Benthic-Invertebrate and Streambed-Sediment Data for the White River and Its Tributaries in and near Indianapolis, Indiana, 1994–96

Open-File Report 98-533

Prepared in cooperation with the Indianapolis Department of Public Works

U.S. Department of the Interior
U.S. Geological Survey

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By Danny E. Renn

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Contents

Figure

Tables

Contents—Continued

Tables—Continued

Contents—Continued

Tables—Continued

Contents—Continued

Tables—Continued

Contents—Continued

Tables—Continued

Contents—Continued

Tables—Continued

Conversion Factors and Abbreviations

Multiply	By	To obtain
inch (in.)	2.54	centimeter
foot (ft)	0.3048	meter
square mile (mi^2)	2.590	square kilometer
cubic foot per second (ft^3/s)	0.02832	cubic meter per second
gallon (gal)	3.785	liter

The following terms and abbreviations are used in this report:

m^2	square meter
mm	millimeter
µm	micrometer

Temperature is given in degrees Celsius (°C) which can be converted to degrees Fahrenheit (°F) as follows:

$$°F = 1.8 \times °C + 32$$

Sea Level: In this report, "sea level" refers to the National Geodetic Vertical Datum of 1929—a geodetic datum derived from a general adjustment of the first-order level nets of the United States and Canada, formerly called Sea Level Datum of 1929.

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Abstract

Data were collected in the White River and its tributaries in and near Indianapolis, Indiana, on the diversity and density of benthic invertebrates; concentrations of metals, insecticides, herbicides, and semivolatile organic compounds sorbed on streambed sediments; and particle-size distribution of streambed sediments. A total of 369 benthic-invertebrate samples were collected at 21 sites during late spring or summer and early fall 1994 through 1996; of these, 30 were quality-control samples. A total of 33 streambed-sediment samples were collected at 14 sites during August 1994, 1995, and 1996; of these, 10 were quality-control samples.

Introduction

Approximately 40 mi^2 of the city of Indianapolis is serviced by a combined-sewer system (fig. 1) (Howard Needles Tammen & Bergendoff, 1983). There are 137 combined-sewer outfalls in the Indianapolis area that discharge into the White River and its tributaries; 29 combined-sewer outfalls discharge directly into the White River, 28 to Fall Creek, 6 to Eagle Creek, 49 to Pleasant Run, 4 to Bean Creek, and 21 to Pogues Run (written commun., Indianapolis Department of Public Works).

The City of Indianapolis is responsible for managing its combined-sewer system and for determining strategies to mitigate the effect of combined-sewer overflows on receiving streams in and near Indianapolis (fig. 1). To evaluate impacts of the sewer overflows and to develop the strategies, the City needs information on stream quality.

In 1993, the Indianapolis Department of Public Works (DPW) and the U.S. Geological Survey (USGS) began a cooperative study to determine the diversity and density of benthic invertebrates; concentrations of selected metals, insecticides, herbicides, and semivolatile organic compounds sorbed on streambed sediments; and particle-size distribution of streambed sediments in the White River and its tributaries in and near Indianapolis. The study was intended to supplement an existing river-quality-monitoring network operated by the department. While water samples reflect stream quality only at the time of sampling, benthic-invertebrate populations reflect long-term and short-term water-quality conditions because of their limited mobility. The differing sensitivity of benthic invertebrates to particular contaminants allows the presence or absence of particular types of benthic invertebrates to be used as an indicator of stream quality. Additionally, benthic invertebrates are found in all aquatic habitats and are easy to collect (Lenat and others, 1980). Chemical constituents sorbed on streambed sediments are not as transient as chemical constituents in the water column. Consequently, concentrations of these metals, insecticides, herbicides, and semivolatile organic compounds sorbed on streambed sediments also can be used as indicators of long-term water-quality conditions. Because of the positive correlation between decreasing particle size and increasing chemical concentrations in sediment (Horowitz, 1991), the particle-size distribution of streambed sediments can be used to help determine the variability in chemical constituents sorbed on streambed sediments.

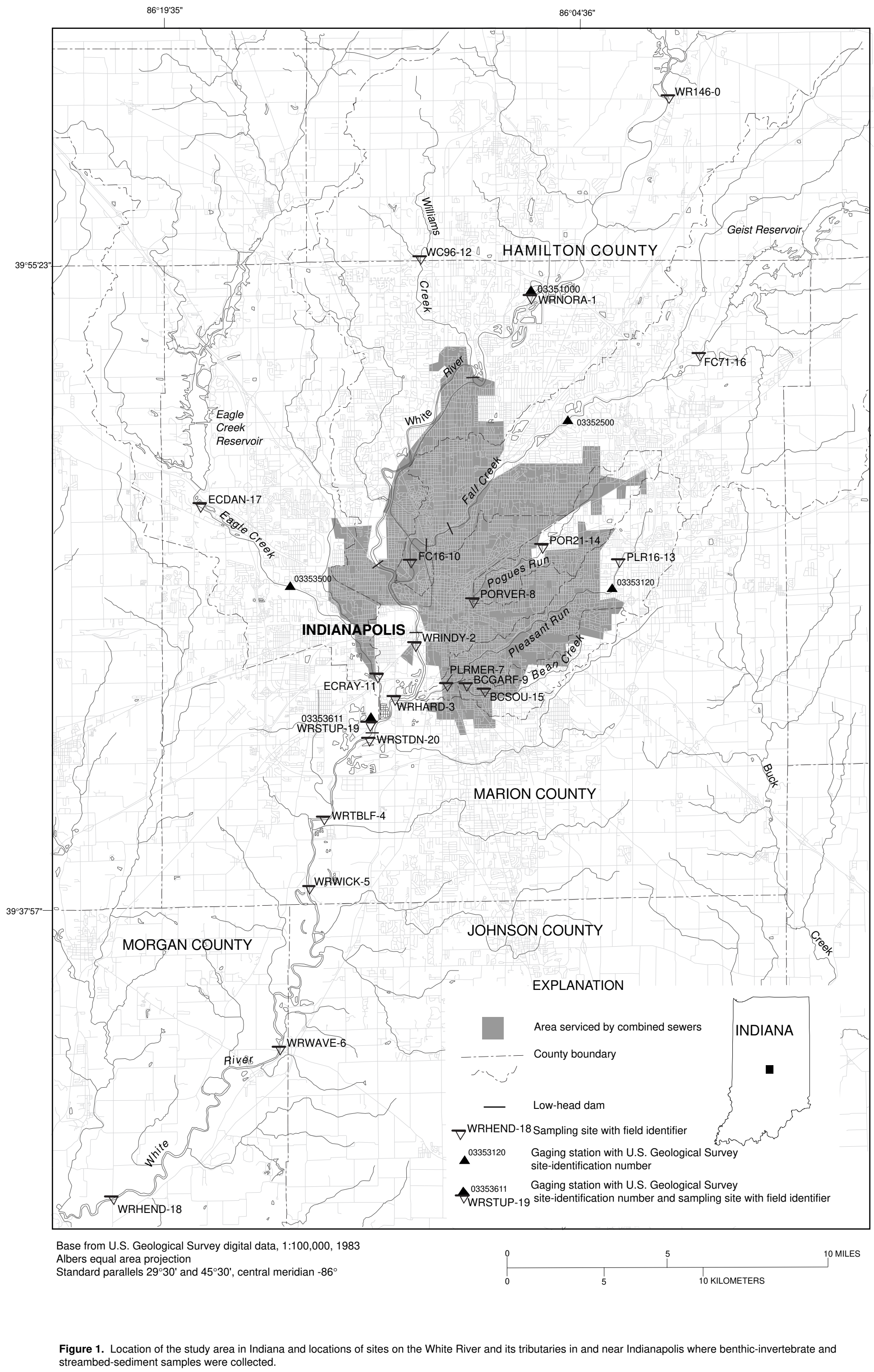

Figure 1. Location of the study area in Indiana and locations of sites on the White River and its tributaries in and near Indianapolis where benthic-invertebrate and streambed-sediment samples were collected.

Purpose and Scope

This report provides information on sampling locations and data collected as part of this study for sites on the White River and its tributaries in and near Indianapolis. Data collected include (1) the diversity and density of benthic invertebrates; (2) the concentrations of metals, insecticides, herbicides, and semivolatile organic compounds sorbed on streambed sediments; and (3) the particle-size distribution of streambed sediments. From 1994 through 1996, 369 benthic-invertebrate samples were collected at 21 sites, and 33 streambed sediments were collected at 14 sites.

Description of Study Area

The study focuses on the White River and selected tributaries in and near the city of Indianapolis. The drainage area of the White River above the confluence of the East Fork White River is 5,372 mi^2. The study area encompasses a 979-mi^2 drainage area that is 18.2 percent of the White River Basin above the confluence of the East Fork White River. The study used 21 sampling sites: 18 in Marion County, 1 in Hamilton County, and 2 in Morgan County. Indianapolis, the capital of Indiana, is the largest city in the State and is incorporated with Marion County. Marion County has a population of 783,042 (Bureau of the Census, 1990) and a surface area of 402 mi^2 (Sturm and Gilbert, 1978).

The study area is underlain by limestone; dolomite; siltstone; and shale of Silurian, Devonian, and Mississippian ages (Gray and others, 1987). The soils adjacent to the White River and its tributaries in the study area are loam soils that formed in unconsolidated glacial outwash that consists of stratified silt to boulder-size deposits and alluvium that consists of stratified sand to gravel-size deposits (Sturm and Gilbert, 1978). In most of the study area, these deposits range in thickness from 50 to 100 ft, but in the lower part of the study area these deposits can be less than 50 ft thick (Gray, 1983). The remaining soils in the study area are silt-loam soils that formed in unconsolidated glacial till consisting of non-stratified silt to boulder-size deposits (Sturm and Gilbert, 1978). In most of the study area these glacial till deposits range in thickness from 100 to 250 ft, but in the lower part of the study area these deposits can be less than 50 ft thick (Gray, 1983). The study area is located in the Tipton Till Plain physiographic unit (Schneider, 1966), which is rolling to gently rolling in the area of glacial till deposits and generally flat in the areas covered by glacial outwash and alluvium.

The streams in the study area generally have low slopes and meandering channels that primarily contain silt to gravel-size material with areas of cobble to boulder-size material that generally form run and riffle areas. In the study area are four low-head dams on the White River and two low-head dams on Fall Creek (figure 1). These dams raise the level of the streams, decrease the streamflow velocities, and increase travel time through the pooled sections of the stream. Land use in the area of Indianapolis is primarily urban, and land use outside the Indianapolis area is primarily agricultural and forest.

The White River and its two largest tributaries, Fall Creek and Eagle Creek, are the major sources of water for public and industrial supply for Indianapolis because they generally have sufficient streamflows even during dry periods (Duwelius, 1990). Flows in Fall Creek are affected by Geist Reservoir, which has a storage capacity of 6.9 billion gallons at a reservoir elevation of 785 ft above sea level (Herring, 1974). Flows in Eagle Creek are affected by Eagle Creek Reservoir, which has a storage capacity of 7.8 billion gallons at a reservoir elevation of 790 ft above sea level (Herring, 1974). These reservoirs generally attenuate high streamflows and augment low streamflows.

The study area is located in the central climate division in Indiana and has a continental-type climate characterized by hot, humid summers and cold, wet winters (Newman, 1966). The mean precipitation in the central climate division for the

Table 1. Sites on the White River and its tributaries in and near Indianapolis, Indiana, where benthic-invertebrate and streambed-sediment samples were collected

[Station number is the U.S. Geological Survey site-identification number; mi^2, square miles; BI, benthic invertebrate; SS, streambed sediment; -- no sample]

Field identifier	Station number	Site name	Latitude	Longitude	Drainage area[1] (mi^2)	Number of samples	
						BI	SS
WR146-0	400001086012301	White River at 146th Street near Noblesville, IN	400001	860123	1,147	30	--
WRNORA-1	03351000	White River near Nora, IN (82nd Street)	395435	860620	1,219	21	4
WRINDY-2	03353000	White River at Indianapolis, IN (Morris Street)	394505	861030	1,635	18	4
WRHARD-3	03353193	White River at Harding Street, Indianapolis, IN	394337	861113	1,660	18	1
WRSTUP-19	03353611	White River at Stout Generating Station at Indianapolis, IN	394252	861202	1,898	12	2
WRSTDN-20	394234086120900	White River below Stout Generating Station at Indianapolis, IN	394234	861209	1,899	12	2
WRTBLF-4	394019086134601	White River at Tibbs-Banta Landfill near Southport, IN	394019	861346	1,920	15	1
WRWICK-5	393827086141701	White River at Wicker Road near Southport, IN	393827	861417	1,947	15	1
WRWAVE-6	393402086152000	White River near Waverly, IN (State Road 144)	393402	861520	2,026	27	5
WRHEND-18	392956086212001	White River at Henderson Bridge near Adams, IN	392956	862120	2,126	9	--
WC96-12	03351072	Williams Creek at 96th Street, Indianapolis, IN	395537	861020	17.0	18	2
FC71-16	395259086001601	Fall Creek at 71st Street near Lawrence, IN	395259	860016	243	18	--
FC16-10	03352875	Fall Creek at 16th Street at Indianapolis, IN	394720	861040	317	15	3
ECDAN-17	394851086181301	Eagle Creek at Dandy Trail Road near Clermont, IN	394851	861813	164	21	--
ECRAY-11	394613086114700	Eagle Creek at Raymond Street at Indianapolis, IN	394411	861148	209	18	4
PLR16-13	394721086031001	Pleasant Run at East 16th Street at Indianapolis, IN	394721	860310	4.00	18	--
PLRMER-7	394358086092100	Pleasant Run near South Meridian Street at Indianapolis, IN	394358	860921	20.8	18	1
BCSOU-15	394349086080001	Bean Creek at Southern Avenue at Indianapolis, IN	394349	860800	5.00	18	--
BCGARF-9	394358086083901	Bean Creek at Garfield Park at Indianapolis, IN	394358	860839	5.30	18	2
POR21-14	394746086055601	Pogues Run at East 21st Street at Indianapolis, IN	394746	860556	4.40	18	--
PORVER-8	03352990	Pogues Run at Vermont Street, Indianapolis, IN	394617	860825	8.87	18	1

[1]Hoggatt, 1975.

period 1961 through 1990 was 40.5 in. (Stewart and others, 1995). During the study period, precipitation in the central climate division was 38.8 in. in 1994 (Stewart and others, 1995); 35.5 in., 1995 (Stewart and others, 1996); and 44.5 in., 1996 (Stewart and others, 1997).

Methods of Data Collection

A total of 21 sampling sites were located on the White River and its tributaries (table 1). Ten sites were on the White River, one on Williams Creek, two on Fall Creek, two on Eagle Creek, two on Pleasant Run, two on Bean Creek, and two on Pogues Run. Benthic invertebrates were sampled at all 21 sites to determine diversity and density. Streambed-sediment samples were collected at 14 sites to determine concentrations of metals, insecticides, herbicides, and semivolatile organic compounds sorbed on the streambed sediments and to determine particle-size distributions of streambed sediments.

Hydrologic Conditions

Samples were collected during periods of low-flow or steady-state streamflow conditions. After review of the USGS streamflow-gaging records in the study area, several sites were selected to be representative of streamflow conditions at all the sampling sites. Table 2 shows monthly mean streamflows during the sampling periods for the streamgage sites and monthly precipitation in the central climate division in Indiana. Table 2 data represent streamflow conditions at sites having drainage areas from 7.58 mi^2 to 1,898 mi^2. Drainage areas at sampling sites on the White River range from 1,147 mi^2 to 2,126 mi^2 (table 1) and on the tributaries from 4.00 mi^2 to 317 mi^2 (table 1) (Hoggatt, 1975). Although monthly mean streamflow during the study period was frequently higher than the long-term mean for the period of record, samples were collected following a period of low-flow conditions and during steady-state streamflow conditions. During the study period, monthly precipitation generally was greater than the long-term mean-monthly precipitation during the months of April, May, and June. During July, August, and September, precipitation was generally lower than the mean-monthly precipitation.

Collection of Benthic Invertebrates

Throughout the study, samples were collected at 21 sites in the study area to determine the diversity and density of benthic invertebrates. Benthic invertebrates were collected at 19 of these sites during May and September 1994. After a review of the 1994 data and consultation with DPW, 1 site was discontinued and 2 sites were added; 20 sites were sampled during July and September 1995 and September 1996. (Data, however, are not available for the Williams Creek site for September 1995.) During July 1996, only 16 sites were sampled before a storm caused high water that prevented access to the remaining number of sites. At each site, three samples from different locations within the stream channel were collected during each sampling event. Three quality-control samples were collected at two sites during May and September 1994 and July and September 1995, and at one site during July 1996 and September 1996. A total of 369 benthic-invertebrate samples were collected during the study, including the 30 quality-control samples.

The three samples collected at each site were the minimum number needed to determine the diversity and density of benthic invertebrates at a site (Britton and Greeson, 1988). Benthic-invertebrate samples were collected twice a year during periods when most species are expected to be in early aquatic stages and prior to their adult terrestrial stage. At each site, samples were collected in habitat areas where the greatest diversity and density of benthic invertebrates were expected. The habitat areas were generally riffle

Table 2. Monthly mean streamflow at U.S. Geological Survey gaging stations on the White River and its tributaries, and precipitation in the central climate division in Indiana during sampling periods

[Station number is the U.S. Geological Survey site-identification number; mi^2, square miles; ft^3/sec, cubic foot per second; APR, April; JUN, June; JUL, July; AUG, August; SEP, September]

Station number	Site name							Drainage area (mi^2)
03353120	Pleasant Run at Arlington Avenue at Indianapolis, IN							7.58
		Streamflow (ft^3/sec)						
	Year	APR	MAY	JUN	JUL	AUG	SEP	
	1994	17.0	6.59	6.09	2.42	6.08	3.06	
	1995	7.37	30.4	7.37	4.56	4.89	1.37	
	1996	26.5	37.8	7.74	9.33	2.80	9.71	
	1960–96	11.6	10.4	6.67	8.85	5.29	4.33	
03353500	Eagle Creek at Indianapolis, IN							174
		Streamflow (ft^3/sec)						
	Year	APR	MAY	JUN	JUL	AUG	SEP	
	1994	387	82.8	54.9	25.6	9.18	6.88	
	1995	57.5	345	35.2	9.91	7.43	11.1	
	1996	411	954	200	91.2	7.19	16.9	
	1939–96	312	215	140	87.9	39.9	39.6	
03352500	Fall Creek at Millersville, IN							298
		Streamflow (ft^3/sec)						
	Year	APR	MAY	JUN	JUL	AUG	SEP	
	1994	560	249	99.0	96.4	71.8	49.9	
	1995	224	713	250	176	99.4	59.1	
	1996	754	1,454	511	240	77.4	77.2	
	1930–96	517	389	274	190	119	94.8	
03351000	White River near Nora, IN (82nd Street)							1,219
		Streamflow (ft^3/sec)						
	Year	APR	MAY	JUN	JUL	AUG	SEP	
	1994	2,411	940	448	333	229	167	
	1995	1,156	2,065	1,079	658	300	204	
	1996	2,283	4,530	1,781	593	251	300	
	1930–96	2,068	1,417	1,100	716	450	379	
03353611	White River at Stout Generating Station at Indianapolis, IN							1,898
		Streamflow (ft^3/sec)						
	Year	APR	MAY	JUN	JUL	AUG	SEP	
	1994	3,874	1,517	829	538	406	308	
	1995	1,738	3,672	1,597	975	506	254	
	1996	3,849	7,735	2,799	1,149	437	657	
	1992–96	3,408	3,713	1,886	1,617	540	676	

areas with gravel to cobble-size substrate material. Streams did not have identical morphology and sites varied in habitat conditions ranging from riffles to pooled areas, each with various sizes of substrate material. A description of the physical characteristics at each sampling site is contained in table 3 (at back of report).

A Surber sampler was used to collect benthic-invertebrate samples. The Surber sampler had a 0.0929-m^2 sample grid and a collection-net-bag mesh opening of 210 µm (U.S. Standard No. 70 sieve size); this mesh size has been recommended by the USGS for collecting benthic invertebrates (Britton and Greeson, 1988). To collect benthic-invertebrate samples, the bottom edge of the Surber sampler was pressed tightly against the bottom of the stream to isolate the sampling area. To remove the benthic invertebrates from the area enclosed by the sampler, the larger rocks were put in a bucket and the remaining streambed materials enclosed by the grid were scrubbed thoroughly so that the disturbed materials released from the streambed were collected in the Surber net. The rocks put in the bucket also were scrubbed, and the materials cleaned from the rocks were collected. The contents of the net and the bucket were combined and sieved through a mesh opening of 210 µm. The benthic invertebrates collected on the mesh screen were put in a container and fixed with a 10-percent Formalin solution. The benthic invertebrates were classified by a contract laboratory, TAI Environmental Sciences, Inc. Taxonomic nomenclature used in this report conform to the usage of Merritt and Cummins (1984) and Pennak (1989). The results of the taxonomic identification and counts are contained in tables 4 through 126 at the back of this report.

Collection of Streambed Sediments

Streambed sediments were collected at 14 sites to determine physical properties; concentrations of metals, insecticides, herbicides, and semivolatile organic compounds sorbed on streambed sediments (table 127); and particle-size distributions of the streambed sediments. All samples were collected during August. Samples were collected at 12 sites during 1994. After a review of the data and consultation with DPW, eight sites were discontinued and two sites were added; six sites were sampled during 1995. After a review of the 1994 and 1995 data, five of the previously sampled sites were selected to be sampled during 1996. Ten quality-control samples were collected at six sites during 1994 and at two sites during 1995 and 1996. A total of 33 streambed-sediment samples were collected during the study.

No standard USGS method has been established for collection of streambed sediments in stream cross sections (Ward and Harr, 1990). For this study, each streambed-sediment sample consisted of two independently collected sub-samples. One sub-sample was collected for the analysis of metals and particle-size determinations and one sub-sample was collected for the analysis of insecticides, herbicides, and semi-volatile organic compounds. For both sub-samples, approximately equal volumes of the top 1 in. of fine-grained sediments were collected to represent the stream at that site. To avoid cross-contamination during sample collection, sub-samples were collected from downstream to upstream. The quality-control samples were collected upstream, or on opposite sides of the stream, from where the other samples were collected.

Polypropylene scoops and containers were used to collect and store the sediment analyzed for metals and particle-size distribution. The sediment was sieved through a polyethylene-sided 2-mm mesh screen. The sieved sediment was collected in a polyethylene pan and composited with a polypropylene scoop. Two representative samples of the composite were submitted for analysis, one for the analysis of metals and one for determination of particle-size distribution. Samples for the analysis of metals were chilled to 4°C and sent to the USGS National Water Quality Laboratory in Arvada, Colo., for analysis. Particle-size distributions were determined by the USGS sediment laboratory in Iowa City, Iowa.

Table 127. Physical properties measured during sampling; metals, insecticides, herbicides, and semivolatile organic compounds analyzed from streambed-sediment samples from the White River and its tributaries in and near Indianapolis, Indiana

[Brackets [ ] and ALL CAPS indicate name as it appears in table 128]

Physical properties:

PH	Specific conductance	Water temperature [TEMPERATURE, WATER]
Oxygen, dissolved		

Metals:

Aluminum	Arsenic	Cadmium	Chromium
Copper	Cyanide	Iron	Lead
Magnesium	Manganese	Mercury	Nickel
Zinc			

Insecticides:

Aldrin	Chlordane	DDT [P,P'DDT]	DDD [P,P'DDD]
DDE [P,P'DDE]	Diazinon	Dieldrin	Endosulfan [ENDOSULFAN I]
Endrin	Ethion	PCB’s [PCB]	PCN’s [PCN]
Heptachlor	Heptachlor epoxide	Lindane	Malathion
Methoxychlor	Methyl parathion	Mirex	Parathion
Perthane	Toxaphene	Trithion	

Herbicides:

2,4-D	2,4,5-T	Dicamba	Picloram
Silvex			

Semivolatile organic compounds:

1,2,4-Trichlorobenzene	1,2-Dichlorobenzene
1,3-Dichlorobenzene	1,4-Dichlorobenzene
2,4,6-Trichlorophenol	2,4-Dichlorophenol
2,4-Dinitrophenol	2,4-Dinitrotoluene
2,4-Dimethylphenol [2,4-DP]	2,6-Dinitrotoluene
2-Chloronapthalene	2-Chlorophenol
2-Methyl-4,6-dinitrophenol [4,6-DINITROORTHOCRESOL]	2-Nitrophenol
4-Bromophenyl-phenylether	4-Chlorophenyl-phenylether
4-Chloro-3-methylphenol [PARACHLOROMETACRESOL]	4-Nitrophenol
Acenaphthene	Acenaphthylene
Anthracene	Benzo(a)pyrene
Benzo(b)fluoranthene	Benzo(k)fluoranthene
Benzo(a)anthracene [BENZO A ANTHRACENE 1,2-BENZANTHRACENE]	
Benzo(g,h,i)perylene [BENZOGHI PERYLENE 1,12-BENZOPERYLENE]	
Bis(2-chloroethoxy)methane	Bis(2-chloroethyl)ether
Bis(2-chloroisopropyl)ether	Bis(2-ethylhexyl)phthalate
Butylbenzylphthalate [N-BUTYLBENZYLPHTHALATE]	Carbon, inorganic
Carbon, inorganic + organic [CARBON, INORG + ORGANIC]	Chrysene
Dibenz(a,h)anthracene [1,2,5,6-DIBENZANTHRACENE]	Di-n-butylphthalate
Di-n-octylphthalate	Diethylphthalate
Dimethylphthalate	Fluoranthene
Fluorene	Hexachlorobenzene
Hexachlorobutadiene [HEXACHLOROBUTADIENCE]	Hexachlorocyclopentadiene
Hexachloroethane	Indeno(1,2,3-cd)pyrene
Isophorone	N-Nitrosodi-n-propylamine
N-Nitrosodimethylamine	N-Nitrosodiphenylamine
Naphthalene	Nitrobenzene
Pentachlorophenol	Phenanthrene
Phenol [PHENOL(C6H-5OH)]	Pyrene

All equipment used for collection of the metals sub-sample was cleaned and decontaminated before each sample was collected. After each sample collection, all equipment was scrubbed thoroughly and rinsed with native-stream water, tap water, and deionized water. All equipment then was rinsed thoroughly with a 5-percent nitric-acid solution followed by a rinse with deionized water. Before samples were collected, all equipment was rinsed three times with native-stream water. For the first sample collection, except for the use of native-stream water, all equipment was cleaned and decontaminated with the same procedures at the USGS Indiana District laboratory.

Glass beakers were used to collect and store the sediment analyzed for insecticides, herbicides, and semivolatile organic compounds. The sediment was sieved through a 2-mm stainless-steel mesh screen. The sieved sediment was collected in a glass pan and composited with a glass beaker. Three representative samples of the composite were submitted for analysis: one for insecticides, one for herbicides, and one for semivolatile organic compounds. All samples were chilled to 4°C and sent to the USGS National Water Quality Laboratory for analysis.

All equipment used for collection of the insecticides, herbicides, and semivolatile organic compounds sub-sample was cleaned and decontaminated before samples were collected. After each sample collection, all equipment was scrubbed thoroughly and rinsed with native-stream water, tap water, and deionized water. All equipment then was rinsed thoroughly with methanol. Before samples were collected, all equipment was rinsed three times with native-stream water. For the first sample collection, except for the use of native-stream water, all equipment was cleaned and decontaminated with the same procedures at the USGS Indiana District laboratory. Table 128 (at back of report) lists data for physical properties; concentrations of metals, insecticides, herbicides, and semivolatile organic compounds; and particle-size distribution of streambed sediments determined at each site.

Summary

Data were collected in the White River and its tributaries in and near Indianapolis, Ind., during a cooperative study between the Indianapolis DPW and the USGS from 1994 through 1996. These data were collected to provide information on the diversity and density of benthic invertebrates; concentrations of metals, insecticides, herbicides, and semivolatile organic compounds sorbed on streambed sediments; and particle-size distributions of streambed sediments. This information may be used to help determine control strategies for mitigating the effects of combined-sewer overflows on receiving streams.

A total of 369 benthic-invertebrate samples were collected at 21 sites during late spring or summer and early fall 1994 through 1996; of these, 30 were quality-control samples. A total of 33 streambed-sediment samples were collected at 14 sites during August 1994, 1995, and 1996; of these, 10 were quality-control samples.

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Data Tables

Table 3. Habitat characteristics for sites on the White River and its tributaries in and near Indianapolis, Indiana, where benthic invertebrates were collected, 1994 through 1996

[USGS, U.S. Geological Survey; IN, Indiana; mi^2, square miles; riffle—turbulent flow, shallow, coarse-grain substrate; run—laminar flow, less turbulent flow, variable depth and substrate; pool—very low current velocity, relatively deep, depositional area, accumulations of fine sediment particles; bar—a depositional feature that is located in the active part of the stream channel and is generally composed of gravel to cobble-size deposits that are generally flat to generally sloping and have no or little vegetation cover; fines—less than .00291 inch (0.074 millimeter); sand—.00291 inch to 0.187 inch (0.074 to 4.76 millimeters); gravel—0.187 inch to 3 inches (4.76 to 76.2 millimeters); cobble—3 inches to 10 inches (76.2 to 254 millimeters); boulder—greater than 10 inches (254 millimeters); side of stream determined by looking downstream]

Field identifier:	WR146-0
Site name:	White River at 146th Street near Noblesville, IN
USGS site-identification number:	400001086012301
Drainage area, mi^2:	[1]1,147
Sampling location:	Adjacent to bar on right side of stream, 500 feet upstream from 146th Street bridge
Stream-channel type:	Natural
Bank vegetation:	Trees
Land use in general vicinity of stream:	Agricultural
Flow characteristics:	Run
Substrate size in stream reach (estimated)[2]:	Gravel and cobble, with some sand and fines
Substrate size sampled (estimated)[2]:	Gravel and cobble
Ancillary information:	Most upstream site in study area. Site is 4.56 miles downstream from Noblesville
Field identifier:	WRNORA-1
Site name:	White River near Nora, IN (82nd Street)
USGS site-identification number:	03351000
Drainage area, mi^2:	[1]1,219
Sampling location:	Spring 1994—on right bank, 200 feet upstream from 82nd Street bridge; all other samplings—at riffle area, 1,000 feet upstream from 82nd Street bridge
Stream-channel type:	Natural
Bank vegetation:	Trees
Land use in general vicinity of stream:	Urban
Flow characteristics:	Spring 1994—run; all other samplings—riffle
Substrate size in stream reach (estimated)[2]:	Spring 1994—fines, sand, gravel, and cobble; other samplings—cobble, gravel, boulder, and sand
Substrate size sampled (estimated)[2]:	Spring 1994—cobble (primarily riprap), gravel, and sand; other samplings—cobble and gravel

Table 3. Habitat characteristics for sites on the White River and its tributaries in and near Indianapolis, Indiana, where benthic invertebrates were collected, 1994 through 1996—Continued

Field identifier:	WRINDY-2
Site name:	White River at Indianapolis, IN (Morris Street)
USGS site-identification number:	03353000
Drainage area, mi^2:	[1]1,635
Sampling location:	On left side of stream; spring 1994—50 feet upstream from Morris Street bridge adjacent to bar; fall 1994—under the bridge; spring 1995—one site 50 feet upstream from bridge adjacent to bar, one site under the bridge, and one site 50 feet downstream from bridge adjacent to bar; all other samplings—under the bridge
Stream-channel type:	Natural, with levees close to stream
Bank vegetation:	Trees and brush
Land use in general vicinity of stream:	Urban
Flow characteristics:	Run
Substrate size in stream reach (estimated)^2:	Fines, gravel, cobble, and sand
Substrate size sampled (estimated)^2:	Gravel and cobble, with some fines and sand
Ancillary information:	Site is located in the center of Indianapolis. Sampling location under the bridge had faster streamflow velocities and greater amount of gravel and cobble than other sampling sites. Sampling location under the bridge generally not in sunlight. Fines were generally black organic material, and some of the gravel and cobble-size material was manmade material (broken concrete, bricks)
Field identifier:	WRHARD-3
Site name:	White River at Harding Street, Indianapolis, IN
USGS site-identification number:	03353193
Drainage area, mi^2:	[1]1,660
Sampling location:	Spring 1994—two sites on the left side of the stream, 200 feet downstream from Harding Street bridge and one site on right side of stream, 25 feet downstream from large combined-sewer outfalls; fall 1994—on right side of stream, 25 feet downstream from large combined-sewer outfalls; all other samplings—on right side of stream downstream from the bridge and upstream from large combined-sewer outfalls
Stream-channel type:	Natural, with levees close to stream
Bank vegetation:	Trees upstream and grass/weeds downstream from Harding Street bridge
Land use in general vicinity of stream:	Urban
Flow characteristics:	Pool
Substrate size in stream reach (estimated)^2:	Fines, cobble, and gravel
Substrate size sampled (estimated)^2:	Cobble and gravel, with some fines
Ancillary information:	There are large combined-sewer outfalls 75 feet downstream from the bridge. The site is located 1.15 miles upstream from the outfall for the Belmont advanced wastewater-treatment plant and 1.75 miles upstream from the dam at the Stout Generating Station, which creates the pooled condition. The fines were generally black organic material, and the cobble and gravel-size material was primarily crushed stone

Table 3. Habitat characteristics for sites on the White River and its tributaries in and near Indianapolis, Indiana, where benthic invertebrates were collected, 1994 through 1996—Continued

Field identifier:	WRSTUP-19
Site name:	White River at Stout Generating Station at Indianapolis, IN
USGS site-identification number:	03353611
Drainage area, mi^2:	[1]1,898
Sampling location:	Left side of stream immediately upstream from the Stout Generating Station
Stream-channel type:	Natural, with levees away from stream
Bank vegetation:	Grass and weeds
Land use in general vicinity of stream:	Industrial
Flow characteristics:	Pool
Substrate size in stream reach (estimated)[2]:	Fines and gravel
Substrate size sampled (estimated)[2]:	Gravel and some fines
Ancillary information:	The site is located 3,000 feet downstream from the outfall for the Belmont advanced wastewater-treatment plant and 2,000 feet upstream from the dam at the Stout Generating Station, which creates the pooled condition. The fines were generally black organic material and the gravel-size material was primarily crushed stone

Field identifier:	WRSTDN-20
Site name:	White River below Stout Generating Station at Indianapolis, IN
USGS site-identification number:	394234086120900
Drainage area, mi^2:	[3]1,899
Sampling location:	At riffle areas adjacent to islands, 100 feet downstream from the dam at the Stout Generating Station
Stream-channel type:	Natural, with levees away from stream
Bank vegetation:	Trees
Land use in general vicinity of stream:	Woodland
Flow characteristics:	Riffle
Substrate size in stream reach (estimated)[2]:	Cobble, boulder, and gravel
Substrate size sampled (estimated)[2]:	Cobble, with some gravel
Ancillary information:	Site had the greatest streamflow velocities of all sites

Table 3. Habitat characteristics for sites on the White River and its tributaries in and near Indianapolis, Indiana, where benthic invertebrates were collected, 1994 through 1996—Continued

Field identifier:	WRTBLF-4
Site name:	White River at Tibbs-Banta Landfill near Southport, IN
USGS site-identification number:	394019086134601
Drainage area, mi^2:	[1]1,920
Sampling location:	Adjacent to bar on left side of stream at west end of Tibbs-Banta Landfill
Stream-channel type:	Natural, with levees away from stream
Bank vegetation:	Trees
Land use in general vicinity of stream:	Woodland
Flow characteristics:	Riffle
Substrate size in stream reach (estimated)[2]:	Cobble and gravel, with some sand
Substrate size sampled (estimated)[2]:	Cobble and gravel
Ancillary information:	Tibbs-Banta Landfill is an inactive landfill. The landfill ceased operation in 1974 and received municipal wastewater sludge during 1983 through 1984, which was part of a revegetation project. The site is located 0.85 miles upstream from the outfall for the Southport advanced wastewater-treatment facility
Field identifier:	WRWICK-5
Site name:	White River at Wicker Road near Southport, IN
USGS site-identification number:	393827086141701
Drainage area, mi^2:	[1]1,947
Sampling location:	Adjacent to bar on left side of stream, 500 feet west of terminus of Wicker Road
Stream-channel type:	Natural, with levees away from stream
Bank vegetation:	Trees
Land use in general vicinity of stream:	Woodland
Flow characteristics:	Run
Substrate size in stream reach (estimated)[2]:	Gravel, cobble, and sand
Substrate size sampled (estimated)[2]:	Gravel and cobble
Ancillary information:	The site is located 2.5 miles downstream from the outfall for the Southport advanced wastewater-treatment facility and 1 mile downstream from Mann Hill
Field identifier:	WRWAVE-6
Site name:	White River near Waverly, IN (State Road 144)
USGS site-identification number:	393402086152000
Drainage area, mi^2:	[1]2,026
Sampling location:	Spring 1994—adjacent to bar on right side of stream, 100 feet downstream from State Road 144 bridge; all other samplings—at riffle area 50 feet upstream from bridge
Stream-channel type:	Natural
Bank vegetation:	Right side of stream—weeds; left side of stream—trees
Land use in general vicinity of stream:	Right side of stream—agricultural; left side of stream—woodland
Flow characteristics:	Spring 1994—run; all other samplings—riffle
Substrate size in stream reach (estimated)[2]:	Adjacent to bar—cobble, gravel, and sand; in riffle areas—cobble, gravel, and boulder
Substrate size sampled (estimated)[2]:	Cobble and gravel

Table 3. Habitat characteristics for sites on the White River and its tributaries in and near Indianapolis, Indiana, where benthic invertebrates were collected, 1994 through 1996—Continued

Field identifier:	WRHEND-18
Site name:	White River at Henderson Bridge near Adams, IN
USGS site-identification number:	392956086212001
Drainage area, mi^2:	[1]2,126
Sampling location:	Adjacent to bar on right side of stream, 500 feet upstream from Road 390 East bridge
Stream-channel type:	Natural
Bank vegetation:	Trees
Land use in general vicinity of stream:	Agricultural
Flow characteristics:	Run
Substrate size in stream reach (estimated)[2]:	Gravel and cobble, with some sand
Substrate size sampled (estimated)[2]:	Cobble and gravel
Ancillary information:	Most downstream site in study area
Field identifier:	WC96-12
Site name:	Williams Creek at 96th Street, Indianapolis, IN
USGS site-identification number:	03351072
Drainage area, mi^2:	[3]17.0
Sampling location:	At riffle areas, 100 feet upstream from 96th Street bridge
Stream-channel type:	Natural
Bank vegetation:	Trees
Land use in general vicinity of stream:	Woodland
Flow characteristics:	Riffle
Substrate size in stream reach (estimated)[2]:	Cobble, boulder, gravel, and sand
Substrate size sampled (estimated)[2]:	Cobble and gravel
Ancillary information:	1,000 feet downstream from north leg of Interstate 465
Field identifier:	FC71-16
Site name:	Fall Creek at 71st Street near Lawrence, IN
USGS site-identification number:	395259086001601
Drainage area, mi^2:	[1]243
Sampling location:	Spring 1994—on right side of stream, 150 feet downstream from 71st Street bridge; fall 1994—on left side of stream, 20 to 200 feet downstream from the bridge; spring and fall 1995—upstream from pier of the bridge; spring 1996—one site upstream from pier and two sites downstream from pier of the bridge; fall 1996—on right side of stream under the bridge
Stream-channel type:	Natural
Bank vegetation:	Trees
Land use in general vicinity of stream:	Woodland
Flow characteristics:	Spring 1994—riffle; all other samplings—run
Substrate size in stream reach (estimated)[2]:	Downstream from the bridge—gravel, sand, and cobble; upstream from and under the bridge—cobble, gravel, sand, and boulder
Substrate size sampled (estimated)[2]:	Downstream from the bridge—gravel and cobble; upstream from and under the bridge—cobble and gravel
Ancillary information:	Site is 2.1 miles downstream from Geist Reservoir. Prior to fall 1996 sampling, the channel downstream from the bridge had been straightened

Table 3. Habitat characteristics for sites on the White River and its tributaries in and near Indianapolis, Indiana, where benthic invertebrates were collected, 1994 through 1996—Continued

Field identifier:	FC16-10
Site name:	Fall Creek at 16th Street at Indianapolis, IN
USGS site-identification number:	03352875
Drainage area, mi^2:	[1]317
Sampling location:	Spring 1994—adjacent to right side of island, 200 feet downstream from 16th Street bridge; all other samplings—at riffle area upstream from island
Stream-channel type:	Channeled and recovered, with levees close to stream
Bank vegetation:	Trees
Land use in general vicinity of stream:	Urban
Flow characteristics:	Spring 1994—run; all other samplings—riffle
Substrate size in stream reach (estimated)[2]:	Spring 1994—sand, fines, gravel, and cobble; all other samplings—cobble, gravel, sand, and boulder
Substrate size sampled (estimated)[2]:	Spring 1994—gravel and cobble; all other samplings—cobble and gravel
Ancillary information:	The site is 2,000 feet downstream from outfalls for a water-treatment facility that discharges filter backwash effluent

Field identifier:	ECDAN-17
Site name:	Eagle Creek at Dandy Trail Road near Clermont, IN
USGS site-identification number:	394851086181301
Drainage area, mi^2:	[3]164
Sampling location:	At riffle area, 50 feet upstream from Dandy Trail Road bridge
Stream-channel type:	Natural
Bank vegetation:	Trees
Land use in general vicinity of stream:	Woodland and field
Flow characteristics:	Riffle
Substrate size in stream reach (estimated)[2]:	Boulder, cobble, gravel, and sand
Substrate size sampled (estimated)[2]:	Cobble and gravel
Ancillary information:	Site is 0.9 mile downstream from Eagle Creek Reservoir

Field identifier:	ECRAY-11
Site name:	Eagle Creek at Raymond Street at Indianapolis, IN
USGS site-identification number:	394613086114700
Drainage area, mi^2:	[1]209
Sampling location:	Close to left bank, 50 feet downstream from the Kentucky Avenue bridge
Stream-channel type:	Channeled and recovered, with levees close to stream
Bank vegetation:	Left bank—trees; right bank—grass/weeds
Land use in general vicinity of stream:	Urban
Flow characteristics:	Run
Substrate size in stream reach (estimated)[2]:	Sand, cobble, gravel, and boulder
Substrate size sampled (estimated)[2]:	Cobble and gravel

Table 3. Habitat characteristics for sites on the White River and its tributaries in and near Indianapolis, Indiana, where benthic invertebrates were collected, 1994 through 1996—Continued

Field identifier:	PLR16-13
Site name:	Pleasant Run at East 16th Street at Indianapolis, IN
USGS site-identification number:	394721086031001
Drainage area, mi^2:	[3]4.00
Sampling location:	At riffle areas, 200 feet upstream from East 16th Street bridge
Stream-channel type:	Natural
Bank vegetation:	Trees
Land use in general vicinity of stream:	Urban
Flow characteristics:	Riffle
Substrate size in stream reach (estimated)[2]:	Cobble, gravel, sand, and boulder
Substrate size sampled (estimated)[2]:	Cobble and gravel
Field identifier:	PLRMER-7
Site name:	Pleasant Run near South Meridian Street at Indianapolis, IN
USGS site-identification number:	394358086092100
Drainage area, mi^2:	[1]20.8
Sampling location:	Spring and fall 1994 and spring 1995—riffle area, 20 feet downstream from the foot bridge between South Meridian Street and Madison Avenue; fall 1995 and spring and fall 1996—riffle area, 100 feet upstream from the foot bridge
Stream-channel type:	Channeled and recovered, with levees close to stream
Bank vegetation:	Grass/weeds, with some brush and trees
Land use in general vicinity of stream:	Urban
Flow characteristics:	Riffle
Substrate size in stream reach (estimated)[2]:	Gravel and sand, with some cobble
Substrate size sampled (estimated)[2]:	Gravel and cobble
Ancillary information:	Prior to the fall 1995 sampling, a major streamflow event changed the channel geometry
Field identifier:	BCSOU-15
Site name:	Bean Creek at Southern Avenue at Indianapolis, IN
USGS site-identification number:	394349086080001
Drainage area, mi^2:	[3]5.00
Sampling location:	Riffle area, 100 feet upstream from the end of Southern Avenue
Stream-channel type:	Natural
Bank vegetation:	Brush, trees, and grass/weeds
Land use in general vicinity of stream:	Urban
Flow characteristics:	Riffle
Substrate size in stream reach (estimated)[2]:	Gravel, cobble, sand, and fines
Substrate size sampled (estimated)[2]:	Gravel and cobble

Table 3. Habitat characteristics for sites on the White River and its tributaries in and near Indianapolis, Indiana, where benthic invertebrates were collected, 1994 through 1996—Continued

Field identifier:	BCGARF-9
Site name:	Bean Creek at Garfield Park at Indianapolis, IN
USGS site-identification number:	394358086083901
Drainage area, mi^2:	[3]5.30
Sampling location:	20 feet upstream to 150 feet downstream from the foot bridge between the ampitheater and conservatory at Garfield Park
Stream-channel type:	Channeled and recovered
Bank vegetation:	For 1994 samplings—trees and brush; other samplings—brush, grass/weeds, and trees
Land use in general vicinity of stream:	Field, woodland, and urban
Flow characteristics:	Run
Substrate size in stream reach (estimated)[2]:	Cobble, gravel, sand, and fines
Substrate size sampled (estimated)[2]:	Cobble and gravel
Ancillary information:	Vegetation along banks was thinned after 1994 samplings
Field identifier:	POR21-14
Site name:	Pogues Run at East 21st Street at Indianapolis, IN
USGS site-identification number:	394746086055601
Drainage area, mi^2:	[3]4.40
Sampling location:	50 feet upstream from the East 21st Street bridge
Stream-channel type:	Natural
Bank vegetation:	Trees
Land use in general vicinity of stream:	Urban
Flow characteristics:	Riffle
Substrate size in stream reach (estimated)[2]:	Gravel, cobble, fines, sand, and boulder
Substrate size sampled (estimated)[2]:	Cobble and gravel
Ancillary information:	Gravel, cobble, and boulder-size material was generally manmade material (broken concrete, bricks)

Table 3. Habitat characteristics for sites on the White River and its tributaries in and near Indianapolis, Indiana, where benthic invertebrates were collected, 1994 through 1996—Continued

Field identifier:	PORVER-8
Site name:	Pogues Run at Vermont Street, Indianapolis, IN
USGS site-identification number:	03352990
Drainage area, mi^2:	[1]8.87
Sampling location:	50 feet downstream from Vermont Street
Stream-channel type:	Channeled (left bank—concrete lined; right bank—faced with riprap
Bank vegetation:	Left bank—no vegetation; right bank—trees
Land use in general vicinity of stream:	Industrial
Flow characteristics:	Run
Substrate size in stream reach (estimated)[2]:	Fines, sand, gravel, cobble, boulder
Substrate size sampled (estimated)[2]:	Cobble and gravel
Ancillary information:	At Vermont Street, Pogues Run goes under Indianapolis and outfalls into the White River. Fines were generally black organic material and the gravel, cobble, and boulder-size material was generally manmade material (broken concrete, bricks)

[1]From Hoggatt (1975).

[2]Listed in order of predominance.

[3]Estimated value from Hoggatt (1975).

Abbreviations Used in Tables 4 through 126

µS/cm	Specific conductance of water is expressed in microsiemens per centimeter at 25 degrees Celsius (µS/cm). This unit is equivalent to micromhos per centimeter at 25 degrees Celsius (µmho/cm), formerly used by the U.S. Geological Survey.
°C	degrees Celsius
mi^2	square miles
m^2	square meter
mg/L	Chemical concentration is given in milligrams per liter.

NOTE: Blanks in tables indicate no organisms found.

Table 4. Benthic-invertebrate data for station 400001086012301 White River at 146th Street near Noblesville, IN

[sp., species]

Field identifier: WR146-0
Date: May 16, 1994
Time: 1420

Habitat: gravel and cobble; run
Drainage area: 1,147 mi^2
Water temperature: 18.5°C

Specific conductance: 665 µs/cm at 25°C
Dissolved oxygen: 11.4 mg/L
pH: 8.35 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Nematoda	unidentified	unidentified	unidentified	*unidentified*		4	5	9	32
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus hoffmeisteri* Claparede	2	1		3	11
Annelida	Oligochaeta	Haplotaxida	Naididae	*Dero furcata* (Mueller)	20	14	31	65	230
Annelida	Oligochaeta	Haplotaxida	Naididae	*Chaetogaster diaphanus* (Gruithuisen)	10	1		11	39
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)	1			1	4
Arthropoda	Insecta	Ephemeroptera	unidentified	*unidentified*	1			1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	2	16	5	23	83
Arthropoda	Insecta	Ephemeroptera	Siphlonuridae	*Ameletus sp.*	1	12	5	18	65
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*	4	15	9	28	100
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*			1	1	4
Arthropoda	Insecta	Ephemeroptera	Potamanthidae	*Potamanthus sp.*	1			1	4
Arthropoda	Insecta	Plecoptera	Perlidae	*Perlesta placida* Hagen		11	14	25	90
Arthropoda	Insecta	Coleoptera	Elmidae	*unidentified*	1			1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*		9	10	19	68
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified larvae*	1		18	19	68
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified pupae*		2	16	18	65
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	16	56	123	195	700
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*	6	15	4	25	90
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	154	288	533	975	3,500
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*	5			5	18
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*		1		1	4
Arthropoda	Insecta	Diptera	Dolichopodidae	*unidentified*	1	1		2	7
Totals					226	446	774	1,446	5,200
Number of Taxa					16	15	13	22	

Table 5. Benthic-invertebrate data for station 03351000 White River near Nora, IN (82nd Street)
[sp., species]

Field identifier:	WRNORA-1	Habitat:	cobble and gravel; riffle	Specific conductance:	679 µs/cm at 25°C
Date:	May 16, 1994	Drainage area:	1,219 mi^2	Dissolved oxygen:	9.9 mg/L
Time:	1200	Water temperature:	17.9°C	pH:	8.32 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)		2		2	7
Nematoda	unidentified	unidentified	unidentified	*unidentified*	1	1	1	3	11
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*	1			1	4
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus hoffmeisteri* Claparede	2			2	7
Annelida	Oligochaeta	Haplotaxida	Naididae	*Dero furcata* (Mueller)			91	91	330
Annelida	Oligochaeta	Haplotaxida	Naididae	*Chaetogaster diaphanus* (Gruithuisen)		7	7	14	50
Annelida	Oligochaeta	Haplotaxida	Naididae	*Nais bretscheri* Michaelsen	54	33		87	310
Annelida	Oligochaeta	Haplotaxida	Naididae	*Uncinais uncinata* (Orsted)			77	77	280
Annelida	Oligochaeta	Haplotaxida	Naididae	*Ophidonais serpentina* (Mueller)	6	25		31	110
Annelida	Oligochaeta	Haplotaxida	Naididae	*Pristinella sp.*	4	1	4	9	32
Arthropoda	Malacostraca	Isopoda	unidentified	*unidentified*	1			1	4
Arthropoda	Malacostraca	Isopoda	Asellidae	*Caecidotea sp.*			1	1	4
Arthropoda	Malacostraca	Amphipoda	Crangonyctidae	*Crangonyx sp.*	9		2	11	39
Arthropoda	Insecta	Collembola	Isotomidae	*Isotomurus palustris* (Mueller)		1		1	4
Arthropoda	Insecta	Ephemeroptera	unidentified	*unidentified*	2	3		5	18
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	47	39	22	108	390
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*	2	15	1	18	65
Arthropoda	Insecta	Ephemeroptera	Potamanthidae	*Potamanthus sp.*	2	1	1	4	14
Arthropoda	Insecta	Ephemeroptera	Ephemeridae	*Hexagenia sp.*	1			1	4
Arthropoda	Insecta	Odonata	Coenagrionidae	*Argia sp.*		1		1	4
Arthropoda	Insecta	Plecoptera	Perlidae	*Perlesta placida* Hagen		1	1	2	7
Arthropoda	Insecta	Coleoptera	Elmidae	*unidentified*	1			1	4
Arthropoda	Insecta	Trichoptera	Psychomyiidae	*Psychomyia sp.*			3	3	11
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*		3		3	11
Arthropoda	Insecta	Diptera	Ceratopogonidae	*Bezzia/Probezzia complex*		1	1	2	7
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	4	7	9	20	72
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*	6	9		15	54
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	15	77	39	131	470
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*	7	1	1	9	32
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*			3	3	11
Arthropoda	Insecta	Diptera	Dolichopodidae	*unidentified*			1	1	4
Totals					165	228	265	658	2,400
Number of Taxa					18	19	18	31	

Table 6. Benthic-invertebrate data for station 03353000 White River at Indianapolis, IN (Morris Street)
[sp., species]

Field identifier:	WRINDY-2	Habitat:	gravel and cobble, with some fines and sand; run	Specific conductance:	666 µs/cm at 25°C
Date:	May 18, 1994	Drainage area:	1,635 mi^2	Dissolved oxygen:	11.1 mg/L
Time:	1330	Water temperature:	19.2°C	pH:	8.33 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*unidentified juvenile*		2		2	7
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	3	4	45	52	190
Nematoda	unidentified	unidentified	unidentified	*unidentified*	3		1	4	14
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus hoffmeisteri* Claparede	19		1	20	72
Annelida	Oligochaeta	Haplotaxida	Naididae	*Dero furcata* (Mueller)	33	67	17	117	420
Annelida	Oligochaeta	Haplotaxida	Naididae	*Chaetogaster diaphanus* (Gruithuisen)	9	24		33	120
Annelida	Hirudinea	unidentified	unidentified	*unidentified juvenile*			3	3	11
Arthropoda	Malacostraca	Amphipoda	Crangonyctidae	*Crangonyx sp.*		4	3	7	25
Arthropoda	Malacostraca	Decapoda	Cambaridae	*Cambarus sp.*	2	1		3	11
Arthropoda	Insecta	Ephemeroptera	unidentified	*unidentified*	1			1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	4	2	8	14	50
Arthropoda	Insecta	Ephemeroptera	Potamanthidae	*Potamanthus sp.*	1			1	4
Arthropoda	Insecta	Odonata	Coenagrionidae	*Ischnura sp.*			1	1	4
Arthropoda	Insecta	Odonata	Coenagrionidae	*Argia sp.*	1			1	4
Arthropoda	Insecta	Plecoptera	Perlidae	*Perlesta placida* Hagen		1	1	2	7
Arthropoda	Insecta	Trichoptera	Psychomyiidae	*Psychomyia sp.*	1			1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*			2	2	7
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	37	11	18	66	240
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*	5	4	1	10	36
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	99	23	49	171	610
Totals					218	143	150	511	1,800
Number of Taxa					14	11	13	20	

Table 7. Benthic-invertebrate data for station 03353193 White River at Harding Street, Indianapolis, IN

[sp., species]

Field identifier:	WRHARD-3	Habitat:	cobble and gravel, with some fines; pool	Specific conductance:	656 µs/cm at 25°C
Date:	May 18, 1994	Drainage area:	1,660 mi^2	Dissolved oxygen:	8.9 mg/L
Time:	0900	Water temperature:	18.5°C	pH:	8.34 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*unidentified juvenile*		12		12	43
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	14	13	4	31	110
Nematoda	unidentified	unidentified	unidentified	*unidentified*		3		3	11
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Tubifex tubifex* (Mueller)	30			30	110
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus hoffmeisteri* Claparede	152	2		154	550
Annelida	Oligochaeta	Haplotaxida	Naididae	*Dero furcata* (Mueller)	79	13	9	101	360
Annelida	Oligochaeta	Haplotaxida	Naididae	*Chaetogaster diaphanus* (Gruithuisen)	47		1	48	170
Annelida	Oligochaeta	Haplotaxida	Naididae	*Ophidonais serpentina* (Mueller)	32			32	110
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella stagnalis* (Linnaeus)	2	1		3	11
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	11			11	39
Arthropoda	Malacostraca	Amphipoda	Crangonyctidae	*Crangonyx sp.*		1	4	5	18
Arthropoda	Malacostraca	Decapoda	Cambaridae	*Cambarus sp.*			1	1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	5	13		18	65
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*			1	1	4
Arthropoda	Insecta	Odonata	Coenagrionidae	*Ischnura sp.*		2		2	7
Arthropoda	Insecta	Trichoptera	Psychomyiidae	*Psychomyia sp.*		1		1	4
Arthropoda	Insecta	Diptera	Ceratopogonidae	*Bezzia/Probezzia complex*		1	1	2	7
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*		2	3	5	18
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*	2	3	3	8	29
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	6	41	38	85	300
Totals					380	108	65	553	2,000
Number of Taxa					11	14	10	20	

Table 8. Benthic-invertebrate data for station 394019086134601 White River at Tibbs-Banta Landfill near Southport, IN

[sp., species]

Field identifier:	WRTBLF-4	Habitat:	cobble and gravel; riffle	Specific conductance:	747 µs/cm at 25°C
Date:	May 17, 1994	Drainage area:	1,920 mi^2	Dissolved oxygen:	10.7 mg/L
Time:	0930	Water temperature:	19.4°C	pH:	7.89 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)			2	2	7
Nematoda	unidentified	unidentified	unidentified	*unidentified*		1		1	4
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus hoffmeisteri* Claparede	12	6	4	22	79
Annelida	Oligochaeta	Haplotaxida	Naididae	*Dero furcata* (Mueller)	34	6	56	96	340
Annelida	Oligochaeta	Haplotaxida	Naididae	*Chaetogaster diaphanus* (Gruithuisen)			1	1	4
Annelida	Oligochaeta	Haplotaxida	Naididae	*Ophidonais serpentina* (Mueller)		4		4	14
Arthropoda	Insecta	Collembola	Isotomidae	*Isotomurus palustris* (Mueller)			1	1	4
Arthropoda	Insecta	Ephemeroptera	unidentified	*unidentified*		2		2	7
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	1		1	2	7
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*			2	2	7
Arthropoda	Insecta	Ephemeroptera	Siphlonuridae	*Ameletus sp.*	7			7	25
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	8	3		11	39
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	1			1	4
Arthropoda	Insecta	Diptera	Tipulidae	*Ormosia sp.*	1			1	4
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified larvae*	17			17	61
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified pupae*	2		4	6	22
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	114	44	41	199	710
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*	12		5	17	61
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	282	145	154	581	2,100
Totals					491	211	271	973	3,500
Number of Taxa					12	8	11	19	

Table 9. Benthic-invertebrate data for station 393827086141701 White River at Wicker Road near Southport, IN

[sp., species]

Field identifier: WRWICK-5
Date: May 17, 1994
Time: 1045

Habitat: gravel and cobble; run
Drainage area: 1,947 mi^2
Water temperature: 19.2°C

Specific conductance: 846 µs/cm at 25°C
Dissolved oxygen: 13.6 mg/L
pH: 7.39 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	1			1	4
Nematoda	unidentified	unidentified	unidentified	*unidentified*	2	1	2	5	18
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus hoffmeisteri* Claparede		2		2	7
Annelida	Oligochaeta	Haplotaxida	Naididae	*Dero furcata* (Mueller)	20	63	36	119	430
Arthropoda	Malacostraca	Amphipoda	Crangonyctidae	*Crangonyx sp.*		2		2	7
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*			1	1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	4		1	5	18
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified larvae*	1		1	2	7
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	79	33	50	162	580
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*	2	3	3	8	29
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	277	175	156	608	2,200
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*	1			1	4
Totals					387	279	250	916	3,300
Number of Taxa					9	7	8	12	

Table 10. Benthic-invertebrate data for station 393402086152000 White River near Waverly, IN (State Road 144)
[sp., species]

Field identifier:	WRWAVE-6	Habitat:	cobble and gravel; run	Specific conductance:	798 µs/cm at 25°C
Date:	May 17, 1994	Drainage area:	2,026 mi^2	Dissolved oxygen:	13.3 mg/L
Time:	1300	Water temperature:	19.6°C	pH:	7.81 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Nematoda	unidentified	unidentified	unidentified	*unidentified*	4		2	6	22
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus hoffmeisteri* Claparede		2		2	7
Annelida	Oligochaeta	Haplotaxida	Naididae	*Dero furcata* (Mueller)	2	11	2	15	54
Annelida	Oligochaeta	Haplotaxida	Naididae	*Ophidonais serpentina* (Mueller)			8	8	29
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)		1		1	4
Arthropoda	Insecta	Plecoptera	Perlidae	*Perlesta placida* Hagen			1	1	4
Arthropoda	Insecta	Coleoptera	Elmidae	*unidentified*		4		4	14
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	14	19	14	47	170
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified larvae*	11	6	7	24	86
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	65	79	61	205	740
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*	6	4	11	21	75
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	299	325	302	926	3,300
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*			2	2	7
Totals					401	451	410	1,262	4,500
Number of Taxa					7	9	10	13	

Table 11. Benthic-invertebrate data for station 393402086152000 White River near Waverly, IN (State Road 144)
[sp., species]

Field identifier: WRWAVE-6
Date: May 17, 1994
Time: 1330

Habitat: cobble and gravel; run
Drainage area: 2,026 mi^2
Water temperature: 19.6°C

Specific conductance: 798 µs/cm at 25°C
Dissolved oxygen: 13.3 mg/L
pH: 7.81 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Nematoda	unidentified	unidentified	unidentified	*unidentified*	4	3	1	8	29
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus hoffmeisteri* Claparede		2	4	6	22
Annelida	Oligochaeta	Haplotaxida	Naididae	*Dero furcata* (Mueller)	11	1	4	16	57
Arthropoda	Insecta	Ephemeroptera	Siphlonuridae	*Ameletus sp.*		1		1	4
Arthropoda	Insecta	Odonata	Coenagrionidae	*Nahalennia sp.*		1		1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	56	10	8	74	270
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified larvae*	49	5	14	68	240
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified pupae*	4		4	8	29
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	133	52	105	290	1,000
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*	12	2	9	23	83
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	579	252	284	1,115	4,000
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*	4			4	14
Totals					852	329	433	1,614	5,800
Number of Taxa					9	10	9	12	

Table 12. Benthic-invertebrate data for station 392956086212001 White River at Henderson Bridge near Adams, IN
[sp., species]

Field identifier:	WRHEND-18	Habitat:	cobble and gravel; run	Specific conductance:	748 µs/cm at 25°C
Date:	May 17, 1994	Drainage area:	2,126 mi^2	Dissolved oxygen:	13.5 mg/L
Time:	1530	Water temperature:	19.9°C	pH:	8.01 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Nematoda	unidentified	unidentified	unidentified	*unidentified*	2	4	3	9	32
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus hoffmeisteri* Claparede		2		2	7
Annelida	Oligochaeta	Haplotaxida	Naididae	*Dero furcata* (Mueller)	6	2		8	29
Arthropoda	Insecta	Collembola	Isotomidae	*Isotomurus palustris* (Mueller)		1		1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*			1	1	4
Arthropoda	Insecta	Ephemeroptera	Siphlonuridae	*Ameletus sp.*	2			2	7
Arthropoda	Insecta	Odonata	Coenagrionidae	*Ischnura sp.*	1			1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	23	30	11	64	230
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified larvae*	6	3	2	11	39
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified pupae*		1	8	9	32
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	48	16	70	134	480
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*	3	3	6	12	43
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	244	230	216	690	2,500
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*	1	1	1	3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*		1		1	4
Totals					336	294	318	948	3,400
Number of Taxa					10	12	9	15	

Table 13. Benthic-invertebrate data for station 03351072 Williams Creek at 96th Street, Indianapolis, IN
[sp., species]

Field identifier:	WC96-12	Habitat:	cobble and gravel; riffle	Specific conductance:	647 µs/cm at 25°C
Date:	May 16, 1994	Drainage area:	17.0 mi^2	Dissolved oxygen:	9.4 mg/L
Time:	1040	Water temperature:	16.4°C	pH:	7.89 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	5	3	10	18	65
Nematoda	unidentified	unidentified	unidentified	*unidentified*	1	1	1	3	11
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus hoffmeisteri* Claparede	2	54	27	83	300
Annelida	Oligochaeta	Haplotaxida	Naididae	*Nais bretscheri* Michaelsen			4	4	14
Annelida	Oligochaeta	Haplotaxida	Naididae	*Pristinella sp.*		1		1	4
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)			1	1	4
Mollusca	Pelecypoda	unidentified	unidentified	*unidentified*			1	1	4
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)	1	15	3	19	68
Arthropoda	Malacostraca	Isopoda	unidentified	*unidentified*		1		1	4
Arthropoda	Insecta	Collembola	Isotomidae	*Isotomurus palustris* (Mueller)		2	1	3	11
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	12	2	12	26	93
Arthropoda	Insecta	Ephemeroptera	Siphlonuridae	*Ameletus sp.*	9	122	35	166	600
Arthropoda	Insecta	Ephemeroptera	Ephemerellidae	*Ephemerella sp.*		1		1	4
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*			4	4	14
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	19		8	27	97
Arthropoda	Insecta	Plecoptera	Perlidae	*Perlesta placida* Hagen	14	3	38	55	200
Arthropoda	Insecta	Coleoptera	Hydrophilidae	*Berosus sp.*			1	1	4
Arthropoda	Insecta	Coleoptera	Elmidae	*unidentified*	3	8	13	24	86
Arthropoda	Insecta	Trichoptera	unidentified	*unidentified*		1		1	4
Arthropoda	Insecta	Trichoptera	Psychomyiidae	*Psychomyia sp.*			3	3	11
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	2	3	11	16	57
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	1		1	2	7
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified larvae*		4	1	5	18
Arthropoda	Insecta	Diptera	Ceratopogonidae	*unidentified*	2		1	3	11
Arthropoda	Insecta	Diptera	Ceratopogonidae	*Bezzia/Probezzia complex*		2		2	7
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	39	15	37	91	330
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*	81	5	37	123	440
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	472	129	431	1,032	3,700
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*	3		6	9	32
Totals					666	372	687	1,725	6,200
Number of Taxa					16	19	24	29	

Table 14. Benthic-invertebrate data for station 395259086001601 Fall Creek at 71st Street near Lawrence, IN

[sp., species]

Field identifier:	FC71-16	Habitat:	cobble and gravel; riffle	Specific conductance:	505 µs/cm at 25°C
Date:	May 16, 1994	Drainage area:	243 mi^2	Dissolved oxygen:	9.2 mg/L
Time:	1545	Water temperature:	19.8°C	pH:	8.29 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Nematoda	unidentified	unidentified	unidentified	*unidentified*	2	5	2	9	32
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus hoffmeisteri* Claparede			3	3	11
Annelida	Oligochaeta	Haplotaxida	Naididae	*Slavina appendiculata* (dUdekem)'		1		1	4
Annelida	Oligochaeta	Haplotaxida	Naididae	*Dero furcata* (Mueller)		35	1	36	130
Annelida	Oligochaeta	Haplotaxida	Naididae	*Chaetogaster diaphanus* (Gruithuisen)		1		1	4
Annelida	Oligochaeta	Haplotaxida	Naididae	*Nais bretscheri* Michaelsen	3	13		16	57
Annelida	Oligochaeta	Haplotaxida	Naididae	*Ophidonais serpentina* (Mueller)	1			1	4
Arthropoda	Malacostraca	Isopoda	unidentified	*unidentified*			5	5	18
Arthropoda	Insecta	Ephemeroptera	unidentified	*unidentified*	5			5	18
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*			1	1	4
Arthropoda	Insecta	Ephemeroptera	Siphlonuridae	*Ameletus sp.*			5	5	18
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*	4			4	14
Arthropoda	Insecta	Ephemeroptera	Potamanthidae	*Potamanthus sp.*		2		2	7
Arthropoda	Insecta	Plecoptera	Perlidae	*Perlesta placida* Hagen		1		1	4
Arthropoda	Insecta	Coleoptera	Hydrophilidae	*Helophorus sp.*		1		1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*		2	1	3	11
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*		1		1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Macrostemum sp.*	1			1	4
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*	4	1		5	18
Arthropoda	Insecta	Lepidoptera	Pyralidae	*unidentified*			1	1	4
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*			1	1	4
Arthropoda	Insecta	Diptera	Tipulidae	*Limnophila sp.*			1	1	4
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified larvae*	5	5	5	15	54
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified pupae*	2	4	4	10	36
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	32	23	59	114	410
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*	4	5	3	12	43
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	122	110	169	401	1,400
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*	1	11	2	14	50
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*	2			2	7
Totals					188	221	263	672	2,400
Number of Taxa					14	17	16	29	

Table 15. Benthic-invertebrate data for station 03352875 Fall Creek at 16th Street at Indianapolis, IN
[sp., species]

Field identifier:	FC16-10	Habitat:	cobble and gravel; run	Specific conductance:	606 µs/cm at 25°C
Date:	May 18, 1994	Drainage area:	317 mi^2	Dissolved oxygen:	9.6 mg/L
Time:	1445	Water temperature:	18.7°C	pH:	7.88 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*		3		3	11
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus hoffmeisteri* Claparede			4	4	14
Annelida	Oligochaeta	Haplotaxida	Naididae	*Dero furcata* (Mueller)	2		7	9	32
Annelida	Oligochaeta	Haplotaxida	Naididae	*Chaetogaster diaphanus* (Gruithuisen)			2	2	7
Annelida	Oligochaeta	Haplotaxida	Naididae	*Nais bretscheri* Michaelsen		1		1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	2		1	3	11
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	6	6	5	17	61
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	37	34	13	84	300
Totals					47	44	32	123	440
Number of Taxa					4	4	6	8	

Table 16. Benthic-invertebrate data for station 394851086181301 Eagle Creek at Dandy Trail Road near Clermont, IN
[sp., species]

Field identifier:	ECDAN-17	Habitat:	cobble and gravel; riffle	Specific conductance:	469 µs/cm at 25°C
Date:	May 20, 1994	Drainage area:	164 mi^2	Dissolved oxygen:	9.8 mg/L
Time:	1230	Water temperature:	18.8°C	pH:	8.20 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	2	5	5	12	43
Nematoda	unidentified	unidentified	unidentified	*unidentified*		2		2	7
Annelida	Oligochaeta	Haplotaxida	Naididae	*Dero furcata* (Mueller)	14	8	19	41	150
Annelida	Oligochaeta	Haplotaxida	Naididae	*Nais bretscheri* Michaelsen			11	11	39
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella elongata* (Castle)			1	1	4
Arthropoda	Malacostraca	Isopoda	unidentified	*unidentified*			1	1	4
Arthropoda	Insecta	Ephemeroptera	unidentified	*unidentified*	1			1	4
Arthropoda	Insecta	Ephemeroptera	Siphlonuridae	*Ameletus sp.*		1		1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*		3	4	7	25
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*		1		1	4
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*		4	1	5	18
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified larvae*	3	36	10	49	180
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified pupae*		39	2	41	150
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	5	37	49	91	330
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*		3		3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	55	240	299	594	2,100
Totals					80	379	402	861	3,100
Number of Taxa					6	12	11	16	

Table 17. Benthic-invertebrate data for station 394851086181301 Eagle Creek at Dandy Trail Road near Clermont, IN
[sp., species]

Field identifier: ECDAN-17
Date: May 20, 1994
Time: 1300

Habitat: cobble and gravel; riffle
Drainage area: 164 mi^2
Water temperature: 18.8°C

Specific conductance: 469 µs/cm at 25°C
Dissolved oxygen: 9.8 mg/L
pH: 8.20 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	29			29	100
Nematoda	unidentified	unidentified	unidentified	*unidentified*		1	1	2	7
Annelida	Oligochaeta	Haplotaxida	Naididae	*Dero furcata* (Mueller)	33	8	9	50	180
Annelida	Oligochaeta	Haplotaxida	Naididae	*Chaetogaster diaphanus* (Gruithuisen)	1			1	4
Arthropoda	Malacostraca	Isopoda	unidentified	*unidentified*	1			1	4
Arthropoda	Malacostraca	Isopoda	Asellidae	*Lirceus sp.*		1		1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*		1		1	4
Arthropoda	Insecta	Ephemeroptera	Siphlonuridae	*Ameletus sp.*	5			5	18
Arthropoda	Insecta	Coleoptera	Elmidae	*unidentified*	1	1		2	7
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	2	1	3	6	22
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*			1	1	4
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*			1	1	4
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*	1		1	2	7
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified larvae*	5	1	4	10	36
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified pupae*	13		2	15	54
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	52	28	48	128	460
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*	2		5	7	25
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	153	43	213	409	1,500
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*	1		2	3	11
Totals					299	85	290	674	2,400
Number of Taxa					14	9	12	19	

Table 18. Benthic-invertebrate data for station 394613086114700 Eagle Creek at Raymond Street at Indianapolis, IN
[sp., species]

Field identifier:	ECRAY-11	Habitat:	cobble and gravel; run	Specific conductance:	755 µs/cm at 25°C
Date:	May 18, 1994	Drainage area:	209 mi^2	Dissolved oxygen:	11.6 mg/L
Time:	1115	Water temperature:	19.4°C	pH:	7.74 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Nematoda	unidentified	unidentified	unidentified	*unidentified*		7		7	25
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus hoffmeisteri* Claparede	9			9	32
Annelida	Oligochaeta	Haplotaxida	Naididae	*Nais bretscheri* Michaelsen	2	237	10	249	890
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella elongata* (Castle)	1			1	4
Arthropoda	Malacostraca	Amphipoda	Crangonyctidae	*Crangonyx sp.*	2			2	7
Arthropoda	Malacostraca	Decapoda	Cambaridae	*unidentified larvae*		1		1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	1			1	4
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*		28	4	32	110
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	2		2	4	14
Arthropoda	Insecta	Ephemeroptera	Potamanthidae	*Potamanthus sp.*	2			2	7
Arthropoda	Insecta	Coleoptera	Elmidae	*unidentified*		1		1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*			1	1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*			3	3	11
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*		32	5	37	130
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified larvae*		1	5	6	22
Arthropoda	Insecta	Diptera	Ceratopogonidae	*unidentified*	1		1	2	7
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	2	59		61	220
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*			1	1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	54	141	47	242	870
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*		3	3	6	22
Totals					76	510	82	668	2,400
Number of Taxa					10	10	11	20	

Table 19. Benthic-invertebrate data for station 394721086031001 Pleasant Run at East 16th Street at Indianapolis, IN
[sp., species]

Field identifier:	PLR16-13	Habitat:	cobble and gravel; riffle	Specific conductance:	1017 µs/cm at 25°C
Date:	May 19, 1994	Drainage area:	4.00 mi^2	Dissolved oxygen:	10.6 mg/L
Time:	1300	Water temperature:	16.8°C	pH:	8.05 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Oligochaeta	Haplotaxida	Naididae	*Dero furcata* (Mueller)	3			3	11
Annelida	Oligochaeta	Haplotaxida	Naididae	*Chaetogaster diaphanus* (Gruithuisen)			1	1	4
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella fusca* Castle			1	1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*			1	1	4
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*	3		13	16	57
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified larvae*	10		12	22	79
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified pupae*	2	2	3	7	25
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	3	1	10	14	50
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*	3		3	6	22
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	192	71	258	521	1,900
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*	1		1	2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Stenochironomus sp.*			1	1	4
Totals					217	74	304	595	2,100
Number of Taxa					8	3	11	12	

Table 20. Benthic-invertebrate data for station 394358086092100 Pleasant Run near South Meridian Street at Indianapolis, IN
[sp., species]

Field identifier:	PLRMER-7	Habitat:	gravel and cobble; riffle	Specific conductance:	920 µs/cm at 25°C
Date:	May 19, 1994	Drainage area:	20.8 mi^2	Dissolved oxygen:	13.5 mg/L
Time:	1100	Water temperature:	17.8°C	pH:	8.09 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Nematoda	unidentified	unidentified	unidentified	*unidentified*			6	6	22
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus hoffmeisteri* Claparede	4	23		27	97
Annelida	Oligochaeta	Haplotaxida	Naididae	*Dero furcata* (Mueller)		18	2	20	72
Annelida	Oligochaeta	Haplotaxida	Naididae	*Chaetogaster diaphanus* (Gruithuisen)	1	11	7	19	68
Annelida	Oligochaeta	Haplotaxida	Naididae	*Nais bretscheri* Michaelsen			1	1	4
Annelida	Oligochaeta	Haplotaxida	Naididae	*Uncinais uncinata* (Orsted)			6	6	22
Annelida	Oligochaeta	Haplotaxida	Naididae	*Pristinella sp.*			1	1	4
Arthropoda	Insecta	Hemiptera	Veliidae	*Microvelia sp.*	1			1	4
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified larvae*	2	9	5	16	57
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	3	1	5	9	32
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	295	247	510	1,052	3,800
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*			1	1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*		1		1	4
Totals					306	310	544	1,160	4,200
Number of Taxa					6	7	10	13	

Table 21. Benthic-invertebrate data for station 394349086080001 Bean Creek at Southern Avenue at Indianapolis, IN

[sp., species]

Field identifier:	BCSOU-15	Habitat:	gravel and cobble; riffle	Specific conductance:	830 µs/cm at 25°C
Date:	May 19, 1994	Drainage area:	5.00 mi^2	Dissolved oxygen:	11.8 mg/L
Time:	0845	Water temperature:	14.6°C	pH:	8.14 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Nematoda	unidentified	unidentified	unidentified	*unidentified*	8	2	3	13	47
Annelida	Oligochaeta	Lumbriculida	Lumbriculidae	*unidentified juvenile*	1			1	4
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus hoffmeisteri* Claparede	2	3		5	18
Annelida	Oligochaeta	Haplotaxida	Naididae	*Dero furcata* (Mueller)	112	173	8	293	1,100
Annelida	Oligochaeta	Haplotaxida	Naididae	*Chaetogaster diaphanus* (Gruithuisen)	40	101	11	152	550
Annelida	Oligochaeta	Haplotaxida	Naididae	*Pristinella sp.*		1		1	4
Arthropoda	Insecta	Ephemeroptera	Siphlonuridae	*Ameletus sp.*			1	1	4
Arthropoda	Insecta	Coleoptera	Elmidae	*unidentified*		1		1	4
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	35	29	38	102	370
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*	3			3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	298	89	88	475	1,700
Arthropoda	Insecta	Diptera	Dolichopodidae	*unidentified*	1			1	4
Totals					500	399	149	1,048	3,800
Number of Taxa					9	8	6	12	

Table 22. Benthic-invertebrate data for station 394358086083901 Bean Creek at Garfield Park at Indianapolis, IN

[sp., species]

Field identifier:	BCGARF-9	Habitat:	cobble and gravel; run	Specific conductance:	830 µs/cm at 25°C
Date:	May 19, 1994	Drainage area:	5.30 mi^2	Dissolved oxygen:	11.6 mg/L
Time:	1000	Water temperature:	15.2°C	pH:	8.18 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Nematoda	unidentified	unidentified	unidentified	*unidentified*		2		2	7
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*	6			6	22
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus hoffmeisteri* Claparede		1	4	5	18
Annelida	Oligochaeta	Haplotaxida	Naididae	*Dero furcata* (Mueller)		1		1	4
Annelida	Oligochaeta	Haplotaxida	Naididae	*Chaetogaster diaphanus* (Gruithuisen)		11	5	16	57
Annelida	Oligochaeta	Haplotaxida	Naididae	*Nais bretscheri* Michaelsen	16		2	18	65
Arthropoda	Malacostraca	Decapoda	Cambaridae	*unidentified larvae*	2			2	7
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	9	10		19	68
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*	2			2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	19	36	8	63	230
Arthropoda	Insecta	Diptera	Dolichopodidae	*unidentified*	2	1		3	11
Totals					56	62	19	137	490
Number of Taxa					7	7	4	11	

Table 23. Benthic-invertebrate data for station 394746086055601 Pogues Run at East 21st Street at Indianapolis, IN

[sp., species]

Field identifier: POR21-14
Date: May 20, 1994
Time: 1030

Habitat: cobble and gravel; riffle
Drainage area: 4.40 mi^2
Water temperature: 14.4°C

Specific conductance: 830 µs/cm at 25°C
Dissolved oxygen: 9.2 mg/L
pH: 8.45 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)		2		2	7
Nematoda	unidentified	unidentified	unidentified	*unidentified*	5	12	4	21	75
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus hoffmeisteri* Claparede		8	4	12	43
Annelida	Oligochaeta	Haplotaxida	Naididae	*Dero furcata* (Mueller)		129	66	195	700
Annelida	Oligochaeta	Haplotaxida	Naididae	*Chaetogaster diaphanus* (Gruithuisen)			1	1	4
Annelida	Oligochaeta	Haplotaxida	Naididae	*Pristinella sp.*		1	1	2	7
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella elongata* (Castle)			3	3	11
Arthropoda	Malacostraca	Decapoda	Cambaridae	*unidentified larvae*	2			2	7
Arthropoda	Insecta	Ephemeroptera	Siphlonuridae	*Ameletus sp.*		1	1	2	7
Arthropoda	Insecta	Coleoptera	Elmidae	*unidentified*	1	1	1	3	11
Arthropoda	Insecta	Trichoptera	Psychomyiidae	*Psychomyia sp.*	1			1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	1		2	3	11
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*		7		7	25
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified pupae*		6		6	22
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	49	75	70	194	700
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*	4		3	7	25
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	694	432	668	1,794	6,400
Arthropoda	Insecta	Diptera	Dolichopodidae	*unidentified*		2		2	7
Totals					757	676	824	2,257	8,100
Number of Taxa					8	12	12	18	

Table 24. Benthic-invertebrate data for station 03352990 Pogues Run at Vermont Street, Indianapolis, IN
[sp., species]

Field identifier:	PORVER-8	Habitat:	cobble and gravel; run	Specific conductance:	936 µs/cm at 25°C
Date:	May 20, 1994	Drainage area:	8.87 mi^2	Dissolved oxygen:	8.8 mg/L
Time:	0900	Water temperature:	15.2°C	pH:	8.22 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Nematoda	unidentified	unidentified	unidentified	*unidentified*	2			2	7
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus hoffmeisteri* Claparede		2	13	15	54
Annelida	Oligochaeta	Haplotaxida	Naididae	*Dero furcata* (Mueller)	18		1	19	68
Annelida	Oligochaeta	Haplotaxida	Naididae	*Chaetogaster diaphanus* (Gruithuisen)	5	1	3	9	32
Annelida	Oligochaeta	Haplotaxida	Naididae	*Pristinella sp.*	2	6	1	9	32
Annelida	Hirudinea	unidentified	unidentified	*unidentified juvenile*			1	1	4
Arthropoda	Insecta	Diptera	Psychodidae	*Psychoda sp.*	11		1	12	43
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	18	2		20	72
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*	2			2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	67	10	7	84	300
Totals					125	21	27	173	620
Number of Taxa					8	5	7	10	

Table 25. Benthic-invertebrate data for station 400001086012301 White River at 146th Street near Noblesville, IN
[sp., species]

Field identifier:	WR146-0	Habitat:	gravel and cobble; run	Specific conductance:	774 µs/cm at 25°C
Date:	September 6, 1994	Drainage area:	1,147 mi^2	Dissolved oxygen:	9.4 mg/L
Time:	1100	Water temperature:	19.8°C	pH:	8.13 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	7	8	6	21	75
Mollusca	Gastropoda	Mesogastropoda	Pleuroceridae	*Pleurocera acuta* Rafinesque	3			3	11
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	6	52		58	210
Mollusca	Pelecypoda	unidentified	unidentified	*unidentified*		1		1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	9	17	3	29	100
Arthropoda	Insecta	Ephemeroptera	Siphlonuridae	*Ameletus sp.*	24	9	5	38	140
Arthropoda	Insecta	Ephemeroptera	Oligoneuriidae	*Isonychia sp.*	4	6		10	36
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*		22	4	26	93
Arthropoda	Insecta	Ephemeroptera	Potamanthidae	*Potamanthus sp.*	7	4	5	16	57
Arthropoda	Insecta	Odonata	Coenagrionidae	*Argia sp.*			1	1	4
Arthropoda	Insecta	Coleoptera	Elmidae	*unidentified*	1			1	4
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	44	15	3	62	220
Arthropoda	Insecta	Megaloptera	Corydalidae	*Corydalus cornutus* (Linnaeus)	2			2	7
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	57	164	16	237	850
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	21	30	14	65	230
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*	4	21	1	26	93
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified larvae*		3		3	11
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	8	23	8	39	140
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	14	7	23	44	160
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes neomodestus Malloch*	7	9	9	25	90
Arthropoda	Insecta	Diptera	Chironomidae	*Microtendipes caelum Townes*	5	4	12	21	75
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	42	63	37	142	510
Totals					265	458	147	870	3,100
Number of Taxa					18	18	15	22	

Table 26. Benthic-invertebrate data for station 03351000 White River near Nora, IN (82nd Street)
[sp., species]

Field identifier:	WRNORA-1	Habitat:	cobble and gravel; riffle	Specific conductance:	810 µs/cm at 25°C
Date:	September 6, 1994	Drainage area:	1,219 mi^2	Dissolved oxygen:	10.4 mg/L
Time:	1315	Water temperature:	20.0°C	pH:	8.08 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	2	8	27	37	130
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*unidentified*	17	7	20	44	160
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*			14	14	50
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus hoffmeisteri* Claparede		2	6	8	29
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	3	17	58	78	280
Mollusca	Pelecypoda	unidentified	unidentified	*unidentified*	4			4	14
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)	4	9	13	26	93
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	2	9	2	13	47
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	9	2	12	23	83
Arthropoda	Insecta	Ephemeroptera	Potamanthidae	*Potamanthus sp.*	6	34	19	59	210
Arthropoda	Insecta	Odonata	Coenagrionidae	*Argia sp.*	1		1	2	7
Arthropoda	Insecta	Plecoptera	Perlidae	*Perlesta placida* Hagen	1			1	4
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	91	15	123	229	820
Arthropoda	Insecta	Megaloptera	Sialidae	*Sialis sp.*			1	1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	11	267	22	300	1,100
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*		44	6	50	180
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*	6	14	3	23	83
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*		6		6	22
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	2	4	9	15	54
Arthropoda	Insecta	Diptera	Chironomidae	*Nanocladius sp.*	3	12	17	32	110
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius/Cricotopus complex*	5	47	53	105	380
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes lobiferus* (Say)	15	16	12	43	150
Arthropoda	Insecta	Diptera	Dolichopodidae	*unidentified*			1	1	4
Totals					182	513	419	1,114	4,000
Number of Taxa					17	17	20	23	

Table 27. Benthic-invertebrate data for station 03351000 White River near Nora, IN (82nd Street)

[sp., species]

Field identifier: WRNORA-1
Date: September 6, 1994
Time: 1435

Habitat: cobble and gravel; riffle
Drainage area: 1,219 mi^2
Water temperature: 20.0°C

Specific conductance: 805 µs/cm at 25°C
Dissolved oxygen: 10.8 mg/L
pH: 8.13 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	2	34	21	57	200
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*unidentified*	3	4	13	20	72
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*			5	5	18
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	2	78	49	129	460
Mollusca	Pelecypoda	unidentified	unidentified	*unidentified*	2			2	7
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)	1		11	12	43
Arthropoda	Malacostraca	Decapoda	Cambaridae	*Cambarus sp.*	1			1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	5	3	38	46	170
Arthropoda	Insecta	Ephemeroptera	Siphlonuridae	*Ameletus sp.*	21	15		36	130
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	3	11		14	50
Arthropoda	Insecta	Odonata	Coenagrionidae	*unidentified*		1	2	3	11
Arthropoda	Insecta	Coleoptera	Psephenidae	*Psephenus herricki* (Dekay)		1		1	4
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	28	11	47	86	310
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	58	19	10	87	310
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	3			3	11
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*	15	6	7	28	100
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	6	14	18	38	140
Arthropoda	Insecta	Diptera	Chironomidae	*Nanocladius sp.*	2	34	17	53	190
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius/Cricotopus complex*	9	7	22	38	140
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus plumosus* (Linnaeus)			8	8	29
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes lobiferus* (Say)	16	4	6	26	93
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	23	2	4	29	100
Arthropoda	Insecta	Diptera	Dolichopodidae	*unidentified*		3		3	11
Totals					200	247	278	725	2,600
Number of Taxa					18	17	16	23	

Table 28. Benthic-invertebrate data for station 03353000 White River at Indianapolis, IN (Morris Street)
[sp., species]

Field identifier:	WRINDY-2	Habitat:	gravel and cobble, with some fines and sand; run	Specific conductance:	850 µs/cm at 25°C
Date:	September 8, 1994	Drainage area:	1,635 mi^2	Dissolved oxygen:	12.5 mg/L
Time:	1130	Water temperature:	21.8°C	pH:	8.09 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	186	357	153	696	2,500
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*unidentified*	34		21	55	200
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Branchiura sowerbyi* Beddard	2	3		5	18
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella elongata* (Castle)	12	12	20	44	160
Mollusca	Gastropoda	Mesogastropoda	Pleuroceridae	*Pleurocera acuta* Rafinesque	9			9	32
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)		3	2	5	18
Mollusca	Pelecypoda	unidentified	unidentified	*unidentified*	2	9	1	12	43
Arthropoda	Malacostraca	Isopoda	Asellidae	*Caecidotea sp.*			5	5	18
Arthropoda	Malacostraca	Amphipoda	Crangonyctidae	*Crangonyx sp.*			7	7	25
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	5	6	5	16	57
Arthropoda	Insecta	Diptera	Chironomidae	*Nanocladius sp.*	4	16	14	34	120
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes neomodestus Malloch*	53		29	82	290
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes lobiferus* (Say)	21	84	23	128	460
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	27			27	97
Totals					355	490	280	1,125	4,000
Number of Taxa					11	8	11	14	

Table 29. Benthic-invertebrate data for station 03353193 White River at Harding Street, Indianapolis, IN

[sp., species]

Field identifier:	WRHARD-3	Habitat:	cobble and gravel, with some fines; pool	Specific conductance:	874 µs/cm at 25°C
Date:	September 8, 1994	Drainage area:	1,660 mi^2	Dissolved oxygen:	6.2 mg/L
Time:	0845	Water temperature:	21.3°C	pH:	7.79 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	8	27	7	42	150
Annelida	Oligochaeta	Haplotaxida	Naididae	*Dero furcata* (Mueller)	16	49	34	99	360
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella elongata* (Castle)	2	2		4	14
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)			5	5	18
Arthropoda	Insecta	Collembola	Isotomidae	*Isotomurus palustris* (Mueller)	1			1	4
Arthropoda	Insecta	Odonata	Coenagrionidae	*Argia sp.*			1	1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	2	2	4	8	29
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius/Cricotopus complex*	5	31	56	92	330
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus plumosus* (Linnaeus)			6	6	22
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes lobiferus* (Say)	6			6	22
Totals					40	111	113	264	950
Number of Taxa					7	5	7	10	

Table 30. Benthic-invertebrate data for station 394019086134601 White River at Tibbs-Banta Landfill near Southport, IN
[sp., species]

Field identifier:	WRTBLF-4	Habitat:	cobble and gravel; riffle	Specific conductance:	1136 µs/cm at 25°C
Date:	September 9, 1994	Drainage area:	1,920 mi^2	Dissolved oxygen:	7.5 mg/L
Time:	1030	Water temperature:	22.8°C	pH:	7.5 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	5			5	18
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Branchiura sowerbyi* Beddard	4			4	14
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)			71	71	250
Mollusca	Pelecypoda	unidentified	unidentified	*unidentified*		1		1	4
Arthropoda	Insecta	Ephemeroptera	Siphlonuridae	*Ameletus sp.*	18	38	29	85	300
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	4		8	12	43
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	2			2	7
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	273	47	454	774	2,800
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	81	104	38	223	800
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	3	17		20	72
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	12	8	37	57	200
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes neomodestus Malloch*	29			29	100
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes lobiferus* (Say)	7			7	25
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	58	57	243	358	1,300
Totals					496	272	880	1,648	5,900
Number of Taxa					12	7	7	14	

Table 31. Benthic-invertebrate data for station 393827086141701 White River at Wicker Road near Southport, IN
[sp., species]

Field identifier:	WRWICK-5	Habitat:	gravel and cobble; run	Specific conductance:	1380 µs/cm at 25°C
Date:	September 9, 1994	Drainage area:	1,947 mi^2	Dissolved oxygen:	10.8 mg/L
Time:	1150	Water temperature:	24.5°C	pH:	6.95 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)		12	5	17	61
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Branchiura sowerbyi* Beddard	1			1	4
Mollusca	Gastropoda	Mesogastropoda	Pleuroceridae	*Pleurocera acuta* Rafinesque	1			1	4
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	76	25	42	143	510
Arthropoda	Malacostraca	Amphipoda	Crangonyctidae	*Crangonyx sp.*	1			1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	2			2	7
Arthropoda	Insecta	Ephemeroptera	Siphlonuridae	*Ameletus sp.*	13	22	12	47	170
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*		37	1	38	140
Arthropoda	Insecta	Coleoptera	Elmidae	*unidentified*			1	1	4
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson			1	1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	12	37	5	54	190
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*			2	2	7
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*		3		3	11
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*			4	4	14
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	27	5	5	37	130
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius/Cricotopus complex*	12	17	4	33	120
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*	2	1		3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes neomodestus Malloch*	16	5	7	28	100
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes lobiferus* (Say)	3	9	29	41	150
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	42	29	26	97	350
Arthropoda	Insecta	Diptera	Athericidae	*Atherix variegata* Walker	1			1	4
Totals					209	202	144	555	2,000
Number of Taxa					14	12	14	21	

Table 32. Benthic-invertebrate data for station 393402086152000 White River near Waverly, IN (State Road 144)
[sp., species]

Field identifier:	WRWAVE-6	Habitat:	cobble and gravel; riffle	Specific conductance:	1274 µs/cm at 25°C
Date:	September 8, 1994	Drainage area:	2,026 mi^2	Dissolved oxygen:	10.7 mg/L
Time:	1645	Water temperature:	23.9°C	pH:	7.23 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	4	2	8	14	50
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*unidentified*	1			1	4
Mollusca	Gastropoda	Mesogastropoda	Pleuroceridae	*Pleurocera acuta* Rafinesque	3	1		4	14
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	1		2	3	11
Mollusca	Pelecypoda	unidentified	unidentified	*unidentified*	3			3	11
Arthropoda	Insecta	Ephemeroptera	Siphlonuridae	*Ameletus sp.*	21	7	13	41	150
Arthropoda	Insecta	Ephemeroptera	Oligoneuriidae	*Isonychia sp.*		4		4	14
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	3	6	2	11	39
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	76	47	101	224	800
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	17	21	9	47	170
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*			3	3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	19	9	10	38	140
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius/Cricotopus complex*	64	63	22	149	530
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes neomodestus Malloch*	13			13	47
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	42	49	38	129	460
Totals					267	209	208	684	2,500
Number of Taxa					13	10	10	15	

Table 33. Benthic-invertebrate data for station 392956086212001 White River at Henderson Bridge near Adams, IN
[sp., species]

Field identifier:	WRHEND-18	Habitat:	cobble and gravel; run	Specific conductance:	1174 µs/cm at 25°C
Date:	September 8, 1994	Drainage area:	2,126 mi^2	Dissolved oxygen:	10.7 mg/L
Time:	1300	Water temperature:	23.9°C	pH:	7.60 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*		2		2	7
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella elongata* (Castle)		1		1	4
Mollusca	Gastropoda	Mesogastropoda	Pleuroceridae	*Pleurocera acuta* Rafinesque	5	1	1	7	25
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	8	4	16	28	100
Mollusca	Pelecypoda	unidentified	unidentified	*unidentified*	3		1	4	14
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)	1			1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	4	3	4	11	39
Arthropoda	Insecta	Ephemeroptera	Siphlonuridae	*Ameletus sp.*	8	68	18	94	340
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	6	2	17	25	90
Arthropoda	Insecta	Ephemeroptera	Potamanthidae	*Potamanthus sp.*	1			1	4
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson		1		1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	2	44	17	63	230
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*		9		9	32
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	15	12	16	43	150
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus plumosus* (Linnaeus)	3			3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*			1	1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes neomodestus Malloch*			2	2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	43	72	89	204	730
Totals					99	219	182	500	1,800
Number of Taxa					12	12	11	18	

Table 34. Benthic-invertebrate data for station 392956086212001 White River at Henderson Bridge near Adams, IN

[sp., species]

Field identifier:	WRHEND-18	Habitat:	cobble and gravel; run	Specific conductance:	1174 µs/cm at 25°C
Date:	September 8, 1994	Drainage area:	2,126 mi^2	Dissolved oxygen:	10.7 mg/L
Time:	1400	Water temperature:	23.9°C	pH:	7.60 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)			11	11	39
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*unidentified*			1	1	4
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella fusca* Castle			5	5	18
Mollusca	Gastropoda	Mesogastropoda	Pleuroceridae	*Pleurocera acuta* Rafinesque	51	28	67	146	520
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	27	86		113	410
Mollusca	Pelecypoda	unidentified	unidentified	*unidentified*	7	17		24	86
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*		2		2	7
Arthropoda	Insecta	Ephemeroptera	Siphlonuridae	*Ameletus sp.*	7	48		55	200
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*	2			2	7
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	6	5	3	14	50
Arthropoda	Insecta	Ephemeroptera	Potamanthidae	*Potamanthus sp.*	3			3	11
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	1	3	3	7	25
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*		6		6	22
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*		13		13	47
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	17	8	3	28	100
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus plumosus* (Linnaeus)	3			3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes lobiferus* (Say)	7			7	25
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	62	94	14	170	610
Totals					193	310	107	610	2,200
Number of Taxa					12	11	8	18	

Table 35. Benthic-invertebrate data for station 03351072 Williams Creek at 96th Street, Indianapolis, IN
[sp., species]

Field identifier:	WC96-12	Habitat:	cobble and gravel; riffle	Specific conductance:	580 µs/cm at 25°C
Date:	September 6, 1994	Drainage area:	17.0 mi^2	Dissolved oxygen:	6.8 mg/L
Time:	1600	Water temperature:	20.2°C	pH:	7.66 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	3	71	192	266	950
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*unidentified*	2		27	29	100
Annelida	Oligochaeta	Haplotaxida	Naididae	*Pristinella sp.*		1		1	4
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)		96	11	107	380
Mollusca	Pelecypoda	unidentified	unidentified	*unidentified*		6	19	25	90
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)	20	12	17	49	180
Arthropoda	Insecta	Collembola	Isotomidae	*Isotomurus palustris* (Mueller)		1		1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	1	28	17	46	170
Arthropoda	Insecta	Ephemeroptera	Siphlonuridae	*Ameletus sp.*	5	9	2	16	57
Arthropoda	Insecta	Odonata	Coenagrionidae	*Argia sp.*	1	3	2	6	22
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	45	6	18	69	250
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	173	17	621	811	2,900
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	39	1		40	140
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	7	10	12	29	100
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes neomodestus Malloch*		84	23	107	380
Arthropoda	Insecta	Diptera	Chironomidae	*Microtendipes caelum Townes*	7			7	25
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	72	43	74	189	680
Totals					375	388	1,035	1,798	6,500
Number of Taxa					12	15	13	17	

Table 36. Benthic-invertebrate data for station 395259086001601 Fall Creek at 71st Street near Lawrence, IN
[sp., species]

Field identifier: FC71-16
Date: September 7, 1994
Time: 0900

Habitat: cobble and gravel; run
Drainage area: 243 mi^2
Water temperature: 19.4°C

Specific conductance: 501 µs/cm at 25°C
Dissolved oxygen: 6.1 mg/L
pH: 7.67 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Mollusca	Gastropoda	Basommato-phora	Ancylidae	*Ferrissia parallela* (Haldeman)		6		6	22
Arthropoda	Insecta	Ephemeroptera	Siphlonuridae	*Ameletus sp.*	18	14	4	36	130
Arthropoda	Insecta	Ephemeroptera	Oligoneuriidae	*Isonychia sp.*	7			7	25
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*			1	1	4
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	42			42	150
Arthropoda	Insecta	Ephemeroptera	Potamanthidae	*Potamanthus sp.*	14		11	25	90
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	6	2	10	18	65
Arthropoda	Insecta	Megaloptera	Corydalidae	*Corydalus sp.*			1	1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	38	131	49	218	780
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*		3		3	11
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*		36	1	37	130
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	9	3	2	14	50
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	16		7	23	83
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius/Cricotopus complex*	11	133	37	181	650
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes neomodestus Malloch*	14			14	50
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes lobiferus* (Say)			32	32	110
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	28	127		155	560
Totals					203	455	155	813	2,900
Number of Taxa					11	9	11	17	

Table 37. Benthic-invertebrate data for station 03352875 Fall Creek at 16th Street at Indianapolis, IN
[sp., species]

Field identifier:	FC16-10	Habitat:	cobble and gravel; riffle	Specific conductance:	782 µs/cm at 25°C
Date:	September 9, 1994	Drainage area:	317 mi^2	Dissolved oxygen:	7.7 mg/L
Time:	0900	Water temperature:	20.6°C	pH:	7.41 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)		1		1	4
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson		9		9	32
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	6			6	22
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	2	3		5	18
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*			2	2	7
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*	7	1	2	10	36
Arthropoda	Insecta	Diptera	Ceratopogonidae	*unidentified*	2			2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	13	3	12	28	100
Arthropoda	Insecta	Diptera	Chironomidae	*Nanocladius sp.*			3	3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius/Cricotopus complex*	114		64	178	640
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes lobiferus* (Say)		93		93	330
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	34	16	31	81	290
Arthropoda	Insecta	Diptera	Athericidae	*Atherix variegata* Walker		2		2	7
Arthropoda	Insecta	Diptera	Dolichopodidae	*unidentified*	4		1	5	18
Totals					182	128	115	425	1,500
Number of Taxa					8	8	7	14	

Table 38. Benthic-invertebrate data for station 394851086181301 Eagle Creek at Dandy Trail Road near Clermont, IN
[sp., species]

Field identifier:	ECDAN-17	Habitat:	cobble and gravel; riffle	Specific conductance:	496 µs/cm at 25°C
Date:	September 9, 1994	Drainage area:	164 mi^2	Dissolved oxygen:	9.1 mg/L
Time:	1600	Water temperature:	23.1°C	pH:	7.79 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	131	77	33	241	860
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Branchiura sowerbyi* Beddard			1	1	4
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)			1	1	4
Arthropoda	Insecta	Ephemeroptera	Siphlonuridae	*Ameletus sp.*	19	48	24	91	330
Arthropoda	Insecta	Odonata	Coenagrionidae	*Ischnura sp.*	1			1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	3	216	64	283	1,000
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*		88	28	116	420
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*	107	209	57	373	1,300
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified larvae*			3	3	11
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	19	28	7	54	190
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius/Cricotopus complex*	141	73	72	286	1,000
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus plumosus* (Linnaeus)	6			6	22
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes lobiferus* (Say)		121	6	127	460
Arthropoda	Insecta	Diptera	Chironomidae	*Microtendipes caelum Townes*	27			27	97
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	201	17	54	272	980
Totals					655	877	350	1,882	6,800
Number of Taxa					10	9	12	15	

Table 39. Benthic-invertebrate data for station 394613086114700 Eagle Creek at Raymond Street at Indianapolis, IN

[sp., species]

Field identifier: ECRAY-11
Date: September 8, 1994
Time: 1000

Habitat: cobble and gravel; run
Drainage area: 209 mi^2
Water temperature: 20.5°C

Specific conductance: 997 µs/cm at 25°C
Dissolved oxygen: 8.6 mg/L
pH: 7.60 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	3	3		6	22
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*unidentified*	8	8	8	24	86
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*			2	2	7
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus hoffmeisteri* Claparede		4	3	7	25
Annelida	Oligochaeta	Haplotaxida	Naididae	*Pristinella sp.*	1			1	4
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella elongata* (Castle)	3	2	1	6	22
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	26	8	4	38	140
Mollusca	Pelecypoda	unidentified	unidentified	*unidentified*			1	1	4
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)	3		3	6	22
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	1	21	12	34	120
Arthropoda	Insecta	Ephemeroptera	Siphlonuridae	*Ameletus sp.*	1			1	4
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	13	4	29	46	170
Arthropoda	Insecta	Odonata	Coenagrionidae	*Ischnura sp.*			3	3	11
Arthropoda	Insecta	Odonata	Coenagrionidae	*Argia sp.*	1	1		2	7
Arthropoda	Insecta	Coleoptera	Hydrophilidae	*Berosus sp.*			3	3	11
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson		1		1	4
Arthropoda	Insecta	Megaloptera	Sialidae	*Sialis sp.*			1	1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	2	1		3	11
Arthropoda	Insecta	Diptera	Ceratopogonidae	*Bezzia/Probezzia complex*			1	1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	5	48	8	61	220
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius/Cricotopus complex*		22	2	24	86
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus plumosus* (Linnaeus)		7		7	25
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*			3	3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes neomodestus Malloch*		16	47	63	230
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes lobiferus* (Say)	19	8		27	97
Arthropoda	Insecta	Diptera	Chironomidae	*Tanytarsus sp.*			2	2	7
Totals					86	154	133	373	1,300
Number of Taxa					13	15	18	26	

Table 40. Benthic-invertebrate data for station 394721086031001 Pleasant Run at East 16th Street at Indianapolis, IN

[sp., species]

Field identifier:	PLR16-13	Habitat:	cobble and gravel; riffle	Specific conductance:	617 µs/cm at 25°C
Date:	September 7, 1994	Drainage area:	4.00 mi^2	Dissolved oxygen:	8.8 mg/L
Time:	1030	Water temperature:	17.3°C	pH:	7.77 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	1			1	4
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*unidentified*			3	3	11
Annelida	Oligochaeta	Haplotaxida	Naididae	*Dero furcata* (Mueller)			4	4	14
Annelida	Oligochaeta	Haplotaxida	Naididae	*Pristinella sp.*			2	2	7
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella elongata* (Castle)	1			1	4
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella fusca* Castle			1	1	4
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)			8	8	29
Arthropoda	Insecta	Ephemeroptera	Siphlonuridae	*Ameletus sp.*	4	19		23	83
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	2	17	3	22	79
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	3	4		7	25
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*	1			1	4
Arthropoda	Insecta	Diptera	Tipulidae	*Tipula sp.*	7	1		8	29
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified larvae*		1		1	4
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*			4	4	14
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	12	5	6	23	83
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius/Cricotopus complex*	9	41	43	93	330
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes neomodestus Malloch*	3	34	72	109	390
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes lobiferus* (Say)		22		22	79
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	7	18	22	47	170
Totals					50	162	168	380	1,400
Number of Taxa					11	10	11	19	

Table 41. Benthic-invertebrate data for station 394358086092100 Pleasant Run near South Meridian Street at Indianapolis, IN
[sp., species]

Field identifier: PLRMER-7
Date: September 7, 1994
Time: 1445

Habitat: gravel and cobble; riffle
Drainage area: 20.8 mi^2
Water temperature: 23.0°C

Specific conductance: 765 µs/cm at 25°C
Dissolved oxygen: 15.2 mg/L
pH: 7.9 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*unidentified*		2	3	5	18
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*		3		3	11
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus hoffmeisteri* Claparede		3		3	11
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella elongata* (Castle)		1	1	2	7
Arthropoda	Insecta	Ephemeroptera	Siphlonuridae	*Ameletus sp.*	71	17	49	137	490
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	4			4	14
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*		2		2	7
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified larvae*	4			4	14
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	13	3		16	57
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	12	18	7	37	130
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes neomodestus Malloch*	61	39	22	122	440
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes lobiferus* (Say)	74	47	83	204	730
Totals					239	135	165	539	1,900
Number of Taxa					7	10	6	12	

Table 42. Benthic-invertebrate data for station 394349086080001 Bean Creek at Southern Avenue at Indianapolis, IN

[sp., species]

Field identifier:	BCSOU-15	Habitat:	gravel and cobble; riffle	Specific conductance:	732 µs/cm at 25°C
Date:	September 7, 1994	Drainage area:	5.00 mi^2	Dissolved oxygen:	15.7 mg/L
Time:	1550	Water temperature:	22.5°C	pH:	8.29 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Oligochaeta	Haplotaxida	Naididae	*Dero furcata* (Mueller)		1		1	4
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella elongata* (Castle)	10			10	36
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	65	9	15	89	320
Arthropoda	Insecta	Collembola	Isotomidae	*Isotomurus palustris* (Mueller)		1		1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	1		1	2	7
Arthropoda	Insecta	Ephemeroptera	Siphlonuridae	*Ameletus sp.*	16	3	5	24	86
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	8	4	7	19	68
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	2			2	7
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*			2	2	7
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	4		7	11	39
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	16	11	18	45	160
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes lobiferus* (Say)	243	3	67	313	1,100
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)			22	22	79
Totals					365	32	144	541	1,900
Number of Taxa					9	7	9	13	

Table 43. Benthic-invertebrate data for station 394358086083901 Bean Creek at Garfield Park at Indianapolis, IN
[sp., species]

Field identifier: BCGARF-9
Date: September 7, 1994
Time: 1645

Habitat: cobble and gravel; run
Drainage area: 5.30 mi^2
Water temperature: 21.6°C

Specific conductance: 713 µs/cm at 25°C
Dissolved oxygen: 12.6 mg/L
pH: 8.2 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	7	3	2	12	43
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*		4		4	14
Arthropoda	Insecta	Odonata	Coenagrionidae	*Ischnura sp.*			1	1	4
Arthropoda	Insecta	Coleoptera	Hydrophilidae	*Berosus sp.*	1			1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*		2	4	6	22
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*	16			16	57
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	2	2	3	7	25
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	17	8	23	48	170
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes lobiferus* (Say)	32	82	187	301	1,100
Arthropoda	Insecta	Diptera	Dolichopodidae	*unidentified*			4	4	14
Totals					75	101	224	400	1,400
Number of Taxa					6	6	7	10	

Table 44. Benthic-invertebrate data for station 394746086055601 Pogues Run at East 21st Street at Indianapolis, IN

[sp., species]

Field identifier:	POR21-14	Habitat:	cobble and gravel; riffle	Specific conductance:	633 µs/cm at 25°C
Date:	September 7, 1994	Drainage area:	4.40 mi^2	Dissolved oxygen:	8.6 mg/L
Time:	1145	Water temperature:	17.6°C	pH:	7.69 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)			1	1	4
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*unidentified*	10		8	18	65
Annelida	Oligochaeta	Haplotaxida	Naididae	*Pristinella sp.*	3		4	7	25
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	16	4	101	121	430
Arthropoda	Insecta	Ephemeroptera	Siphlonuridae	*Ameletus sp.*	10	9	9	28	100
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	4	2		6	22
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	21	41	3	65	230
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*		83		83	300
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*			5	5	18
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified larvae*		1		1	4
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	16		5	21	75
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	25	9	10	44	160
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius/Cricotopus complex*	16		12	28	100
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus plumosus* (Linnaeus)	2			2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes lobiferus* (Say)	21	63	42	126	450
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	47		31	78	280
Totals					191	212	231	634	2,300
Number of Taxa					12	8	12	16	

Table 45. Benthic-invertebrate data for station 03352990 Pogues Run at Vermont Street, Indianapolis, IN
[sp., species]

Field identifier:	PORVER-8	Habitat:	cobble and gravel; run	Specific conductance:	666 µs/cm at 25°C
Date:	September 7, 1994	Drainage area:	8.87 mi^2	Dissolved oxygen:	14.0 mg/L
Time:	1330	Water temperature:	21.9°C	pH:	8.36 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*unidentified*	3	2	13	18	65
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus hoffmeisteri* Claparede		2		2	7
Annelida	Oligochaeta	Haplotaxida	Naididae	*Pristina sp.*	1			1	4
Annelida	Oligochaeta	Haplotaxida	Naididae	*Dero furcata* (Mueller)	1	3		4	14
Annelida	Oligochaeta	Haplotaxida	Naididae	*Pristinella sp.*	3	4	4	11	39
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	3	9	6	18	65
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	1			1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	12	29	6	47	170
Arthropoda	Insecta	Diptera	Chironomidae	*Nanocladius sp.*		7		7	25
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius/Cricotopus complex*		16		16	57
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes lobiferus* (Say)	24	34	10	68	240
Totals					48	106	39	193	690
Number of Taxa					8	9	5	11	

Table 46. Benthic-invertebrate data for station 400001086012301 White River at 146th Street near Noblesville, IN

[sp., species]

Field identifier:	WR146-0	Habitat:	gravel and cobble; run	Specific conductance:	745 µs/cm at 25°C
Date:	July 20, 1995	Drainage area:	1,147 mi^2	Dissolved oxygen:	11.8 mg/L
Time:	1330	Water temperature:	25.1°C	pH:	8.46 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	1	2		3	11
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Branchiura sowerbyi* Beddard	1	1		2	7
Arthropoda	Malacostraca	Decapoda	Cambaridae	*Cambarus sp.*		1		1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*		12	15	27	97
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	30	1	8	39	140
Arthropoda	Insecta	Ephemeroptera	Oligoneuriidae	*Isonychia sp.*			3	3	11
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*		7	23	30	110
Arthropoda	Insecta	Ephemeroptera	Potamanthidae	*Potamanthus sp.*	3			3	11
Arthropoda	Insecta	Ephemeroptera	Polymitarcyidae	*Ephoron sp.*	2	15		17	61
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	1			1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	1	23	17	41	150
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	4	82	32	118	420
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*		3	2	5	18
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*		8	2	10	36
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified larvae*		1		1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*		7	4	11	39
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	27	12	14	53	190
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*	2			2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*		2		2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	1			1	4
Totals					73	177	120	370	1,300
Number of Taxa					11	15	10	20	

Table 47. Benthic-invertebrate data for station 400001086012301 White River at 146th Street near Noblesville, IN

[sp., species]

Field identifier:	WR146-0	Habitat:	gravel and cobble; run	Specific conductance:	745 µs/cm at 25°C
Date:	July 20, 1995	Drainage area:	1,147 mi^2	Dissolved oxygen:	11.8 mg/L
Time:	1400	Water temperature:	25.1°C	pH:	8.46 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	1		1	2	7
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)			1	1	4
Arthropoda	Malacostraca	Decapoda	Cambaridae	*Cambarus sp.*			1	1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	5	6	13	24	86
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	22	8	6	36	130
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	7	1	13	21	75
Arthropoda	Insecta	Ephemeroptera	Potamanthidae	*Potamanthus sp.*	1			1	4
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson			1	1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	16	28	84	128	460
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	34	8	87	129	460
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*	9	5	3	17	61
Arthropoda	Insecta	Diptera	Tipulidae	*Tipula sp.*	1			1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	4	1	7	12	43
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	5	7	2	14	50
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*	1	2		3	11
Totals					106	66	219	391	1,400
Number of Taxa					12	9	12	15	

Table 48. Benthic-invertebrate data for station 03351000 White River near Nora, IN (82nd Street)
[sp., species]

Field identifier:	WRNORA-1	Habitat:	cobble and gravel; riffle	Specific conductance:	725 µs/cm at 25°C
Date:	July 20, 1995	Drainage area:	1,219 mi^2	Dissolved oxygen:	11.8 mg/L
Time:	1030	Water temperature:	25.8°C	pH:	8.18 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella elongata* (Castle)			15	15	54
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)			2	2	7
Mollusca	Pelecypoda	Veneroida	Sphaeriidae	*Sphaerium transversum* (Say)	9	4		13	47
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*		41	4	45	160
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	14	9	7	30	110
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*		3		3	11
Arthropoda	Insecta	Ephemeroptera	Polymitarcyidae	*Ephoron sp.*	4			4	14
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	16	81	13	110	390
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	168	231	242	641	2,300
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	384	563	362	1,309	4,700
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*	23	56	41	120	430
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	12		3	15	54
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	7	12	4	23	83
Totals					637	1,000	693	2,330	8,400
Number of Taxa					9	9	10	13	

Table 49. Benthic-invertebrate data for station 03353000 White River at Indianapolis, IN (Morris Street)
[sp., species]

Field identifier:	WRINDY-2	Habitat:	gravel and cobble, with some fines and sand; run	Specific conductance:	694 µs/cm at 25°C
Date:	July 18, 1995	Drainage area:	1,635 mi^2	Dissolved oxygen:	9.30 mg/L
Time:	1445	Water temperature:	29.9°C	pH:	8.10 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Oligochaeta	Lumbriculida	Lumbriculidae	*unidentified juvenile*	1		1	2	7
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella elongata* (Castle)	5		3	8	29
Arthropoda	Malacostraca	Decapoda	Cambaridae	*Cambarus sp.*	1			1	4
Arthropoda	Insecta	Odonata	Coenagrionidae	*Ischnura sp.*			1	1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*		1		1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Procladius sp.*	1			1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	3	38	17	58	210
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*	1		9	10	36
Totals					12	39	31	82	290
Number of Taxa					6	2	5	8	

Table 50. Benthic-invertebrate data for station 03353193 White River at Harding Street, Indianapolis, IN

[sp., species]

Field identifier:	WRHARD-3	Habitat:	cobble and gravel, with some fines; pool	Specific conductance:	624 µs/cm at 25°C
Date:	July 18, 1995	Drainage area:	1,660 mi^2	Dissolved oxygen:	7.4 mg/L
Time:	0845	Water temperature:	27.9°C	pH:	7.67 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)			1	1	4
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella elongata* (Castle)	1	2	1	4	14
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*		2	2	4	14
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	2		7	9	32
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	1	1	96	98	350
Totals					4	5	107	116	420
Number of Taxa					3	3	5	5	

Table 51. Benthic-invertebrate data for station 03353611 White River at Stout Generating Station at Indianapolis, IN
[sp., species]

Field identifier: WRSTUP-19
Date: July 18, 1995
Time: 1230

Habitat: gravel and some fines; pool
Drainage area: 1,898 mi^2
Water temperature: 29.7°C

Specific conductance: 782 µs/cm at 25°C
Dissolved oxygen: 13.2 mg/L
pH: 7.79 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)			17	17	61
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Branchiura sowerbyi* Beddard		11		11	39
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella elongata* (Castle)		1		1	4
Arthropoda	Malacostraca	Decapoda	Cambaridae	*Cambarus sp.*	1			1	4
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*		2	1	3	11
Arthropoda	Insecta	Odonata	Coenagrionidae	*Ischnura sp.*			1	1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*			1	1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	1	1	1	3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	19	27	57	103	370
Totals					21	42	78	141	510
Number of Taxa					3	5	6	9	

Table 52. Benthic-invertebrate data for station 394234086120900 White River below Stout Generating Station at Indianapolis, IN
[sp., species]

Field identifier:	WRSTDN-20	Habitat:	cobble, with some gravel; riffle	Specific conductance:	877 µs/cm at 25°C
Date:	July 18, 1995	Drainage area:	1,899 mi^2	Dissolved oxygen:	8.3 mg/L
Time:	1000	Water temperature:	28.4°C	pH:	7.38 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)		6		6	22
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella elongata* (Castle)	3	3		6	22
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	6		1	7	25
Mollusca	Pelecypoda	Veneroida	Sphaeriidae	*Sphaerium transversum* (Say)		96		96	340
Arthropoda	Malacostraca	Isopoda	Asellidae	*Caecidotea sp.*		1		1	4
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*		2		2	7
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	65	9	16	90	320
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	104	10	64	178	640
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified larvae*	5	3		8	29
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*			1	1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	13		5	18	65
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	117	41	27	185	660
Totals					313	171	114	598	2,100
Number of Taxa					7	9	6	12	

Table 53. Benthic-invertebrate data for station 394019086134601 White River at Tibbs-Banta Landfill near Southport, IN

[sp., species]

Field identifier:	WRTBLF-4	Habitat:	cobble and gravel; riffle	Specific conductance:	1024 µs/cm at 25°C
Date:	July 19, 1995	Drainage area:	1,920 mi^2	Dissolved oxygen:	11.4 mg/L
Time:	1500	Water temperature:	29.4°C	pH:	7.56 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Branchiura sowerbyi* Beddard		2		2	7
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*		1	1	2	7
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	2	1	7	10	36
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	2	3	41	46	170
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	8	20	116	144	520
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	8	2	17	27	97
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	98	24	43	165	590
Totals					118	53	225	396	1,400
Number of Taxa					5	7	6	7	

Table 54. Benthic-invertebrate data for station 393827086141701 White River at Wicker Road near Southport, IN
[sp., species]

Field identifier:	WRWICK-5	Habitat:	gravel and cobble; run	Specific conductance:	1142 µs/cm at 25°C
Date:	July 19, 1995	Drainage area:	1,947 mi^2	Dissolved oxygen:	9.7 mg/L
Time:	1230	Water temperature:	27.6°C	pH:	7.59 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)			3	3	11
Arthropoda	Insecta	Trichoptera	unidentified	*unidentified*	1			1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	3	2	5	10	36
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	11	6	7	24	86
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	6	3	5	14	50
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	58	12	29	99	360
Totals					79	23	49	151	540
Number of Taxa					5	4	5	6	

Table 55. Benthic-invertebrate data for station 393402086152000 White River near Waverly, IN (State Road 144)
[sp., species]

Field identifier:	WRWAVE-6	Habitat:	cobble and gravel; riffle	Specific conductance:	1046 µs/cm at 25°C
Date:	July 19, 1995	Drainage area:	2,026 mi^2	Dissolved oxygen:	11.6 mg/L
Time:	1030	Water temperature:	27.4°C	pH:	8.01 units

Phylum	**Class**	**Order**	**Family**	**Species**	**Sample 1**	**Sample 2**	**Sample 3**	**Total**	**Average density (organisms per m^2)**
Annelida	Oligochaeta	Lumbriculida	Lumbriculidae	*unidentified juvenile*	4			4	14
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella elongata* (Castle)		1		1	4
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*			1	1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	31	39	29	99	360
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	94	117	68	279	1,000
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	36			36	130
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	133	92	29	254	910
Totals					298	249	127	674	2,400
Number of Taxa					5	4	4	7	

Table 56. Benthic-invertebrate data for station 393402086152000 White River near Waverly, IN (State Road 144)
[sp., species]

Field identifier:	WRWAVE-6	Habitat:	cobble and gravel; riffle	Specific conductance:	1046 µs/cm at 25°C
Date:	July 19, 1995	Drainage area:	2,026 mi^2	Dissolved oxygen:	11.6 mg/L
Time:	1100	Water temperature:	27.4°C	pH:	8.01 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson		2	5	7	25
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	54	67	33	154	550
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	163	201	94	458	1,600
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	15			15	54
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	92	14	38	144	520
Totals					324	284	170	778	2,800
Number of Taxa					4	4	4	5	

Table 57. Benthic-invertebrate data for station 03351072 Williams Creek at 96th Street, Indianapolis, IN
[sp., species]

Field identifier: WC96-12
Date: July 20, 1995
Time: 0845

Habitat: cobble and gravel; riffle
Drainage area: 17.0 mi^2
Water temperature: 24.0°C

Specific conductance: 647 µs/cm at 25°C
Dissolved oxygen: 3.2 mg/L
pH: 7.59 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)		5	21	26	93
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	6			6	22
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)			5	5	18
Arthropoda	Malacostraca	Isopoda	unidentified	*unidentified*		1	1	2	7
Arthropoda	Malacostraca	Decapoda	Cambaridae	*Cambarus sp.*	2	1		3	11
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	12	4		16	57
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*	2	3		5	18
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	1	21	11	33	120
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*			16	16	57
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*			21	21	75
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*		1		1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	9	5	2	16	57
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	11	2	4	17	61
Totals					43	43	81	167	600
Number of Taxa					7	9	8	13	

Table 58. Benthic-invertebrate data for station 395259086001601 Fall Creek at 71st Street near Lawrence, IN

[sp., species]

Field identifier:	FC71-16	Habitat:	cobble and gravel; run	Specific conductance:	495 µs/cm at 25°C
Date:	July 20, 1995	Drainage area:	243 mi^2	Dissolved oxygen:	7.2 mg/L
Time:	1530	Water temperature:	26.6°C	pH:	7.92 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Branchiura sowerbyi* Beddard		2	1	3	11
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	1			1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	2	1		3	11
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*	1	6	8	15	54
Arthropoda	Insecta	Ephemeroptera	Potamanthidae	*Potamanthus sp.*		1	2	3	11
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson			11	11	39
Arthropoda	Insecta	Trichoptera	unidentified	*unidentified*		2		2	7
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	7	24	35	66	240
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*			2	2	7
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*	2	1	2	5	18
Arthropoda	Insecta	Diptera	Tipulidae	*Limnophila sp.*		2	1	3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*		6	3	9	32
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	27	27	14	68	240
Totals					40	72	79	191	690
Number of Taxa					6	10	10	13	

Table 59. Benthic-invertebrate data for station 03352875 Fall Creek at 16th Street at Indianapolis, IN
[sp., species]

Field identifier: FC16-10
Date: July 19, 1995
Time: 0900

Habitat: cobble and gravel; riffle
Drainage area: 317 mi^2
Water temperature: 25.6°C

Specific conductance: 657 µs/cm at 25°C
Dissolved oxygen: 6.8 mg/L
pH: 7.59 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella elongata* (Castle)	1			1	4
Arthropoda	Malacostraca	Decapoda	Cambaridae	*Cambarus sp.*	3			3	11
Arthropoda	Insecta	Ephemeroptera	unidentified	*unidentified*			1	1	4
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	1			1	4
Arthropoda	Insecta	Plecoptera	Perlidae	*Perlesta placida* Hagen	1			1	4
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	7		1	8	29
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	4			4	14
Arthropoda	Insecta	Diptera	Tipulidae	*Tipula sp.*	1			1	4
Arthropoda	Insecta	Diptera	Ceratopogonidae	*unidentified*	1			1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	3		6	9	32
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	8	176	34	218	780
Totals					30	176	42	248	890
Number of Taxa					10	1	4	11	

Table 60. Benthic-invertebrate data for station 394851086181301 Eagle Creek at Dandy Trail Road near Clermont, IN

[sp., species]

Field identifier:	ECDAN-17	Habitat:	cobble and gravel; riffle	Specific conductance:	485 µs/cm at 25°C
Date:	July 19, 1995	Drainage area:	164 mi^2	Dissolved oxygen:	8.0 mg/L
Time:	1630	Water temperature:	25.2°C	pH:	7.69 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	112	21	18	151	540
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*		1		1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*		23	33	56	200
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*		6	1	7	25
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	12		1	13	47
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	92	17	26	135	480
Totals					216	68	79	363	1,300
Number of Taxa					3	5	5	6	

Table 61. Benthic-invertebrate data for station 394613086114700 Eagle Creek at Raymond Street at Indianapolis, IN

[sp., species]

Field identifier: ECRAY-11
Date: July 18, 1995
Time: 1600

Habitat: cobble and gravel; run
Drainage area: 209 mi^2
Water temperature: 28.9°C

Specific conductance: 925 µs/cm at 25°C
Dissolved oxygen: 12.0 mg/L
pH: 8.21 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Oligochaeta	Lumbriculida	Lumbriculidae	*unidentified juvenile*		2		2	7
Mollusca	Pelecypoda	unidentified	unidentified	*unidentified*		1		1	4
Arthropoda	Malacostraca	Amphipoda	Crangonyctidae	*Crangonyx sp.*			2	2	7
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	2			2	7
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*		1		1	4
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*	1			1	4
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*			2	2	7
Arthropoda	Insecta	Odonata	unidentified	*unidentified*		1		1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*			16	16	57
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*		1		1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	14	1	26	41	150
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	5	27	61	93	330
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*	7	2		9	32
Totals					29	36	107	172	620
Number of Taxa					5	8	5	13	

Table 62. Benthic-invertebrate data for station 394721086031001 Pleasant Run at East 16th Street at Indianapolis, IN

[sp., species]

Field identifier:	PLR16-13	Habitat:	cobble and gravel; riffle	Specific conductance:	516 µs/cm at 25°C
Date:	July 17, 1995	Drainage area:	4.00 mi^2	Dissolved oxygen:	6.9 mg/L
Time:	1545	Water temperature:	28.0°C	pH:	7.74 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Oligochaeta	Lumbriculida	Lumbriculidae	*unidentified juvenile*			1	1	4
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)			2	2	7
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*			1	1	4
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	2	3	1	6	22
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	3	4	12	19	68
Arthropoda	Insecta	Diptera	Tipulidae	*Tipula sp.*		1		1	4
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified larvae*	2			2	7
Arthropoda	Insecta	Diptera	Ceratopogonidae	*unidentified*	1			1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	5	1	5	11	39
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*		1	4	5	18
Totals					13	10	26	49	180
Number of Taxa					5	5	7	10	

Table 63. Benthic-invertebrate data for station 394358086092100 Pleasant Run near South Meridian Street at Indianapolis, IN

[sp., species]

Field identifier: PLRMER-7
Date: July 17, 1995
Time: 1200

Habitat: gravel and cobble; riffle
Drainage area: 20.8 mi^2
Water temperature: 28.5°C

Specific conductance: 501 µs/cm at 25°C
Dissolved oxygen: 7.4 mg/L
pH: 7.64 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Oligochaeta	Lumbriculida	Lumbriculidae	*unidentified juvenile*	2	1		3	11
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	17	5	9	31	110
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	1		2	3	11
Arthropoda	Insecta	Diptera	Tipulidae	*Tipula sp.*	1		1	2	7
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified larvae*	5	2	4	11	39
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified pupae*			1	1	4
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*		5		5	18
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	8	17	6	31	110
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	34	14	21	69	250
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*	7	39	6	52	190
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*		8		8	29
Totals					75	91	50	216	780
Number of Taxa					8	8	8	11	

Table 64. Benthic-invertebrate data for station 394349086080001 Bean Creek at Southern Avenue at Indianapolis, IN

[sp., species]

Field identifier:	BCSOU-15	Habitat:	gravel and cobble; riffle	Specific conductance:	758 µs/cm at 25°C
Date:	July 17, 1995	Drainage area:	5.00 mi^2	Dissolved oxygen:	8.1 mg/L
Time:	0930	Water temperature:	25.2°C	pH:	7.87 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella elongata* (Castle)	2	4	1	7	25
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	2			2	7
Arthropoda	Malacostraca	Decapoda	Cambaridae	*Cambarus sp.*	4	1		5	18
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	1		3	4	14
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	2	10	14	26	93
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	1	17	56	74	270
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*	1			1	4
Totals					13	32	74	119	430
Number of Taxa					7	4	4	7	

Table 65. Benthic-invertebrate data for station 394358086083901 Bean Creek at Garfield Park at Indianapolis, IN
[sp., species]

Field identifier:	BCGARF-9	Habitat:	cobble and gravel; run	Specific conductance:	748 µs/cm at 25°C
Date:	July 17, 1995	Drainage area:	5.30 mi^2	Dissolved oxygen:	8.0 mg/L
Time:	1100	Water temperature:	26.4°C	pH:	7.90 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Arthropoda	Malacostraca	Decapoda	Cambaridae	*Cambarus sp.*			1	1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*			3	3	11
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	2		1	3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	10	1		11	39
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	66	12	7	85	300
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*		8		8	29
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*		1		1	4
Totals					78	22	12	112	400
Number of Taxa					3	4	4	7	

Table 66. Benthic-invertebrate data for station 394746086055601 Pogues Run at East 21st Street at Indianapolis, IN

[sp., species]

Field identifier: POR21-14
Date: July 17, 1995
Time: 1500

Habitat: cobble and gravel; riffle
Drainage area: 4.40 mi^2
Water temperature: 28.7°C

Specific conductance: 548 µs/cm at 25°C
Dissolved oxygen: 6.6 mg/L
pH: 7.68 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Oligochaeta	Lumbriculida	Lumbriculidae	*unidentified juvenile*			1	1	4
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	9	3	1	13	47
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	4	1		5	18
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*		2	2	4	14
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	2	4		6	22
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	2	2	2	6	22
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*		2		2	7
Totals					17	14	6	37	130
Number of Taxa					4	6	4	7	

Table 67. Benthic-invertebrate data for station 03352990 Pogues Run at Vermont Street, Indianapolis, IN

[sp., species]

Field identifier:	PORVER-8	Habitat:	cobble and gravel; run	Specific conductance:	516 µs/cm at 25°C
Date:	July 17, 1995	Drainage area:	8.87 mi^2	Dissolved oxygen:	6.6 mg/L
Time:	1400	Water temperature:	28.8°C	pH:	7.72 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Tubifex tubifex* (Mueller)			3	3	11
Annelida	Oligochaeta	Haplotaxida	Naididae	*unidentified juvenile*	2		5	7	25
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*		2		2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	1		3	4	14
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	3	5	10	18	65
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*		1		1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*	1		1	2	7
Totals					7	8	22	37	130
Number of Taxa					4	3	5	7	

Table 68. Benthic-invertebrate data for station 400001086012301 White River at 146th Street near Noblesville, IN

[sp., species]

Field identifier:	WR146-0	Habitat:	gravel and cobble; run	Specific conductance:	993 µs/cm at 25°C
Date:	September 13, 1995	Drainage area:	1,147 mi^2	Dissolved oxygen:	7.8 mg/L
Time:	1000	Water temperature:	20.5°C	pH:	7.94 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	7	2	5	14	50
Annelida	Oligochaeta	Lumbriculida	Lumbriculidae	*unidentified juvenile*		1		1	4
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Branchiura sowerbyi* Beddard	2	2		4	14
Mollusca	Gastropoda	Mesogastropoda	Pleuroceridae	*Pleurocera acuta* Rafinesque	2	2	5	9	32
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)		1	3	4	14
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	3	3		6	22
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	3	29	29	61	220
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	7	4	7	18	65
Arthropoda	Insecta	Ephemeroptera	Potamanthidae	*Potamanthus sp.*	5	12	16	33	120
Arthropoda	Insecta	Odonata	Gomphidae	*Gomphus sp.*		1		1	4
Arthropoda	Insecta	Odonata	Coenagrionidae	*Ischnura sp.*			2	2	7
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	6	18	8	32	110
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	4	2		6	22
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*	2		4	6	22
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*		3	8	11	39
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	6	9	3	18	65
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	31	44	24	99	360
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*	5			5	18
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)		4		4	14
Totals					83	137	114	334	1,200
Number of Taxa					13	16	12	19	

Table 69. Benthic-invertebrate data for station 400001086012301 White River at 146th Street near Noblesville, IN

[sp., species]

Field identifier:	WR146-0	Habitat:	gravel and cobble; run	Specific conductance:	1000 µs/cm at 25°C
Date:	September 13, 1995	Drainage area:	1,147 mi^2	Dissolved oxygen:	8.0 mg/L
Time:	1100	Water temperature:	21.0°C	pH:	7.97 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Branchiura sowerbyi* Beddard		2		2	7
Annelida	Oligochaeta	Haplotaxida	Naididae	*Pristinella sp.*	3		1	4	14
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	2	9	4	15	54
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)	1			1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	4	4	6	14	50
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	8	29	22	59	210
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	14	6	11	31	110
Arthropoda	Insecta	Ephemeroptera	Potamanthidae	*Potamanthus sp.*	9	3	7	19	68
Arthropoda	Insecta	Odonata	Coenagrionidae	*Argia sp.*			1	1	4
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	41	47	30	118	420
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	9	12	8	29	100
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	22	31	17	70	250
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*	7	7	8	22	79
Arthropoda	Insecta	Trichoptera	Polycentropodidae	*Polycentropus sp.*		2		2	7
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*	23	43	63	129	460
Arthropoda	Insecta	Diptera	Tipulidae	*Tipula sp.*			1	1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	34	41	55	130	470
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	194	266	229	689	2,500
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*			10	10	36
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	67	51	47	165	590
Totals					438	553	520	1,511	5,400
Number of Taxa					15	15	17	20	

Table 70. Benthic-invertebrate data for station 03351000 White River near Nora, IN (82nd Street)
[sp., species]

Field identifier:	WRNORA-1	Habitat:	cobble and gravel; riffle	Specific conductance:	856 µs/cm at 25°C
Date:	September 13, 1995	Drainage area:	1,219 mi^2	Dissolved oxygen:	7.9 mg/L
Time:	1300	Water temperature:	21.7°C	pH:	7.85 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	2	19	30	51	180
Annelida	Oligochaeta	Lumbriculida	Lumbriculidae	*unidentified juvenile*			1	1	4
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella elongata* (Castle)	1			1	4
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)		12		12	43
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)	8	1		9	32
Mollusca	Pelecypoda	Veneroida	Sphaeriidae	*Sphaerium transversum* (Say)	1			1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	18	17	24	59	210
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	19	9		28	100
Arthropoda	Insecta	Ephemeroptera	Oligoneuriidae	*Isonychia sp.*			7	7	25
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	8	16	34	58	210
Arthropoda	Insecta	Ephemeroptera	Potamanthidae	*Potamanthus sp.*		4		4	14
Arthropoda	Insecta	Coleoptera	unidentified	*unidentified*			1	1	4
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	98	44	22	164	590
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	116	49	123	288	1,000
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	225	82	267	574	2,100
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*	56	31	119	206	740
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	6	6	5	17	61
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	24	24		48	170
Totals					582	314	633	1,529	5,500
Number of Taxa					13	13	11	18	

Table 71. Benthic-invertebrate data for station 03353000 White River at Indianapolis, IN (Morris Street)
[sp., species]

Field identifier: WRINDY-2
Date: September 13, 1995
Time: 1600

Habitat: gravel and cobble, with some fines and sand; run
Drainage area: 1,635 mi^2
Water temperature: 24.4°C

Specific conductance: 900 µs/cm at 25°C
Dissolved oxygen: 13.0 mg/L
pH: 8.35 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	4	53	63	120	430
Annelida	Oligochaeta	Lumbriculida	Lumbriculidae	*unidentified juvenile*		2		2	7
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Branchiura sowerbyi* Beddard		1	3	4	14
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella elongata* (Castle)		1		1	4
Mollusca	Gastropoda	Mesogastropoda	Pleuroceridae	*Pleurocera acuta* Rafinesque			37	37	130
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	6			6	22
Mollusca	Pelecypoda	Veneroida	Sphaeriidae	*Sphaerium transversum* (Say)			12	12	43
Arthropoda	Malacostraca	Isopoda	unidentified	*unidentified*			1	1	4
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	1			1	4
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson			8	8	29
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	3		7	10	36
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*			2	2	7
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*	2			2	7
Arthropoda	Insecta	Diptera	Tipulidae	*Tipula sp.*	2			2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	18	25	18	61	220
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	463	386	271	1,120	4,000
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*			3	3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)		4		4	14
Totals					499	472	425	1,396	5,000
Number of Taxa					8	7	11	18	

Table 72. Benthic-invertebrate data for station 03353193 White River at Harding Street, Indianapolis, IN

[sp., species; >, greater than]

Field identifier:	WRHARD-3	Habitat:	cobble and gravel, with some fines; pool	Specific conductance:	857 µs/cm at 25°C
Date:	September 14, 1995	Drainage area:	1,660 mi^2	Dissolved oxygen:	>15.5 mg/L
Time:	1600	Water temperature:	24.6°C	pH:	8.57 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	12		7	19	68
Annelida	Oligochaeta	Lumbriculida	Lumbriculidae	*unidentified juvenile*			3	3	11
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella elongata* (Castle)		1	1	2	7
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)			3	3	11
Arthropoda	Insecta	Collembola	Isotomidae	*Isotomurus palustris* (Mueller)	6			6	22
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*		1		1	4
Arthropoda	Insecta	Odonata	Coenagrionidae	*Argia sp.*	2		3	5	18
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	5			5	18
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	2	2	3	7	25
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*		2		2	7
Arthropoda	Insecta	Diptera	Tipulidae	*Tipula sp.*			2	2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*		2		2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	351	417	661	1,429	5,100
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*	17	43	8	68	240
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	43			43	150
Totals					438	468	691	1,597	5,700
Number of Taxa					8	7	9	15	

Table 73. Benthic-invertebrate data for station 03353611 White River at Stout Generating Station at Indianapolis, IN
[sp., species]

Field identifier:	WRSTUP-19	Habitat:	gravel and some fines; pool	Specific conductance:	1136 µs/cm at 25°C
Date:	September 14, 1995	Drainage area:	1,898 mi^2	Dissolved oxygen:	14.1 mg/L
Time:	1430	Water temperature:	26.8°C	pH:	7.40 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	5	6	43	54	190
Annelida	Oligochaeta	Lumbriculida	Lumbriculidae	*unidentified juvenile*	6			6	22
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella elongata* (Castle)	2	5	4	11	39
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	1			1	4
Mollusca	Pelecypoda	Veneroida	Sphaeriidae	*Sphaerium transversum* (Say)			1	1	4
Arthropoda	Malacostraca	Amphipoda	Crangonyctidae	*Crangonyx sp.*			2	2	7
Arthropoda	Insecta	Collembola	Isotomidae	*Isotomurus palustris* (Mueller)	5			5	18
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	6	1	23	30	110
Arthropoda	Insecta	Odonata	Coenagrionidae	*Ischnura sp.*		2		2	7
Arthropoda	Insecta	Odonata	Coenagrionidae	*Argia sp.*		1		1	4
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson		7	6	13	47
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	2			2	7
Arthropoda	Insecta	Diptera	Ceratopogonidae	*unidentified*	4	2	5	11	39
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*			9	9	32
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	78	68	182	328	1,200
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	9	16	29	54	190
Totals					118	108	304	530	1,900
Number of Taxa					10	9	10	16	

Table 74. Benthic-invertebrate data for station 394234086120900 White River below Stout Generating Station at Indianapolis, IN

[sp., species]

Field identifier:	WRSTDN-20	Habitat:	cobble, with some gravel; riffle	Specific conductance:	1162 µs/cm at 25°C
Date:	September 14, 1995	Drainage area:	1,899 mi^2	Dissolved oxygen:	8.7 mg/L
Time:	1115	Water temperature:	25.6°C	pH:	7.40 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	13		47	60	220
Annelida	Oligochaeta	Lumbriculida	Lumbriculidae	*unidentified juvenile*			6	6	22
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Branchiura sowerbyi* Beddard	3			3	11
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella elongata* (Castle)	6	5	34	45	160
Mollusca	Gastropoda	Mesogastropoda	Pleuroceridae	*Pleurocera acuta* Rafinesque	3		28	31	110
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	18		16	34	120
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)	13			13	47
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	7			7	25
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	3			3	11
Arthropoda	Insecta	Odonata	Coenagrionidae	*Ischnura sp.*			4	4	14
Arthropoda	Insecta	Coleoptera	unidentified	*unidentified*			2	2	7
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	19	9	19	47	170
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	177	95	195	467	1,700
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	432	416	386	1,234	4,400
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*		12		12	43
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	11	33	42	86	310
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	24	117	87	228	820
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*			8	8	29
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	4			4	14
Totals					733	687	874	2,294	8,200
Number of Taxa					14	7	13	19	

Table 75. Benthic-invertebrate data for station 394019086134601 White River at Tibbs-Banta Landfill near Southport, IN

[sp., species]

Field identifier:	WRTBLF-4	Habitat:	cobble and gravel; riffle	Specific conductance:	1273 µs/cm at 25°C
Date:	September 14, 1995	Drainage area:	1,920 mi^2	Dissolved oxygen:	7.2 mg/L
Time:	0945	Water temperature:	23.9°C	pH:	7.22 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)			18	18	65
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Branchiura sowerbyi* Beddard	10			10	36
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)		2		2	7
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)	2			2	7
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	42	16	9	67	240
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	17	14	6	37	130
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	33		5	38	140
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	48	142	177	367	1,300
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	94	361	355	810	2,900
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*	9	9		18	65
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	38	26	45	109	390
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	241	207	416	864	3,100
Arthropoda	Insecta	Diptera	Chironomidae	*Nanocladius sp.*		7		7	25
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*	6	11	14	31	110
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	17	3		20	72
Totals					557	798	1,045	2,400	8,600
Number of Taxa					12	11	9	15	

Table 76. Benthic-invertebrate data for station 393827086141701 White River at Wicker Road near Southport, IN

[sp., species]

Field identifier:	WRWICK-5	Habitat:	gravel and cobble; run	Specific conductance:	1379 µs/cm at 25°C
Date:	September 15, 1995	Drainage area:	1,947 mi^2	Dissolved oxygen:	7.0 mg/L
Time:	1000	Water temperature:	22.9°C	pH:	7.47 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	8			8	29
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Branchiura sowerbyi* Beddard			3	3	11
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	16	5	12	33	120
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)	1			1	4
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	3	3	5	11	39
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	5	2	11	18	65
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	7		6	13	47
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	11	2	8	21	75
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*			6	6	22
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	72	43	17	132	470
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	216	115	387	718	2,600
Arthropoda	Insecta	Diptera	Chironomidae	*Nanocladius sp.*		6		6	22
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*		3	48	51	180
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*		2		2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	19	7	14	40	140
Totals					358	188	517	1,063	3,800
Number of Taxa					10	10	11	15	

Table 77. Benthic-invertebrate data for station 393402086152000 White River near Waverly, IN (State Road 144)
[sp., species]

Field identifier:	WRWAVE-6	Habitat:	cobble and gravel; riffle	Specific conductance:	1278 µs/cm at 25°C
Date:	September 15, 1995	Drainage area:	2,026 mi^2	Dissolved oxygen:	8.0 mg/L
Time:	1200	Water temperature:	22.7°C	pH:	7.58 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	15			15	54
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*			3	3	11
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	42	5	32	79	280
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	21	8	7	36	130
Arthropoda	Insecta	Megaloptera	Corydalidae	*Corydalus cornutus* (Linnaeus)			2	2	7
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	101	19	263	383	1,400
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	429	85	520	1,034	3,700
Arthropoda	Insecta	Diptera	Tipulidae	*Tipula sp.*	3			3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	22	16	9	47	170
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	58	94	46	198	710
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*	4			4	14
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)			3	3	11
Totals					695	227	885	1,807	6,500
Number of Taxa					9	6	9	12	

Table 78. Benthic-invertebrate data for station 393402086152000 White River near Waverly, IN (State Road 144)
[sp., species]

Field identifier: WRWAVE-6
Date: September 15, 1995
Time: 1300

Habitat: cobble and gravel; riffle
Drainage area: 2,026 mi^2
Water temperature: 22.7°C

Specific conductance: 1278 µs/cm at 25°C
Dissolved oxygen: 8.0 mg/L
pH: 7.58 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Branchiura sowerbyi* Beddard		1		1	4
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella elongata* (Castle)			3	3	11
Mollusca	Gastropoda	Mesogastropoda	Pleuroceridae	*Pleurocera acuta* Rafinesque	2	1	4	7	25
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	4	6	7	17	61
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)	1		2	3	11
Mollusca	Pelecypoda	Veneroida	Sphaeriidae	*Sphaerium transversum* (Say)		1	5	6	22
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	15	9		24	86
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	9		14	23	83
Arthropoda	Insecta	Odonata	Coenagrionidae	*Argia sp.*	2			2	7
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson			22	22	79
Arthropoda	Insecta	Megaloptera	Corydalidae	*Corydalus cornutus* (Linnaeus)	2			2	7
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	247	38	141	426	1,500
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	366	42	336	744	2,700
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*		4		4	14
Arthropoda	Insecta	Diptera	Tipulidae	*Tipula sp.*		2		2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	38	53	36	127	460
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	65	116	74	255	910
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*			1	1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*			2	2	7
Totals					751	273	647	1,671	6,000
Number of Taxa					11	11	13	19	

Table 79. Benthic-invertebrate data for station 395259086001601 Fall Creek at 71st Street near Lawrence, IN

[sp., species]

Field identifier: FC71-16 | Habitat: cobble and gravel; run | Specific conductance: 450 µs/cm at 25°C

Date: September 12, 1995 | Drainage area: 243 mi^2 | Dissolved oxygen: 6.8 mg/L

Time: 1300 | Water temperature: 22.4°C | pH: 7.77 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)			8	8	29
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Branchiura sowerbyi* Beddard			5	5	18
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	4		11	15	54
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*		2	17	19	68
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	18	24	7	49	180
Arthropoda	Insecta	Ephemeroptera	Potamanthidae	*Potamanthus sp.*	6	4	1	11	39
Arthropoda	Insecta	Odonata	Coenagrionidae	*Argia sp.*		2	2	4	14
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	9	9	27	45	160
Arthropoda	Insecta	Megaloptera	Corydalidae	*Corydalus cornutus* (Linnaeus)			2	2	7
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	7	40	114	161	580
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	21	73	236	330	1,200
Arthropoda	Insecta	Trichoptera	Polycentropodidae	*Polycentropus sp.*	8	3	6	17	61
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*	33	29	135	197	710
Arthropoda	Insecta	Diptera	Tipulidae	*Tipula sp.*			3	3	11
Arthropoda	Insecta	Diptera	Ceratopogonidae	*unidentified*		4		4	14
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	391	247	226	864	3,100
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*	3		14	17	61
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)		8	5	13	47
Totals					500	445	819	1,764	6,300
Number of Taxa					10	12	17	18	

Table 80. Benthic-invertebrate data for station 03352875 Fall Creek at 16th Street at Indianapolis, IN

[sp., species]

Field identifier:	FC16-10	Habitat:	cobble and gravel; riffle	Specific conductance:	724 µs/cm at 25°C
Date:	September 12, 1995	Drainage area:	317 mi^2	Dissolved oxygen:	8.0 mg/L
Time:	0945	Water temperature:	20.4°C	pH:	7.45 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Oligochaeta	Haplotaxida	Naididae	*Pristinella sp.*			2	2	7
Arthropoda	Malacostraca	Decapoda	Cambaridae	*Cambarus sp.*			1	1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*			2	2	7
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	2	2	1	5	18
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	5	5	7	17	61
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	2	2	1	5	18
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*	2			2	7
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*	3	3	5	11	39
Arthropoda	Insecta	Diptera	Tipulidae	*Tipula sp.*		3		3	11
Arthropoda	Insecta	Diptera	Ceratopogonidae	*unidentified*		2	5	7	25
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	6	42	9	57	200
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	58	163	67	288	1,000
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	13	17	6	36	130
Totals					91	239	106	436	1,600
Number of Taxa					8	9	11	13	

Table 81. Benthic-invertebrate data for station 394851086181301 Eagle Creek at Dandy Trail Road near Clermont, IN
[sp., species]

Field identifier:	ECDAN-17	Habitat:	cobble and gravel; riffle	Specific conductance:	472 µs/cm at 25°C
Date:	September 13, 1995	Drainage area:	164 mi^2	Dissolved oxygen:	5.5 mg/L
Time:	1745	Water temperature:	22.1°C	pH:	7.51 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	4	8	21	33	120
Annelida	Oligochaeta	Lumbriculida	Lumbriculidae	*unidentified juvenile*			2	2	7
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)		5		5	18
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	7	7	16	30	110
Arthropoda	Insecta	Odonata	Coenagrionidae	*Ischnura sp.*	3			3	11
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	4	4	18	26	93
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	2		43	45	160
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	6	6	147	159	570
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*	5		7	12	43
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*	23		59	82	290
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified pupae*	3		86	89	320
Arthropoda	Insecta	Diptera	Ceratopogonidae	*unidentified*	2	3		5	18
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	3	7	32	42	150
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*			14	14	50
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)			12	12	43
Totals					62	40	457	559	2,000
Number of Taxa					11	7	12	15	

Table 82. Benthic-invertebrate data for station 394613086114700 Eagle Creek at Raymond Street at Indianapolis, IN

[sp., species]

Field identifier:	ECRAY-11	Habitat:	cobble and gravel; run	Specific conductance:	900 µs/cm at 25°C
Date:	September 13, 1995	Drainage area:	209 mi^2	Dissolved oxygen:	13.0 mg/L
Time:	1700	Water temperature:	24.4°C	pH:	8.35 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)			6	6	22
Annelida	Oligochaeta	Lumbriculida	Lumbriculidae	*unidentified juvenile*		4	7	11	39
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella elongata* (Castle)	1		1	2	7
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	2	16		18	65
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)		5	1	6	22
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	13			13	47
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	2		4	6	22
Arthropoda	Insecta	Odonata	Coenagrionidae	*Argia sp.*	5	3	3	11	39
Arthropoda	Insecta	Coleoptera	Hydrophilidae	*Berosus sp.*			2	2	7
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson		1		1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	3	4		7	25
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	4	8		12	43
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*		3	8	11	39
Arthropoda	Insecta	Diptera	Ceratopogonidae	*unidentified*		1	5	6	22
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	29	19	9	57	200
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	71	58	65	194	700
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*	18	31	7	56	200
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	9	7	11	27	97
Totals					157	160	129	446	1,600
Number of Taxa					11	13	13	18	

Table 83. Benthic-invertebrate data for station 394721086031001 Pleasant Run at East 16th Street at Indianapolis, IN
[sp., species]

Field identifier:	PLR16-13	Habitat:	cobble and gravel; riffle	Specific conductance:	648 µs/cm at 25°C
Date:	September 11, 1995	Drainage area:	4.00 mi^2	Dissolved oxygen:	9.3 mg/L
Time:	1515	Water temperature:	18.0°C	pH:	7.94 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	4		10	14	50
Annelida	Oligochaeta	Lumbriculida	Lumbriculidae	*unidentified juvenile*	14	3		17	61
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)	12		9	21	75
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	7		3	10	36
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	15	39	24	78	280
Arthropoda	Insecta	Odonata	Coenagrionidae	*Ischnura sp.*	1	2		3	11
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	4			4	14
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*		6	3	9	32
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	2	27	17	46	170
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*		3		3	11
Arthropoda	Insecta	Diptera	Tipulidae	*Tipula sp.*			1	1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	22	26	26	74	270
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	12	17	32	61	220
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*	5	4	9	18	65
Totals					98	127	134	359	1,300
Number of Taxa					11	9	10	14	

Table 84. Benthic-invertebrate data for station 394358086092100 Pleasant Run near South Meridian Street at Indianapolis, IN

[sp., species]

Field identifier:	PLRMER-7	Habitat:	gravel and cobble; riffle	Specific conductance:	898 µs/cm at 25°C
Date:	September 11, 1995	Drainage area:	20.8 mi^2	Dissolved oxygen:	12.6 mg/L
Time:	1415	Water temperature:	21.5°C	pH:	7.70 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)			3	3	11
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella elongata* (Castle)		2	1	3	11
Mollusca	Gastropoda	Mesogastropoda	Pleuroceridae	*Pleurocera acuta* Rafinesque	17	3		20	72
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*			2	2	7
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	5	23	4	32	110
Arthropoda	Insecta	Odonata	Coenagrionidae	*Ischnura sp.*			1	1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	1	16	3	20	72
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*		3	6	9	32
Arthropoda	Insecta	Diptera	Tipulidae	*Tipula sp.*		4	3	7	25
Arthropoda	Insecta	Diptera	Simuliidae	*unidentified pupae*		11		11	39
Arthropoda	Insecta	Diptera	Ceratopogonidae	*unidentified*		5	1	6	22
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	12	34	192	238	850
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	63	143	123	329	1,200
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*		17	7	24	86
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)		8		8	29
Totals					98	269	346	713	2,600
Number of Taxa					5	12	12	15	

Table 85. Benthic-invertebrate data for station 394349086080001 Bean Creek at Southern Avenue at Indianapolis, IN
[sp., species]

Field identifier:	BCSOU-15	Habitat:	gravel and cobble; riffle	Specific conductance:	993 µs/cm at 25°C
Date:	September 11, 1995	Drainage area:	5.00 mi^2	Dissolved oxygen:	14.3 mg/L
Time:	1130	Water temperature:	18.8°C	pH:	8.22 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Oligochaeta	Lumbriculida	Lumbriculidae	*unidentified juvenile*	3	2		5	18
Annelida	Oligochaeta	Haplotaxida	Naididae	*Dero furcata* (Mueller)		3	3	6	22
Annelida	Oligochaeta	Haplotaxida	Naididae	*Pristinella sp.*	2	3		5	18
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	20	9	30	59	210
Arthropoda	Malacostraca	Decapoda	Cambaridae	*Cambarus sp.*			1	1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	4	18	16	38	140
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*			2	2	7
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*			9	9	32
Arthropoda	Insecta	Odonata	Coenagrionidae	*Ischnura sp.*	3		2	5	18
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*		1	16	17	61
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	3		41	44	160
Arthropoda	Insecta	Diptera	Ceratopogonidae	*unidentified*			3	3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	19	41	38	98	350
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	28	57	85	170	610
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*	5	9		14	50
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*	8	6	24	38	140
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	3	8	17	28	100
Totals					98	157	287	542	1,900
Number of Taxa					11	11	14	17	

Table 86. Benthic-invertebrate data for station 394358086083901 Bean Creek at Garfield Park at Indianapolis, IN

[sp., species]

Field identifier:	BCGARF-9	Habitat:	cobble and gravel; run	Specific conductance:	886 µs/cm at 25°C
Date:	September 11, 1995	Drainage area:	5.30 mi^2	Dissolved oxygen:	12.5 mg/L
Time:	1230	Water temperature:	20.4°C	pH:	8.24 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Oligochaeta	Lumbriculida	Lumbriculidae	*unidentified juvenile*	1		3	4	14
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella elongata* (Castle)			2	2	7
Mollusca	Gastropoda	Mesogastropoda	Pleuroceridae	*Pleurocera acuta* Rafinesque	5			5	18
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	4	26	19	49	180
Arthropoda	Arachnoidea	Acarina	unidentified suborder Trombidiformes	*unidentified*	1		4	5	18
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	2	10	14	26	93
Arthropoda	Insecta	Odonata	Coenagrionidae	*Ischnura sp.*		1		1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	1	22	5	28	100
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	1	49	8	58	210
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*		2	6	8	29
Arthropoda	Insecta	Diptera	Ceratopogonidae	*unidentified*			6	6	22
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	89	129	155	373	1,300
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	321	453	371	1,145	4,100
Arthropoda	Insecta	Diptera	Chironomidae	*Nanocladius sp.*		6	8	14	50
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*	16	16	26	58	210
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*			3	3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	8	24	21	53	190
Totals					449	738	651	1,838	6,600
Number of Taxa					11	11	15	17	

Table 87. Benthic-invertebrate data for station 394746086055601 Pogues Run at East 21st Street at Indianapolis, IN
[sp., species]

Field identifier:	POR21-14	Habitat:	cobble and gravel; riffle	Specific conductance:	801 µs/cm at 25°C
Date:	September 12, 1995	Drainage area:	4.40 mi^2	Dissolved oxygen:	6.7 mg/L
Time:	1200	Water temperature:	17.9°C	pH:	7.51 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Oligochaeta	Lumbriculida	Lumbriculidae	*unidentified juvenile*		2		2	7
Annelida	Oligochaeta	Haplotaxida	Naididae	*Pristinella sp.*	2		2	4	14
Mollusca	Gastropoda	Mesogastropoda	Pleuroceridae	*Pleurocera acuta* Rafinesque		28		28	100
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	37	27		64	230
Arthropoda	Arachnoidea	Acarina	unidentified suborder Trombidiformes	*unidentified*			1	1	4
Arthropoda	Insecta	Collembola	Isotomidae	*Isotomurus palustris* (Mueller)		1		1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	8	2	3	13	47
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*			2	2	7
Arthropoda	Insecta	Odonata	Coenagrionidae	*Ischnura sp.*	1		1	2	7
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson			1	1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*		5	1	6	22
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	12	5	1	18	65
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	11	13	4	28	100
Totals					71	83	16	170	610
Number of Taxa					6	8	9	13	

Table 88. Benthic-invertebrate data for station 03352990 Pogues Run at Vermont Street, Indianapolis, IN
[sp., species]

Field identifier:	PORVER-8	Habitat:	cobble and gravel; run	Specific conductance:	872 µs/cm at 25°C
Date:	September 12, 1995	Drainage area:	8.87 mi^2	Dissolved oxygen:	4.6 mg/L
Time:	1045	Water temperature:	19.0°C	pH:	7.33 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Oligochaeta	Lumbriculida	Lumbriculidae	*unidentified juvenile*		4	2	6	22
Annelida	Oligochaeta	Haplotaxida	Naididae	*Dero furcata* (Mueller)	2	6	4	12	43
Annelida	Oligochaeta	Haplotaxida	Naididae	*Pristinella sp.*	5	5	2	12	43
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	4	3	4	11	39
Mollusca	Gastropoda	Basommatophora	Physidae	*Physella sp.*	15	7	3	25	90
Arthropoda	Arachnoidea	Acarina	unidentified suborder Trombidiformes	*unidentified*			1	1	4
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*			3	3	11
Arthropoda	Insecta	Odonata	Gomphidae	*Gomphus sp.*			1	1	4
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson			1	1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*			2	2	7
Arthropoda	Insecta	Diptera	Ceratopogonidae	*unidentified*			2	2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	22	16	8	46	170
Arthropoda	Insecta	Diptera	Chironomidae	*Cricotopus sp.*	8	10	17	35	130
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*			5	5	18
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)			7	7	25
Totals					56	51	62	169	610
Number of Taxa					6	7	15	15	

Table 89. Benthic-invertebrate data for station 400001086012301 White River at 146th Street near Noblesville, IN

[sp., species]

Field identifier:	WR146-0	Habitat:	gravel and cobble; run	Specific conductance:	783 µs/cm at 25°C
Date:	July 17, 1996	Drainage area:	1,147 mi^2	Dissolved oxygen:	9.6 mg/L
Time:	1030	Water temperature:	26.6°C	pH:	8.29 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Branchiura sowerbyi* Beddard		1		1	4
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus hoffmeisteri* Claparede		4	4	8	29
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)			26	26	93
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	34	44	32	110	390
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	1	4		5	18
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*	268	232	317	817	2,900
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	2	5		7	25
Arthropoda	Insecta	Ephemeroptera	Potamanthidae	*Potamanthus sp.*	2			2	7
Arthropoda	Insecta	Hemiptera	Veliidae	*Microvelia sp.*	2			2	7
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	4	37		41	150
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*	13	4	18	35	130
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*			4	4	14
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	48	78	118	244	880
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	5	21	27	53	190
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*	1	1	1	3	11
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*	9	11	30	50	180
Arthropoda	Insecta	Diptera	Simuliidae	*Simulium sp.*	2			2	7
Arthropoda	Insecta	Diptera	Ceratopogonidae	*unidentified pupae*		13	3	16	57
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	44	48	84	176	630
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	43	36	48	127	460
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	45	93	47	185	660
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	481	305	620	1,406	5,000
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*	6			6	22
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*	4			4	14
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*	56	2		58	210
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*	10	3	1	14	50
Arthropoda	Insecta	Diptera	Chironomidae	*Parachironomos sp.*		1		1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	11	23	20	54	190
Arthropoda	Insecta	Diptera	Chironomidae	*Tribelos sp.*	2			2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*	156	78	345	579	2,100
Arthropoda	Insecta	Diptera	Athericidae	*Atherix variegata* Walker	11	24	37	72	260
Totals					1,260	1,068	1,782	4,110	15,000
Number of Taxa					25	23	19	31	

Table 90. Benthic-invertebrate data for station 400001086012301 White River at 146th Street near Noblesville, IN
[sp., species]

Field identifier:	WR146-0	Habitat:	gravel and cobble; run	Specific conductance:	783 µs/cm at 25°C
Date:	July 17, 1996	Drainage area:	1,147 mi^2	Dissolved oxygen:	9.6 mg/L
Time:	1100	Water temperature:	26.6°C	pH:	8.29 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)			1	1	4
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Branchiura sowerbyi* Beddard			1	1	4
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*	12		8	20	72
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	4	9	2	15	54
Mollusca	Pelecypoda	Veneroida	Sphaeriidae	*Sphaerium transversum* (Say)		1		1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	22	28	76	126	450
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	3	1	9	13	47
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*	150	195	191	536	1,900
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	5	2		7	25
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	4	12	12	28	100
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*	8	11	8	27	97
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	53	93	135	281	1,000
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	7	14	39	60	220
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*	1	1		2	7
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*	11	19	34	64	230
Arthropoda	Insecta	Diptera	Ceratopogonidae	*unidentified pupae*	8	9	4	21	75
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	56	52	96	204	730
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	28	45	59	132	470
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	21	31	22	74	270
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	687	402	777	1,866	6,700
Arthropoda	Insecta	Diptera	Chironomidae	*Thienemanniella xena (Roback)*	16	16		32	110
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*		1		1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*		1	17	18	65
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	209	160	520	889	3,200
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*	209	163	512	884	3,200
Arthropoda	Insecta	Diptera	Athericidae	*Atherix variegata* Walker	43	39	51	133	480
Arthropoda	Insecta	Diptera	Dolichopodidae	*unidentified*	1			1	4
Totals					1,558	1,305	2,574	5,437	20,000
Number of Taxa					22	23	21	27	

Table 91. Benthic-invertebrate data for station 03351000 White River near Nora, IN (82nd Street)

[sp., species]

Field identifier:	WRNORA-1	Habitat:	cobble and gravel; riffle	Specific conductance:	807 µs/cm at 25°C
Date:	July 17, 1996	Drainage area:	1,219 mi^2	Dissolved oxygen:	10.5 mg/L
Time:	0900	Water temperature:	24.8°C	pH:	7.97 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	28	34	60	122	440
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*	12	96		108	390
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	48	132	240	420	1,500
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)	4	6	18	28	100
Arthropoda	Malacostraca	Decapoda	Cambaridae	*Cambarus sp.*		2		2	7
Arthropoda	Insecta	Collembola	Isotomidae	*Isotomurus palustris* (Mueller)			8	8	29
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	28	74	68	170	610
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	16	18	16	50	180
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*	360	498	596	1,454	5,200
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	40		28	68	240
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	40	42	20	102	370
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*	156	94	182	432	1,600
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*	20	16	16	52	190
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	1,020	1,120	692	2,832	10,000
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	520	316	358	1,194	4,300
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*	40	52	28	120	430
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*	32	66	122	220	790
Arthropoda	Insecta	Diptera	Simuliidae	*Simulium sp.*	8			8	29
Arthropoda	Insecta	Diptera	Ceratopogonidae	*unidentified pupae*		2	2	4	14
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	24	272	80	376	1,300
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	24	128	50	202	720
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	32	88	74	194	700
Arthropoda	Insecta	Diptera	Chironomidae	*Nanocladius sp.*		2		2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	292	1,110	466	1,868	6,700
Arthropoda	Insecta	Diptera	Chironomidae	*Thienemanniella xena (Roback)*	40	64	16	120	430
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*		4	16	20	72
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	64	12	58	134	480
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*	248	520	686	1,454	5,200
Arthropoda	Insecta	Diptera	Athericidae	*Atherix variegata* Walker	12		2	14	50
Arthropoda	Insecta	Diptera	Dolichopodidae	*unidentified*	8			8	29
Totals					3,116	4,768	3,902	11,786	42,000
Number of Taxa					25	25	25	30	

Table 92. Benthic-invertebrate data for station 03353000 White River at Indianapolis, IN (Morris Street)
[sp., species]

Field identifier:	WRINDY-2	Habitat:	gravel and cobble, with some fines and sand; run	Specific conductance:	804 µs/cm at 25°C
Date:	July 16, 1996	Drainage area:	1,635 mi^2	Dissolved oxygen:	6.3 mg/L
Time:	1230	Water temperature:	25.8°C	pH:	7.70 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	96	11	142	249	890
Nematoda	unidentified	unidentified	unidentified	*unidentified*	4	6		10	36
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*		2	16	18	65
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella sp.*	12	10	4	26	93
Mollusca	Gastropoda	Mesogastropoda	Pleuroceridae	*Pleurocera acuta* Rafinesque	228	6	186	420	1,500
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	10			10	36
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)		2		2	7
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	4		44	48	170
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*	27	4	82	113	410
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	2			2	7
Arthropoda	Insecta	Ephemeroptera	Ephemeridae	*unidentified*		2		2	7
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson		2		2	7
Arthropoda	Insecta	Trichoptera	Psychomyiidae	*Psychomyia sp.*			2	2	7
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*			14	14	50
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*		1	4	5	18
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	6	5	56	67	240
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	4		14	18	65
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	86	24	220	330	1,200
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	14	7	46	67	240
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*	12	1		13	47
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	22	5	18	45	160
Arthropoda	Insecta	Diptera	Chironomidae	*Nanocladius sp.*	2	6	6	14	50
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	10	4	68	82	290
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*		2		2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*			8	8	29
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*	10	24	20	54	190
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*	859	743	1,640	3,242	12,000
Arthropoda	Insecta	Diptera	Chironomidae	*Parachironomos sp.*			14	14	50
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	10	1	34	45	160
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*	6	5	34	45	160
Totals					1,424	873	2,672	4,969	18,000
Number of Taxa					20	22	22	30	

Table 93. Benthic-invertebrate data for station 03353193 White River at Harding Street, Indianapolis, IN
[sp., species]

Field identifier: WRHARD-3
Date: July 16, 1996
Time: 0815

Habitat: cobble and gravel, with some fines; pool
Drainage area: 1,660 mi^2
Water temperature: 25.0°C

Specific conductance: 755 µs/cm at 25°C
Dissolved oxygen: 4.4 mg/L
pH: 7.59 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	81	1	143	225	810
Nematoda	unidentified	unidentified	unidentified	*unidentified*	1		17	18	65
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Branchiura sowerbyi* Beddard		1		1	4
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*	3	8	33	44	160
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella sp.*	2		9	11	39
Mollusca	Gastropoda	Mesogastropoda	Pleuroceridae	*Pleurocera acuta* Rafinesque	6	1	58	65	230
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	2	2	1	5	18
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)	1		1	2	7
Arthropoda	Malacostraca	Decapoda	Cambaridae	*Cambarus sp.*	1			1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	16		23	39	140
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	1			1	4
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*		1	9	10	36
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*			1	1	4
Arthropoda	Insecta	Odonata	Coenagrionidae	*Ischnura sp.*	5	3	32	40	140
Arthropoda	Insecta	Hemiptera	Corixidae	*unidentified*		1		1	4
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	3	1	2	6	22
Arthropoda	Insecta	Neuroptera	Sisyridae	*Climacia sp.*		1		1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*			3	3	11
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	1	4		5	18
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*			11	11	39
Arthropoda	Insecta	Diptera	Simuliidae	*Simulium sp.*			8	8	29
Arthropoda	Insecta	Diptera	Ceratopogonidae	*Bezzia/Probezzia complex*			8	8	29
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	1	7	171	179	640
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	3	1	3	7	25
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*	1		48	49	180
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	2	2	28	32	110
Arthropoda	Insecta	Diptera	Chironomidae	*Nanocladius sp.*			8	8	29
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	14	16	300	330	1,200
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*			10	10	36
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*		1	34	35	130
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*	63	39	1,438	1,540	5,500
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	16	45	186	247	890
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*			1	1	4
Totals					223	135	2,586	2,944	11,000
Number of Taxa					20	18	27	33	

Table 94. Benthic-invertebrate data for station 03353611 White River at Stout Generating Station at Indianapolis, IN

[sp., species]

Field identifier:	WRSTUP-19	Habitat:	gravel and some fines; pool	Specific conductance:	745 µs/cm at 25°C
Date:	July 16, 1996	Drainage area:	1,898 mi^2	Dissolved oxygen:	4.2 mg/L
Time:	0930	Water temperature:	24.4°C	pH:	7.56 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	16	34	10	60	220
Nematoda	unidentified	unidentified	unidentified	*unidentified*		4	1	5	18
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*	36	16	13	65	230
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella sp.*	13	16	24	53	190
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)		4		4	14
Mollusca	Pelecypoda	Veneroida	Sphaeriidae	*Musculium sp.*	1			1	4
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*			3	3	11
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*			2	2	7
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	1			1	4
Arthropoda	Insecta	Odonata	Coenagrionidae	*Ischnura sp.*			2	2	7
Arthropoda	Insecta	Hemiptera	Corixidae	*unidentified*	4			4	14
Arthropoda	Insecta	Coleoptera	Dytiscidae	*Agabus sp.*			1	1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*			1	1	4
Arthropoda	Insecta	Diptera	Simuliidae	*Simulium sp.*			1	1	4
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	44	173	71	288	1,000
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	12	30	23	65	230
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*		4		4	14
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*		1	6	7	25
Arthropoda	Insecta	Diptera	Chironomidae	*Nanocladius sp.*		4		4	14
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	70	166	149	385	1,400
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*	16	9	22	47	170
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*	281	632	843	1,756	6,300
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	84	119	71	274	980
Arthropoda	Insecta	Diptera	Chironomidae	*Tanytarsus sp.*			2	2	7
Totals					578	1,212	1,245	3,035	11,000
Number of Taxa					12	14	18	24	

Table 95. Benthic-invertebrate data for station 394234086120900 White River below Stout Generating Station at Indianapolis, IN

[sp., species]

Field identifier:	WRSTDN-20	Habitat:	cobble, with some gravel; riffle	Specific conductance:	842 µs/cm at 25°C
Date:	July 16, 1996	Drainage area:	1,899 mi^2	Dissolved oxygen:	6.7 mg/L
Time:	1045	Water temperature:	25.4°C	pH:	7.66 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	2	24	2	28	100
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Branchiura sowerbyi* Beddard		2	2	4	14
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*	33	146	2	181	650
Annelida	Oligochaeta	Haplotaxida	Naididae	*Nais bretscheri* Michaelsen	8			8	29
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella sp.*	6			6	22
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)		16		16	57
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)	2	4		6	22
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	2	34	32	68	240
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	4	32	24	60	220
Arthropoda	Insecta	Ephemeroptera	Oligoneuriidae	*Isonychia sp.*		2		2	7
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*	14	148	18	180	650
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*			2	2	7
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	5	2	2	9	32
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*	32	112	6	150	540
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*	14	24	20	58	210
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	250	644	156	1,050	3,800
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	11	78	120	209	750
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*			8	8	29
Arthropoda	Insecta	Diptera	Simuliidae	*Simulium sp.*	24	62	2	88	320
Arthropoda	Insecta	Diptera	Ceratopogonidae	*unidentified pupae*	2			2	7
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	50	168	132	350	1,300
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	113	104	74	291	1,000
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*		16		16	57
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	10	64	22	96	340
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	387	596	690	1,673	6,000
Arthropoda	Insecta	Diptera	Chironomidae	*Thienemanniella xena (Roback)*	8			8	29
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*			2	2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*		2		2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*	16		6	22	79
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*	97	468	208	773	2,800
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	233	698	246	1,177	4,200
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*	59	96	66	221	790
Totals					1,382	3,542	1,842	6,766	24,000
Number of Taxa					24	24	23	32	

Table 96. Benthic-invertebrate data for station 03351072 Williams Creek at 96th Street, Indianapolis, IN
[sp., species]

Field identifier:	WC96-12	Habitat:	cobble and gravel; riffle	Specific conductance:	773 µs/cm at 25°C
Date:	July 17, 1996	Drainage area:	17.0 mi^2	Dissolved oxygen:	4.7 mg/L
Time:	0800	Water temperature:	23.8°C	pH:	7.71 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	98	110	31	239	860
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Branchiura sowerbyi* Beddard	2			2	7
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*	21	8		29	100
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)		24	38	62	220
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)	1	14		15	54
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	4	6	9	19	68
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	13	26	11	50	180
Arthropoda	Insecta	Odonata	Coenagrionidae	*Ischnura sp.*	1			1	4
Arthropoda	Insecta	Coleoptera	Psephenidae	*Psephenus sp.*		4		4	14
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	4	34	22	60	220
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*	12	76	33	121	430
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*	3	10	4	17	61
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	91	232	159	482	1,700
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	15	56	12	83	300
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*	28	16	26	70	250
Arthropoda	Insecta	Diptera	Tipulidae	*Antocha sp.*			1	1	4
Arthropoda	Insecta	Diptera	Simuliidae	*Simulium sp.*	526	8		534	1,900
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	14	52	34	100	360
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	6	22	21	49	180
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	29	22	25	76	270
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	9	10	21	40	140
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*		2	1	3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*	1	6	4	11	39
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	453	274	205	932	3,300
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*	6	98	340	444	1,600
Totals					1,337	1,110	997	3,444	12,000
Number of Taxa					21	22	19	25	

Table 97. Benthic-invertebrate data for station 395259086001601 Fall Creek at 71st Street near Lawrence, IN
[sp., species]

Field identifier:	FC71-16	Habitat:	cobble and gravel; run	Specific conductance:	518 µs/cm at 25°C
Date:	July 17, 1996	Drainage area:	243 mi^2	Dissolved oxygen:	7.9 mg/L
Time:	1315	Water temperature:	26.4°C	pH:	7.97 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)			29	29	100
Nematoda	unidentified	unidentified	unidentified	*unidentified*		2		2	7
Mollusca	Gastropoda	Mesogastropoda	Pleuroceridae	*Pleurocera acuta* Rafinesque		8		8	29
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)			8	8	29
Mollusca	Gastropoda	Basommatophora	Planorbidae	*Gyraulus sp.*		8		8	29
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	1		18	19	68
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	1	1	8	10	36
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*	69	52	310	431	1,500
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*		1		1	4
Arthropoda	Insecta	Ephemeroptera	Potamanthidae	*Potamanthus sp.*		6		6	22
Arthropoda	Insecta	Coleoptera	Hydrophilidae	*unidentified*		1		1	4
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	5	73	12	90	320
Arthropoda	Insecta	Coleoptera	Elmidae	*Ancyronyx sp.*			8	8	29
Arthropoda	Insecta	Trichoptera	Psychomyiidae	*Psychomyia sp.*			16	16	57
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*	10	10	226	246	880
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*	4	1	26	31	110
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	51	15	566	632	2,300
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	1	1	274	276	990
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*			74	74	270
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*			20	20	72
Arthropoda	Insecta	Diptera	Tipulidae	*Limnophila sp.*		4		4	14
Arthropoda	Insecta	Diptera	Simuliidae	*Simulium sp.*	8			8	29
Arthropoda	Insecta	Diptera	Ceratopogonidae	*unidentified pupae*			24	24	86
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	10	4	32	46	170
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*		1		1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	5	20	24	49	180
Arthropoda	Insecta	Diptera	Chironomidae	*Nanocladius sp.*	5		32	37	130
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*		20	28	48	170
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*		4	8	12	43
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*			34	34	120
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*	2	11	20	33	120
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	32	18	374	424	1,500
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*	32	36	66	134	480
Arthropoda	Insecta	Diptera	Athericidae	*Atherix variegata* Walker	2	9	36	47	170
Totals					238	306	2,273	2,817	10,000
Number of Taxa					16	23	25	34	

Table 98. Benthic-invertebrate data for station 394851086181301 Eagle Creek at Dandy Trail Road near Clermont, IN

[sp., species]

Field identifier:	ECDAN-17	Habitat:	cobble and gravel; riffle	Specific conductance:	456 µs/cm at 25°C
Date:	July 15, 1996	Drainage area:	164 mi^2	Dissolved oxygen:	8.7 mg/L
Time:	1445	Water temperature:	23.5°C	pH:	7.91 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	4	53		57	200
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*	40	48	64	152	550
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)		3	4	7	25
Arthropoda	Malacostraca	Amphipoda	Crangonyctidae	*Crangonyx sp.*		1		1	4
Arthropoda	Malacostraca	Decapoda	Cambaridae	*Cambarus sp.*	2			2	7
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	4			4	14
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	2		16	18	65
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	4	10		14	50
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	2			2	7
Arthropoda	Insecta	Trichoptera	Psychomyiidae	*Psychomyia sp.*			4	4	14
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*	46	51	200	297	1,100
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*	2	21	48	71	250
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	188	117	836	1,141	4,100
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	78	37	596	711	2,600
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*		16		16	57
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*	8			8	29
Arthropoda	Insecta	Diptera	Simuliidae	*Simulium sp.*	532	214	892	1,638	5,900
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	154	703	384	1,241	4,500
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	144	178	72	394	1,400
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*	8	32		40	140
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	14	54		68	240
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	1,060	1,287	1,360	3,707	13,000
Arthropoda	Insecta	Diptera	Chironomidae	*Thienemanniella xena (Roback)*	88	96	32	216	780
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*		8		8	29
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*	2	2		4	14
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*	10	25		35	130
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*	12	102	36	150	540
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	2,420	2,292	3,268	7,980	29,000
Arthropoda	Insecta	Diptera	Chironomidae	*Tribelos sp.*		4		4	14
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*	46	137	72	255	910
Arthropoda	Insecta	Diptera	Athericidae	*Atherix variegata* Walker	4		8	12	43
Totals					4,874	5,491	7,892	18,257	66,000
Number of Taxa					25	24	17	31	

Table 99. Benthic-invertebrate data for station 394613086114700 Eagle Creek at Raymond Street at Indianapolis, IN
[sp., species]

Field identifier:	ECRAY-11	Habitat:	cobble and gravel; run	Specific conductance:	752 µs/cm at 25°C
Date:	July 15, 1996	Drainage area:	209 mi^2	Dissolved oxygen:	11.2 mg/L
Time:	1300	Water temperature:	24.9°C	pH:	8.11 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*		41	8	49	180
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella sp.*		5		5	18
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	13	22	34	69	250
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)	4		5	9	32
Arthropoda	Malacostraca	Amphipoda	Crangonyctidae	*Crangonyx sp.*	1			1	4
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*	7	26	13	46	170
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*			1	1	4
Arthropoda	Insecta	Odonata	Coenagrionidae	*Ischnura sp.*	1			1	4
Arthropoda	Insecta	Coleoptera	Dytiscidae	*Agabus sp.*			1	1	4
Arthropoda	Insecta	Coleoptera	Hydrophilidae	*Berosus sp.*	4			4	14
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	1		1	2	7
Arthropoda	Insecta	Trichoptera	Psychomyiidae	*Psychomyia sp.*	4			4	14
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*	4		4	8	29
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*	10		2	12	43
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	11	1	77	89	320
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*			4	4	14
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*	11		8	19	68
Arthropoda	Insecta	Diptera	Simuliidae	*Simulium sp.*	1		41	42	150
Arthropoda	Insecta	Diptera	Ceratopogonidae	*unidentified pupae*			4	4	14
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	97	63	65	225	810
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	113	69	135	317	1,100
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	41	60	39	140	500
Arthropoda	Insecta	Diptera	Chironomidae	*Nanocladius sp.*	4			4	14
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	790	297	1,272	2,359	8,500
Arthropoda	Insecta	Diptera	Chironomidae	*Thienemanniella xena (Roback)*			16	16	57
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*	11	1	1	13	47
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*		8		8	29
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*	56	105	29	190	680
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*	41	24	44	109	390
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	167	78	116	361	1,300
Arthropoda	Insecta	Diptera	Chironomidae	*Tribelos sp.*		16		16	57
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*	50	42	89	181	650
Arthropoda	Insecta	Diptera	Chironomidae	*Tanytarsus sp.*		8		8	29
Totals					1,442	866	2,009	4,317	15,000
Number of Taxa					23	17	24	33	

Table 100. Benthic-invertebrate data for station 394721086031001 Pleasant Run at East 16th Street at Indianapolis, IN
[sp., species]

Field identifier:	PLR16-13	Habitat:	cobble and gravel; riffle	Specific conductance:	607 µs/cm at 25°C
Date:	July 17, 1996	Drainage area:	4.00 mi^2	Dissolved oxygen:	8.1 mg/L
Time:	1445	Water temperature:	24.2°C	pH:	7.78 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	71	88	97	256	920
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*	1	5	1	7	25
Mollusca	Gastropoda	Mesogastropoda	Pleuroceridae	*Pleurocera acuta* Rafinesque		1	1	2	7
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	3	1		4	14
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)		1		1	4
Arthropoda	Malacostraca	Decapoda	Cambaridae	*Cambarus sp.*		1		1	4
Arthropoda	Insecta	Collembola	Isotomidae	*Isotomurus palustris* (Mueller)	1			1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	2	5	4	11	39
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	11	22	13	46	170
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*			1	1	4
Arthropoda	Insecta	Hemiptera	Saldidae	*Salda sp.*	2			2	7
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson		1		1	4
Arthropoda	Insecta	Neuroptera	Sisyridae	*Climacia areolaris* (Hagen)	5			5	18
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*	56	27		83	300
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*	2	9		11	39
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	2	13	11	26	93
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	1	16	3	20	72
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*	7	15	2	24	86
Arthropoda	Insecta	Diptera	Tipulidae	*Tipula sp.*		1		1	4
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	17	29	1	47	170
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*		2		2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	60	64	6	130	470
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	186	71	8	265	950
Arthropoda	Insecta	Diptera	Chironomidae	*Thienemanniella xena (Roback)*	4	4	6	14	50
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*		3		3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*	40	10		50	180
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	22	40	21	83	300
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*	3	1	2	6	22
Arthropoda	Insecta	Diptera	Chironomidae	*Tanytarsus sp.*			1	1	4
Arthropoda	Insecta	Diptera	Athericidae	*Atherix variegata* Walker		2	1	3	11
Arthropoda	Insecta	Diptera	Dolichopodidae	*unidentified larvae*		1		1	4
Totals					496	433	179	1,108	4,000
Number of Taxa					20	26	17	31	

Table 101. Benthic-invertebrate data for station 394358086092100 Pleasant Run near South Meridian Street at Indianapolis, IN
[sp., species]

Field identifier:	PLRMER-7	Habitat:	gravel and cobble; riffle	Specific conductance:	462 µs/cm at 25°C
Date:	July 15, 1996	Drainage area:	20.8 mi^2	Dissolved oxygen:	7.9 mg/L
Time:	1215	Water temperature:	23.5°C	pH:	7.82 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Nematoda	unidentified	unidentified	unidentified	*unidentified*		4		4	14
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*	16	4	1	21	75
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella sp.*	4			4	14
Mollusca	Gastropoda	Mesogastropoda	Pleuroceridae	*Pleurocera acuta* Rafinesque	1			1	4
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*	4			4	14
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*	8			8	29
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	6			6	22
Arthropoda	Insecta	Diptera	Tipulidae	*Limonia sp.*	8			8	29
Arthropoda	Insecta	Diptera	Psychodidae	*Psychoda sp.*	2			2	7
Arthropoda	Insecta	Diptera	Simuliidae	*Simulium sp.*	2			2	7
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	6	6		12	43
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*		2	1	3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	16	1		17	61
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	392	25	5	422	1,500
Arthropoda	Insecta	Diptera	Chironomidae	*Thienemanniella xena (Roback)*	8			8	29
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*	2	2		4	14
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*		12	4	16	57
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*	16	20	1	37	130
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*	2			2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	23	9		32	110
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*		1		1	4
Totals					516	86	12	614	2,200
Number of Taxa					17	11	6	21	

Table 102. Benthic-invertebrate data for station 394349086080001 Bean Creek at Southern Avenue at Indianapolis, IN

[sp., species]

Field identifier:	BCSOU-15	Habitat:	gravel and cobble; riffle	Specific conductance:	424 µs/cm at 25°C
Date:	July 15, 1996	Drainage area:	5.00 mi^2	Dissolved oxygen:	7.7 mg/L
Time:	0900	Water temperature:	20.9°C	pH:	7.79 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)		1		1	4
Nematoda	unidentified	unidentified	unidentified	*unidentified*			2	2	7
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*			4	4	14
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella sp.*	34	20	5	59	210
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)		1	18	19	68
Arthropoda	Malacostraca	Decapoda	Cambaridae	*Cambarus sp.*		1		1	4
Arthropoda	Insecta	Collembola	Isotomidae	*Isotomurus palustris* (Mueller)			2	2	7
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*			2	2	7
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*		4	1	5	18
Arthropoda	Insecta	Hemiptera	Corixidae	*unidentified*			2	2	7
Arthropoda	Insecta	Coleoptera	Dytiscidae	*Agabus sp.*		1		1	4
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	1	1		2	7
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*		1	2	3	11
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*			4	4	14
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*		8	9	17	61
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	1	8		9	32
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*			3	3	11
Arthropoda	Insecta	Diptera	Tipulidae	*Limnophila sp.*		1		1	4
Arthropoda	Insecta	Diptera	Simuliidae	*Simulium sp.*		1	5	6	22
Arthropoda	Insecta	Diptera	Ceratopogonidae	*unidentified pupae*	1		2	3	11
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	11	1	12	24	86
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	1	3	3	7	25
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	10	37	15	62	220
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	36	37	70	143	510
Arthropoda	Insecta	Diptera	Chironomidae	*Thienemanniella xena (Roback)*	4			4	14
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*			1	1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*	1	1		2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*		2		2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*	1		3	4	14
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)		5	7	12	43
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*		3	2	5	18
Arthropoda	Insecta	Diptera	Athericidae	*Atherix variegata* Walker			1	1	4
Totals					101	137	175	413	1,500
Number of Taxa					11	20	23	32	

Table 103. Benthic-invertebrate data for station 394358086083901 Bean Creek at Garfield Park at Indianapolis, IN
[sp., species]

Field identifier: BCGARF-9
Date: July 15, 1996
Time: 1030

Habitat: cobble and gravel; run
Drainage area: 5.30 mi^2
Water temperature: 21.0°C

Specific conductance: 542 µs/cm at 25°C
Dissolved oxygen: 8.3 mg/L
pH: 8.01 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Nematoda	unidentified	unidentified	unidentified	*unidentified*	2	4	4	10	36
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*	9	11	28	48	170
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella sp.*	1	2		3	11
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	2	2		4	14
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)	1	2		3	11
Arthropoda	Malacostraca	Decapoda	Cambaridae	*Cambarus sp.*	1	1	2	4	14
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	3		12	15	54
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	45	35	15	95	340
Arthropoda	Insecta	Hemiptera	Saldidae	*Salda sp.*		1		1	4
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	1			1	4
Arthropoda	Insecta	Megaloptera	Corydalidae	*unidentified*		1		1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*	3	2	22	27	97
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*			1	1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	23	22	28	73	260
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	16	14	20	50	180
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*	2	2	8	12	43
Arthropoda	Insecta	Diptera	Tipulidae	*Tipula sp.*	1			1	4
Arthropoda	Insecta	Diptera	Tipulidae	*Limonia sp.*			5	5	18
Arthropoda	Insecta	Diptera	Psychodidae	*Psychoda sp.*			4	4	14
Arthropoda	Insecta	Diptera	Simuliidae	*Simulium sp.*	2	4	26	32	110
Arthropoda	Insecta	Diptera	Ceratopogonidae	*unidentified pupae*		10	4	14	50
Arthropoda	Insecta	Diptera	Ceratopogonidae	*Bezzia/Probezzia complex*		4		4	14
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	10	6	26	42	150
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	12	10	13	35	130
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*	10			10	36
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	84	38	27	149	530
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	95	99	301	495	1,800
Arthropoda	Insecta	Diptera	Chironomidae	*Thienemanniella xena (Roback)*	10	8	32	50	180
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*	2			2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*	9	3	2	14	50
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*			2	2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*	3			3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	34	20	53	107	380
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*		1	1	2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Tanytarsus sp.*	2	2		4	14
Arthropoda	Insecta	Diptera	Athericidae	*Atherix variegata* Walker	10	6	24	40	140
Arthropoda	Insecta	Diptera	Dolichopodidae	*unidentified larvae*		1	5	6	22
Totals					393	311	665	1,369	4,900
Number of Taxa					27	27	25	37	

Table 104. Benthic-invertebrate data for station 394746086055601 Pogues Run at East 21st Street at Indianapolis, IN
[sp., species]

Field identifier:	POR21-14	Habitat:	cobble and gravel; riffle	Specific conductance:	637 µs/cm at 25°C
Date:	July 16, 1996	Drainage area:	4.40 mi^2	Dissolved oxygen:	8.4 mg/L
Time:	1430	Water temperature:	23.6°C	pH:	7.92 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	1	8		9	32
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*	2	12	1	15	54
Annelida	Oligochaeta	Haplotaxida	Naididae	*Nais bretscheri* Michaelsen		1		1	4
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella sp.*		2		2	7
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	61	30	17	108	390
Mollusca	Gastropoda	Basommatophora	Physidae	*Physella sp.*	1			1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	4	3	4	11	39
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	2	8	1	11	39
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*			1	1	4
Arthropoda	Insecta	Hemiptera	Saldidae	*Salda sp.*		4		4	14
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	1	8		9	32
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*	1			1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*	2	6		8	29
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	11		2	13	47
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	6		1	7	25
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*	2		1	3	11
Arthropoda	Insecta	Diptera	Tipulidae	*Limonia sp.*	1			1	4
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	4	8	1	13	47
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	2	2		4	14
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	3	40		43	150
Arthropoda	Insecta	Diptera	Chironomidae	*Nanocladius sp.*			1	1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	23	32	18	73	260
Arthropoda	Insecta	Diptera	Chironomidae	*Thienemanniella xena (Roback)*	14	60	7	81	290
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*		1	1	2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*	1		1	2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*	1	9		10	36
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	4	28	3	35	130
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*	2	8	5	15	54
Totals					149	270	65	484	1,700
Number of Taxa					22	19	16	28	

Table 105. Benthic-invertebrate data for station 03352990 Pogues Run at Vermont Street, Indianapolis, IN
[sp., species]

Field identifier:	PORVER-8	Habitat:	cobble and gravel; run	Specific conductance:	667 µs/cm at 25°C
Date:	July 16, 1996	Drainage area:	8.87 mi^2	Dissolved oxygen:	10.1 mg/L
Time:	1330	Water temperature:	24.7°C	pH:	8.23 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*	33	1	3	37	130
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella sp.*	4		1	5	18
Mollusca	Gastropoda	Mesogastropoda	Pleuroceridae	*Pleurocera acuta* Rafinesque	64	32		96	340
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	125	81		206	740
Mollusca	Gastropoda	Basommatophora	Physidae	*Physella sp.*	29	7	28	64	230
Arthropoda	Insecta	Trichoptera	Psychomyiidae	*unidentified*		1		1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*	24		4	28	100
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*		2		2	7
Arthropoda	Insecta	Diptera	Psychodidae	*Psychoda sp.*			1	1	4
Arthropoda	Insecta	Diptera	Simuliidae	*Simulium sp.*	8	16	2	26	93
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	26	23		49	180
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	31	22	2	55	200
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	50	20	9	79	280
Arthropoda	Insecta	Diptera	Chironomidae	*Nanocladius sp.*		1		1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	290	303	39	632	2,300
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*	4		1	5	18
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*	9	2	5	16	57
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*	1	16	3	20	72
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	48	67	10	125	450
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*	19	3	4	26	93
Arthropoda	Insecta	Diptera	Dolichopodidae	*unidentified*			1	1	4
Totals					765	597	113	1,475	5,300
Number of Taxa					16	16	15	21	

Table 106. Benthic-invertebrate data for station 400001086012301 White River at 146th Street near Noblesville, IN

[sp., species]

Field identifier: WR146-0
Date: September 11, 1996
Time: 1000

Habitat: gravel and cobble; run
Drainage area: 1,147 mi^2
Water temperature: 24.5°C

Specific conductance: 1046 µs/cm at 25°C
Dissolved oxygen: 5.9 mg/L
pH: 8.02 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	2	50	30	82	290
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)		1	2	3	11
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	1	16	24	41	150
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	1	3	34	38	140
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*	15	290	242	547	2,000
Arthropoda	Insecta	Ephemeroptera	Potamanthidae	*Potamanthus sp.*	8	64	13	85	300
Arthropoda	Insecta	Odonata	Coenagrionidae	*Argia sp.*		1		1	4
Arthropoda	Insecta	Hemiptera	Corixidae	*unidentified*	1	2		3	11
Arthropoda	Insecta	Hemiptera	Saldidae	*Salda sp.*			8	8	29
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	3	54	43	100	360
Arthropoda	Insecta	Megaloptera	Corydalidae	*Corydalus cornutus* (Linnaeus)			1	1	4
Arthropoda	Insecta	Neuroptera	Sisyridae	*unidentified*		1		1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*		48	48	96	340
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*	2	16	6	24	86
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	7	54	228	289	1,000
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	1	8	33	42	150
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*			32	32	110
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*	2	51	130	183	660
Arthropoda	Insecta	Diptera	Ceratopogonidae	*unidentified pupae*			1	1	4
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	7	229	75	311	1,100
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	7		38	45	160
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	7	74	124	205	740
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	1	16	9	26	93
Arthropoda	Insecta	Diptera	Chironomidae	*Thienemanniella xena (Roback)*	1			1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*	1			1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*	19			19	68
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*	187	101	78	366	1,300
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	6	117	69	192	690
Arthropoda	Insecta	Diptera	Chironomidae	*Tribelos sp.*		34		34	120
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*	2	693	259	954	3,400
Arthropoda	Insecta	Diptera	Athericidae	*Atherix variegata* Walker		16	3	19	68
Totals					281	1,939	1,530	3,750	13,000
Number of Taxa					21	23	24	31	

Table 107. Benthic-invertebrate data for station 03351000 White River near Nora, IN (82nd Street)
[sp., species]

Field identifier:	WRNORA-1	Habitat:	cobble and gravel; riffle	Specific conductance:	1066 µs/cm at 25°C
Date:	September 11, 1996	Drainage area:	1,219 mi^2	Dissolved oxygen:	5.6 mg/L
Time:	0830	Water temperature:	22.7°C	pH:	7.83 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	9	4	14	27	97
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella sp.*			1	1	4
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)			2	2	7
Mollusca	Pelecypoda	Veneroida	Sphaeriidae	*Musculium sp.*	3	1	5	9	32
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	3	5	12	20	72
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	15	36	20	71	250
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*	10	5	28	43	150
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*			1	1	4
Arthropoda	Insecta	Odonata	Coenagrionidae	*Argia sp.*			1	1	4
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	14	9	83	106	380
Arthropoda	Insecta	Coleoptera	Elmidae	*Neocylloepus sp.*	1			1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*	3	8	2	13	47
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*	24	12	16	52	190
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	160	122	126	408	1,500
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	76	116	27	219	790
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*	25	13	15	53	190
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	1			1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	2	2	5	9	32
Arthropoda	Insecta	Diptera	Chironomidae	*Nanocladius sp.*		1		1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	1		2	3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*			1	1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*	2	1		3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	3	4	12	19	68
Arthropoda	Insecta	Diptera	Chironomidae	*Tribelos sp.*			1	1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*	4	5	1	10	36
Totals					356	344	375	1,075	3,900
Number of Taxa					18	16	21	25	

Table 108. Benthic-invertebrate data for station 03353000 White River at Indianapolis, IN (Morris Street)
[sp., species]

Field identifier:	WRINDY-2	Habitat:	gravel and cobble, with some fines and sand; run	Specific conductance:	913 µs/cm at 25°C
Date:	September 11, 1996	Drainage area:	1,635 mi^2	Dissolved oxygen:	11.2 mg/L
Time:	1430	Water temperature:	25.6°C	pH:	7.99 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	206	43	141	390	1,400
Nematoda	unidentified	unidentified	unidentified	*unidentified*		3		3	11
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*		3		3	11
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella sp.*	2		1	3	11
Mollusca	Gastropoda	Mesogastropoda	Pleuroceridae	*Pleurocera acuta* Rafinesque		27	7	34	120
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	2	1		3	11
Mollusca	Pelecypoda	Veneroida	Sphaeriidae	*Musculium sp.*		2		2	7
Arthropoda	Insecta	Ephemeroptera	Potamanthidae	*Potamanthus sp.*			1	1	4
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	2	1	1	4	14
Arthropoda	Insecta	Coleoptera	Elmidae	*Ancyronyx sp.*		1		1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*			1	1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	6			6	22
Arthropoda	Insecta	Trichoptera	Polycentropodidae	*Polycentropus sp.*	6	4	2	12	43
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	58	132	19	209	750
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	6	15	9	30	110
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*	4	4	3	11	39
Arthropoda	Insecta	Diptera	Chironomidae	*Nanocladius sp.*	4	3		7	25
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*			1	1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*	40	42	22	104	370
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*	452	695	196	1,343	4,800
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*		2		2	7
Totals					788	978	404	2,170	7,800
Number of Taxa					12	16	13	21	

Table 109. Benthic-invertebrate data for station 03353193 White River at Harding Street, Indianapolis, IN
[sp., species]

Field identifier:	WRHARD-3	Habitat:	cobble and gravel, with some fines; pool	Specific conductance:	914 µs/cm at 25°C
Date:	September 11, 1996	Drainage area:	1,660 mi^2	Dissolved oxygen:	7.5 mg/L
Time:	1115	Water temperature:	24.2°C	pH:	7.74 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	36	2	21	59	210
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*		5		5	18
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella sp.*	1	7	7	15	54
Mollusca	Gastropoda	Mesogastropoda	Pleuroceridae	*Pleurocera acuta* Rafinesque			1	1	4
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	5	5	9	19	68
Mollusca	Gastropoda	Basommatophora	Physidae	*Physella sp.*			2	2	7
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*		1		1	4
Arthropoda	Insecta	Odonata	Coenagrionidae	*Ischnura sp.*		2	3	5	18
Arthropoda	Insecta	Megaloptera	Corydalidae	*Corydalus cornutus* (Linnaeus)	1			1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*		1		1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*			4	4	14
Arthropoda	Insecta	Trichoptera	Polycentropodidae	*Polycentropus sp.*			1	1	4
Arthropoda	Insecta	Lepidoptera	Noctuidae	*Bellura sp.*	1			1	4
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*			4	4	14
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	21	29	20	70	250
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	5	2	4	11	39
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*	7	8	9	24	86
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*			2	2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	2	3	1	6	22
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*	4	8	2	14	50
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*	251	286	217	754	2,700
Arthropoda	Insecta	Diptera	Chironomidae	*Parachironomos sp.*		2	4	6	22
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)		2	18	20	72
Arthropoda	Insecta	Diptera	Chironomidae	*Tanytarsus sp.*		1		1	4
Totals					334	364	329	1,027	3,700
Number of Taxa					11	16	18	24	

Table 110. Benthic-invertebrate data for station 03353611 White River at Stout Generating Station at Indianapolis, IN

[sp., species]

Field identifier: WRSTUP-19
Date: September 12, 1996
Time: 1445

Habitat: gravel and some fines; pool
Drainage area: 1,898 mi^2
Water temperature: 25.8°C

Specific conductance: 1049 µs/cm at 25°C
Dissolved oxygen: 10.0 mg/L
pH: 7.33 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)		26	5	31	110
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*	1	31	5	37	130
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella sp.*	5	20	7	32	110
Mollusca	Gastropoda	Basommatophora	Planorbidae	*unidentified*		2		2	7
Mollusca	Gastropoda	Basommatophora	Physidae	*Physella sp.*		2		2	7
Arthropoda	Insecta	Collembola	Isotomidae	*Isotomurus palustris* (Mueller)		4		4	14
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	2	5		7	25
Arthropoda	Insecta	Odonata	Coenagrionidae	*Ischnura sp.*		1		1	4
Arthropoda	Insecta	Hemiptera	Saldidae	*Salda sp.*		1		1	4
Arthropoda	Insecta	Coleoptera	Hydrophilidae	*Berosus sp.*	5	11	2	18	65
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*		1		1	4
Arthropoda	Insecta	Diptera	Simuliidae	*Simulium sp.*	1			1	4
Arthropoda	Insecta	Diptera	Ceratopogonidae	*Bezzia/Probezzia complex*		2		2	7
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	4	92	8	104	370
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	5	15	9	29	100
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	4	9	2	15	54
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*		19	4	23	83
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*	4	4	3	11	39
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*	96	477	87	660	2,400
Arthropoda	Insecta	Diptera	Chironomidae	*Parachironomos sp.*		2		2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	1	20	11	32	110
Arthropoda	Insecta	Diptera	Dolichopodidae	*unidentified*		1		1	4
Totals					128	745	143	1,016	3,600
Number of Taxa					11	21	11	22	

Table 111. Benthic-invertebrate data for station 394234086120900 White River below Stout Generating Station at Indianapolis, IN

[sp., species]

Field identifier: WRSTDN-20
Date: September 12, 1996
Time: 1315

Habitat: cobble, with some gravel; riffle
Drainage area: 1,899 mi^2
Water temperature: 25.7°C

Specific conductance: 1250 µs/cm at 25°C
Dissolved oxygen: 7.5 mg/L
pH: 7.19 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	352	248	528	1,128	4,000
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Branchiura sowerbyi* Beddard	40	32		72	260
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*	176	360	272	808	2,900
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella sp.*	8	1		9	32
Mollusca	Gastropoda	Mesogastropoda	Pleuroceridae	*Pleurocera acuta* Rafinesque	8	2		10	36
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	168	24		192	690
Mollusca	Pelecypoda	unidentified	unidentified	*unidentified*	8		16	24	86
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*		8		8	29
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*		8	40	48	170
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*	8	8		16	57
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	8	16	24	48	170
Arthropoda	Insecta	Coleoptera	Elmidae	*Ancyronyx sp.*			8	8	29
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*	16	256	408	680	2,400
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*	152	344	816	1,312	4,700
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	248	1,264	3,416	4,928	18,000
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	56	232	632	920	3,300
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*	32	16	40	88	320
Arthropoda	Insecta	Diptera	Simuliidae	*Simulium sp.*			8	8	29
Arthropoda	Insecta	Diptera	Ceratopogonidae	*Bezzia/Probezzia complex*			8	8	29
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	152	648	752	1,552	5,600
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	352	264	456	1,072	3,800
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	144	232	192	568	2,000
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	966	1,968	3,272	6,206	22,000
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*		8		8	29
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*		8		8	29
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*		8		8	29
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*	3,024	1,272	1,920	6,216	22,000
Arthropoda	Insecta	Diptera	Chironomidae	*Parachironomos sp.*		8		8	29
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	1,208	4,152	8,816	14,176	51,000
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*		16	32	48	170
Arthropoda	Insecta	Diptera	Chironomidae	*Tanytarsus sp.*		8		8	29
Arthropoda	Insecta	Diptera	Athericidae	*Atherix variegata* Walker	8	16	16	40	140
Totals					7,134	11,427	21,672	40,233	140,000
Number of Taxa					21	28	21	32	

Table 112. Benthic-invertebrate data for station 394019086134601 White River at Tibbs-Banta Landfill near Southport, IN

[sp., species]

Field identifier:	WRTBLF-4	Habitat:	cobble and gravel; riffle	Specific conductance:	1259 µs/cm at 25°C
Date:	September 12, 1996	Drainage area:	1,920 mi^2	Dissolved oxygen:	5.6 mg/L
Time:	1100	Water temperature:	24.6°C	pH:	7.23 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	2		17	19	68
Nematoda	unidentified	unidentified	unidentified	*unidentified*		2		2	7
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Branchiura sowerbyi* Beddard		3		3	11
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*		5	1	6	22
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella sp.*	1			1	4
Mollusca	Gastropoda	Mesogastropoda	Pleuroceridae	*Pleurocera acuta* Rafinesque		1	4	5	18
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)		1		1	4
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	45	38	18	101	360
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*	3	5	3	11	39
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	1			1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*			4	4	14
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*			26	26	93
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	46	116	184	346	1,200
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	1	18	34	53	190
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*	1			1	4
Arthropoda	Insecta	Diptera	Simuliidae	*Simulium sp.*			1	1	4
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	2	5	5	12	43
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	7	4	6	17	61
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*	3	1	2	6	22
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	16	23	26	65	230
Arthropoda	Insecta	Diptera	Chironomidae	*Nanocladius sp.*		1		1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	17	4	6	27	97
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*	1	1	2	4	14
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*			7	7	25
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*	23	24	23	70	250
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	79	77	190	346	1,200
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*	4	1	4	9	32
Arthropoda	Insecta	Diptera	Athericidae	*Atherix variegata* Walker			1	1	4
Totals					252	330	564	1,146	4,100
Number of Taxa					17	19	21	28	

Table 113. Benthic-invertebrate data for station 393827086141701 White River at Wicker Road near Southport, IN

[sp., species]

Field identifier:	WRWICK-5	Habitat:	gravel and cobble; run	Specific conductance:	1540 µs/cm at 25°C
Date:	September 13, 1996	Drainage area:	1,947 mi^2	Dissolved oxygen:	5.9 mg/L
Time:	0845	Water temperature:	21.8°C	pH:	7.44 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)			1	1	4
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella sp.*			1	1	4
Mollusca	Gastropoda	Mesogastropoda	Pleuroceridae	*Pleurocera acuta* Rafinesque	4	2	3	9	32
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	1		1	2	7
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)			1	1	4
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*		1		1	4
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*	1	6	2	9	32
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*		2	1	3	11
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*	1	4		5	18
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	2	10	13	25	90
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	4	14	24	42	150
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	1	2	5	8	29
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	2	2		4	14
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*	2	1	4	7	25
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	4	4	13	21	75
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	16	13	18	47	170
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*		1		1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*		3	3	6	22
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*	16	4		20	72
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*	11	14	13	38	140
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	14	24	31	69	250
Arthropoda	Insecta	Diptera	Chironomidae	*Tribelos sp.*			1	1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*			4	4	14
Totals					79	107	139	325	1,200
Number of Taxa					14	17	18	23	

Table 114. Benthic-invertebrate data for station 393402086152000 White River near Waverly, IN (State Road 144)
[sp., species]

Field identifier:	WRWAVE-6	Habitat:	cobble and gravel; riffle	Specific conductance:	1406 µs/cm at 25°C
Date:	September 13, 1996	Drainage area:	2,026 mi^2	Dissolved oxygen:	7.3 mg/L
Time:	1000	Water temperature:	21.9°C	pH:	7.58 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*	2	1	1	4	14
Mollusca	Gastropoda	Mesogastropoda	Pleuroceridae	*Pleurocera acuta* Rafinesque			1	1	4
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)			1	1	4
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	4	19	37	60	220
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*	2	5	5	12	43
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	2		3	5	18
Arthropoda	Insecta	Megaloptera	Corydalidae	*unidentified*			1	1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*	20	2	32	54	190
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*	4	1	7	12	43
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	490	348	1,308	2,146	7,700
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	120	96	384	600	2,200
Arthropoda	Insecta	Diptera	Simuliidae	*Simulium sp.*	8	5	14	27	97
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	4	2	5	11	39
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*			2	2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	10	14	24	48	170
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*		2	5	7	25
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*			1	1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*		2	3	5	18
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	10	23	118	151	540
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*	4	13	122	139	500
Arthropoda	Insecta	Diptera	Athericidae	*Atherix variegata* Walker			1	1	4
Totals					680	533	2,075	3,288	12,000
Number of Taxa					13	14	21	21	

Table 115. Benthic-invertebrate data for station 393402086152000 White River near Waverly, IN (State Road 144)
[sp., species]

Field identifier:	WRWAVE-6	Habitat:	cobble and gravel; riffle	Specific conductance:	1406 µs/cm at 25°C
Date:	September 13, 1996	Drainage area:	2,026 mi^2	Dissolved oxygen:	7.3 mg/L
Time:	1030	Water temperature:	21.9°C	pH:	7.58 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*			1	1	4
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)			1	1	4
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	90	88	6	184	660
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*	6	8	2	16	57
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson		6	1	7	25
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*	18	14	17	49	180
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*	12	4	6	22	79
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	686	578	419	1,683	6,000
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	282	114	178	574	2,100
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*			1	1	4
Arthropoda	Insecta	Diptera	Simuliidae	*Simulium sp.*	22	4	8	34	120
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*		14	4	18	65
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	2		1	3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	22	54	10	86	310
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*		2	1	3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*		4		4	14
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*	4	4	2	10	36
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	50	70	30	150	540
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*	74	50	5	129	460
Totals					1,268	1,014	693	2,975	11,000
Number of Taxa					12	15	18	19	

Table 116. Benthic-invertebrate data for station 03351072 Williams Creek at 96th Street, Indianapolis, IN

[sp., species]

Field identifier:	WC96-12	Habitat:	cobble and gravel; riffle	Specific conductance:	754 µs/cm at 25°C
Date:	September 9, 1996	Drainage area:	17.0 mi^2	Dissolved oxygen:	6.8 mg/L
Time:	1445	Water temperature:	24.4°C	pH:	7.77 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	71	99	103	273	980
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*		5	1	6	22
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Glossiphonia sp.*		1		1	4
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	1	2		3	11
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)	9	21	56	86	310
Mollusca	Pelecypoda	Veneroida	Sphaeriidae	*Musculium sp.*	1	5	20	26	93
Arthropoda	Malacostraca	Isopoda	Asellidae	*Lirceus sp.*		1		1	4
Arthropoda	Malacostraca	Decapoda	Cambaridae	*Cambarus sp.*		1		1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	1	4		5	18
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*			1	1	4
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*	1			1	4
Arthropoda	Insecta	Odonata	Calopterygidae	*Calopteryx sp.*		2		2	7
Arthropoda	Insecta	Odonata	Coenagrionidae	*Ischnura sp.*	1	1		2	7
Arthropoda	Insecta	Hemiptera	Saldidae	*Salda sp.*			1	1	4
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	1	34	39	74	270
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*			2	2	7
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*			30	30	110
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	1	4	42	47	170
Arthropoda	Insecta	Diptera	Tipulidae	*Tipula sp.*		1	4	5	18
Arthropoda	Insecta	Diptera	Simuliidae	*Simulium sp.*		1		1	4
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*		2		2	7
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*		1		1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*		1		1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	6	7	8	21	75
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*			1	1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*		1		1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*	4	2		6	22
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*	1	1		2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Paratendipes sp.*		3		3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)		14	36	50	180
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*	2	4		6	22
Arthropoda	Insecta	Diptera	Chironomidae	*Tanytarsus sp.*	1	1		2	7
Totals					101	219	344	664	2,400
Number of Taxa					14	26	14	32	

Table 117. Benthic-invertebrate data for station 395259086001601 Fall Creek at 71st Street near Lawrence, IN
[sp., species]

Field identifier: FC71-16
Date: September 11, 1996
Time: 1300

Habitat: cobble and gravel; run
Drainage area: 243 mi^2
Water temperature: 24.4°C

Specific conductance: 458 µs/cm at 25°C
Dissolved oxygen: 8.1 mg/L
pH: 8.00 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	5	4	6	15	54
Nematoda	unidentified	unidentified	unidentified	*unidentified*		1	1	2	7
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Branchiura sowerbyi* Beddard		1	4	5	18
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*	1	2		3	11
Arthropoda	Malacostraca	Isopoda	Asellidae	*Lirceus sp.*	1			1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	18	5	15	38	140
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	3	1	3	7	25
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*	25	16	43	84	300
Arthropoda	Insecta	Ephemeroptera	Caenidae	*Caenis sp.*		2		2	7
Arthropoda	Insecta	Ephemeroptera	Potamanthidae	*Potamanthus sp.*	1	3	10	14	50
Arthropoda	Insecta	Odonata	Coenagrionidae	*Ischnura sp.*		2	4	6	22
Arthropoda	Insecta	Odonata	Coenagrionidae	*Argia sp.*	1	2	1	4	14
Arthropoda	Insecta	Hemiptera	Saldidae	*Salda sp.*	2			2	7
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson		3	10	13	47
Arthropoda	Insecta	Megaloptera	Corydalidae	*Corydalus cornutus* (Linnaeus)		1		1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*		1		1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	9	2	4	15	54
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*		1		1	4
Arthropoda	Insecta	Trichoptera	Polycentropodidae	*Polycentropus sp.*	2		1	3	11
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*	2	2	4	8	29
Arthropoda	Insecta	Diptera	unidentified	*undentified*			1	1	4
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	5	5	3	13	47
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*		4	2	6	22
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	4	2	4	10	36
Arthropoda	Insecta	Diptera	Chironomidae	*Nanocladius sp.*	3	1		4	14
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	1		1	2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*		1	1	2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*	10	3	6	19	68
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*	50	8	18	76	270
Arthropoda	Insecta	Diptera	Chironomidae	*Parachironomos sp.*	1	2	1	4	14
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	2		3	5	18
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*	4		1	5	18
Arthropoda	Insecta	Diptera	Chironomidae	*Tanytarsus sp.*	1	1		2	7
Arthropoda	Insecta	Diptera	Stratiomyidae	*unidentified*		1		1	4
Arthropoda	Insecta	Diptera	Athericidae	*Atherix variegata* Walker	2			2	7
Totals					153	77	147	377	1,400
Number of Taxa					23	27	24	35	

Table 118. Benthic-invertebrate data for station 03352875 Fall Creek at 16th Street at Indianapolis, IN

[sp., species]

Field identifier:	FC16-10	Habitat:	cobble and gravel; riffle	Specific conductance:	763 µs/cm at 25°C
Date:	September 12, 1996	Drainage area:	317 mi^2	Dissolved oxygen:	7.1 mg/L
Time:	0845	Water temperature:	22.0°C	pH:	7.63 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*		1		1	4
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	24	7	9	40	140
Arthropoda	Insecta	Megaloptera	Corydalidae	*Corydalus cornutus* (Linnaeus)	1			1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*	6			6	22
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*	1	2		3	11
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	7	17	7	31	110
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	36	29	10	75	270
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*	25	24	18	67	240
Arthropoda	Insecta	Diptera	Ceratopogonidae	*unidentified pupae*		2		2	7
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*		2		2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	7	2		9	32
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	5	24	15	44	160
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)		3	3	6	22
Arthropoda	Insecta	Diptera	Athericidae	*Atherix variegata* Walker	1			1	4
Totals					113	113	62	288	1,000
Number of Taxa					10	11	6	14	

Table 119. Benthic-invertebrate data for station 394851086181301 Eagle Creek at Dandy Trail Road near Clermont, IN
[sp., species]

Field identifier:	ECDAN-17	Habitat:	cobble and gravel; riffle	Specific conductance:	441 µs/cm at 25°C
Date:	September 9, 1996	Drainage area:	164 mi^2	Dissolved oxygen:	5.8 mg/L
Time:	1315	Water temperature:	21.5°C	pH:	7.46 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	220	12	49	281	1,000
Arthropoda	Malacostraca	Isopoda	Asellidae	*Lirceus sp.*			2	2	7
Arthropoda	Malacostraca	Amphipoda	Crangonyctidae	*Crangonyx sp.*			1	1	4
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	11	3	13	27	97
Arthropoda	Insecta	Trichoptera	Psychomyiidae	*unidentified*	2			2	7
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*	1		14	15	54
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*	5		8	13	47
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	61	12	209	282	1,000
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	48		75	123	440
Arthropoda	Insecta	Trichoptera	Polycentropodidae	*Polycentropus sp.*	32		21	53	190
Arthropoda	Insecta	Lepidoptera	Pyralidae	*Petrophila sp.*	1	5	4	10	36
Arthropoda	Insecta	Diptera	Simuliidae	*Simulium sp.*	49	1	37	87	310
Arthropoda	Insecta	Diptera	Ceratopogonidae	*unidentified pupae*	1			1	4
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*		6	2	8	29
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*		1		1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	5		4	9	32
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	2	5	4	11	39
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*		5		5	18
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*		12		12	43
Arthropoda	Insecta	Diptera	Chironomidae	*Microtendipes sp.*	2	17	2	21	75
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	59	25	74	158	570
Arthropoda	Insecta	Diptera	Chironomidae	*Tribelos sp.*		3		3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Pseudochironomus sp.*		3		3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*	4	1	7	12	43
Totals					503	111	526	1,140	4,100
Number of Taxa					16	15	17	24	

Table 120. Benthic-invertebrate data for station 394613086114700 Eagle Creek at Raymond Street at Indianapolis, IN

[sp., species; >, greater than; x2sat., twice the saturation]

Field identifier:	ECRAY-11	Habitat:	cobble and gravel; run	Specific conductance:	941 µs/cm at 25°C
Date:	September 11, 1996	Drainage area:	209 mi^2	Dissolved oxygen:	>x2sat. mg/L
Time:	1515	Water temperature:	27.5°C	pH:	8.23 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	1	1		2	7
Nematoda	unidentified	unidentified	unidentified	*unidentified*			1	1	4
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella sp.*	2			2	7
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	41	2	3	46	170
Mollusca	Gastropoda	Basommatophora	Physidae	*Physella sp.*		1		1	4
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)	8	8	13	29	100
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*	1		1	2	7
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*		2		2	7
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*	10	6	7	23	83
Arthropoda	Insecta	Odonata	Calopterygidae	*Calopteryx sp.*			1	1	4
Arthropoda	Insecta	Odonata	Coenagrionidae	*Ischnura sp.*	1			1	4
Arthropoda	Insecta	Odonata	Coenagrionidae	*Nahalennia sp.*			2	2	7
Arthropoda	Insecta	Coleoptera	Hydrophilidae	*Berosus sp.*	2			2	7
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	3	1	1	5	18
Arthropoda	Insecta	Megaloptera	Corydalidae	*unidentified*	1			1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*		4	2	6	22
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*	4		5	9	32
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	24	7	37	68	240
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	5	7	4	16	57
Arthropoda	Insecta	Diptera	Simuliidae	*Simulium sp.*	3	2		5	18
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	4	10	12	26	93
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	6	10	7	23	83
Arthropoda	Insecta	Diptera	Chironomidae	*Ablabesmyia sp.*		2		2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	40	50	46	136	490
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	36	204	64	304	1,100
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*		12		12	43
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*		1		1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*	16	12	31	59	210
Arthropoda	Insecta	Diptera	Chironomidae	*Glyptotendipes sp.*	15	1	40	56	200
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)		53	63	116	420
Arthropoda	Insecta	Diptera	Chironomidae	*Pseudochironomus sp.*			1	1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*	5	6	6	17	61
Arthropoda	Insecta	Diptera	Chironomidae	*Tanytarsus sp.*	4		2	6	22
Totals					232	402	349	983	3,500
Number of Taxa					22	22	22	33	

Table 121. Benthic-invertebrate data for station 394721086031001 Pleasant Run at East 16th Street at Indianapolis, IN
[sp., species]

Field identifier:	PLR16-13	Habitat:	cobble and gravel; riffle	Specific conductance:	444 µs/cm at 25°C
Date:	September 10, 1996	Drainage area:	4.00 mi^2	Dissolved oxygen:	6.5 mg/L
Time:	0845	Water temperature:	20.4°C	pH:	7.55 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)	4	1	2	7	25
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*		4		4	14
Mollusca	Pelecypoda	Veneroida	Corbiculidae	*Corbicula fluminea* (Mueller)		4	3	7	25
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*		1	1	2	7
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	6	3	3	12	43
Arthropoda	Insecta	Odonata	Coenagrionidae	*Argia sp.*			1	1	4
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson			2	2	7
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*	1			1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	3	4	4	11	39
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	2		2	4	14
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*		1	1	2	7
Arthropoda	Insecta	Diptera	Tipulidae	*Limonia sp.*	1			1	4
Arthropoda	Insecta	Diptera	Simuliidae	*Simulium sp.*			1	1	4
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	1	3	3	7	25
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	1	1	1	3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	14	39	35	88	320
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	18	8	24	50	180
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*		1		1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*	4	15	7	26	93
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	19	13	27	59	210
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*			2	2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Tanytarsus sp.*	3			3	11
Totals					77	98	119	294	1,100
Number of Taxa					13	14	17	22	

Table 122. Benthic-invertebrate data for station 394358086092100 Pleasant Run near South Meridian Street at Indianapolis, IN
[sp., species]

Field identifier:	PLRMER-7	Habitat:	gravel and cobble; riffle	Specific conductance:	718 µs/cm at 25°C
Date:	September 10, 1996	Drainage area:	20.8 mi^2	Dissolved oxygen:	7.9 mg/L
Time:	1315	Water temperature:	25.1°C	pH:	7.66 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Platyhelminthes	Turbellaria	Tricladida	Planariidae	*Dugesia tigrina* (Girard)		13	4	17	61
Nematoda	unidentified	unidentified	unidentified	*unidentified*		2		2	7
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*	1			1	4
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella sp.*	3	10	3	16	57
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)		9	10	19	68
Mollusca	Gastropoda	Basommatophora	Physidae	*Physella sp.*	2	1		3	11
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	7	13	6	26	93
Arthropoda	Insecta	Ephemeroptera	Tricorythidae	*Tricorythodes sp.*		1	2	3	11
Arthropoda	Insecta	Coleoptera	Hydrophilidae	*Berosus sp.*	7	10	13	30	110
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*	1		1	2	7
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*	5	2	4	11	39
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	4	1	7	12	43
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	2	1	4	7	25
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*	4	2	6	12	43
Arthropoda	Insecta	Diptera	Tipulidae	*Tipula sp.*	2	2		4	14
Arthropoda	Insecta	Diptera	Simuliidae	*Simulium sp.*			1	1	4
Arthropoda	Insecta	Diptera	Ceratopogonidae	*unidentified pupae*	1		1	2	7
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	26	33	24	83	300
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	7	10	4	21	75
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	126	147	88	361	1,300
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	106	81	127	314	1,100
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*	1	1	2	4	14
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*	187	123	110	420	1,500
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	44	34	39	117	420
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*		1		1	4
Arthropoda	Insecta	Diptera	Athericidae	*Atherix variegata* Walker	3	1	6	10	36
Totals					539	498	462	1,499	5,400
Number of Taxa					20	22	21	26	

Table 123. Benthic-invertebrate data for station 394349086080001 Bean Creek at Southern Avenue at Indianapolis, IN

[sp., species]

Field identifier:	BCSOU-15	Habitat:	gravel and cobble; riffle	Specific conductance:	708 µs/cm at 25°C
Date:	September 10, 1996	Drainage area:	5.00 mi^2	Dissolved oxygen:	10.5 mg/L
Time:	1415	Water temperature:	23.6°C	pH:	8.13 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Nematoda	unidentified	unidentified	unidentified	*unidentified*	1			1	4
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella sp.*			2	2	7
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	7	5	3	15	54
Mollusca	Gastropoda	Basommatophora	Physidae	*Physella sp.*			1	1	4
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	2	1		3	11
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*	18			18	65
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	168	38	2	208	750
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	76	13	6	95	340
Arthropoda	Insecta	Diptera	Tipulidae	*Tipula sp.*		1		1	4
Arthropoda	Insecta	Diptera	Simuliidae	*Simulium sp.*	1	2		3	11
Arthropoda	Insecta	Diptera	Ceratopogonidae	*unidentified pupae*		1		1	4
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	4	11	2	17	61
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	5	7		12	43
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	17	20	25	62	220
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	69	84	46	199	710
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*	1			1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Cryptochironomus sp.*			1	1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*		11	10	21	75
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	6			6	22
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*	1			1	4
Arthropoda	Insecta	Diptera	Chironomidae	*Tanytarsus sp.*		1		1	4
Arthropoda	Insecta	Diptera	Athericidae	*Atherix variegata* Walker	1		1	2	7
Totals					377	195	99	671	2,400
Number of Taxa					15	13	11	22	

Table 124. Benthic-invertebrate data for station 394358086083901 Bean Creek at Garfield Park at Indianapolis, IN
[sp., species]

Field identifier:	BCGARF-9	Habitat:	cobble and gravel; run	Specific conductance:	648 µs/cm at 25°C
Date:	September 10, 1996	Drainage area:	5.30 mi^2	Dissolved oxygen:	10.1 mg/L
Time:	1230	Water temperature:	23.1°C	pH:	8.19 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Nematoda	unidentified	unidentified	unidentified	*unidentified*	1			1	4
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*	2			2	7
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	10	8	3	21	75
Arthropoda	Malacostraca	Decapoda	Cambaridae	*Cambarus sp.*		1		1	4
Arthropoda	Insecta	Megaloptera	Corydalidae	*Corydalus sp.*	1			1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*	2		1	3	11
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*			1	1	4
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	18	1	12	31	110
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	5	2	18	25	90
Arthropoda	Insecta	Diptera	Tipulidae	*Tipula sp.*		1		1	4
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	13	5		18	65
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	6	2		8	29
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	59	25	8	92	330
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	80	20	8	108	390
Arthropoda	Insecta	Diptera	Chironomidae	*Chironomus sp.*	3			3	11
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*	27	10	3	40	140
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	39	7	6	52	190
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum fallax group*	2			2	7
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*	12			12	43
Arthropoda	Insecta	Diptera	Chironomidae	*Tanytarsus sp.*	12			12	43
Arthropoda	Insecta	Diptera	Athericidae	*Atherix variegata* Walker		1	1	2	7
Totals					292	83	61	436	1,600
Number of Taxa					17	12	10	21	

Table 125. Benthic-invertebrate data for station 394746086055601 Pogues Run at East 21st Street at Indianapolis, IN

[sp., species]

Field identifier:	POR21-14	Habitat:	cobble and gravel; riffle	Specific conductance:	490 µs/cm at 25°C
Date:	September 10, 1996	Drainage area:	4.40 mi^2	Dissolved oxygen:	6.8 mg/L
Time:	0830	Water temperature:	19.8°C	pH:	7.57 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*			1	1	4
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	29	27	7	63	230
Mollusca	Gastropoda	Basommatophora	Physidae	*Physella sp.*		1		1	4
Arthropoda	Insecta	Ephemeroptera	Heptageniidae	*Stenonema sp.*			1	1	4
Arthropoda	Insecta	Odonata	Coenagrionidae	*Argia sp.*			1	1	4
Arthropoda	Insecta	Coleoptera	Elmidae	*Stenelmis sexlineata* Sanderson	5	12	3	20	72
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified larvae*	5		1	6	22
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*unidentified pupae*	1	1		2	7
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*	94	40	9	143	510
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Hydropsyche sp.*	44	12	1	57	200
Arthropoda	Insecta	Diptera	Tipulidae	*Limnophila sp.*	1			1	4
Arthropoda	Insecta	Diptera	Simuliidae	*Simulium sp.*		2		2	7
Arthropoda	Insecta	Diptera	Ceratopogonidae	*unidentified pupae*	2			2	7
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	6	1	6	13	47
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	3	2		5	18
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	11	11	12	34	120
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	43	11	14	68	240
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*	5		7	12	43
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	49	25	5	79	280
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*	26	3	10	39	140
Arthropoda	Insecta	Diptera	Athericidae	*Atherix variegata* Walker		2		2	7
Totals					324	150	78	552	2,000
Number of Taxa					15	14	14	21	

Table 126. Benthic-invertebrate data for station 03352990 Pogues Run at Vermont Street, Indianapolis, IN
[sp., species]

Field identifier: PORVER-8
Date: September 10, 1996
Time: 1045

Habitat: cobble and gravel; run
Drainage area: 8.87 mi^2
Water temperature: 20.9°C

Specific conductance: 698 µs/cm at 25°C
Dissolved oxygen: 6.8 mg/L
pH: 7.74 units

Phylum	Class	Order	Family	Species	Sample 1	Sample 2	Sample 3	Total	Average density (organisms per m^2)
Annelida	Oligochaeta	Haplotaxida	Tubificidae	*Limnodrilus sp.*		2	5	7	25
Annelida	Hirudinea	Rhynchobdellida	Glossiphoniidae	*Helobdella sp.*		1	3	4	14
Mollusca	Gastropoda	Basommatophora	Ancylidae	*Ferrissia parallela* (Haldeman)	1	2		3	11
Arthropoda	Insecta	Ephemeroptera	Baetidae	*Baetis sp.*	1	1		2	7
Arthropoda	Insecta	Trichoptera	Hydropsychidae	*Cheumatopsyche sp.*		2		2	7
Arthropoda	Insecta	Trichoptera	Hydroptilidae	*Agraylea sp.*		1		1	4
Arthropoda	Insecta	Diptera	Tipulidae	*Tipula sp.*			1	1	4
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified larvae*	7	7	2	16	57
Arthropoda	Insecta	Diptera	Chironomidae	*unidentified pupae*	1	2	2	5	18
Arthropoda	Insecta	Diptera	Chironomidae	*Conchapelopia sp.*	6	4		10	36
Arthropoda	Insecta	Diptera	Chironomidae	*Orthocladius sp.*	36	11	5	52	190
Arthropoda	Insecta	Diptera	Chironomidae	*Dicrotendipes sp.*	31	20	2	53	190
Arthropoda	Insecta	Diptera	Chironomidae	*Polypedilum convictum* (Walker)	10	4	4	18	65
Arthropoda	Insecta	Diptera	Chironomidae	*Rheotanytarsus sp.*	5	7	1	13	47
Arthropoda	Insecta	Diptera	Chironomidae	*Tanytarsus sp.*	5	4		9	32
Totals					103	68	25	196	700
Number of Taxa					10	14	9	15	

Table 128. Data for metals, insecticides, herbicides, semivolatile organic compounds, and particle-size distribution of streambed sediments determined for sites on the White River and its tributaries in and near Indianapolis, Indiana

[STATION NUMBER is the U.S. Geological Survey site-identification number; RECOV., recovered; FM, from; US/CM, microsiemens per centimeter; DEG C, degree Celsius; MG/L, milligrams per liter; UG/G, micrograms per gram; <, less than; UG/KG, micrograms per kilogram; TOT., total; MATL., material; E, estimated; BOT.MAT, bottom material; DRY WT., dry weight; G/KG, grams per kilogram; GM/KG grams per kilogram; DIAM., diameter; %, percent; MM, millimeter; MG/KG, milligrams per kilogram; INORG +, inorganic plus]

STATION NUMBER	DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ALUM-INUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)
03351000	08-24-94	0855	849	7.7	23.0	6.4	1200	3	<1	7	10
03351000	08-24-94	1000	845	7.7	23.0	6.4	1500	3	<1	7	10
03351000	08-20-96	1000	921	8.1	24.5	12.6	4800	4	1	10	10
03351000	08-20-96	1030	921	8.1	24.5	12.6	4500	5	1	10	10
03353000	08-24-94	1130	757	7.9	24.0	8.4	1200	9	1	6	51
03353000	08-24-94	1230	767	8.0	24.5	8.5	1300	5	1	10	91
03353000	08-22-95	1130	666	8.2	30.0	12.1	510	3	1	7	33
03353000	08-20-96	1415	830	8.0	28.0	11.2	4300	3	1	10	31
03353193	08-25-94	1245	754	8.1	25.5	10.0	1700	3	1	10	54
03353611	08-23-95	1200	875	7.3	29.0	14.2	270	2	1	3	10
03353611	08-23-95	1530	1050	7.1	29.0	14.5	4000	2	3	70	82
394234086120900	08-23-95	1030	1070	7.3	28.0	9.3	1800	4	1	9	10
394234086120900	08-23-95	1330	995	7.4	29.0	11.1	190	2	1	3	10
394019086134601	08-25-94	1445	1180	7.7	28.0	8.6	640	4	1	4	10
393827086141701	08-26-94	1000	1350	7.1	25.5	10.7	1000	3	1	6	10
393402086152000	08-26-94	1105	1310	7.3	25.5	9.8	1700	3	1	6	10
393402086152000	08-26-94	1330	1320	7.3	26.0	10.4	1300	4	1	7	10
393402086152000	08-22-95	1400	1400	8.1	28.0	14.0	1300	2	<1	8	10
393402086152000	08-20-96	1615	1150	7.9	27.0	11.3	3600	2	<1	9	10
393402086152000	08-20-96	1645	1150	7.9	27.0	11.3	4300	2	<1	10	10
03351072	08-22-94	0945	500	7.7	20.0	6.4	1300	5	1	6	10
03351072	08-22-94	1100	539	7.7	20.0	8.0	1400	4	1	5	10
03352875	08-23-94	1430	717	7.6	24.0	8.2	1100	2	1	4	22
03352875	08-24-95	1000	716	7.5	25.0	7.5	810	2	1	3	19
03352875	08-21-96	0930	794	7.7	25.0	7.7	3800	2	1	6	97

Table 128. Data for metals, insecticides, herbicides, semivolatile organic compounds, and particle-size distribution of streambed sediments determined for sites on the White River and its tributaries in and near Indianapolis, Indiana—Continued

STATION NUMBER	CYANIDE TOTAL IN BOTTOM MATERIAL (UG/G AS CN)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MAGNESIUM, RECOV. FM BOTTOM MATERIAL (MG/KG)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	P,P'-DDT, RECOV. IN BOTTOM MATERIAL (UG/KG)
03351000	<.5	4200	<10	21000	200	<.01	20	20	<.100	1.00	<.100
03351000	<.5	5700	<10	23000	210	.01	20	20	<.100	2.00	.100
03351000	<.5	16000	20	38000	400	<.01	20	40	<.200	4.00	<.200
03351000	<.5	15000	20	38000	430	.05	20	40	<.100	4.00	<.200
03353000	<.5	4800	120	18000	210	.34	20	60	<.100	23.0	.600
03353000	<.5	5600	120	28000	230	.27	20	50	<.200	19.0	<.100
03353000	<.5	1900	70	29000	170	.11	10	60	<.200	33.0	.700
03353000	<.5	17000	70	32000	320	.02	20	70	<.500	28.0	.400
03353193	<.5	5300	40	24000	170	.09	20	50	<.200	23.0	.400
03353611	<.5	1400	10	28000	170	.04	<10	20	<.200	9.00	.300
03353611	<.5	1200	140	14000	250	.13	20	190	<.200	16.0	.300
394234086120900	<.5	5800	10	23000	200	.03	10	30	<.100	8.00	.300
394234086120900	<.5	990	10	28000	190	.03	<10	20	<.100	4.00	.100
394019086134601	<.5	2400	20	32000	320	.02	10	30	<.200	4.00	.100
393827086141701	<.5	3400	10	27000	210	.02	10	30	<.200	5.00	.100
393402086152000	<.5	5900	10	32000	310	.02	20	30	<.100	2.00	<.100
393402086152000	<.5	6600	10	25000	240	.01	20	20	<.100	2.00	<.100
393402086152000	<.5	5900	10	24000	210	.02	10	20	<.100	3.00	.200
393402086152000	<.5	9800	20	26000	260	<.01	10	30	<.100	2.00	<.100
393402086152000	<.5	12000	20	28000	320	<.01	10	20	<.200	2.00	<.100
03351072	<.5	5600	10	30000	280	.01	20	30	<.100	2.00	<.100
03351072	<.5	6700	10	29000	270	<.01	20	30	<.100	2.00	<.100
03352875	<.5	2900	20	28000	190	.03	10	20	<.100	16.0	<.100
03352875	<.5	1800	10	25000	230	.02	10	20	<.100	13.0	.300
03352875	<.5	6500	30	29000	840	.06	30	40	<.300	10.0	.300

Table 128. Data for metals, insecticides, herbicides, semivolatile organic compounds, and particle-size distribution of streambed sediments determined for sites on the White River and its tributaries in and near Indianapolis, Indiana—Continued

STATION NUMBER	P,P'-DDD, RECOV. IN BOTTOM MATERIAL (UG/KG)	P,P'-DDE, RECOV. IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN I TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)
03351000	.300	.500	.300	<.400	<.100	<.100	<.200	13.0	<1.00	<.100	<.100
03351000	.400	.900	.400	<.400	<.100	<.100	<.200	24.0	<1.00	<.100	<.100
03351000	.500	.100	.200	1.30	<.100	<.100	<.200	E38.0	<1.00	<.100	<.200
03351000	.500	.200	.400	1.40	<.100	<.100	<.200	E27.0	<1.00	<.100	<.200
03353000	1.70	.900	.500	<.400	.100	<.100	<.200	9.00	<1.00	<.200	.200
03353000	1.60	1.30	.400	.800	<.100	<.100	<.200	38.0	<1.00	<.200	.200
03353000	5.30	1.70	.300	2.70	<.100	<.200	<.200	110	<1.00	<.100	.300
03353000	2.20	.900	.300	2.80	<.400	<.100	<.200	E49.0	<1.00	<.100	<.300
03353193	1.20	.800	.200	1.40	<.100	<.600	<.200	53.0	<1.00	<.100	.100
03353611	1.60	1.00	.400	.700	<.100	<.200	<.200	59.0	<1.00	<.100	<.100
03353611	2.30	.900	.200	1.40	<.100	<.200	<.200	79.0	<1.00	<.100	.300
394234086120900	.500	.300	.300	.500	<.100	<.100	<.200	13.0	<1.00	<.100	<.200
394234086120900	.500	.400	.300	.600	<.100	<.100	<.200	22.0	<1.00	<.100	.100
394019086134601	.200	.200	.200	.700	<.100	<.100	<.200	12.0	<1.00	<.100	<.100
393827086141701	.300	.200	.400	.600	<.200	<.100	<.200	13.0	<1.00	<.100	<.100
393402086152000	.100	.100	.200	.400	<.100	<.100	<.200	5.00	<1.00	<.100	<.100
393402086152000	.100	.100	.200	<.400	<.100	<.100	<.200	6.00	<1.00	<.100	<.100
393402086152000	.200	.300	<.200	.300	<.100	<.100	<.200	7.00	<1.00	<.100	<.100
393402086152000	.200	.200	<.200	<.100	<.100	.200	<.200	E6.00	<1.00	<.100	<.100
393402086152000	.200	.200	.200	.300	<.200	<.100	<.200	E8.00	<1.00	<.100	<.100
03351072	<.100	.100	1.90	.600	<.100	<.100	<.200	<1.00	<1.00	<.100	<.100
03351072	<.100	.100	1.50	.800	<.100	<.100	<.200	<1.00	<1.00	<.100	<.100
03352875	4.20	.600	.500	.800	<.100	<.100	<.200	15.0	<1.00	<.100	.100
03352875	4.30	2.10	.400	1.40	<.100	2.00	<.200	220	<1.00	<.100	.200
03352875	1.90	.400	.300	.600	<.200	<.100	<.200	E16.0	<1.00	<.100	<.100

Table 128. Data for metals, insecticides, herbicides, semivolatile organic compounds, and particle-size distribution of streambed sediments determined for sites on the White River and its tributaries in and near Indianapolis, Indiana—Continued

STATION NUMBER	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MALA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PARA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PER-THANE IN BOT-TOM MA-TERIAL (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TRI-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	2,4-D, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	2,4,5-T TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
03351000	<.100	<.200	<.400	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100
03351000	<.100	<.200	<.400	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100
03351000	<.100	<.200	<.800	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100
03351000	<.200	<.200	<.900	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100
03353000	<.100	<.200	<.400	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100
03353000	<.100	<.200	<.400	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100
03353000	.100	<2.00	<.800	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100
03353000	<.100	<.200	<3.90	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100
03353193	<.100	<.200	<.800	<.200	<.100	<.200	<1.00	<100	<.200	<.100	<.100
03353611	.100	<2.00	<.800	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100
03353611	.100	<2.00	<.800	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100
394234086120900	<.100	<2.00	<3.20	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100
394234086120900	<.100	<2.00	<1.50	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100
394019086134601	<.100	<.200	<.800	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100
393827086141701	.100	<.200	<.800	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100
393402086152000	<.100	<.200	<.800	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100
393402086152000	<.100	<.200	<.800	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100
393402086152000	<.100	<2.00	<1.00	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100
393402086152000	<.100	<.200	<.800	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100
393402086152000	<.100	<.200	<.800	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100
03351072	<.100	<.200	<.800	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100
03351072	<.100	<.200	<.800	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100
03352875	<.100	<.200	<.400	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100
03352875	<.100	<2.00	<2.30	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100
03352875	<.100	<.200	<3.80	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100

Table 128. Data for metals, insecticides, herbicides, semivolatile organic compounds, and particle-size distribution of streambed sediments determined for sites on the White River and its tributaries in and near Indianapolis, Indiana—Continued

STATION NUMBER	DICAMBA BOT.MAT TOTAL RECOV. DRY WT. (UG/KG)	PI- CLORAM BOT.MAT TOTAL RECOV. DRY WT. (UG/KG)	SILVEX, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	1,2,4- TRI- CHLORO- BENZENE BOT.MAT (UG/KG)	1,2- DI- CHLORO- BENZENE BOT.MAT (UG/KG)	1,3- DI- CHLORO- BENZENE BOT.MAT (UG/KG)	1,4- DI- CHLORO- BENZENE BOT.MAT (UG/KG)	2,4,6- TRI- CHLORO- PHENOL BOT.MAT (UG/KG)	2,4- DI- CHLORO- PHENOL BOT.MAT (UG/KG)	2,4- DI- NITRO- PHENOL BOT.MAT (UG/KG)	2,4- DI- NITRO- TOLUENE BOT.MAT (UG/KG)
03351000	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
03351000	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
03351000	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
03351000	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
03353000	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
03353000	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
03353000	<1.00	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
03353000	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
03353193	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
03353611	<1.00	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
03353611	<1.00	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
394234086120900	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
394234086120900	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
394019086134601	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
393827086141701	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
393402086152000	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
393402086152000	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
393402086152000	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
393402086152000	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
393402086152000	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
03351072	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
03351072	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
03352875	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
03352875	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
03352875	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200

Table 128. Data for metals, insecticides, herbicides, semivolatile organic compounds, and particle-size distribution of streambed sediments determined for sites on the White River and its tributaries in and near Indianapolis, Indiana—Continued

STATION NUMBER	2,4-DP, IN BOTTOM MATL. (UG/KG)	2,6-DI-NITRO-TOLUENE BOT.MAT (UG/KG)	2-CHLORO-NAPH-THALENE BOT.MAT (UG/KG)	2-CHLORO-PHENOL BOT.MAT (UG/KG)	2-NITRO-PHENOL BOT.MAT (UG/KG)	4,6-DINITRO-ORTHO-CRESOL BOT.MAT (UG/KG)	4-BROMO-PHENYL PHENYL ETHER BOT.MAT (UG/KG)	4-CHLORO-PHENYL PHENYL ETHER BOT.MAT (UG/KG)	PARA-CHLORO-META CRESOL BOT.MAT (UG/KG)	4-NITRO-PHENOL BOT.MAT (UG/KG)	ACE-NAPHTH-ENE BOT.MAT (UG/KG)
03351000	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
03351000	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
03351000	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
03351000	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
03353000	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
03353000	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
03353000	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
03353000	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
03353193	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
03353611	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
03353611	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
394234086120900	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
394234086120900	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
394019086134601	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
393827086141701	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
393402086152000	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
393402086152000	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
393402086152000	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
393402086152000	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
393402086152000	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
03351072	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
03351072	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
03352875	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
03352875	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
03352875	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200

Table 128. Data for metals, insecticides, herbicides, semivolatile organic compounds, and particle-size distribution of streambed sediments determined for sites on the White River and its tributaries in and near Indianapolis, Indiana—Continued

STATION NUMBER	ACE-NAPHTH-YLENE BOT.MAT (UG/KG)	ANTHRA-CENE BOT.MAT (UG/KG)	BENZO-A-PYRENE BOT.MAT (UG/KG)	BENZO B FLUOR-AN-THENE BOT.MAT (UG/KG)	BENZO K FLUOR-AN-THENE BOT.MAT (UG/KG)	BENZO A ANTHRAC ENE 1,2-BENZANT HRACENE BOT.MAT (UG/KG)	BENZO GHI PERYL ENE 1,12-BENZOP ERYLENE BOT.MAT (UG/KG)	BIS (2-CHLORO-ETHOXY) METHANE BOT.MAT (UG/KG)	BIS (2-CHLORO-ETHYL) ETHER BOT.MAT (UG/KG)	BIS(2-CHLORO-ISO-PROPYL) ETHER BOT.MAT (UG/KG)	BIS(2-ETHYL HEXYL) PHTHAL-ATE BOT.MAT (UG/KG)
03351000	<200	<200	<400	<400	<400	<400	<400	<200	<200	<200	<200
03351000	<200	<200	<400	<400	<400	<400	<400	<200	<200	<200	<200
03351000	<200	<200	<400	<400	<400	<400	<400	<200	<200	<200	<200
03351000	<200	<200	<400	<400	<400	<400	<400	<200	<200	<200	<200
03353000	<200	<200	620	740	630	440	<400	<200	<200	<200	330
03353000	<200	<200	700	860	760	620	<400	<200	<200	<200	490
03353000	<200	420	960	960	890	860	490	<200	<200	<200	360
03353000	<200	<200	<400	<400	<400	<400	<400	<200	<200	<200	310
03353193	<200	<200	1000	890	810	940	620	<200	<200	<200	210
03353611	<200	220	670	720	540	590	<400	<200	<200	<200	230
03353611	210	350	700	1100	<400	650	450	<200	<200	<200	240
394234086120900	<200	<200	<400	<400	<400	<400	<400	<200	<200	<200	<200
394234086120900	<200	<200	<400	<400	<400	<400	<400	<200	<200	<200	<200
394019086134601	<200	<200	<400	<400	<400	<400	<400	<200	<200	<200	<200
393827086141701	<200	<200	<400	<400	<400	<400	<400	<200	<200	<200	<200
393402086152000	<200	<200	<400	<400	<400	2400	<400	<200	<200	<200	<200
393402086152000	<200	<200	<400	<400	<400	<400	<400	<200	<200	<200	<200
393402086152000	<200	<200	<400	<400	<400	<400	<400	<200	<200	<200	<200
393402086152000	<200	<200	<400	<400	<400	<400	<400	<200	<200	<200	<200
393402086152000	<200	<200	<400	<400	<400	<400	<400	<200	<200	<200	<200
03351072	<200	<200	<400	<400	<400	<400	<400	<200	<200	<200	<200
03351072	<200	<200	<400	<400	<400	<400	<400	<200	<200	<200	<200
03352875	<200	<200	430	470	<400	<400	<400	<200	<200	<200	<200
03352875	<200	240	<400	<400	<400	<400	<400	<200	<200	<200	<200
03352875	<200	<200	<400	<400	<400	<400	<400	<200	<200	<200	<200

Table 128. Data for metals, insecticides, herbicides, semivolatile organic compounds, and particle-size distribution of streambed sediments determined for sites on the White River and its tributaries in and near Indianapolis, Indiana—Continued

STATION NUMBER	N-BUTYL BENZYL PHTHAL- ATE BOT.MAT (UG/KG)	CARBON, INOR- GANIC, TOT. IN BOT.MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT.MAT (GM/KG AS C)	CHRY- SENE BOT.MAT (UG/KG)	1,2,5,6- DIBENZ- ANTHRA- CENE BOT.MAT (UG/KG)	DI-N- BUTYL PHTHAL- ATE BOT.MAT (UG/KG)	DI-N- OCTYL PHTHAL- ATE BOT.MAT (UG/KG)	DIETHYL PHTHAL- ATE BOT.MAT (UG/KG)	DI- METHYL PHTHAL- ATE BOT.MAT (UG/KG)	FLUOR- ANTHENE BOT.MAT (UG/KG)	FLUOR- ENE BOT.MAT (UG/KG)
03351000	<200	35	41	<400	<400	<200	<400	<200	<200	<200	<200
03351000	<200	28	33	<400	<400	<200	<400	<200	<200	<200	<200
03351000	<200	58	58	<400	<400	<200	<400	<200	<200	<200	<200
03351000	<200	59	63	<400	<400	<200	<400	<200	<200	<200	<200
03353000	<200	39	46	600	<400	<200	<400	<200	<200	1200	<200
03353000	<200	36	43	820	<400	<200	<400	<200	<200	1700	<200
03353000	<200	28	36	1100	<400	<200	<400	<200	<200	2900	<200
03353000	<200	48	50	<400	<400	<200	<400	<200	<200	580	<200
03353193	<200	25	35	1100	<400	<200	<400	<200	<200	1800	<200
03353611	<200	38	46	690	<400	<200	<400	<200	<200	1500	<200
03353611	<200	19	27	670	<400	<200	<400	<200	<200	1700	<200
394234086120900	<200	23	26	<400	<400	<200	<400	<200	<200	250	<200
394234086120900	<200	36	40	<400	<400	<200	<400	<200	<200	400	<200
394019086134601	<200	37	42	<400	<400	<200	<400	<200	<200	<200	<200
393827086141701	<200	38	44	<400	<400	<200	<400	<200	<200	<200	<200
393402086152000	<200	36	40	<400	<400	<200	<400	<200	<200	<200	<200
393402086152000	<200	36	39	<400	<400	<200	<400	<200	<200	<200	<200
393402086152000	<200	36	40	<400	<400	<200	<400	<200	<200	<200	<200
393402086152000	<200	39	43	<400	<400	<200	<400	<200	<200	<200	<200
393402086152000	<200	39	44	<400	<400	<200	<400	<200	<200	<200	<200
03351072	<200	38	46	<400	<400	<200	<400	<200	<200	<200	<200
03351072	<200	37	46	<400	<400	<200	<400	<200	<200	<200	<200
03352875	<200	42	65	<400	<400	<200	<400	<200	<200	800	<200
03352875	<200	38	57	<400	<400	<200	<400	<200	<200	1100	270
03352875	<200	44	78	<400	<400	<200	<400	<200	<200	370	<200

Table 128. Data for metals, insecticides, herbicides, semivolatile organic compounds, and particle-size distribution of streambed sediments determined for sites on the White River and its tributaries in and near Indianapolis, Indiana—Continued

STATION NUMBER	HEXA-CHLORO-BENZENE TOT. IN BOTTOM MATL. (UG/KG)	HEXA-CHLORO-BUT-ADIENCE BOT.MAT (UG/KG)	HEXA-CHLORO-CYCLO-PENT-ADIENE BOT.MAT (UG/KG)	HEXA-CHLORO-ETHANE BOT.MAT (UG/KG)	INDENO (1,2,3-CD) PYRENE BOT.MAT (UG/KG)	ISO-PHORONE BOT.MAT (UG/KG)	N-NITRO-SODI-N-PROPYL-AMINE BOT.MAT (UG/KG)	N-NITRO-SODI-METHY-LAMINE BOT.MAT (UG/KG)	N-NITRO-SODI-PHENY-LAMINE BOT.MAT (UG/KG)	NAPHTH-ALENE BOT.MAT (UG/KG)	NITRO-BENZENE BOT.MAT (UG/KG)
03351000	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200
03351000	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200
03351000	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200
03351000	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200
03353000	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200
03353000	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200
03353000	<200	<200	<200	<200	460	<200	<200	<200	<200	320	<200
03353000	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200
03353193	<200	<200	<200	<200	580	<200	<200	<200	<200	<200	<200
03353611	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200
03353611	<200	<200	<200	<200	420	<200	<200	<200	<200	<200	<200
394234086120900	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200
394234086120900	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200
394019086134601	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200
393827086141701	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200
393402086152000	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200
393402086152000	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200
393402086152000	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200
393402086152000	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200
393402086152000	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200
03351072	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200
03351072	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200
03352875	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200
03352875	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200
03352875	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200

Table 128. Data for metals, insecticides, herbicides, semivolatile organic compounds, and particle-size distribution of streambed sediments determined for sites on the White River and its tributaries in and near Indianapolis, Indiana—Continued

STATION NUMBER	PENTA-CHLORO-PHENOL BOT.MAT (UG/KG)	PHENAN-THRENE BOT.MAT (UG/KG)	PHENOL (C6H-5OH) BOT.MAT (UG/KG)	PYRENE BOT.MAT (UG/KG)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM
03351000	<600	<200	<200	<200	1	2	12	48	83	100	100
03351000	<600	<200	<200	<200	1	3	19	47	76	100	100
03351000	<600	<200	<200	<200	1	3	7	14	47	99	100
03351000	<600	<200	<200	<200	1	3	6	13	46	98	100
03353000	<600	530	<200	940	1	2	13	48	82	100	100
03353000	<600	1200	<200	1400	1	2	8	35	74	100	100
03353000	<600	1700	<200	2400	1	2	10	43	75	100	100
03353000	<600	290	<200	520	0	1	7	34	70	99	100
03353193	<600	1200	<200	1600	3	10	51	79	92	100	100
03353611	<600	560	<200	1300	1	3	13	31	70	100	100
03353611	<600	830	<200	1400	6	25	83	96	99	100	100
394234086120900	<600	<200	<200	280	1	2	15	47	81	100	100
394234086120900	<600	<200	<200	420	0	1	3	21	66	99	100
394019086134601	<600	<200	<200	<200	1	2	9	31	67	99	100
393827086141701	<600	<200	<200	<200	1	3	7	39	76	100	100
393402086152000	<600	<200	<200	<200	1	3	11	47	78	100	100
393402086152000	<600	<200	<200	<200	1	2	10	42	75	99	100
393402086152000	<600	<200	<200	<200	0	1	7	31	74	100	100
393402086152000	<600	<200	<200	<200	1	2	8	42	74	99	100
393402086152000	<600	<200	<200	<200	1	3	11	46	75	99	100
03351072	<600	<200	<200	<200	2	5	15	35	68	100	100
03351072	<600	<200	<200	<200	3	7	20	48	82	100	100
03352875	<600	580	<200	830	0	0	5	39	92	100	100
03352875	<600	700	<200	1000	0	0	4	33	71	100	100
03352875	<600	<200	<200	420	0	1	3	21	58	100	100

Table 128. Data for metals, insecticides, herbicides, semivolatile organic compounds, and particle-size distribution of streambed sediments determined for sites on the White River and its tributaries in and near Indianapolis, Indiana—Continued

STATION NUMBER	DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ALUM-INUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)
394613086114700	08-24-94	1435	874	8.2	27.5	12.1	1100	3	<1	6	11
394613086114700	08-24-94	1520	882	8.3	27.5	12.4	1500	3	<1	5	10
394613086114700	08-22-95	1000	903	7.8	24.5	8.3	1600	4	1	10	11
394613086114700	08-21-96	1100	1060	7.8	25.0	9.4	2900	3	<1	10	10
394358086092100	08-23-94	0900	822	7.5	20.0	8.4	180	4	1	2	10
394358086083901	08-23-94	1000	731	8.2	22.0	11.1	410	3	2	3	10
394358086083901	08-23-94	1100	727	8.2	23.0	11.9	150	3	2	1	10
03352990	08-23-94	1410	674	8.0	25.0	7.5	1400	4	2	6	20

STATION NUMBER	CYANIDE TOTAL IN BOT-TOM MA-TERIAL (UG/G AS CN)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MAGNE-SIUM, RECOV. FM BOT-TOM MA-TERIAL (MG/KG)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	P,P'-DDT, RECOV. IN BOT-TOM MA-TERIAL (UG/KG)
394613086114700	<.5	2100	20	19000	86	.01	10	5	<.100	12.0	.100
394613086114700	<.5	5500	20	51000	170	.04	10	40	<.200	4.00	<.100
394613086114700	<.5	6400	20	24000	87	.02	10	50	<.200	4.00	.200
394613086114700	<.5	6900	20	22000	230	.08	10	40	<.200	5.00	<.200
394358086092100	<.5	550	20	43000	230	.14	10	40	<.200	23.0	.200
394358086083901	<.5	1800	30	41000	300	<.01	20	40	<.100	19.0	.100
394358086083901	<.5	380	20	41000	320	.01	10	30	<.100	10.0	.300
03352990	<.5	6200	50	25000	270	.03	<10	80	<.100	40.0	.100

Table 128. Data for metals, insecticides, herbicides, semivolatile organic compounds, and particle-size distribution of streambed sediments determined for sites on the White River and its tributaries in and near Indianapolis, Indiana—Continued

STATION NUMBER	P,P'-DDD, RECOV. IN BOTTOM MATERIAL (UG/KG)	P,P'-DDE, RECOV. IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDOSULFAN I TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)
394613086114700	.200	.200	1.20	1.20	<.100	<.300	<.200	23.0	<1.00	<.100	.200
394613086114700	.200	.100	1.00	.800	<.100	<.100	<.200	12.0	<1.00	<.100	<.100
394613086114700	.400	.600	.800	.700	<.100	<.100	<.200	35.0	<1.00	<.100	<.100
394613086114700	.400	.600	1.20	1.40	<.300	<.200	<.200	E27.0	<1.00	<.100	<.300
394358086092100	.400	.400	1.30	1.40	<.100	<.700	<.200	28.0	<1.00	<.100	.200
394358086083901	.200	3.40	.900	.600	.100	<.100	<.200	8.00	<1.00	<.100	.200
394358086083901	.300	.700	.700	.500	<.100	<.100	<.200	8.00	<1.00	<.100	.100
03352990	3.00	.500	1.80	1.10	.100	<.100	<.200	7.00	<1.00	.100	.400

STATION NUMBER	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	2,4-D, TOTAL IN BOTTOM MATERIAL (UG/KG)	2,4,5-T TOTAL IN BOTTOM MATERIAL (UG/KG)
394613086114700	<.100	<.200	<.800	<.200	<.100	<.200	<1.00	<100	<.200	<.100	<.100
394613086114700	<.100	<.200	<.800	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100
394613086114700	<.100	<2.00	<.800	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100
394613086114700	<.200	<.200	<1.80	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100
394358086092100	<.100	<.200	<.800	<.200	<.100	<.200	<1.00	<100	<.200	<.100	<.100
394358086083901	<.100	.200	<.400	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100
394358086083901	<.100	.200	<.800	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100
03352990	<.100	.300	<.400	<.200	<.100	<.200	<1.00	<10.0	<.200	<.100	<.100

Table 128. Data for metals, insecticides, herbicides, semivolatile organic compounds, and particle-size distribution of streambed sediments determined for sites on the White River and its tributaries in and near Indianapolis, Indiana—Continued

STATION NUMBER	DICAMBA BOT.MAT TOTAL RECOV. DRY WT. (UG/KG)	PI- CLORAM BOT.MAT TOTAL RECOV. DRY WT. (UG/KG)	SILVEX, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	1,2,4- TRI- CHLORO- BENZENE BOT.MAT (UG/KG)	1,2- DI- CHLORO- BENZENE BOT.MAT (UG/KG)	1,3- DI- CHLORO- BENZENE BOT.MAT (UG/KG)	1,4- DI- CHLORO- BENZENE BOT.MAT (UG/KG)	2,4,6- TRI- CHLORO- PHENOL BOT.MAT (UG/KG)	2,4- DI- CHLORO- PHENOL BOT.MAT (UG/KG)	2,4- DI- NITRO- PHENOL BOT.MAT (UG/KG)	2,4- DI- NITRO- TOLUENE BOT.MAT (UG/KG)
394613086114700	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
394613086114700	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
394613086114700	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
394613086114700	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
394358086092100	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
394358086083901	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
394358086083901	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200
03352990	<.100	<.100	<.100	<200	<200	<200	<200	<600	<200	<600	<200

STATION NUMBER	2,4-DP, IN BOTTOM MATL. (UG/KG)	2,6-DI- NITRO- TOLUENE BOT.MAT (UG/KG)	2- CHLORO- NAPH- THALENE BOT.MAT (UG/KG)	2- CHLORO- PHENOL BOT.MAT (UG/KG)	2- NITRO- PHENOL BOT.MAT (UG/KG)	4,6- DINITRO- ORTHO- CRESOL BOT.MAT (UG/KG)	4- BROMO- PHENYL PHENYL ETHER BOT.MAT (UG/KG)	4- CHLORO- PHENYL PHENYL ETHER BOT.MAT (UG/KG)	PARA- CHLORO- META CRESOL BOT.MAT (UG/KG)	4- NITRO- PHENOL BOT.MAT (UG/KG)	ACE- NAPHTH- ENE BOT.MAT (UG/KG)
394613086114700	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
394613086114700	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
394613086114700	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
394613086114700	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
394358086092100	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
394358086083901	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
394358086083901	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200
03352990	<.100	<200	<200	<200	<200	<600	<200	<200	<600	<600	<200

Table 128. Data for metals, insecticides, herbicides, semivolatile organic compounds, and particle-size distribution of streambed sediments determined for sites on the White River and its tributaries in and near Indianapolis, Indiana—Continued

STATION NUMBER	ACE- NAPHTH- YLENE BOT.MAT (UG/KG)	ANTHRA- CENE BOT.MAT (UG/KG)	BENZO- A- PYRENE BOT.MAT (UG/KG)	BENZO B FLUOR- AN- THENE BOT.MAT (UG/KG)	BENZO K FLUOR- AN- THENE BOT.MAT (UG/KG)	BENZO A ANTHRAC ENE 1,2- BENZANT HRACENE BOT.MAT (UG/KG)	BENZO GHI PERYL ENE 1,12- BENZOP ERYLENE BOT.MAT (UG/KG)	BIS (2- CHLORO- ETHOXY) METHANE BOT.MAT (UG/KG)	BIS (2- CHLORO- ETHYL) ETHER BOT.MAT (UG/KG)	BIS(2- CHLORO- ISO- PROPYL) ETHER BOT.MAT (UG/KG)	BIS(2- ETHYL HEXYL) PHTHAL- ATE BOT.MAT (UG/KG)
394613086114700	<200	<200	<400	400	<400	<400	<400	<200	<200	<200	<200
394613086114700	<200	<200	<400	<400	<400	<400	<400	<200	<200	<200	300
394613086114700	<200	<200	<400	<400	<400	<400	<400	<200	<200	<200	<200
394613086114700	<200	<200	<400	<400	<400	<400	<400	<200	<200	<200	<200
394358086092100	<200	550	1700	1300	1500	1900	930	<200	<200	<200	270
394358086083901	<200	<200	<400	440	<400	<400	<400	<200	<200	<200	<200
394358086083901	<200	<200	410	520	<400	<400	<400	<200	<200	<200	<200
03352990	<200	<200	560	610	510	<400	<400	<200	<200	<200	360

STATION NUMBER	N-BUTYL BENZYL PHTHAL- ATE BOT.MAT (UG/KG)	CARBON, INOR- GANIC, TOT. IN BOT.MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT.MAT (GM/KG AS C)	CHRY- SENE BOT.MAT (UG/KG)	1,2,5,6- DIBENZ- ANTHRA- CENE BOT.MAT (UG/KG)	DI-N- BUTYL PHTHAL- ATE BOT.MAT (UG/KG)	DI-N- OCTYL PHTHAL- ATE BOT.MAT (UG/KG)	DIETHYL PHTHAL- ATE BOT.MAT (UG/KG)	DI- METHYL PHTHAL- ATE BOT.MAT (UG/KG)	FLUOR- ANTHENE BOT.MAT (UG/KG)	FLUOR- ENE BOT.MAT (UG/KG)
394613086114700	<200	25	34	<400	<400	<200	<400	<200	<200	320	<200
394613086114700	660	32	40	<400	<400	<200	<400	<200	<200	<200	<200
394613086114700	<200	37	47	<400	<400	<200	<400	<200	<200	340	<200
394613086114700	<200	35	39	<400	<400	<200	<400	<200	<200	<200	<200
394358086092100	<200	48	56	2000	540	<200	<400	<200	<200	3600	<200
394358086083901	<200	48	52	<400	<400	<200	<400	<200	<200	510	<200
394358086083901	<200	48	55	<400	<400	<200	<400	<200	<200	670	<200
03352990	<200	42	51	520	<400	<200	<400	<200	<200	800	<200

Table 128. Data for metals, insecticides, herbicides, semivolatile organic compounds, and particle-size distribution of streambed sediments determined for sites on the White River and its tributaries in and near Indianapolis, Indiana—Continued

STATION NUMBER	HEXA-CHLORO-BENZENE TOT. IN BOTTOM MATL. (UG/KG)	HEXA-CHLORO-BUT-ADIENCE BOT.MAT (UG/KG)	HEXA-CHLORO-CYCLO-PENT-ADIENE BOT.MAT (UG/KG)	HEXA-CHLORO-ETHANE BOT.MAT (UG/KG)	INDENO (1,2,3-CD) PYRENE BOT.MAT (UG/KG)	ISO-PHORONE BOT.MAT (UG/KG)	N-NITRO-SODI-N-PROPYL-AMINE BOT.MAT (UG/KG)	N-NITRO-SODI-METHY-LAMINE BOT.MAT (UG/KG)	N-NITRO-SODI-PHENY-LAMINE BOT.MAT (UG/KG)	NAPHTH-ALENE BOT.MAT (UG/KG)	NITRO-BENZENE BOT.MAT (UG/KG)
394613086114700	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200
394613086114700	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200
394613086114700	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200
394613086114700	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200
394358086092100	<200	<200	<200	<200	810	<200	<200	<200	<200	<200	<200
394358086083901	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200
394358086083901	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200
03352990	<200	<200	<200	<200	<400	<200	<200	<200	<200	<200	<200

STATION NUMBER	PENTA-CHLORO-PHENOL BOT.MAT (UG/KG)	PHENAN-THRENE BOT.MAT (UG/KG)	PHENOL (C6H-5OH) BOT.MAT (UG/KG)	PYRENE BOT.MAT (UG/KG)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM
394613086114700	<600	<200	<200	230	0	1	14	62	91	100	100
394613086114700	<600	<200	<200	<200	0	1	11	70	94	100	100
394613086114700	<600	<200	<200	310	2	6	25	59	82	100	100
394613086114700	<600	<200	<200	<200	0	1	5	36	82	100	100
394358086092100	<600	2900	<200	3100	1	2	4	14	51	99	100
394358086083901	<600	<200	<200	390	1	1	7	22	59	99	100
394358086083901	<600	320	<200	510	1	1	6	21	61	100	100
03352990	<600	310	<200	630	0	1	1	21	76	100	100