.94	.2658E+07	657501
	MINIMUM	19.2018	698.493	2242.73	346.604	336.409	1456.32	1456.32
	SUM	200780	179207	.1698E+07	219751	160208	.1983E+08	.5065E+07
	MEAN	1792.68	5780.86	15169.5	2414.84	1953.75	178723	50154.7
	VARIANCE	.1558E+08	.2089E+08	.1773E+09	.4113E+07	.2040E+07	.8659E+11	.5277E+10
	STAND DEV	3948.38	4571.38	13316.2	2028.29	1428.38	294266	72644.7
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05530590 G 15
41 57 11.0 087 51 15.0 2
DES PLAINES RIVER NEAR SCHILLER PARK, IL
17031 ILLINOIS COOK
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004011 0011.290 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	82.5247	1168.29	3009.72	436.895	343.044	13139.2	4530.76
	PCTL(025.0)	185.546	1738.95	4144.57	634.631	521.038	29935.4	8004.35
	PCTL(050.0)	605.181	2915.87	6450.94	963.812	783.175	61893.5	18986.1
	PCTL(075.0)	1130.10	5817.66	11553.5	1297.74	1067.97	180211	39266.6
	PCTL(085.0)	1802.11	7234.55	15922.4	1604.65	1229.78	274111	66052.0
	PCTL(090.0)	2784.53	10356.0	19013.0	1812.31	1506.80	333087	77023.0
	PCTL(095.0)	3549.10	12103.6	19676.5	2071.21	2106.81	397521	95167.6
	NUMBER	105	100	105	103	90	105	105
	MAXIMUM	7839.84	22815.6	34951.6	4920.41	3807.14	.1787E+07	367586
	MINIMUM	14.7250	359.603	1045.31	45.3077	22.6538	4530.76	1413.17
	SUM	108219	444140	925509	114131	80755.0	.1414E+08	.3390E+07
	MEAN	1030.66	4441.39	8814.37	1108.07	897.278	134747	32295.1
	VARIANCE	.1923E+07	.1611E+08	.3972E+08	611466	366565	.4563E+11	.1954E+10
	STAND DEV	1386.86	4014.58	6303.00	781.963	605.446	213633	44213.3
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05529000 G 22
42 04 55.0 087 53 25.0 2
DES PLAINES RIVER NEAR DES PLAINES, IL
17031 ILLINOIS COOK
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004011 0022.100 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01							
STATION PCTL(010.0)	36.6237	1844.13	2272.93	340.778	289.969	6229.80	2459.56
PCTL(025.0)	103.614	1844.13	3174.77	478.967	414.241	16720.7	5474.67
PCTL(050.0)	325.784	2524.28	4664.53	639.539	550.596	38155.5	10442.3
PCTL(075.0)	638.622	3678.55	9018.38	863.866	711.978	95469.6	21175.9
PCTL(085.0)	800.382	3678.55	11703.4	1174.76	850.004	132520	33700.3
PCTL(090.0)	1107.61	3678.55	16019.5	1385.39	938.516	214564	58382.2
PCTL(095.0)	1379.46	3678.55	17268.7	1864.09	1097.36	372817	71845.0
NUMBER	148	3	148	118	113	147	147
MAXIMUM	8491.95	3678.55	41929.0	3426.98	1724.28	691697	157822
MINIMUM	4.09926	1844.13	261.598	94.1752	36.6237	1305.29	1100.33
SUM	73367.3	8046.96	.1032E+07	92300.0	66732.6	.1232E+08	.2888E+07
MEAN	495.725	2682.32	6975.07	782.203	590.555	83837.7	19649.0
VARIANCE	651188	860024	.3417E+08	267928	68725.2	.1514E+11	.6387E+09
STAND DEV	806.962	927.375	5846.03	517.617	262.155	123083	25273.5
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05537980 G 23
41 32 12.0 088 04 57.0 2
DES PLAINES RIVER AT ROUTE 53 AT JOLIET, IL
17197 ILLINOIS WILL
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004006 0002.650 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01							
STATION PCTL(010.0)	1577.14	4768.08	10269.7	1833.88	1514.57	43096.2	13915.9
PCTL(025.0)	2757.30	6601.97	10485.5	1864.09	1797.20	69687.5	17745.5
PCTL(050.0)	5226.56	15588.0	32006.6	6301.00	5446.63	202914	64078.0
PCTL(075.0)	13939.7	32168.4	56774.8	7812.33	6586.87	266021	91694.0
PCTL(085.0)	19482.3	32702.4	61273.2	9412.67	7918.59	311760	107228
PCTL(090.0)	22168.4	45814.7	70938.8	11527.6	9458.51	328696	147789
PCTL(095.0)	22168.4	45814.7	70938.8	11527.6	9458.51	328696	147789
NUMBER	9	9	9	9	9	9	9
MAXIMUM	22168.4	45814.7	70938.8	11527.6	9458.51	328696	147789
MINIMUM	1577.14	4768.08	10269.7	1833.88	1514.57	43096.2	13915.9
SUM	83980.8	188334	318798	52600.6	43067.6	.1642E+07	569852
MEAN	9331.21	20926.0	35422.0	5844.50	4785.29	182549	63316.8
VARIANCE	.5711E+08	.2068E+09	.5327E+09	.1201E+08	.8575E+07	.1310E+11	.2378E+10
STAND DEV	7557.27	14382.7	23081.2	3466.24	2928.46	114486	48772.6
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05532500 G 39
41 49 20.0 087 49 15.0 4
DES PLAINES R BARRY PT RD RIVERSIDE T39NR12ESW36
17031 ILLINOIS COOK
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM DES PLAINES RIVER
21ILAMB 870523 07120004011 0000.450 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01							
STATION PCTL(010.0)	128.749	1710.90	6898.09	1239.00	985.873	15188.9	4142.41
PCTL(025.0)	341.426	2398.07	8159.69	1344.34	1200.92	29261.2	8187.74
PCTL(050.0)	642.560	3764.85	10582.6	1705.78	1444.45	54903.2	16138.2
PCTL(075.0)	1364.62	6407.80	16304.8	2340.90	1758.58	108544	30205.1
PCTL(085.0)	2017.27	10895.4	23495.2	2868.46	2189.87	277887	54045.6
PCTL(090.0)	3080.92	16504.9	27788.7	4230.44	2702.28	480369	79320.7
PCTL(095.0)	5976.30	30679.7	37799.5	8964.44	3873.81	.1497E+07	234305
NUMBER	99	98	99	99	96	99	99
MAXIMUM	11890.0	67556.9	70259.1	21348.0	10397.0	.2948E+07	374975
MINIMUM	13.4305	156.042	4320.41	688.677	529.237	1116.51	1116.51
SUM	127312	677442	.1429E+07	249096	169508	.1991E+08	.3680E+07
MEAN	1285.98	6912.67	14442.7	2516.12	1765.71	201159	37176.5
VARIANCE	.3501E+07	.9609E+08	.1066E+09	.7954E+07	.1546E+07	.1952E+12	.4280E+10
STAND DEV	1871.17	9802.59	10327.4	2820.31	1243.75	441874	65422.3
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05540290 GB 10
41 41 24.0 088 09 58.0 2
DU PAGE RIVER NEAR NAPERVILLE, IL
17197 ILLINOIS WILL
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004017 0023.050 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01							
STATION PCTL(010.0)	61.9205	740.457	2677.47	664.512	609.496	4584.70	1968.73
PCTL(025.0)	192.558	740.457	3449.86	830.640	730.559	7281.59	3559.89
PCTL(050.0)	456.043	1661.28	5663.46	1018.34	918.235	19018.4	7184.50
PCTL(075.0)	984.471	1939.81	7858.72	1355.83	1205.18	65129.8	16780.0
PCTL(085.0)	1464.95	2313.93	9937.48	1587.92	1308.79	101996	25372.3
PCTL(090.0)	1839.49	2313.93	11300.5	1770.77	1486.52	195691	37680.9
PCTL(095.0)	2036.69	2313.93	13425.1	2807.40	1991.11	292882	58576.3
NUMBER	101	4	101	79	76	100	100
MAXIMUM	2847.91	2313.93	23770.3	5134.87	3656.98	.1766E+07	255988
MINIMUM	19.4176	740.457	1980.59	76.2679	65.3725	2189.87	485.439
SUM	69948.3	6655.47	656150	97742.6	78871.6	.9721E+07	.1932E+07
MEAN	692.558	1663.87	6496.53	1237.25	1037.79	97215.6	19324.2
VARIANCE	429630	450477	.1575E+08	681822	246707	.7621E+11	.1604E+10
STAND DEV	655.462	671.176	3968.73	825.725	496.697	276064	40054.6
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05540500 GB 11
41 31 20.0 088 11 35.0 2
DU PAGE RIVER AT SHOREWOOD, IL
17197 ILLINOIS WILL
UPPER MISSISSIPPI RIVER 071391
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004017 0009.560 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01							
STATION PCTL(010.0)	21.7908	396.981	3524.29	695.958	663.218	3937.45	1726.01
PCTL(025.0)	43.4198	800.435	5102.50	872.173	790.025	10043.2	3365.71
PCTL(050.0)	232.202	1337.65	7474.68	1107.88	984.363	26062.7	8398.10
PCTL(075.0)	918.289	2498.39	12978.5	1471.42	1276.17	108501	24595.6
PCTL(085.0)	1330.10	5485.46	16427.3	2272.93	1812.31	216829	46871.8
PCTL(090.0)	1943.05	28058.4	19430.5	3292.79	2078.97	386626	84574.3
PCTL(095.0)	2735.18	34433.8	29773.6	4375.42	2899.37	734632	146279
NUMBER	158	49	158	135	130	159	159
MAXIMUM	6526.46	62179.4	60766.2	14951.5	6087.41	.9680E+07	.1554E+07
MINIMUM	4.90833	121.899	850.597	108.323	102.482	652.646	463.864
SUM	108353	278564	.1684E+07	235013	158817	.3092E+08	.5659E+07
MEAN	685.780	5684.98	10661.8	1740.84	1221.67	194492	35593.5
VARIANCE	.1104E+07	.1535E+09	.8861E+08	.4979E+07	608378	.6820E+12	.1709E+11
STAND DEV	1050.87	12390.5	9413.37	2231.55	779.986	825868	130740
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05540095 GBK 05
41 49 22.0 088 10 23.0 2
WEST BR DU PAGE RIVER NEAR WARRENVILLE, IL
17043 ILLINOIS DU PAGE
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004019 0011.420 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01							
STATION PCTL(010.0)	35.4910	220.551	1121.90	234.953	201.727	2966.57	760.522
PCTL(025.0)	77.0230	220.551	1536.14	315.643	272.925	5070.14	1423.96
PCTL(050.0)	178.803	453.885	2195.26	395.471	341.749	10760.6	2750.82
PCTL(075.0)	349.462	3346.78	3063.66	516.993	434.630	27632.3	5868.42
PCTL(085.0)	467.208	4571.76	3880.28	686.087	555.181	61704.7	12400.3
PCTL(090.0)	570.769	4571.76	4669.92	862.302	648.601	104758	26505.0
PCTL(095.0)	702.754	4571.76	5275.10	949.519	756.099	218334	44514.8
NUMBER	149	5	149	124	124	148	148
MAXIMUM	1821.47	4571.76	9417.52	2461.71	1038.68	404425	138911
MINIMUM	4.11544	220.551	38.2148	4.52699	4.05665	99.9465	52.9128
SUM	37856.4	9014.76	385380	59072.8	47532.3	.5718E+07	.1258E+07
MEAN	254.070	1802.95	2586.44	476.394	383.325	38637.5	8502.00
VARIANCE	67198.0	.4070E+07	.2407E+07	89886.4	30979.1	.5497E+10	.2874E+09
STAND DEV	259.226	2017.50	1551.49	299.811	176.009	74142.6	16954.4
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05539900 GBK 09
41 54 39.0 088 10 44.0 2
W BRANCH DU PAGE RIVER NR WEST CHICAGO, IL
17043 ILLINOIS DU PAGE
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004019 0021.180 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	11.6505	97.0878	711.978	137.865	128.102	1044.23	377.564
	PCTL(025.0)	22.0066	97.0878	880.262	177.994	154.370	2189.87	625.677
	PCTL(050.0)	62.2980	207.121	1067.97	209.170	187.703	4611.67	1165.05
	PCTL(075.0)	108.415	436.895	1393.75	254.856	225.460	10652.7	2319.32
	PCTL(085.0)	138.836	1200.65	1598.71	295.578	247.574	20172.7	4190.96
	PCTL(090.0)	184.467	1200.65	1941.76	357.283	287.380	33096.2	7238.44
	PCTL(095.0)	266.991	1200.65	2514.04	450.056	365.913	63829.9	14563.2
	NUMBER	146	5	146	122	119	146	146
	MAXIMUM	484.954	1200.65	5534.01	950.004	654.858	272412	40776.9
	MINIMUM	1.50486	97.0878	378.643	90.6584	79.7415	323.626	183.388
	SUM	12157.5	2106.81	182728	29492.5	24210.8	.2095E+07	443572
	MEAN	83.2709	421.361	1251.56	241.742	203.452	14353.3	3038.17
	VARIANCE	6822.09	206071	490350	16620.6	8216.79	.9378E+09	.3316E+08
	STAND DEV	82.5960	453.950	700.250	128.921	90.6465	30624.9	5758.69
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05540210 GBL 10
41 48 02.0 088 04 53.0 2
E BR DUPAGE RIVER AT RT 34 BRIDGE AT LISLE, IL
17043 ILLINOIS DU PAGE
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004018 0011.640 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	10.7875	181.230	490.833	107.929	102.751	841.428	350.595
	PCTL(025.0)	28.3173	181.230	776.703	169.904	153.620	2189.87	604.102
	PCTL(050.0)	76.9152	247.574	1113.27	233.874	201.732	4153.19	1456.32
	PCTL(075.0)	297.736	291.263	1956.32	347.898	270.983	12599.8	2912.63
	PCTL(085.0)	545.849	500.542	2292.35	401.820	364.619	19158.7	4590.09
	PCTL(090.0)	681.880	500.542	2659.13	564.458	429.614	41230.0	8721.73
	PCTL(095.0)	828.483	500.542	3452.01	715.181	528.643	68231.1	11785.4
	NUMBER	106	4	103	86	81	107	107
	MAXIMUM	1661.28	500.542	14951.5	1578.22	1245.96	640780	111069
	MINIMUM	2.65373	181.230	213.593	65.5343	72.7620	261.598	160.195
	SUM	24122.1	1220.61	157865	25673.7	20382.4	.2458E+07	514820
	MEAN	227.567	305.152	1532.67	298.531	251.635	22976.0	4811.40
	VARIANCE	99269.5	19014.0	.2660E+07	58522.7	34946.1	.6792E+10	.2317E+09
	STAND DEV	315.071	137.891	1631.23	241.915	186.939	82413.6	15224.0
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05539000 GG 02
41 31 10.0 088 04 10.0 2
HICKORY CREEK AT JOLIET, IL
17197 ILLINOIS WILL
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004005 0001.830 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	7.68612	36.2461	102.482	26.6452	19.9569	431.501	183.388
	PCTL(025.0)	15.4262	105.179	217.369	38.7380	33.8189	852.755	388.351
	PCTL(050.0)	35.0055	213.593	513.487	72.4923	55.1243	2152.11	1132.69
	PCTL(075.0)	149.515	343.044	1537.87	121.036	100.324	11704.5	3155.36
	PCTL(085.0)	246.819	434.738	2740.04	223.680	149.127	32362.6	6850.08
	PCTL(090.0)	285.330	879.292	3236.26	339.807	216.560	66175.0	11348.5
	PCTL(095.0)	412.300	879.292	5475.75	503.454	302.590	193421	25172.7
	NUMBER	144	8	144	121	112	144	144
	MAXIMUM	10205.5	879.292	59692.8	22914.3	2118.13	.3003E+08	.2695E+07
	MINIMUM	1.69904	36.2461	8.63003	8.75948	6.79615	107.875	102.482
	SUM	28445.3	2515.87	262910	44605.1	13096.7	.3944E+08	.3868E+07
	MEAN	197.537	314.483	1825.77	368.637	116.935	273923	26867.8
	VARIANCE	768170	69072.6	.3068E+08	.4585E+07	56890.2	.6482E+13	.5245E+11
	STAND DEV	876.453	262.817	5539.33	2141.46	238.517	.2546E+07	229029
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05536995 GI 01
41 38 27.0 088 03 36.0 4
SAN & SHIP CANAL 135TH ST ROMEOVILLE T36NR10ENW2
17197 ILLINOIS WILL
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM DES PLAINES RIVER
21ILAMB 870523 07120004007 0006.550 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	11278.4	25803.8	39509.4	7825.28	6289.67	51510.5	21251.5
	PCTL(025.0)	15803.7	31068.1	54282.9	9555.60	7715.25	128156	35814.6
	PCTL(050.0)	25722.9	46030.4	63197.7	11955.3	9708.78	243259	76278.6
	PCTL(075.0)	48878.3	66408.0	76106.0	18571.4	13527.6	428670	122978
	PCTL(085.0)	79388.6	100659	108641	23274.2	16031.4	630855	192881
	PCTL(090.0)	86613.1	112622	119094	25037.9	16781.3	.1120E+07	215265
	PCTL(095.0)	108428	240886	140842	63128.7	18323.7	.1891E+07	362138
	NUMBER	59	59	59	59	59	59	59
	MAXIMUM	144930	404277	191047	230745	27837.2	.2791E+08	.4466E+07
	MINIMUM	8949.34	16936.4	15566.4	4962.37	3476.82	10032.4	10032.4
	SUM	.2240E+07	.4023E+07	.4225E+07	.1202E+07	651216	.5005E+08	.1049E+08
	MEAN	37974.1	68190.3	71623.3	20373.3	11037.6	848422	177826
	VARIANCE	.9543E+09	.5286E+10	.1095E+10	.1143E+10	.2246E+08	.1307E+14	.3387E+12
	STAND DEV	30891.9	72704.8	33097.5	33815.3	4739.81	.3615E+07	581993
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05537000 GI 02
41 34 11.0 088 04 42.0 2
CHICAGO SANITARY AND SHIP CANAL AT LOCKPORT, IL
17197 ILLINOIS WILL
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004010 0001.100 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	13290.2	28204.0	22098.3	5663.46	4417.50	92880.6	40345.4
	PCTL(025.0)	24412.2	45874.0	33009.9	6948.25	5728.18	131392	61165.4
	PCTL(050.0)	44175.0	67621.6	52449.0	9223.34	7663.46	194176	89266.8
	PCTL(075.0)	59331.5	81769.5	68867.6	11401.3	10237.4	336140	155341
	PCTL(085.0)	74277.5	114920	73571.0	15868.8	11934.3	534631	228157
	PCTL(090.0)	81715.6	118469	77842.8	16718.5	13592.3	583067	256797
	PCTL(095.0)	101160	143582	90561.3	18469.9	14717.2	957125	409279
	NUMBER	52	52	52	52	49	52	52
	MAXIMUM	145519	196878	101764	29474.6	15899.8	.1417E+07	433120
	MINIMUM	10863.0	22783.3	12233.1	4078.77	2614.90	74434.0	26537.3
	SUM	.2503E+07	.3771E+07	.2735E+07	534741	405855	.1553E+08	.6470E+07
	MEAN	48150.6	72536.6	52609.5	10283.5	8282.75	298821	124430
	VARIANCE	.8486E+09	.1481E+10	.4661E+09	.2160E+08	.1096E+08	.7782E+11	.9918E+10
	STAND DEV	29132.1	38487.7	21591.3	4648.45	3311.88	278962	99591.2
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05531500 GL 09
41 49 35.0 087 54 00.0 2
SALT CREEK AT WESTERN SPRINGS, IL
17031 ILLINOIS COOK
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004016 0006.410 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	39.9139	504.857	2386.20	548.870	444.986	4493.01	1423.96
	PCTL(025.0)	114.618	652.646	3015.12	649.140	585.116	8737.91	2346.29
	PCTL(050.0)	299.031	1073.04	3791.82	805.721	700.759	17950.5	4660.21
	PCTL(075.0)	796.120	1660.20	4841.44	1026.54	902.917	41262.3	10463.9
	PCTL(085.0)	919.098	3851.15	5695.82	1344.56	1021.69	75588.2	22955.9
	PCTL(090.0)	1252.43	4364.64	6143.28	1646.82	1309.39	151651	33700.3
	PCTL(095.0)	1988.14	8133.80	9242.76	2297.75	1652.00	357046	75728.4
	NUMBER	155	152	155	138	130	154	145
	MAXIMUM	3534.00	16052.9	23032.5	6456.07	3524.66	.1801E+07	247774
	MINIMUM	2.64295	36.1382	1513.49	317.154	264.295	1423.96	334.414
	SUM	84702.6	304261	686547	136302	105741	.1208E+08	.2306E+07
	MEAN	546.469	2001.72	4429.33	987.695	813.395	78442.0	15904.7
	VARIANCE	440997	.7739E+07	.7762E+07	473878	173448	.4864E+11	.1295E+10
	STAND DEV	664.076	2781.98	2786.11	688.388	416.471	220548	35987.4
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05532000 GLA 02
41 52 48.0 087 52 07.0 2
ADDISON CREEK AT BELLWOOD, IL
17031 ILLINOIS COOK
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120004016 0002.470 OFF
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	2.96657	23.6894	113.916	18.9860	17.8588	330.099	135.923
	PCTL(025.0)	6.87166	64.7252	215.211	32.8157	26.5805	679.615	202.266
	PCTL(050.0)	15.1295	100.863	333.766	56.6669	48.5439	1553.41	403.454
	PCTL(075.0)	36.6776	151.026	498.384	78.2097	71.1978	4487.62	1051.79
	PCTL(085.0)	71.1977	211.436	611.653	125.405	92.8807	9180.19	2211.45
	PCTL(090.0)	101.726	211.436	841.428	187.800	151.457	15145.7	3980.60
	PCTL(095.0)	186.894	530.747	1262.14	335.277	229.019	80874.1	18158.7
	NUMBER	153	12	155	132	114	155	146
	MAXIMUM	1131.40	530.747	5575.00	1387.45	604.404	863435	154823
	MINIMUM	.582527	23.6894	14.0238	2.07121	1.65049	45.3077	29.1264
	SUM	8946.24	1731.62	78957.5	13578.2	8574.54	.3542E+07	629072
	MEAN	58.4721	144.302	509.404	102.865	75.2153	22856.8	4308.71
	VARIANCE	26330.3	17941.4	588540	35837.7	10340.0	.1126E+11	.3057E+09
	STAND DEV	162.266	133.946	767.164	189.308	101.686	106148	17485.6
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05536195 HB 42
41 34 07.0 087 31 18.0 2
L CALUMET R S HOLMAN AV IND ST LINE N MUNSTER IN
18089 INDIANA LAKE
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM DES PLAINES RIVER
21ILAMB 870314 07120003006 0011.700 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	54.3692	201.727	82.5247	39.6981	22.4381	1245.96	463.864
	PCTL(025.0)	129.450	334.414	213.593	58.2527	34.9516	2567.43	889.972
	PCTL(050.0)	294.500	641.859	543.692	98.3823	67.6379	7820.96	1990.30
	PCTL(075.0)	553.239	1690.95	1292.89	225.567	115.373	35000.2	6947.17
	PCTL(085.0)	793.208	2349.53	1591.16	321.280	184.062	69579.6	14563.2
	PCTL(090.0)	980.587	2627.84	2333.34	451.566	208.847	101457	22330.2
	PCTL(095.0)	1305.29	4180.17	2990.31	584.469	274.111	198836	32184.6
	NUMBER	94	95	95	90	92	94	93
	MAXIMUM	7110.07	34729.9	19416.0	6344.37	1756.64	910717	99676.8
	MINIMUM	26.6992	93.2583	11.8663	21.4079	15.0648	560.952	97.0879
	SUM	43817.3	142059	99381.0	21593.9	10382.2	.4338E+07	763695
	MEAN	466.142	1495.36	1046.12	239.932	112.850	46157.2	8211.77
	VARIANCE	609296	.1327E+08	.4350E+07	461069	37327.0	.1388E+11	.2559E+09
	STAND DEV	780.574	3642.88	2085.70	679.020	193.202	117826	15999.8
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05536275 HBD 04
41 34 05.0 087 36 30.0 2
THORN CREEK AT THORNTON, IL
17031 ILLINOIS COOK
LAKE MICHIGAN 084900
/TYPA/AMBNT/STREAM CALUMET-BURNS DITCH COMPLEX
21ILAMB 870314 07120003006 0005.860 OFF
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	30.5341	110.572	769.152	431.933	392.666	1262.14	442.289
	PCTL(025.0)	79.2345	110.572	1116.51	531.718	506.636	2475.74	873.791
	PCTL(050.0)	145.632	286.085	1550.71	748.169	678.536	6731.42	1796.12
	PCTL(075.0)	332.256	680.154	2356.00	1038.30	901.623	26650.6	5749.76
	PCTL(085.0)	555.774	811.223	3020.51	1315.11	1135.60	64941.0	15102.6
	PCTL(090.0)	663.434	811.223	3780.49	1749.52	1337.39	149176	23732.6
	PCTL(095.0)	1301.41	811.223	4489.23	2354.70	1980.59	201420	32362.6
	NUMBER	148	4	148	119	114	147	147
	MAXIMUM	9525.93	811.223	7914.82	22857.4	22049.6	.1587E+07	291264
	MINIMUM	2.48113	110.572	374.543	14.3690	16.1651	533.983	151.026
	SUM	51668.2	1888.03	289092	130527	109219	.7492E+07	.1485E+07
	MEAN	349.109	472.009	1953.32	1096.86	958.063	50967.6	10105.7
	VARIANCE	703190	107865	.1781E+07	.4537E+07	.4172E+07	.2496E+11	.9881E+09
	STAND DEV	838.564	328.427	1334.66	2130.24	2042.78	158008	31435.2
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05536000 HCC 07
42 00 44.0 087 47 45.0 2
NORTH BRANCH CHICAGO RIVER AT NILES, IL
17031 ILLINOIS COOK
UPPER MISSISSIPPI RIVER 071300
/TYPA/AMBNT/STREAM CHICAGO-CALUMET RES.-DES PLAINES RIVER
21ILAMB 870314 07120003
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01							
STATION PCTL(010.0)	27.1846	183.604	453.077	99.5151	103.776	1229.78	463.864
PCTL(025.0)	46.9258	293.421	872.173	176.053	161.344	2589.01	970.879
PCTL(050.0)	99.5151	478.157	1363.55	239.483	225.244	6796.15	2006.48
PCTL(075.0)	209.710	1109.28	2061.50	344.338	305.018	25339.9	6871.66
PCTL(085.0)	310.681	1759.99	3029.14	530.855	463.864	57983.0	14757.4
PCTL(090.0)	463.864	2319.86	3365.71	711.384	560.682	132525	18953.7
PCTL(095.0)	660.197	4202.82	3910.48	1170.23	747.630	234629	39870.7
NUMBER	147	144	148	127	127	148	148
MAXIMUM	1779.94	13411.1	57551.5	5399.16	4746.51	784831	162498
MINIMUM	1.24057	56.0952	129.450	30.2590	46.8179	463.864	124.057
SUM	29245.2	167640	304058	48179.2	39525.4	.6984E+07	.1359E+07
MEAN	198.947	1164.17	2054.45	379.364	311.224	47192.8	9186.07
VARIANCE	88060.3	.4202E+07	.2259E+08	313323	193463	.1410E+11	.4374E+09
STAND DEV	296.750	2049.93	4753.24	559.753	439.844	118782	20914.2
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05534500 HCCC02
42 09 10.0 087 49 07.0 2
NORTH BR CHICAGO RIVER AT DEERFIELD, IL
17097 ILLINOIS LAKE
LAKE MICHIGAN 082600
/TYPA/AMBNT/STREAM LAKE MICHIGAN-WESTERN SHORE
21ILAMB 870314 07120003
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01							
STATION PCTL(010.0)	.830640	5.46928	1.40238	.761061	.358146	80.9066	32.0929
PCTL(025.0)	2.24381	5.46928	4.74652	1.79612	.830640	245.417	75.5128
PCTL(050.0)	6.64512	5.46928	28.0476	5.17802	2.80476	1051.79	280.476
PCTL(075.0)	19.2665	5.46928	101.942	11.3269	6.88245	3039.39	792.884
PCTL(085.0)	25.2428	5.46928	158.577	21.5751	17.5297	5663.46	1359.23
PCTL(090.0)	42.8481	5.46928	242.720	44.8762	21.5751	11650.5	1898.61
PCTL(095.0)	88.9972	5.46928	375.406	87.3791	42.2332	31262.3	6860.87
NUMBER	146	1	146	124	111	146	146
MAXIMUM	426.755	5.46928	13052.9	465.051	189.623	188604	21035.7
MINIMUM	.0593314	5.46928	.248113	.266452	.143474	15.8577	2.48113
SUM	3418.51	5.46928	25871.2	2420.58	1196.52	.1001E+07	175987
MEAN	23.4144	5.46928	177.200	19.5208	10.7794	6859.10	1205.39
VARIANCE	3134.96		.1185E+07	2775.12	776.056	.4932E+09	.9508E+07
STAND DEV	55.9907		1088.65	52.6794	27.8578	22208.3	3083.59
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

07022000 I 84
37 13 00.0 089 27 50.0 2
MISSISSIPPI RIVER AT THEBES ILL
17003 ILLINOIS ALEXANDER
UPPER MISSISSIPPI RIVER 072291
/TYPA/AMBNT/STREAM MISSISSIPPI RIVER-CAPE GIRARDEAU AREA
21ILAMB 870314 07140105036 0028.050 ON
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01							
STATION PCTL(010.0)	39374.5	472494	311221	97411.4	50054.2	.1902E+08	.3129E+07
PCTL(025.0)	57373.5	717372	.1017E+07	145524	66052.0	.3782E+08	.5333E+07
PCTL(050.0)	114078	.1268E+07	.2195E+07	295255	119256	.1141E+09	.1185E+08
PCTL(075.0)	207121	.2194E+07	.3996E+07	518018	170659	.4142E+09	.4379E+08
PCTL(085.0)	266021	.3576E+07	.5036E+07	793964	224812	.7031E+09	.7815E+08
PCTL(090.0)	399462	.4386E+07	.6422E+07	985442	245309	.9621E+09	.9031E+08
PCTL(095.0)	471685	.5494E+07	.8310E+07	.1359E+07	324273	.1182E+10	.1100E+09
NUMBER	80	104	68	103	103	67	67
MAXIMUM	.1117E+07	.1405E+08	.1079E+08	.2281E+07	816832	.2657E+10	.2818E+09
MINIMUM	10248.2	135923	146160	40458.7	21575.1	.1828E+07	609496
SUM	.1363E+08	.1991E+09	.1931E+09	.4489E+08	.1451E+08	.2163E+11	.2184E+10
MEAN	170457	.1915E+07	.2840E+07	435841	140953	.3228E+09	.3260E+08
VARIANCE	.3086E+11	.3932E+13	.5682E+13	.1934E+12	.1131E+11	.2449E+18	.2285E+16
STAND DEV	175688	.1982E+07	.2383E+07	439810	106355	.4949E+09	.4780E+08
96/09/30							

1STORET RETRIEVAL DATE 99/01/19

05595540 II 03
37 57 22.0 089 42 22.0 2
MARYS RIVER AT WELGE, IL
17157 ILLINOIS RANDOLPH
UPPER MISSISSIPPI RIVER 072100
/TYPA/AMBNT/STREAM
BIG MUDDY RIVER
21ILAMB 870314 07140105
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	3.18232		9.36358	4.30423	2.48113	604.102	97.0879
	PCTL(025.0)	5.17802		20.3884	10.1133	6.47252	1298.82	248.113
	PCTL(050.0)	17.2601		57.9830	22.1360	14.2395	3856.54	593.315
	PCTL(075.0)	55.0164		166.128	61.1654	37.2170	10873.8	1618.13
	PCTL(085.0)	97.0878		339.807	106.797	70.0111	36278.5	7939.63
	PCTL(090.0)	252.105		773.682	369.257	148.329	171792	21100.4
	PCTL(095.0)	550.164		2330.11	1032.37	266.991	618860	65372.5
	NUMBER	96		97	63	63	97	97
	MAXIMUM	4638.64		25512.5	2284.26	522.980	.3203E+07	463864
	MINIMUM	.151025		.949303	2.42720	1.21360	134.844	49.6227
	SUM	13158.7		52797.8	10147.4	3044.79	.1281E+08	.1548E+07
	MEAN	137.069		544.308	161.070	48.3300	132153	15961.0
	VARIANCE	291778		.6977E+07	188805	9181.40	.2634E+12	.4138E+10
	STAND DEV	540.165		2641.55	434.517	95.8196	513251	64334.4
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05587555 J 05
38 57 07.0 090 22 12.0 4
MISSISSIPPI R NEAR ELSAH RM 214.6 T6N R11W NW19
17083 ILLINOIS JERSEY
UPPER MISSISSIPPI RIVER 072200
/TYPA/AMBNT/STREAM
MISSISSIPPI RIVER SOUTH CENTRAL
21ILAMB 890520 07110009
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	7011.90	134413	180152	30097.2	9007.59	.4236E+08	.7060E+07
	PCTL(025.0)	15361.5	377564	371798	49644.2	17281.6	.4236E+08	.7060E+07
	PCTL(050.0)	52519.1	655612	806908	114564	35302.2	.4236E+08	.7060E+07
	PCTL(075.0)	90075.8	.1272E+07	.4002E+07	144122	98166.5	.1522E+09	.7060E+07
	PCTL(085.0)	165049	.1320E+07	.5061E+07	151026	121036	.1522E+09	.7060E+07
	PCTL(090.0)	165049	.1320E+07	.6746E+07	151026	121036	.1522E+09	.7060E+07
	PCTL(095.0)	181231	.1621E+07	.6746E+07	198059	140022	.1522E+09	.7060E+07
	NUMBER	11	11	8	11	11	2	1
	MAXIMUM	181231	.1621E+07	.6746E+07	198059	140022	.1522E+09	.7060E+07
	MINIMUM	7011.90	134413	180152	30097.2	9007.59	.4236E+08	.7060E+07
	SUM	724647	.8259E+07	.2063E+08	.1113E+07	603945	.1945E+09	.7060E+07
	MEAN	65877.0	750886	.2578E+07	101232	54904.1	.9729E+08	.7060E+07
	VARIANCE	.3538E+10	.2241E+12	.6110E+13	.2987E+10	.2227E+10	.6035E+16	
	STAND DEV	59481.8	473422	.2472E+07	54659.6	47200.9	.7768E+08	
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05587550 J 83
38 51 41.0 090 08 15.0 2
MISSISSIPPI RIVER BELOW ALTON,ILL
17119 ILLINOIS MADISON
UPPER MISSISSIPPI RIVER 072293
/TYPA/AMBNT/STREAM
MISSISSIPPI RIVER-CAPE GIRARDEAU AREA
21ILAMB 870314 07110009003 0000.820 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	9277.29	247574	38403.6	30631.2	12281.6	.3228E+07	679615
	PCTL(025.0)	18619.3	411544	347898	69989.6	27508.2	.3228E+07	679615
	PCTL(050.0)	42287.1	891266	729237	134251	63592.5	.3468E+08	.5291E+07
	PCTL(075.0)	93010.2	.1699E+07	.2330E+07	209656	106797	.5385E+08	.7292E+07
	PCTL(085.0)	121360	.1980E+07	.2694E+07	287380	123787	.2157E+09	.2883E+08
	PCTL(090.0)	189861	.2401E+07	.3596E+07	319311	136732	.2157E+09	.2883E+08
	PCTL(095.0)	385924	.3371E+07	.4315E+07	647253	178642	.2157E+09	.2883E+08
	NUMBER	33	54	17	54	54	5	5
	MAXIMUM	437542	.4093E+07	.4315E+07	781557	837383	.2157E+09	.2883E+08
	MINIMUM	3403.47	131069	38403.6	22297.8	5356.01	.3228E+07	679615
	SUM	.2721E+07	.6228E+08	.2325E+08	.9305E+07	.4793E+07	.3111E+09	.4286E+08
	MEAN	82484.0	.1153E+07	.1368E+07	172331	88764.1	.6222E+08	.8573E+07
	VARIANCE	.1110E+11	.9017E+12	.1703E+13	.2547E+11	.1522E+11	.7825E+16	.1365E+15
	STAND DEV	105359	949629	.1305E+07	159593	123375	.8846E+08	.1168E+08
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05587900 JQ 05
38 49 28.0 089 58 29.0 2
CAHOKIA CREEK AT EDWARDSVILLE, IL
17119 ILLINOIS MADISON
UPPER MISSISSIPPI RIVER 071800
/TYPA/AMBNT/STREAM MISSISSIPPI-ST. LOUIS AREA
21ILAMB 870314 07140101
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.350595	6.47252	.539377	1.47250	.582527	242.720	56.6346
	PCTL(025.0)	2.48113	6.47252	4.15320	5.51243	2.26538	880.263	210.357
	PCTL(050.0)	13.3765	30.2051	63.7867	20.1727	8.25246	5902.94	916.940
	PCTL(075.0)	81.5538	53.9377	543.692	188.566	72.8159	51780.2	8630.03
	PCTL(085.0)	163.108	7792.92	1145.64	524.490	161.813	201727	17918.1
	PCTL(090.0)	280.476	7792.92	2467.65	2388.90	266.020	518880	47292.6
	PCTL(095.0)	1078.75	7792.92	7119.77	5553.42	777.781	.3171E+07	269689
	NUMBER	147	4	147	114	114	146	145
	MAXIMUM	14559.9	7792.92	30443.5	37502.9	10760.6	.4479E+08	.3956E+07
	MINIMUM	.0000000	6.47252	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	44439.4	7883.53	195445	132611	27813.8	.1071E+09	.8889E+07
	MEAN	302.309	1970.88	1329.56	1163.25	243.981	734032	61308.4
	VARIANCE	.1899E+07	.1506E+08	.1751E+08	.2242E+08	.1345E+07	.1577E+14	.1186E+12
	STAND DEV	1378.40	3881.40	4185.38	4735.98	1160.14	.3971E+07	344453
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05474500 K 04
40 23 37.0 091 22 27.0 2
MISSISSIPPI RIVER AT KEOKUK, IOWA
19111 IOWA LEE
UPPER MISSISSIPPI RIVER 071192
/TYPA/AMBNT/STREAM MISSISSIPPI-DES MOINES-SKUNK RIVERS
21ILAMB 870314 07080104001 0003.290 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	6699.06	122439	101619	21359.3	9929.93	.1825E+07	500003
	PCTL(025.0)	20604.2	185438	339166	32524.4	16990.4	.7023E+07	.1439E+07
	PCTL(050.0)	40453.3	387057	906153	70147.0	40194.4	.1883E+08	.2809E+07
	PCTL(075.0)	78910.8	777781	.1747E+07	138188	69579.5	.4522E+08	.6892E+07
	PCTL(085.0)	100734	.1052E+07	.2770E+07	181231	88889.3	.7645E+08	.9708E+07
	PCTL(090.0)	127126	.1300E+07	.3361E+07	207552	103776	.8031E+08	.1149E+08
	PCTL(095.0)	289133	.1726E+07	.4368E+07	289106	115642	.1965E+09	.1950E+08
	NUMBER	74	79	77	80	79	72	72
	MAXIMUM	397531	.5825E+07	.5300E+07	527187	162352	.3787E+09	.3905E+08
	MINIMUM	1666.67	24271.9	12082.0	8155.38	1515.65	485439	160195
	SUM	.4774E+07	.4701E+08	.9894E+08	.8438E+07	.3708E+07	.3019E+10	.4055E+09
	MEAN	64514.5	595139	.1285E+07	105476	46946.2	.4193E+08	.5632E+07
	VARIANCE	.5823E+10	.5577E+12	.1587E+13	.9544E+10	.1226E+10	.4492E+16	.5282E+14
	STAND DEV	76314.8	746800	.1259E+07	97694.6	35021.9	.6702E+08	.7267E+07
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05513000 KCA 01
39 26 35.0 090 47 45.0 2
BAY CREEK AT NEBO, IL
17149 ILLINOIS PIKE
UPPER MISSISSIPPI RIVER 071200
/TYPA/AMBNT/STREAM MISSISSIPPI-SALT RIVERS
21ILAMB 870314 07110004
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	1.24057		1.18663	1.10572	.377564	231.069	63.1071
	PCTL(025.0)	6.79615		10.2482	8.49519	1.77994	1682.86	302.051
	PCTL(050.0)	45.3076		284.791	26.4295	5.50164	8333.37	1229.78
	PCTL(075.0)	98.0047		1245.96	114.779	26.3216	57907.5	7281.59
	PCTL(085.0)	173.895		2545.32	184.251	73.7868	172849	21521.1
	PCTL(090.0)	376.755		3398.07	882.852	308.524	411005	40453.3
	PCTL(095.0)	619.744		7850.08	1213.60	385.655	.2966E+07	201727
	NUMBER	98		97	68	67	97	97
	MAXIMUM	9493.03		23462.9	34412.2	768.936	.6209E+08	.6100E+07
	MINIMUM	.215751		.226538	.296657	.0431502	32.3626	5.39377
	SUM	25143.0		152970	47203.5	4475.03	.8374E+08	.8124E+07
	MEAN	256.561		1577.01	694.168	66.7915	863331	83752.6
	VARIANCE	.1304E+07		.1457E+08	.1745E+08	23144.7	.4000E+14	.3860E+12
	STAND DEV	1142.14		3817.65	4177.39	152.134	.6325E+07	621299
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05495500 KI 02
40 08 34.0 091 20 14.0 2
BEAR CREEK NEAR MARCELLINE, IL
17001 ILLINOIS ADAMS
UPPER MISSISSIPPI RIVER 071200
/TYPA/AMBNT/STREAM MISSISSIPPI-SALT RIVERS
21ILAMB 870314 07110001
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01							
STATION PCTL(010.0)	.453076	62.1362	.431501	.707123	.258901	242.720	97.0879
PCTL(025.0)	3.02051	62.1362	21.7153	5.33983	1.07875	1238.41	318.232
PCTL(050.0)	27.1846	62.1362	323.626	29.4500	10.5718	6343.07	1229.78
PCTL(075.0)	173.679	62.1362	1566.35	215.751	74.4340	75189.1	8069.08
PCTL(085.0)	506.637	62.1362	4150.50	643.692	282.418	294112	35971.1
PCTL(090.0)	750.813	62.1362	5619.77	1481.23	688.245	749842	97303.6
PCTL(095.0)	2878.55	62.1362	14179.1	6202.83	1383.50	.4764E+07	483282
NUMBER	144	1	144	113	112	141	141
MAXIMUM	25210.5	62.1362	98188.1	225567	6634.33	.3317E+09	.2653E+08
MINIMUM	.0000000	62.1362	.0000000	.0000000	.0000000	.0000000	.0000000
SUM	79390.9	62.1362	420787	297222	27329.8	.5260E+09	.4515E+08
MEAN	551.326	62.1362	2922.13	2630.28	244.016	.3731E+07	320280
VARIANCE	.5610E+07		.9173E+08	.4517E+09	608375	.8384E+15	.5714E+13
STAND DEV	2368.55		9577.69	21254.5	779.984	.2895E+08	.2390E+07

96/09/30

1STORET RETRIEVAL DATE 99/01/19

05469000 LD 02
41 00 05.0 090 51 15.0 2
HENDERSON CREEK NEAR OQUAWKA, IL
17071 ILLINOIS HENDERSON
UPPER MISSISSIPPI RIVER 071700
/TYPA/AMBNT/STREAM ILLINOIS RIVER
21ILAMB 870314 07080104
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01							
STATION PCTL(010.0)	9.06153		891.051	146.711	113.269	3106.81	744.340
PCTL(025.0)	24.5956		1608.42	219.580	159.224	8155.38	1618.13
PCTL(050.0)	117.800		7024.84	320.390	258.685	35340.0	4595.49
PCTL(075.0)	355.449		18123.1	597.306	385.762	241846	27697.0
PCTL(085.0)	733.769		32416.6	936.790	528.805	826838	86084.5
PCTL(090.0)	1078.65		38576.2	2115.22	692.776	.2406E+07	203561
PCTL(095.0)	1963.33		64951.8	5229.80	1505.83	.4176E+07	424921
NUMBER	144		143	114	113	145	144
MAXIMUM	20539.5		131802	13823.1	5100.35	.2718E+08	.2826E+07
MINIMUM	.863003		129.450	58.2527	20.7121	490.833	161.813
SUM	78058.8		.2229E+07	103969	46196.4	.1114E+09	.1084E+08
MEAN	542.075		15593.6	912.012	408.817	768534	75327.2
VARIANCE	.3443E+07		.5204E+09	.3620E+07	351110	.7199E+13	.7307E+11
STAND DEV	1855.59		22813.9	1902.72	592.546	.2683E+07	270322

96/09/30

1STORET RETRIEVAL DATE 99/01/19

05466500 LF 01
41 11 15.0 090 58 05.0 2
EDWARDS RIVER NEAR NEW BOSTON, IL
17131 ILLINOIS MERCER
UPPER MISSISSIPPI RIVER 071000
/TYPA/AMBNT/STREAM MISSISSIPPI-IOWA-CEDAR RIVERS
21ILAMB 870314 07080104
0000 FEET DEPTH

DATE FROM TO	00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01							
STATION PCTL(010.0)	6.47252		67.6379	10.1403	3.72170	1332.26	582.527
PCTL(025.0)	23.7326		2446.61	37.9721	20.0648	7421.83	1132.69
PCTL(050.0)	104.639		8333.37	143.043	67.9615	52319.6	5480.07
PCTL(075.0)	262.784		16828.6	466.561	192.558	272407	33009.9
PCTL(085.0)	570.769		26936.5	837.113	371.631	.1135E+07	108350
PCTL(090.0)	992.454		33560.0	2335.83	518.341	.2357E+07	199893
PCTL(095.0)	2296.24		50669.1	9222.48	1553.40	.6069E+07	688245
NUMBER	143		141	113	112	142	142
MAXIMUM	28317.3		189801	47637.8	5422.89	.2756E+08	.1708E+07
MINIMUM	.420714		6.47252	1.77994	.533983	88.9971	70.1190
SUM	98531.2		.2042E+07	156012	30157.2	.1510E+09	.1353E+08
MEAN	689.030		14484.2	1380.63	269.260	.1063E+07	95336.0
VARIANCE	.7728E+07		.5050E+09	.2732E+08	438467	.1174E+14	.6969E+11
STAND DEV	2780.03		22473.5	5227.80	662.168	.3426E+07	263997

96/09/30

1STORET RETRIEVAL DATE 99/01/19

05420500 M 04
41 46 53.0 090 15 04.0 2
MISSISSIPPI RIVER AT CLINTON, IOWA
19045 IOWA CLINTON
UPPER MISSISSIPPI RIVER 070891
/TYPA/AMBNT/STREAM MISSISSIPPI-WAPSIPINICON & TRIBS
21ILAMB 870314 07080101
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	2955.79	85437.3	13808.0	11391.6	4142.41	.1993E+07	550165
	PCTL(025.0)	6256.77	148437	70119.0	16995.8	7464.98	.3678E+07	.1208E+07
	PCTL(050.0)	18090.7	285870	335600	46925.8	15793.0	.1081E+08	.2171E+07
	PCTL(075.0)	47724.1	579938	618935	78705.8	32092.9	.2252E+08	.3969E+07
	PCTL(085.0)	81985.2	737220	793963	116505	40043.3	.4485E+08	.6051E+07
	PCTL(090.0)	106365	837383	951461	123841	41100.5	.5029E+08	.7060E+07
	PCTL(095.0)	181554	959012	.1265E+07	143043	50313.1	.5756E+08	.8569E+07
	NUMBER	65	71	67	71	70	65	65
	MAXIMUM	343044	.1415E+07	.2329E+07	159386	100944	.8198E+08	.1164E+08
	MINIMUM	1218.99	19805.9	6094.96	2640.79	1540.46	466561	198059
	SUM	.2775E+07	.2735E+08	.2869E+08	.3876E+07	.1537E+07	.1160E+10	.1992E+09
	MEAN	42699.5	385271	428327	54598.4	21969.8	.1785E+08	.3065E+07
	VARIANCE	.4129E+10	.9220E+11	.1930E+12	.1843E+10	.3683E+09	.3748E+15	.6432E+13
	STAND DEV	64259.3	303645	439365	42934.1	19193.1	.1936E+08	.2536E+07
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05420100 MJ 01
42 05 50.0 090 07 38.0 2
PLUM RIVER AT SAVANNA, IL
17015 ILLINOIS CARROLL
UPPER MISSISSIPPI RIVER 070800
/TYPA/AMBNT/STREAM MISSISSIPPI-WAPSIPINICON & TRIBS
21ILAMB 870314 07060005
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	12.2978	913.704	1115.43	36.9473	18.9321	4919.11	1181.24
	PCTL(025.0)	37.2170	913.704	1922.34	61.4890	33.6571	16197.5	2847.91
	PCTL(050.0)	71.7371	913.704	3990.31	114.294	56.6346	35383.1	5749.75
	PCTL(075.0)	186.894	1567.97	6546.42	302.051	123.517	132956	15728.2
	PCTL(085.0)	274.111	1567.97	9524.32	568.180	179.073	234467	29147.9
	PCTL(090.0)	560.952	1567.97	13226.6	827.081	294.500	419959	47680.9
	PCTL(095.0)	1067.97	1567.97	19439.1	1192.56	619.420	916855	99245.3
	NUMBER	116	2	116	87	86	115	116
	MAXIMUM	11855.5	1567.97	59827.7	9360.60	943.370	.1185E+08	.1947E+07
	MINIMUM	2.37326	913.704	403.454	12.5135	7.82097	409.927	409.927
	SUM	38295.8	2481.67	694426	31924.1	10872.5	.3326E+08	.4364E+07
	MEAN	330.136	1240.84	5986.43	366.944	126.424	289259	37624.2
	VARIANCE	.1601E+07	214030	.5312E+08	.1080E+07	31232.5	.1486E+13	.3505E+11
	STAND DEV	1265.35	462.634	7288.42	1039.30	176.727	.1219E+07	187243
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05418950 MN 03
42 19 07.0 090 15 18.0 2
APPLE RIVER NEAR ELIZABETH, IL
17085 ILLINOIS JO DAVIESS
UPPER MISSISSIPPI RIVER 070800
/TYPA/AMBNT/STREAM MISSISSIPPI-WAPSIPINICON & TRIBS
21ILAMB 870314 07060005
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	15.1026		405.611	23.3011	15.1026	2615.98	690.403
	PCTL(025.0)	25.8901		1003.24	42.7186	27.2925	6796.15	1504.86
	PCTL(050.0)	50.9711		2610.59	77.6703	56.0952	17367.9	3236.26
	PCTL(075.0)	131.176		4961.19	213.593	130.529	52368.1	8543.73
	PCTL(085.0)	308.092		8213.63	351.134	236.409	107492	13052.9
	PCTL(090.0)	458.740		10841.5	776.811	391.264	177779	22842.6
	PCTL(095.0)	819.853		16553.5	1500.57	607.554	512624	53161.0
	NUMBER	138		138	115	110	138	138
	MAXIMUM	3101.42		29845.9	4021.59	2386.74	.1991E+07	155837
	MINIMUM	2.96657		90.6153	9.06153	4.04533	194.176	183.388
	SUM	24673.2		603376	33324.0	16731.6	.1311E+08	.1487E+07
	MEAN	178.792		4372.28	289.773	152.106	95035.0	10776.4
	VARIANCE	163766		.3038E+08	376100	92083.7	.7257E+11	.5535E+09
	STAND DEV	404.680		5512.12	613.270	303.453	269389	23526.7
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05416000 MQ 01
42 24 50.0 090 25 40.0 2
GALENA RIVER AT GALENA, IL
17085 ILLINOIS JO DAVIESS
UPPER MISSISSIPPI RIVER 070891
/TYPA/AMBNT/STREAM MISSISSIPPI-WAPSIPINICON & TRIBS
21ILAMB 870314 07060005
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	6.90402		353.831	34.5201	27.6161	3883.52	345.201
	PCTL(025.0)	19.4176		809.066	84.1428	45.3077	6084.17	674.221
	PCTL(050.0)	58.2527		3171.54	110.033	77.6703	11057.2	3236.26
	PCTL(075.0)	90.6153		4002.18	173.679	131.824	27750.9	3883.52
	PCTL(085.0)	96.2788		4719.55	188.782	161.813	33980.8	3964.42
	PCTL(090.0)	618.665		9029.17	652.107	418.017	125405	26753.1
	PCTL(095.0)	618.665		9029.17	652.107	418.017	125405	26753.1
	NUMBER	9		9	9	9	9	9
	MAXIMUM	618.665		9029.17	652.107	418.017	125405	26753.1
	MINIMUM	6.90402		353.831	34.5201	27.6161	3883.52	345.201
	SUM	1055.51		28789.2	1575.90	1129.78	241765	47562.2
	MEAN	117.278		3198.80	175.100	125.531	26862.7	5284.69
	VARIANCE	36230.2		.7028E+07	34227.4	13836.7	.1469E+10	.6666E+08
	STAND DEV	190.342		2651.10	185.006	117.630	38334.5	8164.67
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05595700 N 08
38 18 36.0 088 59 18.0 2
BIG MUDDY RIVER NEAR MT. VERNON, IL
17081 ILLINOIS JEFFERSON
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140106
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
	PCTL(025.0)	.215751	3.23626	.304208	.304208	.0852215	76.0522	17.7455
	PCTL(050.0)	5.68503	43.1502	6.47252	4.31502	.916941	1078.75	213.054
	PCTL(075.0)	24.2720	143.474	63.2689	20.4963	4.85439	9018.38	1078.75
	PCTL(085.0)	64.5095	404.533	155.341	81.5538	13.4844	46947.4	6116.53
	PCTL(090.0)	91.1547	1102.49	519.744	227.887	56.6346	85685.4	11682.9
	PCTL(095.0)	272.601	3087.93	1487.60	914.028	170.012	250551	25372.3
	NUMBER	102	100	102	101	100	102	102
	MAXIMUM	736.250	7443.40	7443.40	3885.46	566.346	.1893E+07	161813
	MINIMUM	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	4474.21	47685.6	25762.0	12908.6	2961.15	.5832E+07	571892
	MEAN	43.8648	476.856	252.568	127.808	29.6115	57182.0	5606.78
	VARIANCE	13895.8	.1827E+07	798402	223279	8802.55	.5279E+11	.4146E+09
	STAND DEV	117.881	1351.92	893.533	472.523	93.8219	229779	20362.6
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05597000 N 11
37 54 05.0 089 00 50.0 2
BIG MUDDY RIVER AT PLUMFIELD, IL
17055 ILLINOIS FRANKLIN
UPPER MISSISSIPPI RIVER 072100
/TYPA/AMBNT/STREAM BIG MUDDY RIVER
21ILAMB 870314 07140106
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	20.4963	204.963	84.9519	48.5439	17.9612	11219.0	1995.70
	PCTL(025.0)	45.3076	204.963	170.551	107.875	30.8524	36003.4	5538.32
	PCTL(050.0)	183.388	329.020	385.115	328.157	95.0382	117368	17907.3
	PCTL(075.0)	548.331	833.014	1771.53	729.885	263.162	272450	35944.1
	PCTL(085.0)	856.423	833.014	2788.58	1015.05	346.226	353292	49083.3
	PCTL(090.0)	1061.49	4435.83	3398.07	1305.29	569.582	439857	70766.2
	PCTL(095.0)	1610.04	4435.83	4611.13	2222.23	858.688	590348	130529
	NUMBER	146	6	146	115	113	145	145
	MAXIMUM	5523.22	4435.83	15165.7	6184.50	2830.65	.3386E+07	587058
	MINIMUM	2.53507	204.963	30.0972	13.7541	2.75082	1650.49	275.082
	SUM	65694.7	6518.46	190305	71440.0	26103.3	.3490E+08	.5462E+07
	MEAN	449.964	1086.41	1303.46	621.217	231.003	240711	37674.1
	VARIANCE	573693	.2746E+07	.3928E+07	988201	165233	.2170E+12	.6095E+10
	STAND DEV	757.425	1657.38	1982.15	994.083	406.489	465867	78073.5
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05599500 N 12
37 45 30.0 089 19 38.0 4
BIG MUDDY RIVER AT MURPHYSBORO, IL
17077 ILLINOIS JACKSON
UPPER MISSISSIPPI RIVER 072191
/TYPA/AMBNT/STREAM BIG MUDDY RIVER
21ILAMB 870314 07140106
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	37.8643	604.102	92.5570	107.444	43.4199	22330.2	4228.71
	PCTL(025.0)	74.2723	1223.31	349.516	235.762	87.1633	54746.8	10949.4
	PCTL(050.0)	427.186	4047.49	1411.33	666.994	222.223	261619	34951.6
	PCTL(075.0)	1809.07	17475.8	7491.41	3475.74	974.115	.1046E+07	134844
	PCTL(085.0)	3122.99	34789.8	11221.7	5568.85	2502.71	.1820E+07	278319
	PCTL(090.0)	4509.19	48543.9	15782.2	8970.91	3186.64	.2937E+07	382257
	PCTL(095.0)	7467.68	59741.4	22869.6	15534.1	5476.30	.4017E+07	474652
	NUMBER	122	145	119	146	143	129	129
	MAXIMUM	22049.7	220497	347575	58274.3	28587.0	.2771E+08	.3779E+07
	MINIMUM	3.12839	.0000000	7.92884	35.0595	10.8199	5323.65	1521.04
	SUM	208068	.2210E+07	988527	510692	184749	.1327E+09	.1849E+08
	MEAN	1705.48	15243.2	8306.95	3497.89	1291.95	.1028E+07	143409
	VARIANCE	.1079E+08	.7192E+09	.1103E+10	.5803E+08	.1028E+08	.7152E+13	.1402E+12
	STAND DEV	3285.66	26818.4	33212.0	7618.39	3207.03	.2674E+07	374495
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05599200 NC 07
37 54 12.0 089 22 36.0 2
BEAUCOUP CREEK NEAR VERGENNES, IL
17077 ILLINOIS JACKSON
UPPER MISSISSIPPI RIVER 072100
/TYPA/AMBNT/STREAM BIG MUDDY RIVER
21ILAMB 870314 07140106
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	11.8663	111.651	16.1813	14.6711	5.39377	3991.39	587.921
	PCTL(025.0)	18.8782	111.651	47.4651	28.0476	7.98278	7864.12	1294.50
	PCTL(050.0)	64.7252	169.904	308.524	58.7921	28.6949	29272.0	4843.60
	PCTL(075.0)	539.377	558.255	2939.61	833.499	117.584	279467	29417.6
	PCTL(085.0)	889.972	558.255	3883.51	1672.07	377.564	733553	73355.2
	PCTL(090.0)	1467.10	558.255	7850.63	2243.81	880.263	.1348E+07	177994
	PCTL(095.0)	1779.94	558.255	12459.6	5134.87	1065.59	.3275E+07	266992
	NUMBER	69	3	68	42	41	69	69
	MAXIMUM	3791.82	558.255	16397.1	6678.57	2750.82	.5799E+07	638622
	MINIMUM	1.07875	111.651	9.70878	10.1942	4.36895	755.128	237.326
	SUM	29324.5	839.810	147070	35134.3	9621.08	.3340E+08	.3228E+07
	MEAN	424.992	279.937	2162.80	836.531	234.661	484094	46790.9
	VARIANCE	496658	58944.3	.1383E+08	.2720E+07	267126	.1256E+13	.1100E+11
	STAND DEV	704.739	242.784	3719.33	1649.25	516.842	.1120E+07	104889
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05598245 ND 01
37 46 18.0 089 10 49.0 2
CRAB ORCHARD CREEK NEAR CARBONDALE, IL
17077 ILLINOIS JACKSON
UPPER MISSISSIPPI RIVER 072100
/TYPA/AMBNT/STREAM BIG MUDDY RIVER
21ILAMB 870314 07140106
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	5.12408	40.4802	32.6323	16.1813	7.76703	917.480	161.813
	PCTL(025.0)	43.1501	103.237	72.7620	28.0476	15.3722	2627.84	409.927
	PCTL(050.0)	94.3910	373.788	174.758	105.178	48.3282	10420.8	1682.86
	PCTL(075.0)	367.855	1591.70	463.648	302.051	111.759	63808.3	10248.1
	PCTL(085.0)	509.711	6015.13	701.190	733.552	153.399	237326	30609.6
	PCTL(090.0)	809.065	7362.49	1456.32	1078.75	183.388	377564	48873.0
	PCTL(095.0)	1348.44	10787.5	3236.26	1208.20	242.720	.1022E+07	90615.3
	NUMBER	75	64	75	64	61	74	74
	MAXIMUM	1870.56	14304.3	6693.67	2310.69	323.626	.2831E+07	275082
	MINIMUM	2.75082	19.6333	7.59442	11.0033	5.50164	165.049	27.5082
	SUM	20287.4	129520	41976.9	18703.8	4701.71	.1205E+08	.1292E+07
	MEAN	270.498	2023.75	559.691	292.247	77.0772	162938	17464.9
	VARIANCE	151694	.1309E+08	.1211E+07	195722	5862.96	.1851E+12	.1731E+10
	STAND DEV	389.479	3618.67	1100.51	442.405	76.5700	430344	41607.1
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05598050 ND 02
37 42 51.0 089 09 04.0 2
CRAB ORCHARD C BL CRAB ORCHARD LK NR CARTERVILLE
17199 ILLINOIS WILLIAMSON
UPPER MISSISSIPPI RIVER 072100
/TYPA/AMBNT/STREAM BIG MUDDY RIVER
21ILAMB 870314 07140106
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
	PCTL(025.0)	.134844	.728159	.0863002	.0906153	.0453077	6.90402	3.66776
	PCTL(050.0)	32.3626	237.326	45.3077	15.7498	3.93745	4077.69	1574.98
	PCTL(075.0)	151.025	1208.20	263.593	85.6531	22.6538	14989.3	4854.39
	PCTL(085.0)	354.694	2525.90	377.564	180.422	37.7564	31844.8	8090.65
	PCTL(090.0)	393.745	3883.51	916.941	251.835	64.2398	53937.6	15102.6
	PCTL(095.0)	1024.82	7173.71	1332.26	512.408	102.482	135923	21585.9
	NUMBER	73	72	73	72	73	72	72
	MAXIMUM	2049.63	7914.82	2211.44	4126.23	1375.41	183388	100863
	MINIMUM	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	12334.6	85246.0	18050.0	9520.08	2616.46	.1452E+07	436064
	MEAN	168.967	1183.97	247.261	132.223	35.8419	20167.9	6056.45
	VARIANCE	122923	.4153E+07	229818	248333	26072.4	.1609E+10	.2187E+09
	STAND DEV	350.604	2038.10	479.393	498.331	161.470	40124.0	14789.0
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05597500 ND 04
37 43 52.0 088 53 21.0 2
CRAB ORCHARD CREEK NEAR MARION, IL
17199 ILLINOIS WILLIAMSON
UPPER MISSISSIPPI RIVER 072100
/TYPA/AMBNT/STREAM BIG MUDDY RIVER
21ILAMB 870314 07140106
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
	PCTL(025.0)	.107875	.0485439	.166128	.0647252	.0237326	17.2601	4.09926
	PCTL(050.0)	1.67207	.431502	4.63864	1.07875	.323626	283.173	72.8159
	PCTL(075.0)	7.55127	1.51025	19.9461	4.36895	1.18124	1601.95	377.564
	PCTL(085.0)	22.6538	1252.97	66.0197	14.0238	3.45201	5523.22	970.879
	PCTL(090.0)	49.6227	1252.97	185.006	42.1793	14.0777	19482.3	3042.09
	PCTL(095.0)	89.1590	7238.44	532.904	158.253	55.2322	43279.6	6601.97
	NUMBER	144	12	144	122	116	141	141
	MAXIMUM	690.942	7238.44	3849.53	1809.61	296.118	.1618E+07	131608
	MINIMUM	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	2958.65	8516.77	12724.9	4465.82	1093.12	.3361E+07	322305
	MEAN	20.5462	709.731	88.3670	36.6051	9.42341	23840.0	2285.85
	VARIANCE	5013.89	.4356E+07	129321	31794.3	1339.69	.2145E+11	.1462E+09
	STAND DEV	70.8088	2087.21	359.613	178.310	36.6018	146464	12093.1
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05597280 NE 05
37 53 01.0 089 12 31.0 2
LITTLE MUDDY RIVER NEAR ELKVILLE, IL
17077 ILLINOIS JACKSON
UPPER MISSISSIPPI RIVER 072100
/TYPA/AMBNT/STREAM BIG MUDDY RIVER
21ILAMB 870314 07140106
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	1.02482	25.5125	2.26538	3.94284	1.68286	440.132	97.0879
	PCTL(025.0)	4.85439	25.5125	8.25247	11.7800	6.38083	1704.43	331.717
	PCTL(050.0)	32.0390	35.0595	93.7437	49.8384	22.6538	7702.30	1283.72
	PCTL(075.0)	278.318	165.049	1206.32	430.423	172.331	168717	17233.1
	PCTL(085.0)	421.793	165.049	2138.63	780.748	248.545	312569	36461.9
	PCTL(090.0)	579.938	165.049	3411.02	893.208	349.516	386642	49353.0
	PCTL(095.0)	1121.90	165.049	5954.72	1960.10	1165.05	626216	60194.5
	NUMBER	81	3	81	50	50	81	81
	MAXIMUM	3411.02	165.049	12459.6	4614.91	3411.02	.1868E+07	323626
	MINIMUM	.0000000	25.5125	.0000000	.485439	.161813	.0000000	.0000000
	SUM	21945.9	225.621	89859.0	19567.3	10011.4	.1178E+08	.1543E+07
	MEAN	270.937	75.2071	1109.37	391.345	200.228	145476	19059.2
	VARIANCE	382201	6076.50	.4810E+07	689756	291054	.9424E+11	.2293E+10
	STAND DEV	618.224	77.9519	2193.34	830.515	539.494	306997	47887.9
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05597040 NG 02
37 53 06.0 088 55 54.0 2
POND CREEK AT WEST FRANKFORT, IL
17055 ILLINOIS FRANKLIN
UPPER MISSISSIPPI RIVER 072100
/TYPA/AMBNT/STREAM BIG MUDDY RIVER
21ILAMB 870314 07140106
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.0080907	.0485439	.0053938	.0043150	.0005394	1.29450	.485439
	PCTL(025.0)	.809065	.0485439	.593314	.177994	.0404533	58.7382	8.89972
	PCTL(050.0)	3.07445	.560952	5.17802	1.13269	.296657	475.730	88.9972
	PCTL(075.0)	11.3269	.679615	35.1134	5.01621	1.51025	2071.21	582.527
	PCTL(085.0)	19.4176	5.66345	76.5376	8.63003	2.91263	5161.83	970.879
	PCTL(090.0)	23.7326	5.66345	104.855	17.9612	5.98708	7767.03	1208.20
	PCTL(095.0)	43.4738	5.66345	138.080	33.9807	16.1813	9967.69	2265.38
	NUMBER	71	4	71	46	46	71	71
	MAXIMUM	238.674	5.66345	474.652	88.9971	22.6538	177994	20172.7
	MINIMUM	.0000000	.0485439	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	844.782	6.95256	2312.53	321.822	109.131	309851	49289.2
	MEAN	11.8983	1.73814	32.5708	6.99614	2.37242	4364.09	694.214
	VARIANCE	904.944	6.92302	4500.10	256.567	27.7967	.4466E+09	.6066E+07
	STAND DEV	30.0823	2.63116	67.0828	16.0177	5.27226	21134.8	2463.06
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05595830 NJ 07
38 16 10.0 088 53 55.0 2
CASEY FORK AT RTE 37 NEAR MOUNT VERNON, IL
17081 ILLINOIS JEFFERSON
UPPER MISSISSIPPI RIVER 072100
/TYPA/AMBNT/STREAM BIG MUDDY RIVER
21ILAMB 870314 07140106
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	1.61274	17.2601	19.3960	2.56204	1.07875	245.956	62.0283
	PCTL(025.0)	7.24923	40.4533	43.4198	4.85439	2.26538	517.802	119.742
	PCTL(050.0)	71.1978	200.842	94.2831	15.7174	7.55127	1793.43	414.241
	PCTL(075.0)	239.483	437.974	245.632	55.0164	22.8696	11213.6	1941.76
	PCTL(085.0)	308.523	912.626	347.089	148.329	62.9992	32039.0	5399.16
	PCTL(090.0)	391.588	1205.61	625.677	222.763	77.7781	66715.5	10183.4
	PCTL(095.0)	488.028	3035.61	1498.17	889.541	144.661	393206	40474.9
	NUMBER	144	142	144	144	143	144	144
	MAXIMUM	1402.38	8220.10	6507.58	2123.53	611.653	.1306E+07	191803
	MINIMUM	.195794	.0000000	.161813	1.16505	.221144	39.1588	7.11978
	SUM	24018.9	84451.1	46432.1	16864.8	5203.93	.8833E+07	959741
	MEAN	166.798	594.727	322.445	117.117	36.3911	61342.2	6664.86
	VARIANCE	56124.8	.1582E+07	642252	97583.1	7877.76	.4872E+11	.5326E+09
	STAND DEV	236.907	1257.98	801.406	312.383	88.7567	220740	23080.1
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05595730 NK 01
38 15 14.0 089 02 23.0 2
RAYSE CREEK NEAR WALTONVILLE, IL
17081 ILLINOIS JEFFERSON
UPPER MISSISSIPPI RIVER 072100
/TYPA/AMBNT/STREAM BIG MUDDY RIVER
21ILAMB 870314 07140106
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
	PCTL(025.0)	.211436	3.13378	.447683	.318232	.107875	63.1071	13.5923
	PCTL(050.0)	3.18232	24.8113	16.1813	2.48113	.760522	836.034	161.813
	PCTL(075.0)	59.3314	339.807	277.671	52.5892	13.3765	18123.1	2459.56
	PCTL(085.0)	141.425	1096.01	679.615	187.703	78.1557	54336.8	8699.61
	PCTL(090.0)	336.571	2305.84	1230.86	428.913	134.467	145157	20172.7
	PCTL(095.0)	837.113	7532.40	2006.48	1551.46	330.098	.1205E+07	91181.6
	NUMBER	147	145	147	146	147	146	146
	MAXIMUM	3042.09	29153.3	22815.6	6971.44	1714.68	.6185E+07	608417
	MINIMUM	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	19678.2	156064	95734.5	36296.4	9952.75	.2580E+08	.2109E+07
	MEAN	133.865	1076.30	651.255	248.605	67.7058	176771	14448.2
	VARIANCE	161035	.1189E+08	.6769E+07	737580	55863.8	.4792E+12	.3436E+10
	STAND DEV	401.291	3448.64	2601.82	858.825	236.355	692271	58617.7
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05591200 O 02
39 35 01.0 088 24 50.0 2
KASKASKIA RIVER AT COOKS MILLS, IL
17029 ILLINOIS COLES
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140201
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	6.47252	100.324	37.5406	30.7445	19.6333	1585.77	485.439
	PCTL(025.0)	16.9904	213.593	819.853	74.4340	49.0833	5663.46	1165.05
	PCTL(050.0)	61.4890	585.763	8948.26	150.810	111.327	24503.9	3883.52
	PCTL(075.0)	208.253	1714.46	28883.6	404.694	274.759	134844	18716.4
	PCTL(085.0)	410.358	2621.37	50781.8	758.321	535.709	195211	27864.2
	PCTL(090.0)	660.197	4449.86	64299.1	866.562	769.421	343961	44223.5
	PCTL(095.0)	927.728	9277.28	83533.1	1847.37	1577.14	489323	105718
	NUMBER	149	147	147	148	146	147	147
	MAXIMUM	7860.34	103426	196333	6785.36	27718.0	.7042E+07	.1116E+07
	MINIMUM	1.59656	11.9742	.409926	12.9450	7.78860	334.414	97.0879
	SUM	44501.5	389176	.3256E+07	68869.4	71452.3	.2931E+08	.4916E+07
	MEAN	298.667	2647.45	22151.9	465.334	489.399	199435	33445.7
	VARIANCE	839705	.9432E+08	.1034E+10	976609	.5465E+07	.6340E+12	.1530E+11
	STAND DEV	916.354	9711.88	32161.2	988.236	2337.92	796277	123708
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05593010 O 07
38 34 28.0 089 22 09.0 2
KASKASKIA RIVER BELOW CARLYLE
17027 ILLINOIS CLINTON
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140202
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	27.1846	275.082	60.5181	46.7640	21.5751	6796.15	1618.13
	PCTL(025.0)	112.730	1057.18	334.899	164.995	59.6551	33980.8	6456.34
	PCTL(050.0)	626.163	5922.36	2827.95	1113.27	401.296	202266	32578.4
	PCTL(075.0)	1796.12	15663.5	19579.4	2744.35	1276.17	583390	106797
	PCTL(085.0)	3378.66	25156.5	48673.4	4455.25	2545.86	859228	170551
	PCTL(090.0)	4368.95	29072.4	65631.3	6216.86	3470.89	985712	220066
	PCTL(095.0)	8200.69	35690.6	106149	9234.13	5119.76	.1553E+07	302321
	NUMBER	145	144	145	143	144	144	143
	MAXIMUM	19239.6	72977.6	167239	13462.8	9536.18	.5108E+07	823629
	MINIMUM	2.75082	47.4652	6.25677	23.7326	2.75082	1078.75	269.688
	SUM	238149	.1647E+07	.2842E+07	312820	166344	.6678E+08	.1160E+08
	MEAN	1642.41	11440.2	19605.8	2187.55	1155.17	463759	81119.1
	VARIANCE	.7451E+07	.1881E+09	.1238E+10	.8838E+07	.3228E+07	.5777E+12	.1357E+11
	STAND DEV	2729.78	13715.5	35193.7	2973.03	1796.68	760114	116511
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05592500 O 08
38 57 35.0 089 05 20.0 2
KASKASKIA RIVER AT VANDALIA, IL
17051 ILLINOIS FAYETTE
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140202
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	32.9020	323.626	83.0641	56.0952	10.7875	11068.0	3171.54
	PCTL(025.0)	96.4406	1125.14	891.752	136.462	32.3626	50205.2	8155.38
	PCTL(050.0)	385.654	4319.33	12011.9	653.725	146.279	412623	44175.0
	PCTL(075.0)	1359.23	13252.5	53161.0	2459.56	635.925	.1713E+07	150378
	PCTL(085.0)	1951.46	20469.4	74682.1	4591.17	1275.09	.2455E+07	266668
	PCTL(090.0)	2912.63	23400.3	122072	6317.18	2912.63	.3123E+07	391587
	PCTL(095.0)	6330.12	43614.0	160562	11568.6	4449.86	.5214E+07	871633
	NUMBER	147	147	146	147	146	147	147
	MAXIMUM	37864.2	267962	328783	53592.5	14514.6	.2854E+08	.3378E+07
	MINIMUM	4.20714	59.8708	17.7994	18.1231	4.07769	1396.99	237.326
	SUM	220808	.1951E+07	.5444E+07	392324	133725	.2194E+09	.2658E+08
	MEAN	1502.09	13275.4	37292.5	2668.87	915.923	.1492E+07	180857
	VARIANCE	.1579E+08	.8721E+09	.2894E+10	.3799E+08	.4451E+07	.1079E+14	.2025E+12
	STAND DEV	3974.08	29532.7	53798.2	6163.93	2109.86	.3285E+07	450055
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05592100 O 10
39 13 50.0 088 50 33.0 2
KASKASKIA RIVER NEAR COWDEN, IL
17173 ILLINOIS SHELBY
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140201
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	11.3269	118.663	143.259	12.2978	2.48113	4714.15	819.853
	PCTL(025.0)	32.0390	404.533	1241.11	64.1858	18.0691	14563.2	2589.01
	PCTL(050.0)	220.875	2922.34	12289.2	339.807	84.4664	188566	19201.8
	PCTL(075.0)	819.853	7269.94	48026.1	901.838	238.135	536141	46925.8
	PCTL(085.0)	1294.50	10399.2	64790.0	1423.95	785.333	762463	80690.8
	PCTL(090.0)	1789.65	11866.3	77411.3	2717.38	1535.61	981666	94175.1
	PCTL(095.0)	2468.19	22443.5	117714	5387.30	2362.47	.1351E+07	171414
	NUMBER	144	143	144	144	140	143	143
	MAXIMUM	9152.15	244208	186409	23152.2	5391.61	.1135E+08	.1395E+07
	MINIMUM	1.07875	27.5082	1.07875	1.40238	.755128	91.6941	91.6941
	SUM	103559	.1014E+07	.4168E+07	154122	62801.2	.7410E+08	.7562E+07
	MEAN	719.157	7093.57	28950.0	1070.29	448.580	518235	52886.8
	VARIANCE	.1953E+07	.4625E+09	.1404E+10	.6037E+07	890129	.1883E+13	.2139E+11
	STAND DEV	1397.59	21508.0	37480.2	2457.13	943.467	.1372E+07	146267
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05592000 O 11
39 24 21.0 088 47 01.0 4
KASKASKIA RIVER AT SHELBYVILLE, IL
17173 ILLINOIS SHELBY
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140201
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	8.89971	49.0833	151.025	2.26538	.701190	377.564	161.813
	PCTL(025.0)	37.7564	175.298	350.595	6.47252	1.61813	1456.32	409.927
	PCTL(050.0)	243.151	1804.22	7319.34	63.6465	28.4791	19093.9	5393.77
	PCTL(075.0)	728.159	4974.13	31359.4	283.173	122.978	60032.7	18738.0
	PCTL(085.0)	988.138	6372.20	51046.6	530.747	401.296	81122.3	22438.1
	PCTL(090.0)	1352.76	7173.71	78495.5	1003.24	828.483	122439	24703.5
	PCTL(095.0)	2049.63	10895.4	96278.8	1824.71	1587.93	141425	31068.1
	NUMBER	125	124	125	125	122	125	125
	MAXIMUM	9077.71	26224.5	195637	5850.08	4544.79	988463	262245
	MINIMUM	1.02482	4.90833	4.90833	.490833	.366776	183.388	49.0833
	SUM	72818.8	417150	.2854E+07	49096.4	36184.6	.5668E+07	.1523E+07
	MEAN	582.550	3364.11	22834.5	392.771	296.595	45351.4	12188.6
	VARIANCE	.1130E+07	.2139E+08	.1122E+10	848083	585338	.9478E+10	.6762E+09
	STAND DEV	1063.03	4625.85	33501.2	920.914	765.074	97359.5	26004.6
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05591300 O 15
39 34 22.0 088 31 56.0 2
KASKASKIA RIVER AT ALLENVILLE, IL
17139 ILLINOIS MOULTRIE
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140201
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.436895	17.4758	2.62137	6.99032	3.93206	377.564	377.564
	PCTL(025.0)	24.2720	188.782	1278.32	18.8782	12.7832	1441.75	393.206
	PCTL(050.0)	38.8351	553.940	1726.01	51.1329	20.0109	13150.0	1715.22
	PCTL(075.0)	76.6994	728.159	13349.6	266.991	142.396	106797	12136.0
	PCTL(085.0)	88.9971	776.703	18123.1	284.791	218.448	112622	16828.6
	PCTL(090.0)	228.696	1530.75	29725.0	291.263	258.901	163755	24919.2
	PCTL(095.0)	228.696	1530.75	29725.0	291.263	258.901	163755	24919.2
	NUMBER	8	8	8	8	8	8	8
	MAXIMUM	228.696	1530.75	29725.0	291.263	258.901	163755	24919.2
	MINIMUM	.436895	17.4758	2.62137	6.99032	3.93206	377.564	377.564
	SUM	528.971	4686.32	70010.1	1122.64	749.242	416514	60210.1
	MEAN	66.1214	585.790	8751.26	140.330	93.6553	52064.2	7526.26
	VARIANCE	5134.41	227282	.1145E+09	16028.9	10242.1	.4231E+10	.8761E+08
	STAND DEV	71.6548	476.741	10704.8	126.605	101.203	65048.9	9360.54
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05594100 O 20
38 27 02.0 089 37 39.0 2
KASKASKIA RIVER NEAR VENEDY STATION, IL
17189 ILLINOIS WASHINGTON
UPPER MISSISSIPPI RIVER 072091
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140204
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	42.0714	713.596	88.3499	135.680	31.2839	49401.5	7594.43
	PCTL(025.0)	97.6272	2763.77	507.662	489.755	184.467	226695	31111.2
	PCTL(050.0)	800.975	11542.7	6626.25	2858.70	1005.94	.1041E+07	115427
	PCTL(075.0)	2922.34	39568.7	30911.7	9147.83	3809.08	.2915E+07	300002
	PCTL(085.0)	5717.39	57174.0	72988.4	14893.8	5609.51	.3832E+07	551243
	PCTL(090.0)	7306.40	72718.7	88393.0	17330.2	7686.12	.5578E+07	850058
	PCTL(095.0)	18252.5	92767.3	102482	24077.8	13980.6	.1296E+08	.1320E+07
	NUMBER	124	148	121	148	146	137	137
	MAXIMUM	27157.6	302051	186409	60518.1	30205.1	.2027E+08	.2644E+07
	MINIMUM	5.44770	.0000000	6.95796	10.2482	4.55774	4902.94	1682.86
	SUM	387528	.4331E+07	.3185E+07	.1054E+07	438103	.3428E+09	.4095E+08
	MEAN	3125.22	29265.9	26329.3	7126.80	3000.71	.2502E+07	298947
	VARIANCE	.3232E+08	.1969E+10	.1769E+10	.1198E+09	.2319E+08	.1642E+14	.2410E+12
	STAND DEV	5685.75	44375.8	42069.7	10945.9	4815.76	.4052E+07	490964
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05595400 O 30
38 00 58.0 089 57 14.0 2
KASKASKIA RIVER AT ROOTS, IL
17157 ILLINOIS RANDOLPH
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140204
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.539377	5.39377	2.91264	.647252	.215751	269.688	59.3315
	PCTL(025.0)	311.490	444.986	622.980	418.287	355.989	9789.69	889.972
	PCTL(050.0)	1778.33	8975.23	6429.37	1542.62	785.333	420714	73624.9
	PCTL(075.0)	2916.95	11008.7	16267.6	2540.46	1300.98	686951	118070
	PCTL(085.0)	3035.61	21683.0	17346.4	3613.83	1439.60	793208	144553
	PCTL(090.0)	3035.61	21683.0	17346.4	3613.83	1439.60	793208	144553
	PCTL(095.0)	5009.73	31310.8	22961.3	5218.47	2713.61	968506	146117
	NUMBER	11	11	11	11	11	11	11
	MAXIMUM	5009.73	31310.8	22961.3	5218.47	2713.61	968506	146117
	MINIMUM	.539377	5.39377	2.91264	.647252	.215751	269.688	59.3315
	SUM	19014.3	102544	89287.7	20567.5	10261.7	.4518E+07	757242
	MEAN	1728.57	9322.18	8117.07	1869.77	932.881	410788	68840.1
	VARIANCE	.2383E+07	.9406E+08	.6934E+08	.2505E+07	591439	.1142E+12	.3135E+10
	STAND DEV	1543.71	9698.55	8327.51	1582.91	769.051	338056	55999.1
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05595200 OC 04
38 19 26.0 089 58 15.0 2
RICHLAND CREEK NEAR HECKER, IL
17163 ILLINOIS ST CLAIR
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140204
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	6.68827	129.450	99.2453	83.0640	59.7090	841.428	215.751
	PCTL(025.0)	32.7941	129.450	305.827	111.651	83.0641	1860.85	431.501
	PCTL(050.0)	137.217	569.582	742.183	143.474	110.033	5717.39	1035.60
	PCTL(075.0)	387.380	806.907	1153.73	218.448	166.128	23408.9	2696.89
	PCTL(085.0)	560.952	1033.99	1419.64	275.082	204.100	52880.5	5291.28
	PCTL(090.0)	771.848	1033.99	1924.07	361.814	242.720	99110.5	13063.7
	PCTL(095.0)	1537.22	1033.99	6469.93	2653.73	1105.72	902270	97303.6
	NUMBER	146	5	147	126	126	147	147
	MAXIMUM	8721.73	1033.99	23786.5	32848.0	4556.66	.2437E+08	.1674E+07
	MINIMUM	.755128	129.450	8.89971	31.2839	.0539377	355.989	64.7252
	SUM	60084.1	2705.62	220314	95757.5	32620.6	.7011E+08	.5183E+07
	MEAN	411.535	541.124	1498.74	759.980	258.893	476978	35260.9
	VARIANCE	989738	156196	.1231E+08	.1084E+08	407462	.7332E+13	.3798E+11
	STAND DEV	994.856	395.216	3509.07	3293.83	638.328	.2707E+07	194889
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05594450 OD 06
38 43 00.0 089 49 45.0 2
SILVER CREEK NEAR TROY, IL
17119 ILLINOIS MADISON
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140204
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	1.51025	25.8901	5.60952	10.2482	7.02268	194.176	40.3454
	PCTL(025.0)	9.97847	25.8901	31.7154	23.1932	14.5632	776.703	140.238
	PCTL(050.0)	49.7845	55.2322	119.202	50.4317	36.8934	4271.86	593.315
	PCTL(075.0)	129.450	166.128	510.250	196.333	120.389	29277.4	3883.52
	PCTL(085.0)	329.559	355.989	1514.73	1278.97	385.115	294446	26645.2
	PCTL(090.0)	521.038	355.989	3812.32	2153.19	753.617	.1078E+07	116667
	PCTL(095.0)	1512.95	355.989	4962.26	3300.99	1377.03	.1672E+07	214456
	NUMBER	144	4	144	122	122	144	144
	MAXIMUM	5006.50	355.989	28608.5	13646.2	2503.25	.3245E+07	385115
	MINIMUM	.0000000	25.8901	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	36599.2	603.239	171476	77828.0	26957.6	.3313E+08	.3952E+07
	MEAN	254.161	150.810	1190.81	637.934	220.964	230083	27450.9
	VARIANCE	451285	22357.7	.1165E+08	.2819E+07	223557	.3542E+12	.5260E+10
	STAND DEV	671.778	149.525	3413.96	1679.26	472.818	595155	72531.9
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05594800 OD 07
38 24 22.0 089 52 26.0 2
SILVER CREEK NEAR FREEBURG, IL
17163 ILLINOIS ST CLAIR
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140204
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	3.02051	142.396	77.1309	30.8523	26.1058	1518.88	237.326
	PCTL(025.0)	12.9450	142.396	200.109	88.3499	59.3315	4271.86	809.066
	PCTL(050.0)	50.1620	463.864	631.071	216.398	127.994	18036.8	2853.30
	PCTL(075.0)	241.641	595.472	1938.57	492.235	259.278	76149.2	12945.0
	PCTL(085.0)	571.739	3333.35	3519.43	1649.20	732.690	348028	52103.8
	PCTL(090.0)	859.227	3333.35	6592.80	3586.86	1188.84	787577	115988
	PCTL(095.0)	1501.63	3333.35	11629.0	5298.30	2002.17	.1460E+07	190939
	NUMBER	148	5	148	125	124	146	145
	MAXIMUM	7276.19	3333.35	33786.6	32284.9	21773.6	.2731E+08	.1818E+07
	MINIMUM	.377564	142.396	1.72601	6.73142	4.50919	302.051	71.1978
	SUM	48611.7	4686.10	340221	146529	65389.5	.6964E+08	.6523E+07
	MEAN	328.458	937.221	2298.79	1172.24	527.335	477053	44986.4
	VARIANCE	660860	.1833E+07	.2082E+08	.1180E+08	.4089E+07	.5800E+13	.3110E+11
	STAND DEV	812.933	1353.90	4563.73	3435.15	2022.18	.2408E+07	176374
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05594090 OH 01
38 32 29.0 089 37 36.0 2
SUGAR CREEK AT ALBERS, IL
17027 ILLINOIS CLINTON
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140204
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	1.18663	83.0640	2.91264	7.81557	4.46604	155.502	43.1501
	PCTL(025.0)	5.39377	83.0640	17.8210	24.3259	15.7013	943.909	195.794
	PCTL(050.0)	31.5643	116.397	68.2312	59.5472	35.7175	2858.70	620.283
	PCTL(075.0)	120.928	220.066	403.562	170.497	106.149	14153.3	2006.48
	PCTL(085.0)	234.467	220.066	748.116	302.590	212.299	51747.8	8268.64
	PCTL(090.0)	398.060	220.066	961.169	591.427	314.457	333982	41747.8
	PCTL(095.0)	1337.65	220.066	4129.47	4034.54	1334.96	.2708E+07	203885
	NUMBER	78	3	78	53	53	78	78
	MAXIMUM	12772.4	220.066	24164.1	18986.1	7421.82	.7836E+07	966564
	MINIMUM	.0000000	83.0640	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	26269.3	419.527	68409.5	42202.6	18752.3	.2219E+08	.2374E+07
	MEAN	336.786	139.842	877.045	796.276	353.817	284599	30439.9
	VARIANCE	.2331E+07	5104.62	.1092E+08	.8764E+07	.1491E+07	.1226E+13	.1617E+11
	STAND DEV	1527.08	71.4466	3305.03	2960.48	1221.07	.1107E+07	127174
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05594000 OI 08
38 36 35.0 089 29 40.0 2
SHOAL CREEK NEAR BREESE, IL
17027 ILLINOIS CLINTON
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140203
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	3.72170	239.483	13.4844	11.8663	3.88351	1925.58	355.989
	PCTL(025.0)	13.4844	239.483	79.3963	42.0714	11.8663	7551.27	1456.32
	PCTL(050.0)	70.6584	440.131	556.475	121.576	38.1879	29903.1	4530.76
	PCTL(075.0)	319.311	510.250	2218.99	582.635	210.357	90615.3	14536.2
	PCTL(085.0)	1243.32	906.153	5258.92	1135.33	394.824	638299	85545.1
	PCTL(090.0)	1887.82	906.153	13322.6	3579.31	1035.60	.2313E+07	269689
	PCTL(095.0)	2757.29	906.153	22977.5	11132.7	3222.24	.4291E+07	543692
	NUMBER	147	5	147	122	121	146	146
	MAXIMUM	12958.0	906.153	74455.5	34673.3	25217.0	.1595E+08	.1272E+07
	MINIMUM	.474651	239.483	.323626	3.15536	.970878	323.626	72.8159
	SUM	91478.9	2484.37	606374	201098	82670.1	.1153E+09	.1206E+08
	MEAN	622.306	496.874	4124.99	1648.34	683.225	790019	82620.2
	VARIANCE	.2647E+07	62234.0	.1126E+09	.2373E+08	.7014E+07	.6199E+13	.5431E+11
	STAND DEV	1627.23	249.467	10614.6	4871.38	2648.50	.2489E+07	233060
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05593785 OI 09
39 03 48.0 089 32 43.0 2
SHOAL CREEK NEAR WALSHVILLE, IL
17135 ILLINOIS MONTGOMERY
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140203
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	1.83388	99.5150	29.7196	14.3043	14.1209	121.360	43.1502
	PCTL(025.0)	5.39377	99.5150	102.482	35.3831	25.9872	863.003	258.901
	PCTL(050.0)	33.4414	99.5150	400.218	81.9853	58.2527	5242.74	1165.05
	PCTL(075.0)	172.493	99.5150	1419.64	208.847	129.990	32362.6	3851.15
	PCTL(085.0)	297.736	99.5150	2038.84	366.776	220.066	79288.3	10399.2
	PCTL(090.0)	582.527	99.5150	3365.71	415.967	252.428	166128	29342.1
	PCTL(095.0)	853.402	99.5150	7443.40	1422.34	524.274	758580	86300.3
	NUMBER	82	1	82	72	71	81	81
	MAXIMUM	2610.58	99.5150	41812.5	13773.5	3689.34	.1165E+08	.1131E+07
	MINIMUM	.755128	99.5150	23.8404	6.04102	5.26432	14.5632	8.63003
	SUM	16441.1	99.5150	151625	30349.0	11618.0	.2646E+08	.2751E+07
	MEAN	200.502	99.5150	1849.09	421.513	163.634	326701	33964.6
	VARIANCE	202993		.2803E+08	.2803E+07	208696	.2456E+13	.2323E+11
	STAND DEV	450.548		5295.11	1674.45	456.832	.1567E+07	152424
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05593505 OJ 07
38 33 50.0 089 03 01.0 2
CROOKED CREEK NEAR ODIN, IL
17121 ILLINOIS MARION
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140202004 0024.090 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	1.34844	8.63003	3.96442	2.52428	1.05178	211.436	48.5439
	PCTL(025.0)	3.23626	8.63003	16.9904	7.85333	2.71846	427.726	101.942
	PCTL(050.0)	17.2601	12.9450	57.5515	24.1641	11.6505	1456.32	283.173
	PCTL(075.0)	124.596	198.491	136.462	96.1170	66.6670	6569.61	1564.19
	PCTL(085.0)	366.776	198.491	696.875	422.332	225.460	49601.1	7119.77
	PCTL(090.0)	415.320	198.491	823.898	471.955	330.099	132903	24541.7
	PCTL(095.0)	698.925	198.491	2163.98	1063.65	513.487	194176	29935.4
	NUMBER	71	3	71	50	50	69	69
	MAXIMUM	4347.37	198.491	6067.99	2675.31	919.637	.1254E+07	425461
	MINIMUM	.512408	8.63003	.863003	.922335	.358685	22.6538	7.55128
	SUM	13645.8	220.066	23758.3	9595.73	4624.16	.3033E+07	710062
	MEAN	192.194	73.3552	334.624	191.915	92.4831	43968.4	10290.7
	VARIANCE	327957	11748.8	771662	206350	34072.1	.2654E+11	.2691E+10
	STAND DEV	572.675	108.392	878.443	454.258	184.586	162914	51875.3
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05593520 OJ 08
38 30 25.0 089 16 24.0 2
CROOKED CREEK NEAR HOFFMAN, IL
17189 ILLINOIS WASHINGTON
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140202004 0008.250 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	2.15751	91.6940	16.1381	21.8448	12.9450	717.371	129.450
	PCTL(025.0)	7.55128	91.6940	42.1361	42.1793	26.1652	2001.09	343.044
	PCTL(050.0)	58.3066	442.289	154.801	83.0641	47.4652	6025.92	1024.82
	PCTL(075.0)	196.819	485.439	471.523	177.455	91.2626	25664.6	4045.33
	PCTL(085.0)	340.562	651.028	1100.33	392.666	262.245	55528.8	9849.01
	PCTL(090.0)	415.320	651.028	2386.74	1661.28	596.551	500812	47249.4
	PCTL(095.0)	949.303	651.028	4651.58	3672.08	1385.12	.1091E+07	118555
	NUMBER	148	5	148	123	123	147	147
	MAXIMUM	5831.74	651.028	14407.8	7375.44	6526.46	.3896E+07	274435
	MINIMUM	.0215751	91.6940	.604102	.453076	.366776	9.92453	1.07875
	SUM	31287.6	1875.41	119876	63105.5	31597.0	.2336E+08	.2447E+07
	MEAN	211.403	375.083	809.971	513.053	256.886	158934	16652.6
	VARIANCE	314926	50522.9	.3830E+07	.1685E+07	557697	.2753E+12	.2272E+10
	STAND DEV	561.182	224.773	1957.07	1298.16	746.791	524731	47673.3
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05592900 OK 01
38 41 20.0 089 05 55.0 2
EAST FORK KASKASKIA RIVER NEAR SANDOVAL, IL
17121 ILLINOIS MARION
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140202
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.0053938	.0711977	.0048544	.0372170	.0161813	1.99569	.485439
	PCTL(025.0)	.539377	6.04102	.776702	1.30529	.334414	71.7371	20.4963
	PCTL(050.0)	5.39377	44.1750	19.4176	7.07123	2.02266	1213.60	258.901
	PCTL(075.0)	35.0595	211.544	136.894	45.7392	15.5341	8845.78	1747.58
	PCTL(085.0)	74.4340	585.456	222.008	124.057	52.3195	28738.0	5264.32
	PCTL(090.0)	209.440	1715.22	1117.05	291.911	129.720	139548	12621.4
	PCTL(095.0)	699.032	7306.39	2441.33	1551.46	323.680	.1294E+07	141101
	NUMBER	147	147	147	147	146	147	147
	MAXIMUM	4689.34	18926.7	10442.3	5640.80	1501.09	.2871E+07	602333
	MINIMUM	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	16346.3	147431	54400.7	35801.9	8440.15	.1905E+08	.2823E+07
	MEAN	111.200	1002.93	370.072	243.550	57.8092	129597	19207.8
	VARIANCE	191967	.1065E+08	.1411E+07	714245	37134.6	.2150E+12	.6185E+10
	STAND DEV	438.140	3263.45	1187.88	845.130	192.703	463689	78648.8
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05592930 OKA 01
38 46 25.0 089 05 10.0 2
NORTH FORK KASKASKIA RIVER NEAR PATOKA, IL
17121 ILLINOIS MARION
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140202
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	1.29450	9.70878	2.91264	1.67207	.539377	593.315	102.482
	PCTL(025.0)	1.29450	9.70878	2.91264	1.67207	.539377	593.315	102.482
	PCTL(050.0)	1.29450	9.70878	2.91264	1.67207	.539377	593.315	102.482
	PCTL(075.0)	1.29450	9.70878	2.91264	1.67207	.539377	593.315	102.482
	PCTL(085.0)	1.29450	9.70878	2.91264	1.67207	.539377	593.315	102.482
	PCTL(090.0)	1.29450	9.70878	2.91264	1.67207	.539377	593.315	102.482
	PCTL(095.0)	1.29450	9.70878	2.91264	1.67207	.539377	593.315	102.482
	NUMBER	1	1	1	1	1	1	1
	MAXIMUM	1.29450	9.70878	2.91264	1.67207	.539377	593.315	102.482
	MINIMUM	1.29450	9.70878	2.91264	1.67207	.539377	593.315	102.482
	SUM	1.29450	9.70878	2.91264	1.67207	.539377	593.315	102.482
	MEAN	1.29450	9.70878	2.91264	1.67207	.539377	593.315	102.482
	VARIANCE							
	STAND DEV							
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05592800 OL 02
38 55 21.0 089 14 14.0 2
HURRICANE CREEK NEAR MULBERRY GROVE, IL
17051 ILLINOIS FAYETTE
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140202
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.393745	4.40671	1.51025	1.65049	.776702	175.297	40.9926
	PCTL(025.0)	2.96657	21.8987	14.7250	5.28589	2.13593	829.022	161.813
	PCTL(050.0)	14.8329	82.7404	102.482	14.8868	7.28159	4217.92	504.857
	PCTL(075.0)	47.5730	327.941	349.516	57.3897	28.1555	25631.2	3505.95
	PCTL(085.0)	129.450	830.101	737.868	193.690	85.4373	49423.1	7864.12
	PCTL(090.0)	265.913	2500.01	1629.46	418.610	199.030	252240	17173.8
	PCTL(095.0)	443.799	3411.02	3101.42	1288.68	533.336	556411	73064.0
	NUMBER	147	147	147	147	146	146	146
	MAXIMUM	4867.33	61737.1	12347.4	6487.62	2197.42	.7773E+07	690942
	MINIMUM	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	18611.7	163991	87547.0	35104.2	12209.2	.2149E+08	.2152E+07
	MEAN	126.610	1115.59	595.558	238.804	83.6246	147241	14744.8
	VARIANCE	245795	.2986E+08	.2284E+07	709456	72622.3	.5508E+12	.4282E+10
	STAND DEV	495.777	5464.62	1511.45	842.292	269.485	742171	65438.1
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05592600 ON 01
38 55 30.0 089 02 20.0 2
HICKORY CREEK NEAR BLUFF CITY, IL
17051 ILLINOIS FAYETTE
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140202
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
	PCTL(025.0)	.345201	5.66345	.776702	.792884	.237326	138.080	33.9807
	PCTL(050.0)	3.07445	22.0066	8.15538	2.62137	.916941	649.410	112.730
	PCTL(075.0)	17.4219	140.238	67.4221	20.4963	6.14890	6041.02	1283.72
	PCTL(085.0)	50.7014	583.066	226.538	115.696	34.7359	31758.5	3096.02
	PCTL(090.0)	103.528	1393.21	636.033	263.162	61.9205	73624.9	10140.3
	PCTL(095.0)	223.518	1618.13	925.571	351.134	177.994	85760.9	12340.9
	NUMBER	84	83	84	84	83	83	83
	MAXIMUM	616.184	4543.71	2446.61	751.460	332.041	782917	120389
	MINIMUM	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	3379.48	24276.8	14235.8	4870.89	1820.71	.2191E+07	400661
	MEAN	40.2319	292.491	169.474	57.9867	21.9363	26403.1	4827.24
	VARIANCE	11312.4	486994	172481	19963.4	3184.34	.1017E+11	.3236E+09
	STAND DEV	106.360	697.849	415.309	141.292	56.4299	100894	17990.8
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05592195 OQ 01
39 12 59.0 089 01 14.0 2
BECK CREEK AT HERRICK, IL
17051 ILLINOIS FAYETTE
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140201
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	1.07875	21.8448	2.56743	2.84791	.181231	160.087	21.1436
	PCTL(025.0)	3.24705	21.8448	18.8782	5.09711	1.99569	937.437	140.238
	PCTL(050.0)	16.1813	21.8448	85.7609	15.3722	4.69258	2491.92	453.077
	PCTL(075.0)	66.8827	2174.77	403.454	58.5224	15.9656	10140.3	1316.08
	PCTL(085.0)	122.816	2174.77	752.431	107.606	43.4738	34498.6	3484.37
	PCTL(090.0)	160.896	2174.77	997.848	189.591	81.1223	65857.8	9843.62
	PCTL(095.0)	236.247	2174.77	1926.65	282.957	96.2788	111781	12502.8
	NUMBER	70	2	70	70	47	69	69
	MAXIMUM	585.979	2174.77	2562.04	943.910	163.108	841428	33139.3
	MINIMUM	.0000000	21.8448	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	3827.58	2196.61	23551.8	4438.48	964.735	.2125E+07	170800
	MEAN	54.6797	1098.31	336.454	63.4068	20.5263	30809.7	2475.36
	VARIANCE	9317.32	.2317E+07	322801	17661.8	1249.20	.1227E+11	.3202E+08
	STAND DEV	96.5262	1522.35	568.156	132.898	35.3440	110779	5658.79
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05591700 OT 02
39 43 18.0 088 39 46.0 4
W OKAW R TWP RD BR 1 MI NW LOVINGTON T15NR5ENE28
17139 ILLINOIS MOULTRIE
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140201
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.350595	5.26432	12.2546	.582527	.418556	88.9971	19.4176
	PCTL(025.0)	3.12839	29.1264	385.655	3.13378	2.10357	668.827	156.419
	PCTL(050.0)	16.1813	82.5247	2664.52	13.1608	7.65915	3915.88	604.102
	PCTL(075.0)	52.8589	282.634	8004.35	53.9377	22.3302	27486.7	3020.51
	PCTL(085.0)	103.560	498.384	14142.5	94.1752	51.2408	66035.8	8414.28
	PCTL(090.0)	139.699	1168.29	16424.0	201.188	83.7113	107401	10830.7
	PCTL(095.0)	339.807	6368.96	26787.6	673.142	211.436	354479	68608.7
	NUMBER	132	133	129	133	126	132	132
	MAXIMUM	2664.52	18230.9	57497.6	5609.52	2971.97	.2552E+07	336571
	MINIMUM	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	10404.6	100885	861482	23719.4	12157.3	.9113E+07	.1380E+07
	MEAN	78.8226	758.534	6678.16	178.341	96.4867	69040.0	10457.7
	VARIANCE	66993.3	.6538E+07	.1030E+09	545802	164403	.6982E+11	.1572E+10
	STAND DEV	258.831	2557.09	10152.2	738.784	405.466	264244	39650.1
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05595280 OZC 01
38 08 48.0 089 50 35.0 2
PLUM CREEK NEAR BALDWIN, IL
17157 ILLINOIS RANDOLPH
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140204
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.161813	1.13269	.161813	.145632	.0323626	67.9615	9.70878
	PCTL(025.0)	1.83388	1.13269	1.45632	5.82527	2.91264	922.335	194.176
	PCTL(050.0)	10.1942	1.13269	43.4738	18.1231	6.04102	3505.95	701.190
	PCTL(075.0)	14.8868	9.11546	240.670	54.5849	37.2170	9816.66	1208.20
	PCTL(085.0)	82.5247	9.11546	340.562	163.647	79.6120	52190.1	5307.47
	PCTL(090.0)	82.5247	9.11546	340.562	163.647	79.6120	52190.1	5307.47
	PCTL(095.0)	88.4578	9.11546	540.995	485.979	330.099	196225	18338.8
	NUMBER	11	2	11	11	11	11	11
	MAXIMUM	88.4578	9.11546	540.995	485.979	330.099	196225	18338.8
	MINIMUM	.161813	1.13269	.161813	.145632	.0323626	67.9615	9.70878
	SUM	235.546	10.2482	1369.41	810.979	493.879	280083	28677.0
	MEAN	21.4132	5.12408	124.492	73.7254	44.8981	25462.1	2607.00
	VARIANCE	1029.40	31.8623	31612.5	20830.7	9503.23	.3429E+10	.2940E+08
	STAND DEV	32.0843	5.64467	177.799	144.329	97.4845	58562.1	5422.91
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05591500 OZZT01
39 37 11.0 088 36 17.0 2
ASA CREEK AT SULLIVAN, IL
17139 ILLINOIS MOULTRIE
UPPER MISSISSIPPI RIVER 072000
/TYPA/AMBNT/STREAM KASKASKIA RIVER
21ILAMB 870314 07140201
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
	PCTL(025.0)	.0889971	.431501	.126754	.0377564	.0151025	8.41428	2.42720
	PCTL(050.0)	.512408	2.25459	53.9377	.188782	.0987059	65.2646	14.8868
	PCTL(075.0)	3.30099	14.6711	524.274	1.10033	.647252	388.351	64.7252
	PCTL(085.0)	8.09065	30.7445	1229.78	2.04963	1.18663	880.263	177.994
	PCTL(090.0)	10.2482	71.1977	1359.23	4.09926	2.58901	2847.91	388.351
	PCTL(095.0)	32.3626	144.553	3538.31	18.0691	14.4553	7427.22	1294.50
	NUMBER	77	74	72	77	70	77	77
	MAXIMUM	126.915	1171.53	16596.6	168.286	58.5763	48813.6	9708.78
	MINIMUM	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
	SUM	423.379	3591.55	52959.7	420.754	164.059	152611	26239.8
	MEAN	5.49843	48.5345	735.551	5.46434	2.34370	1981.96	340.776
	VARIANCE	259.689	32909.3	.4703E+07	591.172	77.7574	.6139E+08	.2214E+07
	STAND DEV	16.1149	181.409	2168.87	24.3140	8.81801	7835.50	1488.24
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05446500 P 04
41 33 35.0 090 10 55.0 2
ROCK RIVER NEAR JOSLIN, IL
17161 ILLINOIS ROCK ISLAND
UPPER MISSISSIPPI RIVER 070992
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090005
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	404.532	20728.3	30334.5	3721.70	597.360	384037	113916
	PCTL(025.0)	1159.66	37815.7	71483.6	5882.44	1623.52	944989	239807
	PCTL(050.0)	3020.51	61710.1	145848	9454.95	3495.16	.2646E+07	674545
	PCTL(075.0)	7335.52	96116.9	230422	18222.3	7702.30	.5868E+07	.1144E+07
	PCTL(085.0)	11338.8	128544	287596	24390.6	10712.0	.9222E+07	.1572E+07
	PCTL(090.0)	14818.8	154046	359009	35124.2	14407.8	.1205E+08	.2097E+07
	PCTL(095.0)	32136.1	207962	474975	53506.2	21596.6	.1852E+08	.2677E+07
	NUMBER	128	143	127	154	144	136	136
	MAXIMUM	60259.2	301458	755128	110680	38009.9	.6638E+08	.7029E+07
	MINIMUM	215.751	12330.2	717.371	2051.79	30.5827	34520.1	15965.6
	SUM	888466	.1121E+08	.2227E+08	.2387E+07	883011	.7114E+09	.1251E+09
	MEAN	6941.14	78426.6	175357	15500.4	6132.02	.5230E+07	920010
	VARIANCE	.1323E+09	.3556E+10	.2089E+11	.2668E+09	.5335E+08	.6146E+14	.1061E+13
	STAND DEV	11504.0	59637.3	144534	16336.7	7304.37	.7839E+07	.1030E+07
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05443500 P 06
41 47 00.0 089 44 58.0 2
ROCK RIVER AT COMO, IL
17195 ILLINOIS WHITESIDE
UPPER MISSISSIPPI RIVER 070991
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090005006 0001.530 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	474.652	21359.3	28479.1	3790.74	663.434	265050	127293
	PCTL(025.0)	900.760	32880.4	59029.4	4983.84	1389.43	756314	243691
	PCTL(050.0)	2686.10	55048.8	121770	8069.08	3689.34	.1862E+07	426108
	PCTL(075.0)	6638.65	85348.8	200918	14374.9	6585.79	.3526E+07	791752
	PCTL(085.0)	11148.9	123409	250271	18204.0	9838.23	.6041E+07	.1177E+07
	PCTL(090.0)	15965.6	148329	322817	26213.7	11704.5	.9185E+07	.1523E+07
	PCTL(095.0)	23949.9	172773	465158	34876.1	17950.5	.1318E+08	.2377E+07
	NUMBER	142	140	142	142	138	141	141
	MAXIMUM	66343.3	325352	924276	70679.9	38026.1	.4083E+08	.5517E+07
	MINIMUM	248.653	10868.4	3074.45	1951.47	289.645	15534.1	15534.1
	SUM	889473	.9946E+07	.2242E+08	.1701E+07	739925	.5173E+09	.1007E+09
	MEAN	6263.89	71043.4	157933	11982.6	5361.78	.3669E+07	714555
	VARIANCE	.1098E+09	.3243E+10	.2073E+11	.1206E+09	.3388E+08	.3466E+14	.7335E+12
	STAND DEV	10482.5	56952.4	143988	10982.0	5820.92	.5887E+07	856501
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05440700 P 14
42 07 24.0 089 15 20.0 2
ROCK RIVER AT BYRON, IL
17141 ILLINOIS OGLE
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090005013 0001.290 ON
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	1039.92	19029.2	36246.1	3883.51	936.358	248113	109494
	PCTL(025.0)	1940.68	24811.3	60669.1	4921.81	2408.86	462786	187649
	PCTL(050.0)	4466.04	48802.8	108334	7632.18	4188.80	.1403E+07	332688
	PCTL(075.0)	7896.48	75566.6	155664	11311.8	6601.97	.2602E+07	682636
	PCTL(085.0)	10792.9	87109.3	210573	13570.7	8959.05	.3433E+07	894935
	PCTL(090.0)	14209.3	103560	282720	18986.1	10647.3	.4466E+07	.1058E+07
	PCTL(095.0)	21359.3	111112	404533	19757.4	12265.4	.5790E+07	.1158E+07
	NUMBER	89	88	89	89	84	89	89
	MAXIMUM	40884.8	202914	541103	28182.5	18640.9	.1014E+08	.2028E+07
	MINIMUM	207.121	12961.2	9908.35	2551.25	277.239	27508.2	13754.1
	SUM	573832	.4827E+07	.1175E+08	808782	422289	.1689E+09	.4179E+08
	MEAN	6447.55	54862.0	132041	9087.44	5027.25	.1898E+07	469618
	VARIANCE	.5248E+08	.1273E+10	.1184E+11	.2992E+08	.1478E+08	.3913E+13	.1431E+12
	STAND DEV	7244.54	35692.4	108847	5470.44	3844.99	.1978E+07	378314
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05437500 P 15
42 26 55.0 089 04 11.0 2
ROCK RIVER AT ROCKTON, IL
17201 ILLINOIS WINNEBAGO
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090005
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	347.359	9644.06	33225.6	2108.96	1106.26	118663	51456.6
	PCTL(025.0)	860.846	14023.8	52184.7	3223.32	1763.76	399786	138728
	PCTL(050.0)	2110.58	27206.2	96392.0	5421.82	2804.76	.1176E+07	279397
	PCTL(075.0)	4881.36	56467.4	169030	9880.30	5721.71	.2804E+07	524814
	PCTL(085.0)	8009.75	77832.0	201727	15023.8	7283.21	.4138E+07	673143
	PCTL(090.0)	11293.5	99903.3	251727	19714.2	12837.2	.4782E+07	887383
	PCTL(095.0)	26240.7	132687	320444	24077.8	17799.4	.7950E+07	.1267E+07
	NUMBER	144	143	144	144	143	144	144
	MAXIMUM	98867.7	327024	818774	258577	42006.7	.1685E+08	.3802E+07
	MINIMUM	99.2453	4029.15	11780.0	940.134	254.586	11866.3	11866.3
	SUM	799532	.6215E+07	.1804E+08	.1421E+07	754005	.3054E+09	.5894E+08
	MEAN	5552.30	43463.9	125319	9871.69	5272.76	.2121E+07	409363
	VARIANCE	.1320E+09	.2066E+10	.1104E+11	.4920E+09	.4635E+08	.7162E+13	.2283E+12
	STAND DEV	11491.4	45458.9	105086	22183.1	6808.43	.2676E+07	477859
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05442200 P 20
41 53 23.0 089 25 10.0 2
ROCK RIVER AT GRAND DETOUR, IL
17141 ILLINOIS OGLE
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090005
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	335.492	20291.4	27055.1	3441.22	914.783	401728	181231
	PCTL(025.0)	626.756	27184.6	55356.2	4737.89	1475.19	596551	219095
	PCTL(050.0)	2092.78	51348.7	109601	7344.16	3797.21	.1481E+07	407769
	PCTL(075.0)	6634.33	80518.1	180368	11210.0	6334.98	.3043E+07	752107
	PCTL(085.0)	9363.58	107767	218448	16786.5	8986.02	.4172E+07	893209
	PCTL(090.0)	15437.0	115696	265805	21406.8	10960.1	.5856E+07	.1266E+07
	PCTL(095.0)	27788.7	156311	436464	25490.9	13743.3	.1137E+08	.1476E+07
	NUMBER	94	92	94	94	90	94	94
	MAXIMUM	135923	521038	686033	124596	28295.7	.4983E+08	.6229E+07
	MINIMUM	176.916	5825.27	4919.12	2541.54	279.937	29126.4	29126.4
	SUM	628770	.6033E+07	.1326E+08	.1003E+07	445275	.2769E+09	.5671E+08
	MEAN	6689.04	65584.7	141073	10673.7	4947.50	.2946E+07	603318
	VARIANCE	.2606E+09	.3922E+10	.1507E+11	.1879E+09	.2164E+08	.3252E+14	.5525E+12
	STAND DEV	16145.4	62631.3	122793	13708.2	4652.58	.5703E+07	743309
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05447100 PB 02
41 35 38.0 089 41 22.0 2
GREEN RIVER NR DEER GROVE, IL
17195 ILLINOIS WHITESIDE
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090007
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	5.17802		49.6227	8.63003	3.55989	1116.51	533.983
	PCTL(025.0)	12.9450		345.201	16.6020	7.11978	4142.41	1413.17
	PCTL(050.0)	29.7736		3346.29	34.9516	17.2601	12038.9	3613.83
	PCTL(075.0)	71.1977		9377.07	114.240	47.4652	45437.1	9520.00
	PCTL(085.0)	112.136		13158.6	206.042	88.2042	131867	26434.8
	PCTL(090.0)	259.710		17228.2	296.069	106.257	180066	38252.6
	PCTL(095.0)	728.159		25961.3	2688.25	362.461	.2195E+07	338297
	NUMBER	95		95	74	72	94	94
	MAXIMUM	9320.43		80928.0	34224.8	4072.51	.1435E+08	.2140E+07
	MINIMUM	1.07875		10.7875	1.77994	1.77994	302.051	177.994
	SUM	22322.8		652192	68183.9	12771.4	.4101E+08	.6212E+07
	MEAN	234.977		6865.18	921.405	177.381	436378	66087.0
	VARIANCE	.1095E+07		.1125E+09	.1994E+08	481607	.3515E+13	.7413E+11
	STAND DEV	1046.49		10610.7	4466.20	693.979	.1874E+07	272283
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05447500 PB 04
41 29 20.0 090 09 30.0 2
GREEN RIVER NEAR GENESEO, IL
17073 ILLINOIS HENRY
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090007
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	24.5416	433.659	528.589	44.0131	21.6829	5339.83	2223.31
	PCTL(025.0)	72.3844	796.282	2710.37	102.751	34.9516	22653.8	6472.52
	PCTL(050.0)	204.100	1936.90	10330.1	268.610	101.403	93722.1	18123.1
	PCTL(075.0)	573.897	5001.64	31283.9	1000.33	338.729	329505	55922.6
	PCTL(085.0)	1170.02	8128.41	48770.5	1885.66	655.882	802216	129990
	PCTL(090.0)	1618.13	14951.5	62481.4	3237.88	1127.30	.1197E+07	184737
	PCTL(095.0)	2142.94	24077.8	91505.2	5066.91	1917.48	.2589E+07	374867
	NUMBER	144	141	143	144	133	144	142
	MAXIMUM	20934.3	236355	193011	63478.2	10644.1	.4912E+08	.5233E+07
	MINIMUM	6.31071	161.813	34.5201	11.3269	1.35384	981.666	539.377
	SUM	112861	.1095E+07	.3478E+07	261953	67243.4	.1585E+09	.1911E+08
	MEAN	783.753	7770.86	24328.3	1819.12	505.590	.1101E+07	134611
	VARIANCE	.5607E+07	.6094E+09	.1093E+10	.4173E+08	.2101E+07	.2496E+14	.2872E+12
	STAND DEV	2368.04	24686.3	33069.3	6459.89	1449.72	.4996E+07	535974
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05444000 PH 16
41 54 10.0 089 41 40.0 2
ELKHORN CREEK NEAR PENROSE, IL
17195 ILLINOIS WHITESIDE
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090005
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	5.39377	293.421	1592.24	23.8189	16.0195	2529.68	776.703
	PCTL(025.0)	10.1942	293.421	2476.82	33.6571	26.1058	5749.76	1343.05
	PCTL(050.0)	23.3011	293.421	4271.86	72.0068	53.9377	14390.6	2502.71
	PCTL(075.0)	64.1859	323.626	7271.88	141.263	99.2993	36936.5	5566.37
	PCTL(085.0)	116.505	323.626	9045.35	211.112	143.474	83441.5	11111.2
	PCTL(090.0)	152.104	323.626	11629.0	349.840	178.803	146311	19417.6
	PCTL(095.0)	229.936	323.626	18441.3	605.828	433.659	368157	36699.2
	NUMBER	143	2	140	120	113	143	143
	MAXIMUM	15679.7	323.626	44164.2	14111.7	5529.15	.2976E+08	.4512E+07
	MINIMUM	2.96657	293.421	727.619	7.11978	4.74652	355.989	237.326
	SUM	43106.0	617.047	879323	49585.4	18802.9	.5009E+08	.6695E+07
	MEAN	301.441	308.523	6280.88	413.211	166.398	350338	46821.9
	VARIANCE	.3021E+07	456.312	.4509E+08	.3135E+07	337872	.6626E+13	.1461E+12
	STAND DEV	1738.29	21.3615	6715.44	1770.83	581.268	.2574E+07	382288
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05442020 PL 03
41 59 10.0 089 17 41.0 2
KYTE RIVER AT DAYSVILLE, IL
17141 ILLINOIS OGLE
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090005
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	4.74652	93.8516	427.187	50.7014	75.7285	517.802	307.445
	PCTL(025.0)	15.1026	93.8516	1147.79	109.709	115.534	1720.61	884.578
	PCTL(050.0)	67.4760	310.681	2638.09	147.250	153.819	5933.14	2373.26
	PCTL(075.0)	245.956	311.814	6170.47	213.162	208.739	16397.1	5016.20
	PCTL(085.0)	441.965	1375.41	8835.00	276.431	240.292	46483.5	10895.4
	PCTL(090.0)	518.880	1375.41	11357.1	393.206	276.431	68716.6	14455.3
	PCTL(095.0)	728.159	1375.41	21844.8	489.322	412.623	181231	26159.8
	NUMBER	92	4	91	76	59	92	92
	MAXIMUM	861.925	1375.41	36621.5	1671.85	498.546	762949	122072
	MINIMUM	2.58901	93.8516	112.730	22.6538	38.9430	129.450	107.875
	SUM	16538.0	2091.76	470538	15468.2	10314.6	.3144E+07	592908
	MEAN	179.761	522.939	5170.74	203.529	174.824	34175.9	6444.66
	VARIANCE	51777.1	333484	.4825E+08	46467.8	8946.08	.8988E+10	.2214E+09
	STAND DEV	227.546	577.481	6946.76	215.564	94.5838	94806.0	14880.0
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05438600 PQ 02
42 12 06.0 088 58 43.0 2
KISHWAUKEE R AB SOUTH BRANCH NR PERRYVILLE, IL
17201 ILLINOIS WINNEBAGO
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090006
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	21.6829	619.205	1796.12	96.4406	71.9529	4266.47	2265.38
	PCTL(025.0)	47.9506	619.205	3754.06	144.553	93.9595	8721.73	4336.59
	PCTL(050.0)	109.493	910.684	6886.76	212.946	151.025	23495.2	8630.03
	PCTL(075.0)	317.154	922.335	14019.5	357.607	252.428	65243.1	19460.7
	PCTL(085.0)	396.442	5885.68	25604.2	533.983	351.242	126408	38026.1
	PCTL(090.0)	550.973	5885.68	39320.6	787.490	472.494	192827	53991.6
	PCTL(095.0)	629.992	5885.68	49169.6	809.065	535.062	288243	73571.0
	NUMBER	109	5	109	83	76	109	109
	MAXIMUM	1618.13	5885.68	148868	3236.26	1941.76	404533	123409
	MINIMUM	6.85009	619.205	261.058	73.2474	6.52646	685.009	685.009
	SUM	24627.0	9001.33	.1521E+07	28575.4	17748.0	.6789E+07	.2080E+07
	MEAN	225.936	1800.27	13961.1	344.282	233.526	62291.1	19087.2
	VARIANCE	82783.6	.5235E+07	.3896E+09	183392	93529.0	.8142E+10	.6223E+09
	STAND DEV	287.721	2288.01	19740.4	428.243	305.825	90237.4	24947.1
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05438201 PQ 10
42 15 40.0 088 43 00.0 2
KISHWAUKEE R AT GP ROAD AT GARDEN PRAIRIE, IL
17007 ILLINOIS BOONE
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090006
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	7.55128	485.439	517.802	13.9159	11.3269	863.003	658.040
	PCTL(025.0)	19.8491	485.439	1102.49	27.9397	16.1813	2157.51	1359.23
	PCTL(050.0)	48.5439	485.439	1991.38	50.0110	32.3626	7475.76	3344.14
	PCTL(075.0)	124.704	1372.17	3473.59	91.3704	52.8589	17038.9	6607.37
	PCTL(085.0)	166.128	1372.17	4791.28	148.922	91.3704	22545.9	8980.63
	PCTL(090.0)	216.560	1372.17	7514.60	179.612	135.384	24919.2	10118.7
	PCTL(095.0)	267.531	1372.17	13376.5	310.303	197.466	38565.4	16267.6
	NUMBER	102	2	102	75	70	101	101
	MAXIMUM	1203.89	1372.17	34198.1	577.996	674.329	105966	33716.5
	MINIMUM	3.88351	485.439	154.262	4.31502	3.62461	194.176	194.176
	SUM	9557.62	1857.61	367827	6126.69	4270.14	.1310E+07	533240
	MEAN	93.7022	928.807	3606.14	81.6892	61.0021	12978.0	5279.60
	VARIANCE	20089.8	393150	.2669E+08	9471.17	10470.5	.3220E+09	.3947E+08
	STAND DEV	141.738	627.017	5166.87	97.3199	102.325	17946.6	6282.81
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05440000 PQ 12
42 11 45.0 088 59 55.0 2
KISHWAUKEE RIVER NEAR PERRYVILLE, IL
17201 ILLINOIS WINNEBAGO
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090006
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	21.6829	1263.76	2502.71	185.707	102.751	7497.34	4180.17
	PCTL(025.0)	52.6971	1457.29	7103.59	260.465	178.965	17599.9	7119.78
	PCTL(050.0)	228.049	1627.57	18030.3	434.738	328.858	49077.8	14692.6
	PCTL(075.0)	563.109	5730.34	42071.4	946.607	622.980	148868	40453.3
	PCTL(085.0)	884.578	9255.70	69471.7	1607.88	927.728	422224	89105.0
	PCTL(090.0)	1132.69	10565.3	80097.5	2135.93	1108.96	554587	119202
	PCTL(095.0)	1457.40	10565.3	109855	3356.00	2349.53	778726	167584
	NUMBER	143	8	144	119	112	143	142
	MAXIMUM	19417.6	10565.3	332041	11022.2	7767.03	.8225E+07	.1118E+07
	MINIMUM	8.52215	1263.76	94.3909	28.3712	20.7660	1175.84	1035.60
	SUM	78694.5	34134.6	.4878E+07	117485	68020.8	.3484E+08	.6909E+07
	MEAN	550.312	4266.82	33881.1	987.266	607.329	243668	48661.1
	VARIANCE	.2859E+07	.1436E+08	.1934E+10	.2853E+07	962484	.5837E+12	.1210E+11
	STAND DEV	1690.93	3790.41	43983.7	1689.30	981.063	764062	110029
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05440520 PQB 02
42 09 36.0 089 04 32.0 2
KILLBUCK CREEK NEAR NEW MILFORD, IL
17201 ILLINOIS WINNEBAGO
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090006
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	8.63003	74.2183	389.430	3.48437	1.72601	819.853	388.351
	PCTL(025.0)	24.5956	74.2183	922.334	7.28159	3.34414	1650.49	631.071
	PCTL(050.0)	51.3487	207.768	2695.81	14.0238	7.76703	3678.55	1456.32
	PCTL(075.0)	92.5570	782.312	5650.51	46.8179	24.2720	11650.5	3290.20
	PCTL(085.0)	113.269	782.312	9024.85	94.6606	60.9711	20841.5	6084.17
	PCTL(090.0)	134.521	782.312	12168.3	182.525	116.505	41230.0	9061.53
	PCTL(095.0)	212.946	782.312	21747.7	235.600	197.412	117368	20539.5
	NUMBER	90	3	88	66	60	90	90
	MAXIMUM	336.571	782.312	48543.9	1051.30	1074.92	311652	43150.2
	MINIMUM	2.26538	74.2183	210.357	1.61813	.695796	80.9066	80.9066
	SUM	6202.75	1064.30	473711	4253.87	2923.70	.1816E+07	379713
	MEAN	68.9195	354.766	5383.08	64.4526	48.7283	20182.0	4219.03
	VARIANCE	4347.82	141556	.6620E+08	24754.0	21765.1	.2507E+10	.6225E+08
	STAND DEV	65.9380	376.239	8136.55	157.334	147.530	50076.2	7889.94
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05439500 PQC 06
42 06 40.0 088 54 00.0 2
SOUTH BR KISHWAUKEE RIVER NR FAIRDALE, IL
17037 ILLINOIS DE KALB
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090006
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	8.41427	248.113	689.323	67.0445	31.7693	2017.27	906.153
	PCTL(025.0)	28.6949	248.113	3365.71	134.790	112.136	5695.82	2152.11
	PCTL(050.0)	85.4373	845.743	8848.48	220.066	185.761	14304.3	5771.33
	PCTL(075.0)	206.797	981.127	21359.3	427.726	319.203	53916.1	15517.9
	PCTL(085.0)	321.415	1416.94	36251.5	723.412	456.475	131996	28090.8
	PCTL(090.0)	656.961	1416.94	47767.2	988.462	642.937	334333	54255.9
	PCTL(095.0)	1245.96	1416.94	75350.9	1762.14	1495.15	652646	91370.4
	NUMBER	147	4	143	122	113	146	146
	MAXIMUM	16127.4	1416.94	139693	13522.2	10792.9	.8120E+07	994854
	MINIMUM	1.83388	248.113	14.0238	17.3679	2.64295	134.844	134.844
	SUM	50981.3	3491.93	.2576E+07	83060.0	45598.8	.2787E+08	.4517E+07
	MEAN	346.811	872.981	18018.3	680.820	403.529	190916	30944.5
	VARIANCE	.1931E+07	232931	.6294E+09	.3483E+07	.1209E+07	.6913E+12	.1197E+11
	STAND DEV	1389.88	482.629	25089.5	1866.46	1099.73	831499	109446
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05438250 PQF 07
42 10 58.0 088 38 28.0 2
COON CREEK AT RILEY, IL
17111 ILLINOIS MCHENRY
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090006
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	3.88351	72.4923	71.1977	4.53077	1.83388	337.111	210.357
	PCTL(025.0)	6.90402	72.4923	258.901	7.82097	3.66776	970.879	377.564
	PCTL(050.0)	17.2601	230.314	1026.97	11.8663	6.74221	2114.36	830.641
	PCTL(075.0)	39.6442	288.836	2168.29	25.8901	12.1899	5890.00	1995.70
	PCTL(085.0)	60.4102	322.547	3071.21	43.1502	19.4176	10517.8	3721.70
	PCTL(090.0)	93.2583	322.547	4560.43	64.5634	26.9688	17745.5	5625.70
	PCTL(095.0)	207.121	322.547	7209.31	90.0490	46.3864	43786.6	8058.29
	NUMBER	109	5	109	84	81	108	108
	MAXIMUM	1652.87	322.547	16362.5	1019.85	685.764	117045	24617.2
	MINIMUM	.355988	72.4923	21.3593	1.45955	.961170	80.9066	80.9066
	SUM	5573.04	1043.64	199470	3458.34	2088.35	929689	240000
	MEAN	51.1288	208.728	1830.00	41.1707	25.7821	8608.23	2222.22
	VARIANCE	26739.3	11170.8	.7126E+07	17991.7	8559.28	.4016E+09	.1612E+08
	STAND DEV	163.521	105.692	2669.49	134.133	92.5164	20041.2	4016.08
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05435800 PW 01
42 25 39.0 089 11 44.0 2
PECATONICA RIVER AT HARRISON, IL
17201 ILLINOIS WINNEBAGO
UPPER MISSISSIPPI RIVER 070900
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090003
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	146.926	5673.43	10828.5	566.346	396.118	48058.5	14417.5
	PCTL(025.0)	291.263	5673.43	20665.1	840.026	551.243	153480	30938.7
	PCTL(050.0)	604.102	5673.43	30016.3	1380.81	795.042	379721	60518.1
	PCTL(075.0)	1611.66	11219.0	55232.2	2664.52	1213.60	834956	134251
	PCTL(085.0)	2912.63	11219.0	71602.2	3330.65	1767.00	.1585E+07	210357
	PCTL(090.0)	3667.76	11219.0	81812.6	4254.39	2531.30	.1848E+07	267531
	PCTL(095.0)	6909.42	11219.0	106797	7262.17	4699.05	.3168E+07	412300
	NUMBER	100	2	99	76	75	100	100
	MAXIMUM	56634.6	11219.0	121166	15857.7	7740.06	.8049E+07	.1850E+07
	MINIMUM	39.7521	5673.43	4446.62	302.590	133.658	1941.76	1941.76
	SUM	219912	16892.5	.3898E+07	162638	94135.3	.8466E+08	.1258E+08
	MEAN	2199.12	8446.23	39376.6	2139.97	1255.14	846690	125802
	VARIANCE	.4033E+08	.1537E+08	.7705E+09	.5533E+07	.1823E+07	.1747E+13	.4643E+11
	STAND DEV	6350.64	3921.34	27757.9	2352.31	1350.49	.1321E+07	215485
96/09/30								

1STORET RETRIEVAL DATE 99/01/19

05435500 PW 08
42 18 13.0 089 36 57.0 2
PECATONICA RIVER AT FREEPORT, IL
17177 ILLINOIS STEPHENSON
UPPER MISSISSIPPI RIVER 070991
/TYPA/AMBNT/STREAM ROCK RIVER
21ILAMB 870314 07090003
0000 FEET DEPTH

DATE FROM TO		00610 NH3+NH4- N TOTAL LB/D	00625 TOT KJEL N LB/D	00630 NO2&NO3 N-TOTAL LB/D	00665 PHOS-TOT LB/D P	00666 PHOS-DIS LB/D P	00530 RESIDUE TOT NFLT LB/D	00535 RESIDUE VOL NFLT LB/D
80/10/01								
STATION	PCTL(010.0)	70.2269		10183.4	462.785	277.779	54763.0	12621.4
	PCTL(025.0)	183.658		16026.0	640.780	392.235	125437	25825.4
	PCTL(050.0)	367.261		26028.2	1178.00	638.622	334468	58123.3
	PCTL(075.0)	1310.69		41159.8	2000.01	1189.33	768224	111975
	PCTL(085.0)	1925.57		47190.1	3092.79	1722.23	.1199E+07	149947
	PCTL(090.0)	3523.75		58317.4	3820.95	2077.68	.1478E+07	195050
	PCTL(095.0)	7292.37		82136.3	5706.60	4010.81	.2135E+07	254101
	NUMBER	138		138	115	114	139	139
	MAXIMUM	47190.1		128674	18513.0	10164.0	.2695E+07	.1041E+07
	MINIMUM	29.2342		3494.62	168.825	116.505	3867.33	2912.64
	SUM	278911		.4312E+07	216608	126875	.7826E+08	.1251E+08
	MEAN	2021.09		31248.2	1883.54	1112.94	563087	90029.8
	VARIANCE	.4439E+08		.4418E+09	.5861E+07	.2165E+07	.3945E+12	.1343E+11
	STAND DEV	6662.67		21021.3	2421.02	1471.60	628105	115923
96/09/30								

Appendix D-1. Summary of smearing estimators.

		Inorganic N		T Phosphorus		TSS		Total N	
Station	USGS #	Smearing Est.	Quasi-Max.	Smearing Est.	Quasi-Max.	Smearing Est.	Quasi-Max.	Smearing Est.	Quasi-Max.
Vermilion River	03339000	1.0831	1.1247	1.1113	1.1171	1.3813	1.3802	1.0374	1.0545
modified		1.0821	1.1233	1.1121	1.1164	1.3745	1.3723	1.0378	1.0548
Embarras River	03345500	1.2006	1.2420	1.1429	1.1261	1.4415	1.5395		
N Fk Embarras R	03346000	1.3004	1.3818	1.1977	1.1795	1.4083	1.4681		
Bonpas Creek	03378000	1.3474	1.4459	1.1052	1.1047	1.3058	1.4018		
Little Wabash R	03381495	1.2448	1.3945	1.1705	1.1437	1.2906	1.3838	1.0638	1.0718
Lusk Creek	03384450	1.2799	1.2045	1.3093	1.2501	1.5907	1.4468	1.1534	1.1324
Cache River	03612000	1.2203	1.2526	1.1008	1.0948	1.4670	1.3830		
Apple River	05418950	1.0596	1.0652	1.2943	1.2422	1.4438	1.4893		
Plum River	05420100	1.0328	1.0376	1.5595	1.2862	2.6433	1.8403		
Rock River	05446500	1.0820	1.0945	1.0974	1.0941	1.1901	1.2328	1.0284	1.0333
Green River	05447500	1.0863	1.0976	1.3668	1.2091	1.3314	1.2760	1.0351	1.0362
Edwards River	05466500	1.1955	1.2696	1.2458	1.1968	1.5599	1.5483		
Henderson Cr.	05469000	1.1338	1.2272	1.1542	1.1402	1.6082	1.5187		
Bear Creek	05495500	1.3776	1.4994	1.2229	1.2318	1.6662	1.5626		
modified		1.3790	1.4900	1.2235	1.2309	1.6665	1.5547		
Illinois River	05586100	1.0429	1.0512	1.0594	1.0737	1.3329	1.4398	1.0253	1.0278
Macoupin Creek	05587000	1.2657	1.2851	1.1270	1.1295	1.5652	1.4889		
Cahokia Creek	05587900	1.5772	1.5775	1.3786	1.2115	1.2833	1.3316		
Kaskaskia River	05594100	1.2679	1.3344	1.2260	1.2252	1.3817	1.3269	1.0783	1.0837
Silver Creek	05594800	1.1100	1.1219	1.1032	1.0990	1.3973	1.3808		
Richland Creek	05595200	1.0901	1.0982	1.0835	1.0916	1.3020	1.4029		
Big Muddy River	05599500	1.1613	1.1725	1.1005	1.1418	1.2530	1.3279	1.0418	1.0447
Wabash River	03341920	1.0811	1.0910	1.0642	1.0649	1.2778	1.3159		
Ohio River	03612500	1.0614	1.0673	1.1070	1.1166			1.0549	1.0585
Mississippi River K	05474500	1.1644	4.4030	1.0709	40.5165	1.3229	2.0126	1.0929	16.6311
Mississippi River T	07022000	1.1081	1.1053	1.0864	1.0890	1.3360	1.4664	1.0657	1.0674

Appendix D-2. Summary of coefficients for inorganic nitrogen loading equations.

station #	b6	b5	b4	b3	b2	b1	b0	R2	se-C	# of Obs.	F	df	b6	b5	b4	t-test b3	b2	b1	b0
3339000	0.0795	0.1961	0.0006	-0.0046	-0.0489	-0.1838	1.8246	0.318	0.485	148	10.957	141	1.41	3.48	0.30	-0.54	-11.31	-6.46	15.12
	0.0564	0.0564	0.0020	0.0085	0.0043	0.0285	0.1207												
mod	0.0744	0.2053	0.0007	-0.0034	-0.0348	-0.0289	2.0212	0.323	0.482	147	11.147	140	1.33	3.64	0.33	-0.40	-6.24	-0.99	19.79
	0.0561	0.0565	0.0020	0.0085	0.0056	0.0292	0.1021												
3345500	0.1230	0.4627	-0.0072	-0.0137	-0.2285	-0.8442	1.0545	0.779	0.658	139	77.567	132	1.57	5.82	-2.54	-1.16	-37.22	-22.09	6.96
	0.0784	0.0795	0.0028	0.0118	0.0061	0.0382	0.1514												
3346000	0.2243	0.3081	-0.0089	-0.0065	-0.0410	-0.1004	0.5049	0.526	0.804	144	25.367	137	2.40	3.21	-2.59	-0.46	-12.53	-3.01	2.54
	0.0935	0.0961	0.0034	0.0143	0.0033	0.0334	0.1990												
3378000	0.0172	0.3850	-0.0029	-0.0156	-0.0278	-0.0854	0.4384	0.391	0.859	137	13.687	128	0.17	3.64	-0.77	-1.02	-9.13	-2.99	2.44
	0.1039	0.1058	0.0037	0.0153	0.0030	0.0286	0.1793												
3381495	0.1633	0.2525	0.0044	0.0158	-0.0767	-0.4231	-0.6325	0.194	0.816	126	4.772	119	1.54	2.53	1.26	1.02	-12.34	-11.99	-3.91
	0.1061	0.1000	0.0035	0.0155	0.0062	0.0353	0.1618												
3384450	0.0259	-0.0531	-0.0044	-0.0741	-0.0005	0.0984	-1.2985	0.350	0.610	137	11.673	130	0.35	-0.71	-1.60	-6.71	-0.21	4.61	-10.99
	0.0735	0.0744	0.0027	0.0110	0.0025	0.0213	0.1181												
3612000	0.0368	0.0735	-0.0039	-0.0436	-0.0424	-0.1750	-0.7120	0.346	0.671	145	12.165	138	0.47	0.94	-1.36	-3.67	-13.33	-6.73	-5.05
	0.0791	0.0785	0.0028	0.0119	0.0032	0.0260	0.1409												
5418950	0.1670	0.0688	0.0048	-0.0003	-0.1653	0.0235	1.6091	0.582	0.356	138	30.374	131	3.88	1.61	3.11	-0.04	-10.67	0.63	22.86
	0.0430	0.0426	0.0015	0.0066	0.0155	0.0374	0.0704												
5420100	0.0371	-0.0282	0.0025	0.0337	-0.0193	0.0263	1.7307	0.277	0.272	116	6.944	109	1.02	-0.81	2.22	6.13	-1.98	0.84	24.43
	0.0364	0.0351	0.0011	0.0055	0.0097	0.0313	0.0708												
5446500	0.2621	0.0332	0.0024	0.0146	-0.3315	0.0655	1.4141	0.477	0.425	131	18.865	124	4.85	0.65	1.31	1.87	-7.81	1.06	19.73
	0.0541	0.0515	0.0019	0.0078	0.0425	0.0620	0.0717												
5447500	0.1701	0.0527	-0.0024	0.0102	-0.2691	-0.0031	1.9956	0.798	0.432	143	89.675	136	3.30	1.04	-1.28	1.27	-22.85	-0.08	24.22
	0.0515	0.0507	0.0018	0.0081	0.0118	0.0368	0.0824												
5466500	0.1326	0.2063	-0.0010	0.0228	-0.1979	-0.5281	1.7254	0.601	0.691	143	34.154	136	1.58	2.58	-0.33	1.85	-23.44	-11.97	12.12
	0.0837	0.0801	0.0029	0.0123	0.0084	0.0441	0.1424												
5469000	0.0732	0.1779	0.0023	0.0283	-0.0571	-0.2232	1.8148	0.134	0.640	145	3.569	138	0.94	2.44	0.84	2.51	-6.25	-5.35	13.41
	0.0778	0.0729	0.0027	0.0113	0.0091	0.0417	0.1354												
5495500	0.2266	0.2190	-0.0015	0.0019	-0.0290	-0.0007	0.9983	0.481	0.900	143	21.020	136	2.10	2.07	-0.41	0.12	-9.95	-0.02	3.97
	0.1077	0.1056	0.0038	0.0159	0.0029	0.0352	0.2515												
mod	0.2384	0.2269	-0.0012	0.0015	-0.0175	0.2309	0.9930	0.493	0.893		21.882	135	2.23	2.15	-0.32	0.09	-3.87	6.40	5.52
	0.1070	0.1053	0.0037	0.0158	0.0045	0.0361	0.1798												
5586100	0.2263	0.3111	-0.0017	-0.0025	-0.1574	0.1194	1.6354	0.639	0.316	143	40.127	136	6.12	8.23	-1.30	-0.44	-6.09	3.45	32.09
	0.0370	0.0378	0.0013	0.0056	0.0258	0.0346	0.0510												
5587000	0.3838	0.2936	-0.0051	0.0126	-0.0732	-0.1578	1.0704	0.662	0.708	146	45.404	139	4.57	3.58	-1.69	1.00	-18.45	-5.47	7.02
	0.0839	0.0820	0.0030	0.0126	0.0040	0.0289	0.1524												
5587900	0.3043	0.2222	-0.0103	-0.0411	0.0225	0.4443	0.8813	0.397	0.955	146	15.256	139	2.74	1.98	-2.54	-2.44	4.98	11.62	4.11
	0.1112	0.1124	0.0041	0.0168	0.0045	0.0382	0.2143												
5594100	-0.1187	0.4885	-0.0028	0.0002	0.0179	0.4212	0.1219	0.526	0.760	119	20.708	112	-1.17	5.07	-0.89	0.01	1.48	9.16	0.88
	0.1010	0.0964	0.0031	0.0149	0.0121	0.0460	0.1381												
5594800	0.1398	0.2420	0.0023	0.0443	-0.0266	-0.2589	0.0249	0.282	0.480	148	9.225	141	2.49	4.37	1.13	5.26	-7.75	-11.02	0.22
	0.0562	0.0554	0.0020	0.0084	0.0034	0.0235	0.1139												
5595200	0.1429	0.1241	0.0005	0.0281	0.0603	-0.0838	0.5802	0.515	0.433	147	24.802	140	2.82	2.46	0.28	3.67	10.39	-2.82	4.29
	0.0507	0.0504	0.0018	0.0077	0.0058	0.0297	0.1353												
5599500	0.4615	0.1572	0.0042	-0.0395	-0.0606	-0.2526	-0.8570	0.353	0.564	123	10.543	116	6.27	2.22	1.79	-3.76	-9.67	-7.90	-6.56
	0.0736	0.0707	0.0024	0.0105	0.0063	0.0320	0.1307												
Wabash R.	0.2016	0.1950	-0.0007	-0.0004	-0.4629	-0.3200	1.6091	0.769	0.417	152	81.147	146	4.23	4.08	-0.49	-0.06	-25.65	-7.90	21.88
03341920	0.0477	0.0477	0.0015	0.0067	0.0180	0.0405	0.0735												
Ohio River	0.0384	0.2533	-0.0024	-0.0123	-0.2093	-0.0852	0.2562	0.512	0.361	72	11.356	65	0.59	4.49	-1.36	-1.38	-6.46	-1.64	2.63
03612500	0.0650	0.0564	0.0018	0.0089	0.0324	0.0521	0.0974												
Miss. R. K	0.3545	0.0556	-0.0069	0.0421	-0.2829	0.5075	1.1773	0.455	0.581	84	10.714	77	3.94	0.62	-1.83	2.51	-3.36	4.59	9.06
05474500	0.0900	0.0895	0.0038	0.0168	0.0841	0.1105	0.1299												
Miss. R. T.	0.0435	0.2382	0.0025	0.0225	-0.2972	-0.1761	0.7221	0.352	0.447	82	6.776	75	0.63	3.36	1.09	1.75	-5.83	-2.27	6.48
07022000	0.0689	0.0710	0.0023	0.0129	0.0510	0.0776	0.1115												

Appendix D-3. Summary of coefficients for total phosphorus loading equations.

station #	b6	b5	b4	b3	b2	b1	b0	R2	se-C	# of Obs.	F	df	b6	b5	b4	t-test b3	b2	b1	b0
3339000	0.0912	-0.2725	-0.0061	-0.0175	0.1190	0.4848	-0.7463	0.631	0.471	139	37.649	132	1.62	-4.82	-2.64	-1.93	26.95	16.80	-6.16
	0.0564	0.0565	0.0023	0.0091	0.0044	0.0289	0.1211												
mod	0.0956	-0.2798	-0.0062	-0.0184	0.1074	0.4025	-0.8722	0.633	0.469	138	37.689	131	1.70	-4.93	-2.69	-2.02	24.28	13.53	-7.03
	0.0563	0.0567	0.0023	0.0091	0.0044	0.0297	0.1240												
3345500	-0.1627	-0.3787	0.0011	-0.0180	0.0213	0.4803	-0.5325	0.480	0.487	107	15.370	100	-2.48	-5.58	0.27	-1.41	4.32	15.57	-4.20
	0.0655	0.0679	0.0040	0.0128	0.0049	0.0308	0.1267												
3346000	-0.2319	-0.4469	-0.0010	0.0172	0.0154	0.3949	-0.0870	0.406	0.575	139	15.046	132	-3.41	-6.37	-0.25	1.36	7.68	17.07	-0.55
	0.0679	0.0702	0.0039	0.0127	0.0020	0.0231	0.1592												
3378000	-0.3697	-0.5709	-0.0065	0.0239	0.0190	0.3423	-0.5961	0.543	0.446	103	19.046	96	-5.95	-9.07	-1.81	2.05	9.57	19.66	-5.82
	0.0621	0.0630	0.0036	0.0117	0.0020	0.0174	0.1023												
3381495	0.0549	-0.2432	0.0011	0.0178	-0.0148	0.1216	-1.1250	0.346	0.518	142	11.895	135	0.88	-4.03	0.47	1.91	-3.89	5.78	-11.63
	0.0627	0.0604	0.0022	0.0093	0.0038	0.0210	0.0968												
3384450	-0.2230	-0.5644	-0.0024	-0.0168	0.0286	0.3386	-3.4688	0.247	0.668	137	7.101	130	-2.77	-6.93	-0.80	-1.39	10.56	14.49	-26.81
	0.0805	0.0815	0.0030	0.0121	0.0027	0.0234	0.1294												
3612000	-0.0761	-0.2945	-0.0076	0.0037	0.0047	0.2486	-1.2207	0.441	0.426	112	13.810	105	-1.34	-5.18	-2.25	0.34	1.37	12.88	-14.61
	0.0569	0.0569	0.0034	0.0109	0.0034	0.0193	0.0835												
5418950	-0.1329	-0.0596	-0.0081	0.0017	0.1115	0.6062	-1.2283	0.228	0.659	115	5.323	108	-1.51	-0.69	-2.03	0.11	3.71	8.29	-8.94
	0.0878	0.0861	0.0040	0.0159	0.0301	0.0732	0.1373												
5420100	-0.3744	-0.2654	-0.0088	-0.0202	0.1359	0.6342	-1.2019	0.230	0.710	87	3.973	80	-3.41	-2.50	-1.68	-1.01	2.82	6.32	-7.38
	0.1098	0.1060	0.0052	0.0200	0.0481	0.1003	0.1628												
5446500	-0.1629	-0.0990	-0.0005	0.0056	0.0723	0.2753	-1.1381	0.128	0.424	154	3.609	147	-3.22	-2.13	-0.31	0.77	2.07	5.02	-15.99
	0.0506	0.0465	0.0017	0.0073	0.0350	0.0549	0.0712												
5447500	-0.4068	-0.1793	-0.0044	-0.0077	0.1859	1.0972	-1.0105	0.534	0.616	144	26.179	137	-5.57	-2.48	-1.65	-0.68	11.08	20.95	-8.64
	0.0730	0.0723	0.0026	0.0115	0.0168	0.0524	0.1170												
5466500	-0.2694	-0.2342	-0.0043	-0.0100	0.0895	0.8773	-0.2447	0.532	0.599	113	20.079	106	-3.34	-2.96	-0.93	-0.66	11.56	21.08	-1.74
	0.0808	0.0791	0.0046	0.0152	0.0077	0.0416	0.1410												
5469000	0.1255	0.0446	-0.0039	-0.0060	0.1655	0.4185	-0.7384	0.530	0.512	114	20.107	107	1.81	0.67	-0.98	-0.47	20.80	11.14	-5.72
	0.0693	0.0667	0.0039	0.0129	0.0080	0.0376	0.1290												
5495500	-0.3722	-0.3722	-0.0118	0.0121	0.0398	0.7862	1.4362	0.554	0.646	112	21.696	105	-4.29	-4.31	-2.36	0.74	17.83	28.27	7.10
	0.0867	0.0863	0.0050	0.0164	0.0022	0.0278	0.2023												
mod	-0.3671	-0.3647	-0.0106	0.0114	0.0471	0.6312	-0.3165	0.534	0.645	111	19.890	104	-4.23	-4.21	-2.12	0.69	12.60	21.84	-2.28
	0.0867	0.0867	0.0050	0.0165	0.0037	0.0289	0.1391												
5586100	0.0011	-0.0453	0.0040	-0.0040	-0.1048	-0.2470	-1.3733	0.109	0.377	156	3.023	149	0.03	-1.06	2.59	-0.63	-3.91	-6.35	-22.85
	0.0427	0.0428	0.0016	0.0063	0.0268	0.0389	0.0601												
5587000	-0.0437	-0.4667	-0.0069	-0.0063	0.0125	0.3943	-0.0464	0.529	0.493	115	20.217	108	-0.67	-7.20	-1.81	-0.50	3.96	16.72	-0.37
	0.0655	0.0648	0.0038	0.0126	0.0032	0.0236	0.1239												
5587900	-0.1463	-0.2887	-0.0139	0.0229	0.0761	0.8164	0.4505	0.506	0.619	113	18.080	106	-1.79	-3.48	-2.86	1.44	23.14	29.76	2.94
	0.0819	0.0830	0.0049	0.0159	0.0033	0.0274	0.1534												
5594100	-0.0822	-0.0214	-0.0009	0.0307	-0.0016	0.1049	-1.2172	0.123	0.637	148	3.305	141	-1.09	-0.29	-0.32	2.79	-0.21	3.08	-11.04
	0.0752	0.0731	0.0027	0.0110	0.0076	0.0341	0.1102												
5594800	0.1157	-0.2694	-0.0065	0.0373	0.0131	0.0829	-0.3349	0.328	0.434	125	9.600	118	2.10	-4.88	-2.51	3.84	3.83	3.55	-3.00
	0.0550	0.0552	0.0026	0.0097	0.0034	0.0233	0.1116												
5595200	0.1037	-0.1358	-0.0024	0.0083	0.1874	0.7160	0.0788	0.625	0.419	126	33.020	119	1.96	-2.57	-0.97	0.90	30.70	22.07	0.54
	0.0528	0.0529	0.0025	0.0093	0.0061	0.0324	0.1463												
5599500	-0.0121	-0.1521	0.0012	0.0183	0.0327	0.1579	-1.5700	0.090	0.515	146	2.283	139	-0.20	-2.53	0.53	2.04	5.89	5.99	-15.30
	0.0604	0.0602	0.0022	0.0090	0.0055	0.0264	0.1026												
Wabash River	-0.1645	-0.2330	0.0013	0.0219	0.0664	0.4496	-1.2455	0.377	0.355	122	11.578	115	-3.68	-5.04	0.54	2.71	3.96	11.74	-17.74
03341920	0.0447	0.0462	0.0023	0.0081	0.0168	0.0383	0.0702												
Ohio River	0.1094	-0.1132	-0.0004	-0.0237	0.0583	0.5450	-1.9113	0.420	0.470	136	15.552	129	1.87	-2.02	-0.20	-3.38	1.56	9.92	-21.54
03612500	0.0587	0.0562	0.0019	0.0070	0.0373	0.0549	0.0887												
Miss. R. K.	-0.0002	-0.0127	0.0024	-0.0117	0.1182	0.5487	-1.4769	0.349	0.368	90	7.430	83	0.00	-0.23	1.07	-1.25	2.30	8.23	-18.81
05474500	0.0554	0.0544	0.0022	0.0094	0.0513	0.0667	0.0785												
Miss. R. T.	-0.0958	-0.0186	-0.0017	-0.0062	-0.0401	0.2418	-1.1867	0.181	0.413	179	6.315	172	-2.24	-0.41	-1.47	-0.89	-0.89	4.46	-19.53
07022000	0.0428	0.0453	0.0012	0.0070	0.0449	0.0542	0.0608												

Appendix D-4. Summary of coefficients for total suspended solids loading equations.

station #	b6	b5	b4	b3	b2	b1	b0	R2	se-C	# of Obs.	F	df	b6	b5	b4	t-test b3	b2	b1	b0
3339000	-0.8325	-0.5546	-0.0017	-0.0073	0.1773	1.8517	7.2038	0.672	0.803	146	47.426	139	-8.81	-5.93	-0.51	-0.52	24.76	39.29	35.87
	0.0945	0.0936	0.0034	0.0141	0.0072	0.0471	0.2008												
mod	-0.8438	-0.5359	-0.0016	-0.0051	0.2049	1.7235	6.0106	0.660	0.796	145	44.680	138	-9.01	-5.74	-0.47	-0.36	22.27	35.78	35.43
	0.0936	0.0933	0.0034	0.0140	0.0092	0.0482	0.1696												
3345500	-0.7036	-0.1447	0.0034	-0.0254	-0.0158	0.4894	5.5898	0.500	0.929	137	21.660	130	-6.29	-1.28	0.84	-1.51	-1.82	9.02	25.82
	0.1118	0.1127	0.0041	0.0168	0.0087	0.0543	0.2165												
3346000	-0.8599	-0.2796	0.0002	-0.0145	0.0314	0.6925	5.9943	0.521	0.876	144	24.862	137	-8.41	-2.68	0.05	-0.93	8.78	18.84	27.33
	0.1022	0.1044	0.0038	0.0157	0.0036	0.0368	0.2193												
3378000	-0.9739	-0.2224	0.0056	-0.0055	0.0100	0.2474	4.8114	0.413	0.822	134	14.867	127	-9.77	-2.18	1.59	-0.37	3.44	9.04	27.93
	0.0996	0.1018	0.0036	0.0147	0.0029	0.0274	0.1723												
3381495	-0.4463	-0.3488	0.0050	0.0287	-0.0580	-0.0183	4.5708	0.355	0.806	130	11.260	123	-4.43	-3.49	1.22	1.80	-9.42	-0.54	29.65
	0.1007	0.0998	0.0041	0.0160	0.0062	0.0337	0.1542												
3384450	-0.5186	-0.4494	0.0193	-0.0719	0.0545	0.6589	2.4599	0.443	0.859	139	17.502	132	-5.07	-4.29	5.05	-4.67	15.67	22.08	14.93
	0.1022	0.1048	0.0038	0.0154	0.0035	0.0298	0.1648												
3612000	-0.6765	-0.0046	0.0012	-0.0069	0.0204	0.4368	4.9582	0.460	0.805	144	19.476	137	-7.08	-0.05	0.36	-0.48	5.32	13.95	29.27
	0.0955	0.0943	0.0034	0.0143	0.0038	0.0313	0.1694												
5418950	-0.7716	-0.1682	-0.0051	-0.0009	0.1370	0.9321	4.3995	0.439	0.893	138	17.058	131	-7.14	-1.57	-1.32	-0.05	3.52	9.94	24.89
	0.1080	0.1070	0.0039	0.0166	0.0389	0.0938	0.1767												
5420100	-0.8825	-0.2100	-0.0056	-0.0109	0.2662	1.5267	5.6808	0.361	1.104	115	10.152	108	-5.97	-1.46	-1.23	-0.48	6.67	11.91	19.70
	0.1478	0.1438	0.0046	0.0224	0.0399	0.1282	0.2884												
5446500	-1.0007	-0.3393	0.0014	-0.0010	-0.1018	0.5396	4.5574	0.591	0.647	136	35.113	143	-12.06	-4.53	0.44	-0.08	-1.88	6.25	40.22
	0.0830	0.0749	0.0031	0.0124	0.0542	0.0863	0.1133												
5447500	-0.7260	-0.3492	-0.0037	-0.0001	0.1433	1.4574	5.2233	0.726	0.698	144	60.651	137	-8.77	-4.26	-1.23	-0.01	7.54	24.56	39.40
	0.0827	0.0819	0.0030	0.0130	0.0190	0.0593	0.1326												
5466500	-0.8493	-0.2536	0.0028	-0.0138	0.1179	1.4830	6.4679	0.686	0.935	142	49.221	135	-7.50	-2.32	0.70	-0.82	10.32	24.84	33.56
	0.1132	0.1092	0.0040	0.0168	0.0114	0.0597	0.1928												
5469000	-0.7870	-0.1890	-0.0014	-0.0260	0.1096	1.1282	5.9049	0.572	0.914	145	30.717	138	-7.13	-1.80	-0.36	-1.61	8.39	19.20	31.00
	0.1105	0.1049	0.0039	0.0162	0.0131	0.0588	0.1905												
5495500	-1.1134	-0.2582	0.0043	0.0094	0.0784	1.3860	8.7298	0.665	0.945	140	43.934	133	-9.75	-2.30	1.07	0.56	24.24	36.36	32.32
	0.1142	0.1121	0.0040	0.0167	0.0032	0.0381	0.2701												
mod	-1.1045	-0.2507	0.0046	0.0088	0.0906	1.1223	6.0820	0.656	0.939	139	41.868	132	-9.71	-2.24	1.17	0.53	17.70	28.63	31.51
	0.1137	0.1120	0.0040	0.0167	0.0051	0.0392	0.1930												
5586100	-0.1523	-0.0356	0.0089	-0.0127	-0.4609	-0.5344	4.4889	0.135	0.854	157	3.91298	150	-1.57	-0.37	2.52	-0.89	-8.32	-6.13	32.39
	0.0971	0.0958	0.0035	0.0142	0.0554	0.0872	0.1386												
5587000	-0.7314	-0.6297	-0.0006	-0.0153	-0.0066	0.5594	6.3905	0.643	0.892	144	41.18187	137	-6.91	-6.02	-0.15	-0.96	-1.31	15.27	32.86
	0.1059	0.1045	0.0038	0.0160	0.0050	0.0366	0.1945												
5587900	-0.8464	-0.4250	-0.0012	-0.0121	0.1014	1.2319	7.0220	0.679	0.757	145	48.62620	138	-9.54	-4.77	-0.36	-0.90	28.38	40.63	41.33
	0.0887	0.0891	0.0033	0.0135	0.0036	0.0303	0.1699												
5594100	-0.4720	-0.0586	-0.0014	0.0101	-0.0711	-0.1892	4.3765	0.245	0.752	137	7.04242	130	-5.12	-0.65	-0.35	0.69	-8.01	-4.50	31.88
	0.0922	0.0897	0.0039	0.0146	0.0089	0.0420	0.1373												
5594800	-0.8580	-0.4017	0.0049	-0.0183	0.0360	0.6087	5.6195	0.476	0.803	146	21.04650	139	-9.06	-4.30	1.44	-1.28	6.21	15.41	29.23
	0.0947	0.0934	0.0034	0.0143	0.0058	0.0395	0.1922												
5595200	-0.5351	-0.3514	0.0077	0.0153	-0.0418	0.5238	5.9410	0.533	0.823	147	26.61258	140	-5.56	-3.67	2.22	1.05	-3.79	9.28	23.09
	0.0963	0.0957	0.0035	0.0146	0.0110	0.0564	0.2573												
5599500	-0.4084	0.2081	-0.0015	-0.0025	-0.0048	-0.0692	3.8372	0.161	0.753	129	3.91325	122	-4.30	2.24	-0.37	-0.16	-0.56	-1.68	24.25
	0.0951	0.0930	0.0040	0.0152	0.0086	0.0412	0.1582												
Wabash River	-0.5669	-0.2254	0.0010	-0.0092	-0.1208	0.3886	4.9732	0.398	0.741	153	16.057	146	-6.68	-2.66	0.36	-0.76	-3.85	5.41	37.94
03341920	0.0849	0.0846	0.0027	0.0121	0.0314	0.0718	0.1311												
Ohio River																			
03612500																			
Miss. R. K.	-0.2215	-0.0545	0.0016	-0.0185	-0.2056	1.0391	4.4216	0.454	0.845	81	10.261	74	-1.67	-0.41	0.28	-0.73	-1.39	6.08	22.20
05474500	0.1328	0.1334	0.0058	0.0253	0.1477	0.1710	0.1992												
Miss> R. T.	-0.5724	-0.0748	-0.0429	0.0238	-0.1371	0.8279	5.7354	0.469	0.875	72	9.57667	65	-3.91	-0.51	-2.58	0.63	-1.07	4.80	25.49
07022000	0.1463	0.1455	0.0166	0.0379	0.1281	0.1726	0.2250												

Appendix D-5. Summary of coefficients for total nitrogen (TKN plus nitrates) loading equations.

station #	b6	b5	b4	b3	b2	b1	b0	R2	se-C	# of Obs.	F	df	b6	b5	b4	t-test b3	b2	b1	b0
3339000	0.0694	0.1954	-0.0016	-0.0053	-0.0113	0.0558	2.3141	0.463	0.326	152	20.817	145	1.86	5.16	-1.04	-0.89	-3.92	2.90	28.05
	0.0373	0.0378	0.0015	0.0059	0.0029	0.0192	0.0825												
mod	0.0686	0.1974	-0.0016	-0.0052	-0.0089	0.0871	2.2768	0.460	0.327	151	20.475	144	1.83	5.17	-1.02	-0.88	-2.39	4.38	32.26
	0.0374	0.0382	0.0016	0.0060	0.0037	0.0199	0.0706												
3345500																			
3346000																			
3378000																			
3381495	0.1086	0.1898	0.0007	0.0094	-0.0489	-0.2482	0.5619	0.351	0.373	122	10.367	115	2.18	4.12	0.46	1.33	-17.10	-15.00	7.18
	0.0497	0.0460	0.0015	0.0071	0.0029	0.0165	0.0782												
3384450	-0.0093	-0.2219	0.0077	-0.0246	0.0101	0.1524	-0.8133	0.180	0.499	136	4.722	129	-0.15	-3.63	3.44	-2.72	4.92	8.66	-8.36
	0.0602	0.0611	0.0022	0.0091	0.0021	0.0176	0.0973												
3612000																			
5418950																			
5420100																			
5446500	0.0686	0.0804	0.0006	0.0128	-0.1351	0.0410	1.7278	0.353	0.256	130	11.201	123	2.10	2.59	0.54	2.71	-5.28	1.09	39.75
	0.0327	0.0311	0.0011	0.0047	0.0256	0.0377	0.0435												
5447500	0.0513	0.0350	-0.0035	0.0049	-0.1295	0.2630	2.2585	0.860	0.267	140	136.042	133	1.60	1.10	-3.04	0.98	-17.69	11.47	44.12
	0.0320	0.0317	0.0012	0.0050	0.0073	0.0229	0.0512												
5466500																			
5469000																			
5495500																			
5586100	0.1626	0.2544	-0.0021	-0.0045	-0.1379	0.0480	1.8639	0.651	0.234	142	42.045	135	5.90	9.06	-2.22	-1.08	-7.14	1.86	49.33
	0.0276	0.0281	0.0010	0.0042	0.0193	0.0258	0.0378												
5587000																			
5587900																			
5594100	-0.0855	0.3556	-0.0013	0.0003	0.0154	0.2125	0.8225	0.552	0.401	119	23.024	112	-1.60	6.99	-0.80	0.03	2.41	8.76	11.28
	0.0533	0.0509	0.0016	0.0079	0.0064	0.0243	0.0729												
5594800																			
5595200																			
5599500	0.1280	0.1092	-0.0004	-0.0159	-0.0142	-0.0919	0.3052	0.179	0.296	121	4.155	114	3.29	2.92	-0.28	-2.81	-4.26	-5.42	4.45
	0.0389	0.0374	0.0013	0.0056	0.0033	0.0170	0.0686												
Wabash River																			
03341920																			
Ohio River	-0.0189	0.1644	-0.0007	-0.0164	-0.1327	0.0077	0.5563	0.349	0.337	134	11.372	127	-0.44	4.06	-0.50	-3.23	-4.96	0.20	8.70
03612500	0.0424	0.0405	0.0014	0.0051	0.0267	0.0392	0.0639												
Miss. R. K.	0.2202	0.0907	-0.0034	0.0011	-0.0242	0.5178	1.4847	0.397	0.422	85	8.559	78	3.40	1.40	-1.25	0.10	-0.40	6.50	15.81
05474500	0.0649	0.0647	0.0027	0.0117	0.0612	0.0797	0.0939												
Miss. R. T.	-0.0072	0.2333	0.0029	-0.0073	-0.2219	-0.1071	1.2242	0.352	0.361	86	7.138	79	-0.13	4.22	1.66	-0.71	-5.48	-1.84	14.18
07022000	0.0549	0.0552	0.0018	0.0102	0.0405	0.0583	0.0864												

Appendix D-6. Annual estimated loads in tons per year based on the regression model after smearing.

Inorganic Nitrogen Load (Nitrite-Nitrate + Ammonia)

Stream	1981	1982	1983	1984	1985	1986	1987	1988
Vermilion River	9226	14004	11387	13214	8807	11379	4787	6564
modified	9839	15316	12334	14700	9917	12376	4517	6763
Embarras River	4501	8758	8174	9206	8070	6583	4235	7371
N Fk Embarras R	247	808	737	874	978	680	240	679
Bonpas Creek	310	693	1102	930	819	484	202	378
Little Wabash R	1027	2793	3447	3268	3439	2415	1166	2212
Lusk Creek	17	19	49	24	45	21	6	10
Cache River	136	206	385	247	407	196	75	110
Apple River	898	1444	1170	451	1007	1314	701	368
Plum River	1068	1532	1326	704	1292	1717	1143	651
Rock River	23505	33162	37578	25082	30998	43777	29711	24912
Green River	3302	4833	5011	3505	3875	4906	3912	4869
Edwards River	2123	3555	3080	2219	2225	2640	1596	1946
Henderson Cr.	2275	4392	3246	2370	2620	2367	1792	866
Bear Creek	861	1195	1220	1151	1421	1660	913	205
modified	752	1009	1147	911	1424	1421	781	128
Illinois River	120610	170971	191070	153905	144980	136044	101718	83912
Macoupin Creek	872	2571	2963	4056	3210	1762	1035	1861
Cahokia Creek	53	362	851	672	1177	774	242	356
Kaskaskia River	1385	8502	8606	11128	9525	4432	1497	5958
Silver Creek	155	519	716	799	794	461	320	586
Richland Creek	328	509	518	610	581	487	410	532
Big Muddy River	833	2165	2903	2262	2782	1683	778	1218
Wabash River	46919	85330	64529	66841	59947	75529	28879	47356
Ohio River	269041	391624	450281	473877	371549	315480	324541	215824
Mississippi R. K	72154	148606	253005	216306	203424	315534	198676	89925
Mississippi R. T	367845	584366	673930	639396	568556	631453	531483	329688

	1989	1990	1991	1992	1993	1994	1995	1996	Mean
Vermilion River	6138	10949	11872	5582	19349	12664	8388	6918	10076.7
modified	6165	12316	12770	5433	21856	14493	9064	7407	10954.2
Embarras River	7862	7412	8431	5142	10188	7130	3842	4627	6970.8
N Fk Embarras R	625	613	937	413	1038	666	294	500	645.5
Bonpas Creek	765	660	503	272	589	531	474	574	580.5
Little Wabash R	2640	2412	2703	1693	4016	3684	3060	3238	2700.8
Lusk Creek	21	18	15	6	13	11	11	7	18.4
Cache River	221	188	202	88	147	133	133	88	185.2
Apple River	155	310	374	431	2189	706	735	852	819.1
Plum River	326	636	706	905	3314	1427	1752	1929	1276.8
Rock River	11224	19950	24772	26617	63360	30581	30191	44131	31221.9
Green River	562	5715	6081	3209	11262	3510	6319	3876	4671.7
Edwards River	437	2907	3061	1577	7132	2187	4071	2677	2714.6
Henderson Cr.	324	2486	2615	1355	9064	2310	4558	3629	2891.8
Bear Creek	26	1047	1095	593	2348	805	1424	948	1057.0
modified	16	1018	900	425	1996	632	1350	999	931.8
Illinois River	46052	135691	183431	88344	249057	152866	144794	86650	136881.0
Macoupin Creek	750	1373	3086	515	4546	3142	2086	1559	2211.5
Cahokia Creek	160	348	402	47	474	560	284	125	430.4
Kaskaskia River	4030	5380	6391	1053	7711	9742	6952	5965	6141.1
Silver Creek	410	506	718	311	1139	984	1126	759	643.9
Richland Creek	447	468	518	454	741	725	780	605	544.6
Big Muddy River	1567	875	1525	735	1433	1587	1168	996	1531.9
Wabash River	54304	75385	88266	43008	114253	74211	40655	47065	63280
Ohio River	516736	462768	473681	287066	375254	456878	295903	403466	380248
Mississippi R. K	69534	165547	240802	278921	610116	229340	233725	231994	222351
Mississippi R. T	247265	451391	521400	492110	1029177	713234	752799	695360	576841

Appendix D-6 (continued). Annual estimated loads in tons per year based on the regression model after smearing.

Total Phosphorus Load

Stream	1981	1982	1983	1984	1985	1986	1987	1988
Vermilion River	390	582	525	649	523	772	198	321
modified	364	535	480	591	464	699	197	305
Embarras River	566	1024	915	901	843	831	174	433
N Fk Embarras R	112	213	252	230	300	303	64	135
Bonpas Creek	40	74	176	121	131	104	29	40
Little Wabash R	305	895	1570	1391	1609	1303	321	936
Lusk Creek	1	1	4	1	5	2	0	1
Cache River	33	53	146	63	150	68	18	36
Apple River	40	56	48	28	74	88	48	29
Plum River	69	80	64	42	93	125	72	35
Rock River	1814	2703	2847	2064	2439	3359	2543	1810
Green River	293	306	343	169	238	396	500	171
Edwards River	348	635	366	118	306	309	86	78
Henderson Cr.	189	364	273	222	251	231	240	228
Bear Creek	757	439	777	699	1206	1689	1558	39
modified	144	89	136	137	204	309	259	10
Illinois River	9415	9686	9619	7878	6724	7284	6164	4583
Macoupin Creek	405	381	629	652	538	431	142	182
Cahokia Creek	19	97	311	234	503	262	93	114
Kaskaskia River	428	1394	1648	1963	1632	1045	487	1165
Silver Creek	46	158	293	325	360	242	129	273
Richland Creek	108	127	162	176	166	183	106	156
Big Muddy River	241	391	812	500	730	461	200	313
Wabash River	3037	4889	3244	3418	3559	4045	1344	1775
Ohio River	29924	52279	63518	62727	42381	39340	34881	20382
Mississippi R. K	14730	23365	29921	23739	18561	27311	16253	7221
Mississippi R. T	52163	82832	103761	97235	80912	92313	78008	38822

	1989	1990	1991	1992	1993	1994	1995	1996	Mean
Vermilion River	266	599	647	223	1046	724	279	206	497.0
modified	255	532	586	216	935	623	257	189	451.8
Embarras River	604	599	708	322	1445	1093	436	968	741.4
N Fk Embarras R	230	195	294	110	520	364	195	321	239.9
Bonpas Creek	114	125	77	57	106	176	106	117	99.7
Little Wabash R	1056	1072	1212	532	1683	2037	1263	1350	1158.4
Lusk Creek	2	1	1	0	1	1	1	1	1.6
Cache River	84	76	85	32	58	58	57	36	65.9
Apple River	14	41	28	26	136	47	32	31	47.8
Plum River	18	65	32	31	168	51	42	47	64.7
Rock River	1118	1970	1929	1894	5851	2196	2210	3686	2527.2
Green River	35	907	312	172	813	163	369	387	348.3
Edwards River	46	411	131	88	974	90	227	255	279.3
Henderson Cr.	250	253	233	179	519	183	221	199	252.3
Bear Creek	19	2722	846	516	2313	339	1349	1273	1033.8
modified	5	427	155	102	434	71	238	209	183.1
Illinois River	3597	7055	8288	5804	12234	8771	8650	7103	7678.5
Macoupin Creek	86	331	391	41	834	609	264	223	383.5
Cahokia Creek	70	425	181	22	319	525	356	162	230.9
Kaskaskia River	838	1120	1422	388	2079	2555	1794	1592	1346.9
Silver Creek	152	219	282	93	433	408	370	190	248.4
Richland Creek	117	157	121	96	190	190	312	239	162.8
Big Muddy River	502	371	494	227	564	753	599	696	490.9
Wabash River	3192	4314	4967	2645	7452	5096	2626	4095	3731
Ohio River	63686	55757	69379	28087	40765	61650	31543	49252	46597
Mississippi R. K	6425	13934	17640	17181	54044	15916	18597	20150	20312
Mississippi R. T	30065	61932	60339	53126	151438	74954	79865	64461	75139

Appendix D-6 (continued). Annual estimated loads in tons per year based on the regression model after smearing.

Total Suspended Solids Load

Stream	1981	1982	1983	1984	1985	1986	1987	1988
Vermilion River	1453011	1381659	2848125	1649166	1905368	2515612	59231	202376
modified	462181	424178	814178	497641	537054	728681	24591	66339
Embarras River	522070	687178	572526	607727	486051	330629	100876	194436
N Fk Embarras R	90209	116846	154301	152029	156812	120124	30615	50661
Bonpas Creek	46390	39485	94053	48450	43647	33211	13308	11216
Little Wabash R	164329	276053	478427	393032	463786	314681	115453	211346
Lusk Creek	2784	1444	5804	982	4177	842	130	232
Cache River	58784	49774	167800	47174	102920	54015	10489	17257
Apple River	18539	16594	11603	8837	19626	26607	11848	5099
Plum River	157509	126677	64886	54011	247821	207261	69105	35039
Rock River	589654	1027906	942264	734316	609099	1115173	921712	385570
Green River	187776	161772	160069	73004	95586	260255	391002	58307
Edwards River	990570	1971734	551093	133734	410025	601894	69612	44674
Henderson Cr.	40607	818464	47664	29216	31452	28630	39564	4253
Bear Creek	7161884	1971656	2811622	2851182	3709924	2972033	4267367	17450
modified	508838	152962	176992	213973	221032	221072	255610	2379
Illinois River	5611408	5047682	4338818	3691322	2690772	3150237	2633132	1785556
Macoupin Creek	1004592	424034	539266	557250	343002	258211	84446	78265
Cahokia Creek	35779	152969	607561	360208	687334	161663	62922	66341
Kaskaskia River	232836	468787	550346	582083	497672	275198	177252	272922
Silver Creek	60889	118053	219385	140493	139837	68444	33266	49211
Richland Creek	43482	32817	38852	45075	31904	32731	16823	18075
Big Muddy River	100355	121346	242004	166670	212991	126823	69468	98149
Wabash River	2682336	3234795	2124536	2195026	1805185	2310021	714822	839444
Ohio River								
Mississippi R. K	4991095	10199827	13223109	10595089	6987404	12625939	6045811	1589050
Mississippi R. T	6569250	18534260	37229627	58436454	51611947	86034701	75582151	27339612

	1989	1990	1991	1992	1993	1994	1995	1996	Mean
Vermilion River	658701	3814693	1686345	502640	5071757	10807042	1315961	1235106	2319174.6
modified	203423	1100778	485049	163162	1505756	3001978	407956	381937	675305.2
Embarras River	386337	500346	289079	219572	734261	549042	384540	938293	468935.2
N Fk Embarras R	113332	148991	94715	45635	196972	134778	143921	236126	124129.3
Bonpas Creek	37016	49657	17708	18028	37426	39332	64750	85031	42419.2
Little Wabash R	311293	394512	279794	170549	603171	621355	598594	685128	380093.9
Lusk Creek	706	638	429	153	784	599	1021	967	1355.8
Cache River	48481	69887	45215	14781	42182	35289	53406	54167	54476.3
Apple River	2405	24441	6049	4470	60652	13681	10327	11439	15763.5
Plum River	13513	356712	40493	18501	549582	156795	58685	133291	143117.5
Rock River	260904	876281	531204	480853	2977077	596037	787521	1972932	925531.5
Green River	13503	752030	155815	101006	493679	82608	228905	300006	219707.8
Edwards River	47765	1012379	99443	112479	2036454	84425	426688	851560	590283.1
Henderson Cr.	3801	101111	22770	12071	944572	10373	65424	77631	142350.2
Bear Creek	19711	22202363	3265719	1618432	8489738	971934	12755858	22139814	6076667.9
modified	2360	1204104	221698	123865	614549	80491	801009	1214015	375934.4
Illinois River	1365057	2994391	3410570	2595036	5171555	4018210	4054574	3592207	3509407.9
Macoupin Creek	61660	445905	201736	21634	743773	556938	301038	326262	371750.8
Cahokia Creek	54307	688989	129253	12647	418299	991446	944195	432140	362878.2
Kaskaskia River	294743	418896	341346	142362	602718	633522	549926	493746	408397.3
Silver Creek	35556	189738	57652	14491	141730	168421	394601	176014	125486.3
Richland Creek	14262	34922	16050	10090	73024	57974	134963	81886	42683.0
Big Muddy River	159415	143691	121030	66895	157657	148190	167522	184763	142935.6
Wabash River	2060436	2540768	2142205	1504899	3669282	2221661	1332311	2264844	2102661
Ohio River									
Mississippi R. K	1485945	6111295	7557745	6165790	29392279	5403344	7190338	8047678	8600734
Mississippi R. T	22788643	89376546	60095677	35648404	138428289	32155617	26891215	11288745	48625696

Appendix D-6 (continued). Annual estimated loads in tons per year based on the regression model after smearing.

Total Nitrogen Load (TKN + Nitrates)

Stream	1981	1982	1983	1984	1985	1986	1987	1988
Vermilion River	10927	17510	14483	17677	12390	15340	5435	8250
modified	10282	16583	13696	16788	11822	14503	4970	7696
Embarras River								
N Fk Embarras R								
Bonpas Creek								
Little Wabash R	2220	6393	8863	8438	9168	6498	2694	5866
Lusk Creek	31	30	76	32	65	29	7	13
Cache River								
Apple River								
Plum River								
Rock River	30900	44170	48401	35294	41679	56618	40590	33490
Green River	4118	5789	6159	4090	4825	6027	5119	5365
Edwards River								
Henderson Cr.								
Bear Creek								
modified								
Illinois River	151839	203452	225973	185592	172062	167513	129125	104176
Macoupin Creek								
Cahokia Creek								
Kaskaskia River	3202	13999	14732	18058	15103	7921	3289	9690
Silver Creek								
Richland Creek								
Big Muddy River	1870	3634	6027	4462	5896	3604	1745	2702
Wabash River								
Ohio River	400692	565235	651913	666355	496201	422455	423479	274239
Mississippi R. K	174491	317470	467767	381920	331585	485363	293347	138437
Mississippi R. T	766367	1164632	1308609	1197198	1015867	1085248	884891	526745

	1989	1990	1991	1992	1993	1994	1995	1996	Mean
Vermilion River	7513	15482	15511	6357	25987	17255	10085	7416	12976.2
modified	6973	14749	14617	5851	24723	16524	9503	7480	12297.5
Embarras River									
N Fk Embarras R									
Bonpas Creek									
Little Wabash R	6939	6436	6922	3806	9634	8991	6841	7085	6674.5
Lusk Creek	29	25	23	10	28	28	32	26	30.3
Cache River									
Apple River									
Plum River									
Rock River	18605	31122	35199	35700	86388	40484	40728	58373	42358.8
Green River	726	8090	7078	3658	13572	3931	7164	4842	5659.4
Edwards River									
Henderson Cr.									
Bear Creek									
modified									
Illinois River	62321	167987	217390	111570	292759	181956	171315	107075	165756.6
Macoupin Creek									
Cahokia Creek									
Kaskaskia River	6803	8529	10646	2346	13598	16188	11508	10124	10358.6
Silver Creek									
Richland Creek									
Big Muddy River	3888	2588	3531	1698	3596	3923	3126	3051	3458.8
Wabash River									
Ohio River	688276	610808	634901	373986	494077	631092	406475	576233	519776.1
Mississippi R. K	113544	236287	322641	334426	828762	277655	293584	294334	294204.8
Mississippi R. T	392757	706244	774506	704585	1511919	981692	1036575	930390	936764.1