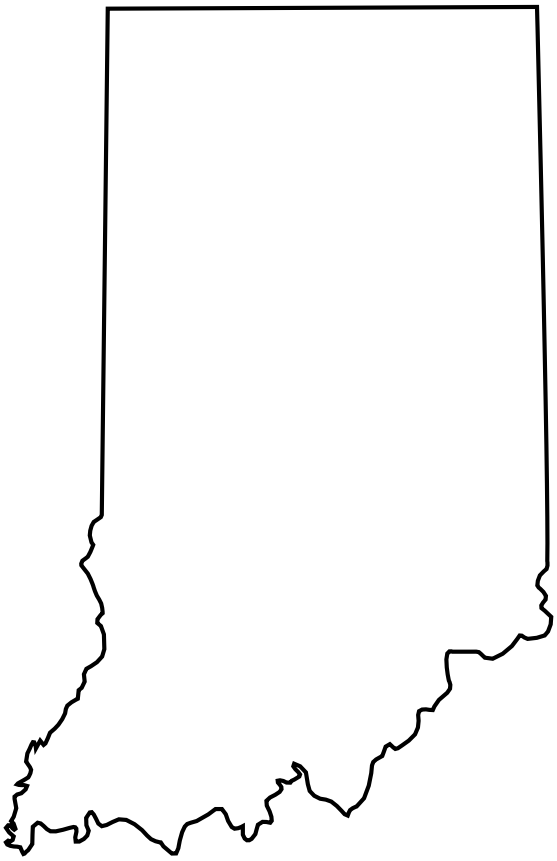
U.S. Department of the Interior
U.S. Geological Survey

Water Resources Data
Indiana
Water Year 2000

By James A. Stewart, Charles R. Keeton, Lowell E. Hammil, Hieu T. Nguyen and Deborah K. Majors

Water-Data Report IN-00-1



**Prepared in cooperation with the
State of Indiana and with other agencies**

U. S. DEPARTMENT OF THE INTERIOR

GALE A. NORTON, Secretary

U.S. Geological Survey

CHARLES G. GROAT, Director

For additional information, write to
District Chief, Water Resources Division
U.S. Geological Survey
5957 Lakeside Boulevard
Indianapolis, Indiana 46278-1996

2001

PREFACE

This volume of the annual hydrologic data report of Indiana is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, stage, lake levels, ground-water levels, and water quality provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources.

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

D.V. Arvin	R.L. Miller
P.R. Baker	S.E. Morlock
B.L. Benedict	J.H. Poehler
J.R. Davis	M.S. Rehmel
J.W. Frey	B.T. Reinking
T.K. Greeman	D.E. Renn
R.G. Knapp	B.A. Robinson
C.D. Menke	C.A. Silcox

The following individuals contributed significantly to the typing, drafting, and assembling of the report:

J. R. Davis L.M. Huff S. E. Morlock

This report was prepared in cooperation with the State of Indiana and with other agencies under the general supervision of L.A. Swain, District Chief, Indiana, and C.L. Hill, Regional Hydrologist, Northeastern Region.

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY *(Leave blank)*	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED
	March 2001	Annual-Oct. 1, 1999 to Sept. 30, 2000

4. TITLE AND SUBTITLE
Water Resources Data--Indiana, Water Year 2000

5. FUNDING NUMBERS

6. AUTHOR(S)
J.A. Stewart, C.R. Keeton, L.E. Hammil, H.T. Nguyen, and D.K. Majors

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
U.S. Geological Survey, Water Resources Division
5957 Lakeside Boulevard
Indianapolis, Indiana 46278-1996

8. PERFORMING ORGANIZATION REPORT NUMBER
USGS-WDR-IN-00-1

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)
U.S. Geological Survey, Water Resources Division
5957 Lakeside Boulevard
Indianapolis, Indiana 46278-1996

10. SPONSORING / MONITORING AGENCY REPORT NUMBER
USGS-WDR-IN-00-1

11. SUPPLEMENTARY NOTES
Prepared in cooperation with the State of Indiana and with other agencies.

12a. DISTRIBUTION / AVAILABILITY STATEMENT
No restriction on distribution. This report may be purchased from: National Technical Information Service, Springfield, Virginia 22161.

12b. DISTRIBUTION CODE

13. ABSTRACT *(Maximum 200 words)*
Water resources data for the 2000 water year for Indiana consists of records of discharge, stage, and water quality of streams and wells; reservoir stage and contents; and water levels in lakes and wells. This report contains records of discharge for 166 stream-gaging stations, stage for 7 stream stations, stage and contents for 1 reservoir, water quality for 2 streams, sediment analysis for 1 stream, water levels for 79 lakes and 89 observation wells. Also included are records of miscellaneous discharge measurements, miscellaneous levels and miscellaneous water-quality, not part of the systematic data-collection program. Data contained in this report represent that part of the National Water Data System operated by the U.S. Geological Survey in Indiana in cooperation with State and Federal agencies.

14. SUBJECT TERMS
*Indiana, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rates, Gaging stations, Lakes, Reservoirs, Chemical analysis, Water temperatures, Water levels, Water analyses, Sampling sites, Sediment analysis.

15. NUMBER OF PAGES
472

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
Unclassified	Unclassified		

CONTENTS

	Page
Preface	iii
List of stream and reservoir gaging stations, in downstream order for which records are published in this volume	vii
List of lake gaging stations, in alphabetical order, for which records are published in this volume	xiii
List of ground-water wells, in alphanumeric order by county, for which records are published in this volume	xv
List of discontinued surface-water discharge or stage-only stations	xvii
List of discontinued surface-water-quality stations	xxi
Introduction	1
Cooperation	2
Summary of hydrologic conditions	3
Precipitation	3
Surface water	6
Ground water	8
Special networks and programs	10
Explanation of the records	12
Station identification numbers	12
Downstream order system	12
Latitude-longitude system	13
Records of surface-water stage and discharge	14
Data collection and computation	14
Data presentation	15
Station manuscript	16
Data table of daily mean values	18
Statistics of monthly mean data	18
Summary statistics	18
Identifying estimated daily discharge	21
Accuracy of the records	21
Other records available	22
Records of surface-water quality	22
Classification of records	22
Arrangement of records	23
On-site measurements and sample collection	23
Laboratory measurements	24
Data presentation	24
Remark codes	25
Records of lake levels	26
Data collection and computation	26
Data presentation	26
Records of ground-water levels	27
Data collection and computation	28
Data presentation	28
Records of ground-water quality	30
Sample collection and analysis	30
Data presentation	30

CONTENTS

Page

Access to USGS water data 30
Definition of terms 31
Techniques of Water-Resources Investigations of the U.S. Geological Survey 44
Selected references 49
Station records, surface water 53
Discharge at miscellaneous sites 236
Miscellaneous water-quality station analyses, miscellaneous streams in Montgomery County 238
Miscellaneous water-quality station analyses, Grand Calumet River and Indiana Harbor Canal in Lake County 241
Station records, lakes 254
Station records, ground water 300
Miscellaneous project data 390
Ground-water levels for the alluvial aquifer near the City of Carmel, Hamilton County network 390
Ground-water and surface-water levels in Northern Lake County 403
Index 447

ILLUSTRATIONS

Figure 1. Climate divisions in Indiana. 4
2. Indiana precipitation during water-year 2000 and mean annual precipitation, 1961-90. 5
3. Mean discharge at three USGS Indiana streamflow-gaging stations during water-year 2000 and median discharges, 1961-90 7
4. Monthly and yearly mean of daily minimum ground-water levels at three USGS Indiana ground-water observation wells during water-year 2000 and mean of monthly and yearly minimum ground-water levels, 1985-94. 9
5. System for numbering wells, and miscellaneous sites (latitude and longitude). 13
6. Locations of streamflow and water-quality gaging stations in Indiana. 50
7. Locations of streamflow gaging stations in Marion County. 52
8. Water-quality sampling sites for Sugar Creek and other sampling sites in Montgomery County. 237
9. Water-quality sampling sites for the Grand Calumet River and the Indiana Harbor Canal, in Lake County, July 1999. 240
10. Water-quality sampling sites for the Grand Calumet River and the Indiana Harbor Canal, in Lake County, April 2000. 247
11. Number of lakes by county having water-level records for water-year 2000. 253

ILLUSTRATIONS--Continued

Page

12. Number of ground-water wells by county having water-level records for water-year 2000 299
13. Location of wells in the Carmel, Hamilton County network 389
14. Location of wells in the Northern Lake County network 402

TABLES

Table 1. Monthly precipitation during water-year 2000 as a percentage of mean monthly precipitation, 1961-90 5
2. Factors for conversion of chemical constituents in milligrams or micrograms per liter to milliequivalents per liter 43
3. Factors for conversion of sediment concentrations in milligrams per liter to parts per million 43

STREAM AND RESERVOIR GAGING STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

(d-discharge, e-gage heights, c-chemical, p-pesticide,s-sediment, t-temperature, v-contents)

	Station Number	Page
OHIO RIVER BASIN		
GREAT MIAMI RIVER BASIN		
Whitewater River near Economy (d)	03274650	53
Whitewater River near Hagerstown (d)	03274750	54
Whitewater River near Alpine (d, c, s, t)	03275000	55
East Fork Whitewater River at Abington (d)	03275600	58
East Fork Whitewater River at Brookville (d)	03276000	59
Whitewater River at Brookville (d)	03276500	60
INDIAN-KENTUCK CREEK BASIN		
Indian-Kentuck Creek near Canaan (d)	03291780	61
SILVER CREEK BASIN		
Silver Creek near Sellersburg (d)	03294000	62
BUCK CREEK BASIN		
Buck Creek near New Middletown (d)	03302220	63
INDIAN CREEK BASIN		
Indian Creek:		
Little Indian Creek near Galena (d)	03302300	64
BLUE RIVER BASIN		
Blue River:		
West Fork Blue River at Salem (d)	03302680	65
Blue River at Fredericksburg (d)	03302800	66
Whiskey Run at Marengo (e)	03302849	67
Blue River near White Cloud (d)	03303000	68
ANDERSON RIVER BASIN		
Anderson River:		
Middle Fork Anderson River at Bristow (d)	03303300	69
CROOKED CREEK BASIN		
Crooked Creek near Santa Claus (d)	03303400	70
PIGEON CREEK BASIN		
Pigeon Creek near Fort Branch (d)	03322011	71
WABASH RIVER BASIN		
Wabash River at Linn Grove (d)	03322900	72
Wabash River at Huntington (d)	03323500	73
Little River near Huntington (d)	03324000	74
Salamonie River near Warren (d)	03324300	75
Salamonie River at Dora (d)	03324500	76
Wabash River at Wabash (d)	03325000	77
Mississinewa River		
Mississinewa River near Ridgeville (d)	03325500	78
Big Lick Creek near Hartford City (d)	03326070	79
Mississinewa River at Marion (d)	03326500	80
Mississinewa River at Peoria (d)	03327000	81
Wabash River at Peru (d)	03327500	82
Pipe Creek near Bunker Hill (d)	03327520	83
Eel River at North Manchester (d)	03328000	84

	Station Number	Page
OHIO RIVER BASIN--Continued		
WABASH RIVER BASIN--Continued		
Weesau Creek near Deedsville (d)	03328430	85
Eel River near Logansport (d)	03328500	86
Wabash River at Logansport (d)	03329000	87
Deer Creek near Delphi (d)	03329700	88
Tippecanoe River at North Webster (d)	03330241	89
Tippecanoe River at Oswego (d)	03330500	90
Walnut Creek near Warsaw (d)	03331110	91
Tippecanoe River near Ora (d)	03331500	92
Tippecanoe River near Delphi (d)	03333050	93
Wildcat Creek near Jerome (d)	03333450	94
Kokomo Creek near Kokomo (d)	03333600	95
Wildcat Creek at Kokomo (d)	03333700	96
Wildcat Creek at Owasco (d)	03334000	97
South Fork Wildcat Creek near Lafayette (d)	03334500	98
Wildcat Creek near Lafayette (d)	03335000	99
Wabash River at Lafayette (d)	03335500	100
Big Pine Creek:		
Mud Pine Creek near Oxford (d)	03335690	101
Wabash River at Covington (d)	03336000	102
Sugar Creek:		
Prairie Creek near Lebanon (d)	03339280	103
Sugar Creek at Crawfordsville (d)	03339500	104
Wabash River at Montezuma (d)	03340500	105
Big Raccoon Creek near Fincastle (d)	03340800	106
Big Raccoon Creek at Ferndale (d)	03340900	107
Big Raccoon Creek at Coxville (d)	03341300	108
Wabash River at Terre Haute (d)	03341500	109
Wabash River at Riverton (d)	03342000	110
Busseron Creek near Hymera (d)	03342100	111
Busseron Creek near Carlisle (d)	03342500	112
Wabash River at Vincennes (e)	03343000	113
White River:		
White River at Muncie (d)	03347000	114
Buck Creek near Muncie (d)	03347500	115
White River at Anderson(e)	03348000	
White River at Raible St. at Anderson (d)	03348130	116
Pipe Creek at Frankton (d)	03348350	117
White River at Noblesville (d)	03349000	118
Stony Creek near Noblesville (d)	03350700	119
White River near Nora (d)	03351000	120
White River at Broad Ripple (e)	03351060	121
Crooked Creek at Indianapolis (d)	03351310	122
Fall Creek near Fortville (d)	03351500	123
Fall Creek at Millersville (d)	03352500	124

	Station Number	Page
OHIO RIVER BASIN--Continued		
WABASH RIVER BASIN--Continued		
White River--Continued		
White River at Indianapolis (d)	03353000	125
Pleasant Run at Arlington Avenue at Indianapolis (d)	03353120	126
Eagle Creek at Zionsville (d)	03353200	127
Eagle Creek Reservoir near Indianapolis (e,v)	03353450	128
Eagle Creek below Reservoir at Indianapolis (d)	03353451	129
Eagle Creek at Indianapolis (d)	03353500	130
Little Eagle Creek at 52nd St. at Indianapolis (d)	03353551	131
Guion Creek above 52nd St. at Indianapolis (d)	03353560	132
Falcon Creek at 30th St. at Indianapolis (d)	03353583	133
Little Eagle Creek at Speedway (d)	03353600	134
White River at Stout Gen. Stn. at Indianapolis (d)	03353611	135
Lick Creek at Indianapolis (d)	03353620	136
Little Buck Creek near Southport (d)	03353630	137
Derbyshire Creek at Southport (d)	03353635	138
Little Buck Creek at Southport (d)	03353636	139
Little Buck Creek near Indianapolis (d)	03353637	140
White Lick Creek:		
West Fork White Lick Creek at Danville (d)	03353700	141
White Lick Creek at Mooresville (d)	03353800	142
White River near Centerton (d)	03354000	143
White River at Spencer (e)	03357000	144
Big Walnut Creek (head of Eel River)		
Plum Creek near Bainbridge (d)	03357350	145
Big Walnut Creek near Reelsville (d)	03357500	146
Mill Creek near Cataract (d)	03358000	147
Mill Creek near Manhattan (d)	03359000	148
Eel River at Bowling Green (d)	03360000	149
White River at Newberry (d)	03360500	150
Big Blue River (head of East Fork White River) at Carthage (d)	03361000	151
Big Blue River at Shelbyville (d)	03361500	152
Sugar Creek at New Palestine (d)	03361650	153
Buck Creek at Acton (d)	03361850	154
Youngs Creek near Edinburgh (d)	03362000	155
Sugar Creek near Edinburgh (d)	03362500	156
Driftwood River (continuation of Big Blue River)		
Flatrock River at St. Paul (d)	03363500	157
Flatrock River at Columbus (d)	03363900	158
East Fork White River (continuation of Driftwood River) at Columbus (d)	03364000	159
Clifty Creek at Hartsville (d)	03364500	160
East Fork White River at Seymour (d)	03365500	161

	Station Number	Page
OHIO RIVER BASIN--Continued		
WABASH RIVER BASIN--Continued		
White River--Continued		
East Fork White River--Continued		
Muscatatuck River--Continued		
Graham Creek (head of Muscatatuck River):		
Big Creek:		
Harberts Creek near Madison (d)	03366200	162
Muscatatuck River near Deputy (d)	03366500	163
Vernon Fork Muscatatuck River:		
Brush Creek near Nebraska (d)	03368000	164
Vernon Fork Muscatatuck River near Butlerville (d)	03369000	165
Vernon Fork Muscatatuck River at Vernon (d)	03369500	166
East Fork White River near Bedford (d)	03371500	167
Guthrie Creek:		
Back Creek at Leesville (d)	03371520	168
Salt Creek near Harrodsburg (d)	03372500	169
East Fork White River at Shoals (d)	03373500	170
Lost River near Leipsic (d)	03373530	171
White River above Petersburg (d)	03373980	172
White River at Petersburg (d)	03374000	173
Patoka River near Hardinsburg (d)	03374455	174
Patoka River near Cuzco (d)	03374500	175
Patoka River at Jasper (d)	03375500	176
Straight River:		
Hall Creek (head of Straight River) near St. Anthony (d)	03375800	177
Patoka River at Winslow (d)	03376300	178
South Fork Patoka River near Spurgeon (d)	03376350	179
Patoka River near Princeton (d)	03376500	180
Wabash River at Mount Carmel, IL (d)	03377500	181
Wabash River at New Harmony (e, c, p, s, t)	03378500	182
Big Creek near Wadesville (d)	03378550	188
STREAMS TRIBUTARY TO LAKE MICHIGAN		
GRAND CALUMET RIVER BASIN		
Grand Calumet River at Industrial Hwy. at Gary (eastern portion) (d)	04092677	189
Indiana Harbor Canal at East Chicago (d)	04092750	190
BURNS WATERWAY		
Deep River (head of Burns Waterway) at Lake George outlet at Hobart (d)	04093000	191
Little Calumet River at Gary (e)	04093200	192
Little Calumet River at Porter (d)	04094000	193
Burns Ditch at Portage (d)	04095090	194
TRAIL CREEK BASIN		
Trail Creek at Michigan City Harbor (d)	04095380	195

	Station Number	Page
STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued		
GALIEN RIVER BASIN		
South Branch Galien River:		
Galena River near LaPorte (d)	04096100	196
ST. JOSEPH RIVER BASIN		
Pigeon Creek near Angola (d)	04099510	197
Pigeon River near Scott (d)	04099750	198
Little Elkhart River at Middlebury (d)	04099808	199
Pine Creek near Elkhart (d)	04099850	200
North Branch Elkhart River (head of Elkhart River) at Cosperville (d)	04100222	201
South Branch Elkhart River:		
Forker Creek near Burr Oak (d)	04100252	202
Rimmell Branch (head of Craft Ditch) near Albion (d)	04100295	203
Solomon Creek near Syracuse (d)	04100377	204
Elkhart River at Goshen (d)	04100500	205
St. Joseph River at Elkhart (d)	04101000	206
Juday Creek near South Bend (d)	04101370	207
STREAMS TRIBUTARY TO LAKE ERIE		
MAUMEE RIVER BASIN		
St. Joseph River (head of Maumee River):		
Fish Creek at Hamilton (d)	04177720	208
Fish Creek near Artic (d, s)	04177810	209
St. Joseph River near Newville (d)	04178000	212
Cedar Creek near Cedarville (d)	04180000	213
St. Joseph River near Fort Wayne (d)	04180500	214
St. Marys River at Decatur (d)	04181500	215
St. Marys River near Fort Wayne (d)	04182000	216
Spy Run Creek at Fort Wayne (d)	04182810	217
Maumee River at Fort Wayne (e)	04182900	218
Maumee River at New Haven (d)	04183000	219
UPPER MISSISSIPPI RIVER BASIN		
ILLINOIS RIVER BASIN		
Kankakee River (head of Illinois River) near North Liberty (d)	05515000	220
Kankakee River at Davis (d)	05515500	221
Yellow River at Plymouth (d)	05516500	222
Yellow River at Knox (d)	05517000	223
Kankakee River at Dunns Bridge (d)	05517500	224
Kankakee River near Kouts (d)	05517530	225
Cobb Ditch near Kouts (d)	05517890	226
Kankakee River at Shelby (d)	05518000	227
Singleton Ditch at Schneider (d)	05519000	228
Iroquois River at Rosebud (d)	05521000	229
Iroquois River at Rensselaer (d)	05522500	230

STREAM AND RESERVOIR GAGING STATIONS, IN DOWNSTREAM ORDER FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME--Continued

	Station Number	Page
UPPER MISSISSIPPI RIVER BASIN--Continued		
ILLINOIS RIVER BASIN--Continued		
Iroquois River near Foresman (d)	05524500	231
DES PLAINES RIVER BASIN		
Chicago Sanitary and Ship Canal		
Little Calumet River (western portion):		
Hart Ditch at Dyer (d)	05536179	232
Hart Ditch at Munster (d)	05536190	233
Little Calumet River at Munster (d)	05536195	234
Grand Calumet River at Hohman Ave. at Hammond (d)	05536357	235

LAKE GAGING STATIONS, IN ALPHABETICAL ORDER, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

(e - gage heights)

	Station Number	Page
Adams Lake near Wolcottville (e)	04100030	254
Ball Lake near Hamilton (e)	04177680	254
Bass Lake at Bass Lake (e)	05517200	255
Bear Lake near Wolflake (e)	04100260	255
Big Chapman Lake near Warsaw (e)	03331010	256
Big Lake near Wolflake (e)	03330040	256
Big Long Lake near Stroh (e)	04099600	257
Bixler Lake at Kendallville (e)	04100140	257
Blue Lake near Churubusco (e)	03327600	258
Bower Lake near Pleasant Lake (e)	04099250	258
Cass Lake near Shipshewana (e)	04099810	259
Cedar Lake at Cedar Lake (e)	05518700	259
Center Lake at Warsaw (e)	03331160	260
Clear Lake at Clear Lake (e)	04177200	260
Clear Lake at LaPorte (e)	05515240	261
Crooked Lake at Crooked Lake (e)	04097850	261
Dewart Lake near Leesburg (e)	04100470	262
Diamond Lake near Silver Lake (e)	03331320	262
Diamond Lake near Wawaka (e)	04100350	263
Engle Lake near Ligonier (e)	04100370	263
Fish Lake near Plato (e)	04099670	264
Fish Lake near Scott (e)	04099760	264
Flint Lake near Valparaiso (e)	05517700	265
Gilbert Lake near Washington Center (e)	03330160	265

LAKE GAGING STATIONS, IN ALPHABETICAL ORDER
FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME--Continued

	Station Number	Page
Hackenburg Lake near Wolcottville (e)	04100110	266
Hamilton Lake at Hamilton (e)	04177700	266
Heaton Lake near Elkhart (e)	04099860	267
High Lake near Wolflake (e)	04100258	267
Hill Lake near Silver Lake (e)	03331300	268
Hogback Lake near Angola (e)	04099500	268
Jimmerson Lake at Nevada Mills (e)	04097680	269
King Lake near Delong (e)	03331438	269
Knapp Lake near Washington Center (e)	04100390	270
Koontz Lake at Koontz Lake (e)	05515600	270
Lake Eliza near Beatrice (e)	05517800	271
Lake Gage at Panama (e)	04097950	271
Lake George at Hobart (e)	04092990	272
Lake George at Jamestown (e)	04097550	272
Lake Manitou at Rochester (e)	03331380	273
Lake Maxinkuckee at Culver (e)	03331440	273
Lake of the Woods near Bremen (e)	05516200	274
Lake of the Woods near Helmer (e)	04099580	274
Lake Pleasant near Nevada Mills (e)	04097520	275
Little Long Lake at Kendallville (e)	04100160	275
Long Lake at Laketon (e)	03328100	276
Long Lake at Moonlight (e)	04099200	276
Lost Lake at Culver (e)	03331460	277
Lukens Lake near Disko (e)	03328400	277
Muncie Lake near Burr Oak (e)	04100280	278
North Twin Lake near Howe (e)	04099700	278
Nyona Lake at Greenoak (e)	03331400	279
Ogle Lake near Nashville (e)	03371700	279
Oliver Lake near Valentine (e)	04100100	280
Palestine Lake at Palestine (e)	03331180	280
Pike Lake at Warsaw (e)	03331040	281
Pine Lake at LaPorte (e)	05515220	281
Pretty Lake near Plymouth (e)	05516600	282
Riddles Lake near Lakeville (e)	05515800	282
Ridinger Lake near Pierceton (e)	03330300	283
Sawmill Lake near North Webster (e)	03330460	283
Sherburn Lake near Pierceton (e)	03331120	284
Shipshewana Lake near Shipshewana (e)	04099740	284
Shoe Lake near Oswego (e)	03330380	285
Shriner Lake at Tri-Lakes (e)	03327650	285
Silver Lake at Silver Lake (e)	03328350	286
Simonton Lake near Elkhart (e)	04099880	286
Skinner Lake near Albion (e)	04100300	287
Smalley Lake near Washington Center (e)	03330140	287
Stone Lake near Scott (e)	04099780	288
Sylvan Lake at Rome City (e)	04100180	288

LAKE GAGING STATIONS, IN ALPHABETICAL ORDER FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME--Continued

	Station Number	Page
Syracuse Lake at Syracuse (e)	04100460	289
Tippecanoe Lake at Oswego (e)	03330480	289
Upper Long Lake near Wolflake (e)	04100320	290
Versailles Lake near Versailles (e)	03276800	290
Waldron Lake near Cosperville (e)	04100220	291
Wauhob Lake near Valparaiso (e)	05517600	291
Webster Lake at North Webster (e)	03330240	292
Wharton Lake near South Bend (e)	05514770	292
Winona Lake at Warsaw (e)	03331140	293
Records available on lakes		294
Other lake maps available		298

GROUND-WATER WELLS, IN ALPHANUMERIC ORDER BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

(e - gage heights, h-hydrographs)

	Local Number	Well Number	Page
Allen 5 (e, h)	AL 5	410426084495201	300
Allen 6 (e, h)	AL 6	410932084561101	301
Allen 8 (e, h)	AL 8	410335085190701	302
Bartholomew 4 (e, h)	BA 4	391627085534401	303
Bartholomew 8 (e, h)	BA 8	390950085553501	304
Bartholomew 9 (e, h)	BA 9	391035085560401	305
Bartholomew 10 (e, h)	BA 10	390317085523701	306
Bartholomew 13 (e, h)	BA 13	390658085572201	307
Benton 4 (e, h)	BE 4	402851087213501	308
Boone 17 (e, h)	BO 17	400532086183901	309
Cass 3 (e, h)	CS 3	403407086175701	310
Clay 6 (e, h)	CY 6	392653087120501	311
Clay 7 (e, h)	CY 7	391124087134701	312
Decatur 2 (e,h)	DC 2	392022085371801	313
Delaware 4 (e, h)	DW 4	400541085213701	314
Elkhart 4 (e,h)	EH 4	413121085481301	315
Elkhart 7 (e, h)	EH 7	414514085505001	316
Elkhart 9 (e, h)	EH 8	414419085595801	317
Fountain 3 (e, h)	FO 3	401200087121701	318
Franklin 5 (e, h)	FR 5	392416085004301	319
Fulton 7 (e, h)	FU 7	405829086175801	320
Grant 8 (e, h)	GT 8	402322085481901	321
Grant 10 (e, h)	GT 10	403836085374401	322

GROUND-WATER WELLS, IN ALPHANUMERIC ORDER BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME--Continued

	Local Number	Well Number	Page
Harrison 8 (e, h)	HR 8	382323086044501	323
Hendricks 4 (e, h)	HD 4	394025086400801	324
Huntington 2 (e, h)	HU 2	404858085284301	325
Jasper 4 (e, h)	JP 4	410249087011201	326
Jasper 7 (e, h)	JP 7	410809087580801	327
Jasper 9 (e, h)	JP 9	410713087063201	328
Jasper 11 (e, h)	JP 11	410322087163101	329
Jasper 12 (e, h)	JP 12	410145087130401	330
Jasper 13 (e, h)	JP 13	405902087141501	331
Jasper 15 (e, h)	JP 15	405550087092301	332
Jefferson 5 (e, h)	JF 5	384949085251901	333
Jennings 3 (e, h)	JN 3	385601085365701	334
Knox 7 (e, h)	KN 7	383247087361001	335
Knox 8 (e, h)	KN 8	384951087202501	336
Kosciusko 9 (e, h)	KO 9	412556085513401	337
Lagrange 2 (e, h)	LG 2	414318085200601	338
Lagrange 3 (e, h)	LG 3	414158085253401	339
Lake 12 (e, h)	LK 12	411038087284701	340
Lake 13 (e, h)	LK 13	413559087270301	341
Lake 14 (e, h)	LK 14	411146087204101	342
LaPorte 9 (e, h)	LP 9	412350086512801	343
LaPorte 10 (e, h)	LP 10	413139086341401	344
LaPorte 11 (e, h)	LP 11	412839086533101	345
LaPorte 12 (e, h)	LP 12	413434086434701	346
Marion 34 (e, h)	MA 34	393855086120701	347
Marion 35 (e, h)	MA 35	394632086092701	348
Marion 36 (e, h)	MA 36	394626086100201	349
Marion 37 (e, h)	MA 37	394732086115501	350
Marion 38 (e, h)	MA 38	393950086124701	351
Martin 5 (e, h)	MT 5	383659086545901	352
Montgomery 7 (e, h)	MY 7	400247086482101	353
Morgan 4 (e, h)	MG 4	393423086161001	354
Newton 6 (e, h)	NE 6	405105087173301	355
Newton 7 (e, h)	NE 7	405959087282901	356
Newton 8 (e. h)	NE 8	410428087231501	357
Newton 9 (e, h)	NE 9	405959087282902	358
Newton 10 (e, h)	NE 10	410428087235021	359
Newton 11 (e, h)	NE 11	410235087305901	360
Newton 14 (e, h)	NE 14	410917087285801	361
Noble 8 (e, h)	NO 8	411922085221801	362
Noble 9 (e, h)	NO 9	413106085232701	363
Noble 11 (e, h)	NO 11	412405085154501	364
Noble 14 (e, h)	NO 14	412405085154504	365
Parke 6 (e, h)	PA 6	393619087043001	366
Posey 3 (e, h)	PY 3	380758087551001	367
Posey 5 (e, h)	PY 5	380546087474301	368

GROUND-WATER WELLS, IN ALPHANUMERIC ORDER BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME--Continued

	Local Number	Well Number	Page
Pulaski 6 (e, h)	PU 6	405916086530701	369
Pulaski 7 (e, h)	PU 7	410739086365201	370
Randolph 3 (e, h)	RA 3	401532085085301	371
St. Joseph 31 (e, h)	SJ 31	413120086055601	372
Shelby 2 (e, h)	SH 2	393943085490901	373
Starke 2 (e, h)	SK 2	411342086365601	374
Steuben 6 (e, h)	SB 6	414204085054002	375
Tippecanoe 17 (e, h)	TC 17	402734087033401	376
Tippecanoe 18 (e, h)	TC 18	402734087033402	377
Vanderburgh 6 (e, h)	VA 6	380608087395901	378
Vanderburgh 7 (e, h)	VA 7	380626087344401	379
Vigo 7 (e, h)	VI 7	392820087242601	380
Wabash 3 (e, h)	WB 3	404424085422801	381
Wabash 4 (e, h)	WB 4	403948085414601	382
Warrick 4 (e, h)	WK 4	380624087164801	383
Washington 2 (e, h)	WA 2	383012086124501	384
Wayne 6 (e, h)	WE 6	394426085080601	385
Wells 4 (e, h)	WL 4	404331085064701	386
White 4 (e, h)	WT 4	404914086403001	387
Whitley 3 (e, h)	WY 3	410337085264201	388

The following continuous-record surface-water discharge or stage-only stations (gaging stations) in Indiana have been discontinued. Daily streamflow or stage records were collected and published for the period of record, expressed in water years, shown for each station. Discontinued short-term project stations have not been included. Information regarding these stations may be obtained from the District Office at the address given on the back side of the title page of this report.

(Most stations are surface-water discharge, exceptions are designated with footnotes)

Station name	Station number	Drainage area (mi^2)	Period of record
OHIO RIVER BASIN			
Little Williams Creek at Connersville	03274950	9.16	1968-91
East Fork Whitewater River at Richmond	03275500	121	1949-78
South Hogan Creek near Dillsboro	03276700	38.1	1961-93
Laughery Creek near Farmers Retreat (a)	03277000	248	1941-73
Indian Creek near Corydon	03302500	129	1943-93
Whiskey Run at Marengo (d)	03302849	7.02	1986-93
Friday Branch tributary near Saint Meinrad (b)	03303276	.096	1981
Little Pigeon Creek near Tennyson	03304000	150	1944-47
Pigeon Creek at Evansville	03322100	323	1960-85
WABASH RIVER BASIN			
Wabash River near New Corydon	03322500	262	1951-88
Wabash River at Bluffton	03323000	532	1930-71, 1987-92 (d)
Salamonie River at Portland	03324200	85.6	1959-93
Little Mississinewa River at Union City	03325311	9.67	1982-97
Mississinewa River near Eaton (b)	03326000	310	1952-71
Wabash River at Delphi	03329500	4,072	1940-71
Tippecanoe River near Warsaw	03331000	126	1943-49
Tippecanoe River at Pulaski	03332000	1,089	1928-31
Little Indian Creek near Royal Center (a)	03332300	35.0	1959-73
Tippecanoe River at Buffalo (e)	03332345	1,285	1986-92
Big Monon Creek near Francesville (a)	03332400	152	1959-73
Tippecanoe River near Monticello (c)	03332500	1,732	1932-81
Rattlesnake Creek near Patton	03329400	6.83	1968-93
Wildcat Creek at Greentown	03333500	168	1945-61
Marshall Ditch near Montmorenci	03335677	1.58	1990-94
Indian Creek near Montmorenci	03335678	27.8	1990-94
Little Pine Creek at Green Hill	03335679	42.3	1990-94
Big Pine Creek near Williamsport	03335700	323	1955-87
East Fork Coal Creek near Hillsboro	03339108	33.4	1968-91
Coal Creek at Coal Creek	03339120	214	1965-72
Little Vermilion River near Newport	03339150	237	1965-72
Sugar Creek tributary near Deer Mill (b)	03339855	.45	1981
Sugar Creek near Byron (b)	03340000	670	1941-71
Big Raccoon Creek at Mansfield (d)	03341000	248	1939-58
Little Raccoon Creek near Catlin (d,g)	03341200	134	1957-71
Big Raccoon Creek near Mecca (d)	03341315	473	1988-92
Brouilletts Creek near Universal (b)	03341420	321	1966-71
North Coal Creek near Terre Haute	03341470	1.91	1974-76
Honey Creek near Riley (b)	03341570	5.79	1981
West Fork Busseron Creek near Hymera	03342150	14.4	1966-86
Mud Creek near Cass	03342244	9.16	1981-91
Mud Creek near Dugger	03342250	11.9	1966-81
Busseron Creek near Sullivan	03342300	138	1966-86
Buttermilk Creek near Paxton	03342350	16.5	1966-73
Buttermilk Creek near Sullivan	03342360	17.6	1975-78
South Fork Smalls Creek at Bruceville (b,g)	03342800	4.94	1972-75
White River at Anderson	03348000	406	1925-26, 1932-93
Killbuck Creek near Gaston	03348020	25.5	1968-91
Killbuck Creek near Anderson	03348100	97.8	1964-68
White River near Noblesville	03348500	828	1915-26, 1929-74 (b)
Cicero Creek near Arcadia (a)	03349500	131	1955-76

Station name	Station number	Drainage area (mi^2)	Period of record
WABASH RIVER BASIN--Continued			
Little Cicero Creek near Arcadia (a)	03349700	40.4	1956-76
Cicero Creek near Cicero	03350000	196	1946-54
Hinkle Creek near Cicero (a)	03350100	18.5	1956-76
Cicero Creek at Noblesville	03350500	216	1950-80, 1986-92
Sugar Creek near Middletown	03351400	5.80	1969-89
Lawrence Creek at Fort Benjamin Harrison	03352000	2.74	1952-56, 1958-69
Mud Creek at Indianapolis (a)	03352200	42.4	1958-76
Fall Creek at 16th St. at Indianapolis	03352875	317	1986-91
Pleasant Run at Brookville Road at Indpls.	03353160	10.1	1960-81
Bean Creek at Indianapolis	03353180	4.4	1970-93
White River at Waverly	03353660	2,026	1986-88
Beanblossom Creek at Beanblossom	03354500	14.6	1952-93
Bear Creek near Trevlac (a)	03355000	6.94	1952-73
Beanblossom Creek at Dolan	03356000	100	1946-78
Beanblossom Creek near Bloomington	03356500	112	1931-33
Big Walnut Creek at Greencastle	03357420	216	1975-82
Deer Creek near Putnamville	03359500	59.0	1955-65, 1968-72
Jordan Creek near Jordan (b)	03359980	25.9	1981
Kessinger Ditch near Monroe City	03360895	56.2	1992-98
Driftwood River near Edinburgh	03363000	1,060	1940-91
Haw Creek near Clifford	03364200	47.5	1967-91
Sand Creek near Brewersville	03365000	155	1948-86
Von Fange Ditch at Seymour	03365575	4.17	1994-97
Graham Creek near Vernon	03366000	77.2	1955-73
Muscatatuck River near Austin	03367000	359	1932-43, 1944-71 (f)
Stucker Creek near Austin	03367500	127	1932-33
Vernon Fork near Crothersville	03370000	391	1932-33
Muscatatuck River near Tampico	03370500	960	1939
Muscatatuck River near Vallonia	03371000	1,134	1932-33
South Fork Salt Creek at Kurtz	03371600	38.2	1961-71, 1972-75 (e)
North Fork Salt Creek at Nashville (a)	03371650	76.1	1962-76
North Fork Salt Creek near Belmont	03372000	120	1946-71
Stephens Creek near Bloomington	03372300	10.9	1970-91
Clear Creek near Harrodsburg	03372700	55.2	1960-71
Salt Creek near Peerless	03373000	573	1939-50, 1957-71, 1971-84 (d)
Indian Creek near Springville (a)	03373200	60.7	1961-73
Lost River near West Baden Springs	03373700	287	1964-93
White River at Hazelton (h)	03374100	11,305	1928-38
Patoka River near Jasper (g)	03376000	348	1944-47
Flat Creek near Otwell	03376260	21.3	1965-82
Little Flat Creek near Otwell (b)	03376279	6.56	1981
South Fork Patoka River near Spurgeon	03376350	42.8	1964-86
STREAMS TRIBUTARY TO LAKE MICHIGAN			
Dunes Creek at Porter	04095050	3.40	1979-82
Burns Ditch at Gary (g)	04093500	160	1943-91
Salt Creek near McCool	04094500	74.6	1945-91
Derby Ditch at Beverly Shores	04095100	4.64	1980
Trail Creek at Michigan City	04095300	54.1	1969-94
Lime Lake outlet at Panama	04097970	17.5	1969-86
Fawn River at Orland	04098000	86.4	1943-47
Pigeon Creek and Hogback Lake near Angola	04099500	103	1946-74
Pretty Lake Inlet near Stroh	04099610	1.96	1963-80
Christiana Creek at Elkhart	04100000	127	1947-52
North Branch Elkhart River near Cosperville	04100220	134	1951-71
Turkey Creek at Syracuse	04100465	43.8	1969-87

Station name	Station number	Drainage area (mi^2)	Period of record
STREAMS TRIBUTARY TO LAKE ERIE			
St. Joseph River at Hursh	04178500	734	1950-54
St. Joseph River at Cedarville	04179000	763	1931-32, 1956-81
Cedar Creek near Auburn (a)	04179500	87.3	1943-73
Harber Ditch at Fort Wayne	04182590	21.9	1960-64 (g), 1961-64 (e), 1964-91
St. Marys River at Fort Wayne	04182700	810	1905-06
UPPER MISSISSIPPI RIVER BASIN			
Kingsbury Creek near LaPorte	05515400	7.08	1970-86
Yellow River near Bremen (a)	05516000	135	1955-73
Singleton Ditch near Hebron	05518500	34.2	1949-51
West Creek near Schneider	05519500	54.7	1948-52, 1954-72
Singleton Ditch at Illinoi, IL	05520000	220	1945-77
Oliver Ditch near Aix	05521500	79.6	1948-51
Iroquois River near North Marion	05522000	144	1948-93
Bice Ditch at South Marion	05523000	21.8	1948-93
Slough Creek near Collegeville	05523500	83.7	1948-52, 1953-82
Carpenter Creek at Egypt	05524000	44.8	1948-52, 1953-82

a Continued as a crest-stage and low-flow partial-record station through 1984.
b Some quality of water data available.
c Records of daily discharges furnished by Northern Indiana Public Service Company.
d Continued as a stage only station.
e Stage only station.
f High-water records only.
g Some record fragmentary.
h Some quality of water data available after station discontinued for stream-gaging records.

The following stations were discontinued as surface-water-quality stations. Records of temperature (T), specific conductance, pH, dissolved oxygen (C) or sediment (S) were collected and published for the record shown for each station. Discontinued short-term project stations have not been included. Information regarding these stations may be obtained from the District Office at the address given on the back side of the title page of this report.

Station name	Station number	Drainage area (mi^2)	Type of Record	Period of record
OHIO RIVER BASIN				
Whitewater River near Alpine	03275000	529	C,T,S	1987-94, 99
				1968-79
East Fork Whitewater River at Abington	03275600	198	C	1969-76,
			T	1970-71,
			T	1973-76
East Fork Whitewater at Brookville	03276000	380	C,T	1974-75
Whitewater River at Brookville	03276500	1224	T	1974-81,
			C	1974-86
South Hogan Creek near Dillsboro	03276700	38.1	C,T,S	1961-93
Trib to Friday Branch at St. Meinard	03303276	.096	C,T,S	1980-81
WABASH RIVER BASIN				
Wabash River near New Corydon	03322500	262	C	1969-73
Wabash River at Huntington	03323500	710	T	1963-77
Salamonie Creek at Warren	03324288	402	T	1980-81
Mississinewa River at Marion	03326500	682	C,T	1975-76,79
Eel River near Logansport	03328500	789	S,T	1969-80
Wildcat Creek near Lafayette	03335000	794	C	1970-79,
			T	1970-74
Wabash River at Lafayette	03335500	7247	T	1954-64,
			T	1967-75,
			S	1978-80
Big Pine Creek at Williamsport	03335700	323	C	1970-76,
			T	1970-75,
			C,T,S	1980-81
Big Raccoon Creek near Fincastle	03340800	132	T	1965-77,
			C	1975-77
Honey Creek at Riley	03341570	5.79	C,T,S	1980-81
Wabash River near Sullivan	03341805	12,600	C,T	1963-64
Wabash River at Riverton	03342000	13,100	T	1954-61,
			T	1962-65,
			T	1967-78
South Fork Smalls Creek at Bruceville	03342800	4.94	C	1973-75
White River at Noblesville	03348500	814	T	1952-76
White River near Nora	03351000	1200	T	1954-60,
			T	1962-72
White River near Centerton	03354000	2,444	C,S	1986-95
			T	1953-56
				1966-67
				1970-72
				1977-80
				1982-85
			S	1965-77
Big Walnut Creek at Greencastle	03357420	216	C,T	1973-77
Mill Creek at Cataract	03358000	245	C,T	1978-82
Jordan Creek at Jordan	03359980	25.9	C,T	1980-81
Big Blue River at Carthage	03361000	184	T	1974-77,
			C,T	1979-82,
			S	1977-81,
			C	1973-77
Flatrock River at St. Paul	03363500	303	C,T	1976-79
Clifty Creek at Hartsville	03364500	91.4	C,T	1970-75
East Fork White River at Seymour	03365500	2333	S	1966-80,
			T	1954-79
North Fork Salt Creek near Nashville	03371650	761	C,T	1974-76
Salt Creek near Harrodsburg	03372500	441	T	1966-76
White River at Petersburg	03374000	11125	T	1964-77
White River near Hazelton	03374100	11305	T	1973-81,
			S	1973-83,
			C	1973-86
Patoka River near English	03374470	308	T	1970-76,
			C	1969-76
Little Flat Creek near Otwell	03376279	6.36	C,T,S	1980-81
Wabash River at New Harmony	03378500	29234	T	1974-80
			C	1974-86
			S	1974-83

DISCONTINUED SURFACE-WATER-QUALITY STATIONS--Continued

Station name	Station number	Drainage area (mi^2)	Type of Record	Period of record
STREAM TRIBUTARY TO LAKE MICHIGAN				
Trail Creek near Michigan City	04095300	54.1	C,T S	1977-81 1990-94
STREAMS TRIBUTARY TO LAKE ERIE				
St. Joseph River near Newville	04178100	615	C	1996-99, 1969-73
St. Marys River at Wilshire	04181050	435	C	1969-73
St. Marys River near Ft Wayne	04182000	762	S T	1953-67, 1964-67
UPPER MISSISSIPPI RIVER BASIN				
Yellow Creek near Plymouth	05516500	29.4	S,T	1979-81

WATER RESOURCES DATA - INDIANA, 2000

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with State and Federal agencies, obtains a large amount of data pertaining to the water resources of Indiana each water year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the U.S. Geological Survey, the data are published annually in this report series entitled "Water Resources Data - Indiana."

Water-resources data for the 2000 water year for Indiana consist of records of discharge, stage, and water quality of streams, and water levels of lakes and ground-water wells. This volume contains records for water discharge at 166 gaging stations, stage at 7 gaging stations, stage and contents at 1 reservoir, water quality at 2 stream sites, sediment data at 1 site, water levels at 79 lakes, and 89 observation wells. Also included are streamflow discharge at miscellaneous sites, water quality data for the Lake Erie National Water-Quality Assessment, water quality data from special studies done in Montgomery and Lake counties, and observation well water levels from special studies done in Hamilton and Lake counties. Locations of the streamflow and water-quality sites are shown on figures 6, 7, 8, 9, and 10. The number of lakes and ground-water observation wells by county having 2000 water-level records are shown on figures 11 and 12. A systematic collection of stages on selected lakes was begun in 1943 in cooperation with the State of Indiana, Department of Natural Resources. The data collected since the beginning of record have not been published previously in the annual water data reports for Indiana. They are available from the Indiana District office. A selected amount of lake data was published in Water-Supply Paper 1363, "Hydrology of Indiana Lakes," by J. I. Perrey and D. M. Corbett (1956). Additional lake data were published in Open-File Report 88-331, "Annual Maximum and Minimum Lake Levels for Indiana, Water Years 1942-85," by Kathleen K. Fowler (1988). These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Indiana.

This series of annual reports for Indiana began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. Beginning with the 1975 water year, the report format was changed to present, in one volume, data on quantity and quality of surface and ground water.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for Indiana were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage; and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States." Stream discharge and stage data were published in four compilation reports (through the 1950, 1951-60, 1961-65, and 1966-70 water years). Data on water quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the

United States," and water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from U.S. Geological Survey, Branch of Information Services, Box 25286, Denver, CO 80225-0286.

Publications similar to this report are published annually by the U.S. Geological Survey for all States. These official U.S. Geological Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report IN-00-1." For archiving and general distribution, the reports for 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

The U.S. Geological Survey has compiled and disseminated estimates of water use for the Nation at 5-year intervals since 1950. A large amount of the Indiana withdrawal data presented in the publication, "Estimated Use of Water in the United States in 1995" U.S. Geological Survey Circular 1200, were provided by the Indiana Department of Natural Resources, Division of Water. The data indicated that in 1995 over 9.1 billion gallons per day were withdrawn from the surface- and ground-water resources of Indiana to meet the needs of its citizens. Approximately 92 percent of this withdrawal was from surface-water sources. Nearly 5.7 billion gallons per day of surface water was used for thermoelectric power production, making it the largest category of use in Indiana. A small percentage of those withdrawals were consumed in the power-production process and the rest of the water was returned to the source, making it available for future use.

Additional information, including current prices, for ordering specific reports may be obtained from the District Chief at the address given on the back of the title page or by telephone (317) 290-3333.

COOPERATION

The U.S. Geological Survey and agencies of the State of Indiana have had cooperative agreements for the systematic collection of streamflow records since 1930, for ground-water levels since 1940, for lake stages since 1943, and for water-quality records since 1951. Organizations that supplied data are acknowledged in station manuscripts. Organizations that assisted in collecting data in this report through cooperative agreement with the U.S. Geological Survey are:

State of Indiana, Department of Natural Resources, Larry D. Macklin, Director, through the Bureau of Resource and Regulation, Paul Ehret, Deputy Director

State of Indiana, Department of Environmental Management, Lori F. Kaplan, Commissioner, Matthew Rueff, Assistant Commissioner, Office of Water Management

State of Indiana, Department of Transportation, Christine M. Klika, Commissioner

Assistance in the form of funds or services was given by the U.S. Army Corps of Engineers in collecting records for surface-water gaging stations published in this report.

The following organizations aided in collecting records: The cities of Elkhart, Fort Wayne, and Indianapolis; Hoosier Energy; Indianapolis Water Co.; IPALCO; CINERGY; Jefferson Smurfit Corp.; Northern Indiana Public Service Co.

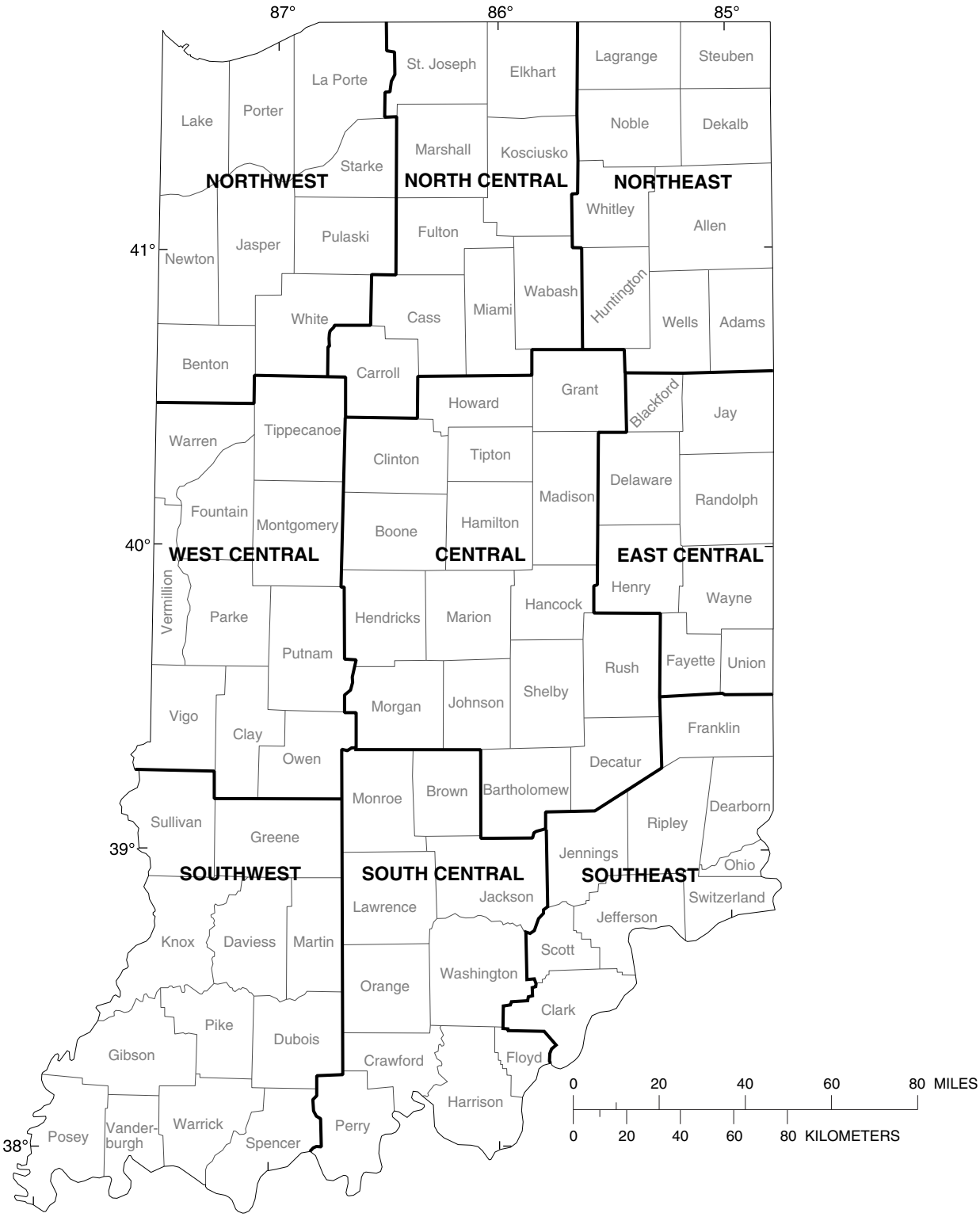
SUMMARY OF HYDROLOGIC CONDITIONS

Precipitation

Indiana has a continental climate influenced mainly by eastward-moving cold polar and warm gulf air masses. The low-pressure centers formed by the interaction of these air masses are the major source of Indiana precipitation. Spring and early summer are normally the wettest periods of the year, as storm systems tap moisture from the Gulf of Mexico and travel across Indiana. Early fall is generally the driest period. Seasonal patterns may vary geographically, particularly in the summer when isolated thunderstorms are common and during the winter when lake-effect snows can affect northern Indiana. The average annual precipitation for Indiana is 38 inches. The average annual precipitation ranges geographically from 36 inches in northern Indiana to 44 inches in southern Indiana. Snowfall accounts for 2 to 7 inches of the average annual precipitation, with the greatest snowfall in northern Indiana (Clark, 1980).

The 2000 water year began during a period of moderate-to-severe drought across most of Indiana. Autumn (September to November) 1999 was the second driest autumn in central Indiana since record keeping began in 1871 (National Weather Service, Indianapolis, World Wide Web page: http://www.crh.noaa.gov/ind/AUXTRM.TXT). Most of Indiana remained in a precipitation deficit (cumulative precipitation totals below normal) through mid June 2000, despite some periods of moderate-to-heavy rainfall in January, February, April, and May. These periods of rainfall were mostly in southern Indiana. From 4 to 6 inches of rain fell in southern Indiana early in January, and more than 7 inches of rain fell in southwestern Indiana February 13–18.

Moderate-to-heavy rainfall was widespread across Indiana in June; up to 7 inches of rain fell, June 17–18, in south-central Indiana. July rainfall was near normal across most of Indiana. August 2000 was active for severe thunderstorms which occurred on 7 days during that month (National Weather Service, Indianapolis, World Wide Web page: http://www.crh.noaa.gov/ind/2000.htm). Southern Indiana, southwestern Indiana in particular, experienced the brunt of the rainfall produced by these storms. September–usually one of Indiana's drier months–was much wetter than normal across central and southern Indiana.



Base from U.S. Geological Survey digital data, 1:2,000,000 1996
Albers Equal-Area Conic projection
Standard parallels 29°30' and 45°30' central meridian -96°

EXPLANATION
Climate division boundaries

Figure 1.--Climate divisions in Indiana.

(Data from National Oceanic and Atmospheric Administration, 1994.)

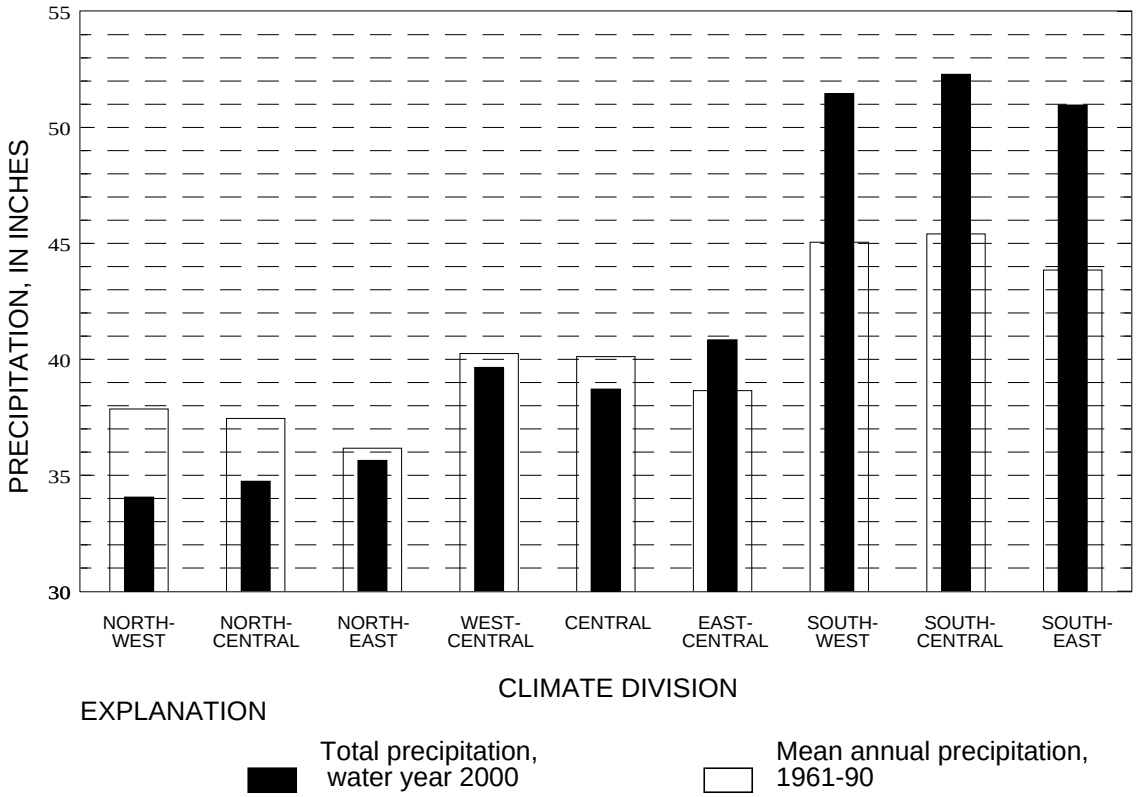


Figure 2.--Indiana precipitation during water-year 2000 and mean annual precipitation,1961–90.

Table 1.--Monthly precipitation during water-year 2000 as a percentage of mean monthly precipitation, 1961–90.

Climate Division	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
Northwest	56	26	112	93	108	51	84	99	177	91	70	95
North-central	62	32	89	94	104	63	77	129	174	81	74	111
Northeast	77	34	73	76	101	69	81	132	177	66	128	129
West-central	79	28	78	81	151	49	67	124	170	86	103	169
Central	64	30	94	82	128	55	82	126	150	74	100	184
East-central	58	41	96	123	121	58	104	117	136	107	110	174
Southwest	85	17	117	162	219	57	68	74	180	104	195	173
South-central	83	42	115	183	206	60	89	87	173	95	146	170
Southeast	75	45	134	163	204	67	112	95	126	103	144	183

Total precipitation for the 2000 water year is compared to the mean annual precipitation, 1961–90, for the nine Indiana climate divisions in figure 2 (a map of Indiana climate divisions is given in fig. 1). Figure 2 illustrates that, while drought conditions affected much of the 2000 water year, above-normal precipitation in the latter part of the water year caused precipitation to be greater than normal in southern Indiana and near normal in central Indiana. Northern Indiana remained below normal because the precipitation amounts in the latter part of the water year did not make up the rainfall deficit caused by the drought conditions.

Monthly precipitation during the 2000 water year, expressed as percentage of the mean monthly precipitant for 1961–90, is given by month for each climate division in table 1 (National Oceanic and Atmospheric Agency, National Climatic Data Center World Wide Web page: http://www.ncdc.noaa.gov/onlineprod/drought/xmgrg1.html).

Surface Water

The major drainage basins in Indiana include the Ohio River Basin, Upper Mississippi River Basin, Lake Michigan Basin, and Lake Erie Basin. Most of Indiana (24,000 square miles) is drained by the Wabash River of the Ohio River Basin.

The sources of flow in Indiana streams and rivers are ground water and direct runoff from precipitation. The majority of streamflow during normal and low flow periods is from ground water; during high-flow periods a significant amount of streamflow is runoff. Of the 38 inches of average annual precipitation that fall in Indiana, it is estimated that about 26 inches are lost to evapotranspiration. The remaining 12 inches are considered the total average annual runoff for Indiana. Of the 12-inch total average annual runoff, about 9 inches are direct surface runoff to streams and lakes, while the remaining 3 inches recharge ground water (Clark, 1980).

A predominant characteristic of streamflow across Indiana is variability. Streamflow is ultimately reflective of the runoff resulting from precipitation, which is highly variable geographically and over time (Clark, 1980). Thus, low-flow periods resulting from drought or floods resulting from storms have occurred in every month. The variability of flows in Indiana streams and rivers was evident during the 2000 water year.

Figure 3 illustrates streamflow during the 2000 water year, as compared to medians of monthly and yearly streamflows (discharges), 1961–90 for three Indiana USGS streamflow-gaging stations: Mississinewa River at Marion (03326500); East Fork White River at Shoals (03373500); and Wabash River at Mount Carmel, Illinois (03377500). Median monthly and yearly discharges, 1961–90, are considered to be “normal” discharges in this discussion because the period includes 30 years of record (this allows the 2000 water year discharges to be quantified relative to normal discharges).

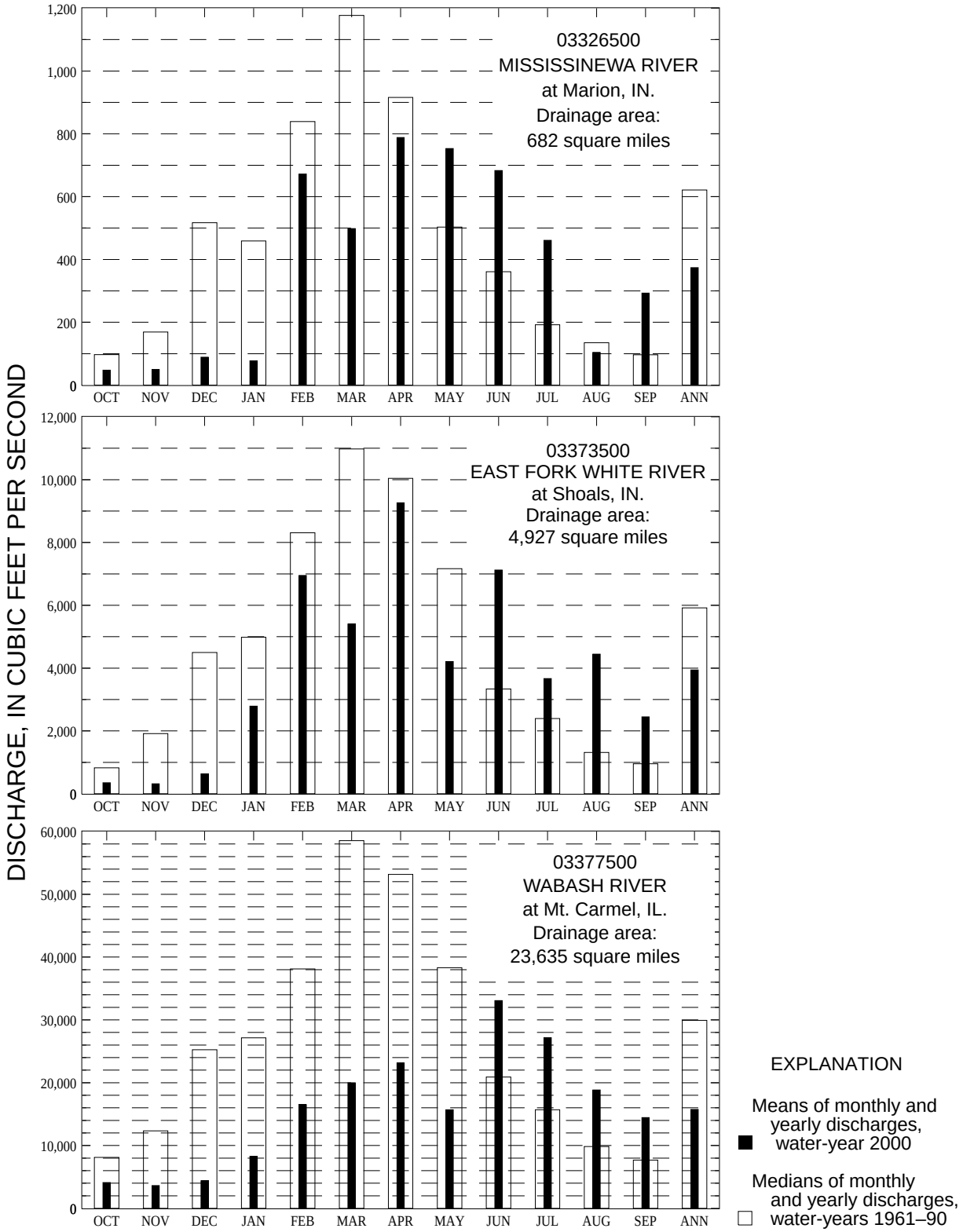


Figure 3.--Mean discharge at three USGS Indiana streamflow-gaging stations during water-year 2000 and median discharges, 1961–90.

Drought caused lower-than-normal discharges across most of Indiana, October through May, as illustrated in the discharges for the Wabash River at Mount Carmel, Illinois, USGS streamflow-gaging station (because the Wabash River drains much of Indiana, this station is representative of conditions across a large part of the State).

Even with lower mean monthly discharges across much of Indiana through May, there were instances of flooding (Al Shipe, National Weather Service, oral commun., January 12, 2001). In early January, up to 6 inches of rain in southern Indiana caused minor flooding (minor flooding mainly affects crop lands and some roads and usually does not cause major property damage) in the Patoka and Muscatatuck River basins in southern Indiana and flash flooding in Indiana counties that border the Ohio River. The 7-inch rains, February 13–18, in southeastern Indiana caused the Blue River near Fredericksburg in southeastern Indiana to reach its highest stage since April 1996. Minor flooding occurred on the lower White River in southwestern Indiana in April and on the East Fork White River in May.

Moderate-to-heavy rains across much of Indiana in June brought discharges to above-normal levels. The heavy rains of June 17 and 18 caused flash flooding in south-central Indiana and minor flooding on the Mississinewa and Wabash Rivers in north-central Indiana. By the end of June, the lower Wabash and White Rivers in southern Indiana were at bank-full stages.

Above-normal precipitation in July caused the lower Wabash River to exceed flood stage at Riverton in southwestern Indiana. Rainfall associated with severe thunderstorms in August caused minor flooding on the lower White River and caused the highest stage in more than a decade on Mill Creek near Cataract in west-central Indiana. The trend of higher-than-normal precipitation and discharges continued though September to the end of the 2000 water year, as illustrated in figure 3. Even with greater-than-normal discharges at the three USGS streamflow-gaging stations from June to September, the mean discharges for the 2000 water year were below normal because of the October to May drought conditions.

Ground Water

Ground water in Indiana occurs in a variety of unconsolidated- and bedrock-aquifer systems. Changes in ground-water levels are produced by natural influences such as precipitation and by man-made causes such as ground-water withdrawals. Normal annual ground-water-level changes are typically in the range of 3 to 7 feet in most aquifers. Statewide, ground-water levels have shown no long-term rising or declining trends (Clark, 1980).

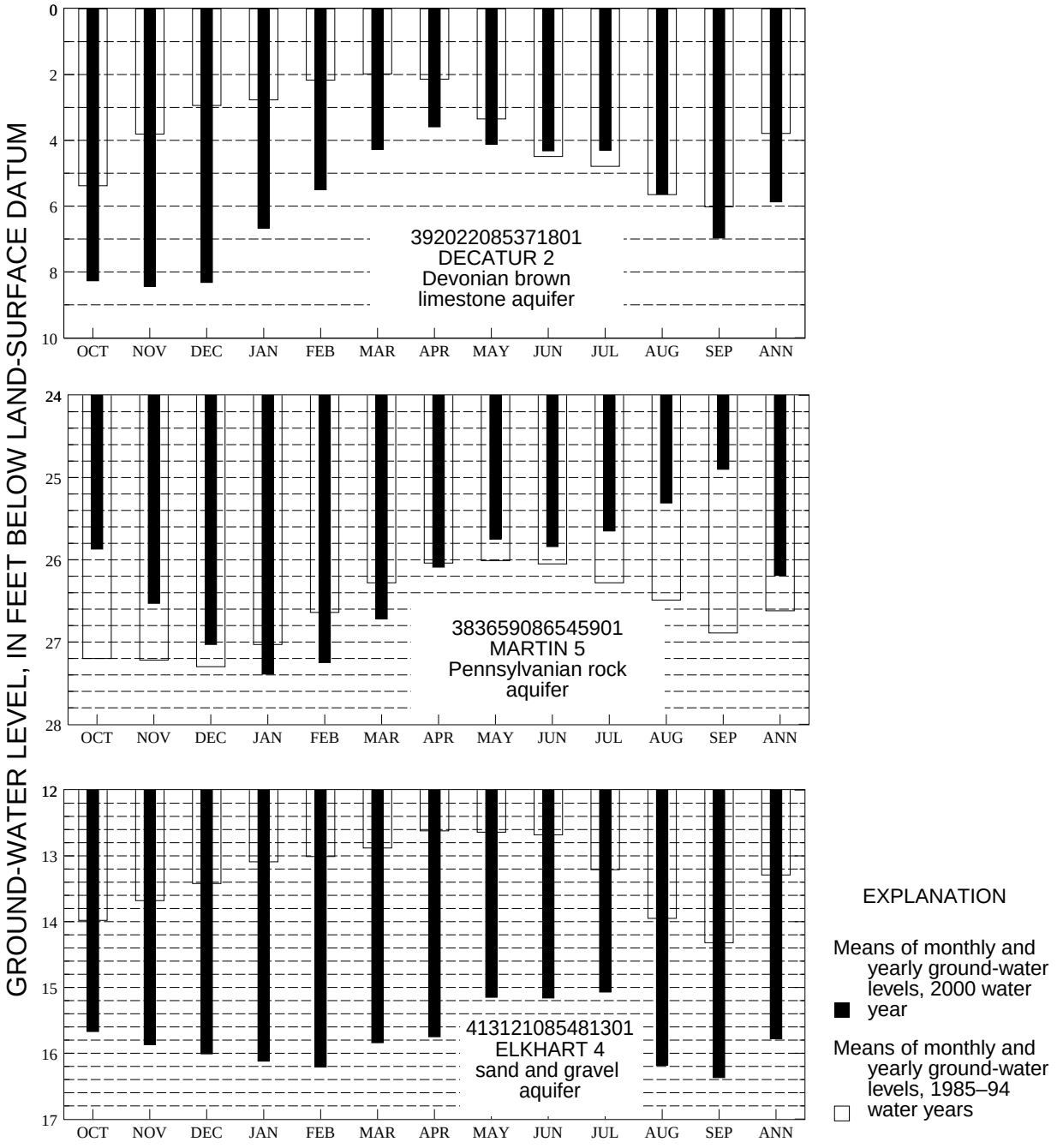


Figure 4.--Monthly and yearly mean of daily minimum ground-water levels at three USGS Indiana ground-water observation wells during water-year 2000 and mean of monthly and yearly minimum ground-water levels, 1985–94.

Generally, in Indiana, ground-water levels follow a consistent seasonal pattern, reaching annual high levels in late April or early May and then beginning a slow but continuous decline throughout the summer. In the fall, ground-water levels begin to rise with increasing precipitation and reduction in evapotranspiration (Clark, 1980).

This seasonal pattern is seen in plots of mean ground-water levels for 1985 to 1994 for three USGS index ground-water-observation wells in Indiana: Decatur 2, Martin 5, and Elkhart 4 (fig. 4). Mean ground-water levels for this period are considered to be "normal" for purposes of this discussion. Figure 4 compares the 2000 water year with normal ground-water levels for the three wells. In this discussion, the term "ground-water level(s)" will refer to a height above an arbitrary datum; however, ground-water-level data are normally quantified in terms of distance lower than a land-surface datum.

The observation well Decatur 2 is located in a Devonian brown limestone aquifer in central Indiana. For Decatur 2, ground-water levels were lower than normal for the entire 2000 water year, except for the months of June, July, and August because of the influence of drought conditions. Levels were above normal June through August likely because of recharge from the heavy June rainfall in central Indiana.

Martin 5 is located in a Pennsylvanian-rock aquifer in southwestern Indiana. Despite drought conditions, water-year ground-water levels were higher than normal October through December and May through September (fig. 4).

The index observation well Elkhart 4 is located in north-central Indiana in a sand and gravel aquifer. Ground-water levels were lower than normal for the entire 2000 water year, reflecting the generally dry year in northern Indiana (fig. 4).

Of the 89 USGS ground-water-observation wells in Indiana, 33 wells had record low- water levels at some time during the 2000 water year. None of the 89 wells had record high-water levels as a result of the drought conditions that existed during much of the 2000 water year.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Benchmark Network is a network of 50 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by human activities.

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within four of the Nation's largest river basins--the Mississippi, Columbia, Colorado, and Rio Grande. The network consists of 39 stations. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment Program (NAWQA); (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical climate of precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to accomplish the following objectives; (1) Provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 191 precipitation chemistry monitoring sites. (2) Provide the mechanism to evaluate the effectiveness of the significant reduction in SO2 emissions that began in 1995 as implementation of the Clean Air Act Amendments (CAAA) occurred. (3) Provide the scientific basis and nationwide evaluation mechanism for implementation of the Phase II CAAA emission reductions for SO2 and NOx scheduled to begin in 2000.

Data from the network, as well as information about individual sites, are available through the world wide web at:

http://nadp.nrel.colostate.edu/NADP

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 53 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents will be measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

Communication and coordination between USGS personnel and other local, State, and federal interests are critical components of the NAWQA Program. Each study unit has a local liaison committee consisting of representatives from key federal, State, and local water resources agencies, Indian nations, and universities in the study unit. Liaison committees typically meet semiannually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities to collaborate efforts among the agencies.

Additional information about the NAWQA Program is available through the world wide web at:

http://wwwrvares.er.usgs.gov/nawqa/nawqa_home.html

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report, are for the 2000 water year that began October 1, 1999 and ended September 30, 2000. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow and stage data, stage and content data for a reservoir, water-quality data for surface water, and ground water, lake-level data, peak-flow data, and ground-water-level data. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each data station, whether streamsite, lake, or well, in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The “downstream order” system is used for regular surface-water stations and for surface-water stations where only miscellaneous measurements are made; the “latitude-longitude” system is used for wells.

Downstream Order System

Since October 1, 1950, the order of listing hydrologic-station records in U.S. Geological Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a mainstream station are listed before that station. A station on a tributary that enters

between two mainstream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary with respect to the stream to which it is an immediate tributary is indicated by an indention in the "List of Stations" in the front of this report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station, such as 03335500, which appears just to the left of the station name, includes the 2-digit Part number "03" plus the 6-digit downstream-order number "335500." The Part number designates the major river basin; for example, Part "03" is the Ohio River basin.

Latitude-Longitude System

The identification numbers for wells are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This site-identification number, once assigned, is a pure number and has no locational significance. In the

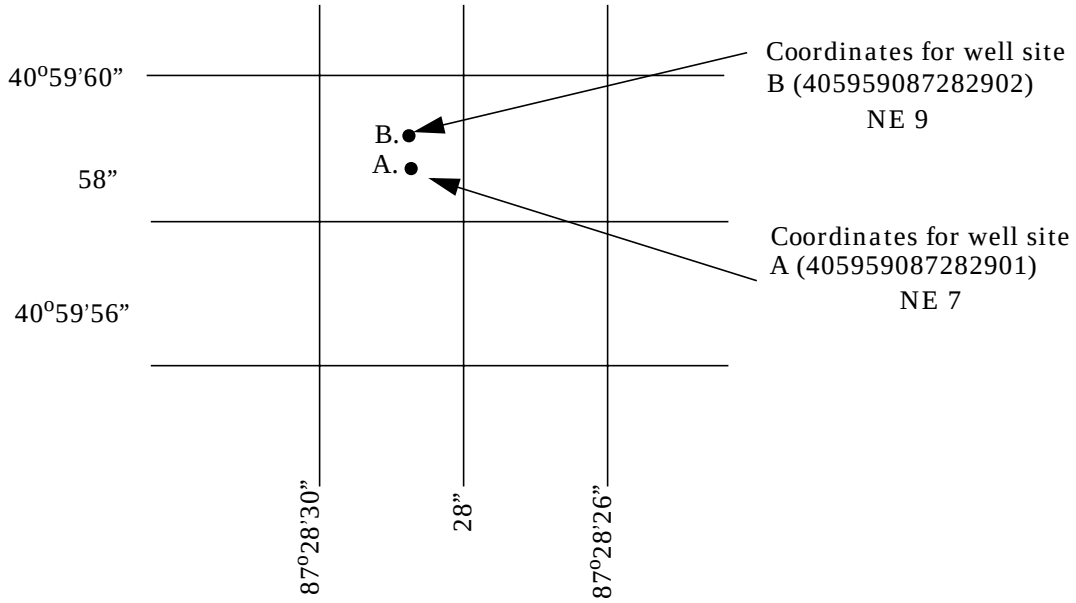


Figure 5.--System for numbering wells, and miscellaneous sites (latitude and longitude).

rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description.

In addition, each well in Indiana carries dual-identification numbers for example, NE 7. The second system is by county name with a sequential number of the well; that is, number one is the first well in that county for which records were obtained.

Records of Surface-Water Stage and Discharge

Data Collection and Computation

The data obtained at a complete-record gaging station on a stream or canal consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relations between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges.

Continuous records of stage are obtained with electronic recorders, or with data collection platforms that store stage data electronically. Measurements of discharge are made with current meters or acoustic flow meters using methods adopted by the U.S. Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, Water-Supply Paper 2175, and the U.S. Geological Survey Techniques of Water-Resources Investigations (TWRI), Book 3,Chap. A1 through A19 and Book 8, Chapters A2 and B2. The methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for Standards (ISO).

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using: (1) Logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow over dams or weirs; or (4) step-backwater techniques.

Daily mean discharges are computed by applying the instantaneous stages (gage heights) to the stage-discharge curves or tables and then assigning the arithmetic mean. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the

control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on the individual discharge measurements and notes of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may so obscure the stage-discharge relations that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and records for other stations in the same or nearby basins for comparable periods.

At some stream-gaging stations, the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations, the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

For some gaging stations, there are periods when no gage-height record is obtained, or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections, “Data Presentation” (REMARKS paragraph) and “Identifying Estimated Daily Discharge.”

At some gaging stations, acoustic velocity meter (AVM) systems are used to compute discharge. The AVM system measures the stream’s velocity at one or more paths in the cross section. Coefficients are developed to relate this path velocity to the mean velocity in the cross section. Because the AVM sensors are fixed in position, the adjustment coefficients generally vary with stage. Cross-sectional area curves are developed to relate stage, recorded as noted above, to cross section area. Discharge is computed by multiplying path velocity by the appropriate stage related coefficient and area.

Data Presentation

Streamflow data in this report are presented in a format that is considerably different from the format in data reports prior to the 1991 water year. The major changes are that statistical characteristics of discharge now appear in tabular summaries following the water-year data table and less information is provided in the text or station manuscript above the table. These changes represent the results of a pilot program to reformat the annual water-data report to meet current user needs and data preferences.

The records published for each continuous-record surface-water discharge station (gaging station) now consist of four parts: the manuscript or station description; the data table of daily mean values of discharge for the current water year with summary data; a tabular statistical summary of that monthly mean flow data for a designated period, by water year; and a summary statistics table includes statistical data of annual, daily, and instantaneous flows as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration.

Station manuscript

The manuscript provides, under various headings, descriptive information, such as station location; period of record; historical extremes outside the period of record; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of the station description.

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the gage with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages were determined by methods given in "River Mileage Measurement," Bulletin 14, revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available.

PERIOD OF RECORD.--This indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not, and whose location was such that records from it can reasonably be considered equivalent with records from the present station.

REVISED RECORDS.--Because of new information, published records, occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

GAGE.--The type of gage in current use, the datum of the current gage referred to sea level (see glossary), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.--All periods of estimated daily-discharge record will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily-discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a remarks statement is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, to conditions that affect natural flow at the station and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

COOPERATION.--Records provided by a cooperating organization or obtained for the U.S. Geological Survey by a cooperating organization are identified here.

EXTREMES OUTSIDE PERIOD OF RECORD.--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the U.S. Geological Survey.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because for these stations there would be no current or, possibly, future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the offices whose addresses are given on the back of the title page of this report, to determine, if the published records were ever revised after the station was discontinued. Of course, if the data were obtained by computer retrieval, the data would be current and there would be no need to check because any published revision of data is always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity table when daily contents are given.

Headings for AVERAGE DISCHARGE, EXTREMES FOR PERIOD OF RECORD, AND EXTREMES FOR CURRENT YEAR have been deleted and the information contained in these paragraphs, except for the listing of secondary instantaneous peak discharges in the EXTREMES FOR CURRENT YEAR paragraph, is now presented in the tabular summaries following the discharge table or in the REMARKS paragraph, as appropriate. No changes have been made to the data presentations of lake contents.

Data table of daily mean values

The daily table for stream-gaging stations gives mean discharge for each day of the water year. In the monthly summary for the table, the line headed "TOTAL" gives the sum of the daily figures for each month. The line headed "MEAN" gives the average flow in cubic feet per second for the month; and the lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for each month. Discharge for the month also is usually expressed in cubic feet per second per square mile (line headed "CFSM"); or in inches (line headed "IN."); or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversion data or reservoir contents are gives. These figures are identified by a symbol and corresponding footnote.

Statistics of monthly mean data

A tabular summary of the mean (line headed "MEAN"), maximum (line headed "MAX"), and minimum (line headed "MIN") of monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those figures. The designated period will be expressed as "FOR WATER YEARS ____ - ____, BY WATER YEAR (WY)," and will list the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station manuscript. It will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript.

Summary statistics

A table titled "SUMMARY STATISTICS" follows the statistics of monthly mean data tabulation. This table consists of four columns, with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, "WATER YEARS ____ - ____," will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water year for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (See line headings below.), except for the "ANNUAL 7-DAY MINIMUM" statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the manuscript or in footnotes. Because the designated period may not be the same as the station period of record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the handing. When this occurs, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration curve statistics and runoff data are also given. Runoff data may be omitted if there is extensive regulation or diversion of flow in the drainage basin.

The following summary statistics data, as appropriate, are provided with each continuous record of discharge. Comments to follow clarify information presented under the various line headings of the summary statistics table.

ANNUAL TOTAL.--The sum of the daily mean values of discharge for the year. At some stations the annual total discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

ANNUAL MEAN.--The arithmetic mean of the individual daily mean discharges for the year noted or for the designated period. At some stations the yearly mean discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

HIGHEST ANNUAL MEAN.--The maximum annual mean discharge occurring for the designated period.

LOWEST ANNUAL MEAN.--The minimum annual mean discharge occurring for the designated period.

HIGHEST DAILY MEAN.--The maximum daily mean discharge for the year or for the designated period.

LOWEST DAILY MEAN.--The minimum daily mean discharge for the year or for the designated period.

ANNUAL 7-DAY MINIMUM.--The lowest mean discharge for seven consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1-March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

INSTANTANEOUS PEAK FLOW.--The maximum instantaneous discharge occurring for the water year or for the designated period. Note that secondary instantaneous peak discharges above a selected base discharge are stored in District computer files for stations meeting certain criteria. Those discharge values may be obtained by writing to the District Office. (See address on back of title page of this report.)

INSTANTANEOUS PEAK STAGE.--The maximum instantaneous stage occurring for the water year or for the designated period. If the dates of occurrence for the instantaneous peak flow and instantaneous peak stage differ, the REMARKS paragraph in the manuscript or a footnote may be used to provide further information.

INSTANTANEOUS LOW FLOW.--The minimum instantaneous discharge occurring for the water year or for the designated period.

ANNUAL RUNOFF.--Indicates the total quantity of water in runoff for a drainage area for the year. Data reports may use any of the following units of measurement in presenting annual runoff data:

Acre-foot (AC-FT) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet, or 325,851 gallons or 1,233 cubic meters.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Inches (INCHES) indicates the depth to which the drainage area would be covered with water if all of the runoff for a given time period were uniformly distributed on it.

10 PERCENT EXCEEDS.--The discharge that has been exceeded 10 percent of the time for the designated period.

50 PERCENT EXCEEDS.--The discharge that has been exceeded 50 percent of the time for the designated period.

90 PERCENT EXCEEDS.--The discharge that has been exceeded 90 percent of the time for the designated period.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified either by flagging individual daily values with the letter symbol “e” and printing a table footnote, “Estimated,” or by listing the dates of the estimated record in the “REMARKS” paragraph of the station description.

Accuracy of the Records

The accuracy of streamflow records depends primarily on: (1) The stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements; and (2) the accuracy of measurements of stage, measurements of discharge, and interpretation of records.

The accuracy attributed to the records is indicated under “REMARKS.” “Excellent” means that about 95 percent of the daily discharges are within 5 percent of their true values; “good,” within 10 percent; and “fair,” within 15 percent. Records that do not meet the criteria mentioned are rated “poor.” Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft^3/s; to the nearest tenth between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures for more than 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff, in inches, are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other Records Available

Information used in the preparation of the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables is on file in the Indiana District office. Also, most of the daily mean discharges are in computer-readable form and have been analyzed statistically. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained from the Indiana District office.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be one or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling usually is less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A careful distinction needs to be made between “continuing records,” as used in this report, and “continuous recordings,” which refers to a continuous graph or a series of discrete values logged at short intervals on electronic recorders. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of cost, most data are obtained monthly or less frequently.

Records of surface-water quality in this report are for continuing-record stations and miscellaneous sampling sites. These stations are part of a cooperative agreement with Montgomery County Commissioners, National Water-Quality Assessment Program (NAWQA) and a cooperative study with the Chicago U.S. Army Corps of Engineers of the Indiana Harbor Canal and Grand Calumet River in Lake County. Locations of stations for which records on the quality of surface water appear in this report are shown on figures 6, 7, 8, 9, and 10.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Water-quality records collected at the miscellaneous sampling sites are published in tables following the surface-water records.

On-site Measurements and Sample Collection

The major concern in obtaining water-quality data is assuring that the data represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, specific conductance, alkalinity, and dissolved oxygen, are made on-site when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for on-site measurements and for collecting, treating, and shipping samples are detailed in the TWRI Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. These references are listed in PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS section of this report. These methods are consistent with ASTM standards and generally follow ISO standards.

One sample can define adequately the water quality at a given time only if the mixture of solutes and sediment throughout the stream cross section is homogeneous. However, the concentration of solutes and sediment at different locations in the cross section can vary widely with different rates of water discharge, depending on the sources of the solutes and sediment, the turbulence and mixing of the stream, and other factors. Most streams must be sampled through several vertical sections using a depth-integrating sampler to obtain a representative sample. All samples obtained for the National Water-Quality Assessment Program and the Montgomery County agreement are obtained from at least several verticals.

NOTE: In March 1989 the National Water-Quality Laboratory discovered a bias in the turbidimetric method for sulfate analysis, indicating that values below 75 mg/L have a median positive bias of 2 mg/L above the true value for the period between 1982 and 1989. Correct sulfate values have been made by the laboratory and published in this report since April 17, 1989.

Laboratory Measurements

Specific conductance, pH, air and water temperatures, dissolved oxygen, barometric pressure, and alkalinity are measured on-site. Fecal coliform and fecal streptococci bacteria are analyzed in the Indiana District laboratory. Suspended sediment and particle-size distribution are analyzed in the U.S. Geological Survey laboratory in Louisville, Kentucky. All other samples are analyzed in the U.S. Geological Survey National Water-Quality Laboratory in Arvada, Colorado. Methods used to analyzing sediment samples and to compute sediment records are described in the TWRI Book 5, Chap. C1. Methods used by the U.S. Geological Survey laboratories are given in the TWRI Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, A4, and A5. These methods are consistent with ASTM standards and generally follow ISO standards.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, and type of data available.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--See “Data Presentation” under “Records of Stage and Water Discharge.”

DRAINAGE AREA.--See “Data Presentation” under “Records of Stage and Water Discharge.”

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station.

REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the records.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey’s computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency’s STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to ensure the most recent updates.

SURFACE-WATER-DISCHARGE AND SURFACE-WATER-QUALITY RECORDS

Remark Codes

The following remark codes may appear with the water-quality data in this report:

PRINTED OUTPUT	REMARK
E	Estimated value.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
K	Results based on colony count outside the acceptance range (non-ideal colony count).
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted).
D	Biological organism count equal to or greater than 15 percent (dominant).
&	Biological organism estimated as dominant.
V	Analyte was detected in both the environmental sample and the associated blanks.

Dissolved Trace-Element Concentrations

NOTE.--Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter (µg/L) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's to 100's of nanograms per liter (ng/L). Data above the µg/L level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey began using new trace-element protocols at some stations in water year 1994.

Change in National Trends Network procedures

NOTE.--Sample handling procedures at all National Trends Network stations were changed substantially on January 11, 1994, in order to reduce contamination from the sample shipping container. The data for samples before and after that date are different and not directly comparable. A tabular summary of the differences based on a special intercomparison study, is available from the NADP/NTN Coordination Office, Colorado State University, Fort Collins, CO 80523 (Telephone: 303-491-5643).

Records of Lake Levels

Water-level data from a network of lake gaging stations are given in this report. These data are intended to provide a historical record of water-level changes in lakes where established average legal levels have been designated by the State. Numbers of lakes by county having current water-level records are shown on figure 11.

Data Collection and Computation

Measurements of water levels are made under varying conditions, but the methods are standardized to the extent possible. The equipment and measuring techniques used at each lake gage will ensure that the measurements are of consistent accuracy and reliability.

Tables of water-level data are presented by lake names arranged in alphabetical order. The prime identification number for a given lake is the "downstream-order" number previously discussed in this report and appears to the left of the lake name.

Lake-level records are obtained from direct measurement with a steel tape, from observation of steel staff gages, or from an electronic water-stage recorder. The water-level measurements in this report are given in feet above gage datum. Gage datum is a datum plane above the National Geodetic Vertical Datum of 1929. Water levels are reported to one-hundredth of a foot.

Data Presentation

Each lake record consists of two parts, the station description, and the data table of water levels observed during the year. The description of the lake gage is presented first through use of descriptive headings preceding the tabular data. Comments that follow clarify information presented under the various headings.

LOCATION.--See "Data Presentation" under "Records of Stage and Water Discharge."

SURFACE AREA.--This entry specifies the surface area of the lake at it's established legal level.

DRAINAGE AREA.--See "Data Presentation" under "Records of Stage and Water Discharge."

PERIOD OF RECORD.--This entry indicates the periods for which lake-level records at the site have been collected.

DATUM OF GAGE.--This entry indicates the datum of the current gage referred to sea level (see glossary).

GAGE.--The type of gage in current use and a condensed history of the types, locations, and datums of previous gages are given under this heading.

ESTABLISHED LEGAL LEVEL.--This entry indicates the average level in feet above gage datum and sea level at which the lake is to be maintained, the data of decree, and court specifying the decreed level.

LAKE-LEVEL CONTROL.--This entry indicates the type of structure used to maintain the lake level.

INLET AND OUTLET.--This entry, if appropriate, describes where surface inflow comes into the lake and where outflow departs. Some lakes may have neither inlets, outlets, nor both; in such cases parts or all of this heading may not appear.

EXTREMES FOR PERIOD OF RECORD.--Extremes include maximum and minimum levels and the dates of occurrence.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

A table of water levels follows the station description for each lake gage. Water levels are reported in feet above gage datum. Only abbreviated tables are published; water-levels at midnight (2400) are listed for every fifth day and at the end of the month (EOM). The highest and lowest 2400 levels with dates of occurrence and mean of the water year are shown on a line below the abbreviated table. Because all values are not published, the extremes may be values not listed in the table. Missing records are indicated by dashes in place of the water level.

Records of Ground-Water Levels

Water-level data from a representative network of observation wells are given in this report. These data are intended to provide a sampling and historical record of water-level changes in the State's most important aquifers. Locations of the observation wells in this network in Indiana are shown on figure 12. Miscellaneous water-level data for Hamilton County from a cooperative agreement with the City of Carmel and for Lake County from a cooperative agreement with Indiana Department of Environmental Management are given in this report. Locations of the Hamilton County observation wells are shown on figure 13 and locations of the Lake County observation wells are shown on figure 14.

Data Collection and Computation

Measurements of water levels are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well ensure that measurements at each well are of consistent accuracy and reliability.

Tables of water-level data are presented by counties arranged in alphabetical order. The prime identification number for a given well is the 15-digit number that appears in the upper left corner of the table. The secondary identification number is the local well number.

Water-level records are obtained from direct measurements with a steel tape or from a electronic water-stage recorder. The water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description.

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only one-hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to one-hundredth of a foot, but some are given to one-tenth of a foot or a larger unit.

Data Presentation

Each well record consists of three parts, the station description, the data table of water levels observed during the correct water year, and a graph of the water levels for the last 5 years. The description of the well is presented first through use of descriptive headings preceding the tabular data. The comments that follow clarify information presented under the various headings of the well description.

LOCATION.--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds), a landline location designation, the hydrologic-unit number, the distance and direction from a geographic point of reference, and the owner's name.

AQUIFER.--This entry designates by name (if a name exists) and geologic age the aquifer(s) open to the well.

WELL CHARACTERISTICS.--This entry describes the well in terms of depth, diameter, casing depth and/or screened interval, method of construction, use, and additional information such as casing breaks, collapsed screen, and other changes since construction.

INSTRUMENTATION.--This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on weekly, monthly, or some other frequency of measurement.

DATUM.--This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base and so forth), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above (or below) sea level; it is reported with a precision depending on the method of determination.

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level. It should identify wells that also are water-quality observation wells and may be used to acknowledge the assistance of local (non-U.S. Geological Survey) observers.

PERIOD OF RECORD.--This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water-level records by the U.S. Geological Survey and the words “to current year” if the records are to be continued into the following year. Periods for which water-level records are available but are not published by the U.S. Geological Survey may be noted.

EXTREMES FOR PERIOD OF RECORD.--This entry contains the highest and lowest water levels of the period of published record, with respect to land-surface datum, and the dates of their occurrence.

A table of water levels follows the station description for each well. Water levels are reported in feet below land-surface datum. Only abbreviated tables are published; water-level highs and lows are listed for every fifth day and at the end of the month (EOM). The highest and lowest water levels of the water year and their dates of occurrence are shown on a line below the abbreviated tables. Because all values are not published, the extremes may be values that are not listed in the tables. Missing records are indicated by dashes in place of the water level. A hydrograph for a selected period of record follows water-level tables.

Records of Ground-Water Quality

Records of ground-water quality in this report differ from other types of records in that they consist of only one set of measurements for the water year. Ground-water quality is sampled immediately after installation and development of a new observation well. As new observation wells are usually installed late in the water year, records of ground-water quality are typically published in the first water year with complete records for ground-water levels.

Sample Collection and Analysis

Measurements of specific conductance, pH, water temperature, dissolved oxygen, and alkalinity are measured on-site. Other constituents and properties are analyzed in the U.S. Geological Survey National Water-Quality Laboratory in Arvada, Colorado. Methods used in collecting and analyzing ground-water-quality samples are given in TWRI, Book 1, Chap. D2, and Book 5, Chap. A1.

Data Presentation

Records of ground-water quality immediately follow records of ground-water levels.

ACCESS TO USGS WATER DATA

The USGS provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry. Historic daily-mean and peak-flow discharge data are also available for most current or discontinued gaging stations. These data are made available to the public through the world wide web (WWW), and may be accessed:

http://water.usgs.gov

Some water-quality and ground-water data also are available through the WWW. In addition, data can be provided in various electronic formats. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division District Offices (See address on the back of the title page).

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. Also, see table for converting English units to International System (SI) units on the inside of the back cover.

Acid neutralizing capacity (ANC) is the equivalent sum of all bases or base-producing materials, solutes plus particulates, in an aqueous system that can be titrated with acid to an equivalence point. This term designates titration of an "unfiltered" sample (formerly reported as alkalinity).

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet, 325,851 gallons or 1,233 cubic meters.

Alkalinity is the capacity of solutes in an aqueous system to neutralize acid. This term designates titration of a "filtered" sample.

Annual runoff is the total quantity of water in runoff for a drainage area for the year.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, while others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Escherichia coli (E. coli) are bacteria present in the intestine and feces of warm-blooded animals. *E. coli* are a member species of the fecal coliform group of indicator bacteria. In the laboratory, they are defined as those bacteria that produce yellow or yellow-brown colonies on a filter pad saturated with urea substrate broth after primary culturing for 22 to 24 hours at 44.5 ^{o}C on mTEC medium. Their concentrations are expressed as the number of colonies per 100 mL of sample.

Bed material is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Bottom material: See "Bed material."

Confined aquifer is a term used to describe an aquifer containing water between two relatively impermeable boundaries. The water level in a well tapping a confined aquifer stands above the top of the confined aquifer and can be higher or lower than the water table that may be present in the material above it. In some cases the water level can rise above the ground surface, yielding a flowing well.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Continuous-record station is a site that meets either of the following conditions:

1. Stage or streamflow are recorded at some interval on a continuous basis. The recording interval is usually 15 minutes, but may be less or more frequent.

2. Water-quality, sediment, or other hydrologic measurements are recorded at least daily.

Control designates a feature in the channel downstream from a gaging station that physically influences the water-surface elevation and thereby determines the stage-discharge relation at the station. This feature may be a constriction of the channel, a bedrock outcrop, a gravel bar, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream, canal, or lake that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic foot per second (CFS, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point in 1 second. It is equivalent to approximately 7.48 gallons per second, 448.8 gallons per minute, or 0.02832 cubic meters per second.

Cubic feet per second-day (CFS-DAY, Cfs-day, $[(ft^3/s)/d]$) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.9835 acre-feet, 646,317 gallons, or 2,447 cubic meters.

Cubic feet per second per square mile $[(ft^3/s)/mi^2]$ is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Daily record is a summary of streamflow, sediment, or water-quality values computed from data collected with sufficient frequency to obtain reliable estimates of daily mean values.

Daily record station is a site for which daily records of streamflow, sediment, or water-quality values are computed.

Datum, as used in this report, is an elevation above mean sea level to which all gage height readings are referenced.

Discharge, or flow, is the volume of water (or more broadly, volume of fluid including solid- and dissolved-phase material), that passes a given point in a given period of time.

Annual 7-day minimum is the lowest mean discharge for 7 consecutive days in a year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1 - March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

Instantaneous discharge is the discharge at a particular instant of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Dissolved refers to that material in a representative water sample which passes through a 0.45 micrometer membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of “dissolved” constituents are made on subsamples of the filtrate.

Dissolved oxygen (DO) content of water in equilibrium with air is a function of atmospheric pressure, temperature, and dissolved-solids concentration of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved solids, with small temperature changes having the more significant offset. Photosynthesis and respiration may cause diurnal variations in dissolved-oxygen concentration in water from some streams.

Dissolved-solids concentration of water is determined either analytically by the “residue-on-evaporation” method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During that analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.4926 to reflect the change. Alternatively, alkalinity concentration (as mg/L $CaCO_3$) can be converted to carbonate concentration by multiplying by 0.60.

Drainage area of a site on a stream is that area, measured in a horizontal plane, that has a common outlet at the site for its surface runoff. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

Drainage basin is a part of the Earth's surface that is occupied by a drainage system with a common outlet for its surface runoff (see "Drainage area").

Gage datum is the elevation of the zero point of the reference gage from which gage height is determined as compared to sea level (see "Datum"). This elevation is established by a system of levels from known benchmarks, by approximation from topographic maps, or by geographical positioning system.

Gage height (G.H.) is the water-surface elevation referenced to the gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a site on a stream, canal, lake, or reservoir where systematic observations of stage, discharge, or other hydrologic data are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate ($CaCO_3$).

Hydrologic benchmark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a benchmark station may be used to separate effects of natural from human-induced changes in other basins that have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped benchmark basin.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as defined by the former Office of Water Data Coordination and delineated on the State Hydrologic Unit Maps by the U.S. Geological Survey. Each hydrologic unit is identified by an 8-digit number.

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Measuring point (MP) is an arbitrary permanent reference point from which the distance to water surface in a well is measured to obtain the water level.

Membrane filter is a thin microporous material of specific pore size used to filter bacteria, algae, and other very small particles from water.

Micrograms per liter (UG/L, µg/L) is a unit expressing the concentration of chemical constituents in water as mass (micrograms) of constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Micrometer (UM/µm) is a unit expressing the pore diameter of a filter. One thousand micrometers is equivalent to one millimeter.

Microsiemens per centimeter (US/CM, µS/cm) is a unit expressing the amount of electrical conductivity of a solution as measured between opposite faces of a centimeter cube of solution at a specified temperature. Siemens in the International System of Units nomenclature. It is synonymous with mhos and is the reciprocal of resistance in ohms.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in water as the mass (milligrams) of constituent per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L and is based on the mass of dry sediment per liter of water-sediment mixture.

Miscellaneous site, or miscellaneous station, is a site where streamflow, sediment, and/or water-quality data are collected once, or more often on a random or discontinuous basis.

National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a geodetic datum derived from a general adjustment of the first order level nets of the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific coasts, it does not necessarily represent local mean sea level at any particular place. *(See NOAA web site: http://www.ngs.noaa.gov/faq.shtml#WhatVD29VD88.)*

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within four of the Nation's largest river basins--the Mississippi, Columbia, Colorado, and Rio Grande. The network consists of 39 stations. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment Program (NAWQA); (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals.

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Nephelometric turbidity unit (NTU) is the measurement for reporting turbidity that is based on use of a standard suspension of Formazin. Turbidity measured in NTU uses nephelometric methods that depend on passing specific light of a specific wavelength through the sample.

Open or screened interval is the length of unscreened opening or of well screen through which water enters a well, in feet below land surface.

Organic carbon (OC) is a measure of organic matter present in aqueous solution, suspension, or bottom sediments. May be reported as dissolved organic carbon (DOC), suspended organic carbon (SOC), or total organic carbon (TOC).

Organochlorine compounds are any chemicals that contain carbon and chlorine. Organochlorine compounds that are important in investigations of water, sediment, and biological quality include certain pesticides and industrial compounds.

Parameter Code is a 5-digit number used in the U.S. Geological Survey computerized data system, National Water Information System (NWIS), to uniquely identify a specific constituent or property.

Partial-record station is a site where discrete measurements of one or more hydrologic parameters are obtained over a period of time without continuous data being recorded or computed. A common example is a crest-stage gage partial-record station at which only peak stages and flows are recorded.

Particle size is the diameter, in millimeters (mm), of a particle determined by sieve or sedimentation methods. The sedimentation method utilizes the principle of Stokes Law to calculate sediment particle sizes. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube, Sedigraph) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay	0.00024 - 0.004	Sedimentation
Silt	0.004 - .062	Sedimentation
Sand	0.062 - 2.0	Sedimentation/sieve
Gravel	2.0 - 64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic matter is removed, and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native water analysis.

Percent composition or percent of total is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, weight, or volume.

Periodic station is a site where stage, discharge, sediment, chemical, or other hydrologic measurements are made one or more times during a year, but at a frequency insufficient to develop a daily record.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

pH of water is the negative logarithm of the hydrogen-ion activity. Solutions with pH less than 7 are termed “acidic,” and solutions with a pH greater than 7 are termed “basic.” Solutions with a pH of 7 are neutral. The presence and concentration of many dissolved chemical constituents found in water are, in part, influenced by the hydrogen-ion activity of water. Biological precesses including growth, distribution of organisms, and toxicity of the water to organisms are also influenced, in part, by the hydrogen-ion activity of water.

Polychlorinated biphenyls (PCB’s) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Return period is the average time interval between occurrences of a hydrological event of a given or greater magnitude, usually expressed in years. May also be called recurrence interval.

River mile is the distance of a point on a river measured in miles from the river’s mouth along the low-water channel.

River mileage is the linear distance along the meandering path of a stream channel determined in accordance with Bulletin No. 14 (October 1968) of the Water Resources Council.

Runoff in inches (IN., in) is the depth, in inches, to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sea level refers to the National Geodetic Vertical Datum of 1929 (NGVD 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. See: *http://www.co-ops.nos.noaa.gov/glossary/gloss_n.html#NGVD.*

Sediment is solid material that is transported by, suspended in, or deposited from water. It originates mostly from disintegrated rocks; it also includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). The entire sample is used for the analysis.

Mean concentration of suspended sediment is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Suspended-sediment discharge (tons/day) is the quantity of sediment moving in suspension, reported as dry weight, that passes a cross section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft^3/s) x 0.0027.

Suspended-sediment load is a term that refers to material in suspension. The term needs to be qualified, such as “annual suspended-sediment load” or “sand-size suspended-sediment load,” and so on. It is not synonymous with either suspended-sediment discharge or concentration.

Total-sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, reported as dry weight, that passes a cross section in a given time.

Total-sediment load or total load is a term that refers to the total sediment (bed load plus suspended-sediment load) that is in transport. The term needs to be qualified, such as “annual suspended-sediment load” or “sand-size suspended-sediment load,” and so on. It is not synonymous with total sediment discharge.

7-day 10-year low flow (7 Q10, $7Q_{10}$) is the minimum flow averaged over 7 consecutive days that is expected to occur on average, once in any 10-year period. The 7Q10 has a 10-percent chance of occurring in any given year.

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25 °C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is from 55 to 75 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stage: See "Gage height."

Stage-discharge relation is the relation between the water-surface elevation, termed stage (gage height), and the volume of water flowing in a channel per unit of time.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff," as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Surface area of a lake or impoundment is that area encompassed by the boundary of the lake or impoundment as shown on USGS topographic maps, or on other available maps or photographs. The computed surface areas reflect the water levels of the lakes or impoundments at the times when the information for the maps or photographs was obtained.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is associated with the material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative suspended-sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of: (1) dissolved; and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative suspended-sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. Knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of: (1) dissolved; and (2) total concentrations of the constituent.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per acre-foot is the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

Tons per day (T/DAY, tons/d) is the rate representing a mass of 1 ton of a constituent in streamflow passing a cross section in 1 day. It is equivalent to 2,000 pounds per day, or 0.9072 metric tons per day.

Total is the total amount of a given constituent in a representative suspended-sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a suspended-sediment mixture and that the analytical method determined all of the constituent in the sample.)

Total discharge is the quantity of a given constituent, measured as dry mass or volume, that passes a stream cross-section per unit of time. When referring to constituents other than water, this term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total recoverable is the amount of a given constituent that is in solution after a representative suspended-sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Turbidity is a measurement of the collective optical properties of a water sample that cause light to be scattered and absorbed rather than transmitted in straight lines; the higher the intensity of scattered light, the higher the turbidity. Turbidity is expressed in nephelometric turbidity units (NTU) or Formazin turbidity units (FTU) depending on the method and equipment used.

Volatile organic compounds (VOC's) are organic compounds that can be isolated from the water phase of a sample by purging the water sample with inert gas, such as helium, and subsequently analyzed by gas chromatography. Many VOC's are man-made chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They are often components of fuels, solvents, hydraulic fluids, paint thinners, and dry cleaning agents commonly used in urban settings. VOC contamination of drinking-water supplies is a human health concern because many are toxic and are known or suspected human carcinogens (U.S. Environmental Protection Agency, 1996).

Water level is the water-surface elevation or stage of the free surface of a body of water above or below any datum (see "Gage height"), or the surface of water standing in a well, usually indicative of the position of the water table or other potentiometric surface.

Water table is the surface of a ground-water body at which the water is at atmospheric pressure.

Water-table aquifer is an unconfined aquifer within which is found the water table.

Water year in U.S. Geological Survey reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 2000, is called the "2000 water year."

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports. (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976).

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

Well is an excavation (pit, hole, tunnel), generally cylindrical in form and often walled in, drilled, dug, driven, bored, or jetted into the ground to such a depth as to generate water-yielding geologic material and allow the water to flow or to be pumped to the surface.

WSP is used as an abbreviation for “Water-Supply Paper” in reference to previously published reports.

Table 2.--Factors for conversion of chemical constituents in milligrams or micrograms per liter to milliequivalents or microequivalents per liter

Ion	Multiply by	Ion	Multiply by
Aluminum ($A1^{+3}$)	0.11119	Iodide (I^{-1})	0.00788
Ammonia as NH_4^{+1}	.05544	Iron (Fe^{+3})*	.05372
Barium (Ba^{+2})	.01456	Lead (Pb^{+2})*	.00965
Bicarbonate (HCO_3^{-1}	.01639	Lithium (Li^{+1})*	.14411
Bromide (Br^{-1})	.01251	Magnesium (Mg^{+2})	.08226
Calcium (Ca^{+2})	.04990	Manganese (Mn^{+2})*	.03640
Carbonate (CO_3^{-2})	.03333	Nickel (Ni^{+2})*	.03406
Chloride ($C1^{-1}$)	.02821	Nitrate (NO_3^{-1})	.01613
Chromium (Cr^{+6})*	.11539	Nitrite (NO_2^{-1})	.02174
Cobalt (Co^{+2})*	.03394	Phosphate (PO_4^{-3})	.03159
Copper (Cu^{+2})*	.03148	Potassium (K^{+1})	.02557
Cyanide (CN^{-1})	.03844	Sodium (Na^{+1})	.04350
Fluoride (F^{-1})	.05264	Strontium (Sr^{+2})*	.02283
Hydrogen (H^{+1})	.99209	Sulfate (SO_4^{-2})	.02082
Hydroxide (OH^{-1})	.05880	Zinc (Zn^{+2})*	.03060

*Constituent reported in micrograms per liter; multiply by factor and divide results by 1,000.

Table 3.--Factors for conversion of sediment concentrations in milligrams per liter to parts per million*
(All values calculated to three significant figures)

Range of concen-tration in 1,000 mg/L	Divide by	Range of concen-tration in 1,000 mg/L	Divide by	Range of concen-tration in 1,000 mg/L	Divide by	Range of concen-tration in 1,000 mg/L	Divide by
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05 - 24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-508	1.31	700-715	1.44
88.5 - 104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 - 120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 - 136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137 - 152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 - 169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 - 185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 - 200	1.12	395-409	1.25	604-617	1.38		

*Based on water density of 1.000 mg/L and a specific gravity of sediment of 2.65.

The U.S.G.S. publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, section A of book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S.G.S., Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be made in the form of a check or money order payable to the "U.S. Geological Survey." Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and mention the "U.S. Geological Survey Techniques of Water-Resources Investigations."

Book 1. Collection of Water Data by Direct Measurement

Section D. Water Quality

1-D1. *Water temperature—influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J.F. Ficke, and G. F. Smoot: USGS–TWRI book 1, chap. D1. 1975. 65 pages.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W.W. Wood: USGS–TWRI book 1, chap. D2. 1976. 24 pages.

Book 2. Collection of Environmental Data

Section D. Surface Geophysical Methods

2-D1. *Application of surface geophysics to ground-water investigations*, by A.A. R. Zohdy, G.P. Eaton, and D.R. Mabey: USGS–TWRI book 2, chap. D1. 1974. 116 pages.

2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F.P. Haeni: USGS–TWRI book 2, chap. D2. 1988. 86 pages.

Section E. Subsurface Geophysical Methods

2-E1. *Application of borehole geophysics to water-resources investigations*, by W.S. Keys and L.M. MacCary: USGS–TWRI book 2, chap. E1. 1971. 126 pages.

2-E2. *Borehole geophysics applied to ground-water investigations*, by W.S. Keys: USGS–TWRI book 2, chap. E2. 1990. 150 pages.

Section F. Drilling and Sampling Methods

2-F1. *Application of drilling, coring, and sampling techniques to test holes and wells*, by Eugene Shuter and W.E. Teasdale: USGS–TWRI book 2, chap. F1. 1989. 97 pages.

Book 3. Applications of Hydraulics

Section A. Surface-Water Techniques

3-A1. *General field and office procedures for indirect discharge measurements*, by M.A. Benson and Tate Dalrymple: USGS–TWRI book 3, chap. A1. 1967. 30 pages.

3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M.A. Benson: USGS–TWRI book 3, chap. A2. 1967. 12 pages.

3-A3. *Measurement of peak discharge at culverts by indirect methods,* by G.L. Bodhaine: USGS–TWRI book 3, chap. A3. 1968. 60 pages.

3-A4. *Measurement of peak discharge at width contractions by indirect methods,* by H.F. Matthai: USGS-TWRI book 3, chap. A4. 1967. 44 pages.

3-A5. *Measurement of peak discharge at dams by indirect methods,* by Harry Hulsing: USGS–TWRI book 3. chap. A5. 1967. 29 pages.

3-A6. *General procedure for gaging streams,* by R.W. Carter and Jacob Davidian: USGS–TWRI book 3, chap. A6. 1968. 13 pages.

3-A7. *Stage measurement at gaging stations,* by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A7. 1968. 28 pages.

3-A8. *Discharge measurements at gaging stations,* by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A8. 1969. 65 pages.

3-A9. *Measurement of time of travel in streams by dye tracing,* by F.A. Kilpatrick and J.F. Wilson, Jr.: USGS–TWRI book 3, chap. A9. 1989. 27 pages.

3-Al0. *Discharge ratings at gaging stations,* by E.J. Kennedy: USGS–TWRI book 3, chap. A10. 1984. 59 pages.

3-A11. *Measurement of discharge by the moving-boat method,* by G.F. Smoot and C.E. Novak: USGS–TWRI book 3, chap. A11. 1969. 22 pages.

3-A12. *Fluorometric procedures for dye tracing,* Revised, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS–TWRI book 3, chap. A12. 1986. 34 pages.

3-A13. *Computation of continuous records of streamflow,* by E.J. Kennedy: USGS–TWRI book 3, chap. A13. 1983. 53 pages.

3-A14. *Use of flumes in measuring discharge,* by F.A. Kilpatrick and V.R. Schneider: USGS–TWRI book 3, chap. A14. 1983. 46 pages.

3-A15. *Computation of water-surface profiles in open channels,* by Jacob Davidian: USGS–TWRI book 3, chap. A15. 1984. 48 pages.

3-A16. *Measurement of discharge using tracers,* by F.A. Kilpatrick and E.D. Cobb: USGS–TWRI book 3, chap. A16. 1985. 52 pages.

3-A17. *Acoustic velocity meter systems,* by Antonius Laenen: USGS–TWRI book 3, chap. A17. 1985. 38 pages.

3-A18. *Determination of stream reaeration coefficients by use of tracers,* by F.A. Kilpatrick, R.E. Rathbun, Nobuhiro Yotsukura, G.W. Parker, and L.L. DeLong: USGS–TWRI book 3, chap. A18. 1989. 52 pages.

3-A19. *Levels at streamflow gaging stations,* by E.J. Kennedy: USGS–TWRI book 3, chap. A19. 1990. 31 pages.

3-A20. *Simulation of soluable waste transport and buildup in surface waters using tracers,* by F.A. Kilpatrick: USGS–TWRI book 3, chap. A20. 1993. 38 pages.

3-A21 *Stream-gaging cableways,* by C. Russell Wagner: USGS–TWRI book 3, chap. A21. 1995. 56 pages.

Section B. Ground-Water Techniques

3-B1. *Aquifer-test design, observation, and data analysis,* by R.W. Stallman: USGS–TWRI book 3, chap. B1. 1971. 26 pages.

3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction,* by G.D. Bennett: USGS–TWRI book 3, chap. B2. 1976. 172 pages.

3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J.E. Reed: USGS–TWRI book 3, chap. B3. 1980. 106 pages.

3-B4. *Regression modeling of ground-water flow*, by R.L. Cooley and R.L. Naff: USGS–TWRI book 3, chap. B4. 1990. 232 pages.

3-B4. *Supplement 1. Regression modeling of ground-water flow --Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems*, by R.L. Cooley: USGS–TWRI book 3, chap. B4. 1993. 8 pages.

3-B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems—An introduction*, by O.L. Franke, T.E. Reilly, and G.D. Bennett: USGS–TWRI book 3, chap. B5. 1987. 15 pages.

3-B6. *The principle of superposition and its application in ground-water hydraulics*, by T.E. Reilly, O.L. Franke, and G.D. Bennett: USGS–TWRI book 3, chap. B6. 1987. 28 pages.

3-B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow*, by E.J. Wexler: USGS–TWRI book 3, chap. B7. 1992. 190 pages.

Section C. Sedimentation and Erosion Techniques

3-C1. *Fluvial sediment concepts*, by H.P. Guy: USGS–TWRI book 3, chap. C1. 1970. 55 pages.

3-C2. *Field methods for measurement of fluvial sediment*, by T.K. Edwards and G.D. Glysson: USGS–TWRI book 3, chap. C2. 1999. 89 pages.

3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS–TWRI book 3, chap. C3. 1972. 66 pages.

Book 4. Hydrologic Analysis and Interpretation

Section A. Statistical Analysis

4-A1. *Some statistical tools in hydrology*, by H.C. Riggs: USGS–TWRI book 4, chap. A1. 1968. 39 pages.

4-A2. *Frequency curves*, by H.C. Riggs: USGS–TWRI book 4, chap. A2. 1968. 15 pages.

Section B. Surface Water

4-B1. *Low-flow investigations*, by H.C. Riggs: USGS–TWRI book 4, chap. B1. 1972. 18 pages.

4-B2. *Storage analyses for water supply*, by H.C. Riggs and C.H. Hardison: USGS–TWRI book 4, chap. B2. 1973. 20 pages.

4-B3. *Regional analyses of streamflow characteristics*, by H.C. Riggs: USGS–TWRI book 4, chap. B3. 1973. 15 pages.

Section D. Interrelated Phases of the Hydrologic Cycle

4-D1. *Computation of rate and volume of stream depletion by wells*, by C.T. Jenkins: USGS–TWRI book 4, chap. D1. 1970. 17 pages.

Book 5. Laboratory Analysis

Section A. Water Analysis

5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M.J. Fishman and L.C. Friedman, editors: USGS–TWRI book 5, chap. A1. 1989. 545 pages.

5-A2. *Determination of minor elements in water by emission spectroscopy*, by P.R. Barnett and E.C. Mallory, Jr.: USGS–TWRI book 5, chap. A2. 1971. 31 pages.

5-A3. *Methods for the determination of organic substances in water and fluvial sediments*, edited by R.L. Wershaw, M.J. Fishman, R.R. Grabbe, and L.E. Lowe: USGS–TWRI book 5, chap. A3. 1987. 80 pages.

5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by L.J. Britton and P.E. Greeson, editors: USGS–TWRI book 5, chap. A4. 1989. 363 pages.

5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS–TWRI book 5, chap. A5. 1977. 95 pages.

5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments*, by L.C. Friedman and D.E. Erdmann: USGS–TWRI book 5, chap. A6. 1982. 181 pages.

Section C. Sediment Analysis

5-C1. *Laboratory theory and methods for sediment analysis*, by H.P. Guy: USGS–TWRI book 5, chap. C1. 1969. 58 pages.

Book 6. Modeling Techniques

Section A. Ground Water

6-A1. *A modular three-dimensional finite-difference ground-water flow model*, by M.G. McDonald and A.W. Harbaugh: USGS–TWRI book 6, chap. A1. 1988. 586 pages.

6-A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model*, by S.A. Leake and D.E. Prudic: USGS–TWRI book 6, chap. A2. 1991. 68 pages.

6-A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual*, by L.J. Torak: USGS–TWRI book 6, chap. A3. 1993. 136 pages.

6-A4. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions*, by R.L. Cooley: USGS–TWRI book 6, chap. A4. 1992. 108 pages.

6-A5. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 3: Design philosophy and programming details*, by L.J. Torak: USGS–TWRI book 6, chap. A5, 1993. 243 pages.

6-A6. A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction, by Eric D. Swain and Eliezer J. Wexler: USGS–TWRI book 6, chap. A5,1996. 125 pages.

Book 7. Automated Data Processing and Computations

Section C. Computer Programs

7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P.C. Trescott, G.F. Pinder, and S.P. Larson: USGS–TWRI book 7, chap. C1. 1976. 116 pages.

7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L.F. Konikow and J.D. Bredehoeft: USGS–TWRI book 7, chap. C2. 1978. 90 pages.

7-C3. *A model for simulation of flow in singular and interconnected channels*, by R.W. Schaffranek, R.A. Baltzer, and D.E. Goldberg: USGS–TWRI book 7, chap. C3. 1981. 110 pages.

8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J.D. Craig: USGS–TWRI book 8, chap. A2. 1983. 57 pages.

Section B. Instruments for Measurement of Discharge

8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G.F. Smoot and C.E. Novak: USGS–TWRI book 8, chap. B2. 1968. 15 pages.

Book 9. Handbooks for Water-Resources Investigations

Section A. National Field Manual for the Collection of Water-Quality Data

9-A1. *National Field Manual for the Collection of Water-Quality Data: Preparations for Water Sampling*, by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A1. 1998. 47 p.

9-A2. *National Field Manual for the Collection of Water-Quality Data: Selection of Equipment for Water Sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A2. 1998. 94 p.

9-A3. *National Field Manual for the Collection of Water-Quality Data: Cleaning of Equipment for Water Sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A3. 1998. 75 p.

9-A4. *National Field Manual for the Collection of Water-Quality Data: Collection of Water Samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A4. 1999. 156 p.

9-A5. *National Field Manual for the Collection of Water-Quality Data: Processing of Water Samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A5. 1999, 149 p.

9-A6. *National Field Manual for the Collection of Water-Quality Data: Field Measurements*, edited by F.D. Wilde and D.B. Radtke: USGS–TWRI book 9, chap. A6. 1998. Variously paginated.

9-A7. *National Field Manual for the Collection of Water-Quality Data: Biological Indicators*,edited by D.N. Myers and F.D. Wilde: USGS–TWRI book 9, chap. A7. 1997 and 1999. Variously paginated.

9-A8. *National Field Manual for the Collection of Water-Quality Data: Bottom-material samples*, by D.B. Radtke: USGS–TWRI book 9, chap. A8. 1998. 48 pages.

9-A9. *National Field Manual for the Collection of Water-Quality Data: Safety in Field Activities*, by S.L. Lane and R.G. Fay: USGS–TWRI book 9, chap. A9. 1998. 60 pages.

SELECTED REFERENCES

Clark, G. D., ed., 1980, The Indiana water resource: Availability, uses, and needs: Indianapolis, Indiana Department of Natural Resources, 1508 p.

Fowler, K. K., 1988, Annual maximum and minimum lake levels for Indiana, water years 1942-85: U.S. Geological Survey Open-File Report 88-331, 363 p.

Fowler, K. K., and Wilson, J. T., 1996, Low-flow characteristics of Indiana streams: U.S. Geological Survey Open-File Report 96-4128, 313 p.

Glatfelter, D. R., 1984, Techniques for estimating magnitude and frequency of floods on streams in Indiana: U.S. Geological Survey Water-Resources Investigations Report 84-4134, 110 p.

Indiana Department of Natural Resources, 1993, Coordinated discharges of selected streams in Indiana: Indiana Department of Natural Resources, Division of Water.

National Oceanic and Atmospheric Administration, 1992, Monthly normals of temperature, precipitation, and heating and cooling days, 1961-90: no. 81.

National Oceanic and Atmospheric Administration, 1997-98, Climatological data, Indiana: Asheville, N.C., National Climatic Center, v. 102, nos. 10-13, and v. 103, nos. 1-9.

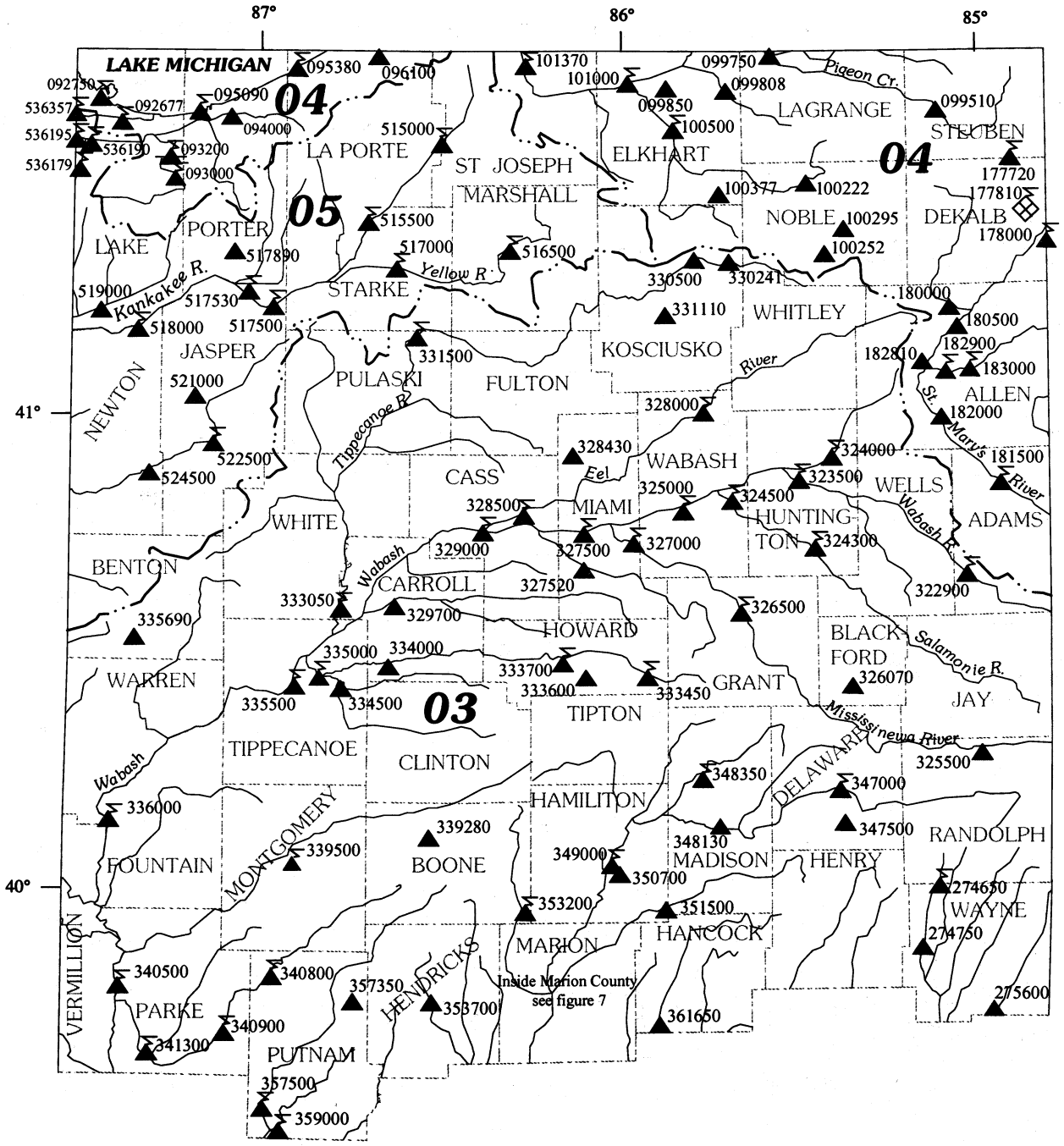
Perrey, J. I., and Corbett, D. M., 1956, Hydrology of Indiana lakes: U.S. Geological Survey Water-Supply Paper 1363, 347 p.

Rantz, S. E., and others, 1982, Volume 1, Measurement of stage and discharge: U.S. Geological Survey Water-Supply Paper 2175, 284 p.

Rantz, S. E., and others, 1982, Volume 2, Computation of discharge: U.S. Geological Survey Water-Supply Paper 2175, 631 p.

Solly, W. B., Pierce, R. R., and Perlman, H. A., 1998, Estimated use of water in the United States in 1995: U.S. Geological Survey Circular 1200, 71 p.

Stewart, J. A., Miller, R. L., and Butch, G. K., 1986, Cost-effectiveness of the U.S. Geological Survey stream-gaging program in Indiana: U.S. Geological Survey Water-Resources Investigations Report 85-4343, 92 p.


87°
86°
85°
41°
40°
LAKE MICHIGAN
04
05
03
04
LAKE
PORTER
LA PORTE
ST JOSEPH
ELKHART
LAGRANGE
STEUBEN
DEKALB
NOBLE
MARSHALL
STARKE
KOSCIUSKO
WHITLEY
ALLEN
JASPER
NEWTON
PULASKI
FULTON
WABASH
WELLS
ADAMS
CASS
MIAMI
HUNTINGTON
WHITE
BENTON
CARROLL
HOWARD
BLACKFORD
JAY
WARREN
TIPPECANOE
CLINTON
TIPTON
GRANT
DELAWARE
RANDOLPH
FOUNTAIN
MONTGOMERY
BOONE
HAMILITON
MADISON
HENRY
WAYNE
VERMILLION
PARKE
PUTNAM
HENDRICKS
MARION
HANCOCK
Kankakee R.
Yellow R.
Tippecanoe R.
Wabash
Eel
River
St. Mary's
Wabash R.
Pigeon Cr.
Salamonie R.
Mississinewa River
Inside Marion County see figure 7
092750
536357
536195
536179
092677
095380
096100
095090
094000
536190
093200
093000
515000
101370
101000
099750
099808
099850
100500
099510
177720
177810
178000
100377
100222
100295
100252
515500
517890
517000
516500
330500
330241
331110
180000
180500
182900
182810
183000
182000
519000
517530
517500
518000
331500
521000
328000
522500
524500
328430
324000
323500
324500
325000
181500
328500
327500
327000
324300
329000
327520
322900
333050
329700
326500
335690
335000
334000
333700
333600
333450
326070
335500
334500
325500
348350
347000
336000
339280
347500
339500
349000
348130
350700
274650
353200
351500
274750
340500
340800
357350
353700
361650
275600
340900
341300
357500
359000

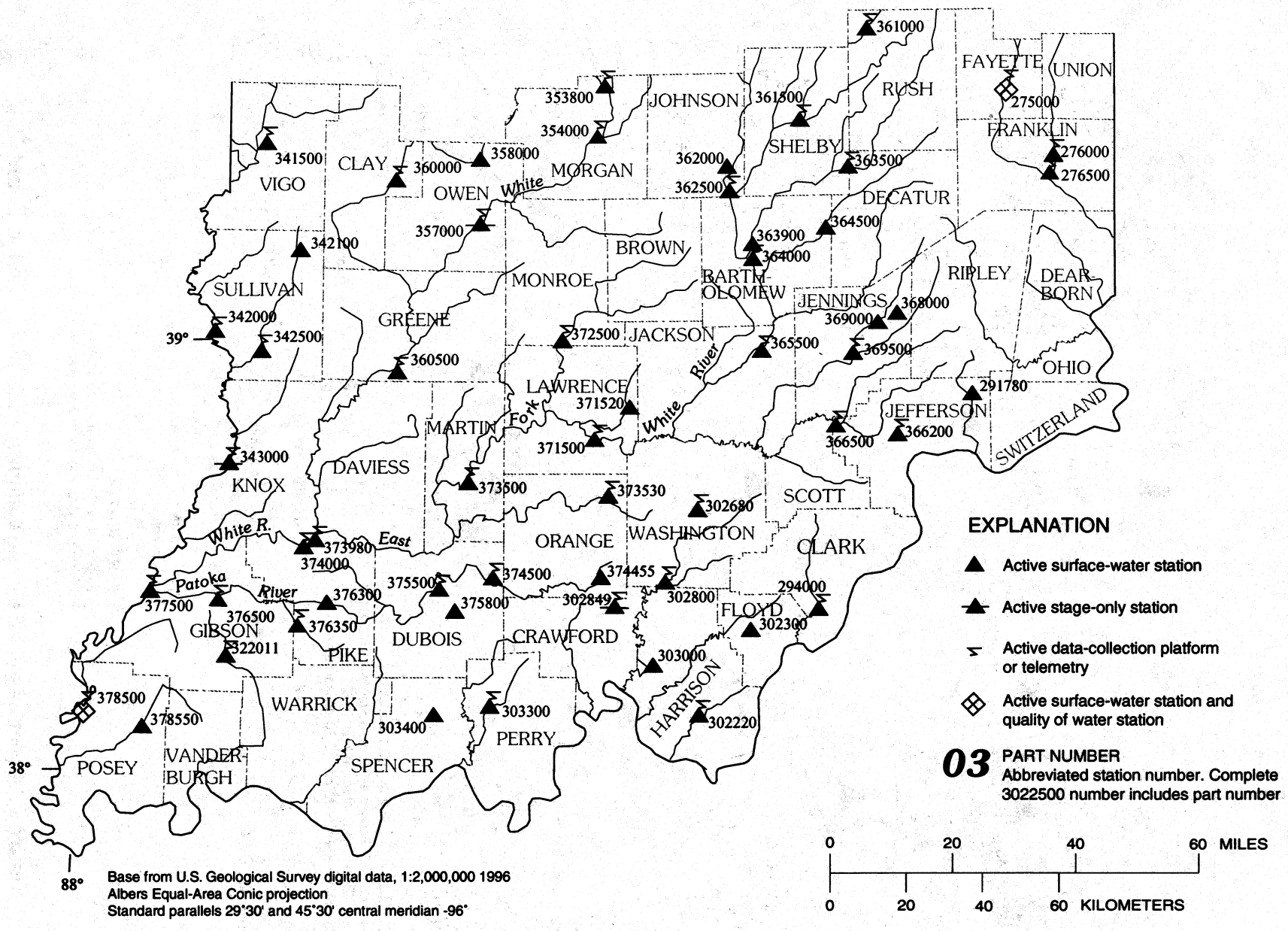
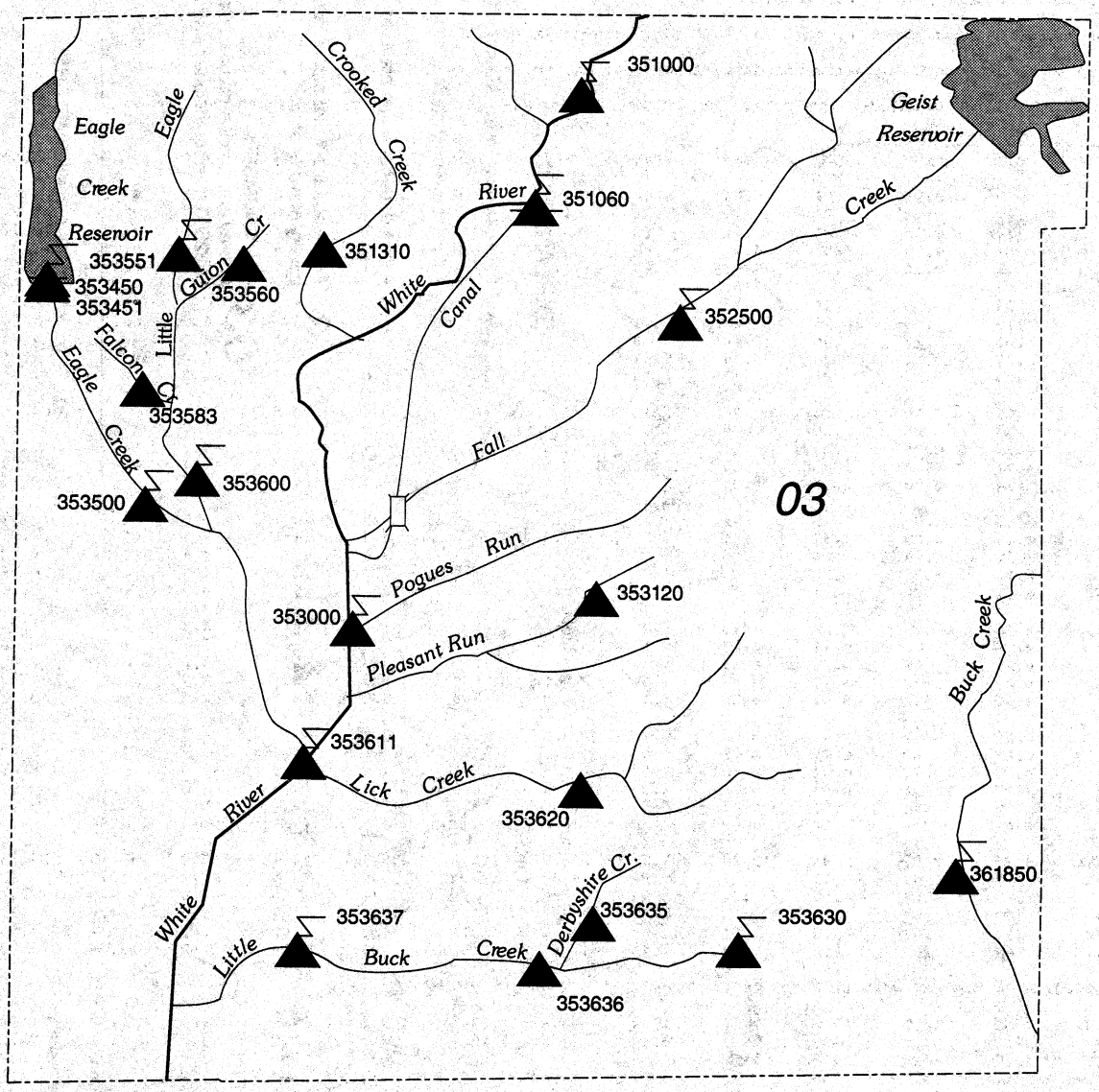


Figure 6.--Locations of streamflow and water-quality gaging stations in Indiana.



Base from U.S. Geological Survey digital data, 1:2,000,000 1996
Albers Equal-Area Conic projection
Standard parallels 29°30' and 45°30' central meridian -96°

0 1 2 3 4 5 MILES
0 1 2 3 4 5 KILOMETERS

EXPLANATION

Active stage-only station

Active surface-water station

Active data-collection platform or telemetry

03 PART NUMBER
Abbreviated station number: complete 302500 number includes part number

Figure 7.--Locations of streamflow gaging stations in Marion County.

03274650 WHITEWATER RIVER NEAR ECONOMY, IN

LOCATION.--Lat 40°00'05", long 85°06'56", in NW1/4NE1/4 sec.19, T.18 N., R.13 E., Wayne County, Hydrologic Unit 05080003, on right bank 15 ft downstream from bridge on Wayne County Line Road, 1.7 mi upstream from Little Creek, 2.4 mi northwest of Economy, and at mile 91.9.

DRAINAGE AREA.--10.4 mi^2.

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,066.00 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges and those below 1.0 ft^3/s, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	e.07	.04	.04	e.02	e5.3	2.6	5.6	4.2	4.1	e3.0	e.75
2	.12	e.13	.04	.10	.01	e4.2	2.7	15	4.0	3.9	e2.5	e.74
3	.14	e.16	.03	.71	.00	3.4	2.7	8.7	3.6	11	e2.0	e.72
4	.21	e.15	.02	4.2	.00	3.2	2.6	6.7	3.5	16	e1.8	e1.0
5	.16	e.14	.20	1.8	.00	2.8	2.2	5.9	4.5	9.3	e1.7	e.80
6	.13	.14	.19	.87	.00	2.5	2.3	5.3	4.2	7.4	e1.7	e.76
7	.13	.13	.16	.62	.00	2.3	68	5.0	3.4	6.0	e9.0	e.72
8	.23	.15	.06	.40	.00	2.1	96	4.9	3.3	5.3	e4.8	e.72
9	.37	.16	.04	.36	.00	2.3	33	4.8	3.1	4.8	e3.0	e.76
10	.29	.13	.22	.35	.00	1.9	22	6.4	2.9	4.6	e2.0	e1.2
11	.19	.10	.18	.26	4.4	1.8	18	5.4	2.8	4.4	e1.7	e1.6
12	.18	e.08	.18	.19	5.6	1.9	15	4.9	2.8	4.2	e1.5	e1.1
13	e.16	e.08	.15	.15	5.8	1.9	11	4.9	2.7	3.9	e1.3	e1.0
14	e.16	e.07	1.0	.10	18	3.1	8.4	4.2	2.7	3.7	e1.2	e.90
15	e.14	e.06	.93	.05	11	3.1	6.9	4.0	9.3	3.6	e1.1	e.85
16	e.13	e.06	.48	.04	11	2.8	5.9	3.9	10	3.5	e1.0	e.82
17	e.12	e.05	.33	.05	7.7	3.0	6.5	3.8	14	3.5	e1.1	e.80
18	e.12	e.05	.24	.05	29	2.5	6.1	3.6	66	3.5	e1.2	e.78
19	e.11	e.06	.20	.05	27	4.4	5.6	31	26	3.6	e.96	e.76
20	e.11	.15	.21	.05	13	31	14	14	17	3.5	e.92	e.80
21	e.10	.10	.18	.28	9.2	26	32	8.8	26	3.3	e.90	e.84
22	e.10	.09	e.14	e.80	10	13	21	7.7	26	3.1	e.92	e.80
23	e.10	.09	e.11	e.70	8.3	8.8	13	12	15	3.0	e.94	e.82
24	e.09	.08	e.11	e.43	6.9	6.8	9.5	7.9	11	2.9	e1.0	e.85
25	e.09	.04	e.09	e.25	6.3	5.5	7.5	5.8	14	e2.8	e.90	e.90
26	e.08	.17	e.07	e.15	5.2	4.6	6.4	4.9	10	e2.7	e.94	e1.0
27	e.08	.10	e.06	e.09	9.0	4.9	5.8	12	7.4	e2.7	e1.0	e.95
28	e.08	.05	e.05	e.06	7.8	4.5	5.4	11	5.9	e2.8	e.90	e.89
29	e.07	.04	e.05	e.04	5.9	3.4	4.9	6.9	5.2	e3.3	e.84	e.87
30	e.07	.04	.04	e.03	---	3.0	4.4	5.5	4.6	e5.8	e.80	e.84
31	e.07	---	.04	e.02	---	2.7	---	4.8	---	e4.0	e.78	---
TOTAL	4.26	2.92	5.84	13.29	201.13	168.7	441.4	235.3	315.1	146.2	53.40	26.34
MEAN	.14	.097	.19	.43	6.94	5.44	14.7	7.59	10.5	4.72	1.72	.88
MAX	.37	.17	1.0	4.2	29	31	96	31	66	16	9.0	1.6
MIN	.07	.04	.02	.02	.00	1.8	2.2	3.6	2.7	2.7	.78	.72
CFSM	.01	.01	.02	.04	.67	.52	1.41	.73	1.01	.45	.17	.08
IN.	.02	.01	.02	.05	.72	.60	1.58	.84	1.13	.52	.19	.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2000, BY WATER YEAR (WY)

MEAN	3.46	10.7	12.2	13.4	17.9	19.8	18.5	13.5	9.46	6.67	4.37	2.98
MAX	39.9	67.0	39.7	37.7	56.0	41.6	46.0	58.4	24.8	27.5	61.5	32.2
(WY)	1987	1994	1978	1996	1985	1978	1996	1996	1998	1979	1979	1989
MIN	.14	.097	.19	.33	3.31	2.58	2.96	1.47	1.03	.57	.40	.15
(WY)	2000	2000	2000	1977	1978	1981	1971	1988	1977	1977	1999	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1971 - 2000	
ANNUAL TOTAL	2139.66		1613.88			
ANNUAL MEAN	5.86		4.41		11.0	
HIGHEST ANNUAL MEAN					18.8	1979
LOWEST ANNUAL MEAN					3.26	1977
HIGHEST DAILY MEAN	147	Jan 22	96	Apr 8	647	Nov 14 1993
LOWEST DAILY MEAN	.02	Dec 4	.00	Feb 3	.00	Feb 3 2000
ANNUAL SEVEN-DAY MINIMUM	.04	Nov 28	.00	Feb 3	.00	Feb 3 2000
INSTANTANEOUS PEAK FLOW			425	Apr 7	1120	Nov 14 1993
INSTANTANEOUS PEAK STAGE			7.51	Apr 7	8.91	Nov 14 1993
ANNUAL RUNOFF (CFSM)	.56		.42		1.06	
ANNUAL RUNOFF (INCHES)	7.65		5.77		14.43	
10 PERCENT EXCEEDS	14		11		25	
50 PERCENT EXCEEDS	2.2		1.7		3.8	
90 PERCENT EXCEEDS	.09		.06		.70	

e Estimated

03274750 WHITEWATER RIVER NEAR HAGERSTOWN, IN

LOCATION.--Lat 39°52'25", long 85°09'47", in NE$^1/_4$NE$^1/_4$ sec.3, T.16 N., R.12 E., Wayne County, Hydrologic Unit 05080003, on right bank at upstream side of bridge on Jerry Meyers Road, 1.0 mi upstream from Pronghorn Run, 1.5 mi north of Interstate 70, 2.0 mi downstream from Nettle Creek, 2.6 mi south of Hagerstown, and at mile 84.9.

DRAINAGE AREA.--58.7 mi^2.

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 950.00 ft above sea level (Indiana Flood Control and Water Resources Commission bench mark).

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	e6.2	e4.2	e4.3	e6.8	37	26	42	33	33	30	15
2	7.6	11	e4.1	4.6	e6.4	32	26	64	31	32	35	15
3	7.5	9.2	e4.0	16	e6.2	30	27	51	29	149	42	15
4	8.5	8.2	e4.0	e40	e5.8	28	26	46	28	125	30	20
5	7.6	7.9	e8.0	28	e5.6	27	24	42	30	83	25	16
6	7.0	8.9	e7.0	22	e5.5	25	23	40	29	207	25	15
7	6.5	9.8	5.9	16	e5.4	24	316	38	27	85	87	15
8	7.4	9.6	5.3	13	e5.4	23	786	37	26	54	43	15
9	9.5	10	4.5	12	e5.8	23	192	36	25	44	35	15
10	8.1	e9.0	6.0	13	e11	22	126	39	24	38	30	24
11	7.1	e8.0	3.9	9.9	20	22	104	36	24	36	25	32
12	6.6	e7.4	6.1	10	33	22	87	35	23	33	23	24
13	e6.5	e6.8	6.1	10	53	22	77	36	23	30	22	20
14	e6.5	e6.4	30	9.1	97	23	68	33	24	28	21	19
15	e6.4	e6.0	15	9.1	33	24	62	31	31	26	21	18
16	e6.4	e5.8	9.7	9.5	27	24	57	31	52	25	20	17
17	e6.3	e5.6	8.9	8.9	21	24	57	31	56	24	21	16
18	e6.3	e5.4	6.7	e9.2	153	22	53	32	323	23	23	16
19	e6.2	e5.2	5.8	e9.7	167	25	50	168	111	29	19	15
20	e6.2	e11	6.4	e11	84	184	63	81	76	24	19	17
21	e6.1	e8.0	e5.8	e14	62	165	124	59	83	22	18	17
22	e6.1	e6.0	e5.4	e20	62	81	97	51	85	21	19	16
23	e6.0	e5.4	e5.2	e17	58	59	73	60	62	20	19	17
24	e6.0	e4.8	e4.9	e15	50	48	61	49	53	20	20	17
25	e5.9	e4.4	e4.7	e13	45	42	54	40	60	19	18	19
26	e5.9	e11	e4.6	e11	40	37	49	36	53	19	19	20
27	e5.8	e7.0	e4.5	e10	46	38	47	52	45	18	20	20
28	e5.8	e4.8	e4.4	e9.0	48	34	44	52	41	21	18	18
29	e5.7	e4.6	4.3	e8.2	40	30	42	44	38	21	17	18
30	e5.7	e4.4	4.4	e7.4	---	28	39	39	36	54	16	17
31	e5.8	---	e4.3	e7.2	---	27	---	36	---	31	16	---
TOTAL	206.9	217.8	204.1	397.1	1202.9	1252	2880	1467	1581	1394	796	538
MEAN	6.67	7.26	6.58	12.8	41.5	40.4	96.0	47.3	52.7	45.0	25.7	17.9
MAX	9.5	11	30	40	167	184	786	168	323	207	87	32
MIN	5.7	4.4	3.9	4.3	5.4	22	23	31	23	18	16	15
CFSM	.11	.12	.11	.22	.71	.69	1.64	.81	.90	.77	.44	.31
IN.	.13	.14	.13	.25	.76	.79	1.83	.93	1.00	.88	.50	.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2000, BY WATER YEAR (WY)

MEAN	27.9	54.0	69.9	77.4	98.2	111	114	91.6	68.8	49.6	35.4	23.6
MAX	188	235	205	208	233	224	286	420	212	219	312	121
(WY)	1987	1994	1978	1996	1975	1973	1996	1996	1996	1979	1979	1989
MIN	6.67	7.26	6.58	8.48	23.0	25.6	28.0	23.0	14.6	8.18	8.56	6.93
(WY)	2000	2000	2000	1977	1995	1981	1971	1988	1977	1977	1988	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1971 - 2000	
ANNUAL TOTAL	14362.6		12136.8			
ANNUAL MEAN	39.3		33.2		68.3	
HIGHEST ANNUAL MEAN					121	1996
LOWEST ANNUAL MEAN					25.4	1977
HIGHEST DAILY MEAN	976	Jan 22	786	Apr 8	1880	Feb 23 1975
LOWEST DAILY MEAN	3.9	Dec 11	3.9	Dec 11	3.9	Dec 11 1999
ANNUAL SEVEN-DAY MINIMUM	4.3	Nov 28	4.3	Nov 28	4.3	Nov 28 1999
INSTANTANEOUS PEAK FLOW			1810	Apr 8	2310	Jul 23 1992
INSTANTANEOUS PEAK STAGE			10.01	Apr 8	11.52	Nov 14 1993
ANNUAL RUNOFF (CFSM)	.67		.56		1.16	
ANNUAL RUNOFF (INCHES)	9.10		7.69		15.81	
10 PERCENT EXCEEDS	81		62		126	
50 PERCENT EXCEEDS	16		22		37	
90 PERCENT EXCEEDS	5.8		5.8		14	

e Estimated

03275000 WHITEWATER RIVER NEAR ALPINE, IN

(Former National stream-quality accounting network station)

LOCATION.--Lat 39°34'46", long 85°09'29", in SW$^1/_4$NE$^1/_4$ sec.l4, T.13 N., R.12 E., Fayette County, Hydrologic Unit 05080003, on right bank at Nulltown, 400 ft upstream from Wilson Creek, 0.4 mi upstream from bridge on County Road 480 South, 2.0 mi northeast of Alpine, 5.1 mi upstream from Bear Creek, and at mile 54.8.

DRAINAGE AREA.--522 mi^2.

PERIOD OF RECORD.--October 1928 to current year. Prior to October 1936, published as West Fork Whitewater River near Alpine.

REVISED RECORDS.--WSP 1143: 1943-44(M), 1947 (M). WSP 1335: 1929-30, 1932(M), 1938, 1946-47(m), 1949-50. WSP 1505: 1942(P). WSP 1908: 1937(M), 1944, 1949(M), drainage area. WDR IN-79-1: 1975 (P).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 750.19 ft above sea level. Prior to Nov. 9, 1928, nonrecording gage at site .5 mi downstream and same datum. Oct. 1, 1982 to June 30, 1993, at same site and datum. July 1, 1993 to Oct. 22, 1998 gage at site .5 mi downstream and at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	69	77	87	75	355	274	363	353	343	186	110
2	56	77	78	89	74	319	277	458	319	314	177	108
3	55	75	80	149	75	286	287	515	292	342	208	105
4	60	72	80	282	76	264	302	445	273	1080	191	116
5	60	70	84	234	74	247	294	429	274	1130	170	112
6	59	70	89	189	71	236	281	392	269	857	163	104
7	58	68	85	163	72	220	1390	372	257	810	223	102
8	61	69	82	147	72	211	12200	361	241	487	235	100
9	76	70	81	139	72	205	3930	340	227	392	215	100
10	79	72	105	135	75	194	2000	327	216	344	205	122
11	75	73	97	127	87	197	1460	315	212	327	176	180
12	69	73	96	121	99	205	1150	302	215	320	161	174
13	69	73	99	118	134	194	932	327	207	289	152	150
14	66	72	151	114	374	191	803	290	208	266	149	134
15	64	71	151	109	481	200	709	270	833	251	145	126
16	65	71	134	107	347	247	631	260	743	234	141	119
17	65	71	121	105	354	280	606	261	1630	224	141	113
18	66	71	113	107	742	252	628	259	2350	214	164	110
19	66	75	108	107	1830	276	573	666	2210	227	150	107
20	66	83	107	112	892	900	550	1060	1080	221	137	114
21	65	83	103	99	577	1840	710	606	1300	203	131	115
22	64	80	98	97	480	986	886	474	1330	194	126	110
23	64	78	96	104	480	690	730	453	873	187	126	141
24	66	79	95	95	457	563	617	547	644	179	125	158
25	67	78	89	e82	424	481	543	428	1440	172	126	152
26	67	90	92	e81	375	413	484	352	905	166	122	189
27	67	85	91	e80	382	406	445	711	637	161	127	153
28	70	82	90	e79	449	400	420	716	506	159	129	140
29	70	79	89	e78	401	362	393	572	435	168	126	131
30	67	77	89	e77	---	318	368	461	384	183	118	125
31	67	---	88	e76	---	291	---	397	---	211	113	---
TOTAL	2027	2256	3038	3689	10101	12229	34873	13729	20863	10655	4858	3820
MEAN	65.4	75.2	98.0	119	348	394	1162	443	695	344	157	127
MAX	79	90	151	282	1830	1840	12200	1060	2350	1130	235	189
MIN	55	68	77	76	71	191	274	259	207	159	113	100
CFSM	.13	.14	.19	.23	.67	.76	2.23	.85	1.33	.66	.30	.24
IN.	.14	.16	.22	.26	.72	.87	2.49	.98	1.49	.76	.35	.27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2000, BY WATER YEAR (WY)

MEAN	186	348	543	825	866	1001	997	764	550	362	239	174
MAX	1685	1978	2531	4409	2639	2522	2360	3763	2609	1777	2342	920
(WY)	1987	1994	1991	1937	1950	1963	1964	1996	1998	1979	1979	1989
MIN	47.1	49.8	50.6	58.9	56.9	120	122	70.0	68.9	61.1	61.3	50.3
(WY)	1935	1935	1935	1935	1935	1935	1941	1941	1934	1934	1988	1934

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1929 - 2000	
ANNUAL TOTAL	151110		122138			
ANNUAL MEAN	414		334		570	
HIGHEST ANNUAL MEAN					1009	1996
LOWEST ANNUAL MEAN					117	1941
HIGHEST DAILY MEAN	13900	Jan 22	12200	Apr 8	26300	Mar 5 1963
LOWEST DAILY MEAN	50	Sep 26	55	Oct 3	30	Aug 6 1934
ANNUAL SEVEN-DAY MINIMUM	51	Sep 22	58	Oct 1	33	Aug 2 1934
INSTANTANEOUS PEAK FLOW			14200	Apr 8	37100	Jan 14 1937
INSTANTANEOUS PEAK STAGE			17.63	Apr 8	19.70	Dec 31 1990
ANNUAL RUNOFF (CFSM)	.79		.64		1.09	
ANNUAL RUNOFF (INCHES)	10.77		8.70		14.83	
10 PERCENT EXCEEDS	869		696		1150	
50 PERCENT EXCEEDS	132		165		275	
90 PERCENT EXCEEDS	63		71		87	

e Estimated

03275000 WHITEWATER RIVER NEAR ALPINE, INDIANA--Continued

National Water-Quality Assessment Program, Great Miami and Little Miami River Basins Study Unit

WATER-QUALITY RECORDS

The data described in the following table were collected and analyzed as part of the NAWQA (National Water-Quality Assessment Program) project in the Great Miami and Little Miami River Basins. The objectives of the NAWQA program are to broadly characterize the water quality of the Nation's streams and aquifers in relation to human and natural factors. The period of high-intensity data collection for the Great Miami and Little Miami River Basins project is in water years 1999-2001.

There are eight additional stream sites in Ohio which data are being reported in the 2000 Ohio annual data report as part of the NAWQA study: Stillwater River at Martindale Rd. near Union, OH (395355084173600), Great Miami River near Vandalia, OH (395457084095100), Mad River at St. Paris Pike near Eagle City, OH (03267900), Holes Creek at Huffman Park near Kettering, OH (393944084120700), Great Miami River at Hamilton, OH (03274000), Little Miami River at Milford, OH (03245500), Great Miami River at Venice, OH (03274500) and East Fork Little Miami River near Williamsburg,OH (03246400). One site is reported in this annual data report: Whitewater River near Alpine, IN (03275000).

These data also can be obtained electronically at: http://oh.water.usgs.gov/miam.html.

--, no data; <, concentration or value reported is less than that indicated; E, estimated value; K, value is estimated for a non-ideal colony count.

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (mm OF Hg) (00025)	OXY-GEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXY-GEN, DIS-SOLVED (mg/L) (00300)	PH WATER WHOLE FIELD (STAN-DARD UNITS) (00400)	PH WATER WHOLE LAB (STAN-DARD UNITS (00403)	SPE-CIFIC CONDUC-TANCE, LAB (90095)	SPE-CIFIC CONDUC-TANCE, FIELD (00095)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE, WATER (DEG C) (00010)	HARD-NESS, TOTAL (mg/L AS $CaCO_3$) (00900)	CALCIUM, DIS-SOLVED (mg/L AS Ca) (00915)
OCT 1999													
19...	1530	66	746	136	14.3	8.2	8.0	717	697	13	12.0	310	76
NOV													
09...	1210	68	738	121	12.5	8.3	8.1	740	737	23	12.5	310	76
DEC													
15...	1130	153	725	101	11.9	8.4	8.2	585	615	6	6.0	290	72
JAN 2000													
05...	1150	239	748	103	13.0	8.4	8.0	617	605	-3	4.5	270	67
FEB													
10...	1220	77	725	123	14.7	8.4	8.1	725	708	10	5.5	300	73
MAR													
15...	1200	201	736	137	14.9	8.5	8.3	628	651	20	10.0	310	73
20...	1140	764	732	104	11.8	8.3	8.1	603	535	10	8.0	270	65
APR													
11...	1200	1460	737	101	11.2	8.2	8.1	589	574	10	9.0	260	66
MAY													
10...	1230	324	726	139	12.1	8.3	8.3	639	630	19	19.5	300	72
JUN													
01...	1340	347	743	112	9.6	8.1	8.2	651	627	34	22.5	300	73
15...	1320	769	718	96	7.7	8.1	7.8	524	531	27	23.0	240	60
JUL													
13...	1250	287	733	121	10.0	8.2	8.1	634	644	30	22.5	290	72
AUG													
17...	1250	142	740	96	8.3	8.1	8.2	653	675	20	21.0	290	70
SEP													
13...	1230	155	731	106	9.4	8.1	8.1	644	648	23	19.0	300	72

03275000 WHITEWATER RIVER NEAR ALPINE, INDIANA--Continued

National Water-Quality Assessment Program, Great Miami and Little Miami River Basins Study Unit

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	MAGNESIUM, DISSOLVED (mg/L AS Mg) (00925)	POTASSIUM, DISSOLVED (mg/L AS K) (00935)	SODIUM, DISSOLVED (mg/L AS Na) (00930)	ALKALINITY, WATER, DISSOLVED FIELD (mg/L AS $CaCO_3$) (39086)	BICARBONATE, WATER, DISSOLVED FIELD (mg/L AS HCO_3) (00453)	CARBONATE WATER DISSOLVED FIELD (mg/L AS CO_3) (00452)	CHLORIDE, DISSOLVED (mg/L AS Cl) (00940)	FLUORIDE, DISSOLVED (mg/L AS F) (00950)	SILICA, DISSOLVED (mg/L AS SiO_2) (00955)	SULFATE DISSOLVED (mg/L AS SO_4) (00945)	NITROGEN, AMMONIA + ORGANIC, DISSOLVED (mg/L AS N) (00623)	NITROGEN, AMMONIA + ORGANIC, TOTAL (mg/L AS N) (00625)
OCT 1999												
19...	30	2.9	26	261	315	<1	48	0.3	4.8	41	0.21	0.30
NOV												
09...	29	2.7	28	264	322	<1	49	.3	3.8	42	.24	.42
DEC												
15...	26	1.8	12	255	311	<1	25	.2	5.2	38	.12	.22
JAN 2000												
05...	24	2.5	12	233	284	<1	27	.2	5.7	43	.24	.43
FEB												
10...	29	2.5	25	256	312	<1	43	.3	3.5	48	.27	.36
MAR												
15...	30	1.9	15	234	286	<1	33	.2	1.8	48	.16	.19
20...	25	2.1	9.9	202	246	<1	28	.2	3.3	44	.25	.94
APR												
11...	24	2.0	8.0	203	248	<1	22	.2	6.9	37	.39	.50
MAY												
10...	29	1.9	12	240	293	<1	28	.2	2.7	41	.15	.28
JUN												
01...	27	2.0	11	242	246	<1	30	.2	4.6	37	.15	.31
15...	23	3.2	7.8	200	244	<1	20	.2	6.1	31	.39	.79
JUL												
13...	28	2.0	9.6	250	305	<1	23	.2	5.4	37	.14	.19
AUG												
17...	28	2.6	15	230	281	<1	30	.3	5.2	38	.12	.23
SEP												
13...	28	2.2	14	260	317	<1	29	.2	6.6	37	.16	.26

DATE	NITROGEN, AMMONIA DISSOLVED (mg/L AS N) (00608)	NITROGEN, NO2 + NO3, DISSOLVED (mg/L AS N) (00631)	NITROGEN, NITRITE DISSOLVED (mg/L AS N) (00613)	PHOSPHORUS DISSOLVED (mg/L AS P) (00666)	PHOSPHORUS ORTHO, DISSOLVED (mg/L AS P) (00671)	PHOSPHORUS TOTAL (mg/L AS P) (00665)	CARBON, ORGANIC DISSOLVED (mg/L AS C) (00681)	CARBON, ORGANIC PARTICULATE TOTAL (mg/L AS C) (00689)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (mg/L) (70300)	E. COLI WATER WHOLE TOTAL (COLONIES/ 100 mL) (31633)	IRON, DISSOLVED (µg/L AS Fe) (01046)	MANGANESE, DISSOLVED (µg/L AS Mn) (01056)	SEDIMENT, SUSPENDED (mg/L) (80154)
OCT 1999													
19...	0.06	2.4	0.05	0.06	0.05	0.09	2.0	0.3	393	80	10	8	12
NOV													
09...	.07	2.3	.09	.04	.03	.05	2.0	.3	422	5600	20	9	13
DEC													
15...	< .02	2.2	< .01	.02	.02	.04	1.4	.7	362	1900	E10	6	13
JAN 2000													
05...	.09	2.5	.02	.03	.02	.06	2.5	.6	367	4600	E10	7	13
FEB													
10...	.13	2.6	.03	.04	.03	.06	1.5	.4	415	1600	10	15	3
MAR													
15...	< .02	3.7	.04	.01	< .01	.02	1.9	.4	377	8	20	8	20
20...	< .02	4.4	.02	.02	.01	.16	4.2	1.5	350	6400	20	5	--
APR													
11...	.03	7.3	.01	.06	.04	.12	3.3	.8	339	210	E10	8	46
MAY													
10...	< .02	3.4	.02	.01	< .01	.01	1.9	.4	357	K35	20	9	23
JUN													
01...	< .02	5.2	.02	.02	.02	.03	2.1	.3	368	K5	<10	8	28
15...	.07	4.1	.04	.05	.04	.16	4.4	.8	315	12000	E10	5	94
JUL													
13...	< .02	3.9	< .01	.03	.03	.04	2.0	.3	370	25	<10	4	27
AUG													
17...	< .02	2.8	.02	.02	.02	.04	1.7	.4	386	52	<10	6	14
SEP													
13...	< .02	2.7	.01	.03	.02	.04	1.7	.4	372	190	<10	8	--

03275600 EAST FORK WHITEWATER RIVER AT ABINGTON, IN

LOCATION.--Lat 39°43'59", long 84°57'35", in NE$^1/_4$SW$^1/_4$ sec.2, T.12 N., R.2 W., Wayne County, Hydrologic Unit 05080003, 15 ft downstream of bridge on county road at Abington, 3 mi downstream from Elkhorn Creek, 8 mi southwest of Richmond, and at mile 26.7.

DRAINAGE AREA.--200 mi^2.

PERIOD OF RECORD.--October 1965 to current year.

REVISED RECORDS.--WSP 2108: Drainage area. WDR IN-90-1: 1966(M), 1967-75(P), 1976-77(M), 1978-79(P), 1982(P), 1987(P), 1989(P).

GAGE.--Water-stage recorder. Datum of gage is 791.00 ft above sea level. Prior to Aug. 2, 1991 at site 250 ft downstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	21	21	23	e32	160	105	132	86	83	43	25
2	15	32	21	25	e31	135	117	255	75	73	39	25
3	13	32	20	182	e34	120	122	189	67	145	70	22
4	23	24	21	432	e35	113	152	165	60	385	47	57
5	16	21	30	165	e34	101	143	173	67	387	36	36
6	14	21	50	111	e33	95	134	146	71	268	34	28
7	13	21	29	88	e33	88	1330	138	57	165	116	24
8	14	21	24	73	34	84	5800	141	51	119	66	23
9	38	24	22	67	36	81	1130	118	46	90	73	23
10	41	25	120	66	48	75	546	123	43	79	79	70
11	21	23	55	60	78	78	414	108	49	90	49	83
12	18	22	37	53	93	90	346	100	52	79	39	83
13	16	23	54	51	152	90	296	131	47	67	34	59
14	17	22	191	46	434	93	265	114	55	60	34	40
15	16	22	89	45	231	95	233	94	e290	56	31	36
16	16	22	60	44	191	143	207	88	277	47	29	33
17	16	22	48	42	158	202	235	87	587	42	30	31
18	19	22	41	43	564	154	249	88	523	40	56	29
19	17	23	35	42	600	189	209	346	384	107	38	26
20	16	52	34	45	352	583	205	363	235	81	30	25
21	17	28	31	43	251	498	266	209	418	55	28	49
22	18	25	27	e42	223	326	294	158	386	44	30	33
23	18	23	28	e40	216	255	248	244	241	40	31	166
24	18	24	26	e38	219	214	213	246	180	37	51	191
25	18	22	23	e37	199	186	192	165	433	35	37	98
26	19	44	26	e36	171	161	166	115	277	33	38	170
27	19	33	24	e35	219	176	156	170	201	31	102	100
28	18	26	23	e34	218	159	146	168	148	35	54	72
29	19	24	23	e33	181	136	136	147	119	50	37	61
30	20	22	24	e33	---	119	125	118	97	70	31	55
31	21	---	25	e32	---	110	---	97	---	49	27	---
TOTAL	583	766	1282	2106	5100	5109	14180	4936	5622	2942	1439	1773
MEAN	18.8	25.5	41.4	67.9	176	165	473	159	187	94.9	46.4	59.1
MAX	41	52	191	432	600	583	5800	363	587	387	116	191
MIN	13	21	20	23	31	75	105	87	43	31	27	22
CFSM	.09	.13	.21	.34	.88	.82	2.36	.80	.94	.47	.23	.30
IN.	.11	.14	.24	.39	.95	.95	2.64	.92	1.05	.55	.27	.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2000, BY WATER YEAR (WY)

MEAN	73.3	166	271	277	318	368	386	333	201	157	105	54.5
MAX	615	732	929	708	901	884	1019	1049	789	773	773	242
(WY)	1987	1994	1991	1969	1975	1978	1996	1968	1998	1979	1979	1979
MIN	18.8	25.5	26.5	21.3	83.8	111	88.7	55.9	24.6	22.9	18.6	12.9
(WY)	2000	2000	1977	1977	1992	1992	1976	1976	1988	1988	1988	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1966 - 2000	
ANNUAL TOTAL	63847		45838			
ANNUAL MEAN	175		125		225	
HIGHEST ANNUAL MEAN					388	1979
LOWEST ANNUAL MEAN					92.3	1977
HIGHEST DAILY MEAN	10100	Jan 22	5800	Apr 8	10100	Jan 22 1999
LOWEST DAILY MEAN	10	Sep 17	13	Oct 3	10	Sep 17 1999
ANNUAL SEVEN-DAY MINIMUM	11	Sep 22	15	Oct 2	11	Sep 22 1999
INSTANTANEOUS PEAK FLOW			10100	Apr 8	20000	Jul 20 1969
INSTANTANEOUS PEAK STAGE			13.60	Apr 8	16.18	Jul 20 1969
ANNUAL RUNOFF (CFSM)	.87		.63		1.13	
ANNUAL RUNOFF (INCHES)	11.88		8.53		15.31	
10 PERCENT EXCEEDS	334		248		444	
50 PERCENT EXCEEDS	48		56		111	
90 PERCENT EXCEEDS	16		21		33	

e Estimated

03276000 EAST FORK WHITEWATER RIVER AT BROOKVILLE, IN

LOCATION.--Lat 39°26'02", long 85°00'12", in NE$^1/_4$NE$^1/_4$ sec.20, T.9 N., R.2 W., Franklin County, Hydrologic Unit 05080003, on right bank 100 ft upstream from bridge on State Highway 101, at Brookville, 0.4 mi downstream from Brookville Lake, and 1.8 mi upstream from mouth.

DRAINAGE AREA.--380 mi^2.

PERIOD OF RECORD.--March 1954 to current year.

REVISED RECORDS.--WSP 1555: 1954(M), 1955(P). WSP 1908: 1955, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 621.76 ft above sea level. Prior to May 22, 1954, nonrecording gage site 100 ft downstream at datum 2.00 ft higher. May 22, 1954 to Aug. 20, 1965, water-stage recorder at site 165 ft downstream at datum 2.00 ft higher. Aug. 21, 1965 to Sept. 30, 1981, water-stage recorder at same site and datum. Data Collection Platform with water temperature probe since Nov. 5, 1986.

REMARKS.--Flow regulated by The U.S. Army Corps of Engineers from Brookville Lake since January 1974.

COOPERATION.--Records of Daily discharge provided by U.S. Army Corps of Engineers beginning Oct. 1, 1991.

AVERAGE DISCHARGE.--46 years, 413 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,100 ft^3/s Jan. 21, 1959, gage height 17.35 ft; no flow Nov. 27, 1991, July 14-16, 21-26, Aug. 4-27, 1992.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,510 ft^3/s Apr. 12; minimum daily discharges, 55 ft^3/s Dec. 28-Jan. 4, Jan. 30-Feb. 6, and Mar. 20-24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	645	288	55	55	1480	56	229	638	200	57	57
2	57	645	207	55	55	1480	56	215	387	200	57	57
3	57	644	93	55	55	1190	56	355	387	201	57	57
4	57	439	93	55	55	694	56	355	343	317	57	57
5	57	293	93	219	55	481	56	355	207	388	57	57
6	57	293	93	343	55	383	56	355	144	388	57	285
7	57	292	93	373	187	247	56	355	112	656	57	201
8	57	292	93	373	298	247	57	355	57	765	57	166
9	57	292	93	373	298	247	57	355	57	764	57	97
10	57	292	93	372	298	247	546	355	57	763	57	97
11	57	292	93	372	298	247	1470	355	57	582	57	97
12	57	292	93	372	298	247	1510	355	57	334	57	196
13	57	291	138	372	298	247	655	355	57	200	57	312
14	57	291	192	372	380	248	387	355	57	200	57	312
15	57	291	296	372	482	248	387	355	57	200	57	312
16	57	291	371	372	482	330	387	355	90	200	57	312
17	57	291	371	371	482	445	387	355	236	140	57	312
18	57	290	371	371	482	481	387	355	389	97	57	312
19	404	290	371	371	321	197	387	355	389	97	57	163
20	651	290	371	371	94	55	387	355	389	97	57	57
21	650	290	296	371	94	55	388	355	660	97	57	57
22	650	290	191	371	95	55	388	355	1040	97	57	57
23	650	290	191	371	339	55	388	356	880	97	57	57
24	649	290	191	370	485	55	424	377	767	97	57	209
25	649	289	191	288	807	56	495	388	766	75	57	387
26	648	289	191	191	1000	56	494	388	1280	57	57	388
27	648	289	112	191	999	56	494	388	1090	57	57	388
28	647	289	55	191	806	56	493	388	528	57	57	388
29	647	289	55	117	1030	56	493	388	270	57	57	387
30	646	289	55	55	---	56	492	623	200	57	57	387
31	646	---	55	55	---	56	---	764	---	57	57	---
TOTAL	9211	9930	5489	8560	10683	10053	11945	11604	11648	7594	1767	6221
MEAN	297	331	177	276	368	324	398	374	388	245	57.0	207
MAX	651	645	371	373	1030	1480	1510	764	1280	765	57	388
MIN	57	289	55	55	55	55	56	215	57	57	57	57

CAL YR 1999 TOTAL 111383 MEAN 305 MAX 2060 MIN 27
WTR YR 2000 TOTAL 104705 MEAN 286 MAX 1510 MIN 55

03276500 WHITEWATER RIVER AT BROOKVILLE, IN

(Former National stream-quality accounting network station)

LOCATION.--Lat 39°24'24", long 85°00'46", in NE$^1/_4$NW$^1/_4$ sec.32, T.9 N., R.2 W., Franklin County, Hydrologic Unit 05080003, on right bank at downstream side of highway bridge, 0.3 mi downstream from East Fork Whitewater River, 1.1 mi south of Brookville, and at mile 29.3.

DRAINAGE AREA.--1,224 mi^2.

PERIOD OF RECORD.--June 1915 to September 1917, October 1917 to May 1920 (gage heights only), and July 1923 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1915-17, 1929, 1930(M), 1933(M), 1934, 1935(m), 1936. WSP 1505: 1916(M). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 595.71 ft above sea level. Prior to July 1923, nonrecording gage at same site at datum 1.5 ft higher. July 1923 to Sept. 27, 1928, nonrecording gage at same site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Brookville Lake since January 1974.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 25, 1913, reached a stage of 39.0 ft, at present datum, from floodmarks (discharge not determined).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	680	436	159	150	1850	503	740	1140	594	364	204
2	82	687	333	145	144	1780	506	665	772	548	288	202
3	80	680	140	1650	146	1540	597	817	705	549	294	199
4	82	538	143	3390	148	1110	916	790	619	948	294	214
5	86	436	146	691	145	893	722	775	508	1470	278	216
6	90	436	148	589	143	728	608	763	456	1290	265	533
7	88	436	150	544	188	478	2230	708	429	1710	299	252
8	91	436	150	494	253	458	14100	719	383	1410	349	237
9	103	436	146	471	258	443	7370	682	362	1250	557	205
10	113	436	161	454	272	427	3460	648	348	1180	823	206
11	111	436	167	437	402	422	3330	629	332	1030	364	234
12	106	437	172	420	389	452	2980	608	329	747	305	403
13	103	438	196	409	800	449	1870	1010	326	504	279	367
14	100	436	501	399	2240	431	1400	948	323	468	264	338
15	98	436	437	390	1320	433	1280	731	525	441	254	322
16	97	436	446	384	1120	1030	1180	658	1180	420	245	313
17	97	438	419	383	1010	1700	1140	677	4190	380	242	304
18	96	437	402	383	4410	1480	1160	717	2390	e330	331	296
19	337	443	392	379	3440	1100	1090	684	3220	e364	308	244
20	680	450	384	382	1610	3030	1060	1460	1720	e383	259	199
21	680	450	331	366	1110	2790	1860	1120	3050	e352	241	230
22	680	464	231	353	907	1710	1650	906	2910	e323	231	224
23	680	465	225	375	1070	1250	1400	823	2210	e306	228	219
24	680	437	225	360	1330	1030	1270	965	1740	e288	223	352
25	680	424	214	285	1510	878	1300	945	2110	e275	221	453
26	680	436	213	217	1500	749	1200	829	2400	270	220	936
27	680	436	183	197	1640	736	1150	3740	1880	265	219	584
28	680	436	149	191	1500	802	1110	1870	1170	262	217	478
29	680	428	146	185	1570	721	1070	1350	799	264	218	440
30	680	436	145	157	---	611	1020	1310	651	269	215	419
31	680	---	145	154	---	543	---	1360	---	324	209	---
TOTAL	10201	14000	7676	15393	30725	32054	60532	30647	39177	19214	9104	9823
MEAN	329	467	248	497	1059	1034	2018	989	1306	620	294	327
MAX	680	687	501	3390	4410	3030	14100	3740	4190	1710	823	936
MIN	80	424	140	145	143	422	503	608	323	262	209	199
CFSM	.27	.38	.20	.41	.87	.84	1.65	.81	1.07	.51	.24	.27
IN.	.31	.43	.23	.47	.93	.97	1.84	.93	1.19	.58	.28	.30

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2000, BY WATER YEAR (WY)

MEAN	466	903	1275	1954	2002	2263	2171	1736	1249	754	500	401
MAX	2796	4160	5468	9401	6290	5909	4664	8618	5273	3390	4271	4239
(WY)	1927	1994	1991	1937	1950	1963	1964	1996	1998	1958	1979	1926
MIN	95.5	98.1	95.1	102	122	294	275	186	161	138	102	85.7
(WY)	1935	1935	1935	1977	1935	1941	1941	1941	1934	1934	1930	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1916 - 2000	
ANNUAL TOTAL	324005		278546			
ANNUAL MEAN	888		761		1302	
HIGHEST ANNUAL MEAN					2398	1996
LOWEST ANNUAL MEAN					271	1941
HIGHEST DAILY MEAN	16500	Jan 23	14100	Apr 8	55000	Jan 21 1959
LOWEST DAILY MEAN	75	Sep 27	80	Oct 3	60	Jul 27 1934
ANNUAL SEVEN-DAY MINIMUM	77	Sep 22	84	Oct 1	66	Sep 25 1941
INSTANTANEOUS PEAK FLOW			17900	Apr 8	81800	Jan 21 1959
INSTANTANEOUS PEAK STAGE			12.45	Apr 8	27.78	Jan 21 1959
ANNUAL RUNOFF (CFSM)	.73		.62		1.06	
ANNUAL RUNOFF (INCHES)	9.85		8.47		14.46	
10 PERCENT EXCEEDS	2530		1580		2850	
50 PERCENT EXCEEDS	436		438		626	
90 PERCENT EXCEEDS	97		153		165	

e Estimated

03291780 INDIAN-KENTUCK CREEK NEAR CANAAN, IN

LOCATION.--Lat 38°52'41", long 85°15'26", in SW$^1/_4$NW$^1/_4$ sec.13, T.5 N., R.11 E., Jefferson County, Hydrologic Unit 05140101, on downstream end of left pier of bridge on State Highway 62, 1,500 ft upstream from Wilson Fork, 2.0 mi northeast of Canaan, and at mile 16.7.

DRAINAGE AREA.--27.5 mi^2.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 590 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges and those below 1 ft^3/s, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.53	e.98	20	6.2	9.7	5.4	1.5	33	2.6
2	.00	.00	.00	.57	e.96	13	99	11	4.4	1.2	8.0	2.3
3	.00	.00	.00	1170	e.98	10	136	8.1	6.3	1.0	4.7	1.9
4	.00	.00	.00	398	e.99	8.6	164	20	3.5	233	3.6	4.3
5	.00	.00	.00	60	e1.0	6.5	51	11	3.2	537	3.0	2.8
6	.00	.00	.00	29	e1.2	5.1	32	9.1	3.2	202	2.6	1.8
7	.00	.00	.00	19	e1.8	4.2	205	7.2	2.5	43	283	1.3
8	.00	.00	.00	14	e2.7	3.9	579	7.4	2.0	16	125	1.1
9	.00	.00	.00	12	e4.8	3.4	104	6.0	1.6	10	287	1.1
10	.00	.00	.02	10	7.6	2.7	59	30	1.3	8.2	349	1.1
11	.00	.00	.01	7.6	15	5.1	42	10	.99	256	53	18
12	.00	.00	.74	5.7	9.6	11	31	6.4	.84	35	25	37
13	.00	.00	11	8.4	633	6.1	25	68	.79	16	15	15
14	.00	.00	87	6.4	335	5.1	22	23	.73	9.9	10	6.0
15	.00	.00	11	4.9	64	4.4	19	12	.75	22	7.6	4.1
16	.00	.00	4.3	5.3	33	259	16	8.2	13	7.8	6.0	3.0
17	.00	.00	2.3	4.4	19	94	42	44	218	5.3	5.0	2.4
18	.00	.00	1.5	3.8	1270	34	36	35	76	4.1	726	2.0
19	.00	.00	1.1	e3.2	289	129	24	15	34	302	58	1.7
20	.00	.00	.92	e2.7	70	528	153	8.9	16	42	23	1.4
21	.00	.00	.72	e2.4	36	115	168	6.9	18	18	13	1.7
22	.00	.00	.62	e2.1	27	50	83	5.8	13	10	8.6	1.9
23	.00	.00	.56	e1.8	20	31	49	6.6	7.4	6.9	7.2	2.0
24	.00	.00	.56	e1.6	31	23	36	5.6	5.5	5.2	102	6.3
25	.00	.00	.56	e1.4	26	17	27	3.8	9.0	4.2	24	483
26	.00	.00	.51	e1.3	19	13	21	2.9	5.5	3.5	12	430
27	.00	.00	.42	e1.2	161	17	18	62	3.9	3.1	8.7	64
28	.00	.00	.42	e1.1	48	18	16	45	3.4	2.7	6.3	28
29	.00	.00	.41	e1.0	27	13	13	22	2.7	3.2	4.8	16
30	.00	.00	.42	e1.1	---	9.5	11	11	2.0	5.0	3.8	11
31	.00	---	.49	e1.0	---	7.5	---	7.4	---	60	3.1	---
TOTAL	0.00	0.00	125.58	1781.50	3155.61	1467.1	2287.2	529.0	464.90	1874.8	2221.0	1154.8
MEAN	.000	.000	4.05	57.5	109	47.3	76.2	17.1	15.5	60.5	71.6	38.5
MAX	.00	.00	87	1170	1270	528	579	68	218	537	726	483
MIN	.00	.00	.00	.53	.96	2.7	6.2	2.9	.73	1.0	2.6	1.1
CFSM	.00	.00	.15	2.09	3.96	1.72	2.77	.62	.56	2.20	2.61	1.40
IN.	.00	.00	.17	2.41	4.27	1.98	3.09	.72	.63	2.54	3.00	1.56

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2000, BY WATER YEAR (WY)

MEAN	9.49	31.6	49.0	52.0	58.5	68.3	63.5	47.9	29.8	15.1	13.8	7.96
MAX	83.6	137	173	169	136	134	216	198	152	60.5	78.9	57.9
(WY)	1984	1980	1991	1982	1990	1975	1996	1996	1996	2000	1995	1979
MIN	.000	.000	3.95	.60	5.24	11.7	6.55	3.82	.44	.12	.000	.000
(WY)	1988	2000	1977	1977	1992	1983	1976	1992	1988	1975	1999	1987

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1970 - 2000	
ANNUAL TOTAL	9518.67		15061.49			
ANNUAL MEAN	26.1		41.2		37.1	
HIGHEST ANNUAL MEAN					77.2	1996
LOWEST ANNUAL MEAN					17.0	1988
HIGHEST DAILY MEAN	706	Jan 23	1270	Feb 18	2370	Apr 29 1996
LOWEST DAILY MEAN	.00	Aug 1	.00	Oct 1	.00	Oct 1 1969
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 1	.00	Oct 1	.00	Jun 27 1970
INSTANTANEOUS PEAK FLOW			4830	Jan 3	7800	May 16 1990
INSTANTANEOUS PEAK STAGE			9.66	Jan 3	11.34	May 16 1990
ANNUAL RUNOFF (CFSM)	.95		1.50		1.35	
ANNUAL RUNOFF (INCHES)	12.88		20.37		18.34	
10 PERCENT EXCEEDS	65		78		78	
50 PERCENT EXCEEDS	.49		5.4		8.8	
90 PERCENT EXCEEDS	.00		.00		.09	

e Estimated

03294000 SILVER CREEK NEAR SELLERSBURG, IN

LOCATION.--Lat 38°22'15", long 85°43'35", in lot 68, Clark Military Grant, Clark County, Hydrologic Unit 05140101, on downstream side of Straws Mill bridge on Watson Road, 0.3 mi downstream from Pleasant Run, 2.4 mi southeast of Sellersburg, and 12.2 mi upstream from mouth.

DRAINAGE AREA.--189 mi^2.

PERIOD OF RECORD.--October 1954 to current year.

REVISED RECORDS.--WSP 1705: 1955-58. WDR IN-72-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 429.78 ft above sea level, (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 6, 1976, and Feb. 15 to Sept. 20, 1984 nonrecording gage and crest-stage gage at same site and datum.

REMARKS.--Records fair except for estimated daily discharges, and those below 10 ft^3/s, which are poor. Some regulation by Deam Lake.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	.36	1.9	10	24	247	86	67	e17	45	7.8	3.6
2	.11	.60	1.9	19	23	202	223	63	e15	33	9.0	3.4
3	.10	.86	2.1	1440	23	171	525	56	e13	31	5.6	4.6
4	.10	1.0	10	4690	28	150	894	65	e12	17	4.5	3.4
5	.10	1.7	7.5	1310	38	130	e470	76	e11	28	3.6	2.5
6	.08	2.3	16	385	29	109	e300	62	e9.5	40	3.0	2.5
7	.07	2.2	11	265	28	97	e350	55	7.5	25	5.3	2.8
8	.06	1.9	3.8	199	32	88	e500	51	6.0	20	41	2.9
9	6.2	1.7	2.0	150	35	82	e900	54	4.9	23	68	2.0
10	14	1.5	92	121	40	72	e700	51	4.1	12	87	1.7
11	2.0	1.4	37	101	47	72	e520	47	2.7	7.9	45	3.2
12	1.1	1.3	53	78	45	132	e450	38	2.0	7.8	18	e17
13	1.1	1.2	253	78	175	115	e410	65	2.0	9.6	11	e42
14	1.0	1.1	791	70	2910	99	e380	116	1.7	7.6	7.2	e23
15	1.1	1.0	207	58	721	86	e350	59	1.3	5.7	3.9	11
16	5.1	.93	99	55	373	850	e330	43	.93	4.7	2.3	13
17	4.8	.93	64	49	247	1430	e400	35	9.1	4.0	2.1	5.7
18	1.7	.99	43	48	3150	488	e980	32	164	3.2	285	3.3
19	1.4	1.1	37	49	7900	419	378	30	153	3.9	140	2.4
20	1.2	1.4	24	49	3560	1880	289	27	57	4.1	61	2.2
21	.96	1.5	19	42	682	938	317	22	58	6.6	31	2.9
22	.79	1.5	16	37	455	497	230	20	88	6.6	21	3.7
23	.74	1.5	15	36	357	348	184	23	48	4.8	17	4.6
24	.71	1.5	13	35	342	273	160	23	33	3.6	25	5.1
25	.67	1.4	10	32	373	226	155	18	36	2.6	28	79
26	.64	1.6	9.1	30	269	192	126	13	33	2.1	15	315
27	.60	1.8	8.8	26	695	177	e110	22	262	1.8	11	105
28	.52	1.9	9.5	23	521	163	e94	84	312	1.8	10	58
29	.47	2.0	9.8	22	324	130	82	42	125	2.3	7.9	46
30	.42	2.0	10	24	---	109	71	29	77	5.3	6.5	29
31	.39	---	10	24	---	94	---	20	---	9.9	3.9	---
TOTAL	48.36	42.17	1886.4	9555	23446	10066	10964	1408	1565.73	379.9	986.6	800.5
MEAN	1.56	1.41	60.9	308	808	325	365	45.4	52.2	12.3	31.8	26.7
MAX	14	2.3	791	4690	7900	1880	980	116	312	45	285	315
MIN	.06	.36	1.9	10	23	72	71	13	.93	1.8	2.1	1.7
CFSM	.01	.01	.32	1.63	4.28	1.72	1.93	.24	.28	.06	.17	.14
IN.	.01	.01	.37	1.88	4.61	1.98	2.16	.28	.31	.07	.19	.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2000, BY WATER YEAR (WY)

MEAN	29.7	114	243	311	414	524	401	317	161	71.5	48.0	34.3
MAX	143	805	862	1150	1323	2252	1117	1369	1337	316	514	390
(WY)	1978	1980	1979	1959	1956	1964	1970	1983	1960	1973	1978	1979
MIN	.21	.61	.60	5.43	32.0	112	72.3	25.4	3.07	2.75	.53	.12
(WY)	1965	1964	1964	1977	1992	1981	1976	1988	1988	1959	1999	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1955 - 2000	
ANNUAL TOTAL	59967.97		61148.66			
ANNUAL MEAN	164		167		221	
HIGHEST ANNUAL MEAN					423	1997
LOWEST ANNUAL MEAN					92.8	1981
HIGHEST DAILY MEAN	6420	Jan 23	7900	Feb 19	15100	Mar 10 1964
LOWEST DAILY MEAN	.00	Sep 26	.06	Oct 8	.00	Oct 1 1954
ANNUAL SEVEN-DAY MINIMUM	.01	Sep 23	.09	Oct 2	.00	Oct 1 1954
INSTANTANEOUS PEAK FLOW			8380	Feb 19	19600	Jan 22 1959
INSTANTANEOUS PEAK STAGE			24.05	Feb 19	30.89	Jan 22 1959
ANNUAL RUNOFF (CFSM)	.87		.88		1.17	
ANNUAL RUNOFF (INCHES)	11.80		12.04		15.92	
10 PERCENT EXCEEDS	358		362		472	
50 PERCENT EXCEEDS	24		24		51	
90 PERCENT EXCEEDS	.27		1.3		2.9	

e Estimated

03302220 BUCK CREEK NEAR NEW MIDDLETOWN, IN

LOCATION.--Lat 38°07'13", long 86°05'16", in SE$^1/_4$NE$^1/_4$ sec.32, T.4 S., R.4 E., Harrison County, Hydrologic Unit 05140104, on right bank at downstream side of bridge on State Highway 337 (revised), 0.6 mi downstream from South Fork Buck Creek, 3.6 mi southwest of New Middletown, and 14.6 mi upstream from mouth.

DRAINAGE AREA.--65.2 mi^2, of which 28.1 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1969 to current year.

REVISED RECORDS.--WDR IN-72-1: 197l(P).

GAGE.--Water-stage recorder. Datum of gage is 501.63 ft above sea level (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records good except for estimated daily discharges, and those below 10 ft^3/s, which are poor. Flow can be affected by regulation of Spring Hills Lake during periods of low flow.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	1.1	2.3	4.6	e8.7	110	35	25	17	52	8.1	3.1
2	1.9	12	2.3	11	e8.4	82	114	26	16	38	6.3	3.0
3	1.6	14	2.3	1440	e9.6	59	175	40	14	29	4.2	2.8
4	1.4	6.5	2.5	1410	e10	53	328	125	12	24	3.9	2.9
5	1.2	3.8	2.9	442	e9.0	43	217	66	12	22	3.5	2.8
6	1.1	2.9	3.2	262	9.9	36	166	48	12	19	4.1	2.5
7	1.3	2.8	3.1	161	11	31	141	39	11	15	4.2	2.5
8	1.9	2.6	2.8	132	13	29	442	35	e11	13	5.6	e2.4
9	19	2.6	2.6	120	15	27	246	31	e11	14	7.5	e2.6
10	13	2.6	58	97	17	23	186	28	e11	13	5.1	e50
11	4.6	2.3	14	78	18	26	142	24	e10	13	3.6	e20
12	3.0	2.3	84	65	15	27	107	22	e10	12	3.0	e12
13	3.3	2.3	207	58	319	23	81	65	e10	13	2.8	e6.4
14	3.6	2.3	285	39	843	22	72	44	e13	12	2.8	4.8
15	3.2	2.0	77	34	311	21	64	31	e19	10	2.8	3.9
16	2.8	2.0	41	31	203	459	56	26	26	10	2.6	3.0
17	2.4	2.0	26	26	139	384	60	25	74	9.8	2.1	2.8
18	1.9	2.0	19	e25	2490	223	53	22	50	9.4	2.7	2.8
19	1.4	2.1	13	24	1260	196	46	24	49	15	3.2	2.7
20	1.4	4.2	11	e20	485	563	51	20	37	12	3.1	2.5
21	1.4	4.7	9.3	e18	314	334	60	14	41	9.0	2.9	2.7
22	1.4	3.8	8.2	e17	233	245	53	13	36	7.7	2.9	3.0
23	1.2	3.0	7.4	e16	145	187	49	20	25	6.7	4.3	3.5
24	1.0	2.6	6.2	e14	125	112	47	37	24	6.3	47	18
25	1.0	2.5	4.6	e11	109	88	43	22	30	5.9	9.3	62
26	1.0	5.1	e4.4	e10	100	69	36	17	31	5.1	5.2	27
27	1.1	6.0	e4.3	e10	164	85	33	17	245	4.3	8.1	5.7
28	1.2	4.5	4.2	e9.6	147	71	31	58	181	4.6	5.8	2.8
29	1.2	3.2	4.1	e9.4	125	52	29	43	108	7.5	4.4	2.5
30	1.2	2.6	3.8	e9.2	---	43	26	27	72	7.6	3.9	2.9
31	1.2	---	4.2	e8.8	---	36	---	21	---	6.1	3.3	---
TOTAL	84.8	112.4	919.7	4612.6	7656.6	3759	3189	1055	1218	426.0	178.3	265.6
MEAN	2.74	3.75	29.7	149	264	121	106	34.0	40.6	13.7	5.75	8.85
MAX	19	14	285	1440	2490	563	442	125	245	52	47	62
MIN	1.0	1.1	2.3	4.6	8.4	21	26	13	10	4.3	2.1	2.4
CFSM	.07	.10	.80	4.01	7.12	3.27	2.87	.92	1.09	.37	.16	.24
IN.	.09	.11	.92	4.63	7.68	3.77	3.20	1.06	1.22	.43	.18	.27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2000, BY WATER YEAR (WY)

MEAN	16.7	52.1	95.5	111	133	160	139	105	61.6	29.2	16.3	16.8
MAX	71.8	228	262	280	368	708	412	558	311	219	67.2	217
(WY)	1971	1980	1991	1999	1989	1997	1970	1983	1997	1979	1992	1979
MIN	.76	3.16	6.01	2.64	24.8	40.4	22.4	16.3	1.56	4.59	1.45	.72
(WY)	1988	1988	1977	1977	1992	1983	1986	1976	1988	1975	1999	1987

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1970 - 2000	
ANNUAL TOTAL	22251.14		23477.0			
ANNUAL MEAN	61.0		64.1		77.8	
HIGHEST ANNUAL MEAN					150	1997
LOWEST ANNUAL MEAN					32.8	1981
HIGHEST DAILY MEAN	2270	Jan 23	2490	Feb 18	5610	Mar 2 1997
LOWEST DAILY MEAN	.96	Sep 20	1.0	Oct 24	.52	Jul 10 1988
ANNUAL SEVEN-DAY MINIMUM	1.0	Aug 17	1.1	Oct 23	.57	Jul 4 1988
INSTANTANEOUS PEAK FLOW			6550	Feb 18	20500	Mar 2 1997
INSTANTANEOUS PEAK STAGE			11.06	Feb 18	17.26	Mar 2 1997
ANNUAL RUNOFF (CFSM)	1.64		1.73		2.10	
ANNUAL RUNOFF (INCHES)	22.31		23.54		28.48	
10 PERCENT EXCEEDS	149		143		175	
50 PERCENT EXCEEDS	13		13		27	
90 PERCENT EXCEEDS	1.2		2.4		3.3	

e Estimated

03302300 LITTLE INDIAN CREEK NEAR GALENA, IN

LOCATION.--Lat 38°19'19", long 85°55'53", in NE$^1/_4$SW$^1/_4$ sec.23, T.2 S., R.5 E., Floyd County, Hydrologic Unit 05140104, on right bank approximately 500 ft upstream of county road bridge, on abandoned county road embankment, 2.0 mi south of Galena, 3.6 mi upstream from mouth, and 7.0 mi northwest of New Albany.

DRAINAGE AREA.--16.1 mi^2.

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 703.00 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.11	.30	.68	e4.5	21	11	4.1	1.2	3.4	1.9	1.5
2	.00	.79	.29	2.3	e4.4	18	28	4.0	2.1	2.8	1.1	1.3
3	.00	.58	.36	1030	e4.3	17	66	3.9	2.4	2.4	.79	1.2
4	.00	.38	.50	250	e4.2	16	78	7.1	1.3	5.4	.69	1.1
5	.00	.22	.55	52	e4.3	14	39	4.5	1.1	11	.66	.97
6	.00	.19	.89	29	e4.5	13	28	3.8	.94	5.5	.68	.93
7	.00	.18	.65	19	5.5	12	33	3.4	.76	3.6	.70	.86
8	.00	.19	.53	15	6.1	11	116	3.3	.68	2.7	16	.86
9	19	.19	.46	13	6.4	10	44	2.9	.58	2.2	6.8	.86
10	6.2	.19	46	11	7.3	9.4	31	2.9	.51	1.7	3.4	1.0
11	.81	.18	4.4	8.9	7.4	13	25	2.6	.48	1.5	2.3	1.1
12	.25	.19	53	7.9	6.2	15	22	2.3	.45	1.5	1.7	4.7
13	.18	.18	81	9.9	181	13	19	8.9	.43	1.6	1.4	2.7
14	.17	.17	119	7.8	208	13	18	4.6	.42	1.5	1.1	1.8
15	.12	.17	15	7.2	53	12	16	3.3	.40	1.2	.95	1.4
16	.09	.16	6.7	6.8	32	159	14	2.7	.42	1.1	.78	1.2
17	.07	.15	3.6	6.1	23	72	217	2.3	2.7	.86	.65	.97
18	.06	.15	2.3	e5.8	1810	37	48	1.9	14	.76	69	.86
19	.06	.18	2.0	e5.6	161	49	26	2.3	4.9	3.7	6.8	.85
20	.06	.74	1.7	e5.4	52	225	22	2.3	2.5	2.1	3.8	.70
21	.06	.61	1.3	e5.2	34	65	19	2.1	4.2	1.3	2.9	.87
22	.07	.51	e1.0	e5.0	27	39	14	1.9	3.0	1.2	2.3	.86
23	.07	.35	e.80	e4.9	22	30	12	2.3	1.9	1.1	2.9	.82
24	.07	.28	e.78	e4.7	24	25	11	3.3	1.4	1.0	6.9	1.1
25	.07	.26	e.70	e4.6	22	21	11	2.3	7.4	.91	3.8	17
26	.08	.80	e.72	e4.5	19	18	8.6	1.9	3.9	.82	3.1	8.4
27	.09	.90	e.70	e4.4	43	20	7.4	2.8	28	.70	3.1	3.5
28	.09	.63	e.66	e4.3	31	17	6.4	2.9	12	.72	2.7	2.5
29	.09	.44	e.64	e4.4	24	15	5.4	2.5	6.3	1.3	2.2	2.1
30	.09	.36	e.66	e4.5	---	14	4.6	1.9	4.1	1.5	2.0	1.7
31	.09	---	e.72	e4.6	---	12	---	1.6	---	1.9	1.7	---
TOTAL	27.94	10.43	347.91	1544.48	2831.1	1025.4	1000.4	98.6	110.47	68.97	154.80	65.71
MEAN	.90	.35	11.2	49.8	97.6	33.1	33.3	3.18	3.68	2.22	4.99	2.19
MAX	19	.90	119	1030	1810	225	217	8.9	28	11	69	17
MIN	.00	.11	.29	.68	4.2	9.4	4.6	1.6	.40	.70	.65	.70
CFSM	.06	.02	.70	3.09	6.06	2.05	2.07	.20	.23	.14	.31	.14
IN.	.06	.02	.80	3.57	6.54	2.37	2.31	.23	.26	.16	.36	.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2000, BY WATER YEAR (WY)

MEAN	4.09	13.8	28.8	34.1	41.0	47.9	42.6	27.5	15.8	7.86	5.38	3.95
MAX	42.2	70.6	103	88.6	111	185	120	116	93.6	50.7	30.5	62.1
(WY)	1978	1980	1991	1999	1990	1997	1970	1983	1997	1979	1978	1979
MIN	.000	.25	1.80	.46	2.91	10.9	7.78	1.48	.002	.088	.027	.000
(WY)	1988	1992	1981	1977	1992	1976	1976	1988	1988	1991	1999	1987

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1969 - 2000	
ANNUAL TOTAL	6656.10		7286.21			
ANNUAL MEAN	18.2		19.9		22.6	
HIGHEST ANNUAL MEAN					45.0	1979
LOWEST ANNUAL MEAN					8.23	1992
HIGHEST DAILY MEAN	797	Jan 22	1810	Feb 18	2530	Mar 1 1997
LOWEST DAILY MEAN	.00	Aug 17	.00	Oct 1	.00	Oct 4 1968
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 17	.00	Oct 1	.00	Sep 24 1969
INSTANTANEOUS PEAK FLOW			5850	Feb 18	6110	Mar 1 1997
INSTANTANEOUS PEAK STAGE			9.02	Feb 18	9.79	Mar 1 1997
ANNUAL RUNOFF (CFSM)	1.13		1.24		1.41	
ANNUAL RUNOFF (INCHES)	15.38		16.84		19.09	
10 PERCENT EXCEEDS	42		28		45	
50 PERCENT EXCEEDS	1.0		2.7		6.1	
90 PERCENT EXCEEDS	.00		.18		.23	

e Estimated

03302680 WEST FORK BLUE RIVER AT SALEM, IN

LOCATION.--Lat 38°36'19", long 86°05'40", in SW¼SE¼ sec.17, T.2 N., R.4 E., Washington County, Hydrologic Unit 05140104, on left bank at downstream side of bridge on East Market Street, 0.35 mi east of County Court House in Salem, 6.0 mi upstream from Hoggatt Branch, and 6.9 mi upstream from mouth.

DRAINAGE AREA.--19.0 mi^2.

PERIOD OF RECORD.--July 1970 to current year. Prior to December 10, 1970, nonrecording gage at site 0.55 mi downstream at datum 5.04 ft lower.

REVISED RECORDS.--WDR IN-96-1: 1983(P), 1988(P), 1990(P), 1995(P).

GAGE.--Water-stage recorder. Datum of gage is 713.00 ft above sea level.

REMARKS.--Records fair except for discharges below 1.00 ft^3/s, and estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	e.04	.22	.64	e2.4	40	8.4	6.8	4.8	5.5	3.7	1.6
2	.07	.47	.21	1.8	e2.4	31	13	6.6	4.4	4.7	2.3	1.5
3	.07	.08	.20	454	e2.5	26	15	8.6	3.8	3.9	2.1	1.4
4	.17	.05	.36	163	e2.5	23	24	28	3.1	4.2	1.7	1.1
5	.16	.05	.53	72	2.4	19	18	33	3.7	6.0	1.5	.96
6	.14	.03	.45	43	2.2	16	15	17	3.2	4.3	1.5	.73
7	.12	e.03	.37	30	2.7	14	26	28	2.4	3.0	2.1	.65
8	.50	e.03	.33	23	3.0	12	113	42	2.1	2.3	60	.76
9	4.1	e.03	.26	19	3.2	11	59	24	1.7	1.8	28	.93
10	.77	e.03	4.4	16	4.0	8.7	41	18	1.5	1.7	15	1.2
11	.23	e.03	2.8	13	4.1	13	31	14	1.4	3.6	8.9	11
12	.15	e.03	6.8	12	2.9	13	22	11	1.3	3.1	6.8	6.6
13	.14	e.03	16	17	403	9.9	17	37	1.3	e2.6	5.2	3.7
14	.12	e.02	26	12	206	9.1	15	23	1.4	e2.1	4.2	2.3
15	.09	e.02	7.4	11	107	8.2	13	16	1.5	e1.7	3.4	2.0
16	.07	e.02	4.6	11	71	80	11	13	24	e1.5	2.8	1.7
17	.06	e.02	3.1	8.9	50	77	228	11	255	e1.3	2.8	1.4
18	.06	e.05	2.3	e7.6	870	49	127	9.4	243	e2.0	84	1.2
19	.05	2.0	1.8	e6.5	225	58	74	8.2	93	e60	18	.94
20	.05	1.4	2.0	e5.6	124	149	51	7.1	48	e25	10	1.1
21	.05	.70	1.3	e4.6	87	98	39	6.3	71	13	7.3	1.8
22	e.05	.59	.98	e4.2	66	63	28	5.3	44	8.8	5.4	1.2
23	e.05	.37	.72	e3.7	50	46	22	6.0	27	6.2	6.8	1.1
24	e.05	.37	.70	e3.1	70	37	18	5.8	20	e5.0	6.3	5.4
25	e.05	e.32	.61	e2.9	61	28	15	4.4	16	e4.0	4.7	149
26	e.05	.78	.51	e2.7	51	22	12	3.6	12	e3.2	5.7	111
27	e.04	.43	.44	e2.5	75	25	11	21	12	2.4	5.1	46
28	e.04	.31	.48	e2.4	59	19	9.9	13	9.8	2.5	3.8	26
29	e.04	.26	.52	e2.3	48	14	8.2	9.2	7.9	3.4	3.0	17
30	e.04	.22	.52	e2.2	---	12	7.3	7.2	6.7	6.8	2.6	13
31	e.04	---	.61	e2.3	---	9.9	---	6.1	---	4.2	2.1	---
TOTAL	7.70	8.81	87.52	959.94	2657.3	1040.8	1091.8	449.6	927.0	199.8	316.8	414.27
MEAN	.25	.29	2.82	31.0	91.6	33.6	36.4	14.5	30.9	6.45	10.2	13.8
MAX	4.1	2.0	26	454	870	149	228	42	255	60	84	149
MIN	.04	.02	.20	.64	2.2	8.2	7.3	3.6	1.3	1.3	1.5	.65
CFSM	.01	.02	.15	1.63	4.82	1.77	1.92	.76	1.63	.34	.54	.73
IN.	.02	.02	.17	1.88	5.20	2.04	2.14	.88	1.81	.39	.62	.81

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2000, BY WATER YEAR (WY)

MEAN	6.57	21.6	30.7	33.9	40.8	44.9	45.3	30.8	15.5	12.7	7.45	6.55
MAX	45.7	89.9	98.2	103	106	104	164	140	80.3	65.7	30.5	40.0
(WY)	1984	1986	1991	1982	1989	1989	1996	1983	1997	1988	1985	1982
MIN	.14	.29	2.33	.97	5.41	9.65	4.21	1.91	.088	.29	.13	.024
(WY)	1988	2000	1977	1977	1992	1976	1976	1988	1988	1991	1987	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1970 - 2000	
ANNUAL TOTAL	6022.58		8161.34			
ANNUAL MEAN	16.5		22.3		24.7	
HIGHEST ANNUAL MEAN					43.1	1989
LOWEST ANNUAL MEAN					10.7	1981
HIGHEST DAILY MEAN	545	Jan 23	870	Feb 18	2130	Apr 29 1996
LOWEST DAILY MEAN	.00	Sep 3	e.02	Nov 14	.00	Sep 3 1999
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 14	e.02	Nov 11	.00	Sep 14 1999
INSTANTANEOUS PEAK FLOW			2600	Jan 3	6930	May 17 1990
INSTANTANEOUS PEAK STAGE			10.01	Jan 3	15.58	May 17 1990
ANNUAL RUNOFF (CFSM)	.87		1.17		1.30	
ANNUAL RUNOFF (INCHES)	11.79		15.98		17.67	
10 PERCENT EXCEEDS	42		53		53	
50 PERCENT EXCEEDS	2.6		4.4		7.2	
90 PERCENT EXCEEDS	.03		.09		.40	

e Estimated

03302800 BLUE RIVER AT FREDERICKSBURG, IN

LOCATION.--Lat 38°26'02", long 86°11'31", in NE$^1/_4$NW$^1/_4$ sec.16, T.1 S., R.3 E., Washington County, Hydrologic Unit 05140104, on downstream side of bridge on U.S. Highway 150 at Fredericksburg, 0.5 mi downstream from South Fork Blue River, and at mile 57.1.

DRAINAGE AREA.--283 mi^2, of which 76.9 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--June 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 590.00 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959, reached a stage of 29.20 ft, from floodmark, on left upstream wingwall.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e3.0	e2.5	e7.2	e9.1	42	444	150	118	73	71	96	37
2	e2.9	4.9	e7.0	e9.4	41	354	164	114	69	63	54	35
3	e2.9	7.1	e7.1	1760	41	303	269	108	62	54	42	34
4	5.2	18	e7.2	10100	42	281	466	237	52	50	38	33
5	4.5	8.9	7.2	1410	40	235	386	320	50	66	35	32
6	3.7	3.5	7.9	686	36	200	304	241	48	91	34	29
7	3.2	2.5	8.6	476	37	178	252	190	43	59	33	26
8	3.6	2.0	8.6	360	39	165	950	279	40	45	82	25
9	9.8	e2.0	8.9	299	41	154	713	239	37	38	306	25
10	48	e1.9	16	259	43	137	493	194	37	35	139	28
11	21	e1.9	31	215	47	130	378	169	34	34	96	29
12	11	e1.9	20	173	51	166	304	139	31	38	66	57
13	7.3	e1.9	57	161	311	151	249	267	29	40	51	97
14	4.5	e1.9	357	147	4860	140	222	375	29	34	43	50
15	3.4	e1.8	222	125	1130	133	201	230	30	29	40	40
16	e3.3	e1.8	94	119	660	612	179	178	32	27	37	34
17	e3.2	e1.8	55	107	445	1390	1060	150	1090	23	35	30
18	e3.2	e1.8	39	101	4410	619	1430	131	1190	21	868	28
19	3.1	e5.5	30	95	10500	537	704	115	728	676	358	25
20	2.9	19	24	92	1860	2020	520	101	383	235	150	20
21	2.8	21	20	e75	1030	1400	570	89	421	101	92	24
22	e2.7	18	18	e66	734	783	419	83	448	70	67	31
23	e2.7	13	17	e62	562	566	336	83	277	53	60	28
24	e2.6	8.5	16	e58	608	450	284	85	188	44	67	27
25	e2.6	7.4	13	e52	653	368	260	78	153	40	61	383
26	e2.5	9.9	12	e50	518	298	214	66	122	36	52	1020
27	e2.5	e8.8	11	e45	719	294	186	119	121	31	55	389
28	e2.5	e8.2	10	45	721	278	169	219	186	28	50	227
29	e2.5	e7.6	e9.5	44	530	224	149	131	120	30	45	154
30	e2.5	e7.3	e9.4	44	---	192	130	100	85	43	41	114
31	e2.5	---	e9.2	44	---	171	---	82	---	56	39	---
TOTAL	178.1	202.3	1159.8	17288.5	30751	13373	12111	5030	6208	2261	3232	3111
MEAN	5.75	6.74	37.4	558	1060	431	404	162	207	72.9	104	104
MAX	48	21	357	10100	10500	2020	1430	375	1190	676	868	1020
MIN	2.5	1.8	7.0	9.1	36	130	130	66	29	21	33	20
CFSM	.02	.02	.13	1.97	3.75	1.52	1.43	.57	.73	.26	.37	.37
IN.	.02	.03	.15	2.27	4.04	1.76	1.59	.66	.82	.30	.42	.41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2000, BY WATER YEAR (WY)

MEAN	58.6	232	392	481	549	623	601	434	255	143	92.3	67.3
MAX	305	1135	1166	1341	1236	1372	1957	1808	1188	588	463	299
(WY)	1984	1980	1991	1982	1990	1997	1996	1983	1997	1973	1977	1996
MIN	3.45	6.74	29.4	11.6	56.1	142	86.8	35.2	8.36	13.1	9.55	4.25
(WY)	1998	2000	1977	1977	1992	1969	1976	1988	1988	1991	1999	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1969 - 2000	
ANNUAL TOTAL	91615.7		94905.7			
ANNUAL MEAN	251		259		326	
HIGHEST ANNUAL MEAN					550	1996
LOWEST ANNUAL MEAN					129	1992
HIGHEST DAILY MEAN	10300	Jan 23	10500	Feb 19	22000	Apr 29 1996
LOWEST DAILY MEAN	1.8	Nov 15	1.8	Nov 15	1.8	Nov 15 1999
ANNUAL SEVEN-DAY MINIMUM	1.8	Nov 12	1.8	Nov 12	1.8	Nov 12 1999
INSTANTANEOUS PEAK FLOW			15400	Feb 19	39000	Apr 29 1996
INSTANTANEOUS PEAK STAGE			23.34	Feb 19	27.15	Apr 29 1996
ANNUAL RUNOFF (CFSM)	.89		.92		1.15	
ANNUAL RUNOFF (INCHES)	12.04		12.48		15.66	
10 PERCENT EXCEEDS	575		544		742	
50 PERCENT EXCEEDS	58		56		113	
90 PERCENT EXCEEDS	3.5		3.7		14	

e Estimated

03302849 WHISKEY RUN AT MARENGO, IN

LOCATION.--Lat 38°22'32", long 86°20'41", in SW$^1/_4$NW$^1/_4$ sec.6, T.2 S., R.2 E., Crawford County, Hydrologic Unit 05140104, on left (north) bank about 100 ft upstream from bridge and intersection of North Main Street and North Water Street in Marengo, known as Old Town.

DRAINAGE AREA.--7.02 mi^2.

PERIOD OF RECORD.--October 1986 to September 1993 (discharge), October 1993 to current year (gage height only).

GAGE.--Water-stage recorder. Datum of gage is 561.45 ft above sea level.

REMARKS.--Stage affected at times by inflow from small cave 50 ft below gage. Stages of 0.90 ft or less are below the gage intake level.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 26, 1979 reached a stage of 15.89 ft. Stage determined from levels to high-water mark in Old Town grocery store just downstream and across bridge from gage. Reports from local residents indicate this event as highest known flood.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 12.39 ft June 7, 1990; minimum gage height, undetermined below 0.90 ft, stream goes dry most years.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 12.29 ft, Jan. 3; minimum gage height, undetermined below 0.90 ft. Periods from Oct. 1-8, 12-31, Nov. 1-18, 21-25, 27-30 and Dec. 1-9 are known to be below 0.90 ft.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	1.31	1.33	1.65	1.54	1.47	1.26	1.34	1.25	1.30
2	---	---	---	1.56	1.33	1.60	1.72	1.46	1.27	1.31	1.20	1.28
3	---	---	---	4.21	1.34	1.60	1.92	1.48	1.27	1.29	1.18	1.26
4	---	---	---	2.16	1.33	1.58	1.85	1.49	1.26	1.27	1.16	1.34
5	---	---	---	1.84	1.33	1.54	1.80	1.58	1.32	1.75	1.15	1.30
6	---	---	---	1.68	1.33	1.50	1.73	1.52	1.25	1.53	1.13	1.28
7	---	---	---	1.58	1.34	1.48	1.97	1.53	1.23	1.40	1.12	1.27
8	---	---	---	1.52	1.35	1.46	2.02	1.50	1.21	1.34	1.70	1.28
9	1.19	---	---	1.49	1.35	1.43	1.90	1.60	1.19	1.32	1.38	1.29
10	1.11	---	1.41	1.45	1.38	1.41	1.82	1.66	1.18	1.30	1.29	1.32
11	.91	---	1.22	1.44	1.37	1.48	1.75	1.57	1.16	1.29	1.25	1.33
12	---	---	1.45	1.45	1.37	1.48	1.70	1.51	1.15	1.28	1.27	1.45
13	---	---	1.97	1.40	3.32	1.49	1.68	1.61	1.14	1.26	1.25	1.34
14	---	---	1.56	1.39	2.10	1.51	1.65	1.53	1.17	1.24	1.23	1.30
15	---	---	1.43	1.39	1.86	1.51	1.63	1.50	1.18	1.22	1.21	1.27
16	---	---	1.34	1.38	1.69	2.43	1.60	1.46	1.41	1.20	1.21	1.24
17	---	---	1.29	1.40	1.71	2.00	2.22	1.44	1.70	1.18	1.23	1.24
18	---	---	1.27	1.39	3.53	1.86	1.95	1.43	1.67	1.17	1.50	1.23
19	---	1.15	1.28	1.40	2.23	2.58	1.84	1.43	1.50	1.29	1.34	1.21
20	---	1.08	1.27	1.38	1.95	2.20	1.79	1.42	1.42	1.23	1.29	1.25
21	---	---	1.26	1.37	1.81	1.97	1.73	1.40	1.52	1.20	1.26	1.24
22	---	---	1.25	1.38	1.72	1.85	1.69	1.40	1.44	1.17	1.25	1.23
23	---	---	1.29	1.37	1.66	1.77	1.66	1.42	1.39	1.16	1.67	1.23
24	---	---	1.31	1.36	2.11	1.71	1.66	1.38	1.40	1.13	1.75	1.27
25	---	---	1.31	1.35	1.89	1.65	1.63	1.33	1.35	1.12	1.55	1.97
26	---	1.08	1.32	1.34	1.83	1.62	1.58	1.35	1.34	1.11	1.53	1.67
27	---	---	1.30	1.33	1.97	1.75	1.56	1.41	1.73	1.10	1.47	1.54
28	---	---	1.30	1.33	1.83	1.67	1.53	1.38	1.54	1.10	1.42	1.45
29	---	---	1.30	1.34	1.74	1.62	1.50	1.33	1.42	1.18	1.38	1.40
30	---	---	1.30	1.33	---	1.58	1.48	1.31	1.37	1.21	1.35	1.38
31	---	---	1.29	1.33	---	1.54	---	1.29	---	1.39	1.32	---
MEAN	---	---	---	1.54	1.76	1.69	1.74	1.46	1.35	1.26	1.33	1.34
MAX	---	---	---	4.21	3.53	2.58	2.22	1.66	1.73	1.75	1.75	1.97
MIN	---	---	---	1.31	1.33	1.41	1.48	1.29	1.14	1.10	1.12	1.21

03303000 BLUE RIVER NEAR WHITE CLOUD, IN

LOCATION.--Lat 38°14'15", long 86°13'42", in NW$^1/_4$SE$^1/_4$ sec.19, T.3 S., R.3 E., Harrison County, Hydrologic Unit 05140104, on left bank 400 ft downstream from Spring Creek, 600 ft upstream from bridge on Interstate 64, 0.2 mi upstream from bridge on State Highway 62, 0.8 mi north of White Cloud, and at mile 14.7.

DRAINAGE AREA.--476 mi^2, of which 192 mi^2 does not contribute directly to surface runoff. Also, part of flow from Indian Creek, downstream from Corydon, IN, enters Blue River via solution channel in Karst area through Harrison Spring.

PERIOD OF RECORD.--April 1931 to current year. Monthly figures only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1921-32, 1933(M), 1935-38(M), 1944. WSP 1385: Drainage area. WSP 1555: 1953. WDR IN-75-1: 1973.

GAGE.--Water-stage recorder. Datum of gage is 434.26 ft above sea level, (levels by State of Indiana, Department of Natural Resources). Prior to Nov. 16, 1938, nonrecording gage at same site and datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	e16	25	60	146	1040	452	350	194	270	253	94
2	26	e21	24	61	138	883	481	335	175	232	230	83
3	25	e29	23	3790	141	759	593	326	163	206	133	74
4	24	49	25	14400	141	698	940	399	151	180	90	71
5	24	43	26	6910	138	643	1020	558	139	205	67	67
6	25	37	31	1860	134	567	819	627	133	300	60	60
7	25	e32	29	1170	133	513	719	483	121	266	52	56
8	26	e28	29	876	135	477	1580	455	115	208	87	53
9	57	e26	27	725	141	451	1810	527	107	164	339	49
10	135	e24	132	633	150	420	1230	477	100	132	465	49
11	84	e22	207	553	160	398	980	422	94	116	262	50
12	e55	e22	184	476	164	400	810	381	90	108	176	133
13	e41	e20	418	425	312	419	689	486	86	101	128	171
14	e33	e20	1310	387	5850	398	615	677	81	99	97	240
15	e28	e20	791	361	2950	380	567	598	86	93	78	158
16	e25	e19	443	330	1510	1050	522	469	82	81	65	105
17	e23	e19	291	308	1060	2630	598	407	566	70	56	81
18	22	e18	225	300	6710	1580	2250	362	1880	66	123	68
19	21	e18	189	284	16800	1250	1430	335	1740	95	1180	60
20	19	e30	165	278	6990	2680	1050	302	909	708	502	54
21	18	59	140	260	2650	3170	932	267	678	298	310	52
22	e18	55	116	241	1790	1800	894	241	835	169	213	49
23	e17	49	102	220	1360	1310	727	242	677	122	172	47
24	e17	43	94	212	1210	1060	642	247	475	95	394	61
25	e17	e40	81	e180	1440	905	582	238	358	77	281	222
26	e17	47	78	e170	1200	772	534	217	304	64	212	1400
27	e16	44	75	e155	1260	723	475	200	438	56	184	951
28	e16	33	72	e151	1550	713	440	244	609	52	165	569
29	e16	29	68	e150	1230	626	412	378	471	56	150	405
30	e16	26	65	150	---	543	378	277	338	76	127	300
31	e16	---	63	147	---	489	---	227	---	80	107	---
TOTAL	930	938	5548	36223	57593	29747	25171	11754	12195	4845	6758	5832
MEAN	30.0	31.3	179	1168	1986	960	839	379	406	156	218	194
MAX	135	59	1310	14400	16800	3170	2250	677	1880	708	1180	1400
MIN	16	16	23	60	133	380	378	200	81	52	52	47
CFSM	.06	.07	.38	2.45	4.17	2.02	1.76	.80	.85	.33	.46	.41
IN.	.07	.07	.43	2.83	4.50	2.32	1.97	.92	.95	.38	.53	.46

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2000, BY WATER YEAR (WY)

MEAN	125	363	653	1068	1139	1392	1169	867	507	287	179	137
MAX	515	2057	2417	6290	3404	4299	3243	4020	2785	1655	801	551
(WY)	1956	1980	1958	1937	1950	1945	1996	1983	1997	1979	1977	1996
MIN	14.3	20.0	17.6	40.3	78.0	70.8	263	91.2	41.0	44.8	29.8	18.8
(WY)	1965	1964	1964	1977	1934	1941	1934	1934	1936	1954	1964	1953

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1932 - 2000	
ANNUAL TOTAL	196995		197534			
ANNUAL MEAN	540		540		655	
HIGHEST ANNUAL MEAN					1199	1950
LOWEST ANNUAL MEAN					140	1941
HIGHEST DAILY MEAN	14500	Jan 23	16800	Feb 19	27300	Apr 30 1996
LOWEST DAILY MEAN	16	Oct 27	16	Oct 27	9.6	Oct 17 1964
ANNUAL SEVEN-DAY MINIMUM	16	Oct 26	16	Oct 26	11	Oct 12 1964
INSTANTANEOUS PEAK FLOW			17800	Feb 19	29400	Apr 30 1996
INSTANTANEOUS PEAK STAGE			17.27	Feb 19	23.30	Apr 30 1996
ANNUAL RUNOFF (CFSM)	1.13		1.13		1.38	
ANNUAL RUNOFF (INCHES)	15.40		15.44		18.69	
10 PERCENT EXCEEDS	1260		1170		1470	
50 PERCENT EXCEEDS	206		184		256	
90 PERCENT EXCEEDS	24		25		36	

e Estimated

03303300 MIDDLE FORK ANDERSON RIVER AT BRISTOW, IN

LOCATION.--Lat 38°08'19", long 86°43'16", in NW$^1/_4$SE$^1/_4$ sec.27, T.4 S., R.3 W., Perry County, Hydrologic Unit 05140201, on left bank at downstream side of bridge on State Highway 145 at Bristow, 2.0 mi downstream from Coon Branch, 6.0 mi upstream from Sulphur Fork Creek, and at mile 14.1.

DRAINAGE AREA.--39.8 mi^2.

PERIOD OF RECORD.--August 1961 to current year.

REVISED RECORDS.--WDR IN-72-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 395.00 ft above sea level.

REMARKS.--Records good except for daily discharges below 1 ft^3/s and estimated daily discharges, which are poor. Flow regulated by U.S. Forest Service and Middle Fork Anderson River Conservancy District control structures beginning June 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959, reached a stage of 20.0 ft, from floodmark, discharge 15,000 ft^3/s from rating curve extended above 7,000 ft^3/s. This is the maximum flood since 1905, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.02	.03	e1.8	e5.6	105	29	15	5.9	28	2.6	7.1
2	.00	.07	.07	e3.0	e5.4	69	46	14	5.1	21	2.0	6.0
3	.00	.03	.08	e900	e5.4	53	61	15	4.5	15	3.1	5.4
4	.00	.02	.12	630	e5.2	46	93	20	5.1	12	3.5	5.5
5	.00	.01	.21	439	e5.0	38	71	35	26	12	3.7	8.3
6	.00	.02	.33	422	e4.9	31	57	34	4.0	11	3.9	36
7	.00	.02	.45	406	e4.8	26	66	29	2.7	10	4.2	52
8	.00	.02	.37	391	e4.8	22	258	26	2.5	11	9.6	52
9	.84	.02	.36	366	e4.9	19	198	25	2.6	8.7	18	53
10	.07	.02	22	321	e5.2	16	151	60	2.3	7.7	16	53
11	.00	.01	8.6	204	e6.0	16	113	46	2.1	6.5	11	53
12	.00	.00	6.9	64	e7.2	20	83	35	1.9	7.1	9.1	54
13	.01	.00	33	42	e81	19	66	42	1.8	6.3	7.4	53
14	.02	.00	148	32	291	18	56	37	1.7	5.4	5.7	53
15	.02	.00	45	27	222	16	50	32	1.7	5.0	4.4	50
16	.05	.00	31	23	149	188	44	27	1.6	4.4	5.2	36
17	.05	.00	24	21	96	224	42	24	53	5.9	5.5	33
18	.04	.00	13	20	784	161	42	20	59	4.2	5.2	31
19	.05	.09	8.2	19	509	223	40	22	44	4.3	4.7	24
20	.06	.14	7.5	18	408	299	38	20	33	4.1	4.4	18
21	.14	.01	6.1	16	397	260	36	18	26	4.4	3.8	18
22	.04	.01	5.3	14	387	197	32	16	17	3.8	4.2	18
23	.00	.01	4.5	13	376	140	29	25	14	3.5	24	11
24	.00	.01	e3.8	12	399	100	28	21	12	3.8	67	4.0
25	.00	.01	e3.2	e10	368	72	28	16	9.5	3.6	36	23
26	.00	.08	e2.9	e9.4	339	54	26	14	8.8	3.2	22	36
27	.00	.04	e2.6	e8.2	336	65	24	44	155	2.9	26	25
28	.00	.02	e2.3	e7.4	258	62	22	39	118	2.8	16	22
29	.00	.02	e2.1	e6.8	165	52	19	12	50	2.7	14	18
30	.00	.02	e2.0	e6.2	---	43	17	8.3	34	3.4	27	11
31	.00	---	e1.9	e5.8	---	35	---	7.2	---	3.0	10	---
TOTAL	1.39	0.72	385.92	4458.6	5629.4	2689	1865	798.5	704.8	226.7	379.2	869.3
MEAN	.045	.024	12.4	144	194	86.7	62.2	25.8	23.5	7.31	12.2	29.0
MAX	.84	.14	148	900	784	299	258	60	155	28	67	54
MIN	.00	.00	.03	1.8	4.8	16	17	7.2	1.6	2.7	2.0	4.0
CFSM	.00	.00	.31	3.61	4.88	2.18	1.56	.65	.59	.18	.31	.73
IN.	.00	.00	.36	4.17	5.26	2.51	1.74	.75	.66	.21	.35	.81

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2000, BY WATER YEAR (WY)

MEAN	8.61	37.0	71.1	82.4	97.9	125	112	75.6	32.9	17.6	11.9	10.9
MAX	63.7	194	210	223	245	393	312	405	190	141	162	78.8
(WY)	1978	1980	1991	1982	1989	1964	1972	1983	1979	1979	1979	1982
MIN	.000	.000	.000	2.78	5.66	33.4	19.6	6.36	.82	.38	.013	.000
(WY)	1965	1964	1964	1964	1992	1990	1963	1988	1988	1968	1965	1964

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1962 - 2000	
ANNUAL TOTAL	19500.94		18008.53			
ANNUAL MEAN	53.4		49.2		56.7	
HIGHEST ANNUAL MEAN					122	1979
LOWEST ANNUAL MEAN					15.2	1992
HIGHEST DAILY MEAN	625	Jan 23	e900	Jan 3	4870	Mar 9 1964
LOWEST DAILY MEAN	.00	Sep 17	.00	Oct 1	.00	Oct 2 1961
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 17	.00	Oct 1	.00	Oct 9 1961
INSTANTANEOUS PEAK FLOW			2520	Jan 3	6360	Mar 9 1964
INSTANTANEOUS PEAK STAGE			16.59	Jan 3	19.33	Mar 4 1964
ANNUAL RUNOFF (CFSM)	1.34		1.24		1.43	
ANNUAL RUNOFF (INCHES)	18.23		16.83		19.36	
10 PERCENT EXCEEDS	168		142		146	
50 PERCENT EXCEEDS	7.6		12		15	
90 PERCENT EXCEEDS	.00		.02		.17	

e Estimated

03303400 CROOKED CREEK NEAR SANTA CLAUS, IN

LOCATION.--Lat 38°07'05", long 86°53'24", in SE$^1/_4$SE$^1/_4$ sec.31, T.4 S., R.4 W., Spencer County, Hydrologic Unit 05140201, on right bank at upstream side of bridge on county road, 1.3 mi east of Santa Claus Post Office, and 1.8 mi upstream from unnamed right-bank tributary.

DRAINAGE AREA.--7.86 mi^2.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 403.00 ft above sea level. Prior to Sept. 30, 1995 datum of gage was 404.34 ft above sea level.

REMARKS.--Records good except for daily discharges below 1 ft^3/s, and estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	.07	.00	.35	e.29	6.1	2.5	.26	.00	3.5	.00	.18
2	e.00	.13	.00	3.5	e.29	4.2	7.2	.70	.00	2.6	.00	.04
3	e.00	.05	.02	1090	e.29	4.8	11	1.1	.00	2.4	.00	.00
4	e.00	.02	.13	113	e.29	4.6	12	3.2	.00	2.1	.00	.00
5	e.00	.00	.55	32	e.27	3.5	5.2	8.4	.00	2.8	.02	.00
6	e.00	.00	.41	13	e.26	2.9	3.7	3.0	.00	1.9	.00	.00
7	e.00	.00	.13	6.2	e.25	2.6	21	2.0	.00	1.2	.09	.00
8	e.00	.00	.05	3.5	e.24	2.4	63	1.6	.00	.64	8.3	.00
9	e3.2	.00	.03	2.8	e.23	2.1	13	2.5	.00	.30	1.8	.09
10	1.0	.00	27	2.5	e.30	1.9	6.9	2.5	.00	.08	.14	.39
11	.21	.00	1.8	2.3	e.35	3.1	4.8	.91	.00	.04	.00	.18
12	.03	.00	13	2.1	e1.5	3.3	3.7	.60	.00	.06	.02	1.0
13	.01	.00	16	2.2	e170	2.8	3.2	1.8	.00	.05	.30	.26
14	.00	.00	41	1.9	68	2.4	2.8	.35	.00	.01	.00	.02
15	.00	.00	2.7	1.9	16	2.2	2.6	.01	.00	.00	.00	.00
16	.00	.00	1.6	1.9	7.0	103	2.4	.00	.00	.00	.00	.00
17	.00	.00	1.2	1.8	5.9	30	3.0	.00	8.5	.00	.00	.00
18	.00	.00	.90	2.5	1180	12	2.5	.00	13	.00	.00	.00
19	.00	.00	.84	2.3	112	60	2.2	1.9	2.7	.00	.00	.00
20	.00	.00	1.1	2.7	37	59	1.9	.40	1.4	.00	.00	.00
21	.00	.43	.83	e1.8	18	19	1.8	.03	1.7	.00	.00	.00
22	.00	.32	.62	e1.4	10	10	1.7	.00	7.4	.00	.00	.00
23	.00	.18	.62	e1.1	6.1	6.9	1.6	1.8	5.9	.00	1.2	.00
24	.00	.09	.60	e.80	97	5.1	1.8	1.1	6.9	.02	13	.00
25	.00	.12	e.36	e.59	35	3.9	1.7	.35	11	.00	.95	32
26	.00	.44	e.33	e.50	18	3.2	1.4	.06	20	.00	.02	5.4
27	.00	.08	e.31	e.45	74	24	1.2	.49	94	.00	296	2.0
28	.00	.04	e.30	e.40	18	7.6	1.0	.28	20	.08	12	1.4
29	.14	.02	e.29	e.36	9.6	4.0	.46	.29	8.0	.25	2.7	.90
30	.08	.01	e.30	e.33	---	3.2	.15	.00	4.8	2.2	1.5	.69
31	.05	---	e.32	e.30	---	2.8	---	.00	---	.02	.63	---
TOTAL	4.72	2.00	113.34	1296.48	1886.16	402.6	187.41	35.63	205.30	20.25	338.67	44.55
MEAN	.15	.067	3.66	41.8	65.0	13.0	6.25	1.15	6.84	.65	10.9	1.49
MAX	3.2	.44	41	1090	1180	103	63	8.4	94	3.5	296	32
MIN	.00	.00	.00	.30	.23	1.9	.15	.00	.00	.00	.00	.00
CFSM	.02	.01	.47	5.32	8.27	1.65	.79	.15	.87	.08	1.39	.19
IN.	.02	.01	.54	6.14	8.93	1.91	.89	.17	.97	.10	1.60	.21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2000, BY WATER YEAR (WY)

MEAN	2.30	9.26	14.4	15.9	21.4	21.9	20.8	11.7	6.90	4.88	2.81	2.42
MAX	10.3	33.5	49.1	43.7	65.0	63.1	65.7	62.0	37.5	47.5	19.4	16.7
(WY)	1994	1994	1991	1982	2000	1997	1996	1995	1997	1979	1977	1996
MIN	.000	.067	.51	.058	1.12	5.35	2.27	.17	.000	.001	.000	.000
(WY)	1988	2000	1977	1977	1992	1990	1976	1988	1988	1974	1983	1970

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1970 - 2000	
ANNUAL TOTAL	3010.86		4537.11			
ANNUAL MEAN	8.25		12.4		11.2	
HIGHEST ANNUAL MEAN					17.5	1997
LOWEST ANNUAL MEAN					3.97	1992
HIGHEST DAILY MEAN	529	Jan 22	1180	Feb 18	1200	Apr 29 1996
LOWEST DAILY MEAN	.00	Jun 18	e.00	Oct 1	.00	Oct 1 1969
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 27	e.00	Oct 1	.00	Jun 28 1970
INSTANTANEOUS PEAK FLOW			3270	Jan 3	4100	Apr 28 1970
INSTANTANEOUS PEAK STAGE			10.98	Jan 3	10.13	Apr 3 1989
ANNUAL RUNOFF (CFSM)	1.05		1.58		1.42	
ANNUAL RUNOFF (INCHES)	14.25		21.47		19.30	
10 PERCENT EXCEEDS	17		12		22	
50 PERCENT EXCEEDS	.77		.39		1.7	
90 PERCENT EXCEEDS	.00		.00		.00	

e Estimated

03322011 PIGEON CREEK NEAR FORT BRANCH, IN

LOCATION.--Lat 38°15'08", long 87°31'11", in NW1/4SW1/4 sec.15, T.3 S., R.10 W., Gibson County, Hydrologic Unit 05140202, on right bank 20 ft downstream from bridge on State Highway 168, 1.1 mi upstream from West Fork Pigeon Creek and 2.6 mi east of intersection of U.S. Highway 41 at Fort Branch.

DRAINAGE AREA.--35.4 mi^2.

PERIOD OF RECORD.--October 1986 to current year.

GAGE.--Water-stage recorder. Datum of gage is 400.00 ft above sea level.

REMARKS.--Records fair except for flows above 50 ft^3/s and estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	1.4	1.6	1.5	e2.3	23	9.3	5.4	3.7	10	11	16
2	2.3	1.3	1.7	2.3	e2.4	17	17	5.9	3.7	9.2	7.4	15
3	1.4	1.3	2.0	520	e2.5	19	14	33	3.5	8.5	7.2	13
4	1.1	1.4	3.8	111	e2.6	22	12	36	3.6	7.8	6.4	12
5	1.1	1.4	4.1	18	e2.7	16	10	8.7	4.1	51	276	11
6	1.1	1.6	3.9	13	e2.9	14	9.8	7.1	3.9	16	70	11
7	1.0	1.4	2.7	10	e3.1	12	25	6.2	3.7	11	467	10
8	1.9	1.4	1.9	9.1	e3.3	11	90	5.8	3.7	9.0	794	10
9	21	1.4	1.7	8.7	e3.7	11	21	5.7	4.0	8.3	144	20
10	7.8	1.4	18	7.8	e4.0	9.1	15	8.6	4.6	7.8	24	42
11	4.6	1.4	6.5	6.4	e4.3	26	13	6.0	9.8	7.6	14	20
12	3.6	1.4	8.7	5.9	e4.6	21	11	5.5	4.5	12	11	36
13	3.0	1.5	13	6.3	e89	16	10	43	11	8.4	9.8	19
14	2.7	1.5	76	5.5	56	14	9.5	7.6	4.9	7.4	8.7	16
15	2.5	1.4	9.0	5.6	19	13	8.9	6.0	4.3	6.8	7.9	14
16	1.8	1.4	5.2	5.5	14	165	8.4	5.0	18	6.1	7.2	12
17	1.4	1.4	4.1	5.3	12	57	9.0	4.9	936	5.6	6.6	12
18	1.3	1.4	3.4	7.0	825	30	7.9	4.8	210	5.5	43	11
19	1.3	1.7	3.2	6.4	183	100	7.6	5.8	26	53	9.2	10
20	1.3	2.9	5.0	5.7	41	280	7.5	5.5	15	9.2	7.5	10
21	1.6	2.3	e3.5	e5.0	26	52	7.1	5.5	22	7.5	7.0	14
22	1.3	1.9	e2.6	e4.3	21	34	6.4	5.7	13	6.8	6.6	12
23	1.2	1.8	e2.0	e3.5	17	26	6.3	8.6	10	6.4	430	11
24	1.3	1.8	e1.6	e3.0	205	21	7.9	8.0	462	6.0	1030	12
25	1.3	1.7	e1.5	e2.6	45	16	8.1	6.7	39	5.6	53	202
26	1.4	1.8	e1.4	e2.3	172	14	6.3	6.8	21	5.2	24	75
27	1.3	1.9	e1.3	e2.3	467	23	5.9	9.4	41	5.0	1310	26
28	1.4	1.7	e1.2	e2.3	51	15	5.9	6.1	20	4.9	113	18
29	1.3	1.6	e1.1	e2.3	32	12	5.5	5.3	14	5.8	32	15
30	1.4	1.6	e1.1	e2.3	---	11	5.4	4.4	12	125	22	13
31	1.4	---	e1.0	e2.3	---	9.6	---	4.0	---	69	18	---
TOTAL	80.0	48.1	193.8	793.2	2313.4	1109.7	380.7	287.0	1932.0	507.4	4977.5	718
MEAN	2.58	1.60	6.25	25.6	79.8	35.8	12.7	9.26	64.4	16.4	161	23.9
MAX	21	2.9	76	520	825	280	90	43	936	125	1310	202
MIN	1.0	1.3	1.0	1.5	2.3	9.1	5.4	4.0	3.5	4.9	6.4	10
CFSM	.07	.05	.18	.72	2.25	1.01	.36	.26	1.82	.46	4.54	.68
IN.	.08	.05	.20	.83	2.43	1.17	.40	.30	2.03	.53	5.23	.75

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2000, BY WATER YEAR (WY)

MEAN	8.91	27.0	33.9	51.1	60.8	60.4	59.4	57.2	40.3	35.0	28.5	8.30
MAX	38.8	161	176	112	170	164	191	203	140	126	161	23.9
(WY)	1991	1994	1991	1999	1989	1989	1996	1990	1996	1999	2000	2000
MIN	.55	1.60	5.88	6.97	4.66	12.4	12.7	2.21	1.38	1.92	1.29	1.06
(WY)	1992	2000	1996	1987	1992	1994	2000	1988	1988	1994	1991	1987

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1987 - 2000	
ANNUAL TOTAL	16838.0		13340.8			
ANNUAL MEAN	46.1		36.5		39.1	
HIGHEST ANNUAL MEAN					62.3	1989
LOWEST ANNUAL MEAN					12.7	1992
HIGHEST DAILY MEAN	1950	Jul 2	1310	Aug 27	2120	Apr 29 1996
LOWEST DAILY MEAN	1.0	Oct 7	1.0	Oct 7	.28	Oct 4 1991
ANNUAL SEVEN-DAY MINIMUM	e1.2	Dec 25	e1.2	Dec 25	.39	Oct 2 1991
INSTANTANEOUS PEAK FLOW			2060	Aug 27	3750	Jul 1 1999
INSTANTANEOUS PEAK STAGE			15.02	Aug 27	17.24	Jul 1 1999
ANNUAL RUNOFF (CFSM)	1.30		1.03		1.11	
ANNUAL RUNOFF (INCHES)	17.69		14.02		15.02	
10 PERCENT EXCEEDS	78		47		53	
50 PERCENT EXCEEDS	9.1		7.4		7.0	
90 PERCENT EXCEEDS	1.4		1.4		1.3	

e Estimated

03322900 WABASH RIVER AT LINN GROVE, IN

LOCATION.--Lat 40°39'22", long 85°01'58", in SE$^1/_4$SE$^1/_4$ sec.34, T.26 N., R.13 E., Adams County, Hydrologic Unit 05120101, on right bank 10 ft downstream from bridge on State Highway 218, 800 ft downstream from Shoemaker Ditch, 0.8 mi north of Linn Grove, and 2.2 mi upstream from Rice Ditch.

DRAINAGE AREA.--453 mi^2.

PERIOD OF RECORD.--September 1964 to current year.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 808.00 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor. Occasional regulation by Grand Lake, diversion from or into St. Marys River Basin, and into Miami and Erie Canal.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	4.0	12	12	e6.2	149	73	72	86	73	49	23
2	22	4.0	11	13	e6.1	112	63	149	72	58	38	19
3	16	4.5	12	19	e6.1	85	62	335	58	245	54	17
4	19	5.6	14	44	e7.2	72	78	211	50	850	69	18
5	19	7.7	15	216	e6.9	65	70	173	55	472	64	18
6	21	9.2	18	140	e6.7	60	61	132	148	189	63	22
7	19	11	24	68	e8.0	54	57	104	143	111	74	20
8	18	7.9	23	37	e10	47	1090	88	85	77	52	25
9	18	6.7	20	32	e14	45	1770	82	64	59	43	22
10	25	8.4	28	27	e19	41	2170	77	54	50	112	50
11	36	9.0	42	24	e150	39	1520	92	48	45	102	280
12	28	9.0	49	21	e500	40	600	73	71	37	56	333
13	20	10	36	19	e600	41	288	65	118	31	34	162
14	17	11	49	15	e340	54	205	66	431	30	26	84
15	15	12	87	12	e220	84	166	69	860	26	22	52
16	15	12	103	11	e200	87	138	52	451	25	17	38
17	14	12	61	15	e340	78	125	47	229	23	18	30
18	14	12	41	8.5	e500	75	333	47	615	21	20	26
19	16	16	31	e8.2	e680	74	384	431	1120	20	28	23
20	16	16	27	e8.2	e900	357	310	810	644	21	20	22
21	13	15	23	e7.6	e1000	601	1210	335	650	20	15	27
22	13	20	19	e7.4	e740	442	1270	169	754	19	17	31
23	12	18	17	e7.2	e560	266	704	192	380	16	20	30
24	10	17	16	e7.0	420	180	357	197	183	16	26	34
25	9.2	15	14	e6.8	274	142	224	134	510	16	34	76
26	9.6	12	12	e6.7	195	113	164	90	715	16	21	139
27	9.4	16	11	e6.6	249	97	130	124	314	15	19	182
28	8.2	20	11	e6.5	353	101	111	346	185	15	115	105
29	7.3	18	10	e6.4	234	134	96	309	119	15	75	65
30	5.5	14	10	e6.3	---	124	80	180	88	18	38	44
31	4.6	---	11	e6.2	---	92	---	113	---	44	27	---
TOTAL	512.8	353.0	857	824.6	8545.2	3951	13909	5364	9300	2673	1368	2017
MEAN	16.5	11.8	27.6	26.6	295	127	464	173	310	86.2	44.1	67.2
MAX	43	20	103	216	1000	601	2170	810	1120	850	115	333
MIN	4.6	4.0	10	6.2	6.1	39	57	47	48	15	15	17
CFSM	.04	.03	.06	.06	.65	.28	1.02	.38	.68	.19	.10	.15
IN.	.04	.03	.07	.07	.70	.32	1.14	.44	.76	.22	.11	.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2000, BY WATER YEAR (WY)

MEAN	86.1	282	482	512	667	789	650	362	374	294	174	96.0
MAX	553	1853	1514	1563	1717	2397	2085	1584	1914	1877	1513	753
(WY)	1991	1973	1991	1974	1976	1978	1972	1996	1981	1993	1995	1972
MIN	6.84	7.52	9.25	6.19	86.0	80.5	68.2	25.9	8.92	11.7	8.20	7.64
(WY)	1965	1966	1977	1977	1978	1981	1971	1988	1988	1965	1966	1967

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1965 - 2000	
ANNUAL TOTAL	106608.6		49674.6			
ANNUAL MEAN	292		136		396	
HIGHEST ANNUAL MEAN					710	1973
LOWEST ANNUAL MEAN					76.8	1966
HIGHEST DAILY MEAN	6950	Jan 24	2170	Apr 10	8460	Jul 4 1993
LOWEST DAILY MEAN	4.0	Nov 1	4.0	Nov 1	4.0	Nov 1 1999
ANNUAL SEVEN-DAY MINIMUM	5.1	Oct 29	5.1	Oct 29	5.1	Oct 29 1999
INSTANTANEOUS PEAK FLOW			2230	Apr 10	9560	Mar 17 1978
INSTANTANEOUS PEAK STAGE			8.79	Apr 10	13.87	Mar 17 1978
ANNUAL RUNOFF (CFSM)	.64		.30		.87	
ANNUAL RUNOFF (INCHES)	8.75		4.08		11.87	
10 PERCENT EXCEEDS	689		357		1150	
50 PERCENT EXCEEDS	44		43		113	
90 PERCENT EXCEEDS	10		9.2		12	

e Estimated

03323500 WABASH RIVER AT HUNTINGTON, IN

LOCATION.--Lat 40°51'20", long 85°29'53", in SW$^1/_4$NE$^1/_4$ sec.27, T.28 N., R.9 E., Huntington County, Hydrologic Unit 05120101, on right bank at the Huntington Water and Light Plant, 2 mi south of Huntington, 2.4 mi downstream from Huntington Lake, 3.2 mi upstream from Little River, and at mile 409.0.

DRAINAGE AREA.--721 mi^2.

PERIOD OF RECORD.--January 1951 to current year.

REVISED RECORDS.--WSP 1909: 1959. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 700.04 ft above sea level, (levels by State of Indiana, Department of Natural Resources). Prior to July 5, 1951, nonrecording gage at same site and datum.

REMARKS.--Flow regulated by Huntington Lake since January 1969. Daily discharge computed from relation between discharge, head, and gate openings for Huntington Lake beginning Oct. 1, 1974.

COOPERATION.--Records of daily discharge provided by U.S. Army Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--49 years, 608 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,900 ft^3/s Feb. 10, 1959; maximum gage height 23.20 ft, Feb. 10, 1959 (backwater from ice); minimum daily discharge, 0.00 ft^3/s, Sept. 12, 1989.

EXTREMES FOR OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 22.7 ft, from high-water mark by U.S. Army Corps. of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,280 ft^3/s, June 18; minimum daily discharge, 21 ft^3/s, Nov. 1-12. Dec. 9, Jan. 28-30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	21	48	38	25	304	143	26	235	2150	61	84
2	88	21	48	35	25	181	124	26	128	1500	61	78
3	87	29	45	38	25	127	115	26	170	825	71	75
4	99	41	38	59	25	117	102	120	107	831	89	75
5	104	55	35	51	25	118	89	195	44	1120	107	59
6	103	76	35	63	25	92	87	203	671	862	149	32
7	103	111	35	105	25	67	87	181	1020	557	170	27
8	102	123	27	123	29	95	89	186	329	225	184	27
9	101	100	21	133	39	109	623	186	94	105	94	27
10	90	60	32	65	44	107	1200	217	118	95	85	67
11	83	44	44	44	50	72	1840	604	90	95	75	120
12	83	44	58	48	105	59	1860	737	44	95	88	301
13	57	44	66	48	320	81	715	319	605	95	106	381
14	38	43	81	48	208	94	262	146	299	95	113	220
15	38	53	88	48	153	112	213	178	331	107	98	153
16	38	58	88	48	228	133	208	189	1020	103	50	168
17	38	57	100	48	209	141	199	188	1900	207	27	114
18	38	57	94	41	256	144	187	161	2280	43	32	82
19	38	56	73	35	449	140	180	140	1860	43	52	89
20	38	83	65	36	939	192	191	580	1950	43	61	104
21	38	69	52	35	1300	640	890	796	1370	43	52	110
22	38	54	46	35	1060	1150	1420	378	1420	43	43	109
23	38	53	48	35	860	1140	1500	304	1660	43	43	109
24	38	53	48	32	916	672	1140	369	1390	43	55	108
25	38	64	43	30	523	176	455	319	486	43	61	121
26	38	90	41	30	275	213	117	225	491	43	61	130
27	38	82	44	25	391	227	39	209	595	43	61	129
28	38	48	44	21	712	219	25	508	872	43	70	94
29	203	36	41	21	372	173	25	1190	985	43	76	87
30	666	44	40	21	---	123	26	1650	1710	43	80	145
31	99	---	39	24	---	135	---	759	---	52	84	---
TOTAL	2722	1769	1607	1463	9613	7353	14151	11315	24274	9678	2459	3425
MEAN	87.8	59.0	51.8	47.2	331	237	472	365	809	312	79.3	114
MAX	666	123	100	133	1300	1150	1860	1650	2280	2150	184	381
MIN	38	21	21	21	25	59	25	26	44	43	27	27

CAL YR 1999 TOTAL 176317 MEAN 483 MAX 5820 MIN 21
WTR YR 2000 TOTAL 89829 MEAN 245 MAX 2280 MIN 21

03324000 LITTLE RIVER NEAR HUNTINGTON, IN

LOCATION.--Lat 40°54'14", long 85°24'22", in NE$^1/_4$NW$^1/_4$ sec.9, T.28 N., R.10 E., Huntington County, Hydrologic Unit 05120101, on right bank on upstream side of former highway bridge, 5 mi east of Huntington, and at mile 7.5.

DRAINAGE AREA.--263 mi^2.

PERIOD OF RECORD.--October 1943 to current year. Prior to January 1944 monthly discharge only, published in WSP 1305. Published as Little River at Huntington, January 1944 to September 1948, Little River near Huntington, October 1948 to September 1956, and Little Wabash River near Huntington, October 1956 to September 1961.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 728.10 ft above sea level. Prior to Oct. 1, 1948, nonrecording gage 4 mi downstream at datum 8.79 ft lower, and Oct. 1, 1948, to Sept. 5, 1950, nonrecording gage at present site and datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. During periods of extreme high water in the St. Marys River, some water leaves the St. Marys River Basin through Junk Ditch and flows into Little River Basin via Graham McCulloch Ditch.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	21	23	e28	e21	181	69	73	178	198	60	30
2	24	21	23	e27	e22	130	67	196	133	145	47	30
3	22	21	22	e31	e23	102	65	143	102	981	82	29
4	92	21	22	119	e23	90	62	100	87	1070	81	28
5	76	21	25	84	e24	78	56	83	994	402	48	30
6	42	20	36	50	e25	67	53	73	2070	217	49	25
7	30	21	41	41	e27	61	52	71	1230	149	391	24
8	25	21	31	38	e30	56	93	73	511	112	159	23
9	22	20	27	32	e38	56	99	75	268	97	79	24
10	24	20	28	30	e50	52	77	775	172	90	54	114
11	23	21	30	31	105	47	65	474	130	79	43	219
12	20	20	28	29	150	51	60	217	163	68	36	395
13	20	20	25	27	134	57	54	144	1350	62	34	139
14	24	26	56	e26	108	69	50	100	2500	58	32	74
15	24	21	145	e25	88	111	51	78	2590	52	29	52
16	21	19	103	e25	80	95	51	68	1880	49	27	41
17	29	19	68	e24	102	74	53	67	834	47	31	36
18	43	19	45	e24	144	61	68	65	957	50	43	31
19	30	21	36	e24	317	76	57	185	758	48	36	33
20	24	28	34	e23	165	767	201	246	396	45	29	31
21	22	29	42	e23	114	942	1340	130	1260	39	28	40
22	21	25	49	e23	370	444	682	96	810	36	25	33
23	21	22	38	e22	608	254	314	555	353	35	44	77
24	21	22	34	e22	360	183	194	535	378	33	47	184
25	20	22	e31	e22	520	147	139	227	3080	31	34	133
26	20	23	e30	e22	304	115	109	130	2350	30	30	80
27	21	27	e29	e22	1050	115	91	112	1830	30	201	57
28	21	26	e29	e21	657	122	81	982	904	34	103	45
29	20	23	e28	e21	283	112	72	1180	483	33	54	37
30	19	21	e28	e21	---	87	70	515	293	75	38	34
31	20	---	e28	e21	---	73	---	256	---	101	34	---
TOTAL	877	661	1214	978	5942	4875	4495	8024	29044	4496	2028	2128
MEAN	28.3	22.0	39.2	31.5	205	157	150	259	968	145	65.4	70.9
MAX	92	29	145	119	1050	942	1340	1180	3080	1070	391	395
MIN	19	19	22	21	21	47	50	65	87	30	25	23
CFSM	.11	.08	.15	.12	.78	.60	.57	.98	3.68	.55	.25	.27
IN.	.12	.09	.17	.14	.84	.69	.64	1.13	4.11	.64	.29	.30

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2000, BY WATER YEAR (WY)

MEAN	82.4	159	271	328	391	482	422	241	241	119	64.7	58.1
MAX	701	1137	1010	1693	1164	1765	1396	748	968	661	501	414
(WY)	1955	1993	1967	1950	1959	1982	1957	1996	2000	1996	1958	1992
MIN	5.72	10.2	8.93	6.25	17.5	90.7	40.3	35.2	22.3	15.9	7.76	4.22
(WY)	1963	1965	1964	1977	1964	1981	1946	1963	1988	1962	1963	1962

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1945 - 2000	
ANNUAL TOTAL	84284		64762			
ANNUAL MEAN	231		177		237	
HIGHEST ANNUAL MEAN					450	1950
LOWEST ANNUAL MEAN					67.0	1954
HIGHEST DAILY MEAN	4790	Jan 24	3080	Jun 25	5610	Mar 14 1982
LOWEST DAILY MEAN	14	Sep 8	19	Oct 30	1.1	Oct 8 1946
ANNUAL SEVEN-DAY MINIMUM	15	Sep 8	20	Oct 25	1.8	Oct 7 1946
INSTANTANEOUS PEAK FLOW			3510	Jun 25	5990	Jan 4 1950
INSTANTANEOUS PEAK STAGE			15.09	Jun 25	19.50	Feb 25 1985
ANNUAL RUNOFF (CFSM)	.88		.67		.90	
ANNUAL RUNOFF (INCHES)	11.92		9.16		12.26	
10 PERCENT EXCEEDS	597		415		593	
50 PERCENT EXCEEDS	38		51		68	
90 PERCENT EXCEEDS	17		21		14	

e Estimated

03324300 SALAMONIE RIVER NEAR WARREN, IN

LOCATION.--Lat 40°42'45", long 85°27'13", in SE$^1/_4$SE$^1/_4$ sec.12, T.26 N., R.9 E., Huntington County, Hydrologic Unit 05120102, on right bank at downstream side of bridge on County Road 800 South, 0.4 mi downstream from Detamore Ditch, 0.4 mi downstream from Interstate 69, 0.8 mi upstream from concrete and stone dam, 2.4 mi northwest of Warren, and at mile 30.0.

DRAINAGE AREA.--425 mi^2.

PERIOD OF RECORD.--March 1957 to current year.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 784.65 ft above sea level, (levels by State of Indiana, Department of Natural Resources). Prior to July 28, 1960, nonrecording gage at same site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	e16	e12	e21	e12	234	74	107	225	89	97	41
2	55	e15	e12	e22	e11	168	72	234	177	74	70	40
3	42	e15	e12	e30	e12	126	72	459	138	230	100	39
4	41	e15	e13	e45	e12	104	73	249	112	1710	187	45
5	34	e14	e14	e125	e12	90	77	218	201	1180	135	47
6	e34	e14	e15	e90	e12	78	71	199	385	570	75	45
7	e29	e13	e17	e50	e13	67	69	142	247	455	62	46
8	e27	e14	e16	e33	e13	60	1010	122	162	197	59	45
9	e25	e13	e15	e30	e13	57	2480	129	125	124	83	46
10	e24	e13	e14	e28	e14	56	1350	1090	106	98	84	78
11	e23	e12	e14	e25	e15	54	400	552	95	84	65	125
12	e23	e12	e14	e23	e45	56	269	270	249	71	71	251
13	e22	e13	e30	e22	e36	55	209	182	294	59	57	109
14	e21	e13	e96	e22	e25	77	165	207	908	51	46	68
15	e21	e13	e220	e21	e21	147	141	177	2300	44	41	52
16	e21	e12	e85	e20	e19	138	123	118	882	40	36	42
17	e21	e12	e48	e19	e19	113	117	98	391	36	42	35
18	e24	e12	e38	e18	e25	92	399	98	1320	33	48	34
19	e19	e12	e32	e15	e50	116	401	348	1940	33	47	32
20	e16	e13	e28	e14	e40	988	332	1170	615	33	41	32
21	e15	e13	e25	e13	e32	2410	1930	393	1210	31	42	40
22	e14	e13	e23	e13	e100	1240	1990	226	1390	26	43	53
23	e14	e13	e21	e12	954	513	821	502	568	24	43	62
24	e15	e13	e20	e11	526	309	411	435	281	22	45	73
25	e15	e13	e18	e12	322	221	270	228	498	18	47	63
26	e16	e12	e18	e11	232	164	202	146	551	19	57	92
27	e16	e13	e18	e11	712	139	159	516	280	24	78	126
28	e16	e13	e18	e11	844	134	147	2020	173	29	99	65
29	e16	e12	e18	e11	377	122	129	1610	129	30	96	39
30	e18	e12	e18	e11	---	103	111	603	103	39	70	29
31	e18	---	e19	e12	---	86	---	317	---	57	49	---
TOTAL	737	393	961	801	4518	8317	14074	13165	16055	5530	2115	1894
MEAN	23.8	13.1	31.0	25.8	156	268	469	425	535	178	68.2	63.1
MAX	55	16	220	125	954	2410	2480	2020	2300	1710	187	251
MIN	14	12	12	11	11	54	69	98	95	18	36	29
CFSM	.06	.03	.07	.06	.37	.63	1.10	1.00	1.26	.42	.16	.15
IN.	.06	.03	.08	.07	.40	.73	1.23	1.15	1.41	.48	.19	.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2000, BY WATER YEAR (WY)

MEAN	82.4	305	467	499	623	850	698	367	374	244	142	91.5
MAX	489	1794	1685	1724	1906	2616	2214	1371	2312	1477	1363	894
(WY)	1991	1993	1991	1974	1976	1978	1964	1996	1958	1998	1998	1972
MIN	8.13	13.1	11.4	6.12	19.2	103	74.5	32.8	16.7	23.8	11.8	9.22
(WY)	1964	2000	1977	1977	1964	1981	1976	1988	1988	1967	1965	1963

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1958 - 2000	
ANNUAL TOTAL	119427.8		68560			
ANNUAL MEAN	327		187		394	
HIGHEST ANNUAL MEAN					665	1993
LOWEST ANNUAL MEAN					109	1966
HIGHEST DAILY MEAN	10900	Jan 23	2480	Apr 9	10900	Jan 23 1999
LOWEST DAILY MEAN	9.8	Aug 12	e11	Jan 24	5.1	Jan 2 1977
ANNUAL SEVEN-DAY MINIMUM	12	Nov 26	e11	Jan 24	5.9	Dec 29 1976
INSTANTANEOUS PEAK FLOW			2770	Jun 15	13500	Aug 5 1998
INSTANTANEOUS PEAK STAGE			b12.13	Feb 19	17.05	Feb 10 1959
ANNUAL RUNOFF (CFSM)	.77		.44		.93	
ANNUAL RUNOFF (INCHES)	10.45		6.00		12.59	
10 PERCENT EXCEEDS	646		471		959	
50 PERCENT EXCEEDS	42		50		92	
90 PERCENT EXCEEDS	13		13		17	

e Estimated
b Backwater from ice jam

03324500 SALAMONIE RIVER AT DORA, IN

LOCATION.--Lat 40°48'42", long 85°41'02", in NE$^1/_4$NE$^1/_4$ sec.12, T.27 N., R.7 E., Wabash County, Hydrologic Unit 05120102, on right bank, 0.4 mi downstream from Salamonie Lake, 1.5 mi northwest of Dora, and 3.0 mi upstream from mouth.

DRAINAGE AREA.--557 mi^2.

PERIOD OF RECORD.--November 1923 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1275: 1931(M), 1932, 1933(M), 1935-36(M), 1938-40(M), 1941-42, 1945, 1952. WSP 1335: 1934(M). WSP 1555: 1952, 1955-56(M), 1957. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 673.96 ft above sea level, (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 1, 1951, non-recording gage at site 1.5 mi upstream at datum 688.59 ft above sea level, (levels by U.S. Army Corps of Engineers) and Oct. 1, 1951, to Oct. 8, 1961, water-stage recorder located on left bank 2,000 ft upstream at datum 679.77 ft above sea level, (levels by U.S. Army Corps of Engineers). Oct. 9, 1961, to Sept. 30, 1974, water-stage recorder at site described in "LOCATION" paragraph.

REMARKS.--Flow regulated by Salamonie Lake since April 1967.

COOPERATION.-Records of daily discharge provided by U.S. Army Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--76 years, 517 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,500 ft^3/s May 18, 1943, gage height, 14.75 ft, from graph based on gage readings, site and datum then in use; minimum daily, 0.70 ft^3/s Oct. 30, 1968, result of abnormal regulation.

EXTREMES FOR CURRENT YEAR.-- Maximum daily discharge, 3,080 ft^3/s June 29; minimum daily, 18 ft^3/s, Mar. 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	220	310	277	52	35	430	23	26	735	1200	109	26
2	335	309	276	65	35	263	23	26	412	508	177	41
3	334	308	275	84	46	186	23	26	289	507	444	48
4	334	307	273	131	52	169	23	26	170	1470	816	39
5	333	306	272	99	52	118	23	26	48	1630	668	26
6	332	305	270	119	52	107	23	26	48	931	197	26
7	331	304	290	104	52	134	23	26	632	612	120	26
8	331	303	299	90	52	143	23	26	710	584	120	26
9	330	302	297	100	52	112	24	26	340	300	120	26
10	329	301	295	87	52	90	24	893	120	50	120	26
11	328	300	293	71	65	90	24	1060	85	50	120	111
12	327	299	291	71	72	90	24	442	48	50	87	357
13	327	298	289	63	504	108	24	271	596	64	70	191
14	326	296	331	52	548	117	24	245	509	70	48	55
15	325	295	335	52	310	51	24	245	500	70	26	48
16	324	294	326	52	273	18	24	214	968	70	26	48
17	324	293	323	42	139	19	24	153	744	70	26	48
18	323	292	320	35	268	19	24	125	1000	70	26	36
19	322	291	316	35	1220	19	24	174	1540	70	26	26
20	321	290	312	42	1520	19	24	934	2020	41	26	26
21	320	289	308	52	723	20	24	832	1150	26	26	26
22	319	288	304	52	548	46	25	321	1720	26	26	26
23	318	286	299	52	814	62	25	397	2440	26	26	26
24	318	285	294	52	622	36	25	506	2230	26	26	72
25	317	284	264	52	354	22	25	322	72	26	26	79
26	316	283	162	44	355	23	25	183	556	26	26	70
27	315	282	124	35	520	23	25	250	1210	26	26	70
28	314	281	86	35	956	23	25	596	2160	26	26	81
29	313	280	71	35	845	23	25	1060	3080	26	26	95
30	312	279	63	35	---	23	26	2110	2540	26	26	95
31	311	---	52	35	---	23	---	1820	---	69	26	---
TOTAL	9929	8840	7987	1925	11136	2626	722	13387	28672	8746	3658	1896
MEAN	320	295	258	62.1	384	84.7	24.1	432	956	282	118	63.2
MAX	335	310	335	131	1520	430	26	2110	3080	1630	816	357
MIN	220	279	52	35	35	18	23	26	48	26	26	26

CAL YR 1999 TOTAL 158693 MEAN 435 MAX 5690 MIN 26
WTR YR 2000 TOTAL 99524 MEAN 272 MAX 3080 MIN 18

03325000 WABASH RIVER AT WABASH, IN

LOCATION.--Lat 40°47'25", long 85°49'13", in SE$^1/_4$NW$^1/_4$ sec.14, T.27 N., R.6 E., Wabash County, Hydrologic Unit 05120101, on right bank on upstream side of Wabash Street bridge in Wabash, 7.1 mi downstream from Salamonie River, and at mile 387.2.

DRAINAGE AREA.--1,768 mi^2.

PERIOD OF RECORD.--August 1923 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1275: 1931-37(M), 1938-39, 1940(M). WSP 1385: 1942. WSP 1505: 1955. WSP 2109: Drainage area. WDR IN-84-1: 1983.

GAGE.--Water-stage recorder. Datum of gage is 642.66 ft above sea level. Prior to Sept. 30, 1954, nonrecording gage at same site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Salamonie Lake beginning April 1967 and by Huntington Lake beginning October 1976.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 28.7 ft Mar. 26, 1913, from floodmark, determined by U.S. Army Corps of Engineers, discharge, 90,000 ft^3/s, from rating curve extended above 49,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	259	387	349	134	e98	1390	334	186	1560	3960	307	209
2	428	354	356	141	e99	1010	365	285	839	2620	308	209
3	443	353	356	169	e110	651	306	373	678	3320	485	214
4	493	353	350	281	e122	532	292	271	589	4030	877	233
5	560	365	353	432	e130	458	265	358	871	3780	943	191
6	518	375	361	278	e135	380	248	371	3950	3010	468	176
7	480	398	370	277	e150	335	247	358	3690	1660	656	151
8	468	468	391	288	e160	331	274	318	2470	1370	695	139
9	469	470	376	310	e181	369	445	354	997	741	375	137
10	460	446	370	334	204	323	1270	1710	554	393	291	188
11	437	384	371	185	234	315	1660	2510	513	363	247	449
12	429	360	383	162	310	264	2120	1800	425	318	211	945
13	426	360	394	167	917	260	1380	1180	2490	299	196	1030
14	397	358	481	148	1490	348	564	608	5180	299	209	656
15	374	360	636	145	1060	404	387	559	5420	286	183	353
16	379	368	667	151	669	385	380	548	4510	304	153	344
17	393	374	615	144	615	357	377	481	3920	280	119	332
18	390	368	586	118	728	326	375	439	4600	231	123	250
19	397	374	544	144	2020	395	365	490	4730	211	136	194
20	385	383	486	134	3130	1210	469	1260	4650	190	150	195
21	373	439	e450	e127	2580	2360	2450	2020	4960	155	144	218
22	371	400	e400	e123	2650	2010	2700	1200	4400	145	141	221
23	369	376	e390	e121	2840	1840	2180	1050	4620	141	151	234
24	367	377	e370	e120	2550	1410	1740	1740	5070	140	229	359
25	364	367	e340	e116	2020	720	1100	1200	7670	140	206	426
26	365	384	e280	e108	1470	520	491	727	4710	140	183	392
27	309	440	e230	e94	3420	593	293	668	4780	141	187	348
28	365	437	e190	e94	3390	597	234	3390	4270	147	363	321
29	366	371	e150	e93	2430	563	206	4060	4710	157	249	371
30	922	347	e142	e93	---	419	188	4690	4490	159	223	391
31	738	---	136	e97	---	343	---	3880	---	237	210	---
TOTAL	13494	11596	11873	5328	35912	21418	23705	39084	102316	29367	9418	9876
MEAN	435	387	383	172	1238	691	790	1261	3411	947	304	329
MAX	922	470	667	432	3420	2360	2700	4690	7670	4030	943	1030
MIN	259	347	136	93	98	260	188	186	425	140	119	137
CFSM	.25	.22	.22	.10	.70	.39	.45	.71	1.93	.54	.17	.19
IN.	.28	.24	.25	.11	.76	.45	.50	.82	2.15	.62	.20	.21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 2000, BY WATER YEAR (WY)

MEAN	591	956	1716	2224	2408	3080	2673	1596	1409	849	523	501
MAX	3200	5044	5829	13260	7764	8144	11060	10410	8260	4776	4887	5676
(WY)	1927	1993	1968	1950	1959	1982	1957	1943	1958	1993	1998	1926
MIN	32.3	61.7	56.0	72.8	114	177	264	135	78.3	55.4	43.4	29.9
(WY)	1964	1965	1964	1977	1964	1941	1971	1941	1988	1934	1941	1941

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1924 - 2000	
ANNUAL TOTAL	485753		313387			
ANNUAL MEAN	1331		856		1541	
HIGHEST ANNUAL MEAN					2994	1950
LOWEST ANNUAL MEAN					276	1931
HIGHEST DAILY MEAN	11500	Jan 23	7670	Jun 25	47800	May 18 1943
LOWEST DAILY MEAN	57	Sep 15	e93	Jan 29	17	Aug 3 1934
ANNUAL SEVEN-DAY MINIMUM	59	Sep 10	e95	Jan 27	18	Aug 3 1934
INSTANTANEOUS PEAK FLOW			9240	Jun 25	49600	May 18 1943
INSTANTANEOUS PEAK STAGE			14.13	Jun 25	24.44	Feb 11 1959
ANNUAL RUNOFF (CFSM)	.75		.48		.87	
ANNUAL RUNOFF (INCHES)	10.22		6.59		11.84	
10 PERCENT EXCEEDS	5510		2560		4580	
50 PERCENT EXCEEDS	397		374		524	
90 PERCENT EXCEEDS	99		144		87	

e Estimated

03325500 MISSISSINEWA RIVER NEAR RIDGEVILLE, IN

LOCATION.--Lat 40°16'48", long 84°59'33", in NW1/4NW1/4 sec.17, T.21 N., R.14 E., Randolph County, Hydrologic Unit 05120103, on left bank 800 ft upstream from county road bridge, 0.6 mi downstream from Mud Creek, 2 mi east of Ridgeville, and at mile 99.7.

DRAINAGE AREA.--133 mi^2.

PERIOD OF RECORD.--August 1946 to current year.

REVISED RECORDS.--WSP 1235: 1948. WSP 1335: 1953. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 965.28 ft above sea level (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 5, 1950, nonrecording gage at site 800 ft downstream, at same datum. Oct. 5, 1950 to Oct. 15, 1994, water-stage recorder, at site 800 ft downstream, at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	e1.8	11	e6.6	e7.8	81	31	41	60	20	9.2	3.8
2	1.0	e9.0	12	e7.0	e7.8	59	34	241	45	18	10	3.4
3	2.8	e10	12	e12	e7.8	48	38	109	34	44	31	3.2
4	4.3	e7.0	14	216	e7.9	43	36	76	30	100	17	225
5	7.6	5.3	20	61	e8.0	37	28	63	41	88	9.4	42
6	11	4.3	38	25	e8.2	30	28	52	48	68	8.1	14
7	9.6	2.9	26	17	e8.6	27	476	47	31	35	20	8.0
8	10	2.6	17	14	e9.2	26	2500	43	26	23	17	5.9
9	18	2.6	15	e14	e10	27	657	39	23	18	17	5.7
10	9.7	3.0	29	e13	e16	23	292	46	20	17	e30	526
11	2.6	3.1	39	e12	e40	21	179	32	19	15	e15	602
12	1.7	2.8	24	e11	e110	23	120	31	19	13	7.7	135
13	1.5	2.6	21	e10	431	22	93	91	19	11	6.0	63
14	1.8	2.4	46	e9.0	400	43	81	54	19	9.8	5.4	33
15	2.8	2.2	41	e8.9	164	44	71	35	74	9.0	4.6	23
16	3.5	2.2	21	e8.7	338	38	61	30	85	8.6	3.7	17
17	7.0	2.2	14	e8.3	196	49	117	30	195	7.7	4.1	13
18	7.5	2.8	12	e8.0	753	35	148	59	1260	7.0	5.3	10
19	e4.7	3.2	9.9	e7.9	814	49	89	541	433	6.8	5.3	8.7
20	e3.4	7.3	e8.4	e7.9	278	366	124	190	167	6.4	4.0	8.3
21	e2.6	11	e7.8	e7.8	190	266	354	98	177	5.8	3.4	23
22	e2.1	9.5	e7.3	e7.8	540	140	236	74	127	5.4	3.2	18
23	e1.8	7.8	e6.8	e7.8	364	96	132	95	75	5.0	18	14
24	e1.9	6.9	e6.6	e7.8	203	78	92	71	58	4.4	16	22
25	e1.8	7.3	e6.3	e7.8	152	66	73	49	84	4.3	7.4	37
26	e1.7	12	e6.2	e7.8	108	53	60	37	61	4.5	5.4	116
27	e1.7	18	e6.1	e7.8	220	67	54	66	43	3.9	12	64
28	e1.7	16	e6.1	e7.8	162	77	47	108	33	4.1	13	36
29	e1.6	13	e6.2	e7.8	100	56	40	74	29	11	7.9	25
30	e1.6	11	e6.3	e7.8	---	42	33	54	25	33	5.5	20
31	e1.6	---	e6.4	e7.8	---	35	---	45	---	19	4.4	---
TOTAL	134.0	191.8	502.4	563.1	5654.3	2067	6324	2621	3360	625.7	326.0	2125.0
MEAN	4.32	6.39	16.2	18.2	195	66.7	211	84.5	112	20.2	10.5	70.8
MAX	18	18	46	216	814	366	2500	541	1260	100	31	602
MIN	1.0	1.8	6.1	6.6	7.8	21	28	30	19	3.9	3.2	3.2
CFSM	.03	.05	.12	.14	1.47	.50	1.58	.64	.84	.15	.08	.53
IN.	.04	.05	.14	.16	1.58	.58	1.77	.73	.94	.18	.09	.59

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2000, BY WATER YEAR (WY)

MEAN	28.8	92.7	145	183	205	248	221	121	149	98.0	38.2	30.3
MAX	272	729	872	865	548	714	810	354	1417	709	454	337
(WY)	1987	1994	1991	1950	1950	1978	1964	1996	1958	1979	1979	1972
MIN	1.25	1.82	2.62	3.25	5.00	46.1	25.8	15.3	6.52	2.37	2.13	.99
(WY)	1947	1954	1964	1977	1964	1957	1976	1988	1988	1952	1983	1954

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1947 - 2000	
ANNUAL TOTAL	31251.19		24494.3			
ANNUAL MEAN	85.6		66.9		129	
HIGHEST ANNUAL MEAN					223	1958
LOWEST ANNUAL MEAN					29.8	1954
HIGHEST DAILY MEAN	3650	Jan 22	2500	Apr 8	11300	Jun 10 1958
LOWEST DAILY MEAN	.48	Sep 27	1.0	Oct 2	.10	Oct 24 1946
ANNUAL SEVEN-DAY MINIMUM	.78	Sep 22	e1.7	Oct 25	.23	Oct 5 1946
INSTANTANEOUS PEAK FLOW			3400	Apr 8	13900	Jun 10 1958
INSTANTANEOUS PEAK STAGE			12.74	Apr 8	16.25	Jun 10 1958
ANNUAL RUNOFF (CFSM)	.64		.50		.97	
ANNUAL RUNOFF (INCHES)	8.74		6.85		13.23	
10 PERCENT EXCEEDS	162		149		274	
50 PERCENT EXCEEDS	14		18		28	
90 PERCENT EXCEEDS	1.8		3.4		3.8	

e Estimated

03326070 BIG LICK CREEK NEAR HARTFORD CITY, IN

LOCATION.--Lat 40°25'20", long 85°21'04", in SE$^1/_4$SE$^1/_4$ sec.23, T.23 N., R.10 E., Blackford County, Hydrologic Unit 05120103, on right bank 6 ft downstream from bridge on County Road 100 East, and 2.0 mi southeast of Hartford City.

DRAINAGE AREA.--29.2 mi^2.

PERIOD OF RECORD.--July 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 865.00 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	.58	.83	e2.5	e1.2	14	5.0	8.4	10	3.6	2.8	2.3
2	.56	.72	.86	e5.0	e1.1	9.0	5.2	46	6.4	3.3	3.6	2.5
3	.73	.76	.87	16	e1.1	7.1	5.7	14	4.8	272	13	2.7
4	2.4	.93	.91	61	e1.2	5.9	5.1	17	4.3	206	4.2	16
5	2.7	.97	1.2	21	e1.2	4.8	4.2	34	8.3	618	3.0	3.7
6	.86	.78	2.9	12	e1.3	3.9	4.1	11	7.9	300	4.5	2.1
7	.51	.76	2.7	8.5	e1.4	3.4	71	7.5	5.0	73	4.8	1.9
8	.62	.88	2.4	5.2	e2.5	3.5	337	6.5	4.3	39	2.9	2.1
9	3.2	.81	1.5	4.8	e5.0	3.3	65	5.3	3.9	24	2.7	2.5
10	7.1	1.6	9.3	4.8	22	2.8	33	26	3.7	16	3.1	25
11	3.3	.95	7.0	5.5	217	2.7	25	8.6	3.4	11	2.4	25
12	1.5	.63	2.0	2.7	97	3.2	20	6.7	4.2	8.1	2.2	32
13	1.0	.71	1.5	2.1	56	4.4	14	31	3.7	6.6	2.2	8.2
14	.65	.64	77	1.9	52	10	11	10	10	5.8	2.2	3.5
15	.77	.69	36	1.9	40	6.1	9.3	5.8	34	4.8	2.3	3.0
16	1.4	.74	18	3.8	74	4.6	7.7	5.0	12	4.2	2.3	2.7
17	1.6	.73	11	2.5	51	4.6	25	4.6	18	3.8	2.8	2.3
18	3.3	.67	8.4	e2.0	212	3.6	22	5.2	237	3.5	3.4	2.2
19	1.2	.69	6.4	e1.8	125	21	13	233	56	3.5	2.6	2.3
20	.68	.92	12	e1.6	46	135	144	53	22	3.5	2.4	2.4
21	.56	1.5	17	e1.5	40	284	273	27	88	3.2	2.4	4.5
22	.58	1.1	8.6	e1.4	95	68	78	17	77	3.0	2.3	3.1
23	.65	.97	6.0	e1.3	53	40	35	18	22	2.9	3.6	2.9
24	.67	1.1	4.4	e1.3	29	26	21	10	12	2.9	3.1	3.6
25	.61	.85	3.1	e1.2	20	18	13	5.9	82	2.8	2.4	7.1
26	.66	1.1	3.1	e1.2	13	13	9.4	4.8	18	2.7	2.3	63
27	.73	3.7	e2.5	e1.2	93	12	7.8	62	7.5	2.7	4.9	12
28	.68	1.5	e2.1	e1.1	39	11	6.5	141	5.5	2.8	3.8	4.9
29	.68	1.6	e1.8	e1.1	21	8.1	5.5	56	4.8	2.8	2.5	3.5
30	.68	1.2	e1.6	e1.2	---	6.4	4.7	22	4.1	4.3	2.4	3.3
31	.67	---	e1.6	e1.3	---	5.4	---	12	---	3.2	2.3	---
TOTAL	42.35	30.78	254.57	180.4	1411.0	744.8	1280.2	914.3	779.8	1643.0	101.4	252.3
MEAN	1.37	1.03	8.21	5.82	48.7	24.0	42.7	29.5	26.0	53.0	3.27	8.41
MAX	7.1	3.7	77	61	217	284	337	233	237	618	13	63
MIN	.51	.58	.83	1.1	1.1	2.7	4.1	4.6	3.4	2.7	2.2	1.9
CFSM	.05	.04	.28	.20	1.67	.82	1.46	1.01	.89	1.82	.11	.29
IN.	.05	.04	.32	.23	1.80	.95	1.63	1.16	.99	2.09	.13	.32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2000, BY WATER YEAR (WY)

MEAN	6.66	25.8	35.3	34.7	44.3	56.1	42.5	26.5	29.7	21.2	10.2	7.17
MAX	53.4	135	157	114	124	152	112	114	148	99.4	84.3	55.0
(WY)	1991	1986	1991	1999	1990	1978	1972	1981	1981	1992	1998	1972
MIN	.50	.82	1.13	.76	3.41	9.38	4.85	2.37	1.21	1.11	.95	.61
(WY)	1998	1998	1996	1977	1978	1983	1976	1988	1988	1977	1988	1983

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1972 - 2000	
ANNUAL TOTAL	10263.49		7634.90			
ANNUAL MEAN	28.1		20.9		28.3	
HIGHEST ANNUAL MEAN					43.3	1993
LOWEST ANNUAL MEAN					9.21	1977
HIGHEST DAILY MEAN	1230	Jan 22	618	Jul 5	1580	Jun 6 1981
LOWEST DAILY MEAN	.22	Sep 16	.51	Oct 7	.19	Oct 4 1983
ANNUAL SEVEN-DAY MINIMUM	.47	Sep 14	.63	Oct 20	.32	Sep 28 1983
INSTANTANEOUS PEAK FLOW			1010	Jul 5	1940	Jun 6 1981
INSTANTANEOUS PEAK STAGE			12.63	Jul 5	16.14	Jun 6 1981
ANNUAL RUNOFF (CFSM)	.96		.71		.97	
ANNUAL RUNOFF (INCHES)	13.08		9.73		13.15	
10 PERCENT EXCEEDS	56		52		65	
50 PERCENT EXCEEDS	3.1		4.1		5.6	
90 PERCENT EXCEEDS	.72		.87		1.1	

e Estimated

03326500 MISSISSINEWA RIVER AT MARION, IN

LOCATION.--Lat 40°34'34", long 85°39'34", in SE$^1/_4$NE$^1/_4$ sec.31, T.25 N., R.8 E., Grant County, Hydrologic Unit 05120103, on left bank 12 ft downstream from Highland Avenue bridge in Marion, 0.1 mi downstream from old mill dam, 1.0 mi upstream from Hummel Creek, 4.6 mi downstream from Lugar Creek, and at mile 35.8.

DRAINAGE AREA.--682 mi^2.

PERIOD OF RECORD.--September 1923 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1927(M). WSP 1385: 1948. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 774.56 ft above sea level. Prior to Dec. 9, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow periodically regulated by dam 0.1 mile above station. 1930 water year not used in summary statistics.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 19.20 ft from information by State of Indiana, Department of Natural Resources.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	41	52	55	e42	516	240	276	621	223	127	71
2	51	40	49	56	e41	409	226	489	517	202	156	64
3	47	40	50	88	e41	334	222	720	406	319	121	58
4	60	39	53	103	e43	288	223	559	332	948	169	166
5	51	35	65	184	e45	261	221	450	414	1110	183	502
6	49	40	75	285	e47	238	211	393	430	4820	146	331
7	49	41	74	176	e50	216	210	324	338	2440	120	170
8	50	43	71	122	e53	202	2200	291	297	804	122	118
9	54	45	68	97	e60	188	4880	353	258	475	207	95
10	64	53	105	89	e70	181	2610	1300	229	359	140	166
11	74	54	112	82	e130	177	972	792	228	285	116	1130
12	58	51	107	78	e900	186	711	518	427	234	121	1690
13	47	49	95	74	1140	178	564	539	342	198	109	688
14	42	47	144	71	741	196	463	661	345	175	91	367
15	39	47	276	67	719	268	413	510	1120	152	76	240
16	40	46	183	63	644	273	370	363	666	137	68	178
17	59	47	157	62	819	261	344	319	540	124	67	143
18	53	46	125	58	944	234	376	312	1480	114	68	122
19	45	52	99	e56	2560	282	465	1140	2830	110	64	107
20	42	63	89	e54	2160	1060	420	2130	1760	111	59	108
21	41	57	82	e52	1000	3250	1590	1010	1500	108	55	135
22	40	57	e70	e50	919	1910	1800	650	1450	99	51	115
23	40	55	e66	e48	1360	989	1070	615	874	91	62	135
24	40	55	e64	e46	1030	691	692	561	576	82	82	131
25	40	55	62	e44	682	545	517	429	556	75	114	164
26	40	58	62	e42	562	439	412	333	640	73	109	312
27	40	59	62	e40	894	390	348	783	441	73	98	532
28	40	61	60	e39	1060	363	310	3130	335	77	87	345
29	41	59	57	e39	729	341	286	1790	281	77	78	231
30	41	55	56	e40	---	306	262	973	249	82	79	173
31	41	---	57	e43	---	266	---	644	---	110	81	---
TOTAL	1476	1490	2747	2403	19485	15438	23628	23357	20482	14287	3226	8787
MEAN	47.6	49.7	88.6	77.5	672	498	788	753	683	461	104	293
MAX	74	63	276	285	2560	3250	4880	3130	2830	4820	207	1690
MIN	39	35	49	39	41	177	210	276	228	73	51	58
CFSM	.07	.07	.13	.11	.99	.73	1.15	1.10	1.00	.68	.15	.43
IN.	.08	.08	.15	.13	1.06	.84	1.29	1.27	1.12	.78	.18	.48

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 2000, BY WATER YEAR (WY)

MEAN	169	405	682	907	942	1244	1135	710	644	403	204	224
MAX	1072	2626	2947	5129	2707	3181	3699	3776	4765	2831	1522	4223
(WY)	1927	1993	1991	1930	1990	1982	1964	1933	1958	1992	1998	1926
MIN	22.8	28.0	36.9	36.1	52.5	65.3	123	40.5	49.3	32.6	25.4	24.1
(WY)	1929	1929	1964	1945	1964	1941	1941	1941	1988	1936	1940	1940

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1924 - 2000	
ANNUAL TOTAL	196145		136806			
ANNUAL MEAN	537		374		630	
HIGHEST ANNUAL MEAN					1167	1927
LOWEST ANNUAL MEAN					106	1941
HIGHEST DAILY MEAN	19900	Jan 23	4880	Apr 9	23400	Jun 11 1958
LOWEST DAILY MEAN	28	Sep 28	35	Nov 5	3.4	Oct 25 1968
ANNUAL SEVEN-DAY MINIMUM	31	Sep 22	39	Oct 31	8.4	Oct 17 1940
INSTANTANEOUS PEAK FLOW			6280	Jul 6	25000	Mar 21 1927
INSTANTANEOUS PEAK STAGE			8.00	Jul 6	17.40	Mar 21 1927
ANNUAL RUNOFF (CFSM)	.79		.55		.92	
ANNUAL RUNOFF (INCHES)	10.70		7.46		12.54	
10 PERCENT EXCEEDS	1280		955		1490	
50 PERCENT EXCEEDS	110		145		200	
90 PERCENT EXCEEDS	40		45		48	

e Estimated

03327000 MISSISSINEWA RIVER AT PEORIA, IN

LOCATION.--Lat 40°43'24", long 85°57'27", in SW$^1/_4$SW$^1/_4$ sec.3, T.26 N., R.5 E., Miami County, Hydrologic Unit 05120103, on right bank at Peoria, 0.6 mi downstream from Mississinewa Lake, 6.5 mi southeast of Peru, and 6.7 mi upstream from mouth.

DRAINAGE AREA.--808 mi^2.

PERIOD OF RECORD.--October 1952 to current year.

REVISED RECORDS.--WSP 1335: 1953. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 660.00 ft above sea level. Oct. 1, 1962, to Sept. 30, 1974, water-stage recorder site described in "LOCATION" paragraph. Prior to Oct. 7, 1954, nonrecording gage and crest-stage gage on highway bridge 2,500 ft upstream, and Oct. 7, 1954, to Sept. 30, 1962, water-stage recorder on right bank at site 2,500 ft upstream at same datum.

REMARKS.--Flow regulated by Mississinewa Lake since April 1968.

COOPERATION.--Records of daily discharge provided by U.S. Army Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--48 years, 735 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,000 ft^3/s June 11, 1958, gage height 19.26 ft, site then in use; zero flow, Sept. 11 to Oct. 2, 1985, Nov 14, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 4,610 ft^3/s July 7; minimum daily, 42 ft^3/s Sept. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	802	87	84	90	58	874	232	243	768	285	377	61
2	795	68	84	90	58	476	208	243	618	212	443	61
3	788	58	84	107	58	382	174	442	432	213	236	42
4	781	58	84	136	58	290	97	653	340	698	152	66
5	774	58	84	148	58	262	58	566	340	948	192	92
6	766	58	84	209	85	232	58	396	341	2650	212	326
7	758	58	84	265	116	232	58	331	341	4610	172	292
8	766	50	84	264	89	195	516	247	341	3420	119	151
9	768	44	85	148	58	174	2450	213	288	1230	91	92
10	763	44	100	122	58	174	3160	1070	250	498	127	438
11	270	50	114	125	76	151	1630	1540	250	498	152	401
12	87	55	114	113	646	116	784	968	250	327	152	1370
13	87	55	114	113	1030	116	529	454	340	243	152	1750
14	87	69	114	81	920	140	361	529	817	243	127	875
15	70	84	259	61	748	252	303	618	1130	218	91	345
16	58	84	346	73	651	291	304	436	1310	182	79	355
17	58	84	171	90	628	291	304	340	1300	165	61	302
18	77	84	84	71	786	290	304	340	1070	152	61	384
19	87	84	136	58	1940	290	304	341	2350	152	61	437
20	70	84	172	74	2560	400	304	1340	2790	152	61	434
21	58	84	135	87	1680	2190	1200	1780	1750	110	61	381
22	58	84	113	87	1380	3230	1700	1200	1320	61	61	349
23	58	84	113	72	1200	2340	1700	619	1240	101	61	476
24	58	84	113	58	1120	780	931	619	975	121	61	420
25	58	99	113	58	1220	478	476	618	783	121	101	309
26	58	113	113	58	748	669	341	378	1770	121	121	292
27	69	100	113	58	561	541	387	346	1780	121	121	554
28	87	84	81	58	911	373	331	2710	920	78	107	634
29	69	84	61	58	1220	317	278	3180	443	61	91	437
30	58	84	61	58	---	317	243	2240	404	81	91	217
31	71	---	69	58	---	269	---	1400	---	153	80	---
TOTAL	9414	2216	3566	3148	20721	17132	19725	26400	27051	18225	4074	12343
MEAN	304	73.9	115	102	715	553	658	852	902	588	131	411
MAX	802	113	346	265	2560	3230	3160	3180	2790	4610	443	1750
MIN	58	44	61	58	58	116	58	213	250	61	61	42

CAL YR 1999 TOTAL 241307 MEAN 661 MAX 6160 MIN 25
WTR YR 2000 TOTAL 164015 MEAN 448 MAX 4610 MIN 42

03327500 WABASH RIVER AT PERU, IN

LOCATION.--Lat 40°44'35", long 86°05'45", in SE$^1/_4$NE$^1/_4$ sec.32, T.27 N., R.4 E., Miami County, Hydrologic Unit 05120101, on right bank at upstream side of bridge on U.S. Highway 31, 0.5 mi southwest of Peru, 4.4 mi downstream from Mississinewa River, and at mile 370.5.

DRAINAGE AREA.--2,686 mi^2.

PERIOD OF RECORD.--August 1943 to current year.

REVISED RECORDS.--WSP 2109: Drainage area. WDR IN-74-1: 1973. WDR IN-81-1: 1979.

GAGE.--Water-stage recorder. Datum of gage is 617.94 ft above sea level, (levels by U.S. Army Corps of Engineers). Prior to June 20, 1961, nonrecording gage at same site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by reservoirs on Wabash River (station 03323500), Salamonie River (station 03324500) and Mississinewa River (station 03327000).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 28.1 ft, discharge, 115,000 ft^3/s, from rating curve extended above 63,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1130	667	454	270	e180	2700	669	529	2650	4630	626	275
2	1360	512	461	276	e182	1830	684	557	1840	3270	899	267
3	1410	456	466	305	e186	1330	e630	828	1400	3560	816	272
4	1480	451	464	397	e194	1010	e532	1080	1150	4780	931	327
5	1490	479	484	611	e212	921	e470	1090	1040	5190	1340	310
6	1490	493	488	540	e220	753	e390	955	3800	6090	910	416
7	1410	506	471	598	e270	724	363	815	4050	6230	715	544
8	1400	560	504	608	e260	663	519	729	3360	5390	1080	362
9	1430	574	500	554	e264	634	2340	647	1700	2590	686	255
10	1400	552	496	469	276	604	4140	1810	1070	1370	577	551
11	1050	510	531	467	299	583	3490	4260	1000	1190	518	882
12	605	461	546	324	674	507	3050	3200	971	973	469	1820
13	602	454	553	324	1670	438	2390	2000	2360	712	430	2960
14	588	453	627	309	2510	496	1240	1380	6160	727	443	1840
15	544	475	839	244	2090	694	881	1350	7240	698	377	867
16	507	484	1130	248	1480	769	811	1210	6050	649	352	735
17	533	498	960	e240	1480	742	828	953	5320	646	297	644
18	544	491	714	e230	1420	705	805	907	5590	624	263	654
19	596	497	698	e240	3080	728	800	937	6700	539	240	680
20	596	510	756	e230	5640	1210	826	1920	7550	513	244	663
21	563	524	677	e220	4550	4040	2900	4010	7010	433	246	605
22	544	560	e620	e215	3880	5270	4710	2980	5930	323	243	598
23	491	506	e600	e210	3920	4420	4090	1590	5800	333	234	686
24	479	507	e580	e204	3880	2690	3120	2510	6300	377	252	786
25	452	496	e530	e198	3330	1490	2010	2130	10600	370	320	814
26	452	547	e490	e192	2570	1340	1100	1400	6960	371	341	726
27	452	579	e430	e178	3710	1320	884	1140	7010	383	327	935
28	464	573	e370	e177	4350	1160	737	5330	5440	370	450	1080
29	512	533	e320	e176	4100	1010	621	7340	5230	323	423	877
30	625	464	e270	e175	---	921	524	6720	5160	322	354	653
31	1130	---	249	e179	---	758	---	5890	---	365	318	---
TOTAL	26329	15372	17278	9608	56877	42460	46554	68197	136441	54341	15721	23084
MEAN	849	512	557	310	1961	1370	1552	2200	4548	1753	507	769
MAX	1490	667	1130	611	5640	5270	4710	7340	10600	6230	1340	2960
MIN	452	451	249	175	180	438	363	529	971	322	234	255
CFSM	.32	.19	.21	.12	.73	.51	.58	.82	1.69	.65	.19	.29
IN.	.36	.21	.24	.13	.79	.59	.64	.94	1.89	.75	.22	.32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2000, BY WATER YEAR (WY)

MEAN	1076	1705	2673	3385	3663	4681	4096	2395	2450	1594	875	815
MAX	4319	7653	8314	18500	10740	10890	14840	6882	14260	7036	7049	3936
(WY)	1973	1973	1958	1950	1959	1982	1957	1996	1958	1993	1998	1992
MIN	110	150	142	141	247	830	412	345	194	175	163	119
(WY)	1954	1954	1964	1945	1964	1983	1971	1976	1988	1944	1966	1963

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1944 - 2000	
ANNUAL TOTAL	778537		512262			
ANNUAL MEAN	2133		1400		2444	
HIGHEST ANNUAL MEAN					4425	1950
LOWEST ANNUAL MEAN					691	1954
HIGHEST DAILY MEAN	15200	Jan 23	10600	Jun 25	50900	Jun 12 1958
LOWEST DAILY MEAN	134	Sep 5	175	Jan 30	72	Oct 5 1946
ANNUAL SEVEN-DAY MINIMUM	148	Sep 3	178	Jan 27	85	Oct 29 1944
INSTANTANEOUS PEAK FLOW			12000	Jun 25	68000	May 18 1943
INSTANTANEOUS PEAK STAGE			10.70	Jun 25	24.46	May 18 1943
ANNUAL RUNOFF (CFSM)	.79		.52		.91	
ANNUAL RUNOFF (INCHES)	10.78		7.09		12.36	
10 PERCENT EXCEEDS	7830		4090		6960	
50 PERCENT EXCEEDS	677		651		1010	
90 PERCENT EXCEEDS	218		270		220	

e Estimated

03327520 PIPE CREEK NEAR BUNKER HILL, IN

LOCATION.--Lat 40°40'06", long 86°05'44", in NE$^1/_4$SE$^1/_4$ sec.29, T.26 N., R.4 E., Miami County, Hydrologic Unit 05120101, on right bank 150 ft downstream from bridge on County Road 125 West, 0.5 mi northeast of Bunker Hill, and at mile 11.4.

DRAINAGE AREA.--159 mi^2.

PERIOD OF RECORD.--May 1968 to current year. Occasional low-flow measurements, water years 1960-67.

GAGE.--Water-stage recorder. Datum of gage is 736.00 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	5.7	5.5	e7.4	e6.7	162	52	36	402	115	28	9.5
2	5.0	5.9	5.3	e10	e6.6	117	51	74	267	93	23	10
3	4.8	6.2	5.3	15	e6.5	86	50	95	181	101	25	10
4	8.2	7.0	6.0	26	e7.4	73	51	71	146	178	25	23
5	13	6.6	8.1	22	e6.7	64	43	58	142	123	21	21
6	6.2	6.0	10	16	e6.6	53	40	49	192	244	20	13
7	5.6	5.8	8.9	16	e6.5	45	38	45	148	303	19	11
8	5.7	6.0	6.4	12	e6.3	42	44	42	118	165	18	11
9	6.8	6.5	5.6	13	e6.2	40	37	63	97	118	18	11
10	7.5	7.0	6.0	12	e7.0	37	33	610	82	268	19	17
11	8.7	6.4	8.5	11	15	32	32	557	84	219	18	27
12	6.8	5.9	8.1	10	27	32	30	298	212	138	16	38
13	6.2	5.8	7.0	9.2	29	30	27	216	692	97	14	26
14	5.8	7.0	11	8.8	e22	34	27	166	595	77	13	20
15	5.4	5.7	26	8.0	e19	67	28	124	749	65	13	16
16	5.5	5.5	21	9.1	e17	70	31	99	389	55	12	14
17	8.1	6.0	20	7.4	22	56	35	89	294	47	12	12
18	25	6.3	18	e7.4	50	43	33	83	242	42	14	12
19	10	6.6	16	e6.8	242	44	30	140	213	41	13	11
20	8.7	8.0	15	e6.6	160	181	50	181	160	41	12	11
21	6.8	10	13	e6.8	104	534	100	120	191	37	12	11
22	6.2	8.3	11	e6.4	156	391	91	116	231	33	11	12
23	5.5	7.8	9.4	e6.4	185	239	72	256	166	30	15	12
24	5.8	7.7	e8.4	e6.3	134	184	59	199	183	27	16	16
25	5.8	7.5	e8.0	e6.3	103	153	50	125	1700	26	12	20
26	6.2	7.0	e7.7	e6.3	85	119	44	87	1390	24	12	22
27	6.7	7.3	e7.7	e6.3	434	114	39	294	407	23	11	25
28	6.6	6.8	e7.6	e6.6	423	103	37	1170	265	22	11	24
29	6.2	6.0	e7.5	e6.5	222	78	37	1050	196	23	11	20
30	5.9	5.7	e7.4	e6.4	---	61	33	510	149	22	10	17
31	5.5	---	e7.4	e6.8	---	55	---	319	---	22	9.8	---
TOTAL	227.4	200.0	312.8	304.8	2515.5	3339	1324	7342	10283	2819	483.8	502.5
MEAN	7.34	6.67	10.1	9.83	86.7	108	44.1	237	343	90.9	15.6	16.8
MAX	25	10	26	26	434	534	100	1170	1700	303	28	38
MIN	4.8	5.5	5.3	6.3	6.2	30	27	36	82	22	9.8	9.5
CFSM	.05	.04	.06	.06	.55	.68	.28	1.49	2.16	.57	.10	.11
IN.	.05	.05	.07	.07	.59	.78	.31	1.72	2.41	.66	.11	.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2000, BY WATER YEAR (WY)

MEAN	49.8	134	168	175	216	292	239	173	154	107	53.6	40.0
MAX	238	797	563	731	648	902	637	525	429	726	321	226
(WY)	1991	1993	1991	1974	1990	1982	1972	1996	1980	1998	1998	1972
MIN	6.66	6.67	6.57	3.70	25.1	49.7	44.1	28.5	12.4	8.17	7.63	5.16
(WY)	1989	2000	1977	1977	1978	1981	2000	1976	1988	1988	1971	1991

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1968 - 2000	
ANNUAL TOTAL	50178.0		29653.8			
ANNUAL MEAN	137		81.0		149	
HIGHEST ANNUAL MEAN					266	1993
LOWEST ANNUAL MEAN					56.6	1968
HIGHEST DAILY MEAN	4780	Jan 23	1700	Jun 25	4780	Jan 23 1999
LOWEST DAILY MEAN	2.9	Sep 27	4.8	Oct 3	2.9	Sep 27 1999
ANNUAL SEVEN-DAY MINIMUM	3.4	Sep 22	5.8	Nov 28	3.4	Sep 22 1999
INSTANTANEOUS PEAK FLOW			2790	Jun 26	5440	Jan 23 1999
INSTANTANEOUS PEAK STAGE			12.39	Jun 26	18.50	Jan 23 1999
ANNUAL RUNOFF (CFSM)	.86		.51		.94	
ANNUAL RUNOFF (INCHES)	11.74		6.94		12.75	
10 PERCENT EXCEEDS	338		203		362	
50 PERCENT EXCEEDS	25		22		54	
90 PERCENT EXCEEDS	5.6		6.2		10	

e Estimated

03328000 EEL RIVER AT NORTH MANCHESTER, IN

LOCATION.--Lat 40°59'55", long 85°45'50", in NE$^1/_4$NE$^1/_4$ sec.5, T.29 N., R.7 E., Wabash County, Hydrologic Unit 05120104, on right bank 200 ft downstream from Main Street bridge in North Manchester, 1.3 mi upstream from Pony Creek, and at mile 52.7.

DRAINAGE AREA.--417 mi^2, includes that of Pony Creek.

PERIOD OF RECORD.--October 1929 to current year. Prior to April 1930, monthly discharge only, published in WSP 1305. Gage-height records since November 20, 1923 are available from the district office.

REVISED RECORDS.--WSP 1275: 1930-37, 1939, 1940(M), 1942, 1948. WSP 1909: 1957. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 738.00 ft above sea level. Prior to July 24, 1953, nonrecording gage on downstream side of Second Street bridge, 700 ft upstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor and estimated daily discharges in July, August, and September, which are fair. Records include flow of Pony Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum instantaneous gage height occurred Dec. 30, 1990 during period of no gage height record.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	72	69	e81	e75	544	171	222	546	426	128	81
2	80	72	70	83	e76	395	167	422	409	357	140	78
3	77	75	71	91	e80	316	163	345	317	751	241	76
4	147	73	71	129	e77	269	156	271	269	1030	217	82
5	139	72	80	135	e82	238	147	233	1240	608	157	79
6	107	72	112	119	e80	212	141	204	2880	444	159	75
7	87	71	105	109	e82	192	143	184	1650	363	532	73
8	76	70	96	98	e87	181	194	171	970	299	324	72
9	75	71	84	97	e87	176	222	175	660	265	198	71
10	73	71	83	97	e92	169	198	902	474	247	152	89
11	72	71	78	99	102	159	176	796	369	234	128	94
12	69	71	75	96	124	158	162	466	365	212	113	235
13	65	71	73	93	109	158	148	330	506	193	104	251
14	68	72	106	87	107	158	142	260	1210	180	101	155
15	68	71	189	85	102	158	139	216	2250	171	96	121
16	69	71	217	85	100	155	133	192	2000	160	90	104
17	78	71	185	81	103	148	130	184	1210	151	97	93
18	74	71	147	83	120	138	148	174	875	144	110	86
19	71	73	124	e82	136	143	154	598	735	147	98	81
20	70	82	117	e80	133	463	327	756	563	140	90	77
21	68	78	e110	e80	127	894	2410	505	1040	134	85	79
22	68	75	e100	e81	321	628	2160	372	863	129	84	77
23	70	74	e97	e80	1000	426	1270	860	577	122	215	85
24	70	78	e94	e80	965	335	797	672	457	118	158	141
25	70	76	e91	e78	739	282	570	436	2380	115	104	188
26	69	76	e88	e79	550	239	435	305	1830	113	94	145
27	70	75	e86	e78	1810	226	351	269	1610	110	109	115
28	70	72	e85	e82	1480	225	297	1850	1110	111	115	100
29	69	70	e83	e80	816	220	260	2040	756	126	97	90
30	69	69	e82	e77	---	206	231	1200	547	193	89	85
31	70	---	e81	e75	---	186	---	752	---	169	83	---
TOTAL	2429	2186	3149	2780	9762	8397	12142	16362	30668	7962	4508	3178
MEAN	78.4	72.9	102	89.7	337	271	405	528	1022	257	145	106
MAX	147	82	217	135	1810	894	2410	2040	2880	1030	532	251
MIN	65	69	69	75	75	138	130	171	269	110	83	71
CFSM	.19	.17	.24	.22	.81	.65	.97	1.27	2.45	.62	.35	.25
IN.	.22	.20	.28	.25	.87	.75	1.08	1.46	2.74	.71	.40	.28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2000, BY WATER YEAR (WY)

MEAN	166	272	394	485	570	716	674	428	347	219	157	132
MAX	1165	1416	1717	2258	1772	2425	1768	2021	1376	767	1031	566
(WY)	1955	1993	1967	1950	1959	1982	1957	1943	1981	1951	1990	1992
MIN	46.2	53.4	49.4	43.2	62.0	200	141	86.1	68.1	44.2	30.7	27.6
(WY)	1947	1940	1964	1977	1964	1941	1946	1931	1934	1941	1941	1941

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1930 - 2000	
ANNUAL TOTAL	146560		103523			
ANNUAL MEAN	402		283		380	
HIGHEST ANNUAL MEAN					783	1950
LOWEST ANNUAL MEAN					103	1931
HIGHEST DAILY MEAN	5780	Jan 24	2880	Jun 6	7770	Dec 31 1990
LOWEST DAILY MEAN	51	Sep 27	65	Oct 13	16	Oct 19 1956
ANNUAL SEVEN-DAY MINIMUM	52	Sep 21	69	Oct 10	23	Sep 13 1941
INSTANTANEOUS PEAK FLOW			3260	Jun 6	8740	Dec 30 1990
INSTANTANEOUS PEAK STAGE			8.33	Jun 6	14.81	Dec 30 1990
ANNUAL RUNOFF (CFSM)	.96		.68		.91	
ANNUAL RUNOFF (INCHES)	13.07		9.24		12.39	
10 PERCENT EXCEEDS	1000		743		895	
50 PERCENT EXCEEDS	117		128		174	
90 PERCENT EXCEEDS	69		72		65	

e Estimated

03328430 WEESAU CREEK NEAR DEEDSVILLE, IN

LOCATION.--Lat 40°54'34", long 86°07'36", in NW1/4NW1/4 sec.6, T.28 N., R.4 E., Miami County, Hydrologic Unit 05120104, on left bank 100 ft downstream from bridge on County Road 1000 North, and 1.5 mi west of Deedsville.

DRAINAGE AREA.--8.87 mi^2.

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 785.00 ft above sea level.

REMARKS.--Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.26	e.92	.76	e1.1	e.75	8.8	2.1	2.6	7.9	3.7	1.5	1.0
2	.20	e1.8	.61	e1.4	e.73	6.5	2.1	6.5	3.8	3.1	1.6	1.1
3	.54	e1.6	.54	2.4	e.80	5.6	2.1	4.3	2.3	65	1.6	1.5
4	1.7	e1.2	.57	3.9	e.73	4.4	1.9	2.7	1.7	54	1.4	2.3
5	.98	e1.0	.82	3.2	e.72	3.7	1.8	2.2	17	31	1.3	1.5
6	.65	e1.0	1.0	2.7	e.70	3.4	1.8	2.1	16	49	1.6	1.0
7	.53	e.95	.69	1.9	e.69	3.4	2.0	1.9	5.1	35	2.7	.79
8	.54	e.92	.58	1.5	e.68	3.3	2.5	1.9	2.9	18	1.8	.76
9	.58	e.97	.55	1.5	e.68	3.9	2.3	2.5	1.8	11	1.7	.62
10	.57	e.97	.62	1.5	e.67	3.5	2.1	11	1.2	9.8	1.5	.96
11	.58	e.97	.50	1.6	.86	3.3	2.0	5.0	1.4	16	1.3	1.1
12	.57	e.91	.50	1.4	1.1	3.3	1.7	3.3	2.9	8.8	1.3	1.9
13	.98	e.91	.56	1.4	1.2	3.4	1.7	2.5	13	6.2	1.2	1.4
14	e.85	e.87	1.6	1.2	e.99	3.4	1.7	2.0	38	5.0	1.2	.96
15	e.72	e.82	2.0	1.1	e.90	3.3	1.6	1.7	42	4.2	1.1	.86
16	e.86	e.91	4.0	1.0	e.85	3.3	1.5	1.7	12	3.7	1.1	.82
17	e1.2	e.90	3.4	.79	1.1	3.1	1.8	1.6	4.4	3.2	1.5	.66
18	e1.1	e.89	2.9	.83	2.1	2.8	1.6	1.6	3.1	2.9	1.4	.56
19	e.79	e.87	2.2	e.78	4.9	3.5	1.7	4.7	2.0	2.9	1.2	.55
20	e.76	1.1	2.0	e.75	3.4	23	8.8	3.2	1.8	2.5	1.2	.60
21	e.73	.91	1.7	e.74	4.2	38	32	2.4	17	2.3	1.1	.72
22	e1.0	.84	e1.4	e.73	23	20	16	1.9	6.5	2.1	1.1	.64
23	e1.3	.88	e1.3	e.72	21	11	8.6	1.9	2.6	2.0	1.3	.86
24	e1.4	.82	e1.2	e.71	9.4	7.6	5.5	1.5	2.9	1.9	1.5	1.0
25	e1.2	.70	e1.2	e.70	5.4	5.8	3.8	1.2	26	1.8	1.2	1.0
26	e1.0	.73	e1.1	e.75	6.8	4.6	2.8	1.1	10	1.7	1.2	.91
27	e.90	.74	e1.1	e.70	46	4.5	2.2	1.7	36	1.6	1.2	.74
28	e.89	.74	e1.1	e.69	24	4.1	2.1	54	14	1.6	1.2	.65
29	e.88	.71	e1.2	e.68	13	3.3	2.0	30	7.2	1.8	1.1	.65
30	e.87	.73	e1.1	e.73	---	2.8	1.8	10	4.9	1.7	1.1	.64
31	e.90	---	e1.1	e.76	---	2.2	---	5.5	---	1.6	1.0	---
TOTAL	26.03	28.28	39.90	39.86	177.35	202.8	121.6	176.2	307.4	355.1	42.2	28.75
MEAN	.84	.94	1.29	1.29	6.12	6.54	4.05	5.68	10.2	11.5	1.36	.96
MAX	1.7	1.8	4.0	3.9	46	38	32	54	42	65	2.7	2.3
MIN	.20	.70	.50	.68	.67	2.2	1.5	1.1	1.2	1.6	1.0	.55
CFSM	.09	.11	.15	.14	.69	.74	.46	.64	1.16	1.29	.15	.11
IN.	.11	.12	.17	.17	.74	.85	.51	.74	1.29	1.49	.18	.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2000, BY WATER YEAR (WY)

MEAN	4.58	9.03	12.7	12.5	16.0	20.3	16.2	10.7	9.11	7.17	4.50	4.01
MAX	28.5	34.5	35.9	55.6	47.6	53.7	34.5	24.6	31.6	31.8	47.0	21.6
(WY)	1991	1993	1991	1993	1985	1982	1983	1983	1986	1998	1990	1989
MIN	.79	.94	.61	.30	2.50	3.50	3.74	3.30	1.17	.80	.66	.45
(WY)	1975	2000	1977	1977	1996	1981	1996	1977	1988	1988	1988	1988

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1971 - 2000	
ANNUAL TOTAL	3498.41		1545.47			
ANNUAL MEAN	9.58		4.22		10.5	
HIGHEST ANNUAL MEAN					19.1	1993
LOWEST ANNUAL MEAN					4.22	2000
HIGHEST DAILY MEAN	159	Jan 23	65	Jul 3	436	Aug 18 1990
LOWEST DAILY MEAN	.20	Oct 2	.20	Oct 2	.20	Oct 2 1999
ANNUAL SEVEN-DAY MINIMUM	.57	Dec 7	.57	Dec 7	.27	Jan 29 1977
INSTANTANEOUS PEAK FLOW			111	Jul 3	518	Aug 18 1990
INSTANTANEOUS PEAK STAGE			4.77	Jul 3	7.39	Apr 12 1994
ANNUAL RUNOFF (CFSM)	1.08		.48		1.19	
ANNUAL RUNOFF (INCHES)	14.67		6.48		16.14	
10 PERCENT EXCEEDS	28		9.0		25	
50 PERCENT EXCEEDS	2.1		1.6		4.3	
90 PERCENT EXCEEDS	.78		.70		1.0	

e Estimated

03328500 EEL RIVER NEAR LOGANSPORT, IN

LOCATION.--Lat 40°46'55", long 86l5'50", in NE$^1/_4$SE$^1/_4$ sec.14, T.27 N., R.2 E., Cass County, Hydrologic Unit 05120104, on right bank at downstream side of bridge on Adamsboro Road, 5.5 mi northeast of Logansport, and 7.4 mi upstream from mouth.

DRAINAGE AREA.--789 mi^2.

PERIOD OF RECORD.--July 1943 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 621.50 ft above sea level. Prior to Aug. 16, 1956, nonrecording gage at same site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 18, 1943, reached a stage of 13.2 ft, from floodmark, discharge, 17,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	255	156	158	e160	e160	1020	332	388	1050	788	326	174
2	202	167	158	e160	e170	764	317	465	827	653	269	168
3	188	166	160	187	e170	613	303	655	646	2250	269	168
4	217	164	162	212	e170	525	298	531	537	3300	401	237
5	254	164	176	245	e170	485	281	448	565	1840	351	214
6	251	163	193	242	e170	424	282	397	2940	1880	287	185
7	215	160	214	223	e170	362	263	359	2890	1630	506	173
8	191	159	210	209	e170	343	283	335	1640	984	842	166
9	178	158	200	197	e180	338	327	332	1090	748	512	166
10	174	160	188	190	e180	314	343	563	807	925	375	197
11	167	157	181	188	190	307	322	1240	663	761	304	252
12	163	157	175	187	232	302	303	880	766	608	264	350
13	160	157	169	182	210	292	277	620	1220	513	239	404
14	155	156	196	179	e200	296	272	482	2540	458	223	382
15	151	155	241	174	e190	295	268	404	3020	416	213	285
16	157	154	324	169	e190	299	251	359	2940	386	202	242
17	163	154	338	168	e180	286	257	338	2120	357	208	216
18	162	154	300	e160	234	273	255	329	1380	338	230	200
19	168	159	255	e160	300	279	266	376	1190	329	231	189
20	163	166	228	e160	351	381	297	838	962	324	209	185
21	160	166	210	e160	322	1130	1710	802	1700	308	193	183
22	158	167	208	e170	415	1210	2920	609	1910	290	187	183
23	156	166	e200	e160	962	836	2140	581	1200	277	182	216
24	157	166	e190	e160	1270	650	1330	1130	899	267	272	248
25	157	166	e180	e160	1110	549	948	782	3940	258	285	265
26	158	166	e180	e160	918	471	731	564	3940	250	214	317
27	157	166	e170	e170	1600	431	601	467	2770	246	195	274
28	159	165	e170	e170	2530	417	518	1590	2050	247	195	235
29	158	162	e170	e170	1560	396	457	3590	1390	256	213	213
30	156	159	e160	e160	---	382	410	2300	1020	320	195	200
31	157	---	e160	e160	---	352	---	1430	---	380	181	---
TOTAL	5467	4835	6224	5552	14674	15022	17562	24184	50612	22587	8773	6887
MEAN	176	161	201	179	506	485	585	780	1687	729	283	230
MAX	255	167	338	245	2530	1210	2920	3590	3940	3300	842	404
MIN	151	154	158	160	160	273	251	329	537	246	181	166
CFSM	.22	.20	.25	.23	.64	.61	.74	.99	2.14	.92	.36	.29
IN.	.26	.23	.29	.26	.69	.71	.83	1.14	2.39	1.06	.41	.32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2000, BY WATER YEAR (WY)

MEAN	350	522	813	969	1114	1367	1312	870	791	505	365	306
MAX	1806	2384	2898	4507	3090	4612	3285	1827	2208	2072	2115	1052
(WY)	1991	1993	1967	1950	1959	1982	1950	1983	1975	1998	1990	1972
MIN	95.1	110	98.2	101	184	353	366	245	176	140	128	101
(WY)	1964	1964	1964	1977	1964	1966	1966	1958	1988	1988	1966	1963

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1944 - 2000	
ANNUAL TOTAL	280056		182379			
ANNUAL MEAN	767		498		772	
HIGHEST ANNUAL MEAN					1573	1950
LOWEST ANNUAL MEAN					324	1954
HIGHEST DAILY MEAN	11800	Jan 24	3940	Jun 25	16600	Feb 24 1985
LOWEST DAILY MEAN	121	Sep 27	151	Oct 15	70	Mar 15 1960
ANNUAL SEVEN-DAY MINIMUM	123	Sep 21	155	Nov 12	76	Dec 17 1963
INSTANTANEOUS PEAK FLOW			5390	Jun 26	17700	Feb 24 1985
INSTANTANEOUS PEAK STAGE			7.88	Jun 26	12.68	Feb 24 1985
ANNUAL RUNOFF (CFSM)	.97		.63		.98	
ANNUAL RUNOFF (INCHES)	13.20		8.60		13.29	
10 PERCENT EXCEEDS	1740		1190		1750	
50 PERCENT EXCEEDS	280		256		401	
90 PERCENT EXCEEDS	156		160		154	

e Estimated

03329000 WABASH RIVER AT LOGANSPORT, IN

LOCATION.--Lat 40°44'47", long 86°22'39", in SW$^1/_4$NE$^1/_4$ sec.35, T.27 N., R.1 E., Cass County, Hydrologic Unit 05120105, on left bank, 150 ft downstream from Cicott Street bridge in Logansport, 1,000 ft downstream from Eel River, and at mile 353.7.

DRAINAGE AREA.--3,779 mi^2.

PERIOD OF RECORD.--April to September, November and December 1903, March to November 1904, March 1905 to July 1906, May 1923 to current year. January, February, and December 1904, January and February 1905 (gage heights only). Gage-height records collected at same site December 1910 to December 1916, and since January 1926 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 783: 1934. WSP 1335: 1904, 1925(M), 1926-30, 1931(M), 1932-35, 1937-39, 1948. WSP 1385: 1903, 1905-6, 1923-25. WSP 1505: 1906(M). WSP 2109: Drainage area. WDR IN-81-1: 1979.

GAGE.--Water-stage recorder. Datum of gage is 573.28 ft above sea level (levels by U.S. Army Corps of Engineers). See WSP 1705 for history of changes prior to Oct. 1, 1927.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow partially regulated by Huntington Lake, Salamonie Lake, and Mississinewa Lake.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 25.3 ft March 26, 1913, from floodmarks, discharge, 140,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1490	1010	690	496	e334	4460	1180	1060	4880	5970	847	464
2	1560	812	692	538	e338	2960	1140	1150	3520	4490	1120	423
3	1710	714	706	579	e350	2220	1110	1460	2670	5520	1210	426
4	1820	682	708	681	e365	1760	1020	1740	2150	8640	1220	609
5	1780	695	764	848	e380	1540	872	1690	2030	7760	1620	584
6	1820	724	820	974	e400	1360	794	1530	6220	7990	1420	494
7	1690	734	788	896	e415	1250	781	1340	7590	8930	1200	789
8	1640	755	799	906	e430	1170	800	1260	5800	7460	1910	592
9	1670	820	803	900	e440	1100	2060	1130	3540	4230	1410	473
10	1640	802	796	755	457	1100	4490	2050	2420	3320	1050	581
11	1520	782	796	796	521	1050	4430	6390	2060	2460	909	1270
12	894	710	820	629	576	1010	3480	5080	2300	1970	812	1760
13	843	690	829	563	1650	915	3030	3160	4130	1470	749	3630
14	834	682	947	557	2710	909	1890	2240	9630	1330	712	2700
15	785	690	1070	487	3030	1050	1320	1960	11800	1270	681	1510
16	747	714	1500	436	1990	1240	1170	1840	9970	1160	600	979
17	755	721	1500	398	1780	1210	1210	1490	8410	1100	578	940
18	751	728	1170	427	1670	1150	1180	1420	7500	1010	546	891
19	797	729	1070	389	2910	1160	1180	1480	8190	947	498	930
20	808	758	1100	428	6300	1490	1230	2340	9250	874	458	893
21	781	749	1040	e394	5490	5020	3590	5150	9390	856	442	877
22	758	816	e830	e392	4430	7530	8280	4220	8650	728	432	796
23	719	769	e815	e390	5260	6110	6810	2670	7530	653	458	886
24	699	761	e800	e388	5600	4250	5160	3830	7570	659	494	1100
25	689	739	e780	e380	4790	2460	3340	3370	17400	662	636	1080
26	688	764	e750	e370	4020	2070	2190	2430	13800	633	585	1120
27	685	797	e700	e360	5310	2020	1690	1820	11000	606	561	1050
28	667	832	e650	e346	7800	1840	1430	7310	8510	646	549	1480
29	755	795	e600	e322	6520	1640	1240	12900	7200	671	728	1140
30	717	722	e550	e322	---	1510	1110	10100	6860	685	588	981
31	1310	---	e460	e330	---	1330	---	8710	---	732	515	---
TOTAL	34022	22696	26343	16677	76266	65884	69207	104320	211970	85432	25538	31448
MEAN	1097	757	850	538	2630	2125	2307	3365	7066	2756	824	1048
MAX	1820	1010	1500	974	7800	7530	8280	12900	17400	8930	1910	3630
MIN	667	682	460	322	334	909	781	1060	2030	606	432	423
CFSM	.29	.20	.22	.14	.70	.56	.61	.89	1.87	.73	.22	.28
IN.	.33	.22	.26	.16	.75	.65	.68	1.03	2.09	.84	.25	.31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 2000, BY WATER YEAR (WY)

MEAN	1411	2205	3645	4677	5149	6482	5859	3780	3254	2079	1334	1224
MAX	6547	10940	12340	25590	15880	18180	17520	21310	16440	10720	9044	10710
(WY)	1991	1973	1968	1950	1959	1982	1957	1943	1958	1998	1998	1926
MIN	197	296	252	290	417	638	929	600	388	269	203	176
(WY)	1964	1964	1964	1945	1964	1941	1971	1941	1988	1936	1941	1941

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1924 - 2000	
ANNUAL TOTAL	1192849		769803			
ANNUAL MEAN	3268		2103		3415	
HIGHEST ANNUAL MEAN					6614	1950
LOWEST ANNUAL MEAN					796	1941
HIGHEST DAILY MEAN	29900	Jan 23	17400	Jun 25	84700	May 19 1943
LOWEST DAILY MEAN	251	Sep 10	322	Jan 29	135	Sep 26 1941
ANNUAL SEVEN-DAY MINIMUM	288	Sep 4	335	Jan 28	142	Sep 24 1941
INSTANTANEOUS PEAK FLOW			19000	Jun 25	89800	May 18 1943
INSTANTANEOUS PEAK STAGE			9.64	Jun 25	21.32	May 18 1943
ANNUAL RUNOFF (CFSM)	.86		.56		.90	
ANNUAL RUNOFF (INCHES)	11.74		7.58		12.28	
10 PERCENT EXCEEDS	12100		6010		9280	
50 PERCENT EXCEEDS	1280		1050		1450	
90 PERCENT EXCEEDS	479		492		420	

e Estimated

03329700 DEER CREEK NEAR DELPHI, IN

LOCATION.--Lat 40°35'25", long 86°37'15", in NW$^1/_4$NE$^1/_4$ sec.27, T.25 N., R.2 W., Carroll County, Hydrologic Unit 05120105, on downstream side of left wingwall of county road bridge, 3.0 mi northeast of Delphi Post Office, and 4.5 mi upstream from mouth.

DRAINAGE AREA.--274 mi^2.

PERIOD OF RECORD.--October 1943 to current year. Prior to March 1944 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 1275: 1944, 1947-48. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 553.81 ft above sea level, (U.S. Army Corps of Engineers bench mark, levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1943 reached a stage of 19.8 ft, from floodmarks, discharge, 18,000 ft^3/s from rating curve extended above 8,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	23	26	e26	e27	123	50	42	342	237	43	15
2	19	30	26	e26	e27	99	48	52	264	194	38	15
3	19	25	27	e34	e27	85	47	53	171	175	39	14
4	31	24	27	45	e26	74	49	54	129	203	35	28
5	25	29	31	41	e26	68	46	49	118	212	33	28
6	23	28	37	37	e26	63	46	44	111	193	33	27
7	21	26	32	37	e26	61	45	41	98	159	31	23
8	20	24	32	36	e26	58	45	39	83	139	29	21
9	20	24	30	34	e26	53	44	46	73	117	30	19
10	21	25	31	32	e27	50	43	82	69	128	30	25
11	21	25	30	32	e27	49	42	203	88	213	28	38
12	21	24	30	29	e27	51	41	139	182	172	27	45
13	21	26	29	29	e27	51	39	103	507	129	25	45
14	21	26	40	27	e27	50	38	82	1470	107	24	36
15	20	26	39	27	e27	51	37	69	1150	96	23	30
16	20	28	41	27	e27	51	37	60	716	85	22	27
17	24	25	38	27	e30	51	38	57	392	77	22	24
18	23	25	35	e27	e50	48	39	60	289	70	23	21
19	24	27	32	e27	96	53	39	68	255	71	21	20
20	24	29	31	e27	99	65	42	85	220	67	21	19
21	24	28	e30	e27	80	79	44	72	263	64	20	19
22	25	27	e30	e27	79	119	71	61	289	56	18	19
23	23	27	e29	e27	88	103	66	55	258	51	19	20
24	22	29	e29	e27	96	87	55	98	309	47	21	22
25	23	27	e29	e27	84	76	47	88	2690	44	21	25
26	22	27	e28	e27	77	70	43	64	2610	41	21	28
27	22	27	e28	e27	136	71	40	81	1080	39	21	25
28	24	27	e27	e27	246	70	37	624	608	42	19	23
29	24	27	e27	e27	169	67	37	749	415	39	18	23
30	23	26	e27	e27	---	60	35	398	305	42	17	24
31	23	---	e26	e27	---	53	---	264	---	51	16	---
TOTAL	698	791	954	924	1756	2109	1330	3982	15554	3360	788	748
MEAN	22.5	26.4	30.8	29.8	60.6	68.0	44.3	128	518	108	25.4	24.9
MAX	31	30	41	45	246	123	71	749	2690	237	43	45
MIN	19	23	26	26	26	48	35	39	69	39	16	14
CFSM	.08	.10	.11	.11	.22	.25	.16	.47	1.89	.40	.09	.09
IN.	.09	.11	.13	.13	.24	.29	.18	.54	2.11	.46	.11	.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2000, BY WATER YEAR (WY)

MEAN	92.9	162	246	318	365	445	422	299	273	182	99.6	79.3
MAX	575	1249	983	1882	1039	1311	1109	793	1799	1080	537	568
(WY)	1991	1993	1991	1950	1959	1982	1959	1983	1958	1998	1958	1989
MIN	15.0	22.7	22.2	17.6	36.1	46.8	44.3	62.2	30.7	22.5	12.5	10.6
(WY)	1965	1954	1945	1977	1954	1954	2000	1976	1977	1944	1966	1954

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1944 - 2000	
ANNUAL TOTAL	75315		32994			
ANNUAL MEAN	206		90.1		248	
HIGHEST ANNUAL MEAN					510	1950
LOWEST ANNUAL MEAN					62.7	1966
HIGHEST DAILY MEAN	5730	Jan 23	2690	Jun 25	12600	Jun 10 1958
LOWEST DAILY MEAN	15	Sep 16	14	Sep 3	6.2	Sep 25 1954
ANNUAL SEVEN-DAY MINIMUM	16	Sep 14	16	Aug 28	6.3	Sep 22 1954
INSTANTANEOUS PEAK FLOW			3270	Jun 26	14400	Jun 10 1958
INSTANTANEOUS PEAK STAGE			7.84	Jun 26	18.26	Jun 10 1958
ANNUAL RUNOFF (CFSM)	.75		.33		.90	
ANNUAL RUNOFF (INCHES)	10.23		4.48		12.29	
10 PERCENT EXCEEDS	472		170		555	
50 PERCENT EXCEEDS	51		35		103	
90 PERCENT EXCEEDS	21		22		27	

e Estimated

03330241 TIPPECANOE RIVER AT NORTH WEBSTER, IN

LOCATION.--Lat 41°18'58", long 85°41'32", in SE$^1/_4$NE$^1/_4$ sec.15, T.33 N., R.7 E., Kosciusko County, Hydrologic Unit 05120106, on right upstream corner of State Road 13 bridge, at the intersection of State Road 13 and County Road 550 North, and 0.4 mi southeast of North Webster.

DRAINAGE AREA.--49.3 mi^2.

PERIOD OF RECORD.--May 1986 to current year.

GAGE.--Water-stage recorder. Datum of gage is 840.00 ft above sea level.

REMARKS.--Records fair except those for Oct. 4 to Mar. 5 and estimated daily discharges, which are poor. Flow regulated by dams at Webster Lake, 0.25 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.7	13	11	16	9.4	52	14	e33	64	89	15	7.1
2	e1.6	12	12	15	10	56	14	e32	61	47	16	8.2
3	e1.9	10	12	16	10	49	13	e26	58	40	22	8.7
4	4.3	9.0	12	16	9.5	44	12	e16	31	75	20	7.9
5	6.3	7.5	12	15	9.8	29	8.9	e16	27	70	20	6.2
6	6.4	6.6	11	15	7.6	e20	4.0	e17	62	68	26	4.6
7	7.8	6.3	11	15	5.6	e16	5.1	e18	56	65	61	6.4
8	9.2	7.5	12	15	6.2	e13	6.6	e18	40	40	13	10
9	9.9	9.2	16	15	6.1	e12	6.6	e22	7.8	18	8.5	15
10	9.7	8.8	16	16	5.7	e11	7.3	e45	12	26	6.9	20
11	7.6	9.1	16	16	4.7	e8.0	7.2	e25	22	39	8.0	46
12	3.9	10	15	14	4.7	e6.2	7.3	14	23	36	8.5	126
13	4.9	10	15	14	4.7	e3.5	7.7	20	47	28	8.8	31
14	10	9.4	17	14	4.5	2.0	8.3	31	84	8.4	8.5	38
15	17	4.7	19	14	4.6	1.8	9.1	29	73	3.7	8.3	40
16	17	1.5	19	14	3.8	2.0	9.6	28	38	5.8	8.9	41
17	16	1.2	18	14	3.0	1.9	10	27	60	9.2	9.3	40
18	15	1.6	18	14	3.3	1.9	11	26	77	11	9.4	38
19	15	4.3	18	13	3.4	2.3	12	27	90	13	9.5	48
20	e14	5.8	18	12	3.4	3.8	32	26	114	14	8.2	30
21	e14	6.5	17	12	3.3	7.4	80	27	174	15	6.6	5.4
22	e13	8.3	17	12	2.8	11	78	18	122	16	6.7	6.3
23	e14	12	16	13	2.4	11	79	27	83	16	8.0	9.7
24	e14	12	16	13	2.6	12	80	34	84	16	7.3	13
25	e13	11	16	13	2.4	11	79	31	102	16	8.6	24
26	e13	11	16	12	2.4	12	77	30	113	16	9.0	46
27	e13	11	16	12	4.0	12	e70	54	116	17	40	32
28	e13	11	17	11	8.6	12	e60	67	116	16	78	9.5
29	13	9.9	17	10	27	12	e45	30	113	16	146	13
30	12	10	16	9.7	---	14	e35	16	108	16	117	18
31	12	---	15	9.4	---	15	---	33	---	15	30	---
TOTAL	323.2	250.2	477	420.1	175.5	464.8	888.7	863	2177.8	881.1	753.0	749.0
MEAN	10.4	8.34	15.4	13.6	6.05	15.0	29.6	27.8	72.6	28.4	24.3	25.0
MAX	17	13	19	16	27	56	80	67	174	89	146	126
MIN	1.6	1.2	11	9.4	2.4	1.8	4.0	14	7.8	3.7	6.6	4.6
CFSM	.21	.17	.31	.27	.12	.30	.60	.56	1.47	.58	.49	.51
IN.	.24	.19	.36	.32	.13	.35	.67	.65	1.64	.66	.57	.57

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2000, BY WATER YEAR (WY)

MEAN	32.3	41.2	45.8	77.2	55.8	66.4	77.4	49.9	51.9	25.4	21.8	18.0
MAX	142	133	98.8	209	119	137	129	112	138	72.0	80.1	87.7
(WY)	1991	1993	1987	1993	1990	1997	1999	1996	1996	1996	1990	1990
MIN	2.68	6.61	12.3	13.6	6.05	15.0	29.6	15.4	3.08	4.36	2.00	1.67
(WY)	1995	1995	1996	2000	2000	2000	2000	1988	1988	1988	1988	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1987 - 2000	
ANNUAL TOTAL	15734.46		8423.4			
ANNUAL MEAN	43.1		23.0		46.9	
HIGHEST ANNUAL MEAN					70.5	1991
LOWEST ANNUAL MEAN					23.0	2000
HIGHEST DAILY MEAN	301	Jan 28	174	Jun 21	420	Jan 8 1993
LOWEST DAILY MEAN	.90	Sep 27	1.2	Nov 17	.06	Aug 18 1988
ANNUAL SEVEN-DAY MINIMUM	.95	Sep 22	2.2	Mar 13	.36	Aug 14 1988
INSTANTANEOUS PEAK FLOW			183	Jun 21	430	Jan 10 1993
INSTANTANEOUS PEAK STAGE			4.93	Jun 21	6.49	Jan 2 1991
ANNUAL RUNOFF (CFSM)	.87		.47		.95	
ANNUAL RUNOFF (INCHES)	11.87		6.36		12.92	
10 PERCENT EXCEEDS	130		60		113	
50 PERCENT EXCEEDS	16		14		29	
90 PERCENT EXCEEDS	2.4		4.7		4.9	

e Estimated

03330500 TIPPECANOE RIVER AT OSWEGO, IN

LOCATION.--Lat 41°19'14", long 85°47'21", in NE$^1/_4$NE$^1/_4$ sec.14, T.33 N., R.6 E., Kosciusko County, Hydrologic Unit 05120106, on left bank 50 ft downstream from dam at Tippecanoe Lake Outlet in Oswego, 3 mi east of Leesburg, and at mile 158.9.

DRAINAGE AREA.--113 mi^2.

PERIOD OF RECORD.--October 1949 to current year.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 830.00 ft above sea level. Prior to Aug. 12, 1953, nonrecording gage at same site and datum.

REMARKS.--Records good. Regulation by gates at lake outlet.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	104	34	35	38	93	15	97	137	235	16	103
2	5.4	131	33	35	38	122	15	96	140	222	17	41
3	6.0	125	32	36	38	131	16	69	142	211	21	22
4	7.8	113	33	37	37	139	16	45	141	205	21	22
5	7.7	102	34	37	37	144	9.4	46	139	199	21	20
6	8.1	89	35	37	36	139	3.7	49	138	200	38	18
7	8.2	76	35	37	36	132	3.6	51	138	194	58	17
8	8.1	58	35	37	36	123	4.6	51	137	168	57	17
9	8.9	38	36	38	35	116	5.2	66	106	130	54	17
10	9.1	37	36	37	33	111	6.0	129	52	133	50	21
11	9.4	20	36	37	30	103	7.1	66	54	131	25	29
12	40	12	36	38	30	93	8.0	43	59	127	16	135
13	25	5.9	36	38	30	82	8.1	44	102	90	16	187
14	7.7	3.7	39	38	30	72	8.2	45	187	21	16	176
15	13	4.0	40	38	30	63	9.3	47	183	34	15	167
16	8.4	4.5	62	37	30	57	11	50	178	39	15	127
17	9.1	5.0	99	37	30	50	12	52	176	38	16	98
18	15	5.2	92	44	31	46	13	81	179	37	17	66
19	9.6	5.8	84	50	34	43	27	114	182	30	17	55
20	9.8	6.8	77	50	36	45	88	125	188	14	16	57
21	10	7.5	73	48	35	44	181	106	227	14	16	54
22	10	8.0	68	47	35	45	183	85	242	14	15	51
23	10	19	63	46	35	47	188	86	238	14	16	50
24	11	37	60	45	37	48	194	89	233	14	17	51
25	11	37	55	44	39	49	195	88	238	14	17	50
26	11	37	52	43	43	51	194	87	241	14	19	51
27	11	36	50	42	54	51	191	89	249	14	24	53
28	11	35	48	41	64	53	182	123	249	14	28	52
29	12	35	43	39	74	47	142	140	246	14	92	51
30	12	35	35	39	---	16	99	135	243	16	118	34
31	45	---	35	39	---	14	---	133	---	16	115	---
TOTAL	375.9	1232.4	1526	1246	1091	2369	2035.2	2527	5164	2616	999	1892
MEAN	12.1	41.1	49.2	40.2	37.6	76.4	67.8	81.5	172	84.4	32.2	63.1
MAX	45	131	99	50	74	144	195	140	249	235	118	187
MIN	5.4	3.7	32	35	30	14	3.6	43	52	14	15	17
CFSM	.11	.36	.44	.36	.33	.68	.60	.72	1.52	.75	.29	.56
IN.	.12	.41	.50	.41	.36	.78	.67	.83	1.70	.86	.33	.62

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2000, BY WATER YEAR (WY)

MEAN	58.0	74.8	108	131	140	184	192	131	104	65.3	45.9	43.7
MAX	369	230	298	443	373	498	493	340	363	198	188	237
(WY)	1955	1993	1967	1950	1950	1982	1950	1956	1981	1968	1990	1958
MIN	4.73	7.25	16.0	7.51	11.0	44.0	58.6	30.8	18.6	11.4	1.13	.40
(WY)	1954	1954	1963	1963	1963	1964	1966	1958	1988	1988	1967	1967

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1950 - 2000	
ANNUAL TOTAL	35412.8		23073.5			
ANNUAL MEAN	97.0		63.0		106	
HIGHEST ANNUAL MEAN					196	1950
LOWEST ANNUAL MEAN					30.8	1964
HIGHEST DAILY MEAN	486	Apr 28	249	Jun 27	944	Mar 21 1982
LOWEST DAILY MEAN	3.0	Sep 26	3.6	Apr 7	.08	Aug 4 1967
ANNUAL SEVEN-DAY MINIMUM	3.2	Sep 22	4.9	Nov 13	.28	Aug 22 1967
INSTANTANEOUS PEAK FLOW			251	Jun 27	950	Mar 21 1982
INSTANTANEOUS PEAK STAGE			6.92	Jun 27	9.25	Mar 21 1982
ANNUAL RUNOFF (CFSM)	.86		.56		.94	
ANNUAL RUNOFF (INCHES)	11.66		7.60		12.77	
10 PERCENT EXCEEDS	274		151		239	
50 PERCENT EXCEEDS	43		39		76	
90 PERCENT EXCEEDS	7.2		9.7		15	

03331110 WALNUT CREEK NEAR WARSAW, IN

LOCATION.--Lat 41°12'17", long 85°52'11", in NW1/4NE1/4 sec.30, T.32 N., R.6 E., Kosciusko County, Hydrologic Unit 05120106, on left bank 10 ft upstream from bridge on County Road 200 South, 0.3 mi downstream from small right-bank tributary, and 2.5 mi south of court house in Warsaw.

DRAINAGE AREA.--19.6 mi^2.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 823.00 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow occasionally regulated by lakes upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.4	4.7	1.9	e1.5	20	4.9	11	29	16	9.1	2.9
2	1.1	2.0	2.1	2.0	1.6	16	3.9	14	23	13	8.7	2.8
3	1.6	2.0	1.5	2.4	2.0	12	3.3	13	19	16	10	2.7
4	1.9	1.9	1.3	3.0	1.6	11	3.7	12	16	18	11	2.9
5	1.9	2.0	2.0	4.5	1.2	9.1	3.9	10	23	16	9.1	2.6
6	1.7	2.1	2.1	5.2	1.3	7.3	3.6	9.4	40	13	8.7	2.4
7	1.5	2.1	4.2	4.5	1.1	4.8	3.7	8.5	37	11	12	2.3
8	1.4	2.0	12	4.4	.97	5.2	6.1	8.5	30	9.7	15	2.4
9	1.3	2.0	4.1	3.4	.96	13	10	9.5	23	8.3	13	2.4
10	1.3	2.2	3.2	3.7	.95	7.8	20	15	19	7.4	11	4.1
11	1.3	2.3	4.9	3.7	1.1	3.8	9.6	16	15	7.1	8.4	6.8
12	1.2	2.2	4.0	3.3	3.3	2.8	7.0	15	15	6.6	6.6	22
13	1.2	2.1	1.8	3.2	1.5	2.8	5.0	17	24	6.1	5.8	24
14	1.2	2.0	4.4	4.1	1.7	2.9	3.8	14	46	5.1	5.1	18
15	1.2	2.0	12	5.9	1.8	3.1	3.0	11	67	4.2	4.6	13
16	1.2	1.9	10	3.3	1.9	4.0	2.6	9.6	63	3.5	4.4	8.9
17	1.4	1.9	8.6	e3.1	5.9	3.9	2.8	9.1	50	2.8	4.9	7.0
18	1.4	2.0	7.1	e2.9	2.3	3.4	3.5	9.2	40	2.7	4.7	4.6
19	1.4	2.2	5.9	e2.7	2.4	3.8	3.2	27	31	3.1	4.5	3.3
20	1.3	2.2	e5.0	e2.5	2.6	6.2	18	26	26	3.0	4.3	3.1
21	1.2	2.2	e4.5	e2.3	3.5	14	66	20	63	2.6	3.7	2.8
22	1.3	2.0	e4.2	e2.1	6.2	25	58	16	53	2.7	3.3	2.5
23	1.4	2.1	e3.7	e2.0	23	14	44	17	35	2.7	4.8	3.1
24	8.6	2.2	e3.4	e1.9	23	11	36	16	28	2.4	6.1	3.6
25	15	2.0	e3.2	e1.8	22	8.9	25	13	38	2.4	5.7	3.6
26	7.1	1.9	e3.0	e1.7	21	5.2	20	11	41	2.2	4.7	3.1
27	2.5	1.9	2.8	e1.7	33	4.5	17	11	50	2.0	5.3	2.6
28	1.4	2.1	2.6	e1.6	34	4.7	14	35	37	1.7	4.6	2.3
29	1.3	8.1	2.4	e1.5	26	5.9	12	53	26	1.8	3.8	2.1
30	1.3	18	2.2	e1.5	---	5.7	11	43	19	5.2	3.4	1.9
31	1.3	---	1.9	e1.5	---	5.9	---	35	---	11	3.3	---
TOTAL	70.0	83.0	134.8	89.3	229.38	247.7	424.6	534.8	1026	209.3	209.6	165.8
MEAN	2.26	2.77	4.35	2.88	7.91	7.99	14.2	17.3	34.2	6.75	6.76	5.53
MAX	15	18	12	5.9	34	25	66	53	67	18	15	24
MIN	1.1	1.4	1.3	1.5	.95	2.8	2.6	8.5	15	1.7	3.3	1.9
CFSM	.12	.14	.22	.15	.40	.41	.72	.88	1.74	.34	.34	.28
IN.	.13	.16	.26	.17	.44	.47	.81	1.02	1.95	.40	.40	.31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2000, BY WATER YEAR (WY)

MEAN	7.86	14.3	20.1	19.9	23.5	33.7	34.6	21.2	19.6	10.6	6.89	6.83
MAX	54.6	44.9	48.3	77.7	60.6	110	66.5	60.8	80.3	49.3	53.7	27.0
(WY)	1991	1993	1991	1993	1985	1982	1981	1981	1981	1997	1990	1980
MIN	1.04	2.18	1.43	.91	2.87	7.99	14.2	6.35	2.34	1.73	1.07	.80
(WY)	1977	1979	1977	1977	1979	2000	2000	1988	1988	1988	1971	1976

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1970 - 2000	
ANNUAL TOTAL	5167.98		3424.28			
ANNUAL MEAN	14.2		9.36		18.2	
HIGHEST ANNUAL MEAN					31.9	1997
LOWEST ANNUAL MEAN					9.36	2000
HIGHEST DAILY MEAN	197	Apr 23	67	Jun 15	389	Jun 14 1981
LOWEST DAILY MEAN	.71	Sep 27	.95	Feb 10	.40	Oct 15 1988
ANNUAL SEVEN-DAY MINIMUM	.79	Sep 21	1.1	Feb 5	.46	Sep 12 1983
INSTANTANEOUS PEAK FLOW			69	Apr 21	561	Jun 13 1981
INSTANTANEOUS PEAK STAGE			2.53	Apr 21	5.38	Jun 13 1981
ANNUAL RUNOFF (CFSM)	.72		.48		.93	
ANNUAL RUNOFF (INCHES)	9.81		6.50		12.62	
10 PERCENT EXCEEDS	39		24		42	
50 PERCENT EXCEEDS	5.0		4.2		11	
90 PERCENT EXCEEDS	1.3		1.5		1.9	

e Estimated

03331500 TIPPECANOE RIVER NEAR ORA, IN

LOCATION.--Lat 41°09'26", long 86°33'49", in SE$^1/_4$SE$^1/_4$ sec.6, T.31 N., R.1 W., Pulaski County, Hydrologic Unit 05120106, on right bank at downstream side of bridge on County Road 700 East, 1.0 mi upstream from Bartee Ditch, 1.3 mi southwest of Ora, and at mile 78.5.

DRAINAGE AREA.--856 mi^2.

PERIOD OF RECORD.--September 1943 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1944(M). WSP 1505: 1949-50(P). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 692.91 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to July 30, 1956, nonrecording gage on upstream side of old highway bridge, 120 ft downstream. July 30, 1956, to Dec. 20, 1964, water-stage recorder on right bank at downstream side of old highway bridge, and Dec. 21, 1964, to Aug. 19, 1965, nonrecording gage on right bank 500 ft downstream. All gages at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	231	198	231	e290	e325	940	460	789	1210	1170	340	342
2	237	213	231	e310	e315	858	436	822	1160	1080	357	353
3	223	233	239	e320	e320	784	412	809	1070	1040	386	346
4	243	270	246	340	e320	722	394	749	961	1210	401	375
5	254	338	281	360	e315	674	382	697	920	1220	400	373
6	264	359	352	362	e310	637	369	646	1280	1130	404	318
7	263	343	394	349	e300	604	366	591	1470	1260	472	297
8	246	315	399	333	e295	579	415	555	1300	1330	537	282
9	240	314	370	329	e295	569	432	533	1150	1150	491	269
10	230	314	346	333	e290	554	440	612	1040	1040	468	280
11	223	293	329	334	e295	533	429	719	949	1060	437	308
12	217	271	318	333	e295	519	415	709	893	953	407	358
13	210	254	308	330	e290	499	404	762	853	833	376	489
14	205	245	322	318	e285	483	386	883	1010	747	346	593
15	207	231	393	311	e290	472	373	812	1390	684	312	646
16	219	220	471	306	e300	469	364	738	1600	624	294	666
17	218	214	500	297	299	461	369	667	1470	547	298	637
18	209	210	482	296	307	447	369	618	1320	495	324	573
19	209	211	445	e360	327	444	362	719	1240	478	316	516
20	206	214	431	e370	331	482	451	1030	1190	463	318	456
21	203	213	402	e365	331	587	1060	959	1340	438	303	415
22	204	220	e380	e360	357	672	1400	897	1590	413	288	383
23	205	226	e360	e360	545	647	1310	873	1520	388	286	376
24	204	227	e350	e355	706	612	1230	856	1340	366	331	396
25	204	223	e330	e350	734	596	1190	778	1360	349	381	410
26	202	228	e320	e350	724	555	1150	690	1520	338	389	435
27	202	244	e310	e345	862	532	1090	649	1560	329	362	433
28	204	241	e300	e340	1110	521	1010	757	1580	321	366	411
29	209	238	e300	e335	1040	511	918	1340	1420	320	415	384
30	205	235	e310	e335	---	497	838	1410	1270	334	394	367
31	200	---	e300	e330	---	480	---	1290	---	352	352	---
TOTAL	6796	7555	10750	10406	12513	17940	19224	24959	37976	22462	11551	12487
MEAN	219	252	347	336	431	579	641	805	1266	725	373	416
MAX	264	359	500	370	1110	940	1400	1410	1600	1330	537	666
MIN	200	198	231	290	285	444	362	533	853	320	286	269
CFSM	.26	.29	.41	.39	.50	.68	.75	.94	1.48	.85	.44	.49
IN.	.30	.33	.47	.45	.54	.78	.84	1.08	1.65	.98	.50	.54

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2000, BY WATER YEAR (WY)

MEAN	460	598	802	1010	1167	1464	1561	1139	927	622	440	367
MAX	2112	1933	2478	3552	3020	4239	4116	2869	3468	1943	2699	1224
(WY)	1991	1973	1967	1950	1959	1982	1950	1981	1981	1996	1990	1958
MIN	134	155	177	183	192	451	525	337	243	180	155	107
(WY)	1954	1954	1964	1963	1963	1957	1958	1958	1988	1988	1988	1966

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1944 - 2000	
ANNUAL TOTAL	319111		194619			
ANNUAL MEAN	874		532		878	
HIGHEST ANNUAL MEAN					1580	1950
LOWEST ANNUAL MEAN					354	1964
HIGHEST DAILY MEAN	5200	Apr 25	1600	Jun 16	8450	Jun 15 1981
LOWEST DAILY MEAN	143	Sep 27	198	Nov 1	87	Sep 13 1966
ANNUAL SEVEN-DAY MINIMUM	146	Sep 21	203	Oct 26	93	Sep 8 1966
INSTANTANEOUS PEAK FLOW			1640	Jun 22	8660	Jun 15 1981
INSTANTANEOUS PEAK STAGE			9.34	Jun 22	15.22	Aug 20 1990
ANNUAL RUNOFF (CFSM)	1.02		.62		1.03	
ANNUAL RUNOFF (INCHES)	13.87		8.46		13.93	
10 PERCENT EXCEEDS	2170		1140		1850	
50 PERCENT EXCEEDS	371		382		610	
90 PERCENT EXCEEDS	203		231		216	

e Estimated

03333050 TIPPECANOE RIVER NEAR DELPHI, IN

LOCATION.--Lat 40°35'38", long 86°46'12", in SW¼SW¼ sec.21, T.25 N., R.3 W., Carroll County, Hydrologic Unit 05120106, on left bank 20 ft upstream from bridge on State Highway 18, 1,400 ft east of Springboro, 5 mi west of Delphi, 8.1 mi downstream from Big Creek, and at mile 8.7.

DRAINAGE AREA.--1,869 mi^2.

PERIOD OF RECORD.--March to December 1903, March to December 1904, March 1905 to July 1906, November and December 1908, July 1939 to September 1987, October 1987 to current year. Published as "at Springboro" 1903-08. Published as "03333000 Tippecanoe River near Delphi:" July 1939 to September 1987.

REVISED RECORDS.--WSP 973: 1942. WSP 1335: 1905-6. WSP 2109: Drainage area. WDR IN-92-1: 1988-1991 (above 5900 ft^3/s). WDR-IN-94-1: 1991 (maximum discharge).

GAGE.--Water-stage recorder. Datum of gage is 535.00 ft above sea level. Mar. 14, 1903, to July 20, 1906, and Nov. 2 to Dec. 31, 1908, nonrecording gage at present site at different datum. July 1939 to Sept. 30, 1987, at site 6.4 mi upstream at datum 17.01 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by upstream reservoirs.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	462	338	464	512	e540	1880	805	1310	2000	1700	489	406
2	401	685	395	556	e503	1760	729	1510	1630	1350	839	714
3	444	370	522	981	e480	1320	966	1310	1730	3110	728	419
4	631	383	395	600	e530	1390	848	1540	1390	3370	613	603
5	562	462	833	577	e400	1210	605	1320	1400	2500	773	466
6	421	557	428	575	e380	1150	871	1150	1850	2500	870	558
7	487	562	581	575	e430	1090	891	1050	1460	2240	602	554
8	436	503	601	654	599	900	633	872	1940	1780	1030	452
9	509	488	688	556	363	1130	1090	1350	1860	2030	913	271
10	468	525	716	607	538	1030	796	1300	1300	2520	738	429
11	398	585	584	607	543	1160	844	1490	1650	3250	600	556
12	398	435	581	694	544	656	859	1230	1070	2550	706	708
13	563	461	477	575	547	1130	769	1460	2210	2060	570	687
14	286	554	540	567	664	826	766	1030	3280	1700	544	509
15	378	446	734	470	701	813	797	1380	4620	1360	719	886
16	383	386	782	599	525	958	902	996	3920	1400	365	668
17	469	416	606	362	528	989	899	1250	2760	1230	375	812
18	398	355	1060	558	877	931	585	1030	2400	754	562	943
19	369	465	553	420	718	628	777	966	2080	1220	556	619
20	451	404	730	e330	902	1160	1140	1220	1740	634	476	702
21	420	435	550	e340	795	1090	3080	1400	3110	913	395	726
22	412	420	473	e430	886	1360	2640	1280	3550	867	399	347
23	318	399	473	e410	1130	1230	2610	1270	2940	511	400	711
24	422	568	300	e500	1350	1080	2100	1310	2440	713	736	514
25	324	367	418	e505	1420	1250	1960	927	2960	704	443	563
26	410	437	559	e520	1350	1050	1690	1060	2710	692	400	553
27	369	413	495	e530	2190	1080	1680	1040	2550	437	703	556
28	381	391	710	e530	2200	960	1360	1170	2090	529	401	556
29	515	427	565	e520	1990	1000	1370	1980	2090	798	613	561
30	345	361	500	e530	---	929	1420	1850	2020	1080	647	556
31	435	---	711	e540	---	886	---	2000	---	919	407	---
TOTAL	13265	13598	18024	16730	24623	34026	36482	40051	68750	47421	18612	17605
MEAN	428	453	581	540	849	1098	1216	1292	2292	1530	600	587
MAX	631	685	1060	981	2200	1880	3080	2000	4620	3370	1030	943
MIN	286	338	300	330	363	628	585	872	1070	437	365	271
CFSM	.23	.24	.31	.29	.45	.59	.65	.69	1.23	.82	.32	.31
IN.	.26	.27	.36	.33	.49	.68	.73	.80	1.37	.94	.37	.35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2000, BY WATER YEAR (WY)

MEAN	1182	1576	1899	2737	2372	3032	3110	2386	2318	1760	1222	1067
MAX	4185	4120	3819	6854	4774	5184	4958	3726	4324	3901	4849	3092
(WY)	1991	1993	1991	1993	1997	1998	1994	1998	1997	1998	1990	1993
MIN	369	453	572	540	762	811	1216	983	493	360	308	325
(WY)	1996	2000	1996	2000	1996	1996	2000	1988	1988	1988	1988	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1988 - 2000	
ANNUAL TOTAL	608800		349187			
ANNUAL MEAN	1668		954		2053	
HIGHEST ANNUAL MEAN					3046	1993
LOWEST ANNUAL MEAN					954	2000
HIGHEST DAILY MEAN	10400	Jan 24	4620	Jun 15	18400	Dec 30 1990
LOWEST DAILY MEAN	229	Sep 23	271	Sep 9	131	Aug 5 1988
ANNUAL SEVEN-DAY MINIMUM	264	Sep 21	377	Oct 22	255	Aug 2 1988
INSTANTANEOUS PEAK FLOW			5210	Jul 3	20600	Apr 12 1994
INSTANTANEOUS PEAK STAGE			5.91	Jul 3	13.72	Apr 12 1994
ANNUAL RUNOFF (CFSM)	.89		.51		1.10	
ANNUAL RUNOFF (INCHES)	12.12		6.95		14.93	
10 PERCENT EXCEEDS	4180		1980		4270	
50 PERCENT EXCEEDS	731		702		1500	
90 PERCENT EXCEEDS	364		400		465	

e Estimated

03333450 WILDCAT CREEK NEAR JEROME, IN

LOCATION.--Lat 40°26'29", long 85°55'08", in NE$^1/_4$SE$^1/_4$ sec.14, T.23 N., R.5 E., Howard County, Hydrologic Unit 05120107, on right bank at downstream side of bridge on County Road 1100 East, 0.5 mi downstream from Mud Creek, 1.5 mi southeast of Jerome, and at mile 79.9.

DRAINAGE AREA.--146 mi^2.

PERIOD OF RECORD.--July 1961 to current year.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 820.04 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of about 18 ft, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	e1.3	1.1	1.8	e1.2	41	17	15	129	48	14	5.6
2	1.9	1.3	.98	2.3	e1.1	28	17	50	101	42	12	5.5
3	1.9	1.6	.98	4.7	e1.1	21	18	55	80	51	12	5.7
4	2.6	1.7	1.2	10	e1.2	18	18	40	68	59	11	14
5	2.9	1.7	2.0	8.9	e1.1	16	16	31	81	46	9.4	18
6	2.8	1.7	2.5	5.4	e1.1	13	15	26	87	65	11	13
7	2.7	1.8	2.5	4.3	e1.2	12	16	23	63	83	9.8	9.5
8	2.7	1.8	1.9	3.0	e1.3	11	19	22	54	48	8.8	7.8
9	4.3	1.7	1.6	3.1	e1.7	11	16	25	47	36	9.3	8.1
10	8.5	1.7	3.2	3.9	2.8	9.8	14	375	42	65	9.3	15
11	5.0	1.7	2.8	3.9	4.1	9.6	15	272	57	102	8.1	23
12	3.5	1.5	2.7	2.9	4.3	10	14	153	519	77	7.5	27
13	1.6	1.7	2.4	2.6	5.3	11	15	138	336	54	7.0	25
14	1.1	1.8	5.0	2.0	5.6	12	14	123	200	40	6.8	18
15	1.2	1.3	6.6	2.0	5.3	19	14	86	276	32	6.4	15
16	1.8	1.2	5.9	1.8	5.3	20	14	68	171	27	6.1	12
17	4.5	1.3	3.6	1.4	5.3	18	16	61	199	23	6.2	10
18	9.8	1.3	3.1	e1.4	13	14	17	61	205	20	7.1	9.3
19	e6.6	1.4	2.6	e1.3	31	16	17	294	182	22	6.7	8.6
20	e5.0	1.6	2.7	e1.3	26	79	18	213	130	20	6.1	7.0
21	e4.0	1.6	2.4	e1.2	17	162	22	128	277	17	5.6	13
22	e3.2	1.5	1.8	e1.2	22	99	22	96	355	15	5.6	21
23	e2.8	1.5	1.5	e1.2	41	66	21	80	192	13	19	30
24	e2.7	1.5	1.5	e1.1	38	51	20	65	136	12	14	74
25	e2.2	1.2	1.5	e1.1	32	43	18	47	270	11	10	75
26	e2.0	1.7	1.4	e1.1	22	34	16	38	185	11	8.2	124
27	e1.8	1.8	e1.4	e1.0	126	34	15	227	118	10	7.4	97
28	e1.7	1.5	e1.3	e1.0	118	33	15	730	87	9.9	6.8	63
29	e1.6	1.4	e1.2	e1.0	60	26	14	478	71	9.4	6.3	45
30	e1.5	1.2	e1.2	e1.1	---	20	13	270	60	11	5.8	33
31	e1.4	---	e1.3	e1.2	---	18	---	178	---	17	5.7	---
TOTAL	97.5	46.0	71.86	80.2	595.0	975.4	496	4468	4778	1096.3	269.0	832.1
MEAN	3.15	1.53	2.32	2.59	20.5	31.5	16.5	144	159	35.4	8.68	27.7
MAX	9.8	1.8	6.6	10	126	162	22	730	519	102	19	124
MIN	1.1	1.2	.98	1.0	1.1	9.6	13	15	42	9.4	5.6	5.5
CFSM	.02	.01	.02	.02	.14	.22	.11	.99	1.09	.24	.06	.19
IN.	.02	.01	.02	.02	.15	.25	.13	1.14	1.22	.28	.07	.21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2000, BY WATER YEAR (WY)

MEAN	40.3	113	157	161	199	279	223	153	141	99.7	43.0	43.5
MAX	252	834	622	687	649	793	689	460	720	692	401	589
(WY)	1970	1993	1991	1974	1976	1982	1964	1996	1998	1992	1998	1989
MIN	1.72	1.53	2.32	1.02	11.2	31.5	16.5	17.9	8.20	7.00	2.86	.88
(WY)	1967	2000	2000	1977	1963	2000	2000	1976	1988	1994	1999	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1962 - 2000	
ANNUAL TOTAL	47930.34		13805.36			
ANNUAL MEAN	131		37.7		137	
HIGHEST ANNUAL MEAN					253	1993
LOWEST ANNUAL MEAN					37.7	2000
HIGHEST DAILY MEAN	5790	Jan 23	730	May 28	6300	Jun 12 1998
LOWEST DAILY MEAN	.47	Sep 27	.98	Dec 2	.47	Sep 27 1999
ANNUAL SEVEN-DAY MINIMUM	.52	Sep 22	1.1	Jan 24	.52	Sep 22 1999
INSTANTANEOUS PEAK FLOW			794	May 28	7120	Jul 14 1992
INSTANTANEOUS PEAK STAGE			5.31	May 28	13.71	Dec 30 1990
ANNUAL RUNOFF (CFSM)	.90		.26		.94	
ANNUAL RUNOFF (INCHES)	12.21		3.52		12.78	
10 PERCENT EXCEEDS	344		100		335	
50 PERCENT EXCEEDS	15		11		45	
90 PERCENT EXCEEDS	1.2		1.3		4.7	

e Estimated

03333600 KOKOMO CREEK NEAR KOKOMO, IN

LOCATION.--Lat 40°26'28", long 86°05'20", in NW1/4SW1/4 sec.16, T.23 N., R.4 E., Howard County, Hydrologic Unit 05120107, on left bank at upstream side of bridge on County Road 200 East, 2.6 mi southeast of intersection of U.S. Highways 31 and 35 in Kokomo, and 4.2 mi upstream from mouth.

DRAINAGE AREA.--24.7 mi^2.

PERIOD OF RECORD.--July 1959 to current year.

REVISED RECORDS.--WSP 2109: Drainage area. WDR IN-72-1: 1970-71(P).

GAGE.--Water-stage recorder. Datum of gage is 807.68 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.58	.58	.46	.74	e.55	5.8	2.2	2.3	30	9.6	1.4	1.0
2	.53	.63	.51	.79	e.54	4.1	2.3	4.5	23	8.3	1.6	.97
3	.60	.56	.52	1.5	e.54	3.1	2.3	5.2	18	15	1.7	.98
4	.75	.55	.52	1.6	e.55	2.7	2.3	3.9	16	17	1.4	4.0
5	.78	.54	.79	.91	e.56	2.3	2.1	3.1	18	14	1.3	1.6
6	.55	.57	.92	.76	e.58	2.0	2.0	2.7	20	10	1.8	1.3
7	.36	.55	.48	.69	e.62	1.7	2.2	2.4	15	7.9	1.5	1.3
8	.34	.58	.43	.62	e.65	1.9	2.8	2.3	13	6.3	1.4	1.1
9	.38	.58	.42	.63	e.74	2.3	2.5	5.4	12	5.7	1.7	1.0
10	.53	.59	.95	.65	e.90	2.5	2.3	26	10	8.5	1.5	1.7
11	.78	.57	.58	.62	1.6	2.4	2.2	12	18	11	1.3	1.5
12	1.2	.48	.52	.58	1.3	2.7	2.0	6.7	79	7.9	1.2	1.8
13	.51	.52	.72	.58	1.2	3.0	2.0	5.8	42	6.0	1.2	1.3
14	.46	.57	2.3	.56	1.3	3.4	1.8	5.3	61	5.0	1.2	1.1
15	.46	.52	1.3	.57	1.1	3.8	1.8	3.8	94	4.5	1.1	1.0
16	.55	.54	1.2	.58	1.1	4.0	1.6	3.1	44	4.0	1.0	.91
17	1.1	.54	.95	.58	.98	3.6	2.7	2.9	33	3.4	1.2	.83
18	1.1	.52	.87	.58	3.7	3.0	2.0	3.4	32	3.0	1.6	.79
19	.95	.56	.87	.59	3.5	4.2	1.9	47	29	3.7	1.2	.70
20	1.3	.61	.87	.65	2.3	10	2.0	28	22	3.2	1.1	.73
21	.77	.52	.78	.61	1.6	13	2.4	13	36	2.7	1.0	.93
22	.51	.48	.76	.60	2.1	9.0	2.3	8.9	55	2.4	1.1	.75
23	.42	.53	e.74	e.60	2.6	6.7	2.1	6.6	31	2.1	2.1	1.3
24	.44	.62	e.70	e.59	3.3	5.7	1.8	4.9	42	2.0	1.8	1.6
25	.50	.50	e.68	e.58	2.4	5.2	1.7	3.3	118	1.8	1.4	1.6
26	.55	.59	e.66	e.58	2.4	4.2	1.5	2.6	47	1.7	1.4	1.7
27	.55	.57	e.64	e.57	18	4.7	1.5	41	27	1.6	1.4	1.2
28	.52	.49	e.62	e.56	14	4.6	1.4	256	18	1.5	1.2	1.2
29	.53	.46	e.62	e.55	7.9	3.6	1.4	127	15	1.4	1.2	.98
30	.58	.46	e.64	e.55	---	2.8	1.4	66	12	1.6	1.1	.84
31	.55	---	e.70	e.56	---	2.5	---	41	---	1.6	1.0	---
TOTAL	19.73	16.38	23.72	21.13	78.61	130.5	60.5	746.1	1030	174.4	42.1	37.71
MEAN	.64	.55	.77	.68	2.71	4.21	2.02	24.1	34.3	5.63	1.36	1.26
MAX	1.3	.63	2.3	1.6	18	13	2.8	256	118	17	2.1	4.0
MIN	.34	.46	.42	.55	.54	1.7	1.4	2.3	10	1.4	1.0	.70
CFSM	.03	.02	.03	.03	.11	.17	.08	.97	1.39	.23	.05	.05
IN.	.03	.02	.04	.03	.12	.20	.09	1.12	1.55	.26	.06	.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2000, BY WATER YEAR (WY)

MEAN	9.06	19.5	24.8	25.5	33.5	48.0	40.3	25.6	19.9	14.8	7.44	6.32
MAX	68.1	144	102	114	129	150	117	87.2	99.7	90.2	58.5	66.7
(WY)	1970	1993	1991	1974	1990	1982	1964	1996	1980	1992	1998	1989
MIN	.55	.55	.44	.33	1.98	4.21	2.02	2.52	1.20	1.07	.50	.16
(WY)	1965	2000	1977	1977	1964	2000	2000	1976	1988	1988	1988	1991

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1960 - 2000	
ANNUAL TOTAL	7514.28		2380.88			
ANNUAL MEAN	20.6		6.51		22.8	
HIGHEST ANNUAL MEAN					45.2	1993
LOWEST ANNUAL MEAN					6.51	2000
HIGHEST DAILY MEAN	715	Jan 23	256	May 28	757	Dec 30 1990
LOWEST DAILY MEAN	.13	Sep 20	.34	Oct 8	.07	Sep 18 1988
ANNUAL SEVEN-DAY MINIMUM	.16	Sep 15	.49	Nov 28	.11	Jul 25 1975
INSTANTANEOUS PEAK FLOW			326	May 28	1040	Apr 20 1964
INSTANTANEOUS PEAK STAGE			5.42	May 28	9.88	Apr 20 1964
ANNUAL RUNOFF (CFSM)	.83		.26		.92	
ANNUAL RUNOFF (INCHES)	11.32		3.59		12.56	
10 PERCENT EXCEEDS	49		15		54	
50 PERCENT EXCEEDS	2.9		1.4		7.4	
90 PERCENT EXCEEDS	.45		.54		.85	

e Estimated

03333700 WILDCAT CREEK AT KOKOMO, IN

LOCATION.--Lat 40°28'15", long 86°09'11", in SW$^1/_4$NE$^1/_4$ sec.2, T.23 N., R.3 E., Howard County, Hydrologic Unit 05120107, on right bank on property of Kokomo Sewage Treatment Plant in Kokomo, 250 ft downstream from Kokomo Creek, 1.0 mi upstream from Dixon Road bridge, and at mile 62.9.

DRAINAGE AREA.--242 mi^2.

PERIOD OF RECORD.--October 1955 to current year.

REVISED RECORDS.--WSP 2109: Drainage area. WDR-IN-83: 1980, 1981(P), 1982. WDR-IN-88: 1986(P), 1987 (M).

GAGE.--Water-stage recorder. Datum of gage is 775.62 ft above sea level (levels by State of Indiana, Department of Natural Resources). Prior to May 9, 1986, recording gage at site 0.4 mi downstream at present datum.

REMARKS.--Records poor. Some regulation by Kokomo Reservoirs Nos. 1 and 2, (combined capacity 4,170 acre-ft, used for municipal water supply) and by Kokomo Sewage Treatment Plant.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	15	13	16	16	117	43	87	273	102	21	18
2	9.7	19	13	19	15	97	39	60	200	87	23	18
3	32	17	13	89	18	78	37	76	155	189	25	20
4	31	15	14	35	18	71	34	96	127	181	20	156
5	12	14	53	18	15	57	34	88	177	172	21	31
6	11	14	33	14	13	50	32	70	166	108	22	24
7	11	14	15	13	16	44	43	53	129	133	23	24
8	15	17	13	11	16	30	58	46	101	99	21	23
9	21	15	13	12	20	27	39	249	91	74	29	23
10	16	18	54	16	44	25	35	470	83	181	21	61
11	12	16	15	12	45	27	54	577	178	143	21	40
12	11	16	14	12	26	45	30	300	650	123	19	48
13	12	16	13	12	27	38	27	228	761	91	20	29
14	12	15	89	11	26	35	26	189	564	71	19	25
15	13	15	22	10	19	31	25	148	699	59	20	25
16	12	16	18	9.7	18	30	25	111	420	48	20	23
17	52	13	15	9.3	17	28	48	107	309	41	30	24
18	15	14	12	10	148	27	33	133	370	38	23	25
19	13	23	12	11	78	68	27	424	314	56	18	24
20	13	17	14	9.1	41	77	43	481	235	38	16	34
21	14	17	13	10	34	61	41	270	344	33	20	30
22	12	18	24	9.7	33	47	34	207	656	31	18	27
23	12	16	32	10	33	50	35	156	396	29	67	56
24	11	24	24	11	42	113	43	121	717	26	34	44
25	13	12	19	9.3	31	108	46	96	1350	25	22	65
26	12	16	19	10	79	101	30	74	636	23	20	41
27	13	15	20	9.8	155	114	25	542	346	22	19	31
28	13	13	21	9.9	132	108	24	1730	215	22	20	40
29	12	15	20	13	178	95	24	1210	159	21	17	60
30	14	13	20	24	---	79	24	667	129	23	18	53
31	14	---	19	18	---	55	---	404	---	21	18	---
TOTAL	474.7	478	689	483.8	1353	1933	1058	9470	10950	2310	705	1142
MEAN	15.3	15.9	22.2	15.6	46.7	62.4	35.3	305	365	74.5	22.7	38.1
MAX	52	24	89	89	178	117	58	1730	1350	189	67	156
MIN	9.7	12	12	9.1	13	25	24	46	83	21	16	18
CFSM	.06	.07	.09	.06	.19	.26	.15	1.26	1.51	.31	.09	.16
IN.	.07	.07	.11	.07	.21	.30	.16	1.46	1.68	.36	.11	.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2000, BY WATER YEAR (WY)

MEAN	82.4	194	255	263	335	441	416	271	259	183	94.6	82.7
MAX	469	1387	968	1375	1097	1376	1117	835	1432	1018	602	879
(WY)	1970	1993	1991	1974	1990	1982	1957	1996	1958	1998	1998	1989
MIN	11.2	15.5	13.8	15.6	25.8	62.4	35.3	53.6	28.2	28.6	22.7	12.8
(WY)	1957	1957	1964	2000	1964	2000	2000	1988	1988	1988	2000	1956

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1956 - 2000	
ANNUAL TOTAL	86198.7		31046.5			
ANNUAL MEAN	236		84.8		239	
HIGHEST ANNUAL MEAN					444	1993
LOWEST ANNUAL MEAN					84.8	2000
HIGHEST DAILY MEAN	7660	Jan 23	1730	May 28	7660	Jan 23 1999
LOWEST DAILY MEAN	9.7	Oct 2	9.1	Jan 20	7.2	Sep 30 1956
ANNUAL SEVEN-DAY MINIMUM	11	Sep 20	9.8	Jan 16	8.3	Dec 28 1963
INSTANTANEOUS PEAK FLOW			2460	Jun 24	8100	Feb 10 1959
INSTANTANEOUS PEAK STAGE			8.33	Jun 24	16.95	Dec 30 1990
ANNUAL RUNOFF (CFSM)	.98		.35		.99	
ANNUAL RUNOFF (INCHES)	13.25		4.77		13.42	
10 PERCENT EXCEEDS	606		181		568	
50 PERCENT EXCEEDS	54		26		86	
90 PERCENT EXCEEDS	13		12		24	

03334000 WILDCAT CREEK AT OWASCO, IN

LOCATION.--Lat 40°27'50", long 86°38'15", in SE$^1/_4$SE$^1/_4$ sec.4, T.23 N., R.2 W., Carroll County, Hydrologic Unit 05120107, on left bank 200 ft downstream from bridge on State Highway 39, 0.5 mi northwest of Owasco, and 15 mi upstream from South Fork Wildcat Creek.

DRAINAGE AREA.--396 mi^2.

PERIOD OF RECORD.--October 1943 to September 1973. Annual maximum, water years 1975-81. October 1988 to current year. Prior to March 1944 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 1625: 1958. WSP 2109: Drainage area. WDR 94-1: 1988-1993 (Peak of record).

GAGE.--Water-stage recorder. Datum of gage is 624.63 ft above sea level. Prior to Oct. 1, 1950, nonrecording gage at site 500 ft upstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Some regulation at low stages for municipal water supply by Kokomo Water Company since 1955.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 18, 1943, reached a stage of 14.00 ft, from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	33	38	39	e33	194	86	54	434	289	49	29
2	44	35	40	40	e39	147	78	75	341	236	46	29
3	38	33	39	43	e44	120	73	110	273	273	45	29
4	40	34	40	71	e37	108	72	85	222	400	49	50
5	73	37	43	89	e33	98	69	98	196	364	54	160
6	53	36	50	58	e32	90	67	95	240	297	48	74
7	40	35	79	47	e31	84	67	85	214	217	45	53
8	36	34	51	43	e30	81	66	74	178	224	43	43
9	35	34	41	41	e30	76	79	75	150	184	44	40
10	40	33	41	40	e31	67	75	281	137	181	42	46
11	53	35	57	39	e39	64	68	515	126	282	48	73
12	43	35	57	41	e58	66	74	450	258	225	44	81
13	35	37	44	38	e70	69	71	348	687	197	43	87
14	33	36	47	36	e60	79	62	283	651	166	37	63
15	31	37	84	35	e53	77	61	236	703	140	35	52
16	31	37	68	34	58	73	59	196	612	121	34	46
17	38	35	53	33	47	69	59	164	438	103	35	42
18	62	35	45	31	65	66	62	156	403	95	34	37
19	60	38	40	29	165	68	70	226	408	89	42	36
20	40	41	38	e29	131	86	65	503	364	100	46	38
21	37	45	35	e28	90	115	66	430	348	92	32	38
22	35	47	33	e28	78	103	82	311	521	82	31	50
23	35	43	32	e28	76	92	71	259	599	72	30	53
24	34	45	39	e27	77	86	67	209	525	67	60	64
25	33	48	42	e27	78	106	67	169	2420	63	80	86
26	34	52	42	e27	77	118	68	139	1890	60	59	92
27	30	43	41	e26	117	111	64	267	895	56	45	102
28	32	42	39	e26	230	123	57	1010	590	52	41	69
29	33	42	39	e27	174	118	53	1520	438	51	35	56
30	35	39	40	e26	---	106	51	934	357	50	33	78
31	32	---	40	e27	---	97	---	574	---	50	32	---
TOTAL	1265	1156	1417	1153	2083	2957	2029	9931	15618	4878	1341	1796
MEAN	40.8	38.5	45.7	37.2	71.8	95.4	67.6	320	521	157	43.3	59.9
MAX	73	52	84	89	230	194	86	1520	2420	400	80	160
MIN	30	33	32	26	30	64	51	54	126	50	30	29
CFSM	.10	.10	.12	.09	.18	.24	.17	.81	1.31	.40	.11	.15
IN.	.12	.11	.13	.11	.20	.28	.19	.93	1.47	.46	.13	.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2000, BY WATER YEAR (WY)

MEAN	144	262	328	545	506	629	681	452	409	306	144	134
MAX	670	2024	1325	3083	1725	1301	1857	1108	2536	1589	707	1339
(WY)	1970	1993	1958	1950	1959	1997	1957	1996	1958	1992	1958	1989
MIN	20.0	30.3	25.9	24.6	50.0	95.4	67.6	120	84.8	41.5	37.1	20.6
(WY)	1945	1945	1945	1945	1963	2000	2000	1954	1949	1954	1954	1954

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1945 - 2000	
ANNUAL TOTAL	118790		45624			
ANNUAL MEAN	325		125		378	
HIGHEST ANNUAL MEAN					733	1950
LOWEST ANNUAL MEAN					104	1954
HIGHEST DAILY MEAN	8740	Jan 24	2420	Jun 25	9850	Jan 5 1950
LOWEST DAILY MEAN	20	Sep 24	26	Jan 27	12	Oct 23 1944
ANNUAL SEVEN-DAY MINIMUM	21	Sep 21	27	Jan 24	15	Sep 23 1954
INSTANTANEOUS PEAK FLOW			3060	Jun 25	10800	Jan 4 1980
INSTANTANEOUS PEAK STAGE			6.57	Jun 25	13.30	Jan 5 1950
ANNUAL RUNOFF (CFSM)	.82		.31		.95	
ANNUAL RUNOFF (INCHES)	11.16		4.29		12.95	
10 PERCENT EXCEEDS	764		281		890	
50 PERCENT EXCEEDS	89		58		161	
90 PERCENT EXCEEDS	33		33		40	

e Estimated

03334500 SOUTH FORK WILDCAT CREEK NEAR LAFAYETTE, IN

LOCATION.--Lat 40°25'04", long 86°46'05", in SW$^1/_4$SW$^1/_4$ sec.21, T.23 N., R.3 W., Tippecanoe County, Hydrologic Unit 05120107, on right bank 40 ft upstream from bridge on State Highway 26, 0.5 mi upstream from Middle Fork, 4.4 mi upstream from mouth, and 5 mi east of Lafayette.

DRAINAGE AREA.--243 mi^2.

PERIOD OF RECORD.--October 1943 to current year. Prior to March 1944 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1948(M). WSP 1505: 1947. WSP 1725: 1951-53(M), 1955(M). WSP 1909: 1955(P). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 566.60 ft above sea level (Indiana Department of Highways bench mark). Prior to July 29, 1954, nonrecording gage at site 40 ft downstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. At times peaks affected by backwater from Middle Fork.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1943 reached a stage of 16.8 ft, from floodmarks, discharge, 17,900 ft^3/s by contracted-opening measurement.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	27	26	e25	e26	102	50	39	187	214	37	21
2	27	26	26	e26	e26	85	49	55	149	175	37	20
3	26	27	26	e28	e26	75	48	61	124	213	56	19
4	29	26	27	45	e26	67	49	57	106	310	46	19
5	32	26	30	44	e26	62	49	54	101	261	38	24
6	28	26	33	36	e26	57	48	51	100	193	35	22
7	26	26	35	33	e25	54	47	47	83	152	34	20
8	26	26	30	31	e25	52	49	46	72	126	32	19
9	29	26	29	30	e25	51	49	51	65	108	33	19
10	34	27	31	30	e26	49	46	204	62	121	35	22
11	35	28	35	29	e30	49	49	423	59	129	32	26
12	29	27	34	29	e29	52	52	258	125	109	29	29
13	26	27	30	29	e28	50	47	209	210	94	28	25
14	26	27	35	28	e27	51	46	194	194	86	27	24
15	25	27	40	27	e27	53	45	147	356	82	26	21
16	26	26	38	27	e26	53	44	119	251	73	25	20
17	30	27	36	26	e26	52	45	117	229	65	24	19
18	48	27	33	26	e40	50	46	130	302	61	31	18
19	36	28	32	26	100	52	45	705	235	61	41	17
20	30	29	31	e26	75	72	45	751	180	62	28	17
21	28	29	29	e26	63	88	49	442	434	56	25	17
22	27	28	e28	e26	60	83	53	302	739	52	23	20
23	26	28	e27	e26	59	78	47	234	449	48	24	20
24	26	30	e27	e26	59	73	44	186	491	45	29	20
25	26	30	e26	e26	61	69	42	146	3600	44	27	27
26	27	30	e26	e26	59	64	41	119	1200	42	26	34
27	28	27	e25	e26	112	62	40	274	705	41	27	34
28	27	26	e25	e26	148	63	39	660	485	39	29	26
29	28	26	e25	e26	128	61	38	509	367	38	24	23
30	27	26	e25	e26	---	57	37	334	280	49	23	22
31	27	---	e25	e26	---	54	---	241	---	42	22	---
TOTAL	899	816	925	887	1414	1940	1378	7165	11940	3191	953	664
MEAN	29.0	27.2	29.8	28.6	48.8	62.6	45.9	231	398	103	30.7	22.1
MAX	48	30	40	45	148	102	53	751	3600	310	56	34
MIN	25	26	25	25	25	49	37	39	59	38	22	17
CFSM	.12	.11	.12	.12	.20	.26	.19	.95	1.64	.42	.13	.09
IN.	.14	.12	.14	.14	.22	.30	.21	1.10	1.83	.49	.15	.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2000, BY WATER YEAR (WY)

MEAN	94.7	174	238	298	333	414	402	304	288	170	98.8	96.3
MAX	426	1304	954	1808	929	1143	1172	881	1674	954	510	849
(WY)	1970	1993	1991	1950	1985	1982	1964	1983	1958	1992	1958	1989
MIN	22.9	27.2	23.5	19.5	37.5	62.6	45.9	67.6	40.6	26.2	18.3	18.0
(WY)	1964	2000	1964	1977	1963	2000	2000	1976	1977	1977	1944	1944

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1944 - 2000	
ANNUAL TOTAL	68666		32172			
ANNUAL MEAN	188		87.9		242	
HIGHEST ANNUAL MEAN					473	1950
LOWEST ANNUAL MEAN					79.2	1954
HIGHEST DAILY MEAN	7150	Jan 23	3600	Jun 25	11000	May 2 1983
LOWEST DAILY MEAN	18	Sep 27	17	Sep 19	15	Sep 19 1944
ANNUAL SEVEN-DAY MINIMUM	19	Sep 22	18	Sep 16	16	Sep 17 1944
INSTANTANEOUS PEAK FLOW			5170	Jun 25	15100	May 2 1983
INSTANTANEOUS PEAK STAGE			10.83	Jun 25	15.68	May 2 1983
ANNUAL RUNOFF (CFSM)	.77		.36		.99	
ANNUAL RUNOFF (INCHES)	10.51		4.93		13.51	
10 PERCENT EXCEEDS	426		193		527	
50 PERCENT EXCEEDS	58		35		109	
90 PERCENT EXCEEDS	26		25		33	

e Estimated

03335000 WILDCAT CREEK NEAR LAFAYETTE, IN

LOCATION.--Lat 40°26'26", long 86°49'45", in SW$^1/_4$NW$^1/_4$ sec.13, T.23 N., R.4 W., Tippecanoe County, Hydrologic Unit 05120107, on right bank about 200 ft downstream of bridge on County Road 2A East, 2.8 mi downstream from South Fork Wildcat Creek, 3.7 mi northeast of courthouse in Lafayette, and 4.8 mi upstream from mouth.

DRAINAGE AREA.--794 mi^2.

PERIOD OF RECORD.--May 1954 to current year.

REVISED RECORDS.--WSP 1555: 1955, 1957(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 527.66 ft above sea level (Indiana Flood Control and Water Resources Commission bench mark). Nonrecording gage prior to June 13, 1957, and August 31, 1974, to May 20, 1976, at present site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1913 reached a stage of about 25.4 ft, from profile by State of Indiana, Department of Natural Resources.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	155	87	88	95	e80	334	175	129	777	637	148	99
2	110	97	89	94	e90	292	167	147	596	519	139	95
3	103	87	90	108	e100	243	160	195	478	574	152	94
4	108	84	89	120	e87	223	155	179	400	794	145	116
5	105	85	99	162	e80	205	153	178	370	735	139	166
6	126	86	106	130	e77	193	149	178	379	599	137	160
7	103	86	117	113	e76	182	146	169	366	451	128	128
8	95	86	121	102	e75	174	148	160	325	403	121	112
9	97	85	103	99	e76	170	150	170	286	365	125	105
10	101	85	104	96	e78	157	156	284	265	403	124	114
11	106	86	100	94	e91	152	152	940	255	457	123	121
12	110	87	121	93	115	157	149	803	296	391	120	163
13	96	88	107	94	146	154	154	608	896	360	116	145
14	90	87	118	89	128	161	141	539	1120	325	114	147
15	89	86	116	87	115	166	135	414	1210	296	108	125
16	90	90	157	87	126	164	134	355	1100	261	105	114
17	104	88	119	84	105	158	136	333	796	239	105	111
18	115	87	110	83	157	153	135	331	776	219	115	103
19	128	90	101	80	217	162	143	892	731	214	125	96
20	109	95	97	e80	293	188	145	1290	615	207	120	96
21	96	95	90	e78	204	228	146	1000	816	211	112	100
22	92	99	91	e76	183	227	160	670	1280	187	102	100
23	87	98	97	e74	172	212	155	521	1190	178	101	117
24	90	99	95	e74	172	199	144	442	1180	168	107	121
25	86	96	103	e74	172	193	138	357	7090	157	141	152
26	85	102	113	e72	180	212	137	302	4060	152	140	163
27	87	98	106	e70	240	208	138	591	2180	149	130	180
28	84	91	110	e70	403	209	130	1640	1490	146	120	150
29	86	92	107	e68	357	213	124	2130	1100	217	110	130
30	86	90	103	e66	---	203	118	1550	827	226	104	122
31	89	---	99	e68	---	188	---	1070	---	168	100	---
TOTAL	3108	2712	3266	2780	4395	6080	4373	18567	33250	10408	3776	3745
MEAN	100	90.4	105	89.7	152	196	146	599	1108	336	122	125
MAX	155	102	157	162	403	334	175	2130	7090	794	152	180
MIN	84	84	88	66	75	152	118	129	255	146	100	94
CFSM	.13	.11	.13	.11	.19	.25	.18	.75	1.40	.42	.15	.16
IN.	.15	.13	.15	.13	.21	.28	.20	.87	1.56	.49	.18	.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2000, BY WATER YEAR (WY)

MEAN	296	578	801	833	1055	1390	1288	938	890	607	342	293
MAX	1298	3963	2474	3711	3227	3991	3657	2614	5210	2968	1511	2546
(WY)	1970	1993	1991	1974	1976	1982	1964	1983	1958	1992	1958	1989
MIN	67.9	85.6	67.0	61.6	104	196	146	231	130	84.4	79.8	68.8
(WY)	1964	1964	1964	1977	1963	2000	2000	1976	1988	1977	1966	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1955 - 2000	
ANNUAL TOTAL	234549		96460			
ANNUAL MEAN	643		264		774	
HIGHEST ANNUAL MEAN					1460	1993
LOWEST ANNUAL MEAN					264	2000
HIGHEST DAILY MEAN	14700	Jan 23	7090	Jun 25	22100	Jun 10 1958
LOWEST DAILY MEAN	58	Sep 26	66	Jan 30	47	Sep 6 1964
ANNUAL SEVEN-DAY MINIMUM	60	Sep 22	70	Jan 25	51	Dec 20 1963
INSTANTANEOUS PEAK FLOW			9190	Jun 25	25000	Jun 10 1958
INSTANTANEOUS PEAK STAGE			13.93	Jun 25	21.52	Jun 10 1958
ANNUAL RUNOFF (CFSM)	.81		.33		.97	
ANNUAL RUNOFF (INCHES)	10.99		4.52		13.25	
10 PERCENT EXCEEDS	1530		579		1750	
50 PERCENT EXCEEDS	186		130		357	
90 PERCENT EXCEEDS	85		87		110	

e Estimated

03335500 WABASH RIVER AT LAFAYETTE, IN

LOCATION.--Lat 40°25'19", long 86°53'49", in NE$^1/_4$SW$^1/_4$ sec.20, T.23 N., R.4 W., Tippecanoe County, Hydrologic Unit 05120108, on right bank 20 ft downstream from Brown St. in Lafayette, 0.2 mi upstream from Main St. bridge, 0.3 mi downstream from Harrison Memorial Bridge, 5.1 mi downstream from Wildcat Creek, and at mile 311.9.

DRAINAGE AREA.--7,267 mi^2.

PERIOD OF RECORD.--February 1901 to January 1902, March to December 1902, January to May 1903 (gage height only), October 1923 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at present site since October 1913 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1335: 1929, 1932-33, 1936. WSP 1505: 1950. WSP 1555: 1928(M). WSP 2109: Drainage area. WDR IN-81-1: 1979.

GAGE.--Water-stage recorder. Datum of gage is 504.14 ft above sea level. Prior to May 2, 1903, nonrecording gage 0.5 mi upstream at different datum. Oct. 7, 1923, to Nov. 20, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow partially regulated by upstream reservoirs and power development.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 32.9 ft, from floodmark determined by National Weather Service, discharge, 190,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2270	1880	1370	e1440	e860	7870	2790	2950	10000	9280	2130	1260
2	2170	1880	1260	e1200	e830	6170	2780	3360	7210	8070	2070	1250
3	2280	1470	1320	e1500	e880	4680	2620	3450	5670	7280	2420	1460
4	2640	1270	1420	1810	e920	4220	2410	3650	4610	12000	2430	1470
5	2680	1330	1420	1570	e980	3740	2410	3690	4220	12400	2580	1430
6	2530	1310	1820	1700	e1050	3430	2270	3620	4500	10500	2800	1580
7	2400	1530	1560	1790	e1030	3190	2070	3350	9350	11900	2410	1460
8	2340	1390	1680	1720	e1100	2990	2330	3010	8750	10600	2650	1640
9	2360	1480	1770	1760	e1150	2940	2230	3350	6950	8690	3030	1300
10	2430	1500	1660	1640	e1200	2800	3990	3610	4890	6930	2710	1210
11	2300	1530	1640	1670	e1260	2710	5760	6030	4220	7560	2170	1570
12	2090	1400	1630	1610	e1380	2540	4940	8120	3990	6170	2110	2650
13	1460	1390	1580	1490	e1460	2670	4640	6690	5350	4880	1640	3100
14	1570	1380	1670	1360	e2460	2440	4120	5010	12300	4270	1860	4250
15	1290	1290	1910	1300	e3500	2390	3150	4390	18400	3790	1560	3400
16	1440	1270	2250	1240	e3300	2680	2500	4080	18100	3410	1730	2540
17	1470	1330	2390	1180	e2740	2810	2590	3780	14100	2900	1280	2340
18	1310	1250	2490	e980	3000	2450	2520	3540	11200	2940	1510	2030
19	1470	1360	2260	e940	3300	2620	2660	3930	10400	2760	1500	1970
20	1400	1360	2010	e960	5290	2970	2580	4270	11300	2450	1450	2010
21	1390	1310	1850	e940	6660	3930	4270	5830	13100	2430	1260	1840
22	1370	1420	1660	e960	5910	7660	8550	7000	14700	2220	1240	1820
23	1340	1400	e1490	e1100	5860	8020	9930	5840	12800	2040	1260	1720
24	1270	1540	e1250	e940	6720	6900	8300	4800	11500	1910	1540	1900
25	1260	1290	e1060	e1100	6670	5120	6690	5680	23200	1970	1420	2100
26	1250	1320	e1250	e1200	6290	4080	5190	4880	30000	1600	1450	2120
27	1230	1380	e1460	e1040	6120	3860	4290	4670	22100	1860	1550	2120
28	1260	1370	e1300	e900	9340	3640	3800	5770	16000	1510	1470	2080
29	1270	1370	e1520	e1040	9530	3490	3460	15400	12000	2290	1530	2370
30	1350	1400	e1200	e930	---	3310	3300	15300	10500	3040	1620	2080
31	1230	---	e1180	e850	---	3090	---	12800	---	2430	1390	---
TOTAL	54120	42400	50330	39860	100790	121410	119140	171850	341410	162080	57770	60070
MEAN	1746	1413	1624	1286	3476	3916	3971	5544	11380	5228	1864	2002
MAX	2680	1880	2490	1810	9530	8020	9930	15400	30000	12400	3030	4250
MIN	1230	1250	1060	850	830	2390	2070	2950	3990	1510	1240	1210
CFSM	.24	.19	.22	.18	.48	.54	.55	.76	1.57	.72	.26	.28
IN.	.28	.22	.26	.20	.52	.62	.61	.88	1.75	.83	.30	.31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 2000, BY WATER YEAR (WY)

MEAN	2969	4285	6658	8511	9493	11830	11550	8243	6703	4349	2823	2650
MAX	14750	19910	25250	42040	28000	33560	28000	37290	31830	19180	12890	20120
(WY)	1927	1993	1928	1950	1959	1982	1957	1943	1958	1998	1998	1926
MIN	652	828	747	735	1232	1663	3135	1460	1029	655	484	435
(WY)	1964	1965	1964	1977	1964	1941	1941	1934	1934	1936	1941	1941

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1924 - 2000	
ANNUAL TOTAL	2250168		1321230			
ANNUAL MEAN	6165		3610		6656	
HIGHEST ANNUAL MEAN					12340	1950
LOWEST ANNUAL MEAN					1631	1941
HIGHEST DAILY MEAN	58600	Jan 24	30000	Jun 26	129000	May 19 1943
LOWEST DAILY MEAN	818	Sep 10	830	Feb 2	399	Sep 26 1941
ANNUAL SEVEN-DAY MINIMUM	851	Jan 7	893	Jan 30	404	Sep 21 1941
INSTANTANEOUS PEAK FLOW			31000	Jun 26	131000	May 19 1943
INSTANTANEOUS PEAK STAGE			16.14	Jun 26	28.47	May 19 1943
ANNUAL RUNOFF (CFSM)	.85		.50		.92	
ANNUAL RUNOFF (INCHES)	11.52		6.76		12.44	
10 PERCENT EXCEEDS	18600		8080		16000	
50 PERCENT EXCEEDS	2300		2300		3640	
90 PERCENT EXCEEDS	1230		1250		1150	

e Estimated

03335690 MUD PINE CREEK NEAR OXFORD, IN

LOCATION.--Lat 40°31'24", long 87°20'30", in NE$^1/_4$SE$^1/_4$ sec.17, T.24 N., R.8 W., Benton County, Hydrologic Unit 05120108, on right bank 5 ft downstream from county road bridge, 0.3 mi north of Chase, 2.0 mi east of Boswell, and 5.0 mi west of Oxford.

DRAINAGE AREA.--39.4 mi^2.

PERIOD OF RECORD.--June 1971 to current year.

REVISED RECORDS.--WDR IN-80-1: 1971-79 (P).

GAGE.--Water-stage recorder. Datum of gage is 718.00 ft above sea level.

REMARKS.--Records fair except for daily discharges below 1.0 ft^3/s and estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.46	e.30	.53	e.25	e.28	13	5.4	11	28	25	30	.74
2	.27	.50	.56	e.40	e.28	9.0	6.3	30	23	22	19	.68
3	.45	.67	.42	e.85	e.28	8.0	6.1	21	19	114	45	.71
4	2.4	.41	.40	2.2	e.30	7.7	5.4	17	19	73	20	.75
5	1.0	.32	1.1	e1.1	e.32	6.8	4.4	16	18	90	14	.53
6	.38	e.28	3.4	e.74	e.35	5.8	5.1	16	14	52	15	.44
7	.38	e.23	1.3	e.64	e.34	5.4	4.1	15	13	30	10	.43
8	.36	e.19	.62	e.56	e.33	5.3	4.9	14	13	23	8.3	.46
9	.39	e.16	.55	e.52	e.40	6.3	3.0	15	12	20	10	.51
10	.47	e.15	.58	e.48	e.60	4.5	3.0	44	11	837	8.8	.73
11	.43	e.15	.64	e.45	e1.0	4.2	3.1	24	11	469	6.6	.97
12	.24	e.15	.51	e.42	e.80	4.6	2.6	21	15	167	6.4	2.6
13	.22	e.15	.46	e.38	e1.5	4.9	2.7	16	32	109	6.0	3.2
14	.15	e.15	1.1	e.36	e.80	5.0	3.5	12	163	75	5.7	1.7
15	.18	e.15	2.6	e.34	e.70	5.3	4.1	11	176	50	5.0	2.3
16	.21	e.15	1.7	e.33	e.66	5.0	3.8	12	85	35	4.3	2.4
17	.35	e.15	1.3	e.31	e.60	4.2	11	12	49	26	3.8	2.4
18	.71	e.15	.76	e.30	e4.0	3.8	8.5	16	37	20	3.8	2.4
19	.37	.40	.67	e.29	15	6.0	7.0	72	28	18	3.2	2.8
20	.27	.44	e.64	e.28	8.5	31	9.2	31	38	15	2.7	2.4
21	.26	.46	e.40	e.28	6.6	24	24	21	174	13	2.3	2.1
22	.20	.47	e.25	e.28	14	16	22	19	92	11	2.1	1.9
23	e.18	.56	e.19	e.28	14	14	17	17	54	9.7	1.9	1.8
24	e.19	.51	e.17	e.28	11	13	14	14	106	8.8	1.6	1.6
25	e.19	.65	e.15	e.28	7.8	12	12	12	270	8.0	1.4	2.1
26	e.18	.47	e.15	e.28	8.1	9.9	10	11	128	6.8	1.2	2.1
27	e.17	.39	e.15	e.28	44	11	11	38	73	5.8	1.2	1.4
28	e.16	.39	e.15	e.28	22	10	10	52	51	31	1.2	1.0
29	e.15	.35	e.15	e.28	15	6.9	8.9	36	40	42	1.1	.67
30	e.15	.34	e.15	e.28	---	6.0	7.6	29	30	89	.97	.43
31	e.16	---	e.15	e.28	---	5.6	---	34	---	85	.90	---
TOTAL	11.68	9.84	21.90	14.28	179.54	274.2	239.7	709	1822	2580.1	243.47	44.25
MEAN	.38	.33	.71	.46	6.19	8.85	7.99	22.9	60.7	83.2	7.85	1.48
MAX	2.4	.67	3.4	2.2	44	31	24	72	270	837	45	3.2
MIN	.15	.15	.15	.25	.28	3.8	2.6	11	11	5.8	.90	.43
CFSM	.01	.01	.02	.01	.16	.22	.20	.58	1.54	2.11	.20	.04
IN.	.01	.01	.02	.01	.17	.26	.23	.67	1.72	2.44	.23	.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2000, BY WATER YEAR (WY)

MEAN	15.1	28.9	43.1	41.2	55.5	75.4	70.4	61.5	62.2	26.6	14.3	15.7
MAX	113	169	154	164	158	237	267	159	240	147	122	134
(WY)	1994	1986	1991	1993	1990	1979	1994	1981	1998	1993	1981	1993
MIN	.38	.33	.71	.46	3.41	6.54	7.99	8.49	2.85	.65	.79	.40
(WY)	2000	2000	2000	2000	1977	1981	2000	1976	1988	1988	1988	1983

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1972 - 2000	
ANNUAL TOTAL	11250.72		6149.96			
ANNUAL MEAN	30.8		16.8		42.4	
HIGHEST ANNUAL MEAN					93.0	1993
LOWEST ANNUAL MEAN					16.2	1977
HIGHEST DAILY MEAN	640	Jan 23	837	Jul 10	4550	Apr 12 1994
LOWEST DAILY MEAN	.01	Sep 11	.15	Oct 14	.01	Sep 11 1999
ANNUAL SEVEN-DAY MINIMUM	.04	Sep 11	e.15	Nov 10	.04	Sep 11 1999
INSTANTANEOUS PEAK FLOW			1570	Jul 10	12100	Apr 12 1994
INSTANTANEOUS PEAK STAGE			11.36	Jul 10	16.98	Apr 12 1994
ANNUAL RUNOFF (CFSM)	.78		.43		1.08	
ANNUAL RUNOFF (INCHES)	10.62		5.81		14.61	
10 PERCENT EXCEEDS	79		34		97	
50 PERCENT EXCEEDS	2.3		3.0		15	
90 PERCENT EXCEEDS	.16		.25		.86	

e Estimated

03336000 WABASH RIVER AT COVINGTON, IN

LOCATION.--Lat 40°08'24", long 87°24'24", in NE$^1/_4$NW$^1/_4$ sec.35, T.20 N., R.9 W., Warren County, Hydrologic Unit 05120108, on right approach to old U.S. Highway 136 bridge at Covington, 2.9 mi downstream from Oppossum Run, 3.6 mi upstream from Spring Creek, and at mile 271.1.

DRAINAGE AREA.--8,218 mi^2.

PERIOD OF RECORD.--October 1939 to current year. Gage-height records collected at site 0.4 mi downstream January 1927 to December 1930, and at present site since January 1931 are contained in reports of National Weather Service.

REVISED RECORDS.--WDR IN-73-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 473.97 ft above sea level. Prior to Oct. 1, 1979, nonrecording gage on old bridge.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow partially regulated by upstream reservoirs.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 35.1 ft, from floodmark determined by National Weather Service, discharge, 200,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2440	1470	1560	e1900	e1230	9190	3410	3650	13100	11300	2830	1480
2	2300	1960	1540	e2000	e1220	7580	3140	3500	10000	9860	2390	1340
3	2240	1950	1500	e1630	e1300	6090	3050	3780	7710	8530	2340	1340
4	2400	1690	1510	1910	e1310	4960	2980	3820	6390	9740	2680	1540
5	2660	1490	1580	1990	e1270	4470	2920	4100	5500	14900	2600	1510
6	2640	1500	1640	1860	e1300	4030	2780	4120	5090	13300	2680	1520
7	2580	1490	1830	1940	e1360	3730	2730	3930	6640	11800	2850	1620
8	2510	1640	1690	1990	e1340	3510	2580	3620	9690	12300	2490	1550
9	2440	1560	1770	1970	e1360	3240	2650	3380	8880	10700	2680	1640
10	2430	1610	1830	1960	e1450	3230	2810	3940	7210	9250	2980	1460
11	2440	1620	1800	1870	e1490	3140	4620	4280	5530	9760	2680	1370
12	2340	1660	1780	1890	e1510	3150	5740	7360	5040	9340	2240	1660
13	2140	1560	1750	1830	e1490	2970	5030	8210	4920	7190	2160	2430
14	1740	1530	1780	1750	e1610	3050	4730	6670	8400	5570	1850	3160
15	1730	1530	1850	1650	e2400	2860	4180	5260	16900	4780	1900	3750
16	1540	1480	2030	1570	e3360	2770	3390	4720	19900	4240	1730	3170
17	1630	1470	2320	1520	3200	3000	2980	4390	18100	3840	1770	2490
18	1650	1520	2410	1470	2950	3130	2970	4270	14300	3430	1570	2290
19	1550	1500	2530	e1300	3310	2980	2850	4230	12000	3210	1690	2110
20	1620	1520	2280	e1100	3670	3120	2950	4600	11600	3110	1710	2000
21	1600	1540	2120	e980	5830	3560	3070	5040	13700	2770	1680	1960
22	1580	1510	1990	e960	6360	5030	5250	6760	16200	2700	1520	1930
23	1530	1590	1670	e1040	5750	8180	9540	7050	15900	2560	1470	1860
24	1520	1570	e1250	e1100	6280	7890	9560	5940	14200	2330	1490	e1710
25	1480	1640	e1120	e1140	6860	6670	8120	5510	20200	2210	1660	e2100
26	1470	1520	e1140	e1150	6710	5210	6510	5790	25000	2210	1580	e2500
27	1460	1490	e1200	e1200	6530	4380	5350	6110	27700	1980	1560	e2800
28	1450	1530	e1350	e1250	7360	4140	4570	8490	25500	2020	1640	e2500
29	1460	1530	e1490	e1180	9900	3980	4060	11300	18400	1860	1560	e2420
30	1470	1530	e1700	e1170	---	3800	3770	17000	13100	2550	1560	e2400
31	1500	---	e1950	e1200	---	3600	---	15200	---	3290	1640	---
TOTAL	59540	47200	53960	47470	99710	136640	128290	186020	386800	192630	63180	61610
MEAN	1921	1573	1741	1531	3438	4408	4276	6001	12890	6214	2038	2054
MAX	2660	1960	2530	2000	9900	9190	9560	17000	27700	14900	2980	3750
MIN	1450	1470	1120	960	1220	2770	2580	3380	4920	1860	1470	1340
CFSM	.23	.19	.21	.19	.42	.54	.52	.73	1.57	.76	.25	.25
IN.	.27	.21	.24	.21	.45	.62	.58	.84	1.75	.87	.29	.28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2000, BY WATER YEAR (WY)

MEAN	3363	4860	7172	9145	10730	13270	13090	9876	8440	5479	3509	2929
MAX	14370	23930	22080	49700	34450	34840	28470	43540	36010	19840	13470	11960
(WY)	1991	1993	1968	1950	1959	1982	1957	1943	1958	1998	1998	1989
MIN	738	919	810	896	1357	1915	3536	1814	1542	1212	640	545
(WY)	1965	1965	1964	1977	1963	1941	1941	1941	1988	1988	1941	1941

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1940 - 2000	
ANNUAL TOTAL	2485830		1463050			
ANNUAL MEAN	6810		3997		7636	
HIGHEST ANNUAL MEAN					14980	1950
LOWEST ANNUAL MEAN					1862	1941
HIGHEST DAILY MEAN	62800	Jan 25	27700	Jun 27	143000	May 20 1943
LOWEST DAILY MEAN	920	Jan 11	960	Jan 22	487	Sep 29 1941
ANNUAL SEVEN-DAY MINIMUM	933	Jan 7	1070	Jan 20	497	Sep 24 1941
INSTANTANEOUS PEAK FLOW			28000	Jun 27	147000	May 20 1943
INSTANTANEOUS PEAK STAGE			19.45	Jun 27	32.44	May 20 1943
ANNUAL RUNOFF (CFSM)	.83		.49		.93	
ANNUAL RUNOFF (INCHES)	11.25		6.62		12.62	
10 PERCENT EXCEEDS	20700		9210		18500	
50 PERCENT EXCEEDS	2400		2440		4430	
90 PERCENT EXCEEDS	1350		1470		1450	

e Estimated

03339280 PRAIRIE CREEK NEAR LEBANON, IN

LOCATION.--Lat 40°06'16", long 86°31'32", in NW1/4SW1/4 sec.10, T.19 N., R.1 W., Boone County, Hydrologic Unit 05120110, on right bank 50 ft upstream from bridge on County Road 450 North, 4.0 mi upstream from Deer Creek, 4.9 mi northwest of Lebanon, and 7.7 mi upstream from mouth.

DRAINAGE AREA.--33.2 mi^2.

PERIOD OF RECORD.--October 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is 860.00 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	1.8	2.7	3.3	e3.4	16	6.2	8.7	6.5	7.7	22	2.6
2	2.2	2.4	2.7	3.4	e3.4	13	6.9	20	5.5	6.7	19	1.1
3	3.1	2.5	2.8	19	e3.5	11	7.0	10	5.0	8.1	33	1.1
4	10	2.6	2.9	12	e3.6	9.9	8.0	8.5	5.9	8.3	8.4	60
5	3.4	1.6	15	6.2	e3.8	8.8	7.8	7.0	16	25	5.9	14
6	3.3	2.3	8.6	5.2	e4.0	8.4	7.1	4.4	10	9.5	29	8.0
7	2.7	2.5	3.7	4.5	e4.7	7.6	8.0	4.9	7.2	7.1	32	5.9
8	11	1.5	3.1	4.3	e9.0	7.2	15	6.5	5.4	5.8	11	4.2
9	17	1.9	2.9	4.3	16	7.9	8.8	29	4.5	5.3	8.9	3.4
10	8.4	2.0	19	4.5	36	7.0	8.2	73	4.0	10	7.0	26
11	4.1	1.7	5.4	4.0	47	7.2	9.7	29	7.3	6.8	5.9	16
12	3.3	2.4	4.4	4.0	21	9.5	8.4	18	9.7	5.7	4.3	17
13	3.3	2.4	4.1	4.1	22	10	8.3	17	6.7	4.8	1.9	10
14	3.4	2.8	11	3.8	30	12	7.2	11	8.2	4.2	2.5	8.5
15	3.1	2.9	6.5	3.9	14	10	7.7	9.7	12	5.7	1.4	7.8
16	2.8	2.6	6.6	4.1	7.5	9.4	9.6	7.6	7.6	3.9	2.0	7.2
17	7.3	3.1	4.4	3.8	7.0	8.2	20	8.1	13	2.9	46	7.0
18	3.9	2.9	3.8	4.3	81	6.8	13	9.1	7.8	2.5	144	6.7
19	3.4	2.1	3.5	3.5	29	18	12	18	6.4	4.0	29	5.5
20	2.9	5.4	3.8	4.5	15	32	18	9.7	8.3	4.0	12	9.0
21	2.8	2.8	3.3	4.1	11	23	19	8.4	57	2.8	8.7	12
22	2.4	2.4	3.3	e4.0	12	15	13	9.2	29	1.8	6.6	7.5
23	2.5	2.5	3.2	e3.8	9.6	13	11	11	14	2.5	6.3	12
24	2.7	5.5	e3.1	e3.7	15	12	11	7.9	37	2.0	7.8	15
25	2.4	3.2	e3.0	e3.7	11	11	8.2	5.7	45	1.9	5.2	34
26	1.6	2.9	e2.9	e3.6	22	9.8	7.4	5.3	23	1.4	4.1	47
27	1.1	3.0	e2.9	e3.5	72	11	6.4	24	40	2.0	4.4	26
28	1.9	2.7	e3.0	e3.5	31	10	6.4	32	18	1.8	4.3	18
29	2.1	3.0	e3.0	e3.4	20	8.7	6.4	15	13	1.6	4.7	13
30	2.9	3.0	e3.1	e3.4	---	8.1	6.3	9.7	9.9	3.0	4.4	10
31	2.5	---	e3.2	e3.3	---	7.1	---	8.1	---	6.3	4.2	---
TOTAL	126.5	80.4	150.9	146.7	564.5	348.6	292.0	445.5	442.9	165.1	485.9	415.5
MEAN	4.08	2.68	4.87	4.73	19.5	11.2	9.73	14.4	14.8	5.33	15.7	13.9
MAX	17	5.5	19	19	81	32	20	73	57	25	144	60
MIN	1.1	1.5	2.7	3.3	3.4	6.8	6.2	4.4	4.0	1.4	1.4	1.1
CFSM	.12	.08	.15	.14	.59	.34	.29	.43	.44	.16	.47	.42
IN.	.14	.09	.17	.16	.63	.39	.33	.50	.50	.18	.54	.47

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2000, BY WATER YEAR (WY)

MEAN	9.47	37.8	26.9	43.8	43.5	54.7	55.5	62.0	40.0	28.6	8.80	20.2
MAX	25.8	205	158	129	139	109	96.7	248	158	95.6	34.8	139
(WY)	1993	1993	1991	1993	1990	1990	1989	1996	1998	1989	1989	1989
MIN	1.59	2.37	3.84	4.73	7.18	11.2	9.73	6.45	4.34	3.08	2.27	1.24
(WY)	1998	1998	1998	2000	1998	2000	2000	1988	1988	1991	1999	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1988 - 2000	
ANNUAL TOTAL	12262.18		3664.5			
ANNUAL MEAN	33.6		10.0		35.9	
HIGHEST ANNUAL MEAN					63.0	1993
LOWEST ANNUAL MEAN					10.0	2000
HIGHEST DAILY MEAN	1450	Jan 22	144	Aug 18	1900	Dec 30 1990
LOWEST DAILY MEAN	.20	Sep 11	1.1	Oct 27	.20	Sep 11 1999
ANNUAL SEVEN-DAY MINIMUM	.24	Sep 21	1.9	Jul 23	.24	Sep 21 1999
INSTANTANEOUS PEAK FLOW			414	Aug 17	2710	Mar 11 1990
INSTANTANEOUS PEAK STAGE			7.58	Aug 17	13.99	Mar 11 1990
ANNUAL RUNOFF (CFSM)	1.01		.30		1.08	
ANNUAL RUNOFF (INCHES)	13.74		4.11		14.67	
10 PERCENT EXCEEDS	76		20		70	
50 PERCENT EXCEEDS	7.3		6.7		13	
90 PERCENT EXCEEDS	1.2		2.5		2.7	

e Estimated

03339500 SUGAR CREEK AT CRAWFORDSVILLE, IN

LOCATION.--Lat 40°02'56", long 86°53'58", in SW$^1/_4$NW$^1/_4$ sec.32, T.19 N., R.4 W., Montgomery County, Hydrologic Unit 05120110, on left bank 327 ft upstream from Crawfordsville Electric Light and Power Co.'s dam at Crawfordsville, 700 ft upstream from bridge on U.S. Highway 231, 1.0 mi downstream from Walnut Fork Sugar Creek, and at mile 40.4.

DRAINAGE AREA.--509 mi^2.

PERIOD OF RECORD.--June 1938 to current year.

REVISED RECORDS.--WSP 973: 1939(M). WSP 1275: Drainage area. WSP 1335: 1949.

GAGE.--Water-stage recorder. Datum of gage is 657.77 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 17.3 ft from information by local resident, discharge, about 36,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	24	27	e23	e21	186	75	52	183	219	42	38
2	20	26	27	e25	e22	145	72	63	152	180	72	34
3	18	25	28	e33	e21	120	71	71	130	391	114	33
4	19	30	27	48	e22	105	71	66	115	1100	109	65
5	18	27	29	53	e22	94	70	62	123	1840	65	129
6	22	25	32	37	e21	86	65	58	131	779	54	71
7	18	26	40	35	e21	75	64	51	113	446	58	53
8	19	27	32	30	e22	67	68	48	96	292	68	46
9	26	28	28	31	e22	67	69	64	85	215	55	42
10	36	29	35	30	e24	68	63	612	78	200	45	46
11	35	31	38	29	e27	67	64	671	74	185	41	66
12	24	31	38	28	e31	71	62	374	405	155	33	102
13	20	30	31	27	e38	69	58	261	375	132	32	95
14	18	29	37	25	51	75	55	197	261	115	31	75
15	16	26	38	24	51	81	55	150	346	105	28	62
16	17	26	41	27	49	83	54	125	267	93	26	54
17	25	26	36	24	43	78	68	114	344	81	543	48
18	23	27	33	25	90	73	75	147	313	73	3290	44
19	26	28	30	22	242	81	70	605	241	68	795	40
20	23	29	28	e23	176	160	71	542	221	64	342	39
21	20	29	25	e23	115	239	91	325	989	61	188	40
22	19	31	23	e22	100	200	98	236	1220	55	123	45
23	20	30	e22	e22	90	163	87	207	805	50	91	47
24	19	31	e22	e22	89	143	74	176	725	46	74	112
25	21	31	e21	e22	100	132	67	141	1590	44	63	167
26	21	32	e21	e22	106	119	61	117	1260	41	57	494
27	22	30	e21	e21	323	113	55	170	867	37	52	363
28	23	28	e20	e21	403	110	58	461	550	36	49	243
29	23	27	e20	e21	248	102	52	462	383	35	45	171
30	22	27	e21	e21	---	90	49	304	281	36	43	132
31	22	---	e22	e20	---	80	---	223	---	36	39	---
TOTAL	682	846	893	836	2590	3342	2012	7155	12723	7210	6667	2996
MEAN	22.0	28.2	28.8	27.0	89.3	108	67.1	231	424	233	215	99.9
MAX	36	32	41	53	403	239	98	671	1590	1840	3290	494
MIN	16	24	20	20	21	67	49	48	74	35	26	33
CFSM	.04	.06	.06	.05	.18	.21	.13	.45	.83	.46	.42	.20
IN.	.05	.06	.07	.06	.19	.24	.15	.52	.93	.53	.49	.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2000, BY WATER YEAR (WY)

MEAN	145	342	476	621	708	882	856	671	583	314	166	156
MAX	1098	3060	2084	4163	2229	2390	2592	3297	2648	1325	1801	1991
(WY)	1978	1993	1991	1950	1985	1978	1964	1943	1957	1993	1958	1989
MIN	13.1	23.5	17.0	17.1	68.4	79.2	67.1	74.9	32.5	16.6	8.42	4.80
(WY)	1964	1998	1964	1977	1964	1941	2000	1941	1988	1988	1941	1941

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1939 - 2000	
ANNUAL TOTAL	143792		47952			
ANNUAL MEAN	394		131		492	
HIGHEST ANNUAL MEAN					1086	1950
LOWEST ANNUAL MEAN					65.0	1941
HIGHEST DAILY MEAN	13100	Jan 22	3290	Aug 18	20100	Jun 29 1957
LOWEST DAILY MEAN	10	Sep 6	16	Oct 15	2.4	Sep 24 1941
ANNUAL SEVEN-DAY MINIMUM	11	Sep 1	19	Oct 2	2.7	Sep 21 1941
INSTANTANEOUS PEAK FLOW			4830	Aug 18	26300	Jun 28 1957
INSTANTANEOUS PEAK STAGE			5.02	Aug 18	14.48	Jun 28 1957
ANNUAL RUNOFF (CFSM)	.77		.26		.97	
ANNUAL RUNOFF (INCHES)	10.51		3.50		13.13	
10 PERCENT EXCEEDS	957		296		1150	
50 PERCENT EXCEEDS	51		54		175	
90 PERCENT EXCEEDS	14		22		27	

e Estimated

03340500 WABASH RIVER AT MONTEZUMA, IN

LOCATION.--Lat 39°47'33", long 87°22'26", in SE$^1/_4$NE$^1/_4$ sec.35, T.16 N., R.9 W., Parke County, Hydrologic Unit 05120108, on left bank 20 ft upstream from bridge on U.S. Highway 36 at Montezuma, 2.0 mi upstream from Big Raccoon Creek, 4.9 mi downstream from Sugar Creek, and at mile 240.0.

DRAINAGE AREA.--11,118 mi^2.

PERIOD OF RECORD.--October 1927 to current year. July 1924 to September 1927 (gage height only) in reports of State of Indiana, Department of Natural Resources.

REVISED RECORDS.--WSP 1335: 1929, 193l(M). WSP 1505: 1954. WSP 1915: 1954(m). WSP 2109: Drainage area. WDR IN-74-1: 1973.

GAGE.--Water-stage recorder. Datum of gage is 457.75 ft above sea level (levels by U.S. Army Corps of Engineers). Oct. 1, 1927, to July 12, 1950, nonrecording gage on downstream side of bridge located 50 ft upstream of present bridge and at same datum. July 12, 1950 to July 27, 1988, recording gage in downstream side of first pier from left bank at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow partially regulated by upstream reservoirs.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 27, 1913, reached a stage of 34.0 ft, from floodmarks, discharge, 230,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2990	1550	1640	2310	1420	11200	4070	4150	16700	15300	3430	e1900
2	2710	1790	1630	2370	1410	9840	3830	3970	13900	13100	3070	e1670
3	2530	2220	1630	2240	1470	8090	3410	4090	10800	11500	2510	e1550
4	2540	2140	1540	2180	1480	6390	3180	4250	8740	10800	2700	e1660
5	2870	1850	1650	2470	1440	5460	3200	4310	7470	16500	2890	e1800
6	3060	1690	1720	2330	1580	4900	3060	4550	6700	18600	2780	e1700
7	2920	1710	1970	2260	1610	4480	2850	4480	6480	15800	3080	e1800
8	2800	1750	1980	2340	1510	4150	2860	4230	9690	14800	3170	e1900
9	2740	1850	1990	2310	1590	3880	2790	3940	10600	13700	2750	e1790
10	2730	1790	2040	2360	1830	3600	2700	4370	9190	11900	3080	e1900
11	2770	1810	2070	2260	1940	3570	3580	5330	7500	11700	3100	e1610
12	2670	1880	2040	2170	2140	3420	5760	6560	6300	12300	2600	e1770
13	2510	1860	1950	2120	2080	3430	5920	9430	6050	10600	2240	e2300
14	2110	1730	2050	2070	2150	3220	5330	8840	6800	8230	2110	3020
15	1810	1700	2160	1910	2440	3320	4930	6980	14600	6820	1880	4200
16	1680	1670	2300	1810	3660	3130	4110	5820	19800	5850	1800	4040
17	1640	1590	2620	1750	3970	3120	3510	5300	21000	5200	1810	3310
18	1690	1550	2900	1700	3850	3330	3630	5000	18300	4730	3880	2600
19	1690	1600	2990	1560	4420	3340	3930	5300	14800	4330	4470	2410
20	1630	1570	3050	1400	5240	3700	3640	6030	13200	3940	2710	2270
21	1710	1660	2600	1050	6320	4810	3540	6360	15000	3850	2240	2090
22	1620	1650	2410	982	7800	5880	4400	7050	19700	3430	2000	2060
23	1570	1640	2190	1240	7250	8350	8330	8400	20700	3350	1820	2070
24	1530	1720	1730	1280	6920	9620	10800	7800	19100	3000	1710	1960
25	1490	1730	1280	1350	7670	8820	9910	6520	26100	2450	1720	2230
26	1460	1800	1340	1360	7930	7200	8420	6620	29800	2330	1940	2940
27	1420	1620	1510	1430	8230	5820	6790	6720	29800	2220	e1820	3170
28	1430	1620	1670	1470	8580	5180	5650	12100	29400	2150	e1890	2940
29	1410	1640	1970	1400	10600	4960	4940	16600	26000	2210	e1990	2760
30	1490	1630	2170	1340	---	4720	4370	19500	19400	2290	e1810	2770
31	1500	---	2320	1390	---	4330	---	19100	---	3150	e1810	---
TOTAL	64720	52010	63110	56212	118530	165260	143440	223700	463620	246130	76810	70190
MEAN	2088	1734	2036	1813	4087	5331	4781	7216	15450	7940	2478	2340
MAX	3060	2220	3050	2470	10600	11200	10800	19500	29800	18600	4470	4200
MIN	1410	1550	1280	982	1410	3120	2700	3940	6050	2150	1710	1550
CFSM	.19	.16	.18	.16	.37	.48	.43	.65	1.39	.71	.22	.21
IN.	.22	.17	.21	.19	.40	.55	.48	.75	1.55	.82	.26	.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2000, BY WATER YEAR (WY)

MEAN	4147	6150	9318	12620	14090	17270	17420	13820	10840	7369	4451	3592
MAX	16990	36840	40350	66690	40610	49690	37650	58400	42730	25110	18840	17800
(WY)	1991	1993	1928	1950	1959	1982	1938	1943	1958	1993	1958	1989
MIN	973	1202	1041	1107	1789	2370	4781	2082	1357	1210	815	710
(WY)	1964	1965	1964	1977	1931	1941	2000	1934	1934	1934	1941	1941

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1928 - 2000	
ANNUAL TOTAL	3375450		1743732			
ANNUAL MEAN	9248		4764		10070	
HIGHEST ANNUAL MEAN					20290	1950
LOWEST ANNUAL MEAN					2506	1931
HIGHEST DAILY MEAN	71500	Jan 26	29800	Jun 26	182000	May 20 1943
LOWEST DAILY MEAN	980	Jan 11	982	Jan 22	571	Sep 24 1941
ANNUAL SEVEN-DAY MINIMUM	990	Jan 6	1240	Jan 20	600	Sep 23 1941
INSTANTANEOUS PEAK FLOW			30100	Jun 26	184000	May 20 1943
INSTANTANEOUS PEAK STAGE			17.79	Jun 26	32.83	May 20 1943
ANNUAL RUNOFF (CFSM)	.83		.43		.91	
ANNUAL RUNOFF (INCHES)	11.29		5.83		12.30	
10 PERCENT EXCEEDS	26100		10800		24800	
50 PERCENT EXCEEDS	2900		2800		5650	
90 PERCENT EXCEEDS	1500		1580		1700	

e Estimated

03340800 BIG RACCOON CREEK NEAR FINCASTLE, IN

LOCATION.--Lat 39°48'45", long 86°57'14", in NW1/4SW1/4 sec.22, T.16 N., R.5 W., Putnam County, Hydrologic Unit 05120108, on left bank at downstream side of county road bridge, 1.6 mi upstream from Ramp Creek, 3.1 mi west of Fincastle, and at mile 48.8.

DRAINAGE AREA.--139 mi^2.

PERIOD OF RECORD.--August 1957 to current year. Prior to October 1963, published as Raccoon Creek near Fincastle.

REVISED RECORDS.--WSP 1909: 1958. WSP 2109: Drainage area. WDR IN-79-1: 1978.

GAGE.--Water-stage recorder. Datum of gage is 686.03 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 28, 1957, reached a stage of 19.10 ft discharge, 39,900 ft^3/s, from slope-area measurement.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	2.2	1.5	3.9	e3.4	82	25	30	39	47	7.6	15
2	2.4	2.4	1.7	4.1	e3.3	64	25	36	35	41	12	14
3	2.4	2.6	1.8	6.2	e3.3	51	26	35	32	37	55	13
4	3.7	2.8	1.9	8.8	e3.4	46	25	31	27	198	19	365
5	3.6	2.9	4.0	8.6	e3.5	41	25	30	39	637	14	71
6	3.0	2.7	3.9	8.5	e3.6	36	22	26	63	344	20	41
7	2.6	2.6	2.6	7.3	e3.6	32	26	24	47	168	53	30
8	4.3	2.3	1.8	6.2	e3.7	29	39	24	37	96	30	24
9	6.6	2.3	1.6	5.8	e3.8	28	44	25	33	66	23	21
10	5.0	2.3	3.6	5.1	e5.2	27	36	54	28	53	15	27
11	2.9	2.3	3.6	4.4	e8.0	26	33	94	28	51	12	40
12	1.8	2.3	3.8	4.2	e10	26	33	67	28	43	10	74
13	1.3	2.3	4.5	3.9	e13	25	27	60	30	36	8.6	62
14	1.6	2.3	6.8	4.1	18	26	25	53	27	31	7.4	49
15	1.6	2.3	6.8	4.2	20	31	26	41	32	27	6.6	38
16	1.4	2.3	7.2	4.2	21	29	25	36	49	24	5.7	31
17	2.1	2.3	6.9	3.6	20	28	34	36	143	21	13	26
18	2.1	2.3	6.0	3.1	33	24	62	36	114	19	1590	23
19	2.0	2.5	5.2	3.3	92	26	54	36	73	18	498	21
20	2.0	2.6	5.0	e3.3	68	72	54	36	56	16	196	20
21	1.6	2.3	5.0	e3.2	46	108	96	33	405	15	107	21
22	1.3	2.3	4.3	e3.2	39	78	84	32	316	14	67	20
23	1.6	2.4	4.1	e3.1	37	63	69	222	152	13	52	20
24	1.8	2.6	4.1	e3.1	42	56	61	103	158	11	42	49
25	1.8	2.3	3.5	e3.0	46	52	52	62	398	11	35	161
26	1.8	2.3	3.1	e3.0	47	45	45	45	268	9.2	29	419
27	1.8	2.1	3.4	e2.9	216	43	40	46	148	8.5	26	255
28	1.8	1.8	3.9	e2.9	189	43	38	67	96	8.0	23	151
29	1.8	1.6	3.7	e2.9	106	37	37	69	73	7.5	21	101
30	1.8	1.6	3.7	e3.1	---	30	34	52	58	7.2	19	77
31	1.8	---	3.7	e3.4	---	28	---	43	---	7.1	17	---
TOTAL	74.5	69.9	122.7	136.6	1107.8	1332	1222	1584	3032	2084.5	3033.9	2279
MEAN	2.40	2.33	3.96	4.41	38.2	43.0	40.7	51.1	101	67.2	97.9	76.0
MAX	6.6	2.9	7.2	8.8	216	108	96	222	405	637	1590	419
MIN	1.3	1.6	1.5	2.9	3.3	24	22	24	27	7.1	5.7	13
CFSM	.02	.02	.03	.03	.27	.31	.29	.37	.73	.48	.70	.55
IN.	.02	.02	.03	.04	.30	.36	.33	.42	.81	.56	.81	.61

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2000, BY WATER YEAR (WY)

MEAN	47.1	127	180	168	199	256	220	180	126	92.8	48.5	41.4
MAX	312	844	913	616	694	683	730	811	614	430	268	545
(WY)	1970	1993	1991	1974	1985	1978	1964	1996	1998	1979	1979	1989
MIN	2.14	2.33	3.91	4.41	14.8	28.6	40.7	19.5	11.1	4.83	2.75	1.62
(WY)	1998	2000	1998	2000	1998	1981	2000	1976	1988	1991	1991	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1958 - 2000	
ANNUAL TOTAL	40977.7		16078.9			
ANNUAL MEAN	112		43.9		140	
HIGHEST ANNUAL MEAN					292	1974
LOWEST ANNUAL MEAN					38.5	1966
HIGHEST DAILY MEAN	5090	Jan 22	1590	Aug 18	12200	Dec 30 1990
LOWEST DAILY MEAN	1.1	Sep 5	1.3	Oct 13	1.0	Oct 11 1988
ANNUAL SEVEN-DAY MINIMUM	1.2	Sep 5	1.7	Oct 21	1.1	Oct 6 1988
INSTANTANEOUS PEAK FLOW			2150	Aug 18	16000	Dec 30 1990
INSTANTANEOUS PEAK STAGE			8.52	Aug 18	16.10	Dec 30 1990
ANNUAL RUNOFF (CFSM)	.81		.32		1.01	
ANNUAL RUNOFF (INCHES)	10.97		4.30		13.69	
10 PERCENT EXCEEDS	235		79		292	
50 PERCENT EXCEEDS	20		23		52	
90 PERCENT EXCEEDS	1.6		2.3		6.2	

e Estimated

03340900 BIG RACCOON CREEK AT FERNDALE, IN

LOCATION.--Lat 39°42'40", long 87°04'15", in SE$^1/_4$SE$^1/_4$ sec.28, T.15 N., R.6 W., Parke County, Hydrologic Unit 05120108, on right bank at upstream side of bridge on New Discovery Road, 0.5 mi downstream from Cecil M. Harden Lake, 3.7 mi upstream from Rocky Fork Creek, and at mile 33.3.

DRAINAGE AREA.--222 mi^2.

PERIOD OF RECORD.--October 1956 to current year. Prior to October 1963, published as Raccoon Creek at Ferndale.

REVISED RECORDS.--WSP 2109: Drainage area. WDR IN-94-1: 1992; 1993: Average discharge.

GAGE.--Water-stage recorder. Datum of gage is 590.00 ft above sea level (U.S. Army Corps of Engineers bench mark). Prior to Oct. 1, 1974, water-stage recorder at site 1.7 mi downstream and at datum 7.64 ft lower.

REMARKS.--Flow regulated by Cecil M. Harden Lake since December 1960.

COOPERATION.--Records of daily discharge provided by U.S. Army Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--44 years, 226 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,500 ft^3/s June 28, 1957, gage height 19.87 ft, from rating curve extended above 5,000 ft^3/s on basis of records for station at Big Raccoon Creek at Mansfield; minimum daily, 2.7 ft^3/s Oct. 11, 1956; no flow, Aug. 23, 24, 1977, July 26, 1986, Mar. 11, 12, 18, 19, 1987, due to regulation.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 644 ft^3/s, Nov. 4; minimum daily 17 ft^3/s, Dec. 20-Feb. 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	154	18	17	17	18	20	22	23	26	27	28
2	28	25	18	17	17	18	20	22	23	26	27	28
3	28	367	18	17	17	18	20	22	23	26	27	28
4	28	644	18	17	17	18	20	22	23	26	27	29
5	28	638	18	17	17	18	20	22	23	26	27	63
6	28	632	18	17	17	19	20	22	23	27	27	83
7	28	626	18	17	17	19	20	22	23	27	27	83
8	28	619	18	17	17	19	20	22	23	27	27	83
9	188	612	18	17	17	19	21	22	23	27	27	83
10	28	605	18	17	17	19	21	22	23	27	27	83
11	28	598	18	17	17	19	21	22	23	27	27	121
12	28	591	18	17	17	19	21	22	23	27	27	160
13	28	583	179	17	17	19	21	22	23	27	27	160
14	28	575	404	17	17	19	21	22	23	27	27	160
15	28	321	489	17	17	19	21	22	23	27	27	160
16	361	162	487	17	17	19	21	22	23	27	27	160
17	314	161	430	17	17	19	21	22	24	27	27	86
18	28	160	263	17	17	19	21	22	24	27	28	49
19	28	160	62	17	17	19	21	22	24	27	28	49
20	340	159	17	17	17	19	21	22	24	27	28	49
21	475	158	17	17	17	19	21	22	24	27	28	49
22	473	158	17	17	17	20	21	22	25	27	28	43
23	471	157	17	17	17	20	21	23	25	27	28	41
24	468	156	17	17	17	20	22	23	25	27	28	41
25	466	156	17	17	17	20	22	23	25	27	28	41
26	464	104	17	17	17	20	22	23	26	27	28	41
27	461	38	17	17	17	20	22	23	26	27	28	228
28	411	31	17	17	18	20	22	23	26	27	28	504
29	457	31	17	17	18	20	22	23	26	27	28	578
30	454	25	17	17	---	20	22	23	26	27	28	233
31	452	---	17	17	---	20	---	23	---	27	28	---
TOTAL	6703	9406	2734	527	495	594	629	691	718	832	851	3544
MEAN	216	314	88.2	17.0	17.1	19.2	21.0	22.3	23.9	26.8	27.5	118
MAX	475	644	489	17	18	20	22	23	26	27	28	578
MIN	28	25	17	17	17	18	20	22	23	26	27	28

CAL YR 1999 TOTAL 70357 MEAN 193 MAX 1560 MIN 17
WTR YR 2000 TOTAL 27724 MEAN 75.7 MAX 644 MIN 17

03341300 BIG RACCOON CREEK AT COXVILLE, IN

LOCATION.--Lat 39°39'09", long 87°17'37", in SW$^1/_4$SW$^1/_4$ sec.15, T.14 N., R.8 W., Parke County, Hydrologic Unit 05120108, on right bank at downstream side of covered bridge on county road at Coxville, 0.8 mi upstream from Rock Run, 1.5 mi downstream from Little Raccoon Creek, 2.1 mi northwest of Rosedale, and at mile 13.1.

DRAINAGE AREA.--448 mi^2.

PERIOD OF RECORD.--October 1956 to September 1988 (discharge). October 1988 to September 1992 (gage height only). October 1992 to current year (discharge). Prior to October 1963, published as Raccoon Creek at Coxville.

REVISED RECORDS.--WSP 2109: Drainage area. WDR IN-74-1: 1973.

GAGE.--Water-stage recorder. Datum of gage is 494.00 ft above sea level (Indiana Flood Control and Water Resources Commission bench mark).

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Cecil M. Harden Lake.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	424	68	e52	e40	142	74	85	75	168	82	73
2	43	166	62	e52	e38	124	71	88	70	152	81	71
3	43	123	60	e58	e38	111	71	86	67	140	86	69
4	46	517	58	72	e38	105	72	83	65	135	81	281
5	44	605	60	63	e35	98	70	79	72	734	79	360
6	44	614	61	52	e35	92	68	75	74	363	87	300
7	43	614	58	50	e38	86	91	73	70	239	246	274
8	54	614	56	48	e38	81	251	73	68	190	179	201
9	120	614	54	48	e38	78	155	72	64	164	131	157
10	132	610	64	47	e38	77	123	99	62	146	105	168
11	60	604	66	46	e35	77	111	101	65	278	91	197
12	52	601	60	44	e40	81	104	87	74	e381	82	308
13	49	597	65	44	e45	82	95	102	75	e248	77	343
14	47	591	246	42	e50	84	90	114	96	e194	73	287
15	46	548	433	43	53	85	86	93	252	e163	69	254
16	85	253	441	43	50	81	84	84	207	e144	66	232
17	e431	219	434	42	48	80	118	80	954	e128	67	211
18	e157	205	340	42	115	76	172	78	507	112	1060	135
19	69	199	189	41	204	84	127	77	332	109	380	118
20	99	192	100	43	116	194	115	82	237	103	213	113
21	405	186	78	e42	91	195	211	83	627	99	149	114
22	440	182	70	e45	82	144	186	77	587	95	123	109
23	447	177	67	e44	76	122	147	73	353	91	111	100
24	449	177	63	e43	92	108	134	73	329	88	107	126
25	453	173	e60	e44	108	101	123	75	923	86	97	193
26	460	172	e58	e45	92	94	111	73	553	83	90	749
27	460	126	e56	e42	419	91	103	106	365	81	86	449
28	438	88	e54	e40	260	91	98	e131	272	79	83	555
29	425	77	e54	e39	174	85	93	e100	221	113	81	722
30	449	73	e54	e41	---	80	88	e88	190	96	77	640
31	453	---	e54	e42	---	76	---	81	---	89	75	---
TOTAL	6588	10341	3643	1439	2526	3105	3442	2671	7906	5291	4414	7909
MEAN	213	345	118	46.4	87.1	100	115	86.2	264	171	142	264
MAX	460	614	441	72	419	195	251	131	954	734	1060	749
MIN	43	73	54	39	35	76	68	72	62	79	66	69
CFSM	.47	.77	.26	.10	.19	.22	.26	.19	.59	.38	.32	.59
IN.	.55	.86	.30	.12	.21	.26	.29	.22	.66	.44	.37	.66

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2000, BY WATER YEAR (WY)

MEAN	317	553	627	564	623	656	650	587	520	349	233	216
MAX	994	1684	2070	1572	1648	1493	1648	2370	3613	1001	1062	1542
(WY)	1990	1994	1968	1974	1969	1985	1957	1996	1957	1981	1958	1989
MIN	17.5	44.3	48.2	25.9	72.8	100	115	86.2	64.2	59.4	34.4	34.6
(WY)	1957	1957	1964	1977	1998	2000	2000	2000	1988	1988	1966	1966

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1957 - 2000	
ANNUAL TOTAL	157327		59275			
ANNUAL MEAN	431		162		488	
HIGHEST ANNUAL MEAN					914	1974
LOWEST ANNUAL MEAN					160	1966
HIGHEST DAILY MEAN	5910	Jan 22	1060	Aug 18	51400	Jun 28 1957
LOWEST DAILY MEAN	40	Sep 27	35	Feb 5	6.5	Oct 10 1956
ANNUAL SEVEN-DAY MINIMUM	41	Sep 22	37	Feb 5	8.8	Oct 7 1956
INSTANTANEOUS PEAK FLOW			2080	Aug 18	108000	Jun 28 1957
INSTANTANEOUS PEAK STAGE			10.18	Aug 18	21.23	Jun 28 1957
ANNUAL RUNOFF (CFSM)	.96		.36		1.09	
ANNUAL RUNOFF (INCHES)	13.06		4.92		14.81	
10 PERCENT EXCEEDS	1330		433		1160	
50 PERCENT EXCEEDS	200		91		260	
90 PERCENT EXCEEDS	46		45		66	

e Estimated

03341500 WABASH RIVER AT TERRE HAUTE, IN

LOCATION.--Lat 39°28'33", long 87°25'07", in NE$^1/_4$NW$^1/_4$ sec.21, T.12 N., R.9 W., Vigo County, Hydrologic Unit 05120111, on left bank at Indiana America Water Company, Inc., 1st and Elm Streets in Terre Haute, 3.0 mi upstream from Sugar Creek, and 3.6 mi downstream from Lost Creek and at mile 215.

DRAINAGE AREA.--12,263 mi^2.

PERIOD OF RECORD.--August 1902 to December 1903 (gage height only), February 1905 to July 1906, October 1927 to current year. Gage-height records collected at site 100 ft downstream June 1891 to June 1897 and since December 1904 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 205: 1905. WSP 1335: 1944. WDR IN-73-1: Drainage area. WDR IN-84-1: 1983. WDR IN-86 1: 1913 (Gage height).

GAGE.--Water-stage recorder. Datum of gage is 445.78 ft above sea level. Prior to Oct. 17, 1984, water-stage recorder at Wabash Avenue bridge 3,400 ft downstream at datum 2.88 ft lower. See WSP 1725 for history of changes prior to Oct. 27, 1928.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow partially regulated by upstream reservoirs.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 27, 1913, reached a stage of about 31.2 ft, present site and datum, discharge, 245,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3030	2270	1940	2440	1470	11700	4520	4660	18100	18500	4040	2070
2	3070	2160	1950	2450	1500	11000	4260	4480	15700	15400	4070	2010
3	2840	2380	1930	2540	1520	9390	3980	4360	12700	13500	3690	1790
4	2760	2590	1910	2310	1560	7740	3810	4520	10200	12000	3350	1730
5	2830	2740	1910	2480	1560	6410	3660	4560	8630	15500	3610	2310
6	3100	2540	2030	2620	1570	5690	3570	4710	7580	20200	3660	2230
7	3190	2480	2060	2430	1710	5140	3600	4760	7020	e17400	3770	2220
8	3280	2490	2360	2420	1670	4720	3780	4620	8310	e16300	4040	2180
9	3140	2620	2280	2470	1670	4400	3610	4400	10800	e15300	3730	2080
10	3160	2600	2440	2470	1800	4090	3420	4340	10300	e13500	3620	2310
11	3110	2580	2420	2480	2020	3980	3440	5190	8800	e13000	3870	2390
12	3080	2610	2420	2340	2190	3940	5120	5940	7360	e13600	3650	2190
13	2970	2650	2350	2300	2280	3840	6360	8490	6670	13300	3170	2510
14	2740	2580	2380	2220	2280	3730	5860	9590	6680	10800	2950	3170
15	2280	2490	2660	2150	2350	3720	5470	8100	11200	8740	2660	3850
16	2140	2370	2870	1990	3130	3620	4900	6570	18800	7530	2570	4500
17	2040	2120	3010	1910	4000	3500	4470	5780	22300	6650	2410	4020
18	2320	2030	3290	1840	4160	3610	4320	5370	21200	6010	3220	3370
19	2140	2020	3350	1790	4500	3810	4450	5290	17500	5480	5830	2900
20	2000	2060	3320	1590	5120	4110	4400	5830	14900	5050	3960	2690
21	2020	2030	3050	1400	5810	4950	4400	6380	15800	4750	2990	2570
22	2300	2090	2690	1040	7490	5950	4490	6740	20000	4390	2610	2420
23	2320	2070	2490	1150	7840	7310	6570	8100	22000	4090	2420	2380
24	2310	2120	2190	1340	7320	9710	10500	8380	21100	3870	2190	2380
25	2280	2120	1670	1350	7710	9580	10800	7310	26100	3570	2090	2500
26	2240	2190	1360	1430	8280	8380	9560	6650	29800	3290	2270	3600
27	2230	2130	1490	1440	8850	6880	8010	7660	30300	3210	2240	4000
28	2200	1970	1660	1510	9160	5870	6660	9460	30200	2980	2120	3740
29	2190	1950	1900	1520	10100	5450	5720	15800	29200	3030	2120	3590
30	2170	1940	2170	1440	---	5160	5080	18500	24400	2810	2150	3510
31	2210	---	2360	1430	---	4850	---	20000	---	3250	1990	---
TOTAL	79690	68990	71910	60290	120620	182230	158790	226540	493650	287000	97060	83210
MEAN	2571	2300	2320	1945	4159	5878	5293	7308	16460	9258	3131	2774
MAX	3280	2740	3350	2620	10100	11700	10800	20000	30300	20200	5830	4500
MIN	2000	1940	1360	1040	1470	3500	3420	4340	6670	2810	1990	1730
CFSM	.21	.19	.19	.16	.34	.48	.43	.60	1.34	.75	.26	.23
IN.	.24	.21	.22	.18	.37	.55	.48	.69	1.50	.87	.29	.25

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2000, BY WATER YEAR (WY)

MEAN	4608	6717	10190	13850	15470	18770	19080	15490	12060	8213	5023	4022
MAX	18880	40220	44490	77540	47990	51250	41940	64810	44130	27840	21330	21440
(WY)	1991	1993	1928	1950	1950	1982	1938	1943	1958	1957	1958	1989
MIN	1103	1405	1145	1216	1998	2645	5250	2405	1492	1292	1002	966
(WY)	1957	1954	1964	1977	1963	1941	1931	1934	1934	1936	1941	1941

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1928 - 2000	
ANNUAL TOTAL	3767410		1929980			
ANNUAL MEAN	10320		5273		11100	
HIGHEST ANNUAL MEAN					22800	1950
LOWEST ANNUAL MEAN					2864	1931
HIGHEST DAILY MEAN	70200	Jan 27	30300	Jun 27	186000	May 20 1943
LOWEST DAILY MEAN	1130	Sep 13	1040	Jan 22	701	Aug 3 1934
ANNUAL SEVEN-DAY MINIMUM	1160	Sep 8	1310	Jan 21	732	Sep 24 1941
INSTANTANEOUS PEAK FLOW			30300	Jun 27	189000	May 20 1943
INSTANTANEOUS PEAK STAGE			15.68	Jun 27	30.50	May 20 1943
ANNUAL RUNOFF (CFSM)	.84		.43		.91	
ANNUAL RUNOFF (INCHES)	11.43		5.85		12.30	
10 PERCENT EXCEEDS	28700		11100		27500	
50 PERCENT EXCEEDS	3290		3350		6410	
90 PERCENT EXCEEDS	1800		1940		1980	

e Estimated

03342000 WABASH RIVER AT RIVERTON, IN

LOCATION.--Lat 39°01'13", long 87°34'07", in NE$^1/_4$SW$^1/_4$ sec.30, T.7 N., R.10 W., Sullivan County, Hydrologic Unit 05120111, on left bank at downstream side of Illinois Central Railroad bridge at Riverton, 0.5 mi downstream from Turtle Creek, and at mile 162.0.

DRAINAGE AREA.--13,161 mi^2.

PERIOD OF RECORD.--October 1938 to current year. Prior to April 1939 monthly discharge only, published in WSP 1305. June 1911 to December 1914 (gage heights only) available in the U.S. Army Corps of Engineers office, Louisville, Ky.

REVISED RECORDS.--WSP 1335: 1939, 1950. WDR IN-73-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 414.65 ft above sea level. Prior to July 17, 1951, nonrecording gage at same site and datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow partially regulated by upstream reservoirs.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 28, 1913, reached a stage of 26.4 ft, from graph based on once-daily readings by Illinois Central Railroad Co., discharge, 250,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2800	2460	2160	2430	e1550	10600	4850	5230	20500	29000	3860	2520
2	3290	2490	2160	2530	e1590	11700	4550	4840	18600	22400	4440	2540
3	3370	2430	2160	2600	e1620	10800	4280	4640	15900	17800	5370	2500
4	3220	2500	2160	2690	e1650	9170	4000	4520	12800	16300	5040	2340
5	3120	2690	2190	2520	e1630	7520	3780	4600	10400	16000	4130	2250
6	3140	2800	2170	2580	e1700	6320	3610	4660	8740	20100	4220	2580
7	3350	2710	2210	2680	e1800	5630	3740	4790	7700	22100	8980	2630
8	3510	2640	2250	2580	e1790	5120	5960	4850	7130	19800	7430	2590
9	3640	2640	2430	2550	e1890	4720	5020	4730	8600	17900	5540	2530
10	3510	2690	2530	2580	1900	4410	4080	4680	10500	16600	4750	3160
11	3460	2720	2560	2570	1980	4160	3720	4630	10200	22500	4380	7430
12	3410	2710	2580	2570	2140	4030	3720	5250	8920	28000	4410	3970
13	3360	2730	2580	2490	2300	3910	5190	6170	7490	21600	4110	3300
14	3260	2760	2580	2430	2390	3820	6170	8550	6780	16800	3680	3200
15	3070	2720	2540	2370	2380	3740	5840	9220	6910	13200	3420	3530
16	2750	2640	2690	2310	2430	3750	5490	7900	12200	10400	3190	4110
17	2590	2560	2870	2210	2990	3690	5500	6590	21200	8780	3070	4540
18	2500	2380	3000	2150	4010	3550	5620	5900	24500	7710	3010	4160
19	2610	2290	3220	2120	4420	3670	4950	5420	22200	9210	3820	3610
20	2530	2260	3280	e2000	4610	4440	4860	5320	18300	8840	5510	3250
21	2420	2270	3250	e1900	5080	5030	5120	5780	18300	6560	4260	3190
22	2380	2250	3050	e1700	5830	5330	5050	6250	21000	5810	3450	3030
23	2550	2290	2770	e1600	7270	6090	5010	6670	23100	5300	3450	2860
24	2600	2290	2620	e1480	7530	7700	7320	7900	25600	4900	3860	3170
25	2580	2290	2410	e1500	7190	9620	10600	8160	26900	4640	3070	5330
26	2550	2320	2140	e1520	7720	9380	10700	7240	30200	4340	2780	9310
27	2510	2340	2080	e1560	8900	8200	9420	8160	31800	4040	3070	7740
28	2500	2330	2010	e1600	9430	6840	7950	10100	32500	3950	2880	5570
29	2480	2220	2060	e1620	9340	5920	6730	11600	33100	3760	2700	4740
30	2460	2170	2130	e1590	---	5470	5860	16800	32900	3780	2650	4300
31	2430	---	2280	e1520	---	5170	---	19900	---	3640	2640	---
TOTAL	89950	74590	77120	66550	115060	189500	168690	221050	534970	395760	127170	115980
MEAN	2902	2486	2488	2147	3968	6113	5623	7131	17830	12770	4102	3866
MAX	3640	2800	3280	2690	9430	11700	10700	19900	33100	29000	8980	9310
MIN	2380	2170	2010	1480	1550	3550	3610	4520	6780	3640	2640	2250
CFSM	.22	.19	.19	.16	.30	.46	.43	.54	1.35	.97	.31	.29
IN.	.25	.21	.22	.19	.33	.54	.48	.62	1.51	1.12	.36	.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2000, BY WATER YEAR (WY)

MEAN	4869	7296	10770	13920	16980	20900	21110	17260	14020	9277	5827	4571
MAX	18350	39340	39250	80210	54530	60520	41840	68010	45640	36240	23680	25370
(WY)	1991	1993	1986	1950	1950	1982	1957	1943	1958	1957	1958	1989
MIN	1382	1437	1213	1318	2058	2763	5623	3435	2601	1968	1215	1261
(WY)	1957	1954	1964	1977	1963	1941	2000	1941	1977	1988	1941	1940

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1940 - 2000	
ANNUAL TOTAL	4308470		2176390			
ANNUAL MEAN	11800		5946		12200	
HIGHEST ANNUAL MEAN					24340	1950
LOWEST ANNUAL MEAN					3206	1941
HIGHEST DAILY MEAN	74700	Jan 29	33100	Jun 29	200000	May 21 1943
LOWEST DAILY MEAN	1440	Sep 17	e1480	Jan 24	858	Sep 27 1941
ANNUAL SEVEN-DAY MINIMUM	1520	Sep 11	e1550	Jan 24	870	Sep 25 1941
INSTANTANEOUS PEAK FLOW			33300	Jun 29	201000	May 21 1943
INSTANTANEOUS PEAK STAGE			16.50	Jun 29	29.36	May 21 1943
ANNUAL RUNOFF (CFSM)	.90		.45		.93	
ANNUAL RUNOFF (INCHES)	12.18		6.15		12.60	
10 PERCENT EXCEEDS	30900		11800		29700	
50 PERCENT EXCEEDS	3910		3760		7160	
90 PERCENT EXCEEDS	2160		2170		2200	

e Estimated

03342100 BUSSERON CREEK NEAR HYMERA, IN

LOCATION.--Lat 39°12'54", long 87°18'41", in NW1/4NW1/4 sec.21, T.9 N., R.8 W., Sullivan County, Hydrologic Unit 05120111, on right bank at downstream side of bridge on County Road 900 North, 1.3 mi upstream from East Fork Busseron Creek, 1.9 mi northwest of Hymera, 4.1 mi upstream from West Fork Busseron Creek, and at mile 30.3.

DRAINAGE AREA.--16.7 mi^2.

PERIOD OF RECORD.--June 1966 to current year.

REVISED RECORDS.--WDR IN-72-1: 1971. WDR IN-87-1: 1982-86.

GAGE.--Water-stage recorder. Datum of gage is 480.00 ft above sea level (U.S. Soil Conservation Service bench mark).

REMARKS.--Records good except for daily discharges below 0.3 ft^3/s and estimated daily discharges, which are poor. Flow affected by U.S. Soil Conservation Service floodwater-retarding structures.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.12	.00	.10	e.04	2.8	.73	3.4	.79	2.2	.26	.00
2	.00	.17	.00	.13	e.04	2.0	.75	3.6	.50	1.9	.53	.00
3	.00	.12	.00	.66	e.04	1.7	.74	3.1	.32	1.7	5.0	.00
4	.00	.08	.00	1.0	e.04	1.4	.63	3.1	.22	1.5	1.3	.03
5	.00	.08	.09	.55	e.04	1.3	.55	2.9	.21	3.0	.79	.04
6	.00	.08	.14	.33	e.04	.91	.54	2.6	.15	2.1	1.2	.04
7	.00	.06	.06	.30	e.04	.55	85	2.4	.09	1.4	85	.04
8	.01	.05	.00	.25	e.04	.52	85	2.4	.04	1.1	16	.04
9	.33	.08	.00	.24	e.04	.50	34	2.8	.03	.98	7.4	.04
10	.27	.08	.33	.24	e.04	.39	21	11	.05	.84	3.9	51
11	.16	.06	.27	.23	e.04	.50	14	33	.18	559	2.2	11
12	.10	.08	.17	.16	e.04	.81	8.4	22	.09	170	1.3	67
13	.06	.11	.33	.12	e.04	.93	5.8	16	.05	63	.78	16
14	.04	.10	.53	.12	e1.0	1.3	4.7	9.8	.05	41	2.0	9.1
15	.04	.08	.59	.12	e.70	1.0	4.0	7.4	.05	24	8.1	5.1
16	.02	.00	.53	.12	e.60	5.5	3.7	3.8	.31	15	6.8	2.5
17	.11	.00	.35	.12	e.50	4.4	38	1.6	16	8.8	7.0	1.1
18	.10	.00	.29	.12	14	2.6	19	1.3	5.3	4.7	9.5	.51
19	.02	.14	.24	.12	9.1	13	10	.86	2.8	72	4.3	.27
20	.02	.21	.13	e.11	4.7	32	8.4	.66	15	14	1.4	.28
21	.01	1.1	.12	e.10	3.3	11	7.8	.55	106	6.5	.46	.42
22	.08	.27	.12	e.09	2.8	6.6	6.0	.54	36	3.9	.28	.27
23	.10	.03	.09	e.09	1.6	4.3	4.9	.72	19	2.4	13	.14
24	.07	.00	.08	e.08	1.4	3.1	4.7	.44	32	1.6	2.6	14
25	.04	.00	.08	e.07	.89	2.3	3.9	.31	22	.98	1.3	322
26	.04	.00	.08	e.07	2.6	1.8	3.4	.27	11	.53	.75	214
27	.04	.06	.08	e.06	20	1.8	3.2	13	6.6	.39	.43	60
28	.08	.18	.08	e.06	5.3	1.4	3.2	5.0	4.3	2.0	.21	38
29	.10	.03	.09	e.05	3.6	1.1	3.4	2.9	3.3	.82	.09	25
30	.10	.00	.12	e.05	---	.91	2.5	1.7	2.6	.64	.02	17
31	.11	---	.12	e.04	---	.79	---	1.2	---	.38	.00	---
TOTAL	2.05	3.37	5.11	5.90	72.61	109.21	387.94	160.35	285.03	1008.36	183.90	854.92
MEAN	.066	.11	.16	.19	2.50	3.52	12.9	5.17	9.50	32.5	5.93	28.5
MAX	.33	1.1	.59	1.0	20	32	85	33	106	559	85	322
MIN	.00	.00	.00	.04	.04	.39	.54	.27	.03	.38	.00	.00
CFSM	.00	.01	.01	.01	.15	.21	.77	.31	.57	1.95	.36	1.71
IN.	.00	.01	.01	.01	.16	.24	.86	.36	.63	2.25	.41	1.90

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2000, BY WATER YEAR (WY)

MEAN	2.95	15.5	22.8	24.5	26.5	33.3	33.6	23.0	11.9	12.5	5.05	7.68
MAX	18.8	79.0	96.8	105	67.4	112	74.9	86.2	43.0	79.3	25.4	60.9
(WY)	1994	1994	1983	1969	1971	1973	1992	1981	1998	1973	1979	1989
MIN	.020	.058	.026	.006	1.63	3.52	1.48	1.23	.22	.17	.065	.000
(WY)	1988	1972	1977	1977	1978	2000	1971	1976	1977	1972	1983	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1967 - 2000	
ANNUAL TOTAL	6648.71		3078.75			
ANNUAL MEAN	18.2		8.41		18.2	
HIGHEST ANNUAL MEAN					36.1	1973
LOWEST ANNUAL MEAN					6.93	1977
HIGHEST DAILY MEAN	918	Jan 22	559	Jul 11	918	Jan 22 1999
LOWEST DAILY MEAN	.00	Aug 22	.00	Oct 1	.00	Oct 12 1966
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 25	.00	Oct 1	.00	Oct 23 1966
INSTANTANEOUS PEAK FLOW			994	Jul 11	1890	Sep 12 1974
INSTANTANEOUS PEAK STAGE			17.52	Jul 11	19.16	Jul 8 1982
ANNUAL RUNOFF (CFSM)	1.09		.50		1.09	
ANNUAL RUNOFF (INCHES)	14.81		6.86		14.83	
10 PERCENT EXCEEDS	42		14		44	
50 PERCENT EXCEEDS	3.5		.55		3.6	
90 PERCENT EXCEEDS	.00		.04		.10	

e Estimated

03342500 BUSSERON CREEK NEAR CARLISLE, IN

LOCATION.--Lat 38°58'27", long 87°25'33", in NW1/4 survey 17, Vincennes Tract, Sullivan County, Hydrologic Unit 05120111, on left bank 10 ft downstream from bridge on State Highway 58, 1.5 mi northwest of Carlisle, and 6.7 mi upstream from mouth.

DRAINAGE AREA.--228 mi^2.

PERIOD OF RECORD.--October 1943 to current year.

REVISED RECORDS.--WSP 1335: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 425.36 ft above sea level (Indiana Department of Highways bench mark). Prior to Nov. 8, 1950, nonrecording gage at same site and datum. Nov. 8, 1950, to Oct. 31, 1969, at site 200 ft upstream at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow affected by U.S. Soil Conservation Service floodwater-retarding structures and surface-mined areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	e5.6	6.7	11	e9.2	111	43	42	42	37	473	50
2	9.3	e6.0	6.6	12	e9.2	88	42	40	35	32	169	45
3	8.7	e6.1	6.9	39	e9.2	73	42	39	30	29	220	40
4	8.7	e6.1	9.6	69	e9.2	61	40	39	25	336	177	36
5	9.0	e6.1	17	39	e9.2	53	36	37	23	347	109	32
6	9.1	e6.2	23	28	e9.2	46	34	34	22	225	100	28
7	8.8	e6.2	15	23	e9.4	42	415	31	20	130	1500	25
8	10	e6.2	11	20	e9.4	40	1530	33	17	91	1830	24
9	16	e6.3	9.4	18	e9.4	38	1160	32	16	72	1820	24
10	17	e6.4	28	18	e9.4	34	633	45	15	60	1370	469
11	11	e6.4	32	17	e9.6	34	338	54	15	1740	610	1050
12	7.4	e6.5	20	16	e9.6	39	243	74	15	2020	319	537
13	6.3	e6.5	21	15	e10	46	175	85	15	1700	230	479
14	6.1	e6.6	45	14	e28	71	139	71	14	1510	169	256
15	6.6	e6.7	34	13	31	60	114	48	13	949	134	180
16	5.4	e6.8	25	13	27	107	98	39	16	383	116	131
17	5.3	e6.8	20	12	24	146	139	34	182	240	94	100
18	5.1	8.2	17	13	466	103	239	32	196	177	88	81
19	5.6	7.8	14	e12	397	186	153	33	86	466	81	73
20	6.4	7.0	13	e12	172	636	127	29	56	564	65	111
21	5.8	7.1	13	e11	104	447	133	26	178	267	54	267
22	5.4	7.3	11	e11	79	253	118	24	223	177	48	121
23	5.8	7.1	11	e11	64	173	97	25	91	130	229	86
24	6.2	7.8	10	e10	59	133	93	26	240	99	277	329
25	5.9	7.2	9.0	e10	57	108	84	23	305	78	156	1290
26	e6.0	6.9	9.8	e10	82	86	70	20	162	64	110	2450
27	e6.0	6.2	9.8	e10	538	79	62	251	97	53	100	2060
28	e5.9	7.0	9.8	e9.8	297	72	56	215	71	48	83	2050
29	e5.8	7.3	10	e9.6	159	59	49	98	55	84	71	1550
30	e5.6	6.6	10	e9.6	---	52	45	66	44	135	62	850
31	e5.6	---	11	e9.4	---	47	---	51	---	587	54	---
TOTAL	236.8	201.0	488.6	525.4	2706.0	3523	6547	1696	2319	12830	10918	14824
MEAN	7.64	6.70	15.8	16.9	93.3	114	218	54.7	77.3	414	352	494
MAX	17	8.2	45	69	538	636	1530	251	305	2020	1830	2450
MIN	5.1	5.6	6.6	9.4	9.2	34	34	20	13	29	48	24
CFSM	.03	.03	.07	.07	.41	.50	.96	.24	.34	1.82	1.54	2.17
IN.	.04	.03	.08	.09	.44	.57	1.07	.28	.38	2.09	1.78	2.42

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2000, BY WATER YEAR (WY)

MEAN	45.5	167	249	324	361	445	431	330	183	113	60.7	76.6
MAX	263	1250	1421	2380	1317	1284	1102	1268	988	1101	633	701
(WY)	1950	1994	1983	1950	1950	1978	1945	1996	1945	1979	1979	1989
MIN	1.39	.94	2.87	3.64	11.3	12.8	35.6	31.6	8.88	.035	1.89	.88
(WY)	1944	1955	1954	1977	1954	1954	1954	1954	1954	1954	1953	1953

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1944 - 2000	
ANNUAL TOTAL	97409.2		56814.8			
ANNUAL MEAN	267		155		231	
HIGHEST ANNUAL MEAN					548	1950
LOWEST ANNUAL MEAN					10.8	1954
HIGHEST DAILY MEAN	4600	Jan 24	2450	Sep 26	8500	Jan 5 1950
LOWEST DAILY MEAN	5.1	Oct 18	5.1	Oct 18	.00	Jul 12 1954
ANNUAL SEVEN-DAY MINIMUM	5.5	Sep 13	5.6	Oct 16	.00	Jul 12 1954
INSTANTANEOUS PEAK FLOW			2640	Sep 26	8800	Jan 5 1950
INSTANTANEOUS PEAK STAGE			13.23	Sep 26	20.30	May 9 1961
ANNUAL RUNOFF (CFSM)	1.17		.68		1.01	
ANNUAL RUNOFF (INCHES)	15.89		9.27		13.78	
10 PERCENT EXCEEDS	786		337		640	
50 PERCENT EXCEEDS	57		39		55	
90 PERCENT EXCEEDS	6.0		6.7		5.7	

e Estimated

03343000 WABASH RIVER AT VINCENNES, IN

LOCATION.--Lat 38°42'19", long 87°31'14", T.3 N., R.10 W., Lawrence County, IL, Hydrologic Unit 05120111, on right bank 30 ft east of Illinois State Highway 33, 300 ft upstream from Kelso Creek, 570 ft downstream from U.S. Highway 50 bridge, 5.1 mi downstream from Maria Creek, 7.5 mi upstream from Embarras River and at mile 129.6.

DRAINAGE AREA.--13,706 mi^2.

PERIOD OF RECORD.--October 1929 to September 1994 (discharge), October 1994 to current year (stage-only). Prior to December 1929 monthly discharge only, published in WSP 1305. Gage-height records for flood peaks in 1867 and 1883, intermittent records 1887-1904, and continuous since November 1904, collected at site 1.8 mi downstream, are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1173: 1943 (maximum gage height only). WSP 1335: 1930-31, 1933, 1936. WSP 1909: l955. WDR IN-73-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 394.43 ft above sea level. Oct. 1, 1968, to June 19, 1979, recording gage at site 570 ft upstream at same datum. Oct. l, l960, to September 30, 1968, nonrecording gage at site 1.8 mi downstream at same datum. Oct. 1, 1960, to Sept. 30, 1968, auxiliary water-stage recorder at site 2.8 mi upstream from base gage at datum 0.80 ft lower. See WSP 1725 for history of changes prior to Oct. 1, 1960.

REMARKS.--Flow partially regulated by upstream reservoirs.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 29, 1913, reached a stage of 26.3 ft, at former site 1.8 mi downstream and at present datum, from floodmarks, determined by U.S. Army Corps of Engineers, discharge, 255,000 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 29.33 ft, May 22, 1943; minimum gage height unknown prior to 1988, since 1988 minimum gage height, 3.92 ft, Sept. 4, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 15.74 ft, June 30; minimum gage height, 3.99 ft, Jan. 24.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.48	4.41	4.26	4.40	4.08	7.99	5.73	5.97	11.12	15.13	5.69	4.78
2	4.69	4.41	4.25	4.45	4.08	8.32	5.61	5.77	10.58	12.97	5.79	4.77
3	4.76	4.40	4.27	4.60	4.10	8.01	5.48	5.69	9.79	10.91	6.17	4.75
4	4.69	4.40	4.27	4.60	4.11	7.44	5.35	5.62	8.85	10.43	6.04	4.65
5	4.65	4.49	4.30	4.49	4.13	6.83	5.24	5.65	7.99	10.94	5.54	4.58
6	4.64	4.56	4.27	4.49	4.13	6.35	5.16	5.67	7.39	12.24	5.52	4.72
7	4.73	4.53	4.28	4.54	4.13	6.05	5.76	5.73	6.98	12.92	9.19	4.77
8	4.87	4.49	4.29	4.50	4.16	5.83	7.24	5.76	6.74	12.34	8.66	4.75
9	4.92	4.48	4.45	4.48	4.18	5.64	6.55	5.79	7.33	11.75	7.43	4.72
10	4.85	4.49	4.47	4.50	4.19	5.48	5.79	5.74	8.07	11.12	6.57	8.04
11	4.81	4.51	4.47	4.48	4.21	5.41	5.44	5.66	7.89	14.03	5.93	8.56
12	4.80	4.51	4.49	4.49	4.28	5.32	5.31	6.07	7.35	14.61	5.76	6.54
13	4.78	4.51	4.50	4.45	4.41	5.27	5.93	6.39	6.84	12.92	5.57	5.99
14	4.74	4.53	4.55	4.42	4.45	5.24	6.38	7.32	6.58	11.35	5.32	5.63
15	4.67	4.52	4.48	4.39	4.42	5.21	6.23	7.56	6.59	9.89	5.16	5.49
16	4.55	4.48	4.52	4.37	4.44	5.34	6.07	7.06	9.41	8.44	5.02	5.69
17	4.45	4.46	4.60	4.33	4.66	5.28	6.10	6.54	11.95	7.66	4.97	5.90
18	4.41	4.38	4.65	4.30	6.20	5.16	6.22	6.26	12.92	7.19	4.88	5.73
19	4.46	4.34	4.76	4.27	5.74	5.40	5.89	6.06	12.26	9.04	5.12	5.47
20	4.44	4.30	4.79	4.24	5.63	6.15	6.12	5.99	10.80	8.09	6.10	5.31
21	4.40	4.31	4.78	4.19	5.77	6.13	6.00	6.18	10.88	6.86	5.54	5.37
22	4.37	4.30	4.72	4.14	6.04	6.08	5.95	6.40	11.69	6.42	5.12	5.21
23	4.44	4.33	4.58	4.05	6.65	6.34	5.87	6.58	12.45	6.11	6.07	5.09
24	4.48	4.32	4.51	4.00	6.83	6.95	6.78	7.06	14.07	5.89	5.81	5.28
25	4.48	4.32	4.42	4.05	6.66	7.68	8.07	7.11	14.07	5.73	5.14	8.44
26	4.46	4.33	4.29	4.05	7.38	7.59	8.06	6.80	14.75	5.56	4.90	10.04
27	4.44	4.34	4.15	4.07	7.90	7.15	7.64	7.64	15.19	5.40	5.97	9.02
28	4.43	4.34	4.14	4.08	7.75	6.61	7.08	8.29	15.45	5.35	5.30	7.97
29	4.42	4.29	4.17	4.11	7.56	6.22	6.60	8.73	15.64	5.52	5.00	6.85
30	4.42	4.27	4.23	4.13	---	6.01	6.23	10.13	15.73	5.40	4.89	6.24
31	4.39	---	4.33	4.10	---	5.88	---	10.97	---	5.72	4.86	---
MEAN	4.58	4.41	4.43	4.31	5.25	6.27	6.20	6.72	10.58	9.29	5.78	6.01
MAX	4.92	4.56	4.79	4.60	7.90	8.32	8.07	10.97	15.73	15.13	9.19	10.04
MIN	4.37	4.27	4.14	4.00	4.08	5.16	5.16	5.62	6.58	5.35	4.86	4.58

CAL YR 1999 MEAN 8.40 MAX 24.09 MIN 4.08
WTR YR 2000 MEAN 6.15 MAX 15.73 MIN 4.00

03347000 WHITE RIVER AT MUNCIE, IN

LOCATION.--Lat 40°12'15", long 85°23'14", in NE$^1/_4$NE$^1/_4$, sec.9, T.20 N., R.10 E., Delaware County, Hydrologic Unit 05120201, on right bank 200 ft downstream from Walnut Street bridge in Muncie, 6 mi upstream from Bell Creek, and at mile 315.8.

DRAINAGE AREA.--241 mi^2.

PERIOD OF RECORD.--November 1930 to current year. Prior to October 1948, published as West Fork White River at Muncie. Daily gage heights from July 1923 to December 1929 are available in the district office.

REVISED RECORDS.--WSP 1335: 1931-32(M), 1936(M), 1938, 1948. WSP 1435: 1955. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 917.10 ft above sea level (City of Muncie bench mark). See WSP 1705 for history of changes prior to Jan. 28, 1942. Jan. 28, 1942, to Apr. 27, 1964, water-stage recorder at present site at datum 3.00 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow affected by regulation of Prairie Creek Reservoir and by diversion of municipal water supply by Muncie Water Works Co. above gage. Records of diversion available since October 1937.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 22.6 ft in March 1913, present datum, discharge, 20,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	15	16	13	e9.7	173	74	96	85	109	77	21
2	16	16	17	17	e9.8	139	70	238	70	97	180	20
3	12	16	16	34	e9.9	108	77	253	60	105	211	20
4	13	16	17	123	e11	98	75	187	52	340	143	99
5	12	17	28	118	e10	90	69	142	59	325	80	65
6	13	18	27	64	e10	80	62	116	68	871	87	36
7	13	19	21	43	e11	73	277	101	73	595	995	33
8	19	20	12	35	e13	71	2120	89	54	314	468	27
9	27	19	10	34	e18	69	1250	90	36	235	257	26
10	31	18	23	31	e45	61	602	92	35	192	217	307
11	23	19	22	30	216	58	383	92	33	200	132	795
12	18	17	19	26	301	66	285	72	35	188	93	369
13	14	19	14	24	210	62	219	102	43	143	74	226
14	12	17	58	22	336	68	188	88	48	111	63	155
15	14	16	77	20	317	89	160	63	214	66	52	117
16	13	15	37	23	278	86	134	54	252	58	42	97
17	15	15	27	e18	266	93	129	56	482	52	44	81
18	15	16	20	e17	412	82	175	68	1410	46	45	64
19	15	20	18	e16	896	104	146	366	1210	53	44	58
20	15	19	20	e15	435	411	167	402	588	46	35	61
21	15	20	17	e14	273	756	414	252	654	39	29	120
22	13	22	12	e13	260	394	485	185	672	35	28	139
23	14	19	e12	e14	295	267	324	196	436	33	50	110
24	14	20	e11	e13	246	214	233	226	318	30	59	521
25	14	20	e10	e12	223	181	187	160	325	25	41	438
26	10	26	e9.8	e12	188	147	146	106	284	24	38	490
27	9.9	21	e10	e11	250	134	121	139	231	24	38	319
28	11	22	e9.8	e10	275	133	106	221	189	22	49	222
29	9.6	18	e9.7	e10	213	120	95	234	158	24	38	172
30	14	16	e9.7	e9.9	---	93	83	148	133	144	28	136
31	14	---	e10	e9.8	---	80	---	105	---	152	23	---
TOTAL	468.5	551	620.0	851.7	6037.4	4600	8856	4739	8307	4698	3760	5344
MEAN	15.1	18.4	20.0	27.5	208	148	295	153	277	152	121	178
MAX	31	26	77	123	896	756	2120	402	1410	871	995	795
MIN	9.6	15	9.7	9.8	9.7	58	62	54	33	22	23	20
CFSM	.06	.08	.08	.11	.86	.62	1.22	.63	1.15	.63	.50	.74
IN.	.07	.09	.10	.13	.93	.71	1.37	.73	1.28	.73	.58	.82

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2000, BY WATER YEAR (WY)

MEAN	54.5	144	218	300	337	410	401	261	221	121	69.4	57.8
MAX	409	1068	1119	1654	1122	963	1476	1239	1492	750	816	825
(WY)	1987	1994	1991	1950	1950	1978	1964	1933	1958	1992	1979	1989
MIN	2.30	7.33	6.57	6.38	21.2	39.0	46.4	16.4	13.6	9.55	4.80	1.96
(WY)	1957	1957	1961	1977	1935	1941	1941	1941	1988	1944	1940	1954

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1932 - 2000	
ANNUAL TOTAL	61622.5		48832.6			
ANNUAL MEAN	169		133		215	
HIGHEST ANNUAL MEAN					421	1950
LOWEST ANNUAL MEAN					42.1	1941
HIGHEST DAILY MEAN	4520	Jan 23	2120	Apr 8	11600	Apr 21 1964
LOWEST DAILY MEAN	9.6	Oct 29	9.6	Oct 29	1.1	Sep 16 1954
ANNUAL SEVEN-DAY MINIMUM	e9.9	Dec 25	e9.9	Dec 25	1.2	Sep 21 1954
INSTANTANEOUS PEAK FLOW			2380	Apr 8	14300	Apr 21 1964
INSTANTANEOUS PEAK STAGE			7.48	Apr 8	21.07	Jan 15 1937
ANNUAL RUNOFF (CFSM)	.70		.55		.89	
ANNUAL RUNOFF (INCHES)	9.51		7.54		12.14	
10 PERCENT EXCEEDS	401		318		480	
50 PERCENT EXCEEDS	43		62		74	
90 PERCENT EXCEEDS	15		13		12	

e Estimated

03347500 BUCK CREEK NEAR MUNCIE, IN

LOCATION.--Lat 40°08'05", long 85°22'25", in SW$^1/_4$SE$^1/_4$ sec.34, T.20 N., R.10 E., Delaware County, Hydrologic Unit 05120201, on left bank at downstream side of bridge on County Road 400 South, 1.0 mi upstream from Muncie Water Works Co. pumping station, 4.2 mi southeast of court house in Muncie, and at mile 10.6.

DRAINAGE AREA.--35.5 mi^2.

PERIOD OF RECORD.--October 1954 to current year.

REVISED RECORDS.--WSP 1909: 1955, 1957. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 944.67 ft above sea level. Prior to May 5, 1955, nonrecording gage at same site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 15 ft, from information by local residents. Date unknown.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	e11	e12	13	e12	26	17	21	15	20	18	12
2	14	e15	e11	13	e11	23	17	34	14	19	19	12
3	16	e14	e11	20	e12	21	17	25	14	103	18	12
4	17	e12	e12	42	e11	20	16	23	13	122	16	20
5	16	e11	19	25	e11	19	15	21	15	46	14	15
6	15	e11	22	20	11	18	15	19	14	202	19	14
7	14	e10	18	19	11	17	105	19	13	101	292	14
8	15	e10	16	17	11	17	234	17	12	54	67	13
9	20	10	16	17	12	17	87	17	11	40	43	13
10	17	9.9	25	16	16	16	55	24	11	34	34	86
11	14	9.0	22	16	34	16	43	19	11	30	27	73
12	13	e9.6	20	15	27	17	36	18	12	27	23	41
13	14	e9.3	20	15	27	17	31	22	13	24	21	26
14	15	e9.0	39	14	47	18	28	19	14	22	20	20
15	14	e8.8	28	14	31	17	26	16	33	22	19	18
16	13	e8.6	22	14	31	18	24	16	34	20	18	16
17	14	e8.5	19	13	25	19	24	16	83	18	18	15
18	14	e8.4	18	14	83	17	23	17	307	18	20	14
19	11	11	17	13	83	22	21	65	96	19	17	13
20	e10	15	e18	13	45	71	26	34	58	18	17	13
21	e10	13	e16	e14	35	85	39	26	235	17	16	26
22	e9.8	e12	e16	e13	34	44	39	22	141	16	15	20
23	e10	e11	e15	e14	30	34	31	21	62	15	16	26
24	e11	e10	15	e13	32	29	26	19	46	15	16	42
25	e10	13	18	e12	28	25	23	17	60	14	15	43
26	e10	16	15	e12	25	23	21	16	39	14	15	65
27	e10	15	14	e11	45	22	20	21	34	13	16	42
28	e10	15	14	e11	37	20	19	21	27	13	13	32
29	e10	14	14	e12	29	19	18	20	24	13	12	26
30	e10	e12	13	e15	---	18	17	18	22	23	12	24
31	e10	---	13	e13	---	17	---	16	---	16	12	---
TOTAL	401.8	342.1	548	483	846	762	1113	679	1483	1128	898	806
MEAN	13.0	11.4	17.7	15.6	29.2	24.6	37.1	21.9	49.4	36.4	29.0	26.9
MAX	20	16	39	42	83	85	234	65	307	202	292	86
MIN	9.8	8.4	11	11	11	16	15	16	11	13	12	12
CFSM	.37	.32	.50	.44	.82	.69	1.05	.62	1.39	1.02	.82	.76
IN.	.42	.36	.57	.51	.89	.80	1.17	.71	1.55	1.18	.94	.84

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2000, BY WATER YEAR (WY)

MEAN	20.4	31.6	37.2	41.6	50.0	56.7	56.3	44.0	42.9	30.1	23.0	18.5
MAX	58.6	146	109	96.2	123	117	166	101	153	97.9	108	76.4
(WY)	1991	1994	1991	1959	1971	1982	1964	1996	1958	1992	1979	1989
MIN	8.73	9.30	8.77	6.36	11.2	16.4	16.7	17.2	11.3	8.64	9.00	8.13
(WY)	1964	1964	1965	1977	1964	1966	1966	1988	1988	1966	1965	1963

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1955 - 2000	
ANNUAL TOTAL	12525.8		9489.9			
ANNUAL MEAN	34.3		25.9		37.6	
HIGHEST ANNUAL MEAN					57.3	1991
LOWEST ANNUAL MEAN					15.4	1966
HIGHEST DAILY MEAN	651	Jan 22	307	Jun 18	1260	Apr 21 1964
LOWEST DAILY MEAN	8.0	Sep 5	e8.4	Nov 18	4.7	Jan 17 1977
ANNUAL SEVEN-DAY MINIMUM	8.2	Aug 31	e8.9	Nov 12	5.5	Jan 15 1977
INSTANTANEOUS PEAK FLOW			589	Aug 7	1780	Apr 21 1964
INSTANTANEOUS PEAK STAGE			8.19	Aug 7	13.96	Apr 21 1964
ANNUAL RUNOFF (CFSM)	.97		.73		1.06	
ANNUAL RUNOFF (INCHES)	13.13		9.94		14.39	
10 PERCENT EXCEEDS	61		42		66	
50 PERCENT EXCEEDS	20		17		24	
90 PERCENT EXCEEDS	9.8		11		12	

e Estimated

03348130 WHITE RIVER AT RAIBLE AVENUE AT ANDERSON, IN

LOCATION.--Lat 40°06'38", long 85°42'39", in NW1/4SW1/4 sec.11, T.19 N., R.7 E., Madison County, Hydrologic Unit 05120201, on the upstream side of bridge in southeast quadrant of Rabile Avenue and White River, 0.3 mi upstream of waste-water treatment plant, 2 mi downstream of Killbuck Creek, and 3.0 mi downstream of the municipal power plant in Anderson.

DRAINAGE AREA.--519 mi^2 (estimated).

PERIOD OF RECORD.--September 1999 to September 30, 2000.

GAGE.--Water-stage recorder. Datum of gage is 816.54 ft above sea level (based on Department of Natural Resources Benchmark MAD17 reset 1984).

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow maybe affected at times by upstream regulation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	80	89	e90	e79	356	206	291	279	236	226	106
2	88	85	91	90	e78	311	201	458	260	209	267	100
3	79	101	91	126	e80	271	207	530	236	350	429	95
4	79	93	89	222	e82	248	211	433	216	711	349	297
5	85	88	132	275	e88	234	200	443	238	557	235	225
6	80	86	165	200	e86	217	189	361	241	942	349	156
7	76	84	128	157	e85	200	326	310	213	1560	1280	125
8	110	84	110	133	e87	189	3460	300	195	684	1220	117
9	185	87	94	121	e96	185	3210	307	180	476	582	107
10	164	88	177	119	e120	179	1310	446	164	397	440	445
11	128	86	162	114	387	171	837	379	168	364	327	1180
12	102	91	129	110	482	180	649	311	172	457	259	737
13	92	90	117	105	399	186	510	388	e192	323	224	487
14	83	91	249	99	417	179	437	370	206	281	203	329
15	79	89	267	96	544	196	390	293	e287	241	183	267
16	82	87	212	93	415	210	352	255	e399	208	167	230
17	83	85	159	e91	434	220	361	246	682	194	150	199
18	83	85	136	e90	546	207	358	270	2080	182	182	177
19	84	96	122	e88	1540	224	341	904	2640	170	157	161
20	84	112	126	e86	918	464	423	1030	1140	194	144	164
21	84	100	129	e81	561	1450	1000	674	1300	165	132	193
22	84	96	e107	e74	455	921	1120	491	1480	149	122	250
23	81	96	e101	e89	488	590	791	453	914	137	133	238
24	80	96	e95	e88	448	453	584	429	605	130	165	476
25	82	94	e90	e85	391	380	460	382	741	126	150	706
26	82	108	e89	e84	347	327	386	311	602	120	137	745
27	78	131	e94	e83	456	302	338	373	521	113	148	616
28	76	102	e91	e79	579	291	312	432	383	111	132	409
29	75	98	e89	e80	434	272	289	484	315	113	135	313
30	75	94	e88	e81	---	247	268	376	273	336	120	265
31	76	---	e89	e80	---	221	---	312	---	353	110	---
TOTAL	2819	2803	3907	3409	11122	10081	19726	13042	17322	10589	8857	9915
MEAN	90.9	93.4	126	110	384	325	658	421	577	342	286	330
MAX	185	131	267	275	1540	1450	3460	1030	2640	1560	1280	1180
MIN	75	80	88	74	78	171	189	246	164	111	110	95

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2000, BY WATER YEAR (WY)

MEAN	90.9	93.4	126	110	384	325	658	421	577	342	286	330
MAX	90.9	93.4	126	110	384	325	658	421	577	342	286	330
(WY)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
MIN	90.9	93.4	126	110	384	325	658	421	577	342	286	330
(WY)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1999 - 2000	
ANNUAL TOTAL			113592			
ANNUAL MEAN			310		310	
HIGHEST ANNUAL MEAN					310	2000
LOWEST ANNUAL MEAN					310	2000
HIGHEST DAILY MEAN	267	Dec 15	3460	Apr 8	3460	Apr 8 2000
LOWEST DAILY MEAN	75	Oct 29	74	Jan 22	74	Jan 22 2000
ANNUAL SEVEN-DAY MINIMUM	77	Oct 26	77	Oct 26	77	Oct 26 1999
INSTANTANEOUS PEAK FLOW			4630	Apr 9	4630	Apr 9 2000
INSTANTANEOUS PEAK STAGE			8.33	Apr 9	8.33	Apr 9 2000
10 PERCENT EXCEEDS	152		594		594	
50 PERCENT EXCEEDS	91		198		198	
90 PERCENT EXCEEDS	79		84		84	

e Estimated

03348350 PIPE CREEK AT FRANKTON, IN

LOCATION.--Lat 40°13'38", long 85°45'58", in SE$^1/_4$NE$^1/_4$ sec.31, T.21 N., R.7 E., Madison County, Hydrologic Unit 05120201, on right bank 20 ft downstream from bridge on County Road 500 West, at northeast edge of Frankton.

DRAINAGE AREA.--113 mi^2.

PERIOD OF RECORD.--May 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 810.00 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 10, 1958, reached a stage of 15.5 ft, from floodmark determined by State of Indiana, Department of Natural Resources, discharge, 4,900 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	e3.0	9.7	6.6	e6.2	52	31	44	80	30	14	9.6
2	2.4	e5.0	10	6.3	e6.0	43	31	119	65	28	13	9.4
3	2.4	e10	11	7.9	e6.2	36	31	105	54	29	41	9.3
4	4.7	e9.0	12	16	e6.0	33	30	74	47	32	27	19
5	3.5	e8.0	14	14	e6.0	31	28	60	50	28	19	14
6	2.9	e7.4	21	12	e6.2	28	27	52	48	51	17	13
7	3.2	e7.2	17	10	e6.4	26	34	46	41	80	16	11
8	3.8	e7.0	16	8.5	e6.8	24	276	43	37	49	15	10
9	7.2	e6.8	14	8.0	e7.5	23	216	40	35	36	17	9.9
10	6.7	6.5	23	8.1	e9.0	22	122	137	32	35	15	15
11	4.7	6.3	20	9.0	e21	22	88	127	30	78	15	26
12	4.0	6.3	18	8.8	e25	23	71	81	33	78	13	24
13	3.7	6.4	17	8.3	e19	23	57	110	31	41	13	18
14	3.7	5.9	27	7.4	e16	28	53	113	40	31	12	15
15	e3.6	7.0	23	7.5	e14	43	49	72	153	26	11	14
16	e3.6	7.0	18	7.4	e13	41	45	57	100	23	11	12
17	e4.5	6.0	14	7.1	e12	35	48	52	96	20	10	12
18	e3.8	6.5	11	e7.0	e64	29	53	53	193	18	14	12
19	e3.5	7.7	9.8	e6.9	182	33	47	189	181	18	11	11
20	e3.4	9.8	9.9	e6.8	95	154	58	184	105	18	11	12
21	e3.4	9.1	9.4	e6.7	63	357	269	111	228	17	10	17
22	e3.3	8.9	8.2	e6.6	68	229	246	81	246	16	10	13
23	e3.3	8.1	8.0	e6.5	75	134	150	67	128	15	18	13
24	e3.5	8.4	7.6	e6.4	58	99	105	56	86	14	17	17
25	e3.3	8.2	7.1	e6.3	48	79	80	45	82	13	15	17
26	e3.3	11	7.1	e6.2	41	62	64	39	63	13	12	25
27	e3.2	12	7.2	e6.1	77	57	56	141	51	12	12	24
28	e3.2	10	7.3	e6.0	96	53	52	555	43	12	11	20
29	e3.1	9.4	7.4	e6.0	64	45	47	330	39	12	11	18
30	e3.1	9.4	7.6	e6.2	---	38	42	156	35	19	11	16
31	e3.0	---	7.8	e6.4	---	34	---	104	---	16	9.8	---
TOTAL	113.5	233.3	400.1	243.0	1117.3	1936	2506	3443	2452	908	451.8	456.2
MEAN	3.66	7.78	12.9	7.84	38.5	62.5	83.5	111	81.7	29.3	14.6	15.2
MAX	7.2	12	27	16	182	357	276	555	246	80	41	26
MIN	2.4	3.0	7.1	6.0	6.0	22	27	39	30	12	9.8	9.3
CFSM	.03	.07	.11	.07	.34	.55	.74	.98	.72	.26	.13	.13
IN.	.04	.08	.13	.08	.37	.64	.82	1.13	.81	.30	.15	.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2000, BY WATER YEAR (WY)

MEAN	30.1	91.2	125	130	157	197	167	100	126	72.2	46.8	40.0
MAX	176	519	482	409	416	544	467	276	409	526	250	529
(WY)	1991	1993	1991	1974	1990	1982	1972	1996	1980	1992	1998	1989
MIN	3.66	6.71	7.31	5.29	16.5	42.4	33.3	19.1	10.3	7.94	4.97	3.23
(WY)	2000	1998	1977	1977	1995	1981	1971	1976	1988	1977	1988	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1969 - 2000	
ANNUAL TOTAL	33935.0		14260.2			
ANNUAL MEAN	93.0		39.0		106	
HIGHEST ANNUAL MEAN					180	1973
LOWEST ANNUAL MEAN					32.7	1977
HIGHEST DAILY MEAN	2970	Jan 23	555	May 28	3840	Jul 14 1992
LOWEST DAILY MEAN	2.0	Sep 27	2.4	Oct 2	2.0	Sep 27 1999
ANNUAL SEVEN-DAY MINIMUM	2.2	Sep 22	3.1	Oct 1	2.2	Sep 22 1999
INSTANTANEOUS PEAK FLOW			673	May 28	5630	Jul 13 1992
INSTANTANEOUS PEAK STAGE			7.01	May 28	15.00	Jul 13 1992
ANNUAL RUNOFF (CFSM)	.82		.34		.94	
ANNUAL RUNOFF (INCHES)	11.17		4.69		12.80	
10 PERCENT EXCEEDS	225		96		246	
50 PERCENT EXCEEDS	17		17		39	
90 PERCENT EXCEEDS	3.4		6.0		8.8	

e Estimated

03349000 WHITE RIVER AT NOBLESVILLE, IN

LOCATION.--Lat 40°02'50", long 86°01'00", in SE$^1/_4$SE$^1/_4$ sec.36, T.19 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, on right bank at downstream side of Logan Street bridge in Noblesville, 1.5 mi upstream from Cicero Creek, 5.1 mi downstream from dam at Clare, and at mile 263.5.

DRAINAGE AREA.--858 mi^2.

PERIOD OF RECORD.--October 1946 to current year. Gage-height records collected at present site from December 1913 to December 1935, and at site 400 ft downstream January 1936 to May 1951, are contained in reports of National Weather Service. Prior to October 1948, published as West Fork White River at Noblesville.

REVISED RECORDS.--WSP 1335: 1949. WSP 2109: Drainage area. WDR IN-94-1: 1993 (M).

GAGE.--Water-stage recorder. Datum of gage is 738.16 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow partially regulated by powerplant above station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	194	117	137	150	e121	528	322	373	552	425	345	142
2	149	117	134	150	e120	457	316	535	480	375	271	138
3	136	117	134	158	e124	394	317	746	428	411	386	131
4	135	121	136	216	e129	349	328	654	382	770	485	221
5	131	121	142	300	e135	325	332	605	381	874	348	325
6	133	121	191	317	e132	305	324	547	401	712	300	231
7	134	121	207	253	e130	284	339	472	364	1620	631	178
8	139	121	177	214	e133	270	1750	433	330	1030	1530	156
9	192	121	153	192	e140	259	3370	421	309	657	764	148
10	242	121	174	184	e150	255	1910	824	288	553	560	213
11	193	121	233	182	e202	247	1210	976	273	501	455	822
12	168	121	202	176	469	250	922	690	292	644	349	1010
13	141	121	177	168	541	254	739	668	297	528	294	622
14	133	121	217	167	474	258	637	765	304	416	264	435
15	126	121	354	159	564	267	581	602	483	352	246	329
16	119	121	330	156	551	302	539	495	717	296	224	278
17	128	121	265	154	491	307	527	446	745	267	210	244
18	123	121	219	155	552	305	527	434	1380	249	230	220
19	123	121	201	146	1180	302	519	809	2850	234	225	201
20	122	121	188	e134	1370	447	500	1550	1780	234	198	193
21	121	142	188	e115	806	1310	1020	1110	1540	229	183	213
22	122	149	177	e118	608	1580	1490	806	2360	207	175	234
23	123	145	169	e143	586	964	1230	683	1710	191	170	280
24	122	146	156	e141	604	718	893	624	1100	176	209	293
25	121	144	138	e131	537	600	704	580	1070	169	209	706
26	119	148	157	e130	487	516	594	493	1040	163	189	721
27	117	164	161	e125	499	461	519	544	903	155	186	789
28	117	173	151	e118	709	441	471	1170	711	150	186	553
29	117	147	152	e120	662	417	433	1360	566	150	172	410
30	117	143	150	e127	---	378	394	919	490	237	169	331
31	117	---	150	e126	---	340	---	672	---	397	154	---
TOTAL	4274	3909	5720	5125	13206	14090	23757	22006	24526	13372	10317	10767
MEAN	138	130	185	165	455	455	792	710	818	431	333	359
MAX	242	173	354	317	1370	1580	3370	1550	2850	1620	1530	1010
MIN	117	117	134	115	120	247	316	373	273	150	154	131
CFSM	.16	.15	.22	.19	.53	.53	.92	.83	.95	.50	.39	.42
IN.	.19	.17	.25	.22	.57	.61	1.03	.95	1.06	.58	.45	.47

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2000, BY WATER YEAR (WY)

MEAN	275	595	857	1159	1260	1558	1485	958	914	577	364	298
MAX	1264	3359	3472	6494	3485	3732	4281	2951	4432	2778	2264	3143
(WY)	1991	1994	1991	1950	1950	1978	1964	1996	1958	1992	1979	1989
MIN	88.4	109	107	102	141	368	322	249	143	138	93.8	69.3
(WY)	1964	1964	1964	1977	1964	1981	1971	1988	1988	1966	1988	1954

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1947 - 2000	
ANNUAL TOTAL	286314		151069			
ANNUAL MEAN	784		413		856	
HIGHEST ANNUAL MEAN					1455	1950
LOWEST ANNUAL MEAN					266	1954
HIGHEST DAILY MEAN	20400	Jan 24	3370	Apr 9	25400	Dec 31 1990
LOWEST DAILY MEAN	94	Sep 28	115	Jan 21	44	Sep 28 1954
ANNUAL SEVEN-DAY MINIMUM	97	Sep 22	117	Oct 27	58	Sep 23 1954
INSTANTANEOUS PEAK FLOW			3590	Apr 9	27000	Dec 31 1990
INSTANTANEOUS PEAK STAGE			9.50	Apr 9	21.31	Apr 22 1964
ANNUAL RUNOFF (CFSM)	.91		.48		1.00	
ANNUAL RUNOFF (INCHES)	12.41		6.55		13.55	
10 PERCENT EXCEEDS	1840		823		1920	
50 PERCENT EXCEEDS	242		267		400	
90 PERCENT EXCEEDS	117		122		137	

e Estimated

03350700 STONY CREEK NEAR NOBLESVILLE, IN

LOCATION.--Lat 40°01'44", long 85°59'44", in NE$^1/_4$NE$^1/_4$ sec.7, T.18 N., R.5 E., Hamilton County, Hydrologic Unit 05120201, on right bank, between dual bridges on State Highway 37, 1.4 mi upstream from mouth, and 1.4 mi southeast of Noblesville.

DRAINAGE AREA.--50.8 mi^2.

PERIOD OF RECORD.--July 1967 to current year.

REVISED RECORDS.--WDR IN-82-1: 1981.

GAGE.--Water-stage recorder. Datum of gage is 749.00 ft above sea level (Indiana Department of Highways bench mark). Prior to Oct. 1, 1988, water-stage recorder at county road bridge 200 ft upstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	3.5	3.9	5.4	e3.1	17	9.8	15	18	19	9.2	5.2
2	2.7	4.8	4.1	5.6	e3.0	14	9.7	22	15	17	8.5	4.9
3	2.7	3.8	4.1	7.8	e3.1	12	10	20	14	24	8.4	4.5
4	3.3	3.7	4.0	14	e3.2	11	10	18	13	163	8.0	21
5	3.0	3.6	5.4	9.2	e3.1	9.9	9.5	17	16	82	6.8	12
6	3.0	3.5	7.4	7.4	e3.2	9.6	8.8	15	15	52	22	7.4
7	3.4	3.5	5.5	6.7	e3.4	8.5	19	15	11	37	113	6.3
8	5.0	3.7	4.6	6.8	e3.6	7.8	135	14	10	27	58	6.0
9	8.5	3.6	4.5	6.4	e4.0	7.4	82	15	10	22	36	5.8
10	7.1	3.5	8.8	6.1	e5.0	7.1	55	35	9.5	19	29	10
11	4.8	3.5	9.0	5.4	e12	7.2	42	32	9.2	17	20	17
12	3.8	3.6	6.4	5.3	e9.2	8.0	33	24	8.7	15	15	13
13	3.4	3.7	5.9	4.7	e10	7.7	28	43	8.6	13	11	11
14	3.3	3.6	19	4.7	17	8.8	25	42	9.3	12	10	9.0
15	3.1	3.6	15	4.9	14	11	23	28	22	11	8.6	8.0
16	3.7	3.7	10	5.0	12	10	20	23	23	10	7.6	7.2
17	4.0	4.0	8.0	e4.8	13	9.8	20	22	37	9.7	6.7	6.5
18	3.8	3.8	7.0	e4.6	28	8.8	19	19	60	9.1	12	6.0
19	3.8	3.9	6.6	e4.4	41	12	17	30	56	9.0	8.3	5.7
20	3.5	4.5	6.6	e4.2	24	42	19	33	38	8.3	6.8	5.6
21	3.4	4.3	6.0	e4.1	18	40	50	25	150	8.1	6.2	5.9
22	3.5	4.1	5.7	e3.9	16	28	39	21	151	7.5	5.8	6.3
23	3.3	3.9	4.9	e3.7	15	22	32	21	94	7.8	6.6	6.8
24	3.4	3.8	e4.5	e3.6	14	20	26	17	64	7.6	13	12
25	3.5	3.9	e4.2	e3.5	12	18	22	14	102	7.3	7.8	13
26	3.4	4.7	e4.1	e3.4	10	16	19	12	67	7.2	6.2	26
27	3.2	4.8	e4.2	e3.3	24	16	18	35	51	6.5	6.1	21
28	3.3	6.0	e4.3	e3.2	27	15	18	56	41	6.4	5.8	14
29	3.4	3.8	5.8	e3.1	20	13	16	36	30	6.5	5.5	11
30	3.4	4.3	5.1	e3.2	---	11	14	25	25	17	5.7	9.5
31	3.4	---	6.1	e3.2	---	10	---	21	---	14	5.4	---
TOTAL	116.1	118.7	200.7	161.6	370.9	438.6	848.8	765	1178.3	672.0	479.0	297.6
MEAN	3.75	3.96	6.47	5.21	12.8	14.1	28.3	24.7	39.3	21.7	15.5	9.92
MAX	8.5	6.0	19	14	41	42	135	56	151	163	113	26
MIN	2.7	3.5	3.9	3.1	3.0	7.1	8.8	12	8.6	6.4	5.4	4.5
CFSM	.07	.08	.13	.10	.25	.28	.56	.49	.77	.43	.30	.20
IN.	.09	.09	.15	.12	.27	.32	.62	.56	.86	.49	.35	.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2000, BY WATER YEAR (WY)

MEAN	15.6	46.2	56.0	58.0	76.7	84.8	79.9	61.7	50.3	30.7	21.2	16.8
MAX	68.0	287	235	145	190	203	160	229	241	128	80.5	210
(WY)	1991	1993	1991	1974	1990	1978	1972	1996	1998	1979	1979	1989
MIN	2.41	3.96	4.99	3.87	6.26	14.1	16.9	16.1	6.50	3.25	3.84	3.38
(WY)	1996	2000	1998	1977	1998	2000	1971	1988	1988	1977	1988	1995

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1968 - 2000	
ANNUAL TOTAL	15019.3		5647.3			
ANNUAL MEAN	41.1		15.4		49.6	
HIGHEST ANNUAL MEAN					83.0	1993
LOWEST ANNUAL MEAN					15.4	2000
HIGHEST DAILY MEAN	949	Jan 22	163	Jul 4	1760	Dec 30 1990
LOWEST DAILY MEAN	2.3	Sep 28	2.7	Oct 2	.88	Oct 9 1995
ANNUAL SEVEN-DAY MINIMUM	2.6	Sep 22	3.0	Oct 1	.96	Oct 8 1995
INSTANTANEOUS PEAK FLOW			212	Jul 4	2090	Dec 30 1990
INSTANTANEOUS PEAK STAGE			3.68	Jul 4	9.21	Dec 30 1990
ANNUAL RUNOFF (CFSM)	.81		.30		.98	
ANNUAL RUNOFF (INCHES)	11.00		4.14		13.28	
10 PERCENT EXCEEDS	102		32		112	
50 PERCENT EXCEEDS	10		8.8		23	
90 PERCENT EXCEEDS	3.5		3.5		5.5	

e Estimated

03351000 WHITE RIVER NEAR NORA, IN

LOCATION.--Lat 39°54'35", long 86°06'20", in NW$^1/_4$NW$^1/_4$ sec.20, T.17 N., R.4 E., Marion County, Hydrologic Unit 05120201, on downstream side of center bridge pier on 82nd Street, 2 mi east of Nora, 14 mi upstream from Fall Creek, and at mile 247.9.

DRAINAGE AREA.--1,219 mi^2.

PERIOD OF RECORD.--October 1929 to current year. Prior to April 1930, monthly discharge only, published in WSP 1305. Prior to October 1948, published as West Fork White River near Nora.

REVISED RECORDS.--WSP 1335: 1930-31, 1934(m), 1936, 1941, 1943, 1945, 1947-48. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 710.94 ft above sea level (levels by U.S. Army Corps of Engineers). Oct. 26, 1929 to July 29, 1942, at site 200 ft downstream at same datum. Supplemental water-stage recorder 4.5 mi downstream.

REMARKS.--Records good. Flow partially regulated by Morse Reservoir.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 22.4 ft, from floodmark, determined by Indiana Department of Highways, discharge, 58,500 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	293	159	164	171	163	671	367	449	790	612	426	160
2	220	161	160	176	143	564	350	560	659	536	323	148
3	200	162	155	214	149	498	339	794	591	511	375	161
4	209	165	157	264	153	446	340	784	501	944	514	521
5	188	181	198	300	159	408	351	670	521	1480	438	433
6	181	170	235	344	155	384	335	634	551	956	502	337
7	181	167	243	298	151	363	501	553	486	1590	1050	249
8	217	161	217	257	152	341	1490	500	424	1550	1610	208
9	338	155	196	232	158	331	3900	502	384	898	1130	189
10	312	143	280	217	172	309	2630	819	355	684	703	298
11	263	143	258	207	233	311	1540	1180	344	634	552	574
12	208	146	279	196	378	319	1140	873	343	662	438	1250
13	190	147	227	185	569	321	907	853	382	715	367	790
14	153	151	302	176	562	330	764	919	455	529	316	552
15	152	146	349	174	533	323	680	767	616	452	287	423
16	166	146	375	166	607	357	618	605	931	390	259	363
17	174	145	312	160	494	372	595	564	1190	337	245	305
18	177	147	254	158	726	360	605	511	1490	294	433	269
19	170	156	220	166	1020	409	584	750	3080	292	298	247
20	168	163	216	159	1710	542	597	1620	2530	276	259	245
21	167	170	201	154	1060	1070	896	1380	2190	271	224	268
22	162	175	209	131	767	1870	1590	1010	2970	250	209	279
23	169	166	199	168	672	1220	1480	832	2520	233	200	312
24	165	167	191	181	715	885	1100	737	1820	222	263	395
25	168	164	173	153	644	718	848	662	1690	207	256	667
26	160	175	163	147	603	614	702	584	1650	197	236	1000
27	163	178	180	151	760	549	605	683	1360	184	218	969
28	167	186	172	134	788	507	541	1090	1130	175	222	774
29	158	181	181	148	836	485	498	1680	867	176	198	558
30	156	165	181	192	---	442	463	1350	720	264	187	442
31	161	---	172	191	---	401	---	983	---	404	169	---
TOTAL	5956	4841	6819	5970	15232	16720	27356	25898	33540	16925	12907	13386
MEAN	192	161	220	193	525	539	912	835	1118	546	416	446
MAX	338	186	375	344	1710	1870	3900	1680	3080	1590	1610	1250
MIN	152	143	155	131	143	309	335	449	343	175	169	148
CFSM	.16	.13	.18	.16	.43	.44	.75	.69	.92	.45	.34	.37
IN.	.18	.15	.21	.18	.46	.51	.83	.79	1.02	.52	.39	.41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2000, BY WATER YEAR (WY)

MEAN	357	735	1082	1592	1655	2079	2041	1410	1173	725	456	373
MAX	1699	5115	4366	9015	4805	5113	5878	6815	6093	3672	2612	4397
(WY)	1991	1993	1991	1950	1950	1978	1964	1943	1958	1992	1979	1989
MIN	108	110	119	119	182	194	280	141	200	102	82.5	72.3
(WY)	1941	1935	1935	1945	1964	1941	1941	1941	1931	1936	1941	1941

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1930 - 2000	
ANNUAL TOTAL	382334		185550			
ANNUAL MEAN	1047		507		1137	
HIGHEST ANNUAL MEAN					2052	1950
LOWEST ANNUAL MEAN					235	1941
HIGHEST DAILY MEAN	21800	Jan 24	3900	Apr 9	31500	May 19 1943
LOWEST DAILY MEAN	143	Nov 10	131	Jan 22	49	Sep 17 1941
ANNUAL SEVEN-DAY MINIMUM	146	Nov 10	146	Nov 10	53	Sep 17 1941
INSTANTANEOUS PEAK FLOW			4130	Apr 9	32400	May 19 1943
INSTANTANEOUS PEAK STAGE			6.86	Apr 9	19.19	Jan 1 1991
ANNUAL RUNOFF (CFSM)	.86		.42		.93	
ANNUAL RUNOFF (INCHES)	11.67		5.66		12.67	
10 PERCENT EXCEEDS	2490		1060		2570	
50 PERCENT EXCEEDS	338		336		518	
90 PERCENT EXCEEDS	163		160		161	

03351060 WHITE RIVER AT BROAD RIPPLE, IN

LOCATION.--Lat 39°52'17", long 86°08'16", in SW 1/4 sec.36, T.17 N., R.3 E., Marion County, Hydrologic Unit 05120201, on left bank at Indianapolis Water Company, 75 ft downstream from diversion canal, and 500 ft upstream from Broad Ripple dam.

DRAINAGE AREA.--1,238 mi^2.

PERIOD OF RECORD.--October 1989 to current year. Fragmentary record November 1927 to Jan. 24, 1947 and continuous record, Jan. 24, 1947 to Sept. 30, 1989, available in District office.

REVISED RECORDS.--WDR IN-93-1: 1992.

GAGE.--Water-stage recorder. Datum of gage is 709.91 ft above sea level.

REMARKS.--Stage affected by diversion through canal for water supply.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 10.16 ft, Jan. 1, 1991; minimum, 2.51 ft, Sept. 11, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 4.70 ft, Apr. 9; minimum 2.63 ft, Jan. 22.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.87	2.80	2.81	2.80	2.73	3.16	2.96	3.08	3.22	3.14	2.97	2.74
2	2.81	2.78	2.78	2.81	2.72	3.09	2.95	3.15	3.14	3.08	2.90	2.73
3	2.83	2.79	2.78	2.97	2.75	3.04	2.93	3.31	3.10	3.10	3.01	2.74
4	2.81	2.80	2.78	2.92	2.75	3.01	2.95	3.24	3.04	3.52	3.06	3.04
5	2.78	2.82	2.92	2.98	2.76	2.99	2.97	3.18	3.10	3.51	2.97	3.04
6	2.77	2.82	2.90	3.01	2.75	2.96	2.93	3.13	3.09	3.33	3.24	2.90
7	2.78	2.80	2.89	2.94	2.73	2.94	3.66	3.09	3.02	3.97	3.41	2.85
8	2.91	2.80	2.84	2.90	2.74	2.92	4.33	3.06	2.97	3.46	3.77	2.80
9	3.01	2.74	2.84	2.88	2.75	2.91	4.63	3.20	2.92	3.26	3.27	2.80
10	2.92	2.73	2.93	2.86	2.82	2.90	3.88	3.31	2.90	3.18	3.17	3.05
11	2.86	2.77	2.91	2.85	2.88	2.93	3.58	3.43	2.89	3.14	3.08	3.29
12	2.83	2.78	2.90	2.81	3.08	2.92	3.42	3.27	2.91	3.31	2.98	3.43
13	2.78	2.78	2.87	2.79	3.20	2.91	3.31	3.34	2.95	3.14	2.94	3.20
14	2.74	2.78	2.98	2.78	3.10	2.92	3.23	3.35	3.18	3.04	2.89	3.06
15	2.76	2.74	3.06	2.78	3.17	2.92	3.19	3.22	3.18	3.00	2.88	3.00
16	2.78	2.74	2.98	2.77	3.13	2.98	3.16	3.13	3.66	2.94	2.83	2.95
17	2.82	2.74	2.93	2.76	3.09	2.95	3.16	3.10	3.42	2.90	2.96	2.91
18	2.77	2.74	2.89	2.76	3.33	2.95	3.16	3.10	3.74	2.86	2.94	2.87
19	2.78	2.79	2.86	2.79	3.70	3.08	3.14	3.36	4.44	2.89	2.90	2.84
20	2.77	2.82	2.83	2.74	3.62	3.15	3.28	3.77	4.01	2.84	2.85	2.90
21	2.74	2.81	2.84	2.74	3.31	3.79	3.62	3.50	3.96	2.83	2.81	2.90
22	2.77	2.81	2.83	2.75	3.19	3.70	3.79	3.37	4.30	2.82	2.81	2.88
23	2.78	2.81	2.82	2.80	3.19	3.41	3.62	3.26	3.94	2.79	2.81	2.95
24	2.77	2.80	2.81	2.76	3.22	3.28	3.42	3.21	3.80	2.80	2.86	3.03
25	2.75	2.81	2.78	2.74	3.14	3.19	3.29	3.17	3.76	2.78	2.84	3.48
26	2.77	2.84	2.80	2.74	3.20	3.13	3.22	3.11	3.64	2.76	2.82	3.34
27	2.76	2.82	2.77	2.72	3.23	3.09	3.14	3.22	3.56	2.75	2.81	3.37
28	2.74	2.82	2.80	2.70	3.36	3.06	3.10	3.62	3.38	2.74	2.79	3.22
29	2.75	2.81	2.81	2.78	3.24	3.05	3.08	3.74	3.28	2.76	2.77	3.10
30	2.77	2.81	2.82	2.82	---	3.00	3.04	3.49	3.19	2.89	2.74	3.02
31	2.76	---	2.80	2.81	---	2.97	---	3.33	---	3.03	2.75	---
MEAN	2.80	2.79	2.86	2.81	3.06	3.07	3.34	3.29	3.39	3.05	2.96	3.01
MAX	3.01	2.84	3.06	3.01	3.70	3.79	4.63	3.77	4.44	3.97	3.77	3.48
MIN	2.74	2.73	2.77	2.70	2.72	2.90	2.93	3.06	2.89	2.74	2.74	2.73

CAL YR 1999 MEAN 3.27 MAX 8.30 MIN 2.64
WTR YR 2000 MEAN 3.04 MAX 4.63 MIN 2.70

03351310 CROOKED CREEK AT INDIANAPOLIS, IN

LOCATION.--Lat 39°49'47", long 86°12'22", in NW1/4SE1/4 sec.16, T.16 N., R.3 E., Marion County, Hydrologic Unit 05120201, on left bank 150 ft downstream from 42nd Street bridge in Indianapolis, and at mile 1.6.

DRAINAGE AREA.--17.9 mi^2.

PERIOD OF RECORD.--June 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 711.00 ft above sea level (Indiana Department of Highways bench mark).

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.79	.34	.12	2.0	e1.3	e11	4.4	7.7	5.8	6.9	2.4	.59
2	.84	.46	.11	2.1	e1.3	e8.0	5.2	24	5.2	5.3	2.0	.58
3	.95	.48	.09	19	e1.4	e6.8	5.1	10	3.9	5.6	10	.57
4	1.4	.43	.09	16	e1.5	5.8	4.0	8.1	3.3	6.5	4.4	60
5	2.2	.44	6.3	7.2	e1.6	5.0	3.6	7.1	12	42	2.5	11
6	1.4	.46	6.8	5.0	e1.7	4.7	3.0	7.3	9.1	19	15	5.1
7	1.2	.47	1.1	5.0	e1.8	4.3	119	7.1	4.9	10	103	2.9
8	13	.50	.29	3.4	2.3	4.1	81	5.9	3.5	7.9	12	1.9
9	21	.62	.11	3.0	2.8	4.1	24	8.2	2.8	5.6	8.5	3.0
10	6.4	.81	29	2.8	6.0	3.9	17	44	2.3	4.9	5.6	22
11	1.5	.79	9.2	2.9	12	3.5	15	13	2.2	4.4	2.9	14
12	.66	.78	5.7	2.8	7.9	5.8	14	10	2.3	5.1	1.9	12
13	.52	.77	5.7	2.3	11	8.7	12	37	2.3	3.9	1.4	5.5
14	.50	.76	14	2.2	18	8.5	10	13	39	3.3	1.0	3.3
15	.54	.69	7.6	2.0	8.2	6.7	9.2	8.1	30	3.1	.86	2.4
16	1.5	.75	5.3	2.0	6.4	8.1	8.6	6.3	135	2.9	1.8	1.7
17	1.8	.57	4.6	2.0	4.4	10	18	8.4	62	2.6	6.0	1.3
18	2.8	.62	3.9	2.1	58	6.5	13	8.9	67	2.4	52	.97
19	1.5	.78	3.2	2.1	24	21	9.8	35	24	2.7	8.8	.79
20	.70	1.0	4.4	e2.0	13	30	21	11	23	4.6	4.0	4.8
21	.15	1.1	5.7	e1.8	9.6	17	26	7.7	88	2.6	2.3	8.9
22	.12	.80	3.6	e1.6	17	12	15	10	29	2.2	1.6	3.0
23	.18	.69	2.7	e1.5	12	9.6	11	15	17	2.1	2.0	3.1
24	.26	1.0	2.5	e1.5	12	8.1	10	8.3	25	1.9	3.2	2.6
25	.21	.83	e2.1	e1.5	9.6	7.2	8.7	6.3	34	1.6	1.9	23
26	.30	1.6	e2.0	e1.5	e25	6.5	7.9	5.2	17	1.4	1.3	25
27	.38	1.4	e1.9	e1.5	e50	6.1	7.2	38	13	1.5	1.6	8.7
28	.30	.53	e1.8	e1.4	e20	5.9	6.7	19	10	1.6	1.3	5.1
29	.25	.24	e1.8	e1.4	e13	5.3	6.2	12	9.2	2.3	.99	3.6
30	.27	.15	e1.9	e1.3	---	4.7	5.6	8.3	7.0	7.3	.79	2.7
31	.30	---	e2.0	e1.3	---	4.6	---	6.4	---	3.5	.63	---
TOTAL	63.92	20.86	135.61	104.2	352.8	253.5	501.2	416.3	688.8	176.7	263.67	240.10
MEAN	2.06	.70	4.37	3.36	12.2	8.18	16.7	13.4	23.0	5.70	8.51	8.00
MAX	21	1.6	29	19	58	30	119	44	135	42	103	60
MIN	.12	.15	.09	1.3	1.3	3.5	3.0	5.2	2.2	1.4	.63	.57
CFSM	.12	.04	.24	.19	.68	.46	.93	.75	1.28	.32	.48	.45
IN.	.13	.04	.28	.22	.73	.53	1.04	.87	1.43	.37	.55	.50

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2000, BY WATER YEAR (WY)

MEAN	8.40	20.4	21.1	19.3	24.7	30.7	29.7	27.1	18.5	12.4	7.93	8.29
MAX	60.9	88.2	95.4	54.8	79.4	63.7	58.2	110	90.8	57.7	30.8	69.9
(WY)	1987	1994	1991	1974	1975	1991	1972	1996	1998	1979	1978	1989
MIN	1.06	.70	1.23	.94	4.17	5.65	5.63	4.31	1.59	1.59	1.94	1.07
(WY)	1998	2000	1977	1977	1978	1981	1971	1988	1988	1997	1991	1991

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1970 - 2000	
ANNUAL TOTAL	5778.73		3217.66			
ANNUAL MEAN	15.8		8.79		19.0	
HIGHEST ANNUAL MEAN					29.6	1974
LOWEST ANNUAL MEAN					8.30	1977
HIGHEST DAILY MEAN	853	Jan 22	135	Jun 16	1570	Jun 26 1978
LOWEST DAILY MEAN	.09	Dec 3	.09	Dec 3	.00	Oct 7 1991
ANNUAL SEVEN-DAY MINIMUM	.19	Nov 28	.19	Nov 28	.00	Oct 12 1991
INSTANTANEOUS PEAK FLOW			602	Jun 16	5500	Jun 26 1978
INSTANTANEOUS PEAK STAGE			5.96	Jun 16	13.31	Jun 26 1978
ANNUAL RUNOFF (CFSM)	.88		.49		1.06	
ANNUAL RUNOFF (INCHES)	12.01		6.69		14.42	
10 PERCENT EXCEEDS	29		20		37	
50 PERCENT EXCEEDS	5.3		4.4		7.3	
90 PERCENT EXCEEDS	.58		.62		1.6	

e Estimated

03351500 FALL CREEK NEAR FORTVILLE, IN

LOCATION.--Lat 39°57'15", long 85°52'05", in NW1/4NE1/4 sec.5, T.17 N., R.6 E., Hamilton County, Hydrologic Unit 05120201, on right bank 100 ft downstream from bridge on State Highway 238, 0.2 mi downstream from Lick Creek, 2 mi northwest of Fortville, and at mile 26.1.

DRAINAGE AREA.--169 mi^2.

PERIOD OF RECORD.--July 1941 to current year.

REVISED RECORDS.--WSP 1435: 1949(P). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 787.43 ft above sea level (levels by Indianapolis Water Co.). Prior to June 27, 1942, nonrecording gage at same site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, about 12 ft March 1913 (information by local resident).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	26	25	29	e26	99	54	87	83	110	77	39
2	19	26	24	31	e25	86	53	130	76	100	61	38
3	18	25	25	38	e26	73	57	125	69	105	55	36
4	19	26	25	80	e30	66	58	109	66	374	53	79
5	20	26	33	70	e29	63	56	118	69	223	48	66
6	21	25	51	53	e29	60	52	107	71	157	58	47
7	23	26	39	46	e29	56	99	97	61	188	793	43
8	23	26	32	42	e30	53	798	92	56	131	441	40
9	44	25	29	40	e30	52	511	87	53	108	217	39
10	50	25	45	40	e32	51	305	147	49	98	179	179
11	32	25	55	38	e40	49	220	157	49	96	130	310
12	27	26	43	36	e54	52	175	121	51	89	102	163
13	29	31	40	34	66	53	144	134	48	79	86	119
14	20	27	70	32	104	53	130	140	51	71	78	94
15	20	27	86	31	106	59	119	109	132	66	69	82
16	20	25	58	32	85	59	111	95	147	64	63	70
17	23	24	49	32	78	62	112	91	297	61	59	65
18	23	24	43	31	112	58	119	86	801	56	68	62
19	22	25	41	e30	270	66	107	333	848	55	62	56
20	22	30	e39	e30	175	143	121	322	406	55	56	53
21	23	34	e37	e29	127	215	330	209	893	51	51	62
22	23	31	e35	e29	108	163	291	162	650	49	47	61
23	22	29	e34	e27	98	123	221	146	356	47	47	63
24	21	28	e33	e25	90	105	175	131	253	46	52	69
25	23	27	e32	e27	87	94	144	106	368	42	46	77
26	23	31	e31	e25	80	82	122	91	283	44	45	104
27	22	35	e31	e25	113	77	110	125	212	39	51	104
28	22	32	31	e24	164	75	101	152	176	38	47	81
29	24	29	31	e24	119	68	93	127	147	39	42	70
30	25	26	31	e24	---	61	86	103	127	120	41	64
31	24	---	31	e27	---	56	---	90	---	101	43	---
TOTAL	750	822	1209	1081	2362	2432	5074	4129	6948	2902	3267	2435
MEAN	24.2	27.4	39.0	34.9	81.4	78.5	169	133	232	93.6	105	81.2
MAX	50	35	86	80	270	215	798	333	893	374	793	310
MIN	18	24	24	24	25	49	52	86	48	38	41	36
CFSM	.14	.16	.23	.21	.48	.46	1.00	.79	1.37	.55	.62	.48
IN.	.17	.18	.27	.24	.52	.54	1.12	.91	1.53	.64	.72	.54

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2000, BY WATER YEAR (WY)

MEAN	63.4	119	167	212	249	298	290	224	188	115	75.8	56.9
MAX	353	788	727	1210	720	674	829	753	888	416	467	498
(WY)	1987	1994	1991	1950	1950	1978	1964	1996	1958	1992	1979	1989
MIN	20.1	27.4	24.2	24.4	42.1	71.2	70.3	71.4	39.2	24.7	16.0	14.5
(WY)	1964	2000	1964	1977	1964	1981	1971	1955	1988	1966	1988	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1942 - 2000	
ANNUAL TOTAL	48373		33411			
ANNUAL MEAN	133		91.3		171	
HIGHEST ANNUAL MEAN					298	1950
LOWEST ANNUAL MEAN					61.4	1966
HIGHEST DAILY MEAN	2700	Jan 23	893	Jun 21	6950	Apr 21 1964
LOWEST DAILY MEAN	12	Sep 10	18	Oct 3	7.0	Oct 1 1941
ANNUAL SEVEN-DAY MINIMUM	12	Sep 10	20	Oct 1	9.7	Aug 21 1988
INSTANTANEOUS PEAK FLOW			1210	Jun 19	8750	Apr 21 1964
INSTANTANEOUS PEAK STAGE			5.22	Jun 19	9.88	Apr 21 1964
ANNUAL RUNOFF (CFSM)	.78		.54		1.01	
ANNUAL RUNOFF (INCHES)	10.65		7.35		13.75	
10 PERCENT EXCEEDS	299		167		348	
50 PERCENT EXCEEDS	52		56		89	
90 PERCENT EXCEEDS	18		25		31	

e Estimated

03352500 FALL CREEK AT MILLERSVILLE, IN

LOCATION.--Lat 39°51'07", long 86°05'15", in NE$^1/_4$NE$^1/_4$ sec.9, T.16 N., R.4 E., Marion County, Hydrologic Unit 05120201, on right bank at downstream side of Emerson Way bridge at Millersville, and 9.2 mi upstream from mouth.

DRAINAGE AREA.--298 mi^2.

PERIOD OF RECORD.--October 1929 to current year. Monthly discharge only for October 1929, published in WSP l305. Twice-daily chain gage readings at former site from July 1925 to September 1926 are available in the district office.

REVISED RECORDS.--WSP 1335: 1930-31, 1933, 1936-38, 1942-43. WSP 2109: Drainage area.

GAGE.--Water-stage recorder and Acoustic Doppler Velocity Meter. Datum of gage is 722.16 ft above sea level. Prior to Oct. 21, 1961, water-stage recorder at site 500 ft downstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Geist Reservoir.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 16.3 ft Mar. 26, 1913, from floodmarks, discharge, 22,000 ft^3/s by slope-area measurement.

REVISIONS.--The peaks for water years 1991 and 1994 have been revised to 12,000 ft^3/s, Dec. 31, 1990, gage height, 13.36 ft, and 8,970 ft^3/s, Nov. 15, 1993, gage height, 12.40 ft, superseding figures published in reports for 1991 and 1994.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	34	34	43	e29	71	72	110	159	179	81	68
2	31	36	34	45	e27	59	74	214	130	153	72	72
3	30	36	35	66	e27	53	77	182	121	144	83	85
4	33	36	35	107	e28	50	69	155	101	225	69	297
5	31	36	50	51	e28	47	71	145	101	654	60	176
6	31	35	60	52	e28	44	63	142	105	379	55	85
7	30	35	42	49	e28	40	278	129	75	262	517	53
8	38	35	37	47	e28	39	1290	122	65	198	842	60
9	72	32	36	47	29	39	1130	119	59	156	509	60
10	58	31	73	48	34	37	752	248	66	129	316	355
11	40	31	60	47	50	37	490	240	67	123	217	588
12	35	30	43	45	43	41	356	199	70	113	160	419
13	38	33	41	45	46	43	269	276	56	99	123	265
14	39	33	84	39	85	44	219	249	67	83	98	175
15	39	32	70	30	57	42	196	197	228	83	80	139
16	38	34	49	29	45	45	178	154	291	72	76	109
17	39	34	43	28	38	53	188	172	671	60	69	88
18	38	34	41	28	144	42	176	152	1270	50	177	83
19	39	35	40	e28	153	60	157	542	1450	71	119	72
20	39	38	39	e27	81	165	203	619	1010	50	84	66
21	39	34	34	e27	61	151	473	458	1180	49	62	91
22	39	34	37	e29	62	206	487	330	1390	56	49	81
23	40	34	37	e32	58	205	398	308	921	63	57	75
24	40	36	37	e31	57	178	329	242	760	58	120	122
25	39	34	e36	e30	58	154	245	190	758	58	95	150
26	40	40	34	e30	54	139	176	149	612	63	70	205
27	39	38	33	e30	147	126	153	490	439	84	65	163
28	39	37	45	e30	111	116	151	494	319	80	65	147
29	35	35	46	e30	83	110	120	371	248	66	53	114
30	34	34	45	e30	---	108	112	250	208	234	57	97
31	34	---	44	e31	---	81	---	187	---	124	55	---
TOTAL	1193	1036	1374	1231	1719	2625	8952	7835	12997	4218	4555	4560
MEAN	38.5	34.5	44.3	39.7	59.3	84.7	298	253	433	136	147	152
MAX	72	40	84	107	153	206	1290	619	1450	654	842	588
MIN	30	30	33	27	27	37	63	110	56	49	49	53
CFSM	.13	.12	.15	.13	.20	.28	1.00	.85	1.45	.46	.49	.51
IN.	.15	.13	.17	.15	.21	.33	1.12	.98	1.62	.53	.57	.57

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2000, BY WATER YEAR (WY)

MEAN	95.6	187	275	400	422	514	510	388	298	188	118	93.9
MAX	713	1283	1059	2390	1278	1399	1503	1524	1638	796	739	966
(WY)	1987	1994	1991	1950	1950	1963	1964	1943	1998	1979	1979	1989
MIN	23.4	32.1	38.2	37.1	50.4	47.5	59.7	33.6	42.2	29.1	15.5	11.5
(WY)	1941	1935	1935	1945	1935	1941	1941	1941	1934	1936	1941	1941

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1930 - 2000	
ANNUAL TOTAL	85620		52295			
ANNUAL MEAN	235		143		290	
HIGHEST ANNUAL MEAN					539	1950
LOWEST ANNUAL MEAN					44.0	1941
HIGHEST DAILY MEAN	5170	Jan 23	1450	Jun 19	10600	May 18 1943
LOWEST DAILY MEAN	30	Oct 3	e27	Jan 20	7.8	Sep 28 1941
ANNUAL SEVEN-DAY MINIMUM	32	Nov 9	28	Feb 2	9.0	Sep 24 1941
INSTANTANEOUS PEAK FLOW			1510	Jun 19	12900	May 28 1956
INSTANTANEOUS PEAK STAGE			5.95	Jun 19	13.53	May 28 1956
ANNUAL RUNOFF (CFSM)	.79		.48		.97	
ANNUAL RUNOFF (INCHES)	10.69		6.53		13.22	
10 PERCENT EXCEEDS	605		317		651	
50 PERCENT EXCEEDS	70		66		126	
90 PERCENT EXCEEDS	35		33		46	

e Estimated

03353000 WHITE RIVER AT INDIANAPOLIS, IN

LOCATION.--Lat 39°44'14", long 86°10'08", in NW1/4NW1/4 sec.14, T.15 N., R.3 E., Marion County, Hydrologic Unit 05120201, on left bank under Raymond Street bridge in Indianapolis, 2.6 mi downstream from Fall Creek, 3.4 mi upstream from Eagle Creek, 4.0 mi upstream from Indianapolis Power and Light Company dam, and at mile 230.3.

DRAINAGE AREA.--1,635 mi^2.

PERIOD OF RECORD.--March 1904 to July 1906 and April 1930 to current year. Gage-height record published in reports of National Weather Service for site 0.9 mi upstream Feb. 8, 1911, to Mar. 25, 1913, and at site 2.1 mi upstream since Oct. 16, 1913. Prior to October 1948, published as West Fork White River at Indianapolis.

REVISED RECORDS.--WSP 1335: 1932-33, 1937, 1939-41. WSP 1505: 1938. WSP 2109: Drainage area.

GAGE.--Acoustic Velocity Meter and Data Collection Platform. Datum of gage is 662.26 ft above sea level. March 1904 to July 1906, nonrecording gage at railroad bridge 0.3 mi upstream at datum approximately 2.9 ft higher. April 1930 to July 20, 1931, nonrecording gage at Indianapolis sanitation plant, 2.3 mi downstream at datum 2.26 ft lower. July 21, 1931 to Mar. 2, 1932, nonrecording gage and March 3, 1932, to September 30, 1960, water-stage recorder at Morris Street at datum 2.26 ft lower. October 1998 to May 2000, Acoustic Velocity Meter at Interstate 70 bridge.

REMARKS.--Records good except for estimated daily discharges, which are poor. Stage-discharge relation affected at times by large releases from Eagle Creek and by variable leakage at Indianapolis Power and Light Company dam. Natural flow affected by regulation of Morse Reservoir, Geist Reservoir and by diversion of municipal water supply by the Indianapolis Water Company.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 30.0 ft, from floodmarks determined by Indianapolis Water Company, discharge, 70,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e194	e121	e147	e148	e180	e490	e326	e480	890	716	537	127
2	e184	e125	e145	e148	e174	e420	e320	e714	709	632	449	128
3	e169	e120	e144	e410	e171	e380	e328	e790	617	582	492	120
4	e185	e117	e146	e370	e168	e350	e310	e930	554	894	493	e1080
5	e172	e110	e266	e260	e167	e330	e312	e886	558	2750	505	e449
6	e164	e112	e258	e250	e167	e320	e315	e820	593	1540	496	e332
7	e151	e115	e220	e245	e169	e315	e1410	e682	544	1280	1880	e289
8	e184	e122	e200	e240	e171	e305	e2770	e608	455	1900	1980	264
9	e376	e126	e188	e230	e174	e300	e4250	e710	401	1060	1900	222
10	e230	e118	e380	e225	e180	e296	e3560	e1500	354	767	1000	1200
11	e153	e112	e224	e220	e204	e295	e2100	e1460	345	670	731	1100
12	e152	e110	e200	e209	e244	e298	e1480	e1240	355	613	578	1490
13	e136	e117	e180	e207	e470	e312	e1160	e1460	351	726	466	1170
14	e125	e120	e232	e198	e530	e290	e970	e1240	634	574	402	749
15	e124	e116	e228	e188	e274	e284	e806	e1190	1080	473	338	545
16	e150	e114	e226	e185	e280	e326	e690	e900	1750	425	301	450
17	e160	e111	e210	e180	e270	e358	e770	646	2630	365	424	387
18	e144	e120	e200	e178	e1500	e308	e686	630	3220	313	1460	338
19	e134	e138	e193	e174	e1120	e640	e612	1230	e3880	285	527	290
20	e129	e160	e184	e182	e1630	e990	e912	1850	e3850	299	380	335
21	e128	e153	e178	e176	e998	e1030	e1220	1920	e3840	243	312	433
22	e129	e152	e171	e172	e800	e1800	e1500	1360	e4180	206	254	361
23	e132	e160	e161	e170	e680	e1600	e1620	1180	e3750	193	269	384
24	e135	e160	e152	e183	e700	e1160	e1410	914	3010	185	295	442
25	e133	e168	e150	e181	e680	e952	e1090	756	2660	168	350	852
26	e128	e174	e146	e160	e640	e756	e842	662	2360	148	296	1490
27	e126	e165	e144	e150	e1380	e656	e650	1850	1790	138	262	1060
28	e126	e159	e142	e146	e680	e550	e580	1400	1410	149	241	955
29	e123	e154	e146	e139	e560	e490	e520	1900	1060	139	207	693
30	e119	e151	e148	e145	---	e424	e500	1700	864	741	170	541
31	e117	---	e150	e172	---	e375	---	1160	---	501	146	---
TOTAL	4812	4000	5859	6241	15361	17400	34019	34768	48694	19675	18141	18276
MEAN	155	133	189	201	530	561	1134	1122	1623	635	585	609
MAX	376	174	380	410	1630	1800	4250	1920	4180	2750	1980	1490
MIN	117	110	142	139	167	284	310	480	345	138	146	120
CFSM	.09	.08	.12	.12	.32	.34	.69	.69	.99	.39	.36	.37
IN.	.11	.09	.13	.14	.35	.40	.77	.79	1.11	.45	.41	.42

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2000, BY WATER YEAR (WY)

MEAN	415	910	1356	1931	2111	2692	2665	1897	1482	892	536	416
MAX	2081	6425	5826	12120	6452	6610	7777	8594	7910	4259	3399	5063
(WY)	1991	1994	1991	1950	1950	1963	1964	1943	1958	1992	1979	1989
MIN	70.1	110	77.3	78.4	178	207	274	113	126	90.3	42.5	31.5
(WY)	1941	1935	1964	1977	1964	1941	1941	1941	1988	1936	1941	1941

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1931 - 2000	
ANNUAL TOTAL	439493		227246			
ANNUAL MEAN	1204		621		1438	
HIGHEST ANNUAL MEAN					2698	1950
LOWEST ANNUAL MEAN					233	1941
HIGHEST DAILY MEAN	24000	Jan 24	4250	Apr 9	36800	Dec 31 1990
LOWEST DAILY MEAN	90	Aug 7	e110	Nov 5	8.0	Sep 29 1941
ANNUAL SEVEN-DAY MINIMUM	101	Aug 7	e114	Nov 11	12	Sep 24 1941
INSTANTANEOUS PEAK FLOW			5500	Jun 16	38000	Dec 31 1990
INSTANTANEOUS PEAK STAGE			9.51	Jun 16	21.57	Jan 16 1937
ANNUAL RUNOFF (CFSM)	.74		.38		.88	
ANNUAL RUNOFF (INCHES)	10.00		5.17		11.95	
10 PERCENT EXCEEDS	2970		1480		3310	
50 PERCENT EXCEEDS	325		331		646	
90 PERCENT EXCEEDS	120		136		145	

e Estimated

03353120 PLEASANT RUN AT ARLINGTON AVENUE AT INDIANAPOLIS, IN

LOCATION.--Lat 39°46'33", long 86°03'50", in SW¼NW¼ sec.2, T.15 N., R.4 E., Marion County, Hydrologic Unit 05120201, on right bank 46 ft upstream from Arlington Avenue bridge in Indianapolis, 0.5 mi downstream from small left-bank tributary, and at mile 7.9.

DRAINAGE AREA.--7.58 mi^2.

PERIOD OF RECORD.--December 1959 to current year.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 780.00 ft above sea level (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1956 reached a stage of 16.0 ft, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.34	.37	.33	.57	e.20	2.7	.87	10	1.1	.68	3.1	.19
2	.22	.87	.44	1.3	e.20	2.0	.92	8.6	.88	.60	5.4	.20
3	.45	.98	.50	38	e.22	1.6	1.4	3.6	.71	1.9	5.7	.38
4	2.7	.52	.66	8.5	e.25	1.4	.89	2.7	.75	13	.90	68
5	.39	.34	32	2.5	e.23	1.2	.87	1.4	2.6	22	.56	1.9
6	.27	.44	4.0	1.6	e.23	1.1	.90	2.2	.83	1.7	16	.86
7	.21	.32	1.4	1.2	e.32	.99	111	1.4	.61	.96	20	.56
8	14	.29	.98	.93	e.52	1.0	26	1.0	.54	.70	2.5	.39
9	21	.23	.90	.89	e1.0	.96	7.1	18	.49	.59	1.4	.36
10	2.8	.25	40	1.9	e4.5	.98	4.1	13	.47	.56	.89	91
11	.52	.17	2.9	1.1	e5.0	1.2	5.1	2.3	.45	.59	.67	9.4
12	.25	.15	3.9	.93	e2.4	6.2	2.9	1.5	.67	.60	.53	4.2
13	.61	.13	3.4	.84	32	4.4	2.2	21	.50	.51	.45	1.4
14	1.2	.14	22	.73	11	2.7	1.9	2.4	29	.58	.54	.91
15	1.3	.11	3.3	.68	4.0	1.6	2.0	1.5	7.5	.43	.43	.81
16	6.4	.09	2.1	.70	2.6	9.0	1.8	1.4	57	.40	.50	.59
17	3.1	.06	1.3	.61	1.8	3.1	10	6.3	24	.37	24	.46
18	.24	.13	.98	.66	66	1.7	2.8	2.5	74	.42	32	.50
19	.14	6.8	1.0	.64	11	29	1.9	20	6.3	1.6	2.1	.40
20	.26	2.2	4.6	e.67	4.2	31	37	2.9	3.0	.56	.98	13
21	.40	.77	1.2	e.58	2.7	7.8	10	1.7	25	.31	.50	4.2
22	.55	.63	.77	e.49	7.0	4.2	4.2	7.4	3.6	.28	.43	1.0
23	.52	.49	e.70	e.42	2.6	2.9	2.7	9.3	3.4	.28	4.8	7.2
24	.32	3.5	e.66	e.38	11	2.2	2.2	1.9	18	.28	5.3	3.3
25	.26	.62	e.64	e.34	3.3	1.8	1.7	1.1	5.4	.28	.77	34
26	.20	8.2	e.62	e.31	8.5	1.5	1.4	.84	1.9	.25	.38	10
27	.26	1.2	e.62	e.28	32	2.0	1.3	77	1.5	.29	.33	2.8
28	.26	.67	e.62	e.26	5.7	1.4	1.2	6.8	1.1	.27	.26	1.7
29	.34	.49	e.64	e.24	3.4	1.3	1.1	3.2	1.9	.28	.24	1.1
30	.51	.39	.65	e.22	---	1.1	.96	1.8	.86	43	.24	.95
31	.44	---	.65	e.21	---	.90	---	1.4	---	2.2	.21	---
TOTAL	60.46	31.55	134.46	68.68	223.87	130.93	248.41	236.14	274.06	96.47	132.11	261.76
MEAN	1.95	1.05	4.34	2.22	7.72	4.22	8.28	7.62	9.14	3.11	4.26	8.73
MAX	21	8.2	40	38	66	31	111	77	74	43	32	91
MIN	.14	.06	.33	.21	.20	.90	.87	.84	.45	.25	.21	.19
CFSM	.26	.14	.57	.29	1.02	.56	1.09	1.00	1.21	.41	.56	1.15
IN.	.30	.15	.66	.34	1.10	.64	1.22	1.16	1.34	.47	.65	1.28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2000, BY WATER YEAR (WY)

MEAN	4.20	8.76	8.48	7.93	8.75	12.9	11.3	10.2	7.73	8.31	5.02	4.18
MAX	27.5	36.9	33.3	25.0	25.7	42.3	28.5	37.8	49.2	33.8	21.3	23.2
(WY)	1987	1994	1991	1969	1971	1963	1961	1996	1998	1979	1979	1989
MIN	.38	1.05	.72	.45	1.11	1.94	1.61	1.12	.69	.61	.67	.49
(WY)	1964	2000	1964	1977	1978	1994	1971	1964	1967	1967	1967	1967

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1960 - 2000	
ANNUAL TOTAL	1943.14		1898.90			
ANNUAL MEAN	5.32		5.19		8.17	
HIGHEST ANNUAL MEAN					11.6	1978
LOWEST ANNUAL MEAN					3.25	1966
HIGHEST DAILY MEAN	204	Jan 22	111	Apr 7	574	Mar 4 1963
LOWEST DAILY MEAN	.00	Sep 1	.06	Nov 17	.00	Sep 11 1960
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 5	.12	Nov 12	.00	Oct 5 1960
INSTANTANEOUS PEAK FLOW			609	May 27	2600	Jun 25 1978
INSTANTANEOUS PEAK STAGE			6.59	May 27	13.86	Jun 25 1978
ANNUAL RUNOFF (CFSM)	.70		.68		1.08	
ANNUAL RUNOFF (INCHES)	9.54		9.32		14.64	
10 PERCENT EXCEEDS	11		12		17	
50 PERCENT EXCEEDS	1.3		1.1		1.9	
90 PERCENT EXCEEDS	.11		.26		.49	

e Estimated

03353200 EAGLE CREEK AT ZIONSVILLE, IN

LOCATION.--Lat 39°56'47", long 86°15'37", in NE$^1/_4$SE$^1/_4$ sec.2, T.17 N., R.2 E., Boone County, Hydrologic Unit 05120201, on right upstream end of Zionsville Road bridge over Eagle Creek, 0.15 mi south of Highway 334, 0.9 mi downstream from Little Eagle Creek, 500 ft downstream from Long Branch Ditch, and at mile 25.1.

DRAINAGE AREA.--106 mi^2.

PERIOD OF RECORD.--October 1957 to current year.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 819.85 ft above sea level. Prior to Oct. 9, 1957, nonrecording gage, and prior to Oct. 1, 1999 a continuous water-stage recorder at site 0.5 mi upstream and at datum 816.85 ft.

REMARKS.--Records fair except those below 1.15 ft^3/s and estimated daily discharges, which are poor. Prior to 1989, low flow affected by the Zionsville well field located on the right bank downstream of the gage.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 28, 1957, reached a stage of 19.20 ft. from floodmark (datum 816.85 ft).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	.62	.88	2.5	e1.3	34	14	15	28	23	1.7	1.5
2	.12	.59	.91	2.7	e1.3	27	14	22	24	19	1.8	1.4
3	.17	.57	1.1	6.0	e1.4	24	15	19	20	18	10	1.3
4	.18	.57	1.1	7.4	e1.5	21	15	17	18	22	10	39
5	.16	.60	2.9	5.3	e1.4	19	14	15	24	38	5.4	40
6	.15	.62	6.0	4.0	e1.5	17	13	15	25	28	29	19
7	.16	.62	2.2	3.3	e1.6	15	33	14	20	20	77	10
8	.28	.64	1.5	3.0	e1.8	14	87	14	16	15	23	6.5
9	3.4	.66	1.2	2.9	e2.3	14	51	17	15	13	13	4.7
10	2.5	.62	7.1	2.9	e6.0	12	37	73	13	11	8.5	8.1
11	.92	.67	3.7	2.6	12	12	33	60	11	11	6.5	7.6
12	.58	.75	2.9	2.4	9.6	14	28	40	11	10	4.8	7.6
13	.51	.81	2.8	2.0	11	14	24	68	11	9.0	3.6	6.5
14	.44	.77	6.0	1.8	17	17	23	49	13	8.1	2.8	4.9
15	.41	.75	5.1	1.9	12	22	22	32	18	6.2	2.1	4.0
16	.36	.75	3.9	2.0	9.7	21	21	26	17	5.6	1.9	3.1
17	.45	.75	3.1	1.9	8.1	20	22	27	23	4.9	2.1	2.7
18	.48	.79	2.7	1.9	35	17	22	26	25	4.3	36	2.2
19	.49	.90	2.4	e1.9	42	22	19	33	21	3.9	14	2.2
20	.52	1.1	2.7	e1.8	26	59	24	41	29	3.5	7.2	2.4
21	.52	1.0	2.7	e1.7	19	63	33	31	209	3.4	4.9	4.3
22	.51	.96	2.6	e1.7	19	42	28	27	178	3.1	3.8	5.0
23	.49	.88	2.3	e1.6	18	35	24	26	99	2.8	2.9	3.7
24	.52	1.1	2.3	e1.6	18	31	23	24	89	2.3	4.0	5.4
25	.52	.98	2.0	e1.5	16	28	20	19	165	2.1	2.8	29
26	.54	1.2	2.0	e1.5	21	25	18	16	103	2.0	2.4	116
27	.57	1.1	2.0	e1.4	117	25	17	89	70	1.9	2.2	70
28	.57	.96	2.1	e1.4	76	24	16	117	45	1.8	1.9	36
29	.62	.93	2.1	e1.4	43	21	15	66	34	1.6	1.9	23
30	.60	.88	2.2	e1.5	---	18	14	41	28	1.8	1.8	17
31	.62	---	2.5	e1.4	---	15	---	32	---	1.8	1.6	---
TOTAL	18.48	24.14	84.99	76.9	549.5	742	739	1111	1402	298.1	290.6	484.1
MEAN	.60	.80	2.74	2.48	18.9	23.9	24.6	35.8	46.7	9.62	9.37	16.1
MAX	3.4	1.2	7.1	7.4	117	63	87	117	209	38	77	116
MIN	.12	.57	.88	1.4	1.3	12	13	14	11	1.6	1.6	1.3
CFSM	.01	.01	.03	.02	.18	.23	.24	.35	.45	.09	.09	.16
IN.	.01	.01	.03	.03	.20	.27	.27	.40	.51	.11	.10	.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2000, BY WATER YEAR (WY)

MEAN	20.3	84.2	121	118	146	193	174	106	92.4	59.6	35.3	20.6
MAX	131	542	530	452	423	459	532	456	523	520	444	332
(WY)	1970	1993	1991	1974	1976	1963	1964	1996	1958	1979	1958	1989
MIN	.000	.80	1.65	1.23	9.05	23.9	24.6	12.0	1.55	1.52	.000	.000
(WY)	1967	2000	1977	1977	1964	2000	2000	1988	1988	1966	1966	1966

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1958 - 2000	
ANNUAL TOTAL	26876.77		5820.81			
ANNUAL MEAN	73.6		15.9		97.1	
HIGHEST ANNUAL MEAN					188	1974
LOWEST ANNUAL MEAN					15.9	2000
HIGHEST DAILY MEAN	3700	Jan 22	209	Jun 21	6840	Dec 30 1990
LOWEST DAILY MEAN	.00	Sep 3	.12	Oct 1	.00	Sep 9 1959
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 3	.15	Oct 1	.00	Sep 15 1959
INSTANTANEOUS PEAK FLOW			264	Jun 21	12400	Apr 20 1964
INSTANTANEOUS PEAK STAGE			3.23	Jun 21	14.64	Apr 20 1964
ANNUAL RUNOFF (CFSM)	.71		.15		.94	
ANNUAL RUNOFF (INCHES)	9.71		2.10		12.81	
10 PERCENT EXCEEDS	158		35		210	
50 PERCENT EXCEEDS	6.3		6.3		29	
90 PERCENT EXCEEDS	.16		.63		1.2	

e Estimated

03353450 EAGLE CREEK RESERVOIR NEAR INDIANAPOLIS, IN

LOCATION.--Lat 39°49'20", long 86°18'11", in NW$^1/_4$NW$^1/_4$ sec. 22, T.16 N., R.2 E., Marion County, Hydrologic Unit 05120201, in outlet structure of reservoir on Eagle Creek, 800 ft upstream from Interstate Highway 74, 0.5 mi downstream from School Branch, 1.0 mi northeast of Clermont, and 2 mi west of Indianapolis.

DRAINAGE AREA.--162 mi^2.

PERIOD OF RECORD.--March 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level. (Prior to 1993 water year, erroneously published as 780.00 ft above sea level).

REMARKS.--Reservoir is formed by earth-fill dam. Low flow is controlled through a 48-inch diameter conduit. Spillway elevation, 783 ft is an ogee section with 6 taintor gates, each 40 ft wide and 25 ft high. Permanent pool capacity is 24,000 acre-ft, elevation, 790.00 ft. Reservoir is used for flood control, low-flow maintenance, water supply, and recreation. Reservoir put into operation Nov. 27, 1969.

COOPERATION.--Water-stage elevations and capacity tables furnished by Indianapolis Flood Control District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 30,580 acre-ft Dec. 30, 1990, elevation, 794.61 ft; minimum, 11,390 acre-ft Nov. 17-18, 1991, elevation, 778.70 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 25,550 acre-ft Apr. 21, June 12, 13, elevation, 791.11 ft; minimum, 17,930 acre-ft Sept. 30, elevation, 785.19 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	785.19	17,930	
Oct. 31	783.76	16,340	-1590
Nov. 30	782.36	14,860	-1480
Dec. 31	781.58	14,080	-780
CAL YR 1999	--	--	-6140
Jan. 31	780.66	13,160	-920
Feb. 28	782.26	14,760	+1600
Mar. 31	784.06	16,670	+1910
Apr. 30	786.75	19,800	+3130
May 31	789.39	23,210	+3410
June 30	790.99	25,390	+2180
July 31	789.53	23,390	+2000
Aug. 31	789.14	22,880	-510
Sept. 30	788.77	22,400	-480
WTR YR 2000	--	--	+4470

03353451 EAGLE CREEK BELOW RESERVOIR AT INDIANAPOLIS, IN

LOCATION.--Lat 39°49'20", long 86°18'11", in NW$^1/_4$NW$^1/_4$ sec. 22, T.16 N., R.2 E., Marion County, Hydrologic Unit 05120201, in outlet structure of reservoir on Eagle Creek, 800 ft upstream from Interstate Highway 74, 0.5 mi downstream from School Branch, 1.0 mi northeast of Clermont, and 2.0 mi west of Indianapolis.

DRAINAGE AREA.--162 mi^2.

PERIOD OF RECORD.--October 1992 to current year. Published as "03353450 Eagle Creek Reservoir near Indianapolis" October 1992 to September 1994.

GAGE.--Water stage recorder located 100 ft downstream of outlet structure. Datum of gage is 741.15 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are fair. Mean daily discharges below 50 ft^3/s published. Unit discharges below 50 ft^3/s available in district office. For a complete record of Eagle Creek in this vicinity use records of Eagle Creek at Indianapolis, IN (station 03353500) about 4.9 mile downstream. Prior to Oct. 1993, this station was published under Eagle Creek Reservoir at Indianapolis (station 03353450).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	11	11	11	11	9.5	10	11	10	13	12	12
2	11	11	11	10	11	9.5	9.9	10	11	12	12	12
3	10	10	11	11	11	9.5	9.9	10	14	11	12	11
4	10	9.8	11	11	11	9.3	10	11	13	11	11	12
5	9.9	10	9.7	11	11	9.3	9.2	11	14	---	12	12
6	9.9	10	10	11	11	9.5	9.6	11	13	12	11	12
7	9.8	10	10	11	10	9.5	10	11	12	12	11	12
8	9.8	10	10	11	10	9.5	11	11	11	12	11	12
9	10	10	11	11	10	9.8	9.8	12	11	12	11	11
10	10	10	11	11	10	9.8	10	14	11	11	11	11
11	9.2	10	11	11	11	9.9	11	12	11	11	11	11
12	9.7	10	11	11	11	9.5	11	11	11	11	11	11
13	11	10	11	11	10	9.4	10	12	10	11	12	11
14	10	10	11	11	10	9.4	10	13	11	11	11	12
15	9.8	10	11	11	10	9.4	9.9	11	10	11	11	12
16	9.7	10	11	11	10	10	10	11	9.6	12	11	12
17	9.7	10	11	11	10	9.9	11	11	10	11	12	12
18	9.8	10	11	11	11	9.7	11	10	11	11	11	12
19	9.8	10	10	11	11	9.7	10	12	11	12	12	12
20	9.8	10	11	e11	10	10	10	12	11	12	12	13
21	9.8	10	11	e12	9.7	10	12	11	---	12	11	13
22	10	10	11	e11	10	9.6	11	10	---	12	11	13
23	10	11	11	10	10	9.2	11	10	---	12	11	12
24	9.9	11	11	e10	10	9.4	9.9	11	---	12	11	12
25	10	11	e11	e11	9.6	9.8	11	12	---	11	11	13
26	11	11	11	11	9.3	10	11	13	---	11	11	13
27	11	11	11	11	9.4	10	11	12	---	11	11	13
28	11	11	11	11	9.5	11	11	13	13	11	11	12
29	11	11	11	11	9.5	10	11	12	13	11	11	12
30	11	11	11	11	---	10	11	12	13	10	11	12
31	11	---	11	11	---	10	---	11	---	11	12	---
TOTAL	315.6	309.8	335.7	339	297.0	301.1	313.2	354	264.6	343	350	360
MEAN	10.2	10.3	10.8	10.9	10.2	9.71	10.4	11.4	11.5	11.4	11.3	12.0
MAX	11	11	11	12	11	11	12	14	14	13	12	13
MIN	9.2	9.8	9.7	10	9.3	9.2	9.2	10	9.6	10	11	11
CFSM	.06	.06	.07	.07	.06	.06	.06	.07	.07	.07	.07	.07
IN.	.07	.07	.08	.08	.07	.07	.07	.08	.06	.08	.08	.08

03353500 EAGLE CREEK AT INDIANAPOLIS, IN

LOCATION.--Lat 39°46'33", long 86°15'01", in NW1/4NW1/4 sec.6, T.15 N., R.3 E., Marion County, Hydrologic Unit 05120201, on right bank at downstream side of bridge on Lynhurst Drive, approximately 600 ft south of intersection of West 10th Street and Lynhurst Drive, 0.5 mi downstream from West 10th Street bridge, 1.0 mi upstream from Vermont Street bridge, 3.0 mi upstream from Little Eagle Creek, and 7.1 mi upstream from mouth.

DRAINAGE AREA.--174 mi^2.

PERIOD OF RECORD.--November 1938 to current year.

REVISED RECORDS.--WSP 953: 1939. WSP 1625: 1958. WSP 2109: Drainage area. WDR IN-93-1: 1992.

GAGE.--Water-stage recorder. Datum of gage is 697.00 ft above sea level. Aug. 8, 1957 to June 30, 1958, temporary site during reconstruction of bridge on Lynhurst Drive, a nonrecording gage on downstream side of 10th Street bridge. Mar. 10, 1966 to Aug. 16, 1967, during channelization of Eagle Creek, a nonrecording gage on downstream side of Lynhurst Drive bridge. Prior to Oct. 1, 1967, at datum 9.21 ft higher, (erroneously published as 7.21 ft higher in 1992 report). Oct. 1, 1967 to Sept. 30, 1992 at datum 2 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated since November 1969 by Eagle Creek Reservoir, 4.7 mi upstream (see station 03353450).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 23.2 ft present datum, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	13	10	9.5	e11	24	14	14	14	16	11	11
2	4.3	12	10	11	e10	16	14	16	12	15	13	11
3	6.3	12	9.9	39	e10	e14	14	14	14	16	15	9.8
4	7.5	12	10	24	e10	e14	13	15	13	41	11	25
5	6.7	12	21	19	e10	e13	12	13	16	219	11	11
6	7.0	13	11	13	e10	e13	12	13	15	25	19	11
7	7.4	13	9.8	12	e10	13	120	12	13	21	38	9.9
8	18	13	8.8	12	e10	e13	65	12	10	18	18	9.7
9	41	13	8.4	11	e10	e14	30	23	8.8	16	16	9.7
10	12	12	31	11	e12	14	25	30	9.0	15	14	56
11	8.5	12	11	11	14	16	25	16	9.9	16	12	18
12	8.2	12	11	11	12	17	22	14	9.9	16	11	20
13	8.9	12	9.7	11	21	16	21	32	9.4	14	12	13
14	9.2	12	16	11	19	15	21	17	36	14	11	12
15	8.9	13	10	11	13	14	21	15	21	13	11	12
16	9.4	13	9.5	11	10	18	21	13	189	13	10	12
17	10	13	9.7	11	9.7	16	34	13	91	13	54	12
18	9.6	12	9.7	9.8	53	14	27	13	95	12	79	11
19	9.7	15	8.3	10	20	29	24	43	49	12	20	10
20	9.5	13	9.4	e10	14	32	41	20	37	12	17	16
21	9.7	13	9.1	e11	12	22	31	20	58	12	14	12
22	9.1	12	9.2	e10	15	18	26	23	268	12	13	10
23	9.5	13	8.1	e9.8	12	17	23	24	170	11	14	9.5
24	9.6	13	8.3	e9.8	13	15	21	19	184	11	14	11
25	10	12	7.6	e10	11	15	17	15	187	11	12	38
26	11	15	7.0	e10	34	15	15	14	185	11	12	22
27	12	11	7.6	e10	98	15	14	46	102	10	12	13
28	12	11	8.5	e10	53	15	13	22	22	9.9	12	11
29	12	11	11	e10	36	15	12	20	19	10	12	11
30	13	11	10	e11	---	15	13	18	18	16	12	10
31	13	---	10	e11	---	14	---	15	---	11	11	---
TOTAL	326.8	374	330.6	380.9	572.7	511	761	594	1885.0	661.9	541	447.6
MEAN	10.5	12.5	10.7	12.3	19.7	16.5	25.4	19.2	62.8	21.4	17.5	14.9
MAX	41	15	31	39	98	32	120	46	268	219	79	56
MIN	3.8	11	7.0	9.5	9.7	13	12	12	8.8	9.9	10	9.5
CFSM	.06	.07	.06	.07	.11	.09	.15	.11	.36	.12	.10	.09
IN.	.07	.08	.07	.08	.12	.11	.16	.13	.40	.14	.12	.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2000, BY WATER YEAR (WY)

MEAN	32.3	112	162	205	237	302	300	210	147	84.4	39.0	38.2
MAX	201	851	906	1485	765	900	906	1127	904	800	490	625
(WY)	1970	1993	1991	1950	1976	1978	1964	1943	1957	1979	1958	1989
MIN	1.52	3.05	3.48	4.06	10.8	16.5	25.4	14.3	4.66	3.69	.19	.40
(WY)	1941	1941	1945	1945	1998	2000	2000	1976	1988	1968	1941	1941

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1939 - 2000	
ANNUAL TOTAL	41952.6		7386.5			
ANNUAL MEAN	115		20.2		155	
HIGHEST ANNUAL MEAN					316	1974
LOWEST ANNUAL MEAN					18.8	1941
HIGHEST DAILY MEAN	5750	Jan 22	268	Jun 22	9890	Dec 30 1990
LOWEST DAILY MEAN	3.8	Oct 1	3.8	Oct 1	.00	Aug 7 1941
ANNUAL SEVEN-DAY MINIMUM	5.8	Sep 30	6.1	Oct 1	.01	Aug 22 1941
INSTANTANEOUS PEAK FLOW			1240	Jun 16	28800	Jun 28 1957
INSTANTANEOUS PEAK STAGE			5.59	Jun 16	23.59	Jun 28 1957
ANNUAL RUNOFF (CFSM)	.66		.12		.89	
ANNUAL RUNOFF (INCHES)	8.97		1.58		12.13	
10 PERCENT EXCEEDS	310		31		350	
50 PERCENT EXCEEDS	14		13		38	
90 PERCENT EXCEEDS	8.9		9.7		6.0	

e Estimated

03353551 LITTLE EAGLE CREEK AT 52ND STREET AT INDIANAPOLIS, IN

LOCATION.--Lat 39°50'45", long 86°14'55", in NE$^1/_4$SW$^1/_4$ sec.7, T.16 N., R.2 E., Marion County, Hydrologic Unit 05120201, on right bank at downstream side of West 52nd Street at Indianapolis, 0.4 mi east of Lafayette Road, 1.1 mi upstream from Guion Creek, and at mile 7.2.

DRAINAGE AREA.--6.28 mi^2.

PERIOD OF RECORD.--October 1989 to current year.

REVISED RECORDS.--WDR IN-95-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 766.34 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.99	.89	.69	1.1	e.47	5.0	1.8	4.7	2.5	2.2	1.5	.89
2	.62	1.2	.72	1.3	e.47	3.9	1.7	14	2.0	2.1	1.2	.77
3	.65	1.1	.72	19	e.58	3.3	2.1	3.5	1.9	2.2	6.2	.73
4	7.7	1.0	.72	e9.0	e.56	2.9	2.0	2.5	1.7	5.9	2.0	41
5	2.1	1.5	16	e3.4	e.50	2.6	1.6	2.1	9.8	45	1.1	5.9
6	.83	1.3	13	e2.3	e.60	2.3	1.4	2.2	4.1	8.9	10	4.9
7	.64	1.1	3.1	1.8	e.80	2.2	81	3.5	2.4	4.6	37	3.4
8	17	1.1	1.7	1.7	e1.5	2.2	30	2.0	2.0	3.8	5.7	1.8
9	25	1.1	1.2	1.5	e2.9	2.4	9.3	9.5	1.5	2.5	3.5	1.5
10	8.0	1.2	25	1.5	e12	2.1	5.6	31	.95	2.2	2.7	22
11	2.9	1.1	5.0	1.4	13	2.2	6.4	5.0	.89	2.5	2.6	10
12	2.0	1.0	3.8	1.2	5.6	4.7	4.7	3.3	1.2	2.0	1.8	7.7
13	2.4	1.1	4.3	1.1	14	7.0	3.4	24	1.0	1.8	1.1	3.7
14	1.8	1.3	15	1.0	14	6.7	3.1	5.0	16	1.6	1.6	2.4
15	.92	1.1	5.9	.97	6.3	3.8	2.8	3.0	14	1.5	2.3	1.7
16	.78	1.0	3.5	.98	4.5	6.4	2.4	2.5	61	1.3	1.3	1.4
17	4.2	1.1	3.3	.89	3.3	6.5	11	4.7	33	1.1	12	1.2
18	2.7	1.0	2.5	.93	42	3.4	5.1	4.8	45	1.2	49	1.1
19	1.2	1.4	1.9	.92	12	20	3.3	22	11	2.0	6.0	1.1
20	.94	3.7	5.2	e.85	6.0	23	16	5.4	11	1.8	3.3	6.9
21	.86	1.6	3.2	e.80	5.0	9.5	11	3.7	45	1.3	2.3	7.4
22	.91	.96	1.9	e.76	10	5.5	4.9	5.9	11	1.2	3.5	2.4
23	1.0	.77	1.4	e.71	5.9	4.5	3.5	7.1	5.9	1.2	4.2	1.8
24	1.0	2.3	1.3	e.67	6.6	3.8	3.1	3.4	15	.95	5.5	2.9
25	.95	1.7	e1.2	e.64	5.0	3.4	2.5	2.4	18	.77	2.7	24
26	.89	3.8	e1.1	e.60	14	2.8	2.2	2.1	6.3	.82	1.8	17
27	.88	3.0	e1.0	e.58	38	2.8	2.0	28	4.8	.65	1.5	5.8
28	1.2	1.3	e.96	e.56	9.2	2.7	1.9	9.4	3.5	.87	1.3	3.8
29	1.1	.88	e.94	e.56	5.9	2.4	1.6	4.8	3.0	1.2	1.3	1.9
30	1.2	.70	e.97	e.50	---	2.2	1.4	3.3	2.5	3.9	1.1	1.2
31	.90	---	e1.0	e.50	---	2.0	---	2.9	---	2.4	.95	---
TOTAL	94.26	42.30	128.22	59.72	240.68	154.2	228.8	227.7	337.94	111.46	178.05	188.29
MEAN	3.04	1.41	4.14	1.93	8.30	4.97	7.63	7.35	11.3	3.60	5.74	6.28
MAX	25	3.8	25	19	42	23	81	31	61	45	49	41
MIN	.62	.70	.69	.50	.47	2.0	1.4	2.0	.89	.65	.95	.73
CFSM	.48	.22	.66	.31	1.32	.79	1.21	1.17	1.79	.57	.91	1.00
IN.	.56	.25	.76	.35	1.43	.91	1.36	1.35	2.00	.66	1.05	1.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2000, BY WATER YEAR (WY)

MEAN	4.61	13.0	9.59	11.4	11.2	12.0	14.3	14.3	10.4	7.43	4.23	5.10
MAX	13.3	41.1	49.8	23.2	31.1	25.0	29.1	43.0	35.8	22.5	6.54	16.3
(WY)	1991	1994	1991	1996	1990	1991	1996	1996	1998	1992	1995	1993
MIN	1.06	1.41	1.15	1.93	3.12	3.36	4.66	4.32	1.63	2.21	1.02	.57
(WY)	1995	2000	1990	2000	1995	1994	1995	1992	1991	1991	1996	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1989 - 2000	
ANNUAL TOTAL	2581.29		1991.62			
ANNUAL MEAN	7.07		5.44		9.78	
HIGHEST ANNUAL MEAN					13.3	1993
LOWEST ANNUAL MEAN					5.44	2000
HIGHEST DAILY MEAN	268	Jan 22	81	Apr 7	664	Nov 14 1993
LOWEST DAILY MEAN	.12	Sep 10	e.47	Feb 1	.10	Sep 4 1998
ANNUAL SEVEN-DAY MINIMUM	.22	Sep 9	e.51	Jan 30	.13	Aug 31 1998
INSTANTANEOUS PEAK FLOW			331	Apr 7	1550	Nov 14 1993
INSTANTANEOUS PEAK STAGE			4.22	Apr 7	8.30	Jul 5 1992
ANNUAL RUNOFF (CFSM)	1.13		.87		1.56	
ANNUAL RUNOFF (INCHES)	15.29		11.80		21.16	
10 PERCENT EXCEEDS	15		13		19	
50 PERCENT EXCEEDS	2.9		2.3		3.1	
90 PERCENT EXCEEDS	.66		.87		.70	

e Estimated

03353560 GUION CREEK ABOVE 52ND STREET AT INDIANAPOLIS, IN

LOCATION.--Lat 39°50'45", long 86°13'57", in NW1/4SW1/4 sec.08., T.16 N., R.3 E., Marion County, Hydrologic Unit 05120201, on right bank 25 ft upstream from private bridge at Indianapolis, 0.2 mi north of West 52nd Street along Guion Road, and 1.25 mi upstream of the confluence with Little Eagle Creek.

DRAINAGE AREA.--4.10 mi^2.

PERIOD OF RECORD.--October 1989 to current year.

REVISED RECORDS.--WDR IN-95-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 760.11 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.47	e.49	e.08	e.32	e.19	3.9	.93	3.0	1.4	1.2	.57	.11
2	.25	e.24	e.09	.49	e.20	2.8	.83	4.7	1.1	1.0	.64	.13
3	.30	e.15	e.09	7.4	e.21	2.2	.85	2.3	.82	1.3	1.3	.14
4	2.2	e.13	e.09	5.0	e.21	1.9	.85	1.8	.64	3.4	.54	18
5	.84	e.12	e4.3	2.4	e.20	1.7	.87	1.4	2.1	8.8	.30	4.8
6	.63	e.18	2.0	1.5	e.25	1.5	.72	1.2	1.1	4.1	2.1	2.8
7	.49	e.37	.70	1.1	e.25	1.3	44	1.1	.79	2.1	6.4	1.7
8	6.8	e.13	.45	.85	e.50	1.3	40	.90	.67	1.5	2.3	1.0
9	15	e.13	.36	.76	e1.0	1.3	17	4.2	.57	1.1	1.7	.62
10	4.7	e.14	11	.77	e3.5	1.1	8.5	7.1	.44	.98	1.1	10
11	2.2	e.13	2.3	.65	e3.5	1.1	6.4	2.9	.50	.91	.65	4.5
12	1.3	e.13	1.8	.58	e3.0	2.0	4.4	2.1	.55	.83	.39	4.1
13	1.2	e.14	1.4	.60	7.0	2.6	3.2	13	.46	.65	.25	2.3
14	1.2	e.14	4.4	.45	7.6	2.1	2.6	4.2	12	.53	.20	1.6
15	1.1	e.12	1.9	.43	4.7	1.6	2.2	2.6	9.0	.42	.15	1.0
16	1.1	e.13	1.5	.39	3.0	3.1	2.0	1.6	46	.33	.13	.59
17	e1.9	e.13	1.2	.30	1.9	2.6	5.0	1.9	36	.28	7.2	.53
18	e.40	e.14	.93	e.30	23	1.9	3.0	1.8	34	.29	16	.45
19	e.18	e.49	.78	e.30	13	9.6	2.3	28	14	.38	4.1	.46
20	e.15	e.34	1.5	e.28	7.2	14	7.3	7.1	8.5	.34	2.3	3.9
21	e.16	e.17	.90	e.27	4.2	8.5	5.9	4.1	17	.25	1.4	2.8
22	e.19	e.15	e.56	e.26	5.3	5.2	4.0	4.0	9.5	.20	.86	1.3
23	e.13	e.14	e.45	e.24	3.8	3.5	3.1	4.1	6.6	.17	1.6	1.1
24	e.10	e.39	e.38	e.23	3.9	2.7	2.4	2.5	7.7	.13	2.0	1.2
25	e.11	e.16	e.35	e.22	3.2	2.3	1.9	1.7	6.6	.11	.87	12
26	e.13	e.70	e.32	e.28	7.4	3.6	1.4	1.3	4.3	.10	.54	8.8
27	e.16	e.21	e.29	e.20	21	2.7	1.2	15	3.2	.11	.44	4.9
28	e.27	e.13	e.28	e.20	10	1.8	1.1	8.3	2.4	.15	.31	3.2
29	e.41	e.10	e.28	e.20	5.8	1.4	.95	4.9	1.9	.43	.22	2.0
30	e.47	e.08	e.29	e.20	---	1.2	.88	2.7	1.5	2.0	.20	1.3
31	e.49	---	e.30	e.19	---	.96	---	1.8	---	.87	.14	---
TOTAL	45.03	6.20	41.27	27.36	145.01	93.46	175.78	143.30	231.34	34.96	56.90	97.33
MEAN	1.45	.21	1.33	.88	5.00	3.01	5.86	4.62	7.71	1.13	1.84	3.24
MAX	15	.70	11	7.4	23	14	44	28	46	8.8	16	18
MIN	.10	.08	.08	.19	.19	.96	.72	.90	.44	.10	.13	.11
CFSM	.35	.05	.32	.22	1.22	.74	1.43	1.13	1.88	.28	.45	.79
IN.	.41	.06	.37	.25	1.32	.85	1.59	1.30	2.10	.32	.52	.88

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2000, BY WATER YEAR (WY)

MEAN	1.82	6.26	4.09	6.35	5.67	6.52	7.48	7.75	6.08	3.28	1.43	2.04
MAX	5.45	20.8	19.6	16.2	16.4	12.5	12.1	21.4	26.2	10.5	3.32	9.03
(WY)	1991	1994	1991	1999	1990	1991	1996	1996	1998	1992	1993	1993
MIN	.15	.21	.52	.88	1.17	1.77	1.98	1.76	.56	.33	.15	.17
(WY)	1995	2000	1990	2000	1995	1994	1995	1992	1991	1991	1991	1991

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1990 - 2000	
ANNUAL TOTAL	1772.14		1097.94			
ANNUAL MEAN	4.86		3.00		4.88	
HIGHEST ANNUAL MEAN					7.26	1993
LOWEST ANNUAL MEAN					2.87	1995
HIGHEST DAILY MEAN	186	Jan 22	46	Jun 16	283	Nov 14 1993
LOWEST DAILY MEAN	.08	Sep 1	e.08	Nov 30	.00	Aug 28 1991
ANNUAL SEVEN-DAY MINIMUM	.09	Nov 28	e.09	Nov 28	.00	Aug 30 1998
INSTANTANEOUS PEAK FLOW			188	Jun 16	435	Nov 14 1993
INSTANTANEOUS PEAK STAGE			4.45	Jun 16	7.35	May 16 1990
ANNUAL RUNOFF (CFSM)	1.18		.73		1.19	
ANNUAL RUNOFF (INCHES)	16.08		9.96		16.19	
10 PERCENT EXCEEDS	12		7.3		10	
50 PERCENT EXCEEDS	1.4		1.1		1.5	
90 PERCENT EXCEEDS	.16		.15		.15	

e Estimated

03353583 FALCON CREEK AT 30TH ST. AT INDIANAPOLIS, IN

LOCATION.--Lat 39°48'33", long 86°13'56", in NW1/4NW1/4 sec.29, T.16 N., R.03 E., Marion County, Hydrologic Unit 05120201, on left bank, 150 ft downstream from bridge on West 30th Street at Indianapolis, 0.6 mi west of Lafayette Road, and 0.6 mi upstream of confluence with Little Eagle Creek.

DRAINAGE AREA.--4.15 mi^2.

PERIOD OF RECORD.--October 1989 to current year.

REVISED RECORDS.--WDR IN-95-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 727.27 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.55	e.98	e.90	e1.1	e.35	2.0	.85	5.2	.64	1.3	.97	.22
2	.55	e1.4	e.80	e1.3	e.35	1.6	.85	3.3	.78	1.3	1.2	.24
3	1.4	e1.3	e.77	e12	e.43	1.4	.92	1.6	1.3	2.6	2.4	.25
4	1.4	e1.2	e.86	e4.0	e.41	1.4	.85	1.3	.73	5.9	.66	12
5	.64	e1.9	e10	e1.9	e.36	1.2	.85	1.1	1.7	7.6	.64	.50
6	e.56	e1.5	e2.5	e1.7	e.40	1.1	.85	.91	.85	1.6	12	.34
7	e.54	e1.4	e1.4	e1.7	e.50	1.1	57	.79	.74	1.0	9.3	.30
8	e2.5	e1.3	e1.0	e1.5	e.70	1.1	23	.67	.65	.87	2.8	.27
9	e22	e1.3	e.83	e1.5	e1.0	1.1	4.9	11	.60	.85	1.3	.26
10	e4.5	e1.5	e15	e1.4	e2.0	.98	2.3	9.4	.50	1.0	.80	21
11	e2.3	e1.3	e4.0	1.3	2.9	1.2	2.4	1.7	.59	.85	.69	1.7
12	e12	e1.2	e3.0	1.3	1.5	2.8	1.3	1.1	.47	.81	.64	2.8
13	e11	e1.3	e4.5	1.3	10	2.1	.91	13	.37	.80	.64	.51
14	e4.5	e1.7	e8.5	1.4	6.1	1.5	.74	1.8	22	.79	.58	.42
15	e2.1	e1.3	e3.7	1.4	2.3	1.2	.74	.87	3.4	.80	.59	.34
16	e1.4	e1.2	e2.5	1.5	1.6	3.3	.74	.71	83	.78	.78	.30
17	e1.6	e1.3	e2.0	1.6	1.2	1.8	5.6	1.0	32	.80	28	.29
18	e1.7	e1.2	e1.7	1.5	26	1.3	1.7	.69	30	.92	25	.31
19	e1.3	e3.4	e2.3	1.4	5.2	13	1.2	31	6.9	1.1	1.4	.33
20	e1.1	e1.5	e3.3	1.3	2.3	12	10	3.2	3.6	.77	.57	6.2
21	e1.0	e1.2	e2.5	e1.1	1.6	4.4	4.4	1.5	16	.76	.39	.92
22	e1.1	e1.0	e1.9	e.90	3.6	2.4	1.9	3.7	4.3	.66	.32	.37
23	e1.3	e.90	e1.6	e.80	1.7	1.8	1.6	2.1	2.9	.66	.33	.39
24	e1.2	e1.5	e1.3	e.70	2.6	1.6	1.3	.93	7.8	.78	.66	.87
25	e1.1	e1.2	e1.2	e.60	1.5	1.4	1.1	.68	3.5	.68	.33	18
26	e.98	e3.4	e1.1	e.56	10	1.3	.98	.64	2.1	.52	.31	4.4
27	e1.2	e1.5	e1.0	e.50	20	1.3	1.1	17	1.7	.45	.30	.82
28	e1.5	e1.1	e.90	e.46	4.5	1.2	.98	2.9	1.6	.43	.28	.51
29	e1.4	e1.0	e.86	e.43	2.5	1.0	.98	1.4	1.5	.47	.27	.42
30	e1.5	e1.0	e.90	e.40	---	.93	1.0	.90	1.4	5.7	.28	.38
31	e1.0	---	e1.0	e.37	---	.85	---	.72	---	.76	.22	---
TOTAL	86.92	42.98	83.82	48.92	113.60	71.36	133.04	122.81	233.62	44.31	94.65	75.66
MEAN	2.80	1.43	2.70	1.58	3.92	2.30	4.43	3.96	7.79	1.43	3.05	2.52
MAX	22	3.4	15	12	26	13	57	31	83	7.6	28	21
MIN	.54	.90	.77	.37	.35	.85	.74	.64	.37	.43	.22	.22
CFSM	.68	.35	.65	.38	.94	.55	1.07	.95	1.88	.34	.74	.61
IN.	.78	.39	.75	.44	1.02	.64	1.19	1.10	2.09	.40	.85	.68

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2000, BY WATER YEAR (WY)

MEAN	1.95	5.24	3.84	4.60	4.65	5.56	6.89	7.74	5.66	3.41	1.81	2.01
MAX	4.37	16.0	17.8	9.70	13.7	12.3	13.1	26.9	18.9	10.0	3.05	6.22
(WY)	1991	1994	1991	1999	1990	1991	1996	1996	1998	1992	2000	1993
MIN	.31	.57	.73	1.44	.89	1.37	1.91	1.57	.82	.61	.30	.52
(WY)	1995	1998	1996	1992	1995	1994	1995	1992	1991	1991	1996	1991

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1989 - 2000	
ANNUAL TOTAL	1521.74		1151.69			
ANNUAL MEAN	4.17		3.15		4.44	
HIGHEST ANNUAL MEAN					6.00	1996
LOWEST ANNUAL MEAN					2.66	1995
HIGHEST DAILY MEAN	134	Jan 22	83	Jun 16	226	Nov 14 1993
LOWEST DAILY MEAN	.54	Oct 7	.22	Aug 31	.00	Sep 21 1991
ANNUAL SEVEN-DAY MINIMUM	.63	Jan 5	.25	Aug 28	.07	Sep 26 1991
INSTANTANEOUS PEAK FLOW			556	Jun 16	565	Jul 18 1996
INSTANTANEOUS PEAK STAGE			6.81	Jun 16	6.81	Jun 16 2000
ANNUAL RUNOFF (CFSM)	1.00		.76		1.07	
ANNUAL RUNOFF (INCHES)	13.64		10.32		14.53	
10 PERCENT EXCEEDS	9.0		6.4		9.6	
50 PERCENT EXCEEDS	1.5		1.2		1.2	
90 PERCENT EXCEEDS	.76		.43		.26	

e Estimated

03353600 LITTLE EAGLE CREEK AT SPEEDWAY, IN

LOCATION.--Lat 39°47'15", long 86°13'41", in NE$^1/_4$SW$^1/_4$ sec.32, T.16 N., R.3 E., Marion County, Hydrologic Unit 05120201, on right bank at downstream side of 16th Street bridge in Speedway, 0.6 mi upstream from Dry Run, and 2.3 mi upstream from mouth.

DRAINAGE AREA.--24.3 mi^2 including 5.57 mi^2 from Dry Run basin. Since June 1964 part of the flow from the 5.57 mi^2 of Dry Run basin has been diverted into Little Eagle Creek above gage.

PERIOD OF RECORD.--October 1959 to current year. Figures of runoff for June 1964 to September 1966 have been found to be in error and should not be used.

REVISED RECORDS.--WDR IN-95-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 707.82 ft above sea level (levels by State of Indiana, Department of Natural Resources). Prior to June 13, 1975, at datum 3.00 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	e3.4	2.9	3.7	e1.2	15	5.3	14	8.6	5.9	5.7	2.7
2	1.8	e4.5	2.6	4.4	e1.2	12	5.1	36	7.2	5.5	4.1	2.5
3	2.4	e4.1	2.5	55	e1.5	9.6	5.5	12	6.6	11	15	2.6
4	10	e3.9	2.6	28	e1.4	8.5	5.7	9.5	5.8	15	5.7	86
5	3.7	e6.2	37	12	e1.3	7.6	5.2	7.5	18	78	3.7	14
6	2.2	e4.9	16	8.0	e1.5	6.7	4.8	6.7	11	21	28	9.4
7	1.7	e4.2	4.9	6.2	e2.0	6.1	255	8.5	6.9	11	91	7.2
8	39	e4.1	3.1	5.3	e3.5	6.0	149	6.4	5.8	8.4	20	4.6
9	98	e4.0	2.7	5.0	e8.0	6.2	44	29	4.9	6.3	11	3.4
10	19	e5.0	68	5.1	e25	5.7	e22	76	4.0	5.9	7.2	88
11	7.6	e4.2	13	4.9	e29	6.5	e25	16	4.2	6.3	5.7	26
12	59	e3.9	10	4.6	e15	13	e18	11	4.2	5.5	4.8	23
13	54	e4.3	10	4.8	39	15	e14	70	3.6	4.8	3.6	11
14	12	e5.4	31	4.9	40	15	e12	19	74	4.3	3.4	7.4
15	6.0	e4.2	e15	4.6	17	9.1	e11	12	49	4.0	4.1	5.6
16	4.6	e3.7	e10	5.0	12	17	e10	8.9	362	3.5	3.3	4.0
17	5.2	e4.2	8.0	5.3	8.4	16	e35	10	169	3.1	63	3.4
18	5.4	e3.9	6.5	4.6	122	9.2	20	13	144	3.5	187	2.9
19	4.3	e5.6	5.6	4.4	41	56	14	114	44	4.8	20	2.7
20	e3.8	9.1	12	e3.3	20	67	49	25	27	5.1	12	20
21	e3.4	5.0	8.3	e2.8	14	31	35	16	96	3.6	7.8	18
22	e3.6	3.8	6.1	e2.5	26	19	17	20	29	4.3	7.2	6.3
23	e4.1	3.0	4.7	e2.2	15	14	14	24	19	2.8	9.0	5.3
24	e3.9	9.1	e4.0	e2.0	18	12	12	12	34	2.8	13	5.1
25	e3.7	5.4	e3.6	e1.8	13	10	9.3	8.6	38	2.5	7.0	68
26	e3.4	16	e3.3	e1.7	37	9.6	7.8	6.9	16	2.4	4.7	48
27	e3.4	8.7	e3.1	e1.5	107	9.9	7.2	92	12	2.2	4.1	16
28	e4.8	4.5	e3.0	e1.4	31	8.5	6.7	31	9.6	1.7	3.5	11
29	e4.4	3.5	e2.9	e1.4	20	7.0	6.3	18	8.3	2.1	3.2	7.5
30	e4.7	3.7	e3.1	e1.3	---	6.0	6.1	13	6.7	21	2.8	5.8
31	e3.5	---	e3.3	e1.3	---	5.6	---	10	---	6.1	2.8	---
TOTAL	385.0	155.5	308.8	199.0	671.0	439.8	831.0	756.0	1228.4	264.4	563.4	517.4
MEAN	12.4	5.18	9.96	6.42	23.1	14.2	27.7	24.4	40.9	8.53	18.2	17.2
MAX	98	16	68	55	122	67	255	114	362	78	187	88
MIN	1.7	3.0	2.5	1.3	1.2	5.6	4.8	6.4	3.6	1.7	2.8	2.5
CFSM	.51	.21	.41	.26	.95	.58	1.14	1.00	1.69	.35	.75	.71
IN.	.59	.24	.47	.30	1.03	.67	1.27	1.16	1.88	.40	.86	.79

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2000, BY WATER YEAR (WY)

MEAN	10.8	25.2	28.2	26.7	31.2	37.3	36.8	33.3	21.3	18.8	11.7	11.2
MAX	88.9	115	111	78.3	77.1	87.8	84.4	140	112	92.3	44.7	101
(WY)	1987	1994	1991	1969	1997	1978	1996	1996	1998	1979	1979	1989
MIN	.81	1.50	.85	.32	3.82	4.84	5.51	4.84	.98	.67	.15	.20
(WY)	1967	1966	1977	1977	1978	1981	1976	1976	1988	1966	1966	1966

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1965 - 2000	
ANNUAL TOTAL	9897.9		6319.7			
ANNUAL MEAN	27.1		17.3		24.4	
HIGHEST ANNUAL MEAN					43.6	1993
LOWEST ANNUAL MEAN					4.86	1966
HIGHEST DAILY MEAN	795	Jan 22	362	Jun 16	1670	Nov 14 1993
LOWEST DAILY MEAN	1.7	Oct 7	e1.2	Feb 1	.00	Jul 8 1966
ANNUAL SEVEN-DAY MINIMUM	2.2	Sep 19	e1.3	Jan 30	.07	Aug 2 1966
INSTANTANEOUS PEAK FLOW			1660	Jun 16	3330	Jul 28 1979
INSTANTANEOUS PEAK STAGE			7.82	Jun 16	12.13	Jul 28 1979
ANNUAL RUNOFF (CFSM)	1.12		.71		1.00	
ANNUAL RUNOFF (INCHES)	15.15		9.67		13.62	
10 PERCENT EXCEEDS	58		38		51	
50 PERCENT EXCEEDS	11		6.7		8.0	
90 PERCENT EXCEEDS	2.6		2.8		1.4	

e Estimated

03353611 WHITE RIVER AT STOUT GEN. STN. AT INDIANAPOLIS, IN

LOCATION.--Lat 39°42'52", long 86°12'02", in SE$^1/_4$NE$^1/_4$ sec.28, T.15N., R.3E., Marion County, Hydrologic Unit 05120201, on right bank 0.30 mi above confluence with Lick Creek and 0.31 mi above dam at Stout Generating Plant, and at mile 226.00.

DRAINAGE AREA.--1,898 mi^2.

PERIOD OF RECORD.--Oct. 1, 1992 to current year.

GAGE.--Water-stage recorder. Datum of gage is 663.40 above sea level.

REMARKS.--Records good. Natural flow affected by regulation of Morse Reservoir and Geist Reservoir, and by diversion of municipal water supply by the Indianapolis Water Company.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	262	185	215	205	259	951	458	633	1130	886	700	257
2	264	195	214	212	238	781	447	968	921	787	586	258
3	243	188	215	527	231	645	460	1000	815	734	663	254
4	259	178	211	426	233	564	429	1140	735	1070	645	1190
5	246	168	335	324	229	506	421	965	751	3040	659	541
6	236	182	322	323	233	471	426	903	796	1810	612	401
7	225	180	281	323	236	436	2070	823	726	1500	2220	352
8	275	186	271	304	236	417	3620	745	605	2070	2130	326
9	471	196	262	296	240	406	4900	830	535	1270	2080	308
10	318	195	498	293	265	398	4160	1580	466	949	1200	1430
11	263	183	276	277	293	398	2490	1550	460	841	908	1320
12	230	178	263	275	309	440	1770	1340	473	778	734	1670
13	214	182	254	276	562	469	1390	1660	459	903	600	1360
14	202	191	296	270	672	439	1160	1360	808	734	516	886
15	190	188	293	263	387	424	1010	1220	1370	613	434	656
16	195	181	290	257	394	505	915	931	2130	555	408	535
17	237	172	273	246	370	533	1020	852	3060	471	593	455
18	219	175	253	243	1830	469	928	820	3550	419	1780	412
19	206	196	239	240	1570	841	845	1580	4040	400	431	389
20	198	233	245	255	2130	1210	1230	2130	4010	405	366	460
21	196	220	228	246	1570	1200	1530	2200	4000	381	344	534
22	200	223	216	235	1180	2360	2100	1650	4330	365	321	436
23	200	221	215	230	917	1900	2160	1480	3950	360	327	462
24	204	238	212	249	972	1320	1690	1180	3190	356	338	543
25	207	219	205	248	892	1070	1310	988	2910	348	356	1080
26	200	247	201	231	872	881	1040	876	2580	336	337	1760
27	197	240	199	211	1780	792	877	2320	2040	330	325	1240
28	192	227	198	202	1180	696	781	1750	1620	337	316	1110
29	196	225	206	193	1180	645	707	2210	1280	331	300	828
30	189	220	211	206	---	588	651	1990	1060	1000	281	649
31	185	---	212	249	---	538	---	1430	---	654	268	---
TOTAL	7119	6012	7809	8335	21460	23293	42995	41104	54800	25033	21778	22102
MEAN	230	200	252	269	740	751	1433	1326	1827	808	703	737
MAX	471	247	498	527	2130	2360	4900	2320	4330	3040	2220	1760
MIN	185	168	198	193	229	398	421	633	459	330	268	254
CFSM	.12	.11	.13	.14	.39	.40	.76	.70	.96	.43	.37	.39
IN.	.14	.12	.15	.16	.42	.46	.84	.81	1.07	.49	.43	.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2000, BY WATER YEAR (WY)

MEAN	502	2391	1377	2669	1812	2812	2845	2867	2674	1326	622	547
MAX	1039	7366	4215	4949	4000	5526	4170	7735	6924	3806	1360	1485
(WY)	1993	1994	1997	1999	1997	1997	1993	1996	1998	1993	1998	1993
MIN	227	200	252	269	666	751	1433	1326	829	533	273	181
(WY)	1995	2000	2000	2000	1995	2000	2000	2000	1994	1999	1999	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1992 - 2000	
ANNUAL TOTAL	531546		281840			
ANNUAL MEAN	1456		770		1868	
HIGHEST ANNUAL MEAN					2947	1993
LOWEST ANNUAL MEAN					770	2000
HIGHEST DAILY MEAN	26000	Jan 23	4900	Apr 9	32700	Nov 17 1993
LOWEST DAILY MEAN	152	Sep 18	168	Nov 5	150	Oct 1 1995
ANNUAL SEVEN-DAY MINIMUM	161	Sep 14	181	Nov 12	161	Sep 14 1999
INSTANTANEOUS PEAK FLOW			6510	Jun 16	36500	Nov 17 1993
INSTANTANEOUS PEAK STAGE			5.67	Jun 16	13.22	Nov 17 1993
ANNUAL RUNOFF (CFSM)	.77		.41		.98	
ANNUAL RUNOFF (INCHES)	10.42		5.52		13.37	
10 PERCENT EXCEEDS	3440		1770		4240	
50 PERCENT EXCEEDS	500		444		902	
90 PERCENT EXCEEDS	188		202		263	

03353620 LICK CREEK AT INDIANAPOLIS, IN

LOCATION.--Lat 39°42'21", long 86°06'13", in NE$^1/_4$NE$^1/_4$ sec.32, T.15 N., R.4 E., Marion County, Hydrologic Unit 05120201, on left bank, at upstream side of Sherman Drive bridge, in Indianapolis, and at mile 6.2.

DRAINAGE AREA.--15.6 mi^2.

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 742.00 ft above sea level (Indiana Flood Control and Water Resources Commission bench mark).

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.80	.16	.16	.24	e.37	8.3	3.2	5.7	3.6	2.6	25	.93
2	.63	.43	.16	.36	e.37	6.3	4.3	14	3.0	2.3	18	.78
3	.68	.74	.16	62	e.45	5.2	12	5.1	2.1	3.4	18	.68
4	1.1	.26	.30	21	e.54	4.8	4.9	4.7	2.1	32	6.3	79
5	.63	.24	40	5.0	e.45	4.4	3.6	4.6	3.7	109	4.0	6.1
6	1.1	.24	5.4	2.6	e.47	3.7	3.2	7.6	2.6	17	17	3.1
7	.91	.24	1.1	1.9	e.52	3.2	229	7.5	1.7	7.8	75	1.8
8	10	.28	.49	1.6	e.56	3.2	131	4.2	1.4	4.4	12	1.2
9	18	.26	.43	1.5	e.80	3.0	38	17	1.2	3.2	6.7	1.1
10	3.8	.24	52	2.8	e9.0	3.1	20	34	1.1	2.6	3.5	78
11	1.1	.28	2.8	2.1	e10	3.4	16	6.6	1.6	2.3	2.2	19
12	.78	.29	1.8	1.3	e6.0	7.4	11	4.5	1.3	2.1	1.6	9.3
13	.82	.29	2.2	1.3	39	7.9	8.7	27	1.0	1.8	1.4	5.9
14	.75	.27	23	1.0	27	6.0	7.2	6.2	25	1.4	1.2	3.7
15	.57	.27	2.9	.99	7.9	4.3	6.4	3.8	22	1.4	1.0	3.1
16	1.4	.27	1.4	.93	5.8	9.2	5.7	3.0	91	1.2	1.0	2.5
17	6.3	.27	.80	.93	3.8	7.0	18	3.9	96	1.1	32	1.8
18	1.1	.29	.98	.82	122	4.2	8.8	4.3	170	1.1	74	1.1
19	.40	3.6	.85	.85	32	46	6.3	12	34	1.4	8.3	1.1
20	.30	3.2	1.8	e.90	13	71	70	4.3	16	1.2	4.2	13
21	.30	.59	.96	e.80	8.3	28	52	3.1	86	1.2	3.2	9.8
22	.24	.28	.44	e.70	15	14	20	6.3	22	.95	2.3	2.5
23	.20	.20	.31	e.60	8.9	10	13	8.3	11	.93	6.8	5.9
24	.23	.86	.27	e.56	22	8.2	10	3.3	52	.93	4.4	5.4
25	.22	.81	.25	e.52	12	6.8	7.8	2.1	42	.91	2.1	52
26	.20	4.0	.24	e.50	13	5.4	6.2	1.7	14	.82	1.5	37
27	.20	1.4	.24	e.47	68	7.1	5.3	130	8.6	.77	1.2	8.2
28	.20	.45	.20	e.46	18	5.3	4.8	23	5.6	.78	1.0	3.8
29	.17	.32	e.20	e.45	11	4.5	4.3	11	4.4	.92	.93	2.6
30	.16	.21	e.21	e.42	---	4.2	3.9	6.7	3.4	70	.91	3.6
31	.16	---	e.22	e.40	---	4.6	---	4.8	---	38	.86	---
TOTAL	53.45	21.24	142.27	116.00	456.23	309.7	734.6	380.3	729.4	315.51	337.60	363.99
MEAN	1.72	.71	4.59	3.74	15.7	9.99	24.5	12.3	24.3	10.2	10.9	12.1
MAX	18	4.0	52	62	122	71	229	130	170	109	75	79
MIN	.16	.16	.16	.24	.37	3.0	3.2	1.7	1.0	.77	.86	.68
CFSM	.11	.05	.29	.24	1.01	.64	1.57	.79	1.56	.65	.70	.78
IN.	.13	.05	.34	.28	1.09	.74	1.75	.91	1.74	.75	.81	.87

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2000, BY WATER YEAR (WY)

MEAN	7.49	21.2	22.7	21.3	26.2	31.1	27.6	25.6	18.2	17.1	11.0	7.77
MAX	53.1	102	76.4	50.5	57.1	64.6	71.4	102	88.8	95.5	54.1	48.2
(WY)	1987	1994	1991	1997	1975	1978	1996	1996	1998	1992	1979	1989
MIN	1.03	.71	2.14	1.00	4.67	5.98	3.92	1.87	.39	2.55	1.28	.17
(WY)	1983	2000	1981	1981	1978	1994	1971	1988	1988	1991	1986	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1971 - 2000	
ANNUAL TOTAL	4178.75		3960.29			
ANNUAL MEAN	11.4		10.8		19.7	
HIGHEST ANNUAL MEAN					27.6	1979
LOWEST ANNUAL MEAN					10.8	2000
HIGHEST DAILY MEAN	400	Jan 22	229	Apr 7	1380	Nov 14 1993
LOWEST DAILY MEAN	.06	Sep 26	.16	Oct 30	.05	Sep 19 1983
ANNUAL SEVEN-DAY MINIMUM	.07	Sep 22	.18	Oct 26	.07	Sep 22 1999
INSTANTANEOUS PEAK FLOW			711	Apr 7	2500	Jun 25 1978
INSTANTANEOUS PEAK STAGE			4.87	Apr 7	9.61	Jun 25 1978
ANNUAL RUNOFF (CFSM)	.73		.69		1.26	
ANNUAL RUNOFF (INCHES)	9.96		9.44		17.18	
10 PERCENT EXCEEDS	24		27		43	
50 PERCENT EXCEEDS	3.6		3.1		6.8	
90 PERCENT EXCEEDS	.17		.28		1.1	

e Estimated

03353630 LITTLE BUCK CREEK NEAR SOUTHPORT, IN

LOCATION.--Lat 39°40'11", long 86°04'57", in SW¼SW¼ sec.10, T.14 N., T.4 E., Marion County, Hydrologic Unit 05120201, on right bank 5 ft upstream from Emerson Avenue bridge in Indianapolis, 1.1 mi downstream from Bunker Creek, and 2.5 mi upstream from Derbyshire Creek.

DRAINAGE AREA.--5.75 mi^2.

PERIOD OF RECORD.--October 1989 to current year.

REVISED RECORDS.--WDR IN-95-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 783.17 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.02	.07	e.10	e.23	3.2	.58	1.4	2.7	.89	1.9	.16
2	.02	.03	.08	.11	e.22	2.2	.64	2.6	1.9	1.4	1.2	.13
3	.03	.02	.11	7.1	e.30	1.7	.69	1.8	1.3	4.7	5.4	.13
4	.02	.03	.13	7.6	e.32	1.5	.64	2.0	1.0	4.6	1.4	13
5	.02	.02	2.5	2.5	e.26	1.2	.53	2.2	1.0	32	.64	3.4
6	.02	.03	1.5	1.2	e.22	1.0	.49	2.0	.88	9.1	1.5	1.5
7	.02	.02	.44	.75	e.23	.92	67	1.7	.67	4.3	33	.81
8	.07	.03	.28	.54	e.24	.80	57	1.4	.59	2.4	7.1	.58
9	.04	.01	.22	.53	e.26	.73	19	1.7	.46	1.6	4.7	.46
10	.01	.02	5.6	.74	2.2	.66	10	8.2	.41	1.2	3.3	11
11	.00	.03	1.2	.67	3.2	.76	7.8	3.5	2.0	1.2	1.6	7.5
12	.00	.03	.71	.53	1.8	1.5	5.6	2.3	1.5	1.0	.88	9.5
13	.01	.03	.91	.51	8.8	1.8	4.8	6.2	.83	.76	.56	4.3
14	.01	.02	5.2	.31	9.8	1.6	3.7	3.1	1.3	.58	.40	2.2
15	.01	.01	1.6	.25	4.5	1.2	3.0	1.7	4.5	.38	.27	1.5
16	.01	.01	.79	.26	2.7	1.9	2.6	1.2	46	.25	.17	.88
17	.01	.01	.48	.23	1.7	1.9	5.4	2.2	56	.18	12	.67
18	.01	.01	.36	.23	36	1.2	3.9	2.3	79	.13	45	.49
19	.01	.07	.31	e.22	14	7.0	2.9	1.9	18	.14	7.5	.39
20	.01	.03	e.23	e.21	6.6	15	14	1.4	9.1	.14	3.4	2.1
21	.01	.01	e.20	e.20	4.2	8.0	15	1.2	31	.25	2.0	3.9
22	.01	.01	e.16	e.20	3.9	4.7	8.7	2.1	11	.10	1.7	1.5
23	.01	.02	e.14	e.19	3.0	3.3	5.6	3.1	6.2	.06	1.3	1.7
24	.01	.04	e.13	e.19	4.8	2.5	4.4	1.6	14	.05	1.3	2.5
25	.01	.04	e.12	e.20	3.9	1.9	3.3	.96	15	.05	1.2	20
26	.01	.14	e.11	e.21	3.3	1.5	2.5	.77	6.4	.05	1.2	21
27	.01	.14	e.11	e.20	14	1.6	2.1	75	4.0	.12	.87	7.2
28	.01	.13	e.10	e.19	6.7	1.3	1.8	29	2.6	.22	.64	4.4
29	.01	.09	e.10	e.20	4.3	.99	1.5	11	1.8	.47	.40	3.8
30	.01	.07	e.10	e.21	---	.78	1.4	6.1	1.2	12	.27	3.6
31	.02	---	e.10	e.24	---	.68	---	4.6	---	3.6	.19	---
TOTAL	0.47	1.17	24.09	26.82	141.68	75.02	256.57	186.23	322.34	83.92	142.99	130.30
MEAN	.015	.039	.78	.87	4.89	2.42	8.55	6.01	10.7	2.71	4.61	4.34
MAX	.07	.14	5.6	7.6	36	15	67	75	79	32	45	21
MIN	.00	.01	.07	.10	.22	.66	.49	.77	.41	.05	.17	.13
CFSM	.00	.01	.14	.15	.85	.42	1.49	1.04	1.87	.47	.80	.76
IN.	.00	.01	.16	.17	.92	.49	1.66	1.20	2.09	.54	.93	.84

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2000, BY WATER YEAR (WY)

MEAN	2.57	11.2	7.87	11.4	8.90	11.9	14.3	13.1	10.4	6.79	1.95	2.29
MAX	6.73	38.1	34.3	23.8	23.2	26.9	31.8	48.0	26.2	39.0	4.94	9.18
(WY)	1994	1994	1991	1999	1990	1991	1996	1996	1998	1992	1990	1993
MIN	.015	.039	.33	.87	2.98	2.42	3.32	1.63	.18	.23	.11	.021
(WY)	2000	2000	1998	2000	1996	2000	1997	1999	1991	1991	1999	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1990 - 2000	
ANNUAL TOTAL	1737.70		1391.60			
ANNUAL MEAN	4.76		3.80		8.54	
HIGHEST ANNUAL MEAN					12.0	1996
LOWEST ANNUAL MEAN					3.80	2000
HIGHEST DAILY MEAN	217	Jan 22	79	Jun 18	531	Nov 14 1993
LOWEST DAILY MEAN	.00	Oct 11	.00	Oct 11	.00	Jun 27 1991
ANNUAL SEVEN-DAY MINIMUM	.01	Oct 10	.01	Oct 10	.00	Jun 27 1991
INSTANTANEOUS PEAK FLOW			299	Apr 7	1260	Jul 9 1992
INSTANTANEOUS PEAK STAGE			5.90	Apr 7	8.93	Jul 9 1992
ANNUAL RUNOFF (CFSM)	.83		.66		1.49	
ANNUAL RUNOFF (INCHES)	11.24		9.00		20.19	
10 PERCENT EXCEEDS	9.9		8.3		17	
50 PERCENT EXCEEDS	.60		1.0		2.4	
90 PERCENT EXCEEDS	.01		.02		.08	

e Estimated

03353635 DERBYSHIRE CREEK AT SOUTHPORT, IN

LOCATION.--Lat 39°40'15", long 86°07'21", in NE$^1/_4$SE$^1/_4$ sec.07, T.14 N., R.04 E., Marion County Hydrologic Unit 05120201, on left bank, 10 ft downstream from bridge on Derbyshire Road, and 0.3 mi upstream from mouth.

DRAINAGE AREA.--1.76 mi^2.

PERIOD OF RECORD.--September 1989 to current year.

REVISED RECORDS.--WDR IN-95-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 746.37 ft above sea level.

REMARKS.--Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.45	.03	.09	.12	e.06	1.2	.55	1.1	1.0	.94	.53	.35
2	.40	.04	.06	.13	e.06	.94	.53	1.3	.94	.87	.75	.33
3	.39	.03	.05	3.0	e.06	.81	.54	1.0	.84	1.2	1.0	.32
4	.36	.03	.06	1.2	e.07	.74	.51	.99	.81	1.9	.51	2.5
5	.43	.05	1.9	.26	e.06	.68	.47	1.2	.80	6.6	.39	.83
6	.42	.08	.32	.19	e.06	.62	.46	1.3	.74	1.8	17	.67
7	.42	.09	.13	.16	e.06	.60	23	1.2	.72	1.1	29	.60
8	.71	.10	.10	.17	e.06	.57	14	1.2	.66	.81	3.8	.58
9	.45	.10	.13	.17	e.08	.55	3.5	2.0	.66	.68	2.6	.55
10	.15	.10	3.4	.22	.25	.51	2.3	1.7	.61	.62	1.6	2.3
11	.08	.09	.32	.13	.24	.60	1.9	1.0	.71	.62	.79	1.2
12	.05	.10	.27	.11	.18	.81	1.5	.88	.59	.56	.54	.99
13	.04	.10	.29	.10	3.4	.70	1.2	1.7	.55	.47	.43	.80
14	.04	.11	2.7	.10	1.8	.67	1.1	.95	1.3	.45	.40	.72
15	.04	.11	.49	.10	.77	.62	1.1	.84	.98	.42	.38	.69
16	.04	.10	.28	.10	.59	1.0	1.0	.78	19	.40	.35	.69
17	.04	.09	.19	.10	.51	.71	1.6	1.2	14	.39	13	.91
18	.04	.09	.16	.10	17	.62	1.1	.85	26	.39	10	.91
19	.04	.52	.15	.09	5.7	4.3	1.0	.81	3.9	.40	1.9	.91
20	.03	.23	.27	e.08	2.3	6.8	4.5	.66	2.2	.38	1.1	1.5
21	.03	.13	.16	e.07	1.4	3.7	3.6	.66	11	.35	.78	1.2
22	.06	.11	e.14	e.07	1.2	2.1	2.2	1.7	3.3	.32	.67	.88
23	.06	.10	e.14	e.07	.92	1.5	1.6	1.0	1.9	.32	.98	1.6
24	.06	.12	e.13	e.06	2.3	1.3	1.3	.78	7.6	.32	.64	1.5
25	.07	.11	e.12	e.06	1.4	1.1	1.1	.65	4.8	.29	.55	6.2
26	.07	.33	e.12	e.06	1.4	.93	.99	.61	2.3	.29	.47	4.6
27	.07	.14	e.12	e.06	7.6	.82	.94	23	1.7	.29	.46	2.0
28	.06	.12	e.11	e.06	3.0	.74	.90	3.6	1.4	.29	.43	1.4
29	.06	.10	e.12	e.06	1.7	.64	.91	2.0	1.2	.34	.40	1.2
30	.05	.10	e.12	e.05	---	.57	.99	1.4	1.0	4.4	.40	1.0
31	.03	---	e.12	e.05	---	.53	---	1.2	---	.83	.37	---
TOTAL	5.24	3.55	12.76	7.30	54.23	37.98	76.39	59.26	113.21	29.04	92.22	39.93
MEAN	.17	.12	.41	.24	1.87	1.23	2.55	1.91	3.77	.94	2.97	1.33
MAX	.71	.52	3.4	3.0	17	6.8	23	23	26	6.6	29	6.2
MIN	.03	.03	.05	.05	.06	.51	.46	.61	.55	.29	.35	.32
CFSM	.10	.07	.23	.13	1.06	.70	1.45	1.09	2.14	.53	1.69	.76
IN.	.11	.08	.27	.15	1.15	.80	1.61	1.25	2.39	.61	1.95	.84

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2000, BY WATER YEAR (WY)

MEAN	.74	3.08	2.87	3.45	3.32	3.93	4.09	4.06	3.03	1.97	.98	.73
MAX	2.49	11.9	17.0	6.91	13.1	8.25	7.78	12.2	11.4	10.8	2.97	2.30
(WY)	1991	1994	1991	1999	1990	1991	1996	1996	1998	1992	2000	1993
MIN	.078	.12	.37	.24	.98	.87	1.52	.74	.28	.26	.17	.052
(WY)	1998	2000	1998	2000	1998	1994	1997	1992	1991	1991	1991	1991

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1990 - 2000	
ANNUAL TOTAL	583.24		531.11			
ANNUAL MEAN	1.60		1.45		2.68	
HIGHEST ANNUAL MEAN					4.25	1990
LOWEST ANNUAL MEAN					1.45	2000
HIGHEST DAILY MEAN	69	Jan 22	29	Aug 7	273	Dec 30 1990
LOWEST DAILY MEAN	.03	Sep 18	.03	Oct 20	.03	Sep 14 1991
ANNUAL SEVEN-DAY MINIMUM	.04	Sep 21	.04	Oct 15	.04	Sep 21 1999
INSTANTANEOUS PEAK FLOW			635	Aug 6	1010	May 15 1990
INSTANTANEOUS PEAK STAGE			4.79	Aug 6	5.14	Jul 9 1992
ANNUAL RUNOFF (CFSM)	.91		.82		1.52	
ANNUAL RUNOFF (INCHES)	12.33		11.23		20.70	
10 PERCENT EXCEEDS	2.8		2.5		4.7	
50 PERCENT EXCEEDS	.50		.60		.90	
90 PERCENT EXCEEDS	.05		.06		.16	

e Estimated

03353636 LITTLE BUCK CREEK AT SOUTHPORT, IN

LOCATION.--Lat 39°39'54", long 86°08'11", in SW1/4SW1/4 sec.7, T.14 N., R.4 E., Marion County, Hydrologic Unit 05120201, on left bank 50 ft downstream from Southport Road bridge in Indianapolis.

DRAINAGE AREA.--10.8 mi^2.

PERIOD OF RECORD.--October 1989 to current year.

REVISED RECORDS.--WDR IN-95-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 725.50 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	.10	.52	e.67	e.94	7.2	2.6	3.5	6.3	3.3	4.8	1.2
2	.87	.24	.46	e.74	e.90	5.6	2.9	6.1	4.3	6.7	3.3	1.1
3	.69	.18	.43	18	e1.3	4.9	3.1	3.9	3.5	15	8.7	.98
4	.80	.21	.67	20	e1.2	4.4	2.8	3.9	3.1	13	3.6	33
5	.75	.19	13	7.9	e.95	3.8	2.2	5.1	3.0	51	2.2	8.5
6	.68	.29	8.3	4.1	e.90	3.4	2.0	4.9	2.7	19	8.1	3.6
7	.59	.31	3.0	2.7	e.91	3.1	154	3.9	2.1	9.6	73	2.5
8	3.9	.35	1.6	2.1	e.96	2.8	127	3.0	2.1	5.7	18	2.0
9	3.9	.34	1.2	1.9	e1.0	2.8	36	7.8	1.7	4.0	11	1.7
10	1.9	.32	20	2.3	4.2	2.6	22	17	1.5	4.0	7.9	23
11	.82	.37	6.2	1.9	5.9	3.2	17	7.6	4.8	4.4	4.3	18
12	.46	.39	4.1	1.4	4.1	4.7	13	5.1	3.9	3.1	2.9	16
13	.32	.42	4.1	1.4	16	4.7	9.6	14	2.5	2.6	2.1	8.5
14	.22	.37	17	1.5	19	4.1	7.5	6.6	5.9	2.4	1.9	4.8
15	.21	.37	6.9	1.3	9.2	3.5	6.5	4.0	9.2	1.9	1.5	3.5
16	.19	.37	3.9	1.3	5.7	5.7	5.6	2.8	103	1.5	1.3	2.6
17	.26	.37	2.6	1.2	3.8	5.3	13	10	116	1.3	43	2.1
18	.24	.34	2.0	1.2	66	3.8	8.7	7.6	159	1.1	105	1.8
19	.24	1.8	1.8	e1.1	28	19	6.4	5.1	38	1.4	21	1.5
20	.17	1.0	e1.4	e1.0	14	33	31	3.2	21	1.1	9.7	8.2
21	.15	.51	e1.2	e1.0	8.9	21	32	2.9	72	.99	5.5	10
22	.16	.37	e1.0	e.97	7.5	13	19	5.4	28	1.0	4.0	4.0
23	.20	.32	e.86	e.90	5.7	9.2	13	6.4	15	.82	6.4	6.6
24	.16	.39	e.83	e.88	12	7.2	9.3	3.6	40	.70	3.9	7.0
25	.14	.32	e.72	e.85	8.0	5.9	6.9	2.5	38	.67	3.1	40
26	.17	2.0	e.65	e.88	7.9	4.9	5.6	1.8	17	.62	3.0	41
27	.15	1.0	e.60	e.87	28	5.2	4.6	168	11	.59	2.6	16
28	.14	.80	e.62	e.86	16	4.6	3.9	56	7.4	.60	2.2	9.0
29	.13	.68	e.60	e.86	10	3.8	3.4	24	5.5	.96	1.9	6.4
30	.11	.58	e.62	e.98	---	3.2	3.1	13	4.1	42	1.5	5.5
31	.10	---	e.64	e1.1	---	2.8	---	9.9	---	9.9	1.3	---
TOTAL	20.22	15.30	107.52	83.86	288.96	208.4	573.7	418.6	731.6	210.95	368.7	290.08
MEAN	.65	.51	3.47	2.71	9.96	6.72	19.1	13.5	24.4	6.80	11.9	9.67
MAX	3.9	2.0	20	20	66	33	154	168	159	51	105	41
MIN	.10	.10	.43	.67	.90	2.6	2.0	1.8	1.5	.59	1.3	.98
CFSM	.06	.05	.32	.25	.92	.62	1.77	1.25	2.26	.63	1.10	.90
IN.	.07	.05	.37	.29	1.00	.72	1.98	1.44	2.52	.73	1.27	1.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2000, BY WATER YEAR (WY)

MEAN	5.08	19.1	15.4	20.6	18.2	23.9	27.3	24.8	20.0	12.9	5.20	4.86
MAX	14.0	68.9	72.5	49.6	48.1	53.8	50.4	73.9	65.7	70.6	12.9	17.8
(WY)	1991	1994	1991	1999	1990	1991	1996	1996	1998	1992	1990	1993
MIN	.65	.51	2.21	2.71	6.38	6.72	9.67	4.43	1.68	1.55	1.20	.36
(WY)	2000	2000	1998	2000	1996	2000	1997	1999	1991	1991	1999	1991

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1990 - 2000	
ANNUAL TOTAL	4064.24		3317.89			
ANNUAL MEAN	11.1		9.07		16.4	
HIGHEST ANNUAL MEAN					19.9	1991
LOWEST ANNUAL MEAN					9.07	2000
HIGHEST DAILY MEAN	547	Jan 22	168	May 27	1110	Dec 30 1990
LOWEST DAILY MEAN	.09	Sep 5	.10	Oct 31	.09	Sep 27 1997
ANNUAL SEVEN-DAY MINIMUM	.11	Sep 1	.13	Oct 26	.11	Sep 26 1997
INSTANTANEOUS PEAK FLOW			627	May 27	2120	Dec 30 1990
INSTANTANEOUS PEAK STAGE			5.98	May 27	10.63	Nov 14 1993
ANNUAL RUNOFF (CFSM)	1.03		.84		1.52	
ANNUAL RUNOFF (INCHES)	14.00		11.43		20.66	
10 PERCENT EXCEEDS	22		19		32	
50 PERCENT EXCEEDS	1.8		3.2		5.7	
90 PERCENT EXCEEDS	.21		.37		.63	

e Estimated

03353637 LITTLE BUCK CREEK NEAR INDIANAPOLIS, IN

LOCATION.--Lat 39°40'00", long 86°11'48", in SW1/4SW1/4 sec.10, T.14 N., R.3 E., Marion County, Hydrologic Unit 05120201, on right bank, 10 ft upstream from bridge on South Belmont Street, and 2.2 mi above mouth.

DRAINAGE AREA.--17.0 mi^2.

PERIOD OF RECORD.--October 1989 to current year.

REVISED RECORDS.--WDR IN-95-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 666.20 above sea level.

REMARKS.--Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	e6.8	3.1	6.6	9.0	2.5	5.4	.00
2	.00	.00	.00	.00	.00	e4.5	3.4	8.5	6.8	4.1	2.9	.00
3	.00	.00	.00	16	.00	12	5.3	7.1	5.5	14	7.5	.00
4	.00	.00	.00	20	.00	2.9	3.9	7.5	4.9	24	3.6	40
5	.00	.00	7.4	4.8	.00	2.1	3.4	8.9	4.6	58	1.3	9.6
6	.00	.00	2.4	1.6	.00	1.4	3.0	8.4	4.4	23	1.1	3.0
7	.00	.00	.03	.78	.00	1.1	144	7.5	4.0	12	97	1.3
8	.84	.00	.00	.27	.00	1.9	179	6.8	3.3	6.9	23	.70
9	.96	.00	.00	.07	.00	1.9	45	12	3.0	4.6	14	.18
10	.00	.00	15	.30	.95	3.2	26	25	2.6	5.1	9.3	25
11	.00	.00	2.5	.10	2.8	4.0	20	13	5.2	5.7	4.9	21
12	.00	.00	.69	.00	4.6	6.2	14	9.6	5.8	4.4	2.7	16
13	.00	.00	.66	.00	16	6.2	12	20	5.4	3.8	1.5	8.2
14	.00	.00	11	.00	21	5.7	10	12	7.8	2.7	.63	3.9
15	.00	.00	2.4	.00	6.7	4.9	8.4	9.1	11	2.0	.00	2.5
16	.00	.00	.66	.00	3.0	7.0	7.3	7.5	112	1.6	.00	2.4
17	.00	.00	.08	.00	2.1	7.1	15	17	158	1.2	51	2.6
18	.00	.00	.00	.00	100	5.7	11	14	195	.87	e125	2.2
19	.00	.00	.00	.00	e34	19	7.7	8.9	47	.99	e21	1.8
20	.00	.00	.05	.00	e14	35	35	5.7	25	.41	e10	9.9
21	.00	.00	.01	.00	e9.0	22	40	5.0	94	.00	e7.5	13
22	.00	.00	.00	.00	e6.5	12	24	7.9	35	.00	e4.0	5.2
23	.00	.00	.00	.00	e4.4	7.4	17	9.6	20	.00	e7.2	7.9
24	.00	.00	.00	.00	e9.6	6.3	14	5.7	44	.00	2.5	9.4
25	.00	.00	.00	.00	e6.8	6.9	12	4.1	49	.00	1.5	45
26	.00	.00	.00	.00	e6.4	5.5	10	3.6	21	.00	1.2	59
27	.00	.00	.00	.00	e32	5.6	9.4	201	14	.00	.91	22
28	.00	.00	.00	.00	e16	5.2	8.6	73	8.9	.00	.48	e14
29	.00	.00	.00	.00	e9.3	4.7	6.7	28	5.3	.00	.03	e12
30	.00	.00	.00	.00	---	3.9	6.5	17	3.6	59	.00	e12
31	.00	---	.00	.00	---	3.3	---	12	---	13	.00	---
TOTAL	1.80	0.00	42.88	43.92	305.15	221.4	704.7	582.0	915.1	249.87	407.15	349.78
MEAN	.058	.000	1.38	1.42	10.5	7.14	23.5	18.8	30.5	8.06	13.1	11.7
MAX	.96	.00	15	20	100	35	179	201	195	59	125	59
MIN	.00	.00	.00	.00	.00	1.1	3.0	3.6	2.6	.00	.00	.00
CFSM	.00	.00	.08	.08	.62	.42	1.38	1.10	1.79	.47	.77	.69
IN.	.00	.00	.09	.10	.67	.48	1.54	1.27	2.00	.55	.89	.77

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2000, BY WATER YEAR (WY)

MEAN	6.50	25.7	19.9	27.6	22.8	29.7	35.0	32.8	26.4	16.7	6.83	6.34
MAX	20.6	91.9	99.4	62.7	54.5	68.0	63.7	105	77.3	85.7	18.3	28.6
(WY)	1991	1994	1991	1999	1990	1991	1996	1996	1998	1992	1990	1993
MIN	.058	.000	1.02	1.42	6.39	7.14	14.1	5.22	4.99	2.67	.80	.000
(WY)	2000	2000	1998	2000	1998	2000	1997	1999	1991	1991	1999	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1990 - 2000	
ANNUAL TOTAL	4797.53		3823.75			
ANNUAL MEAN	13.1		10.4		21.3	
HIGHEST ANNUAL MEAN					30.3	1993
LOWEST ANNUAL MEAN					10.4	2000
HIGHEST DAILY MEAN	686	Jan 22	201	May 27	1390	Dec 30 1990
LOWEST DAILY MEAN	.00	Jun 17	.00	Oct 1	.00	Sep 8 1991
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 17	.00	Oct 1	.00	Sep 8 1991
INSTANTANEOUS PEAK FLOW			603	Apr 7	2300	Dec 30 1990
INSTANTANEOUS PEAK STAGE			5.71	Apr 7	11.21	Nov 14 1993
ANNUAL RUNOFF (CFSM)	.77		.61		1.25	
ANNUAL RUNOFF (INCHES)	10.50		8.37		17.04	
10 PERCENT EXCEEDS	27		22		44	
50 PERCENT EXCEEDS	.96		3.0		8.0	
90 PERCENT EXCEEDS	.00		.00		.00	

e Estimated

03353700 WEST FORK WHITE LICK CREEK AT DANVILLE, IN

LOCATION.--Lat 39°45'39", long 86°30'54", in NE$^1/_4$NW$^1/_4$ sec.10, T.15 N., R.1 W., Hendricks County, Hydrologic Unit 05120201, 600 ft upstream of U.S. Highway 36 bridge, at Danville Filtration Plant, 0.6 mi upstream from small left bank tributary, and 7 mi west of Avon.

DRAINAGE AREA.--28.8 mi^2.

PERIOD OF RECORD.--May 1958 to current year.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 828.83 ft above sea level. Prior to Oct. 23, 1968, nonrecording gage and crest-stage gage on upstream side of bridge at same datum. Oct. 23, 1968, to Aug. 6, 1970, water-stage recorder on upstream side of bridge at same datum. Aug. 7, 1970 to Nov. 14, 1994, water-stage recorder on downstream side of bridge at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 28, 1957, reached a stage of 16.0 ft, from floodmarks, discharge, 6,660 ft^3/s, from contracted-opening measurement.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.03	e.10	e.01	37	4.9	12	8.4	6.2	2.4	3.9
2	.00	.00	.01	e.50	e.01	22	5.6	13	6.9	5.2	3.7	3.5
3	.01	.00	.02	e2.2	e.01	16	6.0	9.5	5.2	6.3	1.9	3.2
4	.00	.01	.03	.91	e.01	13	5.1	9.5	4.9	14	.89	8.4
5	.00	.51	1.1	.68	e.01	11	4.1	8.3	9.3	156	.56	4.8
6	.00	.02	.42	.67	e.01	7.8	4.4	7.8	8.4	64	8.3	3.9
7	.00	.02	.13	.57	e.01	7.1	101	7.7	4.9	25	49	3.1
8	.64	.06	.11	.68	e.08	7.0	189	7.7	4.2	13	13	3.2
9	.89	.02	.11	.58	e.15	6.5	89	14	3.4	9.0	5.3	3.0
10	.09	.02	2.5	.51	e.40	4.6	55	61	2.8	7.4	2.6	12
11	.00	.01	.48	.37	e1.0	4.8	39	31	2.6	7.6	1.6	10
12	.00	.01	.61	.50	e2.5	5.2	24	20	2.6	5.1	.92	15
13	.00	.01	.67	.46	e6.0	6.0	19	64	2.3	3.9	.65	11
14	.01	.00	1.7	.48	e20	8.9	16	37	3.6	3.6	.54	7.7
15	.00	.01	.71	.59	12	8.3	14	21	5.8	2.9	.46	6.2
16	.01	.01	.56	.52	7.5	8.7	12	17	44	2.0	.30	4.9
17	.08	.01	.50	.43	9.2	8.1	61	20	181	1.7	12	5.1
18	.01	.01	.53	e.27	75	6.4	56	14	113	1.4	439	4.7
19	.00	.10	.56	e.21	68	29	37	58	60	1.5	148	4.4
20	.01	.06	.72	e.16	32	84	64	16	33	1.2	67	7.7
21	.00	.03	e.41	e.13	18	58	104	11	171	.95	35	10
22	.00	.03	e.30	e.10	19	36	66	12	97	.74	21	10
23	.02	.03	e.20	e.09	16	26	46	39	47	.59	16	8.6
24	.00	.07	e.12	e.08	15	22	35	16	37	.46	12	11
25	.00	.02	e.08	e.07	12	17	24	9.1	75	.45	8.6	45
26	.00	.09	e.05	e.06	53	13	18	7.2	42	.35	7.5	118
27	.04	.04	e.03	e.05	193	14	16	81	23	.33	6.7	50
28	.00	.01	e.02	e.04	87	11	14	64	15	.32	5.9	29
29	.00	.00	e.02	e.03	53	7.3	12	28	11	.78	5.2	22
30	.00	.03	e.02	e.02	---	5.9	9.5	16	8.2	.93	4.5	19
31	.00	---	e.01	e.01	---	5.2	---	11	---	.41	4.2	---
TOTAL	1.81	1.24	12.76	12.07	699.90	516.8	1150.6	742.8	1032.5	343.31	884.72	448.3
MEAN	.058	.041	.41	.39	24.1	16.7	38.4	24.0	34.4	11.1	28.5	14.9
MAX	.89	.51	2.5	2.2	193	84	189	81	181	156	439	118
MIN	.00	.00	.01	.01	.01	4.6	4.1	7.2	2.3	.32	.30	3.0
CFSM	.00	.00	.01	.01	.84	.58	1.33	.83	1.20	.38	.99	.52
IN.	.00	.00	.02	.02	.90	.67	1.49	.96	1.33	.44	1.14	.58

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2000, BY WATER YEAR (WY)

MEAN	8.47	27.6	37.2	38.5	47.7	59.9	51.7	38.8	22.9	19.1	8.53	6.35
MAX	82.0	156	154	134	151	145	123	178	174	134	69.4	109
(WY)	1987	1986	1991	1999	1990	1978	1996	1996	1998	1979	1979	1989
MIN	.000	.041	.035	.062	2.82	8.86	9.14	3.87	.51	.14	.026	.000
(WY)	1965	2000	1964	1977	1964	1994	1971	1976	1988	1991	1964	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1959 - 2000	
ANNUAL TOTAL	9477.69		5846.81			
ANNUAL MEAN	26.0		16.0		30.5	
HIGHEST ANNUAL MEAN					55.7	1973
LOWEST ANNUAL MEAN					6.35	1966
HIGHEST DAILY MEAN	2260	Jan 22	439	Aug 18	2260	Jan 22 1999
LOWEST DAILY MEAN	.00	Aug 15	.00	Oct 1	.00	Oct 3 1960
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 17	.00	Oct 28	.00	Oct 3 1960
INSTANTANEOUS PEAK FLOW			727	Aug 18	5120	Feb 27 1997
INSTANTANEOUS PEAK STAGE			5.89	Aug 18	12.13	Jul 13 1979
ANNUAL RUNOFF (CFSM)	.90		.55		1.06	
ANNUAL RUNOFF (INCHES)	12.24		7.55		14.40	
10 PERCENT EXCEEDS	58		48		70	
50 PERCENT EXCEEDS	2.6		4.4		8.0	
90 PERCENT EXCEEDS	.00		.01		.16	

e Estimated

03353800 WHITE LICK CREEK AT MOORESVILLE, IN

LOCATION.--Lat 39°36'28", long 86°22'56", in NE$^1/_4$SE$^1/_4$ sec.35, T.14 N., R.1 E., Morgan County, Hydrologic Unit 05120201, on right bank at downstream side of bridge on State Highway 42 at Mooresville, 0.9 mi downstream from McCracken Creek, 2.0 mi upstream from East Fork White Lick Creek, and at mile 11.4.

DRAINAGE AREA.--212 mi^2.

PERIOD OF RECORD.--August 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 644.64 ft above sea level. Dec. 10, 1963 to Sept. 30, 1964, nonrecording gage at bridge 1,950 ft upstream at datum 1.39 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Pumpage from a well field above gage affects low flows.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 28, 1957, reached a stage of 22.5 ft, from levels to high-water mark by State of Indiana, Department of Natural Resources.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	7.5	11	9.4	e12	147	47	74	101	86	26	21
2	6.0	9.7	11	9.6	e12	115	46	90	84	75	44	20
3	4.8	8.6	10	39	e12	91	48	87	72	69	47	20
4	5.9	7.9	11	90	e12	79	46	80	64	78	38	51
5	8.4	8.2	25	43	e11	69	43	71	72	725	30	55
6	8.5	8.8	42	28	e11	60	40	66	79	361	28	32
7	7.5	8.6	24	21	e11	53	196	59	64	176	181	25
8	12	8.2	15	18	e11	49	1150	55	54	114	140	22
9	69	10	12	17	e11	49	500	55	48	88	84	21
10	53	9.4	70	16	e12	45	326	237	43	74	54	87
11	26	9.0	51	15	e15	43	235	182	40	88	38	171
12	16	10	28	14	e22	50	193	126	40	83	31	91
13	11	11	23	13	e35	52	154	191	35	63	26	64
14	8.0	12	34	13	97	54	131	207	44	55	24	44
15	7.1	9.6	33	12	72	54	119	129	110	50	22	36
16	6.8	10	23	12	49	61	106	96	168	47	21	30
17	11	9.9	18	12	37	72	165	148	1180	e40	21	26
18	11	10	15	13	171	57	237	254	829	e38	978	24
19	11	11	13	13	273	90	180	238	447	e36	440	22
20	9.1	14	15	e13	146	263	184	227	248	e34	182	23
21	8.1	13	15	e13	95	245	515	151	470	30	108	42
22	7.5	13	e12	e14	77	163	359	120	619	28	73	33
23	7.4	12	e11	e13	72	127	246	137	312	26	56	32
24	7.7	14	e10	e13	66	108	203	127	200	24	49	33
25	7.8	16	e9.7	e13	63	96	171	96	274	23	40	80
26	7.2	22	9.5	e13	70	81	139	79	282	22	34	342
27	7.0	19	9.3	e13	531	77	116	741	203	21	30	173
28	7.9	15	9.8	e13	361	73	104	417	149	20	28	108
29	7.7	13	9.7	e14	198	65	91	235	120	21	26	76
30	7.5	12	9.7	e13	---	55	80	160	101	23	24	59
31	7.3	---	9.6	e13	---	49	---	126	---	23	22	---
TOTAL	382.5	342.4	599.3	566.0	2565	2692	6170	5061	6552	2641	2945	1863
MEAN	12.3	11.4	19.3	18.3	88.4	86.8	206	163	218	85.2	95.0	62.1
MAX	69	22	70	90	531	263	1150	741	1180	725	978	342
MIN	4.8	7.5	9.3	9.4	11	43	40	55	35	20	21	20
CFSM	.06	.05	.09	.09	.42	.41	.97	.77	1.03	.40	.45	.29
IN.	.07	.06	.11	.10	.45	.47	1.08	.89	1.15	.46	.52	.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2000, BY WATER YEAR (WY)

MEAN	64.2	194	259	264	323	422	376	292	175	143	80.0	56.1
MAX	547	1193	975	845	942	1154	1328	1062	936	764	567	712
(WY)	1987	1994	1991	1969	1971	1963	1964	1996	1998	1979	1979	1989
MIN	5.47	9.86	8.83	9.60	35.7	86.8	83.1	46.3	12.9	11.7	5.10	3.51
(WY)	1998	1968	1964	1977	1964	2000	1971	1976	1988	1966	1966	1991

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1957 - 2000	
ANNUAL TOTAL	65284.1		32379.2			
ANNUAL MEAN	179		88.5		221	
HIGHEST ANNUAL MEAN					372	1974
LOWEST ANNUAL MEAN					51.1	1966
HIGHEST DAILY MEAN	8000	Jan 22	1180	Jun 17	12100	Dec 30 1990
LOWEST DAILY MEAN	2.2	Sep 26	4.8	Oct 3	.68	Aug 27 1988
ANNUAL SEVEN-DAY MINIMUM	2.4	Sep 22	6.9	Oct 1	1.8	Sep 24 1988
INSTANTANEOUS PEAK FLOW			1940	Jun 17	19000	Jul 13 1979
INSTANTANEOUS PEAK STAGE			12.39	Jun 17	23.31	Jul 13 1979
ANNUAL RUNOFF (CFSM)	.84		.42		1.04	
ANNUAL RUNOFF (INCHES)	11.46		5.68		14.15	
10 PERCENT EXCEEDS	371		203		468	
50 PERCENT EXCEEDS	41		41		86	
90 PERCENT EXCEEDS	7.3		9.6		12	

e Estimated

03354000 WHITE RIVER NEAR CENTERTON, IN

(Former National stream-quality accounting network station)

LOCATION.--Lat 39°29'51", long 86°24'02", in NE$^1/_4$NE$^1/_4$ sec.10, T.12 N., R.1 E., Morgan County, Hydrologic Unit 05120201, on right bank at upstream side of bridge on Blue Bluff Road, 0.8 mi downstream from White Lick Creek, 1 mi south of Centerton, and at mile 199.3.

DRAINAGE AREA.--2,444 mi^2.

PERIOD OF RECORD.--July 1925 to September 1930 (gage heights only), October 1930 to March 1932, October 1946 to current year. Monthly discharge only for October and November 1946, published in WSP 1305. Published as West Fork White River at Martinsville prior to March 1932, and as West Fork White River near Centerton October 1946 to September 1948.

REVISED RECORDS.--WSP 1335: 1948-49. WSP 1909: 1931(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 595.44 ft above sea level (Corps of Engineers bench mark), levels by Indianapolis Power and Light Co. See WSP 1725 for history of changes prior to July 1953. July 1953 to Aug. 7, 1975, water-stage recorder at site 0.4 mi downstream at same datum.

REMARKS.--Records good. Flow regulated by upstream reservoirs.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 22.8 ft at Martinsville site (from information by Indiana State Highway Commission) and 21.9 ft at site 0.4 mi downstream (from information by Corps of Engineers), discharge, 90,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	435	318	338	386	371	1410	836	1000	1600	1380	1220	455
2	423	329	336	373	374	1200	772	1160	1370	1230	1120	441
3	393	319	333	444	360	1050	775	1250	1190	1160	1010	427
4	374	319	330	1270	359	958	762	1370	1090	1190	924	885
5	385	315	359	892	362	871	704	1310	1040	3970	917	1380
6	362	321	818	675	352	806	699	1220	1070	3180	859	968
7	344	316	581	662	360	748	1670	1150	1020	1960	2610	801
8	354	315	477	607	363	706	7990	1050	928	2230	2250	619
9	796	314	430	539	360	675	4850	1000	818	1900	2510	549
10	1070	317	785	512	392	645	5270	1860	735	1560	1820	758
11	722	310	987	502	465	620	3480	1760	768	2120	1360	2330
12	537	303	651	463	538	678	2550	1750	740	1380	1130	1660
13	438	292	632	434	664	743	2050	2010	687	1260	979	1830
14	404	294	675	423	1390	752	1740	1880	675	1210	861	1360
15	362	301	842	407	1170	735	1530	1600	1520	1040	763	1100
16	342	304	732	402	1010	756	1390	1370	1320	935	676	930
17	391	291	705	392	995	951	1480	2760	5740	843	634	829
18	440	287	612	380	1700	864	1630	2590	5310	771	3930	731
19	400	298	529	369	2560	936	1430	1770	4390	709	2100	671
20	380	351	503	381	1890	1830	1420	2160	4850	675	1230	625
21	361	357	519	370	1920	1780	2840	2510	5680	655	965	958
22	357	332	455	360	1480	1920	2440	2080	5170	596	810	787
23	345	338	430	352	1280	2240	2640	1930	4940	564	713	733
24	339	355	415	349	1190	1740	2300	1650	3820	541	733	809
25	346	365	402	373	1230	1470	1910	1390	3840	526	727	1310
26	345	348	386	361	1110	1280	1600	1240	3300	507	701	3180
27	342	413	377	350	2120	1190	1380	3480	2900	490	635	1960
28	340	377	375	338	2030	1120	1250	3010	2310	479	585	1600
29	330	349	375	335	1540	1030	1140	2430	1900	485	557	1340
30	336	347	388	329	---	967	1060	2440	1590	1810	522	1110
31	322	---	387	343	---	907	---	1970	---	1380	489	---
TOTAL	13115	9795	16164	14373	29935	33578	61588	56150	72311	38736	36340	33136
MEAN	423	326	521	464	1032	1083	2053	1811	2410	1250	1172	1105
MAX	1070	413	987	1270	2560	2240	7990	3480	5740	3970	3930	3180
MIN	322	287	330	329	352	620	699	1000	675	479	489	427
CFSM	.17	.13	.21	.19	.42	.44	.84	.74	.99	.51	.48	.45
IN.	.20	.15	.25	.22	.46	.51	.94	.85	1.10	.59	.55	.50

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2000, BY WATER YEAR (WY)

MEAN	822	1831	2527	3303	3739	4558	4328	3069	2500	1823	1123	887
MAX	3709	11760	8248	17760	10430	10390	11530	11280	10310	6629	6001	8417
(WY)	1987	1994	1958	1950	1950	1963	1964	1996	1998	1979	1979	1989
MIN	281	320	305	302	460	1083	1097	799	419	344	338	213
(WY)	1964	1954	1964	1977	1964	2000	1971	1976	1988	1954	1966	1954

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1948 - 2000	
ANNUAL TOTAL	786054		415221			
ANNUAL MEAN	2154		1134		2535	
HIGHEST ANNUAL MEAN					4115	1950
LOWEST ANNUAL MEAN					812	1954
HIGHEST DAILY MEAN	33000	Jan 23	7990	Apr 8	47100	Apr 22 1964
LOWEST DAILY MEAN	283	Sep 6	287	Nov 18	138	Sep 27 1954
ANNUAL SEVEN-DAY MINIMUM	292	Sep 13	295	Nov 13	157	Sep 27 1954
INSTANTANEOUS PEAK FLOW			10600	Apr 8	50500	Apr 22 1964
INSTANTANEOUS PEAK STAGE			9.35	Apr 8	18.38	Dec 31 1990
ANNUAL RUNOFF (CFSM)	.88		.46		1.04	
ANNUAL RUNOFF (INCHES)	11.96		6.32		14.09	
10 PERCENT EXCEEDS	5190		2260		5680	
50 PERCENT EXCEEDS	842		786		1340	
90 PERCENT EXCEEDS	314		344		403	

03357000 WHITE RIVER AT SPENCER, IN

LOCATION.--Lat 39°16'51", long 86°45'44", in NE$^1/_4$NE$^1/_4$ sec.29, T.10 N., R. 3 W., Owen County, Hydrologic Unit 05120202, on right bank at upstream side of county road bridge at the south edge of Spencer, 3.3 mi upstream from McBrides Creek, and at mile 165.9.

DRAINAGE AREA.--2,988 mi^2.

PERIOD OF RECORD.--July 1925 to September 1971 (discharge), October 1971 to current year (gage heights only).

REVISED RECORDS.--WDR IN-95-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 526.04 ft above sea level. Prior to Dec. 26, 1940, nonrecording gage at same site and datum.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 23.99 ft Jan. 1, 1991; minimum gage height, 0.88 ft Sept. 25, 30, and Oct. 1, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 28.5 ft Mar. 26, 1913, from flood marks.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 13.76 ft, Apr. 9; minimum gage height, 2.56 ft, Nov. 3, 4, 5.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.83	2.59	2.73	2.69	2.65	4.77	3.63	4.04	5.02	4.74	4.55	2.85
2	2.75	2.57	2.71	2.70	2.67	4.40	3.50	4.00	4.63	4.43	4.38	2.80
3	2.76	2.57	2.72	2.90	2.69	4.13	3.47	4.44	4.31	4.28	3.94	2.76
4	2.70	2.57	2.75	4.03	2.64	3.92	3.44	4.47	4.10	4.42	3.79	3.30
5	2.71	2.57	2.84	3.70	2.66	3.74	3.38	4.49	3.94	8.22	3.65	4.36
6	2.68	2.68	3.18	3.32	2.64	3.61	3.32	4.29	3.94	7.29	3.65	3.70
7	2.66	2.69	3.20	3.20	2.65	3.51	7.58	4.15	3.88	5.69	6.48	3.43
8	2.69	2.70	3.05	3.17	2.66	3.41	13.69	4.00	3.73	5.54	5.86	3.16
9	2.79	2.69	3.04	3.07	2.67	3.33	10.62	4.08	3.56	5.38	6.02	3.02
10	3.69	2.69	3.10	3.01	2.70	3.26	10.88	5.30	3.44	4.77	5.37	3.56
11	3.32	2.69	3.75	2.96	2.78	3.26	8.22	5.07	3.38	6.18	4.64	5.81
12	3.08	2.68	3.30	2.92	2.91	3.25	6.80	5.15	3.39	5.08	4.20	5.68
13	2.90	2.65	3.19	2.85	3.07	3.35	6.01	5.48	3.31	4.61	---	5.49
14	2.79	2.63	3.17	2.80	4.07	3.41	5.47	5.50	3.29	4.45	---	4.70
15	2.74	2.64	3.43	2.78	4.04	3.42	5.11	5.01	4.21	4.12	---	4.19
16	2.67	2.67	3.30	2.76	3.72	3.52	4.84	4.68	5.25	3.86	---	3.84
17	2.63	2.66	3.25	2.74	3.71	3.95	5.14	4.49	9.51	3.66	3.34	3.63
18	2.78	2.63	3.15	2.72	4.77	3.83	5.80	7.30	9.36	3.52	7.27	3.46
19	2.75	2.67	3.05	2.71	6.66	4.12	---	5.29	8.24	3.42	5.80	3.35
20	2.72	2.69	2.98	2.70	5.27	5.77	---	5.74	8.80	3.33	4.47	3.42
21	2.67	2.78	2.95	2.68	5.41	5.66	7.35	6.06	10.56	3.26	3.90	4.11
22	2.66	2.75	2.91	2.68	4.77	5.33	6.67	5.66	9.23	3.17	3.59	3.72
23	2.63	2.75	2.84	2.66	4.46	5.88	6.70	5.38	8.75	3.09	3.41	3.44
24	2.62	2.73	2.81	2.63	4.35	5.27	6.25	5.05	7.69	3.03	3.37	3.56
25	2.62	2.76	2.77	2.65	4.51	4.84	5.70	4.66	7.64	2.99	3.26	7.78
26	2.63	2.76	2.74	2.66	4.47	4.49	5.21	4.39	7.13	2.95	3.27	9.28
27	2.63	2.78	2.72	2.63	5.81	4.31	4.85	6.70	6.88	2.90	3.17	6.94
28	2.62	2.81	2.71	2.63	5.98	4.15	4.57	7.44	6.16	2.88	3.09	5.60
29	2.62	2.77	2.70	2.62	5.04	3.98	4.36	6.27	5.57	2.88	3.02	4.96
30	2.59	2.73	2.71	2.61	---	3.85	4.15	6.13	5.07	5.30	2.96	4.47
31	2.60	---	2.71	2.61	---	3.74	---	5.55	---	4.85	2.90	---
MEAN	2.76	2.69	2.98	2.86	3.88	4.11	5.95	5.17	5.80	4.33	4.20	4.35
MAX	3.69	2.81	3.75	4.03	6.66	5.88	13.69	7.44	10.56	8.22	7.27	9.28
MIN	2.59	2.57	2.70	2.61	2.64	3.25	3.32	4.00	3.29	2.88	2.90	2.76

CAL YR 1999 MEAN 5.22 MAX 22.07 MIN 2.51

03357350 PLUM CREEK NEAR BAINBRIDGE, IN

LOCATION.--Lat 39°45'42", long 86°43'46", in SW1/4SE1/4 sec.3, T.15 N., R.3 W., Putnam County, Hydrologic Unit 05120203, on right upstream wingwall of bridge on U.S. Highway 36, 0.5 mi west of Groveland, and 4.5 mi east of Bainbridge.

DRAINAGE AREA.--3.00 mi^2.

PERIOD OF RECORD.--July 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 828.44 ft above sea level (Indiana Department of Highways bench mark).

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.03	1.7	.81	1.3	.91	.81	.04	.14
2	.00	.00	.00	.01	.07	1.2	.85	1.2	.78	.69	.04	.12
3	.00	.00	.00	.03	.06	1.0	.81	.96	.67	.62	.34	.09
4	.00	.00	.00	.02	.02	.90	.72	.91	.65	.62	.11	5.1
5	.00	.00	.00	.01	.01	.81	.65	.83	1.4	2.9	.06	.69
6	.00	.00	.00	.00	.01	.71	.70	.79	.83	.96	.23	.44
7	.00	.00	.00	.00	.01	.69	11	.77	.66	.59	5.6	.37
8	.00	.00	.00	.00	.00	.70	14	.76	.60	.46	.75	.32
9	.00	.00	.00	.01	.01	1.3	7.1	1.6	.54	.41	.48	.31
10	.00	.00	.02	.01	.05	.87	4.7	4.9	.54	.39	.32	.91
11	.00	.00	.01	.00	.07	.82	3.9	1.9	.55	1.6	.22	.88
12	.00	.00	.01	.00	.03	.82	2.5	1.4	.57	.64	.16	.77
13	.00	.00	.00	.00	.10	1.2	2.1	4.2	.55	.42	.08	.55
14	.00	.00	.02	.00	.16	1.4	1.8	1.8	2.4	.35	.05	.45
15	.00	.00	.01	.00	.09	1.2	1.6	1.2	2.5	.32	.03	.42
16	.00	.00	.01	.00	.08	1.1	1.4	1.1	20	.27	.03	.37
17	.00	.00	.00	.00	.12	1.0	12	9.8	19	.22	17	.35
18	.00	.00	.00	.00	5.1	.93	8.0	4.6	7.5	.21	35	.34
19	.00	.00	.00	.00	2.3	5.4	5.6	3.0	4.3	.20	4.4	.32
20	.00	.00	.00	e.00	.97	11	12	1.9	3.0	.18	1.7	.85
21	.00	.00	.00	.00	.72	7.1	11	1.6	13	.12	.82	1.0
22	.00	.00	.00	.00	.69	4.7	7.7	1.6	5.4	.08	.60	.62
23	.00	.00	.00	.00	.62	3.6	5.8	1.7	3.0	.05	.56	.61
24	.00	.00	.00	.00	.62	2.8	4.7	1.0	5.4	.03	.47	.97
25	.00	.00	.00	.00	.58	1.9	3.6	.80	14	.03	.39	5.7
26	.00	.00	.00	e.00	2.3	1.6	2.6	.73	5.4	.04	.37	7.3
27	.00	.00	.00	e.00	11	1.7	2.2	8.2	3.3	.04	.37	3.5
28	.00	.00	.00	.00	4.5	1.3	1.7	4.5	2.1	.04	.31	1.9
29	.00	.00	.00	.00	2.5	.97	1.4	2.3	1.5	.04	.29	1.3
30	.00	.00	.00	.00	---	.89	1.2	1.5	1.0	.04	.25	1.0
31	.00	---	.00	e.00	---	.82	---	1.1	---	.04	.18	---
TOTAL	0.00	0.00	0.08	0.09	32.82	62.13	134.14	69.95	122.05	13.41	71.25	37.69
MEAN	.000	.000	.003	.003	1.13	2.00	4.47	2.26	4.07	.43	2.30	1.26
MAX	.00	.00	.02	.03	11	11	14	9.8	20	2.9	35	7.3
MIN	.00	.00	.00	.00	.00	.69	.65	.73	.54	.03	.03	.09
CFSM	.00	.00	.00	.00	.38	.67	1.49	.75	1.36	.14	.77	.42
IN.	.00	.00	.00	.00	.41	.77	1.66	.87	1.51	.17	.88	.47

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2000, BY WATER YEAR (WY)

MEAN	1.06	3.72	4.51	3.83	5.52	6.57	5.43	4.08	2.65	2.24	1.16	1.05
MAX	5.80	20.6	18.4	13.5	17.1	19.1	12.8	16.1	13.7	12.9	7.90	12.8
(WY)	1987	1986	1991	1974	1971	1978	1996	1981	1998	1979	1979	1989
MIN	.000	.000	.000	.000	.55	1.46	.92	.14	.007	.019	.001	.000
(WY)	1997	1998	1998	1977	1998	1981	1971	1976	1988	1988	1991	1988

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1969 - 2000	
ANNUAL TOTAL	983.12		543.61			
ANNUAL MEAN	2.69		1.49		3.46	
HIGHEST ANNUAL MEAN					5.71	1973
LOWEST ANNUAL MEAN					1.49	2000
HIGHEST DAILY MEAN	177	Jan 22	35	Aug 18	218	Nov 19 1985
LOWEST DAILY MEAN	.00	Aug 30	.00	Oct 1	.00	Aug 18 1970
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 30	.00	Oct 1	.00	Aug 26 1970
INSTANTANEOUS PEAK FLOW			202	Aug 17	940	Sep 14 1989
INSTANTANEOUS PEAK STAGE			3.51	Aug 17	6.50	Sep 14 1989
ANNUAL RUNOFF (CFSM)	.90		.50		1.15	
ANNUAL RUNOFF (INCHES)	12.19		6.74		15.69	
10 PERCENT EXCEEDS	5.6		4.5		7.2	
50 PERCENT EXCEEDS	.29		.36		.94	
90 PERCENT EXCEEDS	.00		.00		.01	

e Estimated

03357500 BIG WALNUT CREEK NEAR REELSVILLE, IN

LOCATION.--Lat 39°32'11", long 86°58'35", in NW1/4SW1/4 sec.28, T.13 N., R.5 W., Putnam County, Hydrologic Unit 05120203, on left bank at downstream side of county highway bridge, 1.5 mi southwest of Reelsville, and 4.1 mi upstream from Mill Creek.

DRAINAGE AREA.--326 mi^2.

PERIOD OF RECORD.--July 1949 to current year. Published as Eel River near Reelsville, October 1952 to September 1956.

REVISED RECORDS.--WSP 1335: 1950. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 588.24 ft above sea level (levels by State of Indiana, Department of Natural Resources). Prior to Dec. 10, 1949, nonrecording gage at same site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow partly regulated by Soil Conservation Service control structures on tributaries to Little Walnut Creek beginning in 1971.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	7.5	14	18	e13	234	104	144	151	159	39	49
2	5.4	7.8	14	19	e12	194	100	156	133	136	40	46
3	4.9	7.8	14	25	e13	161	99	151	118	121	88	43
4	6.5	7.5	14	42	e12	143	98	139	107	122	67	773
5	7.2	8.5	18	37	e12	131	94	129	107	329	49	386
6	7.0	9.2	23	31	e12	120	90	121	123	434	45	177
7	6.6	9.3	21	25	e13	111	363	115	116	242	200	112
8	10	9.3	21	25	e13	104	1220	111	101	164	187	86
9	40	9.3	20	22	e13	100	615	109	92	127	108	71
10	41	9.3	30	21	e12	99	386	174	86	110	77	289
11	31	9.7	33	21	e12	96	301	242	83	200	60	341
12	23	10	27	20	e12	98	252	195	80	218	50	249
13	18	11	26	19	e20	102	207	208	77	140	42	199
14	14	12	35	19	e45	106	185	235	75	111	37	139
15	10	12	36	18	e56	110	171	187	92	96	33	111
16	8.8	11	31	17	e54	113	159	153	119	87	29	91
17	8.6	11	26	17	e52	117	470	140	921	77	33	76
18	8.2	12	23	e16	e150	108	550	322	610	70	2810	66
19	8.6	13	22	e16	273	154	376	239	356	66	1180	59
20	8.1	14	21	e15	206	395	392	206	246	61	504	57
21	8.1	14	20	e14	138	421	745	167	479	55	283	95
22	8.3	13	19	e15	122	299	564	144	746	51	185	86
23	8.0	13	19	e14	104	237	401	138	444	47	143	90
24	8.0	14	18	e13	101	204	335	156	445	44	124	109
25	7.8	14	15	e14	101	182	279	126	1160	41	102	306
26	7.5	14	18	e14	113	162	234	109	764	39	87	864
27	7.5	14	17	e13	529	151	205	531	485	37	78	556
28	7.5	13	16	e12	523	145	187	408	323	35	70	363
29	7.5	13	17	e12	307	133	171	320	240	43	65	268
30	7.5	13	18	e13	---	121	156	228	192	35	59	216
31	7.5	---	18	e13	---	111	---	177	---	33	54	---
TOTAL	358.7	336.2	664	590	3043	4962	9509	5980	9071	3530	6928	6373
MEAN	11.6	11.2	21.4	19.0	105	160	317	193	302	114	223	212
MAX	41	14	36	42	529	421	1220	531	1160	434	2810	864
MIN	4.9	7.5	14	12	12	96	90	109	75	33	29	43
CFSM	.04	.03	.07	.06	.32	.49	.97	.59	.93	.35	.69	.65
IN.	.04	.04	.08	.07	.35	.57	1.09	.68	1.04	.40	.79	.73

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2000, BY WATER YEAR (WY)

MEAN	94.3	266	389	465	514	635	588	459	332	220	125	114
MAX	642	1655	1602	2947	1402	1636	1459	1848	2183	1221	1047	1248
(WY)	1987	1986	1991	1950	1950	1978	1957	1996	1957	1979	1979	1989
MIN	4.79	11.2	9.71	13.6	65.1	151	142	69.5	26.7	19.4	9.49	4.76
(WY)	1965	2000	1964	1977	1964	1966	1971	1976	1988	1954	1966	1954

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1950 - 2000	
ANNUAL TOTAL	114379.0		51344.9			
ANNUAL MEAN	313		140		349	
HIGHEST ANNUAL MEAN					640	1950
LOWEST ANNUAL MEAN					76.0	1954
HIGHEST DAILY MEAN	9010	Jan 23	2810	Aug 18	18600	Jun 29 1957
LOWEST DAILY MEAN	3.5	Sep 27	4.9	Oct 3	1.4	Sep 8 1954
ANNUAL SEVEN-DAY MINIMUM	4.1	Sep 22	6.3	Oct 1	2.3	Oct 6 1988
INSTANTANEOUS PEAK FLOW			3570	Aug 18	30700	Jun 28 1957
INSTANTANEOUS PEAK STAGE			9.97	Aug 18	18.63	Jun 28 1957
ANNUAL RUNOFF (CFSM)	.96		.43		1.07	
ANNUAL RUNOFF (INCHES)	13.05		5.86		14.56	
10 PERCENT EXCEEDS	742		346		762	
50 PERCENT EXCEEDS	99		79		146	
90 PERCENT EXCEEDS	7.7		10		21	

e Estimated

03358000 MILL CREEK NEAR CATARACT, IN

LOCATION.--Lat 39°26'00", long 86°45'48", in NE$^1/_4$SE$^1/_4$ sec.32, T.12 N., R.3 W., Owen County, Hydrologic Unit 05120203, on left bank at downstream side of bridge on U.S. Highway 231, 3 mi east of Cataract, and at mile 17.5.

DRAINAGE AREA.--245 mi^2.

PERIOD OF RECORD.--July 1949 to current year.

REVISED RECORDS.--WSP 1505: 1956(P). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 706.40 ft above sea level. Prior to Nov. 8, 1949, nonrecording gage, and Nov. 8, 1949, to Sept. 22, 1968, water-stage recorder at site 100 ft upstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum instantaneous gage height may have occurred Dec. 30, 1990, during period of no gage height record.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e3.0	e3.3	5.0	5.4	e3.5	208	55	95	154	94	16	15
2	e2.4	e3.3	4.9	5.6	e3.3	148	56	108	128	83	23	14
3	e2.2	e3.4	5.1	9.0	e3.5	114	58	93	106	111	25	13
4	e2.6	e3.4	5.4	54	e3.4	100	55	83	92	111	21	443
5	e3.1	e3.5	6.7	44	e3.3	85	48	79	90	1850	15	216
6	e3.0	e3.6	8.9	24	e3.3	72	44	73	87	1020	15	69
7	e2.9	e3.6	9.0	20	e3.5	62	332	68	68	298	151	41
8	e3.9	e3.7	8.3	15	e3.5	58	2460	66	61	169	98	30
9	22	e3.7	6.8	14	e3.5	57	1570	65	55	120	48	25
10	21	e3.8	10	13	e3.4	51	547	367	49	95	32	241
11	14	e3.8	20	12	e3.3	45	359	243	45	632	22	966
12	6.7	e3.9	12	12	e3.5	50	275	157	44	456	17	461
13	4.8	e4.0	8.5	11	e5.6	55	220	314	42	208	15	344
14	3.5	e4.1	8.6	9.8	69	76	194	273	40	133	13	175
15	3.0	e4.2	12	9.0	79	76	170	162	56	97	12	120
16	3.0	e4.2	8.9	9.8	54	77	148	126	87	74	11	84
17	3.1	3.8	7.5	9.5	32	133	331	153	888	58	13	65
18	2.9	3.8	6.5	8.4	216	103	451	569	907	48	1750	54
19	3.6	4.1	5.9	9.4	501	186	287	367	502	47	661	46
20	3.6	4.5	5.9	8.8	215	699	286	286	270	42	184	45
21	3.5	4.7	5.8	e8.0	128	476	1000	188	1220	35	91	64
22	3.4	4.7	4.9	e7.2	102	273	608	153	633	29	58	56
23	3.2	4.7	4.9	e6.8	90	202	376	137	289	25	47	46
24	3.2	4.9	4.7	e6.2	77	169	287	119	230	22	45	57
25	3.2	5.1	4.3	e5.8	75	145	226	93	533	20	37	652
26	3.1	5.1	4.1	e5.4	84	117	178	77	372	18	29	2390
27	3.2	5.3	4.2	e4.9	1030	112	155	1040	394	17	25	1020
28	e3.2	5.3	4.3	e4.6	583	104	141	1210	212	16	23	460
29	e3.2	5.2	4.3	e4.2	290	84	119	438	154	16	21	280
30	e3.3	4.9	4.6	e4.0	---	67	102	263	119	17	19	202
31	e3.3	---	5.2	e3.8	---	60	---	193	---	17	17	---
TOTAL	150.1	125.6	217.2	364.6	3671.6	4264	11138	7658	7927	5978	3554	8694
MEAN	4.84	4.19	7.01	11.8	127	138	371	247	264	193	115	290
MAX	22	5.3	20	54	1030	699	2460	1210	1220	1850	1750	2390
MIN	2.2	3.3	4.1	3.8	3.3	45	44	65	40	16	11	13
CFSM	.02	.02	.03	.05	.52	.56	1.52	1.01	1.08	.79	.47	1.18
IN.	.02	.02	.03	.06	.56	.65	1.69	1.16	1.20	.91	.54	1.32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2000, BY WATER YEAR (WY)

MEAN	57.2	227	302	351	408	498	424	333	244	184	107	80.7
MAX	435	1576	1135	2214	1088	1425	1064	1522	1120	1694	1092	918
(WY)	1987	1994	1958	1950	1971	1963	1964	1981	1957	1979	1993	1989
MIN	2.88	4.19	4.05	6.55	41.1	108	74.5	35.1	11.2	6.84	3.72	.91
(WY)	1965	2000	1964	1977	1954	1994	1971	1954	1988	1954	1954	1954

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1950 - 2000	
ANNUAL TOTAL	92167.9		53742.1			
ANNUAL MEAN	253		147		267	
HIGHEST ANNUAL MEAN					528	1979
LOWEST ANNUAL MEAN					37.3	1954
HIGHEST DAILY MEAN	7190	Jan 23	2460	Apr 8	11500	Dec 30 1990
LOWEST DAILY MEAN	1.5	Sep 27	2.2	Oct 3	.10	Sep 7 1954
ANNUAL SEVEN-DAY MINIMUM	1.6	Sep 22	2.7	Oct 1	.20	Sep 2 1954
INSTANTANEOUS PEAK FLOW			2610	Apr 8	12200	Dec 30 1990
INSTANTANEOUS PEAK STAGE			12.46	Apr 8	22.58	Jun 24 1960
ANNUAL RUNOFF (CFSM)	1.03		.60		1.09	
ANNUAL RUNOFF (INCHES)	13.99		8.16		14.81	
10 PERCENT EXCEEDS	479		373		576	
50 PERCENT EXCEEDS	46		46		80	
90 PERCENT EXCEEDS	3.1		3.5		7.7	

e Estimated

03359000 MILL CREEK NEAR MANHATTAN, IN

LOCATION.--Lat 39°29'16", long 86°55'30", in SE$^1/_4$SE$^1/_4$ sec.11, T.12 N., R.5 W., Putnam County, Hydrologic Unit 05120203, on left bank 0.3 mi upstream from Cagles Mill Dam, 0.4 mi downstream from Cagles Mill Lake, 1.3 mi upstream from Deer Creek, 5.0 mi south of Manhattan, and at mile 2.3.

DRAINAGE AREA.--294 mi^2.

PERIOD OF RECORD.--May to September 1931 (fragmentary), October 1938 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1940-41. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 581.83 ft above sea level. May 12, 1941 to Sept. 30, 1974, water-stage recorder at site 0.3 mi downstream. See WSP 1725 for history of changes prior to May 12, 1941.

REMARKS.--Flow regulated by U.S. Army Corps of Engineers from Cagles Mill Lake since July 1953.

COOPERATION.--Records of daily discharge provided by U.S. Army Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--62 years (1938 to current year), 321 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,960 ft^3/s, Jan. 5, 1950, gage height, 18.38 ft; no flow Aug. 7, 1953.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,320 ft^3/s Sept. 30; minimum daily, 17 ft^3/s Nov. 3 to Dec. 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	18	17	18	18	628	31	118	648	535	36	36
2	18	18	17	18	18	623	31	175	368	112	36	36
3	18	17	17	18	18	489	31	215	117	117	73	36
4	18	17	17	18	18	194	31	117	117	118	54	36
5	18	17	17	18	18	93	32	77	117	121	36	190
6	18	17	17	18	18	99	32	77	117	229	36	253
7	18	17	17	18	18	99	32	92	117	701	72	211
8	18	17	17	18	18	99	36	99	103	1240	172	81
9	18	17	17	18	18	99	39	99	76	1300	207	56
10	18	17	17	18	18	98	39	101	69	1110	206	56
11	18	17	17	18	18	62	40	404	56	315	121	81
12	18	17	17	18	18	71	40	556	56	325	36	102
13	18	17	17	18	18	82	40	322	56	436	36	563
14	18	17	17	18	47	82	40	346	56	435	30	1000
15	18	17	18	18	162	82	566	247	66	432	22	929
16	18	17	18	18	107	164	1160	172	77	326	22	352
17	18	17	18	18	46	204	960	104	187	140	22	88
18	18	17	18	18	47	124	827	154	297	148	161	76
19	18	17	18	18	68	83	1020	513	410	76	245	76
20	18	17	18	18	163	243	1080	493	519	76	711	76
21	18	17	18	18	260	418	1080	322	312	62	874	76
22	18	17	18	18	207	418	1080	138	299	61	685	76
23	18	17	18	18	207	670	1070	113	604	46	287	76
24	18	17	18	18	207	532	1060	189	402	36	117	77
25	18	17	18	18	206	293	387	182	333	36	76	91
26	18	17	18	18	206	99	116	117	448	36	76	103
27	18	17	18	18	208	164	90	151	598	36	61	339
28	18	17	18	18	334	167	105	543	818	36	55	757
29	18	17	18	18	536	116	118	660	1160	36	43	1210
30	18	17	18	18	---	98	118	657	1070	36	36	1320
31	18	---	18	18	---	51	---	653	---	36	36	---
TOTAL	558	512	544	558	3245	6744	11331	8206	9673	8749	4680	8459
MEAN	18.0	17.1	17.5	18.0	112	218	378	265	322	282	151	282
MAX	18	18	18	18	536	670	1160	660	1160	1300	874	1320
MIN	18	17	17	18	18	51	31	77	56	36	22	36

CAL YR 1999 TOTAL 116218 MEAN 318 MAX 1750 MIN 17
WTR YR 2000 TOTAL 63259 MEAN 173 MAX 1320 MIN 17

03360000 EEL RIVER AT BOWLING GREEN, IN

LOCATION.--Lat 39°22'58", long 87°01'14", in NE$^1/_4$NE$^1/_4$ sec.24, T.11 N., R.6 W., Clay County, Hydrologic Unit 05120203, on left bank 500 ft downstream from bridge on State Highway 46 at Bowling Green, 0.2 mi downstream from Jordan Creek, and at mile 38.4.

DRAINAGE AREA.--830 mi^2.

PERIOD OF RECORD.--January 1931 to current year. Prior to October 1934, published as "near Centerpoint".

REVISED RECORDS.--WSP 893: 1935, 1937-39. WSP 973: 1937-38, 1939(M). WSP 1335: 1931(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 548.02 ft above sea level, (levels by U.S. Army Corps of Engineers). See WSP 1725 for history of changes prior to Dec. 1, 1949.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated by Cagles Mill Lake.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, about 30.0 ft in 1875, present datum, from information by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	33	38	49	e43	974	211	348	868	1020	127	138
2	39	33	38	48	e41	888	200	364	751	408	153	132
3	37	34	38	55	e42	782	195	448	341	344	212	126
4	37	34	40	97	e43	534	191	401	291	323	227	327
5	37	34	46	92	e41	305	186	295	276	960	150	910
6	37	34	61	73	e43	288	178	279	277	754	143	526
7	37	34	62	64	e42	269	551	268	274	780	555	410
8	42	35	58	58	e43	257	3110	270	257	1290	460	271
9	52	35	54	56	e42	247	1400	267	224	1390	401	184
10	62	35	73	55	e42	238	801	449	210	1320	297	471
11	58	35	91	53	e41	232	589	527	198	1530	166	1420
12	47	35	78	52	e46	213	503	875	189	758	143	712
13	42	36	70	49	74	235	430	793	183	733	131	732
14	37	36	82	47	125	246	380	650	179	639	122	1160
15	35	36	93	46	163	246	395	641	180	585	107	1130
16	33	36	82	45	247	294	974	428	223	548	99	546
17	33	37	70	44	118	439	1630	372	891	291	96	267
18	33	38	63	43	288	376	1900	417	1220	287	2390	223
19	32	39	59	43	565	411	1620	647	822	224	2300	205
20	32	42	57	e42	412	1070	1620	857	840	193	1230	210
21	32	43	54	e42	436	1240	2400	596	1440	180	1230	239
22	32	42	54	e43	419	937	2270	410	1160	162	1050	250
23	31	41	56	e42	361	873	1790	305	1120	153	606	225
24	31	41	52	e43	336	975	1600	342	1130	140	386	243
25	31	41	57	e42	333	664	1210	396	1510	132	264	819
26	33	41	57	e43	350	379	539	284	1640	126	228	2310
27	33	40	52	e42	1150	349	465	1600	1420	122	204	1160
28	33	39	52	e43	1160	402	409	1400	1240	119	181	1160
29	33	38	49	e42	964	337	400	1220	1320	117	169	1420
30	33	38	48	e43	---	283	375	1040	1430	121	154	1580
31	33	---	48	e42	---	257	---	932	---	117	146	---
TOTAL	1157	1115	1832	1578	8010	15240	28522	18121	22104	15866	14127	19506
MEAN	37.3	37.2	59.1	50.9	276	492	951	585	737	512	456	650
MAX	62	43	93	97	1160	1240	3110	1600	1640	1530	2390	2310
MIN	31	33	38	42	41	213	178	267	179	117	96	126
CFSM	.04	.04	.07	.06	.33	.59	1.15	.70	.89	.62	.55	.78
IN.	.05	.05	.08	.07	.36	.68	1.28	.81	.99	.71	.63	.87

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2000, BY WATER YEAR (WY)

MEAN	264	571	880	1229	1294	1551	1613	1220	872	593	325	299
MAX	1393	3076	2960	7212	3249	3843	4120	5090	4077	2746	2656	2488
(WY)	1987	1986	1991	1950	1950	1938	1944	1943	1957	1987	1979	1989
MIN	22.5	29.7	29.0	27.5	107	125	285	129	66.9	39.4	24.1	13.9
(WY)	1941	1965	1964	1977	1934	1941	1971	1934	1988	1954	1936	1954

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1931 - 2000	
ANNUAL TOTAL	304021		147178			
ANNUAL MEAN	833		402		893	
HIGHEST ANNUAL MEAN					1551	1950
LOWEST ANNUAL MEAN					161	1954
HIGHEST DAILY MEAN	13300	Jan 23	3110	Apr 8	28700	Jun 29 1957
LOWEST DAILY MEAN	31	Oct 23	31	Oct 23	11	Oct 7 1954
ANNUAL SEVEN-DAY MINIMUM	32	Oct 19	32	Oct 19	12	Oct 2 1954
INSTANTANEOUS PEAK FLOW			3910	Aug 18	34000	Jan 4 1950
INSTANTANEOUS PEAK STAGE			12.74	Aug 18	23.53	Jan 4 1950
ANNUAL RUNOFF (CFSM)	1.00		.48		1.08	
ANNUAL RUNOFF (INCHES)	13.63		6.60		14.63	
10 PERCENT EXCEEDS	2080		1160		2190	
50 PERCENT EXCEEDS	236		210		358	
90 PERCENT EXCEEDS	36		37		56	

e Estimated

03360500 WHITE RIVER AT NEWBERRY, IN

LOCATION.--Lat 38°55'39", long 87°00'41", in NE$^1/_4$NW$^1/_4$ sec.30, T.6 N., R.5 W., Greene County, Hydrologic Unit 05120202, on left bank 0.4 mi upstream from bridge on State Highway 57 at Newberry, 1.9 mi downstream from Doans Creek, and at mile 113.0.

DRAINAGE AREA.--4,688 mi^2.

PERIOD OF RECORD.--September 1928 to current year. Prior to October 1948, published as West Fork White River at Newberry.

REVISED RECORDS.--WSP 873: 1937(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 465.59 ft above sea level. Nonrecording gage prior to Oct. 21, 1928. Prior to Aug. 5, 1982, recording gage 0.3 mi downstream at same datum.

REMARKS.--Records fair, except those for estimated daily discharges, which are poor. Flow regulated by upstream reservoirs.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1875, 27.5 ft Mar. 27, 1913, from floodmarks by Indiana Department of Highways, discharge, 130,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	433	452	514	605	e570	3720	1530	2140	3900	4000	2340	966
2	507	464	504	609	592	3130	1410	1970	3340	3370	2080	918
3	535	456	504	675	548	2760	1320	1870	2890	2660	2610	880
4	519	442	511	1030	553	2440	1250	2060	2320	2640	2220	844
5	507	435	539	1030	548	2080	1180	2180	1920	2440	1760	1030
6	482	443	577	1260	538	1700	1150	2110	1720	4350	1520	1860
7	481	444	589	1070	547	1490	1500	1950	1590	5580	8520	1890
8	499	471	786	929	546	1370	12200	1810	1560	4200	8800	1480
9	539	483	788	879	549	1290	16000	1730	1470	3760	5500	1270
10	556	478	817	840	571	1200	14000	1970	1350	4050	3960	1230
11	684	470	830	796	595	1150	10500	2490	1230	6260	3450	3580
12	883	469	981	753	609	1120	7900	2890	1160	8490	2620	4230
13	779	474	1050	737	663	1100	5450	3150	1140	5330	2050	4680
14	684	473	969	702	891	1150	4260	3540	1080	3630	1720	3640
15	615	455	961	674	1070	1240	3560	3480	1050	2960	1500	3280
16	574	447	959	664	1390	1340	3100	3010	1170	2530	1330	2880
17	544	448	982	641	1320	1790	4000	2570	3830	2210	1200	2250
18	507	460	915	632	2360	1910	5850	2340	6590	1840	1420	1680
19	494	463	875	622	4360	2090	5510	4510	8260	2930	3360	1420
20	530	473	842	622	4230	4340	5010	3520	7090	2540	6030	1290
21	519	474	786	589	3270	5340	5760	3480	7270	1620	3600	1720
22	509	483	735	576	2840	4730	7190	3490	10800	1340	2860	1740
23	487	521	719	574	2550	3850	7000	3350	9210	1210	2820	1690
24	478	521	702	e570	2450	3770	6180	2890	7720	1100	2290	1620
25	468	509	669	e575	2470	3690	5610	2620	7590	1020	1760	3710
26	463	511	650	e558	2310	3000	4790	2360	6850	964	1480	15900
27	461	522	632	e540	5020	2510	3560	2970	6510	914	1350	15600
28	464	517	626	e530	5480	2160	2980	4960	5900	893	1260	9490
29	479	529	613	e520	4860	2010	2600	6710	5040	881	1170	5750
30	482	531	609	e520	---	1840	2350	5060	4360	1660	1090	4570
31	465	---	608	e545	---	1650	---	4370	---	1390	1030	---
TOTAL	16627	14318	22842	21867	54300	72960	154700	93550	125910	88762	84700	103088
MEAN	536	477	737	705	1872	2354	5157	3018	4197	2863	2732	3436
MAX	883	531	1050	1260	5480	5340	16000	6710	10800	8490	8800	15900
MIN	433	435	504	520	538	1100	1150	1730	1050	881	1030	844
CFSM	.11	.10	.16	.15	.40	.50	1.10	.64	.90	.61	.58	.73
IN.	.13	.11	.18	.17	.43	.58	1.23	.74	1.00	.70	.67	.82

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2000, BY WATER YEAR (WY)

MEAN	1421	3031	4501	6787	6938	8658	8881	6880	4696	3242	1978	1595
MAX	6193	24180	16780	36920	21870	19150	20340	25090	19350	13270	15900	13510
(WY)	1994	1994	1958	1950	1950	1963	1944	1943	1998	1979	1979	1989
MIN	259	408	386	405	705	686	1539	677	771	536	308	317
(WY)	1941	1945	1945	1945	1931	1941	1941	1941	1988	1936	1941	1940

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1929 - 2000	
ANNUAL TOTAL	1724193		853624			
ANNUAL MEAN	4724		2332		4872	
HIGHEST ANNUAL MEAN					8752	1950
LOWEST ANNUAL MEAN					958	1941
HIGHEST DAILY MEAN	62900	Jan 26	16000	Apr 9	103000	Nov 18 1993
LOWEST DAILY MEAN	414	Sep 28	433	Oct 1	200	Oct 1 1941
ANNUAL SEVEN-DAY MINIMUM	420	Sep 22	448	Nov 1	211	Sep 26 1941
INSTANTANEOUS PEAK FLOW			17300	Sep 26	105000	Nov 18 1993
INSTANTANEOUS PEAK STAGE			13.57	Sep 26	25.87	Nov 18 1993
ANNUAL RUNOFF (CFSM)	1.01		.50		1.04	
ANNUAL RUNOFF (INCHES)	13.68		6.77		14.12	
10 PERCENT EXCEEDS	12200		5460		11500	
50 PERCENT EXCEEDS	1630		1390		2510	
90 PERCENT EXCEEDS	465		502		622	

e Estimated

03361000 BIG BLUE RIVER AT CARTHAGE, IN

LOCATION.--Lat 39°44'38", long 85°34'33", in SW$^1/_4$SW$^1/_4$ sec.18, T.15 N., R.9 E., Rush County, Hydrologic Unit 05120204, on right bank 300 ft upstream from highway bridge, 0.5 mi northwest of Carthage, 2.2 mi downstream from Three Mile Creek, and at mile 50.7.

DRAINAGE AREA.--184 mi^2.

PERIOD OF RECORD.--October 1950 to current year. Prior to October 1961, published as Blue River at Carthage.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 859.33 ft above sea level. Prior to July 19, 1951, nonrecording gage at site 300 ft downstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow partly regulated by Big Blue River Conservancy District control structures on tributaries to Big Blue River beginning in 1969.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	46	46	46	e40	126	80	111	123	112	81	42
2	42	52	45	48	e39	109	81	181	113	105	71	42
3	37	57	46	72	e38	101	84	147	103	118	72	40
4	44	51	47	184	e41	94	83	134	98	304	67	64
5	41	49	72	109	e42	88	80	137	103	196	63	52
6	40	49	80	85	e43	82	76	130	100	210	65	45
7	39	47	57	75	e45	78	369	122	89	269	160	43
8	42	47	51	68	e46	76	2020	124	87	166	120	42
9	56	49	49	66	e48	74	767	114	83	135	91	43
10	55	50	80	66	e52	71	461	169	78	121	82	166
11	50	48	70	64	e61	72	361	134	81	133	69	172
12	45	48	59	58	e73	77	292	119	80	125	63	111
13	44	48	62	58	88	76	240	136	75	106	59	89
14	45	48	131	55	236	81	211	119	84	97	57	74
15	43	47	100	57	164	86	187	107	435	91	55	71
16	46	47	76	57	136	87	167	102	282	85	53	65
17	44	48	67	55	119	89	193	104	474	81	53	62
18	44	47	61	56	282	81	176	102	1440	79	75	60
19	45	50	57	55	465	101	156	303	703	101	58	57
20	45	69	66	e53	272	300	183	260	416	90	52	58
21	46	51	61	e49	185	391	316	177	408	76	49	82
22	45	48	58	e47	163	257	295	145	352	69	49	64
23	44	47	53	e45	150	186	235	257	253	66	50	64
24	45	49	52	e42	141	156	194	184	201	64	57	68
25	45	47	e51	e41	136	139	166	135	262	63	50	70
26	47	55	e49	e40	123	119	145	115	200	60	47	83
27	46	53	49	e39	174	122	135	290	166	59	57	74
28	46	47	48	e38	181	112	127	301	142	61	50	68
29	46	46	48	e37	143	98	118	202	134	66	47	63
30	46	48	48	e39	---	88	110	157	121	155	45	61
31	45	---	47	e41	---	83	---	138	---	103	43	---
TOTAL	1392	1488	1886	1845	3726	3700	8108	4956	7286	3566	2010	2095
MEAN	44.9	49.6	60.8	59.5	128	119	270	160	243	115	64.8	69.8
MAX	56	69	131	184	465	391	2020	303	1440	304	160	172
MIN	37	46	45	37	38	71	76	102	75	59	43	40
CFSM	.24	.27	.33	.32	.70	.65	1.47	.87	1.32	.63	.35	.38
IN.	.28	.30	.38	.37	.75	.75	1.64	1.00	1.47	.72	.41	.42

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2000, BY WATER YEAR (WY)

MEAN	92.4	164	210	232	286	328	329	257	213	149	103	77.0
MAX	579	925	702	619	741	967	829	916	848	581	649	400
(WY)	1987	1994	1991	1959	1951	1963	1964	1996	1958	1979	1979	1989
MIN	34.2	38.6	33.2	27.9	59.6	84.2	97.8	81.5	48.1	32.5	30.5	24.4
(WY)	1964	1977	1977	1977	1964	1981	1971	1976	1988	1977	1988	1954

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1951 - 2000	
ANNUAL TOTAL	53934		42058			
ANNUAL MEAN	148		115		203	
HIGHEST ANNUAL MEAN					324	1973
LOWEST ANNUAL MEAN					78.8	1977
HIGHEST DAILY MEAN	2610	Jan 22	2020	Apr 8	6900	Mar 5 1963
LOWEST DAILY MEAN	29	Sep 6	37	Oct 3	17	Jan 18 1977
ANNUAL SEVEN-DAY MINIMUM	29	Sep 6	39	Jan 28	19	Jul 31 1977
INSTANTANEOUS PEAK FLOW			2950	Apr 8	12900	Mar 4 1963
INSTANTANEOUS PEAK STAGE			8.40	Apr 8	14.62	Mar 4 1963
ANNUAL RUNOFF (CFSM)	.80		.62		1.10	
ANNUAL RUNOFF (INCHES)	10.90		8.50		14.98	
10 PERCENT EXCEEDS	311		204		405	
50 PERCENT EXCEEDS	78		74		115	
90 PERCENT EXCEEDS	38		45		50	

e Estimated

03361500 BIG BLUE RIVER AT SHELBYVILLE, IN

LOCATION.--Lat 39°31'45", long 85°46'55", in SE$^1/_4$SE$^1/_4$ sec.31, T.13 N., R.7 E., Shelby County, Hydrologic Unit 05120204, on left bank 0.2 mi downstream from bridge on State Highway 9 in Shelbyville, 0.6 mi downstream from Little Blue River, and at mile 23.9.

DRAINAGE AREA.--421 mi^2.

PERIOD OF RECORD.--September 1943 to current year. Prior to October 1961, published as Blue River at Shelbyville.

REVISED RECORDS.--WSP 1505: 1944. WSP 1909: 1959(M). WSP 2109: Drainage area. WDR IN-79-1: 1975.

GAGE.--Water-stage recorder. Datum of gage is 737.67 ft above sea level. Prior to Oct. 1, 1953, nonrecording gage at bridge 0.2 mi upstream at datum 3.5 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of about 20.2 ft from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	59	66	72	e62	283	179	239	e340	257	151	69
2	57	61	65	72	e60	247	177	279	297	237	131	68
3	55	62	65	99	e60	217	185	299	262	242	120	66
4	53	67	66	174	e62	203	183	272	237	335	116	93
5	56	66	82	193	e64	189	176	334	228	508	108	90
6	56	64	102	151	e66	175	168	317	225	371	106	77
7	54	63	97	132	e70	164	535	290	201	404	141	71
8	59	63	81	118	70	156	4130	273	186	329	219	68
9	69	64	75	112	75	152	3780	256	176	268	166	67
10	72	64	102	107	80	146	1650	320	164	239	140	106
11	70	65	107	104	91	145	1070	353	167	227	124	276
12	65	63	99	98	107	152	796	285	182	249	109	192
13	61	63	92	94	125	153	626	306	177	222	101	174
14	58	64	118	91	213	154	533	301	170	195	96	133
15	58	64	161	87	286	173	463	251	644	178	93	113
16	58	63	128	89	233	203	407	232	711	164	90	103
17	59	63	108	87	201	243	399	255	1070	154	101	95
18	58	64	97	85	334	219	462	262	2240	147	111	90
19	58	71	91	83	854	225	396	306	2630	147	110	87
20	59	73	92	84	614	504	404	508	1230	168	93	102
21	59	84	93	76	418	785	691	334	1250	144	85	98
22	59	72	e82	e73	335	609	697	272	1070	129	82	106
23	57	68	e76	e70	298	454	574	285	723	121	85	94
24	57	67	e70	e67	283	378	473	355	551	115	85	96
25	57	67	e66	e65	279	331	401	254	576	109	88	112
26	57	72	e65	e64	264	289	348	207	510	106	82	118
27	58	73	e64	e62	297	274	314	667	415	101	80	124
28	59	73	e66	e59	404	264	295	1050	350	99	85	112
29	59	67	e67	e58	328	237	272	e640	312	118	78	102
30	59	64	e68	e60	---	210	250	e500	285	152	75	94
31	59	---	e70	e63	---	191	---	e410	---	214	72	---
TOTAL	1840	1993	2681	2849	6633	8125	21034	10912	17579	6449	3323	3196
MEAN	59.4	66.4	86.5	91.9	229	262	701	352	586	208	107	107
MAX	72	84	161	193	854	785	4130	1050	2630	508	219	276
MIN	53	59	64	58	60	145	168	207	164	99	72	66
CFSM	.14	.16	.21	.22	.54	.62	1.67	.84	1.39	.49	.25	.25
IN.	.16	.18	.24	.25	.59	.72	1.86	.96	1.55	.57	.29	.28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2000, BY WATER YEAR (WY)

MEAN	166	347	471	634	703	798	789	600	472	317	197	144
MAX	1199	2114	1575	4319	2208	1970	1973	2605	1729	1363	1404	953
(WY)	1987	1994	1967	1950	1950	1963	1964	1996	1998	1979	1979	1989
MIN	41.7	52.5	52.3	38.3	92.0	204	183	149	81.2	56.1	46.4	43.1
(WY)	1964	1954	1964	1977	1964	1957	1971	1976	1988	1954	1988	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1944 - 2000	
ANNUAL TOTAL	115240		86614			
ANNUAL MEAN	316		237		469	
HIGHEST ANNUAL MEAN					908	1950
LOWEST ANNUAL MEAN					166	1954
HIGHEST DAILY MEAN	6830	Jan 23	4130	Apr 8	13800	Mar 5 1963
LOWEST DAILY MEAN	39	Sep 11	53	Oct 4	27	Jan 18 1977
ANNUAL SEVEN-DAY MINIMUM	40	Sep 8	56	Oct 2	32	Jan 16 1977
INSTANTANEOUS PEAK FLOW			4700	Apr 8	13800	Nov 15 1993
INSTANTANEOUS PEAK STAGE			12.06	Apr 8	18.41	Nov 15 1993
ANNUAL RUNOFF (CFSM)	.75		.56		1.11	
ANNUAL RUNOFF (INCHES)	10.18		7.65		15.12	
10 PERCENT EXCEEDS	687		462		1000	
50 PERCENT EXCEEDS	120		119		238	
90 PERCENT EXCEEDS	50		62		73	

e Estimated

03361650 SUGAR CREEK AT NEW PALESTINE, IN

LOCATION.--Lat 39°42'51", long 85°53'08", in SE$^1/_4$SW$^1/_4$ sec.29, T.15 N., R.6 E., Hancock County, Hydrologic Unit 05120204, on left bank 10 ft downstream from bridge on County Road 450 West, 0.5 mi south of New Palestine, 3.1 mi upstream from Little Sugar Creek, and 37.3 mi upstream from mouth.

DRAINAGE AREA.--93.9 mi^2.

PERIOD OF RECORD.--October 1967 to current year.

REVISED RECORDS.--WDR IN-76-1: 1975.

GAGE.--Water-stage recorder. Datum of gage is 786.00 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	e2.4	5.6	6.3	e6.3	92	26	42	67	50	28	6.9
2	2.1	e3.0	5.5	6.6	e6.2	68	26	57	57	45	22	6.6
3	e2.0	e3.8	5.3	11	e6.4	52	27	77	48	41	17	6.2
4	e1.9	e3.2	5.0	31	e6.6	42	27	70	43	68	15	32
5	e1.8	e2.9	9.1	19	e6.5	37	26	62	41	95	13	15
6	e1.8	e2.7	12	17	e6.4	32	24	67	39	48	13	12
7	e1.9	e2.6	8.3	16	e6.7	28	118	58	35	37	25	10
8	e2.1	e2.5	7.6	13	e7.2	26	387	53	30	36	22	8.7
9	e2.7	e2.5	6.7	12	e7.7	24	364	50	26	31	28	8.4
10	e3.4	e2.4	12	11	e8.4	23	212	75	25	27	20	154
11	e2.8	e2.4	11	10	e12	23	146	107	25	25	16	191
12	e2.5	e2.3	10	9.3	e13	23	112	88	23	34	14	132
13	e2.3	e2.3	9.8	8.8	e17	23	91	80	21	48	12	94
14	e2.2	e2.3	18	8.1	45	23	77	81	43	32	12	53
15	e2.2	e2.2	16	7.9	57	24	69	71	123	25	11	37
16	e2.1	e2.2	14	7.6	57	28	60	57	273	22	9.9	28
17	e2.0	e2.2	11	7.3	36	28	59	57	494	19	10	22
18	e2.0	e2.5	10	e7.2	100	25	60	53	779	18	17	19
19	e2.2	e4.0	9.4	e7.1	180	31	66	103	694	17	12	17
20	e2.3	7.1	9.5	e7.0	204	82	79	238	577	16	10	18
21	2.5	5.9	8.7	e6.8	124	129	176	173	285	14	9.0	26
22	3.2	5.4	9.6	e6.7	93	112	166	121	233	13	8.5	19
23	3.3	5.7	7.6	e6.6	72	85	133	127	166	13	9.3	18
24	e2.7	5.9	7.2	e6.6	67	68	108	140	126	12	10	21
25	e2.5	5.5	7.1	e6.5	60	58	89	105	139	11	9.5	27
26	e2.4	6.6	7.4	e6.4	55	50	72	76	150	10	9.1	63
27	e2.4	6.5	6.9	e6.4	119	46	62	151	107	10	8.6	52
28	e2.3	5.8	6.9	e6.3	145	43	56	184	84	10	8.4	39
29	e2.3	6.0	6.9	e6.2	128	38	50	147	69	10	7.9	31
30	e2.2	5.6	7.0	e6.4	---	33	44	104	58	50	7.6	25
31	e2.2	---	6.5	e6.4	---	28	---	80	---	29	7.2	---
TOTAL	73.1	116.4	277.6	294.5	1652.4	1424	3012	2954	4880	916	422.0	1191.8
MEAN	2.36	3.88	8.95	9.50	57.0	45.9	100	95.3	163	29.5	13.6	39.7
MAX	3.4	7.1	18	31	204	129	387	238	779	95	28	191
MIN	1.8	2.2	5.0	6.2	6.2	23	24	42	21	10	7.2	6.2
CFSM	.03	.04	.10	.10	.61	.49	1.07	1.01	1.73	.31	.14	.42
IN.	.03	.05	.11	.12	.65	.56	1.19	1.17	1.93	.36	.17	.47

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2000, BY WATER YEAR (WY)

MEAN	33.8	90.4	119	129	161	172	158	131	100	61.6	42.5	27.8
MAX	309	441	352	345	439	413	299	549	469	241	306	314
(WY)	1987	1994	1991	1969	1982	1978	1996	1996	1998	1969	1979	1989
MIN	2.36	3.88	8.95	5.35	35.7	35.0	30.0	23.4	8.47	9.21	3.72	.65
(WY)	2000	2000	2000	1977	1978	1981	1971	1976	1988	1977	1999	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1968 - 2000	
ANNUAL TOTAL	24661.56		17213.8			
ANNUAL MEAN	67.6		47.0		102	
HIGHEST ANNUAL MEAN					150	1973
LOWEST ANNUAL MEAN					37.7	1977
HIGHEST DAILY MEAN	1410	Jan 23	779	Jun 18	1930	Nov 15 1993
LOWEST DAILY MEAN	.11	Sep 19	e1.8	Oct 5	.11	Sep 19 1999
ANNUAL SEVEN-DAY MINIMUM	.26	Sep 16	e1.9	Oct 2	.26	Sep 16 1999
INSTANTANEOUS PEAK FLOW			853	Jun 18	2340	Nov 14 1993
INSTANTANEOUS PEAK STAGE			6.97	Jun 18	10.34	Feb 23 1979
ANNUAL RUNOFF (CFSM)	.72		.50		1.08	
ANNUAL RUNOFF (INCHES)	9.77		6.82		14.74	
10 PERCENT EXCEEDS	194		120		240	
50 PERCENT EXCEEDS	19		19		45	
90 PERCENT EXCEEDS	2.0		2.6		8.3	

e Estimated

03361850 BUCK CREEK AT ACTON, IN

LOCATION.--Lat 39°39'25", long 85°57'27", in NW1/4SE1/4 sec.15, T.14 N., R.5 E., Marion County, Hydrologic Unit 05120204, on left bank 30 ft downstream from McGregor Road bridge, 0.5 mi east of Acton, and 4.1 mi upstream from mouth.

DRAINAGE AREA.--78.8 mi^2.

PERIOD OF RECORD.--October 1967 to current year.

REVISED RECORDS.--WDR IN-79-1: 1969 (M).

GAGE.--Water-stage recorder. Datum of gage is 757.00 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Low flow is affected by regulation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	e2.6	6.4	9.4	e6.9	59	23	31	50	31	48	6.5
2	2.6	e2.8	8.8	11	e6.8	45	22	44	40	29	30	4.5
3	2.2	e3.8	12	13	e6.9	37	27	41	33	32	33	3.7
4	2.1	e3.4	15	61	e7.1	34	27	38	28	33	25	73
5	2.1	e3.1	23	20	e7.0	31	24	37	28	169	18	49
6	2.1	e3.1	46	13	e6.9	28	23	36	28	80	16	25
7	2.1	e3.0	20	11	e7.2	27	201	33	23	49	85	18
8	2.4	e2.8	14	9.9	e7.5	26	952	31	20	36	50	14
9	5.3	e2.8	12	9.3	e8.2	25	349	29	16	29	32	12
10	14	e2.7	29	9.6	10	24	198	67	14	25	25	57
11	9.5	e2.7	26	9.7	14	22	131	55	18	24	19	135
12	6.9	e2.6	15	9.6	15	23	97	44	16	22	15	81
13	3.9	e2.6	14	9.7	16	28	77	53	15	20	13	59
14	3.6	e2.6	27	9.5	62	27	67	47	23	18	11	36
15	2.8	e2.6	30	9.4	28	27	58	36	89	17	10	26
16	2.7	e2.5	16	9.1	17	27	51	31	201	15	9.3	21
17	2.4	e2.5	13	8.8	14	30	56	30	573	13	10	17
18	2.4	e2.5	11	e8.6	138	26	57	35	793	15	60	14
19	2.5	e2.8	10	e8.4	193	39	49	45	423	16	34	14
20	2.5	e10	10	e8.2	93	160	75	77	222	16	20	13
21	3.3	16	11	e8.0	61	149	253	62	269	14	18	34
22	3.2	11	10	e7.9	56	90	160	48	199	13	13	24
23	3.4	11	9.8	e7.7	53	67	105	58	116	12	15	20
24	3.0	12	9.6	e7.5	53	54	79	62	86	11	23	24
25	2.7	9.9	9.2	e7.4	55	46	64	44	164	11	19	40
26	2.6	8.7	9.1	e7.2	44	39	53	32	91	8.9	14	137
27	e2.6	15	9.1	e7.1	119	38	46	209	65	7.4	11	82
28	e2.6	13	9.1	e7.0	116	35	42	276	49	7.6	9.1	52
29	e2.5	8.0	9.2	e6.9	76	31	38	149	41	8.7	8.7	35
30	e2.5	8.9	9.6	e7.0	---	28	32	93	36	81	8.3	27
31	e2.5	---	9.5	e7.1	---	25	---	65	---	54	7.9	---
TOTAL	108.9	177.0	463.4	339.0	1297.5	1347	3436	1938	3769	917.6	710.3	1153.7
MEAN	3.51	5.90	14.9	10.9	44.7	43.5	115	62.5	126	29.6	22.9	38.5
MAX	14	16	46	61	193	160	952	276	793	169	85	137
MIN	2.1	2.5	6.4	6.9	6.8	22	22	29	14	7.4	7.9	3.7
CFSM	.04	.07	.19	.14	.57	.55	1.45	.79	1.59	.38	.29	.49
IN.	.05	.08	.22	.16	.61	.64	1.62	.91	1.78	.43	.34	.54

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2000, BY WATER YEAR (WY)

MEAN	30.2	96.0	109	116	135	156	138	117	85.5	65.5	36.9	22.3
MAX	312	463	333	352	349	347	302	462	478	324	216	166
(WY)	1987	1994	1991	1969	1971	1978	1996	1996	1998	1969	1979	1989
MIN	2.96	5.90	8.11	4.09	18.8	27.8	18.5	17.4	6.04	5.97	2.83	1.24
(WY)	1998	2000	1977	1977	1978	1969	1971	1976	1988	1991	1999	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1968 - 2000	
ANNUAL TOTAL	20934.29		15657.4			
ANNUAL MEAN	57.4		42.8		92.1	
HIGHEST ANNUAL MEAN					138	1979
LOWEST ANNUAL MEAN					36.7	1977
HIGHEST DAILY MEAN	2380	Jan 22	952	Apr 8	3570	Nov 14 1993
LOWEST DAILY MEAN	.84	Sep 28	2.1	Oct 4	.60	Oct 1 1967
ANNUAL SEVEN-DAY MINIMUM	.98	Sep 22	2.2	Oct 2	.98	Sep 22 1999
INSTANTANEOUS PEAK FLOW			1330	Apr 8	7140	Jul 20 1969
INSTANTANEOUS PEAK STAGE			8.48	Apr 8	14.99	Jul 20 1969
ANNUAL RUNOFF (CFSM)	.73		.54		1.17	
ANNUAL RUNOFF (INCHES)	9.88		7.39		15.88	
10 PERCENT EXCEEDS	120		85		202	
50 PERCENT EXCEEDS	20		20		32	
90 PERCENT EXCEEDS	1.7		3.1		5.6	

e Estimated

03362000 YOUNGS CREEK NEAR EDINBURGH, IN

LOCATION.--Lat 39°25'08", long 86°00'18", in SE$^1/_4$SW$^1/_4$ sec.5, T.11 N., R.5 E., Johnson County, Hydrologic Unit 05120204, on right bank at downstream side of county highway bridge, 0.5 mi southwest of Amity, 2.0 mi upstream from mouth, and 5.0 mi northwest of Edinburgh.

DRAINAGE AREA.--107 mi^2.

PERIOD OF RECORD.--October 1942 to current year. Prior to December 1942 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1944. WSP 1909: 1958. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 670.20 ft above sea level. Prior to June 30, 1955, nonrecording gage at same site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	6.0	6.4	7.5	e6.9	68	34	54	70	56	70	15
2	5.7	5.4	6.4	7.9	e6.7	52	36	63	60	48	59	14
3	5.7	5.9	6.4	27	e6.6	44	37	54	53	78	45	13
4	5.5	6.5	6.6	114	e7.3	40	36	56	46	90	37	38
5	5.7	6.8	15	43	e7.9	35	33	58	46	736	30	36
6	5.2	8.8	28	26	e8.1	32	31	50	43	258	29	22
7	5.1	5.7	15	21	e9.3	30	363	46	e38	133	173	18
8	5.8	5.4	10	17	e9.8	29	1510	45	e35	90	121	15
9	13	6.3	8.0	16	11	28	624	44	32	70	86	15
10	15	7.0	22	15	12	26	345	77	29	72	63	98
11	11	6.7	30	14	14	26	242	60	27	258	47	253
12	7.5	7.4	16	13	14	29	178	50	47	117	37	145
13	6.9	6.7	15	12	16	32	140	120	38	e83	30	113
14	7.9	7.0	34	12	54	37	120	99	34	e63	27	67
15	7.4	7.2	33	11	42	36	104	65	115	50	24	49
16	7.3	7.6	18	11	29	56	91	54	103	42	22	37
17	6.7	7.5	13	11	23	83	122	319	351	36	22	31
18	7.2	5.9	11	e10	238	59	138	529	e442	33	517	27
19	7.2	6.4	9.9	e10	374	78	109	195	e270	34	210	24
20	7.3	11	11	e9.8	153	314	135	124	e192	32	90	68
21	7.1	10	11	e9.4	92	233	324	96	e863	28	55	219
22	6.8	8.4	10	e8.9	79	138	197	82	430	25	41	99
23	6.6	7.2	9.0	e8.7	65	101	143	86	206	22	35	67
24	6.3	6.7	8.4	e8.4	83	84	117	69	139	21	34	83
25	6.2	6.6	7.7	e8.2	89	73	97	54	145	21	30	274
26	6.2	6.8	7.3	e8.1	66	61	82	46	107	20	25	741
27	6.1	8.1	7.4	e8.0	121	59	74	389	148	19	23	326
28	5.9	7.6	7.3	e7.9	124	58	70	333	115	18	22	191
29	5.7	7.4	7.3	e7.6	84	47	62	178	84	18	21	127
30	5.5	7.0	7.3	e7.4	---	40	56	113	67	243	18	97
31	5.8	---	7.5	e7.1	---	36	---	86	---	132	17	---
TOTAL	219.7	213.0	404.9	497.9	1845.6	2064	5650	3694	4375	2946	2060	3322
MEAN	7.09	7.10	13.1	16.1	63.6	66.6	188	119	146	95.0	66.5	111
MAX	15	11	34	114	374	314	1510	529	863	736	517	741
MIN	5.1	5.4	6.4	7.1	6.6	26	31	44	27	18	17	13
CFSM	.07	.07	.12	.15	.59	.62	1.76	1.11	1.36	.89	.62	1.03
IN.	.08	.07	.14	.17	.64	.72	1.96	1.28	1.52	1.02	.72	1.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2000, BY WATER YEAR (WY)

MEAN	21.1	82.2	115	157	174	208	184	148	100	72.1	29.6	23.3
MAX	260	593	470	837	441	498	516	551	463	492	231	228
(WY)	1994	1994	1991	1950	1971	1963	1964	1996	1958	1979	1979	1989
MIN	1.82	3.91	2.90	3.13	15.1	40.9	28.3	20.7	6.73	2.03	2.43	2.36
(WY)	1954	1954	1964	1977	1954	1969	1971	1988	1988	1944	1954	1954

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1944 - 2000	
ANNUAL TOTAL	34714.2		27292.1			
ANNUAL MEAN	95.1		74.6		109	
HIGHEST ANNUAL MEAN					176	1979
LOWEST ANNUAL MEAN					20.3	1954
HIGHEST DAILY MEAN	2420	Jan 22	1510	Apr 8	6260	May 24 1968
LOWEST DAILY MEAN	2.8	Sep 19	5.1	Oct 7	.50	Sep 29 1953
ANNUAL SEVEN-DAY MINIMUM	2.9	Sep 22	5.5	Oct 2	.73	Oct 19 1953
INSTANTANEOUS PEAK FLOW			1630	Apr 8	10700	Jan 27 1952
INSTANTANEOUS PEAK STAGE			7.44	Apr 8	13.40	Jan 27 1952
ANNUAL RUNOFF (CFSM)	.89		.70		1.02	
ANNUAL RUNOFF (INCHES)	12.07		9.49		13.87	
10 PERCENT EXCEEDS	218		178		246	
50 PERCENT EXCEEDS	29		34		36	
90 PERCENT EXCEEDS	5.5		6.8		4.6	

e Estimated

03362500 SUGAR CREEK NEAR EDINBURGH, IN

LOCATION.--Lat 39°21'39", long 85°59'51", in SW$^1/_4$SE$^1/_4$ sec.29, T.11 N., R.5 E., Johnson County, Hydrologic Unit 05120204, on left bank 50 ft upstream from highway bridge in Camp Atterbury, 1.3 mi upstream from confluence with Blue River, 1.5 mi northwest of Edinburgh, and at mile 1.3.

DRAINAGE AREA.--474 mi^2.

PERIOD OF RECORD.--October 1942 to current year. Prior to February 1943 monthly discharge only, published in WSP 1305. Prior to October 1977, published as "near Edinburg".

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 646.23 ft above sea level. Prior to Oct. 1, 1952, nonrecording gage on downstream side of old highway bridge, 100 ft downstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	28	33	37	e36	342	154	224	367	275	238	72
2	24	28	32	41	e35	274	148	231	305	240	195	70
3	26	27	32	53	e37	225	149	245	263	254	157	67
4	25	28	32	164	e39	196	151	255	226	292	138	104
5	22	28	39	179	e40	176	145	258	212	1410	120	221
6	21	29	59	123	e41	159	136	243	202	1070	108	154
7	20	32	65	96	e43	146	388	244	184	542	230	111
8	23	32	59	83	e44	137	3850	222	167	382	348	93
9	29	31	47	74	e47	132	3640	210	154	295	236	86
10	37	31	58	70	e49	126	1710	244	141	252	189	122
11	35	32	69	66	e52	123	1050	346	132	432	152	745
12	36	34	76	64	e58	125	761	311	174	304	123	614
13	30	34	63	61	73	125	586	353	158	237	106	523
14	26	42	72	59	117	133	500	377	141	218	96	359
15	24	35	86	57	194	138	443	298	509	184	90	249
16	26	33	91	54	159	157	396	250	698	160	85	190
17	25	32	71	54	137	208	396	493	1930	143	82	156
18	23	39	58	52	251	186	429	840	3000	131	494	136
19	23	34	51	51	878	186	386	442	3210	130	416	123
20	23	38	48	e49	602	508	384	418	1880	125	225	122
21	23	39	48	e46	422	770	837	515	2270	116	150	341
22	24	42	46	e44	316	584	869	411	1730	107	121	266
23	25	41	42	e42	269	444	649	359	1010	99	110	201
24	25	36	41	e41	260	362	521	363	688	95	106	193
25	25	35	e40	e41	281	311	440	337	663	91	107	305
26	27	37	e39	e40	252	268	376	265	643	88	100	988
27	27	37	e38	e39	294	245	328	625	566	85	94	724
28	27	35	e37	e38	544	239	298	1430	468	84	88	484
29	26	35	e37	e38	431	212	270	935	381	82	84	367
30	26	35	37	e37	---	186	244	601	321	259	79	287
31	26	---	36	e37	---	167	---	453	---	413	75	---
TOTAL	808	1019	1582	1930	6001	7590	20634	12798	22793	8595	4942	8473
MEAN	26.1	34.0	51.0	62.3	207	245	688	413	760	277	159	282
MAX	37	42	91	179	878	770	3850	1430	3210	1410	494	988
MIN	20	27	32	37	35	123	136	210	132	82	75	67
CFSM	.05	.07	.11	.13	.44	.52	1.45	.87	1.60	.58	.34	.60
IN.	.06	.08	.12	.15	.47	.60	1.62	1.00	1.79	.67	.39	.66

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2000, BY WATER YEAR (WY)

MEAN	128	373	503	707	784	938	846	685	482	320	176	124
MAX	983	2591	1742	4000	2192	2281	2076	2878	2381	1564	1348	1295
(WY)	1987	1994	1991	1950	1950	1961	1964	1996	1998	1979	1979	1989
MIN	22.2	33.4	30.4	36.5	74.8	215	170	120	58.7	29.5	25.4	13.4
(WY)	1945	1954	1964	1977	1964	1981	1971	1976	1988	1954	1954	1954

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1943 - 2000	
ANNUAL TOTAL	136861		97165			
ANNUAL MEAN	375		265		504	
HIGHEST ANNUAL MEAN					849	1950
LOWEST ANNUAL MEAN					160	1954
HIGHEST DAILY MEAN	10400	Jan 23	3850	Apr 8	19200	May 29 1956
LOWEST DAILY MEAN	14	Sep 19	20	Oct 7	9.2	Sep 18 1954
ANNUAL SEVEN-DAY MINIMUM	15	Sep 22	23	Oct 2	10	Sep 13 1954
INSTANTANEOUS PEAK FLOW			4840	Apr 8	27600	May 29 1956
INSTANTANEOUS PEAK STAGE			10.15	Apr 8	18.38	May 29 1956
ANNUAL RUNOFF (CFSM)	.79		.56		1.06	
ANNUAL RUNOFF (INCHES)	10.74		7.63		14.44	
10 PERCENT EXCEEDS	853		551		1150	
50 PERCENT EXCEEDS	116		136		208	
90 PERCENT EXCEEDS	24		32		45	

e Estimated

03363500 FLATROCK RIVER AT ST. PAUL, IN

LOCATION.--Lat 39°25'03", long 85°38'03", in SE$^1/_4$NE$^1/_4$ sec.9, T.11 N., R.8 E., Shelby County, Hydrologic Unit 05120205, on right bank 500 ft downstream from county road bridge, 0.8 mi southwest of St. Paul, 1.5 mi downstream from Mill Creek, and at mile 34.4.

DRAINAGE AREA.--303 mi^2.

PERIOD OF RECORD.--October 1930 to current year. Prior to October 1958, published as Flatrock Creek at St. Paul.

REVISED RECORDS.--WSP 853: 1934-36. WSP 973: 1942. WSP 1335: 1933, 1936. WSP 1725: 1957(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 764.84 ft above sea level (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 21, 1938, nonrecording gage at site 500 ft upstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of approximately 20.5 ft, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	3.9	8.7	13	e15	205	145	252	253	165	76	13
2	1.2	5.0	8.5	15	e15	172	148	292	208	143	57	12
3	1.4	4.2	9.8	31	e16	145	156	298	178	183	e48	12
4	2.0	e4.0	10	130	e16	136	173	293	158	214	e41	18
5	e1.7	e3.9	11	118	e16	127	175	295	155	653	e36	20
6	e1.4	e3.7	13	82	e17	115	168	277	148	274	e33	17
7	1.2	e3.6	15	61	e18	103	741	252	130	322	e48	14
8	2.2	e3.6	13	48	e19	100	3490	243	120	265	64	12
9	3.9	e3.5	12	41	e20	97	3530	212	111	171	81	12
10	3.2	e3.5	25	38	24	93	1570	208	100	141	137	15
11	7.2	e3.4	39	33	31	90	868	175	91	127	83	30
12	14	e3.3	22	30	39	97	665	155	96	118	55	33
13	10	e3.1	20	28	54	92	542	309	93	106	41	34
14	6.3	e3.1	36	26	151	93	471	246	87	93	35	28
15	3.8	e3.1	41	24	249	108	410	177	357	83	31	23
16	2.7	e3.0	37	23	171	154	360	154	389	75	28	20
17	2.5	e3.0	29	22	131	271	452	166	684	70	29	16
18	2.8	7.7	24	21	387	218	484	157	887	65	72	14
19	3.2	9.7	20	e21	978	226	390	208	1100	64	43	13
20	2.1	16	20	e21	637	619	408	289	684	64	32	14
21	2.6	18	19	e20	406	823	669	232	1520	61	27	31
22	2.6	11	e17	e19	303	636	635	184	927	54	23	29
23	3.8	8.9	e15	e19	254	469	526	172	555	47	22	24
24	5.0	8.6	e15	e19	253	381	444	169	405	42	23	27
25	5.1	9.8	e14	e19	285	321	386	148	760	38	20	34
26	6.0	12	e14	e18	239	257	334	125	562	36	20	58
27	4.8	11	e14	e18	255	257	305	594	404	34	18	59
28	4.1	13	e13	e17	266	253	294	956	299	31	17	40
29	e4.0	13	e13	e16	230	204	271	620	233	31	17	33
30	e3.9	9.6	13	e16	---	171	254	427	195	35	16	27
31	e3.9	---	13	e15	---	154	---	324	---	55	15	---
TOTAL	120.8	209.2	574.0	1022	5495	7187	19464	8609	11889	3860	1288	732
MEAN	3.90	6.97	18.5	33.0	189	232	649	278	396	125	41.5	24.4
MAX	14	18	41	130	978	823	3530	956	1520	653	137	59
MIN	1.2	3.0	8.5	13	15	90	145	125	87	31	15	12
CFSM	.01	.02	.06	.11	.63	.77	2.14	.92	1.31	.41	.14	.08
IN.	.01	.03	.07	.13	.67	.88	2.39	1.06	1.46	.47	.16	.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2000, BY WATER YEAR (WY)

MEAN	81.9	213	337	494	519	585	581	448	297	186	91.5	65.3
MAX	585	1342	1567	3450	1808	1605	1534	1968	1502	915	716	392
(WY)	1937	1994	1991	1937	1950	1961	1964	1996	1998	1979	1979	1989
MIN	1.96	6.97	9.98	15.1	27.7	41.8	51.9	42.9	19.7	9.28	4.06	1.36
(WY)	1964	2000	1964	1977	1935	1941	1941	1934	1934	1936	1988	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1931 - 2000	
ANNUAL TOTAL	74229.78		60450.0			
ANNUAL MEAN	203		165		324	
HIGHEST ANNUAL MEAN					642	1950
LOWEST ANNUAL MEAN					40.6	1941
HIGHEST DAILY MEAN	5800	Jan 23	3530	Apr 9	16500	Jan 5 1949
LOWEST DAILY MEAN	.71	Sep 16	1.2	Oct 2	.60	Aug 7 1931
ANNUAL SEVEN-DAY MINIMUM	.83	Sep 10	1.6	Oct 1	.80	Oct 12 1963
INSTANTANEOUS PEAK FLOW			4220	Apr 8	18500	Jan 5 1949
INSTANTANEOUS PEAK STAGE			5.66	Apr 8	12.37	May 24 1968
ANNUAL RUNOFF (CFSM)	.67		.55		1.07	
ANNUAL RUNOFF (INCHES)	9.11		7.42		14.52	
10 PERCENT EXCEEDS	487		407		750	
50 PERCENT EXCEEDS	50		41		131	
90 PERCENT EXCEEDS	2.5		4.0		16	

e Estimated

03363900 FLATROCK RIVER AT COLUMBUS, IN

LOCATION.--Lat 39°14'06", long 85°55'36", in NE$^1/_4$SW$^1/_4$ sec.12, T.9 N., R.5 E., Bartholomew County, Hydrologic Unit 05120205, on left bank at downstream side of bridge on U.S. Highway 31, 0.2 mi northwest of Columbus city limits, and 2.6 mi upstream from mouth.

DRAINAGE AREA.--534 mi^2.

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 610.14 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	24	35	47	e40	e335	304	357	570	416	e220	e41
2	25	26	35	51	e39	e309	292	357	484	365	e151	e39
3	25	25	33	70	e40	e284	298	359	420	332	e113	e37
4	24	25	32	e123	e41	e271	303	348	373	441	e92	e69
5	24	26	34	e174	e42	e258	312	344	350	1070	e79	e81
6	23	26	37	e159	e43	e244	304	345	333	1020	e74	e58
7	23	26	36	e130	e44	e239	369	330	305	702	e83	e47
8	25	25	36	e119	e45	235	4160	327	273	637	e106	e42
9	31	25	36	e109	e49	227	5500	321	253	490	e138	e39
10	27	26	43	100	e54	218	3700	319	236	404	e260	e44
11	27	26	43	93	60	208	1610	325	217	485	e190	e89
12	28	27	74	87	68	208	1240	299	207	382	e159	e129
13	27	29	70	81	85	206	1020	381	205	320	e111	e105
14	27	31	73	77	e141	202	892	595	202	277	e89	e80
15	26	29	e83	72	e242	222	797	454	231	247	e69	e66
16	29	28	e93	70	e269	262	712	368	590	221	e58	e52
17	29	28	e90	67	e225	471	665	539	772	199	e56	e43
18	27	27	80	65	e212	536	788	796	1340	190	e112	e39
19	27	30	73	64	e504	462	711	620	1660	e179	e231	e42
20	28	34	69	e58	e864	808	642	621	1260	e172	e194	e62
21	26	34	64	e56	e635	1220	833	589	1660	e151	e92	e98
22	25	40	60	e55	e324	1070	934	488	2000	e138	e81	e88
23	25	40	56	e54	e280	844	840	450	1190	e122	e66	e69
24	26	39	52	e53	e268	705	739	414	891	e112	e61	e103
25	25	35	49	e52	e274	619	648	377	899	e99	e64	e118
26	24	36	48	e51	e261	539	565	329	1060	e93	e59	e165
27	24	35	47	e49	e285	489	500	516	818	e88	e55	e231
28	23	35	46	e45	e420	486	463	1360	687	e83	e49	e168
29	23	35	46	e43	e540	442	428	1120	564	e80	e47	e122
30	24	34	45	e42	---	375	389	852	482	e120	e46	e103
31	24	---	45	e41	---	331	---	688	---	e165	e44	---
TOTAL	795	906	1663	2357	6394	13325	30958	15588	20532	9800	3249	2469
MEAN	25.6	30.2	53.6	76.0	220	430	1032	503	684	316	105	82.3
MAX	31	40	93	174	864	1220	5500	1360	2000	1070	260	231
MIN	23	24	32	41	39	202	292	299	202	80	44	37
CFSM	.05	.06	.10	.14	.41	.80	1.93	.94	1.28	.59	.20	.15
IN.	.06	.06	.12	.16	.45	.93	2.16	1.09	1.43	.68	.23	.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2000, BY WATER YEAR (WY)

MEAN	154	430	657	746	934	968	1011	900	612	392	252	147
MAX	912	2336	2092	1827	2524	2223	2301	3871	2728	1556	1296	837
(WY)	1994	1994	1991	1969	1982	1978	1996	1996	1998	1979	1979	1989
MIN	25.6	30.2	44.8	30.6	189	204	251	132	77.2	50.8	35.0	17.0
(WY)	2000	2000	1977	1977	1992	1992	1976	1976	1988	1988	1988	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1968 - 2000	
ANNUAL TOTAL	136909		108036			
ANNUAL MEAN	375		295		598	
HIGHEST ANNUAL MEAN					949	1996
LOWEST ANNUAL MEAN					271	1977
HIGHEST DAILY MEAN	7880	Jan 24	5500	Apr 9	18200	Dec 31 1990
LOWEST DAILY MEAN	13	Sep 18	23	Oct 6	13	Sep 18 1999
ANNUAL SEVEN-DAY MINIMUM	13	Sep 18	24	Oct 26	13	Sep 18 1999
INSTANTANEOUS PEAK FLOW			6560	Apr 9	20000	May 25 1968
INSTANTANEOUS PEAK STAGE			11.43	Apr 9	15.87	May 25 1968
ANNUAL RUNOFF (CFSM)	.70		.55		1.12	
ANNUAL RUNOFF (INCHES)	9.54		7.53		15.22	
10 PERCENT EXCEEDS	889		711		1320	
50 PERCENT EXCEEDS	118		112		310	
90 PERCENT EXCEEDS	24		27		58	

e Estimated

03364000 EAST FORK WHITE RIVER AT COLUMBUS, IN

LOCATION.--Lat 39°12'00", long 85°55'32", in NE$^1/_4$NW$^1/_4$ sec.25, T.9 N., R.5 E., Bartholomew County, Hydrologic Unit 05120205, on left bank at abutment of abandoned bridge at west end of Second Street in Columbus, 0.6 mi downstream from confluence of Driftwood River and Flatrock River, 1.3 mi upstream from Haw Creek, and at mile 238.7.

DRAINAGE AREA.--1,707 mi^2.

PERIOD OF RECORD.--October 1947 to current year. Prior to January 1948 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1948-49. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 603.12 ft above sea level. Prior to Oct. 22, 1952, nonrecording gage 600 ft upstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	156	164	178	217	190	1560	948	1180	1800	1400	835	300
2	160	174	184	217	188	1370	900	1150	1570	1260	695	292
3	155	168	182	280	192	1200	895	1200	1380	1180	601	282
4	155	165	182	492	197	1080	907	1210	1250	1450	528	421
5	150	163	190	623	199	998	903	1250	1170	2840	481	547
6	145	167	218	581	197	928	866	1270	1110	3570	448	571
7	145	168	237	453	196	848	1250	1250	1040	2190	558	428
8	156	167	255	379	196	794	9100	1190	952	1860	835	353
9	178	168	236	337	197	755	12300	1130	880	1540	840	322
10	183	165	249	315	204	728	11000	1140	824	1330	845	373
11	187	165	265	297	216	707	5700	1310	766	1810	741	1060
12	190	167	289	285	233	717	3890	1310	775	1460	589	1450
13	188	172	289	274	275	714	3040	1450	813	1220	496	1230
14	184	175	297	265	386	715	2580	1670	769	1080	437	974
15	175	179	313	257	693	741	2270	1430	892	970	399	737
16	172	171	347	250	811	897	2020	1230	2450	866	370	595
17	179	169	328	241	673	1300	2000	2190	3380	783	355	506
18	177	170	298	238	982	1310	2220	4310	6630	727	810	451
19	174	184	279	232	2870	1230	2020	2270	7530	703	1100	404
20	176	194	272	232	3130	2150	1870	1940	6960	669	735	389
21	176	196	262	206	2270	3150	2590	2090	5900	642	543	630
22	173	203	255	e200	1780	2940	3100	1780	6530	596	453	661
23	166	210	250	e195	1530	2350	2710	1590	4090	554	414	586
24	165	201	243	e190	1520	1950	2310	1530	2950	520	423	527
25	163	189	225	e187	1600	1710	2000	1510	2670	485	443	632
26	163	193	224	e186	1480	1520	1760	1310	2920	456	430	1630
27	162	190	223	e185	1530	1390	1590	1970	2440	431	398	1540
28	161	188	222	e184	1850	1350	1470	4410	2110	414	357	1160
29	160	186	220	e183	1790	1270	1360	3870	1770	413	343	905
30	162	181	219	e181	---	1130	1270	2780	1560	509	326	737
31	163	---	219	e181	---	1030	---	2160	---	924	311	---
TOTAL	5199	5352	7650	8543	27575	40532	86839	56080	75881	34852	17139	20693
MEAN	168	178	247	276	951	1307	2895	1809	2529	1124	553	690
MAX	190	210	347	623	3130	3150	12300	4410	7530	3570	1100	1630
MIN	145	163	178	181	188	707	866	1130	766	413	311	282
CFSM	.10	.10	.14	.16	.56	.77	1.70	1.06	1.48	.66	.32	.40
IN.	.11	.12	.17	.19	.60	.88	1.89	1.22	1.65	.76	.37	.45

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2000, BY WATER YEAR (WY)

MEAN	531	1332	1932	2638	2977	3240	3097	2554	1763	1272	756	517
MAX	2957	8137	6004	14400	8640	8014	7466	10960	8272	4990	5185	3696
(WY)	1987	1994	1967	1950	1950	1963	1964	1996	1998	1958	1979	1989
MIN	104	172	191	163	342	829	852	532	325	161	136	101
(WY)	1995	1955	1964	1977	1964	1954	1971	1976	1988	1954	1954	1954

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1949 - 2000	
ANNUAL TOTAL	469682		386335			
ANNUAL MEAN	1287		1056		1878	
HIGHEST ANNUAL MEAN					3304	1950
LOWEST ANNUAL MEAN					534	1954
HIGHEST DAILY MEAN	29600	Jan 24	12300	Apr 9	49000	Mar 6 1963
LOWEST DAILY MEAN	113	Sep 20	145	Oct 6	85	Sep 22 1994
ANNUAL SEVEN-DAY MINIMUM	115	Sep 17	152	Oct 1	90	Sep 28 1954
INSTANTANEOUS PEAK FLOW			12400	Apr 9	52300	Mar 6 1963
INSTANTANEOUS PEAK STAGE			6.65	Apr 9	16.23	Mar 6 1963
ANNUAL RUNOFF (CFSM)	.75		.62		1.10	
ANNUAL RUNOFF (INCHES)	10.24		8.42		14.95	
10 PERCENT EXCEEDS	2760		2270		4240	
50 PERCENT EXCEEDS	431		598		955	
90 PERCENT EXCEEDS	160		175		248	

e Estimated

03364500 CLIFTY CREEK AT HARTSVILLE, IN

LOCATION.--Lat 39°16'25", long 85°42'10", in NW$^1/_4$NW$^1/_4$ sec.36, T.10 N., R.7 E., Bartholomew County, Hydrologic Unit 05120206, at downstream side of left abutment of county highway bridge, 0.2 mi north of Hartsville, 5.9 mi upstream from Duck Creek, and at mile 22.0.

DRAINAGE AREA.--91.4 mi^2.

PERIOD OF RECORD.--February 1948 to current year.

REVISED RECORDS.--WSP 1335: 1950. WSP 1725: 1949(M). WSP 2109: Drainage area. WDR IN-74-1: 1973.

GAGE.--Water-stage recorder. Datum of gage is 677.34 ft above sea level. Prior to Sept. 24, 1952, nonrecording gage at same site and datum.

REMARKS.--Records good except for estimated daily discharges and those below 1 ft^3/s, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1913 reached an elevation of 702.4 ft above sea level, from floodmarks, upstream from bridge.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	1.1	2.1	e5.8	88	44	45	71	58	9.3	3.0
2	.00	.00	1.2	2.2	e5.4	68	45	48	58	48	8.6	2.9
3	.00	.00	1.5	20	e5.0	55	46	42	48	61	7.7	2.9
4	.00	.00	1.7	287	e5.6	51	48	40	41	126	6.9	4.7
5	.00	.00	2.1	115	e5.9	44	48	48	40	712	6.1	3.5
6	.00	.00	2.3	61	e5.6	38	47	65	37	242	6.0	4.5
7	.00	.00	2.3	38	e5.8	33	316	51	29	166	7.8	3.6
8	.00	.00	2.2	27	6.2	31	2190	64	26	98	12	2.9
9	.00	.00	2.1	22	7.2	31	552	59	24	72	83	2.9
10	.00	.00	3.2	19	8.9	28	322	53	21	105	127	3.5
11	.00	.00	3.4	17	14	27	228	41	19	172	36	4.1
12	.00	.00	3.8	14	28	31	173	38	19	72	21	6.1
13	.00	.00	4.8	12	31	30	138	217	19	51	15	5.0
14	.00	.00	9.2	10	154	31	117	190	23	40	12	3.7
15	.00	.00	14	9.3	118	31	100	104	266	39	9.8	3.8
16	.00	.00	7.7	8.6	81	65	84	75	239	32	8.4	3.2
17	.00	.00	5.3	7.9	56	229	110	172	782	26	9.2	2.6
18	.00	.00	4.4	7.8	308	134	146	113	515	22	99	2.1
19	.00	.03	3.9	6.8	561	143	107	133	273	23	51	1.7
20	.00	.17	4.1	8.4	246	437	137	92	163	21	23	2.4
21	.00	.06	3.2	6.4	153	381	375	69	904	18	15	6.3
22	.00	.06	2.6	7.2	123	220	288	61	354	15	11	9.7
23	.00	.02	2.4	e6.5	103	157	192	71	176	13	9.5	10
24	.00	.01	2.2	e5.5	131	124	143	61	196	12	8.8	9.9
25	.00	.00	1.9	e5.0	156	102	111	44	307	10	7.7	32
26	.00	.23	1.8	e4.6	111	82	88	36	171	9.3	6.5	151
27	.00	.19	1.8	e4.3	144	85	75	736	156	8.6	6.0	90
28	.00	.12	1.8	e4.0	144	81	68	367	128	7.7	5.5	44
29	.00	.10	1.8	e3.7	105	67	57	194	92	8.0	4.6	27
30	.00	.05	1.9	e3.5	---	56	48	124	72	10	4.2	20
31	.00	---	2.1	e5.0	---	49	---	92	---	11	4.0	---
TOTAL	0.00	1.04	103.8	750.8	2828.4	3029	6443	3545	5269	2308.6	641.6	469.0
MEAN	.000	.035	3.35	24.2	97.5	97.7	215	114	176	74.5	20.7	15.6
MAX	.00	.23	14	287	561	437	2190	736	904	712	127	151
MIN	.00	.00	1.1	2.1	5.0	27	44	36	19	7.7	4.0	1.7
CFSM	.00	.00	.04	.26	1.07	1.07	2.35	1.25	1.92	.81	.23	.17
IN.	.00	.00	.04	.31	1.15	1.23	2.62	1.44	2.14	.94	.26	.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2000, BY WATER YEAR (WY)

MEAN	20.0	69.5	114	159	165	181	159	135	79.6	55.6	31.9	17.8
MAX	183	431	515	874	551	465	572	482	487	242	264	261
(WY)	1978	1986	1991	1949	1950	1961	1996	1996	1998	1992	1995	1974
MIN	.000	.000	.13	1.47	7.18	21.1	17.7	10.9	1.16	.000	.000	.000
(WY)	1954	1954	1954	1977	1954	1954	1976	1976	1988	1954	1954	1953

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1949 - 2000	
ANNUAL TOTAL	22742.70		25389.24			
ANNUAL MEAN	62.3		69.4		98.6	
HIGHEST ANNUAL MEAN					197	1950
LOWEST ANNUAL MEAN					9.00	1954
HIGHEST DAILY MEAN	1500	Jan 23	2190	Apr 8	6230	Apr 29 1996
LOWEST DAILY MEAN	.00	Sep 7	.00	Oct 1	.00	Oct 14 1948
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 7	.00	Oct 1	.00	Sep 2 1951
INSTANTANEOUS PEAK FLOW			3120	Apr 8	11300	Jan 21 1959
INSTANTANEOUS PEAK STAGE			7.59	Apr 8	14.29	Jan 21 1959
ANNUAL RUNOFF (CFSM)	.68		.76		1.08	
ANNUAL RUNOFF (INCHES)	9.26		10.33		14.66	
10 PERCENT EXCEEDS	157		171		218	
50 PERCENT EXCEEDS	15		16		31	
90 PERCENT EXCEEDS	.00		.00		.80	

e Estimated

03365500 EAST FORK WHITE RIVER AT SEYMOUR, IN

LOCATION.--Lat 38°58'57", long 85°53'57", in NW1/4NE1/4 sec.7, T.6 N., R.6 E., Jackson County, Hydrologic Unit 05120206, on left bank 1,700 ft downstream from highway bridge, 1 mi north of Seymour, 9.5 mi downstream from Sand Creek, and at mile 214.6.

DRAINAGE AREA.--2,341 mi^2.

PERIOD OF RECORD.--October 1927 to current year. Yearly maximum discharge only for water years 1924-27 published in WSP 1305. Daily gage heights from May 1923 to September 1927 are available in the district office.

REVISED RECORDS.--WSP 743: 1928-29, 1931-32. WSP 783: 1934. WSP 873: 1938. WSP 1335: 1928(M), 1929-30, 1932-33(M), 1937(M), 1942. WSP 1435: 1949. WSP 1705: 1958. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 550.67 ft above sea level. Oct. 1, 1927 to July 2, 1931, nonrecording gage 1,700 ft upstream at datum 7.61 ft higher. July 3, 1931 to July 16, 1934, nonrecording gage at site 100 ft downstream at present datum.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 21.0 ft, from information by Corps of Engineers and Indiana Department of Highways, discharge, 120,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	174	178	216	250	314	2040	1060	1900	2870	2180	1150	476
2	179	185	217	251	314	1730	1000	1790	2470	1960	1020	457
3	181	184	214	352	316	1470	1010	1740	2340	1790	917	441
4	179	178	217	3540	323	1270	1120	1780	1930	1910	820	462
5	177	180	219	1730	321	1140	1110	2140	1730	3530	755	539
6	173	183	230	1060	321	1040	1020	2540	1600	7240	711	609
7	170	184	240	799	320	960	e1980	2090	1490	4420	1210	567
8	178	183	256	662	319	892	e14300	2360	1370	3080	1210	493
9	206	184	269	585	319	848	e18700	2050	1250	2580	1260	456
10	222	185	279	538	324	804	e14000	1850	1170	2130	3980	445
11	217	186	283	506	336	781	12900	1800	1090	3700	2320	562
12	220	184	311	474	352	784	7170	1880	1030	3640	1370	1240
13	218	185	354	458	407	787	5110	1860	1090	2340	1010	1370
14	208	187	377	430	1130	777	4180	2840	1110	1900	851	1160
15	197	188	396	417	1300	777	3640	2500	1090	1670	757	930
16	192	189	430	404	1180	833	3250	2010	2040	1500	694	755
17	188	190	421	389	1010	1620	3250	1780	8210	1350	646	650
18	185	188	383	385	2340	1840	4130	7990	10300	1220	1970	581
19	183	189	349	378	7850	1590	3550	5320	10700	1310	2430	534
20	180	213	332	377	5460	3450	3140	3470	10000	1330	1500	500
21	180	217	317	359	3660	5050	4490	3050	8830	1110	1040	526
22	182	216	303	343	2610	4350	5430	2820	9140	1030	831	703
23	181	236	295	e330	2140	3360	4700	2480	7930	946	736	719
24	178	237	288	e320	2150	2630	3900	2270	5080	880	686	657
25	176	227	276	e312	2800	2190	3350	2170	4130	831	662	665
26	178	228	264	e310	2230	1880	2940	1930	4190	787	631	3080
27	181	225	261	e308	2170	1690	2640	3330	3740	747	599	3040
28	179	218	257	e305	2640	1630	2440	8450	3300	720	568	2070
29	180	215	255	e310	2410	1500	2250	6630	2840	708	544	1480
30	180	214	254	e310	---	1310	2070	4720	2480	753	521	1130
31	179	---	251	315	---	1160	---	3530	---	909	496	---
TOTAL	5801	5956	9014	17507	47366	52183	139830	93070	116540	60201	33895	27297
MEAN	187	199	291	565	1633	1683	4661	3002	3885	1942	1093	910
MAX	222	237	430	3540	7850	5050	18700	8450	10700	7240	3980	3080
MIN	170	178	214	250	314	777	1000	1740	1030	708	496	441
CFSM	.08	.08	.12	.24	.70	.72	1.99	1.28	1.66	.83	.47	.39
IN.	.09	.09	.14	.28	.75	.83	2.22	1.48	1.85	.96	.54	.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2000, BY WATER YEAR (WY)

MEAN	695	1595	2512	3823	3964	4558	4363	3489	2347	1588	966	641
MAX	3599	11570	9245	19560	12290	10690	9211	17020	12630	6040	8795	4244
(WY)	1994	1994	1928	1950	1950	1963	1944	1996	1998	1979	1979	1989
MIN	162	182	207	192	373	299	356	264	394	199	148	136
(WY)	1941	1935	1964	1977	1931	1941	1941	1941	1931	1941	1941	1941

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1928 - 2000	
ANNUAL TOTAL	693673		608660			
ANNUAL MEAN	1900		1663		2538	
HIGHEST ANNUAL MEAN					4575	1950
LOWEST ANNUAL MEAN					287	1941
HIGHEST DAILY MEAN	32700	Jan 24	e18700	Apr 9	63500	Jan 6 1949
LOWEST DAILY MEAN	155	Sep 26	170	Oct 7	86	Sep 28 1941
ANNUAL SEVEN-DAY MINIMUM	157	Sep 23	176	Oct 1	93	Sep 25 1941
INSTANTANEOUS PEAK FLOW			unknown		78500	Jan 5 1949
INSTANTANEOUS PEAK STAGE			unknown		19.67	Jan 5 1949
ANNUAL RUNOFF (CFSM)	.81		.71		1.08	
ANNUAL RUNOFF (INCHES)	11.02		9.67		14.73	
10 PERCENT EXCEEDS	4870		3670		5740	
50 PERCENT EXCEEDS	664		840		1210	
90 PERCENT EXCEEDS	180		188		298	

e Estimated

03366200 HARBERTS CREEK NEAR MADISON, IN

LOCATION.--Lat 38°46'55", long 85°29'08", in SW$^1/_4$SE$^1/_4$ sec.14, T.4 N., R.9 E., Jefferson County, Hydrologic Unit 05120207, mounted on left downstream wingwall of bridge on County Road 533 West, 0.2 mi west of Smyrna, 3.7 mi upstream from Big Creek, and 4 mi northwest of Madison.

DRAINAGE AREA.--9.31 mi^2.

PERIOD OF RECORD.--August 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 725.75 ft above sea level.

REMARKS.--Records good except for estimated daily discharges and daily discharges below 1.0 ft^3/s, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.44	.00	.00	.39	e.21	11	3.8	1.5	1.1	.41	8.0	.52
2	.04	.00	.00	.49	e.20	7.9	24	4.3	1.0	.31	1.6	.45
3	.00	.00	.00	405	e.22	6.6	57	2.2	.70	.29	.85	.41
4	.00	.00	.00	188	e.21	6.0	56	1.7	.57	.31	.60	.53
5	.00	.01	.08	15	e.28	5.1	20	1.9	.70	.37	.43	.40
6	.00	.00	.18	7.0	e.36	4.5	12	1.6	.56	.44	.43	.33
7	.00	.00	.41	4.4	e.47	3.9	30	1.4	.43	.38	146	.32
8	.00	.00	.19	3.3	e.64	3.6	139	1.7	.34	.17	97	.34
9	5.4	.00	.09	2.9	e.85	3.4	20	1.2	.30	.09	118	.49
10	4.1	.00	4.8	2.3	1.5	3.0	11	2.0	.24	.08	196	.48
11	1.1	.00	1.8	1.9	1.5	5.0	7.2	1.1	.19	1.7	15	18
12	.40	.00	3.2	1.8	1.1	9.4	5.2	.88	.16	.93	6.5	21
13	.12	.00	11	2.9	319	6.2	4.0	7.4	.10	.40	4.0	6.0
14	.00	.00	37	2.1	139	4.9	3.4	3.2	.11	.20	2.7	2.2
15	.00	.00	7.1	1.6	20	4.3	2.9	1.9	.21	.08	1.9	1.3
16	.00	.00	3.4	1.5	10	102	2.3	e1.1	9.2	.02	1.3	.97
17	.00	.00	1.9	1.3	6.7	37	42	1.5	88	.00	1.1	e.76
18	.00	.00	1.3	e1.1	595	16	26	e1.1	61	.00	62	.64
19	.00	.00	1.0	e.90	114	62	11	e.82	14	24	8.5	.58
20	.00	.29	.90	e.76	28	176	64	e.63	5.0	2.5	3.8	.63
21	.00	.81	.72	e.63	16	38	61	e.50	4.2	1.1	2.5	1.1
22	.00	.31	.61	e.53	15	19	23	e.38	2.6	.59	1.9	.84
23	.00	.12	.55	e.45	11	13	11	1.0	1.7	.37	1.9	2.8
24	.00	.02	.45	e.40	17	10	7.3	.85	1.4	.27	4.0	5.9
25	.00	.00	.27	e.34	14	8.1	5.4	.68	2.0	.18	2.4	188
26	.00	.26	e.20	e.29	9.7	6.6	3.9	.63	1.3	.13	1.6	107
27	.00	1.0	e.14	e.25	80	8.6	3.1	6.8	1.0	.10	1.3	17
28	.00	.37	e.15	e.22	24	8.8	2.5	8.8	.85	.05	1.1	7.6
29	.00	.14	e.16	e.20	14	6.8	1.9	3.9	.70	.49	.87	4.5
30	.00	.02	e.28	e.22	---	5.2	1.6	1.7	.55	.97	.70	3.0
31	.00	---	e.30	e.22	---	4.3	---	1.3	---	23	.59	---
TOTAL	11.60	3.35	78.18	648.39	1439.94	606.2	661.5	65.67	200.21	59.93	694.57	394.09
MEAN	.37	.11	2.52	20.9	49.7	19.6	22.0	2.12	6.67	1.93	22.4	13.1
MAX	5.4	1.0	37	405	595	176	139	8.8	88	24	196	188
MIN	.00	.00	.00	.20	.20	3.0	1.6	.38	.10	.00	.43	.32
CFSM	.04	.01	.27	2.25	5.33	2.10	2.37	.23	.72	.21	2.41	1.41
IN.	.05	.01	.31	2.59	5.75	2.42	2.64	.26	.80	.24	2.78	1.57

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2000, BY WATER YEAR (WY)

MEAN	3.52	12.5	18.0	19.3	21.8	25.6	24.4	17.7	8.80	3.89	4.54	2.42
MAX	28.8	48.6	64.1	57.5	51.9	52.0	84.5	76.1	51.3	14.7	28.2	18.7
(WY)	1984	1980	1991	1982	1971	1975	1996	1996	1997	1993	1992	1979
MIN	.036	.11	1.52	.49	1.47	4.72	2.65	.72	.083	.21	.000	.000
(WY)	1998	2000	1977	1977	1992	1969	1976	1999	1988	1991	1999	1998

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1969 - 2000	
ANNUAL TOTAL	3345.57		4863.63			
ANNUAL MEAN	9.17		13.3		13.5	
HIGHEST ANNUAL MEAN					23.7	1996
LOWEST ANNUAL MEAN					6.13	1981
HIGHEST DAILY MEAN	356	Jan 23	595	Feb 18	1110	Apr 29 1996
LOWEST DAILY MEAN	.00	May 29	.00	Oct 3	.00	Oct 1 1968
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 6	.00	Oct 14	.00	Aug 26 1969
INSTANTANEOUS PEAK FLOW			1400	Jan 3	2150	May 16 1990
INSTANTANEOUS PEAK STAGE			6.94	Jan 3	8.96	May 16 1990
ANNUAL RUNOFF (CFSM)	.98		1.43		1.45	
ANNUAL RUNOFF (INCHES)	13.37		19.43		19.68	
10 PERCENT EXCEEDS	16		22		26	
50 PERCENT EXCEEDS	.34		1.1		2.4	
90 PERCENT EXCEEDS	.00		.00		.07	

e Estimated

03366500 MUSCATATUCK RIVER NEAR DEPUTY, IN

LOCATION.--Lat 38°48'15", long 85°40'26", in SW$^1/_4$NE$^1/_4$ sec.7, T.4 N., R.8 E., Jefferson County, Hydrologic Unit 05120207, on left bank approximately 100 ft downstream of highway bridge, 1.4 mi northwest of Deputy, 1.9 mi upstream from Coffee Creek, 2.4 mi downstream from confluence of Graham Creek and Big Creek, and at mile 50.0.

DRAINAGE AREA.--293 mi^2.

PERIOD OF RECORD.--November 1947 to current year.

REVISED RECORDS.--WSP 1335: 1948. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 540.00 ft above sea level. Prior to June 22, 1955, nonrecording gage at same site. Prior to Aug. 25, 1983, at datum 1.17 ft higher.

REMARKS.--Records fair except for discharges below 0.3 ft^3/s and estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.19	.28	3.2	15	e29	302	131	78	47	55	191	45
2	.17	e.90	3.1	16	e28	240	186	89	37	52	157	42
3	.16	e1.4	2.8	1780	e28	199	986	90	40	49	86	40
4	.17	e1.8	2.8	10800	e30	176	1460	261	31	47	62	40
5	.17	1.4	2.9	1190	e30	157	650	159	32	287	50	39
6	.16	1.1	3.1	365	e31	134	363	118	28	358	45	36
7	.14	.95	3.0	237	32	115	315	88	24	214	2030	34
8	.19	.85	2.8	178	33	99	5840	102	21	106	1450	33
9	1.0	.83	2.7	146	35	92	1570	82	19	74	804	33
10	2.3	1.0	5.4	122	38	77	552	74	17	60	3080	33
11	2.4	1.1	e11	97	41	72	359	118	16	94	698	38
12	1.8	1.0	9.4	76	42	108	274	100	14	333	245	114
13	1.6	1.1	31	86	939	126	218	196	13	152	162	115
14	.98	1.1	e220	90	6110	122	185	485	16	94	119	65
15	.56	.96	e210	74	1100	100	164	198	28	71	91	52
16	.51	.84	116	67	453	658	141	118	39	58	75	44
17	.49	.82	56	59	290	1680	385	81	2390	57	65	40
18	.36	.76	36	53	6260	508	1180	186	1290	52	1620	36
19	.27	.91	29	50	9460	387	498	173	820	927	835	34
20	.27	2.5	25	50	1370	3130	464	98	289	264	235	33
21	.32	4.2	23	43	565	1620	1910	66	210	152	151	33
22	.38	3.8	20	41	408	581	1060	51	181	89	108	31
23	.37	3.3	19	39	342	369	493	45	155	67	88	32
24	.35	3.1	18	37	388	282	321	40	112	56	82	60
25	.21	3.4	17	34	535	232	252	35	93	48	109	597
26	.21	3.9	17	35	355	192	201	32	82	43	108	2540
27	.22	4.2	16	32	981	193	165	105	76	40	99	671
28	.23	3.9	16	30	917	236	137	358	71	37	75	260
29	.24	3.5	16	e28	416	288	112	210	65	37	63	158
30	.27	3.3	15	e28	---	207	92	134	60	71	55	109
31	.27	---	15	e29	---	161	---	72	---	55	50	---
TOTAL	16.96	58.20	967.2	15927	31286	12843	20664	4042	6316	4099	13088	5437
MEAN	.55	1.94	31.2	514	1079	414	689	130	211	132	422	181
MAX	2.4	4.2	220	10800	9460	3130	5840	485	2390	927	3080	2540
MIN	.14	.28	2.7	15	28	72	92	32	13	37	45	31
CFSM	.00	.01	.11	1.75	3.68	1.41	2.35	.45	.72	.45	1.44	.62
IN.	.00	.01	.12	2.02	3.97	1.63	2.62	.51	.80	.52	1.66	.69

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2000, BY WATER YEAR (WY)

MEAN	57.2	244	433	620	643	719	580	456	244	154	94.9	48.8
MAX	720	1438	1723	2896	1826	2055	1957	1967	1552	661	748	480
(WY)	1984	1980	1991	1950	1950	1964	1996	1983	1997	1958	1992	1974
MIN	.000	.15	.21	9.24	18.1	65.2	73.2	23.8	9.46	.42	.000	.000
(WY)	1954	1964	1964	1977	1954	1954	1976	1976	1988	1954	1954	1954

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1949 - 2000	
ANNUAL TOTAL	87776.52		114744.36			
ANNUAL MEAN	240		314		357	
HIGHEST ANNUAL MEAN					636	1950
LOWEST ANNUAL MEAN					25.3	1954
HIGHEST DAILY MEAN	10800	Jan 23	10800	Jan 4	32400	Jan 21 1959
LOWEST DAILY MEAN	.08	Sep 11	.14	Oct 7	.00	Oct 1 1948
ANNUAL SEVEN-DAY MINIMUM	.09	Sep 17	.17	Oct 1	.00	Oct 1 1948
INSTANTANEOUS PEAK FLOW			18600	Feb 19	52200	Jan 21 1959
INSTANTANEOUS PEAK STAGE			25.39	Feb 19	34.27	Jan 21 1959
ANNUAL RUNOFF (CFSM)	.82		1.07		1.22	
ANNUAL RUNOFF (INCHES)	11.14		14.57		16.54	
10 PERCENT EXCEEDS	541		613		751	
50 PERCENT EXCEEDS	17		65		76	
90 PERCENT EXCEEDS	.21		.99		3.3	

e Estimated

03368000 BRUSH CREEK NEAR NEBRASKA, IN

LOCATION.--Lat 39°04'13", long 85°29'10" in NW1/4NE1/4 sec.11, T.7 N., R.9 E., Jennings County, Hydrologic Unit 05120207, at upstream side of bridge on right bank on county road, 1.5 mi northwest of Nebraska, 2.9 mi northeast of Butlerville, and 3.6 mi upstream from Brush Creek Dam.

DRAINAGE AREA.--11.4 mi^2.

PERIOD OF RECORD.--May 1955 to current year.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 717.17 ft above sea level (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.13	e.04	e.03	.38	e.26	5.4	3.0	3.5	e.93	.26	e4.8	.50
2	e.08	e.06	e.03	.48	e.25	4.1	41	3.5	e.71	.19	e2.0	.45
3	e.03	e.04	e.03	291	e.24	3.5	42	2.6	e.60	.20	.56	.42
4	e.04	e.04	e.04	57	e.29	3.2	47	2.6	.48	.22	.28	.83
5	e.02	e.05	e.02	9.3	e.33	2.7	15	2.2	.45	17	.15	.56
6	e.01	e.04	e.06	5.0	e.48	2.5	9.1	1.9	.33	8.9	.15	.33
7	e.02	e.04	e.05	3.5	e.69	2.2	307	2.4	.22	1.3	101	.29
8	e.08	e.03	.06	2.7	e.89	2.1	187	2.9	.17	.55	26	.28
9	e.09	e.04	.06	2.5	1.4	2.0	31	1.7	.13	.34	169	.32
10	e.12	e.04	.17	2.3	2.1	1.9	20	1.6	.10	80	82	.37
11	e.04	e.02	.11	2.0	4.0	2.5	16	1.2	.08	81	10	1.1
12	e.04	e.02	.34	1.8	2.6	3.2	14	.96	.06	8.6	4.7	1.8
13	e.05	e.02	1.4	1.7	73	2.7	11	6.8	.07	2.8	2.8	1.1
14	e.04	e.02	12	1.6	48	2.5	9.6	2.5	.23	4.3	2.0	.66
15	e.05	e.03	1.9	1.5	12	2.2	8.6	1.3	.28	7.2	1.4	.56
16	e.04	e.03	1.0	1.5	6.9	31	7.7	e28	39	1.2	1.0	.48
17	e.03	e.02	.67	1.3	4.6	18	68	e45	86	.59	4.4	.35
18	e.03	e.02	.51	1.4	372	7.6	29	e27	57	.37	173	.29
19	e.02	e.03	.44	1.3	55	38	17	e18	13	e13	11	.26
20	e.03	e.04	.43	e.86	18	106	63	e11	4.8	e6.5	4.8	.37
21	e.04	e.04	.39	e.74	10	25	61	e.69	26	e2.9	2.8	.97
22	e.04	e.05	.32	e.64	9.7	12	29	e.42	6.1	e1.2	2.0	.68
23	e.03	e.06	.30	e.54	7.3	7.3	17	e1.5	2.5	e.79	1.7	1.1
24	e.02	e.05	.29	e.47	31	5.5	13	e.51	1.6	e.61	2.2	3.5
25	e.03	e.03	.25	e.41	13	4.4	9.9	e.30	1.2	e.46	1.4	109
26	e.03	e.04	.25	e.37	7.8	3.5	7.5	e.51	.83	e.30	3.9	77
27	e.04	e.06	.27	e.32	36	12	6.3	e1.5	.76	e.21	2.8	10
28	e.04	e.04	.27	e.30	12	12	5.3	e6.9	.61	e.15	1.4	5.2
29	e.04	e.04	.29	e.29	7.1	6.6	4.5	e3.4	.43	e.45	1.0	3.4
30	e.04	e.04	.32	e.28	---	4.5	3.8	e1.7	.32	e2.6	.78	2.6
31	e.04	---	.37	e.27	---	3.5	---	e1.2	---	e19	.60	---
TOTAL	1.38	1.12	22.67	393.75	736.93	339.6	1103.3	185.29	244.99	263.19	621.62	224.77
MEAN	.045	.037	.73	12.7	25.4	11.0	36.8	5.98	8.17	8.49	20.1	7.49
MAX	.13	.06	12	291	372	106	307	45	86	81	173	109
MIN	.01	.02	.02	.27	.24	1.9	3.0	.30	.06	.15	.15	.26
CFSM	.00	.00	.06	1.11	2.23	.96	3.23	.52	.72	.74	1.76	.66
IN.	.00	.00	.07	1.28	2.40	1.11	3.60	.60	.80	.86	2.03	.73

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2000, BY WATER YEAR (WY)

MEAN	2.35	9.55	16.7	20.0	22.3	27.9	25.6	20.3	9.50	7.03	4.54	1.67
MAX	19.7	64.5	86.9	70.4	51.8	89.6	79.9	86.1	45.6	72.0	41.9	11.0
(WY)	1984	1986	1991	1959	1971	1963	1998	1995	1997	1962	1978	1974
MIN	.000	.000	.000	.063	1.44	4.22	2.12	.76	.12	.025	.000	.000
(WY)	1958	1964	1964	1977	1964	1969	1976	1976	1965	1970	1964	1957

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1956 - 2000	
ANNUAL TOTAL	3773.21		4138.61			
ANNUAL MEAN	10.3		11.3		13.9	
HIGHEST ANNUAL MEAN					27.3	1996
LOWEST ANNUAL MEAN					5.92	1977
HIGHEST DAILY MEAN	388	Jan 23	372	Feb 18	1460	Jan 21 1959
LOWEST DAILY MEAN	.00	Jul 23	e.01	Oct 6	.00	Oct 4 1955
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 23	e.02	Nov 11	.00	Aug 6 1956
INSTANTANEOUS PEAK FLOW			1600	Jan 3	9360	Jun 10 1981
INSTANTANEOUS PEAK STAGE			8.65	Jan 3	12.99	Jun 10 1981
ANNUAL RUNOFF (CFSM)	.91		.99		1.22	
ANNUAL RUNOFF (INCHES)	12.31		13.50		16.58	
10 PERCENT EXCEEDS	20		26		24	
50 PERCENT EXCEEDS	.22		1.2		2.1	
90 PERCENT EXCEEDS	.00		.04		.00	

e Estimated

03369000 VERNON FORK MUSCATATUCK RIVER NEAR BUTLERVILLE, IN

LOCATION.--Lat 39°02'55", long 85°32'40", in NW$^1/_4$SE$^1/_4$ sec.17, T.7 N., R.9 E., Jennings County, Hydrologic Unit 05120207, on left bank 0.3 mi downstream from Muscatatuck State School dam, 1.1 mi downstream from Brush Creek, 2 mi northwest of Butlerville, and at mile 50.6.

DRAINAGE AREA.--85.9 mi^2.

PERIOD OF RECORD.--February 1942 to current year. Prior to October 1960, published as North Fork of Vernon Fork near Butlerville, and as Vernon Fork near Butlerville, October 1960 to September 1979.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 669.40 ft above sea level. Prior to Aug. 19, 1942, nonrecording gage at same site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Water supply for the Muscatatuck State School is diverted and the sewage effluent returned above station. Flow regulated by Brush Creek Reservoir.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	8.0	.59	1.3	e3.6	44	21	30	29	14	20	5.1
2	.27	13	.48	1.4	e3.5	36	55	30	27	13	13	5.0
3	.35	.58	.45	705	e3.5	31	84	28	30	12	12	4.6
4	.42	.44	.45	556	e3.5	28	181	28	22	12	10	6.5
5	.36	.48	.58	53	e3.6	26	79	28	20	230	9.7	11
6	.30	.49	.61	24	e3.8	23	51	30	19	79	9.5	6.0
7	1.8	.61	.56	17	e4.0	22	697	31	17	25	131	4.7
8	4.1	.70	.51	14	e4.5	20	1700	61	16	19	52	4.3
9	1.7	.75	.67	13	e5.2	19	217	35	16	16	231	4.5
10	1.1	.57	1.3	12	e6.2	18	115	29	15	74	632	4.8
11	.62	.65	1.1	10	e8.0	19	80	26	14	359	56	6.1
12	.50	2.6	1.6	9.4	13	23	67	24	14	61	25	6.5
13	.43	1.5	2.5	8.7	141	21	54	82	14	30	15	6.0
14	.50	1.3	29	8.1	393	20	48	54	14	21	12	5.5
15	.49	1.1	18	7.7	107	19	43	33	15	26	9.3	5.1
16	.42	.89	7.3	7.6	62	85	40	28	169	18	7.6	4.9
17	.44	.78	4.7	7.3	43	134	164	913	997	15	9.1	4.5
18	.48	1.8	3.6	7.0	1610	57	135	246	298	13	370	4.2
19	5.6	9.4	2.9	6.8	519	107	76	82	99	34	58	4.1
20	1.1	1.5	2.6	6.9	133	589	128	50	48	22	23	4.3
21	2.3	1.1	2.2	6.1	72	218	343	39	164	16	15	5.7
22	8.0	.80	1.9	6.0	58	91	185	33	55	13	11	5.6
23	.75	.84	1.8	5.8	53	59	95	32	33	12	9.5	7.0
24	.42	1.2	1.9	5.5	145	45	69	29	26	11	9.4	8.8
25	.43	.91	1.8	5.4	103	37	54	25	22	9.9	8.2	101
26	.47	.93	1.6	5.2	62	30	45	22	21	9.4	8.1	318
27	.49	.78	1.5	4.6	152	41	40	1500	18	9.2	15	50
28	3.0	.78	1.5	4.4	90	45	37	186	17	9.1	11	23
29	2.8	.76	1.4	e3.5	56	35	34	78	15	10	7.6	15
30	.86	.66	1.3	e3.5	---	28	31	47	14	12	6.3	12
31	.59	---	1.3	e3.6	---	24	---	35	---	17	5.6	---
TOTAL	41.39	55.90	97.70	1529.8	3861.4	1994	4968	3894	2278	1221.6	1811.9	653.8
MEAN	1.34	1.86	3.15	49.3	133	64.3	166	126	75.9	39.4	58.4	21.8
MAX	8.0	13	29	705	1610	589	1700	1500	997	359	632	318
MIN	.27	.44	.45	1.3	3.5	18	21	22	14	9.1	5.6	4.1
CFSM	.02	.02	.04	.57	1.55	.75	1.93	1.46	.88	.46	.68	.25
IN.	.02	.02	.04	.66	1.67	.86	2.15	1.69	.99	.53	.78	.28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2000, BY WATER YEAR (WY)

MEAN	15.4	59.2	104	153	160	200	171	130	63.1	43.5	28.2	15.0
MAX	99.7	441	395	763	492	604	509	554	317	277	308	126
(WY)	1991	1986	1991	1950	1950	1945	1998	1968	1998	1992	1978	1950
MIN	.33	.34	.37	1.28	11.3	29.3	18.4	6.91	1.56	1.22	1.32	.37
(WY)	1952	1944	1944	1977	1964	1983	1976	1949	1965	1954	1951	1943

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1943 - 2000	
ANNUAL TOTAL	21422.38		22407.49			
ANNUAL MEAN	58.7		61.2		95.0	
HIGHEST ANNUAL MEAN					188	1950
LOWEST ANNUAL MEAN					13.1	1954
HIGHEST DAILY MEAN	2260	Feb 7	1700	Apr 8	13200	Jan 21 1959
LOWEST DAILY MEAN	.15	Aug 21	.27	Oct 2	.00	Jul 20 1944
ANNUAL SEVEN-DAY MINIMUM	.47	Oct 12	.47	Oct 12	.00	Oct 29 1944
INSTANTANEOUS PEAK FLOW			5200	Apr 8	26200	Jan 21 1959
INSTANTANEOUS PEAK STAGE			11.89	Apr 8	25.41	Jan 21 1959
ANNUAL RUNOFF (CFSM)	.68		.71		1.11	
ANNUAL RUNOFF (INCHES)	9.28		9.70		15.02	
10 PERCENT EXCEEDS	132		119		186	
50 PERCENT EXCEEDS	5.9		14		20	
90 PERCENT EXCEEDS	.42		.69		1.4	

e Estimated

03369500 VERNON FORK MUSCATATUCK RIVER AT VERNON, IN

LOCATION.--Lat 38°58'34", long 85°37'13", in NW$^1/_4$SE$^1/_4$ sec.10, T.6 N., R.8 E., Jennings County, Hydrologic Unit 05120207, at left upstream side of bridge, 1 mi southwest of Vernon, 3.1 mi downstream from Otter Creek, and at mile 36.4.

DRAINAGE AREA.--198 mi^2.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1305. Prior to October 1979, published as Vernon Fork at Vernon.

REVISED RECORDS.--WSP 1335: 1940, 1953. WSP 1909: 1952-53. WSP 2109: Drainage area. WDR IN-91-1: 1990. WDR IN-95-1: 1991-94 (M). WDR IN-99-1: 1991-94, 1998 (M).

GAGE.--Water-stage recorder. Datum of gage is 585.00 ft above sea level, (levels by State of Indiana, Department of Natural Resources). Prior to Jan. 14, 1940, and June 23 to Nov. 13, 1967, nonrecording gage, and Jan. 14, 1940, to June 22, 1967, water-stage recorder at site on right bank. Prior to Aug. 8, 1983, datum 2.30 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversion above station for municipal water supply of North Vernon and Vernon. Part of this diverson returned above gage as sewage effluent by North Vernon Sewage Treatment Plant. Some regulation at times at low flow by Old Timbers Lake on Jefferson Proving Grounds and Brush Creek Reservoir.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	1.3	2.8	6.7	e8.2	160	96	72	71	26	210	11
2	2.7	2.2	2.3	7.1	e8.1	123	353	68	57	24	64	9.8
3	1.4	3.4	2.2	1500	e8.0	99	520	63	63	22	41	9.3
4	1.6	4.6	2.4	3230	e8.0	88	839	60	49	21	31	9.9
5	1.2	5.1	3.2	319	e8.2	74	387	63	50	279	24	14
6	1.5	4.3	3.7	153	e8.4	66	248	60	50	288	20	16
7	1.7	3.3	3.8	91	e8.8	59	1380	62	35	86	523	11
8	2.1	2.8	3.3	62	e9.9	53	5420	111	29	45	281	9.6
9	5.9	2.5	2.8	49	e12	49	847	84	24	34	256	8.3
10	9.7	2.6	8.4	43	e14	44	443	64	22	27	2450	7.9
11	2.6	2.7	9.4	35	e22	44	294	52	22	804	310	13
12	1.8	2.6	8.3	29	40	60	232	45	20	242	135	31
13	2.6	3.2	29	27	257	67	188	116	19	97	68	24
14	1.6	1.6	114	23	1690	58	149	192	25	60	42	16
15	.87	2.0	109	20	364	49	140	86	27	51	28	13
16	1.4	1.9	42	20	207	183	119	61	29	49	20	11
17	1.9	1.9	25	18	136	573	541	736	2840	33	16	8.6
18	1.9	2.3	18	18	4440	231	638	1230	1190	26	1880	7.7
19	1.5	2.4	14	17	2290	291	328	246	486	82	353	6.8
20	2.1	4.2	13	18	536	2010	322	141	202	87	144	6.5
21	2.3	6.8	11	15	297	855	1400	99	410	46	73	12
22	1.9	1.9	9.4	13	216	372	730	79	248	32	45	12
23	1.7	2.3	8.8	13	197	252	360	71	118	24	36	13
24	3.0	2.7	8.5	12	368	192	284	66	82	20	31	22
25	1.2	2.5	7.6	11	404	148	221	55	63	17	29	198
26	1.1	3.1	7.1	11	229	122	160	44	54	14	25	1560
27	1.6	3.2	7.0	9.8	482	145	124	2260	48	13	34	255
28	2.4	3.0	6.9	8.8	372	266	106	584	40	13	33	103
29	2.3	2.5	6.5	8.1	216	198	88	264	34	14	19	54
30	2.3	2.3	8.0	e8.1	---	135	80	140	29	19	15	35
31	3.5	---	7.6	e8.2	---	111	---	95	---	32	12	---
TOTAL	72.37	87.2	505.0	5803.8	12856.6	7177	17037	7369	6436	2627	7248	2508.4
MEAN	2.33	2.91	16.3	187	443	232	568	238	215	84.7	234	83.6
MAX	9.7	6.8	114	3230	4440	2010	5420	2260	2840	804	2450	1560
MIN	.87	1.3	2.2	6.7	8.0	44	80	44	19	13	12	6.5
CFSM	.01	.01	.08	.95	2.24	1.17	2.87	1.20	1.08	.43	1.18	.42
IN.	.01	.02	.09	1.09	2.42	1.35	3.20	1.38	1.21	.49	1.36	.47

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2000, BY WATER YEAR (WY)

MEAN	35.6	135	250	356	390	470	414	301	165	98.5	66.0	33.4
MAX	292	986	962	2049	1188	1798	1402	1440	963	581	639	284
(WY)	1984	1986	1991	1950	1950	1945	1998	1968	1960	1962	1978	1974
MIN	.22	.61	1.03	4.23	24.4	19.0	37.3	8.77	1.80	.63	.003	.19
(WY)	1941	1954	1944	1977	1964	1941	1941	1941	1988	1954	1940	1943

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1940 - 2000	
ANNUAL TOTAL	53741.22		69727.37			
ANNUAL MEAN	147		191		226	
HIGHEST ANNUAL MEAN					468	1950
LOWEST ANNUAL MEAN					32.8	1954
HIGHEST DAILY MEAN	5650	Jan 23	5420	Apr 8	31900	Jan 21 1959
LOWEST DAILY MEAN	.39	Aug 23	.87	Oct 15	.00	Aug 2 1940
ANNUAL SEVEN-DAY MINIMUM	1.2	Sep 23	1.6	Oct 14	.00	Aug 2 1940
INSTANTANEOUS PEAK FLOW			11200	Apr 8	56800	Jan 21 1959
INSTANTANEOUS PEAK STAGE			17.50	Apr 8	32.83	Jan 21 1959
ANNUAL RUNOFF (CFSM)	.74		.96		1.14	
ANNUAL RUNOFF (INCHES)	10.10		13.10		15.48	
10 PERCENT EXCEEDS	325		372		459	
50 PERCENT EXCEEDS	9.5		32		47	
90 PERCENT EXCEEDS	1.4		2.4		2.6	

e Estimated

03371500 EAST FORK WHITE RIVER NEAR BEDFORD, IN

LOCATION.--Lat 38°46'10", long 86°24'30", in SW$^1/_4$NE$^1/_4$ sec.21, T.4 N., R.1 E., Lawrence County, Hydrologic Unit 05120208, on right downstream side of county road bridge, 0.4 mi upstream from Mill Creek, 2.9 mi downstream from Sugar Creek, 3.9 mi northeast of Mitchell, 7.8 mi southeast of Bedford, and at mile 153.3.

DRAINAGE AREA.--3,861 mi^2.

PERIOD OF RECORD.--May 1939 to current year (high-water records only October 1943 to September 1957).

REVISED RECORDS.--WSP 2109: Drainage area. WDR IN-73-1: 1972.

GAGE.--Water-stage recorder. Datum of gage is 473.59 ft above sea level. Prior to Feb. 6, 1940, nonrecording gage, and Feb. 6, 1940 to Sept. 24, 1957, water-stage recorder, at site 9.8 mi downstream at datum 4.39 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are fair.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 47.5 ft, from floodmark determined by U.S. Army Corps of Engineers, discharge, 155,000 ft^3/s, at former site.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	256	265	304	384	e580	6620	2610	2950	5290	3220	1300	948
2	254	272	301	380	e570	5540	2360	2710	4050	2830	1370	888
3	261	272	301	1220	e560	4280	2420	2520	3370	2530	1540	834
4	272	277	304	6800	551	3520	3060	2410	2980	2330	1500	883
5	280	273	308	6880	534	3020	3990	2560	2680	2410	1290	831
6	280	269	306	6900	527	2670	4500	3030	2370	2740	1160	789
7	278	263	306	7020	525	2390	4240	3410	2140	5080	3980	809
8	286	264	309	7610	523	2170	6300	3290	1980	6140	9100	841
9	324	266	321	7140	523	1990	8550	3480	1850	4550	8740	811
10	365	266	365	5850	527	1850	10400	3400	1720	3470	6830	771
11	381	266	392	4230	532	1730	13600	2890	1610	2920	6890	750
12	369	268	408	2490	538	1680	17000	2560	1500	3220	7330	870
13	355	270	442	1720	617	1650	17800	2590	1410	4730	6330	1140
14	346	268	636	1430	2140	1650	14700	2690	1350	3930	5370	1440
15	334	268	799	1270	3860	1670	10400	3160	1350	2940	3580	1530
16	321	268	899	1160	5090	1730	6900	3610	1360	2380	2220	1370
17	310	269	954	1060	5630	2340	5640	3060	3470	2070	1680	1190
18	300	273	887	976	8380	3710	7170	2570	8400	1860	1870	1050
19	290	278	774	905	12800	5170	7880	4280	10600	2520	2090	942
20	285	289	683	867	12100	6140	8030	6890	11800	3390	4390	875
21	279	288	614	818	13600	7300	7540	5530	13200	3720	4500	823
22	274	298	561	787	15800	8410	7390	4090	13600	3450	3090	791
23	272	302	522	749	15800	8940	8440	3590	12800	2620	2110	799
24	271	301	496	710	14500	8740	8760	3180	11400	1950	1680	916
25	268	307	e440	e660	e14000	7810	7860	2840	9320	1600	1460	1440
26	268	341	e430	e560	e12000	6040	6200	2620	6430	1410	1310	3600
27	267	334	e420	e520	e10000	4310	4920	2620	5260	1270	1250	5030
28	270	321	e400	e540	7890	3650	4140	3080	4810	1190	1220	6270
29	270	313	e420	e500	7170	3360	3630	6260	4220	1150	1170	5810
30	267	308	404	e490	---	3230	3270	8190	3700	1200	1100	4460
31	266	---	391	e520	---	2990	---	7340	---	1230	1020	---
TOTAL	9119	8517	15097	73146	167867	126300	219700	113400	156020	86050	98470	49501
MEAN	294	284	487	2360	5789	4074	7323	3658	5201	2776	3176	1650
MAX	381	341	954	7610	15800	8940	17800	8190	13600	6140	9100	6270
MIN	254	263	301	380	523	1650	2360	2410	1350	1150	1020	750
CFSM	.08	.07	.13	.61	1.50	1.06	1.90	.95	1.35	.72	.82	.43
IN.	.09	.08	.15	.70	1.62	1.22	2.12	1.09	1.50	.83	.95	.48

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2000, BY WATER YEAR (WY)

MEAN	1007	2342	4248	5022	6417	8047	7452	6452	3893	2480	1841	1091
MAX	4186	15520	12090	15010	15610	18710	15180	30650	16310	9649	11280	5234
(WY)	1994	1994	1958	1991	1982	1964	1989	1996	1997	1958	1979	1989
MIN	228	284	272	300	712	450	730	382	622	603	291	244
(WY)	1941	2000	1964	1977	1941	1941	1941	1941	1988	1941	1941	1941

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1940 - 2000	
ANNUAL TOTAL	1190676		1123187			
ANNUAL MEAN	3262		3069		4180	
HIGHEST ANNUAL MEAN					6752	1996
LOWEST ANNUAL MEAN					643	1941
HIGHEST DAILY MEAN	36000	Jan 27	17800	Apr 13	78200	May 1 1996
LOWEST DAILY MEAN	251	Sep 28	254	Oct 2	138	Sep 7 1941
ANNUAL SEVEN-DAY MINIMUM	255	Sep 26	266	Nov 6	196	Sep 5 1941
INSTANTANEOUS PEAK FLOW			18200	Apr 13	80500	May 1 1996
INSTANTANEOUS PEAK STAGE			20.43	Apr 13	36.32	May 1 1996
ANNUAL RUNOFF (CFSM)	.84		.79		1.08	
ANNUAL RUNOFF (INCHES)	11.47		10.82		14.71	
10 PERCENT EXCEEDS	10100		7870		10400	
50 PERCENT EXCEEDS	1080		1700		2120	
90 PERCENT EXCEEDS	271		280		474	

e Estimated

03371520 BACK CREEK AT LEESVILLE, IN

LOCATION.--Lat 38°50'48", long 86°18'06", in SW$^1/_4$SE$^1/_4$ sec.21, T.5 N., R.2 E., Lawrence County, Hydrologic Unit 05120208, on left bank at downstream side of county road bridge, 0.9 mi west of Leesville, 2.5 mi upstream from Jones Defeat Hollow, and 7 mi above mouth.

DRAINAGE AREA.--24.1 mi^2.

PERIOD OF RECORD.--October 1970 to current year.

REVISED RECORDS.--WDR IN-72-1: 1971.

GAGE.--Water-stage recorder. Datum of gage is 575.00 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges and those below 1.0 ft^3/s, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1913 reached a stage of 18.1 ft from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	e.60	e.74	38	14	9.0	6.6	4.1	19	3.5
2	.00	.00	.00	e.70	e.64	25	15	8.6	5.6	3.6	8.4	3.2
3	.00	.00	.01	e710	e.56	22	15	13	4.9	3.2	7.2	2.9
4	.00	.00	.03	315	e.50	20	16	15	4.3	39	5.5	167
5	.00	.00	.07	98	e.44	18	14	14	4.1	18	4.6	18
6	.00	.00	.09	49	e.40	16	13	10	3.9	6.1	4.1	8.2
7	.00	.00	.19	31	e.37	15	79	9.2	3.4	4.5	1270	6.0
8	.00	.00	.25	22	e.36	14	365	10	3.0	3.5	459	5.0
9	.39	.00	.25	19	e.35	13	154	8.6	2.7	2.9	266	4.5
10	.31	.00	1.5	16	e5.0	12	70	24	2.4	2.5	117	5.0
11	.04	.00	1.9	12	e7.6	12	39	12	2.1	37	50	5.9
12	.00	.00	2.2	8.9	e5.6	14	25	8.9	2.0	8.7	28	12
13	.00	.00	3.2	8.1	e66	13	22	18	28	5.4	17	10
14	.00	.00	15	6.3	106	12	19	11	7.0	4.1	12	6.7
15	.00	.00	6.3	5.3	25	12	18	8.4	4.7	3.2	8.9	5.6
16	.00	.00	3.8	4.9	18	23	16	7.3	376	2.7	7.1	4.6
17	.00	.00	2.7	4.2	14	27	457	6.7	796	2.3	6.8	3.9
18	.00	.00	2.0	4.0	883	21	299	6.6	756	2.0	257	3.6
19	.00	.00	1.7	3.6	438	118	160	7.2	247	21	38	3.1
20	.00	.06	1.8	3.7	198	371	237	6.1	92	6.0	17	2.9
21	.00	.05	e1.4	e3.0	87	201	291	5.6	198	3.9	11	3.3
22	.00	.01	e1.3	e2.5	52	91	171	5.2	73	3.0	8.3	3.2
23	.00	.00	e1.1	e2.2	30	48	103	5.2	28	2.4	9.4	3.2
24	.00	.00	e1.0	e1.9	290	30	67	5.1	26	2.0	9.6	4.8
25	.00	.00	e.92	e1.7	175	25	45	4.3	16	1.7	7.4	450
26	.00	.04	e.86	e1.5	84	21	29	3.8	9.4	1.5	6.2	383
27	.00	.07	e.80	e1.3	230	25	22	172	8.1	1.3	5.9	119
28	.00	.02	e.74	e1.2	126	22	18	40	6.8	1.5	5.3	51
29	.00	.00	e.70	e1.0	64	19	13	18	5.6	3.4	4.8	27
30	.00	.00	e.66	e.90	---	17	10	10	4.8	289	4.3	17
31	.00	---	e.63	e.80	---	15	---	8.1	---	85	3.9	---
TOTAL	0.74	0.25	53.10	1340.30	2908.56	1330	2816	490.9	2727.4	574.5	2678.7	1343.1
MEAN	.024	.008	1.71	43.2	100	42.9	93.9	15.8	90.9	18.5	86.4	44.8
MAX	.39	.07	15	710	883	371	457	172	796	289	1270	450
MIN	.00	.00	.00	.60	.35	12	10	3.8	2.0	1.3	3.9	2.9
CFSM	.00	.00	.07	1.79	4.16	1.78	3.89	.66	3.77	.77	3.59	1.86
IN.	.00	.00	.08	2.07	4.49	2.05	4.35	.76	4.21	.89	4.13	2.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2000, BY WATER YEAR (WY)

MEAN	7.48	29.0	39.4	43.5	51.7	64.3	69.9	46.0	25.3	20.2	16.8	6.90
MAX	48.0	132	101	147	105	168	176	174	159	195	92.4	60.9
(WY)	1984	1986	1983	1982	1979	1989	1972	1995	1997	1973	1979	1974
MIN	.000	.008	1.71	.98	5.78	9.74	8.62	2.70	.25	.014	.037	.000
(WY)	1989	2000	2000	1977	1992	1981	1976	1988	1988	1991	1999	1988

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1971 - 2000	
ANNUAL TOTAL	8555.32		16263.55			
ANNUAL MEAN	23.4		44.4		34.9	
HIGHEST ANNUAL MEAN					64.6	1973
LOWEST ANNUAL MEAN					14.4	1987
HIGHEST DAILY MEAN	826	Feb 7	1270	Aug 7	5000	Jul 21 1973
LOWEST DAILY MEAN	.00	Jul 31	.00	Oct 1	.00	Oct 4 1970
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 31	.00	Oct 1	.00	Jul 12 1975
INSTANTANEOUS PEAK FLOW			6300	Aug 7	15300	Jul 21 1973
INSTANTANEOUS PEAK STAGE			9.94	Aug 7	14.00	Jul 21 1973
ANNUAL RUNOFF (CFSM)	.97		1.84		1.45	
ANNUAL RUNOFF (INCHES)	13.21		25.10		19.70	
10 PERCENT EXCEEDS	55		109		75	
50 PERCENT EXCEEDS	2.0		5.6		9.0	
90 PERCENT EXCEEDS	.00		.00		.29	

e Estimated

03372500 SALT CREEK NEAR HARRODSBURG, IN

LOCATION.--Lat 39°00'16", long 86°30'31", in NE$^1/_4$NW$^1/_4$ sec.34, T.7 N., R.1 W., Monroe County, Hydrologic Unit 05120208, on right bank 0.35 mi downstream from Monroe Lake, 0.9 mi upstream from Clear Creek, 2.2 mi southeast of Harrodsburg, and 25.7 mi upstream from mouth.

DRAINAGE AREA.--432 mi^2.

PERIOD OF RECORD.--May 1955 to current year.

REVISED RECORDS.--WSP 1705: 1959. WSP 1725: 1956(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 480.00 ft above sea level, (levels by U.S. Army Corps of Engineers). Oct. 1, 1960, to Sept. 30, 1974, water-stage recorder 0.1 mi upstream from site described in "LOCATION" paragraph. Prior to Oct. 1, 1960, nonrecording gage at site 0.7 mi upstream at datum 2.41 ft higher.

REMARKS.--Flow regulated by U.S. Army Corps of Engineers from Monroe Lake since April 1966.

COOPERATION.--Records of daily discharge provided by U.S. Army Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--45 years, 497 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,000 ft^3/s June 25, 1960, gage height, 32.76 ft site and datum then in use; maximum gage height at present site and datum, 35.35 ft May 9, 1961; no flow Sept. 29 to Dec. 2, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,560 ft^3/s Apr. 25-26; minimum daily, 53 ft^3/s Nov. 16-Jan. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	54	53	53	54	369	334	1000	201	1550	201	56
2	75	54	53	53	54	484	200	881	201	1540	201	56
3	75	54	53	53	54	686	200	516	201	1540	201	56
4	62	54	53	54	54	885	200	159	201	1370	200	56
5	54	54	53	54	54	883	200	101	160	1210	200	56
6	54	54	53	54	54	721	200	158	92	1060	110	56
7	54	54	53	54	54	559	201	201	92	512	129	56
8	54	54	53	54	54	557	206	201	92	200	203	56
9	54	54	53	54	54	556	210	201	70	200	204	56
10	54	54	53	54	54	378	429	201	56	128	354	56
11	54	54	53	54	54	201	585	201	56	56	564	77
12	54	54	53	54	54	200	734	201	56	129	563	92
13	54	54	53	54	54	200	909	201	56	201	561	92
14	54	54	53	54	54	200	1040	201	56	201	230	92
15	54	54	53	54	54	200	1240	201	56	201	56	92
16	54	53	53	54	54	200	1240	201	56	201	56	92
17	54	53	53	54	54	201	1240	201	57	201	56	92
18	54	53	53	54	55	201	1240	201	122	200	56	92
19	54	53	53	54	55	202	1240	201	198	201	56	92
20	54	53	53	54	56	203	1120	201	308	200	56	92
21	54	53	53	54	56	296	1080	201	758	106	56	92
22	54	53	53	54	56	772	1240	201	1060	56	56	92
23	54	53	53	54	56	892	1240	201	1260	56	56	92
24	54	53	53	54	129	891	1440	201	1060	56	56	92
25	54	53	53	54	202	889	1560	201	914	56	56	92
26	54	53	53	54	202	888	1560	155	1080	56	56	149
27	54	53	53	54	203	886	1550	92	1250	56	56	205
28	54	53	53	54	204	884	1540	165	1160	56	56	416
29	54	53	53	54	266	882	1540	202	1240	56	56	754
30	54	53	53	54	---	880	1370	202	1500	56	56	886
31	54	---	53	54	---	678	---	202	---	74	56	---
TOTAL	1745	1605	1643	1671	2458	16924	27088	7652	13669	11785	4873	4335
MEAN	56.3	53.5	53.0	53.9	84.8	546	903	247	456	380	157	144
MAX	75	54	53	54	266	892	1560	1000	1500	1550	564	886
MIN	54	53	53	53	54	200	200	92	56	56	56	56

CAL YR 1999 TOTAL 142721 MEAN 391 MAX 2140 MIN 53
WTR YR 2000 TOTAL 95448 MEAN 261 MAX 1560 MIN 53

03373500 EAST FORK WHITE RIVER AT SHOALS, IN

LOCATION.--Lat 38°40'02", long 86°47'32", in SW$^1/_4$NW$^1/_4$ sec.30, T.3 N., R.3 W., Martin County, Hydrologic Unit 05120208, on upstream left bank, at U.S. Highway 50 bridge, 30 ft upstream of Highway 50 bridge at Shoals, 1.0 mi upstream from Beaver Creek, 6.5 mi downstream from Indian Creek, and at mile 105.4.

DRAINAGE AREA.--4,927 mi^2.

PERIOD OF RECORD.--June 1903 to July 1906, October 1908 to September 1916, June 1923 to current year. Monthly discharge only for some periods, published in WSP 1305. Published as East Branch White River at Shoals, 1903-06, 1908-16. Gage-height records collected at same site since May 1908 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 353: 1912. WSP 1335: 1903-6. WSP 2109: Drainage area. WDR IN-91-1: Location.

GAGE.--Water-stage recorder. Datum of gage is 442.25 ft above sea level. Oct. 26, 1932 to Dec. 12, 1989 and Aug. 9, 1999 to present, at current site. Water-stage recorder, located 440 ft downstream of U.S. Highway bridge, Dec. 13, 1989 to Aug. 9, 1999. See WSP 1725 for history of changes prior to Oct. 26, 1932.

REMARKS.--Records good. Flow partially regulated by upstream reservoir.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	366	293	338	521	787	8140	4010	4790	6710	5150	2830	1290
2	367	300	337	510	776	7170	3390	4240	5080	4810	2620	1200
3	352	288	344	988	757	5970	3020	3830	4130	4490	2250	1130
4	347	290	352	8370	743	5180	3130	3440	3560	4260	2240	1320
5	344	297	371	9310	718	4730	3900	2970	3210	4220	2070	2200
6	346	302	387	7640	701	4300	4650	3110	2880	4260	1810	1670
7	345	303	413	7050	683	3830	4980	3590	2520	4740	4880	1260
8	358	296	416	7420	680	3380	8830	3820	2290	6260	15300	1150
9	435	293	387	7620	677	3130	12600	3720	2140	5800	15800	1140
10	549	293	428	6720	686	2790	11700	4010	2000	4470	10500	1140
11	537	297	498	5380	698	2450	13400	4040	1850	3720	7820	1270
12	478	295	585	3790	703	2340	16300	3490	1740	3850	8270	1840
13	431	295	602	2490	773	2270	18400	3480	1730	4410	7690	2640
14	388	299	728	1880	1630	2240	18400	3470	1680	4920	6690	2340
15	368	293	1000	1610	3680	2240	15400	3390	1600	4020	5320	2160
16	353	293	1120	1470	4750	2340	11100	3850	1690	3210	3600	2030
17	343	288	1140	1360	5470	2740	7990	3900	7130	2740	2560	1810
18	326	292	1140	1250	9100	3640	9610	3400	18200	2440	2700	1600
19	314	302	1070	1160	19100	5060	10300	3210	19900	2890	3150	1420
20	306	330	967	1090	17200	7490	10400	5610	15800	5070	3200	1300
21	298	345	860	1040	14900	9690	10700	6650	14800	4310	4720	1230
22	300	351	789	977	16000	9820	10000	5190	15700	4120	4290	1190
23	291	349	723	933	17200	10700	10200	4270	15500	3540	3280	1140
24	289	355	680	902	17400	10900	10900	3850	14400	2770	2580	1160
25	286	349	624	823	16900	10300	10700	3440	12900	2190	2140	1690
26	286	355	568	714	14400	8590	9180	3130	9770	1860	1860	6840
27	286	379	555	679	13000	6610	7410	3340	7200	1650	1680	8110
28	286	381	554	691	12000	5460	6340	4520	6470	1510	1580	6940
29	287	368	534	654	9370	4910	5680	4920	5690	1470	1530	6930
30	289	349	555	648	---	4630	5230	7520	5390	2000	1460	6320
31	290	---	545	737	---	4450	---	8310	---	2570	1370	---
TOTAL	10841	9520	19610	86427	201482	167490	277850	130500	213660	113720	137790	73460
MEAN	350	317	633	2788	6948	5403	9262	4210	7122	3668	4445	2449
MAX	549	381	1140	9310	19100	10900	18400	8310	19900	6260	15800	8110
MIN	286	288	337	510	677	2240	3020	2970	1600	1470	1370	1130
CFSM	.07	.06	.13	.57	1.41	1.10	1.88	.85	1.45	.74	.90	.50
IN.	.08	.07	.15	.65	1.52	1.26	2.10	.99	1.61	.86	1.04	.55

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 2000, BY WATER YEAR (WY)

MEAN	1561	2888	5247	8657	8673	11040	10160	7630	4622	2971	1984	1369
MAX	12520	18370	17890	47640	30880	34300	24000	35120	19290	13520	15220	9154
(WY)	1911	1994	1928	1937	1950	1945	1913	1996	1997	1958	1979	1926
MIN	262	293	305	432	589	562	1029	529	696	365	265	233
(WY)	1941	1955	1964	1931	1931	1941	1915	1941	1936	1954	1936	1954

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1904 - 2000	
ANNUAL TOTAL	1511623		1442350			
ANNUAL MEAN	4141		3941		5545	
HIGHEST ANNUAL MEAN					10370	1950
LOWEST ANNUAL MEAN					855	1941
HIGHEST DAILY MEAN	32800	Jan 28	19900	Jun 19	155000	Mar 28 1913
LOWEST DAILY MEAN	286	Oct 25	286	Oct 25	64	Oct 6 1935
ANNUAL SEVEN-DAY MINIMUM	287	Oct 24	287	Oct 24	168	Oct 3 1935
INSTANTANEOUS PEAK FLOW			20700	Jun 19	160000	Mar 28 1913
INSTANTANEOUS PEAK STAGE			14.04	Jun 19	42.20	Mar 28 1913
ANNUAL RUNOFF (CFSM)	.84		.80		1.13	
ANNUAL RUNOFF (INCHES)	11.41		10.89		15.29	
10 PERCENT EXCEEDS	13300		10300		14500	
50 PERCENT EXCEEDS	1410		2440		2620	
90 PERCENT EXCEEDS	317		342		520	

03373530 LOST RIVER NEAR LEIPSIC, IN

LOCATION.--Lat 38°38'11", long 86°21'55", in NE$^1/_4$SE$^1/_4$, sec.2, T.2N., R.1E., Orange County, Hydrologic Unit 05120208, on left bank, 5 ft upstream from bridge on Potato Road, 400 ft upstream from Carter Creek, and 2.2 mile south of Leipsic.

DRAINAGE AREA.--34.8 mi^2 (Above a gage height of about 12.5 ft, flow from Carter Creek is included. Total drainage area is 44 mi^2.).

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

REVISED RECORDS.--WDR IN-94-1: 1993.

GAGE.--Water-stage recorder. Datum of gage is 645.00 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.5	e6.0	1.5	e2.5	e4.0	71	19	19	13	14	8.0	4.6
2	e1.3	11	1.6	e3.2	e3.8	60	29	18	12	13	5.8	4.2
3	e1.7	14	1.7	e1000	e3.6	54	33	16	11	12	5.5	3.8
4	e1.7	11	2.1	458	e3.4	49	53	16	9.8	11	4.7	6.3
5	1.5	8.1	2.6	139	e3.2	42	32	16	9.9	12	4.5	5.1
6	2.1	7.7	2.7	106	e3.1	36	28	15	9.1	11	4.6	3.9
7	2.2	9.6	1.7	85	e3.0	32	35	14	8.4	9.0	5.4	3.6
8	6.0	e2.6	1.5	69	e2.9	30	224	14	8.0	7.9	114	3.6
9	9.3	e2.0	1.7	59	e2.8	27	90	13	7.6	7.7	56	4.1
10	5.3	e1.5	6.3	51	e3.5	25	69	13	7.2	6.8	31	3.8
11	2.2	e1.5	5.8	43	e3.5	24	56	12	6.9	7.6	22	8.1
12	1.6	e1.5	5.0	36	e3.5	23	46	12	6.8	7.2	17	27
13	1.9	e1.5	13	37	e245	21	39	29	7.2	6.2	13	24
14	e2.1	e1.7	83	31	240	19	35	21	6.8	5.4	11	17
15	e1.8	e1.5	23	28	114	18	31	17	6.7	4.9	9.4	13
16	e1.7	e1.5	14	26	83	67	28	15	8.5	4.8	8.1	10
17	e1.6	e1.5	10	23	62	51	166	14	143	4.1	7.3	8.7
18	e1.6	e1.5	8.5	22	1860	31	107	14	244	3.8	87	7.6
19	e1.5	e3.0	7.2	20	317	56	74	12	82	249	22	6.5
20	e1.6	8.4	6.9	19	167	168	63	11	55	36	15	6.0
21	e1.5	3.8	5.6	15	132	87	56	11	74	21	12	7.1
22	e1.5	2.2	5.1	14	111	65	48	10	51	15	10	5.9
23	e1.5	1.8	e4.7	13	93	54	41	10	39	11	11	5.9
24	e1.5	1.8	e4.3	11	190	47	37	9.9	33	9.4	10	17
25	e1.5	1.8	e3.7	e10	120	40	33	9.0	29	8.0	8.6	250
26	e1.6	3.5	e3.7	e8.5	96	34	29	8.2	25	7.4	7.8	149
27	e1.5	3.2	e3.4	e7.0	136	35	26	37	23	6.5	7.8	88
28	e1.5	2.3	e3.1	e6.0	97	31	24	27	20	6.9	6.9	67
29	e1.5	1.8	e2.9	e5.2	81	26	21	20	17	6.7	6.1	53
30	e1.5	1.7	e2.7	e4.7	---	23	20	17	16	8.5	5.5	44
31	e2.5	---	e2.6	e4.3	---	21	---	15	---	50	5.0	---
TOTAL	67.8	121.0	241.6	2356.4	4184.3	1367	1592	485.1	989.9	583.8	542.0	857.8
MEAN	2.19	4.03	7.79	76.0	144	44.1	53.1	15.6	33.0	18.8	17.5	28.6
MAX	9.3	14	83	1000	1860	168	224	37	244	249	114	250
MIN	1.3	1.5	1.5	2.5	2.8	18	19	8.2	6.7	3.8	4.5	3.6
CFSM	.06	.12	.22	2.18	4.15	1.27	1.52	.45	.95	.54	.50	.82
IN.	.07	.13	.26	2.52	4.47	1.46	1.70	.52	1.06	.62	.58	.92

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2000, BY WATER YEAR (WY)

MEAN	7.06	29.9	38.3	68.7	65.4	73.4	105	90.6	53.8	15.9	15.5	18.8
MAX	21.1	148	106	113	144	168	307	251	131	28.1	40.2	94.7
(WY)	1997	1994	1997	1999	2000	1997	1996	1995	1996	1995	1993	1996
MIN	1.96	3.97	7.79	23.6	22.4	24.1	43.5	15.6	8.15	5.95	1.65	.58
(WY)	1998	1998	2000	1998	1996	1994	1997	2000	1994	1994	1999	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1993 - 2000	
ANNUAL TOTAL	11947.51		13388.7			
ANNUAL MEAN	32.7		36.6		48.4	
HIGHEST ANNUAL MEAN					79.0	1996
LOWEST ANNUAL MEAN					33.4	1999
HIGHEST DAILY MEAN	733	Jan 23	1860	Feb 18	4100	Apr 29 1996
LOWEST DAILY MEAN	.39	Sep 6	e1.3	Oct 2	.39	Sep 6 1999
ANNUAL SEVEN-DAY MINIMUM	.47	Sep 5	e1.5	Oct 19	.47	Sep 5 1999
INSTANTANEOUS PEAK FLOW			4450	Feb 18	10700	Apr 29 1996
INSTANTANEOUS PEAK STAGE			13.32	Feb 18	15.01	Apr 29 1996
ANNUAL RUNOFF (CFSM)	.94		1.05		1.39	
ANNUAL RUNOFF (INCHES)	12.77		14.31		18.89	
10 PERCENT EXCEEDS	86		81		99	
50 PERCENT EXCEEDS	11		11		18	
90 PERCENT EXCEEDS	1.1		1.7		2.3	

e Estimated

03373980 WHITE RIVER ABOVE PETERSBURG, IN

LOCATION.--Lat 38°31'42", long 87°15'12", in NE$^1/_4$SW$^1/_4$ sec.12, T.1 N., R.8 W., Pike County, Hydrologic Unit 05120202, on left bank 300 ft upstream from intake structure of Indianapolis Power and Light Company's generating plant, 1.5 mi downstream from East Fork White River, 2.2 mi upstream from State Highway 61, 2.9 mi northeast of Petersburg, and at mile 48.0.

DRAINAGE AREA.--11,123 mi^2.

PERIOD OF RECORD.--October 1976 to current year. Discharges below 1500 ft^3/s only, published 1980 to 1993, and 1995 to current year.

GAGE.--Water-stage recorder. Datum of gage is 401.52 ft above sea level.

REMARKS.--Discharges below 1,500 ft^3/s only, published. Records good. For a complete record of White River in this vicinity use records of White River at Petersburg, IN (sta. 03374000), 2.3 mi downstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1010	948	1150	1390	---	---	---	---	---	---	---	---
2	1020	937	1150	1380	---	---	---	---	---	---	---	---
3	1010	934	1160	---	---	---	---	---	---	---	---	---
4	1040	928	1170	---	---	---	---	---	---	---	---	---
5	1060	926	1200	---	---	---	---	---	---	---	---	---
6	1040	932	1230	---	---	---	---	---	---	---	---	---
7	1030	936	1240	---	---	---	---	---	---	---	---	---
8	1060	933	1260	---	---	---	---	---	---	---	---	---
9	1210	928	1300	---	---	---	---	---	---	---	---	---
10	1440	948	---	---	---	---	---	---	---	---	---	---
11	1350	949	---	---	---	---	---	---	---	---	---	---
12	1320	953	---	---	---	---	---	---	---	---	---	---
13	1400	951	---	---	---	---	---	---	---	---	---	---
14	1430	946	---	---	---	---	---	---	---	---	---	---
15	1340	947	---	---	---	---	---	---	---	---	---	---
16	1250	945	---	---	---	---	---	---	---	---	---	---
17	1180	943	---	---	---	---	---	---	---	---	---	---
18	1130	949	---	---	---	---	---	---	---	---	---	---
19	1090	964	---	---	---	---	---	---	---	---	---	---
20	1060	1000	---	---	---	---	---	---	---	---	---	---
21	1050	1020	---	---	---	---	---	---	---	---	---	---
22	1040	1030	---	---	---	---	---	---	---	---	---	---
23	1030	1040	---	---	---	---	---	---	---	---	---	---
24	1010	1070	---	---	---	---	---	---	---	---	---	---
25	994	1080	---	---	---	---	---	---	---	---	---	---
26	978	1090	---	---	---	---	---	---	---	---	---	---
27	970	1100	---	---	---	---	---	---	---	---	---	---
28	964	1110	1430	---	---	---	---	---	---	---	---	---
29	962	1120	1410	---	---	---	---	---	---	---	---	---
30	958	1140	1390	---	---	---	---	---	---	---	---	---
31	954	---	1370	---	---	---	---	---	---	---	---	---
TOTAL	34380	29697	---	---	---	---	---	---	---	---	---	---
MEAN	1109	990	---	---	---	---	---	---	---	---	---	---
MAX	1440	1140	---	---	---	---	---	---	---	---	---	---
MIN	954	926	---	---	---	---	---	---	---	---	---	---
CFSM	.10	.09	---	---	---	---	---	---	---	---	---	---
IN.	.11	.10	---	---	---	---	---	---	---	---	---	---

03374000 WHITE RIVER AT PETERSBURG, IN

LOCATION.--Lat 38°30'39", long 87°17'22", in SE$^1/_4$SW$^1/_4$ sec.15, T.1 N., R.8 W., Pike County, Hydrologic Unit 05120202, on left bank 300 ft downstream from bridge on State Highway 61, 0.4 mi upstream from Prides Creek, 1.4 mi north of Petersburg, and at mile 45.7.

DRAINAGE AREA.--11,125 mi^2.

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only for October 1927, published in WSP 1305. Published as "at Hazleton" October 1927 to September 1938. Records published for both sites October 1937 to September 1938. Gage-height records collected at present site and datum since January 1935 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1305: 1930(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 400.00 ft above sea level. See WSP 1725 for history of changes prior to Apr. 1, 1941.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow partially regulated by upstream reservoir.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913, reached a stage of 29.5 ft, present site and datum, from floodmarks by U.S. Army Corps of Engineers, discharge, 235,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	920	887	1070	1290	1620	16700	6810	8390	12400	10800	5810	3640
2	920	893	1060	1280	1630	14100	6270	7690	11400	10000	5590	3380
3	915	874	1060	2080	1670	12000	5670	6930	9200	9160	5910	3140
4	962	858	1060	7660	1690	10400	5210	6370	7630	8220	5700	2960
5	987	848	1090	10600	1660	9050	5090	5990	6570	10300	5370	2890
6	971	850	1130	11200	1620	8090	5550	5710	5700	9920	4670	3560
7	948	862	1140	10400	1620	7200	6240	5650	5050	9210	4260	3870
8	980	864	1150	9960	1580	6390	9730	5850	4520	10400	14800	3910
9	1180	874	1190	9630	1570	5750	18500	5930	4160	10900	30900	3560
10	1450	888	1440	8880	1560	5280	24500	6090	3890	10100	27000	3350
11	1370	901	1490	7780	1580	4890	25400	6210	3660	10100	19600	4760
12	1320	901	1470	6410	1590	4560	25000	6470	3420	12400	15200	5760
13	1400	901	1590	5130	1740	4290	25000	8010	3970	13300	13200	6820
14	1450	910	2130	3960	3320	4150	24900	7810	4310	11900	11700	7840
15	1360	910	2280	3290	3930	4060	23700	7390	3290	10000	10200	7470
16	1250	910	2180	2950	5590	4290	19900	7190	3030	8290	8540	6500
17	1180	905	2280	e2800	6820	5280	15400	7050	9710	6880	6730	5900
18	1110	906	2300	e2700	11400	5600	13300	6800	21700	5930	6050	5240
19	1060	916	2240	e2550	23900	6570	15500	6180	28600	6720	6040	4490
20	1010	956	2200	2390	26100	9600	16500	6820	30200	8770	6820	3910
21	990	978	2050	2230	24700	13600	17000	8710	26800	9280	9150	3610
22	996	984	1890	2130	22500	16100	17300	9600	24100	7820	9370	3480
23	966	989	1770	2070	22100	15900	17400	8870	25400	6700	9850	3620
24	950	1020	1690	1990	23400	15400	17600	7870	26100	5810	13600	3560
25	929	1030	1590	1920	23800	14900	17300	7010	24300	4900	10000	4030
26	915	1040	1530	1730	22000	14100	16500	6310	21400	4170	7050	10900
27	910	1040	1460	1610	23200	12600	14700	6320	18000	3670	e6000	19100
28	905	1040	1370	1580	22200	10600	12300	7380	15300	3400	e5400	22700
29	904	1050	1340	1660	19900	8840	10500	8930	13600	3210	4920	21400
30	899	1070	1310	1670	---	7890	9260	10700	12000	4140	4310	16500
31	891	---	1290	1620	---	7290	---	12000	---	5030	3940	---
TOTAL	32998	28055	48840	133150	305990	285470	448030	228230	389410	251430	297680	201850
MEAN	1064	935	1575	4295	10550	9209	14930	7362	12980	8111	9603	6728
MAX	1450	1070	2300	11200	26100	16700	25400	12000	30200	13300	30900	22700
MIN	891	848	1060	1280	1560	4060	5090	5650	3030	3210	3940	2890
CFSM	.10	.08	.14	.39	.95	.83	1.34	.66	1.17	.73	.86	.60
IN.	.11	.09	.16	.45	1.02	.95	1.50	.76	1.30	.84	1.00	.67

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2000, BY WATER YEAR (WY)

MEAN	3151	6523	10790	17230	18250	22530	22140	17650	11430	7471	4812	3409
MAX	12780	46800	38140	86440	67080	55340	42900	70110	38550	25620	39590	19640
(WY)	1994	1994	1986	1950	1950	1945	1944	1996	1998	1958	1979	1989
MIN	653	884	861	981	1388	1597	3767	1597	1950	1118	870	878
(WY)	1941	1954	1964	1977	1931	1941	1941	1941	1988	1954	1936	1936

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1928 - 2000	
ANNUAL TOTAL	3776908		2651133			
ANNUAL MEAN	10350		7244		12090	
HIGHEST ANNUAL MEAN					22760	1950
LOWEST ANNUAL MEAN					2138	1941
HIGHEST DAILY MEAN	87700	Jan 28	30900	Aug 9	182000	Jan 22 1937
LOWEST DAILY MEAN	848	Nov 5	848	Nov 5	573	Oct 1 1941
ANNUAL SEVEN-DAY MINIMUM	861	Nov 3	861	Nov 3	598	Sep 26 1941
INSTANTANEOUS PEAK FLOW			31900	Aug 9	183000	Jan 22 1937
INSTANTANEOUS PEAK STAGE			17.03	Aug 9	28.30	Jan 22 1937
ANNUAL RUNOFF (CFSM)	.93		.65		1.09	
ANNUAL RUNOFF (INCHES)	12.63		8.86		14.76	
10 PERCENT EXCEEDS	27900		17500		29800	
50 PERCENT EXCEEDS	3760		5570		6410	
90 PERCENT EXCEEDS	938		979		1500	

e Estimated

03374455 PATOKA RIVER NEAR HARDINSBURG, IN

LOCATION.--Lat 38°26'41", long 86°23'14", in NW$^1/_4$SE$^1/_4$ sec.10, T.1 S., R.1 E., Orange County, Hydrologic Unit 05120209, on downstream edge of left edge of pier of county road bridge, 0.3 mi downstream from Fudge Creek, 0.7 mi northeast of Valeene, 6.0 mi southwest of Hardinsburg, and at mile 158.0.

DRAINAGE AREA.--12.8 mi^2.

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 606.89 ft above sea level.

REMARKS.--Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	e.00	e.02	e.45	e1.6	e19	e6.2	e5.0	e3.3	e2.4	e.42	e.52
2	e.00	e.00	e.04	e1.0	e1.6	e15	e9.0	e4.8	e2.9	e1.6	e.26	e.40
3	e.00	e.00	e.07	e300	e1.6	e12	e12	e7.0	e2.5	e1.2	e.27	e.27
4	e.00	e.00	e.15	e100	e1.6	e10	e16	e10	e2.2	e1.2	e.19	e.38
5	e.00	e.00	e.25	e50	e1.6	e9.2	e12	e15	e1.9	e5.3	e.12	e.33
6	e.00	e.00	e.52	e30	e1.5	e8.2	e11	e9.6	e1.6	e7.3	e.10	e.20
7	e.00	e.00	e.25	e20	e1.6	e7.0	e25	e6.2	e1.3	e3.9	e.15	e.17
8	e.00	e.00	e.21	e15	e1.6	e6.4	e74	e4.3	e1.0	e1.9	e10	e.22
9	e.00	e.00	e.18	e12	e1.6	e5.6	e40	e10	e.86	e1.3	e12	e.33
10	e.00	e.00	e25	e10	e1.6	e5.2	e25	e19	e.72	e.92	e3.2	e.56
11	e.00	e.00	e6.0	e9.0	e1.7	e6.4	e19	e14	e.62	e.99	e1.2	e.68
12	e.00	e.00	e2.0	e8.0	e2.3	e7.4	e16	e12	e.52	e.84	e.68	e1.5
13	e.00	e.00	e8.0	e11	e150	e6.2	e13	e25	e.45	e.74	e.55	e1.4
14	e.00	e.00	e25	e9.0	e90	e5.6	e11	e17	e.38	e.44	e.42	e1.2
15	e.00	e.00	e10	e7.0	e54	e5.2	e9.6	e13	e.29	e.29	e.29	e1.3
16	e.00	e.00	e4.0	e6.2	e35	e70	e8.6	e9.0	e.69	e.20	e.18	e1.3
17	e.00	e.00	e2.3	e5.6	e26	e40	e150	e7.2	e78	e.15	e.09	e1.4
18	e.00	e.00	e1.7	e5.0	e370	e30	e80	e6.4	e84	e.12	e17	e1.2
19	e.00	e.00	e1.3	e4.0	e210	e50	e50	e5.6	e34	e1.0	e8.5	e1.0
20	e.00	e.00	e1.4	e3.5	e130	e96	e35	e4.8	e11	e1.3	e3.0	e1.1
21	e.00	e.00	e1.1	e3.0	e75	e50	e25	e4.1	e47	e.67	e1.6	e1.5
22	e.00	e.00	e.96	e2.7	e45	e40	e19	e3.8	e23	e.44	e1.0	e1.5
23	e.00	e.00	e.88	e2.5	e26	e30	e15	e4.3	e9.9	e.28	e2.8	e1.3
24	e.00	e.00	e.80	e2.3	e38	e21	e12	e4.0	e7.2	e.20	e5.1	e1.8
25	e.00	e.00	e.74	e2.1	e33	e19	e10	e3.3	e7.7	e.12	e3.7	e51
26	e.00	e.00	e.68	e2.0	e28	e17	e8.8	e2.7	e6.1	e.07	e2.5	e30
27	e.00	e.00	e.64	e1.8	e52	e15	e7.6	e14	e7.7	e.04	e3.1	e3.6
28	e.00	e.00	e.58	e1.7	e35	e12	e6.6	e9.0	e7.2	e.03	e2.0	e1.6
29	e.00	e.00	e.54	e1.6	e27	e9.6	e5.8	e6.6	e4.8	e.10	e1.5	e1.1
30	e.00	e.00	e.50	e1.5	---	e8.0	e5.2	e5.0	e3.4	e.57	e1.1	e1.1
31	e.00	---	e.47	e1.6	---	e6.8	---	e4.0	---	e.44	e.76	---
TOTAL	0.00	0.00	96.28	629.55	1443.9	642.8	737.4	265.7	352.23	36.05	83.78	109.96
MEAN	.000	.000	3.11	20.3	49.8	20.7	24.6	8.57	11.7	1.16	2.70	3.67
MAX	.00	.00	25	300	370	96	150	25	84	7.3	17	51
MIN	.00	.00	.02	.45	1.5	5.2	5.2	2.7	.29	.03	.09	.17
CFSM	.00	.00	.24	1.59	3.89	1.62	1.92	.67	.92	.09	.21	.29
IN.	.00	.00	.28	1.83	4.20	1.87	2.14	.77	1.02	.10	.24	.32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2000, BY WATER YEAR (WY)

MEAN	3.01	18.1	30.6	35.2	39.5	50.3	50.7	38.0	19.2	9.72	5.60	3.97
MAX	11.9	77.3	109	107	89.6	134	133	158	108	89.6	35.8	34.4
(WY)	1991	1980	1991	1982	1990	1997	1996	1996	1997	1979	1998	1996
MIN	.000	.000	1.17	.61	2.58	8.80	6.79	2.66	.46	.26	.000	.000
(WY)	1998	2000	1981	1981	1992	1981	1976	1988	1988	1983	1991	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1969 - 2000	
ANNUAL TOTAL	8976.34		4397.65			
ANNUAL MEAN	24.6		12.0		25.2	
HIGHEST ANNUAL MEAN					47.3	1996
LOWEST ANNUAL MEAN					6.35	1992
HIGHEST DAILY MEAN	615	Jan 23	e370	Feb 18	1770	Jul 26 1979
LOWEST DAILY MEAN	.00	Aug 7	e.00	Oct 1	.00	Oct 4 1970
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 18	e.00	Oct 1	.00	Sep 11 1972
INSTANTANEOUS PEAK FLOW			unknown		9270	Jul 26 1979
INSTANTANEOUS PEAK STAGE			unknown		11.35	Jul 26 1979
ANNUAL RUNOFF (CFSM)	1.92		.94		1.97	
ANNUAL RUNOFF (INCHES)	26.09		12.78		26.80	
10 PERCENT EXCEEDS	64		30		53	
50 PERCENT EXCEEDS	1.8		1.8		5.2	
90 PERCENT EXCEEDS	.00		.00		.24	

e Estimated

03374500 PATOKA RIVER NEAR CUZCO, IN

LOCATION.--Lat 38°26'31", long 86°42'51", in SW$^1/_4$SW$^1/_4$ sec.11, T.1 S., R.3 W., Dubois County, Hydrologic Unit 05120209 on right bank 30 ft upstream from bridge on Cuzco Road South, 0.7 mi downstream from Patoka Lake, 2.3 mi south of Cuzco, 4.5 mi upstream from Dillon Creek, and at mile 117.8.

DRAINAGE AREA.--170 mi^2.

PERIOD OF RECORD.--June 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 477.00 ft above sea level, (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 1, 1961, nonrecording gage on downstream side of bridge, 1.7 mi downstream at same datum. Oct. 1, 1961 to Sept. 30, 1981, water-stage recorder at site described above. Prior to October 1979, published as "near Ellsworth".

REMARKS.--Flow regulated by U.S. Army Corps of Engineers from Patoka Lake since February 1978.

COOPERATION.--Records of daily discharge provided by U.S. Army Corps of Engineers beginning Oct. 1, 1981.

AVERAGE DISCHARGE.--39 years, 221 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 14,700 ft^3/s Mar. 10, 1964, gage height, 20.02 ft; no flow Oct. 30, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 19.1 ft according to information by local resident, discharge, 12,300 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,050 ft^3/s Jan. 9; minimum daily, 14 ft^3/s June 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	19	19	376	19	774	63	19	19	19	19	19
2	19	19	19	375	19	846	63	19	19	19	19	19
3	19	19	19	378	19	844	63	19	19	19	19	19
4	19	19	19	179	19	843	63	19	19	19	19	19
5	19	19	19	53	19	841	63	19	19	19	19	19
6	19	19	19	202	19	840	63	19	19	19	19	19
7	19	19	19	520	19	839	63	19	19	19	19	19
8	19	19	19	877	19	837	63	19	19	19	19	19
9	19	19	19	1050	19	836	64	19	19	19	19	19
10	19	19	19	1040	19	834	64	19	19	19	19	19
11	19	19	19	1040	19	833	64	19	19	19	19	19
12	19	19	19	1040	19	832	36	19	19	19	19	19
13	19	19	19	1040	19	831	19	19	19	19	19	19
14	19	19	19	1040	19	829	19	19	19	19	19	19
15	19	19	19	1030	126	828	19	19	19	19	19	19
16	19	19	19	1030	191	623	19	19	19	19	19	19
17	19	19	19	1030	191	414	19	19	14	19	19	19
18	19	19	19	1030	105	682	19	19	19	19	19	19
19	19	19	19	1020	20	828	19	19	19	19	19	19
20	19	19	19	1020	20	829	19	19	19	19	19	19
21	19	19	51	1020	20	829	19	19	19	19	19	19
22	19	19	168	1020	208	828	19	19	19	19	19	19
23	19	19	268	1010	631	827	19	19	19	19	19	19
24	19	19	297	479	578	826	19	19	19	19	19	19
25	19	19	297	19	423	824	19	19	19	19	19	19
26	19	19	158	19	307	822	19	19	19	19	19	20
27	19	19	19	19	107	599	19	19	19	19	19	20
28	19	19	19	19	306	410	19	19	19	19	20	20
29	19	19	19	19	591	207	19	19	19	19	20	20
30	19	19	134	19	---	95	19	19	19	19	20	20
31	19	---	322	19	---	75	---	19	---	19	19	---
TOTAL	589	570	2132	19032	4090	22205	1074	589	565	589	592	575
MEAN	19.0	19.0	68.8	614	141	716	35.8	19.0	18.8	19.0	19.1	19.2
MAX	19	19	322	1050	631	846	64	19	19	19	20	20
MIN	19	19	19	19	19	75	19	19	14	19	19	19

CAL YR 1999 TOTAL 56122 MEAN 154 MAX 1040 MIN 19
WTR YR 2000 TOTAL 52602 MEAN 144 MAX 1050 MIN 14

03375500 PATOKA RIVER AT JASPER, IN

LOCATION.--Lat 38°24'49", long 86°52'36", in NW$^1/_4$SE$^1/_4$ sec.20, T.1 S., R.4 W., Dubois County, Hydrologic Unit 05120209, on left bank 0.3 mi upstream from unnamed outlet of Idlewild Lake, 1.2 mi downstream from county road bridge, 1.2 mi downstream from Beaver Creek, 3.3 mi northeast of Jasper, and at mile 91.5.

DRAINAGE AREA.--262 mi^2.

PERIOD OF RECORD.--November 1947 to current year.

REVISED RECORDS.--WSP 1909: 1958. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 446.00 ft above sea level (levels by State of Indiana, Department of Natural Resources). Nonrecording gage at bridge 5.6 mi downstream, used for high-water periods when flow exceeds about 2,500 ft^3/s, at datum 0.15 ft lower. Prior to Sept. 18, 1956, nonrecording gage at bridge 5.6 mi downstream at datum 0.15 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Beaver Creek Reservoir beginning Oct. 11, 1955, and by Patoka Lake beginning Feb. 13, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 15.9 ft at downstream site, from floodmark furnished by local residents, discharge 16,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	20	21	285	e49	726	130	46	27	33	38	35
2	21	19	21	333	e47	820	124	45	28	31	42	30
3	20	21	21	729	e39	855	163	42	28	29	30	27
4	20	22	22	1280	e34	868	245	42	26	28	27	25
5	21	21	22	1580	e32	866	221	44	26	37	23	23
6	21	21	23	1020	e32	851	168	44	26	45	21	23
7	21	21	21	413	e33	835	164	42	25	40	34	21
8	21	21	21	625	e34	808	746	40	24	32	181	20
9	40	21	21	826	e35	779	612	39	24	28	412	22
10	55	20	30	927	e37	754	295	47	24	27	131	23
11	29	21	38	960	40	741	208	51	24	26	66	23
12	21	21	33	966	38	741	166	42	23	26	48	32
13	20	21	43	970	170	730	127	50	24	26	38	37
14	18	21	139	967	946	723	97	64	24	25	33	28
15	19	21	104	961	681	775	85	49	23	17	28	23
16	20	21	50	955	325	875	77	40	24	11	25	20
17	19	21	35	946	283	982	83	37	391	9.8	23	19
18	19	21	29	948	949	842	137	36	336	9.6	76	19
19	20	21	27	948	1790	885	120	35	182	19	81	19
20	20	25	27	943	2220	1070	114	33	100	36	43	18
21	20	24	27	928	1280	1190	152	31	89	19	30	22
22	20	21	37	915	476	1190	99	31	91	16	25	23
23	19	21	145	909	378	1070	83	32	68	17	56	21
24	20	21	236	913	861	985	78	34	56	17	507	20
25	20	21	266	511	1020	923	77	32	48	16	273	231
26	20	21	265	99	898	885	69	28	40	16	110	466
27	20	22	156	60	806	880	62	29	42	16	115	155
28	20	21	37	e54	522	784	58	34	49	22	82	78
29	20	20	26	e52	597	599	53	33	39	39	62	56
30	20	20	26	e52	---	282	49	30	34	57	50	46
31	19	---	105	e48	---	161	---	28	---	58	41	---
TOTAL	684	633	2074	22123	14652	25475	4862	1210	1965	828.4	2751	1605
MEAN	22.1	21.1	66.9	714	505	822	162	39.0	65.5	26.7	88.7	53.5
MAX	55	25	266	1580	2220	1190	746	64	391	58	507	466
MIN	18	19	21	48	32	161	49	28	23	9.6	21	18
CFSM	.08	.08	.26	2.72	1.93	3.14	.62	.15	.25	.10	.34	.20
IN.	.10	.09	.29	3.14	2.08	3.62	.69	.17	.28	.12	.39	.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2000, BY WATER YEAR (WY)

MEAN	103	231	423	623	670	774	609	427	211	121	101	91.1
MAX	494	800	1506	2742	1898	2543	1574	2034	1044	787	530	484
(WY)	1980	1975	1952	1950	1950	1964	1972	1996	1996	1958	1977	1979
MIN	.000	.000	.17	17.5	27.7	144	130	37.5	8.66	.074	.000	.000
(WY)	1949	1954	1954	1964	1964	1992	1976	1952	1953	1954	1952	1953

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1949 - 2000	
ANNUAL TOTAL	100258		78862.4			
ANNUAL MEAN	275		215		364	
HIGHEST ANNUAL MEAN					673	1950
LOWEST ANNUAL MEAN					63.6	1954
HIGHEST DAILY MEAN	2130	Jan 24	2220	Feb 20	13500	Mar 11 1964
LOWEST DAILY MEAN	18	Oct 14	9.6	Jul 18	.00	Oct 1 1948
ANNUAL SEVEN-DAY MINIMUM	19	Oct 13	17	Jul 21	.00	Oct 1 1948
INSTANTANEOUS PEAK FLOW			2440	Feb 20	14100	Mar 11 1964
INSTANTANEOUS PEAK STAGE			15.23	Feb 20	21.20	Mar 11 1964
ANNUAL RUNOFF (CFSM)	1.05		.82		1.39	
ANNUAL RUNOFF (INCHES)	14.24		11.20		18.88	
10 PERCENT EXCEEDS	981		870		1060	
50 PERCENT EXCEEDS	40		38		132	
90 PERCENT EXCEEDS	21		20		7.1	

e Estimated

03375800 HALL CREEK NEAR ST. ANTHONY, IN

LOCATION.--Lat 38°21'45", long 86°49'43", in NW1/4NW1/4 sec.11, T.2 S., R.4 W., Dubois County, Hydrologic Unit 05120209, on right bank 10 ft downstream of bridge on County Road 125 South, 0.7 mi upstream from Grassy Fork, 3.3 mi north of St. Anthony, and at mile 4.1.

DRAINAGE AREA.--21.8 mi^2.

PERIOD OF RECORD.--October 1970 to current year.

REVISED RECORDS.--WDR IN-75-1: 1971-74.

GAGE.--Water-stage recorder. Datum of gage is 456.22 ft above sea level (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 1, 1997 at datum 3.00 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.07	.03	.95	e1.7	21	7.1	4.4	2.7	3.1	3.9	2.9
2	.00	.09	.02	1.1	e1.6	16	13	4.3	2.8	2.5	2.4	2.3
3	.00	.03	.04	1100	e1.5	16	17	6.2	2.9	2.0	2.3	2.0
4	.00	.00	.18	358	e1.5	16	20	7.2	2.2	1.7	1.5	2.5
5	.00	.07	.35	46	e1.5	13	14	8.1	2.7	9.5	1.2	2.2
6	.00	.43	.93	25	e1.5	12	12	5.9	3.0	4.0	1.3	1.4
7	.00	.29	.44	17	e1.5	10	21	5.0	2.2	2.4	6.1	1.1
8	.00	e.15	.21	14	e1.5	9.7	89	6.1	1.7	1.6	368	1.1
9	6.1	e.14	.12	13	e1.7	8.7	30	5.1	1.4	1.3	64	1.8
10	3.8	e.13	17	11	e2.0	7.3	20	8.4	1.3	1.0	18	2.9
11	.43	e.12	4.6	8.9	e3.0	9.8	15	4.4	1.1	.99	8.2	2.3
12	.02	e.11	7.6	7.5	e4.5	11	12	3.8	1.1	1.4	5.0	4.6
13	.05	e.11	14	9.0	e355	9.6	9.9	14	1.0	1.1	3.6	3.2
14	.04	e.11	79	6.6	151	8.8	8.7	6.0	.97	.82	2.9	2.2
15	.00	e.11	10	6.7	45	8.3	8.0	4.4	.91	.63	2.4	1.9
16	.00	.11	5.3	6.4	27	109	7.2	3.9	1.2	.49	2.0	1.5
17	.00	.11	3.7	5.7	21	51	22	3.6	338	.39	1.7	1.2
18	.00	.11	2.4	10	1060	28	17	3.5	226	.33	16	1.2
19	.00	.18	2.0	8.9	170	113	13	3.5	41	4.2	3.2	1.1
20	.00	2.2	3.2	10	53	132	11	3.2	16	1.5	2.4	1.0
21	.00	.79	e2.5	e5.0	30	48	9.7	3.2	44	.77	1.9	3.0
22	.00	.23	e1.5	e3.7	23	31	8.5	3.5	17	.58	1.4	1.8
23	.00	.11	e1.3	e3.5	18	23	7.4	4.3	8.6	.45	31	1.4
24	.00	.11	e1.0	e3.3	140	19	9.0	4.7	6.8	.35	127	1.5
25	.00	.07	e.94	e3.1	48	15	8.0	4.0	5.5	.26	24	146
26	.00	.11	e.86	e3.1	30	13	6.4	3.5	4.3	.22	11	44
27	.00	.26	e.80	e2.2	147	15	5.8	4.2	23	.22	18	18
28	.00	.23	e.74	e1.8	46	12	5.3	4.1	10	25	9.9	11
29	.00	.10	e.70	e1.6	30	9.5	4.9	3.6	5.8	7.2	6.5	7.7
30	.00	.05	e.66	e1.5	---	8.5	4.5	3.2	4.0	47	4.8	5.9
31	.58	---	e.62	e1.6	---	7.4	---	2.9	---	6.5	3.7	---
TOTAL	11.02	6.73	162.74	1696.15	2417.5	811.6	436.4	152.2	779.18	129.50	755.3	280.7
MEAN	.36	.22	5.25	54.7	83.4	26.2	14.5	4.91	26.0	4.18	24.4	9.36
MAX	6.1	2.2	79	1100	1060	132	89	14	338	47	368	146
MIN	.00	.00	.02	.95	1.5	7.3	4.5	2.9	.91	.22	1.2	1.0
CFSM	.02	.01	.24	2.51	3.82	1.20	.67	.23	1.19	.19	1.12	.43
IN.	.02	.01	.28	2.89	4.13	1.38	.74	.26	1.33	.22	1.29	.48

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2000, BY WATER YEAR (WY)

MEAN	7.74	31.7	39.2	41.6	55.0	58.9	54.4	35.1	22.5	19.7	11.5	10.4
MAX	34.1	147	125	154	131	131	142	153	73.7	247	52.5	68.0
(WY)	1978	1980	1991	1982	1985	1989	1972	1983	1979	1979	1979	1986
MIN	.003	.22	3.28	.17	4.96	13.9	5.83	.35	.003	.32	.040	.000
(WY)	1988	2000	1977	1977	1992	1981	1986	1988	1988	1983	1991	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1971 - 2000	
ANNUAL TOTAL	8961.87		7639.02			
ANNUAL MEAN	24.6		20.9		32.2	
HIGHEST ANNUAL MEAN					78.4	1979
LOWEST ANNUAL MEAN					11.5	1992
HIGHEST DAILY MEAN	990	Jun 28	1100	Jan 3	5110	Jul 26 1979
LOWEST DAILY MEAN	.00	Aug 23	.00	Oct 1	.00	Jun 23 1972
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 23	.00	Oct 1	.00	Jun 23 1972
INSTANTANEOUS PEAK FLOW			3130	Jan 3	11500	Jul 26 1979
INSTANTANEOUS PEAK STAGE			15.22	Jan 3	15.30	Jul 26 1979
ANNUAL RUNOFF (CFSM)	1.13		.96		1.48	
ANNUAL RUNOFF (INCHES)	15.29		13.04		20.05	
10 PERCENT EXCEEDS	48		29		62	
50 PERCENT EXCEEDS	4.4		3.4		7.0	
90 PERCENT EXCEEDS	.00		.08		.26	

e Estimated

03376300 PATOKA RIVER AT WINSLOW, IN

LOCATION.--Lat 38°22'48", long 87°13'00", in SW$^1/_4$SW$^1/_4$ sec.32, T.1 S., R.7 W., Pike County, Hydrologic Unit 05120209, on right bank at abandoned bridge abutment, 65 ft upstream from bridge on State Highway 61, 100 ft downstream from dam of Winslow Water Company, and 41.3 mi above mouth.

DRAINAGE AREA.--603 mi^2.

PERIOD OF RECORD.--October 1963 to September 1974, May 1986 to current year. Discharge measurements and gage readings June 1961 to September 1963, obtained by State of Indiana, Department of Natural Resources, are available in the district office.

GAGE.--Water-stage recorder. Datum of gage is 400.00 ft above sea level (levels by State of Indiana, Department of Natural Resources). Prior to Nov. 21, 1963, nonrecording gage on downstream side of bridge 65 ft downstream at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated by Patoka Lake. Minor diversion by municipal water supply 100 ft above gage.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in January 1937 reached a stage of 28.9 ft, from floodmarks, information from State of Indiana, Department of Natural Resources.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e29	e23	e27	43	98	2760	712	117	47	144	341	1120
2	e27	e23	e26	134	93	2460	458	102	43	99	171	734
3	e25	e24	28	844	94	2180	423	91	49	77	111	458
4	e28	e24	30	2290	90	1960	493	90	53	61	92	179
5	e26	e24	34	2070	88	1760	550	129	58	59	77	99
6	e25	e24	38	2320	81	1620	527	135	48	106	62	86
7	e23	e24	41	2720	78	1500	460	123	47	161	69	79
8	e30	e25	43	2940	79	1390	1160	105	48	112	711	74
9	49	e25	39	3000	82	1280	1460	98	43	70	1760	74
10	129	e25	47	2790	86	1190	1440	105	40	55	1650	76
11	240	e25	125	2460	89	1130	1220	123	38	47	1420	87
12	152	e25	187	2150	89	1130	872	120	35	45	971	130
13	82	e25	156	1920	187	1100	571	111	42	43	472	203
14	43	e25	339	1730	1480	1050	421	141	56	43	173	184
15	30	e24	726	1590	1650	1020	330	149	64	40	107	121
16	23	e24	523	1470	1720	1200	266	122	44	37	88	95
17	21	e26	252	1380	1770	1660	245	95	992	33	77	83
18	20	26	142	1320	2430	1640	277	80	1940	29	96	75
19	21	32	92	1280	3530	1730	332	68	1890	30	140	71
20	22	39	65	1240	3540	2050	341	61	1820	43	166	68
21	23	62	55	1210	4190	2090	342	58	1670	86	129	68
22	e23	91	60	1190	5150	2070	354	54	1310	67	96	82
23	e23	59	54	1170	5270	2070	309	55	879	47	217	94
24	e22	41	55	1150	4950	2070	249	66	583	40	1830	83
25	e22	38	172	1130	4420	2050	246	85	355	35	2090	323
26	e23	35	316	1040	3810	1990	230	75	187	32	2080	1360
27	e23	e31	374	631	3640	1930	196	60	177	32	2570	1480
28	e24	e29	336	245	3330	1820	167	54	438	53	2640	1310
29	e24	e30	197	149	3040	1680	144	52	492	242	2480	894
30	e23	e28	98	118	---	1460	128	51	260	450	2210	458
31	e23	---	49	103	---	1130	---	50	---	507	1710	---
TOTAL	1298	956	4726	43827	55154	52170	14923	2825	13748	2925	26806	10248
MEAN	41.9	31.9	152	1414	1902	1683	497	91.1	458	94.4	865	342
MAX	240	91	726	3000	5270	2760	1460	149	1940	507	2640	1480
MIN	20	23	26	43	78	1020	128	50	35	29	62	68
CFSM	.07	.05	.25	2.34	3.15	2.79	.82	.15	.76	.16	1.43	.57
IN.	.08	.06	.29	2.70	3.40	3.22	.92	.17	.85	.18	1.65	.63

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2000, BY WATER YEAR (WY)

MEAN	153	382	726	1066	1352	1593	1416	1114	585	308	194	187
MAX	579	2218	2048	2576	2832	5126	3426	4863	2958	1305	865	708
(WY)	1991	1994	1991	1991	1991	1964	1972	1996	1996	1969	2000	1996
MIN	2.84	6.83	13.8	56.3	45.5	428	349	85.7	13.4	13.5	7.46	.94
(WY)	1965	1964	1964	1964	1964	1969	1967	1988	1972	1966	1965	1972

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1964 - 2000	
ANNUAL TOTAL	265247		229606			
ANNUAL MEAN	727		627		753	
HIGHEST ANNUAL MEAN					1332	1997
LOWEST ANNUAL MEAN					224	1992
HIGHEST DAILY MEAN	4940	Jan 27	5270	Feb 23	15200	Mar 13 1964
LOWEST DAILY MEAN	20	Oct 18	20	Oct 18	.50	Aug 5 1964
ANNUAL SEVEN-DAY MINIMUM	22	Oct 16	22	Oct 16	.61	Sep 8 1972
INSTANTANEOUS PEAK FLOW			5430	Feb 22	15500	Mar 13 1964
INSTANTANEOUS PEAK STAGE			24.27	Feb 22	28.84	Mar 13 1964
ANNUAL RUNOFF (CFSM)	1.21		1.04		1.25	
ANNUAL RUNOFF (INCHES)	16.36		14.16		16.96	
10 PERCENT EXCEEDS	2240		2010		2000	
50 PERCENT EXCEEDS	142		120		304	
90 PERCENT EXCEEDS	23		26		23	

e Estimated

03376350 SOUTH FORK PATOKA RIVER NEAR SPURGEON, IN

LOCATION.--Lat 38°17'49", long 87°15'37", in NW1/4SW1/4 sec. 36, T. 2 S., R. 8 W., Pike County, Hydrologic Unit 05120209, on the left bank, 150 ft upstream of the bridge on State Road 61, 0.5 mi north of Enos Corner, and 3.1 mi north of Spurgeon, IN.

DRAINAGE AREA.--42.8 mi^2.

PERIOD OF RECORD.--October 1964 to October 1986. October 1998 to current year.

GAGE.--Water-stage recorder. Datum of gage is 420.88 ft above sea level (Indiana Flood Control and Water Resources Commission bench mark).

REMARKS.--Records good except for estimated daily discharges, which are poor. Runoff affected by un-reclaimed surface mined lands.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e5.6	e5.3	4.1	7.5	e8.8	58	24	13	13	14	9.8	48
2	e5.0	e10	3.9	9.5	e8.5	48	33	14	67	12	8.7	40
3	e4.5	e5.1	4.7	786	e8.0	51	35	14	27	11	8.1	39
4	e6.0	e5.1	7.3	270	e7.8	53	37	23	13	10	7.5	34
5	e5.0	e5.0	9.3	61	e7.8	45	29	21	12	19	15	33
6	e4.5	e5.0	9.0	43	e7.9	41	23	15	10	14	22	29
7	e4.3	e4.9	6.7	37	e7.9	39	32	14	9.4	10	88	30
8	e5.0	e4.9	6.5	27	e8.0	37	125	16	9.7	9.3	259	27
9	e50	e4.8	6.3	23	e8.0	36	48	14	8.8	8.4	e58	32
10	e16	e4.8	41	22	e8.0	32	36	18	9.6	8.3	e33	36
11	e7.2	e4.7	17	22	e8.1	44	30	13	12	8.7	17	35
12	e6.0	e4.7	37	17	8.2	48	27	13	7.9	12	14	150
13	e5.3	e4.6	48	18	226	39	25	18	17	9.9	12	54
14	e5.3	e4.6	100	15	149	37	23	14	9.7	8.5	12	32
15	e5.3	e4.5	32	14	53	33	22	12	11	7.7	11	25
16	e5.2	e4.4	18	14	39	228	20	11	14	7.1	9.9	20
17	e5.2	e4.3	13	14	30	104	27	12	971	6.4	9.1	18
18	e5.1	e4.2	11	18	1470	55	23	12	161	6.9	39	18
19	e5.1	e6.0	9.4	16	621	105	22	13	70	26	14	17
20	e5.0	11	18	17	114	179	21	12	43	9.8	8.7	17
21	e5.0	6.5	13	e15	83	77	22	12	54	8.2	7.7	24
22	e4.9	5.7	9.6	e14	64	53	25	11	36	7.2	7.7	19
23	e4.9	5.8	8.9	e13	54	43	20	25	22	6.7	74	18
24	e4.9	6.0	10	e13	183	41	27	18	26	6.3	728	23
25	e4.8	5.4	e9.6	e12	85	35	26	13	19	6.2	76	420
26	e4.8	6.0	e9.2	e11	142	33	21	12	28	5.7	45	103
27	e4.8	6.1	e9.0	e11	486	40	19	15	49	5.6	1290	53
28	e4.8	6.0	e9.2	e10	102	40	16	14	33	14	185	40
29	e4.7	5.5	9.4	e10	68	37	13	13	20	12	76	31
30	e4.7	4.3	9.1	e9.8	---	29	13	12	15	14	60	26
31	e4.7	---	8.7	e9.2	---	25	---	18	---	9.7	53	---
TOTAL	213.6	165.2	507.9	1579.0	4066.0	1765	864	455	1798.1	314.6	3258.2	1491
MEAN	6.89	5.51	16.4	50.9	140	56.9	28.8	14.7	59.9	10.1	105	49.7
MAX	50	11	100	786	1470	228	125	25	971	26	1290	420
MIN	4.3	4.2	3.9	7.5	7.8	25	13	11	7.9	5.6	7.5	17
CFSM	.16	.13	.38	1.19	3.28	1.33	.67	.34	1.40	.24	2.46	1.16
IN.	.19	.14	.44	1.37	3.53	1.53	.75	.40	1.56	.27	2.83	1.30

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2000, BY WATER YEAR (WY)

MEAN	15.3	37.8	56.0	60.3	82.3	94.2	88.7	66.2	45.2	33.3	24.7	18.0
MAX	32.1	136	154	186	229	188	223	263	227	283	127	72.7
(WY)	1978	1986	1983	1982	1985	1975	1983	1983	1979	1979	1979	1982
MIN	3.35	5.51	4.84	.81	26.1	21.2	23.6	12.5	11.0	6.02	6.83	5.00
(WY)	1965	2000	1977	1977	1978	1981	1976	1965	1972	1966	1999	1972

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1965 - 2000	
ANNUAL TOTAL	17469.3		16477.6			
ANNUAL MEAN	47.9		45.0		51.7	
HIGHEST ANNUAL MEAN					118	1979
LOWEST ANNUAL MEAN					25.3	1981
HIGHEST DAILY MEAN	945	Jan 22	1470	Feb 18	3640	Jun 9 1979
LOWEST DAILY MEAN	3.9	Dec 2	3.9	Dec 2	.00	Jan 20 1977
ANNUAL SEVEN-DAY MINIMUM	4.5	Nov 12	e4.5	Nov 12	.00	Jan 20 1977
INSTANTANEOUS PEAK FLOW			3160	Feb 18	5900	Jun 9 1979
INSTANTANEOUS PEAK STAGE			12.54	Feb 18	15.07	Jun 9 1979
ANNUAL RUNOFF (CFSM)	1.12		1.05		1.21	
ANNUAL RUNOFF (INCHES)	15.18		14.32		16.40	
10 PERCENT EXCEEDS	82		65		112	
50 PERCENT EXCEEDS	19		14		22	
90 PERCENT EXCEEDS	4.9		5.1		6.3	

e Estimated

03376500 PATOKA RIVER NEAR PRINCETON, IN

LOCATION.--Lat 38°23'25", long 87°32'55", in sec. 107, T.1 S., R.10 W., Gibson County, Hydrologic Unit 05120209, on right downstream side of bridge on State Highway 65, 0.5 mi downstream from Indian Creek, 2 mi northeast of Princeton, and at mile 21.4.

DRAINAGE AREA.--822 mi^2.

PERIOD OF RECORD.--August 1934 to current year. Published as "at Patoka" August 1934 to September 1940. Records published for both sites October 1939 to September 1940 (monthly discharge only at present site, for October, November 1939, published in WSP 1305).

REVISED RECORDS.--WSP 1275: 1952. WSP 1335: 1935-36, 1938-39, 1949(M), 1940-50. WSP 1385: 1951-52. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 390.00 ft above sea level. Jan. 21, 1941 to Oct. 23, 1986, water-stage recorder at dam 0.1 mi downstream and at datum 4.14 ft higher. See WSP 1725 for history of changes prior to Jan. 21, 1941.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Patoka Lake.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	e33	40	81	135	4410	1480	157	83	253	465	2790
2	36	e33	38	73	130	4120	955	148	76	176	255	2580
3	35	e34	39	828	131	3890	672	141	146	141	167	2120
4	38	e34	43	1740	130	3590	579	144	101	121	123	1190
5	36	e34	50	1730	126	3210	586	144	81	300	137	473
6	33	e34	54	1790	124	2890	580	170	74	251	179	256
7	31	e35	58	1870	120	2620	584	164	65	217	375	177
8	36	e35	59	1970	121	2380	1460	154	62	186	1430	148
9	46	e35	59	2090	122	2110	1590	143	59	137	2100	154
10	106	e35	73	2200	126	1840	1610	147	54	109	1970	244
11	179	e35	106	2280	131	1630	1580	148	56	99	1910	215
12	198	e35	154	2330	130	1500	1390	151	55	136	1780	277
13	126	e36	207	2320	243	1400	995	190	132	98	1320	384
14	82	e36	352	2250	1190	1290	631	155	108	87	597	322
15	56	e36	560	2150	1540	1190	466	164	87	80	281	248
16	45	e35	615	2000	1570	1410	362	154	134	71	172	186
17	38	e35	365	1860	1600	1680	319	135	1660	62	126	153
18	34	38	203	1710	2300	1720	315	118	2060	55	190	136
19	33	39	138	1570	2490	1820	346	111	1970	85	180	126
20	32	42	113	1460	2560	2150	369	101	1990	86	190	120
21	32	50	107	1370	2760	2140	361	95	2000	86	177	140
22	34	62	99	1310	2980	2160	363	90	1950	104	138	132
23	35	71	95	1250	3190	2160	357	97	1780	84	355	140
24	35	58	90	1200	3600	2150	307	116	2160	67	2130	142
25	35	49	92	1160	3960	2140	291	109	1470	56	2060	414
26	35	45	211	1120	4270	2130	272	116	670	47	2080	1310
27	e34	44	330	883	4810	2130	240	116	430	41	2910	1530
28	e34	41	351	431	4770	2090	209	105	436	42	2800	1510
29	e33	42	264	209	4640	2050	182	95	591	95	2830	1320
30	e33	41	162	166	---	1960	166	88	425	371	2880	846
31	e32	---	106	147	---	1820	---	84	---	505	2890	---
TOTAL	1630	1212	5233	43548	49999	69780	19617	4050	20965	4248	35197	19783
MEAN	52.6	40.4	169	1405	1724	2251	654	131	699	137	1135	659
MAX	198	71	615	2330	4810	4410	1610	190	2160	505	2910	2790
MIN	31	33	38	73	120	1190	166	84	54	41	123	120
CFSM	.06	.05	.21	1.71	2.10	2.74	.80	.16	.85	.17	1.38	.80
IN.	.07	.05	.24	1.97	2.26	3.16	.89	.18	.95	.19	1.59	.90

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2000, BY WATER YEAR (WY)

MEAN	249	515	962	1522	1800	2207	1960	1489	825	447	320	230
MAX	2573	2978	3735	8365	5570	8531	4664	6810	4322	3075	3915	1125
(WY)	1946	1994	1952	1937	1950	1945	1989	1961	1996	1958	1979	1979
MIN	1.53	9.83	10.2	44.3	64.2	61.5	373	117	7.93	15.0	4.60	8.12
(WY)	1943	1944	1944	1944	1964	1941	1976	1941	1936	1944	1936	1942

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1935 - 2000	
ANNUAL TOTAL	353643		275262			
ANNUAL MEAN	969		752		1040	
HIGHEST ANNUAL MEAN					2080	1950
LOWEST ANNUAL MEAN					151	1954
HIGHEST DAILY MEAN	4410	Feb 1	4810	Feb 27	18500	Jan 26 1937
LOWEST DAILY MEAN	31	Sep 9	31	Oct 7	.00	Aug 29 1936
ANNUAL SEVEN-DAY MINIMUM	33	Sep 6	33	Oct 27	.00	Aug 29 1936
INSTANTANEOUS PEAK FLOW			4830	Feb 27	18700	Jan 26 1937
INSTANTANEOUS PEAK STAGE			19.53	Feb 27	26.80	Jan 26 1937
ANNUAL RUNOFF (CFSM)	1.18		.91		1.27	
ANNUAL RUNOFF (INCHES)	16.00		12.46		17.19	
10 PERCENT EXCEEDS	3060		2150		2830	
50 PERCENT EXCEEDS	235		176		384	
90 PERCENT EXCEEDS	35		36		28	

e Estimated

03377500 WABASH RIVER AT MOUNT CARMEL, IL

LOCATION.--Lat 38°24'07", long 87°45'10", in SE$^1/_4$NW$^1/_4$ sec.28, T.1 S., R.12 W., Wabash County, Illinois, Hydrologic Unit 05120113, on right bank on downstream side of Southern Railway bridge at Mount Carmel, 0.2 mi downstream from Patoka River, and at mile 94.4.

DRAINAGE AREA.--28,635 mi^2.

PERIOD OF RECORD.--January 1908 to September 1913 (gage heights only), October 1927 to current year. Gage-height records collected in this vicinity November 1874 to December 1878, are contained in files of Louisville office of the U.S. Army Corps of Engineers and since June 1884, are contained in reports of National Weather Service.

REVISED RECORDS.--WDR IN-73-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 369.46 ft above sea level. Oct. 1, 1949, to Feb. 8, 1977, at datum 2.00 ft higher. See WSP 1725 for history of changes prior to Sept. 30, 1949.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow partially regulated by upstream reservoirs.

EXTREMES OUTSIDE THE PERIOD OF RECORD.--(1874-78, 1884 to 1985) Maximum discharge, 428,000 ft^3/s Mar. 30, 1913, gage height, 33.0 ft, present site and datum.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3570	3490	3410	3830	3920	34900	15400	16500	31200	50000	12400	11000
2	3680	3500	3450	4190	3820	32100	14300	15000	31600	47200	12700	10100
3	3930	3530	3400	4790	3900	30100	13100	13900	28700	39300	12100	9290
4	4230	3560	3430	8080	3930	27300	12000	13000	25100	30500	12900	8220
5	4220	3550	3590	12500	4000	24000	11400	12200	21200	29000	14400	6940
6	4130	3700	3520	15100	4010	20900	11100	11900	17800	35900	12900	6420
7	4090	3800	3440	15100	4000	18500	11600	11600	15400	38000	11400	6910
8	4560	3770	3440	14800	3930	16700	16100	11700	13700	39600	21400	7240
9	4900	3770	3520	14700	3960	15100	25200	12000	12600	40000	41500	7280
10	4940	3770	3970	14600	4050	13700	32200	12500	13100	38900	44100	7030
11	4970	3720	4130	13900	3940	12800	33100	12600	14500	35900	37700	12100
12	5020	3800	4300	12900	3990	12200	32200	13000	14300	40300	28100	19600
13	4930	3830	4360	11800	4460	11600	31300	15200	12900	44100	22600	19200
14	4790	3830	4880	10400	5710	11200	31800	16500	12500	41800	19300	19100
15	4800	3820	5710	9230	7670	11100	32300	17100	12000	36200	16600	17700
16	4680	3800	5760	8260	8510	11000	30500	17500	11300	29700	14300	13400
17	4330	3740	5530	7590	10100	12200	26100	16700	22700	22700	12300	12000
18	4010	3740	5490	7230	14500	13100	22200	15300	40800	18500	10600	11600
19	3850	3690	5510	6850	27200	13100	22000	14200	51200	18200	9930	10600
20	3800	3520	5670	6520	32500	16900	23900	14100	53400	23100	10200	9470
21	3770	3380	5630	6230	33000	22800	24700	13700	50300	23300	12700	8520
22	3640	3430	5500	6040	32300	25800	24900	14900	47800	19300	14000	8200
23	3560	3470	5240	5790	31600	26200	25100	16200	49600	15800	14100	7790
24	3620	3470	4860	5480	33600	26000	24800	16400	56200	13800	25400	7530
25	3760	3440	4580	5180	35400	26600	26300	16200	60400	12400	26800	8920
26	3730	3460	4340	e4800	35400	27500	28500	16000	58200	11100	19400	20700
27	3610	3490	4110	e4500	39500	26700	27700	15500	56000	9930	20800	34100
28	3590	3460	3900	e4300	41600	23900	24800	18600	53900	9030	25600	39900
29	3580	3480	3830	4070	38700	20700	21200	23100	52500	8740	20400	39800
30	3550	3400	3730	4070	---	18100	18400	25300	51600	9330	15500	33000
31	3530	---	3680	4060	---	16500	---	28300	---	10700	12300	---
TOTAL	127370	108410	135910	256890	479200	619300	694200	486700	992500	842330	584430	433660
MEAN	4109	3614	4384	8287	16520	19980	23140	15700	33080	27170	18850	14460
MAX	5020	3830	5760	15100	41600	34900	33100	28300	60400	50000	44100	39900
MIN	3530	3380	3400	3830	3820	11000	11100	11600	11300	8740	9930	6420
CFSM	.14	.13	.15	.29	.58	.70	.81	.55	1.16	.95	.66	.50
IN.	.17	.14	.18	.33	.62	.80	.90	.63	1.29	1.09	.76	.56

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2000, BY WATER YEAR (WY)

MEAN	9125	15330	25150	37550	40860	50090	50280	41760	28820	19380	12140	8991
MAX	37700	87950	92340	199300	147100	108700	106400	144100	80120	73580	75530	50670
(WY)	1994	1994	1986	1950	1950	1985	1938	1996	1998	1958	1979	1989
MIN	2465	2632	2266	2861	3758	4815	11900	5805	5035	3366	2372	2572
(WY)	1941	1931	1964	1977	1931	1941	1941	1934	1988	1936	1936	1940

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1928 - 2000	
ANNUAL TOTAL	9789950		5760900			
ANNUAL MEAN	26820		15740		28220	
HIGHEST ANNUAL MEAN					56740	1950
LOWEST ANNUAL MEAN					6144	1941
HIGHEST DAILY MEAN	175000	Jan 30	60400	Jun 25	302000	May 25 1943
LOWEST DAILY MEAN	2880	Sep 16	3380	Nov 21	1650	Sep 27 1941
ANNUAL SEVEN-DAY MINIMUM	3000	Sep 13	3430	Nov 28	1700	Dec 19 1963
INSTANTANEOUS PEAK FLOW			60800	Jun 25	305000	May 25 1943
INSTANTANEOUS PEAK STAGE			16.65	Jun 25	31.75	Jan 7 1991
ANNUAL RUNOFF (CFSM)	.94		.55		.99	
ANNUAL RUNOFF (INCHES)	12.72		7.48		13.39	
10 PERCENT EXCEEDS	66800		35000		67800	
50 PERCENT EXCEEDS	9870		12400		16400	
90 PERCENT EXCEEDS	3520		3690		4330	

e Estimated

03378500 WABASH RIVER AT NEW HARMONY, IN

LOCATION.--Lat 38°07'55", long 87°56'25"in SE$^1/_4$SE$^1/_4$ sec.35, T.4 S., R.14 W., Posey County, Hydrologic Unit 05120113, at bridge on State Highway 66 at New Harmony, at Indiana-Illinois state line, and at mile 51.5.

DRAINAGE AREA.--29,234 mi^2.

WATER STAGE RECORDS

PERIOD OF RECORD.--August 1988 to current year. Water discharge published October 1938 to September 1947.

GAGE.--Water-stage recorder. Datum of gage is 353.20 ft above sea level. (Prior to October 1992, erroneously published as 353.30 ft above sea level).

REMARKS.--Water-quality data collected October 1974 to September 1986.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 23.84 ft. May 26, 1943. Beginning August 1988, minimum gage height 0.46 ft. Oct. 12, 1988.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1913 reached a stage of 27.7 ft. Flood of Jan. 31, 1937, reached a stage of 24.4 ft.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 13.02 ft, June 25, 26; minimum gage height, 0.61 ft, Nov. 2.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.74	.74	.68	.85	.79	8.25	3.85	4.09	7.05	11.06	3.25	3.14
2	.75	.69	.69	.91	.75	7.54	3.61	3.79	7.13	10.59	3.23	2.79
3	.87	.70	.69	1.58	.75	7.12	3.32	3.54	6.58	9.13	3.11	2.58
4	.96	.71	.69	2.09	.75	6.54	3.09	3.35	5.86	7.33	3.29	2.33
5	.97	.70	.73	3.04	.80	5.83	2.97	3.15	5.03	6.75	3.65	2.01
6	.95	.75	.71	3.62	.81	5.14	2.85	3.07	4.34	8.22	3.41	1.81
7	.93	.82	.70	3.67	.81	4.59	2.97	3.01	3.83	8.65	3.10	1.91
8	1.09	.81	.69	3.61	.80	4.22	3.98	2.99	3.47	8.94	5.17	2.01
9	1.25	.79	.79	3.55	.78	3.80	5.91	3.08	3.22	8.89	9.33	2.05
10	1.22	.78	.88	3.50	.82	3.49	7.41	3.31	3.29	8.67	9.85	1.97
11	1.22	.78	.95	3.36	.79	3.31	7.54	3.23	3.58	8.17	8.77	2.97
12	1.23	.81	1.02	3.19	.79	3.14	7.39	3.33	3.53	9.11	6.87	4.55
13	1.18	.82	1.07	2.91	1.05	3.02	7.23	3.95	3.26	9.73	5.52	4.57
14	1.18	.81	1.21	2.63	1.41	2.95	7.31	4.18	3.17	9.31	4.74	4.57
15	1.17	.81	1.39	2.30	1.93	2.91	7.41	4.21	3.09	8.22	4.13	4.30
16	1.15	.81	1.44	2.10	2.10	3.06	7.11	4.25	3.01	6.95	3.65	3.45
17	1.03	.80	1.39	1.97	2.51	3.21	6.22	4.00	6.13	5.49	3.23	3.09
18	.93	.78	1.37	1.82	4.07	3.36	5.35	3.71	9.62	4.61	2.86	3.01
19	.87	.77	1.39	1.71	6.71	3.39	5.23	3.51	11.33	4.47	2.67	2.81
20	.83	.73	1.41	1.61	7.77	4.49	5.61	3.51	11.67	5.55	2.67	2.55
21	.82	.67	1.41	1.53	7.89	5.63	5.85	3.45	11.21	5.59	3.17	2.32
22	.77	.67	1.40	1.49	7.65	6.25	5.87	3.79	10.71	4.73	3.49	2.25
23	.74	.70	1.33	1.41	7.49	6.25	5.89	3.99	10.86	3.96	3.47	2.13
24	.75	.69	1.20	1.33	8.07	6.15	5.85	3.91	12.51	3.53	6.66	2.07
25	.81	.69	1.13	1.21	8.38	6.25	6.12	3.90	13.02	3.21	6.57	2.50
26	.81	.69	1.02	1.14	8.74	6.41	6.59	3.85	12.81	2.93	5.06	5.03
27	.77	.69	.95	1.09	9.67	6.29	6.47	3.63	12.45	2.67	5.69	7.71
28	.75	.69	.87	.91	9.79	5.71	5.87	4.39	12.07	2.46	6.42	8.87
29	.75	.69	.87	.87	9.19	5.02	5.15	5.35	11.65	2.39	5.36	8.82
30	.74	.68	.83	.81	---	4.47	4.53	5.79	11.37	2.52	4.33	7.50
31	.73	---	.81	.82	---	4.09	---	6.42	---	2.95	3.57	---
MEAN	.93	.74	1.02	2.02	3.93	4.90	5.49	3.86	7.56	6.35	4.72	3.59
MAX	1.25	.82	1.44	3.67	9.79	8.25	7.54	6.42	13.02	11.06	9.85	8.87
MIN	.73	.67	.68	.81	.75	2.91	2.85	2.99	3.01	2.39	2.67	1.81

WTR YR 2000 MEAN 3.75 MAX 13.02 MIN .67

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued

(National Stream-Quality Accounting Network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL ANALYSES.--October 1974 to 1986, 1997 to current water year. Data collected for water years 1997 and 1998 were published in the Kentucky Water Resources Data reports, and are stored in the Indiana NWIS/QW data base.
SEDIMENT DISCHARGE.--Partial record station--October 1974 to 1985.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE.--October 1974 to September 1980.
WATER TEMPERATURES.--October 1974 to September 1980.

REMARKS.--Water discharge obtained from station Wabash River at Mount Carmel, IL. (03377500).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /Cm) (50624)	SPE-CIFIC CON-DUCT-ANCE (µS/Cm) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (mg/L) (00300)	HARD-NESS TOTAL (MG/L AS $CaCO_3$) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)
NOV											
22...	1140	ENVIRONMENTAL	3440	0.079	720	8.3	12.0	16	13.1	270	61.8
DEC											
14...	1210	ENVIRONMENTAL	4840	.081	783	8.2	7.5	19	13.2	270	66.7
14...	1218	BLANK	--	--	--	--	--	--	--	--	M
MAR											
21...	1210	ENVIRONMENTAL	23200	.171	528	8.2	10.0	60	11.8	210	55.5
21...	1220	REPLICATE	--	.165	--	--	--	65	--	210	54.9
APR											
04...	1150	ENVIRONMENTAL	12400	.104	591	8.4	14.0	25	11.1	250	65.2
25...	1240	ENVIRONMENTAL	26500	.126	463	7.6	14.5	51	9.0	200	53.7
25...	1248	BLANK	--	--	--	--	--	--	--	--	.01
MAY											
09...	1300	ENVIRONMENTAL	11900	.096	--	7.6	--	32	--	250	63.6
09...	1308	BLANK	--	--	--	--	--	--	--	--	--
23...	1200	ENVIRONMENTAL	16300	.116	626	7.9	22.0	53	8.4	250	66.7
JUN											
11...	1300	ENVIRONMENTAL	14600	.112	608	8.0	26.0	47	10.4	260	66.3
11...	1308	BLANK	--	--	--	--	--	--	--	--	--
27...	1220	ENVIRONMENTAL	56000	.177	441	7.3	25.0	78	5.5	190	49.8
27...	1228	BLANK	--	--	--	--	--	--	--	--	.01
JUL											
11...	1210	ENVIRONMENTAL	35300	.167	445	7.5	28.0	2.0	5.7	190	50.6
11...	1220	REPLICATE	--	.162	--	--	--	4.0	--	190	51.3
AUG											
13...	1140	ENVIRONMENTAL	22500	.173	376	7.6	26.0	74	6.2	150	41.4

DATE	MAGNE-SIUM, DIS-SOLVED (mg/L AS Mg) (00925)	SODIUM, DIS-SOLVED (mg/L AS Na) (00930)	POTAS-SIUM, DIS-SOLVED (mg/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD mg/L AS HCO_3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD mg/L AS $CaCO_3$ (39086)	CHLO-RIDE, DIS-SOLVED (mg/L AS Cl) (00940)	SULFATE DIS-SOLVED (mg/L AS SO_4) (00945)	FLUO-RIDE, DIS-SOLVED (mg/L AS F) (00950)	SILICA, DIS-SOLVED (mg/L AS SiO_2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (Mg/L) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (mg/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (mg/L AS N) (00631)
NOV												
22...	27.4	44.0	3.9	227	186	55.2	90.2	0.3	E.1	389	<0.010	0.237
DEC												
14...	26.0	44.2	3.7	231	190	56.7	106	.3	.4	450	.017	.987
14...	<.01	<.1	--	--	--	--	--	--	<.1	--	<.001	<.005
MAR												
21...	18.4	23.4	3.3	154	126	32.8	70.4	.2	3.4	312	<.010	2.47
21...	18.2	23.3	3.3	162	133	33.8	70.8	.2	3.3	315	<.010	2.44
APR												
04...	20.4	22.1	2.8	180	148	37.6	68.7	.3	2.5	355	.010	3.47
25...	16.0	16.0	3.1	158	129	26.1	53.6	.2	5.6	277	.011	2.76
25...	<.01	<.1	--	--	--	--	--	--	<.1	--	<.001	<.005
MAY												
09...	22.8	25.2	3.0	200	164	36.2	73.9	.2	.3	349	.011	2.22
09...	--	--	--	--	--	--	--	--	--	--	--	--
23...	21.3	26.6	3.5	216	177	42.9	64.8	.2	3.8	371	.018	4.00
JUN												
11...	23.1	19.5	3.0	200	164	36.0	60.5	.3	4.4	359	.013	5.44
11...	--	--	--	--	--	--	--	--	--	--	--	--
27...	15.4	10.5	4.6	149	120	20.6	35.3	.2	7.9	269	.044	5.88
27...	<.01	<.1	--	--	--	--	--	--	<.1	--	<.001	<.005
JUL												
11...	16.1	10.7	4.1	162	133	19.6	35.3	.2	7.2	286	.015	3.75
11...	15.8	10.8	3.9	--	--	19.7	35.4	.2	7.5	269	.017	3.78
AUG												
13...	12.0	11.7	4.1	140	115	15.0	42.3	.2	6.8	227	.017	1.08

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	NITROGEN, AMMONIA DISSOLVED (mg/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC DIS. (mg/L AS N) (00623)	NITROGEN,AMMONIA + ORGANIC TOTAL (mg/L AS N) (00625)	PHOSPHORUS TOTAL (mg/L AS P) (00665)	PHOSPHORUS DISSOLVED (mg/L AS P) (00666)	PHOSPHORUS ORTHO, DISSOLVED (mg/L AS P) (00671)	ALUMINUM, DISSOLVED (µg/L AS Al) (01106)	ANTIMONY, DISSOLVED (µg/L AS Sb) (01095)	ARSENIC DISSOLVED (µg/L AS As) (01000)	BARIUM, DISSOLVED (µg/L AS Ba) (01005)	BERYLLIUM, DISSOLVED (µg/L AS Be) (01010)	BORON, DISSOLVED (µg/L AS B) (01020)
NOV												
22...	<0.020	0.31	1.6	0.137	0.011	<0.001	--	--	E1.2	--	--	224
DEC												
14...	<.020	.35	1.3	.155	.015	<.001	--	--	<2.0	--	--	190
14...	<.002	--	--	--	--	<.001	<1	<1	--	<1	<1	<2
MAR												
21...	<.020	.47	1.2	.262	.044	.034	--	--	<2.0	--	--	86
21...	<.020	.44	1.2	.252	.045	.034	--	--	<2.0	--	--	86
APR												
04...	<.020	.45	.98	.181	.021	.018	3	<1	E1.2	49	<1	80
25...	<.020	.31	.95	.248	.060	.052	--	--	E1.7	--	--	80
25...	.002	--	--	--	--	<.001	<1	<1	--	<1	<1	<2
MAY												
09...	<.020	.34	1.2	.117	.010	.002	7	<1	E1.2	53	<1	122
09...	--	--	--	--	--	--	--	--	--	--	--	--
23...	<.020	.40	.84	.247	.071	.061	--	--	<2.0	--	--	113
JUN												
11...	<.020	.38	1.3	.254	.032	.004	3	<1	E1.6	54	<1	100
11...	--	--	--	--	--	--	--	--	--	--	--	--
27...	<.020	.57	.99	.341	.126	.100	--	--	E1.1	--	--	53
27...	<.002	--	--	--	--	<.001	4	<1	--	<1	<1	<2
JUL												
11...	<.020	.38	1.0	.342	.130	.001	--	--	2.1	--	--	66
11...	<.020	.45	1.0	.347	.130	.106	--	--	E2.0	--	--	69
AUG												
13...	<.020	.40	1.1	.310	.078	.062	5	<1	E1.4	37	<1	91

DATE	CADMIUM DISSOLVED (µg/L AS Cd) (01025)	CHROMIUM, DISSOLVED (µg/L AS Cr) (01030)	COBALT, DISSOLVED (µg/L AS Co) (01035)	COPPER, DISSOLVED (µg/L AS Cu) (01040)	IRON, DISSOLVED (µg/L AS Fe) (01046)	LEAD, DISSOLVED (µg/L AS Pb) (01049)	LITHIUM DISSOLVED (µg/L AS Li) (01130)	MANGANESE, DISSOLVED (µg/L AS Mn) (01056)	MOLYBDENUM, DISSOLVED (µg/L AS Mo) (01060)	NICKEL, DISSOLVED (µg/L AS Ni) (01065)	SELENIUM, DISSOLVED (µg/L AS Se) (01145)	SILVER, DISSOLVED (µg/L AS Ag) (01075)
NOV												
22...	--	--	--	--	<10	--	8.2	--	--	--	<2.4	--
DEC												
14...	--	--	--	--	<10	--	6.6	--	--	--	<2.4	--
14...	<.3	<.2	<1	<1	<1	<1	--	<1	M	<1	--	<1
MAR												
21...	--	--	--	--	E10	--	E3.0	--	--	--	E1.8	--
21...	--	--	--	--	10	--	E2.7	--	--	--	E1.3	--
APR												
04...	<1.0	<.8	<1	1	<10	<1	E3.0	2	5	1	<2.4	<1
25...	--	--	--	--	<10	--	<3.9	--	--	--	<2.4	--
25...	<.3	<.2	<1	<1	<1	<1	--	<1	<1	<1	--	<1
MAY												
09...	<1.0	<.8	<1	2	<10	<1	E3.8	<1	6	3	E1.4	<1
09...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	<10	--	4.9	--	--	--	E2.1	--
JUN												
11...	<1.0	E.5	<1	2	<10	<1	4.7	<1	6	<1	<2.4	<1
11...	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	E10	--	E2.5	--	--	--	<2.4	--
27...	<.3	<.2	<1	<1	<1	<1	--	<1	<1	<1	--	<1
JUL												
11...	--	--	--	--	<10	--	<3.9	--	--	--	E1.2	--
11...	--	--	--	--	<10	--	<3.9	--	--	--	<2.4	--
AUG												
13...	<1.0	<.8	<1	2	E10	<1	E2.3	<1	3	2	<2.4	<1

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	STRON-TIUM, DIS-SOLVED (µg/L AS Sr) (01080)	THAL-LIUM, DIS-SOLVED (µg/L AS Tl) (01057)	VANA-DIUM, DIS-SOLVED (µg/L AS V) (01085)	ZINC, DIS-SOLVED (µg/L AS Zn) (01090)	URANIUM NATURAL DIS-SOLVED (µg/L AS U) (22703)	CARBON, ORGANIC DIS-SOLVED (mg/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (mg/L AS C) (00689)	ALA-CHLOR, WATER, DISS, REC, (µg/L) (46342)	ACETO-CHLOR, WATER FLTRD REC (µg/L) (49260)	ATRA-ZINE, WATER, DISS, REC (µg/L) (39632)	ALPHA BHC DIS-SOLVED (µg/L) (34253)	BUTYL-ATE, WATER, DISS, REC (µg/L) (04028)
NOV												
22...	285	--	<10	--	--	3.5	1.7	<0.002	<0.002	0.478	<0.002	<0.002
DEC												
14...	303	--	<10	--	--	3.5	3.5	<.002	.014	.326	<.002	<.002
14...	<.1	<.1	--	4	<1	--	--	--	--	--	--	--
MAR												
21...	196	--	<10	--	--	5.2	3.0	--	--	--	--	--
21...	196	--	<10	--	--	5.2	3.2	E.005	E.022	1.47	<.002	<.002
APR												
04...	246	--	<10	2	1	4.2	3.8	<.002	.016	.135	<.002	<.002
25...	169	--	<10	--	--	4.2	2.5	.012	.221	3.04	<.002	<.002
25...	<.1	<.1	--	1	<1	--	--	--	--	--	--	--
MAY												
09...	231	--	<10	5	1	3.7	3.6	.006	.106	1.01	<.002	<.002
09...	--	--	--	--	--	.45	<.2	<.002	<.002	<.001	<.002	<.002
23...	253	--	<10	--	--	4.5	2.5	.037	.564	5.17	<.002	<.002
JUN												
11...	249	--	<10	5	<1	4.0	3.3	.028	.246	3.75	<.002	<.002
11...	--	--	--	--	--	.53	<.2	<.002	<.002	<.001	<.002	<.002
27...	161	--	<10	--	--	5.4	2.1	.080	.251	2.87	<.002	<.002
27...	<.1	<.1	--	2	<1	--	--	--	--	--	--	--
JUL												
11...	154	--	<10	--	--	5.1	1.5	.007	.058	.646	<.002	<.002
11...	161	--	<10	--	--	5.2	2.6	.011	.068	.779	<.002	<.002
AUG												
13...	125	--	<10	2	<1	5.2	2.3	<.010	.018	.244	<.002	<.002

DATE	CHLOR-PYRIFOS DIS-SOLVED (µg/L) (38933)	CYANA-ZINE, WATER, DISS, REC (µg/L) (04041)	DEETHYL ATRA-ZINE, WATER, DISS, REC (µg/L) (04040)	DI-AZINON, DIS-SOLVED (µg/L) (39572)	DI-ELDRIN DIS-SOLVED (µg/L) (39381)	FONOFOS WATER DISS REC (µg/L) (04095)	LINDANE DIS-SOLVED (µg/L) (39341)	MALA-THION, DIS-SOLVED (µg/L) (39532)	METRI-BUZIN SENCOR WATER DISSOLV (µg/L) (82630)	METO-LACHLOR WATER DISSOLV (µg/L) (39415)	P,P' DDE DISSOLV (µg/L) (34653)
NOV											
22...	<0.004	0.058	E0.16	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.057	<0.006
DEC											
14...	.007	.053	E.10	<.002	<.001	<.003	<.004	<.005	<.004	.058	<.006
14...	--	--	--	--	--	--	--	--	--	--	--
MAR											
21...	--	--	--	--	--	--	--	--	--	--	--
21...	E.003	.016	E.12	.004	<.001	<.003	<.004	<.005	.018	.087	<.006
APR											
04...	.008	.011	E.061	<.002	<.001	<.003	<.004	<.005	<.010	.056	<.006
25...	.013	.022	E.16	.005	<.001	<.003	<.004	<.005	.067	.334	<.006
25...	--	--	--	--	--	--	--	--	--	--	--
MAY											
09...	E.004	.029	E.098	E.003	<.001	<.003	<.004	<.005	.014	.204	<.006
09...	E.003	<.004	<.002	<.002	<.001	<.003	<.004	<.005	<.004	<.002	<.006
23...	.007	.055	E.39	.006	<.001	<.003	<.004	<.005	.080	1.13	<.006
JUN											
11...	<.004	.041	E.47	E.004	<.001	<.003	<.004	<.005	.026	.751	<.006
11...	<.004	<.004	<.002	<.002	<.001	<.003	<.004	<.005	<.004	<.002	<.006
27...	E.002	.040	E.60	.005	<.001	<.003	<.004	<.005	.046	.920	<.006
27...	--	--	--	--	--	--	--	--	--	--	--
JUL											
11...	E.004	.016	E.27	.006	<.001	<.003	<.004	<.005	.011	.257	<.006
11...	.004	.019	E.32	.009	<.001	<.003	<.004	<.005	.012	.311	<.006
AUG											
13...	<.004	.016	E.12	.007	<.001	<.003	<.004	<.005	<.004	.056	<.006

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	PARA-THION, DIS-SOLVED (µg/L) (39542)	PROPA-CHLOR, WATER, DISS, REC (µg/L) (04024)	PRO-METON, WATER, DISS, REC (µg/L) (04037)	SI-MAZINE, WATER, DISS, REC (µg/L) (04035)	BEN-FLUR-ALIN WAT FLD 0.7 µm GF, REC (µg/L) (82673)	CAR-BARYL WATER FLTRD 0.7 µm GF, REC (µg/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 µm GF, REC (µg/L) (82674)	DCPA WATER FLTRD 0.7 µm GF, REC (µg/L) (82682)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 µm GF, REC (µg/L) (82660)	DISUL-FOTON WATER FLTRD 0.7 µm GF, REC (µg/L) (82677)	ETHAL-FLUR-ALIN WAT FLT 0.7 µm GF, REC (µg/L) (82663)
NOV											
22...	<0.004	<0.007	E0.018	0.044	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
DEC											
14...	<.004	<.007	E.015	.282	<.002	<.003	<.003	E.001	<.003	<.017	<.004
14...	--	--	--	--	--	--	--	--	--	--	--
MAR											
21...	--	--	--	--	--	--	--	--	--	--	--
21...	<.004	<.007	E.010	1.31	<.002	<.003	<.003	<.002	<.003	<.017	<.004
APR											
04...	<.004	<.007	E.014	.036	<.002	<.003	<.003	<.002	<.003	<.017	<.004
25...	<.004	<.007	.025	.310	<.002	<.003	<.003	<.002	<.003	<.017	<.004
25...	--	--	--	--	--	--	--	--	--	--	--
MAY											
09...	<.004	<.007	.021	.132	<.002	<.003	<.003	<.002	<.003	<.017	<.004
09...	<.004	<.007	<.018	<.005	<.002	<.003	<.003	<.002	<.003	<.017	<.004
23...	<.004	<.007	.052	.564	<.002	<.003	<.003	<.002	<.003	<.017	<.004
JUN											
11...	<.004	<.007	.029	.136	<.002	<.003	<.003	<.002	<.003	<.017	<.004
11...	<.004	<.007	<.018	<.005	<.002	<.003	<.003	<.002	<.003	<.017	<.004
27...	<.004	<.007	.036	.174	<.002	<.003	<.003	<.002	<.003	<.017	<.004
27...	--	--	--	--	--	--	--	--	--	--	--
JUL											
11...	<.004	<.007	.033	.060	<.002	<.003	<.003	<.002	<.003	<.017	<.004
11...	<.004	<.007	.034	.068	<.002	<.003	<.003	<.002	<.003	<.017	<.004
AUG											
13...	<.004	<.007	.023	.034	<.002	<.003	<.003	<.002	<.003	<.017	<.004

DATE	PENDI-METH-ALIN WAT FLT 0.7 µm GF, REC (µg/L) (82683)	ETHO-PROP WATER FLTRD 0.7 µm GF, REC (µg/L) (82672)	EPTC WATER FLTRD 0.7 µm GF, REC (µg/L) (82668)	LIN-URON WATER FLTRD 0.7 µm GF, REC (µg/L) (82666)	METHYL AZIN-PHOS WAT FLT 0.7 µm GF, REC (µg/L) (82686)	METHYL PARA-THION WAT FLT 0.7 µm GF, REC (µg/L) (82667)	MOL-INATE WATER FLTRD 0.7 µm GF, REC (µg/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 µm GF, REC (µg/L) (82684)	PEB-ULATE WATER FILTRD 0.7 µm GF, REC (µg/L) (82669)	PER-METHRIN CIS WAT FLT 0.7 µm GF, REC (µg/L) (82687)	PHORATE WATER FLTRD 0.7 µm GF, REC (µg/L) (82664)
NOV											
22...	<0.004	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002
DEC											
14...	<.004	<.003	<.002	<.002	<.001	<.006	<.004	<.003	<.004	<.005	<.002
14...	--	--	--	--	--	--	--	--	--	--	--
MAR											
21...	--	--	--	--	--	--	--	--	--	--	--
21...	<.004	<.003	<.002	<.002	<.001	<.006	<.004	<.003	<.004	<.005	<.002
APR											
04...	<.004	<.003	<.002	<.002	<.001	<.006	<.004	<.003	<.004	<.005	<.002
25...	<.004	<.003	E.001	<.002	<.001	<.006	<.004	<.003	<.004	<.005	<.002
25...	--	--	--	--	--	--	--	--	--	--	--
MAY											
09...	<.004	<.003	<.002	<.002	<.001	<.006	<.004	<.003	<.004	<.005	<.002
09...	<.004	<.003	<.002	<.002	<.001	<.006	<.004	<.003	<.004	<.005	<.002
23...	<.010	<.003	<.002	<.002	<.001	<.006	<.004	<.003	<.004	<.005	<.002
JUN											
11...	<.004	<.003	<.002	<.002	<.001	<.006	<.004	<.003	<.004	<.005	<.002
11...	<.004	<.003	<.002	<.002	<.001	<.006	<.004	<.003	<.004	<.005	<.002
27...	<.008	<.003	<.002	<.002	<.001	<.006	<.004	<.003	<.004	<.005	<.002
27...	--	--	--	--	--	--	--	--	--	--	--
JUL											
11...	<.004	<.003	<.002	<.002	<.001	<.006	<.004	<.003	<.004	<.005	<.002
11...	<.004	<.003	<.002	<.002	<.001	<.006	<.004	<.003	<.004	<.005	<.002
AUG											
13...	<.004	<.003	<.002	<.002	<.001	<.006	<.004	<.003	<.004	<.005	<.002

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	PRON-AMIDE WATER FLTRD 0.7 µm GF, REC (µg/L) (82676)	PRO-PANIL WATER FLTRD 0.7 µm GF, REC (µg/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 µm GF, REC (µg/L) (82685)	TEBU-THIURON WATER FLTRD 0.7 µm GF, REC (µg/L) (82670)	TER-BACIL WATER FLTRD 0.7 µm GF, REC (µg/L) (82665)	TER-BUFOS WATER FLTRD 0.7 µm GF, REC (µg/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 µm GF, REC (µg/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 µm GF, REC (µg/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 µm GF, REC (µg/L) (82681)	SEDI-MENT, SUS-PENDED (mg/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 mm (70331)
NOV											
22...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	35	100
DEC											
14...	<.003	<.004	<.013	<.010	<.007	<.013	<.001	<.002	<.002	31	100
14...	--	--	--	--	--	--	--	--	--	--	--
MAR											
21...	--	--	--	--	--	--	--	--	--	155	97
21...	<.003	<.004	<.013	E.009	<.007	<.013	<.001	<.002	<.002	--	--
APR											
04...	<.003	<.004	<.013	E.013	<.007	<.013	<.001	<.002	<.002	85	98
25...	<.003	<.004	<.013	E.007	<.007	<.013	<.001	<.002	<.002	155	97
25...	--	--	--	--	--	--	--	--	--	--	--
MAY											
09...	<.003	<.004	<.013	E.009	<.007	<.013	<.001	<.002	<.002	93	99
09...	<.003	<.004	<.013	<.010	<.007	<.013	<.001	<.002	<.002	--	--
23...	<.003	<.004	<.013	.010	<.007	<.013	<.001	<.002	<.002	160	99
JUN											
11...	<.003	<.004	<.013	<.010	<.007	<.013	<.001	<.002	<.002	156	99
11...	<.003	<.004	<.013	<.010	<.007	<.013	<.001	<.002	<.002	--	--
27...	<.003	<.004	<.013	E.017	<.007	<.013	<.001	<.002	<.002	201	96
27...	--	--	--	--	--	--	--	--	--	--	--
JUL											
11...	<.003	<.004	<.013	E.010	<.007	<.013	<.001	<.002	<.002	194	97
11...	<.003	<.004	<.013	.012	<.007	<.013	<.001	<.002	<.002	--	--
AUG											
13...	<.003	<.004	<.013	<.010	<.007	<.013	<.001	<.002	<.002	205	98

E Estimated
M Presence of material verified but not quantified

03378550 BIG CREEK NEAR WADESVILLE, IN

LOCATION.--Lat 38°04'58", long 87°46'10", in SW1/4SW1/4 sec.16, T.5 S., R.12 W., Posey County, Hydrologic Unit 05120113, on left bank at downstream side of bridge on State Highway 66, 0.6 mi northwest of Blairsville, and 1.6 mi southeast of Wadesville.

DRAINAGE AREA.--104 mi^2.

PERIOD OF RECORD.--July 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 370.00 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges and those below 1.0 ft^3/s, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.60	e.70	.26	.38	e1.7	100	28	7.7	3.6	27	13	7.9
2	.42	.64	.25	.79	e1.6	68	37	8.2	3.6	21	7.4	6.6
3	.45	.67	.24	868	e1.5	62	36	8.0	9.8	18	5.1	5.6
4	.34	.46	1.3	726	e1.5	60	32	18	5.4	15	4.8	4.5
5	.25	.42	1.5	42	e1.5	50	26	11	3.5	42	9.2	3.8
6	.22	.37	1.2	18	e1.5	41	26	8.9	2.7	32	91	3.3
7	.19	e.33	.97	12	e1.5	36	29	8.2	2.3	18	45	3.2
8	.19	e.32	1.4	9.4	e1.5	34	144	8.0	2.3	14	56	3.1
9	49	e.31	1.0	8.9	e1.5	32	44	7.4	2.4	12	46	3.4
10	49	e.30	7.5	8.2	e2.1	24	33	8.3	2.2	10	11	5.6
11	4.7	e.30	11	6.3	e3.0	36	28	7.1	3.7	22	6.2	7.5
12	1.7	e.30	5.3	4.8	e2.7	50	21	6.6	2.7	204	4.8	28
13	1.3	e.30	20	4.6	e95	33	20	17	4.5	20	4.2	22
14	1.1	e.30	228	3.6	277	31	19	10	6.0	13	3.5	8.6
15	.77	e.30	21	3.4	46	30	19	7.1	3.3	10	3.2	6.4
16	.75	e.30	4.3	3.6	27	224	17	6.3	2.5	8.1	2.8	4.8
17	.67	e.30	2.4	3.5	18	196	18	6.1	1390	6.5	2.8	4.2
18	.67	e.30	1.8	4.5	1850	103	16	5.6	537	5.8	3.5	3.7
19	.64	1.0	1.7	5.2	1970	139	15	5.8	84	96	3.2	3.3
20	.65	1.4	1.3	4.7	250	921	15	5.7	33	23	2.9	3.6
21	.66	1.4	2.6	3.5	120	234	13	5.3	40	12	2.7	5.4
22	.62	1.4	e1.7	3.2	98	148	11	5.1	27	9.1	2.6	6.4
23	e.58	1.0	e1.0	3.4	76	115	11	12	17	7.3	14	4.9
24	e.56	.90	e.60	e3.4	504	92	13	10	686	6.0	500	4.8
25	e.52	1.0	e.35	e2.8	185	69	16	5.7	120	5.3	45	183
26	e.50	1.1	e.26	e2.3	281	57	11	5.4	136	4.6	11	183
27	e.48	.77	e.22	e1.8	1600	72	10	12	524	4.2	1080	38
28	e.46	.54	e.21	e1.6	239	55	11	8.5	233	3.7	453	22
29	e.44	.47	e.20	e1.5	139	38	9.0	6.0	69	4.0	43	15
30	e.42	.33	e.19	e1.5	---	34	8.0	4.7	39	16	17	13
31	e.54	---	e.28	e1.6	---	29	---	4.0	---	16	11	---
TOTAL	119.39	18.23	320.03	1764.47	7796.6	3213	736.0	249.7	3995.5	705.6	2504.9	614.6
MEAN	3.85	.61	10.3	56.9	269	104	24.5	8.05	133	22.8	80.8	20.5
MAX	49	1.4	228	868	1970	921	144	18	1390	204	1080	183
MIN	.19	.30	.19	.38	1.5	24	8.0	4.0	2.2	3.7	2.6	3.1
CFSM	.04	.01	.10	.55	2.59	1.00	.24	.08	1.28	.22	.78	.20
IN.	.04	.01	.11	.63	2.79	1.15	.26	.09	1.43	.25	.90	.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2000, BY WATER YEAR (WY)

MEAN	19.8	79.1	127	145	189	216	200	160	94.7	73.7	44.4	25.9
MAX	131	513	710	559	727	581	702	742	347	264	341	233
(WY)	1978	1986	1983	1982	1990	1975	1996	1990	1996	1992	1977	1982
MIN	.019	.61	.30	.13	9.15	14.3	8.73	2.98	.62	.33	.18	.000
(WY)	1969	2000	1966	1977	1992	1981	1981	1988	1988	1994	1988	1983

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1966 - 2000	
ANNUAL TOTAL	43774.43		22038.02			
ANNUAL MEAN	120		60.2		114	
HIGHEST ANNUAL MEAN					205	1983
LOWEST ANNUAL MEAN					38.7	1987
HIGHEST DAILY MEAN	4820	Jul 2	1970	Feb 19	9400	Apr 29 1996
LOWEST DAILY MEAN	.03	Sep 13	.19	Oct 7	.00	Jul 22 1966
ANNUAL SEVEN-DAY MINIMUM	.06	Sep 7	e.24	Dec 25	.00	Jul 29 1966
INSTANTANEOUS PEAK FLOW			4410	Feb 18	10400	Apr 29 1996
INSTANTANEOUS PEAK STAGE			18.35	Feb 18	20.35	Apr 29 1996
ANNUAL RUNOFF (CFSM)	1.15		.58		1.10	
ANNUAL RUNOFF (INCHES)	15.66		7.88		14.91	
10 PERCENT EXCEEDS	243		101		208	
50 PERCENT EXCEEDS	10		6.3		16	
90 PERCENT EXCEEDS	.26		.46		.23	

e Estimated

04092677 GRAND CALUMET RIVER AND INDUSTRIAL HWY AT GARY, IN

LOCATION.--Lat 41°36'29", long 87°23'39",in NW1/4NW1/4 sec.6, T.37 N., R.8W., Lake County, Hydrologic Unit 04040001, on left bank, 30 feet upstream of U.S. 12 (Industrial Highway), 100 feet streamward of the centerline of Interstate 90, 2,000 feet downstream of Norfolk and Western railroad bridge, 6,000 feet southeast of Gary Airport terminal.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1991 to September 1994, (gage heights only), October 1994 to current year.

GAGE.--Water-stage recorder and Acoustic Velocity Meter. Datum of gage is 580.00 ft above sea level.

REMARKS.--Records good. Discharge is primarily from industrial and city effluent.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	559	522	512	496	463	483	537	557	618	620	529	521
2	557	517	515	508	455	497	532	546	612	609	523	526
3	593	508	516	509	463	520	538	541	602	625	532	520
4	570	497	527	506	473	532	529	545	594	619	539	523
5	548	506	622	505	483	534	524	539	645	599	531	524
6	543	513	521	494	477	541	539	567	635	600	544	515
7	547	520	513	506	471	537	563	564	630	608	549	510
8	557	511	494	506	473	539	565	564	618	599	531	523
9	551	523	522	512	474	536	546	e566	624	564	526	532
10	554	513	517	500	487	527	546	579	615	607	527	549
11	556	510	522	500	484	532	537	571	619	623	538	582
12	555	508	525	495	494	533	534	575	619	605	539	612
13	551	507	513	482	488	526	533	574	618	593	529	544
14	548	496	557	509	479	526	539	575	600	592	530	549
15	550	472	555	498	485	526	542	563	612	590	538	532
16	543	442	546	479	482	532	547	576	597	570	527	538
17	531	459	558	472	492	540	585	561	570	572	574	535
18	536	489	550	479	500	545	541	593	573	575	559	528
19	552	503	545	450	500	557	549	588	564	561	557	538
20	532	506	538	469	508	560	584	574	594	563	540	535
21	524	502	534	478	507	539	575	570	625	564	547	531
22	529	501	524	480	530	541	571	578	590	558	531	530
23	516	522	511	471	532	547	569	588	573	551	545	534
24	529	514	497	476	548	557	546	587	658	519	530	537
25	533	503	488	472	531	563	550	583	667	504	529	542
26	546	501	496	474	538	566	544	568	617	501	536	504
27	521	494	497	473	539	564	536	585	608	500	527	513
28	527	505	496	476	536	572	552	655	616	501	527	513
29	539	496	495	480	533	547	539	611	610	541	511	515
30	522	501	505	476	---	536	558	580	637	545	519	513
31	521	---	496	473	---	534	---	601	---	540	530	---
TOTAL	16840	15061	16207	15104	14425	16689	16450	17824	18360	17718	16594	15968
MEAN	543	502	523	487	497	538	548	575	612	572	535	532
MAX	593	523	622	512	548	572	585	655	667	625	574	612
MIN	516	442	488	450	455	483	524	539	564	500	511	504

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2000, BY WATER YEAR (WY)

MEAN	489	479	471	472	478	490	492	493	520	506	516	513
MAX	543	506	523	515	534	548	579	587	612	578	596	594
(WY)	2000	1999	2000	1999	1999	1999	1999	1999	2000	1999	1999	1999
MIN	454	438	425	427	419	404	381	400	459	434	469	478
(WY)	1995	1996	1996	1996	1996	1996	1996	1996	1995	1995	1995	1995

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1995 - 2000	
ANNUAL TOTAL	204002		197240			
ANNUAL MEAN	559		539		493	
HIGHEST ANNUAL MEAN					553	1999
LOWEST ANNUAL MEAN					444	1996
HIGHEST DAILY MEAN	661	Jun 1	667	Jun 25	667	Jun 25 2000
LOWEST DAILY MEAN	442	Nov 16	442	Nov 16	305	Apr 27 1996
ANNUAL SEVEN-DAY MINIMUM	481	Nov 14	469	Jan 29	361	Apr 25 1996
INSTANTANEOUS PEAK FLOW			1010	Jun 24	1010	Jun 27 2000
INSTANTANEOUS PEAK STAGE			3.70	Jun 24	4.81	Jun 13 1994
10 PERCENT EXCEEDS	607		599		574	
50 PERCENT EXCEEDS	562		536		488	
90 PERCENT EXCEEDS	502		488		428	

e Estimated

04092750 INDIANA HARBOR CANAL AT EAST CHICAGO, IN

LOCATION.--Lat 41°38'57", long 87°28'07", in NE$^1/_4$NE$^1/_4$ sec.20, T.37N., R.9W., Lake County, Hydrologic Unit 04040001, on left bank at the site of the former Canal Street drawbridge, 3200 ft east of U.S. Highway 20, 3500 ft north of U.S. Highway 12, 4,300 ft south of 129th Street, and 1000 ft west of the crossing of the centerlines of Cline Avenue and the Indiana Harbor Canal.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1991 to current year.

REVISED RECORDS.--WDR IN-96-1: Instantaneous peak flow date.

GAGE.--Water-stage recorder, Acoustic Doppler Velocity Meter. Datum of gage not established.

REMARKS.--Records poor. Positive discharges indicate flow towards Lake Michigan; negative discharges indicate flow away from Lake Michigan.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	607	508	576	424	461	623	e550	e599	e953	e645	e797	e572
2	626	614	510	503	583	512	e514	e541	e645	e556	e580	e549
3	743	611	487	668	526	679	e579	e591	e651	e686	e565	e692
4	703	547	574	616	535	642	e555	e568	e632	e646	e551	e581
5	591	584	891	652	583	628	e507	e563	e938	e566	e506	e489
6	568	587	574	559	470	519	e554	e672	e761	e624	e650	e688
7	607	652	556	606	418	571	e600	e562	e644	e668	e594	e493
8	619	504	504	494	558	548	e692	e515	e554	e607	e552	e690
9	513	530	544	463	480	637	e506	e659	e647	e580	e510	e584
10	582	456	624	626	521	745	e667	e620	e648	e635	e614	e670
11	651	651	523	556	501	621	e609	e532	e742	e717	e565	e819
12	593	546	576	535	439	569	e552	e611	e676	e638	e713	e1240
13	628	521	586	633	510	568	e563	e611	e743	e596	e554	e786
14	762	510	670	631	477	536	e528	e529	e633	e594	e558	e589
15	573	547	686	512	522	e506	e566	e477	e845	e557	e677	e597
16	553	471	623	e563	680	e642	e508	e665	e711	e690	e500	e511
17	631	528	583	e525	675	e488	e666	e600	e600	e599	e1090	e615
18	568	466	599	e546	618	e525	e598	e730	e585	e590	e531	e501
19	608	556	620	e490	646	e665	e745	e906	e524	e520	e677	e537
20	584	519	624	e609	649	e554	e944	e668	e690	e619	e545	e651
21	592	444	618	e600	536	e521	e652	e528	e914	e706	e641	e737
22	538	469	563	e578	565	e558	e548	e579	e674	e551	e511	e584
23	516	590	562	e621	591	e570	e590	e626	e550	e570	e591	606
24	563	618	559	e491	680	e583	e521	e606	e907	e506	e496	677
25	584	462	607	e536	547	e600	e655	e588	e712	e539	e615	652
26	534	559	545	476	644	e611	e576	e542	e609	e522	e791	542
27	547	550	501	410	664	e576	e549	e670	e613	e532	e651	517
28	593	602	553	449	598	e626	e687	e817	e651	e524	e543	567
29	536	452	604	479	558	e531	e597	e697	e590	e642	e646	492
30	548	559	585	517	---	e484	e626	e633	e682	e654	e543	496
31	534	---	622	528	---	e516	---	e778	---	e675	e733	---
TOTAL	18395	16213	18249	16896	16235	17954	18004	19283	20724	18754	19090	18724
MEAN	593	540	589	545	560	579	600	622	691	605	616	624
MAX	762	652	891	668	680	745	944	906	953	717	1090	1240
MIN	513	444	487	410	418	484	506	477	524	506	496	489

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2000, BY WATER YEAR (WY)

MEAN	535	632	675	667	662	693	653	672	630	590	603	587
MAX	752	916	1094	963	843	1111	922	1016	724	761	759	759
(WY)	1997	1997	1997	1997	1997	1999	1999	1999	1996	1996	1996	1996
MIN	-81.3	407	429	467	476	508	498	508	439	471	467	416
(WY)	1994	1998	1998	1998	1998	1998	1998	1998	1998	1998	1998	1997

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1994 - 2000	
ANNUAL TOTAL	264115		218521			
ANNUAL MEAN	724		597		632	
HIGHEST ANNUAL MEAN					727	1999
LOWEST ANNUAL MEAN					-81.3	1994
HIGHEST DAILY MEAN	2120	Mar 21	e1240	Sep 12	2120	Mar 21 1999
LOWEST DAILY MEAN	315	Jul 19	410	Jan 27	-641	Oct 21 1993
ANNUAL SEVEN-DAY MINIMUM	493	Nov 16	474	Jan 26	-180	Oct 15 1993
INSTANTANEOUS PEAK FLOW			6030	Dec 25	8530	Apr 11 1992
INSTANTANEOUS PEAK STAGE			10.49	Sep 3	14.41	Mar 9 1998
10 PERCENT EXCEEDS	1100		690		805	
50 PERCENT EXCEEDS	632		584		623	
90 PERCENT EXCEEDS	509		504		437	

e Estimated

04093000 DEEP RIVER AT LAKE GEORGE OUTLET AT HOBART, IN

LOCATION.--Lat 41°32'10", long 87°15'25", in NW1/4NW1/4 sec.32, T.36 N., R.7 W., Lake County, Hydrologic Unit 04040001, on left bank at upstream side of bridge on Ridge Road in Hobart, 300 ft upstream from Duck Creek, and 400 ft downstream from Lake George Dam.

DRAINAGE AREA.--124 mi^2.

PERIOD OF RECORD.--April 1947 to current year.

REVISED RECORDS.--WSP 1337: 1953. WSP 1507: 1956. WDR IN-72-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 588.17 ft above sea level (levels by State of Indiana, Department of Natural Resources). Prior to July 29, 1952, nonrecording gage, and July 30, 1952, to July 20, 1955, water-stage recorder at site 400 ft upstream at datum 11.80 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow subject to regulation by operation of Lake George Dam.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	15	15	24	20	72	33	62	147	140	27	2.3
2	26	16	15	25	20	60	30	82	174	101	19	1.8
3	27	18	16	27	20	55	30	76	120	114	8.1	7.6
4	58	17	20	29	22	49	27	63	87	106	9.5	11
5	55	24	68	28	22	43	29	50	124	70	15	14
6	33	16	129	26	22	40	30	40	270	52	38	15
7	25	16	79	24	23	38	30	38	177	46	77	18
8	22	19	52	22	23	37	88	34	103	44	67	19
9	18	22	41	27	24	31	128	35	67	40	42	20
10	17	20	34	37	28	29	105	49	52	45	27	29
11	16	15	32	39	33	28	83	48	45	58	16	53
12	17	19	29	35	33	30	69	45	50	43	14	153
13	15	19	27	31	33	28	58	42	139	29	21	133
14	13	15	37	28	31	29	51	37	270	22	21	52
15	15	17	62	25	28	29	46	28	439	22	9.3	29
16	15	17	72	24	29	36	41	21	349	27	1.5	20
17	13	18	62	23	27	47	75	18	212	24	20	19
18	15	18	49	23	32	42	92	19	134	12	72	15
19	16	19	41	23	31	40	77	42	91	12	55	8.9
20	16	15	38	24	31	51	164	52	81	10	36	5.8
21	17	14	29	21	30	70	563	45	600	7.2	26	11
22	15	16	e26	e19	75	67	721	35	838	7.8	20	12
23	13	20	e25	e19	134	59	600	23	686	14	17	14
24	13	18	e24	e18	267	55	427	18	479	14	16	20
25	15	16	e23	e19	250	50	267	15	995	8.7	11	21
26	14	17	23	e20	172	41	152	18	1200	5.1	11	17
27	13	16	24	20	140	38	110	21	885	5.8	15	10
28	15	15	24	20	115	37	89	80	597	16	14	7.4
29	14	14	24	20	89	38	74	114	393	38	7.9	8.8
30	16	14	24	21	---	36	65	83	229	47	9.7	12
31	10	---	25	20	---	35	---	77	---	42	5.3	---
TOTAL	620	515	1189	761	1804	1340	4354	1410	10033	1222.6	748.3	759.6
MEAN	20.0	17.2	38.4	24.5	62.2	43.2	145	45.5	334	39.4	24.1	25.3
MAX	58	24	129	39	267	72	721	114	1200	140	77	153
MIN	10	14	15	18	20	28	27	15	45	5.1	1.5	1.8
CFSM	.16	.14	.31	.20	.50	.35	1.17	.37	2.70	.32	.19	.20
IN.	.19	.15	.36	.23	.54	.40	1.31	.42	3.01	.37	.22	.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2000, BY WATER YEAR (WY)

MEAN	56.7	92.5	112	120	147	217	215	149	120	64.2	49.0	47.9
MAX	433	499	393	475	456	688	477	454	557	315	427	312
(WY)	1955	1986	1983	1993	1997	1979	1950	1970	1993	1996	1990	1993
MIN	6.42	10.7	12.5	10.8	14.7	38.3	23.1	21.8	16.4	10.7	8.81	6.91
(WY)	1957	1957	1963	1977	1964	1957	1963	1958	1988	1988	1964	1948

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1948 - 2000	
ANNUAL TOTAL	36385.1		24756.5			
ANNUAL MEAN	99.7		67.6		116	
HIGHEST ANNUAL MEAN					234	1993
LOWEST ANNUAL MEAN					35.3	1963
HIGHEST DAILY MEAN	1650	Jan 24	1200	Jun 26	3900	Nov 28 1990
LOWEST DAILY MEAN	7.8	Jul 30	1.5	Aug 16	.00	Nov 5 1978
ANNUAL SEVEN-DAY MINIMUM	9.3	Jul 25	6.5	Aug 29	.04	Aug 29 1996
INSTANTANEOUS PEAK FLOW			1260	Jun 26	4230	Nov 28 1990
INSTANTANEOUS PEAK STAGE			10.76	Jun 26	19.48	Oct 11 1954
ANNUAL RUNOFF (CFSM)	.80		.55		.93	
ANNUAL RUNOFF (INCHES)	10.92		7.43		12.66	
10 PERCENT EXCEEDS	180		128		274	
50 PERCENT EXCEEDS	33		28		48	
90 PERCENT EXCEEDS	13		14		13	

e Estimated

04093200 LITTLE CALUMET RIVER AT GARY, IN

LOCATION.--Lat 41°34'19", long 87°19'13", in NE$^1/_4$SE$^1/_4$ sec.15, T.36 N., R.8 W., Lake County, Hydrologic Unit 04040001, on right bank 100 ft upstream of Conrail Railroad bridge, 800 ft upstream of Martin Luther King Avenue bridge at Gary, 1.3 mi downstream of highway 53, and 1.5 mi upstream from confluence with Deep River.

DRAINAGE AREA.--5.82 mi^2, approximately.

PERIOD OF RECORD.--June 1958 to September 1967, October 1968 to September 30, 1971 (discharge), December, 1984 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is 580.00 ft above sea level.

REMARKS.--Stage affected by backwater from Deep River during times of flood. Minimum gage height for the period of record may have been lower prior to December 13, 1984.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 13.31 ft, Nov. 30, 1990; minimum gage height, 5.27 ft, Aug. 7, 8, 1991. Minimum gage height was not published prior to December 13, 1984.

EXTREMES OUTSIDE PERIOD OF RECORD.-- Flood in October 1954 reached a stage of 13.09 ft, from flood mark.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 10.53 ft, June 27; minimum gage height, 8.49 ft, July 27, 28, Sept. 8, 9, 10.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.83	8.59	8.58	8.66	8.62	8.93	8.66	8.88	9.13	9.45	8.93	8.56
2	8.80	8.59	8.58	8.68	8.62	8.89	8.66	8.86	9.21	9.32	8.84	8.55
3	8.79	8.59	8.59	8.69	8.63	8.86	8.65	8.85	9.21	9.27	8.78	8.54
4	8.93	8.59	8.64	8.69	8.63	8.82	8.64	8.83	9.19	9.20	8.74	8.52
5	8.97	8.58	8.92	8.69	8.64	8.80	8.62	8.80	9.22	9.11	8.71	8.50
6	8.95	8.56	9.01	8.69	8.64	8.77	8.62	8.76	9.28	9.02	8.85	8.50
7	8.86	8.56	9.01	8.68	8.65	8.76	8.66	8.74	9.33	8.93	8.99	8.50
8	8.79	8.56	9.00	8.68	8.65	8.74	8.81	8.72	9.32	8.86	9.02	8.49
9	8.76	8.57	8.94	8.69	8.66	8.72	8.86	8.74	9.21	8.81	8.97	8.49
10	8.74	8.58	8.86	8.74	8.68	8.70	8.88	8.86	9.10	8.83	8.88	8.67
11	8.72	8.57	8.80	8.75	8.70	8.69	8.87	8.91	9.00	8.85	8.81	8.79
12	8.72	8.58	8.75	8.74	8.70	8.69	8.85	8.91	8.99	8.85	8.76	9.13
13	8.70	8.59	8.71	8.73	8.72	8.68	8.82	8.89	9.15	8.81	8.72	9.19
14	8.70	8.59	8.71	8.72	8.72	8.68	8.81	8.88	9.32	8.78	8.69	9.18
15	8.68	8.59	8.78	8.71	8.72	8.68	8.78	8.84	9.44	8.74	8.66	9.07
16	8.59	8.58	8.80	8.70	8.72	8.68	8.77	8.81	9.47	8.71	8.63	8.96
17	8.57	8.58	8.80	8.69	8.71	8.67	8.92	8.78	9.39	8.68	8.81	8.88
18	8.56	8.58	8.79	8.68	8.69	8.67	8.98	8.77	9.30	8.65	8.85	8.80
19	8.57	8.59	8.78	8.68	8.68	8.69	8.99	8.85	9.19	8.63	8.82	8.71
20	8.58	8.60	8.77	8.67	8.68	8.73	9.10	8.85	9.12	8.61	8.76	8.69
21	8.58	8.60	8.79	8.67	8.68	8.73	9.25	8.84	9.34	8.58	8.72	8.70
22	8.58	8.59	8.77	8.67	8.73	8.75	9.34	8.82	9.49	8.56	8.69	8.70
23	8.58	8.59	8.74	8.66	8.83	8.75	9.38	8.81	9.50	8.54	8.70	8.70
24	8.55	8.68	8.72	8.65	8.91	8.75	9.36	8.77	9.53	8.54	8.74	8.72
25	8.55	8.68	8.70	8.64	8.99	8.74	9.27	8.71	9.86	8.53	8.73	8.71
26	8.55	8.68	8.68	8.64	9.01	8.73	9.18	8.68	10.33	8.51	8.70	8.69
27	8.55	8.64	8.67	8.63	9.01	8.71	9.10	8.69	10.53	8.49	8.65	8.67
28	8.55	8.62	8.66	8.62	9.01	8.70	9.02	8.96	10.14	8.53	8.62	8.66
29	8.55	8.60	8.65	8.62	8.98	8.69	8.95	8.99	9.85	8.66	8.60	8.66
30	8.55	8.59	8.65	8.62	---	8.69	8.90	8.99	9.61	8.93	8.58	8.65
31	8.55	---	8.66	8.62	---	8.67	---	8.99	---	8.98	8.57	---
MEAN	8.68	8.60	8.76	8.68	8.75	8.73	8.92	8.83	9.43	8.81	8.76	8.72
MAX	8.97	8.68	9.01	8.75	9.01	8.93	9.38	8.99	10.53	9.45	9.02	9.19
MIN	8.55	8.56	8.58	8.62	8.62	8.67	8.62	8.68	8.99	8.49	8.57	8.49

CAL YR 1999 MEAN 8.78 MAX 10.87 MIN 7.99
WTR YR 2000 MEAN 8.80 MAX 10.53 MIN 8.49

04094000 LITTLE CALUMET RIVER AT PORTER, IN

LOCATION.--Lat 41°37'18", long 87°05'13", in NE$^1/_4$NE$^1/_4$ sec.34, T.37 N., R.6 W., Porter County, Hydrologic Unit 04040001, on right bank at downstream end of county road bridge, 200 ft upstream from bridge on U.S. Highway 20, 0.8 mi northwest of Porter, and 4.5 mi upstream from Salt Creek.

DRAINAGE AREA.--66.2 mi^2.

PERIOD OF RECORD.--May 1945 to current year.

REVISED RECORDS.--WSP 1084: 1945. WSP 1337: 1946-47. WDR IN-72-1: Drainage area. WDR IN-83-1: 1982.

GAGE.--Water-stage recorder. Datum of gage is 603.48 ft above sea level. Prior to June 26, 1952, nonrecording gage at same site and datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	39	32	46	e39	70	39	48	54	63	35	27
2	25	41	32	48	e39	63	39	56	47	54	32	27
3	28	42	34	55	e39	59	41	51	41	131	31	28
4	44	40	43	55	e40	56	40	48	38	230	29	26
5	40	39	77	51	e39	54	37	47	68	109	28	26
6	34	39	92	48	e39	52	38	45	115	91	37	26
7	30	39	65	47	e38	53	49	41	78	92	66	25
8	29	39	55	45	e38	50	91	40	56	61	42	25
9	31	38	51	49	e39	48	87	43	44	52	36	25
10	31	38	50	57	e40	47	67	51	38	62	33	43
11	29	38	48	56	e42	46	59	46	34	73	37	61
12	29	37	46	50	e45	45	55	50	38	57	34	171
13	29	37	46	48	52	44	49	44	86	46	30	90
14	32	37	62	46	48	45	47	41	181	42	30	52
15	32	36	86	45	47	47	48	38	281	40	30	41
16	33	36	89	45	47	57	45	37	157	37	29	36
17	38	35	70	42	e44	55	67	39	81	35	39	34
18	38	35	59	43	e45	49	66	40	61	34	42	32
19	34	35	55	e42	e42	49	61	45	48	32	35	31
20	33	36	53	e42	e40	57	108	42	46	32	32	32
21	35	36	45	e41	e45	60	302	39	178	31	31	37
22	34	35	e44	e41	66	53	265	37	184	35	30	33
23	35	36	e43	e41	143	50	123	40	79	35	30	33
24	36	44	e42	e40	194	50	102	37	85	34	30	36
25	36	41	e42	e40	201	47	82	34	781	33	30	35
26	36	37	e41	e41	126	44	67	37	828	36	29	33
27	38	35	e42	e40	115	42	59	37	376	35	29	31
28	37	34	e42	e40	99	44	56	86	183	32	30	30
29	37	33	e44	e39	79	44	53	85	110	31	28	30
30	38	32	46	e40	---	42	49	57	78	31	28	30
31	38	---	47	e39	---	41	---	49	---	34	27	---
TOTAL	1044	1119	1623	1402	1910	1563	2291	1430	4474	1740	1029	1186
MEAN	33.7	37.3	52.4	45.2	65.9	50.4	76.4	46.1	149	56.1	33.2	39.5
MAX	44	44	92	57	201	70	302	86	828	230	66	171
MIN	25	32	32	39	38	41	37	34	34	31	27	25
CFSM	.51	.56	.79	.68	.99	.76	1.15	.70	2.25	.85	.50	.60
IN.	.59	.63	.91	.79	1.07	.88	1.29	.80	2.51	.98	.58	.67

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2000, BY WATER YEAR (WY)

MEAN	58.0	76.0	80.0	80.8	94.4	122	118	87.8	75.1	48.4	43.0	43.6
MAX	414	285	186	202	208	319	292	277	272	190	277	143
(WY)	1955	1991	1966	1993	1997	1982	1947	1996	1993	1981	1990	1972
MIN	22.3	27.4	24.5	27.0	30.9	50.4	44.6	33.5	25.6	22.2	23.1	21.4
(WY)	1964	1954	1964	1977	1964	2000	1963	1958	1965	1988	1964	1953

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1946 - 2000	
ANNUAL TOTAL	22457		20811			
ANNUAL MEAN	61.5		56.9		77.1	
HIGHEST ANNUAL MEAN					124	1991
LOWEST ANNUAL MEAN					36.5	1964
HIGHEST DAILY MEAN	654	Jan 23	828	Jun 26	3040	Nov 28 1990
LOWEST DAILY MEAN	19	Sep 20	25	Oct 1	17	Aug 24 1965
ANNUAL SEVEN-DAY MINIMUM	20	Sep 15	26	Sep 3	19	Aug 20 1965
INSTANTANEOUS PEAK FLOW			1310	Jun 25	3880	Nov 28 1990
INSTANTANEOUS PEAK STAGE			8.72	Jun 25	11.66	Oct 10 1954
ANNUAL RUNOFF (CFSM)	.93		.86		1.16	
ANNUAL RUNOFF (INCHES)	12.62		11.69		15.82	
10 PERCENT EXCEEDS	93		85		141	
50 PERCENT EXCEEDS	42		42		49	
90 PERCENT EXCEEDS	29		31		28	

e Estimated

04095090 BURNS DITCH AT PORTAGE, IN

LOCATION.--Lat 41°37'20", long 86°10'35", in NE$^1/_4$NW$^1/_4$ sec. 36, T.37 N., R.7 W., Porter County, Hydrologic Unit 04040001, on left bank at an industrial road bridge, 1,300 feet north of U.S. Highway 12, 0.7 mi south of the mouth, 1.2 mi west of the State Road 249 overpass over U.S. Highway 12, 2.4 mi east of County Line Road, 3.2 mi north of the intersection of Central Avenue and Willow Creek Road in Portage.

DRAINAGE AREA.--331 mi^2.

PERIOD OF RECORD.--February 2, 1995 to current year.

GAGE.--Water-stage recorder and Acoustic Doppler Velocity Meter. Datum of gage is 575 ft above sea level from topographic map.

REMARKS.--Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	396	395	389	365	615	558	316	432	576	791	332	193
2	559	582	394	295	404	481	282	520	612	605	278	176
3	571	472	338	309	387	503	236	509	465	832	266	200
4	588	255	324	347	329	475	325	473	380	916	288	149
5	499	320	458	400	546	399	352	427	665	675	e340	176
6	522	429	766	364	388	433	281	364	985	533	e400	195
7	491	440	619	380	304	447	203	311	862	492	e450	223
8	465	378	499	367	413	442	618	328	673	446	e250	192
9	500	290	415	352	335	283	684	316	530	331	e360	206
10	529	200	335	408	333	316	588	417	479	387	e220	338
11	506	242	390	404	347	230	513	377	346	421	e260	493
12	492	279	327	349	556	408	464	392	355	406	e300	1070
13	568	254	277	289	445	457	394	378	732	369	e330	772
14	518	236	374	379	347	405	429	337	1250	311	e290	454
15	452	197	553	409	417	313	332	332	1630	254	261	357
16	495	229	607	235	349	298	258	300	1520	290	224	340
17	551	346	536	347	467	484	513	283	986	250	330	268
18	538	331	454	308	358	465	546	260	774	258	372	268
19	488	302	449	332	385	402	482	365	633	239	337	269
20	498	290	440	346	416	413	725	338	600	267	270	240
21	391	302	563	567	438	530	1530	356	1660	275	241	280
22	527	297	430	545	501	485	1920	320	2310	218	239	248
23	600	303	742	433	805	450	1530	316	1870	137	223	224
24	531	321	549	492	1110	471	1200	258	1440	185	217	162
25	328	244	436	222	1190	379	973	272	2840	243	226	223
26	400	221	533	351	968	348	766	252	3600	252	207	284
27	424	258	444	443	838	231	655	234	2610	224	154	201
28	444	267	428	473	708	305	544	569	1820	199	191	222
29	442	159	415	306	638	348	502	593	1380	244	162	267
30	419	294	389	435	---	342	451	526	1030	279	187	262
31	484	---	346	521	---	378	---	482	---	319	210	---
TOTAL	15216	9133	14219	11773	15337	12479	18612	11637	35613	11648	8415	8952
MEAN	491	304	459	380	529	403	620	375	1187	376	271	298
MAX	600	582	766	567	1190	558	1920	593	3600	916	450	1070
MIN	328	159	277	222	304	230	203	234	346	137	154	149

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2000, BY WATER YEAR (WY)

MEAN	273	349	385	426	453	508	582	634	740	424	358	261
MAX	491	512	494	587	754	759	880	1286	1187	637	505	398
(WY)	2000	1995	1995	1998	1997	1998	1995	1996	2000	1996	1995	1995
MIN	107	144	179	231	255	321	358	288	237	214	205	147
(WY)	1996	1999	1999	1996	1996	1996	1997	1999	1999	1997	1999	1997

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1995 - 2000	
ANNUAL TOTAL	129612		173034			
ANNUAL MEAN	355		473		449	
HIGHEST ANNUAL MEAN					522	1995
LOWEST ANNUAL MEAN					288	1999
HIGHEST DAILY MEAN	1740	Apr 24	3600	Jun 26	8000	May 10 1996
LOWEST DAILY MEAN	121	Sep 19	137	Jul 23	83	Oct 16 1995
ANNUAL SEVEN-DAY MINIMUM	144	Sep 22	182	Aug 27	95	Oct 13 1995
INSTANTANEOUS PEAK FLOW			4180	Jun 26	4180	Jun 26 2000
INSTANTANEOUS PEAK STAGE			5.64	Apr 21	10.19	Mar 9 1998
10 PERCENT EXCEEDS	558		727		755	
50 PERCENT EXCEEDS	295		388		378	
90 PERCENT EXCEEDS	170		228		168	

e Estimated

04095380 TRAIL CREEK AT MICHIGAN CITY HARBOR, IN

LOCATION.--Lat 41°43'22", long 86°54'15", sec. 29, T.38 N., R.4 W., LaPorte County, Hydrologic Unit 04040001, on right bank 2000 ft north of Michigan Street, 2,600 ft southeast of lake end of west breakwater, 0.5 mi southwest of Washington Park, 3000 ft downstream of U.S. Hwy 12 bridge in Michigan City.

DRAINAGE AREA.--59.1 mi^2.

PERIOD OF RECORD.--October 1994 to current year.

GAGE.--Water-stage recorder and Acoustic Velocity Meter. Datum of gage is 575 ft above sea level from topographic map.

REMARKS.--Records poor. Positive discharges indicate flow towards Lake Michigan; negative discharges indicate flow away from Lake Michigan.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	104	115	91	e100	134	111	138	85	119	116	102
2	101	112	105	96	e90	120	106	138	122	122	108	96
3	101	135	122	101	e85	118	108	162	104	184	105	77
4	115	109	112	150	e130	125	124	171	114	168	69	97
5	105	101	165	151	e100	120	119	151	223	118	90	105
6	87	102	164	116	e95	124	108	165	219	119	129	101
7	102	98	136	117	e88	133	95	155	150	125	140	114
8	112	116	116	120	e100	136	207	143	141	82	103	104
9	95	114	117	113	e90	105	150	89	131	121	109	114
10	115	95	123	134	e100	119	124	120	135	170	64	169
11	103	104	110	130	e130	97	119	134	130	155	76	199
12	114	116	108	97	e85	102	116	142	135	138	88	367
13	103	114	101	108	e95	121	114	122	335	145	92	173
14	114	111	152	122	101	116	139	104	396	254	77	118
15	115	97	174	114	95	114	129	112	269	142	91	133
16	107	109	184	96	77	117	112	126	157	134	93	105
17	113	98	124	97	83	114	158	117	125	90	113	65
18	116	108	116	113	102	106	133	89	121	79	89	68
19	109	114	119	93	112	99	126	106	120	87	78	102
20	105	121	117	147	94	125	219	116	150	56	86	101
21	112	103	125	109	91	142	351	117	231	62	80	115
22	96	106	107	101	167	129	235	123	130	74	98	87
23	114	129	126	e82	237	115	157	137	123	61	103	101
24	124	136	90	e100	229	126	149	119	221	63	110	124
25	119	96	99	e130	221	124	140	111	869	63	104	108
26	112	91	92	e120	180	114	123	106	364	71	83	76
27	111	101	122	e110	180	97	123	104	217	99	100	45
28	102	100	109	e92	148	112	122	254	92	92	119	47
29	113	113	109	e120	144	111	129	146	93	110	116	77
30	120	105	94	e140	---	106	115	111	72	91	125	103
31	108	---	89	e150	---	103	---	114	---	102	132	---
TOTAL	3365	3258	3742	3560	3549	3624	4261	4042	5774	3496	3086	3393
MEAN	109	109	121	115	122	117	142	130	192	113	99.5	113
MAX	124	136	184	151	237	142	351	254	869	254	140	367
MIN	87	91	89	82	77	97	95	89	72	56	64	45

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2000, BY WATER YEAR (WY)

MEAN	118	135	147	143	130	141	156	145	144	126	113	102
MAX	127	173	185	176	155	162	176	159	192	150	126	113
(WY)	1998	1995	1997	1995	1995	1997	1999	1998	2000	1998	1995	2000
MIN	109	109	121	115	108	117	124	130	122	113	99.5	90.3
(WY)	2000	2000	2000	2000	1998	2000	1998	2000	1995	2000	2000	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1994 - 2000	
ANNUAL TOTAL	46382		45150			
ANNUAL MEAN	127		123		132	
HIGHEST ANNUAL MEAN					145	1995
LOWEST ANNUAL MEAN					123	2000
HIGHEST DAILY MEAN	523	Jan 23	869	Jun 25	4150	Apr 19 1996
LOWEST DAILY MEAN	64	Aug 20	45	Sep 27	-185	Jan 12 1997
ANNUAL SEVEN-DAY MINIMUM	78	Sep 13	64	Jul 20	-28	Jan 12 1997
INSTANTANEOUS PEAK FLOW			p3610	Jun 1	p3610	Jun 1 2000
INSTANTANEOUS PEAK STAGE			6.49	Apr 21	7.88	Jan 20 1995
10 PERCENT EXCEEDS	162		159		195	
50 PERCENT EXCEEDS	118		114		127	
90 PERCENT EXCEEDS	93		89		93	

e Estimated
p Peak flow contains only positive flow.

04096100 GALENA RIVER NEAR LAPORTE, IN

LOCATION.--Lat 41°44'54", long 86°40'30", in SE$^1/_4$NW$^1/_4$ sec.17, T.38 N., R.2 W., LaPorte County, Hydrologic Unit 04040001, on left bank at downstream side of bridge on County Road 125 East, 1.3 mi south of Indiana-Michigan State line, and 9.8 mi north of Courthouse in LaPorte.

DRAINAGE AREA.--17.2 mi^2, of which 2.30 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1969 to current year.

REVISED RECORDS.--WDR IN-80-1: 1970, 1971(P), 1972, 1973, 1974(P), 1975 (M), 1976 (P), and 1978 (P).

GAGE.--Water-stage recorder. Datum of gage is 625.00 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum instantaneous gage height may have occurred Nov. 28, 1990 during period of no gage height record.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	17	14	15	e13	28	16	25	25	19	13	8.0
2	14	18	14	19	e12	26	17	28	21	18	12	9.1
3	15	18	15	21	e12	24	17	24	19	20	12	9.2
4	22	17	17	20	e12	23	16	22	18	20	11	9.4
5	15	19	36	18	e12	22	16	21	32	18	11	9.9
6	14	16	33	17	e12	21	16	20	35	17	13	9.7
7	13	16	23	16	e12	21	19	19	25	16	25	9.8
8	13	16	20	16	e12	20	32	18	22	15	16	10
9	14	16	18	20	13	20	26	20	19	14	14	11
10	14	16	18	22	15	19	22	21	18	23	13	18
11	14	15	17	19	17	19	21	20	17	24	12	28
12	13	15	17	17	16	18	20	21	17	18	11	70
13	14	15	17	16	15	18	19	19	29	17	9.5	34
14	18	15	29	15	14	19	18	18	42	21	9.3	27
15	14	14	40	14	14	19	17	17	29	18	11	25
16	13	14	40	14	13	23	17	17	23	16	10	22
17	14	14	27	14	13	20	18	18	20	15	13	20
18	14	14	23	e13	13	19	18	20	19	14	14	18
19	15	14	21	e13	14	20	20	30	18	14	12	16
20	15	15	22	e12	14	24	50	23	18	14	11	17
21	15	15	20	e12	14	25	86	21	26	13	10	21
22	15	16	e16	e12	30	22	48	19	20	13	10	18
23	16	16	e15	e12	55	21	38	19	18	12	11	20
24	18	20	e14	e13	58	20	34	17	22	11	9.6	21
25	17	16	e14	e14	52	19	29	16	164	9.8	9.1	19
26	19	15	e14	e16	39	18	27	16	54	11	10	18
27	17	15	e14	e17	44	18	25	16	33	11	10	17
28	17	15	e14	e14	34	18	24	36	26	9.9	10	16
29	17	14	e14	e13	30	18	22	28	23	10	9.8	16
30	17	14	16	e14	---	17	21	23	21	12	8.7	15
31	16	---	15	e13	---	17	---	22	---	12	8.0	---
TOTAL	477	470	627	481	624	636	769	654	873	475.7	359.0	562.1
MEAN	15.4	15.7	20.2	15.5	21.5	20.5	25.6	21.1	29.1	15.3	11.6	18.7
MAX	22	20	40	22	58	28	86	36	164	24	25	70
MIN	13	14	14	12	12	17	16	16	17	9.8	8.0	8.0
CFSM	.89	.91	1.18	.90	1.25	1.19	1.49	1.23	1.69	.89	.67	1.09
IN.	1.03	1.02	1.36	1.04	1.35	1.38	1.66	1.41	1.89	1.03	.78	1.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2000, BY WATER YEAR (WY)

MEAN	22.4	30.0	30.3	27.6	31.2	37.3	34.3	27.2	24.3	17.7	15.9	16.8
MAX	43.8	64.4	51.8	54.5	65.3	70.1	56.0	65.5	69.7	39.0	28.5	32.6
(WY)	1991	1991	1973	1998	1997	1982	1970	1996	1993	1996	1996	1993
MIN	14.8	15.7	15.6	15.0	19.2	19.4	18.2	15.5	12.3	10.3	9.71	9.27
(WY)	1990	2000	1990	1976	1980	1981	1971	1992	1971	1988	1970	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1970 - 2000	
ANNUAL TOTAL	7865.2		7007.8			
ANNUAL MEAN	21.5		19.1		26.2	
HIGHEST ANNUAL MEAN					35.4	1993
LOWEST ANNUAL MEAN					19.1	2000
HIGHEST DAILY MEAN	263	Jan 23	164	Jun 25	650	Nov 28 1990
LOWEST DAILY MEAN	7.9	Sep 12	8.0	Aug 31	6.7	Sep 13 1973
ANNUAL SEVEN-DAY MINIMUM	8.4	Sep 11	8.9	Aug 29	7.6	Aug 27 1970
INSTANTANEOUS PEAK FLOW			238	Jun 25	900	Nov 28 1990
INSTANTANEOUS PEAK STAGE			4.94	Jun 25	7.04	Jun 8 1993
ANNUAL RUNOFF (CFSM)	1.25		1.11		1.52	
ANNUAL RUNOFF (INCHES)	17.01		15.16		20.70	
10 PERCENT EXCEEDS	33		27		42	
50 PERCENT EXCEEDS	16		17		21	
90 PERCENT EXCEEDS	10		12		12	

e Estimated

04099510 PIGEON CREEK NEAR ANGOLA, IN

LOCATION.--Lat 41°38'04", long 85°06'35", in NW$^1/_4$SE$^1/_4$ sec.26, T.37 N., R.12 E., Steuben County, Hydrologic Unit 04050001, on left bank 5 ft upstream from bridge on U.S. Highway 20, 1.3 mi downstream from outlet of Hogback Lake, 1.3 mi southeast of Flint, and 5.8 mi west of Angola.

DRAINAGE AREA.--106 mi^2, of which 22.5 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1945 to current year. Prior to October 1947, published as "near Flint". Published as Pigeon Creek at Hogback Lake Outlet near Angola, October 1947 to September 1971, and Pigeon Creek and Hogback Lake near Angola, October 1971 to September 1974.

REVISED RECORDS.--WSP 1144: 1948. WSP 2111: Drainage area. WDR IN 92-1: 1991.

GAGE.--Water-stage recorder. Datum of gage is 940.00 ft above sea level. Prior to October 1947, nonrecording gage at site 0.3 mi downstream at different datum. Oct. 1947 to Aug. 3, 1953, nonrecording gage at site 1.2 mi upstream at same datum. Aug. 4, 1953, to Apr. 3, 1974, recording gage at site 1.3 mi upstream at same datum. Apr. 18, 1974, to Sept. 2, 1974, nonrecording gage at same site and datum.

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	16	17	19	18	67	55	108	214	129	51	54
2	24	16	16	19	18	62	54	103	193	116	52	48
3	22	16	16	20	18	56	52	97	166	110	51	43
4	24	17	16	21	19	50	49	91	143	105	49	39
5	24	17	18	22	19	46	48	85	128	108	47	35
6	25	17	20	23	19	42	45	79	123	113	48	32
7	25	17	20	22	19	38	45	73	126	111	54	30
8	25	16	21	22	19	36	46	69	127	104	59	29
9	25	16	20	22	18	34	47	65	120	96	60	28
10	23	16	20	23	19	33	49	67	108	89	57	30
11	21	16	20	22	20	32	50	71	97	82	53	35
12	21	16	20	22	20	30	50	75	106	75	48	49
13	21	16	19	23	20	29	50	76	120	70	45	74
14	21	15	21	22	21	28	48	73	141	65	42	88
15	20	15	22	22	21	29	47	70	160	61	39	85
16	20	15	24	21	20	29	46	67	165	57	37	76
17	19	15	24	21	20	29	44	64	155	55	37	68
18	19	15	25	21	20	28	42	62	145	52	37	61
19	19	15	24	21	21	28	42	78	133	49	35	54
20	18	16	24	21	20	31	54	114	124	47	34	49
21	17	17	23	21	20	35	113	153	124	45	33	45
22	17	18	23	21	20	43	194	175	129	43	32	42
23	16	19	22	21	22	50	255	174	134	42	33	39
24	17	19	22	20	27	53	280	160	133	41	36	38
25	17	19	21	20	33	53	265	141	137	39	36	36
26	16	19	21	19	40	51	231	125	142	38	37	35
27	16	19	20	19	49	50	195	110	153	38	48	34
28	16	18	20	19	60	50	164	124	160	39	55	32
29	16	18	20	18	67	51	139	157	156	42	61	31
30	16	17	19	18	---	55	120	193	143	46	63	31
31	16	---	19	18	---	56	---	215	---	49	59	---
TOTAL	621	501	637	643	727	1304	2919	3314	4205	2156	1428	1370
MEAN	20.0	16.7	20.5	20.7	25.1	42.1	97.3	107	140	69.5	46.1	45.7
MAX	25	19	25	23	67	67	280	215	214	129	63	88
MIN	16	15	16	18	18	28	42	62	97	38	32	28
CFSM	.24	.20	.25	.25	.30	.50	1.17	1.28	1.68	.83	.55	.55
IN.	.28	.22	.28	.29	.32	.58	1.30	1.48	1.87	.96	.64	.61

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2000, BY WATER YEAR (WY)

MEAN	34.3	53.6	75.9	95.5	106	159	164	115	81.3	50.5	38.1	32.9
MAX	154	195	195	385	257	437	491	423	362	164	126	119
(WY)	1955	1993	1968	1993	1959	1982	1950	1996	1996	1981	1981	1981
MIN	4.12	4.51	7.20	7.95	8.55	20.4	48.1	29.8	21.6	10.8	8.12	5.83
(WY)	1965	1965	1964	1964	1963	1964	1946	1963	1988	1963	1964	1963

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1946 - 2000	
ANNUAL TOTAL	30249		19825			
ANNUAL MEAN	82.9		54.2		83.7	
HIGHEST ANNUAL MEAN					151	1950
LOWEST ANNUAL MEAN					19.5	1964
HIGHEST DAILY MEAN	558	Jan 27	280	Apr 24	996	May 21 1996
LOWEST DAILY MEAN	14	Sep 28	15	Nov 14	3.4	Oct 25 1964
ANNUAL SEVEN-DAY MINIMUM	15	Nov 13	15	Nov 13	3.5	Oct 22 1964
INSTANTANEOUS PEAK FLOW			283	Apr 24	1000	May 21 1996
INSTANTANEOUS PEAK STAGE			8.12	Apr 24	13.90	Mar 22 1982
ANNUAL RUNOFF (CFSM)	.99		.65		1.00	
ANNUAL RUNOFF (INCHES)	13.48		8.83		13.62	
10 PERCENT EXCEEDS	189		128		188	
50 PERCENT EXCEEDS	35		37		54	
90 PERCENT EXCEEDS	16		17		17	

04099750 PIGEON RIVER NEAR SCOTT, IN

LOCATION.--Lat 41°44'56", long 85°34'35", in SE$^1/_4$NW$^1/_4$ sec.14, T.38 N., R.8 E., Lagrange County, Hydrologic Unit 04050001, on right bank 20 ft downstream from bridge on County Road 750 North, 1,200 ft downstream from Page Ditch, 0.7 mi south of Indiana-Michigan State line, and 1.2 mi northwest of Scott.

DRAINAGE AREA.--361 mi^2 of which 53.9 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--June 1968 to current year.

REVISED RECORDS.--WSP 2111: Drainage area. WDR IN-92-1: 1991.

GAGE.--Water-stage recorder. Datum of gage is 815.00 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	157	140	140	e160	e154	403	262	467	500	413	213	186
2	149	150	138	162	e154	397	258	478	485	387	202	176
3	151	154	138	168	e154	383	255	441	467	387	202	171
4	183	150	140	186	e156	364	245	398	448	386	195	152
5	183	147	165	183	e156	343	235	356	432	357	184	152
6	171	144	217	174	e156	323	226	328	433	335	179	146
7	163	141	202	167	e158	276	228	318	396	324	259	139
8	158	141	183	163	e158	277	280	304	357	313	311	136
9	159	141	173	169	e151	272	286	300	347	303	223	135
10	160	143	173	188	e152	262	269	350	337	298	243	167
11	154	142	164	192	e154	253	260	336	321	300	226	234
12	150	142	159	180	e154	242	255	325	323	271	205	298
13	147	141	154	177	e154	233	250	318	402	254	194	336
14	156	142	173	173	e156	228	246	302	415	239	186	237
15	158	139	223	170	e153	227	241	288	410	215	176	263
16	152	138	239	165	e143	272	233	280	403	207	163	263
17	149	137	224	e164	142	266	231	285	394	203	159	246
18	146	137	205	e163	144	244	230	292	393	195	171	231
19	144	139	e200	e162	146	234	226	378	384	186	167	218
20	142	150	e193	e161	138	252	325	389	365	177	161	180
21	141	149	e188	e160	137	271	571	377	418	171	152	186
22	140	147	e183	e159	151	269	647	393	441	167	146	186
23	140	145	e180	e158	205	263	610	442	366	167	147	178
24	140	151	e177	e157	275	263	663	416	375	161	140	179
25	140	158	e173	e157	294	263	675	409	532	152	138	177
26	137	161	e170	e156	295	260	673	390	655	150	137	170
27	133	155	e168	e156	356	259	655	374	572	146	174	162
28	135	147	e166	e155	421	260	612	424	500	150	219	157
29	135	144	e164	e155	385	271	557	454	470	172	178	153
30	135	141	e162	e154	---	270	487	463	432	208	162	150
31	138	---	e160	e154	---	264	---	474	---	240	199	---
TOTAL	4646	4356	5494	5148	5552	8664	11191	11549	12773	7634	5811	5764
MEAN	150	145	177	166	191	279	373	373	426	246	187	192
MAX	183	161	239	192	421	403	675	478	655	413	311	336
MIN	133	137	138	154	137	227	226	280	321	146	137	135
CFSM	.49	.47	.58	.54	.62	.91	1.22	1.21	1.39	.80	.61	.63
IN.	.56	.53	.67	.62	.67	1.05	1.36	1.40	1.55	.93	.70	.70

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2000, BY WATER YEAR (WY)

MEAN	221	297	363	403	431	592	596	457	387	264	222	206
MAX	575	684	719	1169	836	1389	1089	976	1103	654	516	538
(WY)	1987	1993	1983	1993	1969	1982	1978	1996	1981	1981	1981	1981
MIN	96.3	96.7	157	166	143	279	324	233	132	104	92.5	85.8
(WY)	1972	1972	1972	2000	1972	2000	1971	1971	1988	1988	1988	1971

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1968 - 2000	
ANNUAL TOTAL	127186		88582			
ANNUAL MEAN	348		242		368	
HIGHEST ANNUAL MEAN					545	1993
LOWEST ANNUAL MEAN					207	1972
HIGHEST DAILY MEAN	1340	Jan 28	675	Apr 25	2340	Mar 21 1982
LOWEST DAILY MEAN	118	Sep 27	133	Oct 27	42	Oct 21 1971
ANNUAL SEVEN-DAY MINIMUM	120	Sep 21	136	Oct 25	69	Aug 27 1971
INSTANTANEOUS PEAK FLOW			677	Apr 24	2370	Mar 21 1982
INSTANTANEOUS PEAK STAGE			4.82	Apr 24	7.85	Mar 21 1982
ANNUAL RUNOFF (CFSM)	1.14		.79		1.20	
ANNUAL RUNOFF (INCHES)	15.41		10.73		16.30	
10 PERCENT EXCEEDS	687		411		681	
50 PERCENT EXCEEDS	203		186		296	
90 PERCENT EXCEEDS	140		142		148	

e Estimated

04099808 LITTLE ELKHART RIVER AT MIDDLEBURY, IN

LOCATION.--Lat 41°40'31", long 85°42'01", in NE$^1/_4$SE$^1/_4$ sec.10, T.37 N., R.7 E., Elkhart County, Hydrologic Unit 04050001, on left bank 15 ft downstream from bridge on County Road 16, 0.1 mi east of Middlebury, and 1.7 mi downstream from Rowe Eden Ditch.

DRAINAGE AREA.--97.6 mi^2, of which 5.89 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1979 to current year.

REVISED RECORDS.--WDR IN-82-1: 1980, 1981. WDR IN-92-1: 1991.

GAGE.--Water-stage recorder. Datum of gage is 810.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	41	38	43	e39	71	50	78	70	74	42	32
2	42	44	38	44	e39	66	50	82	66	70	45	33
3	43	43	38	46	41	64	49	75	63	71	46	32
4	51	42	38	47	42	62	49	71	62	69	44	33
5	46	42	52	46	41	60	48	68	65	66	41	32
6	44	41	54	45	41	59	48	66	64	64	43	32
7	42	41	50	44	41	57	51	64	60	61	58	32
8	42	41	48	43	40	56	59	63	57	60	49	30
9	43	41	46	46	41	55	57	66	55	58	45	32
10	43	41	46	48	42	54	53	83	54	60	40	46
11	42	40	45	49	44	53	52	71	53	58	35	48
12	41	40	44	48	44	53	51	68	57	55	35	64
13	43	40	43	47	43	52	50	64	68	51	35	50
14	43	40	52	45	43	51	49	60	68	49	34	46
15	43	40	59	45	42	54	48	58	77	48	35	44
16	42	40	59	45	42	62	47	59	63	48	34	42
17	42	40	55	43	42	57	48	59	57	47	39	41
18	42	40	52	43	44	54	48	61	56	47	39	40
19	42	41	51	44	43	54	48	112	54	43	36	39
20	42	41	51	44	43	60	159	89	55	42	36	38
21	41	41	48	e40	42	61	294	76	96	42	36	39
22	41	40	46	e39	51	59	175	69	78	41	35	38
23	41	40	e45	e39	82	58	133	74	65	42	34	38
24	41	40	e44	e38	87	56	116	72	65	41	32	39
25	42	40	e43	e38	80	55	104	63	196	39	31	38
26	42	40	e42	e38	78	54	95	61	152	38	32	38
27	41	39	e41	e37	100	54	88	60	131	37	36	37
28	41	39	e41	e37	86	54	83	116	102	41	35	37
29	41	39	e42	e37	76	53	79	101	90	42	34	36
30	41	38	e42	e38	---	52	75	81	81	43	33	36
31	41	---	43	e38	---	50	---	74	---	44	32	---
TOTAL	1314	1215	1436	1324	1519	1760	2356	2264	2280	1591	1181	1162
MEAN	42.4	40.5	46.3	42.7	52.4	56.8	78.5	73.0	76.0	51.3	38.1	38.7
MAX	51	44	59	49	100	71	294	116	196	74	58	64
MIN	41	38	38	37	39	50	47	58	53	37	31	30
CFSM	.46	.44	.51	.47	.57	.62	.86	.80	.83	.56	.42	.42
IN.	.53	.49	.58	.54	.62	.71	.96	.92	.92	.65	.48	.47

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2000, BY WATER YEAR (WY)

MEAN	77.6	96.4	108	115	123	146	137	109	103	71.7	63.4	61.8
MAX	172	202	207	307	280	404	210	264	278	189	160	118
(WY)	1991	1986	1991	1993	1985	1982	1985	1996	1993	1981	1998	1981
MIN	36.0	38.6	42.9	42.7	52.4	56.8	78.5	55.3	36.7	37.9	38.1	38.3
(WY)	1995	1981	1990	2000	2000	2000	2000	1988	1988	1988	2000	1994

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1980 - 2000	
ANNUAL TOTAL	33518		19402			
ANNUAL MEAN	91.8		53.0		101	
HIGHEST ANNUAL MEAN					155	1993
LOWEST ANNUAL MEAN					53.0	2000
HIGHEST DAILY MEAN	789	Jan 23	294	Apr 21	2040	Feb 24 1985
LOWEST DAILY MEAN	37	Sep 26	30	Sep 8	24	Jul 9 1988
ANNUAL SEVEN-DAY MINIMUM	38	Sep 21	32	Sep 3	26	Jul 3 1988
INSTANTANEOUS PEAK FLOW			420	Apr 21	2470	Feb 24 1985
INSTANTANEOUS PEAK STAGE			6.67	Apr 21	10.52	Feb 24 1985
ANNUAL RUNOFF (CFSM)	1.00		.58		1.10	
ANNUAL RUNOFF (INCHES)	13.60		7.87		14.93	
10 PERCENT EXCEEDS	163		75		168	
50 PERCENT EXCEEDS	56		45		79	
90 PERCENT EXCEEDS	40		38		43	

e Estimated

04099850 PINE CREEK NEAR ELKHART, IN

LOCATION.--Lat 41°40'53", long 85°52'57", in NE$^1/_4$NW$^1/_4$ sec.7, T.37 N., R.6 E., Elkhart County, Hydrologic Unit 04050001, on right bank 50 ft upstream from bridge on County Road 14, 0.3 mi east of the intersection of County Roads 17 and 14, and 3.1 mi east of Elkhart.

DRAINAGE AREA.--31.0 mi^2, of which 8.75 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1979 to current year.

GAGE.--Water-stage recorder. Datum of gage is 755.00 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	5.7	5.7	e5.5	e3.9	12	7.6	8.8	8.8	15	6.9	2.6
2	6.5	5.9	5.7	6.2	e4.1	11	7.5	10	8.2	14	7.3	2.0
3	6.6	6.0	5.7	6.5	4.8	11	7.5	9.1	7.5	14	7.6	2.0
4	8.6	5.9	5.7	6.9	5.2	10	7.3	8.5	7.2	13	6.9	2.5
5	8.0	5.9	8.1	6.6	5.2	9.6	7.3	7.7	9.1	13	6.6	2.4
6	7.3	5.8	11	6.2	5.1	8.9	7.2	7.4	11	12	7.1	2.2
7	6.9	5.8	8.6	5.9	5.3	8.6	7.2	7.0	9.1	12	8.1	2.1
8	6.9	5.9	7.7	5.6	5.0	8.2	11	6.8	8.8	11	7.3	2.2
9	6.9	5.9	7.2	6.3	5.4	7.9	12	6.8	8.2	10	7.0	2.3
10	6.7	5.7	6.9	7.7	5.4	7.7	11	8.0	7.9	11	6.5	3.6
11	6.5	5.7	6.6	8.2	5.7	7.7	10	7.6	7.5	11	6.1	4.3
12	6.3	5.7	6.6	7.4	5.2	7.6	9.4	7.6	9.0	9.7	5.5	5.2
13	6.3	5.6	6.3	7.1	5.7	7.5	8.7	7.4	29	9.2	5.1	4.7
14	6.3	5.7	8.3	5.7	5.6	7.3	8.1	6.8	29	9.4	5.4	4.0
15	6.3	5.7	11	6.6	5.4	7.4	7.6	6.5	19	9.2	5.1	3.8
16	6.3	5.7	12	6.4	5.4	13	7.1	6.2	15	8.9	3.9	3.6
17	6.3	5.7	10	e4.6	5.0	13	7.2	6.6	13	8.2	4.4	3.5
18	6.3	5.8	7.7	e4.5	5.4	11	7.2	6.5	13	7.2	5.0	3.4
19	6.2	5.9	7.6	e4.2	5.4	10	7.1	8.2	12	6.4	4.4	3.2
20	6.1	6.1	8.2	e4.0	5.3	13	32	8.8	12	6.5	4.1	3.1
21	6.1	5.9	6.4	e3.9	4.9	14	61	8.1	46	6.5	4.3	3.2
22	6.1	5.9	e6.0	e3.8	6.4	12	25	7.4	22	6.7	3.9	3.3
23	6.1	5.7	e5.7	e3.7	15	11	18	7.1	16	6.5	3.9	3.4
24	6.2	6.0	e5.5	e3.6	18	10	15	6.8	16	6.8	3.3	3.6
25	6.1	5.9	e5.3	e3.6	16	9.4	14	6.5	116	6.2	3.3	3.4
26	6.0	5.9	e5.2	e3.6	15	8.8	12	6.3	46	6.0	2.9	3.6
27	5.9	5.8	e5.0	e3.6	26	8.7	11	6.3	28	5.2	3.3	3.4
28	6.0	5.7	e5.0	e3.5	17	9.0	10	16	21	5.8	2.9	3.3
29	5.8	5.7	e5.0	e3.5	14	9.1	9.6	12	18	6.8	2.4	3.3
30	5.7	5.7	e5.0	e3.6	---	8.5	9.0	10	16	7.0	2.3	3.3
31	5.7	---	e5.2	e3.7	---	8.0	---	9.2	---	7.3	2.6	---
TOTAL	199.8	174.3	215.9	162.2	235.8	300.9	374.6	248.0	589.3	281.5	155.4	96.5
MEAN	6.45	5.81	6.96	5.23	8.13	9.71	12.5	8.00	19.6	9.08	5.01	3.22
MAX	8.6	6.1	12	8.2	26	14	61	16	116	15	8.1	5.2
MIN	5.7	5.6	5.0	3.5	3.9	7.3	7.1	6.2	7.2	5.2	2.3	2.0
CFSM	.21	.19	.22	.17	.26	.31	.40	.26	.63	.29	.16	.10
IN.	.24	.21	.26	.19	.28	.36	.45	.30	.71	.34	.19	.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2000, BY WATER YEAR (WY)

MEAN	14.8	17.1	20.0	20.2	21.8	26.5	26.3	21.5	22.5	16.0	13.2	12.3
MAX	42.4	32.8	52.7	45.6	47.6	82.3	42.7	50.7	68.1	39.2	26.7	23.7
(WY)	1991	1986	1991	1993	1985	1982	1999	1996	1993	1981	1997	1981
MIN	6.32	5.81	6.93	5.23	8.13	9.71	12.5	8.00	7.79	6.58	5.01	3.22
(WY)	1996	2000	1990	2000	2000	2000	2000	2000	1988	1988	2000	2000

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1980 - 2000	
ANNUAL TOTAL	6269.3		3034.2			
ANNUAL MEAN	17.2		8.29		19.3	
HIGHEST ANNUAL MEAN					30.1	1993
LOWEST ANNUAL MEAN					8.29	2000
HIGHEST DAILY MEAN	248	Apr 23	116	Jun 25	532	Dec 30 1990
LOWEST DAILY MEAN	5.0	Dec 27	2.0	Sep 2	2.0	Sep 2 2000
ANNUAL SEVEN-DAY MINIMUM	5.1	Dec 25	2.2	Sep 2	2.2	Sep 2 2000
INSTANTANEOUS PEAK FLOW			157	Jun 25	607	Dec 30 1990
INSTANTANEOUS PEAK STAGE			4.97	Jun 25	9.74	Jul 26 1981
ANNUAL RUNOFF (CFSM)	.55		.27		.62	
ANNUAL RUNOFF (INCHES)	7.52		3.64		8.47	
10 PERCENT EXCEEDS	30		13		31	
50 PERCENT EXCEEDS	10		6.6		15	
90 PERCENT EXCEEDS	5.7		3.6		7.4	

e Estimated

04100222 NORTH BRANCH ELKHART RIVER AT COSPERVILLE, IN

LOCATION.--Lat 41°28'54", long 858'32", in NE$^1/_4$NW$^1/_4$ sec.22, T.35 N., R.9 E., Noble County, Hydrologic Unit 04050001, on right bank at downstream side of bridge on County Road 900 North at Cosperville, 1,300 ft downstream from Boyd Ditch, 1.7 mi upstream from Hustin Ditch, and 3.1 mi downstream from Waldron Lake.

DRAINAGE AREA.--142 mi^2.

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 880.12 ft above sea level (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated at times by dam at Waldron Lake.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	30	35	45	e45	130	81	156	164	104	21	96
2	26	37	34	45	e44	127	80	159	156	95	22	87
3	26	42	34	47	44	123	77	154	148	99	25	79
4	40	45	35	51	41	117	72	146	138	100	24	72
5	39	43	40	53	40	112	72	139	141	93	23	62
6	37	42	46	54	40	107	67	131	150	85	31	52
7	34	42	49	52	38	102	70	122	147	79	72	45
8	31	41	49	52	37	98	74	115	136	72	73	40
9	57	39	49	52	37	93	74	111	123	66	67	37
10	79	38	47	53	38	90	75	119	109	63	61	42
11	64	38	47	53	39	88	75	126	99	63	56	54
12	53	36	47	54	41	81	72	128	98	58	52	112
13	44	36	46	53	41	77	71	106	102	51	49	105
14	40	35	53	52	41	74	69	71	112	46	47	91
15	37	34	63	52	42	72	67	84	118	41	45	83
16	34	34	70	50	40	72	66	88	114	37	42	76
17	32	33	74	48	41	71	65	90	103	34	43	68
18	29	33	73	50	44	69	57	89	97	32	45	63
19	27	33	71	49	45	67	53	131	90	30	41	57
20	25	34	68	49	44	72	81	152	84	27	39	51
21	25	35	66	e49	44	77	159	150	121	24	39	47
22	22	35	63	e49	47	79	199	141	138	21	36	44
23	21	35	60	e48	58	80	210	138	130	20	37	41
24	20	36	57	e48	74	79	213	134	117	18	35	42
25	20	38	54	e48	86	76	210	126	150	17	32	41
26	19	38	50	e46	94	75	203	122	153	15	33	37
27	18	37	50	e47	116	73	196	120	151	14	78	35
28	18	36	49	e46	130	76	186	144	138	14	95	33
29	18	35	47	e45	134	80	174	168	125	15	101	30
30	18	35	46	e45	---	83	164	172	114	18	104	28
31	24	---	45	e45	---	82	---	169	---	21	102	---
TOTAL	1004	1105	1617	1530	1605	2702	3332	4001	3766	1472	1570	1750
MEAN	32.4	36.8	52.2	49.4	55.3	87.2	111	129	126	47.5	50.6	58.3
MAX	79	45	74	54	134	130	213	172	164	104	104	112
MIN	18	30	34	45	37	67	53	71	84	14	21	28
CFSM	.23	.26	.37	.35	.39	.61	.78	.91	.88	.33	.36	.41
IN.	.26	.29	.42	.40	.42	.71	.87	1.05	.99	.39	.41	.46

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2000, BY WATER YEAR (WY)

MEAN	79.3	115	139	161	156	252	243	172	145	85.7	63.8	64.9
MAX	272	314	341	542	272	553	530	354	405	211	171	161
(WY)	1987	1973	1986	1993	1990	1985	1985	1996	1996	1981	1997	1972
MIN	17.8	17.8	46.5	42.2	43.2	87.2	111	67.2	18.1	16.4	18.3	9.59
(WY)	1975	1972	1972	1977	1972	2000	2000	1988	1988	1988	1978	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1972 - 2000	
ANNUAL TOTAL	42313.8		25454			
ANNUAL MEAN	116		69.5		140	
HIGHEST ANNUAL MEAN					222	1993
LOWEST ANNUAL MEAN					69.5	2000
HIGHEST DAILY MEAN	558	Apr 26	213	Apr 24	916	Mar 22 1982
LOWEST DAILY MEAN	4.8	Sep 19	14	Jul 27	2.2	Jul 7 1988
ANNUAL SEVEN-DAY MINIMUM	5.2	Sep 17	16	Jul 24	2.8	Jul 3 1988
INSTANTANEOUS PEAK FLOW			214	Apr 24	919	Mar 23 1982
INSTANTANEOUS PEAK STAGE			4.50	Apr 24	8.12	Mar 23 1982
ANNUAL RUNOFF (CFSM)	.82		.49		.98	
ANNUAL RUNOFF (INCHES)	11.09		6.67		13.36	
10 PERCENT EXCEEDS	289		135		297	
50 PERCENT EXCEEDS	63		53		108	
90 PERCENT EXCEEDS	15		30		31	

e Estimated

04100252 FORKER CREEK NEAR BURR OAK, IN

LOCATION.--Lat 41°19'58", long 85°25'25", in SE$^1/_4$NE$^1/_4$ sec.12, T.33 N., R.9 E., Noble County, Hydrologic Unit 04050001, on right bank 300 ft downstream from bridge on State Highway 9, and 400 ft downstream from Miller Lake Outlet, 0.8 mi northeast of Burr Oak, and 4.5 mi south of Albion.

DRAINAGE AREA.--19.2 mi^2.

PERIOD OF RECORD.--June 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 889.00 ft above sea level (Indiana Department of Highways bench mark).

REMARKS.--Records poor. Occasional regulation at Miller Lake Outlet.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.34	.51	.22	.25	1.1	20	e6.4	e13	e17	20	e2.2	1.3
2	.34	.60	.17	.26	.97	16	e7.6	e14	e14	e15	e2.1	1.2
3	.37	.65	.17	.21	1.1	13	e7.0	e11	e12	e13	e2.3	1.1
4	.34	.53	.18	.25	1.1	11	e6.4	e10	e10	12	e2.0	1.2
5	.31	.51	.23	.25	.99	9.2	6.2	e9.4	e18	11	e1.9	1.1
6	.33	.54	.22	.25	.89	7.3	5.4	e8.6	e16	9.1	e2.1	1.0
7	.33	.51	.17	.32	.82	5.7	6.1	e8.3	e14	6.7	e2.9	.91
8	.31	.56	.18	.34	.81	4.6	6.5	e8.0	11	5.7	e3.4	.84
9	.34	.55	.19	.33	.82	e3.9	5.7	e11	8.6	5.3	e3.0	.86
10	.28	.59	.24	.45	1.0	e3.2	5.7	e15	7.0	5.1	e2.7	1.1
11	.25	.59	.25	.50	1.3	e2.5	5.4	e14	6.7	4.9	e2.5	1.3
12	.30	.59	.24	.47	1.2	e2.1	4.6	e12	7.8	4.2	e2.3	e8.0
13	.31	.54	.17	.59	1.3	1.9	4.1	e10	11	3.6	e2.1	e5.4
14	.37	.51	.13	.68	1.5	1.8	3.5	e9.0	20	3.2	e1.9	e3.8
15	.29	.51	.14	.75	1.4	2.4	3.1	e8.4	33	2.7	e1.8	2.6
16	.27	.52	.17	.77	1.2	3.6	3.5	e7.6	42	2.3	e1.7	2.0
17	.34	.51	.17	.88	1.2	4.9	e4.0	7.2	37	2.0	e1.6	1.5
18	.34	.43	.19	1.2	2.0	7.1	e3.5	7.4	32	1.9	e1.8	1.3
19	.39	.42	.22	1.2	2.2	e9.2	e3.2	e30	26	1.8	e1.6	1.2
20	.42	.41	.23	1.5	1.9	e14	19	e28	e23	1.8	e1.5	1.0
21	.42	.38	.25	1.5	1.7	e21	68	e22	e30	1.7	e1.4	.97
22	.47	.34	.23	1.6	1.9	e19	87	e17	e26	1.7	1.4	.90
23	.51	.41	.18	1.6	3.9	e15	71	e14	e22	1.7	1.4	1.4
24	.48	.42	.17	1.3	8.0	e12	53	e12	e17	1.7	1.3	e2.5
25	.37	.41	.18	1.1	11	e10	39	e10	e15	e1.7	1.2	2.1
26	.35	.34	.23	1.0	14	e9.4	31	e9.0	e20	e1.6	1.3	1.6
27	.38	.34	.20	.99	19	e9.0	25	e8.0	e50	e1.6	e2.4	1.4
28	.42	.34	.25	1.1	25	e15	20	e30	42	e1.9	e3.8	1.4
29	.42	.34	.33	1.0	25	e18	16	e43	34	e2.3	e2.7	1.3
30	.48	.34	.27	1.2	---	e10	12	e29	27	e2.6	e1.9	1.2
31	.50	---	.19	1.2	---	e5.8	---	e22	---	e2.3	1.4	---
TOTAL	11.37	14.24	6.36	25.04	134.30	287.6	538.9	457.9	649.1	152.1	63.6	53.48
MEAN	.37	.47	.21	.81	4.63	9.28	18.0	14.8	21.6	4.91	2.05	1.78
MAX	.51	.65	.33	1.6	25	21	87	43	50	20	3.8	8.0
MIN	.25	.34	.13	.21	.81	1.8	3.1	7.2	6.7	1.6	1.2	.84
CFSM	.02	.02	.01	.04	.24	.48	.94	.77	1.13	.26	.11	.09
IN.	.02	.03	.01	.05	.26	.56	1.04	.89	1.26	.29	.12	.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2000, BY WATER YEAR (WY)

MEAN	7.21	13.2	18.3	18.2	23.5	35.0	33.6	19.1	19.7	9.02	4.93	5.17
MAX	50.6	48.8	52.5	67.1	62.5	111	60.5	41.9	90.7	49.5	36.4	33.4
(WY)	1991	1989	1978	1993	1985	1982	1978	1996	1981	1986	1990	1990
MIN	.31	.25	.21	.81	2.96	9.28	9.61	4.70	1.98	.41	.25	.23
(WY)	1995	1995	2000	2000	1979	2000	1971	1988	1988	1971	1971	1978

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1970 - 2000	
ANNUAL TOTAL	3911.43		2393.99			
ANNUAL MEAN	10.7		6.54		17.2	
HIGHEST ANNUAL MEAN					29.0	1982
LOWEST ANNUAL MEAN					6.54	2000
HIGHEST DAILY MEAN	198	Jan 24	87	Apr 22	431	Feb 25 1985
LOWEST DAILY MEAN	.13	Dec 14	.13	Dec 14	.10	Nov 12 1994
ANNUAL SEVEN-DAY MINIMUM	.17	Dec 13	.17	Dec 13	.12	Oct 2 1996
INSTANTANEOUS PEAK FLOW			91	Apr 22	480	Feb 24 1985
INSTANTANEOUS PEAK STAGE			4.10	Apr 22	7.03	Dec 30 1990
ANNUAL RUNOFF (CFSM)	.56		.34		.90	
ANNUAL RUNOFF (INCHES)	7.58		4.64		12.16	
10 PERCENT EXCEEDS	30		19		43	
50 PERCENT EXCEEDS	.87		1.8		8.7	
90 PERCENT EXCEEDS	.30		.27		.76	

e Estimated

04100295 RIMMELL BRANCH NEAR ALBION, IN

LOCATION.--Lat 41°23'07", long 85°22'14", in NE$^1/_4$SE$^1/_4$ sec.21, T.34 N., R.10 E., Noble County, Hydrologic Unit 04050001, on right bank 900 ft downstream from culvert on County Road 300 East, 0.75 mi south of State Highway 8, and 3.0 mi east of intersection of State Highway 9 and State Highway 8 in Albion.

DRAINAGE AREA.--10.7 mi^2.

PERIOD OF RECORD.--November 1979 to current year.

GAGE.--Water-stage recorder. Datum of gage is 934.49 ft above sea level.

REMARKS.--Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.30	.22	.15	.26	e.10	11	3.8	7.4	10	e3.2	.73	e.40
2	e.15	.23	.18	.38	e.10	9.0	3.4	9.1	8.7	e2.9	.83	e.31
3	e1.3	.23	.19	.41	e.11	7.5	3.0	7.8	7.4	e2.6	1.2	e.32
4	.85	e.21	.19	.64	e.11	6.3	2.7	6.9	6.6	e2.5	.89	e.34
5	.41	e.20	.26	.87	e.10	5.3	2.2	6.3	10	e2.3	.77	e.20
6	e.25	e.19	.37	.49	e.10	4.2	2.2	5.5	13	2.2	1.0	e.14
7	e.15	e.18	.28	.50	e.11	3.5	2.0	4.9	10	2.2	1.4	.13
8	e.16	e.17	.21	.35	e.11	3.0	3.3	4.5	8.8	e1.9	1.0	.12
9	e.17	e.16	.19	.37	e.12	2.9	3.7	5.4	7.2	e1.8	.87	.11
10	e.17	e.15	.20	.39	e.13	2.3	3.1	15	5.9	e1.7	.76	.16
11	e.16	.14	.16	.55	e.14	2.1	2.7	11	5.1	e1.7	.69	1.7
12	e.16	.13	.18	.42	e.15	2.0	2.2	9.1	4.8	e1.6	.65	11
13	e.18	.13	.17	.39	e.16	1.9	2.0	8.0	6.5	1.6	.69	4.2
14	.19	.14	.60	.28	e.17	1.9	1.9	5.8	12	1.6	.69	.97
15	.18	.13	1.8	.30	e.19	2.0	1.8	4.2	e16	1.6	.73	.96
16	.18	.14	3.0	.36	e.22	2.0	1.7	3.4	e14	1.5	.71	.70
17	.19	.14	.84	.30	e.24	1.8	1.8	3.1	7.7	1.4	.79	.52
18	.17	e.15	.63	e.27	e.35	1.8	1.8	4.0	8.1	1.4	.86	.43
19	e.17	.18	.48	e.24	e.54	1.9	1.8	28	7.2	1.3	.72	.37
20	e.17	.21	.77	e.23	e1.0	8.1	27	16	7.8	1.2	.53	.31
21	.18	.19	.97	e.21	e2.0	12	42	11	17	1.2	.50	.28
22	.19	.18	.60	e.20	12	9.8	24	8.7	11	1.1	.47	.24
23	.22	.17	.49	e.18	21	8.2	16	8.0	7.6	1.0	.49	.74
24	.21	.19	e.45	e.16	16	7.1	13	6.7	6.5	.95	1.1	1.1
25	.22	.17	e.40	e.15	16	5.9	11	4.9	18	.90	.64	.87
26	.23	.18	e.36	e.14	15	4.3	9.8	3.6	11	.82	.56	.72
27	.24	.18	e.34	e.13	27	4.5	9.0	3.1	8.6	.81	5.8	.57
28	.23	.17	e.32	e.12	16	5.5	8.2	35	6.6	.82	2.1	.47
29	.24	.16	e.30	e.12	12	7.8	7.3	22	5.3	.84	.97	.42
30	.23	.16	e.29	e.11	---	6.1	6.5	15	4.0	.88	.71	.39
31	.22	---	.28	e.11	---	4.8	---	12	---	.82	e.54	---
TOTAL	8.07	5.18	15.65	9.63	141.25	156.5	220.9	295.4	272.4	48.34	30.39	29.19
MEAN	.26	.17	.50	.31	4.87	5.05	7.36	9.53	9.08	1.56	.98	.97
MAX	1.3	.23	3.0	.87	27	12	42	35	18	3.2	5.8	11
MIN	.15	.13	.15	.11	.10	1.8	1.7	3.1	4.0	.81	.47	.11
CFSM	.02	.02	.05	.03	.46	.47	.69	.89	.85	.15	.09	.09
IN.	.03	.02	.05	.03	.49	.54	.77	1.03	.95	.17	.11	.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2000, BY WATER YEAR (WY)

MEAN	5.08	9.89	11.1	11.7	15.7	19.4	18.0	11.3	10.3	4.76	2.37	2.08
MAX	26.8	34.3	38.7	46.2	44.8	69.9	31.8	36.0	39.1	33.0	16.1	12.7
(WY)	1991	1993	1991	1993	1985	1982	1981	1996	1981	1986	1990	1992
MIN	.16	.17	.50	.31	3.97	4.56	5.94	2.05	.72	.38	.19	.12
(WY)	1995	2000	2000	2000	1995	1996	1986	1985	1988	1994	1999	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1981 - 2000	
ANNUAL TOTAL	2773.84		1232.90			
ANNUAL MEAN	7.60		3.37		10.1	
HIGHEST ANNUAL MEAN					15.1	1993
LOWEST ANNUAL MEAN					3.37	2000
HIGHEST DAILY MEAN	155	Apr 23	42	Apr 21	349	Jul 16 1986
LOWEST DAILY MEAN	.02	Sep 25	e.10	Feb 1	.02	Sep 25 1999
ANNUAL SEVEN-DAY MINIMUM	.03	Sep 21	e.10	Jan 31	.03	Sep 21 1999
INSTANTANEOUS PEAK FLOW			73	Apr 20	418	Jul 16 1986
INSTANTANEOUS PEAK STAGE			7.91	Apr 20	12.82	Apr 14 1981
ANNUAL RUNOFF (CFSM)	.71		.31		.94	
ANNUAL RUNOFF (INCHES)	9.64		4.29		12.82	
10 PERCENT EXCEEDS	21		10		22	
50 PERCENT EXCEEDS	.85		.84		4.2	
90 PERCENT EXCEEDS	.15		.16		.43	

e Estimated

04100377 SOLOMON CREEK NEAR SYRACUSE, IN

LOCATION.--Lat 41°27'30", long 85°43'12", in NW$^1/_4$SE$^1/_4$ sec.28, T.35 N., R.7 E., Elkhart County, Hydrologic Unit 04050001, on right bank 40 ft upstream from County Road 52 East bridge over Solomon Creek, and 2.5 mi northeast of Syracuse.

DRAINAGE AREA.--36.1 mi^2.

PERIOD OF RECORD.--October 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is 840.00 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	13	12	15	e10	28	15	23	26	24	10	9.0
2	14	14	12	17	e10	26	15	25	25	23	12	7.3
3	15	14	12	17	11	25	15	23	24	23	14	7.0
4	17	14	12	19	12	24	15	22	23	23	14	6.8
5	16	13	13	18	11	23	15	21	24	22	14	6.9
6	15	13	15	17	11	21	15	20	24	20	18	6.3
7	15	13	15	17	11	20	15	20	22	19	25	6.8
8	15	13	14	16	11	20	16	19	21	19	23	7.7
9	15	13	13	16	11	20	16	24	19	19	22	7.3
10	14	13	13	16	11	19	16	39	18	23	21	8.4
11	14	13	13	16	12	19	16	34	17	21	19	14
12	14	13	13	16	11	18	15	32	17	19	18	25
13	14	12	13	15	12	17	15	30	18	18	17	22
14	14	12	17	15	11	17	15	27	26	17	13	20
15	14	12	23	15	11	17	15	25	29	15	9.9	19
16	14	12	23	15	11	17	15	24	27	15	8.8	18
17	14	12	21	14	11	17	15	24	23	14	11	16
18	14	12	18	e13	11	16	15	25	22	12	12	16
19	14	12	18	e12	11	17	15	42	20	9.9	12	15
20	14	12	17	e12	11	17	33	36	20	12	13	15
21	14	12	e16	e11	11	18	66	32	48	10	13	15
22	14	12	e15	e11	14	17	55	30	49	8.7	12	15
23	13	12	e15	e11	21	17	49	29	35	11	12	15
24	13	12	e14	e11	25	17	42	26	29	11	12	15
25	13	12	e14	e10	25	17	35	24	45	9.3	11	15
26	13	12	e14	e10	25	16	31	23	44	8.1	8.7	14
27	13	12	e13	e10	37	16	29	22	38	7.3	13	13
28	13	12	e13	e10	35	16	26	32	34	7.0	13	13
29	13	12	e13	e10	31	16	24	36	30	7.2	13	13
30	13	12	e13	e10	---	16	22	32	27	7.4	13	13
31	13	---	14	e10	---	16	---	29	---	9.8	12	---
TOTAL	436	375	461	425	445	580	701	850	824	464.7	439.4	394.5
MEAN	14.1	12.5	14.9	13.7	15.3	18.7	23.4	27.4	27.5	15.0	14.2	13.1
MAX	17	14	23	19	37	28	66	42	49	24	25	25
MIN	13	12	12	10	10	16	15	19	17	7.0	8.7	6.3
CFSM	.39	.35	.41	.38	.43	.52	.65	.76	.76	.42	.39	.36
IN.	.45	.39	.48	.44	.46	.60	.72	.88	.85	.48	.45	.41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2000, BY WATER YEAR (WY)

MEAN	24.1	30.9	32.7	43.6	38.0	43.9	49.6	40.7	48.3	29.1	21.1	20.4
MAX	61.5	60.1	60.3	94.8	56.6	75.4	85.8	59.4	82.3	56.3	33.2	36.5
(WY)	1991	1993	1991	1993	1997	1998	1998	1990	1993	1997	1990	1990
MIN	11.2	12.5	14.8	13.7	15.3	18.7	23.4	24.4	16.5	12.1	10.5	11.7
(WY)	1996	2000	1990	2000	2000	2000	2000	1989	1988	1988	1988	1994

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1988 - 2000	
ANNUAL TOTAL	11603		6395.6			
ANNUAL MEAN	31.8		17.5		35.2	
HIGHEST ANNUAL MEAN					53.2	1993
LOWEST ANNUAL MEAN					17.5	2000
HIGHEST DAILY MEAN	219	Apr 23	66	Apr 21	256	Jun 9 1993
LOWEST DAILY MEAN	11	Aug 6	6.3	Sep 6	6.3	Sep 6 2000
ANNUAL SEVEN-DAY MINIMUM	12	Aug 31	7.0	Sep 2	7.0	Sep 2 2000
INSTANTANEOUS PEAK FLOW			72	Apr 21	333	Jun 8 1993
INSTANTANEOUS PEAK STAGE			4.41	Jan 21	6.35	Jun 8 1993
ANNUAL RUNOFF (CFSM)	.88		.48		.97	
ANNUAL RUNOFF (INCHES)	11.96		6.59		13.23	
10 PERCENT EXCEEDS	57		27		61	
50 PERCENT EXCEEDS	22		15		29	
90 PERCENT EXCEEDS	13		11		14	

e Estimated

04100500 ELKHART RIVER AT GOSHEN, IN

LOCATION.--Lat 41°35'36", long 85°50'55", in NE1/4NE1/4 sec.8, T.36 N., R.6 E., Elkhart County, Hydrologic Unit 04050001, on right bank 20 ft downstream from River Avenue bridge at Goshen, 0.4 mi upstream from Rock Run, and at mile 16.1.

DRAINAGE AREA.--594 mi^2.

PERIOD OF RECORD.--April 1931 to current year.

REVISED RECORDS.--WSP 1337: 1939(M). WSP 1557: 1954. WSP 2111: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 769.43 ft above sea level. Prior to Nov. 20, 1931, nonrecording gage at same site and datum.

REMARKS.--Records poor. Occasional low-flow regulation at Goshen Dam, 3.4 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e191	147	184	e195	e150	568	310	613	594	532	194	156
2	e189	167	182	198	e151	538	304	650	572	484	199	147
3	e192	188	185	215	e152	521	294	613	556	457	255	137
4	e242	194	169	229	e154	509	288	570	548	451	231	131
5	e250	193	216	229	e153	495	278	535	578	423	217	122
6	e240	183	268	219	e152	473	268	494	661	395	226	112
7	e216	181	248	210	e151	455	286	462	612	356	316	109
8	e200	187	236	196	e151	440	331	434	563	324	300	100
9	e205	186	228	207	e152	420	331	429	525	311	266	95
10	e210	182	228	227	e153	397	315	500	480	371	240	145
11	e228	184	214	224	e154	375	303	492	437	341	221	207
12	e190	179	203	223	e155	364	293	481	438	290	208	543
13	e220	179	204	209	e156	348	281	489	436	261	196	704
14	e188	174	253	202	e158	336	272	460	610	231	188	544
15	178	188	325	190	e160	340	265	412	702	202	164	468
16	171	178	316	208	e163	347	260	401	597	187	150	424
17	169	181	313	187	e168	334	263	391	515	176	161	392
18	165	183	291	158	e176	318	263	401	492	164	150	357
19	162	185	265	e160	e183	321	263	595	478	159	100	312
20	159	190	273	e158	189	354	582	639	467	157	90	292
21	158	189	250	e158	202	381	1470	563	823	160	86	281
22	154	185	194	e157	220	374	1310	533	1000	148	81	263
23	156	188	e193	e156	391	367	904	522	782	143	88	257
24	156	196	e192	e155	547	359	803	500	702	150	98	255
25	157	194	e191	e154	496	350	775	478	1050	142	90	255
26	154	190	e190	e153	477	337	764	464	1070	134	84	256
27	155	189	e190	e152	682	334	751	438	839	140	115	248
28	152	184	e191	e151	741	346	726	580	734	146	170	240
29	154	182	e191	e150	609	325	685	736	649	193	183	236
30	150	185	e193	e149	---	321	638	652	579	200	181	230
31	149	---	e195	e148	---	317	---	606	---	200	183	---
TOTAL	5660	5511	6971	5727	7546	12064	14876	16133	19089	8028	5431	8018
MEAN	183	184	225	185	260	389	496	520	636	259	175	267
MAX	250	196	325	229	741	568	1470	736	1070	532	316	704
MIN	149	147	169	148	150	317	260	391	436	134	81	95
CFSM	.31	.31	.38	.31	.44	.66	.83	.88	1.07	.44	.29	.45
IN.	.35	.35	.44	.36	.47	.76	.93	1.01	1.20	.50	.34	.50

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2000, BY WATER YEAR (WY)

MEAN	311	391	496	600	692	937	945	711	515	360	271	252
MAX	1652	1132	1276	2058	1657	2497	2424	2354	1521	1079	712	784
(WY)	1955	1973	1983	1993	1959	1982	1950	1943	1996	1951	1958	1958
MIN	75.9	95.9	122	122	108	301	363	222	101	94.0	73.0	58.5
(WY)	1965	1965	1964	1963	1963	1964	1946	1958	1934	1934	1941	1941

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1932 - 2000	
ANNUAL TOTAL	200499		115054			
ANNUAL MEAN	549		314		539	
HIGHEST ANNUAL MEAN					1005	1950
LOWEST ANNUAL MEAN					197	1964
HIGHEST DAILY MEAN	3300	Apr 24	1470	Apr 21	6010	Feb 24 1985
LOWEST DAILY MEAN	85	Sep 28	81	Aug 22	7.0	Aug 11 1964
ANNUAL SEVEN-DAY MINIMUM	94	Sep 22	88	Aug 20	50	Sep 21 1941
INSTANTANEOUS PEAK FLOW			1670	Apr 21	6360	Feb 24 1985
INSTANTANEOUS PEAK STAGE			5.12	Apr 21	11.94	Mar 14 1982
INSTANTANEOUS LOW FLOW					7.0	Aug 11 1964
ANNUAL RUNOFF (CFSM)	.92		.53		.91	
ANNUAL RUNOFF (INCHES)	12.56		7.21		12.33	
10 PERCENT EXCEEDS	1170		594		1110	
50 PERCENT EXCEEDS	330		229		390	
90 PERCENT EXCEEDS	151		151		156	

e Estimated

04101000 ST. JOSEPH RIVER AT ELKHART, IN

LOCATION.--Lat 41°41'30", long 85°58'30", in SW$^1/_4$NE$^1/_4$ sec.5, T.37 N., R.5 E., Elkhart County, Hydrologic Unit 04050001, on left bank 200 ft downstream from Elkhart River, 200 ft upstream from Main Street bridge in Elkhart, 2,000 ft downstream from Christiana Creek, 0.5 mi downstream from Elkhart Hydroelectric Plant, and at mile 76.5.

DRAINAGE AREA.--3,370 mi^2.

PERIOD OF RECORD.--August 1947 to current year. Gage heights at site 0.8 mi downstream at different datum from September 1924 to March 1926 are available from the district office.

REVISED RECORDS.--WSP 2111: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor. The flow is regulated by Elkhart Hydroelectric Plant.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1480	1230	1430	1670	1540	2900	2020	3810	4200	4770	2030	1850
2	1360	1370	1420	1670	1520	2780	2040	3870	4150	4250	2070	1650
3	1160	1230	1420	1740	1550	2680	1960	3670	4030	4290	2190	1350
4	1340	1310	1420	1750	1630	2520	1960	3360	3920	4340	2110	1610
5	1430	1450	1640	1780	1590	2540	1920	3250	3640	4060	1860	1420
6	1440	1370	1850	1730	1580	2430	1800	3100	3630	3800	2040	1550
7	1350	1290	1900	1790	1580	2330	1830	2910	3650	3850	2250	1470
8	1370	1290	1860	1740	1560	2060	2270	2750	3490	3820	2190	1240
9	1360	1270	1800	1810	1580	2060	2350	2770	3290	3700	2160	1250
10	1350	1320	1770	1860	1590	2040	2280	2990	3000	3660	2020	1590
11	1370	1280	1700	1850	1610	2090	2230	3070	2840	3520	1920	2470
12	1320	1280	1670	1900	1560	2040	2200	3220	3070	3280	1860	2870
13	1340	1320	1650	1840	1620	1910	2160	3370	3360	3090	1770	3110
14	1170	1370	1860	1780	1650	1810	2110	3300	3720	2930	1610	3020
15	1300	1340	1970	1760	1550	1980	2040	3180	4300	2690	1400	2890
16	1310	1330	2120	1800	1590	2310	1810	3070	4150	2240	1440	2770
17	1340	1320	2080	1620	1560	2180	1960	3070	3740	2110	1610	2630
18	1300	1330	1940	1560	1600	2120	1940	3080	3170	2440	1590	2540
19	1260	1340	1820	1650	1580	2250	2030	3660	3280	2060	1560	2500
20	1270	1400	1980	1720	1570	2330	2590	4170	3110	1760	1500	2300
21	1210	1380	1830	1450	1560	2350	4590	4080	3920	1940	1470	2240
22	1250	1350	1490	1370	1690	2450	4790	4510	4190	1890	1450	2150
23	1250	1380	1590	1620	1930	2390	4740	4510	3940	1630	1450	2150
24	1210	1520	1560	1500	2420	2310	5030	4430	3930	1630	1410	1950
25	1200	1550	1610	1530	2510	2320	4760	4130	5650	1680	1340	2040
26	1260	1530	1640	1560	2510	2220	4650	3950	5970	1600	1420	1980
27	1250	1390	1910	1470	3090	2030	4630	3780	5450	1370	1300	1950
28	1240	1360	1730	1500	3170	2240	4320	4300	5530	1560	1710	1790
29	1270	1370	1940	1530	2960	2170	3900	4510	5380	1720	1780	1790
30	1250	1370	1810	1530	---	2150	3880	4320	5040	1920	1590	1780
31	1270	---	1720	1560	---	2100	---	4260	---	1910	1760	---
TOTAL	40280	40640	54130	51640	53450	70090	86790	112450	120740	85510	53860	61900
MEAN	1299	1355	1746	1666	1843	2261	2893	3627	4025	2758	1737	2063
MAX	1480	1550	2120	1900	3170	2900	5030	4510	5970	4770	2250	3110
MIN	1160	1230	1420	1370	1520	1810	1800	2750	2840	1370	1300	1240
CFSM	.39	.40	.52	.49	.55	.67	.86	1.08	1.19	.82	.52	.61
IN.	.44	.45	.60	.57	.59	.77	.96	1.24	1.33	.94	.59	.68

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2000, BY WATER YEAR (WY)

MEAN	2181	2619	3183	3611	3860	5080	5208	4114	3275	2386	1970	1897
MAX	5752	5883	5795	9270	7039	10760	12690	7725	7535	4409	4180	3855
(WY)	1987	1993	1991	1993	1968	1982	1950	1956	1989	1968	1981	1981
MIN	791	856	958	1127	1120	1679	2633	1911	1280	898	737	721
(WY)	1964	1965	1964	1964	1963	1964	1958	1958	1988	1988	1964	1964

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1948 - 2000	
ANNUAL TOTAL	1026222		831480			
ANNUAL MEAN	2812		2272		3278	
HIGHEST ANNUAL MEAN					5264	1950
LOWEST ANNUAL MEAN					1283	1964
HIGHEST DAILY MEAN	10000	Apr 24	5970	Jun 26	18500	Mar 21 1982
LOWEST DAILY MEAN	856	Sep 26	1160	Oct 3	336	Aug 5 1964
ANNUAL SEVEN-DAY MINIMUM	953	Sep 20	1230	Oct 21	561	Aug 2 1964
INSTANTANEOUS PEAK FLOW			6360	Jun 26	18800	Feb 27 1985
INSTANTANEOUS PEAK STAGE			21.51	Jun 26	27.91	Mar 21 1982
ANNUAL RUNOFF (CFSM)	.83		.67		.97	
ANNUAL RUNOFF (INCHES)	11.33		9.18		13.22	
10 PERCENT EXCEEDS	5520		3940		5820	
50 PERCENT EXCEEDS	1880		1900		2790	
90 PERCENT EXCEEDS	1210		1340		1390	

04101370 JUDAY CREEK NEAR SOUTH BEND, IN

LOCATION.--Lat 41°43'43", long 85°15'46", in NW$^1/_4$SE$^1/_4$ sec .23, T. 38 N., R. 2 E., St. Joseph County, Hydrologic Unit 04050001, on right bank at downstream side of bridge on access road to Izaak Walton League property, 0.1 mi south of Darden Road in Roseland, IN.

DRAINAGE AREA.--Approx. 38 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is about 690.00 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	e4.0	e3.1	e4.4	e8.1	e16	11	e21	28	27	11	e6.4
2	5.6	e4.5	e3.0	e4.6	e8.1	e15	11	20	26	23	10	e6.6
3	6.6	e4.2	e3.1	e5.0	e8.2	e14	11	19	25	26	13	e6.0
4	8.9	e3.9	e3.5	e7.4	e8.3	13	11	18	24	23	9.7	e6.1
5	6.5	e3.7	e6.0	e6.6	e8.2	13	11	e18	30	22	8.7	e6.2
6	5.6	e3.6	e5.2	e6.2	e8.2	13	11	e17	31	21	9.2	e6.3
7	5.0	e3.5	e4.5	e6.0	e8.1	13	e13	e17	28	20	e13	e6.4
8	4.9	e3.3	e4.0	e5.9	e8.0	12	e15	e17	26	19	e12	e6.8
9	4.4	e3.2	e4.0	e7.0	e7.9	12	14	e18	23	16	e10	e6.6
10	3.9	e3.2	e3.7	e13	e7.9	12	13	e23	21	17	e9.0	e8.0
11	3.5	e3.1	e3.5	9.5	e7.9	12	e13	e23	21	16	e8.8	e13
12	3.5	e3.1	e3.5	8.9	e7.8	12	e12	e22	e30	15	e8.6	e14
13	e3.6	e3.0	e3.4	9.0	e7.9	12	12	36	e33	14	e8.4	e11
14	e3.6	e3.0	e4.5	8.7	e7.9	12	11	34	29	14	e8.2	e10
15	e3.5	e3.0	e7.0	8.6	e7.9	13	11	31	30	15	e8.0	e8.8
16	e3.6	e2.9	e6.4	8.1	e8.0	14	10	29	30	14	e8.2	e8.6
17	e3.5	e2.9	e5.6	e8.2	e8.2	13	e13	28	30	12	e11	e8.4
18	e3.5	e2.9	e5.2	e8.1	e8.8	12	e14	31	30	12	e10	e8.2
19	e3.6	e3.3	e5.0	e8.2	e8.4	e13	e33	33	26	12	e9.0	e8.1
20	e3.5	e3.0	e4.9	e8.4	e8.2	e14	e72	32	20	11	e8.4	e8.0
21	e3.4	e3.0	e4.8	e8.4	e8.1	e15	e56	28	23	11	e7.9	e8.1
22	e3.4	e3.1	e4.7	e8.3	e8.1	e14	e42	26	20	10	e8.4	e8.3
23	e4.0	e3.7	e4.6	e8.2	e10	13	e38	27	19	11	e8.0	e11
24	e3.8	e3.3	e4.5	e8.1	e19	13	e26	26	22	9.6	e7.8	e10
25	e3.6	e3.2	e4.4	e8.4	e15	12	e23	24	37	9.5	e7.6	e9.3
26	e3.5	e3.2	e4.4	e8.3	e27	12	e22	23	35	9.1	e8.2	e9.0
27	e3.4	e3.3	e4.7	e8.2	e24	12	e21	24	34	8.7	e7.8	e8.7
28	e3.3	e3.1	e4.6	e8.1	e18	12	e20	48	35	9.3	e7.6	e8.5
29	e3.2	e3.2	e4.5	e8.1	e17	12	e20	40	32	9.7	e7.4	e8.3
30	e3.1	e3.2	e4.5	e8.2	---	12	e19	33	28	13	e7.2	e8.1
31	e3.1	---	e4.4	e8.2	---	11	---	31	---	11	e6.8	---
TOTAL	130.0	99.6	139.2	242.3	308.2	398	609	817	826	460.9	278.9	252.8
MEAN	4.19	3.32	4.49	7.82	10.6	12.8	20.3	26.4	27.5	14.9	9.00	8.43
MAX	8.9	4.5	7.0	13	27	16	72	48	37	27	13	14
MIN	3.1	2.9	3.0	4.4	7.8	11	10	17	19	8.7	6.8	6.0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2000, BY WATER YEAR (WY)

MEAN	14.5	18.7	17.0	21.8	21.1	24.3	28.4	23.3	23.9	17.2	16.3	13.2
MAX	27.3	31.6	23.6	38.3	30.5	33.8	47.0	27.2	44.9	28.6	36.4	24.0
(WY)	1994	1994	1993	1993	1997	1993	1998	1996	1993	1996	1995	1993
MIN	4.19	3.32	4.49	7.82	10.6	12.8	18.0	17.0	14.0	11.9	6.55	4.01
(WY)	2000	2000	2000	2000	2000	2000	1996	1994	1999	1999	1999	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1993 - 2000	
ANNUAL TOTAL	4711.7		4561.9			
ANNUAL MEAN	12.9		12.5		20.0	
HIGHEST ANNUAL MEAN					27.7	1993
LOWEST ANNUAL MEAN					12.5	2000
HIGHEST DAILY MEAN	68	Apr 23	e72	Apr 20	163	Jun 9 1993
LOWEST DAILY MEAN	2.9	Nov 16	e2.9	Nov 16	2.9	Nov 16 1999
ANNUAL SEVEN-DAY MINIMUM	3.0	Nov 12	e3.0	Nov 12	3.0	Nov 12 1999
INSTANTANEOUS PEAK FLOW			unknown		226	Jun 9 1993
INSTANTANEOUS PEAK STAGE			unknown		4.59	Jan 22 1997
10 PERCENT EXCEEDS	25		27		32	
50 PERCENT EXCEEDS	10		8.9		18	
90 PERCENT EXCEEDS	3.4		3.5		9.3	

e Estimated

04177720 FISH CREEK AT HAMILTON, IN

LOCATION.--Lat 41°31'55", long 84°54'12", in SE$^1/_4$SW$^1/_4$ sec.34, T.36 N., R.14 E., Steuben County, Hydrologic Unit 04100003, on left bank 6 ft upstream from bridge on County Road 775 South, 0.5 mi downstream from Hamilton Lake outlet, and 0.5 mi southeast of Hamilton.

DRAINAGE AREA.--37.5 mi^2.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 876.00 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	2.7	2.2	4.4	e4.5	37	26	21	44	19	7.4	13
2	2.5	2.5	2.5	5.4	5.0	29	22	29	34	16	7.8	11
3	4.8	3.1	2.5	8.6	6.0	23	21	24	24	22	11	9.6
4	8.1	2.6	2.4	12	6.5	20	19	21	20	23	7.1	8.1
5	4.4	2.5	3.8	10	6.0	17	14	19	45	19	4.9	4.3
6	3.0	2.1	5.8	8.8	5.5	16	14	16	65	16	15	2.8
7	2.4	1.9	4.8	7.9	5.3	14	13	15	42	12	80	2.9
8	2.5	2.0	3.9	7.4	5.0	13	23	14	31	9.5	47	3.4
9	3.2	2.2	3.3	8.2	5.1	14	20	17	24	8.6	27	3.6
10	3.9	2.7	3.2	9.0	5.8	11	17	49	21	8.6	18	10
11	2.8	2.4	2.6	8.6	8.2	11	16	32	18	8.0	13	44
12	2.9	2.2	2.4	7.2	7.3	10	15	27	49	6.0	9.2	189
13	3.3	2.2	2.4	7.9	7.0	8.6	13	23	62	5.1	6.8	109
14	3.0	2.3	4.5	6.4	7.6	8.8	13	16	103	4.9	5.9	66
15	2.4	2.1	8.1	6.0	6.8	10	13	11	188	3.5	5.5	53
16	2.5	2.5	9.9	5.8	6.4	12	12	11	110	3.0	4.6	35
17	2.8	2.6	7.5	4.9	5.9	10	12	11	70	2.7	6.0	25
18	2.3	2.4	6.9	e4.8	7.8	8.2	12	17	71	2.4	6.8	20
19	2.0	2.7	6.2	e4.7	8.8	10	12	120	55	2.2	4.6	16
20	2.1	3.4	8.7	e4.6	7.7	32	69	96	48	2.1	3.4	14
21	1.9	3.0	7.3	e4.5	7.0	45	201	65	105	2.0	2.8	12
22	2.3	3.4	5.6	e4.4	e9.7	36	132	48	76	1.8	2.8	9.2
23	1.9	3.1	4.7	e4.3	e18	28	84	54	51	1.7	5.6	12
24	1.8	3.1	4.2	e4.3	e29	24	59	57	42	1.7	10	15
25	1.8	2.5	4.0	e4.2	e40	22	44	36	131	1.8	7.3	13
26	2.0	2.8	4.1	e4.2	43	17	34	24	93	1.8	11	10
27	1.9	2.8	3.8	e4.1	94	19	28	21	62	1.8	70	8.8
28	2.0	2.4	4.3	e4.1	69	33	23	138	42	4.8	41	7.2
29	2.0	2.5	4.7	e4.1	47	57	20	143	32	15	28	6.1
30	2.2	2.3	4.7	e4.7	---	42	17	90	24	15	20	5.9
31	3.3	---	4.5	e4.6	---	31	---	60	---	11	16	---
TOTAL	87.4	77.0	145.5	190.1	484.9	668.6	1018	1325	1782	252.0	505.5	738.9
MEAN	2.82	2.57	4.69	6.13	16.7	21.6	33.9	42.7	59.4	8.13	16.3	24.6
MAX	8.1	3.4	9.9	12	94	57	201	143	188	23	80	189
MIN	1.8	1.9	2.2	4.1	4.5	8.2	12	11	18	1.7	2.8	2.8
CFSM	.08	.07	.13	.16	.45	.58	.90	1.14	1.58	.22	.43	.66
IN.	.09	.08	.14	.19	.48	.66	1.01	1.31	1.77	.25	.50	.73

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2000, BY WATER YEAR (WY)

MEAN	12.7	28.1	36.9	38.9	47.5	70.5	61.8	39.5	30.4	15.3	13.3	11.4
MAX	69.5	117	91.3	161	129	219	112	174	118	64.3	45.2	47.1
(WY)	1987	1993	1991	1993	1976	1982	1978	1996	1981	1992	1996	1981
MIN	2.14	2.46	4.69	5.96	7.84	21.6	18.7	8.24	2.05	2.02	1.89	1.88
(WY)	1995	1972	2000	1977	1979	2000	1971	1985	1988	1988	1970	1988

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1970 - 2000	
ANNUAL TOTAL	10404.1		7274.9			
ANNUAL MEAN	28.5		19.9		33.8	
HIGHEST ANNUAL MEAN					54.7	1993
LOWEST ANNUAL MEAN					17.8	1972
HIGHEST DAILY MEAN	520	Jan 24	201	Apr 21	1220	May 17 1996
LOWEST DAILY MEAN	1.1	Sep 11	1.7	Jul 23	.52	Aug 31 1971
ANNUAL SEVEN-DAY MINIMUM	1.4	Sep 11	1.8	Jul 21	.82	Aug 26 1971
INSTANTANEOUS PEAK FLOW			228	Jun 15	1510	May 17 1996
INSTANTANEOUS PEAK STAGE			6.56	Jun 15	14.49	May 17 1996
ANNUAL RUNOFF (CFSM)	.76		.53		.90	
ANNUAL RUNOFF (INCHES)	10.32		7.22		12.24	
10 PERCENT EXCEEDS	68		52		80	
50 PERCENT EXCEEDS	5.6		8.6		16	
90 PERCENT EXCEEDS	2.0		2.4		3.0	

e Estimated

04177810 FISH CREEK NEAR ARTIC, IN

LOCATION.--Lat 41°27'54", long 84°48'53", in NE$^1/_4$SE$^1/_4$ sec. 29, T.35 N., R.15 E., DeKalb County, Hydrologic Unit 04100003, on right bank 3 ft upstream from bridge on county road 79, 0.6 miles south of Artic, 0.8 miles upstream from Indiana-Ohio state line and 3.8 miles north-northeast of Butler, IN.

DRAINAGE AREA.--98 mi^2 (approx.).

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--April 1998 to current year.

GAGE.--Water-stage recorder. Datum of gage is 832.96 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	e6.5	8.1	23	e14	119	70	49	159	76	21	21
2	5.7	e6.3	8.0	23	e14	93	58	73	117	61	17	18
3	5.4	e6.8	8.0	25	e14	74	50	79	91	61	19	16
4	8.6	e6.5	8.2	32	e15	62	45	64	71	168	20	15
5	8.7	e6.4	8.9	34	e14	53	38	53	100	173	16	13
6	6.9	e6.2	11	e28	e14	46	33	46	233	100	18	11
7	5.9	e6.0	12	e26	e14	41	30	40	239	72	108	11
8	5.4	e5.9	11	e25	e14	38	40	36	142	54	102	10
9	5.3	e5.8	9.5	26	e14	35	57	34	97	44	57	10
10	5.6	e5.7	8.6	27	e14	35	54	85	72	39	36	11
11	6.1	e5.7	7.4	28	e15	31	45	128	58	37	26	33
12	5.9	e5.6	6.4	26	e17	29	41	97	103	33	21	233
13	5.9	e5.5	5.7	25	e16	27	36	80	278	28	18	258
14	6.2	e5.5	8.4	e23	e16	25	33	64	369	25	16	136
15	5.9	e5.4	22	e22	e15	25	30	47	690	22	15	110
16	4.8	e5.3	37	e22	e15	27	29	38	532	20	14	82
17	5.9	e5.3	37	e21	e15	28	27	36	272	19	14	56
18	e5.4	e5.3	32	e20	e18	25	27	40	224	18	16	42
19	e5.1	e6.3	30	e19	e20	24	25	292	205	17	15	33
20	e5.3	e9.4	32	e18	e18	75	157	393	155	16	14	28
21	e5.1	e11	36	e18	e16	157	443	383	196	15	13	25
22	e5.6	e10	30	e17	e21	146	554	191	270	15	12	22
23	e5.0	11	27	e16	e36	105	392	165	186	14	13	80
24	e4.8	10	25	e16	e61	82	221	170	138	14	17	51
25	e4.7	10	24	e16	e94	69	156	119	444	14	17	39
26	e4.6	9.9	23	e15	133	58	118	83	438	14	16	30
27	e4.6	9.9	23	e15	210	50	95	65	345	13	119	25
28	e4.8	9.4	23	e15	239	80	78	328	183	13	101	21
29	e5.0	8.9	23	e15	171	194	65	502	127	19	54	19
30	e5.6	8.4	24	e14	---	129	55	494	96	25	35	17
31	e7.1	---	23	e14	---	90	---	263	---	26	26	---
TOTAL	177.7	219.9	592.2	664	1287	2072	3102	4537	6630	1265	1006	1476
MEAN	5.73	7.33	19.1	21.4	44.4	66.8	103	146	221	40.8	32.5	49.2
MAX	8.7	11	37	34	239	194	554	502	690	173	119	258
MIN	4.6	5.3	5.7	14	14	24	25	34	58	13	12	10
CFSM	.06	.07	.19	.22	.45	.68	1.06	1.49	2.26	.42	.33	.50
IN.	.07	.08	.22	.25	.49	.79	1.18	1.72	2.52	.48	.38	.56

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2000, BY WATER YEAR (WY)

MEAN	13.7	18.3	20.0	105	82.8	114	204	90.5	102	26.1	50.2	24.1
MAX	21.6	29.2	20.8	189	123	161	306	146	221	40.8	110	49.2
(WY)	1999	1999	1999	1999	1999	1999	1999	2000	2000	2000	1998	2000
MIN	5.73	7.33	19.1	21.4	44.4	66.8	103	61.2	25.6	14.2	7.82	4.32
(WY)	2000	2000	2000	2000	2000	2000	2000	1998	1998	1999	1999	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1998 - 2000	
ANNUAL TOTAL	29034.8		23028.8			
ANNUAL MEAN	79.5		62.9		72.9	
HIGHEST ANNUAL MEAN					82.8	1999
LOWEST ANNUAL MEAN					62.9	2000
HIGHEST DAILY MEAN	1200	Jan 24	690	Jun 15	1200	Jan 24 1999
LOWEST DAILY MEAN	3.6	Sep 12	e4.6	Oct 26	3.6	Sep 12 1999
ANNUAL SEVEN-DAY MINIMUM	3.8	Sep 10	e4.8	Oct 23	3.8	Sep 10 1999
INSTANTANEOUS PEAK FLOW			745	Jun 15	1200	Jan 24 1999
INSTANTANEOUS PEAK STAGE			9.37	Jun 15	10.60	Jan 24 1999
ANNUAL RUNOFF (CFSM)	.81		.64		.74	
ANNUAL RUNOFF (INCHES)	11.02		8.74		10.10	
10 PERCENT EXCEEDS	220		169		184	
50 PERCENT EXCEEDS	17		25		25	
90 PERCENT EXCEEDS	5.0		6.0		7.1	

e Estimated

04177810 FISH CREEK NEAR ARTIC, IN--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (mg/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (mg/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (mg/L)	SEDIMENT DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	6.8	22	0.40	e6.5	30	.53	8.1	22	0.49
2	5.7	11	.17	e6.3	21	.35	8.0	27	.59
3	5.4	9	.13	e6.8	18	.33	8.0	33	.71
4	8.6	11	.26	e6.5	20	.35	8.2	35	.76
5	8.7	22	.50	e6.4	19	.33	8.9	35	.84
6	6.9	16	.30	e6.2	14	.24	11	36	1.1
7	5.9	13	.21	e6.0	13	.20	12	36	1.2
8	5.4	20	.29	e5.9	22	.35	11	37	1.1
9	5.3	28	.40	e5.8	36	.56	9.5	37	.96
10	5.6	26	.39	e5.7	34	.53	8.6	38	.88
11	6.1	22	.36	e5.7	23	.35	7.4	38	.77
12	5.9	20	.31	e5.6	13	.20	6.4	39	.67
13	5.9	23	.36	e5.5	14	.21	5.7	40	.61
14	6.2	37	.62	e5.5	20	.29	8.4	46	1.1
15	5.9	28	.45	e5.4	26	.38	22	70	4.2
16	4.8	23	.29	e5.3	29	.41	37	57	5.7
17	5.9	19	.30	e5.3	33	.47	37	47	4.7
18	e5.4	16	.24	e5.3	38	.54	32	44	3.8
19	e5.1	16	.22	e6.3	42	.71	30	41	3.3
20	e5.3	16	.22	e9.4	34	.87	32	39	3.3
21	e5.1	19	.26	e11	28	.81	36	36	3.5
22	e5.6	23	.34	e10	45	1.2	30	34	2.7
23	e5.0	27	.36	11	52	1.5	27	31	2.3
24	e4.8	32	.41	10	49	1.4	25	30	2.0
25	e4.7	46	.58	10	43	1.2	24	29	1.9
26	e4.6	42	.52	9.9	37	1.0	23	29	1.8
27	e4.6	34	.43	9.9	32	.86	23	28	1.8
28	e4.8	38	.49	9.4	25	.63	23	28	1.7
29	e5.0	39	.52	8.9	19	.47	23	27	1.7
30	e5.6	46	.69	8.4	20	.45	24	27	1.7
31	e7.1	53	1.0	---	---	---	23	26	1.7
TOTAL	177.7	---	12.02	219.9	---	17.72	592.2	---	59.58

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (mg/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (mg/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (mg/L)	SEDIMENT DISCHARGE (TONS/DAY)
	JANUARY			FEBRUARY			MARCH		
1	23	26	1.6	e14	26	0.96	119	35	11
2	23	25	1.6	e14	25	.95	93	27	6.9
3	25	27	1.8	e14	25	.94	74	23	4.5
4	32	44	3.9	e15	25	1.0	62	19	3.1
5	34	37	3.3	e14	24	.94	53	15	2.2
6	e28	35	2.6	e14	24	.93	46	13	1.6
7	e26	34	2.4	e14	24	.91	41	11	1.2
8	e25	34	2.3	e14	24	.90	38	10	1.1
9	26	33	2.4	e14	23	.89	35	11	1.1
10	27	33	2.4	e14	23	.89	35	12	1.1
11	28	33	2.5	e15	23	.89	31	12	1.0
12	26	32	2.3	e17	22	1.0	29	13	1.0
13	25	32	2.2	e16	22	.94	27	14	1.0
14	e23	32	2.0	e16	22	.93	25	15	1.0
15	e22	31	1.9	e15	22	.90	25	16	1.1
16	e22	31	1.8	e15	21	.90	27	16	1.2
17	e21	30	1.7	e15	21	.88	28	17	1.3
18	e20	30	1.6	e18	21	1.0	25	18	1.2
19	e19	30	1.5	e20	21	1.1	24	19	1.3
20	e18	29	1.5	e18	20	.99	75	46	12
21	e18	29	1.4	e16	20	.90	157	62	26
22	e17	29	1.3	e21	22	1.2	146	48	19
23	e16	28	1.2	e36	35	3.3	105	41	12
24	e16	28	1.2	e61	60	9.7	82	38	8.3
25	e16	28	1.2	e94	88	22	69	36	6.7
26	e15	27	1.1	133	62	22	58	34	5.2
27	e15	27	1.1	210	90	51	50	32	4.3
28	e15	27	1.1	239	59	38	80	46	13
29	e15	26	1.0	171	45	21	194	70	37
30	e14	26	1.0	---	---	---	129	52	18
31	e14	26	.99	---	---	---	90	43	10
TOTAL	664	---	55.89	1287	---	187.94	2072	---	215.4

04177810 FISH CREEK NEAR ARTIC, IN--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (mg/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (mg/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (mg/L)	SEDIMENT DISCHARGE (TONS/DAY)
	APRIL			MAY			JUNE		
1	70	35	6.6	49	26	3.5	159	50	21
2	58	29	4.5	73	44	8.9	117	55	17
3	50	23	3.2	79	38	8.0	91	55	13
4	45	19	2.3	64	34	5.8	71	52	9.9
5	38	16	1.6	53	31	4.4	100	93	29
6	33	13	1.1	46	28	3.5	233	83	52
7	30	11	.86	40	25	2.7	239	68	44
8	40	32	3.9	36	23	2.2	142	50	19
9	57	38	5.9	34	21	2.0	97	57	15
10	54	25	3.7	85	69	17	72	58	11
11	45	24	2.9	128	49	17	58	51	8.0
12	41	22	2.5	97	33	8.5	103	160	61
13	36	21	2.1	80	41	8.8	278	184	133
14	33	20	1.8	64	43	7.4	369	148	164
15	30	19	1.6	47	45	5.7	690	115	208
16	29	18	1.4	38	49	5.0	532	52	76
17	27	17	1.2	36	50	4.9	272	55	40
18	27	16	1.2	40	59	7.1	224	104	63
19	25	15	1.0	292	216	167	205	66	37
20	157	77	55	393	89	93	155	62	26
21	443	90	106	383	48	50	196	153	84
22	554	65	98	191	46	23	270	115	84
23	392	59	62	165	65	30	186	93	47
24	221	53	32	170	68	31	138	82	33
25	156	48	20	119	56	18	444	168	195
26	118	44	14	83	48	11	438	68	80
27	95	40	10	65	44	7.7	345	53	49
28	78	36	7.6	328	187	164	183	68	34
29	65	32	5.7	502	67	90	127	57	19
30	55	29	4.3	494	38	51	96	60	16
31	---	---	---	263	44	31	---	---	---
TOTAL	3102	---	463.96	4537	---	889.1	6630	---	1687.9

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (mg/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (mg/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (mg/L)	SEDIMENT DISCHARGE (TONS/DAY)
	JULY			AUGUST			SEPTEMBER		
1	76	66	14	21	49	2.7	21	26	1.5
2	61	73	12	17	43	1.9	18	21	1.0
3	61	81	14	19	45	2.3	16	23	.99
4	168	138	65	20	42	2.3	15	30	1.2
5	173	102	49	16	31	1.4	13	28	.98
6	100	80	22	18	38	2.0	11	32	.98
7	72	86	17	108	146	43	11	23	.64
8	54	76	11	102	74	21	10	29	.81
9	44	70	8.3	57	48	7.4	10	30	.84
10	39	77	8.1	36	42	4.2	11	29	.85
11	37	78	7.8	26	34	2.4	33	61	6.2
12	33	77	6.8	21	30	1.7	233	128	79
13	28	77	5.7	18	28	1.3	258	57	40
14	25	81	5.4	16	24	1.0	136	45	16
15	22	81	4.9	15	22	.89	110	45	13
16	20	82	4.5	14	25	.95	82	32	7.2
17	19	78	4.1	14	33	1.2	56	26	4.0
18	18	83	4.0	16	29	1.2	42	28	3.1
19	17	78	3.5	15	25	1.0	33	30	2.6
20	16	76	3.2	14	25	.94	28	40	3.0
21	15	63	2.6	13	25	.86	25	21	1.4
22	15	65	2.6	12	26	.88	22	16	.93
23	14	62	2.4	13	29	1.0	80	159	46
24	14	59	2.2	17	46	2.2	51	64	9.1
25	14	58	2.2	17	47	2.2	39	27	2.9
26	14	53	1.9	16	37	1.7	30	16	1.3
27	13	46	1.7	119	164	56	25	20	1.4
28	13	39	1.4	101	85	24	21	18	1.0
29	19	87	4.9	54	49	7.1	19	19	.95
30	25	67	4.5	35	38	3.5	17	19	.90
31	26	46	3.2	26	30	2.1	---	---	---
TOTAL	1265	---	299.9	1006	---	202.32	1476	---	249.77
YEAR	23028.8		4341.50						

e Estimated

04178000 ST. JOSEPH RIVER NEAR NEWVILLE, IN

LOCATION.--Lat 41°23'08", long 84°48'06", in SW$^1/_4$SW$^1/_4$ sec.18, T.5 N., R.1 E., Defiance County, Ohio, Hydrologic Unit 04100003, on left downstream side at bridge on Ohio State Highway 249, 3.5 mi northeast of Newville, 6.5 mi northwest of Hicksville, Ohio, and at mile 42.3.

DRAINAGE AREA.--610 mi^2.

PERIOD OF RECORD.--October 1946 to current year. Monthly discharge only for some periods, published in WSP 1307.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 795.40 ft above sea level. Prior to Oct. 22, 1947, nonrecording gage at same site and datum.

REMARKS.--Records fair except for discharges below 100 ft^3/s and estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	64	55	e73	e52	689	336	500	2010	2090	135	169
2	62	72	52	e85	e52	547	289	472	1720	1650	141	135
3	61	82	48	e100	e51	437	258	487	1360	1190	131	113
4	80	82	45	139	e51	358	234	481	962	1180	147	98
5	81	77	48	155	e52	302	212	437	844	1400	171	86
6	80	76	58	155	e52	263	194	386	1250	1470	155	79
7	74	71	63	159	e53	243	182	343	1310	1370	291	72
8	72	67	69	138	e54	221	188	315	1230	1080	413	67
9	69	68	73	148	e57	205	228	284	1110	797	288	63
10	66	68	72	138	e60	191	278	382	955	602	197	66
11	66	65	70	138	e70	181	274	515	759	495	151	101
12	66	63	65	e125	e77	172	260	587	683	423	125	764
13	67	62	60	e115	e80	164	241	601	1320	364	107	1030
14	67	61	65	e105	e80	157	222	608	1680	315	98	931
15	62	58	84	e94	e81	151	207	592	2160	274	88	782
16	63	55	96	e85	e82	142	194	537	2730	242	82	685
17	65	56	93	e80	e84	142	185	459	2760	215	80	513
18	71	55	93	e75	e86	143	173	395	2510	193	90	356
19	72	56	73	e72	e88	142	163	1190	2280	173	98	266
20	73	61	87	e68	e90	292	547	1660	2000	157	92	212
21	71	58	95	e66	e98	710	1680	1750	1770	143	106	172
22	70	58	e96	e64	e100	800	1900	1800	1590	131	88	148
23	67	57	e90	e61	328	741	1860	1960	1390	122	68	312
24	63	60	e82	e60	518	611	1710	2180	1170	113	73	739
25	62	60	e77	e58	697	491	1640	2110	2090	106	76	426
26	63	60	e74	e56	724	404	1640	1760	2610	99	72	267
27	62	59	e72	e56	899	345	1430	1320	2440	92	215	192
28	62	58	e70	e55	993	361	1050	1560	2230	88	390	155
29	66	57	e70	e54	854	794	760	2200	2270	87	394	130
30	64	56	e70	e53	---	657	598	2330	2330	112	311	114
31	63	---	e71	e52	---	435	---	2250	---	120	227	---
TOTAL	2096	1902	2236	2882	6563	11491	19133	32451	51523	16893	5100	9243
MEAN	67.6	63.4	72.1	93.0	226	371	638	1047	1717	545	165	308
MAX	81	82	96	159	993	800	1900	2330	2760	2090	413	1030
MIN	61	55	45	52	51	142	163	284	683	87	68	63
CFSM	.11	.10	.12	.15	.37	.61	1.05	1.72	2.82	.89	.27	.51
IN.	.13	.12	.14	.18	.40	.70	1.17	1.98	3.14	1.03	.31	.56

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2000, BY WATER YEAR (WY)

MEAN	177	376	584	674	840	1200	1071	634	417	241	154	140
MAX	1066	1756	2085	2545	2302	3512	3102	2499	1864	1045	921	671
(WY)	1987	1993	1968	1950	1976	1982	1950	1956	1989	1951	1998	1997
MIN	21.0	30.5	31.1	38.3	41.4	312	321	148	51.4	32.2	29.1	20.3
(WY)	1964	1965	1964	1963	1963	1964	1971	1988	1988	1988	1967	1963

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1947 - 2000	
ANNUAL TOTAL	172840		161513			
ANNUAL MEAN	474		441		539	
HIGHEST ANNUAL MEAN					1008	1950
LOWEST ANNUAL MEAN					132	1964
HIGHEST DAILY MEAN	5530	Jan 26	2760	Jun 17	9790	May 18 1996
LOWEST DAILY MEAN	23	Sep 22	45	Dec 4	14	Sep 10 1964
ANNUAL SEVEN-DAY MINIMUM	25	Sep 17	52	Nov 29	15	Sep 10 1964
INSTANTANEOUS PEAK FLOW			2870	Jun 16	10400	May 18 1996
INSTANTANEOUS PEAK STAGE			12.74	Jun 16	17.96	Mar 17 1982
ANNUAL RUNOFF (CFSM)	.78		.72		.88	
ANNUAL RUNOFF (INCHES)	10.54		9.85		12.01	
10 PERCENT EXCEEDS	1410		1500		1490	
50 PERCENT EXCEEDS	100		142		237	
90 PERCENT EXCEEDS	41		60		49	

e Estimated

04180000 CEDAR CREEK NEAR CEDARVILLE, IN

LOCATION.--Lat 41°13'08", long 85°04'35", in NW1/4NW1/4 sec.19, T.32 N., R.13 E., Allen County, Hydrologic Unit 04100003, on left bank at downstream side of bridge on Tonkle Road, 3 mi northwest of Cedarville, 5.8 mi upstream from mouth, and 10 mi south of Auburn.

DRAINAGE AREA.--270 mi^2.

PERIOD OF RECORD.--October 1946 to current year.

REVISED RECORDS.--WSP 1912: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 780.09 ft above sea level. Prior to Nov. 4, 1947, nonrecording gage at same site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	27	25	e40	e28	323	170	151	300	188	59	92
2	41	29	25	e41	e28	248	147	208	237	158	57	77
3	39	31	26	e45	e28	204	134	178	193	244	87	65
4	123	29	27	100	e28	176	126	153	168	285	69	58
5	89	28	35	85	e28	149	111	138	252	194	56	52
6	60	27	101	72	e28	129	104	124	634	155	74	48
7	47	26	76	65	e28	115	98	114	360	133	201	45
8	39	24	61	57	e28	106	137	104	250	117	218	43
9	39	27	55	57	e35	99	152	105	196	107	135	41
10	36	28	52	57	40	90	137	475	162	103	96	47
11	33	27	49	62	72	83	124	385	141	100	76	68
12	33	26	45	57	79	83	113	262	133	91	63	1330
13	34	28	44	56	63	82	99	214	156	82	55	1480
14	37	28	89	50	59	78	93	171	224	78	51	693
15	35	25	168	e45	55	78	90	136	1170	73	49	461
16	31	26	168	e47	54	79	84	119	851	68	46	340
17	32	26	132	e40	56	76	85	118	446	64	48	254
18	30	25	98	e36	58	69	91	122	364	65	60	206
19	34	28	79	e35	58	71	82	896	333	62	47	168
20	30	44	79	e34	56	292	442	768	251	58	40	143
21	28	33	89	e34	51	543	2070	438	456	55	37	126
22	29	30	136	e33	105	380	1500	312	401	53	38	109
23	30	29	95	e32	460	280	830	312	263	50	37	232
24	29	33	74	e21	551	224	538	379	259	48	40	527
25	27	33	63	e31	531	192	394	276	1110	49	41	326
26	33	29	53	e31	413	163	307	203	931	48	38	225
27	30	30	e47	e30	910	152	251	172	805	46	342	167
28	30	26	e44	e30	802	182	213	737	436	46	435	136
29	29	25	e42	e29	457	348	185	1170	296	62	244	117
30	29	26	e40	e29	---	274	158	645	228	75	160	103
31	26	---	e40	e29	---	206	---	410	---	71	116	---
TOTAL	1215	853	2157	1410	5189	5574	9065	9995	12006	3028	3115	7779
MEAN	39.2	28.4	69.6	45.5	179	180	302	322	400	97.7	100	259
MAX	123	44	168	100	910	543	2070	1170	1170	285	435	1480
MIN	26	24	25	21	28	69	82	104	133	46	37	41
CFSM	.15	.11	.26	.17	.66	.67	1.12	1.19	1.48	.36	.37	.96
IN.	.17	.12	.30	.19	.71	.77	1.25	1.38	1.65	.42	.43	1.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2000, BY WATER YEAR (WY)

MEAN	110	183	278	323	394	510	469	284	216	123	86.4	87.8
MAX	805	936	908	1393	1290	1724	1130	947	1046	515	331	477
(WY)	1955	1993	1967	1950	1959	1982	1950	1956	1981	1986	1997	1972
MIN	19.8	24.0	24.7	25.9	28.5	146	139	68.6	44.0	35.1	22.0	20.9
(WY)	1965	1965	1964	1963	1963	1957	1971	1958	1988	1953	1964	1964

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1947 - 2000	
ANNUAL TOTAL	92143		61386			
ANNUAL MEAN	252		168		255	
HIGHEST ANNUAL MEAN					485	1950
LOWEST ANNUAL MEAN					85.3	1964
HIGHEST DAILY MEAN	4050	Jan 24	2070	Apr 21	5220	Dec 31 1990
LOWEST DAILY MEAN	22	Sep 20	e21	Jan 24	13	Oct 3 1949
ANNUAL SEVEN-DAY MINIMUM	22	Sep 20	26	Nov 28	18	Sep 27 1949
INSTANTANEOUS PEAK FLOW			2400	Apr 21	5580	Dec 30 1990
INSTANTANEOUS PEAK STAGE			7.47	Apr 21	13.38	Dec 30 1990
ANNUAL RUNOFF (CFSM)	.93		.62		.94	
ANNUAL RUNOFF (INCHES)	12.70		8.46		12.81	
10 PERCENT EXCEEDS	605		404		600	
50 PERCENT EXCEEDS	76		79		115	
90 PERCENT EXCEEDS	27		29		32	

e Estimated

04180500 ST. JOSEPH RIVER NEAR FORT WAYNE, IN

LOCATION.--Lat 41°10'41", long 85°03'19", in NW1/4NE1/4 sec.3, T.31 N., R.13 E., Allen County, Hydrologic Unit 04100003, on left bank 0.8 mi downstream from Ely Run, 1.3 mi upstream from Mayhew Road, 8.0 mi northeast of the Fort Wayne Court House.

DRAINAGE AREA.--1,060 mi^2.

PERIOD OF RECORD.--October 1983 to current year. July 1941 to September 1955 gage located 1.3 mi downstream at Ely Bridge.

GAGE.--Water-stage recorder. Datum of gage is 754.00 ft above sea level (levels by State of Indiana). Datum was previously published erroneously as 750.00 ft.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Cedarville Reservoir and some flow diverted into storage of Hurshtown Reservoir.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	81	96	e100	e99	1300	672	812	2770	2510	240	341
2	162	87	99	e110	e100	936	521	813	2110	2210	235	288
3	172	82	100	136	e100	792	396	647	1850	1730	424	237
4	265	86	100	239	e100	636	414	667	1210	1330	250	219
5	275	93	106	289	e100	510	395	688	1330	1410	244	182
6	197	97	153	221	e101	483	368	558	2130	1430	336	183
7	146	96	173	190	e104	396	352	520	1770	1390	535	165
8	127	105	150	186	e108	371	400	494	1350	1250	614	168
9	123	98	142	180	112	375	407	455	1410	914	582	175
10	133	97	149	189	130	326	413	829	970	746	442	190
11	105	101	143	204	183	321	451	1020	1000	525	307	193
12	82	92	139	181	219	313	426	826	642	570	272	2210
13	124	92	135	177	195	304	402	867	946	536	251	3140
14	159	95	222	162	185	283	368	758	1570	387	180	1910
15	93	91	466	141	175	272	359	707	3070	365	198	1370
16	97	91	433	138	169	313	343	667	3260	412	195	1090
17	94	88	346	132	176	254	296	659	3060	377	203	887
18	91	88	258	125	186	220	287	610	3260	316	204	641
19	105	93	206	e128	185	281	321	2890	3090	240	197	517
20	92	110	e160	e125	158	832	860	2930	2470	296	194	424
21	68	113	e150	e118	158	1740	4500	2380	2930	262	183	305
22	82	106	e139	e112	239	1490	4190	2300	2310	269	190	348
23	87	104	e130	e107	1060	1270	3220	2380	1670	256	180	453
24	85	107	e119	e103	1610	983	2730	2730	1660	207	227	1940
25	80	113	e113	e101	1530	826	2200	2610	5580	196	284	1210
26	82	115	e108	e100	1390	689	2090	2420	4690	198	217	694
27	83	131	e103	e98	2060	583	2010	1950	4400	203	447	437
28	81	120	e100	e97	2470	600	1680	2900	3200	194	913	446
29	81	101	e99	e97	1600	1360	1070	4040	2670	214	695	332
30	80	92	e95	e98	---	1470	895	3470	2460	228	562	251
31	82	---	e92	e98	---	831	---	2870	---	280	443	---
TOTAL	3642	2965	5024	4482	15002	21360	33036	48467	70838	21451	10444	20946
MEAN	117	98.8	162	145	517	689	1101	1563	2361	692	337	698
MAX	275	131	466	289	2470	1740	4500	4040	5580	2510	913	3140
MIN	68	81	92	97	99	220	287	455	642	194	180	165
CFSM	.11	.09	.15	.14	.49	.65	1.04	1.47	2.23	.65	.32	.66
IN.	.13	.10	.18	.16	.53	.75	1.16	1.70	2.49	.75	.37	.74

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2000, BY WATER YEAR (WY)

MEAN	498	985	1166	1475	1577	1919	1825	1083	1009	477	382	379
MAX	1984	3330	2421	4615	3315	3612	3071	3675	2915	1413	1157	1258
(WY)	1987	1993	1991	1993	1990	1985	1999	1996	1989	1986	1998	1997
MIN	78.6	98.8	162	145	310	689	607	272	153	122	125	81.5
(WY)	1995	2000	2000	2000	1995	2000	1986	1988	1988	1988	1988	1994

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1984 - 2000	
ANNUAL TOTAL	330807		257657			
ANNUAL MEAN	906		704		1061	
HIGHEST ANNUAL MEAN					1532	1993
LOWEST ANNUAL MEAN					642	1995
HIGHEST DAILY MEAN	9670	Jan 24	5580	Jun 25	13100	Feb 26 1985
LOWEST DAILY MEAN	56	Sep 16	68	Oct 21	43	Oct 17 1991
ANNUAL SEVEN-DAY MINIMUM	65	Sep 13	81	Oct 21	56	Oct 24 1994
INSTANTANEOUS PEAK FLOW			3560	Sep 13	13400	Jan 5 1993
INSTANTANEOUS PEAK STAGE			8.12	Sep 13	18.40	Jan 5 1993
ANNUAL RUNOFF (CFSM)	.86		.66		1.00	
ANNUAL RUNOFF (INCHES)	11.61		9.04		13.60	
10 PERCENT EXCEEDS	2650		2200		2660	
50 PERCENT EXCEEDS	206		278		512	
90 PERCENT EXCEEDS	88		97		145	

e Estimated

04181500 ST. MARYS RIVER AT DECATUR, IN

LOCATION.--Lat 40°50'55", long 84°56'16", in SW$^1/_4$SW$^1/_4$ sec.27, T.28 N., R.14 E., Adams County, Hydrologic Unit 04100004, on left downstream side of bridge on U.S. Highway 27, 0.5 mi upstream from Holthouse Ditch, 1.3 mi north of Decatur, and at mile 29.1.

DRAINAGE AREA.--621 mi^2.

PERIOD OF RECORD.--October 1946 to current year. Monthly discharge only for some periods, published in WSP 1307. Gage-height records collected at site 0.5 mi upstream January 1932 to November 1954, and at present site thereafter are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1174: 1948. WSP 1337: 1947. WSP 1627: 1950. WSP 1912: 1955, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 760.44 ft above sea level. Prior to July 27, 1948, nonrecording gage at same site and datum.

REMARKS.--Records good, except for estimated daily discharges, which are poor. Flow regulated by Grand Lake. Slight diversion from or into Wabash River Basin and into Miami and Erie Canal.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	25	30	e26	e22	363	140	127	238	285	42	47
2	32	26	27	e28	e23	271	116	144	185	185	51	38
3	42	26	25	e30	e23	206	108	148	154	450	192	33
4	58	26	24	e63	e24	169	134	185	128	1500	153	36
5	40	27	26	97	e24	141	124	224	452	1180	86	33
6	35	30	30	109	e24	121	106	180	1030	987	90	32
7	30	31	28	200	e25	105	100	150	531	784	90	30
8	30	33	27	131	e26	94	500	131	392	392	60	33
9	32	30	33	75	29	89	1050	206	280	199	71	33
10	32	28	52	56	40	84	1140	879	201	148	65	152
11	29	28	42	48	123	75	1640	356	161	117	51	364
12	28	27	38	e40	252	80	1750	207	185	92	43	256
13	34	27	47	e35	349	78	1330	170	1110	76	49	262
14	39	25	125	e31	417	105	805	137	2810	64	48	203
15	33	25	134	e30	448	168	418	105	4340	57	40	131
16	28	24	89	e29	462	187	251	93	3300	53	35	79
17	36	24	e70	e27	549	198	206	87	1450	48	36	56
18	29	25	e56	e26	600	171	231	82	1230	45	60	45
19	29	28	e46	e26	1100	166	242	187	1170	43	69	38
20	26	30	e40	e25	849	643	367	259	787	40	71	37
21	27	27	e34	e24	776	999	1430	464	965	39	72	37
22	28	27	e30	e24	1310	788	1190	507	1200	37	55	42
23	28	26	e27	e23	1340	630	812	663	878	37	50	44
24	26	26	e26	e22	887	468	712	367	707	36	46	67
25	25	27	e25	e22	648	331	618	217	817	33	49	123
26	24	33	e24	e22	445	245	410	170	775	33	50	185
27	23	28	e24	e22	613	213	261	151	785	32	351	204
28	23	29	e24	e22	642	198	201	337	898	32	122	171
29	25	27	e24	e21	448	188	166	435	866	32	74	125
30	26	27	e24	e21	---	202	142	369	580	37	80	85
31	26	---	e25	e21	---	178	---	309	---	38	65	---
TOTAL	957	822	1276	1376	12518	7954	16700	8046	28605	7131	2416	3021
MEAN	30.9	27.4	41.2	44.4	432	257	557	260	954	230	77.9	101
MAX	58	33	134	200	1340	999	1750	879	4340	1500	351	364
MIN	23	24	24	21	22	75	100	82	128	32	35	30
CFSM	.05	.04	.07	.07	.70	.41	.90	.42	1.54	.37	.13	.16
IN.	.06	.05	.08	.08	.75	.48	1.00	.48	1.71	.43	.14	.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2000, BY WATER YEAR (WY)

MEAN	121	309	553	737	873	1096	952	484	452	326	141	107
MAX	866	1988	2079	3834	2546	3263	3409	1920	2075	2674	848	1225
(WY)	1955	1993	1991	1950	1950	1978	1957	1996	1981	1992	1998	1992
MIN	7.52	13.7	12.8	21.0	30.5	125	79.3	55.6	28.1	20.6	15.5	12.6
(WY)	1964	1965	1964	1961	1964	1981	1966	1988	1988	1965	1963	1963

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1947 - 2000	
ANNUAL TOTAL	144361		90822			
ANNUAL MEAN	396		248		507	
HIGHEST ANNUAL MEAN					879	1993
LOWEST ANNUAL MEAN					140	1966
HIGHEST DAILY MEAN	9090	Jan 25	4340	Jun 15	10600	Feb 15 1950
LOWEST DAILY MEAN	23	Oct 27	e21	Jan 29	5.4	Oct 18 1960
ANNUAL SEVEN-DAY MINIMUM	24	Dec 25	e22	Jan 25	6.2	Oct 12 1963
INSTANTANEOUS PEAK FLOW			4520	Jun 15	11300	Feb 10 1959
INSTANTANEOUS PEAK STAGE			18.98	Jun 15	24.40	Mar 14 1982
ANNUAL RUNOFF (CFSM)	.64		.40		.82	
ANNUAL RUNOFF (INCHES)	8.65		5.44		11.09	
10 PERCENT EXCEEDS	1010		784		1500	
50 PERCENT EXCEEDS	52		74		130	
90 PERCENT EXCEEDS	26		25		23	

e Estimated

04182000 ST. MARYS RIVER NEAR FORT WAYNE, IN

LOCATION.--Lat 40°59'16", long 85°06'43", in A. LaFontaine Reserve, T.29 N., R.12 E., Allen County, Hydrologic Unit 04100004, on left bank 130 ft downstream from Anthony Boulevard Extension, 0.8 mi downstream from Houk Ditch, 5 mi south of Fort Wayne, and 10.8 mi upstream from mouth.

DRAINAGE AREA.--762 mi^2.

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1307. Fragmentary gage-height records for period November 1924 to October 1927 are available from the District Office.

REVISED RECORDS.--WSP 974: 1942. WSP 1337: 1933, 1947. WSP 1912: 1954, 1955, 1960, drainage area. WDR IN- 82-1: 1973, 1974, 1978, 1979.

GAGE.--Water-stage recorder. Datum of gage is 748.97 ft above sea level (levels by State of Indiana, Department of Natural Resources). Prior to Apr. 13, 1939, nonrecording gage on upstream highway bridge at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. The flow is sometimes regulated by Grand Lake. Slight diversion from or into Wabash River Basin and into Miami and Erie Canal. During extreme floods, some water bypasses gage and flows through Houk Ditch and Paul Trier Ditch into the Maumee River. Period of record computations do not include 1934 water year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	27	29	e31	e27	460	183	151	355	467	41	72
2	32	26	33	e33	e27	353	149	187	259	262	47	55
3	33	26	32	43	e28	262	131	176	196	698	107	45
4	53	27	29	85	e28	206	129	169	159	1760	247	42
5	61	29	28	105	e29	169	150	252	639	1600	138	43
6	42	31	32	98	e30	141	133	241	1830	1220	103	39
7	37	34	37	139	e31	122	120	187	948	1030	196	38
8	31	37	33	194	e32	108	187	159	586	653	119	36
9	31	39	32	114	e35	97	1080	145	428	327	71	37
10	36	39	41	68	e50	91	1160	1210	294	201	76	66
11	37	37	60	54	126	86	1620	782	215	154	66	462
12	32	34	50	46	296	83	1960	359	194	119	53	404
13	31	34	47	41	451	86	1670	233	1810	96	45	346
14	34	32	86	e37	582	98	1110	175	4300	81	e52	296
15	43	30	165	e35	638	170	639	136	5450	68	e49	215
16	38	27	135	e33	678	215	360	113	5220	61	e45	137
17	43	26	91	e32	757	219	255	106	2970	56	41	85
18	43	25	e80	e31	866	215	230	99	2000	52	43	62
19	35	27	e67	e30	1490	192	277	145	1800	49	66	51
20	31	31	e60	e29	1520	751	751	265	1180	47	72	45
21	28	35	e60	e28	1220	1380	2080	451	1340	44	75	48
22	27	32	e52	e28	1730	1070	1850	603	1570	42	74	50
23	28	29	e45	e27	1670	813	1160	1040	1200	40	59	77
24	29	30	e38	e27	1200	639	908	796	929	40	56	121
25	27	28	e30	e26	1020	461	803	375	1330	39	51	149
26	25	31	e29	e25	643	335	608	239	1020	36	53	182
27	25	37	e29	e25	793	276	388	189	998	35	776	256
28	24	36	e29	e25	897	253	272	1150	1010	36	362	234
29	23	33	e29	e25	593	238	210	925	1040	37	147	189
30	24	31	e29	e26	---	226	169	609	830	38	95	135
31	26	---	e30	e26	---	223	---	459	---	41	92	---
TOTAL	1046	940	1567	1566	17487	10038	20742	12126	42100	9429	3517	4017
MEAN	33.7	31.3	50.5	50.5	603	324	691	391	1403	304	113	134
MAX	61	39	165	194	1730	1380	2080	1210	5450	1760	776	462
MIN	23	25	28	25	27	83	120	99	159	35	41	36
CFSM	.04	.04	.07	.07	.79	.42	.91	.51	1.84	.40	.15	.18
IN.	.05	.05	.08	.08	.85	.49	1.01	.59	2.06	.46	.17	.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2000, BY WATER YEAR (WY)

MEAN	145	328	617	874	1024	1324	1146	638	529	352	162	115
MAX	1299	2612	2349	4897	3404	4070	4119	3866	2545	2708	1134	1453
(WY)	1955	1973	1978	1950	1959	1978	1957	1943	1981	1992	1998	1992
MIN	8.28	16.9	16.7	21.3	45.4	87.0	90.7	59.9	34.3	11.9	13.9	11.6
(WY)	1964	1965	1964	1977	1964	1941	1946	1931	1988	1936	1932	1944

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1931 - 2000	
ANNUAL TOTAL	184946		124575			
ANNUAL MEAN	507		340		613	
HIGHEST ANNUAL MEAN					1093	1950
LOWEST ANNUAL MEAN					174	1966
HIGHEST DAILY MEAN	9660	Jan 25	5450	Jun 15	13000	May 19 1943
LOWEST DAILY MEAN	21	Sep 25	23	Oct 29	3.4	Oct 19 1934
ANNUAL SEVEN-DAY MINIMUM	23	Sep 22	25	Oct 25	4.9	Oct 15 1934
INSTANTANEOUS PEAK FLOW			5650	Jun 15	13600	Feb 11 1959
INSTANTANEOUS PEAK STAGE			12.37	Jun 15	19.66	Mar 14 1982
ANNUAL RUNOFF (CFSM)	.66		.45		.80	
ANNUAL RUNOFF (INCHES)	9.03		6.08		10.93	
10 PERCENT EXCEEDS	1260		1040		1730	
50 PERCENT EXCEEDS	57		88		145	
90 PERCENT EXCEEDS	29		29		24	

e Estimated

04182810 SPY RUN CREEK AT FORT WAYNE, IN

LOCATION.--Lat 41°06'18", long 85°09'12", in SW1/4SW1/4 sec.26, T.31 N., R.12 E., Allen County, Hydrologic Unit 04100004, on right bank 50 ft upstream from Sherman Boulevard bridge in Fort Wayne, and at mile 2.2.

DRAINAGE AREA.--14.0 mi^2.

PERIOD OF RECORD.--October 1983 to current year.

GAGE.--Water-stage recorder. Datum of gage is 760.00 ft above sea level, (levels by City of Fort Wayne).

REMARKS.--Records good.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 14, 1982 reached a stage of 10.75 ft, present site and datum.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	2.4	1.9	e1.6	e2.0	11	4.5	42	6.7	5.6	6.3	2.7
2	3.7	2.8	1.9	e1.9	e2.1	9.0	3.7	32	4.9	4.2	24	2.6
3	34	3.0	1.9	30	e2.3	5.9	3.5	8.8	3.5	60	30	2.6
4	52	2.8	1.9	19	e2.4	4.5	3.2	5.6	2.7	16	6.9	5.8
5	9.2	2.6	11	6.9	e2.5	3.6	3.1	4.3	167	6.8	4.5	3.0
6	4.8	2.6	17	5.2	e2.5	3.2	2.8	3.7	45	4.8	45	2.3
7	3.5	2.4	5.3	4.0	e2.6	3.0	14	3.5	13	3.9	70	2.4
8	4.3	2.4	3.1	3.0	e3.1	3.0	24	4.4	8.7	3.1	12	2.4
9	4.9	2.5	2.5	2.7	6.2	2.9	8.0	34	5.0	2.7	6.7	2.4
10	3.5	2.9	6.5	6.4	15	2.7	5.1	95	3.5	2.9	4.8	39
11	3.2	2.4	3.8	6.4	26	2.8	4.6	17	11	3.0	3.9	17
12	2.7	2.6	2.5	3.5	11	8.0	3.9	10	13	2.5	3.2	26
13	8.0	2.5	2.4	3.4	7.7	9.8	3.2	6.4	107	2.3	2.7	6.2
14	7.3	2.1	59	3.1	7.1	7.8	3.0	3.5	96	2.6	3.0	4.0
15	3.0	1.9	27	2.5	5.9	7.1	2.7	2.8	70	2.3	2.9	3.7
16	3.0	1.9	17	2.3	8.2	5.9	2.5	4.7	15	1.9	2.9	2.7
17	16	1.7	7.5	2.0	9.6	4.8	8.4	5.2	8.6	1.9	28	2.0
18	4.2	1.7	5.0	2.1	7.4	3.5	5.3	13	67	2.3	12	2.2
19	2.6	9.2	3.7	2.1	8.0	34	3.7	130	14	7.1	4.3	2.5
20	2.1	9.8	11	2.5	8.1	127	50	19	46	3.2	2.8	2.8
21	2.0	2.9	6.0	2.4	21	48	41	9.4	91	2.5	2.3	3.5
22	2.4	2.2	3.1	2.1	56	19	14	21	19	1.9	2.8	2.9
23	2.8	2.1	2.5	e2.1	45	12	7.7	89	8.8	1.4	3.4	50
24	2.8	7.1	2.0	e2.0	52	9.1	5.6	28	103	1.5	3.1	26
25	2.6	3.1	1.6	e2.0	31	8.2	4.4	11	485	1.7	2.7	7.9
26	2.5	9.2	1.6	e2.0	34	5.5	3.5	6.8	91	1.8	5.8	4.3
27	2.4	5.6	e1.5	e1.9	101	18	3.2	18	55	2.0	47	3.1
28	2.4	2.7	e1.5	e1.9	21	26	2.8	169	18	1.9	6.3	2.5
29	2.4	2.0	e1.5	e1.9	11	13	2.5	32	12	36	3.9	2.1
30	2.4	1.9	e1.5	e1.9	---	7.5	2.2	13	8.2	31	2.9	1.9
31	2.3	---	e1.5	e1.9	---	5.4	---	8.5	---	26	2.9	---
TOTAL	204.5	101.0	216.2	132.7	511.7	431.2	246.1	850.6	1598.6	246.8	359.0	238.5
MEAN	6.60	3.37	6.97	4.28	17.6	13.9	8.20	27.4	53.3	7.96	11.6	7.95
MAX	52	9.8	59	30	101	127	50	169	485	60	70	50
MIN	2.0	1.7	1.5	1.6	2.0	2.7	2.2	2.8	2.7	1.4	2.3	1.9
CFSM	.47	.24	.50	.31	1.26	.99	.59	1.96	3.81	.57	.83	.57
IN.	.54	.27	.57	.35	1.36	1.15	.65	2.26	4.25	.66	.95	.63

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2000, BY WATER YEAR (WY)

MEAN	11.7	19.2	19.1	19.1	23.7	25.7	25.1	18.5	17.0	17.3	9.89	11.8
MAX	43.7	61.3	66.2	48.9	64.6	46.6	58.8	46.9	53.3	48.3	23.3	39.8
(WY)	1992	1993	1991	1993	1990	1984	1999	1997	2000	1986	1998	1993
MIN	2.79	3.37	3.03	3.76	5.32	11.4	8.20	4.15	2.16	3.85	4.10	3.94
(WY)	1988	2000	1990	1984	1989	1987	2000	1988	1988	1991	1984	1988

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1984 - 2000	
ANNUAL TOTAL	6319.9		5136.9			
ANNUAL MEAN	17.3		14.0		18.1	
HIGHEST ANNUAL MEAN					27.5	1997
LOWEST ANNUAL MEAN					11.5	1987
HIGHEST DAILY MEAN	448	Jan 22	485	Jun 25	748	Feb 22 1990
LOWEST DAILY MEAN	1.5	Sep 5	1.4	Jul 23	.93	Jul 9 1990
ANNUAL SEVEN-DAY MINIMUM	1.5	Dec 25	1.5	Dec 25	1.1	Jan 15 1994
INSTANTANEOUS PEAK FLOW			1090	Jun 25	1370	Feb 22 1990
INSTANTANEOUS PEAK STAGE			10.30	Jun 25	10.74	Jul 22 1997
ANNUAL RUNOFF (CFSM)	1.24		1.00		1.29	
ANNUAL RUNOFF (INCHES)	16.79		13.65		17.59	
10 PERCENT EXCEEDS	36		34		34	
50 PERCENT EXCEEDS	4.9		3.9		5.6	
90 PERCENT EXCEEDS	2.4		2.0		2.5	

e Estimated

04182900 MAUMEE RIVER AT FORT WAYNE, IN

LOCATION.--Lat 41°04'55", long 85°06'53", in SE$^1/_4$NE$^1/_4$ sec. 1, T.30 N., R.12 E., Allen County, Hydrologic Unit 04100005, on left bank at downstream side of Hosey Dam, 250 ft upstream of Anthony Boulevard, 1.2 mi below confluence of St. Joseph and St. Mary's Rivers and 1.5 mi upstream of Highway 930.

DRAINAGE AREA.--1,926 mi^2.

PERIOD OF RECORD.--October 1997 to current year.

GAGE.--Water-stage recorder. Datum of gage 730.07 ft above sea level. Prior to December 12, 1962, nonrecording gage on downstream side of bridge at same datum. Dec. 12, 1962 to Aug. 13, 1997 water-stage recorder at site 310 ft downstream at same datum.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 20.98 ft, Jan. 25, 1999; minimum gage height, 0.75 ft, Sept. 29, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 14.66 ft, June 25; minimum gage height, 0.86 ft, Oct. 1.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.05	1.11	1.23	1.30	1.23	4.06	2.52	3.60	6.42	6.29	1.53	1.60
2	1.29	1.13	1.22	1.35	1.24	3.43	2.12	3.02	5.27	5.17	1.49	1.58
3	3.12	1.12	1.28	1.61	1.25	2.98	1.79	2.57	4.17	6.95	2.02	1.44
4	1.57	1.13	1.29	1.59	1.27	2.54	1.84	2.46	3.33	6.86	1.74	---
5	1.49	1.15	1.43	1.63	1.29	2.18	1.78	2.60	7.77	6.54	1.56	---
6	1.42	1.20	1.48	1.53	1.28	2.06	1.77	2.29	8.16	5.64	2.57	---
7	1.32	1.20	1.49	1.55	1.28	1.78	2.00	2.19	5.75	5.40	2.47	---
8	1.27	1.24	1.40	1.55	1.32	1.75	2.01	2.06	4.98	4.02	2.29	---
9	1.26	1.23	1.38	1.54	1.32	1.81	3.91	2.53	4.39	3.09	2.18	---
10	1.17	1.24	1.50	1.53	1.42	1.72	3.93	5.99	3.46	2.53	1.78	---
11	1.28	1.25	1.46	1.46	1.49	1.73	5.19	3.97	3.36	2.16	1.59	---
12	1.06	1.22	1.46	1.50	1.61	1.77	5.50	2.83	2.47	2.22	1.50	---
13	1.19	1.21	1.41	1.43	1.65	1.68	4.68	2.64	10.67	1.96	1.49	---
14	1.43	1.17	1.96	1.42	1.80	1.63	3.54	2.63	11.22	1.86	.92	---
15	1.13	1.18	2.29	1.36	2.13	1.74	2.82	2.38	14.06	1.51	1.01	3.17
16	1.28	1.15	2.00	1.36	2.14	1.88	2.30	2.32	12.96	1.66	1.02	3.14
17	1.60	1.20	1.74	1.34	2.22	1.68	2.16	2.24	9.74	1.71	1.89	2.51
18	1.35	1.16	1.59	1.36	2.41	1.59	1.76	2.70	10.21	1.58	1.29	2.07
19	1.12	1.43	1.52	1.37	3.28	2.12	1.63	7.53	8.74	1.41	1.52	1.81
20	1.16	1.34	1.48	1.36	3.15	6.16	7.91	6.29	9.14	1.48	1.51	1.94
21	1.05	1.33	1.49	1.34	3.02	6.90	12.36	6.22	8.95	1.51	1.47	1.54
22	1.14	1.26	1.47	1.34	5.51	5.71	10.27	6.60	7.67	1.43	1.64	1.62
23	1.18	1.27	1.48	1.35	6.59	4.98	8.33	8.13	5.76	1.51	1.42	2.22
24	1.20	1.23	1.39	1.32	6.85	3.99	7.51	7.38	10.75	1.47	1.39	4.72
25	1.14	1.30	1.38	1.25	6.02	3.38	6.52	6.39	12.56	1.40	1.48	3.25
26	1.15	1.35	1.32	1.27	5.20	2.92	5.91	5.80	10.78	1.41	1.53	2.17
27	1.16	1.37	1.34	1.25	7.53	2.69	5.11	4.84	9.62	1.29	3.32	1.82
28	1.10	1.37	1.33	1.22	6.67	2.77	3.95	10.45	8.18	1.37	3.24	2.02
29	1.12	1.26	1.31	1.20	4.96	4.66	2.97	8.60	7.46	1.69	2.36	1.77
30	1.12	1.27	1.30	1.20	---	3.91	2.91	7.90	6.74	1.57	2.01	1.58
31	1.13	---	1.23	1.24	---	3.05	---	6.93	---	1.57	1.68	---
TOTAL	40.05	37.07	45.65	43.12	87.13	91.25	127.00	144.08	234.74	86.26	54.91	41.97
MEAN	1.29	1.24	1.47	1.39	3.00	2.94	4.23	4.65	7.82	2.78	1.77	2.21
MAX	3.12	1.43	2.29	1.63	7.53	6.90	12.36	10.45	14.06	6.95	3.32	4.72
MIN	1.05	1.11	1.22	1.20	1.23	1.59	1.63	2.06	2.47	1.29	.92	1.44

CAL YR 1999 TOTAL 1224.70 MEAN 3.36 MAX 20.87 MIN .77

04183000 MAUMEE RIVER AT NEW HAVEN, IN

LOCATION.--Lat 41°05'06", long 85°01'20", in SE$^1/_4$NE$^1/_4$ sec.2, T.30 N., R.13 E., Allen County, Hydrologic Unit 04100005, on left bank 600 ft upstream from bridge on Landin Road, 1,400 ft upstream from the Norfolk and Western Railroad bridge, 1.1 mi northwest of New Haven, 2.8 mi upstream from Sixmile Creek and at mile 129.0.

DRAINAGE AREA.--1,967 mi^2.

PERIOD OF RECORD.--December 1946 to September 1956 (high-water records only), October 1956 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 724.51 ft above sea level. Prior to Sept. 7, 1956, nonrecording gage, Sept. 7, 1956 to Sept. 14, 1965, water-stage recorder at site 500 ft downstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by hydro-powerplant on the St. Joseph River 10.3 mi upstream from station. Flow slightly regulated by upstream reservoirs.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	139	156	e160	e142	2200	1210	1380	3440	3250	442	550
2	108	141	154	e170	e145	1670	1040	1570	2690	2760	383	459
3	249	138	159	e200	e148	1440	765	1280	2390	2840	624	346
4	1120	137	162	e250	e150	1200	655	1120	1690	3400	681	356
5	474	140	183	e400	e152	966	669	1110	3120	3310	499	320
6	344	143	288	470	e160	824	650	1150	4690	3010	569	192
7	236	146	298	399	e164	746	660	922	3580	2720	1400	266
8	194	143	280	427	e168	617	840	914	2290	2340	1020	190
9	193	208	219	444	180	582	1290	847	2280	1690	900	182
10	170	178	257	406	218	531	1810	2080	1680	1330	787	469
11	189	160	260	373	351	502	2150	2520	1580	1080	546	699
12	168	155	260	321	443	517	2580	1640	1370	777	404	2050
13	136	148	236	290	579	534	2460	1440	2680	903	337	3860
14	237	146	571	267	687	532	1950	1210	6990	688	236	2560
15	216	146	861	241	761	517	1460	1130	8690	524	117	2010
16	142	144	903	220	816	627	1090	1030	9460	572	131	1430
17	291	141	719	201	867	652	1000	1010	7440	537	294	1310
18	496	140	515	191	1000	542	712	978	6340	539	331	1060
19	210	154	420	189	1240	630	575	2840	5840	452	272	701
20	138	259	e380	e190	1570	1760	1440	3700	4430	331	274	686
21	141	192	e330	e185	1400	3660	6650	2990	5420	392	292	510
22	129	177	e280	e180	1810	3160	7320	3190	4510	346	578	470
23	139	168	e260	e170	3030	2530	5210	4100	3500	326	416	674
24	147	171	e230	e165	3400	2110	4100	4140	2840	328	282	1900
25	146	170	e210	e155	3200	1700	3410	3450	9690	265	325	1830
26	141	205	e200	e150	2660	1420	3010	3010	7250	255	366	1240
27	138	215	e180	e145	3250	1290	2720	2620	6410	235	962	952
28	135	197	e175	e140	3990	1180	2330	5290	4760	226	1700	824
29	129	183	e165	e140	2740	1490	1740	6160	4040	306	1270	738
30	130	166	e160	e140	---	2090	1270	4600	3590	521	928	547
31	136	---	e160	e140	---	1610	---	3710	---	459	735	---
TOTAL	6925	4950	9631	7519	35421	39829	62766	73131	134680	36712	18101	29381
MEAN	223	165	311	243	1221	1285	2092	2359	4489	1184	584	979
MAX	1120	259	903	470	3990	3660	7320	6160	9690	3400	1700	3860
MIN	103	137	154	140	142	502	575	847	1370	226	117	182
CFSM	.11	.08	.16	.12	.62	.65	1.06	1.20	2.28	.60	.30	.50
IN.	.13	.09	.18	.14	.67	.75	1.19	1.38	2.55	.69	.34	.56

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2000, BY WATER YEAR (WY)

MEAN	535	1242	2059	2002	2646	3742	3436	1892	1647	1023	579	529
MAX	3087	6523	6292	7203	7649	11460	7955	6914	6480	3988	2461	2737
(WY)	1987	1993	1968	1993	1976	1982	1957	1996	1981	1992	1998	1992
MIN	62.3	102	96.4	119	161	1181	789	382	122	197	99.1	91.2
(WY)	1964	1965	1964	1963	1964	1981	1971	1988	1988	1964	1962	1963

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1957 - 2000	
ANNUAL TOTAL	597767		459046			
ANNUAL MEAN	1638		1254		1772	
HIGHEST ANNUAL MEAN					2975	1993
LOWEST ANNUAL MEAN					669	1963
HIGHEST DAILY MEAN	19200	Jan 25	9690	Jun 25	26300	Mar 17 1982
LOWEST DAILY MEAN	86	Sep 2	103	Oct 1	48	Oct 6 1963
ANNUAL SEVEN-DAY MINIMUM	97	Sep 21	135	Oct 26	55	Oct 4 1963
INSTANTANEOUS PEAK FLOW			10500	Jun 25	26600	Mar 17 1982
INSTANTANEOUS PEAK STAGE			15.53	Jun 25	25.49	Mar 17 1982
ANNUAL RUNOFF (CFSM)	.83		.64		.90	
ANNUAL RUNOFF (INCHES)	11.30		8.68		12.24	
10 PERCENT EXCEEDS	5000		3400		4790	
50 PERCENT EXCEEDS	329		548		775	
90 PERCENT EXCEEDS	136		146		155	

e Estimated

05515000 KANKAKEE RIVER NEAR NORTH LIBERTY, IN

LOCATION.--Lat 41°33'50", long 86°29'50", in NW$^1/_4$NE$^1/_4$ sec.23, T.36 N., R.1 W., St. Joseph County, Hydrologic Unit 07120001, on left bank at upstream side of bridge on county highway named "New Road", 2.7 mi upstream from Little Kankakee River, 4 mi northwest of North Liberty, and at mile 126.9.

DRAINAGE AREA.--174 mi^2, of which 58.2 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--January 1951 to current year.

REVISED RECORDS.--WSP 1915: 1952, 1956-59. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 680.04 ft above sea level (levels by State of Indiana, Department of Natural Resources). Prior to June 26, 1956, nonrecording gage on downstream side of bridge; June 26, 1956 to Sept. 3, 1996, water-stage recorder on left bank at downstream side of bridge, all at same datum

REMARKS.--Records good except for estimated daily discharges and those above 300 ft^3/s (backwater), which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	89	81	91	90	174	104	133	142	179	119	81
2	81	95	81	93	89	159	104	131	136	170	117	74
3	83	94	80	96	93	151	104	125	129	184	114	77
4	97	91	80	101	89	146	102	122	127	189	109	75
5	96	89	106	100	87	142	101	119	139	176	107	76
6	93	89	142	99	88	137	101	116	183	191	111	78
7	89	88	130	97	89	132	105	115	170	185	132	79
8	88	89	119	95	88	129	117	114	155	171	129	81
9	88	89	111	100	91	127	117	119	144	164	122	80
10	88	88	107	116	91	123	113	133	136	166	117	82
11	86	89	102	125	91	119	111	127	133	166	110	92
12	87	89	101	119	91	e114	108	126	149	157	104	131
13	91	89	98	113	91	e109	106	133	249	150	99	134
14	91	88	109	108	91	e110	104	127	382	148	96	120
15	90	90	138	107	89	e120	99	121	328	145	93	114
16	91	88	158	103	90	e130	99	120	262	140	93	110
17	90	87	146	99	88	123	101	118	222	137	97	107
18	88	87	130	100	91	119	99	118	200	134	106	100
19	88	86	122	98	90	120	102	148	186	132	102	96
20	89	86	119	99	89	122	153	149	179	129	98	95
21	89	85	113	96	89	126	283	142	312	127	95	95
22	91	91	107	97	101	126	247	137	358	123	93	93
23	91	91	104	95	171	123	208	132	256	121	96	101
24	91	86	102	92	244	122	184	126	202	116	94	103
25	90	83	99	92	245	119	167	121	307	112	93	101
26	91	83	99	91	215	115	155	117	296	110	90	99
27	90	82	97	90	235	114	147	117	267	103	93	98
28	90	80	96	94	213	114	139	154	226	100	93	96
29	90	81	95	88	189	109	134	170	203	111	92	95
30	89	81	94	90	---	105	130	155	186	120	90	94
31	89	---	90	90	---	103	---	146	---	123	87	---
TOTAL	2768	2623	3356	3074	3498	3882	3944	4031	6364	4479	3191	2857
MEAN	89.3	87.4	108	99.2	121	125	131	130	212	144	103	95.2
MAX	97	95	158	125	245	174	283	170	382	191	132	134
MIN	81	80	80	88	87	103	99	114	127	100	87	74
CFSM	.51	.50	.62	.57	.69	.72	.76	.75	1.22	.83	.59	.55
IN.	.59	.56	.72	.66	.75	.83	.84	.86	1.36	.96	.68	.61

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2000, BY WATER YEAR (WY)

MEAN	135	156	168	169	177	222	213	179	159	128	108	105
MAX	333	303	341	367	298	471	310	335	410	390	273	222
(WY)	1994	1991	1991	1991	1991	1982	1985	1996	1996	1996	1995	1993
MIN	70.1	67.3	77.5	78.0	76.3	112	112	98.4	84.0	64.2	63.1	64.4
(WY)	1954	1965	1961	1961	1963	1957	1987	1958	1971	1971	1964	1953

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1951 - 2000	
ANNUAL TOTAL	48142.0		44067			
ANNUAL MEAN	132		120		160	
HIGHEST ANNUAL MEAN					245	1991
LOWEST ANNUAL MEAN					95.4	1964
HIGHEST DAILY MEAN	565	Jan 24	382	Jun 14	903	Mar 17 1982
LOWEST DAILY MEAN	62	Sep 19	74	Sep 2	44	Aug 4 1988
ANNUAL SEVEN-DAY MINIMUM	63	Sep 14	77	Sep 1	51	Sep 7 1964
INSTANTANEOUS PEAK FLOW			405	Jun 14	908	Mar 17 1982
INSTANTANEOUS PEAK STAGE			4.77	Jun 14	9.04	Jun 27 1968
ANNUAL RUNOFF (CFSM)	.76		.69		.92	
ANNUAL RUNOFF (INCHES)	10.29		9.42		12.47	
10 PERCENT EXCEEDS	204		172		260	
50 PERCENT EXCEEDS	106		105		138	
90 PERCENT EXCEEDS	71		88		83	

e Estimated

05515500 KANKAKEE RIVER AT DAVIS, IN

LOCATION.--Lat 41°24'00", long 86°42'04", in SE$^1/_4$NE$^1/_4$ sec.13, T.34 N., R.3 W., Starke County, Hydrologic Unit 07120001, on left bank at downstream side of bridge on U.S. Highway 30 at Davis, 0.5 mi downstream from Mill Creek, 4 mi east of Hanna, and at mile 110.9.

DRAINAGE AREA.--537 mi^2, of which 137 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--July 1905 to July 1906 and October 1924 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 1338: 1953. WSP 2115: Drainage area.

GAGE.--Water-stage recorder and Acoustic Doppler Velocity meter. Datum of gage is 664.68 ft above sea level. July 13, 1905, to July 21, 1906, nonrecording gage at site 50 ft downstream at different datum. July 28, 1925, to May 18, 1929, nonrecording gage on bridge 0.5 mi downstream at different datum. Apr. 19, 1931, to Nov. 3, 1953, nonrecording gage at present site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	277	268	262	305	e296	612	390	478	508	678	389	267
2	264	280	265	317	e295	549	392	514	496	649	380	256
3	268	277	283	336	e294	513	399	504	469	664	386	255
4	314	272	293	343	e292	503	385	485	452	706	374	255
5	322	277	336	323	e290	497	375	469	477	670	360	254
6	315	275	417	312	300	474	370	457	663	758	377	256
7	301	270	398	313	304	459	381	446	642	780	458	255
8	291	273	373	310	300	448	433	447	574	710	451	258
9	289	281	356	340	304	437	447	447	524	658	415	260
10	288	281	353	363	325	425	438	503	492	634	391	271
11	282	283	329	397	324	416	415	510	469	630	373	295
12	273	271	320	389	322	405	403	496	478	596	351	466
13	274	270	316	374	335	410	406	494	599	561	335	512
14	271	278	334	343	322	408	397	473	868	608	324	468
15	273	262	395	332	320	425	390	449	906	596	317	413
16	276	260	444	338	318	456	384	439	844	559	309	352
17	280	266	438	325	307	481	398	435	752	531	339	335
18	274	270	401	324	314	459	403	436	676	515	374	324
19	262	281	383	325	310	447	403	492	632	498	352	334
20	266	285	378	325	316	461	485	526	601	487	338	311
21	264	282	354	289	322	489	802	504	1060	479	326	311
22	263	282	e350	e307	345	493	859	482	1220	463	324	302
23	269	291	e340	e306	499	475	747	478	1090	450	314	322
24	263	302	e330	e305	658	447	678	464	943	430	306	342
25	268	290	e325	e304	715	451	625	437	987	410	290	314
26	268	281	e320	e302	673	438	581	421	1000	401	289	301
27	266	282	e312	e300	688	430	545	414	928	395	302	304
28	266	280	e308	e300	700	421	525	510	846	390	296	302
29	274	273	e306	e299	643	409	501	622	789	386	291	295
30	267	266	e304	e298	---	401	480	573	731	391	286	295
31	270	---	312	e297	---	395	---	525	---	401	275	---
TOTAL	8598	8309	10635	10041	11431	14134	14437	14930	21716	17084	10692	9485
MEAN	277	277	343	324	394	456	481	482	724	551	345	316
MAX	322	302	444	397	715	612	859	622	1220	780	458	512
MIN	262	260	262	289	290	395	370	414	452	386	275	254
CFSM	.52	.52	.64	.60	.73	.85	.90	.90	1.35	1.03	.64	.59
IN.	.60	.58	.74	.70	.79	.98	1.00	1.03	1.50	1.18	.74	.66

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 2000, BY WATER YEAR (WY)

MEAN	409	478	520	549	581	719	741	628	532	428	363	348
MAX	1162	988	1191	1275	990	1376	1218	1067	1076	983	804	718
(WY)	1955	1991	1928	1993	1991	1985	1982	1983	1996	1996	1996	1972
MIN	198	230	236	235	236	325	420	296	248	205	174	179
(WY)	1964	1965	1964	1963	1964	1934	1987	1934	1934	1934	1941	1941

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1926 - 2000	
ANNUAL TOTAL	159595		151492			
ANNUAL MEAN	437		414		524	
HIGHEST ANNUAL MEAN					823	1991
LOWEST ANNUAL MEAN					293	1964
HIGHEST DAILY MEAN	1440	Apr 24	1220	Jun 22	1920	Mar 20 1982
LOWEST DAILY MEAN	214	Sep 12	254	Sep 5	154	Aug 30 1941
ANNUAL SEVEN-DAY MINIMUM	218	Sep 17	256	Sep 2	156	Aug 28 1941
INSTANTANEOUS PEAK FLOW			1310	Jun 22	1920	Mar 20 1982
INSTANTANEOUS PEAK STAGE			11.76	Jun 22	13.79	Jul 19 1996
ANNUAL RUNOFF (CFSM)	.81		.77		.98	
ANNUAL RUNOFF (INCHES)	11.06		10.49		13.26	
10 PERCENT EXCEEDS	724		636		891	
50 PERCENT EXCEEDS	346		374		452	
90 PERCENT EXCEEDS	245		272		279	

e Estimated

05516500 YELLOW RIVER AT PLYMOUTH, IN

LOCATION.--Lat 41°20'25", long 86°18'16", in SE$^1/_4$NW$^1/_4$ sec.13, T.33 N., R.2 E., Marshall County, Hydrologic Unit 07120001, on left bank 50 ft upstream from LaPorte Street footbridge in Plymouth, 1.1 mi downstream from Elmer Seltenright (formerly Baker) Ditch, 8.1 mi upstream from Wolf Creek, and at mile 40.3.

DRAINAGE AREA.--294 mi^2, of which 22 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--July 1948 to current year.

REVISED RECORDS.--WSP 1338: 1950-51. WSP 2115: Drainage area. WDR IN-73-1: l972(M).

GAGE.--Water-stage recorder. Datum of gage is 764.78 ft above sea level (levels by State of Indiana, Department of Natural Resources). Prior to Aug. 27, 1959, nonrecording gage at same site and datum.

REMARKS.--Records fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	41	34	47	e31	287	97	193	191	242	78	44
2	32	46	35	49	e31	231	97	251	170	212	79	42
3	40	51	34	56	e31	196	99	226	147	219	77	41
4	55	53	36	62	e32	177	97	198	134	226	75	44
5	48	42	72	59	e33	161	92	178	226	198	69	42
6	40	41	90	55	e34	146	88	163	783	252	85	42
7	35	40	72	57	e35	138	99	152	689	226	152	43
8	33	40	54	50	e37	133	149	145	356	184	143	43
9	33	41	46	59	e39	128	187	157	258	162	94	44
10	33	41	44	67	44	120	162	211	208	182	77	57
11	31	40	41	82	49	109	140	199	180	223	69	101
12	31	41	39	82	50	104	127	176	165	171	62	300
13	32	43	37	71	54	99	117	171	258	144	58	363
14	33	41	73	62	51	97	114	161	899	132	58	200
15	32	38	144	57	49	99	112	138	1090	120	53	137
16	32	37	159	60	49	115	107	126	879	111	51	131
17	33	37	130	48	45	161	113	125	449	104	71	110
18	34	37	98	45	47	134	110	126	300	99	68	97
19	35	40	81	e42	47	126	109	344	243	96	55	88
20	39	40	78	e40	51	155	499	356	223	91	51	82
21	39	38	60	e38	48	215	1300	235	1000	89	55	78
22	37	38	e56	e36	83	211	1650	192	1490	86	55	73
23	37	40	e54	e35	400	180	1460	194	1620	84	64	70
24	34	42	e52	e34	540	164	822	174	1240	80	78	72
25	35	41	e50	e34	435	154	443	144	872	78	61	71
26	34	36	e49	e33	339	138	334	131	1080	75	53	66
27	35	35	e48	e33	642	132	281	127	895	72	71	62
28	36	34	e47	e33	716	133	243	274	531	76	62	60
29	37	35	e48	e32	387	122	212	520	364	116	56	57
30	40	34	50	e32	---	109	188	312	288	95	50	56
31	41	---	48	e32	---	102	---	227	---	84	45	---
TOTAL	1122	1203	1959	1522	4429	4576	9648	6326	17228	4329	2175	2716
MEAN	36.2	40.1	63.2	49.1	153	148	322	204	574	140	70.2	90.5
MAX	55	53	159	82	716	287	1650	520	1620	252	152	363
MIN	31	34	34	32	31	97	88	125	134	72	45	41
CFSM	.12	.14	.21	.17	.52	.50	1.09	.69	1.95	.47	.24	.31
IN.	.14	.15	.25	.19	.56	.58	1.22	.80	2.18	.55	.28	.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2000, BY WATER YEAR (WY)

MEAN	146	191	270	313	368	527	501	297	261	173	109	92.3
MAX	1583	689	733	1244	1007	1586	1190	1098	850	711	494	536
(WY)	1955	1993	1983	1993	1959	1982	1950	1996	1996	1996	1958	1972
MIN	23.7	20.9	30.4	26.5	35.7	79.5	99.8	65.4	51.2	39.4	31.2	22.4
(WY)	1965	1965	1954	1963	1963	1957	1971	1958	1988	1988	1949	1949

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1949 - 2000	
ANNUAL TOTAL	86078		57233			
ANNUAL MEAN	236		156		270	
HIGHEST ANNUAL MEAN					453	1993
LOWEST ANNUAL MEAN					119	1957
HIGHEST DAILY MEAN	2570	Apr 25	1650	Apr 22	5310	Oct 13 1954
LOWEST DAILY MEAN	31	Oct 11	31	Oct 11	13	Dec 3 1964
ANNUAL SEVEN-DAY MINIMUM	32	Oct 10	32	Jan 29	15	Dec 2 1964
INSTANTANEOUS PEAK FLOW			1690	Apr 22	5390	Oct 12 1954
INSTANTANEOUS PEAK STAGE			11.06	Apr 22	17.13	Oct 12 1954
ANNUAL RUNOFF (CFSM)	.80		.53		.92	
ANNUAL RUNOFF (INCHES)	10.89		7.24		12.48	
10 PERCENT EXCEEDS	576		300		677	
50 PERCENT EXCEEDS	98		78		131	
90 PERCENT EXCEEDS	35		35		39	

e Estimated

05517000 YELLOW RIVER AT KNOX, IN

LOCATION.--Lat 41°18'10", long 86°37'14", in SW$^1/_4$SW$^1/_4$ sec.14, T.33 N., R.2 W., Starke County, Hydrologic Unit 07120001, on right bank 40 ft upstream from bridge on U.S. Highway 35 in Knox, 1.4 mi downstream from Eagle Creek, and at mile 11.6.

DRAINAGE AREA.--435 mi^2, of which 51 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--August 1905 to July 1906, August 1943 to current year.

REVISED RECORDS.--WSP 1278: 1952. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 679.93 ft above sea level (levels by State of Indiana, Department of Natural Resources). August 1905 to July 1906, nonrecording gage at same site at different datum. August 1943 to July 17, 1952, nonrecording gage at same site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	136	118	120	131	e84	564	199	327	355	455	117	76
2	121	124	119	133	e84	451	199	368	306	393	117	72
3	122	131	122	142	e85	383	195	398	275	370	113	65
4	148	129	133	158	e86	339	192	358	248	375	109	62
5	162	136	167	162	e90	312	186	320	269	367	106	62
6	149	126	261	154	e96	289	182	296	487	343	111	61
7	136	122	246	143	e103	273	187	276	836	382	147	61
8	128	122	203	142	e110	261	223	261	777	339	205	62
9	126	123	169	138	e118	251	267	260	507	294	186	61
10	128	122	149	156	125	241	296	277	395	274	138	74
11	121	121	137	175	130	230	270	338	332	301	120	93
12	116	119	132	185	138	215	242	315	296	312	107	174
13	112	120	124	182	143	207	224	322	298	259	92	386
14	111	122	142	164	146	201	212	322	543	237	78	390
15	111	121	221	153	141	203	205	278	920	218	75	248
16	113	121	289	144	137	213	199	251	1070	200	75	182
17	119	123	287	139	135	225	207	236	993	184	92	167
18	117	126	245	e120	138	262	211	239	633	174	119	144
19	117	129	208	e108	142	241	207	290	462	166	104	126
20	117	131	185	e98	135	255	283	548	395	155	90	116
21	119	132	e160	e93	139	300	811	483	638	147	87	109
22	120	130	e144	e91	146	354	1100	372	1070	138	81	105
23	120	130	e138	e90	263	334	1350	320	1290	129	85	102
24	125	130	e130	e89	590	301	1410	313	1480	123	95	100
25	120	133	e124	e88	667	279	1000	279	1420	114	102	98
26	117	134	e122	e87	585	263	648	245	1080	109	90	98
27	115	128	e120	e86	593	247	517	231	1090	104	84	93
28	114	124	e124	e86	789	243	442	245	1020	106	100	86
29	115	121	136	e85	792	241	391	464	725	108	94	84
30	114	120	136	e85	---	225	350	603	550	166	84	80
31	117	---	134	e84	---	208	---	435	---	134	77	---
TOTAL	3806	3768	5127	3891	6930	8611	12405	10270	20760	7176	3280	3637
MEAN	123	126	165	126	239	278	414	331	692	231	106	121
MAX	162	136	289	185	792	564	1410	603	1480	455	205	390
MIN	111	118	119	84	84	201	182	231	248	104	75	61
CFSM	.28	.29	.38	.29	.55	.64	.95	.76	1.59	.53	.24	.28
IN.	.33	.32	.44	.33	.59	.74	1.06	.88	1.78	.61	.28	.31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2000, BY WATER YEAR (WY)

MEAN	253	301	390	453	515	719	722	503	422	287	207	179
MAX	1939	883	1070	1580	1193	2127	1714	1154	1113	955	652	692
(WY)	1955	1973	1967	1993	1959	1982	1950	1996	1975	1996	1958	1972
MIN	77.5	83.3	91.6	71.3	107	194	243	169	146	115	93.6	75.9
(WY)	1965	1965	1964	1963	1963	1957	1958	1958	1988	1971	1964	1964

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1944 - 2000	
ANNUAL TOTAL	135245		89661			
ANNUAL MEAN	371		245		412	
HIGHEST ANNUAL MEAN					661	1950
LOWEST ANNUAL MEAN					180	1964
HIGHEST DAILY MEAN	2860	Apr 26	1480	Jun 24	5600	Oct 15 1954
LOWEST DAILY MEAN	47	Jan 2	61	Sep 6	47	Jan 2 1999
ANNUAL SEVEN-DAY MINIMUM	88	Jan 2	62	Sep 3	50	Jan 21 1963
INSTANTANEOUS PEAK FLOW			1530	Jun 24	5660	Oct 15 1954
INSTANTANEOUS PEAK STAGE			7.83	Jun 24	13.75	Oct 15 1954
ANNUAL RUNOFF (CFSM)	.85		.56		.95	
ANNUAL RUNOFF (INCHES)	11.57		7.67		12.87	
10 PERCENT EXCEEDS	775		470		888	
50 PERCENT EXCEEDS	203		148		268	
90 PERCENT EXCEEDS	101		90		113	

e Estimated

05517500 KANKAKEE RIVER AT DUNNS BRIDGE, IN

LOCATION.--Lat 41°13'10", long 86°58'07", in NE$^1/_4$SE$^1/_4$ sec.15, T.32 N., R.5 W., Porter County, Hydrologic Unit 07120001, on right bank at downstream side of county road 500E bridge at Dunns Bridge, 1.8 mi north of Tefft, 3.6 mi upstream from Davis Ditch, and at mile 90.8.

DRAINAGE AREA.--1,352 mi^2, of which 192 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--July 1948 to current year.

REVISED RECORDS.--WSP 1728: 1954(m). WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 649.65 ft above sea level (levels by State of Indiana, Department of Natural Resources). Prior to July 17, 1956, nonrecording gage, and July 17, 1956 to Oct. 31 1998, water-stage recorder at site 250 ft downstream at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	473	435	475	e725	e662	1830	878	1270	1280	2260	813	393
2	468	433	474	721	e660	1630	877	1320	1170	1980	776	374
3	477	447	482	760	e660	1460	868	1330	1090	1830	761	363
4	534	466	514	776	e662	1350	863	1300	1030	1800	734	385
5	573	457	588	770	e664	1270	839	1220	1080	1750	712	391
6	566	447	752	745	e666	1210	831	1150	1340	1740	717	395
7	540	446	825	732	e670	1160	840	1120	1680	1790	807	398
8	518	446	804	705	667	1120	920	1110	1850	1760	874	398
9	499	441	779	720	650	1070	985	1080	1710	1620	872	401
10	494	441	752	743	672	1020	1010	1200	1450	1540	797	427
11	480	442	710	842	690	996	999	1270	1290	1480	725	473
12	459	446	674	875	689	972	957	1280	1190	1450	673	590
13	459	444	650	892	703	953	915	1280	1190	1370	631	819
14	458	444	678	866	711	947	885	1270	1450	1300	604	900
15	453	442	799	801	692	941	868	1200	1870	1310	581	878
16	455	448	902	776	692	981	860	1130	2140	1260	561	820
17	467	453	955	728	678	1020	879	1090	2220	1160	568	728
18	464	458	933	696	686	1040	884	1070	2110	1080	665	677
19	458	461	902	702	703	1050	887	1100	1800	1030	668	643
20	463	477	879	666	717	1070	994	1240	1550	992	630	621
21	461	479	816	668	698	1100	1550	1410	2090	961	596	630
22	458	476	790	603	719	1160	2110	1300	2810	905	578	617
23	453	479	e778	e686	916	1190	2350	1200	3010	872	580	608
24	455	488	e762	e683	1310	1140	2470	1140	3110	833	566	630
25	456	493	e754	e680	1640	1100	2490	1070	3240	792	556	633
26	458	513	e748	e674	1720	1060	2260	1010	3300	762	532	613
27	445	493	e740	e672	1710	1020	1900	970	3210	735	521	593
28	441	481	e732	e670	1800	990	1620	1010	3090	732	529	577
29	434	482	e726	e668	1880	970	1440	1170	2930	782	522	558
30	429	468	e720	e666	---	943	1330	1410	2610	848	517	519
31	431	---	e722	e664	---	907	---	1400	---	868	486	---
TOTAL	14679	13826	22815	22575	25987	34670	37559	37120	59890	39592	20152	17052
MEAN	474	461	736	728	896	1118	1252	1197	1996	1277	650	568
MAX	573	513	955	892	1880	1830	2490	1410	3300	2260	874	900
MIN	429	433	474	603	650	907	831	970	1030	732	486	363
CFSM	.35	.34	.54	.54	.66	.83	.93	.89	1.48	.94	.48	.42
IN.	.40	.38	.63	.62	.72	.95	1.03	1.02	1.65	1.09	.55	.47

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2000, BY WATER YEAR (WY)

MEAN	931	1140	1367	1489	1577	2070	2209	1760	1467	1106	849	737
MAX	3378	2562	2816	3845	2874	4229	4376	3231	3360	2622	2316	1924
(WY)	1955	1973	1983	1991	1968	1985	1950	1983	1996	1996	1990	1993
MIN	350	398	447	449	391	719	1082	767	657	419	371	360
(WY)	1964	1965	1964	1963	1963	1957	1958	1958	1988	1988	1964	1964

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1949 - 2000	
ANNUAL TOTAL	423382		345917			
ANNUAL MEAN	1160		945		1391	
HIGHEST ANNUAL MEAN					2161	1991
LOWEST ANNUAL MEAN					618	1964
HIGHEST DAILY MEAN	4130	Apr 29	3300	Jun 26	5850	Mar 23 1982
LOWEST DAILY MEAN	313	Sep 12	363	Sep 3	280	Jan 25 1963
ANNUAL SEVEN-DAY MINIMUM	330	Sep 11	386	Sep 1	283	Jan 24 1963
INSTANTANEOUS PEAK FLOW			3310	Jun 25	5870	Mar 23 1982
INSTANTANEOUS PEAK STAGE			10.02	Jun 25	13.38	Mar 23 1982
ANNUAL RUNOFF (CFSM)	.86		.70		1.03	
ANNUAL RUNOFF (INCHES)	11.65		9.52		13.97	
10 PERCENT EXCEEDS	2220		1690		2640	
50 PERCENT EXCEEDS	799		777		1150	
90 PERCENT EXCEEDS	442		458		535	

e Estimated

05517530 KANKAKEE RIVER NEAR KOUTS, IN

LOCATION.--Lat 41°15'14", long 87°02'02", in SW¼NE¼ sec.6, T.32 N., R.5 W., Jasper County, Hydrologic Unit 07120001, on left bank, 20 ft downstream from bridge on State Highway 49, 0.7 mi upstream from Cook Ditch, 4.5 mi south of Kouts, and at mile 86.7.

DRAINAGE AREA.--1,376 mi^2, of which 194 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1974 to current year.

REVISED RECORDS.--WDR IN-77-1: 1975(M).

GAGE.--Water-stage recorder. Datum of gage is 645.00 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	477	383	449	e710	e657	1780	860	1210	1220	2310	787	361
2	445	382	445	e716	e657	1600	837	1260	1140	2020	736	330
3	456	415	451	734	e658	e1440	836	1260	1050	1860	724	347
4	524	455	488	758	e658	e1320	840	1230	977	1820	716	376
5	578	432	588	797	e660	e1250	824	1160	1020	1780	697	357
6	576	408	726	763	e664	e1190	818	1120	1250	1750	725	363
7	553	433	800	726	e668	e1140	828	1070	1570	1780	797	379
8	505	418	822	712	e676	e1100	905	1090	1760	1760	866	384
9	458	411	756	711	669	e1050	975	1060	1660	1630	868	399
10	452	387	738	721	670	e1010	999	1110	1430	1570	807	424
11	493	391	703	809	685	e980	997	1200	1280	1490	720	463
12	477	411	652	867	695	e960	961	1250	1170	1460	657	564
13	459	408	640	877	695	e945	925	1270	1170	1390	587	804
14	417	427	677	864	695	950	896	1250	1400	1300	552	883
15	437	440	789	782	671	e950	860	1180	1810	1290	538	838
16	386	450	876	754	679	e960	825	1120	2060	1250	517	800
17	433	455	922	720	677	e990	849	1060	2140	1160	510	716
18	480	458	909	691	658	1020	861	1050	2070	1080	614	662
19	467	445	883	697	673	1030	866	1090	1810	1020	635	615
20	431	422	e850	671	685	e1050	969	1190	1550	970	607	595
21	441	461	e802	668	682	e1100	1490	1350	2300	931	608	607
22	436	446	e784	e680	692	e1120	2020	1270	2950	885	578	622
23	418	457	e770	e678	865	e1130	2250	1160	3030	848	546	622
24	426	488	e760	e674	1240	1130	2390	1110	3100	805	499	635
25	462	492	e750	e670	1550	1060	2400	1060	3340	762	515	643
26	474	513	e740	e666	1640	1030	2220	988	3410	728	496	627
27	459	492	e736	e664	1640	998	1890	937	3280	688	476	626
28	451	436	e724	e662	1740	964	1590	955	3140	687	533	581
29	424	453	e720	e660	1790	952	1410	1110	2970	746	523	530
30	403	445	e710	e658	---	918	1290	1310	2670	810	508	520
31	387	---	e710	e657	---	889	---	1330	---	859	442	---
TOTAL	14285	13114	22370	22417	25289	34006	36681	35810	59727	39439	19384	16673
MEAN	461	437	722	723	872	1097	1223	1155	1991	1272	625	556
MAX	578	513	922	877	1790	1780	2400	1350	3410	2310	868	883
MIN	386	382	445	657	657	889	818	937	977	687	442	330
CFSM	.33	.32	.52	.53	.63	.80	.89	.84	1.45	.92	.45	.40
IN.	.39	.35	.60	.61	.68	.92	.99	.97	1.61	1.07	.52	.45

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2000, BY WATER YEAR (WY)

MEAN	986	1263	1569	1562	1619	2325	2427	1882	1728	1223	957	827
MAX	2770	2392	2889	3787	2614	4613	4229	3255	3403	2642	2432	2014
(WY)	1991	1991	1991	1991	1991	1985	1985	1983	1996	1996	1990	1993
MIN	461	437	704	634	718	1089	1144	1113	619	411	398	350
(WY)	2000	2000	1979	1977	1978	1996	1987	1992	1988	1988	1988	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1975 - 2000	
ANNUAL TOTAL	416236		339195			
ANNUAL MEAN	1140		927		1530	
HIGHEST ANNUAL MEAN					2160	1991
LOWEST ANNUAL MEAN					927	2000
HIGHEST DAILY MEAN	4160	Apr 29	3410	Jun 26	6410	Mar 24 1982
LOWEST DAILY MEAN	281	Sep 12	330	Sep 2	281	Sep 12 1999
ANNUAL SEVEN-DAY MINIMUM	306	Sep 11	359	Sep 1	306	Sep 11 1999
INSTANTANEOUS PEAK FLOW			3470	Jun 25	6420	Mar 24 1982
INSTANTANEOUS PEAK STAGE			11.30	Jun 25	14.52	Mar 24 1982
ANNUAL RUNOFF (CFSM)	.83		.67		1.11	
ANNUAL RUNOFF (INCHES)	11.25		9.17		15.11	
10 PERCENT EXCEEDS	2230		1630		2900	
50 PERCENT EXCEEDS	800		761		1300	
90 PERCENT EXCEEDS	404		439		600	

e Estimated

05517890 COBB DITCH NEAR KOUTS, IN

LOCATION.--Lat 41°20'19", long 87°04'30", in NW$^1/_4$SE$^1/_4$ sec. 2, T.33 N., R.6 W., Porter County, Hydrologic Unit 07120001, on left bank 15 ft upstream from bridge on County Road 50 West, 1.6 mi upstream from mouth, and 3 mi northwest of Kouts.

DRAINAGE AREA.--30.3 mi^2.

PERIOD OF RECORD.--July 1968 to current year. Prior to October 1971, published as State Ditch near Kouts.

GAGE.--Water-stage recorder. Datum of gage is 652.00 ft above sea level (Indiana Department of Highways bench mark). Prior to Oct. 19, 1978, water-stage recorder at site 1.4 mi downstream at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.9	9.2	9.6	10	e9.6	23	16	20	24	32	14	11
2	10	9.3	9.7	11	e9.5	21	16	20	22	30	14	10
3	11	9.1	10	12	e9.5	20	17	19	21	30	14	11
4	14	9.1	11	12	e9.5	19	16	18	21	29	13	11
5	11	9.2	19	11	e9.2	19	16	17	35	28	13	11
6	9.4	9.1	18	11	e9.0	18	16	17	37	26	16	9.7
7	8.9	9.6	15	11	e9.0	18	17	17	29	24	18	11
8	9.1	9.7	13	11	e8.8	18	21	18	25	23	15	10
9	9.3	9.6	13	11	e8.8	17	23	19	23	23	14	11
10	9.1	9.5	12	12	e9.0	17	21	18	22	24	14	11
11	8.7	9.2	12	12	e9.2	16	20	18	21	23	13	12
12	8.8	9.4	12	12	e9.0	16	18	19	24	22	13	16
13	8.7	9.4	11	11	e9.0	16	18	18	125	21	13	12
14	8.7	9.4	17	e10	e9.0	16	18	18	122	21	12	12
15	8.8	9.3	20	e9.6	e8.9	16	18	18	129	20	11	11
16	9.3	9.4	19	e9.2	e8.8	18	17	18	60	19	11	11
17	8.9	9.3	16	e9.0	e8.8	17	18	18	48	19	16	11
18	8.9	9.5	14	e9.0	e8.8	16	18	19	42	17	15	11
19	8.9	10	13	e9.0	e8.8	18	18	21	38	17	13	11
20	9.5	9.8	13	e11	8.7	20	107	19	40	17	13	11
21	9.1	9.8	e11	e10	8.9	20	163	19	542	17	13	11
22	8.9	10	e11	e10	11	19	60	19	147	16	13	11
23	8.8	11	e10	e11	27	19	39	18	72	16	13	12
24	8.7	11	e9.6	e11	71	18	35	18	69	16	12	11
25	8.8	10	e9.6	e10	50	17	29	17	305	15	12	11
26	8.7	10	e9.7	e9.8	35	17	23	17	100	14	12	11
27	8.7	10	e9.6	e9.8	36	17	20	18	63	15	12	11
28	8.9	9.8	e9.4	e9.8	29	18	20	26	49	15	11	11
29	9.1	9.5	e9.2	e9.8	24	17	17	22	41	17	10	11
30	9.7	9.5	8.8	e9.8	---	16	17	21	35	15	10	11
31	9.6	---	8.8	e9.8	---	16	---	21	---	15	12	---
TOTAL	289.9	288.7	384.0	324.6	472.8	553	872	585	2331	636	405	335.7
MEAN	9.35	9.62	12.4	10.5	16.3	17.8	29.1	18.9	77.7	20.5	13.1	11.2
MAX	14	11	20	12	71	23	163	26	542	32	18	16
MIN	8.7	9.1	8.8	9.0	8.7	16	16	17	21	14	10	9.7
CFSM	.31	.32	.41	.35	.54	.59	.96	.62	2.56	.68	.43	.37
IN.	.36	.35	.47	.40	.58	.68	1.07	.72	2.86	.78	.50	.41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2000, BY WATER YEAR (WY)

MEAN	21.2	30.7	32.6	33.7	38.7	52.2	50.0	41.1	40.0	27.3	21.5	18.5
MAX	67.8	112	88.9	86.8	82.8	142	103	89.4	121	77.7	99.0	60.6
(WY)	1991	1986	1991	1993	1997	1982	1975	1974	1997	1996	1990	1993
MIN	9.35	9.62	12.4	10.5	10.6	17.8	20.8	14.9	14.6	12.0	10.8	10.2
(WY)	2000	2000	2000	2000	1978	2000	1986	1980	1988	1988	1988	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1969 - 2000	
ANNUAL TOTAL	8834.0		7477.7			
ANNUAL MEAN	24.2		20.4		33.9	
HIGHEST ANNUAL MEAN					53.1	1991
LOWEST ANNUAL MEAN					19.3	1977
HIGHEST DAILY MEAN	479	Apr 23	542	Jun 21	955	Nov 28 1990
LOWEST DAILY MEAN	8.7	Oct 11	8.7	Oct 11	8.7	Oct 11 1999
ANNUAL SEVEN-DAY MINIMUM	8.8	Oct 22	8.8	Oct 22	8.8	Oct 22 1999
INSTANTANEOUS PEAK FLOW			700	Jun 21	1160	Nov 28 1990
INSTANTANEOUS PEAK STAGE			14.63	Jun 21	17.95	Mar 29 1985
ANNUAL RUNOFF (CFSM)	.80		.67		1.12	
ANNUAL RUNOFF (INCHES)	10.85		9.18		15.21	
10 PERCENT EXCEEDS	38		28		58	
50 PERCENT EXCEEDS	16		13		22	
90 PERCENT EXCEEDS	9.4		9.1		13	

e Estimated

05518000 KANKAKEE RIVER AT SHELBY, IN

LOCATION.--Lat 41°10'58", long 87°20'25", in SW$^1/_4$NE$^1/_4$ sec.33, T.32 N., R.8 W., Lake County, Hydrologic Unit 07120001, on right bank at upstream side of Highway 55 bridge, 1.0 mi south of Shelby, 7.8 mi upstream from Beaver Lake Ditch, and at mile 68.0.

DRAINAGE AREA.--1,779 mi^2, of which 201 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1922 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 1005: 1928(M). WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 628.13 ft above sea level. Prior to Dec. 19, 1934, nonrecording gage, Dec. 19, 1934, to Oct. 4, 1965, water-stage recorder on left bank 50 ft downstream, Oct. 5, 1965, to Sept. 21, 1966, nonrecording gage on right bank 200 ft downstream, and Sept. 21, 1966 to July 21, 1998, water-stage recorder on right bank 25 ft upstream from Monon railroad bridge and approximately 400 ft downstream, all at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	548	455	517	e920	e820	2170	1130	1670	1670	3410	960	472
2	516	436	518	e940	e815	2110	1100	1660	1550	3030	889	430
3	517	454	530	e980	e810	1970	1080	1650	1440	2750	897	418
4	581	486	561	1000	e810	1810	1080	1590	1340	2550	884	455
5	646	506	669	1020	e815	1670	1070	1520	1380	2430	844	459
6	653	466	899	1020	e820	1580	1060	1470	1580	2320	927	430
7	637	471	979	957	e825	1480	1070	1410	1760	2220	1120	448
8	608	481	1020	931	e830	1420	1170	1380	2000	2170	1160	456
9	580	475	982	921	e835	1360	1250	1400	2050	2070	1120	479
10	539	461	917	949	e840	1300	1280	1410	1910	2010	1040	514
11	548	450	876	979	e845	1260	1270	1470	1710	1950	902	549
12	549	468	817	1050	e860	1240	1240	1550	1580	1820	809	647
13	546	471	790	1070	e865	1220	1190	1690	1600	1730	732	841
14	515	476	842	1060	e870	1200	1170	1680	2080	1600	669	961
15	498	495	997	1020	865	1200	1140	1610	2380	1520	632	970
16	501	503	1110	958	849	1240	1080	1520	2540	1480	577	932
17	487	512	1160	898	870	1290	1080	1470	2580	1390	575	883
18	533	533	1140	874	843	1290	1100	1410	2560	1280	666	810
19	530	531	1110	890	850	1310	1090	1460	2430	1180	711	769
20	516	497	1090	e880	855	1360	1200	1480	2180	1130	696	737
21	507	499	e1070	e875	854	1400	1920	1600	3010	1060	674	727
22	505	520	e1050	e870	907	1420	2300	1650	3980	1020	655	731
23	484	513	e1030	e865	1100	1450	2570	1540	3910	961	638	758
24	502	537	e1010	e860	1550	1440	2730	1440	3920	906	578	748
25	513	560	e990	e855	1930	1440	2790	1380	4170	865	549	753
26	534	566	e970	e850	2050	1350	2750	1320	4450	822	561	740
27	529	579	e960	e845	2080	1330	2550	1270	4390	779	571	722
28	516	542	e940	e840	2110	1260	2240	1290	4200	732	555	723
29	514	527	e930	e835	2140	1250	1980	1380	4000	810	591	664
30	476	525	e910	e830	---	1190	1790	1530	3750	943	567	673
31	461	---	e900	e825	---	1160	---	1680	---	965	531	---
TOTAL	16589	14995	28284	28667	31513	44170	46470	46580	78100	49903	23280	19899
MEAN	535	500	912	925	1087	1425	1549	1503	2603	1610	751	663
MAX	653	579	1160	1070	2140	2170	2790	1690	4450	3410	1160	970
MIN	461	436	517	825	810	1160	1060	1270	1340	732	531	418
CFSM	.30	.28	.51	.52	.61	.80	.87	.84	1.46	.90	.42	.37
IN.	.35	.31	.59	.60	.66	.92	.97	.97	1.63	1.04	.49	.42

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 2000, BY WATER YEAR (WY)

MEAN	1068	1338	1624	1830	1961	2546	2773	2304	1831	1290	980	875
MAX	3529	3413	4502	4867	3658	5570	5365	4409	4347	3228	3058	2843
(WY)	1991	1973	1928	1991	1950	1985	1982	1943	1981	1996	1990	1993
MIN	455	500	540	460	462	848	1226	789	569	441	402	356
(WY)	1954	2000	1964	1940	1963	1934	1925	1934	1934	1988	1988	1941

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1924 - 2000	
ANNUAL TOTAL	524446		428450			
ANNUAL MEAN	1437		1171		1700	
HIGHEST ANNUAL MEAN					2767	1993
LOWEST ANNUAL MEAN					775	1964
HIGHEST DAILY MEAN	5140	Apr 29	4450	Jun 26	7650	Mar 26 1982
LOWEST DAILY MEAN	330	Sep 12	418	Sep 3	260	Jan 13 1954
ANNUAL SEVEN-DAY MINIMUM	352	Sep 11	442	Sep 2	298	Aug 2 1988
INSTANTANEOUS PEAK FLOW			4480	Jun 26	7650	Mar 26 1982
INSTANTANEOUS PEAK STAGE			10.87	Jun 26	12.98	Mar 24 1982
ANNUAL RUNOFF (CFSM)	.81		.66		.96	
ANNUAL RUNOFF (INCHES)	10.97		8.96		12.98	
10 PERCENT EXCEEDS	2950		2080		3350	
50 PERCENT EXCEEDS	997		960		1360	
90 PERCENT EXCEEDS	464		510		630	

e Estimated

05519000 SINGLETON DITCH AT SCHNEIDER, IN

LOCATION.--Lat 41°12'44", long 87°26'44", in SW$^1/_4$NW$^1/_4$ sec.22, T.32 N., R.9 W., Lake County, Hydrologic Unit 07120001, on left bank 15 ft upstream from bridge on Ackerman Avenue, 0.5 mi upstream from Bruce Ditch, 1.5 mi downstream from Cedar Creek, 1.6 mi north of Schneider, and at mile 10.1.

DRAINAGE AREA.--123 mi^2.

PERIOD OF RECORD.--July 1948 to current year.

REVISED RECORDS.--WSP 1915: 1956-59. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 623.67 ft above sea level. Prior to Oct. 1, 1949, nonrecording gage at same site at datum 2.00 ft higher. Oct. 1, 1949, to Aug. 13, 1951, nonrecording gage at same site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	26	27	e26	e30	94	44	87	129	160	44	25
2	24	31	27	e26	e30	81	44	121	120	145	42	23
3	25	31	28	e34	e30	75	44	100	94	136	41	25
4	35	30	28	e35	e30	69	44	88	83	127	39	25
5	30	29	34	e34	e31	65	41	81	97	117	36	24
6	26	29	49	e32	e31	59	40	75	154	109	51	24
7	24	28	40	e31	e31	56	40	71	112	100	124	24
8	24	27	36	e31	e31	53	70	69	94	92	79	24
9	24	27	34	e31	e31	54	90	68	82	88	65	24
10	24	27	33	e31	e31	49	82	74	72	94	57	24
11	23	27	32	e30	e31	47	68	69	66	94	49	24
12	23	26	32	e30	e31	46	64	70	64	84	44	31
13	23	26	31	e30	e30	45	57	74	167	79	41	29
14	23	26	37	e30	e30	43	52	68	431	74	39	29
15	23	26	58	e30	e30	45	49	62	606	68	37	27
16	23	26	59	e30	e29	54	44	59	376	65	33	25
17	23	27	51	e30	e28	61	44	58	235	62	36	25
18	23	27	46	e30	e29	56	46	57	173	56	38	25
19	23	27	43	e30	e30	51	45	66	140	56	33	24
20	23	27	42	e30	e30	64	360	62	124	53	31	24
21	24	27	e39	e29	e29	92	736	59	1420	53	31	25
22	24	27	e38	e29	e35	84	471	56	1060	49	32	24
23	23	27	e36	e29	e100	75	293	57	668	48	32	25
24	23	27	e34	e29	184	69	214	53	455	44	29	26
25	23	28	e33	e29	177	66	169	50	979	42	27	25
26	23	27	e32	e29	137	60	139	48	776	35	25	25
27	23	27	e31	e30	141	58	119	47	474	38	25	25
28	22	27	e30	e30	123	58	105	78	324	36	23	25
29	22	27	e29	e30	103	55	96	81	256	39	24	25
30	22	27	e28	e30	---	49	88	70	192	50	24	26
31	23	---	e27	e30	---	46	---	70	---	45	24	---
TOTAL	743	821	1124	935	1633	1879	3798	2148	10023	2338	1255	756
MEAN	24.0	27.4	36.3	30.2	56.3	60.6	127	69.3	334	75.4	40.5	25.2
MAX	35	31	59	35	184	94	736	121	1420	160	124	31
MIN	22	26	27	26	28	43	40	47	64	35	23	23
CFSM	.19	.22	.29	.25	.46	.49	1.03	.56	2.72	.61	.33	.20
IN.	.22	.25	.34	.28	.49	.57	1.15	.65	3.03	.71	.38	.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2000, BY WATER YEAR (WY)

MEAN	59.3	85.9	113	128	149	208	212	145	128	72.5	49.6	45.7
MAX	295	471	457	475	486	634	477	421	481	321	237	308
(WY)	1994	1986	1991	1993	1959	1982	1950	1974	1997	1996	1990	1993
MIN	7.54	11.8	8.13	17.5	15.6	34.3	48.6	30.6	26.3	10.6	7.09	7.78
(WY)	1964	1957	1964	1977	1964	1957	1963	1958	1988	1988	1964	1964

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1949 - 2000	
ANNUAL TOTAL	38499		27453			
ANNUAL MEAN	105		75.0		116	
HIGHEST ANNUAL MEAN					227	1993
LOWEST ANNUAL MEAN					24.0	1964
HIGHEST DAILY MEAN	1360	Apr 23	1420	Jun 21	2990	Mar 5 1976
LOWEST DAILY MEAN	22	Oct 28	22	Oct 28	3.6	Sep 7 1964
ANNUAL SEVEN-DAY MINIMUM	23	Oct 24	23	Oct 24	3.8	Sep 4 1964
INSTANTANEOUS PEAK FLOW			1900	Jun 21	3550	Mar 5 1976
INSTANTANEOUS PEAK STAGE			11.33	Jun 21	12.54	Nov 28 1990
ANNUAL RUNOFF (CFSM)	.86		.61		.94	
ANNUAL RUNOFF (INCHES)	11.64		8.30		12.82	
10 PERCENT EXCEEDS	227		123		255	
50 PERCENT EXCEEDS	50		37		62	
90 PERCENT EXCEEDS	24		24		19	

e Estimated

05521000 IROQUOIS RIVER AT ROSEBUD, IN

LOCATION.--Lat 41°02'00", long 87°10'49", in NW1/4SW1/4 sec.24, T.30 N., R.7 W., Jasper County, Hydrologic Unit 07120002, on right bank 100 ft downstream from bridge on county road, 0.5 mi north of Rosebud, 0.5 mi downstream from confluence of Swain and Dexter Ditches, 1.5 mi upstream from Davidson Ditch, 2 mi east of Parr, and at mile 93.5.

DRAINAGE AREA.--35.6 mi^2.

PERIOD OF RECORD.--July 1948 to current year.

REVISED RECORDS.--WSP 1338: 1950-53. WSP 1728: 1959-60(M). WSP 1915: 1949-60. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 661.47 ft above sea level (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 1, 1953, nonrecording gage on downstream side of county road bridge at same datum.

REMARKS.--Records good, except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	3.5	2.3	e5.4	e3.7	16	12	22	39	28	19	3.1
2	4.3	3.4	2.4	e6.0	e4.0	15	12	29	35	26	19	2.8
3	5.6	3.2	2.5	6.9	e4.5	14	12	25	28	27	17	2.8
4	7.4	3.3	2.9	6.6	e6.0	13	11	23	25	27	13	2.8
5	5.0	3.4	10	5.4	e5.0	12	11	21	25	25	11	2.6
6	4.3	3.1	10	9.7	e4.5	12	10	20	23	22	11	2.6
7	4.0	3.1	7.3	7.0	e4.6	11	13	20	22	20	11	2.6
8	4.3	3.1	6.1	9.7	e5.4	12	19	19	21	19	11	2.5
9	4.4	3.1	5.9	6.7	e7.8	12	16	25	19	19	10	2.5
10	4.1	3.8	8.8	8.6	e8.6	11	15	44	18	29	9.2	3.4
11	3.9	3.5	10	7.1	e9.0	11	14	34	18	35	8.5	3.7
12	3.6	3.2	7.1	6.1	e10	9.9	12	30	17	24	7.9	6.0
13	3.5	3.1	5.1	6.1	e6.0	10	12	28	21	19	7.5	4.5
14	3.7	3.1	11	7.5	e5.6	9.8	12	25	31	19	6.0	4.2
15	3.9	3.0	11	9.1	e5.4	11	12	23	31	17	5.9	3.6
16	7.3	2.9	11	5.9	e5.8	13	11	23	27	16	5.5	3.1
17	4.4	3.0	9.4	e5.6	e6.6	11	13	21	21	15	7.5	2.8
18	3.6	2.7	8.5	e5.1	7.9	10	11	21	18	14	7.4	2.6
19	3.3	2.9	10	e5.0	8.8	12	12	22	17	16	6.0	2.5
20	3.3	3.0	7.7	e5.2	8.9	23	47	22	20	15	5.5	2.8
21	3.3	2.8	e7.0	e4.7	14	21	73	20	114	13	5.3	2.9
22	3.1	2.6	e6.2	e4.4	27	18	46	20	74	12	5.1	2.7
23	3.3	2.8	e5.8	e4.3	27	16	35	19	46	12	5.1	3.2
24	3.2	3.5	e5.4	e4.2	23	16	29	18	61	11	4.9	3.5
25	3.1	2.8	e5.1	e4.1	19	15	25	17	137	11	4.4	3.9
26	3.0	2.7	e4.9	e4.0	18	14	22	17	80	10	4.4	3.4
27	3.4	2.4	e4.7	e3.9	22	14	21	17	53	9.9	4.3	2.8
28	3.1	2.3	e4.6	e3.8	19	15	20	27	41	9.6	4.0	3.0
29	3.0	2.4	e4.7	e3.7	17	13	19	34	35	13	4.0	5.8
30	3.3	2.3	e4.9	e3.6	---	12	18	30	31	37	3.6	3.8
31	3.3	---	e5.0	e3.9	---	12	---	29	---	28	3.4	---
TOTAL	123.2	90.0	207.3	179.3	314.1	414.7	595	745	1148	598.5	247.4	98.5
MEAN	3.97	3.00	6.69	5.78	10.8	13.4	19.8	24.0	38.3	19.3	7.98	3.28
MAX	7.4	3.8	11	9.7	27	23	73	44	137	37	19	6.0
MIN	3.0	2.3	2.3	3.6	3.7	9.8	10	17	17	9.6	3.4	2.5
CFSM	.11	.08	.19	.16	.30	.38	.56	.68	1.07	.54	.22	.09
IN.	.13	.09	.22	.19	.33	.43	.62	.78	1.20	.63	.26	.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2000, BY WATER YEAR (WY)

MEAN	15.1	19.2	27.8	30.4	36.9	49.9	51.5	40.0	33.9	18.4	10.4	12.0
MAX	106	68.5	96.8	113	91.1	149	141	111	111	63.2	52.1	88.9
(WY)	1994	1993	1991	1950	1959	1982	1950	1974	1981	1996	1972	1993
MIN	1.19	1.80	2.43	3.52	3.13	7.69	17.2	10.2	5.47	3.08	1.97	1.53
(WY)	1965	1965	1964	1963	1964	1957	1986	1958	1988	1988	1964	1964

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1949 - 2000	
ANNUAL TOTAL	8431.0		4761.0			
ANNUAL MEAN	23.1		13.0		28.7	
HIGHEST ANNUAL MEAN					61.7	1993
LOWEST ANNUAL MEAN					6.38	1964
HIGHEST DAILY MEAN	240	Jan 23	137	Jun 25	621	Dec 30 1990
LOWEST DAILY MEAN	2.3	Nov 28	2.3	Nov 28	.50	Oct 11 1964
ANNUAL SEVEN-DAY MINIMUM	2.4	Nov 27	2.4	Nov 27	.77	Oct 11 1964
INSTANTANEOUS PEAK FLOW			162	Jun 25	656	Dec 30 1990
INSTANTANEOUS PEAK STAGE			3.11	Jun 25	8.86	Feb 10 1959
ANNUAL RUNOFF (CFSM)	.65		.37		.81	
ANNUAL RUNOFF (INCHES)	8.81		4.97		10.96	
10 PERCENT EXCEEDS	54		27		63	
50 PERCENT EXCEEDS	12		9.1		17	
90 PERCENT EXCEEDS	3.2		3.0		4.3	

e Estimated

05522500 IROQUOIS RIVER AT RENSSELAER, IN

LOCATION.--Lat 40°56'00", long 87°07'44", in NW1/4SE1/4 sec.29, T.29 N., R.6 W., Jasper County, Hydrologic Unit 07120002, on right bank 20 ft downstream from bridge on State Highway 114, 0.8 mi east of Rensselaer, 1.5 mi downstream from Ryan Ditch, 5.5 mi upstream from Slough Creek, and at mile 84.9.

DRAINAGE AREA.--203 mi^2.

PERIOD OF RECORD.--July 1948 to current year.

REVISED RECORDS.--WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 642.29 ft above sea level (levels by State of Indiana, Department of Natural Resources). Prior to July 8, 1949, nonrecording gage at same site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Streamflow affected by irrigation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	13	14	e33	e23	149	63	102	209	111	47	13
2	14	13	13	e38	e25	128	63	162	205	97	48	13
3	16	13	14	44	e28	110	63	152	150	119	57	12
4	21	13	14	45	e32	97	64	124	123	135	38	13
5	21	14	30	38	e30	91	64	106	178	109	32	13
6	17	13	56	40	e28	83	59	95	253	102	33	13
7	15	12	47	37	e28	77	63	87	194	87	48	13
8	13	12	39	38	e29	75	113	85	147	76	48	14
9	16	13	37	42	e29	75	108	125	117	70	31	15
10	16	13	37	42	e30	70	93	367	99	97	24	18
11	14	13	37	47	e37	65	90	283	88	114	20	20
12	13	13	33	45	e43	63	76	214	85	90	18	30
13	13	12	32	42	e45	60	69	180	91	72	17	46
14	13	12	36	34	e48	61	72	167	185	72	16	30
15	14	13	48	36	e43	71	67	134	323	70	16	23
16	15	13	52	46	e46	73	62	120	233	60	15	20
17	18	14	50	32	e44	72	64	113	151	52	18	17
18	15	15	46	e32	e52	62	62	111	116	48	21	16
19	14	17	43	e31	70	62	61	119	99	53	18	16
20	13	19	42	e32	73	107	171	107	97	51	17	17
21	14	18	32	e30	82	145	505	100	460	47	17	18
22	14	14	37	e27	157	125	481	94	557	43	16	17
23	14	13	34	e27	243	114	354	93	438	39	16	18
24	13	15	33	e26	210	105	244	83	302	36	17	24
25	12	15	e31	e26	172	95	183	73	350	32	16	20
26	12	14	e31	e25	141	87	153	68	375	32	14	19
27	12	14	e30	e25	248	81	130	75	299	31	13	17
28	12	13	e29	e24	241	83	116	178	204	30	13	16
29	16	13	e30	e24	173	81	109	259	161	36	14	17
30	14	13	e31	e23	---	67	99	186	132	86	15	17
31	13	---	e32	e25	---	63	---	162	---	68	13	---
TOTAL	454	412	1070	1056	2450	2697	3921	4324	6421	2165	746	555
MEAN	14.6	13.7	34.5	34.1	84.5	87.0	131	139	214	69.8	24.1	18.5
MAX	21	19	56	47	248	149	505	367	557	135	57	46
MIN	12	12	13	23	23	60	59	68	85	30	13	12
CFSM	.07	.07	.17	.17	.42	.43	.64	.69	1.05	.34	.12	.09
IN.	.08	.08	.20	.19	.45	.49	.72	.79	1.18	.40	.14	.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2000, BY WATER YEAR (WY)

MEAN	86.8	121	179	208	247	334	343	246	212	106	53.6	65.7
MAX	921	561	559	774	660	935	886	766	863	613	238	641
(WY)	1994	1993	1991	1950	1997	1982	1950	1974	1958	1996	1990	1993
MIN	5.77	7.75	7.04	14.5	13.9	40.8	87.8	47.6	22.9	12.5	4.61	5.26
(WY)	1965	1965	1964	1963	1964	1957	1986	1958	1988	1964	1964	1964

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1949 - 2000	
ANNUAL TOTAL	57127		26271			
ANNUAL MEAN	157		71.8		183	
HIGHEST ANNUAL MEAN					415	1993
LOWEST ANNUAL MEAN					29.7	1964
HIGHEST DAILY MEAN	1650	Jan 24	557	Jun 22	2500	Jun 11 1958
LOWEST DAILY MEAN	10	Sep 23	12	Oct 25	2.2	Sep 9 1964
ANNUAL SEVEN-DAY MINIMUM	11	Sep 21	13	Nov 7	2.8	Sep 9 1964
INSTANTANEOUS PEAK FLOW			572	Jun 22	2550	Jun 10 1958
INSTANTANEOUS PEAK STAGE			7.85	Jun 22	16.54	Jun 10 1958
ANNUAL RUNOFF (CFSM)	.77		.35		.90	
ANNUAL RUNOFF (INCHES)	10.47		4.81		12.25	
10 PERCENT EXCEEDS	432		164		457	
50 PERCENT EXCEEDS	46		42		92	
90 PERCENT EXCEEDS	13		13		17	

e Estimated

05524500 IROQUOIS RIVER NEAR FORESMAN, IN

LOCATION.--Lat 40°52'14", long 87°18'24", in NE$^1/_4$SE$^1/_4$ sec.15, T.28 N., R.8 W., Newton County, Hydrologic Unit 07120002, on right bank at downstream side of bridge on State Highway 55, 0.2 mi north of intersection of State Highways 16 and 55, 0.5 mi downstream from Mosquito Creek, 0.6 mi west of Foresman, 3 mi east of Brook, and at mile 72.7.

DRAINAGE AREA.--449 mi^2.

PERIOD OF RECORD.--December 1948 to current year.

REVISED RECORDS.--WSP 1338: 1953. WSP 1438: 1955. WSP 1508: 1956. WSP 2115: Drainage area.

GAGE.--Water-stage recorder and Acoustic Doppler Velocity meter. Datum of gage is 624.00 ft above sea level. Prior to Sept. 7, 1955 nonrecording gage 2.5 mi upstream at datum 3.54 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	25	e20	46	e32	320	136	236	472	264	138	23
2	30	25	e25	73	e36	273	140	358	479	230	107	25
3	28	22	27	89	e45	230	142	369	375	320	135	23
4	44	e22	30	81	e57	208	139	321	313	876	101	23
5	49	e25	49	66	e55	194	130	285	316	933	78	22
6	40	27	86	e53	e45	181	127	255	393	792	77	22
7	36	25	88	e56	e46	167	133	238	352	567	90	22
8	30	e25	68	e50	e48	161	235	229	295	362	113	20
9	26	25	59	72	e50	158	243	253	255	278	88	20
10	33	e26	58	75	e66	154	208	682	221	820	76	28
11	31	26	53	75	e85	134	193	639	200	1360	60	39
12	26	26	47	70	e87	129	176	493	193	1240	52	59
13	e27	25	46	63	100	122	157	415	193	958	48	73
14	24	e28	67	51	88	122	159	352	321	623	46	68
15	25	25	88	e47	77	132	158	304	713	395	41	50
16	24	e25	99	69	90	140	150	274	631	277	39	49
17	33	e22	93	e32	83	139	149	269	436	203	42	39
18	29	22	73	e49	103	121	155	254	311	166	51	33
19	27	26	70	e44	169	123	147	292	259	165	47	30
20	26	26	76	45	222	200	315	273	226	163	42	29
21	23	29	e34	44	201	322	895	249	768	143	41	35
22	26	35	55	e41	313	277	905	235	1020	126	39	32
23	26	29	52	e39	418	240	756	231	922	112	36	33
24	e24	33	53	e39	389	228	554	216	716	103	35	43
25	e21	28	45	e39	328	215	428	190	804	90	36	40
26	23	28	35	e40	281	193	355	170	760	82	33	38
27	e23	27	39	e40	429	183	308	186	676	74	26	34
28	25	e24	35	e36	514	189	285	333	514	68	26	31
29	22	e22	44	e33	380	177	257	532	392	72	25	30
30	31	e22	58	e30	---	151	234	436	317	223	25	30
31	27	---	58	e36	---	140	---	378	---	214	24	---
TOTAL	895	775	1730	1623	4837	5723	8369	9947	13843	12299	1817	1043
MEAN	28.9	25.8	55.8	52.4	167	185	279	321	461	397	58.6	34.8
MAX	49	35	99	89	514	322	905	682	1020	1360	138	73
MIN	21	22	20	30	32	121	127	170	193	68	24	20
CFSM	.06	.06	.12	.12	.37	.41	.62	.71	1.03	.88	.13	.08
IN.	.07	.06	.14	.13	.40	.47	.69	.82	1.15	1.02	.15	.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2000, BY WATER YEAR (WY)

MEAN	176	254	396	442	553	744	762	561	488	263	104	138
MAX	1792	1218	1274	1736	1490	2266	1672	1360	2314	1099	435	1387
(WY)	1994	1993	1968	1993	1968	1982	1950	1974	1958	1993	1990	1993
MIN	9.70	16.1	15.3	27.0	31.4	81.7	199	108	39.8	17.7	12.2	11.1
(WY)	1957	1965	1964	1963	1964	1957	1986	1958	1988	1988	1988	1964

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1950 - 2000	
ANNUAL TOTAL	111872		62901			
ANNUAL MEAN	306		172		406	
HIGHEST ANNUAL MEAN					891	1993
LOWEST ANNUAL MEAN					77.6	1964
HIGHEST DAILY MEAN	3300	Jan 25	1360	Jul 11	5930	Jun 14 1958
LOWEST DAILY MEAN	16	Sep 27	e20	Dec 1	6.3	Sep 10 1964
ANNUAL SEVEN-DAY MINIMUM	17	Sep 22	22	Sep 3	8.0	Sep 5 1964
INSTANTANEOUS PEAK FLOW			1430	Jul 11	5930	Jun 14 1958
INSTANTANEOUS PEAK STAGE			16.03	Jul 11	24.42	Jun 14 1958
ANNUAL RUNOFF (CFSM)	.68		.38		.90	
ANNUAL RUNOFF (INCHES)	9.27		5.21		12.27	
10 PERCENT EXCEEDS	909		401		1080	
50 PERCENT EXCEEDS	82		78		195	
90 PERCENT EXCEEDS	24		25		28	

e Estimated

05536179 HART DITCH AT DYER, IN

LOCATION.--Lat 41°30'28", long 87°30'36",in NE$^1/_4$NE$^1/_4$ sec.12, T.35 N., R.10 W., Lake County, Hydrologic Unit 07120003, on right bank, 50 ft upstream from 213th Street in Dyer, and 0.8 mi upstream from Dyer Ditch.

DRAINAGE AREA.--37.6 mi^2.

PERIOD OF RECORD.--October 1989 to current year.

GAGE.--Water-stage recorder. Datum of gage is 607.38 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Low-flow affected by sewage effluent.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	e3.5	3.5	4.3	e3.6	9.4	6.0	14	195	36	11	e4.3
2	11	e3.7	3.5	4.6	e3.6	8.0	6.1	16	75	29	9.5	e4.1
3	16	3.4	3.9	4.6	e3.7	7.0	6.1	14	41	29	8.8	e4.0
4	9.0	3.2	4.8	4.6	e3.8	6.5	6.0	12	29	24	9.2	e3.8
5	5.8	3.3	25	4.3	e3.7	6.3	5.7	11	115	20	9.7	e3.7
6	3.7	3.3	18	4.4	e3.7	6.1	5.7	10	105	18	26	e3.5
7	2.8	3.2	9.2	4.2	e3.9	5.3	8.4	9.6	44	15	68	e3.4
8	2.8	3.2	6.4	4.2	4.1	5.5	13	9.2	29	13	22	e3.4
9	3.0	3.1	5.6	5.1	4.3	5.5	15	14	21	12	13	e3.5
10	3.1	3.3	5.2	6.2	4.6	5.4	12	15	17	23	9.2	e5.4
11	e3.0	3.2	4.9	7.0	5.2	5.3	10	14	14	41	7.5	e19
12	e2.8	3.3	4.7	6.6	5.3	5.1	9.3	20	90	22	6.5	e43
13	e3.0	3.3	4.5	6.0	4.7	4.9	8.3	16	252	16	5.8	e20
14	e2.8	3.2	5.5	4.7	3.9	5.1	7.6	12	293	15	5.7	e12
15	e3.0	3.2	6.4	5.1	3.8	5.7	7.4	11	213	12	5.7	e8.5
16	e2.9	3.0	7.4	4.7	4.0	5.9	8.0	e10	92	11	5.6	e6.6
17	e3.0	3.1	7.2	4.3	3.9	6.2	12	e9.4	58	11	11	e5.6
18	e3.3	3.0	6.1	4.3	4.1	6.2	14	12	42	10	11	e4.9
19	e3.0	3.2	5.3	4.1	4.1	6.8	16	22	32	9.4	7.4	e4.4
20	e2.7	3.3	4.9	4.0	4.4	10	65	20	35	8.6	6.0	e7.0
21	e2.5	3.4	4.2	3.8	5.2	15	237	15	243	8.1	5.6	e5.7
22	e2.7	3.3	e3.7	3.7	9.2	12	134	12	94	7.8	5.4	e5.0
23	e2.5	5.4	e3.8	3.8	24	9.7	66	11	48	7.6	6.5	e6.0
24	e2.7	5.0	e3.6	3.8	29	7.7	48	9.7	85	7.5	e6.2	e7.3
25	e2.8	4.7	e3.9	3.6	27	7.2	36	8.5	809	6.9	e5.6	e5.9
26	e2.8	4.3	e3.8	e3.6	18	6.7	26	7.8	300	6.7	e5.4	e5.2
27	e2.8	4.1	e3.7	e3.6	18	6.7	21	7.7	123	6.7	e4.8	e4.8
28	e2.5	3.8	e3.9	e3.5	15	6.8	17	15	77	7.2	e4.7	e5.8
29	e2.8	3.8	e4.2	e3.6	11	6.4	15	18	56	9.9	e4.3	e5.0
30	e3.0	3.6	4.3	e3.6	---	6.2	13	17	44	19	e4.6	e4.3
31	e3.2	---	4.5	e3.8	---	6.3	---	34	---	13	e4.3	---
TOTAL	128.0	106.4	185.6	137.7	238.8	216.9	854.6	426.9	3671	475.4	316.0	225.1
MEAN	4.13	3.55	5.99	4.44	8.23	7.00	28.5	13.8	122	15.3	10.2	7.50
MAX	16	5.4	25	7.0	29	15	237	34	809	41	68	43
MIN	2.5	3.0	3.5	3.5	3.6	4.9	5.7	7.7	14	6.7	4.3	3.4
CFSM	.11	.09	.16	.12	.22	.19	.76	.37	3.25	.41	.27	.20
IN.	.13	.11	.18	.14	.24	.21	.85	.42	3.63	.47	.31	.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2000, BY WATER YEAR (WY)

MEAN	23.3	48.8	39.0	54.6	54.0	70.9	61.3	55.5	62.8	22.6	22.0	16.4
MAX	113	195	106	136	183	169	138	140	182	92.9	74.1	106
(WY)	1994	1991	1991	1993	1997	1991	1999	1996	1993	1996	1998	1993
MIN	2.77	3.55	4.92	4.44	8.23	7.00	19.3	7.48	4.21	4.46	4.65	2.41
(WY)	1996	2000	1990	2000	2000	2000	1997	1992	1992	1991	1992	1994

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1990 - 2000	
ANNUAL TOTAL	12453.5		6982.4			
ANNUAL MEAN	34.1		19.1		44.2	
HIGHEST ANNUAL MEAN					76.6	1993
LOWEST ANNUAL MEAN					19.1	2000
HIGHEST DAILY MEAN	907	Jan 24	809	Jun 25	2580	Nov 28 1990
LOWEST DAILY MEAN	2.5	Oct 21	e2.5	Oct 21	.61	Oct 23 1995
ANNUAL SEVEN-DAY MINIMUM	2.7	Oct 20	e2.7	Oct 20	.95	Sep 17 1994
INSTANTANEOUS PEAK FLOW			950	Jun 25	3010	Nov 28 1990
INSTANTANEOUS PEAK STAGE			8.50	Jun 25	15.33	Nov 28 1990
ANNUAL RUNOFF (CFSM)	.91		.51		1.17	
ANNUAL RUNOFF (INCHES)	12.32		6.91		15.95	
10 PERCENT EXCEEDS	75		30		107	
50 PERCENT EXCEEDS	7.6		6.1		13	
90 PERCENT EXCEEDS	3.2		3.3		3.9	

e Estimated

05536190 HART DITCH AT MUNSTER, IN

LOCATION.--Lat 41°33'40", long 87°28'50", in SE$^1/_4$NW$^1/_4$ sec.20, T.36 N., R.9 W., Lake County, Hydrologic Unit 07120003, on left bank, 0.2 mi downstream from Ridge Road, and 0.4 mi upstream from mouth.

DRAINAGE AREA.--70.7 mi^2.

PERIOD OF RECORD.--September 1942 to current year.

REVISED RECORDS.--WDR IN-72-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 591.27 ft above sea level (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records fair except for daily discharges above 100 ft^3/s due to possible backwater from Little Calumet River and estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	e15	10	16	e12	38	20	53	e270	81	40	16
2	14	e18	10	17	e13	33	20	51	e125	68	32	15
3	92	e16	16	18	e12	31	e19	43	89	e110	33	15
4	48	e15	29	18	e12	29	e18	37	e76	69	27	14
5	20	e14	e263	15	e14	27	e17	32	e250	56	40	14
6	15	e13	78	15	e14	27	e17	30	e180	48	e125	13
7	13	12	35	14	e15	24	e29	29	e103	41	e203	13
8	14	11	25	14	17	24	e96	29	71	35	71	13
9	13	12	22	28	20	e22	e60	e110	53	32	44	13
10	13	13	21	30	23	e22	e40	e70	43	e100	33	27
11	12	14	18	25	25	e20	e36	e56	36	83	28	e105
12	11	12	17	22	22	e20	e32	e48	e170	50	24	e160
13	12	12	16	23	21	e20	28	e42	e350	38	23	53
14	11	12	32	19	20	19	26	e32	e420	36	20	44
15	12	12	33	20	19	e22	e25	28	e310	31	21	29
16	11	12	33	19	21	e25	35	27	e170	27	24	23
17	12	12	26	18	20	e22	e70	25	e103	26	e100	20
18	13	12	23	17	22	e20	e55	45	87	23	45	18
19	12	14	21	e15	22	e33	e64	63	e58	22	30	16
20	11	13	19	e14	23	e52	e180	47	e130	20	24	36
21	10	15	16	e13	31	41	e580	36	e540	19	21	24
22	11	15	e14	e12	70	e34	348	41	e240	18	20	21
23	10	41	e14	e11	87	e29	165	30	e135	18	98	26
24	11	24	e13	e11	e111	27	115	26	e560	18	26	34
25	11	14	e14	e10	90	25	86	22	e1700	16	21	23
26	11	12	e14	e11	76	23	67	20	e590	16	20	19
27	11	12	e14	e11	74	24	55	24	e370	15	18	17
28	e10	12	e14	e12	58	32	47	e110	e230	38	18	20
29	e11	13	e15	e13	45	e24	41	61	e150	e206	16	18
30	e12	11	16	e13	---	e22	37	55	e100	e112	17	14
31	e13	---	16	e11	---	e21	---	e160	---	57	16	---
TOTAL	492	433	907	505	1009	832	2428	1482	7709	1529	1278	873
MEAN	15.9	14.4	29.3	16.3	34.8	26.8	80.9	47.8	257	49.3	41.2	29.1
MAX	92	41	263	30	111	52	580	160	1700	206	203	160
MIN	10	11	10	10	12	19	17	20	36	15	16	13
CFSM	.22	.20	.41	.23	.49	.38	1.14	.68	3.63	.70	.58	.41
IN.	.26	.23	.48	.27	.53	.44	1.28	.78	4.06	.80	.67	.46

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2000, BY WATER YEAR (WY)

MEAN	31.5	51.1	65.0	69.3	85.8	137	134	102	75.9	37.3	30.5	28.2
MAX	282	287	279	335	479	429	430	373	423	335	156	219
(WY)	1955	1986	1983	1999	1997	1979	1999	1996	1993	1996	1998	1993
MIN	3.95	3.54	3.07	3.77	6.32	19.1	19.2	11.9	8.78	6.11	4.73	3.91
(WY)	1965	1972	1964	1977	1963	1957	1946	1958	1965	1965	1964	1956

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1943 - 2000	
ANNUAL TOTAL	37413.5		19477			
ANNUAL MEAN	103		53.2		70.5	
HIGHEST ANNUAL MEAN					160	1993
LOWEST ANNUAL MEAN					19.2	1964
HIGHEST DAILY MEAN	2320	Jan 24	e1700	Jun 25	2600	Nov 28 1990
LOWEST DAILY MEAN	8.3	Sep 25	10	Oct 21	1.6	Dec 24 1963
ANNUAL SEVEN-DAY MINIMUM	9.4	Sep 21	11	Oct 20	1.7	Sep 3 1964
INSTANTANEOUS PEAK FLOW			unknown	Jun 25	3010	Nov 28 1990
INSTANTANEOUS PEAK STAGE			7.23	Jun 25	8.72	Nov 28 1990
ANNUAL RUNOFF (CFSM)	1.45		.75		1.00	
ANNUAL RUNOFF (INCHES)	19.69		10.25		13.54	
10 PERCENT EXCEEDS	152		104		151	
50 PERCENT EXCEEDS	29		23		24	
90 PERCENT EXCEEDS	11		12		5.8	

e Estimated

05536195 LITTLE CALUMET RIVER AT MUNSTER, IN

LOCATION.--Lat 41°34'38", long 87°31'17", in SE$^1/_4$NW$^1/_4$ sec.13, T.36 N., R.10 W., Lake County, Hydrologic Unit 07120003, on left bank 200 ft upstream from Hohman Avenue bridge at north city limits of Munster, 0.4 mi upstream from Indiana-Illinois State line, and 4.6 mi upstream from Thorn Creek.

DRAINAGE AREA.--90.0 mi^2. During times of floods on Deep River, flow may enter basin from eastern portion of Little Calumet River Basin; or, during times of floods on Hart Ditch, flow may leave the basin and enter eastern portion of the Little Calumet River Basin.

PERIOD OF RECORD.--June 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 580.72 ft above sea level.

REMARKS.--Records poor. Flow from eastern portion of Little Calumet River Basin is diverted to Lake Michigan by Burns Ditch. Periods of high flow frequently are in backwater from downstream storage.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	6.3	3.7	e10	e6.4	26	16	27	170	66	27	11
2	6.5	13	3.6	11	e6.4	22	16	30	107	51	21	11
3	24	5.8	3.7	11	e6.4	21	16	23	67	74	20	11
4	44	4.5	18	11	e6.6	19	15	20	50	48	17	11
5	12	4.3	169	9.9	e6.5	18	15	19	152	39	20	10
6	7.9	4.4	62	9.2	e6.6	17	15	16	142	32	49	9.6
7	6.8	4.9	30	8.3	e7.2	16	34	15	82	27	86	9.0
8	7.2	4.8	20	8.1	e11	15	49	16	57	23	46	8.5
9	6.8	4.8	16	13	e16	15	34	56	42	21	32	8.3
10	6.2	4.1	14	17	19	14	28	62	32	60	24	15
11	5.8	3.5	11	14	16	14	28	34	25	45	20	71
12	5.3	3.9	11	12	12	14	24	30	94	31	16	163
13	5.3	3.4	10	11	12	14	21	25	213	24	15	47
14	5.4	3.4	21	10	11	13	19	19	250	22	13	36
15	5.3	3.5	26	9.3	13	15	18	16	208	19	13	26
16	5.2	3.7	24	8.8	17	18	20	15	125	17	15	20
17	5.0	3.2	19	e8.4	17	15	82	14	87	16	69	16
18	5.2	3.1	17	e8.1	18	14	39	19	65	14	34	14
19	5.4	3.1	15	e7.9	19	20	51	41	50	13	25	12
20	4.5	3.5	14	e7.6	20	29	129	29	74	12	21	20
21	4.4	3.5	e12	e7.3	23	26	256	22	375	11	18	21
22	4.5	3.4	e11	e7.0	46	24	187	29	279	11	15	18
23	3.9	10	e10	e6.8	57	21	109	19	118	11	59	22
24	3.9	27	e9.2	e6.5	75	19	84	16	150	10	23	25
25	3.8	8.0	e8.6	e6.4	56	18	65	13	612	9.7	19	21
26	3.7	5.8	e8.4	e6.3	48	17	50	13	498	8.8	16	17
27	3.7	4.7	e8.2	e6.3	49	18	40	13	250	8.7	14	16
28	3.9	4.1	e8.0	e6.2	38	22	32	67	158	26	13	16
29	4.1	3.9	e8.1	e6.2	31	18	26	43	118	71	12	15
30	4.3	3.6	e8.6	e6.4	---	17	22	38	88	89	12	14
31	5.3	---	e9.0	e6.6	---	16	---	80	---	38	12	---
TOTAL	226.3	165.2	609.1	277.6	670.1	565	1540	879	4738	948.2	796	714.4
MEAN	7.30	5.51	19.6	8.95	23.1	18.2	51.3	28.4	158	30.6	25.7	23.8
MAX	44	27	169	17	75	29	256	80	612	89	86	163
MIN	3.7	3.1	3.6	6.2	6.4	13	15	13	25	8.7	12	8.3
CFSM	.08	.06	.22	.10	.26	.20	.57	.32	1.75	.34	.29	.26
IN.	.09	.07	.25	.11	.28	.23	.64	.36	1.96	.39	.33	.30

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2000, BY WATER YEAR (WY)

MEAN	34.6	58.9	74.6	64.9	83.1	129	130	94.9	73.7	40.4	37.5	39.9
MAX	151	212	301	199	252	386	268	266	222	185	141	217
(WY)	1994	1973	1983	1993	1959	1979	1973	1959	1993	1996	1990	1965
MIN	6.47	5.29	7.12	7.32	8.49	18.2	21.3	18.1	11.2	9.56	7.28	5.54
(WY)	1969	1972	1961	1961	1963	2000	1963	1992	1965	1965	1964	1966

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1959 - 2000	
ANNUAL TOTAL	16553.3		12128.9			
ANNUAL MEAN	45.4		33.1		71.6	
HIGHEST ANNUAL MEAN					121	1973
LOWEST ANNUAL MEAN					23.5	1964
HIGHEST DAILY MEAN	693	Jan 24	612	Jun 25	1160	Apr 28 1959
LOWEST DAILY MEAN	3.1	Nov 18	3.1	Nov 18	1.9	Aug 16 1964
ANNUAL SEVEN-DAY MINIMUM	3.3	Nov 13	3.3	Nov 13	2.2	Sep 2 1964
INSTANTANEOUS PEAK FLOW			664	Jun 25	1510	Apr 28 1959
INSTANTANEOUS PEAK STAGE			13.23	Jun 25	17.03	Nov 28 1990
ANNUAL RUNOFF (CFSM)	.50		.37		.80	
ANNUAL RUNOFF (INCHES)	6.84		5.01		10.82	
10 PERCENT EXCEEDS	94		71		182	
50 PERCENT EXCEEDS	21		16		32	
90 PERCENT EXCEEDS	4.5		4.9		8.7	

e Estimated

05536357 GRAND CALUMET RIVER AT HOHMAN AVE AT HAMMOND, IN

LOCATION.--Lat 41°37'28", long 87°31'04", in NE1/4NW1/4sec. 36, T37 N., R10 W., Lake County, Hydrologic Unit 07120003, on left bank, 20 feet upstream of Hohman Avenue, 1,000 feet east of Indiana-Illinois State line, 1,300 feet south of 173rd street, 1.0 mile north of U.S. Highway 41.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 575.00 ft above sea level.

REMARKS.--Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	7.5	4.8	5.0	4.4	8.2	6.6	19	29	25	26	8.0
2	8.4	9.7	4.2	5.1	e4.0	9.3	6.7	14	18	23	23	8.8
3	14	7.0	4.9	6.2	e4.7	10	6.7	12	11	62	22	7.3
4	11	6.7	7.9	8.3	e5.1	9.0	8.7	12	11	39	18	8.0
5	9.8	7.2	42	5.8	e4.6	9.1	6.8	14	41	35	20	6.8
6	9.7	6.3	9.6	5.5	e4.6	7.6	5.6	12	18	36	39	4.9
7	7.8	6.0	7.3	5.4	e4.6	7.6	18	11	14	33	37	4.5
8	8.3	7.5	7.8	5.5	e4.7	7.4	25	12	13	31	17	4.0
9	8.0	5.3	6.7	7.0	e4.7	7.7	8.6	37	12	30	16	4.1
10	8.3	7.2	7.8	8.4	5.7	7.6	8.3	26	12	62	15	14
11	9.4	6.3	6.1	6.6	6.8	7.4	10	22	11	45	13	63
12	9.0	6.0	6.6	5.6	e4.7	8.2	7.6	16	40	41	12	129
13	8.8	6.4	7.6	6.8	e4.8	7.8	7.4	25	52	35	11	11
14	8.5	7.2	8.9	5.8	e4.8	7.3	7.3	22	36	36	10	11
15	8.2	6.0	9.5	6.2	e4.7	8.3	7.4	12	34	33	11	8.4
16	8.6	5.1	7.6	5.8	e5.2	9.4	12	10	20	32	11	6.8
17	8.9	4.8	6.8	6.4	e5.3	8.4	36	8.7	17	34	53	5.5
18	9.0	5.1	6.9	6.0	e4.9	9.1	13	18	14	33	16	4.6
19	7.8	5.5	6.4	5.4	e5.1	10	22	31	13	35	10	4.2
20	7.3	4.7	8.6	5.7	e5.0	14	47	16	35	31	10	8.1
21	7.3	6.3	6.1	e5.4	e5.1	8.5	55	16	63	29	9.0	6.1
22	8.9	5.6	6.8	e5.5	6.1	7.7	24	16	34	29	9.0	5.3
23	9.5	6.5	7.5	6.8	6.6	7.8	20	14	22	26	32	9.1
24	8.4	7.2	5.9	6.1	15	7.5	18	13	50	27	12	7.5
25	7.1	6.2	5.7	5.3	11	7.9	17	11	91	25	11	5.3
26	7.0	4.8	5.4	5.8	9.8	7.3	14	9.8	57	25	9.3	4.3
27	6.9	5.1	6.8	5.7	12	9.5	14	9.5	40	23	9.0	4.1
28	6.9	7.0	7.2	4.8	9.0	8.6	12	32	32	37	9.5	4.4
29	8.7	7.0	5.4	4.7	7.9	8.5	12	16	31	40	8.9	3.6
30	8.4	5.1	5.4	4.6	---	7.3	12	14	26	40	9.1	3.4
31	8.0	---	5.3	4.2	---	7.5	---	29	---	26	8.6	---
TOTAL	267.9	188.3	245.5	181.4	180.9	261.5	468.7	530.0	897	1058	517.4	375.1
MEAN	8.64	6.28	7.92	5.85	6.24	8.44	15.6	17.1	29.9	34.1	16.7	12.5
MAX	14	9.7	42	8.4	15	14	55	37	91	62	53	129
MIN	6.9	4.7	4.2	4.2	4.0	7.3	5.6	8.7	11	23	8.6	3.4

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2000, BY WATER YEAR (WY)

MEAN	38.0	36.8	32.5	31.9	35.2	38.6	46.3	48.4	51.5	53.0	44.5	40.5
MAX	80.4	63.7	65.2	66.8	95.9	81.5	90.8	85.9	98.8	102	93.9	88.9
(WY)	1998	1998	1998	1998	1997	1998	1998	1997	1993	1993	1997	1997
MIN	8.64	6.28	7.92	5.85	6.24	8.44	15.6	17.1	18.5	18.1	13.1	7.96
(WY)	2000	2000	2000	2000	2000	2000	2000	2000	1999	1999	1999	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1991 - 2000	
ANNUAL TOTAL	5917.7		5171.7			
ANNUAL MEAN	16.2		14.1		41.5	
HIGHEST ANNUAL MEAN					76.2	1997
LOWEST ANNUAL MEAN					14.1	2000
HIGHEST DAILY MEAN	104	Apr 23	129	Sep 12	464	Feb 21 1997
LOWEST DAILY MEAN	4.2	Dec 2	3.4	Sep 30	3.4	Sep 30 2000
ANNUAL SEVEN-DAY MINIMUM	5.3	Nov 16	4.5	Jan 28	4.5	Jan 28 2000
INSTANTANEOUS PEAK FLOW			238	Sep 11	701	Feb 21 1997
INSTANTANEOUS PEAK STAGE			6.33	Sep 11	8.76	Jul 18 1996
10 PERCENT EXCEEDS	27		33		80	
50 PERCENT EXCEEDS	15		8.6		35	
90 PERCENT EXCEEDS	6.7		5.1		11	

e Estimated

Special study and miscellaneous sites

Streamflow was measured at points other than continuous gaging stations from 6 sites in the Patoka River Basin on August 30, 2000 and September 28, 2000. Five sites were unnamed tributaries to Augusta Lake. One site was the outflow (Mill Creek) from Augusta Lake. They were collected in cooperation with the Office of Surface Mining (Department of Interior).

STREAMS TRIBUTARY TO OHIO RIVER BASIN

Wabash River Basin

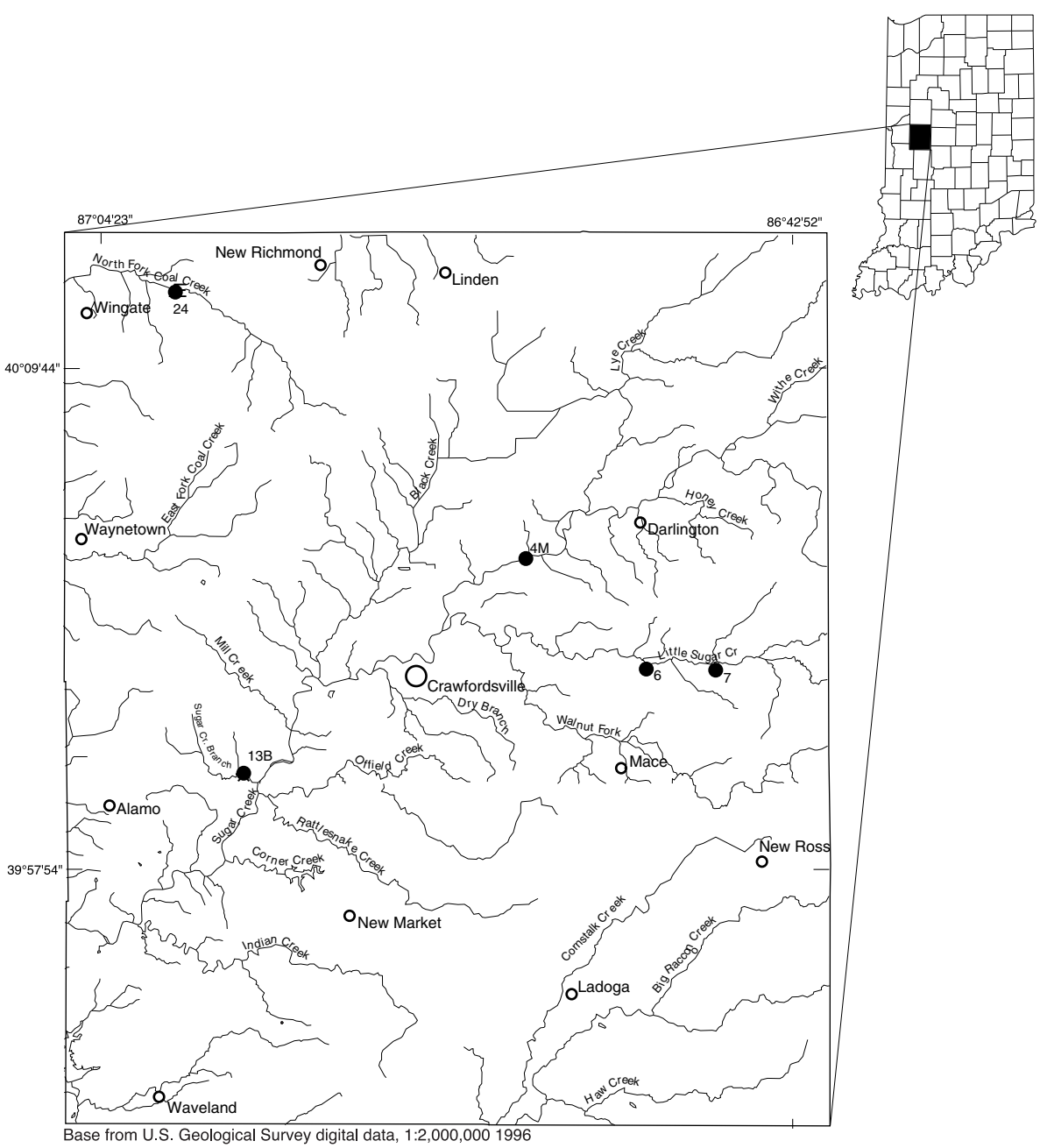
Stream	Tributary to	Location	Measurement date	Discharge (ft^3/s)
Mill Creek	Patoka River	Lat 38°20'45"N, long 87°10'50"W, 300 below the outflow culvert from Augusta Lake, Northeast of Augusta, Marion Township, Pike County, IN.	08-30-00 09-28-00	1.76 1.56
Unnamed	Augusta Lake	Lat 38°20'28"N, long 87°10'27"W, an unnamed tributary to Augusta Lake, Marion Township, Pike County, IN.	08-30-00 09-28-00	.09 .14
Unnamed	Augusta Lake	An unnamed tributary on the south side of Augusta Lake, Marion Township, Pike County, IN.	08-30-00 08-30-00 09-28-00	.16 .17 .21
Unnamed	Augusta Lake	An unnamed tributary on the south side of Augusta Lake, Marion Township, Pike County, IN.	08-30-00 09-28-00	.01 .02
Unnamed	Augusta Lake	An unnamed tributary of Augusta Lake, Marion Township, Pike County, IN.	08-30-00 09-28-00	<.01 <.01
Unnamed	Augusta Lake	An unnamed tributary of Augusta Lake, Marion Township, Pike County, IN.	08-30-00 09-28-00	.02 .02

Streamflow was measured at the Westfield Sewage Treatment Plant. Measurements were used to develop a discharge rating curve at the request of the Westfield Sewage Treatment Plant. They were collected in cooperation with the City of Westfield Utilities.

STREAMS TRIBUTARY TO OHIO RIVER BASIN

Wabash River Basin

Stream	Tributary to	Location	Measurement date	Discharge (ft^3/s)
Cool Creek	White River	Lat 40°2'20"N, long 86°6'57"W, at the Sewage Treatment Plant on E 171 St, Southeast of Westfield, Washington Township, Hamilton County, IN. Drainage area 7.23mi^2	03-29-99 04-15-99 04-27-99 06-29-99 07-01-99 07-01-99 07-01-99 07-01-99 02-18-00	3.10 25.3 23.2 2.39 1.33 5.39 8.98 6.98 40.0



EXPLANATION

● 7M Sampling site and site number

Figure 8.--Water-quality sampling sites for Sugar Creek and other sampling sites in Montgomery County.

MISCELLANEOUS WATER-QUALITY STATION ANALYSES

MISCELLANEOUS STREAMS IN MONTGOMERY COUNTY

Analytical results for samples collected from Sugar Creek and other selected streams in Montgomery County, Indiana, May 2000.

Water-quality data listed below are from water samples collected at various sites on Sugar Creek and other streams in Montgomery County, Indiana. The sampling was conducted through a cooperative agreement between the Montgomery County Commissioners and the U.S. Geological Survey.

Note: Specific conductance, pH, water temperature, and dissolved oxygen measurements were determined in-stream using a multiple-parameter instrument.

STATION NUMBER	SITE NUMBER	DATE	TIME	TEMPER-ATURE WATER (DEG C) (00010)	SPE-CIFIC CON-DUCT-ANCE (µS/cm) (00095)	OXYGEN, DIS-SOLVED (mg/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	NITRO-GEN, AMMONIA DIS-SOLVED (mg/L AS N) (00608)	NITRO-GEN, NITRITE DIS-SOLVED (mg/L AS N) (00613)	NITRO GEN, NO2+NO3 DIS-SOLVED (mg/L AS N) (00631)
400515086510801	4M	05-10-00	1115	17.2	576	7.0	7.7	0.306	0.174	7.82
400251086472201	6	05-11-00	1000	16.8	585	7.8	7.6	.339	.454	12.8
400247086443801	7	05-11-00	0820	15.8	628	7.4	7.6	.228	.478	16.0
400016087000201	13B	05-10-00	0900	12.3	660	10.1	7.9	.060	.016	1.67
401137087020801	24	05-10-00	1000	16.7	652	10.3	8.0	.156	.104	1.62

STATION NUMBER	SITE NUMBER	DATE	TIME	CALCIUM DIS-SOLVED (mg/L AS Ca) (00915)	MAGNE-SIUM, DIS-SOLVED (mg/L AS Mg) (00925)	SODIUM, DIS-SOLVED (mg/L AS Na) (00930)	POTAS-SIUM, DIS-SOLVED (mg/L AS K) (00935)	CHLO-RIDE, DIS-SOLVED (mg/L AS Cl) (00940)	SULFATE DIS SOLVED (mg/L AS SO_4) (00945)
400515086510801	4M	05-10-00	1115	69.0	24.6	13.4	3.6	32.8	51.6
400251086472201	6	05-11-00	1000	71.3	22.0	8.5	3.4	31.1	42.4
400247086443801	7	05-11-00	0820	78.1	23.8	8.3	2.4	33.1	43.6
400016087000201	13B	05-10-00	0900	86.8	30.5	5.4	2.4	10.5	42.9
401137087020801	24	05-10-00	1000	90.4	30.2	7.4	1.5	19.3	83.0

STATION NUMBER	SITE NUMBER	DATE	TIME	FLUO-RIDE, DIS-SOLVED (mg/L AS F) (00950)	SILICA, DIS-SOLVED (mg/L AS SiO_2) (00955)	IRON, DIS-SOLVED (µg/L AS Fe) (01046)	MANGA-NESE, DIS-SOLVED (µg/L AS Mn) (01056)	ALKA-LINITY WAT.DIS FET LAB $CaCO_3$ (mg/L) (29801)	SOLIDS RESIDUE AT 180 DEG. C DIS-SOLVED (mg/L) (70300)
400515086510801	4M	05-10-00	1115	0.2	7.4	20	14	171	367
400251086472201	6	05-11-00	1000	.2	8.3	20	34	166	367
400247086443801	7	05-11-00	0820	.2	8.4	20	35	183	397
400016087000201	13B	05-10-00	0900	.1	13.6	<10	4	299	392
401137087020801	24	05-10-00	1000	.2	8.8	40	58	241	409

MISCELLANEOUS STREAMS IN MONTGOMERY COUNTY

Analytical results for the quality-assurance samples collected from a site in Montgomery County, Indiana, May 2000.

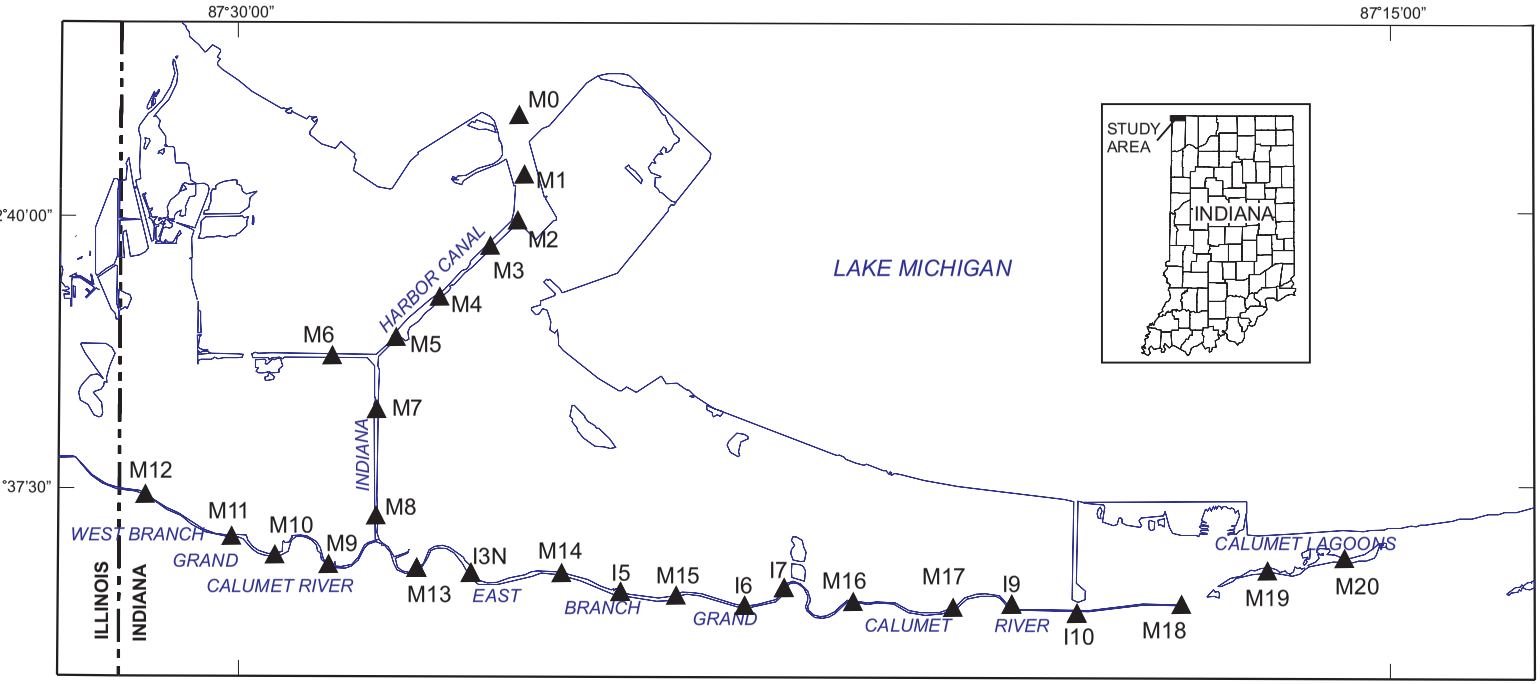
Water-quality data listed below are from a water sample collected at a site in Montgomery County, Indiana. The sampling was conducted through a cooperative agreement between the Montgomery County Commissioners and the U.S. Geological Survey.

Note: Specific conductance, pH, water temperature, and dissolved oxygen measurements were determined in-stream using a multiple-parameter instrument.

STATION NUMBER	SITE NUMBER	DATE	TIME	TEMPERATURE WATER (DEG C) (00010)	SPECIFIC CONDUCTANCE (µS/cm) (00095)	OXYGEN, DISSOLVED (mg/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	NITROGEN, AMMONIA DISSOLVED (mg/L AS N) (00608)	NITROGEN, NITRITE DISSOLVED (mg/L AS N) (00613)
400247086443801	7	05-11-00	0855	15.8	628	7.4	7.6	0.220	0.465

NITROGEN, NO2+NO3 DISSOLVED (mg/L AS N) (00631)	CALCIUM DISSOLVED (mg/L AS Ca) (00915)	MAGNESIUM, DISSOLVEd (mg/L AS Mg) (00925)	SODIUM, DISSOLVED (mg/L AS Na) (00930)	POTASSIUM, DISSOLVEd (mg/L AS K) (00935)	CHLORIDE, DISSOLVED (mg/L AS Cl) (00940)
15.9	78.6	23.9	8.2	2.3	33.5

SULFATE DISSOLVED (mg/L AS SO_4) (00945)	FLUORIDE, DISSOLVED (mg/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SiO_2) (00955)	IRON, DISSOLVED (µg/L AS Fe) (01046)	MANGANESE, DISSOLVED (µg/L AS Mn) (01056)	ALKALINITY WAT.DIS FET LAB $CaCO_3$ (mg/L) (29801)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (mg/L) (70300)
44.1	0.2	8.4	20	35	179	401



Base from U.S. Geological Survey digital data 1:24,000 Albers Equal Area projection
Standard parallels 29°30' and 45°30', Central meridian -86°

EXPLANATION

▲ M0 Water-quality-sampling site and site designation

Figure 9.--Water-quality-sampling sites for the Grand Calumet River and the Indiana Harbor Canal, in Lake County, Indiana, July 1999.

GRAND CALUMET RIVER AND INDIANA HARBOR CANAL IN LAKE COUNTY

Analytical results for water-quality samples collected at various sites on the Grand Calumet River and the Indiana Harbor Canal in Lake County, Indiana, July, 1999. The sampling was conducted through a cooperative investigation with the US Army Corps of Engineers and the U.S. Geological Survey. Location of water-quality-sampling sites shown on figure 9.

Measurements for dissolved oxygen, pH, specific conductance, water temperature, light intensity, transparency, and turbidity were determined at the site.

Water-quality analysis were done by a Department of Interior approved contractual laboratory.

[Date is in month-day-year; time is in military notation; numbers in parenthesis are U.S. Geological Survey National Water Information System parameter codes; mg/L, milligrams per liter; E, estimated value; --, no data; µS/cm, microsiemens per centimeter at 25 degrees Celsius; deg C, degrees Celsius; µ-Eins/sqm/s, micro Einsteins per square meter per second; m, meter; Ntu, Nephelometric turbidity units; µg/L, micrograms per liter]

STATION NUMBER	SITE NUMBER	DATE	TIME	OXYGEN, DIS-SOLVED (mg/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400	SPE-CIFIC CON-DUCT-ANCE (µS/cm) (00095)	TEMPER-ATURE WATER (deg C) (00010)	HARD-NESS TOTAL (mg/L AS $CaCO_3$) (00900)	ALKA-LINITY WAT.DIS FET LAB $CaCO_3$ (mg/L) (29801)	BICAR-BONATE WAT.DIS FET FIELD HCO_3 (mg/L) (29804)	CAR-BONATE WAT.DIS FET FIELD CO3 (mg/L) (29807)
414057087263601	M0	07-28-99	1000	8.2	8.1	368	26.0	150	106	106	<5.0
414023087262301	M1	07-27-99	1630	8.4	8.3	366	26.8	160	107	105	E2.1
414003087263300	M2	07-27-99	1045	6.6	7.9	399	27.1	160	108	108	<5.0
413952087264701	M3	07-26-99	1645	7.3	7.8	392	26.1	160	107	107	<5.0
413919087273201	M4	07-26-99	1520	5.3	7.6	496	29.9	330	108	108	<5.0
413857087280301	M5	07-27-99	1430	7.1	8.0	498	29.7	200	109	109	<5.0
413848087285201	M6	07-28-99	1200	9.9	8.3	497	30.4	200	110	110	<5.0
413822087281601	M7	07-27-99	1100	5.8	7.6	513	28.2	200	110	110	<5.0
413716087281600	M8	07-29-99	1500	7.6	7.9	485	29.4	190	111	14	<5.0
413651087285001	M9	07-27-99	1730	9.2	7.4	1350	29.0	360	159	159	<5.0
413658087292601	M10	07-30-99	0945	5.4	7.0	1300	26.1	360	153	153	<5.0
413707087300300	M11	07-26-99	1530	7.1	7.1	1180	25.9	160	136	149	<5.0
413650087274201	M13	07-28-99	1500	8.2	8.0	453	31.8	200	110	109	E.7
413647087255700	M14	07-29-99	1300	7.0	7.9	418	28.7	200	108	108	<5.0
413636087242601	M15	07-28-99	1600	8.6	8.3	422	31.3	200	106	106	<5.0
413632087221601	M16	07-29-99	1100	7.1	8.3	363	31.9	190	110	108	E1.7
413626087211101	M17	07-28-99	1230	7.6	8.1	375	31.9	180	108	106	E2.4
413630087180401	M18	07-28-99	1000	4.2	7.6	655	28.2	280	115	115	<5.0
413649087171201	M19	07-30-99	1310	--	8.7	615	32.5	230	103	90	13
413655087160601	M20	07-30-99	1400	12.1	8.7	646	32.3	180	109	96	13
413643087263801	I3N	07-29-99	1430	8.0	8.2	432	29.6	--	--	--	--
413637087251301	I5	07-29-99	1500	7.9	8.2	433	30.8	--	--	--	--
04092677	I6	07-29-99	1545	7.4	8.3	408	31.8	--	--	--	--
413641087230801	I7	07-29-99	1630	7.9	8.4	371	32.7	--	--	--	--
413628087201401	I9	07-29-99	0830	7.6	7.9	363	31.1	--	--	--	--
413627087192801	I10	07-29-99	0915	7.2	7.9	464	30.3	--	--	--	--

STATION NUMBER	DATE	HY-DROXIDE WAT.DIS FET FIELD OH (mg/L) (29810)	CHLO-RIDE, WATER UNFLTRD (mg/L AS Cl) (99220)	FLUO-RIDE, TOTAL (mg/L AS F) (00951)	SULFATE TOTAL (mg/L AS SO_4) (00946)	SULFIDE TOTAL (mg/L AS S) (00745)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (mg/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (mg/L AS N) (00625)	NITRO-GEN, AMMONIA TOTAL (mg/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (mg/L AS N) (00608)	NITRO-GEN, NO2+NO3 TOTAL (mg/L AS N) (00630)
414057087263601	07-28-99	<5.0	25.2	E0.4	35.4	<0.05	E0.28	E0.21	E0.06	E0.067	1.4
414023087262301	07-27-99	<5.0	25.4	E.4	34.6	<.05	<.50	1.8	.15	E.098	1.4
414003087263300	07-27-99	<5.0	29.4	E.4	39.9	<.05	E.18	E.23	.20	.20	2.0
413952087264701	07-26-99	<5.0	30.6	E.4	40.3	<.05	.85	E.46	.19	.19	2.1
413919087273201	07-26-99	<5.0	46.4	E.6	48.9	<.05	.78	.94	.30	.27	3.8
413857087280301	07-27-99	<5.0	47.1	E.6	52.2	<.05	.57	.84	.20	.22	3.6
413848087285201	07-28-99	<5.0	46.4	E.6	50.8	<.05	E.44	E.48	E.08	E.089	3.6
413822087281601	07-27-99	<5.0	45.1	E.6	51.7	<.05	.92	.75	.30	.31	3.8
413716087281600	07-29-99	<5.0	48	E.6	48.1	<.05	.65	.63	.52	.41	3.5
413651087285001	07-27-99	<5.0	209	E.8	179	<.05	3.8	3.6	2.60	2.80	6.9
413658087292601	07-30-99	<5.0	189	E.9	178	<.05	6.9	8.4	4.80	5.10	7.4
413707087300300	07-26-99	<5.0	155	E.8	159	.055	1.1	1.5	.25	.22	12.4
05536357	07-27-99	<5.0	188	E.8	162	<.05	1.5	1.9	.45	.51	6.5
413650087274201	07-28-99	<5.0	33.9	E.5	46.3	<.05	E.47	E.44	.17	.17	3.3
413647087255700	07-29-99	<5.0	34.1	E.5	34.9	<.05	E.39	.51	.20	.21	3.2
413636087242601	07-28-99	<5.0	34.6	E.6	35.8	<.05	.59	.51	.16	.16	3.8
413632087221601	07-29-99	<5.0	22.4	E.5	28.8	<.05	.53	.50	.25	.30	2.4
413626087211101	07-28-99	<5.0	21.8	E.5	28.7	<.05	.52	E.45	.28	.26	3.0
413630087180401	07-28-99	<5.0	67.7	E.6	78.3	E.014	1.7	1.7	1.00	1.10	1.9
413649087171201	07-30-99	<5.0	69.9	E.6	72.8	E.016	.73	1.4	.62	.32	1.5
413655087160601	07-30-99	<5.0	111	E.4	21.2	<.05	E.39	2.7	<.10	<.10	<.1
413643087263801	07-29-99	--	--	--	--	--	.69	--	.16	.16	3.9
413637087251301	07-29-99	--	--	--	--	--	.50	--	.17	.17	3.2
04092677	07-29-99	--	--	--	--	--	.52	--	.21	.20	3.2
413641087230801	07-29-99	--	--	--	--	--	.65	--	.24	.23	3.0
413628087201401	07-29-99	--	--	--	--	--	.68	--	.30	.29	2.8
413627087192801	07-29-99	--	--	--	--	--	1.6	--	.83	.92	8.7

MISCELLANEOUS WATER-QUALITY STATION ANALYSES--Continued

GRAND CALUMET RIVER AND INDIANA HARBOR CANAL IN LAKE COUNTY

STATION NUMBER	DATE	PHOS-PHORUS DIS-SOLVED (mg/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (mg/L AS P) (00671)	PHOS-PHORUS ORTHO TOTAL (mg/L AS P) (70507)	PHOS-PHORUS TOTAL (mg/L AS P) (00665)	CARBON, INOR-GANIC, TOTAL (mg/L AS C) (00685)	CARBON, ORGANIC DIS-SOLVED (mg/L AS C) (00681)	CARBON, ORGANIC TOTAL (mg/L AS C) (00680)	OXYGEN DEMAND, BIO-CHEM-ICAL 30 DAY (mg/L) (00349)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (mg/L) (00310)	LIGHT INCID-400-700NM X-S.AVG (µ-Eins /sqm/s) (90200)
414057087263601	07-28-99	E0.031	<0.05	E0.019	0.051	38	2.7	2.3	--	--	--
414023087262301	07-27-99	E.019	E.028	.057	E.021	44	2.3	2.5	--	--	--
414003087263300	07-27-99	E.036	E.028	.084	E.038	45	2.5	2.6	3.8	<2.0	--
413952087264701	07-26-99	E.022	<.05	.078	E.034	43	2.8	2.5	--	--	--
413919087273201	07-26-99	E.026	E.036	.120	.060	44	2.7	3.1	--	--	--
413857087280301	07-27-99	E.026	<.05	E.036	.055	43	3.4	3.2	5.9	<2.0	--
413848087285201	07-28-99	E.037	E.023	E.038	.075	43	3.4	2.3	6.8	2.2	--
413822087281601	07-27-99	<.05	.120	E.049	E.040	45	3.7	3.1	4.8	<2.0	120
413716087281600	07-29-99	.053	E.028	E.040	.064	48	3.3	3.4	--	--	--
413651087285001	07-27-99	.200	.280	.520	.320	67	6.8	7.4	24	<2.0	210
413658087292601	07-30-99	.210	.400	.350	.260	62	7.7	7.5	--	--	--
413707087300300	07-26-99	.240	.400	.990	.490	56	5.7	6.8	--	--	240
05536357	07-27-99	.150	.120	.370	.290	63	7.6	8.1	15	3.0	110
413650087274201	07-28-99	.050	<.05	E.032	.057	39	3.5	3.2	6.4	<2.0	--
413647087255700	07-29-99	.054	E.038	.097	.063	31	3.2	2.9	--	--	--
413636087242601	07-28-99	.077	E.046	.057	.090	38	3.2	4.0	5.8	<2.0	--
413632087221601	07-29-99	E.035	<.05	E.046	E.040	30	2.8	2.7	--	--	--
413626087211101	07-28-99	<.05	<.05	<.05	E.038	41	2.7	2.3	6.2	<2.0	--
413630087180401	07-28-99	E.044	E.028	.200	.069	55	7.2	11	29	4.2	--
413649087171201	07-30-99	E.020	.200	.500	.064	39	7.6	7.4	--	--	--
413655087160601	07-30-99	E.017	.290	.410	.088	16	6.3	6.4	--	2.4	--
413643087263801	07-29-99	E.032	E.034	.059	E.031	40	3.4	4.1	--	<2.0	--
413637087251301	07-29-99	E.029	E.032	E.030	E.036	30	3.7	3.4	--	<2.0	--
04092677	07-29-99	E.024	<.05	E.023	E.023	9.9	3.3	2.8	--	<2.0	--
413641087230801	07-29-99	<.05	<.05	E.021	E.022	12	2.4	2.5	--	<2.0	--
413628087201401	07-29-99	E.031	.067	.180	E.041	57	3.1	2.9	--	<2.0	--
413627087192801	07-29-99	E.030	.084	.150	E.039	26	2.8	4.3	--	<2.0	--

STATION NUMBER	DATE	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (mg/L) (00530)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (mg/L) (70300)	SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (mg/L) (00500)	TRANS-PAR-ENCY (SECCHI DISK) (m) (00078)	TUR-BID-ITY (Ntu) (00076)	ALUM-INUM, DIS-SOLVED (µg/L AS Al) (01106)	ALUM-INUM, TOTAL RECOV-ERABLE (µg/L AS Al) (01105)	ARSENIC DIS-SOLVED (µg/L AS As) (01000)	ARSENIC TOTAL (µg/L AS As) (01002)	BARIUM, DIS-SOLVED (µg/L AS Ba) (01005)
414057087263601	07-28-99	5	255	206	2.41	3.1	<100	E43	E1.4	<5	22
414023087262301	07-27-99	4	275	200	1.72	3.0	<100	E41	E1.4	E.94	22
414003087263300	07-27-99	E3	254	220	1.59	4.7	E21	E72	E1.6	E.95	22
413952087264701	07-26-99	5	467	258	1.87	--	E21	E79	E1.6	E2	22
413919087273201	07-26-99	6	314	313	1.26	--	E29	E96	E2.4	E2	23
413857087280301	07-27-99	4	291	307	1.38	3.7	<100	E72	E2.1	<5	22
413848087285201	07-28-99	5	338	295	1.07	4.2	<100	E47	E2.2	<5	23
413822087281601	07-27-99	E3	331	301	--	--	E40	E74	E2.0	<5	22
413716087281600	07-29-99	8	275	300	--	2.6	E46	E51	E1.9	E1	22
413651087285001	07-27-99	5	787	805	--	--	<100	E90	13.1	17	22
413658087292601	07-30-99	<4	785	840	1.02	2.0	<100	<100	15.1	13	18
413707087300300	07-26-99	10	683	775	--	--	E22	E98	10.6	12	20
05536357	07-27-99	8	787	778	--	--	E55	E71	12.0	15	20
413650087274201	07-28-99	E1	287	250	--	3.3	<100	E53	E1.5	<5	22
413647087255700	07-29-99	E1	224	243	--	9.8	E37	E52	E1.3	<5	22
413636087242601	07-28-99	25	262	243	.61	4.6	E26	E59	E1.3	<5	21
413632087221601	07-29-99	E2	199	202	1.80	2.8	E28	E49	E1.2	<5	22
413626087211101	07-28-99	<4	200	197	--	3.4	<100	<100	E1.3	<5	22
413630087180401	07-28-99	32	419	414	--	16	<100	E65	8.3	11	39
413649087171201	07-30-99	39	367	468	.27	33	<100	<100	8.7	11	25
413655087160601	07-30-99	6	354	389	--	6.8	<100	<100	6.2	8	7
413643087263801	07-29-99	E2	--	--	2.04	3.0	--	--	--	--	--
413637087251301	07-29-99	4	--	--	.72	3.2	--	--	--	--	--
04092677	07-29-99	<4	--	--	1.35	3.5	--	--	--	--	--
413641087230801	07-29-99	<4	--	--	1.59	2.7	--	--	--	--	--
413628087201401	07-29-99	E1	--	--	--	--	--	--	--	--	--
413627087192801	07-29-99	E2	--	--	--	1.8	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY STATION ANALYSES--Continued

GRAND CALUMET RIVER AND INDIANA HARBOR CANAL IN LAKE COUNTY

STATION NUMBER	DATE	BARIUM, TOTAL RECOV-ERABLE (µg/L AS Ba) (01007)	CADMIUM DIS-SOLVED (µg/L AS Cd) (01025)	CADMIUM WATER UNFLTRD TOTAL (µg/L AS Cd) (01027)	CHRO-MIUM, DIS-SOLVED (µg/L AS Cr) (01030)	CHRO-MIUM, TOTAL RECOV-ERABLE (µg/L AS Cr) (01034)	COPPER, DIS-SOLVED (µg/L AS Cu) (01040)	COPPER, TOTAL RECOV-ERABLE (µg/L AS Cu) (01042)	IRON, DIS-SOLVED (µg/L AS Fe) (01046)	IRON, TOTAL RECOV-ERABLE (µg/L AS Fe) (01045)	LEAD, DIS-SOLVED (µg/L AS Pb) (01049)
414057087263601	07-28-99	23.2	<1.0	<1.0	3.9	E2	E2	2	E20	140	<1
414023087262301	07-27-99	23.4	<1.0	E.4	3.6	E4	2	4	E30	260	<1
414003087263300	07-27-99	23.4	<1.0	E.087	3.9	5	E2	4	E30	380	<1
413952087264701	07-26-99	25.1	<1.0	E.3	3.6	E3	2	2	E10	320	E.41
413919087273201	07-26-99	23.2	<1.0	E.075	4.7	E4	E1	3	E20	540	E.55
413857087280301	07-27-99	24.2	<1.0	E.092	4.4	6	E2	4	E30	440	E.43
413848087285201	07-28-99	25.5	<1.0	E.056	4.0	E3	E2	2	E60	300	E.35
413822087281601	07-27-99	24.2	<1.0	E.1	5.3	E3	E2	4	E50	400	E.35
413716087281600	07-29-99	23.4	<1.0	E.064	4.6	E3	2	4	E70	330	E.67
413651087285001	07-27-99	27.9	<1.0	E.4	6.2	E4	2	6	E50	660	2
413658087292601	07-30-99	20.8	E.1	E.4	5.3	6	4	5	220	410	11
413707087300300	07-26-99	27.7	E.6	E.6	6.3	6	3	15	E100	780	3
05536357	07-27-99	24.3	<1.0	E.069	5.8	E2	E2	4	180	430	2
413650087274201	07-28-99	22.9	E1.0	<1.0	4.5	E3	2	3	E70	340	<1
413647087255700	07-29-99	23.7	<1.0	<1.0	4.6	E3	2	4	E20	250	<1
413636087242601	07-28-99	21.9	<1.0	<1.0	4.5	E3	3	5	E30	480	<1
413632087221601	07-29-99	22.7	<1.0	<1.0	3.7	E2	2	4	E60	338	<1
413626087211101	07-28-99	20.9	<1.0	E.081	4.3	E2	2	4	E20	180	<1
413630087180401	07-28-99	48.0	<1.0	<1.0	4.0	E2	E.77	E2	E60	930	<1
413649087171201	07-30-99	38.3	<1.0	<1.0	3.9	5	E.77	E.84	E20	690	<1
413655087160601	07-30-99	26.0	<1.0	<1.0	4.7	6	E.50	E.66	E60	400	<1
413643087263801	07-29-99	--	--	--	--	--	--	--	--	--	--
413637087251301	07-29-99	--	--	--	--	--	--	--	--	--	--
04092677	07-29-99	--	--	--	--	--	--	--	--	--	--
413641087230801	07-29-99	--	--	--	--	--	--	--	--	--	--
413628087201401	07-29-99	--	--	--	--	--	--	--	--	--	--
413627087192801	07-29-99	--	--	--	--	--	--	--	--	--	--

STATION NUMBER	DATE	LEAD, TOTAL RECOV-ERABLE (µg/L AS Pb) (01051)	MANGA-NESE, DIS-SOLVED (µg/L AS Mn) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (µg/L AS Mn) (01055)	NICKEL, DIS-SOLVED (µg/L AS Ni) (01065)	NICKEL, TOTAL RECOV-ERABLE (µg/L AS Ni) (01067)	SELE-NIUM, DIS-SOLVED (µg/L AS Se) (01145)	SELE-NIUM, TOTAL (µg/L AS Se) (01147)	ZINC, DIS-SOLVED (µg/L AS Zn) (01090)	ZINC, TOTAL RECOV-ERABLE (µg/L AS Zn) (01092)	1,2,5,6 -DIBENZ -ANTHRA -CENE TOTAL (µg/L) (34556)
414057087263601	07-28-99	2	E0.96	13	E0.80	E2	<5.0	<5	E5	26	<0.1
414023087262301	07-27-99	4	2	17	E.76	4	<5.0	E.97	E6	25	<.1
414003087263300	07-27-99	4	3	22	E.95	3	<5.0	<5	E6	20	<.1
413952087264701	07-26-99	4	4	22	E.95	E2	<5.0	<5	E7	17	<.1
413919087273201	07-26-99	6	6	32	E2	E2	<5.0	<5	E10	26	<.1
413857087280301	07-27-99	5	6	30	E1	4	<5.0	<5	E7	22	<.1
413848087285201	07-28-99	4	2	25	E2	3	<5.0	<5	E7	16	<.1
413822087281601	07-27-99	4	14	25	E1	3	<5.0	E1	E7	19	<.1
413716087281600	07-29-99	4	14	26	3	8	<5.0	<5	12	22	<.1
413651087285001	07-27-99	14	30	37	8	10	<25.0	<10	44	79	<.1
413658087292601	07-30-99	15	129	134	24	25	<15.0	<17	139	149	<.1
413707087300300	07-26-99	14	15	22	5	6	<25.0	<10	40	86	<.1
05536357	07-27-99	6	24	27	7	9	<25.0	<10	40	48	<.1
413650087274201	07-28-99	3	14	24	E1	4	<5.0	<5	E7	18	<.1
413647087255700	07-29-99	3	10	20	E1	2	<5.0	E1	E5	14	<.1
413636087242601	07-28-99	3	9	24	14	17	<5.0	<5	25	47	<.1
413632087221601	07-29-99	2	6	17	E.41	E1	<5.0	E1	E2	E9	<.1
413626087211101	07-28-99	1	5	13	E.50	2	E.9	E2	E3	E9	<.1
413630087180401	07-28-99	3	78	263	<2	5	<5.0	<5	E2	E8	<.1
413649087171201	07-30-99	2	5	226	<2	E1	<5.0	<5	E2	E4	<.1
413655087160601	07-30-99	2	1	74	E.28	E1	<5.0	<5	E1	E5	<.1
413643087263801	07-29-99	--	--	--	--	--	--	--	--	--	--
413637087251301	07-29-99	--	--	--	--	--	--	--	--	--	--
04092677	07-29-99	--	--	--	--	--	--	--	--	--	--
413641087230801	07-29-99	--	--	--	--	--	--	--	--	--	--
413628087201401	07-29-99	--	--	--	--	--	--	--	--	--	--
413627087192801	07-29-99	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY STATION ANALYSES--Continued

GRAND CALUMET RIVER AND INDIANA HARBOR CANAL IN LAKE COUNTY

STATION NUMBER	DATE	ACE-NAPHTH-ENE TOTAL (µg/L) (34205)	ACE-NAPHTH-YLENE TOTAL (µg/L) (34200)	ALDRIN, TOTAL (µg/L) (39330)	ALPHA BHC TOTAL (µg/L) (39337)	ANTHRA-CENE TOTAL (µg/L) (34220)	AROCLOR 1016 PCB TOTAL (µg/L) (34671)	AROCLOR 1221 PCB TOTAL (µg/L) (39488)	AROCLOR 1232 PCB TOTAL (µg/L) (39492)	AROCLOR 1242 PCB TOTAL (µg/L) (39496)	AROCLOR 1248 PCB TOTAL (µg/L) (39500)
414057087263601	07-28-99	<1	<1	<0.05	<0.5	<2	<1.0	<2	<1.0	<1.0	<1.0
414023087262301	07-27-99	<1	<1	<.05	<.5	<2	<1.0	<2	<1.0	<1.0	<1.0
414003087263300	07-27-99	<1	<1	<.05	<.5	<2	<1.0	<2	<1.0	<1.0	<1.0
413952087264701	07-26-99	<1	<1	<.05	<.5	<2	<1.0	<2	<1.0	<1.0	<1.0
413919087273201	07-26-99	<1	<1	<.05	<.5	<2	<1.0	<2	<1.0	<1.0	<1.0
413857087280301	07-27-99	<1	<1	<.05	<.5	<2	<1.0	<2	<1.0	<1.0	<1.0
413848087285201	07-28-99	<1	<1	<.05	<.5	<2	<1.0	<2	<1.0	<1.0	<1.0
413822087281601	07-27-99	<1	<1	<.05	<.5	<2	<1.0	<2	<1.0	<1.0	<1.0
413716087281600	07-29-99	<1	<1	<.05	<.5	<2	<1.0	<2	<1.0	<1.0	<1.0
413651087285001	07-27-99	<1	<1	<.05	<.5	<2	<1.0	<2	<1.0	<1.0	<1.0
413658087292601	07-30-99	<1	<1	<.05	<.5	<2	<1.0	<2	<1.0	<1.0	<1.0
413707087300300	07-26-99	<1	<1	<.05	<.5	<2	<1.0	<2	<1.0	<1.0	<1.0
05536357	07-27-99	<1	<1	<.05	<.5	<2	<1.0	<2	<1.0	<1.0	<1.0
413650087274201	07-28-99	<1	<1	<.05	<.5	<2	<1.0	<2	<1.0	<1.0	<1.0
413647087255700	07-29-99	<1	<1	<.05	<.5	<2	<1.0	<2	<1.0	<1.0	<1.0
413636087242601	07-28-99	<1	<1	<.05	<.5	<2	<1.0	<2	<1.0	<1.0	<1.0
413632087221601	07-29-99	<1	<1	<.05	<.5	<2	<1.0	<2	<1.0	<1.0	<1.0
413626087211101	07-28-99	<1	<1	<.05	<.5	<2	<1.0	<2	<1.0	<1.0	<1.0
413630087180401	07-28-99	<1	<1	<.05	<.5	<2	<1.0	<2	<1.0	<1.0	<1.0
413649087171201	07-30-99	<1	<1	<.05	<.5	<2	<1.0	<2	<1.0	<1.0	<1.0
413655087160601	07-30-99	<1	<1	<.05	<.5	<2	<1.0	<2	<1.0	<1.0	<1.0
413643087263801	07-29-99	--	--	--	--	--	--	--	--	--	--
413637087251301	07-29-99	--	--	--	--	--	--	--	--	--	--
04092677	07-29-99	--	--	--	--	--	--	--	--	--	--
413641087230801	07-29-99	--	--	--	--	--	--	--	--	--	--
413628087201401	07-29-99	--	--	--	--	--	--	--	--	--	--
413627087192801	07-29-99	--	--	--	--	--	--	--	--	--	--

STATION NUMBER	DATE	AROCLOR 1254 PCB TOTAL (µg/L) (39504)	AROCLOR 1260 PCB TOTAL (µg/L) (39508)	BENZO-A-PYRENE TOTAL (µg/L) (34247)	BENZO B FLUOR-AN-THENE TOTAL (µg/L) (34230)	BENZO K FLUOR-AN-THENE TOTAL (µg/L) (34242)	BENZ(A) ANTHRA-CENE WATER UNFLTRD REC (µg/L) (34526)	BENZO-[GHI]-PERY-LENE TOTAL (µg/L) (34521)	BETA BENZENE HEXA-CHLOR-IDE TOTAL (µg/L) (39338)	CHLOR-DANE, TECH-NICAL TOTAL (µg/L) (39350)	CHRY-SENE TOTAL (µg/L) (34320)
414057087263601	07-28-99	<1.0	<1.0	<0.10	<0.10	<0.10	<0.10	<0.10	<0.05	<0.5	<0.10
414023087262301	07-27-99	<1.0	<1.0	<.10	<.10	<.10	<.10	<.10	<.05	<.5	<.10
414003087263300	07-27-99	<1.0	<1.0	<.10	<.10	<.10	<.10	<.10	<.05	<.5	<.10
413952087264701	07-26-99	<1.0	<1.0	<.10	<.10	<.10	<.10	<.10	<.05	<.5	<.10
413919087273201	07-26-99	<1.0	<1.0	<.10	.11	<.10	<.10	<.10	<.05	<.5	<.10
413857087280301	07-27-99	<1.0	<1.0	<.10	<.10	<.10	<.10	<.10	<.05	<.5	<.10
413848087285201	07-28-99	<1.0	<1.0	<.10	<.10	<.10	<.10	<.10	<.05	<.5	<.10
413822087281601	07-27-99	<1.0	<1.0	<.10	<.10	<.10	<.10	<.10	<.05	<.5	<.10
413716087281600	07-29-99	<1.0	<1.0	<.10	<.10	<.10	<.10	<.10	<.05	<.5	E.96
413651087285001	07-27-99	<1.0	<1.0	<.10	<.10	<.10	<.10	<.10	<.05	<.5	<.10
413658087292601	07-30-99	<1.0	<1.0	<.10	<.10	<.10	<.10	<.10	<.05	<.5	<.10
413707087300300	07-26-99	<1.0	<1.0	.13	<.10	<.10	E.091	<.10	<.05	<.5	.16
05536357	07-27-99	<1.0	<1.0	<.10	<.10	<.10	<.10	<.10	<.05	<.5	<.10
413650087274201	07-28-99	<1.0	<1.0	E.091	<.10	<.10	<.10	<.10	<.05	<.5	<.10
413647087255700	07-29-99	<1.0	<1.0	<.10	<.10	<.10	<.10	<.10	<.05	<.5	<.10
413636087242601	07-28-99	<1.0	<1.0	<.10	<.10	<.10	<.10	<.10	<.05	<.5	<.10
413632087221601	07-29-99	<1.0	<1.0	<.10	<.10	<.10	<.10	<.10	<.05	<.5	<.10
413626087211101	07-28-99	<1.0	<1.0	.15	.14	E.055	<.10	<.10	<.05	<.5	.11
413630087180401	07-28-99	<1.0	<1.0	.16	.17	E.590	.11	<.10	<.05	<.5	<.10
413649087171201	07-30-99	<1.0	<1.0	<.10	<.10	<.10	<.10	<.10	<.05	<.5	<.10
413655087160601	07-30-99	<1.0	<1.0	<.10	<.10	<.10	<.10	<.10	<.05	<.5	<.10
413643087263801	07-29-99	--	--	--	--	--	--	--	--	--	--
413637087251301	07-29-99	--	--	--	--	--	--	--	--	--	--
04092677	07-29-99	--	--	--	--	--	--	--	--	--	--
413641087230801	07-29-99	--	--	--	--	--	--	--	--	--	--
413628087201401	07-29-99	--	--	--	--	--	--	--	--	--	--
413627087192801	07-29-99	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY STATION ANALYSES--Continued

GRAND CALUMET RIVER AND INDIANA HARBOR CANAL IN LAKE COUNTY

STATION NUMBER	DATE	DELTA BENZENE HEXA-CHLOR-IDE TOTAL (µg/L) (34259)	DI-ELDRIN TOTAL (µg/L) (39380)	ENDO-SULFAN I TOTAL (µg/L) (39388)	ENDO-SULFAN-II WATER WHOLE TOT.REC (µg/L) (82624)	ENDO-SULFAN SULFATE TOTAL (µg/L) (34351)	ENDRIN ALDE-HYDE TOTAL (µg/L) (34366)	ENDRIN KETONE WATER WHOLE TOTAL (µg/L) (78008)	ENDRIN WATER UNFLTRD REC (µg/L) (39390)	FLUOR-ANTHENE TOTAL (µg/L) (34376)
414057087263601	07-28-99	<0.05	<0.10	<0.05	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
414023087262301	07-27-99	<.05	<.10	<.05	<.1	<.1	<.1	<.10	<.10	<.10
414003087263300	07-27-99	<.05	<.10	<.05	<.1	<.1	<.1	<.10	<.10	<.10
413952087264701	07-26-99	<.05	<.10	<.05	<.1	<.1	<.1	<.10	<.10	<.10
413919087273201	07-26-99	<.05	<.10	<.05	<.1	<.1	<.1	<.10	<.10	.29
413857087280301	07-27-99	<.05	<.10	<.05	<.1	<.1	<.1	<.10	<.10	<.10
413848087285201	07-28-99	<.05	<.10	<.05	<.1	<.1	<.1	<.10	<.10	<.10
413822087281601	07-27-99	<.05	<.10	<.05	<.1	<.1	<.1	<.10	<.10	.59
413716087281600	07-29-99	<.05	<.10	<.05	<.1	<.1	<.1	<.10	<.10	.34
413651087285001	07-27-99	<.05	<.10	<.05	<.1	<.1	<.1	<.10	<.10	<.10
413658087292601	07-30-99	<.05	<.10	<.05	<.1	<.1	<.1	<.10	<.10	<.10
413707087300300	07-26-99	<.05	<.10	<.05	<.1	<.1	<.1	<.10	<.10	<.10
05536357	07-27-99	<.05	<.10	<.05	<.1	<.1	<.1	<.10	<.10	<.10
413650087274201	07-28-99	<.05	<.10	<.05	<.1	<.1	<.1	<.10	<.10	<.10
413647087255700	07-29-99	<.05	<.10	<.05	<.1	<.1	<.1	<.10	<.10	.34
413636087242601	07-28-99	<.05	<.10	<.05	<.1	<.1	<.1	<.10	<.10	.33
413632087221601	07-29-99	<.05	<.10	<.05	<.1	<.1	<.1	<.10	<.10	.40
413626087211101	07-28-99	<.05	<.10	<.05	<.1	<.1	<.1	<.10	<.10	.40
413630087180401	07-28-99	<.05	<.10	<.05	<.1	<.1	<.1	<.10	<.10	.79
413649087171201	07-30-99	<.05	<.10	<.05	<.1	<.1	<.1	<.10	<.10	<.10
413655087160601	07-30-99	<.05	<.10	<.05	<.1	<.1	<.1	<.10	<.10	<.10
413643087263801	07-29-99	--	--	--	--	--	--	--	--	--
413637087251301	07-29-99	--	--	--	--	--	--	--	--	--
04092677	07-29-99	--	--	--	--	--	--	--	--	--
413641087230801	07-29-99	--	--	--	--	--	--	--	--	--
413628087201401	07-29-99	--	--	--	--	--	--	--	--	--
413627087192801	07-29-99	--	--	--	--	--	--	--	--	--

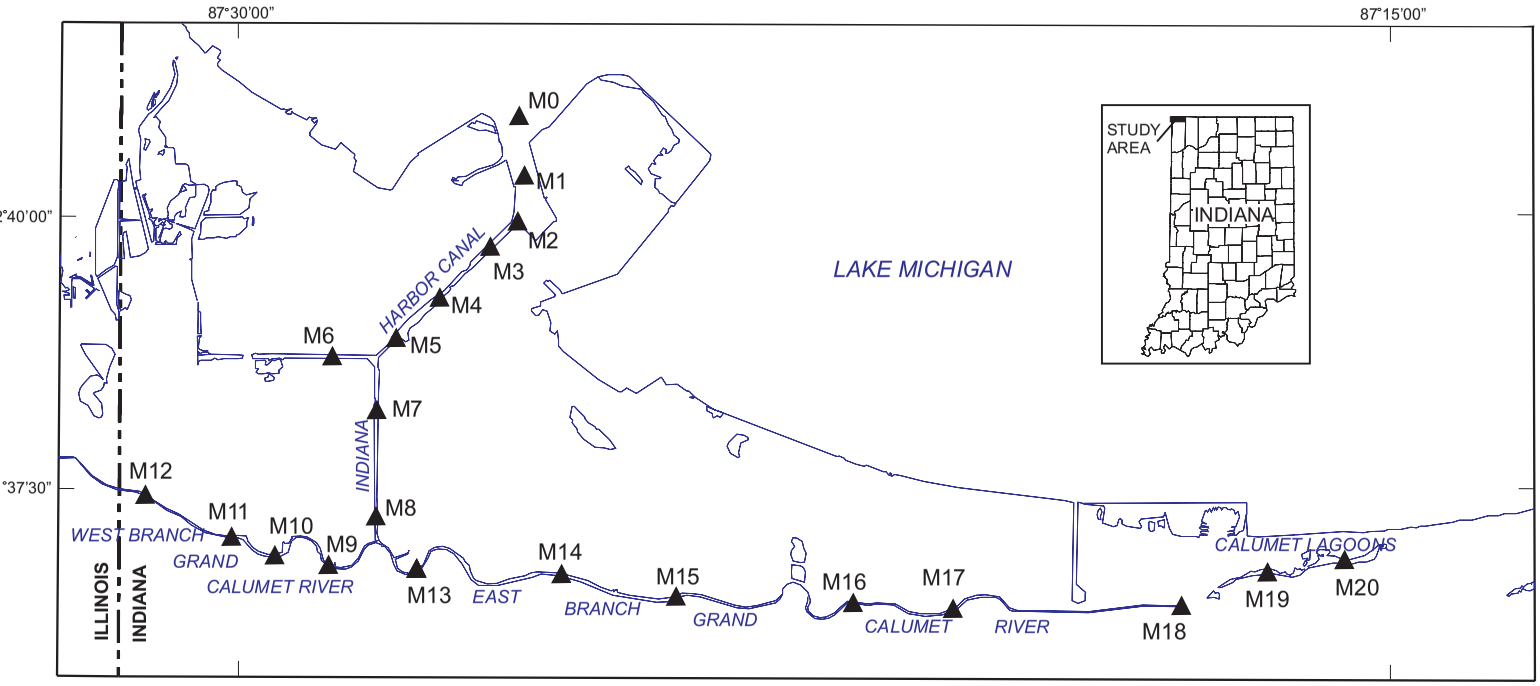
STATION NUMBER	DATE	FLUOR-ENE TOTAL (µg/L) (34381)	HEPTA-CHLOR EPOXIDE TOTAL (µg/L) (39420)	HEPTA-CHLOR, TOTAL (µg/L) (39410)	INDENO (1,2,3-CD) PYRENE TOTAL (µg/L) (34403)	LINDANE TOTAL (µg/L) (39340)	METH-OXY-CHLOR, TOTAL (µg/L) (39480)	O,P' DDD, TOTAL (µg/L) (39315)	O,P' DDE TOTAL (µg/L) (39327)	O,P' DDT, TOTAL (µg/L) (39305)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (mg/L) (00556)
414057087263601	07-28-99	<1	<0.05	<0.05	<0.10	<0.05	<0.50	<0.10	<0.10	<0.10	9
414023087262301	07-27-99	<1	<.05	<.05	<.10	<.05	<.50	<.10	<.10	<.10	E.65
414003087263300	07-27-99	<1	<.05	<.05	<.10	<.05	<.50	<.10	<.10	<.10	E.69
413952087264701	07-26-99	<1	<.05	<.05	<.10	<.05	<.50	<.10	<.10	<.10	E.96
413919087273201	07-26-99	<1	<.05	<.05	<.10	<.05	<.50	<.10	<.10	<.10	1
413857087280301	07-27-99	<1	<.05	<.05	<.10	<.05	<.50	<.10	<.10	<.10	10
413848087285201	07-28-99	<1	<.05	<.05	<.10	<.05	<.50	<.10	<.10	<.10	13
413822087281601	07-27-99	<1	<.05	<.05	<.10	<.05	<.50	<.10	<.10	<.10	<1
413716087281600	07-29-99	<1	<.05	<.05	<.10	<.05	<.50	<.10	<.10	<.10	19
413651087285001	07-27-99	<1	<.05	<.05	<.10	<.05	<.50	<.10	<.10	<.10	27
413658087292601	07-30-99	<1	<.05	<.05	<.10	<.05	<.50	<.10	<.10	<.10	2
413707087300300	07-26-99	<1	<.05	<.05	<.10	<.05	<.50	<.10	<.10	<.10	2
05536357	07-27-99	<1	<.05	<.05	<.10	<.05	<.50	<.10	<.10	<.10	4
413650087274201	07-28-99	<1	<.05	<.05	<.10	<.05	<.50	<.10	<.10	<.10	21
413647087255700	07-29-99	<1	<.05	<.05	<.10	<.05	<.50	<.10	<.10	<.10	2
413636087242601	07-28-99	<1	<.05	<.05	<.10	<.05	<.50	<.10	<.10	<.10	13
413632087221601	07-29-99	<1	<.05	<.05	<.10	<.05	<.50	<.10	<.10	<.10	42
413626087211101	07-28-99	<1	<.05	<.05	.11	<.05	<.50	<.10	<.10	<.10	16
413630087180401	07-28-99	<1	<.05	<.05	.12	<.05	<.50	<.10	<.10	<.10	25
413649087171201	07-30-99	<1	<.05	<.05	<.10	<.05	<.50	<.10	<.10	<.10	E.89
413655087160601	07-30-99	<1	<.05	<.05	<.10	<.05	<.50	<.10	<.10	<.10	3
413643087263801	07-29-99	--	--	--	--	--	--	--	--	--	--
413637087251301	07-29-99	--	--	--	--	--	--	--	--	--	--
04092677	07-29-99	--	--	--	--	--	--	--	--	--	--
413641087230801	07-29-99	--	--	--	--	--	--	--	--	--	--
413628087201401	07-29-99	--	--	--	--	--	--	--	--	--	--
413627087192801	07-29-99	--	--	--	--	--	--	--	--	--	--

MISCELLANEOUS WATER-QUALITY STATION ANALYSES--Continued

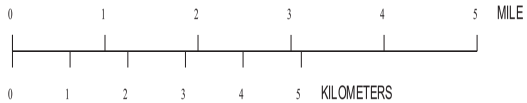
GRAND CALUMET RIVER AND INDIANA HARBOR CANAL IN LAKE COUNTY

STATION NUMBER	DATE	DDD, TOTAL (µg/L) (39310)	DDE, TOTAL (µg/L) (39320)	P,P' DDT, TOTAL (µg/L) (39300)	P,P' THRENE TOTAL (µg/L) (34461)	P,P' PHENOLS TOTAL (µg/L) (32730)	PHENAN-PYRENE TOTAL (µg/L) (34469)	TOX-APHENE, TOTAL (µg/L) (39400)	NAPHTH-ALENE TOTAL (µg/L) (34696)	CYANIDE UNFLTRD TOT REC EPA-CON-TRACT (mg/L) (99896)	CYANIDE AMEN-ABLE TO CHLOR-INATION UNFLTRD (mg/L) (00722)
414057087263601	07-28-99	<0.1	<0.1	<0.1	<1	<0.02	<0.1	<5	<1	0.00084	0.00161
414023087262301	07-27-99	<.1	<.1	<.1	<1	<.02	<.1	<5	<1	.00128	.00193
414003087263300	07-27-99	<.1	<.1	<.1	<1	<.02	.16	<5	<1	.00249	.00281
413952087264701	07-26-99	<.1	<.1	<.1	<1	<.02	.22	<5	<1	.00198	.00233
413919087273201	07-26-99	<.1	<.1	<.1	<1	<.02	.44	<5	<1	.00412	.00407
413857087280301	07-27-99	<.1	<.1	<.1	<1	<.02	.31	<5	<1	.00319	.00408
413848087285201	07-28-99	<.1	<.1	<.1	<1	<.02	.17	<5	<1	.00182	.00287
413822087281601	07-27-99	<.1	<.1	<.1	<1	<.02	.43	<5	<1	.00365	.00398
413716087281600	07-29-99	--	<.1	<.1	<1	.022	.33	<5	<1	.00305	.00362
413651087285001	07-27-99	<.1	<.1	<.1	<1	<.02	<.23	<5	<1	.0071	.00746
413658087292601	07-30-99	<.1	<.1	<.1	<1	<.02	.13	<5	<1	.00873	.00868
413707087300300	07-26-99	<.1	<.1	<.1	<1	<.02	.25	<5	<1	.02095	.01918
05536357	07-27-99	<.1	<.1	<.1	<1	<.02	.13	<5	<1	.00494	.00752
413650087274201	07-28-99	<.1	<.1	<.1	<1	<.02	.28	<5	<1	.00287	.00368
413647087255700	07-29-99	<.1	<.1	<.1	<1	<.02	.24	<5	<1	.00236	.00219
413636087242601	07-28-99	<.1	<.1	<.1	<1	<.02	.22	<5	<1	.00173	.00184
413632087221601	07-29-99	<.1	<.1	<.1	<1	<.02	.27	<5	<1	.00213	.00198
413626087211101	07-28-99	<.1	<.1	<.1	<1	<.02	.27	<5	<1	.00147	.00154
413630087180401	07-28-99	<.1	<.1	<.1	<1	<.02	.53	<5	<1	.01254	.00974
413649087171201	07-30-99	<.1	<.1	<.1	<1	<.02	<.1	<5	<1	.00494	.00553
413655087160601	07-30-99	<.1	<.1	<.1	<1	<.02	<.1	<5	<1	.0028	.00282
413643087263801	07-29-99	--	--	--	--	--	--	--	--	--	--
413637087251301	07-29-99	--	--	--	--	--	--	--	--	--	--
04092677	07-29-99	--	--	--	--	--	--	--	--	--	--
413641087230801	07-29-99	--	--	--	--	--	--	--	--	--	--
413628087201401	07-29-99	--	--	--	--	--	--	--	--	--	--
413627087192801	07-29-99	--	--	--	--	--	--	--	--	--	--

STATION NUMBER	DATE	CHRO-MIUM, HEXA-VALENT, DIS. (µg/L AS Cr) (01032)	MERCURY WATER, UNFLTRD (ng/L) (50286)	NITRO-GEN, ORGANIC TOTAL (mg/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (mg/L AS N) (00607)	NITROGN ORGANIC SEDIMNT SUSP TOTAL AS N (mg/L) (00606)	PHOS-PHORUS ORGANIC TOTAL (mg/L AS P) (00670)	PHOS-PHORUS ORGANIC DIS-SOLVED (mg/L AS P) (00673)	PHOS ORGANIC SEDIMNT SUSP TOTAL AS P (mg/L) (00676)	PHOS ORTHO SEDIMNT SUSP TOTAL AS P (mg/L) (00674)	CARBON, ORGANIC PARTIC-ULATE TOTAL (mg/L AS C) (00689)
414057087263601	07-28-99	--	--	E0.149	E0.213	<0.5	E0.032	<0.1	<0.1	<0.05	<0.5
414023087262301	07-27-99	--	--	1.65	<.5	<1.15	<.05	<.1	<.1	E.029	.2
414003087263300	07-27-99	.756	3.11	E.03	<.5	<.5	<.05	E.008	<.1	E.056	.1
413952087264701	07-26-99	--	--	E.27	.660	<.5	<.05	<.1	<.1	<.05	<.5
413919087273201	07-26-99	--	--	.640	.510	.13	<.05	<.1	<.1	E.084	.4
413857087280301	07-27-99	.504	4	.640	.350	.29	E.019	<.1	<.1	<.05	<.5
413848087285201	07-28-99	6.8	2.06	E.399	E.351	E.048	E.037	E.014	E.023	E.015	<.5
413822087281601	07-27-99	<.5	5.18	.450	.610	<.5	<.05	<.1	<.1	<.05	<.5
413716087281600	07-29-99	--	--	.110	.240	<.5	E.024	E.025	<.1	E.012	.1
413651087285001	07-27-99	.504	18.98	1.000	1.000	<.5	<.05	<.1	<.1	.24	.6
413658087292601	07-30-99	--	--	3.600	1.800	1.8	<.05	<.1	<.1	<.05	<.5
413707087300300	07-26-99	--	--	1.250	.880	.37	<.05	<.1	<.1	.59	1.1
05536357	07-27-99	.504	6.23	1.450	.990	.46	<.05	.03	<.1	.25	.5
413650087274201	07-28-99	--	3.31	E.27	E.3	<.5	E.025	<.1	<.1	<.05	<.5
413647087255700	07-29-99	--	--	.310	E.28	.03	<.05	E.016	<.1	E.059	<.5
413636087242601	07-28-99	3.28	1.54	.350	.430	<.5	.033	E.031	E.003	E.011	.8
413632087221601	07-29-99	--	--	.250	.230	.02	<.05	<.1	<.1	<.05	<.5
413626087211101	07-28-99	1.01	2	E.17	.260	<.5	<.05	<.1	<.1	<.05	<.5
413630087180401	07-28-99	3.28	7.39	.700	.600	.1	<.05	E.016	<.1	E.172	3.8
413649087171201	07-30-99	--	--	.780	.410	.37	<.05	<.1	<.1	.3	<.5
413655087160601	07-30-99	--	--	<2.6	<.5	<2.1	<.05	<.1	<.1	.12	.1
413643087263801	07-29-99	--	--	--	.530	--	--	--	--	--	--
413637087251301	07-29-99	--	--	--	.330	--	--	--	--	--	--
04092677	07-29-99	--	--	--	.320	--	--	--	--	--	--
413641087230801	07-29-99	--	--	--	.420	--	--	--	--	--	--
413628087201401	07-29-99	--	--	--	.390	--	--	--	--	--	--
413627087192801	07-29-99	--	--	--	.680	--	--	--	--	--	--



Base from U.S. Geological Survey digital data 1:24,000 Albers Equal Area projection
Standard parallels 29°30' and 45°30', Central meridian -86°



EXPLANATION

▲ M0 Water-quality-sampling site and site designation

Figure 10.--Water-quality-sampling sites for the Grand Calumet River and the Indiana Harbor Canal, in Lake County, Indiana, April 2000.

GRAND CALUMET RIVER AND INDIANA HARBOR CANAL IN LAKE COUNTY

Analytical results for water-quality samples collected at various sites on the Grand Calumet River and the Indiana Harbor Canal in Lake County, Indiana, April, 2000. The sampling was conducted through a cooperative investigation with the US Army Corps of Engineers and the U.S. Geological Survey. Location of water-quality- sampling sites shown on figure 9.

Measurements for dissolved oxygen, pH, specific conductance, water temperature, light intensity, oxidation-reduction potential, transparency, and turbidity were determined at the site.

Water-quality analysis were done by a Department of Interior approved contractual laboratory.

Date is in month-day-year; time is in military notation; numbers in parenthesis are U.S. Geological Survey National Water Information System parameter codes; mg/L, milligrams per liter; E, estimated value; --, no data; µS/cm, microsiemens per centimeter at 25 degrees Celsius; deg C, degrees Celsius; µ-Eins/sqm/s, micro Einsteins per square meter per second; mv, millivolts; m, meter; Ntu, Nephelometric turbidity units; µg/L, micrograms per liter

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

STATION NUMBER	SITE NUMBER	DATE	TIME	OXYGEN, DIS-SOLVED (mg/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (µS/cm) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (mg/L AS $CaCO_3$) (00900)	ALKA-LINITY WAT.DIS FET LAB $CaCO_3$ (mg/L) (29801)	BICAR-BONATE WAT.DIS FET FIELD HCO_3 (mg/L) (29804)	CAR-BONATE WAT.DIS FET FIELD CO_3 (mg/L) (29807)	HY-DROXIDE WAT.DIS FET FIELD OH (mg/L) (29810)
414057087263601	M1	04-27-00	0840	9.5	8.0	446	12.8	230	112	112	<5.0	<5.0
414023087262301	M2	04-27-00	0930	8.6	7.9	492	14.3	170	118	118	<5.0	<5.0
414003087263300	M3	04-25-00	0930	7.8	7.7	578	15.7	230	115	115	<5.0	<5.0
413952087264701	M4	04-24-00	1630	7.8	7.6	539	15.6	210	112	112	<5.0	<5.0
413919087273201	M5	04-24-00	1500	7.0	7.5	619	15.9	220	120	120	<5.0	<5.0
413857087280301	M5	04-25-00	1300	7.4	7.8	643	17.1	210	110	110	<5.0	<5.0
413848087285201	M6	04-25-00	1430	7.8	7.7	652	16.3	190	117	117	<5.0	<5.0
413822087281601	M7	04-25-00	1200	7.5	8.0	569	16.2	250	117	117	<5.0	<5.0
413716087281600	M8	04-27-00	0930	7.6	7.9	609	16.7	200	115	115	<5.0	<5.0
413651087285001	M9	04-25-00	1500	12.0	7.7	1210	17.3	420	156	156	<5.0	<5.0
413658087292601	M10	04-27-00	1330	9.5	7.2	1560	16.2	460	140	140	<5.0	<5.0
413707087300300	M11	04-26-00	1100	9.8	7.5	1310	16.0	420	158	158	<5.0	<5.0
05536357	M12	04-26-00	0930	4.6	7.3	1240	11.8	410	173	173	<5.0	<5.0
413650087274201	M13	04-26-00	1345	8.5	8.1	515	18.4	180	110	110	<5.0	<5.0
413647087255700	M14	04-27-00	1230	8.4	8.2	480	18.4	170	111	111	<5.0	<5.0
413636087242601	M15	04-26-00	1430	9.4	8.1	513	19.0	180	110	110	<5.0	<5.0
413632087221601	M16	04-24-00	1430	9.5	8.3	400	18.6	170	110	110	<5.0	<5.0
413626087211101	M17	04-24-00	1600	9.3	8.3	394	18.8	170	107	107	<5.0	<5.0
413630087180401	M18	04-25-00	0900	3.5	7.9	809	13.4	450	232	232	<5.0	<5.0
413649087171201	M19	04-26-00	0900	10.2	8.1	767	13.2	350	212	212	<5.0	<5.0
413656087160701	M20	04-26-00	1030	13.4	8.7	634	13.9	170	107	107	<5.0	<5.0

STATION NUMBER	DATE	CHLOR-IDE WATER UNFLTRD (mg/L) (99220)	FLUO-RIDE, TOTAL (mg/L AS F) (00951)	SULFATE (mg/L AS SO_4) (00946)	SULFIDE TOTAL (mg/L AS S) (00745)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (mg/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (mg/L AS N) (00625)	NITRO-GEN, AMMONIA TOTAL (mg/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (mg/L AS N) (00608)	NITRO-GEN, ORGANIC DIS-SOLVED (mg/L AS N) (00607)
414057087263601	04-27-00	35.7	E0.40	44.9	<0.05	<0.50	1.0	0.26	0.27	<0.50
414023087262301	04-27-00	48.1	E.58	48.0	<.05	.57	1.4	.49	.43	.14
414003087263300	04-25-00	47.5	E.49	52.4	<.05	E.18	E.32	.34	.37	<.50
413952087264701	04-24-00	51.0	E.49	59.9	<.05	E.33	<.50	.34	.37	<.50
413919087273201	04-24-00	63.7	E.53	69.1	<.05	E.27	E.10	.43	.42	<.50
413857087280301	04-25-00	72.7	E.73	70.7	<.05	E.18	E.38	.19	.37	<.50
413848087285201	04-25-00	62.2	E.55	66.7	<.05	.50	E.48	.40	.45	.05
413822087281601	04-25-00	54.7	E.54	65.8	E.01	E.11	.61	.37	.42	<.50
413716087281600	04-27-00	60.0	E.52	64.1	E.02	1.2	.80	.45	.45	.75
413651087285001	04-25-00	209	E.74	216	E.03	.70	1.1	.19	.10	.60
413658087292601	04-27-00	249	E.86	183	<.05	.73	.97	.31	.37	.36
413707087300300	04-26-00	191	E.74	182	.08	.73	1.1	.21	.12	.61
05536357	04-26-00	186	E.74	179	<.05	.94	1.2	.25	.23	.71
413650087274201	04-26-00	42.5	E.47	53.4	<.05	.69	.69	.44	.40	.29
413647087255700	04-27-00	44.7	E.54	39.5	E.01	E.36	.76	.30	.31	E.05
413636087242601	04-26-00	47.8	E.49	42.7	<.05	.64	.62	.42	.31	.33
413632087221601	04-24-00	26.8	E.57	30.2	<.05	<.50	E.17	.48	.48	<.50
413626087211101	04-24-00	25.6	E.51	29.7	<.05	E.12	<.50	.52	.50	<.50
413630087180401	04-25-00	50.3	E.63	108	E.02	9.6	8.2	7.2	9.5	.10
413649087171201	04-26-00	45.5	E.52	78.1	<.05	4.9	5.2	4.9	4.5	.40
413656087160701	04-26-00	98.7	E.35	32.6	<.05	E.33	E.28	.57	<.10	E.33

GRAND CALUMET RIVER AND INDIANA HARBOR CANAL IN LAKE COUNTY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

STATION NUMBER	DATE	NITRO-GEN, NO2+NO3 TOTAL (mg/L AS N) (00630)	NITROGN ORGANIC SEDIMNT SUSP TOTAL AS N (mg/L) (00606)	NITRO-GEN, ORGANIC TOTAL (mg/L AS N) (00605)	PHOS-PHORUS DIS-SOLVED (mg/L AS P) (00666)	PHOS-PHORUS ORGANIC DIS-SOLVED (mg/L AS P) (00673)	PHOS-PHORUS ORGANIC TOTAL (mg/L AS P) (00670)	PHOS-PHORUS ORTHO, DIS-SOLVED (mg/L AS P) (00671)	PHOS-PHORUS ORTHO TOTAL (mg/L AS P) (70507)	PHOS-PHORUS TOTAL (mg/L AS P) (00665)
414057087263601	04-27-00	2.0	0.74	0.74	<0.05	<0.10	E0.04	<0.10	<0.10	E0.04
414023087262301	04-27-00	2.2	.83	.97	E.02	<.10	<.05	<.05	<.05	E.04
414003087263300	04-25-00	3.4	<.50	<.50	E.03	.03	<.05	<.05	E.05	E.04
413952087264701	04-24-00	3.3	<.50	<.50	.05	.03	<.05	E.03	.08	.07
413919087273201	04-24-00	4.0	<.50	<.50	.05	E.02	.23	E.04	.06	.09
413857087280301	04-25-00	2.3	E.19	E.19	E.05	E.05	.07	<.05	<.05	.07
413848087285201	04-25-00	4.3	E.03	E.08	E.03	E.03	E.03	<.05	E.02	E.05
413822087281601	04-25-00	4.1	.24	.24	E.03	E.03	E.01	<.05	E.05	.06
413716087281600	04-27-00	5.1	<.50	.35	E.02	E.02	E.04	<.05	<.05	E.04
413651087285001	04-25-00	11.8	.31	.91	.19	<.10	.05	.21	.23	.28
413658087292601	04-27-00	15.2	.30	.66	.12	E.10	.14	E.02	<.10	.14
413707087300300	04-26-00	12.3	<.28	.89	.15	<.15	.34	<.10	<.10	.34
05536357	04-26-00	11.4	.24	.95	.08	.08	E.25	<.05	E.03	.28
413650087274201	04-26-00	3.8	<.50	.25	E.03	.01	E.03	E.02	<.05	E.03
413647087255700	04-27-00	4.4	E.41	.46	E.02	E.02	E.03	<.05	<.05	E.03
413636087242601	04-26-00	4.4	<.50	.20	<.05	<.10	E.04	<.05	<.05	E.04
413632087221601	04-24-00	3.6	<.50	<.50	.05	E.02	E.03	E.03	E.03	.06
413626087211101	04-24-00	3.6	<.50	<.50	.05	E.03	E.03	E.02	E.03	.06
413630087180401	04-25-00	1.5	.90	1.0	E.02	E.02	E.05	<.05	E.02	.07
413649087171201	04-26-00	2.3	<.50	.30	E.02	E.02	E.03	<.05	<.10	E.03
413656087160701	04-26-00	E.05	<.50	<.50	.01	E.01	E.05	<.05	<.05	E.05

STATION NUMBER	DATE	PHOS ORGANIC SEDIMNT SUSP TOTAL AS P (mg/L) (00676)	PHOS ORTHO SEDIMNT SUSP TOTAL AS P (mg/L) (00674)	CARBON, INOR-GANIC, TOTAL (mg/L AS C) (00685)	CARBON, ORGANIC DIS-SOLVED (mg/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (mg/L AS C) (00689)	CARBON, ORGANIC TOTAL (mg/L AS C) (00680)	OXYGEN DEMAND, BIO-CHEM-ICAL 30 DAY (mg/L) (00349)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (mg/L) (00310)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (mg/L) (00340)
414057087263601	04-27-00	E0.04	<0.10	24.8	2.7	<0.5	2.3	--	E1.4	E11.2
414023087262301	04-27-00	<.05	<.05	26.0	2.7	<.5	2.4	--	<2.0	E3.2
414003087263300	04-25-00	<.10	E.05	28.6	2.0	.4	2.4	17.4	E1.9	E16.9
413952087264701	04-24-00	<.10	E.05	27.1	2.0	.4	3.2	--	2.5	<20.0
413919087273201	04-24-00	E.01	E.03	28.4	2.1	.9	3.0	--	<2.0	E10.2
413857087280301	04-25-00	E.02	<.05	27.1	3.0	.3	3.3	7.0	4.2	25.6
413848087285201	04-25-00	E.01	E.02	29.6	3.0	<.5	2.8	20.0	2.0	<20.0
413822087281601	04-25-00	<.10	E.05	26.1	2.5	<.5	2.2	21.2	E1.8	E17.5
413716087281600	04-27-00	E.02	<.05	25.8	3.8	<.5	3.0	--	2.9	E16.9
413651087285001	04-25-00	.05	.02	37.9	6.0	.5	6.5	21.3	E1.8	36.6
413658087292601	04-27-00	E.04	<.05	32.2	7.6	<.5	7.4	--	3.4	30.6
413707087300300	04-26-00	<.19	<.05	40.0	7.0	.8	7.8	--	3.1	29.9
05536357	04-26-00	E.17	E.03	42.5	6.7	.7	7.4	21.3	5.6	34.6
413650087274201	04-26-00	E.02	<.05	26.9	1.9	1.7	3.6	25.0	6.2	E8.5
413647087255700	04-27-00	E.01	<.05	25.0	3.0	<.5	2.8	--	2.8	10.5
413636087242601	04-26-00	E.04	<.05	24.7	2.2	.2	2.4	11.8	2.3	E11.2
413632087221601	04-24-00	E.01	<.05	25.8	1.4	.3	1.7	--	4.6	<20.0
413626087211101	04-24-00	<.10	E.01	25.6	1.3	.2	1.5	--	3.4	E4.5
413630087180401	04-25-00	E.03	E.02	56.6	6.3	.2	6.5	48.6	7.9	31.6
413649087171201	04-26-00	E.01	<.05	49.9	4.7	.4	5.1	--	3.6	E14.9
413656087160701	04-26-00	E.03	<.05	25.6	4.7	1.3	6.0	29.2	6.2	29.2

GRAND CALUMET RIVER AND INDIANA HARBOR CANAL IN LAKE COUNTY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

STATION NUMBER	DATE	NITRO- LIGHT INCID. 400- 700NM X-S.AVG (µ-Eins /sqm/s) (90200)	NITROGN ORGANIC OXID- ATION RED- UCTION POTEN- TIAL (mv) (00090)	NITRO- RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (mg/L) (00530)	PHOS- RESIDUE VOLA- TILE, DIS- SOLVED (mg/L) (00520)	PHOS- PHORUS RESIDUE VOLA- TILE, SUS- PENDED (mg/L) (00535)	PHOS- SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (mg/L) (70300)	PHOS- PHORUS SOLIDS, RESIDUE AT 105 DEG. C, TOTAL (mg/L) (00500)	PHOS- TRANS- PAR- ENCY (SECCHI DISK) (m) (00078)	TUR- BID- ITY FIELD WATER UNFLTRD (Ntu) (61028)
414057087263601	04-27-00	--	--	9.6	5.2	48	271	261	0.79	14
414023087262301	04-27-00	--	--	7.6	E.8	53	265	302	.76	12
414003087263300	04-25-00	--	--	5.2	E2.4	185	361	389	.91	10
413952087264701	04-24-00	--	521	8.0	E4.4	27	330	296	.91	11
413919087273201	04-24-00	--	526	10.8	1.6	36	376	338	.82	12
413857087280301	04-25-00	--	--	E3.2	E1.2	130	414	412	.88	8
413848087285201	04-25-00	--	--	4.4	E2.4	155	437	409	1.10	9
413822087281601	04-25-00	15.5	428	12.0	E2.4	174	391	399	--	15
413716087281600	04-27-00	--	366	20.4	4.8	108	374	364	--	18
413651087285001	04-25-00	3000	407	E3.6	E1.2	285	906	878	--	3
413658087292601	04-27-00	--	--	E1.6	E1.6	225	955	953	.79	2
413707087300300	04-26-00	3000	292	18.4	6.4	261	880	967	--	11
05536357	04-26-00	4700	335	10.0	E3.6	189	837	894	--	8.83
413650087274201	04-26-00	225	319	24.8	E3.2	153	317	353	--	16
413647087255700	04-27-00	--	346	20.8	E1.2	60	303	286	--	22
413636087242601	04-26-00	--	--	8.0	E2.4	96	306	338	.64	14
413632087221601	04-24-00	350	363	11.2	E2.4	31	249	213	--	17
413626087211101	04-24-00	140	362	14.4	E3.6	28	243	213	--	17
413630087180401	04-25-00	58.0	450	18.0	8.0	170	546	562	--	17
413649087171201	04-26-00	--	--	10.8	E2.8	164	521	493	.79	9
413656087160701	04-26-00	--	--	24.8	7.6	123	382	347	.85	6

STATION NUMBER	DATE	ALUM- INUM, DIS- SOLVED (µg/L AS Al) (01106)	ALUM- INUM, TOTAL RECOV- ERABLE (µg/L AS Al) (01105)	ARSENIC DIS- SOLVED (µg/L AS As) (01000)	ARSENIC TOTAL (µg/L AS As) (01002)	BARIUM, DIS- SOLVED (µg/L AS Ba) (01005)	BARIUM, TOTAL RECOV- ERABLE (µg/L AS Ba) (01007)	CADMIUM DIS- SOLVED (µg/L AS Cd) (01025)	CADMIUM WATER UNFLTRD TOTAL (µg/L AS Cd) (01027)	CHRO- MIUM, DIS- SOLVED (µg/L AS Cr) (01030)
414057087263601	04-27-00	--	--	--	--	--	--	--	--	--
414023087262301	04-27-00	--	--	--	--	--	--	--	--	--
414003087263300	04-25-00	E40.8	179	E1.7	E1.4	22.6	25.1	<1.0	E0.06	5.9
413952087264701	04-24-00	--	--	--	--	--	--	--	--	--
413919087273201	04-24-00	--	--	--	--	--	--	--	--	--
413857087280301	04-25-00	E47.9	222	E1.7	E1.2	22.3	25.7	<1.0	E.09	5.4
413848087285201	04-25-00	<100	151	E1.8	<5.0	22.9	26.6	<1.0	E.07	6.2
413822087281601	04-25-00	E34.2	324	E2.1	E1.5	21.7	25.4	<1.0	E.14	7.0
413716087281600	04-27-00	--	--	--	--	--	--	--	--	--
413651087285001	04-25-00	<100	105	10.1	13.8	17.8	21.1	<1.0	E.35	9.8
413658087292601	04-27-00	--	--	--	--	--	--	--	--	--
413707087300300	04-26-00	--	--	--	--	--	--	--	--	--
05536357	04-26-00	E37.2	232	9.7	14.1	18.3	26.5	<1.0	E.23	6.3
413650087274201	04-26-00	E66.2	502	E1.1	E1.6	21.9	26.1	<1.0	E.13	4.7
413647087255700	04-27-00	--	--	--	--	--	--	--	--	--
413636087242601	04-26-00	E72.1	326	E.98	<5.0	21.1	23.4	<1.0	E.05	4.6
413632087221601	04-24-00	--	--	--	--	--	--	--	--	--
413626087211101	04-24-00	--	--	--	--	--	--	--	--	--
413630087180401	04-25-00	<100	E82.0	5.5	11.2	60.0	69.0	<1.0	<1.0	13.9
413649087171201	04-26-00	--	--	--	--	--	--	--	--	--
413656087160701	04-26-00	E42.6	E69.3	E2.4	E4.0	33.6	39.8	<1.0	<1.0	3.6

GRAND CALUMET RIVER AND INDIANA HARBOR CANAL IN LAKE COUNTY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

STATION NUMBER	DATE	CHRO-MIUM, HEXA-VALENT, DIS. (µg/L AS Cr) (01032)	CHRO-MIUM, TOTAL RECOV-ERABLE (µg/L AS Cr) (01034)	COPPER, DIS-SOLVED (µg/L AS Cu) (01040)	COPPER, TOTAL RECOV-ERABLE (µg/L AS Cu) (01042)	CYANIDE AMEN-ABLE TO CHLOR-INATION UNFLTRD (mg/L) (00722)	IRON, DIS-SOLVED (µg/L AS Fe) (01046)	IRON, TOTAL RECOV-ERABLE (µg/L AS Fe) (01045)	LEAD, DIS-SOLVED (µg/L AS Pb) (01049)	LEAD, TOTAL RECOV-ERABLE (µg/L AS Pb) (01051)
414057087263601	04-27-00	--	--	E1.8	3.5	0.033	<40.0	618	<1.0	2.8
414023087262301	04-27-00	--	--	2.9	5.8	.412	E12.5	673	<1.0	3.3
414003087263300	04-25-00	0.55	2.9	E1.3	3.3	.004	E20.6	669	<1.0	3.5
413952087264701	04-24-00	--	--	E1.7	4.7	.002	E21.7	871	<1.0	8.7
413919087273201	04-24-00	--	--	1.4	E3.1	.002	23.1	E1100	.72	E5.8
413857087280301	04-25-00	<.5	9.4	E1.3	4.5	.003	E14.2	947	<1.0	4.0
413848087285201	04-25-00	<.5	4.2	E1.5	2.9	.003	E12.1	579	<1.0	3.5
413822087281601	04-25-00	<.5	5.3	E1.5	4.3	.004	<40.0	1870	<1.0	11.3
413716087281600	04-27-00	--	--	E1.5	6.9	.005	<40.0	3310	<1.0	11.9
413651087285001	04-25-00	<.5	5.1	E1.9	4.9	.012	56.6	670	E.64	7.3
413658087292601	04-27-00	--	--	E1.7	2.7	.007	E36.8	69	E.50	1.3
413707087300300	04-26-00	--	--	E1.4	26.6	.011	139	1180	E.60	14.0
05536357	04-26-00	<.5	4.4	E1.3	19.3	.008	229	1180	E.60	11.1
413650087274201	04-26-00	<.5	7.3	E1.7	6.2	.003	<40.0	3610	<1.0	11.7
413647087255700	04-27-00	--	--	E1.8	7.4	.004	E23.7	2220	<1.0	7.0
413636087242601	04-26-00	<.5	2.2	2.1	4.2	.003	<40.0	1270	<1.0	3.9
413632087221601	04-24-00	--	--	1.8	E3.2	.002	40.0	910	3.7	2.4
413626087211101	04-24-00	--	--	E1.2	3.4	.003	<40.0	546	<1.0	2.5
413630087180401	04-25-00	<.5	2.5	E.64	E1.7	.004	122	1350	<1.0	2.4
413649087171201	04-26-00	--	--	E.62	E1.4	.003	98.0	571	<1.0	2.3
413656087160701	04-26-00	<.5	<2.0	E.30	E1.0	.002	51.3	491	<1.0	1.8

STATION NUMBER	DATE	MANGA-NESE, DIS-SOLVED (µg/L AS Mn) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (µg/L AS Mn) (01055)	NICKEL, DIS-SOLVED (µg/L AS Ni) (01065)	NICKEL, TOTAL RECOV-ERABLE (µg/L AS Ni) (01067)	SELE-NIUM, DIS-SOLVED (µg/L AS Se) (01145)	SELE-NIUM, TOTAL (µg/L AS Se) (01147)	ZINC, DIS-SOLVED (µg/L AS Zn) (01090)	ZINC, TOTAL RECOV-ERABLE (µg/L AS Zn) (01092)	1,2,5,6 -DIBENZ -ANTHRA -CENE TOTAL (µg/L) (34556)
414057087263601	04-27-00	--	--	--	--	--	--	--	--	<0.1
414023087262301	04-27-00	--	--	--	--	--	--	--	--	<.1
414003087263300	04-25-00	28.6	43.0	E1.8	3.0	<3.0	<3.0	E10.4	23.4	<.1
413952087264701	04-24-00	--	--	--	--	--	--	--	--	<.1
413919087273201	04-24-00	--	--	--	--	--	--	--	--	<.1
413857087280301	04-25-00	32.5	47.7	E1.8	3.9	<3.0	<3.0	E5.8	E18.5	<.1
413848087285201	04-25-00	34.9	50.5	E1.7	3.3	<3.0	E.99	E9.9	E16.3	<.1
413822087281601	04-25-00	28.8	50.3	E1.8	3.6	<3.0	E1.3	E15.5	37.1	<.1
413716087281600	04-27-00	--	--	--	--	--	--	--	--	<.1
413651087285001	04-25-00	19.0	23.0	4.1	5.7	<20.0	5.7	41.0	65.3	<.1
413658087292601	04-27-00	--	--	--	--	--	--	--	--	<.1
413707087300300	04-26-00	--	--	--	--	--	--	--	--	<.1
05536357	04-26-00	58.2	65.1	3.9	6.8	<20.0	5.3	32.0	72.8	<.1
413650087274201	04-26-00	19.8	65.9	E1.6	4.3	<3.0	E1.6	E9.2	60.0	<.1
413647087255700	04-27-00	--	--	--	--	--	--	--	--	<.1
413636087242601	04-26-00	11.9	35.1	E1.7	3.7	E.97	E1.6	E7.5	23.5	<.1
413632087221601	04-24-00	--	--	--	--	--	--	--	--	<.1
413626087211101	04-24-00	--	--	--	--	--	--	--	--	<.1
413630087180401	04-25-00	231	354	<2.0	E1.3	<3.0	<3.0	<20.0	E9.3	<.1
413649087171201	04-26-00	--	--	--	--	--	--	--	--	<.1
413656087160701	04-26-00	1.1	43.4	E.16	E1.4	<3.0	E1.0	<20.0	<20.0	<.1

GRAND CALUMET RIVER AND INDIANA HARBOR CANAL IN LAKE COUNTY--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

STATION NUMBER	DATE	ACE-NAPHTH-ENE TOTAL (µg/L) (34205)	ACE-NAPHTH-YLENE TOTAL (µg/L) (34200)	ANTHRA-CENE TOTAL (µg/L) (34220)	BENZO-A-PYRENE TOTAL (µg/L) (34247)	BENZO B FLUOR-AN-THENE TOTAL (µg/L) (34230)	BENZO K FLUOR-AN-THENE TOTAL (µg/L) (34242)	BENZ(A) ANTHRA-CENE WATER UNFLTRD REC (µg/L) (34526)	BENZO-[GHI]-PERY-LENE TOTAL (µg/L) (34521)	CHRY-SENE TOTAL (µg/L) (34320)
414057087263601	04-27-00	<1.0	<1.0	<0.50	<0.10	E0.04	<0.05	<0.10	<0.10	<0.10
414023087262301	04-27-00	<1.0	<1.0	<.50	E.02	E.05	<.05	E.02	<.10	E.03
414003087263300	04-25-00	<1.0	E.05	<.50	E.04	E.06	<.05	<.10	<.10	E.03
413952087264701	04-24-00	<1.0	.04	<.50	E.04	<.10	E.02	<.10	E.04	E.04
413919087273201	04-24-00	<1.0	<1.0	<.50	E.05	<.10	E.03	<.10	E.06	E.06
413857087280301	04-25-00	<1.0	<1.0	<.50	<.10	E.06	<.05	<.10	<.10	E.03
413848087285201	04-25-00	<1.0	<1.0	<.50	<.10	E.07	<.05	<.10	E.03	E.02
413822087281601	04-25-00	E.15	<1.0	E.06	.14	.16	.06	.13	.11	.22
413716087281600	04-27-00	<1.0	<1.0	E.10	.45	.54	.20	.37	.46	.64
413651087285001	04-25-00	E.30	E.18	E.02	E.03	E.09	<.05	E.07	<.10	.15
413658087292601	04-27-00	<1.0	<1.0	<.50	<.10	<.10	<.05	<.10	<.10	<.10
413707087300300	04-26-00	<1.0	<1.0	<.50	E.07	.12	.06	E.06	E.09	.15
05536357	04-26-00	E.15	<1.0	<.50	E.08	.12	.05	E.07	.10	.12
413650087274201	04-26-00	<1.0	E.10	E.02	.13	.15	.06	.10	.11	.15
413647087255700	04-27-00	E.48	E.08	E.04	.12	.16	.07	.11	.10	.14
413636087242601	04-26-00	E.16	E.07	E.03	E.10	.10	E.04	E.08	E.09	E.09
413632087221601	04-24-00	E.30	E.16	E.05	.13	.14	.06	.12	.12	.13
413626087211101	04-24-00	E.25	E.18	E.03	E.08	E.09	E.03	E.07	E.07	E.07
413630087180401	04-25-00	<1.0	E.31	E.04	.14	.17	.06	.11	.15	.13
413649087171201	04-26-00	<1.0	<1.0	<.50	E.04	E.07	<.05	E.02	E.05	E.03
413656087160701	04-26-00	<1.0	E.48	<.50	<.10	<.10	<.05	<.10	<.10	<.10

STATION NUMBER	DATE	FLUOR-ANTHENE TOTAL (µg/L) (34376)	FLUOR-ENE TOTAL (µg/L) (34381)	INDENO (1,2,3-CD) PYRENE TOTAL (µg/L) (34403)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (mg/L) (00556)	PHENAN-THRENE TOTAL (µg/L) (34461)	PHENOLS TOTAL (µg/L) (32730)	PYRENE TOTAL (µg/L) (34469)	NAPHTH-ALENE TOTAL (µg/L) (34696)	CYANIDE UNFLTRD TOT REC EPA-CON-TRACT (mg/L) (99896)
414057087263601	04-27-00	E0.04	<1.0	<0.10	<5.0	<1.0	<20	E0.09	<1.0	0.032
414023087262301	04-27-00	E.07	<1.0	<.10	<5.0	<1.0	<20	E.15	<1.0	.465
414003087263300	04-25-00	E.05	<1.0	<.10	<5.0	<1.0	<20	E.15	<1.0	.005
413952087264701	04-24-00	.11	E.01	E.02	<5.0	E.05	<20	E.19	<1.0	.003
413919087273201	04-24-00	.14	<1.0	E.03	<5.0	<1.0	<20	E.27	<1.0	.003
413857087280301	04-25-00	.13	<1.0	<.10	E2.3	E.07	<20	E.17	<1.0	.004
413848087285201	04-25-00	E.09	<1.0	<.10	<5.0	E.04	<20	E.23	<1.0	.002
413822087281601	04-25-00	.33	E.04	E.08	E2.7	E.12	<20	E.22	<1.0	.004
413716087281600	04-27-00	.55	E.08	.29	<5.0	E.27	<20	E.71	E.10	.007
413651087285001	04-25-00	.23	E.12	<.10	E2.8	E.24	<20	E.34	E.48	.009
413658087292601	04-27-00	E.07	<1.0	<.10	E3.5	E.04	<20	<1.0	<1.0	.005
413707087300300	04-26-00	.17	<1.0	E.05	9.7	E.11	<20	E.22	<1.0	.014
05536357	04-26-00	.32	E.04	E.06	E2.4	E.21	<20	E.25	E.13	.009
413650087274201	04-26-00	.39	E.04	E.07	<5.0	E.09	<20	E.32	E.08	.003
413647087255700	04-27-00	.51	E.13	E.08	1.9	E.13	<20	E.35	E.12	.003
413636087242601	04-26-00	.37	E.06	E.05	<5.0	E.09	<20	E.23	<1.0	.002
413632087221601	04-24-00	.40	E.17	E.08	<5.0	E.15	<20	E.28	<1.0	.003
413626087211101	04-24-00	.29	E.16	E.04	<5.0	E.11	47	E.21	<1.0	.003
413630087180401	04-25-00	.49	E.13	E.08	<5.0	E.24	<20	E.44	E.53	.011
413649087171201	04-26-00	.13	<1.0	E.03	<5.0	E.03	<20	E.09	<1.0	.001
413656087160701	04-26-00	E.04	<1.0	<.10	5.4	E.03	<20	<1.0	<1.0	.001

E Estimated

Base from U.S. Geological Survey digital data, 1:2,000,000 1996
Albers Equal-Area Conic projection
Standard parallels 29˚30' and 45˚30' central meridian -96˚

EXPLANATION

2 Number of lakes in designated county

Figure 11.--Number of lakes by county having water-level records for water-year 2000.

04100030 ADAMS LAKE NEAR WOLCOTTVILLE, IN

LOCATION.--Lat 41°33'15", long 86°19'11", in NE$^1/_4$NE$^1/_4$NW$^1/_4$ sec.25, T.36 N., R.10 E., Lagrange County, Hydrologic Unit 04050001 (WOLCOTTVILLE, IN quadrangle). The gage is on the east side of the lake on a dredged inlet, at the public access site, and 3.1 mi northeast of Wolcottville.

SURFACE AREA.--308 acres.

DRAINAGE AREA.--5.62 mi^2.

PERIOD OF RECORD.--1946 to current year.

DATUM OF GAGE.--949.90 ft above sea level, as corrected on the basis of levels of the Indiana Department of Natural Resources, 1976.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage is attached to the southwest wall of the dam on the outlet channel about 500 ft downstream from the lake.

ESTABLISHED LEGAL LEVEL.--3.59 ft gage datum or 953.59 ft above sea level as decreed on December 17, 1949, by the Lagrange County Circuit Court. Minor errors were subsequently discovered in the establishment of the datum of the gage (see "DATUM OF GAGE") and the correct elevation of the legal level should be 3.59 ft gage datum or 953.49 ft above sea level.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a concrete dam with a fixed crest "V" notch weir.

INLET AND OUTLET.--One inlet enters on the east side from Blackman Lake 2.3 mi upstream. The other inlet enters on the northeastern shore from Eve Lake. The outlet flows from the lake on the southern shore and into Little Elkhart Creek 1.7 mi downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 5.32 ft June 15, 1981; minimum stage, 2.12 ft Jan. 8, 1954.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.18	3.04	---	---	---	---	---	---	4.23	4.50	4.18	4.00
10	3.17	3.01	---	---	---	---	---	---	4.22	4.47	4.41	3.93
15	3.16	2.98	---	---	---	---	---	---	4.29	4.41	4.35	4.01
20	3.12	2.98	---	---	---	---	---	3.92	4.34	4.33	4.30	3.88
25	3.07	3.01	---	---	---	---	---	3.98	4.46	4.24	4.24	3.80
EOM	3.04	2.98	---	---	---	---	---	4.17	4.45	4.23	4.20	3.71

WTR YR 2000 MEAN 3.85 MAX 4.50 MIN 2.96

STREAMS TRIBUTARY TO LAKE ERIE

04177680 BALL LAKE NEAR HAMILTON, IN

LOCATION.--Lat 41°32'12", long 84°56'18", in SE$^1/_4$SW$^1/_4$NE$^1/_4$ sec.32, T.36 N., R.14 E., Steuben County, Hydrologic Unit 04100003 (HAMILTON, IN quadrangle). The gage is on the northeastern shore of the lake, south of the bridge over the outlet, and 1.3 mi west of Hamilton.

SURFACE AREA.--87 acres.

DRAINAGE AREA.--11.6 mi^2.

PERIOD OF RECORD.--1961 to current year.

DATUM OF GAGE.--889.81 ft above sea level, as corrected on the basis of levels of the Indiana Department of Natural Resources in February 1972.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage is driven into the lake bed near the recording gage and a high-water staff gage is attached to the control dam.

ESTABLISHED LEGAL LEVEL.--4.95 ft gage datum or 894.76 ft above sea level as decreed on September 20, 1974, by the Steuben County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a concrete sill with movable boards.

INLET AND OUTLET.--Fish Creek flows through the lake, entering at the western end and leaving at the northeastern end. Fish Creek empties into the St. Joseph River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 10.02 ft Dec. 26, 1965; minimum stage, 3.96 ft Oct. 19-31, Nov. 1-12, 1978.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.74	4.75	4.91	4.82	4.77	4.88	4.81	4.77	4.96	4.74	4.72	4.68
10	4.75	4.76	4.83	4.81	4.77	4.78	4.85	4.88	4.74	4.74	4.76	4.75
15	4.73	4.77	4.90	4.77	4.77	4.79	4.81	4.75	4.99	4.70	4.72	4.82
20	4.74	4.78	4.82	4.77	4.77	4.97	5.43	4.92	4.95	4.69	4.69	4.74
25	4.72	4.81	4.78	4.77	4.77	4.82	4.83	4.80	4.97	4.69	4.71	4.71
EOM	4.76	4.82	4.78	4.77	4.88	4.88	4.75	4.85	4.75	4.77	4.72	4.70

WTR YR 2000 MEAN 4.80 MAX 5.43 MIN 4.67

05517200 BASS LAKE AT BASS LAKE, IN

LOCATION.--Lat 41°12'28", long 86°36'07", in NW$^1/_4$NW$^1/_4$SW$^1/_4$ sec.24, T.32 N., R.2 W., Starke County, Hydrologic Unit 07120001 (BASS LAKE, IN quadrangle). The gage is on the southern shore of the lake, just north of the junction of U.S. Highway 35 and State Highway 10, at the town of Bass Lake.

SURFACE AREA.--1,400 acres.

DRAINAGE AREA.--5.18 mi^2.

PERIOD OF RECORD.--1943 to current year.

DATUM OF GAGE.--699.83 ft above sea level, as corrected from the unadjusted elevations.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage in two sections is at the site.

ESTABLISHED LEGAL LEVEL.--13.65 ft gage datum or 713.65 ft above sea level as decreed on August 10, 1948, by the Starke County Circuit Court. Minor errors were subsequently discovered in the establishment of the datum of the gage (see "DATUM OF GAGE") and the correct elevation of the legal level should be 13.65 ft gage datum or 713.48 ft above sea level.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a steel sheet piling dam.

INLET AND OUTLET.--Several small unnamed ditches enter the lake at various locations. The outlet flows from the western shore, into Cedar Lake Ditch, and eventually into the Kankakee River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 15.03 ft June 18, 1981; minimum stage, 10.52 ft Nov. 12, 13, 1964.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.65	12.37	12.44	12.46	12.49	12.59	12.55	12.69	12.80	13.00	12.80	12.58
10	12.63	12.34	12.41	12.47	12.48	12.60	12.63	12.70	12.71	13.01	12.82	12.57
15	12.53	12.29	12.45	12.45	12.48	12.67	12.59	12.67	12.84	12.95	12.74	12.69
20	12.52	12.28	12.44	12.47	12.52	12.63	12.75	12.70	12.92	12.86	12.69	12.62
25	12.43	12.30	12.44	12.49	12.54	12.62	12.73	12.67	12.95	12.78	12.69	12.62
EOM	12.41	12.27	12.43	12.50	12.61	12.59	12.67	12.75	12.91	12.79	12.66	12.55

WTR YR 2000 MEAN 12.61 MAX 13.02 MIN 12.24

STREAMS TRIBUTARY TO LAKE MICHIGAN

04100260 BEAR LAKE NEAR WOLFLAKE, IN

LOCATION.--Lat 41°19'07", long 85°30'49", in SW$^1/_4$NW$^1/_4$ sec.17, T.33 N., R.9 E., Noble County, Hydrologic Unit 04050001 (ORMAS, IN quadrangle). The gage is on the southern shore of the lake on a dredged channel, at the end of the gravel lane to the Merry Lea Nature Center, 1.1 mi southwest of the town of Wolflake.

SURFACE AREA.--136 acres.

DRAINAGE AREA.--6.98 mi^2.

PERIOD OF RECORD.--1943 to current year.

DATUM OF GAGE.--889.90 ft above sea level, as corrected on the basis of levels of the Indiana Department of Natural Resources, 1974-75.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well on the west side of the dredged channel.

ESTABLISHED LEGAL LEVEL.--4.60 ft gage datum or 894.60 ft above sea level as decreed on September 23, 1959, by the Noble County Circuit Court. Minor errors were subsequently discovered in the establishment of the datum of the gage (see "DATUM OF GAGE") and the correct elevation of the legal level should be 4.60 ft gage datum or 894.50 ft above sea level.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a steel sheet piling dam.

INLET AND OUTLET.--There are two inlets to the lake, one enters on the southwest shore from High Lake, 0.6 mi upstream, and the other enters from the northeast. The outlet, Carrol Creek, leaves the lake on the southeast tip, flows into Muncie Lake, 3.1 mi downstream, and eventually into the Elkhart River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 8.25 ft Dec. 30, 1942 (before dredging of the outlet channel). Maximum stage, 6.61 ft Apr. 12, 1944 (after dredging); minimum stage, 2.90 ft Oct. 31, Nov. 1-3, 7-17, 1952, Oct. 22-24, 29-31, Nov. 1-3, 6, 7, 1966.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.40	3.29	3.42	3.79	3.99	4.29	4.20	4.34	4.50	4.40	4.18	4.24
10	3.39	3.27	3.44	3.80	4.06	4.24	4.20	4.31	4.33	4.29	4.22	4.19
15	3.35	3.26	3.59	3.80	4.13	4.19	4.18	4.30	4.61	4.21	4.12	4.58
20	3.35	3.28	3.66	3.89	4.15	4.23	4.47	4.44	4.58	4.13	4.07	4.34
25	3.30	3.30	3.68	3.89	4.03	4.22	4.49	4.44	4.68	4.03	3.97	4.34
EOM	3.27	3.29	3.72	3.90	4.33	4.21	4.37	4.61	4.56	3.99	4.32	4.25

WTR YR 2000 MEAN 4.02 MAX 4.71 MIN 3.25

03331010 BIG CHAPMAN LAKE NEAR WARSAW, IN

LOCATION.--Lat 41°16'53", long 85°46'47", in NW$^1/_4$SE$^1/_4$SW$^1/_4$ sec.25, T.33 N., R.6 E., Kosciusko County, Hydrologic Unit 05120106 (LEESBURG, IN quadrangle). The gage is on the southeastern shore of the lake, at the public access site, 4.9 mi northeast of Warsaw.

SURFACE AREA.--581 acres.

DRAINAGE AREA.--4.17 mi^2.

PERIOD OF RECORD.--1945-68, 1971, 1976 to current year.

DATUM OF GAGE.--820.00 ft above sea level.

GAGE.--A water-stage recorder and an electric tape gage (ETG) are installed in an aluminum shelter over a 15-inch diameter stilling well.

ESTABLISHED LEGAL LEVEL.--7.75 ft gage datum or 827.75 ft above sea level as established on October 18, 1949, by the Kosciusko County Circuit Court. Little Chapman Lake has the same control structure and established level and hence the same lake levels for the period of record.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a concrete dam with a fixed crest at the outlet channel downstream from Little Chapman Lake.

INLET AND OUTLET.--Several small ditches enter the lake at various points. The outlet flows into Little Chapman Lake to the south, then into Deeds Creek, and eventually into the Tippecanoe River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 9.37 ft Oct. 11, 1954; minimum stage, 6.75 ft Oct. 20, 1953.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.15	7.07	7.36	7.49	7.49	7.81	7.69	7.45	7.83	7.85	7.45	7.55
10	7.11	7.08	7.29	7.51	7.52	7.82	7.73	7.48	7.67	7.83	7.49	7.65
15	7.07	7.07	7.50	7.50	7.53	7.78	7.72	7.49	7.69	7.58	7.43	7.84
20	7.06	7.09	7.44	7.51	7.57	7.82	7.85	7.58	7.66	7.46	7.43	7.58
25	7.05	7.13	7.37	7.49	7.72	7.80	7.62	7.60	7.84	7.37	7.59	7.63
EOM	7.04	7.12	7.40	7.47	7.85	7.73	7.46	7.72	7.82	7.48	7.60	7.58

WTR YR 2000 MEAN 7.51 MAX 8.01 MIN 7.01

03330040 BIG LAKE NEAR WOLFLAKE, IN

LOCATION.--Lat 41°16'33", long 85°30'43", in NW$^1/_4$SE$^1/_4$NW$^1/_4$ sec.32, T.33 N., R.9 E., Noble County, Hydrologic Unit 05120106 (ORMAS, IN quadrangle). The gage is at the head of the outlet channel, approximately 20 feet north of the control structure and 4 mi southwest of the town of Wolflake.

SURFACE AREA.--228 acres.

DRAINAGE AREA.--8.89 mi^2.

PERIOD OF RECORD.--1943-74, 1978 to current year.

DATUM OF GAGE.--890.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well.

ESTABLISHED LEGAL LEVEL.--8.40 ft gage datum or 898.40 ft above sea level as decreed on July 18, 1956, by the Noble County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a steel sheet piling dam with a fixed crest.

INLET AND OUTLET.--The main inlet enters from Crooked Lake to the east. Three other inlets flow from Crane Lake to the east, Green Lake to the north, and Sell Brook to the south. The outlet leaves the lake at the extreme west end and forms the headwaters of the Tippecanoe River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 12.76 ft Apr. 4, 1950; minimum stage, 7.11 ft Sept. 26, 27, 1999.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.35	7.21	7.24	7.48	7.54	8.17	8.10	8.20	8.71	8.40	8.12	8.04
10	7.35	7.20	7.23	7.53	7.54	8.12	8.12	8.33	8.61	8.22	8.10	8.02
15	7.33	7.17	7.35	7.54	7.54	8.15	8.10	8.19	9.56	8.11	8.05	8.24
20	7.29	7.17	7.37	7.54	7.54	8.20	8.59	8.35	9.37	8.06	8.02	8.12
25	7.25	7.19	7.36	7.54	8.05	8.17	8.45	8.22	9.14	7.99	7.98	8.29
EOM	7.23	7.17	7.36	7.54	8.32	8.12	8.22	8.89	8.72	8.01	8.09	8.17

WTR YR 2000 MEAN 7.93 MAX 9.63 MIN 7.15

STREAMS TRIBUTARY TO LAKE MICHIGAN

04099600 BIG LONG LAKE NEAR STROH, IN

LOCATION.--Lat 41°33'17", long 85°13'47", in NE$^1/_4$NW$^1/_4$NW$^1/_4$ sec.26, T.36 N., R.11 E., Lagrange County, Hydrologic Unit 04050001 (STROH, IN quadrangle). The gage is on the northeast shore near the east end of the Shady Nook Addition in the vicinity of the Shady Nook Tavern, 2.4 mi southwest of Stroh.

SURFACE AREA.--388 acres.

DRAINAGE AREA.-- 4.77 mi^2.

PERIOD OF RECORD.--1954 to current year.

DATUM OF GAGE.--950.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well.

ESTABLISHED LEGAL LEVEL.--6.21 ft gage datum or 956.21 ft above sea level as decreed on July 22, 1965, by the Lagrange County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a concrete dam with a fixed sill and removable boards.

INLET AND OUTLET.--The one inlet is a small ditch that enters at the extreme western tip. The outlet flows from the extreme northern tip, northeastward to Mud and Little Turkey Lakes, thence to Turkey Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 7.49 ft Mar. 31, 1978; minimum stage, 4.58 ft Nov. 27, 1964.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.61	5.36	5.34	5.41	5.46	5.80	6.01	6.38	6.44	6.37	6.14	6.21
10	5.57	5.33	5.31	5.42	5.53	5.81	6.07	6.43	6.31	6.32	6.39	6.22
15	5.53	5.29	5.42	5.42	5.50	5.82	6.08	6.40	6.35	6.21	6.29	6.25
20	5.49	5.28	5.41	5.44	5.53	5.90	6.37	6.52	6.38	6.12	6.21	6.18
25	5.41	5.30	5.38	5.44	5.62	5.93	6.39	6.49	6.40	6.03	6.22	6.13
EOM	5.37	5.27	5.37	5.45	5.77	6.01	6.33	6.51	6.30	6.17	6.31	6.06

WTR YR 2000 MEAN 5.89 MAX 6.61 MIN 5.25

STREAMS TRIBUTARY TO LAKE MICHIGAN

04100140 BIXLER LAKE AT KENDALLVILLE, IN

LOCATION.--Lat 41°26'13", long 85°15'10", in NE$^1/_4$NE$^1/_4$NE$^1/_4$ sec.4, T.34 N., R.11 E., Noble County, Hydrologic Unit 04050001 (KENDALLVILLE, IN quadrangle). The gage is on the south bank of the outlet channel on the southwest shore of the lake and 0.7 mi southeast of City Hall in Kendallville.

SURFACE AREA.--120 acres.

DRAINAGE AREA.--5.28 mi^2.

PERIOD OF RECORD.--1946 to current year.

DATUM OF GAGE.--960.10 ft above sea level, as corrected on the basis of levels of the Indiana Department of Natural Resources, 1974-75.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage is bolted to a concrete pier 20 ft upstream from the control dam.

ESTABLISHED LEGAL LEVEL.--3.65 ft gage datum or 963.65 ft above sea level as decreed on April 25, 1952, by the Noble County Circuit Court. Minor errors were subsequently discovered in the establishment of the datum of the gage (see "DATUM OF GAGE") and the correct elevation of the legal level should be 3.65 ft gage datum or 963.75 ft above sea level.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a fixed deep-notch concrete dam with two flood gates.

INLET AND OUTLET.--Riddle Ditch enters the lake from the north, Sherman Ditch from the east, Shaffer Ditch from the southeast, and an unnamed ditch from the southwest. The outlet leaves at the southwest corner and flows into Henderson Lake 1.9 mi downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 6.26 ft Feb. 24, 1985; minimum stage, 1.24 ft Jan. 13-15, 18, 1954.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.45	2.17	1.91	2.53	2.60	3.39	3.79	4.31	4.43	4.13	3.74	4.05
10	2.43	2.08	2.23	2.56	2.62	3.45	3.88	4.34	4.26	4.01	3.85	3.91
15	2.40	2.03	2.41	2.56	2.67	3.48	3.89	4.22	4.27	3.87	3.75	4.28
20	2.35	1.97	2.47	2.59	2.73	3.67	4.60	4.35	4.26	3.82	3.67	3.94
25	2.27	1.95	2.45	2.59	2.91	3.77	4.56	4.19	4.33	3.69	3.68	3.67
EOM	2.24	1.92	2.45	2.59	3.29	3.85	4.36	4.51	4.19	3.75	4.33	3.54

WTR YR 2000 MEAN 3.34 MAX 4.96 MIN 1.90

03327600 BLUE LAKE NEAR CHURUBUSCO, IN

LOCATION.--Lat 41°14'30", long 85°21'04", in SW$^1/_4$NE$^1/_4$SE$^1/_4$ sec.10, T.32 N., R.10 E., Whitley County, Hydrologic Unit 05120104 (CHURUBUSCO, IN quadrangle). Gage is located on a dredged channel at the extreme east end of the lake, approximately 2.0 mi west of Churubusco.

SURFACE AREA.--239 acres.

DRAINAGE AREA.--3.58 mi^2.

PERIOD OF RECORD.--1946-68, 1976 to current year.

DATUM OF GAGE.--840.00 ft above sea level.

GAGE.--A water-stage recorder installed in an aluminum shelter over a 15-inch diameter stilling well.

ESTABLISHED LEGAL LEVEL.--10.28 ft gage datum or 850.28 ft above sea level as decreed on July 23, 1948, by the

Whitley County Circuit Court.

LAKE-LEVEL CONTROL.--A concrete dam with a fixed crest is located in the outlet channel about 300 ft downstream from the lake.

INLET AND OUTLET.--Maloney Ditch enters at the eastern tip of the lake. The outlet flows from the lake at the northwest end and joins Carter Creek (Blue River) 0.2 mi downstream. Carter Creek eventually flows into Eel River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 15.80 ft Dec. 10, 1966; minimum stage, 7.64 ft Nov. 19, 20, 1952.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.98	8.61	8.98	8.97	8.91	9.60	9.54	9.92	10.33	9.95	9.38	9.19
10	8.91	8.56	8.77	8.96	8.97	9.56	9.57	10.05	10.16	9.76	9.43	9.20
15	8.86	8.54	9.07	8.94	9.00	9.53	9.55	9.99	10.55	9.57	9.35	9.42
20	8.80	8.66	8.93	8.95	9.07	9.65	10.06	10.20	10.30	9.44	9.29	9.35
25	8.73	8.68	8.75	8.93	9.36	9.65	10.13	10.29	10.19	9.32	9.22	9.54
EOM	8.65	8.64	8.81	8.90	9.68	9.58	9.96	10.39	9.99	9.36	9.23	9.48

WTR YR 2000 MEAN 9.36 MAX 10.55 MIN 8.52

STREAMS TRIBUTARY TO LAKE MICHIGAN

04099250 BOWER LAKE NEAR PLEASANT LAKE, IN

LOCATION.--Lat 41°36'03", long 85°03'24", in SW$^1/_4$SW$^1/_4$SE$^1/_4$ sec.5, T.36 N., R.13 E., Steuben County, Hydrologic Unit 04050001 (ASHLEY, IN quadrangle). The gage is located at the public access site on the northwestern edge of the lake, 3.9 mi southwest of Angola.

SURFACE AREA.--25 acres.

DRAINAGE AREA.--84.6 mi^2.

PERIOD OF RECORD.--1946-1970, 1977 to current year.

DATUM OF GAGE.--940.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary wire-weight gage is attached to the bridge over the outlet.

ESTABLISHED LEGAL LEVEL.--8.50 ft gage datum or 948.50 ft above sea level, as decreed on October 28, 1959, by Steuben County Circuit Court. Golden Lake near Pleasant Lake has the same established level and hence the same lake levels for the period of record.

LAKE-LEVEL CONTROL.--The lake level is controlled by the outlet channel or the outlet of Golden Lake.

INLET AND OUTLET.--Pigeon Creek flows through the lake, entering at the southern shore and leaving at the western end to flow into Golden Lake and eventually into the St. Joseph River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 17.13 ft Mar. 22, 1982; minimum stage, 7.88 ft Sept. 14, 15, 1964.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.31	8.09	8.17	8.25	8.09	8.85	8.53	9.14	9.60	9.73	8.56	8.34
10	8.17	8.10	8.18	8.22	8.12	8.51	8.70	9.06	9.36	9.20	8.65	8.40
15	8.13	8.08	8.30	8.17	8.15	8.39	8.55	8.97	10.31	8.77	8.37	9.07
20	8.07	8.13	8.27	8.15	8.14	8.59	9.72	10.20	9.70	8.53	8.31	8.56
25	8.05	8.13	8.18	8.10	9.07	8.83	11.01	9.68	10.02	8.40	8.36	8.38
EOM	8.08	8.08	8.13	8.05	9.59	8.79	9.49	10.47	9.88	8.72	8.68	8.35

WTR YR 2000 MEAN 8.70 MAX 11.53 MIN 8.03

STREAMS TRIBUTARY TO LAKE MICHIGAN

04099810 CASS LAKE NEAR SHIPSHEWANA, IN

LOCATION.--Lat 41°41'42", long 85°38'18", in SW$^1/_4$NW$^1/_4$NW$^1/_4$ sec.5, T.37 N, R.8 E., Lagrange County, Hydrologic Unit 04050001 (MIDDLEBURY, IN quadrangle). The gage is on the northeast shore of the lake, at the beach area in the Foxwood Hills Addition, and 3.3 mi northwest of Shipshewana.

SURFACE AREA.--89 acres.

DRAINAGE AREA.--0.68 mi^2.

PERIOD OF RECORD.--1971 to current year.

DATUM OF GAGE.--840.95 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well.

ESTABLISHED LEGAL LEVEL.--Not established.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by the outlet channel.

INLET AND OUTLET.--A small unnamed ditch enters on the northwestern shore. The outlet leaves the lake at the southwest and flows into Mather Ditch 1.0 mi downstream. Mather Ditch eventually empties into the Little Elkhart River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 3.89 ft June 14, 1993; minimum stage, 1.80 ft May 15, 1971.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.35	2.41	2.58	2.53	2.47	2.56	2.43	2.57	2.41	2.76	2.71	2.52
10	2.37	2.42	2.54	2.56	2.46	2.50	2.50	2.52	2.32	2.78	2.70	2.66
15	2.38	2.42	2.63	2.53	2.46	2.56	2.45	2.42	2.41	2.73	2.66	2.71
20	2.38	2.43	2.59	2.52	2.47	2.64	2.81	2.48	2.46	2.68	2.63	2.68
25	2.38	2.46	2.55	2.51	2.56	2.52	2.67	2.40	2.77	2.65	2.60	2.67
EOM	2.40	2.45	2.52	2.49	2.67	2.48	2.57	2.46	2.76	2.71	2.59	2.64

WTR YR 2000 MEAN 2.54 MAX 2.84 MIN 2.29

ILLINOIS RIVER BASIN

05518700 CEDAR LAKE AT CEDAR LAKE, IN

LOCATION.--Lat 41°21'58", long 87°25'36", in NE$^1/_4$SW$^1/_4$SW$^1/_4$ sec.26, T.34 N., R.9 W., Lake County, Hydrologic Unit 07120001 (LOWELL, IN quadrangle). The gage is on the south bank of outlet channel on the east shore of the lake, upstream from the first bridge over the outlet, and 0.5 mi east of the town of Cedar Lake.

SURFACE AREA.--781 acres.

DRAINAGE AREA.--8.14 mi^2.

PERIOD OF RECORD.--1943 to current year.

DATUM OF GAGE.--690.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 24-inch diameter stilling well. An auxiliary staff gage is driven into the channel bed.

ESTABLISHED LEGAL LEVEL.--Not established.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a fixed-crest concrete dam.

INLET AND OUTLET.--Several small ditches enter the lake at various points. The outlet, Cedar Creek, flows from the lake on the eastern shore of the center lobe, into Dalecarlia Lake, 1.5 mi downstream, and eventually into the Kankakee River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 4.30 ft May 15, 1970; minimum stage not determined, below 1.22 ft during July, Aug., Sept., Oct. 1988, and Sept. 1991.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.04	1.83	1.87	1.92	1.88	2.18	2.16	2.60	2.86	3.04	2.66	2.36
10	2.02	1.79	1.84	1.97	1.88	2.14	2.25	2.64	2.80	2.98	2.70	2.32
15	1.98	1.76	1.94	1.96	1.90	2.18	2.24	2.61	2.97	2.89	2.63	2.37
20	1.94	1.73	1.92	1.95	1.93	2.23	2.46	2.62	3.30	2.78	2.60	2.32
25	1.88	1.74	1.91	1.93	2.16	2.22	2.58	2.58	3.48	2.69	2.52	2.29
EOM	1.85	1.71	1.91	1.88	2.18	2.19	2.56	2.78	3.19	2.68	2.45	2.24

WTR YR 2000 MEAN 2.29 MAX 3.50 MIN 1.70

WABASH RIVER BASIN

03331160 CENTER LAKE AT WARSAW, IN

LOCATION.--Lat 41°15'02", long 85°51'32", in NE$^1/_4$SW$^1/_4$SW$^1/_4$ sec.5, T.32 N., R.6 E., Kosciusko County, Hydrologic Unit 05120106 (LEESBURG, IN quadrangle). The gage is on the northwestern side of the lake, mounted on a sea wall behind the house at 300 Gilliam Drive, 0.8 mi north of the court house, Warsaw.

SURFACE AREA.--120 acres.

DRAINAGE AREA.--0.73 mi^2.

PERIOD OF RECORD.--1943-1968, 1971 to current year.

DATUM OF GAGE.--800.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage is attached to the control dam at the outlet.

ESTABLISHED LEGAL LEVEL.--3.86 ft gage datum or 803.86 ft above sea level as decreed on December 3, 1963, by the Kosciusko County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a concrete dam at the western end of the lake.

INLET AND OUTLET.--The one inlet flows through a 24-inch diameter tile from Pike Lake and enters the lake on the southeastern side. The outlet flows from the western shore and joins Walnut Creek 0.65 mi downstream, which in turn flows into the Tippecanoe River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 7.24 ft Oct. 15, 1954; minimum stage, 0.17 ft Oct. 4, 1955.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.29	4.54	4.33	4.41	4.35	4.90	4.52	4.95	5.29	5.36	4.41	4.62
10	4.30	4.46	4.29	4.38	4.37	4.94	4.47	4.87	5.19	5.24	4.58	4.61
15	4.27	4.29	4.41	4.35	4.36	4.78	4.41	4.78	5.34	4.81	4.48	5.09
20	4.28	4.22	4.51	4.34	4.37	4.75	4.73	4.96	5.56	4.55	4.47	4.80
25	4.28	4.22	4.51	4.35	4.46	4.70	5.42	4.91	5.65	4.40	4.60	4.76
EOM	4.29	4.21	4.36	4.35	4.74	4.64	5.31	5.26	5.49	4.42	4.72	4.60

WTR YR 2000 MEAN 4.65 MAX 5.70 MIN 4.16

STREAMS TRIBUTARY TO LAKE ERIE

04177200 CLEAR LAKE AT CLEAR LAKE, IN

LOCATION.--Lat 41°44'52", long 84°50'25", in SW$^1/_4$SW$^1/_4$ sec.17, T.38 N., R.15 E., Steuben County, Hydrologic Unit 04100003 (CLEAR LAKE, IN-OH-MI quadrangle). The gage is on the northern shore of the lake, at the channel between Clear and Round Lakes, and 4.75 mi northeast of Fremont.

SURFACE AREA.--800 acres.

DRAINAGE AREA.--6.86 mi^2.

PERIOD OF RECORD.--1943 to current year.

DATUM OF GAGE.--1030.00 ft above sea level.

GAGE.--A water-stage recorder is installed in a wooden shelter over a 24-inch stilling well. An auxiliary staff gage is attached to the north end of the upstream culvert.

ESTABLISHED LEGAL LEVEL.--7.38 ft gage datum or 1037.38 ft above sea level as decreed on June 1, 1950, by the Steuben County Circuit Court. Round Lake at Clear Lake has the same established level and hence the same lake levels for the period of record.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a fixed-crest concrete dam with an auxiliary slide gate at the outlet of Round Lake.

INLET AND OUTLET.--Two unnamed ditches enter the lake on the southern shore. The outlet is a short channel connecting Clear and Round Lakes. The outlet of Round Lake flows from the northeast end and eventually into the West Branch of the St. Joseph River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 9.24 ft May 20, 1943 (from high-water mark); maximum recorded stage, 8.58 ft Jan. 5, 1993; minimum stage, 6.24 ft Sept. 30, 1962.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.15	7.06	7.11	7.23	7.29	7.65	7.83	8.00	8.11	8.14	7.87	---
10	7.14	7.05	7.11	7.24	7.32	7.66	7.86	8.05	8.01	8.02	---	---
15	7.19	7.03	7.17	7.24	7.33	7.69	7.85	7.97	8.08	7.90	---	7.87
20	7.15	7.03	7.18	7.27	7.36	7.80	8.18	8.11	8.07	7.82	---	7.81
25	7.10	7.05	7.15	7.28	7.42	7.83	8.14	8.02	8.23	7.76	---	7.78
EOM	7.07	7.04	7.15	7.28	7.64	7.84	8.02	8.10	8.09	7.84	---	7.74

WTR YR 2000 MEAN 7.59 MAX 8.24 MIN 7.02

05515240 CLEAR LAKE AT LAPORTE, IN

LOCATION.--Lat 41°37'25", long 86°43'11", in NE$^1/_4$SE$^1/_4$SE$^1/_4$ sec.26, T.37 N., R.3 W., LaPorte County, Hydrologic Unit 07120001 (LAPORTE EAST, IN quadrangle). The gage is on the northeast shore of the lake, 100 ft south of the entrance to Fox Memorial Park, in LaPorte.

SURFACE AREA.--106 acres.

DRAINAGE AREA.--0.65 mi^2.

PERIOD OF RECORD.--1942-49, 1952-75, 1979 to current year.

DATUM OF GAGE.--790.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage is attached to the north wingwall of the inlet culvert on the west side of the lake.

ESTABLISHED LEGAL LEVEL.--8.20 ft gage datum or 798.20 ft above sea level as decreed on August 31, 1949, by the LaPorte County Circuit Court.

LAKE-LEVEL CONTROL.--During periods of high water, water may be released through the main sewer system of the city of LaPorte and diverted into the Kankakee River.

INLET AND OUTLET.--A small ditch enters on the west shore. There is no outlet during periods of low and medium water levels. When water levels are high, water may flow from the lake into the city sewer system.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 11.36 ft June 6, 1993; minimum stage, 3.98 ft Nov. 27, 1964.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.52	7.26	7.50	7.34	7.26	7.59	7.35	7.47	7.66	7.85	7.45	7.06
10	7.44	7.30	7.31	7.51	7.40	7.49	7.55	7.53	7.39	7.84	7.39	6.96
15	7.37	7.29	7.58	7.37	7.34	7.62	7.42	7.37	7.67	7.84	7.26	7.39
20	7.33	7.32	7.46	7.30	7.30	7.58	7.71	7.46	7.69	7.70	7.24	7.40
25	7.32	7.34	7.34	7.27	7.68	7.50	7.69	7.32	7.83	7.53	7.17	7.35
EOM	7.30	7.25	7.31	7.27	7.69	7.42	7.60	7.61	7.77	7.54	7.14	7.31

WTR YR 2000 MEAN 7.44 MAX 7.93 MIN 6.96

STREAMS TRIBUTARY TO LAKE MICHIGAN

04097850 CROOKED LAKE AT CROOKED LAKE, IN

LOCATION.--Lat 41°40'14", long 85°02'04", in NE$^1/_4$NW$^1/_4$NE$^1/_4$ sec.16, T.37 N., R.13 E., Steuben County, Hydrologic Unit 04050001 (ANGOLA WEST, IN quadrangle). The gage is on an inlet channel on the lower eastern shore of the lake, 3.1 mi northwest of Angola.

SURFACE AREA.--828 acres.

DRAINAGE AREA.--10.4 mi^2.

PERIOD OF RECORD.--1946-70, 1972 to current year.

DATUM OF GAGE.--980.26 ft above sea level, as corrected on the basis of levels of Indiana Department of Natural Resources, 1977-78.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage is driven into the channel bed between the Second and Third Basins under County Road 400 West.

ESTABLISHED LEGAL LEVEL.--8.17 ft gage datum or 988.17 ft above sea level as decreed on June 17, 1948, by the Steuben County Circuit Court. Minor errors were subsequently discovered in the establishment of the datum of the gage (see "DATUM OF GAGE") and the correct elevation of the legal level should be 8.17 ft gage datum or 988.43 ft above sea level.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a fixed-crest dam with an adjustable gate at the western end of the Third Basin.

INLET AND OUTLET.--The principal inlets enter the lake from the south, from Loon and Buck Lakes, and the southeast, from Center Lake. Another ditch enters from the east. The outlet flows from the western end of the Third Basin into Lake Gage 1.4 mi downstream and eventually into the St. Joseph River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 10.30 ft May 19, 1996; minimum stage, 7.05 ft Nov. 13-15, 1964.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.40	8.33	8.40	8.49	8.52	8.80	8.84	9.20	9.33	9.45	9.13	9.11
10	8.36	8.28	8.35	8.50	8.54	8.76	8.91	9.26	9.28	9.27	9.17	9.17
15	8.39	8.25	8.45	8.48	8.56	8.74	8.88	9.24	9.40	9.21	9.11	9.31
20	8.35	8.25	8.45	8.48	8.58	8.83	9.15	9.38	9.29	9.13	9.05	9.27
25	8.32	8.26	8.40	8.50	8.80	8.84	9.21	9.37	9.48	9.05	9.04	9.27
EOM	8.42	8.75	8.39	8.50	8.84	8.86	9.17	9.38	9.41	9.14	9.18	9.22

WTR YR 2000 MEAN 8.85 MAX 9.49 MIN 8.22

STREAMS TRIBUTARY TO LAKE MICHIGAN

04100470 DEWART LAKE NEAR LEESBURG, IN

LOCATION.--Lat 41°22'27", long 85°47'07", in NW$^1/_4$SW$^1/_4$NW$^1/_4$ sec.25, T.34 N., R.6 E., Kosciusko County, Hydrologic Unit 04050001 (LEESBURG, IN quadrangle). The gage is on the west shore of the lake, 0.1 mi east of County Road 300 East at the public access site, and 4.5 mi northeast of Leesburg.

SURFACE AREA.--551 acres.

DRAINAGE AREA.--8.05 mi^2.

PERIOD OF RECORD.--1945 to current year.

DATUM OF GAGE.--859.897 ft above sea level, as corrected on the basis of levels of Indiana Department of Natural Resources, 1973-74.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 24-inch diameter stilling well.

ESTABLISHED LEGAL LEVEL.--7.70 ft gage datum or 867.70 ft above sea level as decreed on October 18, 1949, by the Kosciusko County Circuit Court. Minor errors were subsequently discovered in the establishment of the datum of the gage (see "DATUM OF GAGE") and the correct elevation of the legal level should be 7.70 ft gage datum or 867.597 ft above sea level.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a steel sheet piling dam.

INLET AND OUTLET.--Cable Run enters the lake on the southeastern tip, and an unnamed ditch enters on the eastern shore. The outlet, Hammond Ditch, flows from the lake on the northwestern shore and into Wabee Lake 2.3 mi downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 9.57 ft June 14, 1981; minimum stage, 3.95 ft Dec. 21-24, 1964.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.64	7.46	7.31	7.31	7.31	7.62	7.42	7.57	7.62	7.80	7.61	7.42
10	7.63	7.39	7.31	7.31	7.31	7.55	7.43	7.62	7.44	7.79	7.62	7.31
15	7.62	7.35	7.31	7.36	7.31	7.49	7.40	7.52	7.64	7.65	7.52	7.60
20	7.50	7.31	7.31	7.31	7.31	7.52	7.63	7.62	7.65	7.62	7.49	7.41
25	7.42	7.31	7.31	7.29	7.62	7.55	7.62	7.52	7.83	7.47	7.39	7.31
EOM	7.37	7.31	7.31	7.28	7.63	7.51	7.50	7.60	7.80	7.62	7.51	7.31

WTR YR 2000 MEAN 7.49 MAX 7.86 MIN 7.27

WABASH RIVER BASIN

03331320 DIAMOND LAKE NEAR SILVER LAKE, IN

LOCATION.--Lat 41°06'23", long 85°56'05", in SW$^1/_4$NW$^1/_4$SE$^1/_4$ sec.26, T.31 N., R.5 E., Kosciusko County, Hydrologic Unit 05120106 (SILVER LAKE, IN quadrangle). The gage is on the inlet channel on the northern shore of the lake, 2.2 mi northwest of the town of Silver Lake.

SURFACE AREA.--79 acres.

DRAINAGE AREA.--3.92 mi^2.

PERIOD OF RECORD.--1954-72, 1975 to current year.

DATUM OF GAGE.--849.90 ft above sea level, as corrected on the basis of levels of Indiana Department of Natural Resources, 1976.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well.

ESTABLISHED LEGAL LEVEL.--Not established.

LAKE-LEVEL CONTROL.--The lake level is controlled by Yellow Creek Lake, 0.3 mi downstream.

INLET AND OUTLET.--There are two inlets. One enters from the north and east from Hill Lake, one enters from the southeast. The one outlet flows from the western shore and into Yellow Creek Lake, 0.3 mi downstream. Yellow Creek Lake flows into Yellow Creek, which eventually discharges into the Tippecanoe River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 13.47 July 9, 1964; minimum stage, 9.78 ft Sept. 18-19, 23, 27- 30, Oct. 10-12, 1988.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.09	10.16	10.32	10.38	10.33	10.60	10.52	10.72	10.99	10.75	10.64	10.49
10	10.10	10.17	10.32	10.38	10.34	10.54	10.53	10.69	10.77	10.64	10.73	10.54
15	10.11	10.16	10.43	10.37	10.38	10.50	10.51	10.58	11.24	10.52	10.55	10.63
20	10.12	10.19	10.39	10.36	10.43	10.57	10.98	10.84	11.10	10.47	10.50	10.50
25	10.11	10.22	10.34	10.33	10.59	10.57	10.77	10.76	11.04	10.41	10.51	10.48
EOM	10.11	10.21	10.31	10.33	10.73	10.52	10.70	11.06	10.78	10.59	10.53	10.42

WTR YR 2000 MEAN 10.50 MAX 11.33 MIN 10.01

STREAMS TRIBUTARY TO LAKE MICHIGAN

04100350 DIAMOND LAKE NEAR WAWAKA, IN

LOCATION.--Lat 41°26'15", long 85°31'05",in NE$^1/_4$NW$^1/_4$NW$^1/_4$, sec.5, T.34 N., R.9 E., Noble County, Hydrologic Unit 04050001 (LIGONIER, IN quadrangle). The gage is located on the southeastern edge of the lake at a public access site, 2.5 mi southwest of the town of Wawaka.

SURFACE AREA.--105 acres.

DRAINAGE AREA.--4.80 mi^2.

PERIOD OF RECORD.--1946 to current year.

DATUM OF GAGE.--870.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage is mounted on a piling driven into the lake bed on the northern edge of the lake.

ESTABLISHED LEGAL LEVEL.--Not established.

LAKE-LEVEL CONTROL.--The lake level is controlled by a riffle at the head of the outlet channel.

INLET AND OUTLET.--Willets Ditch enters at the southwestern tip of the lake from Eagle Lake, 0.6 mi upstream. One unnamed ditch enters the lake from the south. The outlet flows from the lake at the southeastern edge and joins the South Branch of the Elkhart River 0.8 mi downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 7.83 ft Mar. 20, 1982; minimum stage, 2.29 ft Oct. 17, 1946.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.41	4.53	4.95	4.87	4.83	5.24	4.85	5.18	5.14	4.95	4.71	4.71
10	4.42	4.56	4.85	4.86	4.81	5.13	4.90	5.13	4.99	4.97	4.78	4.72
15	4.41	4.60	4.94	4.83	4.78	4.93	4.85	4.98	5.11	4.86	4.73	5.16
20	4.43	4.67	4.93	4.83	4.81	4.89	5.16	5.05	5.03	4.81	4.67	5.01
25	4.44	4.73	4.85	4.83	5.02	4.89	5.31	4.92	5.13	4.71	4.62	4.95
EOM	4.49	4.77	4.82	4.83	5.28	5.00	5.09	5.14	5.02	4.67	4.74	4.87

WTR YR 2000 MEAN 4.86 MAX 5.32 MIN 4.32

STREAMS TRIBUTARY TO LAKE MICHIGAN

04100370 ENGLE LAKE NEAR LIGONIER, IN

LOCATION.--Lat 41°26'08", long 85°34'30", in SE$^1/_4$NW$^1/_4$NW$^1/_4$ sec.2, T.34 N., R.8 E., Noble County, Hydrologic Unit 04050001 (LIGONIER, IN quadrangle). The gage is located at a public access site on the eastern side of the lake, 2.2 mi south of the town of Ligonier.

SURFACE AREA.--48 acres.

DRAINAGE AREA.--4.19 mi^2.

PERIOD OF RECORD.--1956-67, 1977 to current year.

DATUM OF GAGE.--870.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well.

ESTABLISHED LEGAL LEVEL.--8.90 ft gage datum or 878.90 ft above sea level as decreed on October 23, 1984, by the Noble County Circuit Court.

LAKE-LEVEL CONTROL.--The lake level is controlled by the outlet channel at low water and the first culvert downstream at higher stages.

INLET AND OUTLET.--Sparta Lake Ditch feeds the lake from the south, flowing from Sparta Lake. The outlet flows from the northern shore through Indian Lake and into the Elkhart River 1.7 mi downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage 10.53 ft Mar. 29, 1985; minimum stage, 7.48 ft Nov. 17, 1964.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.29	8.23	8.32	8.34	8.18	8.48	8.26	8.44	8.41	---	---	---
10	8.27	8.22	8.30	8.33	8.19	8.38	8.30	8.46	8.30	---	---	---
15	8.23	8.20	8.48	8.29	8.21	8.33	8.26	8.36	8.43	---	---	---
20	8.21	8.23	8.42	8.28	8.25	8.38	8.59	8.46	8.45	---	---	8.11
25	8.19	8.26	8.32	8.25	8.50	8.33	8.60	8.36	---	---	---	8.07
EOM	8.19	8.23	8.27	8.19	8.64	8.30	8.42	8.47	---	---	---	8.00

WTR YR 2000 MEAN 8.31 MAX 8.73 MIN 8.00

STREAMS TRIBUTARY TO LAKE MICHIGAN

04099670 FISH LAKE NEAR PLATO, IN

LOCATION.--Lat 41°37'27", long 85°19'56", in SW$^1/_4$NE$^1/_4$NE$^1/_4$ sec.35, T.37 N., R.10 E., Lagrange County, Hydrologic Unit 04050001 (WOLCOTTVILLE, IN quadrangle). The gage is on the northeast bank of the outlet channel, approximately 15 ft downstream of the lake on the northwest side, and 1.2 mi south of Plato.

SURFACE AREA.--100 acres.

DRAINAGE AREA.--10.6 mi^2.

PERIOD OF RECORD.--1945 to current year.

DATUM OF GAGE.--930.75 ft above sea level, as corrected on the basis of levels of the U.S. Geological Survey, 1966.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage is mounted on a tree stump on the northern bank of the outlet channel at the same site.

ESTABLISHED LEGAL LEVEL.--6.50 ft gage datum or 936.50 ft above sea level as decreed on May 7, 1959, by the Lagrange County Circuit Court. Minor errors were subsequently discovered in the establishment of the datum of the gage (see "DATUM OF GAGE") and the correct elevation of the legal level should be 6.50 ft gage datum or 937.25 ft above sea level.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by the outlet channel.

INLET AND OUTLET.--One inlet enters at the extreme southern tip from Royer Lake 700 ft upstream. The other enters on the north shore of the east lobe from Grass Lake, approximately 1.4 mi upstream. The outlet, East Fly Creek, flows from the lake on the northwest shore and joins Fly Creek, which empties into Pigeon River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 9.23 ft June 14, 15, 1981; minimum stage, 5.32 ft Nov. 17-20, 1953.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.42	6.63	6.62	6.58	6.48	6.78	6.68	6.81	6.76	6.72	6.47	6.40
10	6.46	6.61	6.60	6.60	6.49	6.71	6.75	6.77	6.64	6.63	6.67	6.44
15	6.56	6.55	6.72	6.58	6.50	6.68	6.71	6.67	6.71	6.53	6.59	6.69
20	6.56	6.55	6.67	6.57	6.52	6.72	7.02	6.79	6.70	6.44	6.49	6.58
25	6.58	6.56	6.54	6.53	6.73	6.72	7.15	6.79	6.97	6.37	6.44	6.52
EOM	6.59	6.52	6.54	6.49	6.91	6.73	6.88	6.87	6.85	6.49	6.49	6.45

WTR YR 2000 MEAN 6.63 MAX 7.34 MIN 6.33

STREAMS TRIBUTARY TO LAKE MICHIGAN

04099760 FISH LAKE NEAR SCOTT, IN

LOCATION.--Lat 41°45'25", long 85°38'54", in NW$^1/_4$NW$^1/_4$SE$^1/_4$ sec.7, T.38 N.,R.8 E., Lagrange County, Hydrologic Unit 04050001 (MIDDLEBURY, IN quadrangle). The gage is on the northwest shore of the lake, on the north side of the outlet channel, 4.8 mi northwest of Scott.

SURFACE AREA.--139 acres.

DRAINAGE AREA.--6.21 mi^2.

PERIOD OF RECORD.--1954-69, 1978 to current year.

DATUM OF GAGE.--809.84 ft above sea level, as corrected on the basis of levels of Indiana Department of Natural Resources, 1975.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage is attached to the dam at the same site.

ESTABLISHED LEGAL LEVEL.--4.42 ft gage datum or 814.42 ft above sea level as decreed on September 11, 1959, by the Lagrange County Circuit Court. Minor errors were subsequently discovered in the establishment of the datum of the gage (see "DATUM OF GAGE") and the correct elevation of the legal level should be 4.42 ft gage datum or 814.26 ft above sea level.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a fixed concrete sill with removable boards.

INLET AND OUTLET.--The inlet, Fetch Ditch, enters on the southeastern shore. The outlet flows from the lake at the lower west shore and empties into Pigeon River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 5.61 ft Feb. 26, 1985; minimum stage, 1.54 ft Nov. 26, 1964.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.03	2.74	2.78	2.81	2.65	2.98	3.11	3.61	3.98	4.49	4.06	3.37
10	2.99	2.73	2.74	2.85	2.63	2.98	3.22	3.67	3.91	4.47	3.99	3.33
15	2.93	2.68	2.82	2.85	2.55	3.03	3.21	3.68	4.08	4.40	3.85	3.33
20	2.88	2.67	2.80	2.85	2.54	3.14	3.41	3.80	4.11	4.29	3.75	3.22
25	2.81	2.69	2.68	2.82	2.88	3.14	3.54	3.79	4.39	4.18	3.65	3.17
EOM	2.78	2.65	2.62	2.68	2.98	3.15	3.54	3.94	4.43	4.13	3.52	3.06

WTR YR 2000 MEAN 3.29 MAX 4.49 MIN 2.54

ILLINOIS RIVER BASIN

05517700 FLINT LAKE NEAR VALPARAISO, IN

LOCATION.--Lat 41°30'41", long 87°02'23", in NE$^1/_4$SW$^1/_4$ sec.6, T.35 N., R.5 W., Porter County, Hydrologic Unit 07120001 (CHESTERTON, IN quadrangle). The gage is on the southeast shore of the lake, at the outlet and the Valparaiso Water Works, 3.2 mi northeast of Valparaiso.

SURFACE AREA.--86 acres.

DRAINAGE AREA.--3.80 mi^2, revised.

PERIOD OF RECORD.--1946 to current year. From Jan. 1, 1911, to Aug. 14, 1946, readings of the lake level were taken approximately once per week by Water Works personnel. These data are available upon request.

DATUM OF GAGE.--780.00 ft above sea level.

GAGE.--A water-stage recorder is installed inside the Valparaiso Water Works. An auxiliary staff gage is located lakeward of the concrete block pumping station.

ESTABLISHED LEGAL LEVEL.--17.66 ft gage datum or 797.66 ft above sea level as decreed on August 19, 1963, by the Porter County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by the outlet channel and two 30-inch corrugated metal pipes under the road, 600 ft downstream.

INLET AND OUTLET.--There are three inlets. One drains Long Lake to the northwest and another drains Loomis Lake to the west and Listenberger drain enters from the south. The outlet flows from the lake at the southeast corner and into the West Branch of Crooked Creek approximately 5.0 mi downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 21.18 ft July 2, 1983 as recorded by the Valparaiso Water Company; minimum stage, 12.59 ft Dec. 29, 1948.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.50	18.37	18.52	18.86	18.99	19.10	19.29	19.64	19.75	19.93	19.03	18.80
10	18.50	18.32	18.58	18.91	18.92	19.10	19.48	19.57	19.56	19.78	19.03	18.75
15	18.50	18.30	18.77	18.90	18.88	19.20	19.46	19.51	19.99	19.50	18.95	19.02
20	18.48	18.27	18.81	18.96	18.92	19.27	19.94	19.61	19.95	19.26	19.00	18.99
25	18.43	18.32	18.80	18.99	19.20	19.31	19.66	19.46	20.49	19.12	18.95	18.99
EOM	18.39	18.29	18.81	19.02	19.17	19.30	19.61	19.58	20.10	19.11	18.88	18.95

WTR YR 2000 MEAN 19.08 MAX 20.49 MIN 18.26

WABASH RIVER BASIN

03330160 GILBERT LAKE NEAR WASHINGTON CENTER, IN

LOCATION.--Lat 41°19'50", long 85°35'48", in NE$^1/_4$NE$^1/_4$SE$^1/_4$ sec.9, T.33 N., R.8 E., Noble County, Hydrologic Unit 05120106 (ORMAS, IN quadrangle). The gage is at the extreme west end of the lake on the east side of County Road 925 West, approximately 400 ft south of Gilbert Lake Road, and 0.4 mi north of Washington Center.

SURFACE AREA.--28 acres.

DRAINAGE AREA.--0.37 mi^2.

PERIOD OF RECORD.--1954-59, 1961 to current year.

DATUM OF GAGE.--884.85 ft above sea level, as corrected on the basis of levels of the Indiana Department of Natural Resources, 1974-75.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage in one section is driven into the lake bed approximately 100 ft south of the primary gage.

ESTABLISHED LEGAL LEVEL.--Not established.

LAKE-LEVEL CONTROL.--The level is controlled by the outlet through the swamp, east of the lake.

INLET AND OUTLET.--The lake has no inlet. The outlet leaves from the southeastern side and flows into Stump Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 6.81 ft Dec. 4-5, 1987; minimum stage, 3.53 ft Nov. 1, 1963.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.44	4.57	4.75	4.60	4.59	4.66	4.60	4.64	4.64	5.00	5.03	5.09
10	4.48	4.59	4.60	4.62	4.60	4.67	4.66	4.72	4.61	5.07	5.07	5.13
15	4.50	4.60	4.69	4.61	4.60	4.67	4.67	4.69	4.82	5.01	5.03	5.24
20	4.50	4.64	4.60	4.58	4.60	4.74	4.99	4.76	4.86	4.96	5.01	5.22
25	4.49	4.68	4.57	4.58	4.70	4.68	4.63	4.60	5.01	4.90	4.98	5.30
EOM	4.52	4.64	4.54	4.59	4.70	4.68	4.55	4.65	4.95	4.91	5.10	5.28

WTR YR 2000 MEAN 4.75 MAX 5.50 MIN 4.30

STREAMS TRIBUTARY TO LAKE MICHIGAN

04100110 HACKENBURG LAKE NEAR WOLCOTTVILLE, IN

LOCATION.--Lat 41°33'25", long 85°26'17", in NE$^1/_4$SW$^1/_4$SW$^1/_4$ sec.24, T.36 N., R.9 E., Lagrange County, Hydrologic Unit 04050001 (OLIVER LAKE, IN quadrangle). The gage is on the north shore of the outlet channel at the bridge on County Road 75 West, and 4.2 mi northwest of Wolcottville.

SURFACE AREA.--42 acres.

DRAINAGE AREA.--55.4 mi^2.

PERIOD OF RECORD.--1945 to current year.

DATUM OF GAGE.--890.00 ft above sea level.

GAGE.--A water-stage recorder is installed in a wooden shelter over a 24-inch diameter stilling well. An auxiliary staff gage is bolted to the downstream side of the bridge at the same site.

ESTABLISHED LEGAL LEVEL.--7.36 ft gage datum or 897.36 ft above sea level as decreed on February 2, 1954, by the Lagrange County Circuit Court. Witmer, Westler, Dallas, and Messick Lakes, all near Wolcottville, have the same established level and hence the same lake levels for the period of record.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a concrete sill with removable stop logs located at the outlet of Messick Lake.

INLET AND OUTLET.--One inlet enters on the north shore from Oliver Lake 1.6 mi upstream. The other inlet enters on the east shore from Dallas Lake 0.5 mi upstream, which is part of a chain of lakes including Westler and Witmer Lakes. The outlet flows from the lake on the southwest shore and into Messick Lake about 0.5 mi downstream. Messick Lake empties into the North Branch of the Elkhart River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 11.17 ft Apr. 7, 1978; minimum stage, 6.34 ft Oct. 10, 1953.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.50	7.20	7.07	7.19	7.04	7.67	7.48	7.97	8.08	7.79	7.50	7.61
10	7.48	7.10	7.12	7.21	7.02	7.57	7.50	7.82	7.86	7.66	7.70	7.58
15	7.48	7.03	7.27	7.20	7.02	7.45	7.43	7.71	7.76	7.55	7.70	7.63
20	7.46	7.02	7.31	7.18	7.06	7.47	7.80	7.80	7.72	7.48	7.62	7.55
25	7.45	7.03	7.24	7.14	7.27	7.47	8.20	7.90	7.88	7.45	7.53	7.52
EOM	7.34	7.00	7.16	7.07	7.65	7.54	8.10	8.09	7.89	7.47	7.72	7.50

WTR YR 2000 MEAN 7.49 MAX 8.21 MIN 6.98

STREAMS TRIBUTARY TO LAKE ERIE

04177700 HAMILTON LAKE AT HAMILTON, IN

LOCATION.--Lat 41°32'10", long 84°54'45", in SW$^1/_4$SW$^1/_4$NW$^1/_4$ sec.34, T.36 N., R.14 E., Steuben County, Hydrologic Unit 04100003 (HAMILTON, IN quadrangle). The gage is on the eastern shore of the southern lobe at the outlet, in the town of Hamilton.

SURFACE AREA.--802 acres.

DRAINAGE AREA.--16.5 mi^2.

PERIOD OF RECORD.--1943 to current year.

DATUM OF GAGE.--890.12 ft above sea level, as corrected on the basis of levels of Indiana Department of Natural Resources, 1978.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well.

ESTABLISHED LEGAL LEVEL.--8.83 ft gage datum or 898.83 ft above sea level as decreed on July 3, 1947, by the Steuben County Circuit Court. Minor errors were subsequently discovered in the establishment of the datum of the gage (see "DATUM OF GAGE") and the correct elevation of the legal level should be 8.83 ft gage datum or 898.95 ft above sea level.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by two dams. The northernmost dam is concrete and steel sheet piling with a fixed crest. The southern dam has a fixed concrete sill.

INLET AND OUTLET.--Black Creek enters the lake on the northeast shore. Two small ditches enter from the east and the north. There are two outlets, both on the southern lobe, that flow into Fish Creek thence into the St. Joseph River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 10.14 ft Dec. 30, 1965; minimum stage, 7.27 ft Jan. 4-9, 1953.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.30	---	8.43	8.51	8.60	8.57	8.53	8.58	8.73	8.61	8.52	8.48
10	8.32	---	8.42	8.58	8.60	8.55	8.55	8.64	8.62	8.55	8.57	8.59
15	8.32	---	8.51	8.60	8.60	8.54	8.55	8.55	8.90	8.48	8.51	8.69
20	8.30	---	8.53	8.60	8.60	8.62	8.76	8.79	8.78	8.43	8.47	8.55
25	8.24	---	8.51	8.60	8.71	8.59	8.67	8.63	8.85	8.36	8.52	8.54
EOM	---	---	8.51	8.60	8.67	8.61	8.57	8.74	8.62	8.51	8.60	8.49

WTR YR 2000 MEAN 8.56 MAX 8.90 MIN 8.22

STREAMS TRIBUTARY TO LAKE MICHIGAN

04099860 HEATON LAKE NEAR ELKHART, IN

LOCATION.--Lat 41°44'14", long 85°54'42", in NW$^1/_4$NE$^1/_4$NE$^1/_4$ sec.23, T.38 N., R.5 E., Elkhart County, Hydrologic Unit 04050001 (ELKHART, IN quadrangle). The gage is on the east bank of the inlet on the north shore of the lake, 4.7 mi northeast of the main Post Office in Elkhart.

SURFACE AREA.--87 acres.

DRAINAGE AREA.--9.33 mi^2.

PERIOD OF RECORD.--1946-53, 1970-75, 1977 to current year.

DATUM OF GAGE.--760.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well.

ESTABLISHED LEGAL LEVEL.--7.30 ft gage datum or 767.30 ft above sea level as decreed on September 25, 1950, by the Elkhart County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a fixed-crest concrete dam.

INLET AND OUTLET.--The one inlet enters the lake at the extreme northern point of the lake. The outlet, Puterbaugh Creek, flows from the west end of the lake and enters the St. Joseph River approximately 4.0 mi downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 9.73 ft Feb. 26, 1985; minimum stage, 4.55 ft Nov. 12-18, 1971.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.81	5.73	5.90	5.77	5.96	6.43	7.02	8.10	8.22	8.23	7.98	6.87
10	5.77	5.72	5.76	5.96	6.04	6.52	7.14	8.11	8.10	8.18	7.94	6.88
15	5.75	5.72	5.88	5.92	5.97	6.62	7.17	8.12	8.27	8.11	7.75	6.95
20	5.74	5.72	5.80	5.89	5.90	6.87	7.51	8.28	8.20	8.02	7.59	6.86
25	5.74	5.71	5.76	5.92	6.09	6.99	8.12	8.12	8.45	7.91	7.38	6.77
EOM	5.73	5.71	5.75	5.96	6.28	7.02	8.09	8.25	8.30	7.96	7.12	6.64

WTR YR 2000 MEAN 6.86 MAX 8.48 MIN 5.71

STREAMS TRIBUTARY TO LAKE MICHIGAN

04100258 HIGH LAKE NEAR WOLFLAKE, IN

LOCATION.--Lat 41°18'51", long 85°31'49", in SW$^1/_4$NE$^1/_4$SW$^1/_4$ sec.18, T.33 N., R.9 E., Noble County, Hydrologic Unit 04050001 (ORMAS, IN quadrangle). The gage is on a dredged channel on the west shore of the east lobe, 2.1 mi southwest of Wolflake.

SURFACE AREA.--123 acres.

DRAINAGE AREA.--4.43 mi^2.

PERIOD OF RECORD.--1961-68, 1970 to current year.

DATUM OF GAGE.--890.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage is driven into the lake bed at the same site.

ESTABLISHED LEGAL LEVEL.--6.35 ft gage datum or 896.35 ft above sea level as decreed on February 25, 1963, by the Noble County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a concrete, fixed-crest dam with a rectangular notch.

INLET AND OUTLET.--The one inlet, Beal Branch, enters the lake on the southeast shore. The outlet flows from the east side of the north lobe, through Bear Lake, 0.6 mi downstream, into Carrol Creek, and eventually into the Elkhart River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 7.70 ft June 28, 1968; minimum stage, 5.30 ft Nov. 15, 25-28, 1964, Oct. 13, 26-31, Nov. 1-3, 1966.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.20	6.13	6.22	6.54	6.52	6.74	6.62	6.70	6.81	6.79	6.64	6.65
10	6.20	6.13	6.23	6.55	6.52	6.66	6.67	6.78	6.70	6.74	6.64	6.65
15	6.20	6.12	6.25	6.54	6.52	6.61	6.65	6.75	7.06	6.64	6.55	6.95
20	6.19	6.13	6.25	6.52	6.52	6.68	6.91	6.91	6.88	6.56	6.50	6.72
25	6.14	6.16	6.49	6.52	6.78	6.68	6.85	6.80	6.98	6.49	6.48	6.79
EOM	6.12	6.16	6.49	6.52	6.87	6.66	6.72	6.93	6.86	6.49	6.81	6.68

WTR YR 2000 MEAN 6.57 MAX 7.06 MIN 6.10

03331300 HILL LAKE NEAR SILVER LAKE, IN

LOCATION.--Lat 41°06'16",long 85°54'35", in SE$^1/_4$NE$^1/_4$SE$^1/_4$ sec.25, T.31 N., R.5 E., Kosciusko County, Hydrologic Unit 05120106 (SILVER LAKE, IN quadrangle). The gage is located on the northern shore of the southwestern lobe of the lake, 2.5 mi northwest of the town of Silver Lake.

SURFACE AREA.--67 acres.

DRAINAGE AREA.--0.85 mi^2.

PERIOD OF RECORD.--1952 to current year.

DATUM OF GAGE.--860.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage is located on the southernmost tip of the lake. The staff is mounted on a board driven into the lake bed.

ESTABLISHED LEGAL LEVEL.--11.50 ft gage datum or 871.50 ft above sea level as decreed on September 10, 1959, by the Koscuisko County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a concrete fixed sill with removable boards.

INLET AND OUTLET.--There are no surface inlets. The one outlet flows from the western edge of the lake and empties into Diamond Lake 1.5 mi downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 12.54 ft July 21, 1963; minimum stage, 9.86 ft Jan. 18, 19, 1954.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.72	10.63	10.66	10.87	10.94	11.33	11.28	11.34	11.48	---	---	---
10	10.71	10.61	10.67	10.90	10.94	11.31	11.31	11.35	11.36	---	---	---
15	10.69	10.59	10.76	10.91	10.95	11.30	11.29	11.29	11.57	---	---	---
20	10.67	10.60	10.78	10.94	10.98	11.35	11.49	11.40	---	---	---	---
25	10.63	10.62	10.77	10.94	11.24	11.35	11.42	11.34	---	---	---	---
EOM	10.61	10.60	10.79	10.94	11.37	11.33	11.33	11.50	---	---	---	---

WTR YR 2000 MEAN 11.03 MAX 11.59 MIN 10.58

STREAMS TRIBUTARY TO LAKE MICHIGAN

04099500 HOGBACK LAKE NEAR ANGOLA, IN

LOCATION.--Lat 41°37'39", long 85°04'59", in SE$^1/_4$SE$^1/_4$SE$^1/_4$ sec.25, T.37 N., R.12 E., Steuben County, Hydrologic Unit 04050001 (ANGOLA WEST, IN quadrangle). The gage is on the northeast shore, 0.5 mi south of the Tri-State Airport, on County Road 500 West, and 4.4 mi southwest of Angola.

SURFACE AREA.--146 acres.

DRAINAGE AREA.--103 mi^2.

PERIOD OF RECORD.--1946-73, 1977 to current year.

DATUM OF GAGE.--940.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage in one section is attached to a tree at the same site.

ESTABLISHED LEGAL LEVEL.--8.50 ft gage datum or 948.50 ft above sea level as decreed on October 28, 1959, by the Steuben County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by the outlet channel (Pigeon Creek).

INLET AND OUTLET.--There are three inlets to the lake. One unnamed ditch enters from the north. A small tributary enters on the eastern tip from Silver Lake, 0.7 mi upstream. Pigeon Creek flows through the lake, entering at the southeastern shore from Golden Lake, 1.2 mi upstream and leaving at the north end of the western lobe. Pigeon Creek joins Turkey Creek to become Pigeon River and eventually empties into the St. Joseph River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 17.07 ft Mar. 22, 1982; minimum stage, 7.24 ft Sept. 9, 10, 1953.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.71	8.53	8.65	8.69	8.61	9.26	8.98	9.48	9.76	9.75	8.96	8.77
10	8.63	8.54	8.67	8.69	8.60	8.96	9.04	9.31	9.60	9.44	9.06	8.76
15	8.58	8.52	8.73	8.65	8.63	8.83	8.98	9.30	10.30	9.10	8.81	9.35
20	8.54	8.55	8.74	8.63	8.63	8.88	9.38	10.04	9.88	8.91	8.73	8.96
25	8.50	8.62	8.65	8.61	9.18	9.17	11.20	9.93	10.02	8.79	8.77	8.78
EOM	8.50	8.57	8.60	8.61	9.81	9.16	9.83	10.57	10.03	8.98	9.06	8.72

WTR YR 2000 MEAN 9.05 MAX 11.44 MIN 8.49

STREAMS TRIBUTARY TO LAKE MICHIGAN

04097680 JIMMERSON LAKE AT NEVADA MILLS, IN

LOCATION.--Lat 41°43'31", long 85°04'55", in SW$^1/_4$NW$^1/_4$ sec.30, T.38 N., R.13 E., Steuben County, Hydrologic Unit 04050001 (ANGOLA WEST, IN quadrangle). The gage is at the extreme west end of the lake on the abutment of the concrete spillway structure and dam in the town of Nevada Mills, 4.6 mi east of Orland.

SURFACE AREA.--434 acres.

DRAINAGE AREA.--51.6 mi^2.

PERIOD OF RECORD.--1937-44, 1946 to current year. (Lake level readings were made once a week by employees of Northern Indiana Public Service Company from 1937 to 1944.)

DATUM OF GAGE.--960.27 ft above sea level, as corrected on the basis of levels of Indiana Department of Natural Resources in June 1972.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 24-inch diameter stilling well attached to the control structure. An auxiliary staff gage is bolted to the same wall.

ESTABLISHED LEGAL LEVEL.--4.66 ft gage datum or 964.66 ft above sea level as decreed on July 3, 1947, by the Steuben County Circuit Court. Minor errors were subsequently discovered in the establishment of the datum of the gage (see "DATUM OF GAGE") and the correct elevation of the legal level should be 4.66 ft gage datum or 964.93 ft above sea level.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a concrete fixed-crest dam.

INLET AND OUTLET.--Crooked Creek flows through the lake, entering from Lake James at the extreme southeast end, and leaving from the northwest. Crooked Creek flows through Tamarack Lake and becomes Fawn River, which eventually empties into the St. Joseph River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 6.22 ft May 27, 1943; minimum stage, 3.71 ft Feb. 16, 17, 1948.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.67	4.67	4.79	4.89	4.84	5.01	4.96	5.18	5.19	5.35	4.97	4.78
10	4.66	4.68	4.81	4.90	4.85	4.97	5.01	5.10	5.08	5.20	4.95	4.82
15	4.76	4.66	4.89	4.89	4.86	4.94	4.97	5.03	5.25	5.03	4.87	4.98
20	4.71	4.70	4.87	4.87	4.86	5.01	5.24	5.16	5.23	4.91	4.76	4.90
25	4.66	4.74	4.84	4.88	4.96	4.97	5.40	5.12	5.34	4.83	4.72	4.88
EOM	4.67	4.73	4.84	4.87	5.08	4.97	5.23	5.25	5.33	4.99	4.94	4.86

WTR YR 2000 MEAN 4.94 MAX 5.44 MIN 4.60

WABASH RIVER BASIN

03331438 KING LAKE NEAR DELONG, IN

LOCATION.--Lat 41°07'48", long 86°25'23", in NW$^1/_4$SW$^1/_4$SE$^1/_4$ sec.16, T.31 N., R.1 E., Fulton County, Hydrologic Unit 05120106 (CULVER, IN quadrangle). The gage is located on the northern shore of the lake, on the lake access road, 0.6 mi southwest of Delong.

SURFACE AREA.--18 acres.

DRAINAGE AREA.--1.98 mi^2.

PERIOD OF RECORD.--1970-72, 1975 to current year.

DATUM OF GAGE.--730.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well.

ESTABLISHED LEGAL LEVEL.--Not established.

LAKE-LEVEL CONTROL.--The lake level is normally controlled by the outlet channel bed. At high stages the control changes to the outlet culvert under old State Highway 17. The culvert is located about 700 ft north of the lake.

INLET AND OUTLET.--The inlet is an unnamed ditch which enters the lake from the southeastern side. The outlet exits the lake on the northern side and flows north approximately 1.5 mi to the Tippecanoe River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 8.69 ft June 14, 1981; minimum stage, 3.60 ft Oct. 23-26, 28-31, Nov. 1, 2, 1974.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.67	4.55	4.59	4.70	4.74	5.06	5.13	5.58	6.01	6.25	5.83	5.37
10	4.65	4.52	4.59	4.73	4.75	5.07	5.17	5.64	5.95	6.21	5.87	5.39
15	4.61	4.49	4.68	4.71	4.76	5.06	5.16	5.70	6.08	6.10	5.69	5.43
20	4.59	4.47	4.67	4.75	4.80	5.14	5.38	5.76	6.06	6.00	5.47	5.35
25	4.56	4.48	4.66	4.75	4.88	5.16	5.42	5.78	6.15	5.87	5.42	5.34
EOM	4.53	4.46	4.67	4.75	5.04	5.16	5.43	5.93	6.17	5.80	5.36	5.27

WTR YR 2000 MEAN 5.20 MAX 6.25 MIN 4.45

STREAMS TRIBUTARY TO LAKE MICHIGAN

04100390 KNAPP LAKE NEAR WASHINGTON CENTER, IN

LOCATION.--Lat. 41°20'36", long 85°36'17", in SW$^1/_4$NE$^1/_4$SW$^1/_4$ sec.4, T.33 N., R.8 E., Noble County, Hydrologic Unit 04050001 (ORMAS, IN quadrangle). The gage is at a public access site on the east side of the lake, and 5.8 mi west of the town of Wolflake.

SURFACE AREA.--88 acres.

DRAINAGE AREA.--6.02 mi^2.

PERIOD OF RECORD.--1946-74, 1976 to current year.

DATUM OF GAGE.--870.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well.

ESTABLISHED LEGAL LEVEL.--8.25 ft gage datum or 878.25 ft above sea level as decreed on October 7, 1954, by the Noble County Circuit Court. Harper Lake, Moss Lake, and Hindman Lake, all near Washington Center, have the same established level as Knapp Lake and hence the same lake levels for the period of record.

LAKE-LEVEL CONTROL.--The lake level is controlled by the outlet channel.

INLET AND OUTLET.--There are three inlets. The outlet of Little Knapp Lake enters at the southeastern corner, the outlet of Harper Lake enters at the southernmost tip, and Galloway Ditch enters on the eastern shore. The outlet flows from the lake on the western shore, through a series of lakes, into Turkey Creek and eventually into the Elkhart River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 11.10 ft June 27, 1968; minimum stage, 6.14 ft Mar. 26, 1994.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.29	7.03	7.14	6.82	6.75	7.09	6.96	7.64	7.61	7.83	7.36	7.24
10	7.39	7.12	6.92	6.81	6.75	6.98	7.08	7.68	7.53	7.71	7.39	7.07
15	7.47	7.19	7.00	6.79	6.76	6.91	7.25	7.57	8.04	7.53	7.22	7.63
20	6.96	7.25	6.92	6.79	6.78	6.97	8.03	7.71	7.85	7.37	7.07	7.33
25	6.80	7.29	6.83	6.77	7.10	6.99	7.97	7.61	8.33	7.29	6.98	7.29
EOM	6.90	7.28	6.78	6.75	7.39	6.99	7.66	7.69	8.07	7.28	7.59	7.11

WTR YR 2000 MEAN 7.26 MAX 8.36 MIN 6.74

ILLINOIS RIVER BASIN

05515600 KOONTZ LAKE AT KOONTZ LAKE, IN

LOCATION.--Lat 41°24'42", long 86°29'18", in SW$^1/_4$SE$^1/_4$NE$^1/_4$ sec.11, T.34 N., R.1 W., Starke County, Hydrologic Unit 07120001 (WALKERTON, IN quadrangle). The gage is on the western tip of the lake, at the control dam on State Highway 23, at the town of Koontz Lake.

SURFACE AREA.--346 acres.

DRAINAGE AREA.--6.25 mi^2.

PERIOD OF RECORD.--1943 to current year.

DATUM OF GAGE.--710.12 ft above sea level, as corrected on the basis of levels of Indiana Department of Natural Resources, 1978.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well.

ESTABLISHED LEGAL LEVEL.--4.56 ft gage datum or 714.56 ft above sea level as decreed on September 15, 1948, by the Starke County Circuit Court. Minor errors were subsequently discovered in the establishment of the datum of the gage (see "DATUM OF GAGE") and the correct elevation of the legal level should be 4.56 ft gage datum or 714.68 ft above sea level.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a steel sheet piling dam with a fixed crest.

INLET AND OUTLET.--Lawrence Pontius Ditch and Rose Ditch enter the lake on the south shore of the east lobe. The outlet flows from the lake at the western tip and into Robbins Ditch 1400 ft downstream. Robbins Ditch empties into the Kankakee River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 6.10 ft Oct. 11, 1954; minimum stage, 3.10 ft Oct. 12, 1970.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.20	4.21	4.41	4.52	4.45	4.50	4.46	4.53	4.65	4.57	4.38	4.29
10	4.22	4.21	4.44	4.51	4.45	4.47	4.51	4.56	4.53	4.53	4.45	4.36
15	4.21	4.20	4.52	4.47	4.45	4.52	4.48	4.51	4.62	4.49	4.41	4.50
20	4.22	4.21	4.46	4.45	4.46	4.54	4.67	4.57	4.76	4.44	4.43	4.45
25	4.21	4.25	4.45	4.45	4.55	4.50	4.57	4.51	4.71	4.40	4.39	4.44
EOM	4.21	4.25	4.46	4.45	4.56	4.47	4.50	4.55	4.56	4.40	4.37	4.41

WTR YR 2000 MEAN 4.44 MAX 4.91 MIN 4.13

05517800 LAKE ELIZA NEAR BEATRICE, IN

LOCATION.--Lat 41°25'55", long 87°10'33", in SW$^1/_4$NE$^1/_4$NW$^1/_4$ sec.1, T.34 N., R.7 W., Porter County, Hydrologic Unit 07120001 (PALMER, IN quadrangle). The gage is on the east bank of a boat channel off the northernmost end of the lake, south of the bridge over the channel, and at the town of Lake Eliza.

SURFACE AREA.--45 acres.

DRAINAGE AREA.--1.70 mi^2.

PERIOD OF RECORD.--1954-74, 1976 to current year.

DATUM OF GAGE.--735.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage is attached to the bridge piling.

ESTABLISHED LEGAL LEVEL.--3.70 ft gage datum or 738.70 ft above sea level as decreed on February 7, 1982, by the Porter County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a reinforced concrete dam with fixed crest.

INLET AND OUTLET.--Two small inlets enter the lake from the northwest and the northeast. The outlet flows from the lake on the south side through a dredged channel, forms the head waters of Wolf Creek, and eventually joins the Kankakee River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 7.24 ft June 14, 1981; minimum stage, 2.45 ft Oct. 13-15, 1988.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.17	2.94	3.04	3.18	3.30	3.88	3.96	4.31	4.32	4.38	4.02	3.67
10	3.15	2.92	3.04	3.22	3.33	3.86	4.11	4.19	4.25	4.37	4.00	3.61
15	3.12	2.87	3.16	3.20	3.32	3.89	4.12	4.14	4.86	4.30	3.92	3.71
20	3.07	2.84	3.16	3.23	3.38	3.99	4.87	4.16	4.80	4.19	3.92	3.67
25	3.02	2.89	3.14	3.25	3.75	3.99	4.58	4.12	4.94	4.08	3.85	3.66
EOM	2.98	2.84	3.16	3.29	3.88	3.98	4.31	4.23	4.64	4.09	3.77	3.58

WTR YR 2000 MEAN 3.71 MAX 5.04 MIN 2.84

STREAMS TRIBUTARY TO LAKE MICHIGAN

04097950 LAKE GAGE AT PANAMA, IN

LOCATION.--Lat 41°42'32", long 85°06'53", in SE$^1/_4$SE$^1/_4$NW$^1/_4$ sec.35, T.38 N., R.12 E., Steuben County, Hydrologic Unit 04050001 (ANGOLA WEST, IN quadrangle). The gage is at the bridge over the outlet on the northern tip of the lake, 0.4 mi northwest of Panama, and 3.3 mi southeast of Orland.

SURFACE AREA.--332 acres.

DRAINAGE AREA.--17.3 mi^2.

PERIOD OF RECORD.--1946 to current year.

DATUM OF GAGE.--950.00 ft above sea level.

GAGE.--A water-stage recorder is installed in a wooden shelter over a 24-inch diameter stilling well at the downstream side of the bridge. An auxiliary staff gage is at the same site.

ESTABLISHED LEGAL LEVEL.--4.25 ft gage datum or 954.25 ft above sea level as decreed on July 3, 1947, by the Steuben County Circuit Court. Lime Lake at Panama has the same established level and hence the same lake levels for the period of record.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a concrete dam with a fixed crest and one adjustable gate at the outlet of Lime Lake.

INLET AND OUTLET.--The one inlet flows into the lake on the extreme eastern shore from the Third Basin of Crooked Lake, 1.4 mi upstream. The outlet flows from the northern tip into Lime Lake approximately 600 ft downstream, then eventually into the St. Joseph River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 5.55 ft Apr. 25, 1950; minimum stage, 3.41 ft Nov. 13, 15-20, 1953.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.33	4.35	4.51	4.53	4.33	4.53	4.35	4.43	4.57	4.53	4.40	4.44
10	4.33	4.35	4.47	4.54	4.37	4.51	4.44	4.39	4.36	4.55	4.43	4.57
15	4.38	4.35	4.59	4.45	4.39	4.53	4.43	4.34	4.68	4.39	4.38	4.65
20	4.36	4.36	4.55	4.35	4.42	4.60	4.76	4.51	4.81	4.35	4.35	4.53
25	4.34	4.39	4.49	4.27	4.51	4.42	4.57	4.38	4.70	4.31	4.35	4.50
EOM	4.34	4.38	4.47	4.29	4.59	4.35	4.43	4.66	4.56	4.39	4.54	4.43

WTR YR 2000 MEAN 4.45 MAX 4.81 MIN 4.25

STREAMS TRIBUTARY TO LAKE MICHIGAN

04092990 LAKE GEORGE AT HOBART, IN

LOCATION.--Lat 41°32'07", long 87°15'30", in NW$^1/_4$NW$^1/_4$NW$^1/_4$ sec.32, T.36 N., R.7 W., Lake County, Hydrologic Unit 04040001 (GARY, IN quadrangle). The gage is on the northeast end of the lake, 70 ft northwest of the dam and 400 ft upstream of the Ridge Road bridge, in Hobart.

SURFACE AREA.--282 acres.

DRAINAGE AREA.--124 mi^2.

PERIOD OF RECORD.--1947 to current year.

DATUM OF GAGE.--600.00 ft above sea level.

GAGE.--A water-stage recorder is installed in a steel shelter over an 18-inch diameter clay stilling well.

ESTABLISHED LEGAL LEVEL.--2.23 ft gage datum or 602.23 ft above sea level as decreed on September 18, 1959, by the Lake County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a concrete dam with removable boards.

INLET AND OUTLET.--The two principal inlets are Turkey Creek, entering from the extreme southwestern tip, and Deep River, entering on the northeastern shore of the southern lobe. Three unnamed tributaries enter from the northwest, south, and southeast. The outlet, Deep River, flows from the lake at the northeast end and eventually joins the Calumet River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 7.14 ft Oct. 11, 1954; minimum stage, below .08 ft Aug. 2, 1997 (while the lake was being drained).

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.15	1.99	2.47	2.03	2.02	2.12	2.10	2.15	2.67	2.20	1.99	1.96
10	2.01	1.99	2.06	2.12	2.06	2.06	2.35	2.19	2.17	2.20	1.97	2.07
15	1.99	2.01	2.27	2.04	2.05	2.04	2.14	2.05	2.93	2.05	1.87	2.05
20	1.99	1.99	2.05	2.02	2.07	2.23	2.75	2.19	2.58	1.94	2.05	1.95
25	1.98	2.01	2.01	2.00	2.62	2.12	2.53	2.01	3.69	1.90	1.96	2.03
EOM	1.99	2.01	2.02	2.00	2.30	2.10	2.21	2.32	2.48	2.04	1.88	1.97

WTR YR 2000 MEAN 2.14 MAX 3.69 MIN 1.82

STREAMS TRIBUTARY TO LAKE MICHIGAN

04097550 LAKE GEORGE AT JAMESTOWN, IN

LOCATION.--Lat 41°44'58", long 85°01'01", in SE$^1/_4$NW$^1/_4$SE$^1/_4$ sec.15, T.38 N., R.13 E., Steuben County, Hydrologic Unit 04050001 (ANGOLA WEST, IN quadrangle). The gage is 25 ft east of the outlet dam on the southwest end of the lake at Jamestown, 8.0 mi north of Angola.

SURFACE AREA.--488 acres.

DRAINAGE AREA.--14.7 mi^2.

PERIOD OF RECORD.--1946 to current year.

DATUM OF GAGE.--980.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well.

ESTABLISHED LEGAL LEVEL.--5.28 ft gage datum or 985.28 ft above sea level as decreed on October 12, 1945, by the Steuben County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a concrete dam with removable boards.

INLET AND OUTLET.--The inlet flows from Silver Lake, 0.8 mi upstream, and enters on the north shore. The outlet flows from the southwest end of the lake and forms Crooked Creek. Crooked Creek flows into Mud Lake 0.8 mi downstream, then enters Snow Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 6.20 ft Apr. 4, 25, 1950; minimum stage, 4.20 ft Dec. 6, 7, 1946; Oct. 23-31, 1948.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.45	5.44	5.62	5.72	5.70	5.73	5.75	5.80	5.90	5.86	5.73	5.65
10	5.46	5.45	5.65	5.73	5.70	5.72	5.78	5.79	5.84	5.79	5.68	5.70
15	5.49	5.44	5.73	5.70	5.70	5.71	5.74	5.76	5.96	5.72	5.63	5.72
20	5.48	5.45	5.72	5.70	5.70	5.74	6.02	5.90	5.92	5.67	5.58	5.76
25	5.44	5.50	5.69	5.70	5.76	5.68	5.89	5.83	5.99	5.64	5.59	5.81
EOM	5.44	5.50	5.69	5.70	5.76	5.78	5.82	5.91	5.86	5.75	5.76	5.79

WTR YR 2000 MEAN 5.70 MAX 6.02 MIN 5.40

WABASH RIVER BASIN

03331380 LAKE MANITOU AT ROCHESTER, IN

LOCATION.--Lat 41°03'00", long 86°10'06", NW$^1/_4$SW$^1/_4$NW$^1/_4$ sec.14, T.30 N., R.3 E., Fulton County, Hydrologic Unit 05120106 (ROCHESTER, IN quadrangle). The gage is located at the public access site on the eastern side of the lake, and 2.6 mi southeast of the courthouse in Rochester.

SURFACE AREA.--1,158 acres.

DRAINAGE AREA.--44.2 mi^2.

PERIOD OF RECORD.--1943 to current year.

DATUM OF GAGE.--770.00 ft above sea level.

GAGE.--A water-stage recorder is installed in a aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage is located at the northwest end of the lake at the fish hatchery.

ESTABLISHED LEGAL LEVEL.--8.41 ft gage datum or 778.41 ft above sea level as decreed on September 27, 1948, by the Fulton County Circuit Court.

LAKE-LEVEL CONTROL.--The lake level is controlled by a concrete dam and the gate of a feeder canal at the lake outlet.

INLET AND OUTLET.--Rain Creek is the main inlet and enters at the southeastern edge of the lake. The other inlet is located on the eastern shore of the lake at the site of the gage. The outlet is Mill Creek, which exits at the northwestern tip of the lake and flows 3.5 mi to the Tippecanoe River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 10.87 ft Aug. 19, 1990; minimum stage, 6.48 ft Nov. 14, 25-27, 1964.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.29	9.25	9.34	9.32	9.25	9.36	9.28	9.37	9.49	9.54	9.47	9.32
10	9.27	9.23	9.29	9.30	9.26	9.32	9.32	9.39	9.37	9.54	9.38	9.32
15	9.24	9.20	9.37	9.27	9.27	9.32	9.30	9.31	9.66	9.38	9.29	9.32
20	9.23	9.21	9.32	9.29	9.32	9.39	9.49	9.38	9.49	9.33	9.27	9.27
25	9.20	9.23	9.26	9.27	9.44	9.37	9.43	9.33	9.51	9.28	9.31	9.30
EOM	9.19	9.21	9.26	9.25	9.46	9.33	9.33	9.54	9.46	9.29	9.27	9.25

WTR YR 2000 MEAN 9.33 MAX 9.68 MIN 9.19

WABASH RIVER BASIN

03331440 LAKE MAXINKUCKEE AT CULVER, IN

LOCATION.--Lat 41°11'48", long 86°25'00", in NE$^1/_4$SE$^1/_4$NW$^1/_4$ sec.28, T.32 N., R.1 E., Marshall County, Hydrologic Unit 05120106 (CULVER, IN quadrangle). The gage is on the lower west side of the lake, at the public access site, 1.4 mi south of the center of Culver.

SURFACE AREA.--1,864 acres.

DRAINAGE AREA.--13.7 mi^2.

PERIOD OF RECORD.--1943 to current year.

DATUM OF GAGE.--730.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage is attached to the upstream side of the north abutment of the outlet dam.

ESTABLISHED LEGAL LEVEL.--3.12 ft gage datum or 733.12 ft above sea level as decreed on August 9, 1948, by the Marshall County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a concrete dam with a fixed crest at the outlet channel.

INLET AND OUTLET.--Wilson Ditch enters the lake at the northeast corner, Curtiss Ditch enters at the east center, and Norris Inlet enters at the southeast corner. The outlet leaves the lake at the western shore, north of the point, and flows into Lost Lake 1,600 ft downstream, thence into the Tippecanoe River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 5.48 ft June 14, 15, 1981; minimum stage, 2.12 ft Nov. 19, 1953 and Nov. 19, 1956.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	2.33	2.39	2.62	2.82	3.19	3.27	3.44	3.47	3.46	3.08	3.01
10	---	2.32	2.47	2.65	2.84	3.25	3.34	3.44	3.41	3.39	3.10	2.93
15	---	2.31	2.55	2.67	2.87	3.23	3.26	3.42	3.51	3.34	3.03	2.99
20	2.40	2.28	2.59	2.70	2.92	3.29	3.49	3.43	3.48	3.19	3.07	2.88
25	2.35	2.30	2.57	2.75	3.01	3.30	3.50	3.40	3.55	3.11	2.96	2.90
EOM	2.33	2.29	2.58	2.80	3.21	3.27	3.44	3.43	3.47	3.07	2.94	2.84

WTR YR 2000 MEAN 2.99 MAX 3.55 MIN 2.27

05516200 LAKE OF THE WOODS NEAR BREMEN, IN

LOCATION.--Lat 41O25'04", long 86O13'44", in SW$^1/_4$NW$^1/_4$NW$^1/_4$ sec.7, T.34 N., R.3 E., Marshall County, Hydrologic Unit 07120001 (BREMEN, IN quadrangle). The gage is on the southwest shore of the lake, at the public fishing site, and 4.7 mi southwest of Bremen.

SURFACE AREA.--416 acres.

DRAINAGE AREA.--9.45 mi^2.

PERIOD OF RECORD.--1945 to current year.

DATUM OF GAGE.--800.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage is driven into the outlet channel.

ESTABLISHED LEGAL LEVEL.--3.85 ft gage datum or 803.85 ft above sea level as decreed on August 9, 1948, by the Marshall County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a concrete dam with a 13 ft by 1 ft notch. The dam is equipped with a lift gate.

INLET AND OUTLET.--Three ditches, Kimble, Martin, and Seltenright, enter the lake on the northwest shore. Scofield Ditch enters at the west lobe. The outlet, Clark Ditch, flows from the lake at the southern end and eventually into Yellow River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 7.68 ft Oct. 12, 1954; minimum stage, 2.75 ft Nov. 18-20, 1953.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.09	2.92	3.11	3.06	3.01	3.29	3.17	3.39	3.95	3.98	3.75	3.64
10	2.98	2.93	3.07	3.10	3.00	3.21	3.24	3.37	4.01	3.98	3.86	3.63
15	2.94	2.92	3.19	3.06	3.01	3.17	3.21	3.25	4.05	3.91	3.80	3.82
20	2.94	2.92	3.14	3.06	3.03	3.23	3.53	3.42	4.01	3.83	3.78	3.41
25	2.93	2.93	3.06	3.05	3.25	3.24	3.64	3.54	4.15	3.71	3.76	3.20
EOM	2.93	2.93	3.03	3.03	3.40	3.20	3.44	3.75	3.95	3.79	3.72	3.07

WTR YR 2000 MEAN 3.36 MAX 4.36 MIN 2.91

STREAMS TRIBUTARY TO LAKE MICHIGAN

04099580 LAKE OF THE WOODS NEAR HELMER, IN

LOCATION.--Lat 41°32'30", long 85°11'42", in SE$^1/_4$SE$^1/_4$SE$^1/_4$ sec.25, T.36 N., R.11 E., Lagrange County, Hydrologic Unit 04050001 (STROH, IN quadrangle). The gage is on the west shore of Duck Pond, a basin connecting Lake of the Woods and McClish Lake, approximately 100 ft south of the bridge over the channel, and 1.5 mi northwest of Helmer.

SURFACE AREA.--136 acres.

DRAINAGE AREA.--5.25 mi^2.

PERIOD OF RECORD.--1951-74, 1977 to current year.

DATUM OF GAGE.--940.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well.

ESTABLISHED LEGAL LEVEL.--11.09 ft gage datum or 951.09 ft above sea level as decreed on July 21, 1960, by the Lagrange County Circuit Court. McClish Lake near Helmer has the same established level and hence the same lake levels for the period of record.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a concrete dam with a fixed sill.

INLET AND OUTLET.--There are four inlets to the lake. Spectacle Lake drains into the west shore, Maumee Ditch enters from the south, Goose Pond flows through a short channel to the southwest shore, and McClish Lake drains into the lake on the southeast shore. The outlet flows to the north from the east end of the lake and through Taylor, Mud, and Little Turkey Lakes to Turkey Creek, thence into Pigeon River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 13.00 ft Dec. 24, 25, 1967; minimum stage, 9.81 ft Nov. 17-20, 1953.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.03	10.93	11.01	11.42	11.44	11.57	11.49	11.52	11.70	11.55	11.48	11.46
10	11.03	10.92	11.02	11.43	11.44	11.49	11.51	11.61	11.54	11.47	11.77	11.45
15	11.02	10.90	11.17	11.43	11.44	11.45	11.46	11.51	11.57	11.35	11.57	11.52
20	10.99	10.91	11.25	11.44	11.43	11.51	11.92	11.79	11.58	11.27	11.46	11.45
25	10.94	10.94	11.25	11.44	11.65	11.52	11.84	11.72	11.71	11.20	11.43	11.41
EOM	10.94	10.92	11.25	11.44	11.76	11.55	11.57	11.96	11.53	11.49	11.59	11.35

WTR YR 2000 MEAN 11.40 MAX 12.14 MIN 10.89

STREAMS TRIBUTARY TO LAKE MICHIGAN

04097520 LAKE PLEASANT NEAR NEVADA MILLS, IN

LOCATION.--Lat 41°45'18", long 85°06'10", in NW$^1/_4$SW$^1/_4$NW$^1/_4$ sec.13, T.38 N., R.12 E., Steuben County, Hydrologic Unit 04050001 (KINDERHOOK, MI-IN quadrangle). The gage is at a bridge over a boat channel on the south shore of the lake, 2.3 mi northwest of Nevada Mills.

SURFACE AREA.--424 acres.

DRAINAGE AREA.--3.18 mi^2.

PERIOD OF RECORD.--1954-69, 1971, 1976 to current year.

DATUM OF GAGE.--960.40 ft above sea level as corrected on the basis of levels of Indiana Department of Natural Resources, 1977-78.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage is attached to the southwest bridge abutment at the site.

ESTABLISHED LEGAL LEVEL.--1.10 ft gage datum or 961.50 ft above sea level as decreed on April 11, 1986, by the Steuben County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a metal plate welded across the bottom of a corrugated metal pipe.

INLET AND OUTLET.--The one inlet enters the lake on the west side. The outlet flows from the northern shore, enters Michigan, and eventually empties into Prairie River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 2.04 ft Mar. 17, 1980; minimum stage, -0.14 ft Nov. 6-14, 1964.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	.37	.31	.43	.62	.70	1.00	1.08	1.34	1.41	1.44	1.14	1.21
10	.37	.31	.43	.68	.70	.99	1.14	1.33	1.29	1.37	1.14	1.28
15	.38	.28	.53	.69	.69	1.03	1.14	1.30	1.43	1.25	1.08	1.33
20	.36	.29	.55	.69	.71	1.10	1.45	1.44	1.42	1.14	1.04	1.24
25	.31	.32	.55	.69	.92	1.10	1.39	1.39	1.51	1.08	1.02	1.21
EOM	.31	.30	.59	.70	1.01	1.10	1.32	1.43	1.41	1.15	1.31	1.15

WTR YR 2000 MEAN .94 MAX 1.51 MIN .27

STREAMS TRIBUTARY TO LAKE MICHIGAN

04100160 LITTLE LONG LAKE AT KENDALLVILLE, IN

LOCATION.--Lat 41°27'49", long 85°15'27", in SE$^1/_4$NW$^1/_4$NE$^1/_4$ sec.28, T.35 N., R.11 E., Noble County, Hydrologic Unit 04050001 (KENDALLVILLE, IN quadrangle). The gage is on the south side of the lake at the bridge over the dredged channel in Wakeville Village, 1.6 mi northeast of City Hall in Kendallville.

SURFACE AREA.--71 acres.

DRAINAGE AREA.--4.55 mi^2.

PERIOD OF RECORD.--1954 to current year.

DATUM OF GAGE.--950.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage in one section is attached to the west wingwall on the south side of the bridge.

ESTABLISHED LEGAL LEVEL.--4.50 ft gage datum or 954.50 ft above sea level as decreed on March 26, 1970. Round Lake at Kendallville has the same established level and hence the same lake levels for the period of record.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a fixed-crest concrete dam.

INLET AND OUTLET.--The one inlet enters on the east side from Round Lake. The outlet, Waterhouse Ditch, flows from the lake at the southwest end and into Henderson Lake Ditch, thence into Sylvan Lake 4.8 mi downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 6.75 ft Jan. 31, 1969; minimum stage, 3.33 ft Nov. 17, 18, 1964.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.22	4.07	4.14	4.46	4.50	4.74	4.69	4.76	4.88	4.73	4.61	4.65
10	4.21	4.06	4.14	4.50	4.50	4.71	4.71	4.83	4.75	4.66	4.68	4.71
15	4.20	4.03	4.30	4.51	4.50	4.70	4.69	4.72	4.83	4.59	4.60	4.87
20	4.16	4.04	4.36	4.50	4.51	4.81	5.18	4.90	4.83	4.55	4.56	4.72
25	4.12	4.06	4.36	4.50	4.77	4.76	4.92	4.79	4.89	4.48	4.53	4.70
EOM	4.10	4.04	4.37	4.50	4.85	4.74	4.76	4.97	4.74	4.66	4.81	4.67

WTR YR 2000 MEAN 4.56 MAX 5.25 MIN 4.02

WABASH RIVER BASIN

03328100 LONG LAKE AT LAKETON, IN

LOCATION.--Lat 40°59'08", long 85°50'20", in NE$^1/_4$NW$^1/_4$NE$^1/_4$ sec.10, T.29 N., R.6 E., Wabash County, Hydrologic Unit 05120104 (NORTH MANCHESTER SOUTH, IN quadrangle). The gage is located on the north shore of the lake, 0.3 mi west of Crill Road, and 0.8 mi north of Laketon.

SURFACE AREA.--48 acres.

DRAINAGE AREA.--0.55 mi^2.

PERIOD OF RECORD.--1946-51, 1959 to current year.

DATUM OF GAGE.--740.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage, driven into the lake bed, is located 50 ft lakeward of the primary gage.

ESTABLISHED LEGAL LEVEL.--11.19 ft gage datum or 751.19 ft above sea level as decreed on July 26, 1951, by the Wabash County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by an 18-inch corrugated metal pipe draining into a clay tile.

INLET AND OUTLET.--Two tile ditches flow into the lake. The outlet flows from the west end of the lake, joins the outlet of Mud Lake, continues through Round Lake, then into Eel River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 13.66 ft Mar. 22, 1982; minimum stage, 8.68 ft Dec. 1-3, 1964.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.50	10.18	10.06	10.06	9.98	10.08	10.03	10.12	10.48	11.33	---	10.95
10	10.47	10.13	10.05	10.03	9.96	10.07	10.03	10.17	10.46	11.40	---	10.95
15	10.41	10.10	10.11	10.00	9.93	10.06	9.99	10.10	10.74	11.33	---	10.99
20	10.38	10.06	10.08	9.98	9.97	10.11	10.14	10.15	10.78	11.28	---	10.89
25	10.28	10.05	10.03	9.99	9.99	10.10	10.12	10.17	11.03	11.19	---	10.88
EOM	10.24	10.01	10.02	9.99	10.10	10.09	10.07	10.33	11.05	11.16	---	10.81

WTR YR 2000 MEAN 10.34 MAX 11.40 MIN 9.91

STREAMS TRIBUTARY TO LAKE MICHIGAN

04099200 LONG LAKE AT MOONLIGHT, IN

LOCATION.--Lat 41°35'01", long 85°01'43", in NE$^1/_4$NE$^1/_4$NE$^1/_4$ sec.16, T.36 N., R.13 E., Steuben County, Hydrologic Unit 04050001 (ASHLEY, IN quadrangle). The gage is located on the northern shore, 0.4 mi east of the lake outlet and 2.5 mi north of Steubenville.

SURFACE AREA.--92 acres.

DRAINAGE AREA.--67.9 mi^2.

PERIOD OF RECORD.--1946 to current year.

DATUM OF GAGE.--940.10 ft above sea level as corrected on the basis of levels of Indiana Department of Natural Resources, 1977.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage is located near the gage in two sections. One section is mounted on a post which is driven into the lake bed. The other section is mounted to a tree near the gage.

ESTABLISHED LEGAL LEVEL.--Not established.

LAKE-LEVEL CONTROL.--The lake level is controlled by the downstream channel.

INLET AND OUTLET.--Pigeon Creek flows into Long Lake at the eastern end of the lake and exits at the western end.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 17.42 ft Mar. 22, 1982; minimum stage, 8.58 ft Sept. 22 and 23, 1994.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.00	8.89	8.93	8.93	8.82	9.27	9.07	9.53	10.04	10.45	9.09	8.97
10	8.92	8.89	8.92	8.90	8.82	9.07	9.30	9.62	9.67	9.57	9.15	9.11
15	8.89	8.88	8.99	8.88	8.85	9.00	9.10	9.43	10.96	9.22	9.00	9.48
20	8.87	8.92	8.94	8.85	8.86	9.22	10.42	11.15	10.07	9.08	8.98	9.08
25	8.84	8.91	8.86	8.81	9.76	9.33	11.41	10.03	10.70	9.00	9.00	9.01
EOM	8.90	8.88	8.84	8.76	10.10	9.27	9.82	11.03	10.28	9.36	9.18	9.02

WTR YR 2000 MEAN 9.32 MAX 12.37 MIN 8.76

WABASH RIVER BASIN

03331460 LOST LAKE AT CULVER, IN

LOCATION.--Lat 41°12'01", long 86°25'19", in NE$^1/_4$NW$^1/_4$NW$^1/_4$ sec.28, T.32 N., R.1 E., Marshall County, Hydrologic Unit 05120106 (CULVER, IN quadrangle). The gage is on the northern shore of the lake at the east end of West 19th Road (lake access road), 1.1 mi south of the center of Culver.

SURFACE AREA.--40 acres.

DRAINAGE AREA.--14.2 mi^2.

PERIOD OF RECORD.--1954-64, 1963-74, 1976 to current year. (Formerly published as Hawks Lake near Culver.)

DATUM OF GAGE.--720.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well.

ESTABLISHED LEGAL LEVEL.--12.00 ft gage datum or 732.00 ft above sea level as decreed on February 17, 1960, by the Marshall County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a concrete dam and sill with removable boards in the outlet channel approximately 850 ft downstream from the main body of the lake.

INLET AND OUTLET.--The one inlet flows into the lake from Maxinkuckee Lake and enters on the north shore. The outlet flows from the south end of the lake to the Tippecanoe River 3.7 mi downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 13.05 ft June 15, 1981; minimum stage, 10.12 ft July 9, 1959.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.06	10.96	11.09	11.23	11.30	11.85	11.89	12.04	12.07	12.00	11.74	11.71
10	11.05	10.94	11.12	11.26	11.32	11.85	11.92	12.03	11.99	11.93	11.72	11.75
15	11.02	10.92	11.23	11.24	11.32	11.87	11.89	12.03	12.06	11.84	11.71	11.74
20	11.02	10.91	11.23	11.28	11.36	11.91	12.12	12.05	12.08	11.76	11.67	11.71
25	10.99	10.92	11.21	11.29	11.47	11.92	12.08	12.01	12.09	11.72	11.68	11.72
EOM	10.96	10.92	11.21	11.29	11.63	11.91	12.04	12.05	12.02	11.74	11.70	11.67

WTR YR 2000 MEAN 11.58 MAX 12.12 MIN 10.89

WABASH RIVER BASIN

03328400 LUKENS LAKE NEAR DISKO, IN

LOCATION.--Lat 40°58'09", long 85°56'06", in SW$^1/_4$NW$^1/_4$NE$^1/_4$ sec.14, T.29 N., R.5 E., Wabash County, Hydrologic Unit 05120104 (ROANN, IN quadrangle). The gage is 25 ft north of the outlet on the southwest side of the lake, 4.1 mi north of Roann.

SURFACE AREA.--46 acres.

DRAINAGE AREA.--1.76 mi^2.

PERIOD OF RECORD.--1948-49, 1959 to current year.

DATUM OF GAGE.--760.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage in one section is driven into the lake bed about 5 ft upstream from the outlet culvert.

ESTABLISHED LEGAL LEVEL.--3.60 ft gage datum or 763.60 ft above the sea level as decreed on March 29, 1978, by the Wabash County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by two 18-inch corrugated metal culverts at the outlet.

INLET AND OUTLET.--The principal inlet is a tile drain from McColley Lake, 0.5 mi to the north. The outlet flows from the southwestern shore, into Bolley Ditch 0.7 mi downstream, thence into Squirrel Creek, and eventually into Eel River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 5.10 ft May 16, 1968; minimum stage, 2.32 ft Oct. 12, 1983.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.14	3.00	3.04	3.30	3.56	4.02	3.98	3.95	4.04	4.14	3.83	3.91
10	3.12	2.98	3.06	3.36	3.61	3.94	3.92	3.89	3.88	4.10	3.93	3.95
15	3.09	2.96	3.16	3.36	3.64	3.94	3.85	3.78	4.05	4.00	3.85	3.90
20	3.08	2.96	3.21	3.42	3.75	3.92	4.06	3.87	4.03	3.90	3.88	3.84
25	3.04	2.98	3.21	3.46	3.90	3.92	3.96	3.82	4.20	3.80	3.92	3.87
EOM	3.02	2.96	3.21	3.51	4.04	3.92	3.96	4.11	4.03	3.89	3.85	3.83

WTR YR 2000 MEAN 3.65 MAX 4.26 MIN 2.95

STREAMS TRIBUTARY TO LAKE MICHIGAN

04100280 MUNCIE LAKE NEAR BURR OAK, IN

LOCATION.--Lat 41°19'37", long 85°27'28", in NE$^1/_4$SW$^1/_4$SW$^1/_4$ sec.11, T.33 N., R.9 E., Noble County, Hydrologic Unit 04050001 (MERRIAM, IN quadrangle). The gage is on the southwest shore of the lake, just north of the gravel road on the Addis farm, and 1.3 mi northwest of Burr Oak.

SURFACE AREA.--47 acres.

DRAINAGE AREA.--42.8 mi^2.

PERIOD OF RECORD.--1954 to current year.

DATUM OF GAGE.--880.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well.

ESTABLISHED LEGAL LEVEL.--Not established.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by the outlet channel.

INLET AND OUTLET.--There are three inlets to the lake. Forker Creek flows into the lake from the east, Brown Ditch from the southeast, and Carrol Creek from the west. The outlet flows from the northwest shore into Williams Lake, then into the South Branch of the Elkhart River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 9.47 ft Mar. 24, 25, 1978, Feb. 25, 26, 1985; minimum stage, 1.88 ft Aug. 8, 1988.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.87	2.78	3.00	2.81	2.71	3.44	2.95	3.25	3.78	3.69	2.89	2.92
10	2.81	2.83	2.93	2.77	2.75	3.05	3.03	3.57	3.33	3.20	2.90	2.89
15	2.75	2.85	3.07	2.75	2.77	2.92	2.91	3.25	5.05	2.97	2.78	3.70
20	2.72	2.89	2.98	2.75	2.83	3.07	4.43	3.89	4.48	2.82	2.73	3.30
25	2.70	2.92	2.88	2.72	3.57	3.27	5.13	3.48	4.56	2.75	2.71	3.60
EOM	2.73	2.89	2.80	2.68	4.33	3.01	3.66	4.57	4.57	2.77	2.95	3.21

WTR YR 2000 MEAN 3.19 MAX 5.85 MIN 2.68

STREAMS TRIBUTARY TO LAKE MICHIGAN

04099700 NORTH TWIN LAKE NEAR HOWE, IN

LOCATION.--Lat 41°43'45", long 85°27'49", in SE$^1/_4$SW$^1/_4$SW$^1/_4$ sec.23, T.38 N., R.9 E., Lagrange County, Hydrologic Unit 04050001 (LAGRANGE, IN quadrangle). The gage is in the channel between North and South Twin Lakes, 100 ft upstream from the county road bridge, and 2.2 mi northwest of Howe.

SURFACE AREA.--135 acres.

DRAINAGE AREA.--1.54 mi^2.

PERIOD OF RECORD.--1953 to current year.

DATUM OF GAGE.--840.00 ft above sea level.

GAGE.--A staff gage is attached to the east concrete retaining wall of the control dam.

ESTABLISHED LEGAL LEVEL.--3.56 ft gage datum or 843.56 ft above sea level as decreed on September 11, 1959, by the Lagrange County Circuit Court. South Twin Lake near Howe has the same established level and hence the same lake levels for the period of record.

LAKE-LEVEL CONTROL.--Prior to October 1, 1982, the low water control was a fixed-crest dam with removable boards at the upstream end of the channel between the two lakes. At high stages the outlet channel of South Twin Lake was the control. After October 1, 1982, a concrete dam with a fixed crest was installed in the outlet of South Twin Lake. This is now the control structure for both North and South Twin Lakes, although the original structure is still in place.

INLET AND OUTLET.--There are two inlets to the lake. One enters at the southeast shore from Still Lake 0.9 mi upstream, and the other, which drains the adjacent marsh land, enters on the northwest shore. The outlet flows from the southwest shore and into South Twin Lake approximately 200 ft downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 5.20 ft Feb. 26, 1985; minimum stage, 2.97 ft Aug. 20, 1964.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	3.45	3.48	3.50	3.48	3.50	3.48	3.50	3.54	3.46	3.42	3.46
10	3.44	3.45	3.48	---	3.50	3.50	3.50	3.50	3.54	3.50	3.42	---
15	3.45	3.44	3.49	3.48	---	3.48	---	3.54	3.52	3.48	3.44	3.63
20	3.43	3.45	3.48	3.50	3.50	3.48	3.50	3.54	3.50	3.44	3.42	3.60
25	3.44	3.46	3.50	3.50	3.50	3.47	3.60	3.54	3.50	3.46	3.46	3.56
EOM	3.45	3.47	3.50	---	3.50	3.45	3.56	3.54	3.50	3.42	3.44	3.52

WTR YR 2000 MEAN 3.49 MAX 3.65 MIN 3.42

WABASH RIVER BASIN

03331400 NYONA LAKE NEAR GREENOAK, IN

LOCATION.--Lat 40°57'40", long 86°11'20", in SE$^1/_4$SE$^1/_4$NE$^1/_4$ sec.16, T.29 N., R.3 E., Fulton County, Hydrologic Unit 05120106 (MACY, IN quadrangle). The gage is on the northwest shore of the southern lobe of the lake, at the public access site, and 2.4 mi south of Greenoak.

SURFACE AREA.--104 acres.

DRAINAGE AREA.--7.59 mi^2.

PERIOD OF RECORD.--1946 to current year.

DATUM OF GAGE.--790.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well.

ESTABLISHED LEGAL LEVEL.--3.91 ft gage datum or 793.91 ft above sea level as decreed on September 27, 1948, by the Fulton County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a concrete dam with a fixed crest.

INLET AND OUTLET.--The lake is fed by two small ditches entering from the east and northeast. The outlet flows from the lake at the southwest corner and into Mud Creek, which eventually joins the Tippecanoe River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 6.13 ft Aug. 18, 1990; minimum stage, 2.98 ft Oct. 12-19, 25, 26, 1953.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.72	3.68	3.78	3.75	3.70	3.79	3.71	3.80	3.94	4.16	3.71	3.70
10	3.68	3.68	3.72	3.73	3.71	3.75	3.72	3.80	3.74	4.04	3.69	3.68
15	3.65	3.66	3.80	3.69	3.72	3.75	3.70	3.71	4.40	3.80	3.65	3.68
20	3.66	3.68	3.72	3.69	3.79	3.85	4.04	3.73	3.98	3.70	3.64	3.63
25	3.64	3.69	3.67	3.69	3.88	3.81	3.85	3.70	4.05	3.66	3.66	3.66
EOM	3.65	3.68	3.69	3.69	3.91	3.75	3.75	3.98	3.96	3.67	3.62	3.62

WTR YR 2000 MEAN 3.76 MAX 4.40 MIN 3.60

WABASH RIVER BASIN

03371700 OGLE LAKE NEAR NASHVILLE, IN

LOCATION.--Lat 39°09'35", long 86°14'54", in NE$^1/_4$SE$^1/_4$NE$^1/_4$ sec.1, T.8 N., R.2 E., Brown County, Hydrologic Unit 05120208 (NASHVILLE, IN quadrangle). The gage is on the dam, near the concrete intake structure on the west side of the lake, 3.3 mi south of Nashville.

SURFACE AREA.--20 acres.

DRAINAGE AREA.--1.03 mi^2.

PERIOD OF RECORD.--1954 to current year.

DATUM OF GAGE.--710.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well.

ESTABLISHED LEGAL LEVEL.--Not established.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a concrete flood spillway with a fixed crest.

INLET AND OUTLET.--Two ditches enter the lake, one from the east and one from the southeast. The outlet flows into Upper Schooner Creek, which joins Lower Schooner Creek, then flows into the North Fork of Salt Creek. The North Fork of Salt Creek empties into Monroe Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 6.80 ft June 23, 1960; minimum stage, -2.70 ft Feb. 12, 13, 1977.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.28	1.81	1.72	1.84	1.12	3.61	4.56	4.60	4.42	4.47	4.16	3.95
10	2.36	1.77	1.75	1.93	1.12	3.64	4.63	4.58	4.30	4.38	4.33	4.02
15	2.29	1.72	1.84	1.94	1.44	3.71	4.61	4.51	4.30	4.39	4.26	4.02
20	2.12	1.73	1.85	1.78	2.74	4.75	4.77	4.46	4.65	4.32	4.21	4.02
25	1.99	1.70	1.33	1.50	3.10	4.62	4.61	4.42	4.57	4.16	4.14	4.37
EOM	1.88	1.66	1.31	1.13	3.52	4.57	4.57	4.48	4.51	4.22	4.02	4.52

WTR YR 2000 MEAN 3.29 MAX 5.33 MIN 1.11

STREAMS TRIBUTARY TO LAKE MICHIGAN

04100100 OLIVER LAKE NEAR VALENTINE, IN

LOCATION.--Lat 41°34'37", long 85°24'44", in SE$^1/_4$SW$^1/_4$NE$^1/_4$ sec.18, T.36 N., R.10 E., Lagrange County, Hydrologic Unit 04050001 (OLIVER LAKE, IN quadrangle). The gage is at the public access site on the northwest side of the lake, and 1.6 mi southwest of Valentine.

SURFACE AREA.--362 acres.

DRAINAGE AREA.--11.1 mi^2.

PERIOD OF RECORD.--1945 to current year.

DATUM OF GAGE.--889.78 ft above sea level as corrected on the basis of levels of Indiana Department of Natural Resources, 1975-76.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxillary staff gage is attached to the dam in the outlet.

ESTABLISHED LEGAL LEVEL.--9.45 ft gage datum or 899.45 ft above sea level as decreed on September 29, 1952, by the Lagrange County Circuit Court. Minor errors were subsequently discovered in the establishment of the datum of the gage (see "DATUM OF GAGE") and the correct elevation of the legal level should be 9.45 ft gage datum or 899.23 ft above sea level. Martin and Olin Lakes near Valentine have the same established level as Oliver Lake and hence the same lake levels for the period of record.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a fixed sill and dam with movable boards.

INLET AND OUTLET.--The lake has several inlets. Dove Creek enters on the northwest, the outlet of Holsinger Hole on the north, Hart Ditch on the east, and the channel between Oliver and Olin Lakes on the southeast shore. The Oliver Lake outlet flows from the southwest lobe of the lake, through a wetland, into Hackenburg Lake 1.6 mi downstream, and eventually into the North Branch of the Elkhart River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 11.77 ft June 14, 1981; minimum stage, 8.42 ft Jan. 18, 19, and Feb. 3-5, 1961.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.33	9.40	9.52	9.49	9.47	9.52	9.49	9.51	9.60	9.55	9.41	9.37
10	9.36	9.40	9.47	9.49	9.48	9.50	9.53	9.52	9.53	9.49	9.54	9.41
15	9.41	9.39	9.56	9.47	9.47	9.50	9.49	9.45	9.59	9.43	9.45	9.44
20	9.40	9.42	9.50	9.48	9.48	9.55	9.70	9.60	9.61	9.37	9.40	9.38
25	9.38	9.44	9.44	9.47	9.58	9.51	9.59	9.61	9.73	9.33	9.37	9.36
EOM	9.41	9.42	9.44	9.47	9.61	9.52	9.50	9.64	9.59	9.37	9.46	9.33

WTR YR 2000 MEAN 9.48 MAX 9.75 MIN 9.25

WABASH RIVER BASIN

03331180 PALESTINE LAKE AT PALESTINE, IN

LOCATION.--Lat 41°10'48", long 85°56'54", in NE$^1/_4$NE$^1/_4$SW$^1/_4$ sec.33, T.32 N., R.5 E., Kosciusko County, Hydrologic Unit 05120106 (BURKET, IN quadrangle). The gage is near the extreme northwestern corner of the lake, at the public access site, in the town of Palestine.

SURFACE AREA.--290 acres.

DRAINAGE AREA.--32.4 mi^2.

PERIOD OF RECORD.--1954 to current year.

DATUM OF GAGE.--815.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage in one section is driven into the lake bed just north of the public access site.

ESTABLISHED LEGAL LEVEL.--1.62 ft gage datum or 816.62 ft above sea level as decreed on August 5, 1965, by the Kosciusko County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by an old mill dam of stone and concrete (fixed crest) at the west lobe of the far northern shore.

INLET AND OUTLET.--There are four inlets to the lake. Magee Ditch enters from the north, Williamson Ditch from the west and the confluence of Adams and Sloan Ditches from the southeast. Trimble Creek flows through the lake, entering on the extreme southeastern end, leaving at the northwestern lobe and flowing into the Tippecanoe River 7.5 mi downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 4.35 ft June 13, 1981; minimum stage, below -0.90 ft, lake drained, 1988.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	1.73	1.76	1.82	1.75	1.70	1.81	1.75	1.82	2.00	1.88	1.88	1.76
10	1.71	1.77	1.75	1.75	1.70	1.80	1.79	1.85	1.87	1.98	1.84	1.84
15	1.73	1.78	1.83	1.72	1.71	1.78	1.76	1.82	2.21	1.97	1.82	1.84
20	1.72	1.78	1.75	1.70	1.73	1.84	2.07	1.93	2.00	1.85	1.79	1.80
25	1.72	1.76	1.73	1.70	1.87	1.80	1.90	1.84	2.09	1.80	1.86	1.83
EOM	1.74	1.72	1.74	1.70	1.89	1.79	1.82	1.96	1.93	1.89	1.84	1.80

WTR YR 2000 MEAN 1.82 MAX 2.22 MIN 1.65

WABASH RIVER BASIN

03331040 PIKE LAKE AT WARSAW, IN

LOCATION.--Lat 41°15'44", long 85°51'00", in NE$^1/_4$NW$^1/_4$NE$^1/_4$ sec.5, T.32 N., R.6 E., Kosciusko County, Hydrologic Unit 05120106 (LEESBURG, IN quadrangle). The gage is on the extreme northwestern point of the lake at the bridge over the outlet, 1.6 mi north of Warsaw.

SURFACE AREA.--203 acres.

DRAINAGE AREA.--41.5 mi^2.

PERIOD OF RECORD.--1954 to current year.

DATUM OF GAGE.--800.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well attached to the upstream abutment of the control structure.

ESTABLISHED LEGAL LEVEL.--5.64 ft gage datum or 805.64 ft above sea level as decreed on December 12, 1963, by the Kosciusko County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a concrete dam with a fixed crest and removable boards.

INLET AND OUTLET.--The one inlet, Deeds Creek, flows from Little Chapman Lake 3.4 mi upstream, and enters the lake on the lower northern shore. The outlet flows to the west from the extreme northern end of the lake through Lones Ditch and enters the Tippecanoe River 0.9 mi downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 10.79 ft Oct. 15, 1954; minimum stage, 3.71 ft Sept. 21, 22, 1955.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.78	5.70	4.90	4.86	4.78	5.05	4.90	5.89	6.09	6.07	5.77	5.65
10	5.71	4.83	4.82	4.84	4.82	4.94	4.95	5.95	5.99	6.05	5.73	5.77
15	5.69	4.77	4.95	4.80	4.85	4.95	4.89	5.92	6.43	5.89	5.68	5.99
20	5.68	4.79	4.88	4.77	4.85	5.02	6.01	6.06	6.08	5.81	5.69	5.87
25	5.66	4.80	4.87	4.78	5.10	4.97	5.88	5.88	6.27	5.74	5.79	5.94
EOM	5.69	4.77	4.82	4.78	5.25	4.95	5.89	6.03	5.98	5.76	5.72	5.77

WTR YR 2000 MEAN 5.43 MAX 6.43 MIN 4.74

ILLINOIS RIVER BASIN

05515220 PINE LAKE AT LAPORTE, IN

LOCATION.--Lat 41°37'01", long 86°44'58", in NE$^1/_4$SE$^1/_4$NW$^1/_4$ sec.34, T.37 N., R.3 W., LaPorte County, Hydrologic Unit 07120001 (LAPORTE EAST, IN quadrangle). The gage is at the highway bridge over the channel connecting Pine and Stone Lakes, on Waverly Beach Road, in LaPorte.

SURFACE AREA.--564 acres.

DRAINAGE AREA.--10.7 mi^2.

PERIOD OF RECORD.--1946-75, 1980 to current year.

DATUM OF GAGE.--780.00 ft above sea level. Prior to Oct. 1, 1964, the datum of the gage was 790.00 ft. All levels given below are at the present datum.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage is driven into the channel bed at the same site.

ESTABLISHED LEGAL LEVEL.--16.20 ft gage datum or 796.20 ft above sea level, as decreed on August 31, 1949, by the LaPorte County Circuit Court. Stone Lake at LaPorte has the same established level and hence the same lake levels during the periods of record when the channel between the two lakes is open and flowing, water years 1946-63 and 1968-85.

LAKE-LEVEL CONTROL.--Pine and Stone Lakes form a closed basin; however, there is a capability of pumping water from the lakes into the Little Kankakee River during times of high water.

INLET AND OUTLET.--Kabelin Ditch enters Pine Lake from the northwest through a large drain tile. Pine Lake is connected to Stone Lake by a channel on the southern tip.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 20.98 ft June 2, 3, 1993; minimum stage, 9.00 ft Nov. 14, 1964.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.95	17.70	17.66	17.68	17.69	17.71	17.52	17.58	17.53	17.67	17.25	16.80
10	17.91	17.66	17.63	17.70	17.67	17.68	17.56	17.58	17.43	17.65	17.25	16.73
15	17.86	17.61	17.73	17.67	17.64	17.68	17.51	17.51	17.57	17.63	17.16	16.97
20	17.81	17.57	17.71	17.69	17.66	17.69	17.69	17.52	17.55	17.49	17.10	16.91
25	17.76	17.59	17.67	17.70	17.72	17.65	17.68	17.45	17.70	17.38	17.02	16.85
EOM	17.72	17.53	17.68	17.70	17.75	17.58	17.61	17.50	17.64	17.30	16.92	16.76

WTR YR 2000 MEAN 17.53 MAX 17.97 MIN 16.73

ILLINOIS RIVER BASIN

05516600 PRETTY LAKE NEAR PLYMOUTH

LOCATION.--Lat 4119"39", long 86°22'15", in NW$^1/_4$SE$^1/_4$NE$^1/_4$ sec. 11, T. 33 N., R. 1 E., Marshall County, Hydrologic Unit 07120001, the gage is on the north shore of the lake, 3.3 mi southwest of Plymouth.

SURFACE AREA.--97 acres.

DRAINAGE AREA.--0.85 mi^2.

PERIOD OF RECORD.--1954-66. 1989 to current year.

DATUM OF GAGE.--780.00 ft above sea level.

GAGE.--A staff gage in one section is driven into the lake bed near house at 10099 Pretty Lake Trail.

ESTABLISHED LEGAL LEVEL.--7.36 ft gage datum or 787.36 ft above sea level as decreed on July 16, 1965, by the Marshall County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by the banks. At times of very high water levels, water overflows the southeastern shore.

INLET AND OUTLET.--There are no inlets. There is no well-defined outlet.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 10.10 ft June 1, 1991; minimum stage, 4.90 ft Nov. 26, 27, 1964.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.24	---	---	---	---	---	---	---	---	---	---	---
10	8.15	---	---	---	---	---	---	---	---	---	---	---
15	8.10	---	---	---	---	---	---	---	---	---	---	---
20	8.07	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
EOM	---	---	---	---	---	---	---	---	---	---	---	---

WTR YR 2000 MEAN 8.13 MAX 8.30 MIN 8.05

ILLINOIS RIVER BASIN

05515800 RIDDLES LAKE NEAR LAKEVILLE, IN

LOCATION.--Lat 41°30'19", long 86°15'31", in NW$^1/_4$NE$^1/_4$ sec.11, T.35 N., R.2 E., St. Joseph County, Hydrologic Unit 07120001 (LAKEVILLE, IN quadrangle). The gage is on the east side of the lake, about 1.4 mi southeast of Lakeville.

SURFACE AREA.--77 acres.

DRAINAGE AREA.--11.7 mi^2.

PERIOD OF RECORD.--1946-71, 1976 to current year.

DATUM OF GAGE.--810.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage is attached to a wingwall of the control dam.

ESTABLISHED LEGAL LEVEL.--7.50 ft gage datum or 817.50 ft above sea level as decreed on July 3, 1953, by the St. Joseph County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a steel and concrete dam with a fixed crest. Boards may be added to raise the water level.

INLET AND OUTLET.--Heston Ditch flows through the lake, entering on the northern shore and leaving on the southern. The outflow eventually enters Yellow River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 11.49 ft Apr. 5, 1950; minimum stage, 6.40 ft July 25-31, Aug. 1- 9, 22-31, Sept. 1-30, 1971.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.60	6.52	6.56	6.88	7.03	7.09	7.04	7.09	7.20	7.12	6.80	6.74
10	6.59	6.51	6.61	6.94	7.02	7.06	7.10	7.10	7.10	7.10	6.89	6.74
15	6.57	6.48	6.74	6.98	7.03	7.08	7.05	7.08	7.26	7.04	6.84	7.12
20	6.57	6.47	6.80	7.02	7.05	7.14	7.23	7.12	7.12	6.96	6.80	7.06
25	6.55	6.49	6.80	7.04	7.17	7.11	7.16	7.08	7.31	6.89	6.80	7.03
EOM	6.52	6.48	6.82	7.03	7.16	7.08	7.08	7.16	7.14	6.85	6.79	6.98

WTR YR 2000 MEAN 6.92 MAX 7.60 MIN 6.46

WABASH RIVER BASIN

03330300 RIDINGER LAKE NEAR PIERCETON, IN

LOCATION.--Lat 41°15'07", long 85°39'34", in SW$^1/_4$SW$^1/_4$SE$^1/_4$ sec.1, T.32 N., R.7 E., Kosciusko County, Hydrologic Unit 05120106 (NORTH WEBSTER, IN quadrangle). The gage is on the inlet channel, attached to the Adams Road bridge, 0.4 mi upstream from the lake and 4.4 mi northeast of Pierceton.

SURFACE AREA.--136 acres.

DRAINAGE AREA.--34.6 mi^2.

PERIOD OF RECORD.--1943 to current year.

DATUM OF GAGE.--840.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well attached to the right downstream wingwall of the bridge. An auxiliary staff gage in two sections is at the control dam.

ESTABLISHED LEGAL LEVEL.--3.12 ft gage datum or 843.12 ft above sea level, as decreed on April 11, 1949, by the Kosciusko County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a concrete dam with a fixed crest and a sluice-way with a steel gate for controlling high water. The dam is located in the outlet, 300 ft downstream from the lake.

INLET AND OUTLET.--Grassy Creek flows through the lake, entering at the southwestern end. Grassy Creek is formed 1.5 mi upstream by the outlet of Robinson Lake and Cedar Lake Branch. Grassy Creek leaves the lake at the northwestern end and flows into Big Barbee Lake, 3.5 mi downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 9.01 ft Feb. 24, 1985; minimum stage, 1.35 ft Jan. 17-19, 1944.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.55	2.66	2.74	2.57	2.57	2.63	2.49	2.64	3.21	3.14	2.54	2.56
10	2.56	2.67	2.68	2.57	2.57	2.62	2.56	2.81	2.81	2.95	2.54	2.62
15	2.50	2.66	2.81	2.57	2.59	2.56	2.55	2.77	4.05	2.66	2.52	2.66
20	2.53	2.69	2.64	2.57	2.59	2.71	3.51	3.21	3.50	2.59	2.52	2.53
25	2.57	2.64	2.64	2.57	2.86	2.46	2.81	2.81	3.77	2.56	2.58	2.84
EOM	2.66	2.61	2.61	2.57	2.95	2.53	2.62	3.25	3.02	2.58	2.56	2.61

WTR YR 2000 MEAN 2.72 MAX 4.05 MIN 2.39

WABASH RIVER BASIN

03330460 SAWMILL LAKE NEAR NORTH WEBSTER, IN

LOCATION.--Lat 41°17'22", long 85°42'52", in NE$^1/_4$SW$^1/_4$NE$^1/_4$ sec.28, T.33 N., R.7 E., Kosciusko County, Hydrologic Unit 05120106 (NORTH WEBSTER, IN quadrangle). The gage is near the southeastern corner of the county road bridge over the channel between Big Barbee Lake and Little Barbee Lake, 2.6 mi southwest of North Webster.

SURFACE AREA.--36 acres.

DRAINAGE AREA.--51.8 mi^2.

PERIOD OF RECORD.--1945-1970, 1972 to current year.

DATUM OF GAGE.--830.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage is attached to the stilling well.

ESTABLISHED LEGAL LEVEL.--7.50 ft gage datum or 837.50 ft above sea level as decreed on October 18, 1949, by the Kosciusko County Circuit Court. All lakes in the Barbee Chain have the same established level and hence the same lake levels for the period of record. The lakes are as follows: Kuhn, Big Barbee, Little Barbee, Irish, Banning, Sechrist and Sawmill.

LAKE-LEVEL CONTROL.--The level of the lakes is controlled by a concrete dam with a fixed crest, located 600 ft upstream of the County Road 500 North bridge over the outlet of Sawmill Lake.

INLET AND OUTLET.--There are four inlets to the Barbee Chain. Grassy Creek flows into Big Barbee Lake at the southeastern side. The outlet of Heron Lake flows into Kuhn Lake from the north. Puntney Ditch enters Little Barbee Lake from the south. The outlet from Shoe Lake flows into Banning Lake on the northeastern shore. The outlet, Grassy Creek, leaves Sawmill Lake at the northwestern tip and flows into Tippecanoe Lake 1.7 mi downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 10.53 ft Mar. 20, 1982; minimum stage, 5.45 ft Jan. 29-31, Feb. 1-28, Mar. 1, 2, 1978.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.21	7.27	7.34	7.34	7.32	7.56	7.29	7.47	7.77	7.68	7.28	7.23
10	7.23	7.26	7.30	7.33	7.34	7.43	7.35	7.44	7.61	7.65	7.30	7.25
15	7.24	7.22	7.39	7.32	7.32	7.39	7.34	7.46	7.84	7.41	7.24	7.56
20	7.23	7.21	7.35	7.31	7.34	7.41	7.60	7.65	7.83	7.30	7.23	7.36
25	7.22	7.24	7.30	7.31	7.57	7.40	7.83	7.59	7.94	7.24	7.27	7.45
EOM	7.23	7.21	7.29	7.32	7.83	7.29	7.54	7.94	7.82	7.25	7.30	7.37

WTR YR 2000 MEAN 7.41 MAX 8.02 MIN 7.10

03331120 SHERBURN LAKE NEAR PIERCETON, IN

LOCATION.--Lat 41°09'40", long 85°44'43", in SE$^1/_4$SE$^1/_4$SE$^1/_4$ sec.4, T.31 N., R.7 E., Kosciusko County, Hydrologic Unit 05120106 (PIERCETON, IN quadrangle). The gage is at the extreme northern end of the lake on the outlet channel just south of County Road 500 South, 3.4 mi southwest of Pierceton.

SURFACE AREA.--15 acres.

DRAINAGE AREA.--5.51 mi^2.

PERIOD OF RECORD.--1954 to current year. (Formerly published as Johnson Lake near Pierceton.)

DATUM OF GAGE.--870.00 ft above sea level. Prior to Oct. 1, 1980, the datum of the gage was 880.00 ft. All levels listed below are at the present datum.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage is driven into the lake bed just south of the western lobe of the lake, 400 ft south of County Road 500 South on the first drive west of the outlet.

ESTABLISHED LEGAL LEVEL.--11.00 ft gage datum or 881.00 ft above sea level as decreed on December 19, 1974, by the Kosciusko County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by the invert of the culvert under the first east-west road north of the lake.

INLET AND OUTLET.--The one inlet flows from Sellers Lake 0.35 mi upstream. The outlet flows from the northern shore through Wyland Ditch and into Winona Lake 6.7 mi downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 15.34 ft Dec. 30, 1990; minimum stage, 8.60 ft Sept. 27, 1999.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.98	9.04	9.25	8.97	8.88	9.53	9.11	9.17	9.98	9.32	8.78	8.85
10	8.92	9.05	9.12	8.97	8.89	9.22	9.38	9.23	9.56	9.06	8.87	9.01
15	8.94	9.06	9.21	8.89	8.97	9.17	9.20	9.18	11.15	8.82	8.77	8.92
20	8.99	9.12	9.17	8.91	9.04	9.43	10.00	9.24	9.93	8.77	9.45	8.82
25	9.00	9.22	9.08	8.88	9.82	9.65	10.10	9.13	10.11	8.74	9.11	8.84
EOM	9.02	9.21	8.96	8.87	10.38	9.34	9.20	10.59	9.52	8.79	8.89	9.07

WTR YR 2000 MEAN 9.21 MAX 11.15 MIN 8.74

STREAMS TRIBUTARY TO LAKE MICHIGAN

04099740 SHIPSHEWANA LAKE NEAR SHIPSHEWANA, IN

LOCATION.--Lat 41°40'53", long 85°36'03", in SE$^1/_4$NE$^1/_4$NE$^1/_4$ sec.9, T.37 N., R.8 E., Lagrange County, Hydrologic Unit 04050001 (SHIPSHEWANA, IN quadrangle). The gage is on the south shore of the lake at the public access site, 1.1 mi northwest of Shipshewana.

SURFACE AREA.--202 acres.

DRAINAGE AREA.--6.74 mi^2.

PERIOD OF RECORD.--1951 to current year.

DATUM OF GAGE.--850.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage is attached to a wingwall of the control dam at the extreme eastern end of the lake.

ESTABLISHED LEGAL LEVEL.--2.04 ft gage datum or 852.04 ft above sea level as decreed on March 8, 1956, by the Lagrange County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a sheet piling dam with a fixed crest at three elevations.

INLET AND OUTLET.--The principal inlet enters on the southern shore from Cotton Lake 2.0 mi upstream. Another small ditch enters on the western shore. The outlet is on the extreme eastern tip of the lake and flows to the northeast through Page Ditch, which empties into Pigeon River, 6.1 mi downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 3.33 ft Mar. 20, 1982; minimum stage, 1.39 ft Sept. 19-22, 1955.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.25	2.20	2.36	2.34	2.29	2.33	2.36	2.39	2.48	2.47	2.23	2.10
10	2.26	2.20	2.32	2.36	2.29	2.28	2.35	2.39	2.33	2.45	2.26	2.25
15	2.24	2.19	2.41	2.33	2.28	2.32	2.31	2.30	2.45	2.33	2.20	2.28
20	2.22	2.21	2.38	2.32	2.30	2.38	2.61	2.59	2.40	2.23	2.17	2.23
25	2.19	2.23	2.34	2.31	2.39	2.37	2.51	2.39	2.67	2.17	2.15	2.25
EOM	2.19	2.21	2.32	2.30	2.41	2.47	2.37	2.56	2.62	2.23	2.16	2.23

WTR YR 2000 MEAN 2.32 MAX 2.71 MIN 2.07

WABASH RIVER BASIN

03330380 SHOE LAKE NEAR OSWEGO, IN

LOCATION.--Lat 41°18'32", long 85°45'10", in SE$^1/_4$SW$^1/_4$SE$^1/_4$ sec.18, T.33 N., R.7 E., Kosciusko County, Hydrologic Unit 05120106 (LEESBURG, IN quadrangle). The gage is on the extreme western end of the lake on County Road 475 East, 2.0 mi southeast of Oswego.

SURFACE AREA.--40 acres.

DRAINAGE AREA.--0.34 mi^2.

PERIOD OF RECORD.--1946-52, 1972-74, 1977 to current year.

DATUM OF GAGE.--830.00 ft above sea level. Prior to 1972, the datum of the gage was 840.00 ft above sea level. All levels listed below are at the present datum.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well.

ESTABLISHED LEGAL LEVEL.--11.57 ft gage datum or 841.57 ft above sea level as decreed on October 18, 1948, by the Kosciusko County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by removable boards placed in wooden support posts in the outlet channel, upstream of the culvert under County Road 450 North.

INLET AND OUTLET.--There is no inlet except for small drainage ditches. The outlet leaves the lake at the southeastern end and flows into Banning Lake 0.3 mi downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 12.95 ft Dec. 13-15, 1972; minimum stage, 10.46 ft Sept. 9, 10, 2000.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.09	10.81	10.73	10.69	10.60	10.65	10.52	10.56	10.60	10.73	10.73	10.53
10	11.05	10.77	10.70	10.68	10.59	10.62	10.54	10.57	10.54	10.82	10.74	10.58
15	11.01	10.71	10.78	10.64	10.58	10.60	10.50	10.54	10.63	10.75	10.65	10.79
20	10.94	10.70	10.75	10.65	10.59	10.60	10.60	10.59	10.60	10.65	10.62	10.73
25	10.86	10.69	10.73	10.64	10.61	10.60	10.60	10.57	10.74	10.60	10.61	10.74
EOM	10.84	10.64	10.67	10.62	10.67	10.60	10.54	10.60	10.69	10.60	10.61	10.69

WTR YR 2000 MEAN 10.67 MAX 11.10 MIN 10.46

WABASH RIVER BASIN

03327650 SHRINER LAKE AT TRI-LAKES, IN

LOCATION.--Lat 41°14'37", long 85°26'24", in SE$^1/_4$SW$^1/_4$NW$^1/_4$ sec.12, T.32 N., R.9 E., Whitley County, Hydrologic Unit 05120104 (COLUMBIA CITY, IN quadrangle). The gage is at the head of outlet channel at the east end of the lake, 6.2 mi northeast of Columbia City.

SURFACE AREA.--111 acres.

DRAINAGE AREA.--0.94 mi^2.

PERIOD OF RECORD.--1943-74, 1976-78, 1980 to current year.

DATUM OF GAGE.--900.19 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage in one section is attached to the concrete head wall at the outlet.

ESTABLISHED LEGAL LEVEL.--7.04 ft gage datum or 907.04 ft above sea level as decreed on May 22, 1949, by the Whitley County Circuit Court. Minor errors were subsequently discovered in the establishment of the datum of the gage (see "DATUM OF GAGE") and the correct elevation of the legal level should be 7.04 ft gage datum or 907.23 ft above sea level.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a concrete dam in the outlet channel 300 ft downstream of the lake.

INLET AND OUTLET.--A ditch from Catfish Lake, 650 ft upstream, enters at the extreme western end of the lake. Two small ditches enter on the southern shore. The outlet is a dredged channel at the eastern edge of the lake that empties into Round Lake 930 ft downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 8.26 ft Dec. 31, 1990; minimum stage, 5.44 ft Dec. 9-11, 23-30, 1944.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.80	5.59	5.97	5.73	5.73	6.29	6.53	6.91	7.08	7.01	6.70	6.55
10	5.78	5.57	5.60	5.73	5.83	6.31	6.57	---	6.94	6.90	6.75	6.57
15	5.74	5.53	5.97	5.72	5.83	6.33	6.57	---	7.41	6.77	6.68	6.77
20	5.71	5.55	5.77	5.73	5.82	6.46	7.12	6.95	7.18	6.66	6.63	6.70
25	5.65	5.55	5.65	5.74	6.03	6.53	7.06	6.92	7.18	6.56	6.58	6.85
EOM	5.63	5.52	5.71	5.73	6.24	6.54	6.92	7.11	7.01	6.62	6.60	6.79

WTR YR 2000 MEAN 6.31 MAX 7.41 MIN 5.50

WABASH RIVER BASIN

03328350 SILVER LAKE AT SILVER LAKE, IN

LOCATION.--Lat 41°04'49", long 85°54'29", in SE$^1/_4$SE$^1/_4$NE$^1/_4$ sec.1, T.30 N., R.5 E., Kosciusko County, Hydrologic Unit 05120104 (SILVER LAKE, IN quadrangle). The gage is located at the outlet channel on the east side of the lake, on the upstream side of the control structure and 1.1 mi northwest of the town of Silver Lake.

SURFACE AREA.--102 acres.

DRAINAGE AREA.--6.31 mi^2.

PERIOD OF RECORD.--1947 to current year.

DATUM OF GAGE.--859.85 ft above sea level, as corrected on the basis of levels of Indiana Department of Natural Resources, 1974.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage in one section is attached to the dam.

ESTABLISHED LEGAL LEVEL.--1.73 ft gage datum or 861.73 ft above sea level as decreed on September 20, 1948, by the Kosciusko County Circuit Court. Minor errors were subsequently discovered in the establishment of the datum of the gage (see "DATUM OF GAGE") and the correct elevation of the legal level should be 1.73 ft gage datum or 861.58 ft above sea level. North Little Lake at Silver Lake has the same established level and hence the same lake levels for the period of record.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a steel sheet piling dam with a fixed crest.

INLET AND OUTLET.--The outlet from North Little Lake enters from the north and two ditches enter from the east and southeast. The outlet leaves from the western side and flows into South Little Lake, then into Silver Creek, which joins Eel River 12 mi downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 3.80 ft Dec. 10, 1966; minimum stage, -0.20 ft Sept. 21, 1959.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	.96	.94	1.09	1.51	1.42	1.52	1.44	1.54	1.78	1.60	1.51	1.46
10	.97	.95	1.11	1.45	1.42	1.50	1.51	1.60	1.58	1.54	1.58	1.50
15	.95	.93	1.27	1.42	1.43	1.49	1.48	1.49	1.90	1.45	1.48	1.55
20	.95	.95	1.32	1.42	1.46	1.57	1.78	1.62	1.66	1.44	1.47	1.48
25	.91	.98	1.32	1.42	1.59	1.51	1.59	1.58	1.72	1.40	1.50	1.48
EOM	.90	.98	1.32	1.42	1.62	1.49	1.50	1.70	1.58	1.54	1.49	1.46

WTR YR 2000 MEAN 1.41 MAX 1.97 MIN .84

STREAMS TRIBUTARY TO LAKE MICHIGAN

04099880 SIMONTON LAKE NEAR ELKHART, IN

LOCATION.--Lat 41°45'05", long 85°57'28", in NE$^1/_4$NE$^1/_4$Nw$^1/_4$ sec.16, T.38 N., R.5 E., Elkhart County, Hydrologic Unit 04050001 (ELKHART, IN quadrangle). The gage is on the southern shore between the two large lobes of the lake, at the public access site, 4.5 mi north of the main Post Office in Elkhart.

SURFACE AREA.--303 acres.

DRAINAGE AREA.--7.44 mi^2.

PERIOD OF RECORD.--1946 to current year.

DATUM OF GAGE.--770.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well.

ESTABLISHED LEGAL LEVEL.--2.19 ft gage datum or 772.19 ft above sea level as decreed on September 25, 1950, by the Elkhart County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by the outlet channel.

INLET AND OUTLET.--Two small drainage ditches enter the lake on the eastern shore. The outlet, Osolo Township Ditch, flows from the lake at the southeastern tip and into the St. Joseph River, 4.0 mi downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 3.42 ft Feb. 24, 1985; minimum stage, 1.36 ft Sept. 7, 1946.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	1.78	1.81	1.94	2.17	2.31	2.43	2.43	2.77	2.91	2.87	2.63	2.23
10	1.79	1.80	1.94	2.24	2.30	2.41	2.48	2.81	2.82	2.82	2.63	2.33
15	1.79	1.79	2.07	2.24	2.29	2.46	2.48	2.85	2.93	2.72	2.55	2.46
20	1.79	1.80	2.09	2.28	2.31	2.51	2.75	2.90	2.89	2.62	2.49	2.43
25	1.79	1.83	2.11	2.30	2.35	2.49	2.77	2.83	3.00	2.53	2.43	2.40
EOM	1.77	1.81	2.13	2.30	2.43	2.45	2.73	2.91	2.91	2.65	2.34	2.33

WTR YR 2000 MEAN 2.38 MAX 3.01 MIN 1.71

STREAMS TRIBUTARY TO LAKE MICHIGAN

04100300 SKINNER LAKE NEAR ALBION, IN

LOCATION.--Lat 4124"12", long 85°22'37", in SE$^1/_4$SE$^1/_4$NW$^1/_4$ sec.16, T.34 N., R.10 E., Noble County, Hydrologic Unit 04050001 (ALBION, IN quadrangle). The gage is on the upstream side of the bridge over the outlet channel on the northwest lobe of the lake, and 2.5 mi northeast of Albion.

SURFACE AREA.--125 acres.

DRAINAGE AREA.--14.0 mi^2.

PERIOD OF RECORD.--1945-72, 1976 to current year.

DATUM OF GAGE.--920.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage is driven into the channel bed at the same site.

ESTABLISHED LEGAL LEVEL.--7.74 ft gage datum or 927.74 ft above sea level, as decreed on August 31, 1955, by the Noble County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a steel sheet piling dam with a fixed crest.

INLET AND OUTLET.--Rimmell Branch enters the lake on the southern shore, a small ditch enters on the southeast tip, and the outlet channel of Sweet Lake flows into the lake from the northeast. The outlet, Croft Ditch, flows from the lake on the south shore of the northwest lobe, and into the South Branch of the Elkhart River 5.6 mi downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 12.60 ft Apr. 5, 1950; minimum stage, 6.14 ft Oct. 16, 17, 1946.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.73	7.66	7.77	7.75	7.72	7.84	7.81	7.83	7.93	7.80	---	---
10	7.71	7.65	7.71	7.73	7.72	7.79	7.79	7.98	7.82	7.77	---	---
15	7.69	7.66	7.80	7.73	7.72	7.78	7.78	7.81	8.06	---	---	---
20	7.68	7.68	7.74	7.72	7.73	7.88	8.53	8.06	7.95	---	---	---
25	7.65	7.70	7.74	7.72	8.05	7.83	8.00	7.85	8.14	---	---	---
EOM	7.66	7.69	7.73	7.72	8.01	7.81	7.85	7.98	7.85	---	---	---

WTR YR 2000 MEAN 7.80 MAX 8.70 MIN 7.64

WABASH RIVER BASIN

03330140 SMALLEY LAKE NEAR WASHINGTON CENTER, IN

LOCATION.--Lat 41°18'52", long 85°35'04", in SW$^1/_4$NW$^1/_4$SE$^1/_4$ sec.15, T.33 N., R.8 E., Noble County, Hydrologic Unit 05120106 (ORMAS, IN quadrangle). The gage is located on the north side of the outlet channel, 300 ft upstream from the first bridge over the outlet, and 0.9 mi southeast of Washington Center.

SURFACE AREA.--69 acres.

DRAINAGE AREA.--27.1 mi^2.

PERIOD OF RECORD.--1943 to current year.

DATUM OF GAGE.--880.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 24-inch diameter stilling well. An auxiliary staff gage is driven into the channel bed.

ESTABLISHED LEGAL LEVEL.--Not established.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a riffle in the outlet channel 500 ft below the lake.

INLET AND OUTLET.--The Tippecanoe River flows through the lake, entering at the south end from Big Lake, 4.2 mi upstream, and flowing from the lake at the northwestern end into Baugher Lake, 1.2 mi downstream. Another inlet enters on the north shore from Gilbert Lake 0.9 mi upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 7.00 ft Mar. 24, 1978; minimum stage, 1.10 ft Aug. 7, 1963.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.30	2.19	1.70	1.62	1.58	2.23	1.86	2.16	2.69	2.87	1.90	1.83
10	2.35	2.24	1.66	1.61	1.61	2.03	1.92	2.34	2.39	2.35	1.90	1.96
15	2.39	2.23	1.77	1.60	1.65	1.92	1.84	2.28	3.59	1.91	1.76	2.71
20	2.43	2.25	1.66	1.61	1.68	2.08	2.48	2.70	3.44	1.69	1.78	2.18
25	2.13	2.06	1.59	1.60	2.18	2.17	3.27	2.41	3.67	1.58	1.78	2.67
EOM	2.09	1.67	1.56	1.59	2.83	1.96	2.31	3.18	3.27	1.61	2.01	2.29

WTR YR 2000 MEAN 2.15 MAX 3.79 MIN 1.56

STREAMS TRIBUTARY TO LAKE MICHIGAN

04099780 STONE LAKE NEAR SCOTT, IN

LOCATION.--Lat 41°44'32", long 85°39'03", in SE$^1/_4$SE$^1/_4$SW$^1/_4$ sec.18, T.38 N., R.8 E., Lagrange County, Hydrologic Unit 04050001 (MIDDLEBURY, IN quadrangle). The gage is on the southeast shore of the lake approximately 200 ft west of the intersection of County Road 1150 West and the lake access road, and 5.4 mi northeast of Middlebury.

SURFACE AREA.--152 acres.

DRAINAGE AREA.--1.51 mi^2.

PERIOD OF RECORD.--1954-71, 1975-76, 1978 to current year.

DATUM OF GAGE.--810.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well.

ESTABLISHED LEGAL LEVEL.--8.76 ft gage datum or 818.76 ft above sea level as decreed on July 28, 1966, by the Lagrange County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a fixed-crest concrete sill.

INLET AND OUTLET.--The inlet enters on the eastern end of the south shore from Brokesha Lake 0.2 mi upstream. The outlet flows from the lake at the northern shore.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 9.60 ft Apr. 16-30, 1969; minimum stage, 5.34 ft Nov. 26, 1964.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.90	7.61	8.06	7.74	7.69	7.64	7.43	7.48	7.52	7.45	7.33	6.99
10	7.80	7.57	7.68	7.76	7.69	7.55	7.54	7.51	7.42	7.44	7.26	7.08
15	7.78	7.56	8.00	7.71	7.66	7.70	7.43	7.48	7.54	7.42	7.22	7.13
20	7.74	7.57	7.78	7.68	7.64	7.63	7.61	7.55	7.58	7.38	7.20	7.06
25	7.69	7.57	7.82	7.71	7.71	7.53	7.48	7.42	7.62	7.35	7.13	7.01
EOM	7.61	7.57	7.78	7.71	7.76	7.49	7.47	7.50	7.48	7.35	7.06	6.91

WTR YR 2000 MEAN 7.53 MAX 8.06 MIN 6.91

STREAMS TRIBUTARY TO LAKE MICHIGAN

04100180 SYLVAN LAKE AT ROME CITY, IN

LOCATION.--Lat 41°29'53", long 85°22'38", in SE$^1/_4$SE$^1/_4$SW$^1/_4$ sec.9, T.35 N., R.10 E., Noble County, Hydrologic Unit 04050001 (ALBION, IN quadrangle). The gage is on the lake outlet on the extreme western end of the lake, and at the northern edge of Rome City.

SURFACE AREA.--669 acres.

DRAINAGE AREA.--33.8 mi^2.

PERIOD OF RECORD.--1943 to current year.

DATUM OF GAGE.--907.00 ft above sea level. Prior to Oct. 1, 1978, the datum of the gage was 910.00 ft. All levels listed below are at the present datum.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage is attached to the north downstream wall of the footbridge.

ESTABLISHED LEGAL LEVEL.--9.20 ft present gage datum or 916.20 ft above sea level as decreed on June 14, 1951, by the Noble County Circuit Court.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a concrete dam with movable gates.

INLET AND OUTLET.--Barr Lake, 0.2 mi upstream, empties into Sylvan Lake on the southeast shore of the northwest lobe. Oviatt Ditch and Henderson Lake Ditch both enter the lake on the extreme eastern end. The outlet flows from the lake at the western tip, into Jones Lake 2.8 mi downstream and eventually into the North Branch of the Elkhart River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 11.14 ft Aug. 22 and 23, 1996; minimum stage, below -.30 ft Oct. 3-9, and 16-18, 1994.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.19	9.06	9.14	9.13	9.07	9.33	9.19	9.39	9.52	9.29	9.06	9.30
10	9.13	9.05	9.13	9.11	9.09	9.21	9.21	9.43	9.36	9.18	9.21	9.23
15	9.08	9.04	9.27	9.09	9.09	9.17	9.17	9.34	9.40	9.09	9.09	9.46
20	9.04	9.07	9.18	9.09	9.11	9.26	9.50	9.52	9.38	9.05	9.04	9.31
25	9.01	9.09	9.11	9.08	9.31	9.25	9.79	9.44	9.55	9.01	9.03	9.24
EOM	9.03	9.07	9.08	9.07	9.51	9.27	9.45	9.68	9.38	9.06	9.62	9.15

WTR YR 2000 MEAN 9.23 MAX 9.92 MIN 9.00

STREAMS TRIBUTARY TO LAKE MICHIGAN

04100460 SYRACUSE LAKE AT SYRACUSE, IN

LOCATION.--Lat 41°25'26", long 85°44'59", in SW$^1/_4$SW$^1/_4$ sec.5, T.34 N., R.7 E., Kosciusko County, Hydrologic Unit 04050001 (LAKE WAWASEE, IN quadrangle). The gage is at the southwestern end of the lake, on the south abutment of the dam, and just west of the State Road 13 bridge in the town of Syracuse.

SURFACE AREA.--414 acres.

DRAINAGE AREA.--38.2 mi^2.

PERIOD OF RECORD.--1943 to current year.

DATUM OF GAGE.--849.85 ft above sea level as corrected on the basis of levels of Indiana Department of Natural Resources, 1973-74.

GAGE.--A water-stage recorder is installed in a concrete shelter over a stilling well in the south abutment of the control structure. Two auxiliary staff gages are at the site. One is attached to the upstream side of the south abutment and the other is bolted to the seawall just west of the bridge over the outlet.

ESTABLISHED LEGAL LEVEL.--8.87 ft gage datum or 858.87 ft above sea level as decreed on September 20, 1948, by the Kosciusko County Circuit Court. Minor errors were subsequently discovered in the establishment of the datum of the gage (see "DATUM OF GAGE") and the correct elevation of the legal level should be 8.87 ft gage datum or 858.72 ft above sea level.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a concrete dam with two steel lift gates.

INLET AND OUTLET.--The one inlet is the outlet channel from Lake Wawasee on the southern shore of the lake. The outlet, Turkey Creek, flows from the lake at the southwest end and eventually into the Elkhart River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 10.15 ft Jan. 27, 28, 1950; minimum stage, 7.00 ft Nov. 19-21, 1953.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.30	8.22	8.28	8.54	8.64	8.85	8.57	8.98	8.86	9.12	8.94	8.83
10	8.28	8.21	8.30	8.57	8.64	8.78	8.65	8.99	8.82	9.12	8.97	8.85
15	8.26	8.18	8.45	8.59	8.73	8.69	8.64	8.89	8.99	9.03	8.92	8.84
20	8.23	8.19	8.46	8.63	8.85	8.68	8.86	8.93	9.08	8.95	8.87	8.86
25	8.18	8.22	8.46	8.63	8.86	8.59	8.96	8.86	9.10	8.87	8.83	8.83
EOM	8.18	8.20	8.49	8.64	8.93	8.61	8.97	8.88	8.99	8.89	8.89	8.81

WTR YR 2000 MEAN 8.69 MAX 9.21 MIN 8.17

WABASH RIVER BASIN

03330480 TIPPECANOE LAKE AT OSWEGO, IN

LOCATION.--Lat 41°19'15", long 85°47'20", in NW$^1/_4$NE$^1/_4$NE$^1/_4$ sec.14, T.33 N., R.6 E., Kosciusko County, Hydrologic Unit 05120106 (LEESBURG, IN quadrangle). The gage is on the south side of the dam at the extreme southwest end of the lake, in the outlet channel, at Oswego.

SURFACE AREA.--768 acres.

DRAINAGE AREA.--113 mi^2.

PERIOD OF RECORD.--1943 to current year.

DATUM OF GAGE.--830.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage is attached to the upstream side of the south abutment of the dam.

ESTABLISHED LEGAL LEVEL.--6.40 ft gage datum or 836.40 ft above sea level as decreed on October 18, 1949, by the Kosciusko County Circuit Court. James Lake at Oswego and Oswego Lake at Oswego have the same established level and hence the same lake levels for the period of record.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a concrete dam with multiple slide gates on the outlet channel of the lake.

INLET AND OUTLET.--The lake has two principal inlets. The Tippecanoe River flows from Webster Lake, enters James Lake, and flows into Tippecanoe Lake on the eastern side. The outlet from the Barbee Chain of Lakes enters from the southeast. The outlet, the Tippecanoe River, leaves the lake on the southwestern side.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 9.43 ft May 21, 1943; minimum stage, 4.90 ft Feb. 13-17, 1963.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.43	5.75	5.77	5.57	5.38	6.09	5.96	6.60	6.63	6.61	6.73	6.66
10	6.47	5.55	5.79	5.57	5.34	5.80	6.24	6.48	6.64	6.57	6.52	6.73
15	6.44	5.68	5.91	5.56	5.37	5.53	6.49	6.62	6.68	6.66	6.61	6.43
20	6.51	5.80	5.69	5.56	5.37	5.42	6.58	6.56	6.80	6.58	6.62	6.63
25	6.53	5.83	5.69	5.56	5.45	5.47	6.69	6.61	6.89	6.57	6.65	6.55
EOM	6.42	5.73	5.51	5.56	5.78	5.76	6.57	6.60	6.88	6.62	6.63	6.60

WTR YR 2000 MEAN 6.18 MAX 6.95 MIN 5.34

STREAMS TRIBUTARY TO LAKE MICHIGAN

04100320 UPPER LONG LAKE NEAR WOLFLAKE, IN

LOCATION.--Lat 41°21'33", long 85°29'09", in NE$^1/_4$NE$^1/_4$SE$^1/_4$ sec.33, T.34 N., R.9 E., Noble County, Hydrologic Unit 04050001 (MERRIAM, IN quadrangle). The gage is on the northeast shore of the lake, at the northernmost boat slip, and 1.8 mi north-northeast of the town of Wolflake.

SURFACE AREA.--86 acres.

DRAINAGE AREA.--2.08 mi^2.

PERIOD OF RECORD.--1956 to current year.

DATUM OF GAGE.--880.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage is also located in the boat slip.

ESTABLISHED LEGAL LEVEL.--11.19 ft gage datum or 891.19 ft above sea level as decreed on February 20, 1968, by Noble County Circuit Court.

LAKE-LEVEL CONTROL.--The lake level is controlled by a fixed-sill concrete dam.

INLET AND OUTLET.--There is one inlet that enters the lake from the eastern side. The outlet flows to the north through Dollar Lake, and eventually into the South Branch Elkhart River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 13.40 ft June 27, 1968; minimum stage, 9.95 ft May 11, 1970.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.27	11.27	---	---	---	---	11.38	11.48	11.56	---	11.29	11.30
10	11.29	11.27	---	---	---	11.44	11.40	11.50	11.46	---	11.32	11.32
15	11.29	11.27	---	---	---	11.42	11.39	11.45	11.57	---	11.29	11.43
20	11.27	11.29	---	---	---	11.45	11.73	11.53	11.54	---	11.25	11.36
25	11.25	11.32	---	---	---	11.44	11.65	11.48	---	---	11.23	11.37
EOM	11.24	11.32	---	---	---	11.42	11.50	11.61	---	11.26	11.36	11.33

WTR YR 2000 MEAN 11.39 MAX 11.82 MIN 11.18

LAUGHERY CREEK BASIN

03276800 VERSAILLES LAKE NEAR VERSAILLES, IN

LOCATION.--Lat 39°04'50", long 85°14'02", in NE$^1/_4$NE$^1/_4$SW$^1/_4$ sec.6, T.7 N., R.12 E., Ripley County, Hydrologic Unit 05090203 (MILAN, IN quadrangle). The gage is on the eastern side of the lake, on the downstream side of the bridge over Falling Timber Creek in Versailles State Park.

SURFACE AREA.--232 acres.

DRAINAGE AREA.--168 mi^2.

PERIOD OF RECORD.--1958 to current year.

DATUM OF GAGE.--760.74 ft above sea level.

GAGE.--A water-stage recorder installed in an aluminum shelter over a 12-inch diameter stilling well.

ESTABLISHED LEGAL LEVEL.--Not established.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a concrete spillway dam with a movable gate.

INLET AND OUTLET.--The inlets are Laughery Creek, Falling Timber Creek, and Cedar Creek. The outlet is Laughery Creek, which flows southeasterly and empties into the Ohio River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 36.43 ft Jan. 21, 1959, as determined by the U.S. Geological Survey from high-water marks during an indirect measurement of discharge; minimum stage, 18.05 ft Apr. 12, 1970.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	28.59	28.68	28.92	29.48	29.17	29.27	29.61	29.25	29.22	29.87	29.18	29.10
10	28.73	28.67	29.05	29.22	29.25	29.21	29.58	29.27	29.19	29.23	29.56	29.10
15	28.81	28.66	29.32	29.15	29.59	29.25	29.34	29.32	29.17	29.17	29.20	29.12
20	28.78	28.69	29.13	29.12	29.59	30.95	30.12	29.37	29.43	29.15	29.26	29.13
25	28.72	28.76	29.10	29.13	29.56	29.37	29.40	29.24	29.27	29.10	29.17	30.16
EOM	28.69	28.85	29.10	29.13	29.44	29.32	29.25	29.36	29.18	30.63	29.14	29.19

WTR YR 2000 MEAN 29.27 MAX 32.91 MIN 28.56

STREAMS TRIBUTARY TO LAKE MICHIGAN

04100220 WALDRON LAKE NEAR COSPERVILLE, IN

LOCATION.--Lat 41°29'34", long 85°26'55", in SE$^1/_4$NW$^1/_4$NE$^1/_4$ sec.14, T.35 N., R.9 E., Noble County, Hydrologic Unit 04050001 (ALBION, IN quadrangle). The gage is on a dredged channel at the public access site west of County Road 125 West at Dukes Bridge, and 6.8 mi northwest of Albion.

SURFACE AREA.--216 acres.

DRAINAGE AREA.--134 mi^2.

PERIOD OF RECORD.--1948 to current year.

DATUM OF GAGE.--880.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary wire-weight gage is attached to the upstream side of Dukes Bridge.

ESTABLISHED LEGAL LEVEL.--5.55 ft gage datum or 885.55 ft above sea level as decreed on May 6, 1968, by the Noble County Circuit Court. Jones, Steinbarger and Tamarack Lakes, all near Cosperville, have the same established level as Waldron Lake and hence the same lake levels for the period of record.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a fixed-crest concrete dam with removable boards.

INLET AND OUTLET.--The North Branch of the Elkhart River flows through the lake, entering through Jones Lake at the north and leaving at the west end of Waldron Lake. Another inlet enters at the southeast from Steinbarger Lake, 0.1 mi upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 10.16 ft Mar. 22, 1982; minimum stage, 4.44 ft Aug. 9-11, Sept. 14-17, 1964.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.63	4.87	4.90	4.98	4.74	5.42	5.06	5.61	5.97	5.79	5.51	5.66
10	5.26	4.83	4.92	4.99	4.76	5.22	5.08	5.49	5.83	5.69	5.66	5.62
15	4.90	4.79	5.09	4.96	4.76	5.06	4.99	5.69	5.88	5.57	5.61	5.73
20	4.76	4.82	5.10	4.92	4.78	5.08	5.30	5.91	5.78	5.51	5.58	5.63
25	4.69	4.84	4.96	4.83	5.20	5.11	6.15	5.84	6.01	5.47	5.54	5.59
EOM	4.77	4.80	4.91	4.77	5.61	5.15	5.77	6.12	5.86	5.51	5.79	5.55

WTR YR 2000 MEAN 5.31 MAX 6.17 MIN 4.66

ILLINOIS RIVER BASIN

05517600 WAUHOB LAKE NEAR VALPARAISO, IN

LOCATION.--Lat 41°32'02", long 87°02'42", in NW$^1/_4$NW$^1/_4$NW$^1/_4$ sec.31, T.36 N., R.5 W., Porter County, Hydrologic Unit 07120001 (CHESTERTON, IN quadrangle). The gage is on the northwest shore of the lake, 4.7 mi north of Valparaiso.

SURFACE AREA.--21 acres.

DRAINAGE AREA.--0.40 mi^2.

PERIOD OF RECORD.--1946 to current year.

DATUM OF GAGE.--790.00 ft above sea level.

GAGE.--A staff gage in one section is driven into the lake bed, 75 ft from Arthur J. Knoblich's cottage. An auxiliary staff gage is 20 ft lakeward of the main gage.

ESTABLISHED LEGAL LEVEL.--Not established.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by the outlet channel.

INLET AND OUTLET.--The lake has one inlet entering on the northeast side from Mink Lake 0.3 mi upstream. The outlet flows from the southeast shore, southwesterly through a swamp to Canada Lake 0.3 mi downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 11.40 Mar. 22, 23, 1998; minimum stage, 6.58 ft Sept. 17, 1964.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.06	8.84	8.92	9.20	9.38	9.90	9.92	10.43	10.50	10.98	10.36	10.09
10	9.04	8.82	8.98	9.23	9.38	9.88	10.00	10.41	10.44	10.78	10.36	10.01
15	9.00	8.78	9.06	9.24	9.40	9.88	9.98	10.36	10.70	10.62	10.28	10.19
20	8.97	8.76	9.15	9.29	9.45	9.96	10.05	10.38	10.60	10.50	10.28	10.13
25	8.92	8.79	9.13	9.34	9.72	9.96	10.40	10.32	11.14	10.42	10.22	10.16
EOM	8.86	8.77	9.17	9.36	9.88	9.93	10.37	10.39	11.10	10.40	10.15	10.08

WTR YR 2000 MEAN 9.81 MAX 11.23 MIN 8.75

WABASH RIVER BASIN

03330240 WEBSTER LAKE AT NORTH WEBSTER, IN

LOCATION.--Lat 41°19'09", long 85°41'20", in NE$^1/_4$SW$^1/_4$NW$^1/_4$ sec.14, T.33 N., R.7 E., Kosciusko County, Hydrologic Unit 05120106 (NORTH WEBSTER, IN quadrangle). The gage is on the southwest side of the lake at the outlet, 0.3 mi northeast of the intersection of State Road 13 and County Road 550 North and approximately 0.6 mi southeast of the center of North Webster.

SURFACE AREA.--774 acres.

DRAINAGE AREA.--49.2 mi^2.

PERIOD OF RECORD.--1943 to current year.

DATUM OF GAGE.--839.93 ft above sea level, as corrected on the basis of levels of Indiana Department of Natural Resources, 1973-74.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxillary staff gage in one section is bolted to the southeast face of the concrete wall of the approach channel to the control dam.

ESTABLISHED LEGAL LEVEL.--12.75 ft gage datum or 852.75 ft above sea level as decreed July 2, 1945, by the Kosciusko County Circuit Court. Minor errors were subsequently discovered in the establishment of the datum of the gage (see "DATUM OF GAGE") and the correct elevation of the legal level should be 12.75 ft gage datum or 852.68 ft above sea level.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a concrete notch dam with seven adjustable gates at the head of the outlet channel. North of this dam is another which used to serve as a mill race. This dam has one metal gate.

INLET AND OUTLET.--The Tippecanoe River flows through Webster Lake, entering at the southeast end and leaving at the southwest side. The Tippecanoe River enters James Lake, 2.1 mi downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 15.15 ft Feb. 11, 1984; minimum stage, 9.79 ft (during repair of the dam) Oct. 5, 1962.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.94	12.58	12.87	12.81	12.50	12.87	13.11	13.39	13.38	13.24	13.21	13.16
10	12.94	12.58	12.92	12.72	12.44	12.85	13.18	13.33	13.30	13.21	13.12	13.19
15	12.88	12.58	12.99	12.57	12.46	12.92	13.18	13.33	13.24	13.12	13.08	13.31
20	12.73	12.63	12.95	12.50	12.56	13.15	13.39	13.34	13.32	13.13	13.03	13.18
25	12.58	12.69	12.94	12.50	12.80	13.22	13.37	13.36	13.26	13.09	12.99	13.28
EOM	12.55	12.74	12.94	12.50	13.29	13.20	13.29	13.38	13.21	13.09	13.16	13.29

WTR YR 2000 MEAN 13.00 MAX 13.42 MIN 12.42

ILLINOIS RIVER BASIN

05514770 WHARTON LAKE NEAR SOUTH BEND, IN

LOCATION.--Lat 41°36'11", long 86°18'36", in NW$^1/_4$SW$^1/_4$NW$^1/_4$ sec.4, T.36 N., R.2 E., St. Joseph County, Hydrologic Unit 07120001 (LAKEVILLE, IN quadrangle). The gage is on the east side of the lake, in a channel west of a storage shed at the Calvert Rod and Gun Club property, and 5.7 mi northwest of Lakeville.

SURFACE AREA.--18 acres (measured on U.S. Geological Survey topographic map, scale 1:24000).

DRAINAGE AREA.--1.85 mi^2.

PERIOD OF RECORD.--1960-76, 1982 to current year.

DATUM OF GAGE.--770.00 ft above sea level.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well.

ESTABLISHED LEGAL LEVEL.--Not established.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a 48-inch round concrete tile in the outlet channel.

INLET AND OUTLET.--The one inlet enters the lake on the southeastern shore and drains the immediately surrounding area. The outlet flows from the lake on the western shore, and eventually into the Kankakee River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 8.51 ft Jan. 8, 9, 10, 1989; minimum stage, 4.90 ft Oct. 2, 1991.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.23	5.24	5.44	5.88	6.02	6.60	6.61	6.72	6.95	6.91	6.27	5.68
10	5.23	5.24	5.46	6.03	6.10	6.55	6.73	6.80	6.69	6.84	6.28	5.67
15	5.23	5.24	5.79	6.01	6.17	6.66	6.65	6.78	7.11	6.63	6.11	6.01
20	5.23	5.24	5.83	6.01	6.21	6.73	7.01	6.86	7.06	6.46	6.07	5.92
25	5.23	5.24	5.76	6.01	6.71	6.66	6.87	6.73	7.46	6.30	5.99	5.95
EOM	5.23	5.24	5.76	6.01	6.69	6.63	6.72	6.83	6.96	6.31	5.85	5.82

WTR YR 2000 MEAN 6.17 MAX 7.46 MIN 5.22

WABASH RIVER BASIN

03331140 WINONA LAKE AT WARSAW, IN

LOCATION.--Lat 41°13'34", long 85°50'46", in NW$^1/_4$NE$^1/_4$SE$^1/_4$ sec.17, T.32 N., R.6 E., Kosciusko County, Hydrologic Unit 05120106 (WARSAW, IN quadrangle). The gage is on the western side of the lake, 20 ft east of the dam on the northern side of the outlet channel, 1.0 mi south of Warsaw.

SURFACE AREA.--562 acres.

DRAINAGE AREA.--32.1 mi^2.

PERIOD OF RECORD.--1943-78, 1980 to current year.

DATUM OF GAGE.--800.10 ft above sea level. Prior to Nov. 17, 1977, the datum of the gage was 810.10 ft above sea level as corrected on the basis of levels of Indiana Department of Natural Resources, 1973-74. All levels listed below are at the present datum.

GAGE.--A water-stage recorder is installed in an aluminum shelter over a 15-inch diameter stilling well. An auxiliary staff gage is attached to the stilling well.

ESTABLISHED LEGAL LEVEL.--11.06 ft gage datum or 811.06 ft above sea level as decreed on June 17, 1949, by the Kosciusko County Circuit Court. Minor errors were subsequently discovered in the establishment of the datum of the gage (see "DATUM OF GAGE") and the correct elevation of the legal level should be 11.06 ft gage datum or 811.16 ft above sea level.

LAKE-LEVEL CONTROL.--The level of the lake is controlled by a concrete fixed-crest dam with steel lift gates.

INLET AND OUTLET.--There are three inlets to the lake. Wyland Ditch enters on the eastern shore from Sherburn Lake 6.7 mi upstream. Keefer-Evans Ditch enters on the southeastern shore and Paterson Ditch on the southwestern shore. The outlet, Eagle Creek, flows from the western lobe of the lake into Walnut Creek 1.4 mi downstream, thence into the Tippecanoe River.

EXTREMES FOR PERIOD OF RECORD.--Maximum stage, 13.31 ft June 14, 1981; minimum stage, 9.40 ft Feb. 15, 1982.

LAKE LEVEL, IN FEET ABOVE GAGE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.98	9.88	9.81	9.76	9.72	9.91	9.79	10.35	11.07	10.92	10.90	10.85
10	10.95	9.74	9.74	9.74	9.75	9.82	9.85	10.69	10.87	10.87	10.95	10.94
15	10.90	9.68	9.83	9.72	9.73	9.80	9.81	10.95	11.04	10.74	10.88	10.91
20	10.88	9.70	9.76	9.71	9.76	9.87	10.07	11.10	11.04	10.80	10.87	10.86
25	10.85	9.71	9.76	9.71	9.93	9.87	10.09	11.02	11.08	10.84	10.98	10.97
EOM	10.88	9.68	9.70	9.71	10.08	9.84	9.92	10.96	10.82	10.91	10.95	10.90

WTR YR 2000 MEAN 10.35 MAX 11.22 MIN 9.67

RECORDS AVAILABLE ON LAKES

For many years, records of the water-surface elevations of many of the lakes in Indiana have been collected by the Geological Survey under cooperative agreement with the Indiana Department of Natural Resources. Basic data for a few selected lakes have been published in WSP 1363, entitled "Hydrology of Indiana Lakes." Records which have not been published are available in the files of the District Office of the Geological Survey in Indianapolis, Indiana. In general, the records before 1976 were based on once-daily readings of a staff gage by a local observer and consist of daily, monthly, and yearly mean water-surface elevations. Starting in 1976, water-stage recorders were installed at many stations which had previously been nonrecording gages. Discharge measurements, made at the outflow, are also available in some instances.

The lakes for which records have been collected are listed by downstream order number in the following table. The established level, sometimes referred to as the legal level, is that elevation set by the courts to which the average level of the lake is to be held; it is normally set at about the average level that has prevailed for a number of years prior to the establishment of the level. Surface area and capacity of the lake is that surface area and capacity at the established level. Depth contour maps are only those surveyed by the Water Resources Division of the Geological Survey. The inclusive years that records of stage have been collected at a lake are shown in the last column. If records are still being collected on a current basis, there is no closing date shown.

Lakes in the Ohio River basin for which records are available

Station number	Lake	County	Drainage (square miles)	Surface area (acres)	Established level*	Capacity (acre-feet)	Contour map available	Records available
	LAUGHERY CREEK BASIN							
03276800	Versailles Lake near Versailles	Ripley	168.0	232	-------	------	-	1957-
	BAYOU DRAIN BASIN							
03322300	Hovey Lake near Mount Vernon	Posey	6.36	253	-------	------	-	1950-69
	WABASH RIVER BASIN							
03327550	Everett Lake at Levert	Allen	1.07	43	835.13	650	+	1946-66
03327600	Blue Lake near Churubusco	Whitley	3.58	239	850.28	5,010	+	1946-69, 1976-
03327650	Shriner Lake at Tri-Lakes	Whitley	.94	111	907.04	------	-	1943-
03327700	Cedar Lake at Tri-Lakes	Whitley	.79	131	901.90	------	-	1943-49
03327750	Round Lake at Tri-Lakes	Whitley	3.36	125	901.90	------	-	1943-53
03327800	Wilson Lake near Larwill	Whitley	.46	29	865.39	390	+	1946-52
03327850	Little Wilson Lake near Larwill	Whitley	.52	8	865.39	130	+	1946-52
03328100	Long Lake at Laketon	Wabash	.55	48	751.19	760	+	1946-51, 1959-
03328250	North Little Lake at Silver Lake	Kosciusko	2.89	12	861.73	170	+	1947-
03328350	Silver Lake at Silver Lake	Kosciusko	6.31	102	861.73	1,520	+	1947-
03328400	Lukens Lake near Disko	Wabash	1.76	46	763.60	1,010	+	1948-49, 1959-
03330020	Crooked Lake near Wolflake	Noble	1.51	206	905.69	9,040	+	1943-53
03330040	Big Lake near Wolflake	Noble	8.89	228	898.18	5,630	+	1943-75 1976-
03330060	Goose Lake near Lorane	Whitley	1.51	84	910.96	2,180	+	1945-53
03330080	Loon Lake at Ormas	Whitley	11.1	222	895.14	5,730	+	1943-66
03330100	New Lake near Etna	Whitley	.29	50	903.91	880	+	1945-53
03330120	Old Lake near Etna	Whitley	2.81	32	898.07	620	+	1949-66
03330140	Smalley Lake near Washington Center	Noble	27.1	69	--------	1,520	+	1943-
03330160	Gilbert Lake near Washington Center	Noble	.37	28	--------	490	+	1954-
03330180	Horseshoe Lake nr Washington Center	Noble	1.62	18	901.80	250	+	1945-66
03330200	Baugher Lake near Washington Center	Noble	31.0	32	878.52	390	+	1945-51
03330220	Wilmot Pond at Wilmot[1]	Noble	35.2	10	--------	------	-	1945-51
03330240	Webster Lake at North Webster	Kosciusko	49.2	774	852.75	7,170	+	1943-
03330243	James Lake at Oswego	Kosciusko	55.9	282	836.40	7,580	+	1943-
03330260	Robinson Lake near Pierceton	Kosciusko	7.15	59	851.09	1,170	+	1946-51
03330280	Troy Cedar Lake near Lorane	Whitley	5.33	93	905.41	2,540	+	1945-52
03330300	Ridinger Lake near Pierceton	Kosciusko	34.6	136	843.12	2,900	+	1943-
03330320	Kuhn Lake near North Webster	Kosciusko	3.85	137	837.50	1,290	+	1945-
03330340	Big Barbee Lake near North Webster	Kosciusko	44.7	304	837.50	5,640	+	1945-
03330360	Little Barbee Lake nr North Webster	Kosciusko	49.0	74	837.50	960	+	1945-
03330380	Shoe Lake near Oswego	Kosciusko	.34	40	841.57	------	-	1946-53, 1972,74, 1976-
03330400	Banning Lake near North Webster	Kosciusko	.48	12	837.50	110	+	1945-
03330420	Irish Lake near North Webster	Kosciusko	50.9	182	837.50	2,330	+	1945-
03330440	Sechrist Lake near North Webster	Kosciusko	.58	105	837.50	2,490	+	1945-
03330460	Sawmill Lake near North Webster	Kosciusko	51.8	36	837.50	370	+	1945-
03330480	Tippecanoe Lake at Oswego	Kosciusko	113	768	836.40	28,380	+	1943-
03330495	Oswego Lake at Oswego	Kosciusko	113	83	836.40	780	+	1943-
03331010	Big Chapman Lake near Warsaw[2]	Kosciusko	4.17	581	827.75	6,080	+	1945-72, 1976-
03331020	Little Chapman Lake near Warsaw	Kosciusko	7.13	77	827.75	1,990	+	1945-72, 1976-
03331040	Pike Lake at Warsaw	Kosciusko	41.5	203	805.64	2,830	+	1954-
03331060	Fish Lake near Warsaw	Kosciusko	4.93	15	845.52	------	-	1951-66
03331080	Muskellunge Lake near Warsaw	Kosciusko	11.8	32	842.67	300	+	1943-53, 1959-71
03331100	Carr Lake near Claypool	Kosciusko	2.27	79	848.88	1,340	+	1947-53
03331120	Sherburn Lake near Pierceton[3]	Kosciusko	5.51	15	881.00	230	+	1954-
03331140	Winona Lake at Warsaw	Kosciusko	32.1	562	811.06	16,680	+	1943-

Lakes in the Ohio River basin for which records are available--Continued

Station number	Lake	County	Drainage (square miles)	Surface area (acres)	Established level*	Capacity (acre-feet)	Contour map available	Records available
	WABASH RIVER BASIN--Continued							
03331160	Center Lake at Warsaw	Kosciusko	0.73	120	803.86	2,060	+	1945-
03331180	Palestine Lake at Palestine	Kosciusko	32.4	290	--------	1,170	+	1954-
03331200	Crystal Lake near Atwood	Kosciusko	.45	76	789.69	930	+	1945-51
03331220	Hoffman Lake at Atwood	Kosciusko	8.07	180	785.85	3,160	+	1945-53
03331240	Beaver Dam Lake near Silver Lake	Kosciusko	2.83	146	868.95	3,280	+	1947-53
03331260	Loon Lake near Silver Lake	Kosciusko	3.59	40	865.74	670	+	1947-53
03331280	McClures Lake near Silver Lake	Kosciusko	1.29	32	865.85	410	+	1945-52
03331300	Hill Lake near Silver Lake	Kosciusko	.85	67	871.50	1,300	+	1952-
03331320	Diamond Lake near Silver Lake	Kosciusko	3.92	79	--------	1,280	+	1954-
03331340	Yellow Creek Lake near Silver Lake	Kosciusko	11.1	151	860.50	4,730	+	1945-53
03331360	Rock Lake near Akron	Kosciusko	2.74	56	847.29	360	+	1946-66
03331370	Town Lake near Akron	Fulton	2.77	23	--------	220	+	1949-50
03331380	Lake Manitou at Rochester	Fulton	44.2	1,158	778.41	10,165	+	1943-
03331390	Zink Lake near Rochester	Fulton	1.11	19	810.68	------	-	1952-55
03331400	Nyona Lake near Greenoak	Fulton	7.59	104	793.91	1,340	+	1946-
03331420	South Mud Lake near Fulton	Fulton	4.53	94	793.42	1,020	+	1946-66
03331438	King Lake near Delong	Fulton	1.98	18	--------	180	+	1971-
03331440	Maxinkuckee Lake at Culver	Marshall	13.7	1,864	733.12	45,600	+	1943-
03331460	Lost Lake near Culver[4]	Marshall	14.2	40	732.00	------	-	1954-
03331480	Langenbaum Lake near Monterey	Starke	.72	48	717.96	260	+	1954-66
03331700	Bruce Lake at Bruce Lake	Pulaski	6.38	245	723.69	1,790	+	1943-53
03332200	Fletcher Lake at Fletcher	Fulton	.67	45	783.20	880	+	1946-53
03370900	Starve Hollow Lake near Vallonia	Jackson	6.67	145	--------	980	+	1946-61, 1963-71
03371700	Ogle Lake near Nashville	Brown	1.03	20	--------	250	+	1954-

Lakes in the St. Lawrence River basin for which records are available

	STREAMS TRIBUTARY TO LAKE MICHIGAN							
04092500	Wolf Lake at Hammond[5]	Lake	5.72	999	--------	------	-	1946-49
04092990	Lake George at Hobart	Lake	124	282	602.23	------	-	1946-
04097520	Lake Pleasant near Nevada Mills	Steuben	3.18	24	961.50	3,490	+	1954-69, 1971, 1976-
04097550	Lake George at Jamestown	Steuben	[a]14.7	488	985.28	------	-	1946-
04097596	Marsh Lake near Fremont	Steuben	14.9	-----	--------	------	-	1967-69
04097600	Little Otter Lake near Fremont	Steuben	15.7	34	965.18	740		1946-53
04097640	Big Otter Lake near Fremont	Steuben	21.3	69	965.18	1,780	+	1946-53
04097650	Snow Lake at Lake James	Steuben	[a]40.2	310	964.96	7,998	+	1943-49
04097660	Lake James at Lake James	Steuben	[a]47.8	1,034	964.96	33,585	+	1943-49
04097680	Jimmerson Lake at Nevada Mills[6]	Steuben	[a]51.6	434	964.66	4,394	+	1946-
04097780	Loon Lake near Angola	Steuben	2.13	138	1,011.98	630	+	1954-66
04097850	Crooked Lake at Crooked Lake	Steuben	10.4	828	988.17	10,555	+	1946-
04097950	Lake Gage at Panama	Steuben	[a]17.3	332	954.25	10,140	+	1946-
04097960	Lime Lake at Panama	Steuben	[a]17.5	57	954.25	427	+	1946-
04098100	Wall Lake near Orland	Lagrange	1.61	141	942.25	1,640	+	1953-54
04098110	Mud Lake near Orland	Steuben	1.85	25	939.01	------	-	1956-67
04098300	Cedar Lake near Ontario	Lagrange	1.60	120	871.90	1,020	+	1948-51
04099050	Pigeon Lake near Angola	Steuben	[a]35.2	61	988.24	930	+	1954-63
04099100	Fox Lake near Angola	Steuben	[a]1.25	142	1,018.83	3,150	+	1946-53
04099190	Pleasant Lake at Pleasant Lake	Steuben	[a]1.12	53	963.52	1,190	+	1946-66
04099200	Long Lake at Moonlight	Steuben	[a]67.9	92	--------	1,540	+	1946-
04099250	Bower Lake near Pleasant Lake	Steuben	[a]84.6	25	948.50	280	+	1946-71, 1976-
04099260	Golden Lake near Pleasant Lake	Steuben	[a]88.8	119	948.50	1,810	+	1946-71, 1976-
04099400	Silver Lake near Angola	Steuben	[a]3.79	238	959.40	2,540	+	1945-53
04099430	Bass Lake near Angola	Steuben	[a].39	61	979.68	450	+	1954-66
04099440	Howard Lake near Angola	Steuben	[a]3.90	27	977.34	130	+	1954-63
04099500	Hogback Lake near Angola	Steuben	[a]103	146	948.50	1,450	+	1946-
04099520	Otter Lake near Flint	Steuben	[a]6.91	118	934.15	1,960	+	1954-66
04099540	Story Lake near Hudson	DeKalb	3.16	77	942.20	1,020	+	1946, 1954-66
04099560	Big Turkey Lake at Stroh	Lagrange	35.8	450	926.61	7,300	+	1945-66
04099575	McClish Lake near Helmer	Lagrange	1.28	35	951.09	1,210	+	1951-74, 1976-
04099580	Lake of the Woods near Helmer	Lagrange	5.25	136	951.09	5,470	+	1951-74, 1976-
04099600	Big Long Lake near Stroh	Lagrange	4.77	388	956.2	------	-	1954-
04099620	Pretty Lake near Stroh	Lagrange	2.89	184	965.50	4,720	+	1949-53, 1963-65
04099640	Little Turkey Lake at Elmira	Lagrange	56.5	135	925.72	1,550	+	1945-66
04099660	Royer Lake near Plato	Lagrange	4.69	69	936.50	1,630	+	1952-
04099670	Fish Lake near Plato	Lagrange	[a]10.6	100	936.50	4,050	+	1945-
04099700	North Twin Lake near Howe	Lagrange	1.54	135	843.56	2,120	+	1953-
04099710	South Twin Lake near Howe	Lagrange	2.22	116	843.56	3,600	+	1953-70

Lakes in the St. Lawrence River basin for which records are available

Station Number	Lake	County	Drainage (square miles)	Surface area (acres)	Established level*	Capacity (acre-feet)	Contour map available	Records available
	STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued							
04099740	Shipshewana Lake near Shipshewana	Lagrange	[a]6.74	202	852.04	1,350	+	1951-
04099760	Fish Lake near Scott	Lagrange	[a]6.21	139	814.42	2,560	+	1954-73, 1976-
04099780	Stone Lake near Scott	Lagrange	1.51	152	818.76	2,060	+	1954-73, 1976-
04099800	Emma Lake near Emma	Lagrange	13.6	42	880.87	700	+	1954-66
04099810	Cass Lake near Shipshewana	Lagrange	.68	89	--------	873	+	1970-
04099820	Hunter Lake near Middlebury	Elkhart	.51	99	856.90	1,120	+	1946-53
04099840	Wolf Lake near Goshen	Elkhart	[a]1.29	100	813.00	------	-	1947-57
04099860	Heaton Lake near Elkhart	Elkhart	9.33	87	767.30	640	+	1946-53, 1969-74, 1976-
04099880	Simonton Lake near Elkhart	Elkhart	7.44	303	772.19	1,560	+	1946-
04099950	Indiana Lake near Bristol	Elkhart	.62	122	759.73	3,400	+	1946-53
04100010	Cree Lake near Kendallville	Noble	4.85	58	945.23	910	+	1949-66
04100020	Blackman Lake near Wolcottville	Lagrange	.98	67	974.20	1,210	+	1953-59
04100030	Adams Lake near Wolcottville	Lagrange	5.62	308	953.59	7,690	+	1946-
04100040	Atwood Lake near Wolcottville	Lagrange	1.23	170	899.99	1,560	+	1948-53
04100050	Witmer Laker near Wolcottville	Lagrange	36.1	204	897.36	7,040	+	1945-
04100060	Westler Lake near Wolcottville	Lagrange	37.8	88	897.36	1,770	+	1945-
04100070	Dallas Lake near Wolcottville	Lagrange	39.8	283	897.36	9,970	+	1945-
04100080	Martin Lake near Valentine	Lagrange	4.93	26	899.45	890	+	1945-
04100090	Olin Lake neaqr Valentine	Lagrange	5.81	103	899.45	9,180	+	1945-
04100100	Oliver Lake near Valentine	Lagrange	11.1	362	899.45	15,358	+	1945-
04100110	Hackenburg Lake near Wolcottville	Lagrange	55.4	42	897.36	510	+	1945-
04100120	Messick Lake near Wolcottville	Lagrange	56.4	68	897.36	1,450	+	1945-
04100130	Jones Lake near Cosperville[7]	Noble	70.3	114	885.55	960	+	1948-
04100140	Bixler Lake at Kendallville	Noble	5.28	120	963.65	2,090	+	1945-
04100150	Round Lake at Kendallville	Noble	3.47	99	954.50	2,140	+	1954-
04100160	Little Long Lake at Kendallville	Noble	4.55	71	954.50	1,750	+	1954-
04100170	Latta Lake near Rome City	Noble	2.52	42	918.71	900	+	1954-66
04100180	Sylvan Lake at Rome City	Noble	33.8	669	916.20	5,986	+	1943-
04100190	Sacarider Lake near Kendallville	Noble	1.43	33	--------	740	+	1954-63
04100200	Tamarack Lake near Cosperville	Noble	15.9	50	885.55	880	+	1948-
04100210	Steinbarger Lake near Cosperville	Noble	24.3	73	885.55	1,590	+	1948-
04100220	Waldron Lake near Cosperville	Noble	134	216	885.55	3,120	+	1948-
04100230	Long Lake near Burr Oak	Noble	12.0	40	895.82	630	+	1954-71
04100240	Sand Lake near Burr Oak	Noble	14.9	47	893.56	1,270	+	1946-51
04100250	Rivir Lake near Burr Oak	Noble	18.6	24	--------	380	+	1954-65
04100258	High Lake near Wolflake	Noble	4.43	123	896.35	1,240	+	1961-
04100260	Bear Lake near Wolflake	Noble	6.98	136	894.60	3,030	+	1943-
04100280	Muncie Lake near Burr Oak	Noble	42.8	47	--------	580	+	1954-
04100290	Silver Lake near Wolflake	Noble	.28	34	--------	220	+	1953-63
04100300	Skinner Lake near Albion	Noble	14.0	125	927.74	1,750	+	1945-72, 1977-
04100310	Pleasant Lake near Wolflake	Noble	.29	20	--------	540	+	1952-53
04100320	Upper Long Lake near Wolflake	Noble	2.08	86	891.19	1,900	+	1956-
04100330	Lower Long Lake near Albion	Noble	4.35	66	889.81	1,560	+	1946-52
04100340	Eagle Lake near Kimmel	Noble	3.22	81	--------	1,050	+	1946-48
04100350	Diamond Lake near Wawaka	Noble	4.80	105	--------	2,580	+	1946-
04100360	Sparta Lake at Kimmel	Noble	.69	31	888.50	170	+	1946-51
04100370	Engle Lake near Ligonier	Noble	[a]4.19	48	878.90	670	+	1956-71, 1977-
04100380	Harper Lake near Washington Center	Noble	2.76	11	878.25	160	+	1946-
04100390	Knapp Lake near Washington Center	Noble	6.02	88	878.25	3,040	+	1946-
04100400	Moss Lake near Washington Center	Noble	6.12	9	878.25	80	+	1946-
04100410	Hindman Lake near Washington Center	Noble	8.66	13	878.25	140	+	1946-
04100420	Gordy Lake near Cromwell	Noble	9.40	31	876.68	680	+	1953-66
04100425	Rider Lake near Cromwell	Noble	10.9	5	876.68	30	+	1953-66
04100430	Duely Lake near Cromwell[8]	Noble	11.2	21	876.68	180	+	1953-66
04100440	Village Lake near Cromwell	Noble	12.0	12	876.68	160	+	1953-66
04100446	Flatbelly Lake near Syracuse	Kosciusko	4.66	326	--------	------	-	1964-69
04100448	Papakeechie Lake near Syracuse	Kosciusko	5.52	300	--------	------	-	1964-69
04100450	Wawasee Lake at Wawasee	Kosciusko	36.9	3,060	858.89	67,210	+	1943-66
04100460	Syracuse Lake at Syracuse	Kosciusko	38.2	414	858.87	5,360	+	1943-
04100470	Dewart Lake near Leesburg	Kosciusko	[a]8.05	551	867.70	9,000	+	1945-
04100480	Wabee Lake near Milford	Kosciusko	[a]14.6	187	829.79	4,750	+	1946-53
	STREAMS TRIBUTARY TO LAKE ERIE							
04177200	Clear Lake at Clear Lake	Steuben	6.86	800	1,037.38	24,990	+	1943-
04177210	Round Lake at Clear Lake	Steuben	7.25	30	1,037.38	340	+	1943-
04177300	Long Lake near Ray	Steuben	2.80	154	--------	1,840	+	1961-63
04177680	Ball Lake near Hamilton	Steuben	11.6	87	894.76	3,520	+	1961-
04177700	Hamilton Lake at Hamilton	Steuben	16.5	802	898.83	16,600	+	1943-
04179200	Indian Lake near Corunna	DeKalb	3.76	56	--------	1,220	+	1957
04179300	Cedar lake near Waterloo	DeKalb	23.4	28	896.76	230	+	1943-56

Lakes in the Upper Mississippi River basin for which records are available--Continued

Station Number	Lake	County	Drainage (square miles)	Surface area (acres)	Established level*	Capacity (acre-feet)	Contour map available	Records available
			ILLINOIS RIVER BASIN					
05514740	Saugany Lake near Rolling Prairie	LaPorte	[a]2.34	74	781.21	2,190	+	1946-50
05514741	Hudson Lake at Hudson Lake	LaPorte	7.92	432	763.09	5,060	+	1946-
05514750	North Chain Lake at Lydick	St. Joseph	[a]3.89	88	721.17	1,400	+	1946-53
05514760	South Chain Lake at Westfield	St. Joseph	[a]6.32	90	717.04	270	-	1946-53
05514770	Wharton Lake near South Bend	St. Joseph	[a]1.85	-----	--------	------	-	1960-
05514900	Silver Lake near Rolling Prairie	LaPorte	1.72	54	795.20	------	-	1946-66
05515200	Upper Fish Lake near Stillwell	LaPorte	[a]9.65	139	688.22	1,040	+	1946-53
05515210	Lower Fish Lake near Stillwell	LaPorte	[a]10.4	134	688.22	870	+	1946-53
05515220	Pine Lake at LaPorte	LaPorte	[a]10.7	564	796.20	------	-	1946-75 1980-
05515230	Stone Lake at LaPorte	LaPorte	[a]10.7	140	796.20	------	-	1946-75 1980-
05515240	Clear Lake at LaPorte	LaPorte	.65	106	798.20	760	+	1942-49, 1952-75 1980-
05515600	Koontz Lake at Koontz Lake	Starke	[a]6.25	346	714.56	3,170	+	1943-
05515800	Riddles Lake near Lakeville	St. Joseph	[a]11.7	77	817.50	640	+	1946-73, 1976-
05516200	Lake of the Woods near Bremen	Marshall	[a]9.45	416	803.85	6,810	+	1945-
05516600	Pretty Lake near Plymouth	Marshall	.85	97	787.36	2,140	+	1954-66
05516700	Myers Lake near Twin Lakes	Marshall	1.41	96	768.69	2,000	+	1945-53
05516800	Mill Pond and Kreighbaum Lake near Twin Lakes	Marshall	[a]5.34	168	767.75	1,020	+	1945-53
05516900	Eagle Lake near Ober	Starke	[a]25.5	24	713.25	160	+	1946-53
05517100	Skitz Lake near Knox	Starke	------	1,000	--------	------	-	1949-53
05517200	Bass Lake at Bass Lake	Starke	5.18	1,400	713.65	------	-	1943-
05517600	Wauhob Lake near Valparaiso	Porter	.40	21	--------	------	-	1946-
05517650	Long Lake near Valparaiso	Porter	1.31	65	797.66	520	+	1947-52
05517670	Spectacle Lake near Valparaiso	Porter	.53	62	812.82	540	+	1946-53
05517700	Flint Lake near Valparaiso	Porter	2.62	86	797.66	------	-	1946-
05517800	Lake Eliza near Beatrice	Porter	1.70	45	738.70	------	-	1954-74, 1976-
05518700	Cedar Lake at Cedar Lake	Lake	8.14	781	--------	6,750	+	1943-
05518800	Dalecarlia Lake near Creston	Lake	20.1	193	--------	------	-	1947-52
05521300	Ringneck Lake near Medaryville	Jasper	1.94	1,400	--------	------	-	1949-55
05525700	J.C. Murphy Lake near Morocco	Newton	13.0	1,515	--------	------	-	1952-61

+ Depth contour maps available for sale by Indiana Department of Natural Resources, State Office Building, Indianapolis, Indiana.
* Elevation, in feet, above mean sea level.

[1] Formerly published as Rider Lake at Wilmot.
[2] Formerly published as Chapman Lake near Warsaw.
[3] Formerly published as Johnson Lake near Pierceton.
[4] Formerly published as Hawks Lake near Culver.
[5] Same as Wolf Lake at Chicago, Illinois WRD District.
[6] Formerly published as Jimerson Lake at Nevada Mills.
[7] Formerly published as Sanford Lake near Cosperville.
[8] Formerly published as Duley Lake near Cromwell, and Druely Lake near Cromwell, and Druley Lake near Cromwell.

[a] Contains drainage area (5 percent or greater) that does not contribute directly to surface-water runoff.

OTHER LAKE MAPS AVAILABLE

The lakes in Indiana which are not included in the cooperative stabilization program but which have been mapped for recreational purposes are shown in the following table. Surface area and capacities are related to reference mean sea level elevation at time of mapping. Additional data is shown on map, which are available for sale by the Indiana Department of Natural Resources, State Office Building, Indianapolis, Indiana.

Lake	County	Surface area (acres)	Capacity (acre-feet)	Lake	County	Surface area (acres)	Capacity (acre-feet)
			OHIO RIVER BASIN				
Barr Lake	Fulton	22	470	Lake 16	Fulton	27	220
Bischoff Reservoir	Ripley	200	1,920	Larwill Lake	Whitley	9	170
Black Lake	Whitley	24	400	Lenape Lake	Greene	36	330
Bowen Lake	Scott	7	60	Lincoln Park Lake	Spencer	58	520
Brown Lake	Whitley	23	580	Little Pike Lake	Kosciusko	25	140
Caldwell Lake	Kosciusko	45	800	McColley Lake	Wabash	28	410
Crane Lake	Noble	28	360	Round Lake	Wabash	48	540
Crosley Lake	Jennings	14	130	Scales Lake	Warrick	66	520
Ferdinand Lake	Dubois	42	440	Schlamm Lake	Clark	19	170
Franke Lake	Clark	9	70	Sellers Lake	Kosciusko	32	340
Hartz Lake	Starke	28	370	Shakamak Lake	Sullivan	56	610
Kunkel Lake	Wells	25	150	Twin Lakes	Wabash	18	190
Lake Freeman	Carroll	1,547	26,000	Whitewater Lake	Union	199	3,650
Lake Shafer	White	1,291	13,120	Yellowwood Lake	Brown	133	1,890
			STREAMS TRIBUTARY TO LAKE MICHIGAN				
Appleman Lake	Lagrange	52	590	Mateer Lake	Lagrange	18	150
Bartley Lake	Noble	34	430	Miller Lake	Noble	11	160
Barton Lake	Steuben	94	1,340	Millers Lake	Noble	28	410
Bell Lake	Steuben	38	510	Mud Lake	Noble	8	70
Boner Lake	Kosciusko	40	370	Norman Lake	Noble	14	280
Bowen Lake	Noble	30	1,080	Pigeon Lake	Lagrange	61	1,160
Bristol Lake	Noble	27	740	Port Mitchell Lake	Noble	15	180
Buck Lake	Lagrange	18	150	Rainbow Lake	Lagrange	16	250
Center Lake	Steuben	46	390	Schockopee Lake	Noble	21	280
Cline Lake	Lagrange	20	350	Shock Lake	Kosciusko	37	1,210
Deer Lake	Noble	36	420	Smith Hole	Lagrange	2	10
Dock Lake	Noble	16	230	Still Lake	Lagrange	30	620
Eve Lake	Lagrange	31	670	Sweet Lake	Noble	16	210
Fish Lake	Steuben	59	750	Tamarack Lake	Noble	84	1,340
Hog Lake	LaPorte	59	690	Walters Lake	Steuben	53	550
Hog Lake	Steuben	48	570	Weir Lake	Lagrange	6	70
Lime Lake	Steuben	30	330	Wible Lake	Noble	49	650
Little Turkey Lake	Steuben	58	780	Williams Lake	Noble	46	1,070
Marl Lake	Noble	30	510	Wyland Lake	Kosciusko	6	100
			STREAMS TRIBUTARY TO LAKE ERIE				
Dunton Lake	DeKalb	21	340	Mirror Lake	Steuben	9	120
Handy Lake	Steuben	16	290	Terry Lake	DeKalb	17	160
Lake Anne	Steuben	17	280				
			UPPER MISSISSIPPI RIVER BASIN				
Cook Lake	Marshall	93	1,650	Gilbert Lake	Marshall	37	490
Dixon Lake	Marshall	33	480	Holem Lake	Marshall	40	390
Flat Lake	Marshall	26	210	Lawrence Lake	Marshall	69	1,580

Base from U.S. Geological Survey digital data, 1:2,000,000 1996
Albers Equal-Area Conic projection
Standard parallels 29˚30' and 45˚30' central meridian -96˚

EXPLANATION

2 Number of ground-water wells in designated county.

Figure 12.--Number of ground-water wells by county having water-level records for water-year 2000.

ALLEN COUNTY

410426084495201. Local number, AL 5.
LOCATION.--Lat 41°04'26", long 84°49'52", in NW$^1/_4$NE$^1/_4$SE$^1/_4$ sec.9, T.30 N., R.15 E., Allen County, Hydrologic Unit 04100005, 1.3 mi west of Edgerton.
Owner: Noel Gerig.

AQUIFER.--Limestone of Salina Formation of Silurian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 4 in., depth 97 ft, cased to 40 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 760 ft above sea level, from topographic map. Measuring point: Top of floor of shelter, 0.00 ft above land-surface datum.

REMARKS.--Well affected by quarry operations until 1980. Quarry operations resumed in 1997.

PERIOD OF RECORD.--July 1962 to December 1971, January 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.04 ft below land-surface datum, July 8, 9, 1962; lowest, 38.41 ft below land-surface datum, May 4, 1967.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

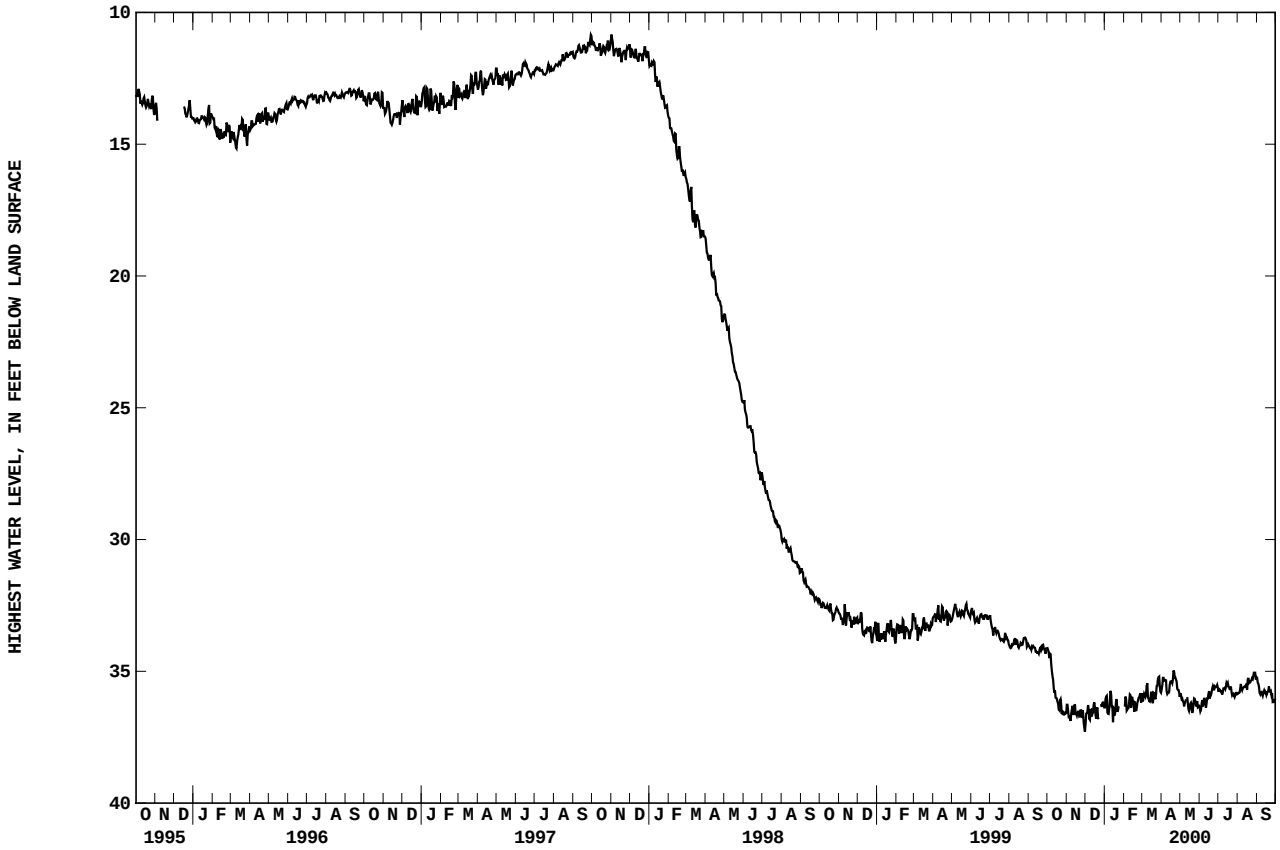
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	34.33	36.72	36.28	36.56	36.49	35.90	35.36	36.14	36.09	35.78	35.64	35.82
10	35.32	36.31	36.46	35.74	35.88	35.99	35.86	36.06	36.24	35.65	35.62	35.93
15	36.02	36.60	36.18	36.38	36.16	35.81	35.39	36.51	35.86	35.49	35.57	35.80
20	36.48	36.53	36.37	36.09	36.51	35.83	34.97	36.58	35.79	35.66	35.43	35.57
25	36.52	36.77	---	---	35.98	35.55	35.39	36.13	35.57	35.85	35.29	35.84
EOM	36.58	37.29	36.37	---	35.91	35.81	35.97	36.32	35.63	35.87	35.22	36.04

WTR YR 2000 HIGH 34.12 OCT 1

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	34.89	37.16	36.68	37.08	36.96	36.33	36.14	36.21	36.64	36.30	36.29	35.95
10	35.79	36.73	37.21	36.21	36.49	36.55	36.31	36.60	36.81	36.04	36.04	36.39
15	36.56	37.05	36.68	37.13	36.86	36.33	35.53	37.03	36.27	36.00	36.18	35.94
20	36.95	37.10	37.06	36.78	36.96	36.26	35.41	37.04	36.28	36.05	35.80	36.10
25	37.12	37.35	---	---	36.49	36.04	35.96	36.43	36.11	36.43	35.75	36.53
EOM	37.02	37.77	36.87	---	36.63	36.32	36.57	36.49	36.10	36.40	35.78	36.44

WTR YR 2000 LOW 37.77 NOV 30



ALLEN COUNTY

410932084561101. Local number, AL 6.
LOCATION.--Lat 41°09'32", long 84°56'11", in SW$^1/_4$SW$^1/_4$NE$^1/_4$ sec.10, T.3l N., R.14 E., Allen County, Hydrologic Unit 04100005, at the intersection of Ehle and Thimler Roads, 10 mi northeast of New Haven.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 84 ft, cased to 8l.5 ft, screened to 83.5 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 760 ft above sea level, from topographic map. Measuring point: Top of floor of shelter, 2.50 ft above land-surface datum.

REMARKS.--Water level affected by pumpage.

PERIOD OF RECORD.--December 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.86 ft below land-surface datum, Jan. 9, l998; lowest, 15.10 ft below land-surface datum, Nov. 26, 1994.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

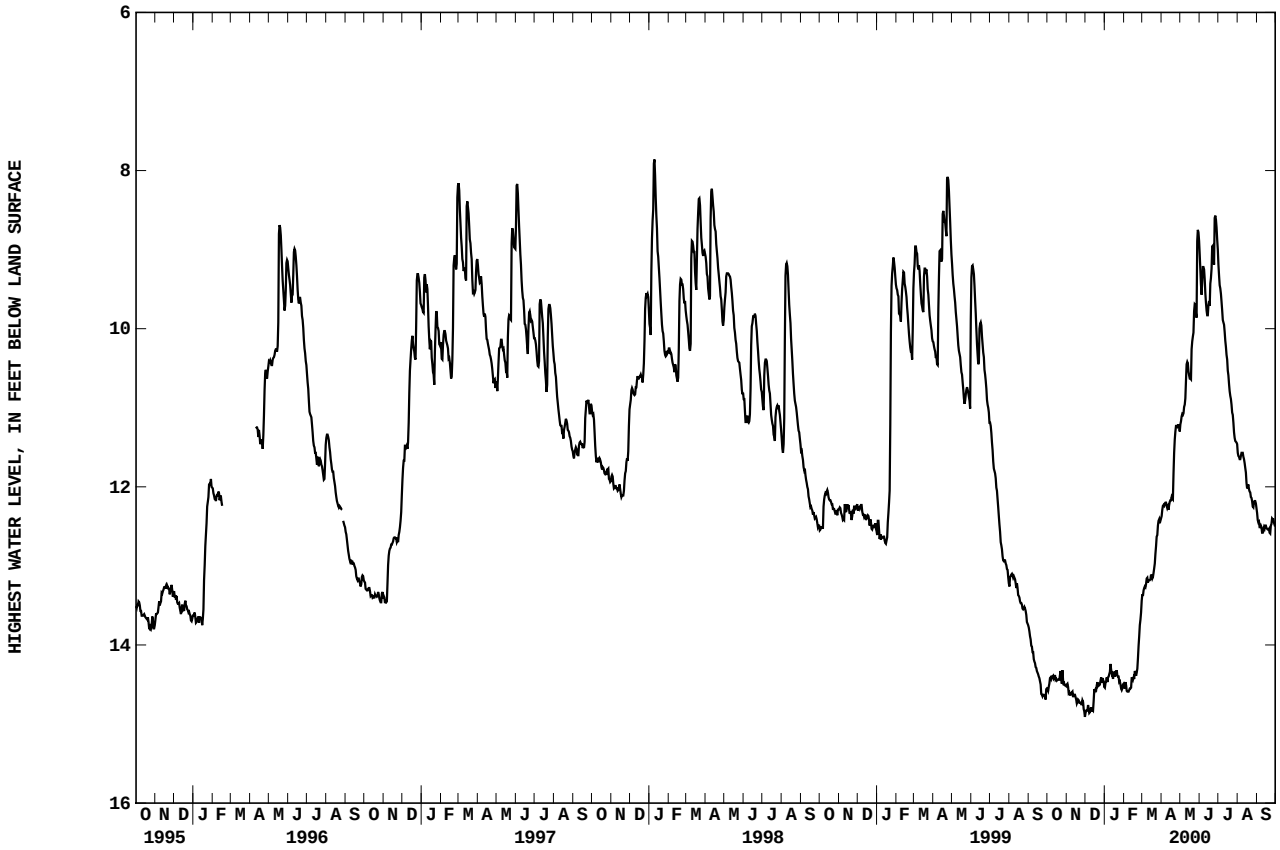
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.42	14.60	14.76	14.47	14.58	13.26	12.24	11.09	9.40	9.56	11.65	12.51
10	14.39	14.59	14.79	14.24	14.55	13.21	12.27	10.65	9.55	9.95	11.62	12.58
15	14.43	14.66	14.56	14.35	14.44	13.11	12.17	10.59	9.70	10.39	11.95	12.49
20	14.44	14.70	14.47	14.32	14.39	13.03	11.83	10.16	9.24	10.85	12.06	12.53
25	14.32	14.75	14.45	14.46	13.89	12.61	11.23	9.70	8.60	11.19	12.25	12.40
EOM	14.52	14.91	14.53	14.49	13.44	12.40	11.30	8.89	9.00	11.46	12.27	12.47

WTR YR 2000 HIGH 8.57 JUN 26

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.54	14.68	14.86	14.59	14.71	13.31	12.34	11.38	9.71	9.71	11.80	12.59
10	14.49	14.75	14.87	14.39	14.63	13.24	12.38	10.88	9.73	10.06	11.72	12.67
15	14.56	14.76	14.71	14.45	14.54	13.20	12.21	10.73	9.83	10.60	12.09	12.63
20	14.46	14.83	14.63	14.45	14.46	13.10	12.16	10.27	9.43	10.93	12.13	12.63
25	14.52	14.84	14.58	14.56	14.01	12.69	11.32	9.90	9.19	11.42	12.37	12.49
EOM	14.59	14.98	14.67	14.57	13.59	12.47	11.43	9.09	9.20	11.67	12.38	12.54

WTR YR 2000 LOW 14.98 NOV 30



ALLEN COUNTY

410335085190701. Local number, AL 8.
LOCATION.--Lat 41°03'35", long 85°19'07", in SE$^1/_4$SW$^1/_4$SW$^1/_4$ sec. 8, T.30 N., R.11 E., Allen County, Hydrologic Unit 05120101, on Covington Rd about 5 mi west of I-69 on the northeast corner of the United Telephone Co. property.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 193 ft, cased to 173 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 850.60 ft above sea level. Measuring point: Top of casing, 3.50 ft above land-surface datum.

REMARKS.--Water level data is affected by nearby pumpage. Daily fluctuations greater than 3 ft are common.

PERIOD OF RECORD.--July 1988 to current year. Records for WY1988, WY1989, WY1990 published as AL 7.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 55.70 ft below land-surface datum, Apr. 26, 1989; lowest, unknown, but greater than 76.48 ft below land-surface datum, July 10, 12, 15, 16, 18, 19, 31, Aug. 1, 2, 3, 1999. Recorder was unable to record below this water level, which occured on numerous occasions between Aug. 3, and Sept. 24, 1999.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

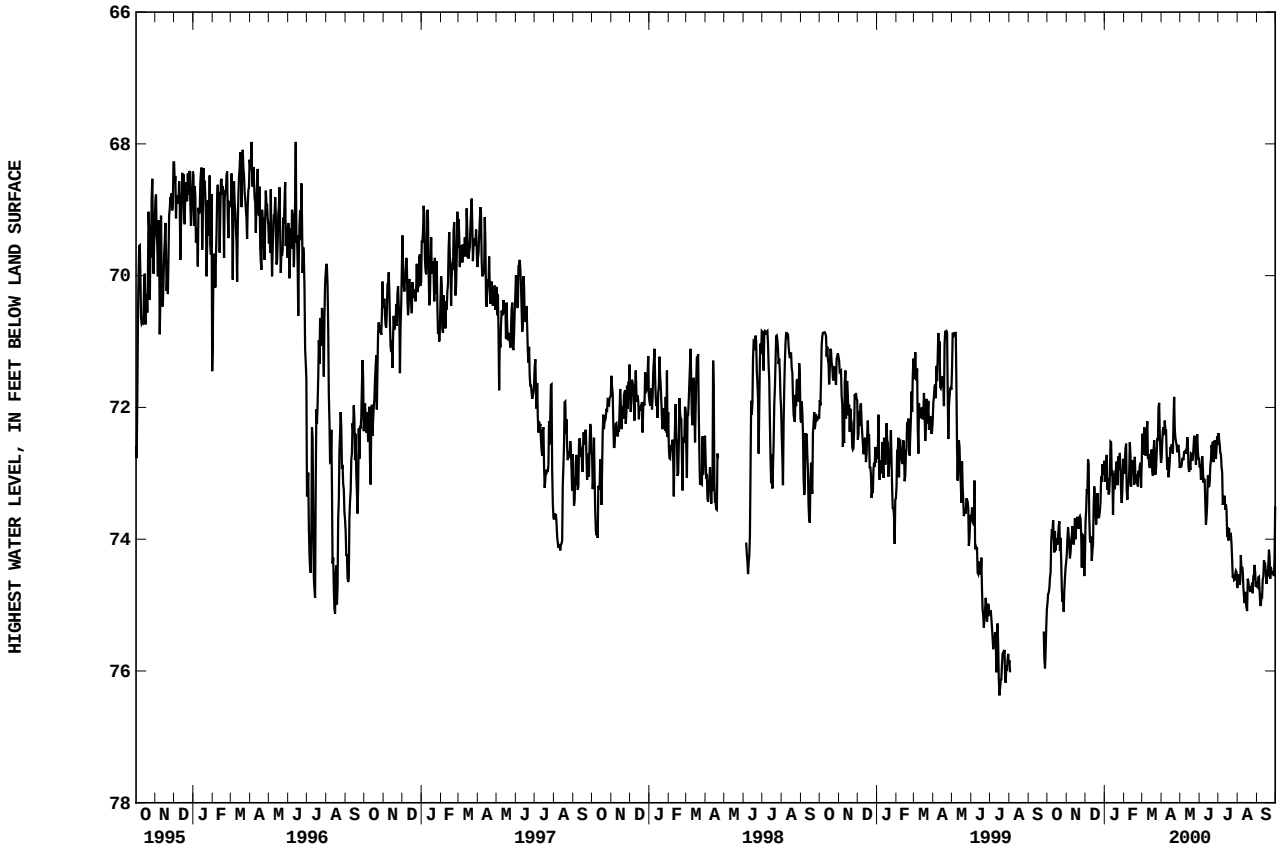
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	74.58	74.10	72.79	73.25	73.26	72.50	72.42	72.78	72.74	72.71	74.63	74.78
10	73.71	73.80	73.96	72.52	72.53	72.78	72.95	72.68	73.46	73.40	74.74	74.62
15	74.01	74.00	73.20	73.20	72.86	72.68	72.60	72.98	73.05	73.96	75.04	74.51
20	73.73	73.84	73.30	72.82	73.14	72.50	72.21	72.81	72.57	73.94	74.76	74.16
25	74.95	74.43	73.44	72.69	73.05	72.47	72.58	72.66	72.50	74.54	74.82	74.54
EOM	74.34	74.28	72.81	72.78	72.86	72.84	72.92	72.78	72.57	74.74	74.64	73.50

WTR YR 2000 HIGH 71.84 APR 21

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	75.11	74.61	73.67	73.90	73.72	73.32	73.14	73.44	73.18	73.62	75.27	75.28
10	74.45	74.25	74.77	73.27	73.24	73.28	73.67	73.41	74.27	73.83	75.21	75.47
15	74.36	74.42	73.92	73.83	73.34	73.12	72.89	73.55	73.78	74.52	75.60	75.00
20	74.42	74.50	73.85	73.42	73.81	73.13	73.02	73.46	73.41	74.32	75.28	74.60
25	75.40	74.90	74.02	73.42	73.45	72.86	73.40	73.19	73.06	74.83	75.41	75.00
EOM	75.12	75.13	73.72	73.42	73.53	73.26	73.56	73.31	73.07	75.25	75.20	74.27

WTR YR 2000 LOW 75.76 OCT 27



BARTHOLOMEW COUNTY

391627085534401. Local number, BA 4.
LOCATION.--Lat 39°16'27", long 85°53'44", in NE$^1/_4$NE$^1/_4$NE$^1/_4$ sec.31, T.10 N., R.6 E., Bartholomew County, Hydrologic Unit 05120205, by a cemetery on the north side of Bakalar AFB at the northern city limits of Columbus.
Owner: Bartholomew County.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 93 ft, cased to 85 ft, screened to 90 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 654.04 ft above sea level. Measuring point: Top of floor of shelter, 2.60 ft above land-surface datum.

REMARKS.--Water level affected by agricultural withdrawals during May - August growing season.

PERIOD OF RECORD.--January 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.58 ft below land-surface datum, June 21, 22, 23, 24, 1996; lowest, 21.18 ft below land-surface datum, July 2, 1992.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

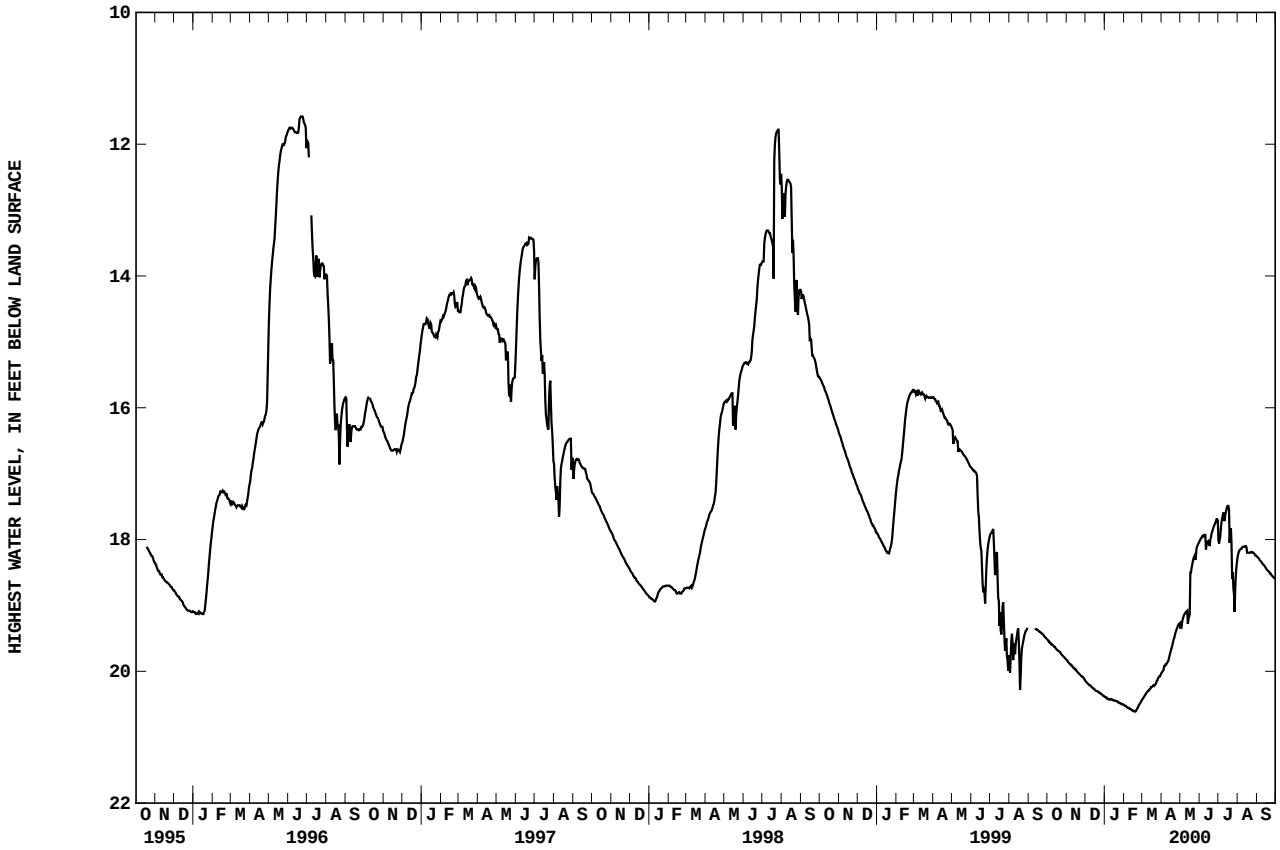
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.57	19.88	20.19	20.42	20.54	20.37	19.92	19.20	17.95	17.82	18.15	18.31
10	19.61	19.92	20.23	20.42	20.57	20.30	19.87	19.11	17.93	17.67	18.11	18.37
15	19.66	19.98	20.27	20.44	20.60	20.24	19.71	19.17	18.02	17.50	18.12	18.43
20	19.70	20.03	20.30	20.45	20.60	20.22	19.52	18.38	17.91	17.86	18.20	18.49
25	19.76	20.08	20.34	20.48	20.51	20.14	19.36	18.31	17.77	18.74	18.20	18.55
EOM	19.82	20.13	20.38	20.51	20.44	20.04	19.27	18.04	17.71	18.32	18.25	18.59

WTR YR 2000 HIGH 17.49 JUL 16

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.57	19.89	20.20	20.42	20.55	20.38	19.98	19.24	17.97	17.95	18.16	18.32
10	19.62	19.94	20.24	20.43	20.57	20.31	19.88	19.11	18.25	18.05	18.12	18.38
15	19.67	19.98	20.28	20.44	20.60	20.26	19.75	19.21	18.03	17.54	18.20	18.45
20	19.71	20.04	20.31	20.46	20.61	20.22	19.57	18.43	17.97	18.05	18.20	18.50
25	19.77	20.08	20.34	20.49	20.52	20.15	19.39	18.40	17.79	18.92	18.21	18.56
EOM	19.83	20.15	20.39	20.52	20.46	20.06	19.58	18.06	18.01	18.40	18.26	18.60

WTR YR 2000 LOW 20.61 FEB 16



390950085553501. Local number, BA 8.
LOCATION.--Lat 39°09'50", long 85°55'35", in NE$^1/_4$NW$^1/_4$SW$^1/_4$ sec.1, T.8 N., R.5 E., Bartholomew County, Hydrologic Unit 05120206, on property of Meadows Metal Products Co., 4 mi south of Columbus.
Owner: Meadows Metal Products Co., Inc.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 49 ft, casing length unknown.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 615.48 ft above sea level. Measuring point: Top of floor of shelter, 3.00 ft above land-surface datum.

REMARKS.--Water levels may be affected by nearby water-supply well fields.

PERIOD OF RECORD.--February 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.06 ft below land-surface datum, June 3, 1968; lowest, 24.13 ft below land-surface datum, Dec. 27, 1988.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

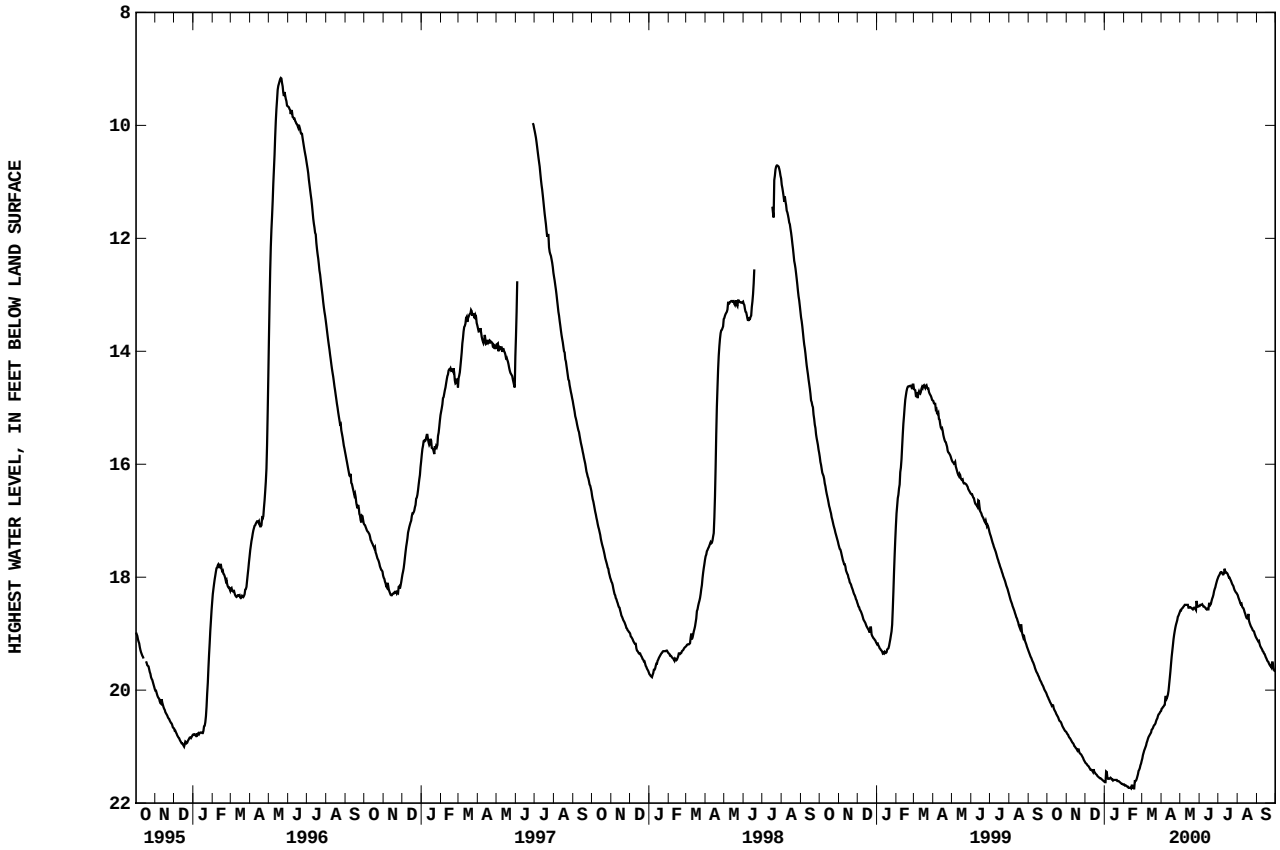
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	20.21	20.84	21.34	21.55	21.70	21.04	20.27	18.54	18.48	17.91	18.46	19.18
10	20.27	20.93	21.41	21.55	21.73	20.86	20.12	18.49	18.54	17.93	18.55	19.31
15	20.42	21.02	21.45	21.59	21.73	20.75	19.67	18.54	18.57	17.93	18.72	19.42
20	20.54	21.05	21.52	21.59	21.60	20.62	19.10	18.56	18.42	18.04	18.81	19.53
25	20.64	21.16	21.56	21.63	21.41	20.50	18.80	18.56	18.21	18.16	18.94	19.51
EOM	20.74	21.27	21.62	21.67	21.25	20.37	18.62	18.51	18.02	18.30	19.08	19.67

WTR YR 2000 HIGH 17.85 JUL 11

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	20.23	20.85	21.35	21.57	21.71	21.07	20.29	18.55	18.50	17.93	18.48	19.22
10	20.32	20.94	21.42	21.56	21.74	20.90	20.15	18.52	18.56	17.96	18.58	19.32
15	20.44	21.03	21.46	21.60	21.75	20.77	19.79	18.55	18.60	17.95	18.73	19.44
20	20.55	21.10	21.53	21.61	21.62	20.64	19.21	18.57	18.47	18.06	18.84	19.55
25	20.66	21.18	21.57	21.64	21.43	20.52	18.84	18.59	18.25	18.20	18.95	19.64
EOM	20.76	21.29	21.63	21.67	21.30	20.38	18.65	18.52	18.05	18.33	19.10	19.68

WTR YR 2000 LOW 21.75 FEB 15



BARTHOLOMEW COUNTY

391035085560401. Local number, BA 9.
LOCATION.--Lat 39°10'35", long 85°56'04", in SW$^1/_4$NE$^1/_4$SW$^1/_4$ sec.35, T.9 N., R.5 E., Bartholomew County, Hydrologic Unit 05120206, at the Bartholomew County Home on the 4-H Fairgrounds, 3.0 mi south of Columbus.
Owner: City of Columbus.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 115 ft, cased to 106 ft, screened to 111 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 621.58 ft above sea level. Measuring point: Top of floor of shelter, 1.65 ft above land-surface datum.

REMARKS.--Water level affected by pumpage from municipal supply well field.

PERIOD OF RECORD.--April 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.75 ft below land-surface datum, Apr. 27-30, 1973; lowest, 42.01 ft below land-surface datum, Nov. 14, 1992.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

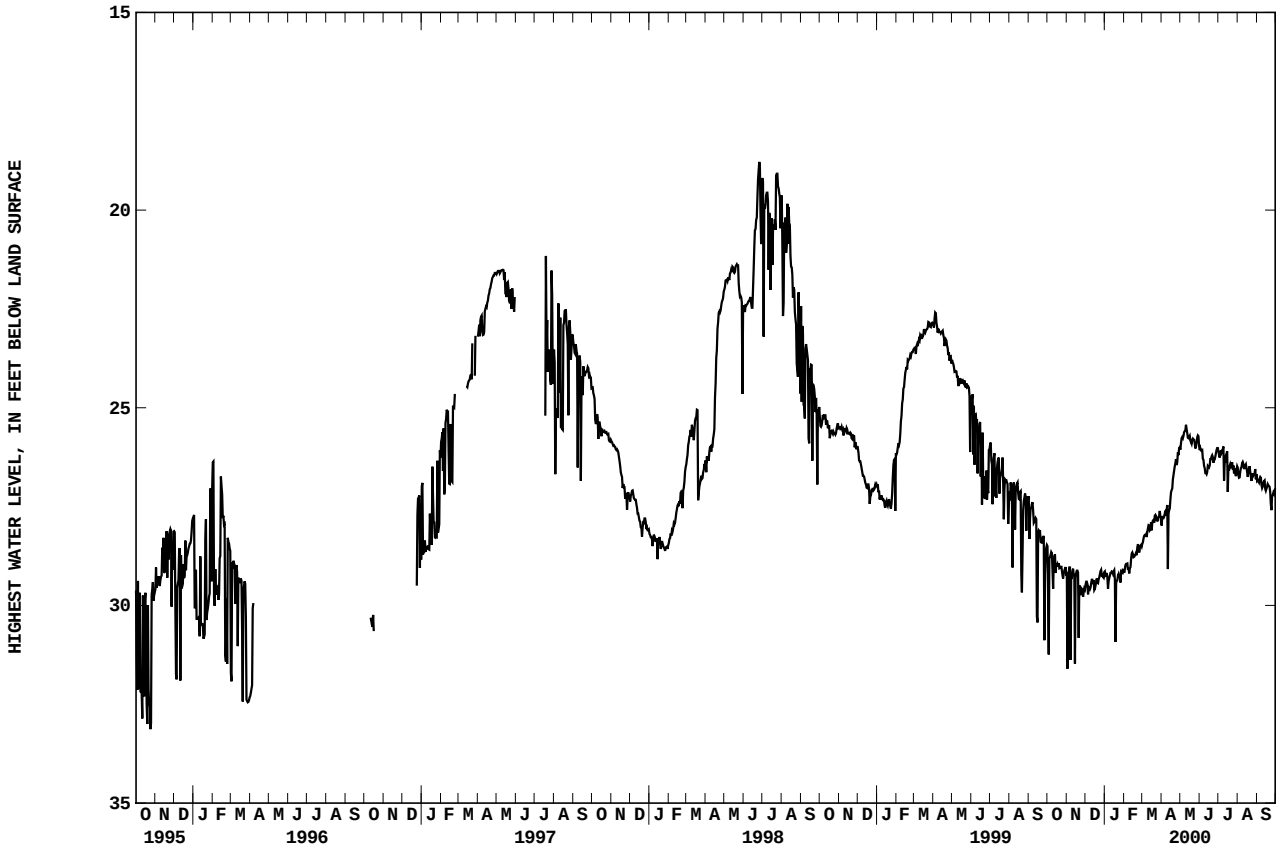
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	28.78	29.04	29.72	29.30	28.95	28.22	27.76	25.77	26.07	26.08	26.61	26.79
10	29.58	29.12	29.44	29.18	29.06	28.05	27.46	25.43	26.65	26.84	26.42	26.99
15	28.94	29.31	29.61	29.14	28.71	27.90	27.32	25.74	26.49	26.10	26.53	27.10
20	29.06	30.82	29.43	29.38	28.67	27.91	26.70	25.81	26.23	26.42	26.48	26.98
25	29.23	29.58	29.13	29.28	28.66	27.80	26.45	26.03	26.31	26.46	26.66	27.25
EOM	29.21	29.60	29.16	29.08	28.51	27.78	26.00	25.97	26.02	26.48	26.68	27.04

WTR YR 2000 HIGH 25.43 MAY 10

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	31.34	31.36	31.63	30.95	30.51	29.67	29.46	27.45	27.76	27.68	27.64	28.24
10	31.49	31.39	31.51	30.86	30.54	29.44	29.08	27.12	28.16	27.84	27.38	28.52
15	31.46	31.57	31.43	30.71	30.25	29.33	29.09	26.76	28.05	27.68	27.47	28.56
20	31.56	31.41	31.25	31.06	30.08	29.50	28.32	26.83	27.83	28.02	27.49	28.44
25	31.70	31.60	30.97	30.85	30.05	29.58	28.01	27.58	27.83	27.42	28.25	28.78
EOM	31.77	31.55	31.02	30.57	29.94	29.51	27.71	27.46	27.63	27.42	28.21	28.42

WTR YR 2000 LOW 31.86 NOV 3



390317085523701. Local number, BA 10.
LOCATION.--Lat 39°03'17", long 85°52'08", in NE$^1/_4$NW$^1/_4$NW$^1/_4$ sec.l6, T.17 N., R.6 E., Bartholomew County, Hydrologic Unit 05120206, 0.8 mi east of State Highway 11 and 1.0 mi southeast of Jonesville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 85 ft, cased to 80 ft, screened to 85 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 580 ft above sea level, from topographic map. Measuring point: Top of floor of shelter, 3.50 ft above land-surface datum.

REMARKS.--Hourly record indicates water level is affected by domestic pumpage. Not significant in monthly-annual report.

PERIOD OF RECORD.--October 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.66 ft below land-surface datum, Nov. 17, 1993; lowest, 12.65 ft below land-surface datum, Oct. 29, Nov. 2, 1988.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

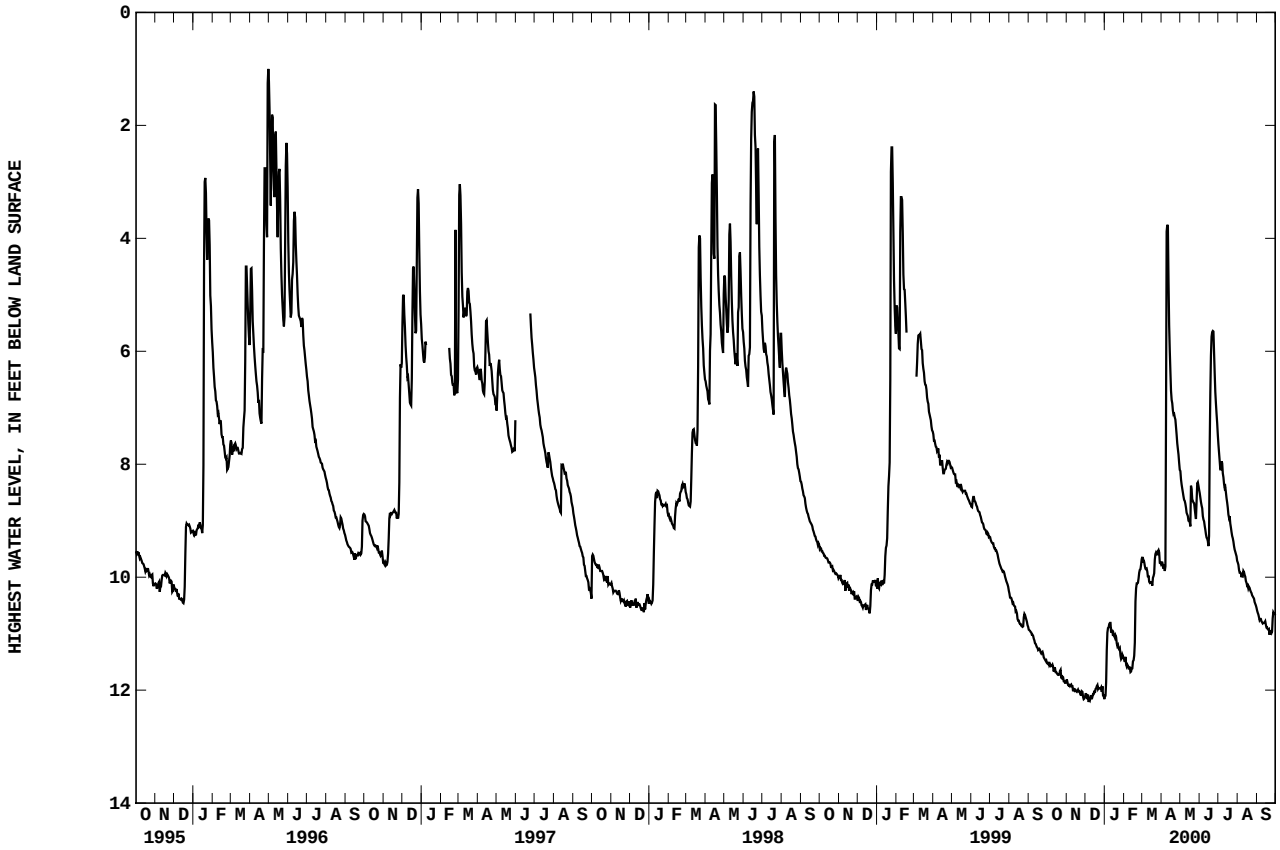
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.54	11.91	12.08	10.98	11.58	9.80	9.78	8.50	8.78	8.09	9.92	10.76
10	11.59	11.93	12.09	10.81	11.60	10.00	3.76	8.77	9.16	8.35	9.89	10.82
15	11.68	12.00	12.01	11.00	11.49	10.09	6.36	9.01	9.45	8.68	10.10	10.84
20	11.72	12.02	11.91	11.17	10.20	9.93	7.12	8.62	5.74	9.05	10.19	10.92
25	11.76	12.02	11.97	11.26	9.92	9.61	7.48	8.89	6.39	9.37	10.34	10.96
EOM	11.86	12.13	12.16	11.44	9.68	9.77	8.10	8.45	7.48	9.71	10.54	10.67

WTR YR 2000 HIGH 3.76 APR 10

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.70	12.04	12.28	11.29	11.76	9.95	10.00	8.66	8.94	8.23	10.00	10.82
10	11.76	12.07	12.34	10.98	11.68	10.10	3.88	8.94	9.27	8.48	10.09	10.95
15	11.74	12.10	12.14	11.08	11.69	10.23	6.73	9.13	9.58	8.81	10.23	10.96
20	11.85	12.16	12.17	11.38	10.47	10.09	7.21	8.72	6.08	9.14	10.25	11.06
25	11.92	12.22	12.18	11.39	10.04	9.69	7.63	9.00	6.73	9.48	10.48	11.11
EOM	11.96	12.22	12.22	11.55	9.78	9.88	8.21	8.59	7.68	9.87	10.65	10.76

WTR YR 2000 LOW 12.34 DEC 10



BARTHOLOMEW COUNTY

390658085572201. Local number, BA 13.
LOCATION.--Lat 39°06'58", long 85°57'22", in SW$^1/_4$NW$^1/_4$SE$^1/_4$ sec.22, T.8 N., R.5 E., Bartholomew County, Hydrologic Unit 05120206, at the end of farm access road, 0.3 mi north of County Road 600 South at its intersection with Interstate 65. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 55.6 ft, cased to 50.6 ft, screened to 55.6 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 633.91 ft above sea level. Measuring point: Top of floor of shelter, 3.40 ft above land-surface datum.

PERIOD OF RECORD.--July 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 19.26 ft below land-surface datum, Apr. 30, 1997; lowest, 24.17 ft below land-surface datum, Feb. 16, 1989.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

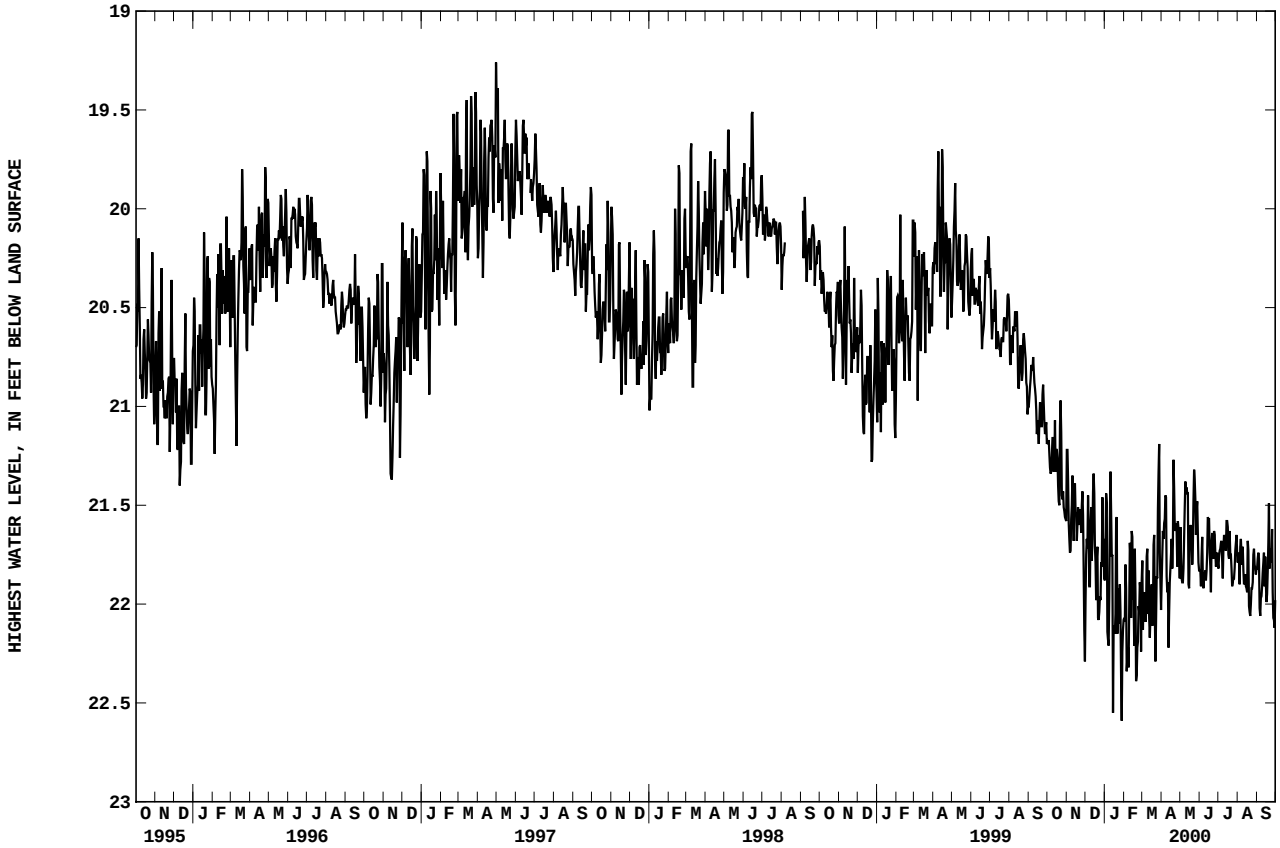
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.31	21.67	21.45	22.14	22.34	21.99	21.59	21.89	21.66	21.69	21.71	22.02
10	21.16	21.35	21.51	21.33	21.69	22.05	21.94	21.44	21.83	21.65	21.83	21.84
15	21.22	21.54	21.44	22.12	21.97	21.96	21.82	21.92	21.57	21.58	21.92	21.89
20	21.50	21.60	21.71	21.56	22.39	21.65	21.27	21.80	21.69	21.75	22.04	21.49
25	21.47	21.50	21.98	21.90	22.04	21.87	21.63	21.47	21.65	21.87	21.89	21.62
EOM	21.58	22.29	21.87	22.08	21.88	22.03	21.87	21.83	21.79	21.74	21.82	21.98

WTR YR 2000 HIGH 20.97 OCT 22

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.47	21.77	21.72	22.34	22.46	22.09	21.96	21.98	21.86	21.75	21.95	22.13
10	21.33	21.51	22.06	21.57	22.01	22.17	22.05	21.73	21.93	21.74	21.92	21.97
15	21.34	21.69	21.71	22.55	22.34	22.08	21.89	22.03	21.67	21.64	22.01	21.99
20	21.58	21.69	22.07	22.18	22.48	22.04	21.72	21.87	21.96	21.83	22.11	21.82
25	21.63	21.88	22.37	22.10	22.18	21.99	21.81	21.69	21.81	21.93	21.99	21.94
EOM	21.70	22.40	22.05	22.17	22.26	22.16	22.05	21.92	21.88	21.83	21.88	22.12

WTR YR 2000 LOW 22.79 JAN 14



BENTON COUNTY

402851087213501. Local number, BE 4.
LOCATION.--Lat 40°28'51", long 87°21'35", in SE$^1/_4$NE$^1/_4$SE$^1/_4$ sec.31, T.24 N., R.8 W., Benton County, Hydrologic Unit 05120108, on north side of county road, 3.6 mi southeast of Boswell.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 310 ft, cased to 300 ft, screened to 305 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 710 ft above sea level, from topographic map. Measuring point: Top of floor of shelter, 2.19 ft above land-surface datum.

PERIOD OF RECORD.--November 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.57 ft below land-surface datum, May 4, 1993; lowest, 17.34 ft below land-surface datum, Mar. 17-18, 2000.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

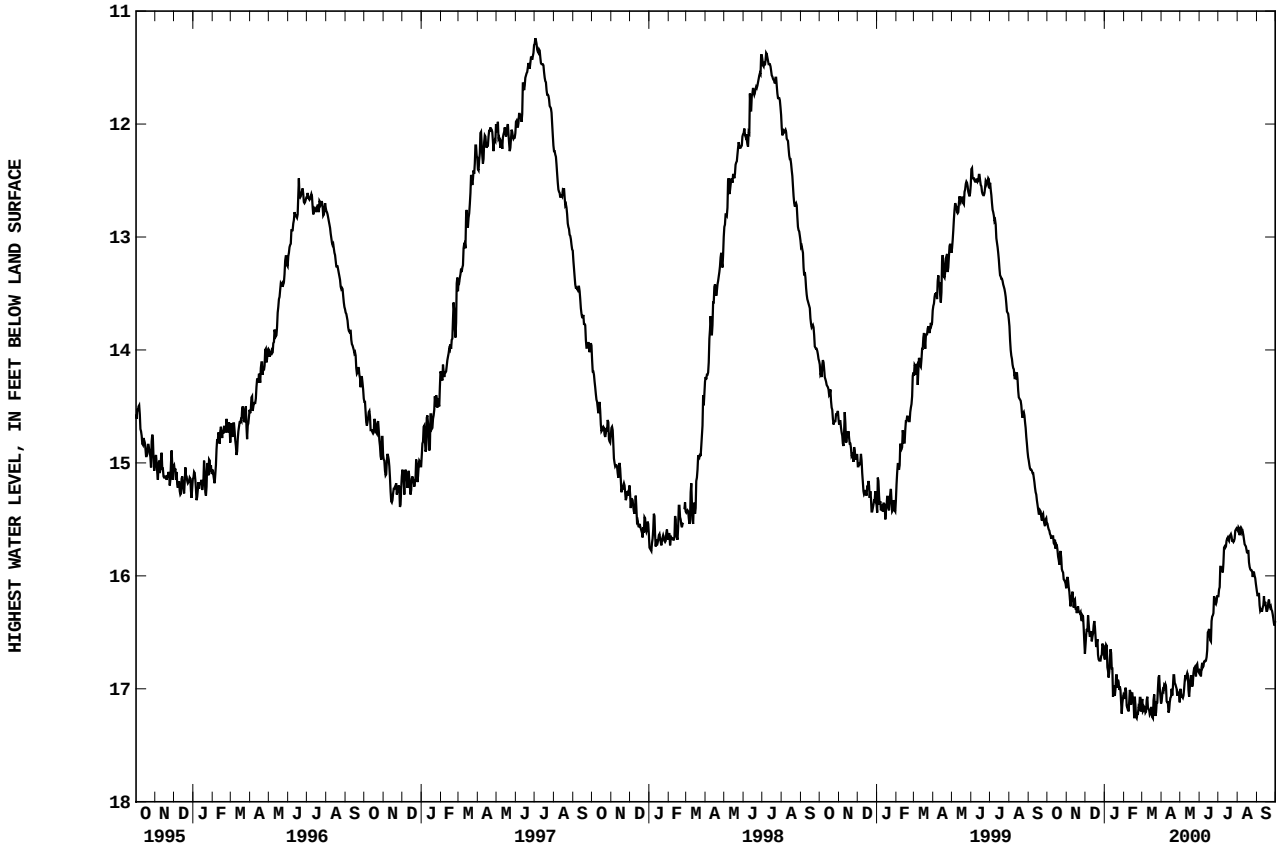
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.63	16.14	16.35	16.81	17.15	17.17	16.97	17.08	16.77	15.92	15.58	16.26
10	15.65	16.14	16.49	16.65	17.01	17.17	17.12	16.90	16.75	15.75	15.64	16.28
15	15.72	16.29	16.40	16.98	17.10	17.16	17.08	17.07	16.49	15.67	15.77	16.27
20	15.90	16.32	16.56	16.88	17.25	17.05	16.88	16.98	16.40	15.64	15.92	16.21
25	15.96	16.40	16.75	16.98	17.17	17.12	17.00	16.84	16.20	15.70	16.01	16.31
EOM	16.11	16.69	16.72	17.05	17.12	17.13	17.12	16.86	16.18	15.59	16.11	16.40

WTR YR 2000 HIGH 15.54 OCT 1

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.67	16.21	16.49	16.87	17.21	17.21	17.08	17.12	16.81	15.95	15.68	16.32
10	15.71	16.20	16.62	16.73	17.11	17.23	17.17	16.98	16.77	15.90	15.68	16.32
15	15.77	16.32	16.46	17.08	17.18	17.22	17.13	17.11	16.54	15.70	15.80	16.31
20	15.94	16.37	16.71	17.00	17.30	17.14	16.99	17.00	16.58	15.66	15.94	16.26
25	16.00	16.48	16.86	17.01	17.19	17.15	17.06	16.91	16.27	15.72	16.04	16.35
EOM	16.14	16.71	16.77	17.08	17.24	17.17	17.17	16.90	16.22	15.63	16.15	16.46

WTR YR 2000 LOW 17.34 MAR 17



BOONE COUNTY

400532086183901. Local number, BO 17.
LOCATION.--Lat 40°05'32", long 86°18'39", in SW$^1/_4$SE$^1/_4$NW$^1/_4$ sec.16, T.19 N., R.2 E., Boone County, Hydrologic Unit 05120201, 0.6 mi north along U.S. Highway 421 from the intersection of U.S. Highway 421 and County Road 300 North at Waugh on the west side of the highway at the residence of John Sheets.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 171.8 ft, cased to 166.8 ft, screened to 171.8 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 956.50 ft above sea level. Measuring point: Mark on top of casing, 3.50 ft above land-surface datum.

REMARKS.--Well may be affected by pumpage.

PERIOD OF RECORD.--July 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 45.87 ft below land-surface datum, July 11-13, 1986; lowest, 55.69 ft below land-surface datum, Oct. 3, 1999.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

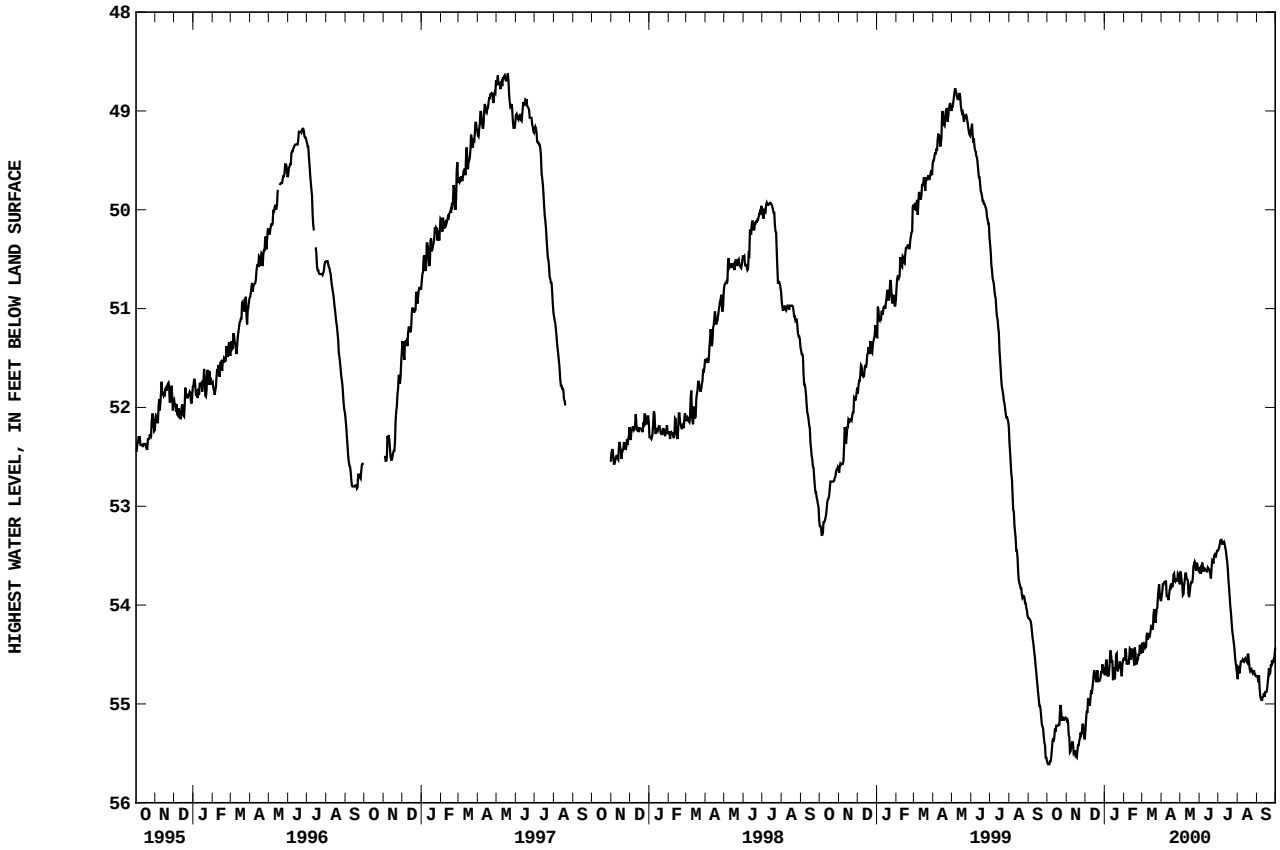
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	55.58	55.34	54.94	54.72	54.60	54.40	53.77	53.90	53.57	53.34	54.62	54.84
10	55.35	55.38	54.86	54.46	54.44	54.35	53.91	53.68	53.64	53.36	54.56	54.93
15	55.22	55.53	54.66	54.65	54.51	54.22	53.81	53.92	53.63	53.56	54.57	54.88
20	55.21	55.42	54.66	54.49	54.58	54.04	53.69	53.77	53.62	54.01	54.64	54.64
25	55.15	55.29	54.73	54.57	54.51	54.03	53.74	53.58	53.49	54.35	54.69	54.56
EOM	55.15	55.35	54.69	54.54	54.43	53.96	53.79	53.66	53.45	54.70	54.72	54.43

WTR YR 2000 HIGH 53.34 JUL 5

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	55.64	55.49	55.10	54.75	54.63	54.43	53.86	53.94	53.65	53.36	54.69	54.92
10	55.38	55.42	54.95	54.55	54.53	54.37	53.95	53.81	53.66	53.40	54.60	55.00
15	55.28	55.55	54.72	54.76	54.58	54.29	53.86	53.95	53.68	53.63	54.58	54.91
20	55.27	55.45	54.77	54.64	54.64	54.12	53.79	53.81	53.74	54.07	54.68	54.73
25	55.19	55.38	54.83	54.63	54.54	54.05	53.77	53.65	53.55	54.41	54.75	54.64
EOM	55.19	55.39	54.76	54.56	54.54	53.98	53.83	53.69	53.50	54.75	54.74	54.51

WTR YR 2000 LOW 55.69 OCT 3



CASS COUNTY

403407086175701. Local number, CS 3.
LOCATION.--Lat 40°34'07", long 86°17'57", in NE$^1/_4$NE$^1/_4$SE$^1/_4$ sec.33, T.25 N., R.2 E., Cass County, Hydrologic Unit 05120105, at intersection of State Highway 18 and County Road 400 East, 2.5 mi east of Young America.
Owner: U.S. Geological Survey.

AQUIFER.--Dolomitic limestone of Devonian-Silurian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 130 ft, cased to 78 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 781.74 ft above sea level. Measuring point: Top of floor of shelter, 2.65 ft above land-surface datum.

PERIOD OF RECORD.--August 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.85 ft below land-surface datum, Feb. 2, 1968; lowest, 13.56 ft below land-surface datum, Jan. 28, 2000.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

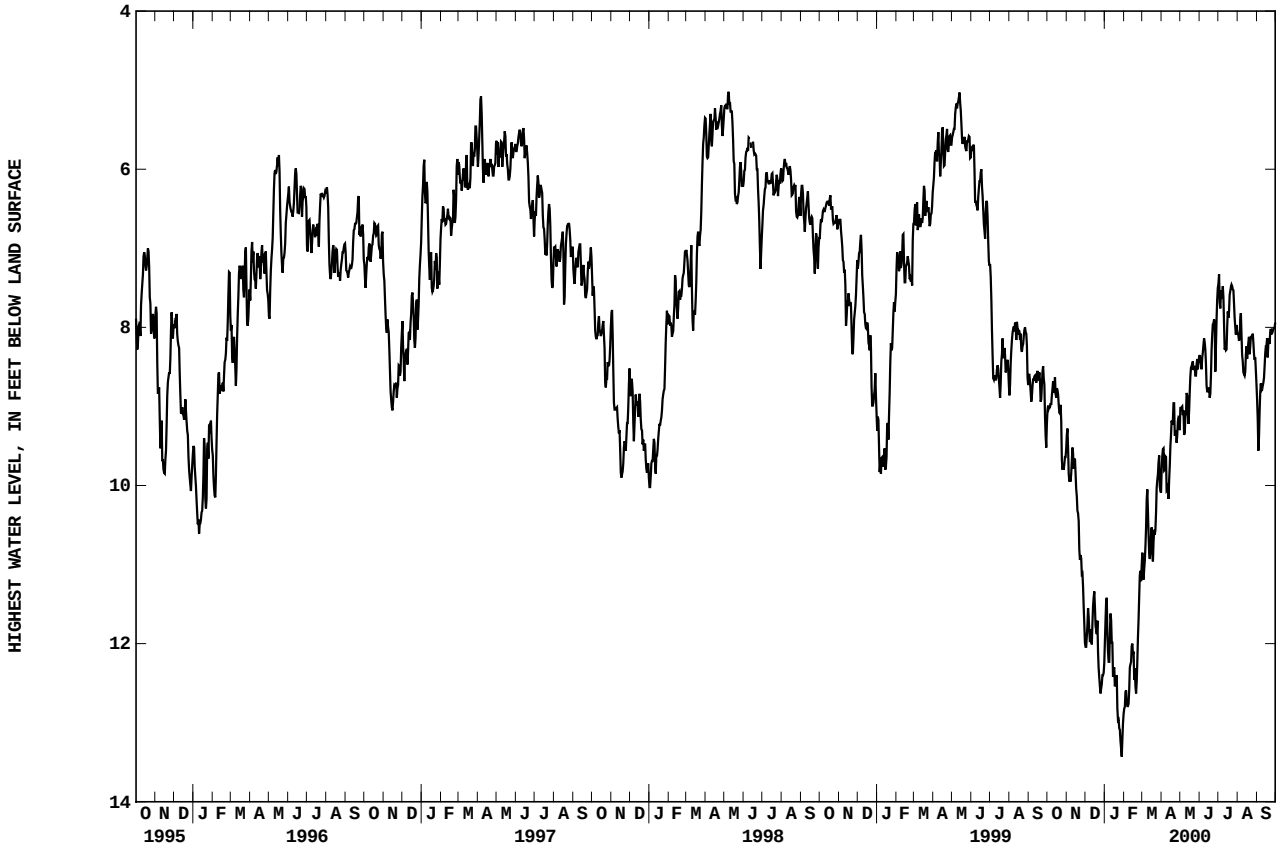
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.01	9.95	11.55	11.89	12.74	10.95	9.81	9.11	8.38	7.59	7.90	9.07
10	8.68	9.52	11.82	11.62	12.30	10.33	10.06	9.09	8.28	7.96	8.57	8.74
15	8.89	9.85	11.34	12.34	12.13	10.63	9.50	9.05	8.77	8.00	8.24	8.24
20	9.08	10.45	11.71	12.40	12.63	10.56	8.96	8.46	8.29	7.54	8.34	8.14
25	9.80	11.12	12.63	13.09	11.40	9.93	9.46	8.61	7.96	7.53	8.08	8.04
EOM	9.53	11.99	12.25	12.89	11.01	10.09	9.30	8.38	7.50	8.05	8.72	7.94

WTR YR 2000 HIGH 7.33 JUL 2

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.14	10.04	11.77	12.17	12.88	11.10	10.00	9.22	8.57	7.76	8.23	9.39
10	8.88	9.71	12.12	11.87	12.58	10.64	10.17	9.18	8.52	8.31	8.68	8.89
15	8.92	10.05	11.53	12.42	12.25	10.80	9.75	9.24	8.90	8.29	8.46	8.38
20	9.25	10.85	12.13	12.87	12.70	10.71	9.19	8.56	8.62	7.74	8.45	8.29
25	9.91	11.22	12.76	13.23	11.69	10.03	9.54	8.74	8.56	7.73	8.22	8.16
EOM	9.64	12.12	12.38	13.01	11.23	10.22	9.45	8.50	7.71	8.19	9.00	8.04

WTR YR 2000 LOW 13.56 JAN 28



CLAY COUNTY

392653087120501. Local number, CY 6.
LOCATION.--Lat 39°26'53", long 87°12'05", in SE$^1/_4$SE$^1/_4$SE$^1/_4$ sec.29, T.12 N., R.7 W., Clay County, Hydrologic Unit 05120111, 2.8 mi southwest of Staunton and 4.0 mi west of State Highway 59 just north of State Highway 42.
Owner: U.S. Geological Survey.

AQUIFER.--Sandstone of the Mansfield Formation, Pennsylvanian Period.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 400 ft, cased to 347 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 653.16 ft above sea level. Measuring point: Top of casing, 3.40 ft above land-surface datum.

REMARKS.--Well affected by pumpage.

PERIOD OF RECORD.--September 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 151.36 ft below land-surface datum, Jan. 19, 1988; lowest, 165.28 ft below land-surface datum, June 8, 1992.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

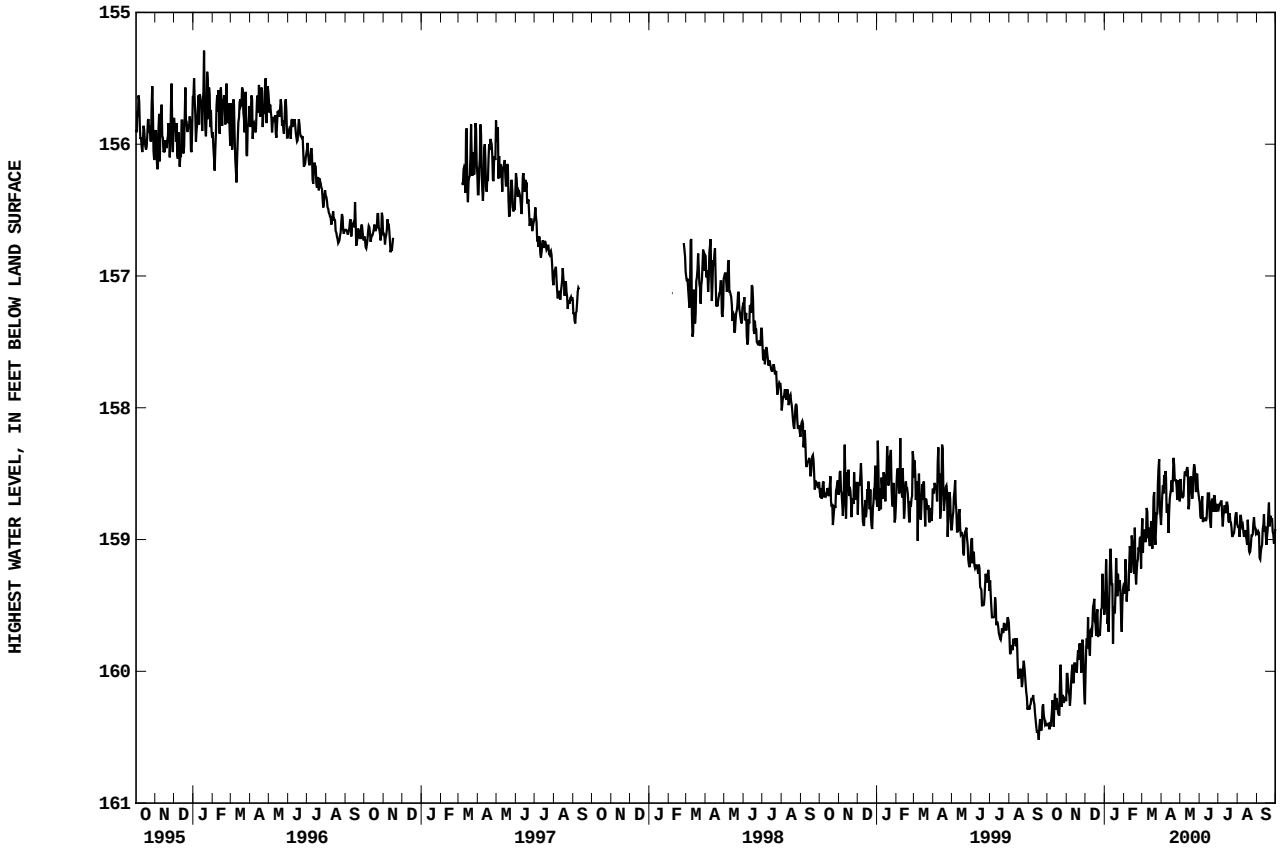
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	160.41	160.18	159.59	159.64	159.47	158.95	158.51	158.68	158.67	158.71	158.82	159.14
10	160.25	159.95	159.68	159.07	159.05	158.99	158.79	158.50	158.84	158.78	158.94	158.92
15	160.21	159.99	159.45	159.51	159.10	158.86	158.65	158.74	158.65	158.72	159.00	158.97
20	160.33	159.91	159.53	159.28	159.34	158.64	158.38	158.69	158.71	158.86	159.10	158.72
25	160.18	159.82	159.63	159.31	159.09	158.80	158.60	158.53	158.67	158.96	158.96	158.84
EOM	160.22	160.25	159.57	159.35	158.96	158.89	158.71	158.69	158.78	158.88	158.94	158.92

WTR YR 2000 HIGH 158.38 APR 20

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	160.62	160.35	159.88	159.78	159.63	159.12	158.88	158.87	158.91	158.85	159.08	159.26
10	160.43	160.14	159.97	159.22	159.21	159.15	158.87	158.71	158.93	158.90	159.10	159.13
15	160.36	160.15	159.62	159.79	159.41	159.03	158.79	158.94	158.86	158.89	159.18	159.11
20	160.47	160.05	159.94	159.64	159.48	158.98	158.57	158.87	158.91	158.97	159.20	158.91
25	160.43	160.20	160.01	159.42	159.16	158.94	158.73	158.72	158.84	159.09	159.21	159.05
EOM	160.36	160.37	159.65	159.47	159.24	159.02	158.89	158.89	159.01	159.09	159.08	159.14

WTR YR 2000 LOW 160.63 OCT 3



CLAY COUNTY

391124087134701. Local number, CY 7.
LOCATION.--Lat 39°11'24", long 87°13'47", in SW$^1/_4$NW$^1/_4$SE$^1/_4$ sec. 30, T.9N., R.7W., Clay County, Hydrologic Unit 05120111, 300 ft east of State Highway 159 just south of Coalmont and about 3.6 mi northwest of Jasonville.
Owner: U.S. Geological Survey.

AQUIFER.--Sandstone of Pennsylvanian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 121 ft, cased to 80 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 616.80 ft above sea level. Measuring point: Top of casing, 3.50 ft above land-surface datum.

PERIOD OF RECORD.--September 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 25.59 ft below land-surface datum, Sept. 4, 5, 1988; lowest, 33.05 ft below land-surface datum, Dec. 26, 1988.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

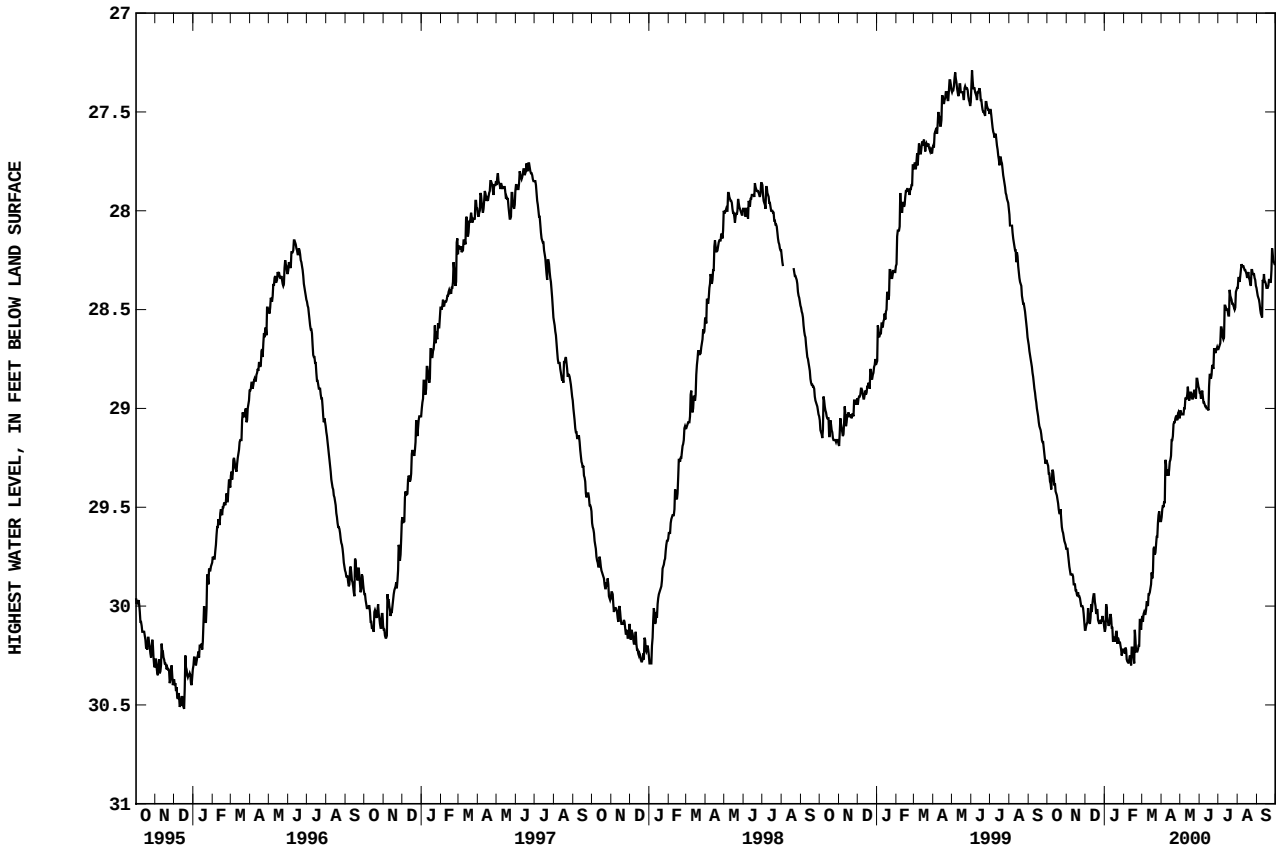
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	29.37	29.80	30.01	30.07	30.27	30.04	29.47	29.03	28.91	28.59	28.33	28.47
10	29.32	29.84	29.99	30.04	30.25	30.00	29.33	28.95	28.99	28.64	28.28	28.35
15	29.43	29.92	29.94	30.16	30.24	29.89	29.26	28.96	29.01	28.50	28.32	28.37
20	29.53	29.95	30.02	30.13	30.23	29.70	29.08	28.95	28.83	28.43	28.35	28.35
25	29.62	30.00	30.09	30.18	30.20	29.65	29.04	28.94	28.70	28.48	28.32	28.19
EOM	29.71	30.12	30.11	30.22	30.07	29.57	29.05	28.90	28.70	28.39	28.39	28.27

WTR YR 2000 HIGH 28.19 SEP 25

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	29.39	29.82	30.08	30.08	30.29	30.05	29.53	29.06	28.95	28.67	28.38	28.50
10	29.35	29.85	30.06	30.06	30.27	30.02	29.34	28.98	29.00	28.66	28.30	28.55
15	29.44	29.93	29.98	30.20	30.27	29.91	29.28	28.98	29.03	28.52	28.34	28.39
20	29.55	29.96	30.07	30.19	30.25	29.74	29.14	28.98	28.86	28.45	28.37	28.39
25	29.63	30.03	30.12	30.20	30.21	29.66	29.06	28.98	28.73	28.49	28.34	28.31
EOM	29.73	30.13	30.13	30.22	30.12	29.59	29.07	28.93	28.72	28.46	28.41	28.27

WTR YR 2000 LOW 30.32 FEB 16



DECATUR COUNTY

392022085371801. Local number, DC 2.
LOCATION.--Lat 39°20'22", long 85°37'18", in SE$^1/_4$NE$^1/_4$SW$^1/_4$ sec.3, T.10 N., R.8 E., Decatur County, Hydrologic Unit 05120206, at the intersection of County Roads 50 North and 750 West and 7.5 mi west of Greensburg.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Devonian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 49 ft, cased to 12.5 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 840.80 ft above sea level. Measuring point: Top of floor of shelter, 3.02 ft above land-surface datum.

PERIOD OF RECORD.--September 1966 to October 1971, September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.12 ft below land-surface datum, Dec. 30, 1991; lowest, 9.25 ft below land-surface datum, Feb. 9-11, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

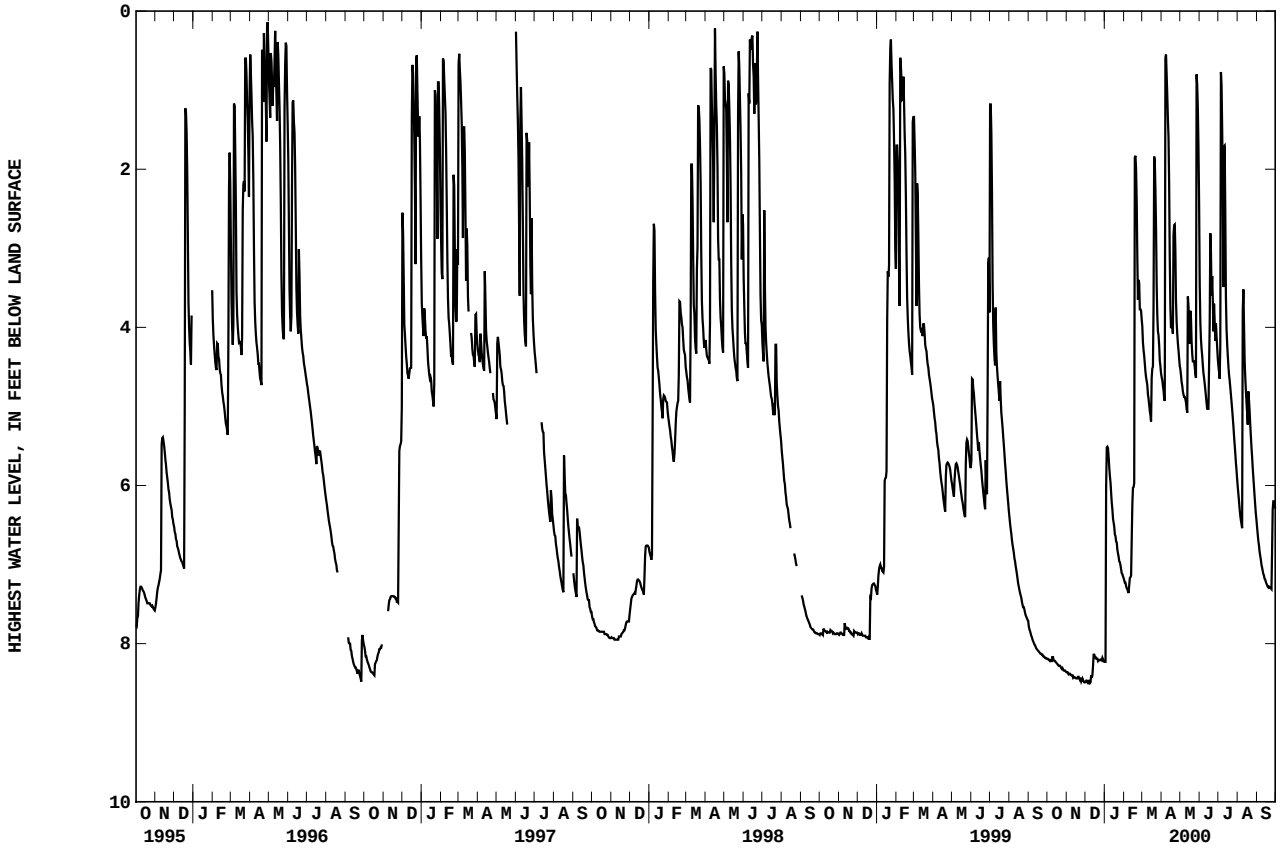
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.22	8.38	8.46	5.51	7.30	4.46	4.90	4.81	4.36	.77	6.38	6.84
10	8.18	8.40	8.40	5.96	7.17	4.85	1.07	4.95	4.79	1.71	3.52	7.08
15	8.24	8.43	8.14	6.47	6.03	5.19	3.75	4.03	5.03	4.21	4.95	7.22
20	8.28	8.42	8.19	6.72	2.00	1.84	2.83	4.34	3.60	4.76	5.06	7.28
25	8.31	8.46	8.20	6.97	3.44	3.85	3.93	4.59	3.93	5.25	5.78	6.83
EOM	8.36	8.49	8.23	7.17	3.90	4.58	4.49	2.41	4.40	5.92	6.44	6.29

WTR YR 2000 HIGH .55 APR 8

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.24	8.39	8.52	5.54	7.33	4.56	4.93	4.85	4.48	4.28	6.44	6.89
10	8.22	8.43	8.51	6.09	7.26	4.91	1.36	5.03	4.87	4.12	3.96	7.13
15	8.26	8.45	8.18	6.52	6.24	5.27	4.01	4.21	5.11	4.36	5.08	7.25
20	8.31	8.44	8.23	6.82	2.42	3.73	4.21	4.43	4.00	4.85	5.23	7.34
25	8.33	8.48	8.24	7.01	3.77	4.05	4.08	4.65	4.17	5.37	5.90	7.34
EOM	8.37	8.51	8.25	7.20	3.99	4.63	4.54	3.45	4.49	6.02	6.53	6.35

WTR YR 2000 LOW 8.52 DEC 5



DELAWARE COUNTY

400541085213701. Local number, DW 4.
LOCATION.--Lat 40°05'36", long 85°21'38", in NW$^1/_4$SE$^1/_4$SW$^1/_4$ sec.14, T.19 N., R.10 E., Delaware County, Hydrologic Unit 05120201, on property owned by Monroe Township Conservation Club, and 8.0 mi south of Muncie.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 91 ft, cased to 89 ft, screened to 91 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 1,005 ft above sea level, from topographic map. Measuring point: Top of floor of shelter, 2.88 ft above land-surface datum.

PERIOD OF RECORD.--October 1966 to October 1971, October 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 42.21 ft below land-surface datum, Dec. 30, 1990; lowest, 49.50 ft below land-surface datum, Oct. 13, 14, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

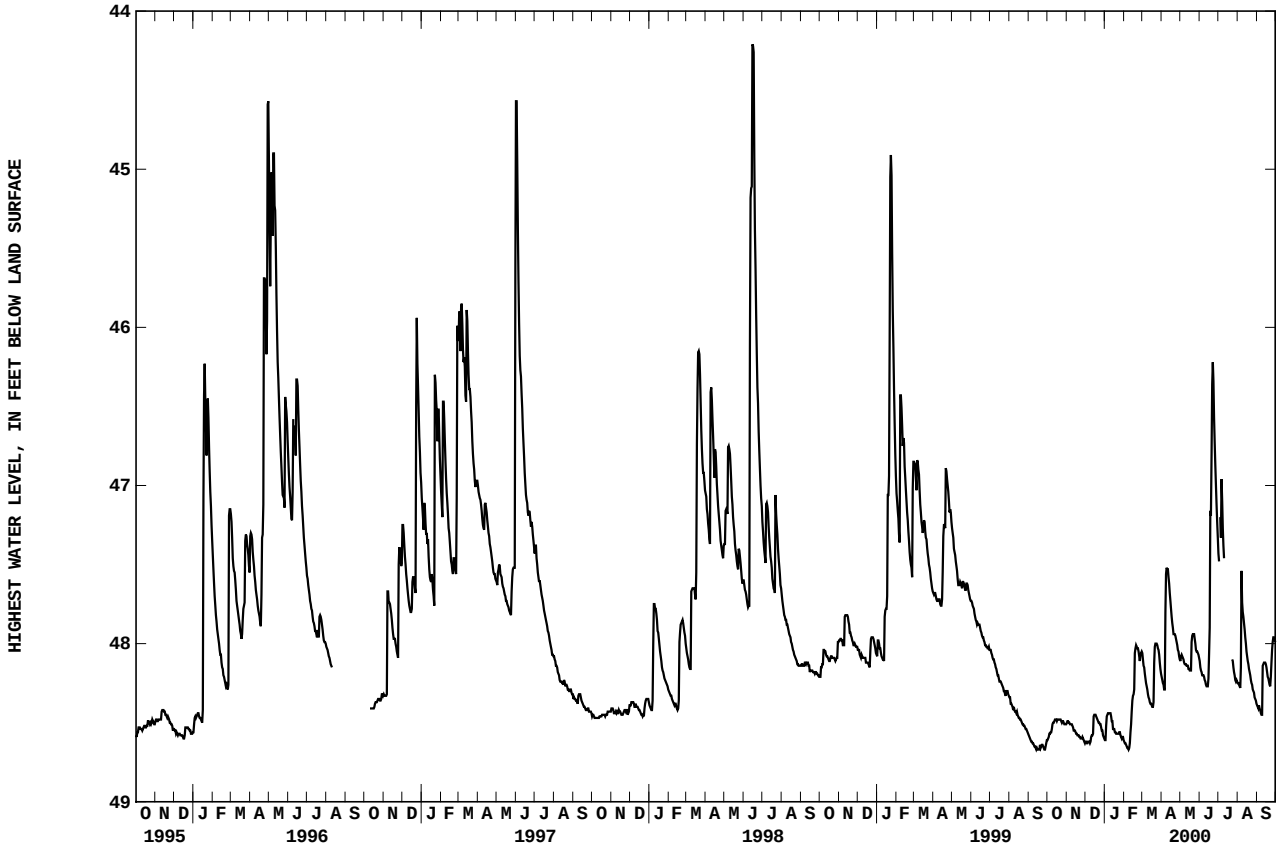
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	48.57	48.50	48.62	48.45	48.65	48.19	48.29	48.09	48.20	47.33	48.28	48.41
10	48.50	48.52	48.59	48.44	48.63	48.32	47.53	48.13	48.24	47.46	47.83	48.14
15	48.48	48.56	48.45	48.54	48.33	48.38	47.73	48.16	48.22	---	48.05	48.13
20	48.48	48.58	48.48	48.57	48.01	48.12	47.94	47.95	46.80	---	48.18	48.24
25	48.49	48.60	48.51	48.56	48.08	48.01	47.99	48.00	46.73	48.15	48.29	48.04
EOM	48.51	48.63	48.60	48.61	48.05	48.19	48.10	48.09	47.33	48.24	48.38	47.99

WTR YR 2000 HIGH 46.22 JUN 22

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	48.58	48.51	48.65	48.46	48.66	48.22	48.30	48.10	48.21	47.45	48.30	48.42
10	48.52	48.53	48.62	48.46	48.66	48.34	47.54	48.15	48.26	47.49	47.87	48.46
15	48.49	48.57	48.46	48.54	48.36	48.39	47.78	48.17	48.27	---	48.08	48.15
20	48.51	48.59	48.49	48.59	48.03	48.37	47.95	47.99	47.21	---	48.20	48.27
25	48.50	48.61	48.54	48.58	48.11	48.03	48.01	48.04	46.87	48.18	48.30	48.12
EOM	48.52	48.64	48.61	48.62	48.07	48.21	48.13	48.11	47.43	48.28	48.39	48.01

WTR YR 2000 LOW 48.67 FEB 7



ELKHART COUNTY

413121085481301. Local number, EH 4.
LOCATION.--Lat 41°31'21", long 85°48'13", in SW$^1/_4$SE$^1/_4$SW$^1/_4$ sec.35, T.36 N., R.6 E., Elkhart County, Hydrologic Unit 04050001, at the southwest corner of Goshen Municipal Airport.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 62 ft, cased to 58 ft, screened to 60 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 818 ft above sea level, from topographic map. Measuring point: Top of floor of shelter, 2.60 ft above land-surface datum.

PERIOD OF RECORD.--November 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.60 ft below land-surface datum, Apr. 14, 1985; lowest, 16.57 ft below land-surface datum, Sept. 9, 2000.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

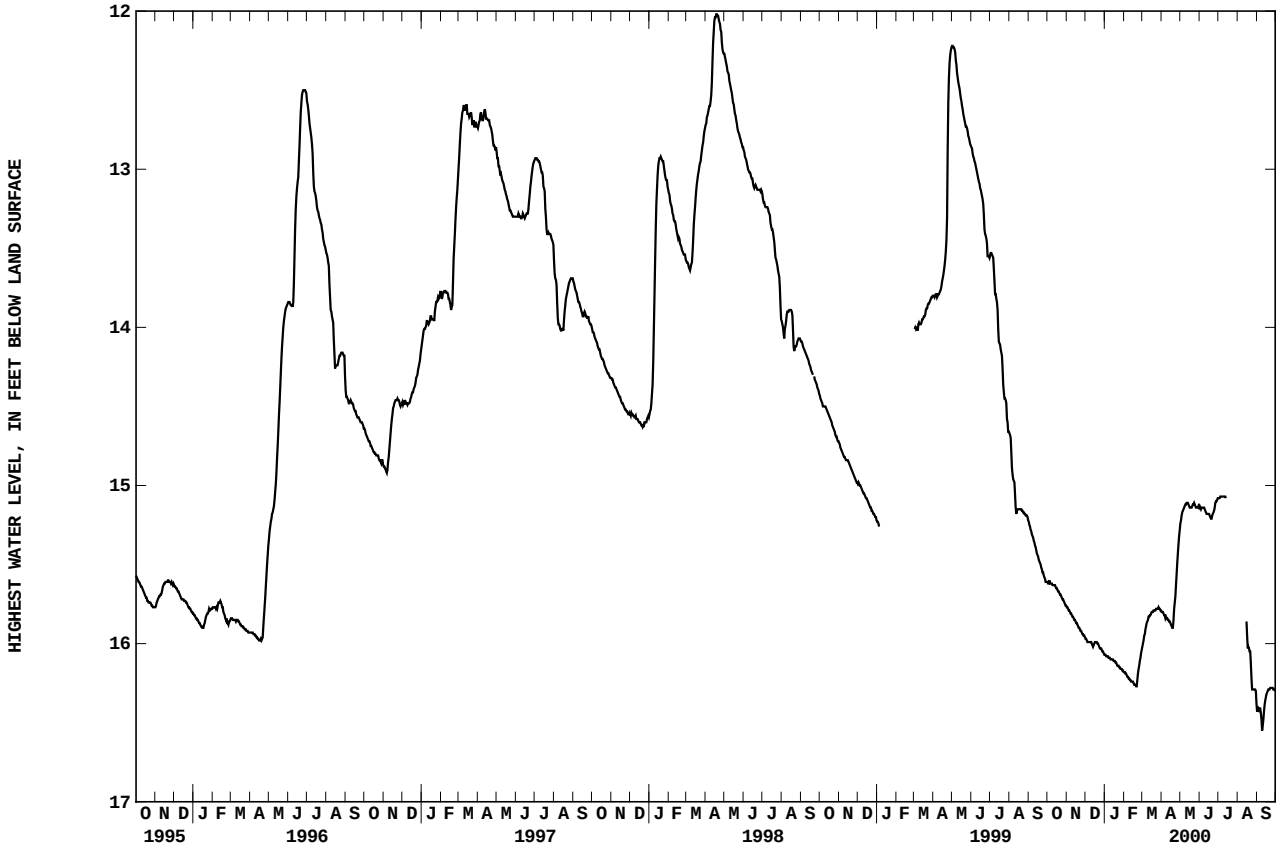
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.62	15.79	15.99	16.08	16.20	15.94	15.82	15.16	15.14	15.07	---	16.41
10	15.63	15.83	15.99	16.10	16.23	15.85	15.84	15.12	15.16	15.07	---	16.52
15	15.65	15.86	16.00	16.11	16.24	15.81	15.87	15.13	15.18	---	15.86	16.34
20	15.68	15.90	16.00	16.13	16.27	15.79	15.85	15.13	15.21	---	16.05	16.29
25	15.72	15.93	16.03	16.15	16.14	15.78	15.56	15.13	15.14	---	16.29	16.28
EOM	15.76	15.96	16.07	16.18	16.04	15.79	15.28	15.14	15.08	---	16.38	16.30

WTR YR 2000 HIGH 15.07 JUL 4

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.62	15.80	16.00	16.08	16.21	15.95	15.83	15.17	15.14	15.07	---	16.42
10	15.63	15.83	16.00	16.10	16.23	15.86	15.85	15.13	15.17	15.08	---	16.55
15	15.65	15.87	16.01	16.11	16.25	15.82	15.88	15.14	15.18	---	15.95	16.36
20	15.69	15.90	16.00	16.14	16.27	15.79	15.91	15.14	15.22	---	16.06	16.29
25	15.72	15.94	16.04	16.16	16.16	15.78	15.63	15.14	15.16	---	16.29	16.28
EOM	15.77	15.97	16.07	16.18	16.06	15.80	15.32	15.14	15.09	---	16.45	16.31

WTR YR 2000 LOW 16.57 SEP 9



ELKHART COUNTY

414514085505001. Local number, EH 7.
LOCATION.--Lat 41°45'14", long 85°50'50", in SW$^1/_4$SE$^1/_4$SW$^1/_4$ sec.9, T.38 N., R.6 E., Elkhart County, Hydrologic Unit 04050001, on north side of County Road 2, 200 ft east of County Road 21, and 2.7 mi northwest of Bristol.
Owner: U.S. Geological Survey.

AQUIFER.--Fine to medium sand of Pleistocene age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 61 ft, cased to 56 ft, screened to 61 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 781 ft above sea level, from topographic map. Measuring point: Top of floor of shelter, 3.70 ft above land-surface datum.

PERIOD OF RECORD.--June 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.50 ft below land-surface datum, Feb. 24, 1985; lowest, 12.73 ft below land-surface datum, Aug. 5, 6, 1988.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

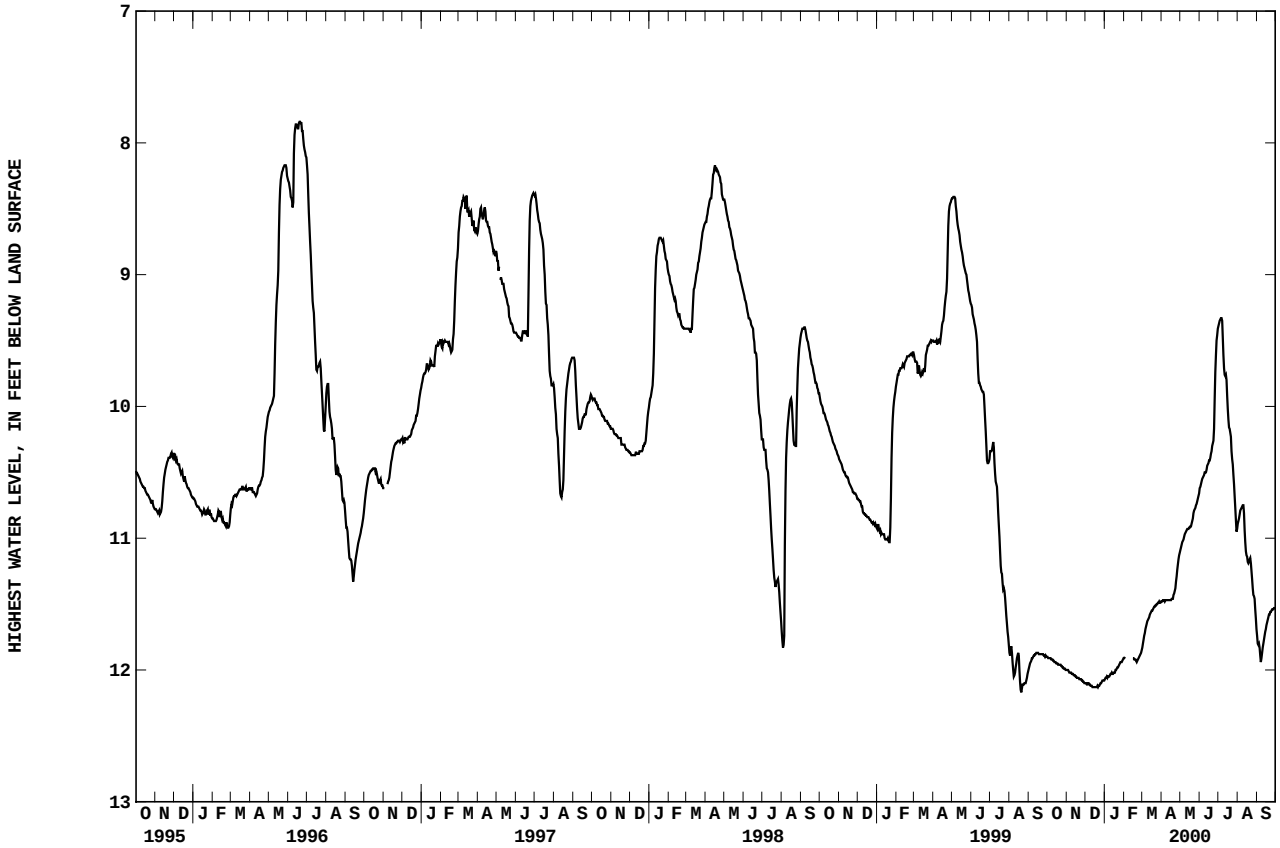
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.91	12.02	12.10	12.06	---	11.72	11.47	11.02	10.55	9.33	10.79	11.83
10	11.93	12.03	12.12	12.03	---	11.62	11.47	10.95	10.50	9.71	10.75	11.83
15	11.95	12.05	12.13	12.02	11.91	11.56	11.47	10.92	10.43	9.92	11.13	11.69
20	11.96	12.06	12.12	11.99	11.93	11.52	11.43	10.87	10.34	10.20	11.16	11.58
25	11.98	12.08	12.10	11.95	11.90	11.50	11.29	10.77	9.94	10.52	11.38	11.54
EOM	12.00	12.10	12.08	11.91	11.85	11.48	11.11	10.66	9.41	10.93	11.69	11.53

WTR YR 2000 HIGH 9.33 JUL 5

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.92	12.02	12.12	12.06	---	11.74	11.49	11.04	10.57	9.34	10.82	11.89
10	11.94	12.03	12.13	12.04	---	11.64	11.48	10.96	10.51	9.76	10.81	11.87
15	11.95	12.06	12.14	12.03	11.92	11.57	11.47	10.93	10.44	10.02	11.14	11.72
20	11.97	12.07	12.14	12.00	11.94	11.53	11.46	10.89	10.36	10.23	11.18	11.60
25	11.99	12.09	12.12	11.96	11.91	11.51	11.33	10.78	10.17	10.59	11.43	11.55
EOM	12.01	12.11	12.08	11.92	11.87	11.49	11.13	10.68	9.46	10.97	11.74	11.54

WTR YR 2000 LOW 12.14 DEC 15



ELKHART COUNTY

414419085595801. Local number, EH 9.
LOCATION.--Lat 41°44'19", long 85°59'58",in NE$^1/_4$NW$^1/_4$NW$^1/_4$ sec.19, T.38 N., R.5 E., Elkhart County, Hydrologic Unit 04050001, on the west side of Iris Avenue, about 6 mi northwest of Elkhart.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in, depth 33.8 ft, cased to 28.8 ft with 5 ft stainless steel screen.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 785.27 ft above sea level. Measuring point: Top of casing, 2.80 ft above land-surface datum.

PERIOD OF RECORD.--July 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.09 ft below land-surface datum, Jan. 16, 1991; lowest, 22.94 ft below land-surface datum, Apr. 19, 2000.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

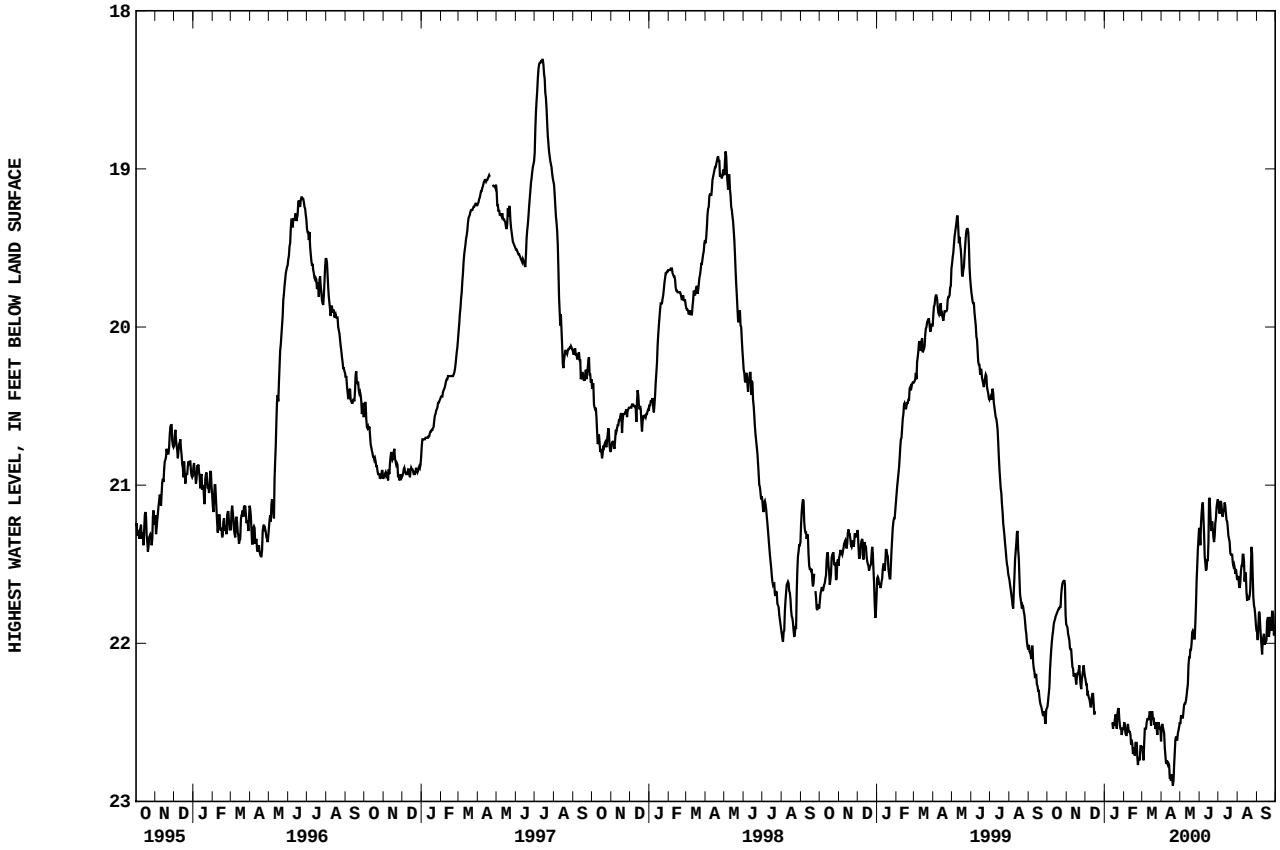
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	22.17	21.98	22.32	---	22.58	22.54	22.57	22.47	21.13	21.10	21.62	21.81
10	21.92	22.15	22.40	---	22.56	22.48	22.76	22.36	21.49	21.16	21.44	21.98
15	21.82	22.22	22.45	22.50	22.70	22.52	22.85	22.09	21.36	21.23	21.68	21.99
20	21.78	22.17	---	22.54	22.63	22.51	22.87	21.93	21.29	21.43	21.70	21.96
25	21.62	22.23	---	22.52	22.73	22.58	22.61	21.87	21.32	21.51	21.58	21.80
EOM	21.88	22.21	---	22.54	22.66	22.62	22.50	21.27	21.09	21.60	21.92	21.89

WTR YR 2000 HIGH 21.08 JUN 17

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	22.28	22.03	22.36	---	22.61	22.66	22.71	22.49	21.18	21.13	21.68	21.91
10	21.95	22.19	22.45	---	22.60	22.56	22.81	22.39	21.54	21.17	21.48	22.11
15	21.83	22.26	22.47	22.56	22.73	22.55	22.93	22.14	21.54	21.27	21.73	22.02
20	21.78	22.20	---	22.57	22.70	22.55	22.93	22.00	21.30	21.48	21.74	22.05
25	21.65	22.29	---	22.54	22.84	22.60	22.65	22.01	21.36	21.54	21.71	21.92
EOM	21.90	22.26	---	22.59	22.70	22.67	22.56	21.34	21.13	21.62	21.96	21.96

WTR YR 2000 LOW 22.94 APR 19



FOUNTAIN COUNTY

401200087121701. Local number, FO 3.
LOCATION.--Lat 40°12'00", long 87°12'17", in NW1/4NW1/4NW1/4 sec.10, T.20 N., R.7 W., Fountain County, Hydrologic Unit 05120108, on the southwest corner of the Union Church property on County Road 520 North, about 6.5 mi southeast of Attica. Owner: U.S. Geological Survey.

AQUIFER.--Shale and sandstone of the Mississippian Period.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 102 ft, cased to 22 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 670.99 ft above sea level. Measuring point: Top of casing, 3.60 ft above land-surface datum.

PERIOD OF RECORD.--July 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.02 ft below land-surface datum, Mar. 11, l990; lowest, 13.53 ft below land-surface datum, Dec. 21, 22, 25-27, 1988.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

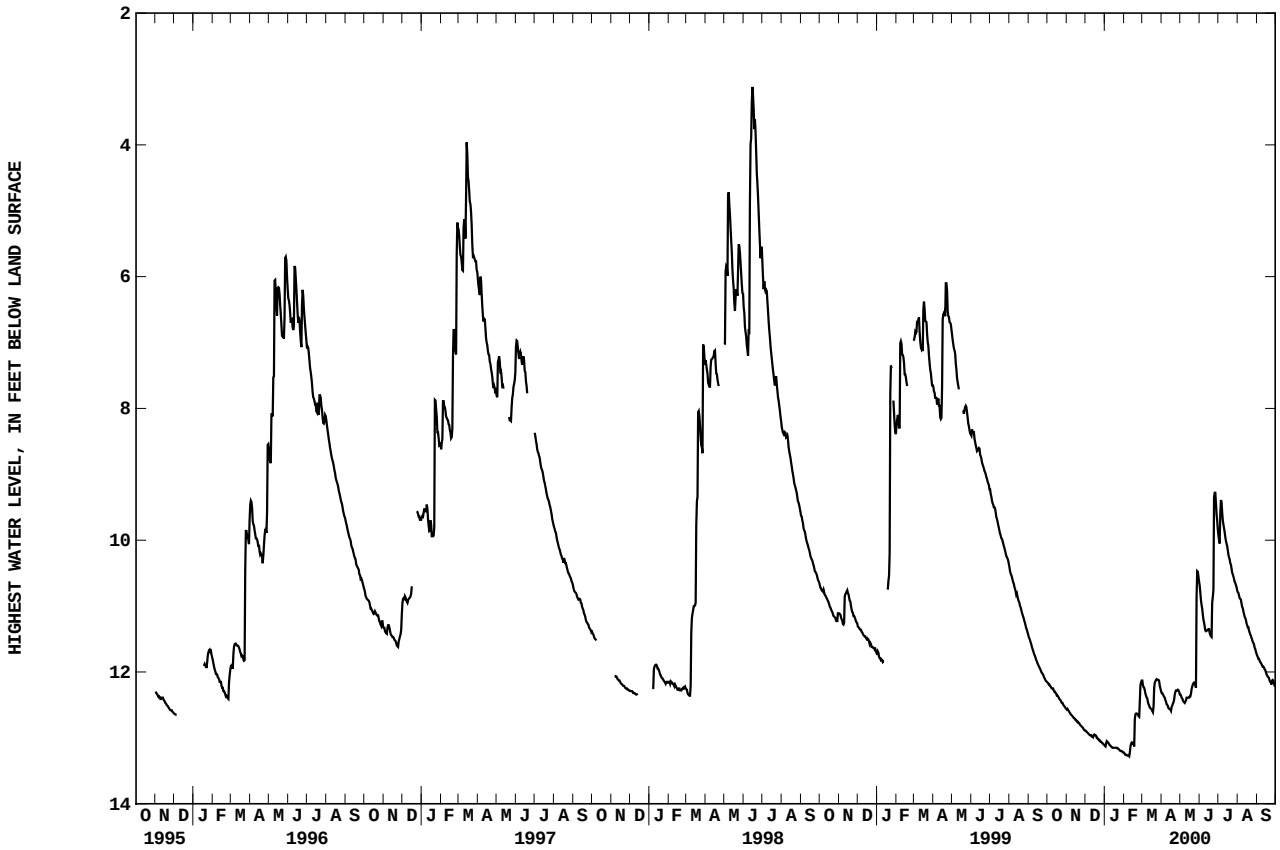
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.21	12.61	12.93	13.06	13.26	12.28	12.38	12.43	11.04	9.39	10.89	11.83
10	12.25	12.67	12.96	13.12	13.22	12.46	12.50	12.43	11.37	9.82	11.08	11.92
15	12.33	12.73	12.95	13.15	13.09	12.56	12.57	12.39	11.35	10.09	11.26	12.00
20	12.41	12.77	13.00	13.15	12.63	12.24	12.46	12.22	11.47	10.35	11.40	12.09
25	12.47	12.83	13.06	13.19	12.68	12.12	12.28	12.20	9.28	10.55	11.54	12.13
EOM	12.56	12.89	13.11	13.22	12.13	12.29	12.34	10.63	9.84	10.76	11.72	12.22

WTR YR 2000 HIGH 9.28 JUN 25

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.22	12.62	12.94	13.07	13.27	12.33	12.41	12.45	11.13	9.60	10.92	11.85
10	12.28	12.68	12.98	13.13	13.29	12.49	12.53	12.45	11.40	9.88	11.12	11.93
15	12.36	12.73	12.96	13.15	13.10	12.57	12.59	12.40	11.36	10.15	11.29	12.03
20	12.42	12.78	13.02	13.16	12.64	12.53	12.48	12.26	11.48	10.37	11.43	12.13
25	12.49	12.84	13.06	13.20	12.70	12.14	12.28	12.24	9.35	10.59	11.56	12.21
EOM	12.57	12.89	13.12	13.23	12.16	12.32	12.35	10.73	9.93	10.80	11.75	12.24

WTR YR 2000 LOW 13.29 FEB 9



FRANKLIN COUNTY

392416085004301. Local number, FR 5.
LOCATION.--Lat 39°24'16", long 85°00'43", in SE$^1/_4$NE$^1/_4$NW$^1/_4$ sec.32, T.9 N., R.2 W., Franklin County, Hydrologic Unit 05080003, adjacent to property of Franklin County Conservation Club, 1.0 mi south of Brookville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 61 ft, cased to 57 ft, screened to 59 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 621.79 ft above sea level. Measuring point: Top of floor of shelter, 2.70 ft above land-surface datum.

PERIOD OF RECORD.--March l968 to October l97l, September l974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, ll.95 ft below land-surface datum, May 24, l968; lowest, 27.32 ft below land-surface datum, Feb. l, l977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

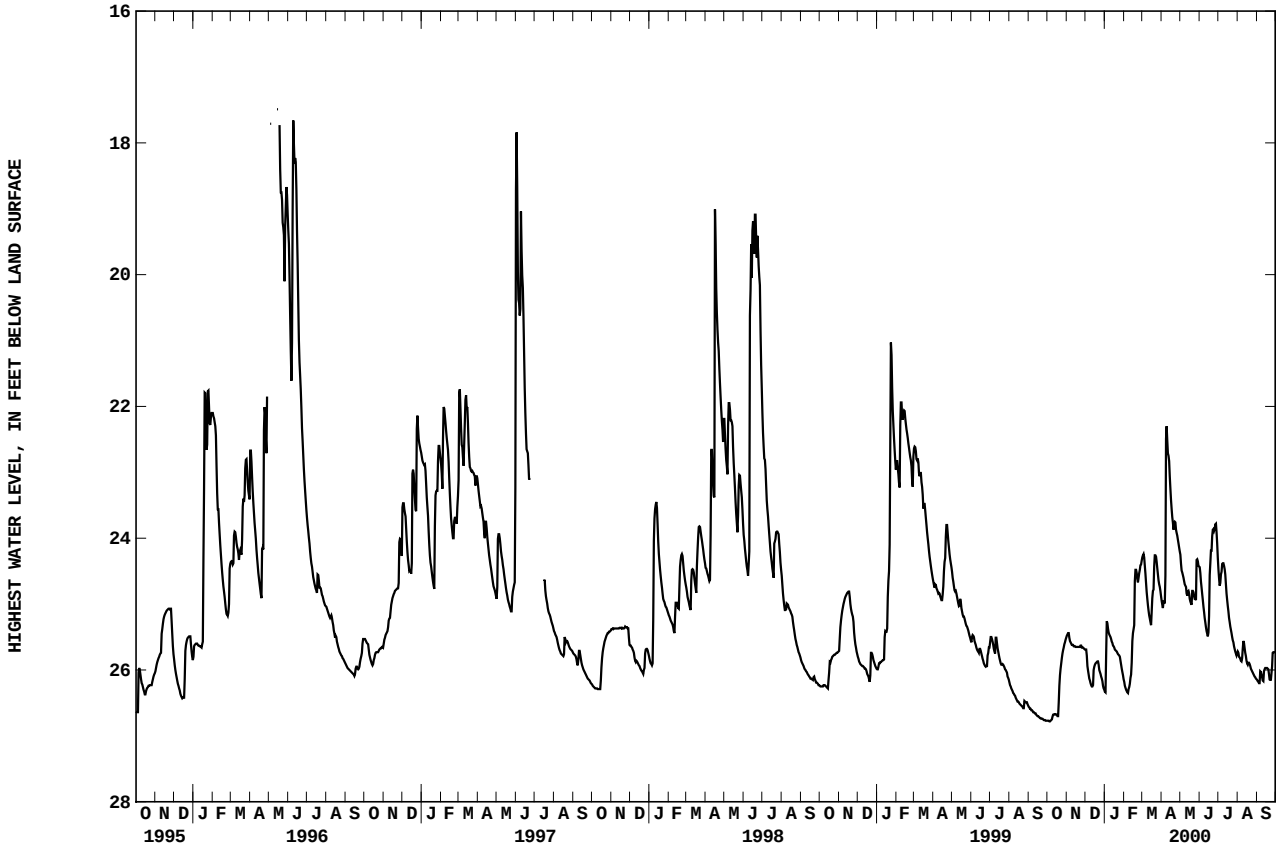
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.78	25.51	26.01	25.29	26.32	24.42	24.96	24.56	24.85	24.55	25.83	26.20
10	26.68	25.62	26.23	25.50	26.21	25.02	22.52	24.74	25.28	24.42	25.56	26.16
15	26.68	25.65	25.95	25.64	25.44	25.32	23.25	24.84	25.43	24.94	25.86	25.97
20	26.24	25.65	25.87	25.72	24.48	24.43	23.87	24.80	24.19	25.34	25.91	26.06
25	25.75	25.66	26.06	25.80	24.53	24.46	23.92	24.92	23.86	25.58	26.04	25.95
EOM	25.51	25.69	26.30	26.14	24.34	24.88	24.20	24.43	24.30	25.75	26.14	25.74

WTR YR 2000 HIGH 22.30 APR 9

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.78	25.56	26.07	25.37	26.34	24.54	24.99	24.60	24.94	24.68	25.86	26.21
10	26.71	25.62	26.25	25.53	26.26	25.10	22.71	24.84	25.35	24.47	25.68	26.18
15	26.68	25.65	26.00	25.66	25.56	25.35	23.42	24.92	25.53	25.03	25.90	25.97
20	26.50	25.66	25.88	25.74	24.53	24.82	23.93	25.03	24.23	25.39	25.94	26.14
25	25.82	25.66	26.10	25.86	24.60	24.55	23.96	24.94	23.96	25.64	26.06	26.05
EOM	25.54	25.69	26.33	26.18	24.44	24.95	24.25	24.44	24.47	25.80	26.15	25.74

WTR YR 2000 LOW 26.78 OCT 3



FULTON COUNTY

405829086175801. Local number, FU 7.
LOCATION.--Lat 40°58'29", long 86°17'58", in NW1/4NW1/4SW1/4 sec.10, T.29 N., R.2 E., Fulton County, Hydrologic Unit 05120106, 2.5 mi northwest of Fulton.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 102 ft, cased to 96 ft, screened to 102 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 776.45 ft above sea level. Measuring point: Top of floor of shelter, 2.50 ft above land-surface datum.

PERIOD OF RECORD.--August 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.35 ft below land-surface datum, Apr. 23-27, 1973; lowest, 13.21 ft below land-surface datum, Oct. 13, 1988.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

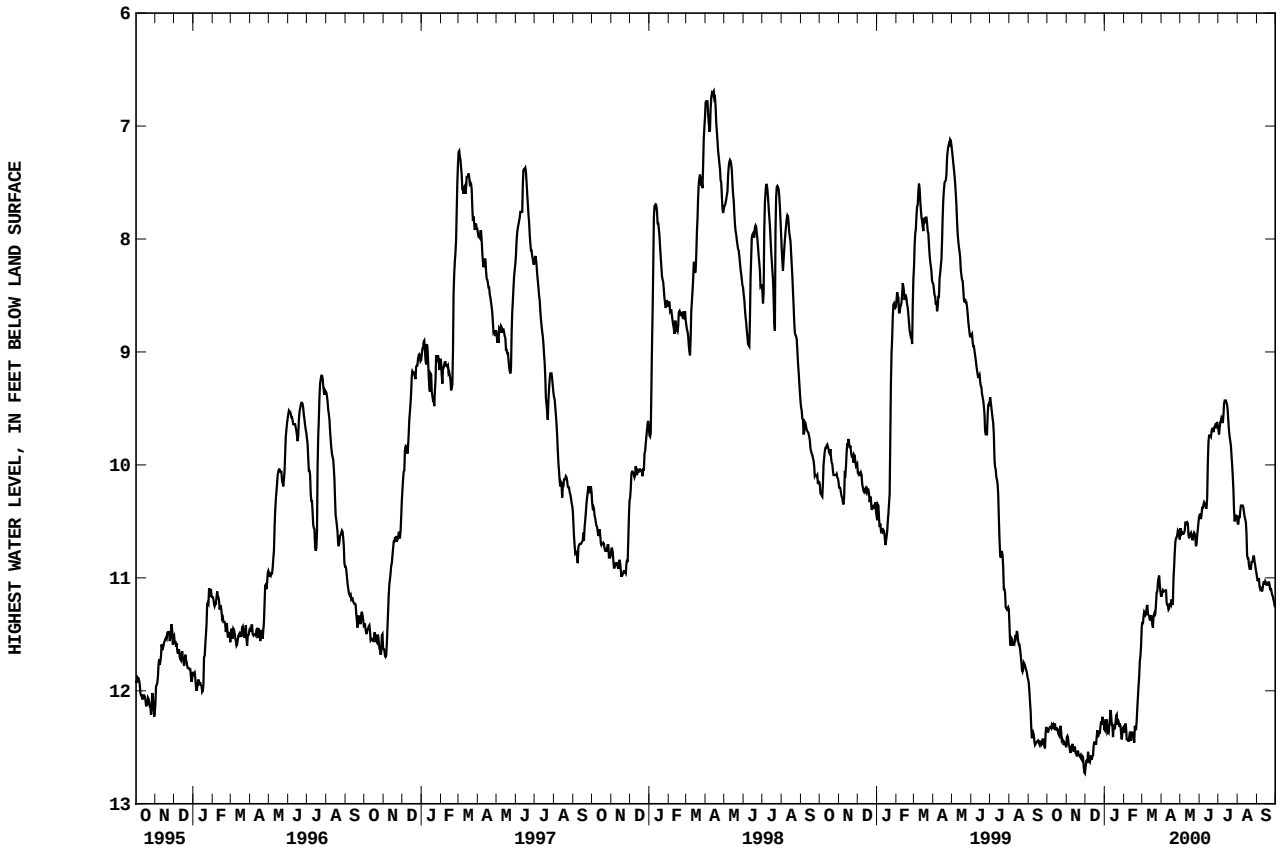
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.32	12.49	12.54	12.37	12.43	11.31	11.12	10.61	10.37	9.61	10.41	11.08
10	12.30	12.47	12.57	12.17	12.37	11.32	11.24	10.51	10.36	9.46	10.38	11.09
15	12.33	12.55	12.45	12.31	12.39	11.33	11.23	10.65	9.80	9.47	10.61	11.04
20	12.40	12.57	12.35	12.21	12.34	11.32	11.00	10.66	9.70	9.79	10.92	11.04
25	12.43	12.61	12.31	12.29	11.87	11.12	10.64	10.65	9.67	10.22	10.85	11.15
EOM	12.50	12.73	12.34	12.32	11.44	11.16	10.66	10.46	9.66	10.48	10.96	11.23

WTR YR 2000 HIGH 9.43 JUL 11

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.36	12.53	12.64	12.40	12.45	11.33	11.19	10.63	10.44	9.62	10.48	11.11
10	12.34	12.50	12.64	12.25	12.41	11.36	11.28	10.60	10.39	9.56	10.42	11.13
15	12.36	12.57	12.50	12.41	12.45	11.37	11.24	10.69	9.99	9.53	10.80	11.06
20	12.42	12.60	12.42	12.30	12.36	11.35	11.22	10.68	9.77	9.83	10.93	11.06
25	12.46	12.67	12.41	12.32	11.95	11.14	10.65	10.72	9.70	10.40	10.87	11.17
EOM	12.51	12.77	12.37	12.34	11.60	11.19	10.68	10.51	9.69	10.52	11.00	11.24

WTR YR 2000 LOW 12.77 NOV 30



GRANT COUNTY

402322085481901. Local number, GT 8.
LOCATION.--Lat 40°23'22", long 85°48'19", in NW1/4SW1/4NW1/4 sec.1, T.22 N., R.6 E., Grant County, Hydrologic Unit 05120107, located on County Road 700 West right-of-way, and 1.0 mi northwest of Rigdon.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Silurian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 35 ft, cased to 20 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 880 ft above sea level, from topographic map. Measuring point: Top of floor of shelter, 3.10 ft above land-surface datum.

PERIOD OF RECORD.--October 1966 to October 1971, July 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.16 ft below land-surface datum, Mar. 21, 1984; lowest, 11.01 ft below land-surface datum, Jan. 13, 14, 27, Feb. 5, 2000.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

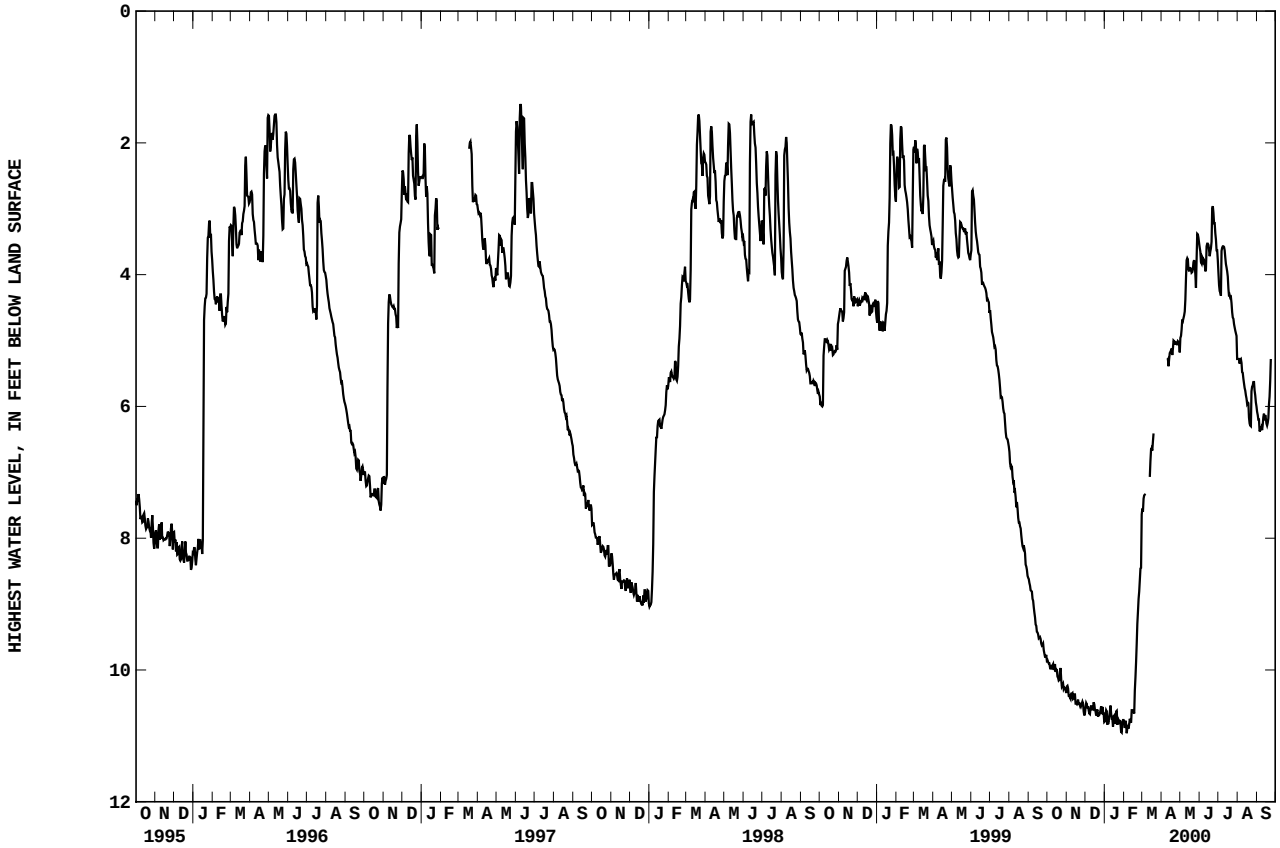
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.96	10.39	10.55	10.83	10.96	7.34	---	4.70	3.73	4.32	5.29	6.38
10	9.91	10.35	10.54	10.54	10.74	---	5.29	4.05	3.95	3.58	5.58	6.28
15	9.99	10.51	10.52	10.70	10.63	6.65	5.17	3.95	3.55	3.95	5.88	6.18
20	10.15	10.51	10.60	10.62	9.88	---	5.00	3.96	3.50	4.35	6.26	5.97
25	10.23	10.51	10.61	10.76	8.81	---	5.04	4.00	3.22	4.67	5.68	---
EOM	10.35	10.66	10.79	10.76	7.64	---	5.18	3.52	3.78	5.28	6.00	---

WTR YR 2000 HIGH 2.96 JUN 22

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.16	10.48	10.65	10.90	11.01	7.36	---	5.02	3.89	4.54	5.50	6.72
10	10.00	10.47	10.70	10.66	10.85	---	5.38	4.38	4.12	3.73	5.97	6.41
15	10.05	10.64	10.61	10.86	10.82	6.83	5.21	4.04	3.85	4.15	6.17	6.52
20	10.22	10.60	10.75	10.89	10.11	---	5.14	4.05	3.61	4.42	6.68	6.31
25	10.39	10.66	10.79	10.82	8.95	---	5.09	4.41	3.44	5.00	5.97	---
EOM	10.49	10.75	10.88	10.86	8.45	---	5.47	3.63	3.98	5.40	6.31	---

WTR YR 2000 LOW 11.01 JAN 13



GRANT COUNTY

403836085374401. Local number, GT 10.
LOCATION.--Lat 40°38'36", long 85°37'44", in NE$^1/_4$SE$^1/_4$SW$^1/_4$ sec.4, T.25 N., R.8 E., Grant County, Hydrologic Unit 05120103, 0.20 mi north of intersection of State Highway 9 and County Road 600 North on west side of road.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 198 ft, cased to 193 ft, screened to 198 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 912.16 ft above sea level. Measuring point: Top of shelf, 3.20 ft above land-surface datum.

REMARKS.--Well affected by pumpage from water-supply well field.

PERIOD OF RECORD.--August 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 107.39 ft below land-surface datum, Apr. 6, 1988; lowest, 124.24 ft below land-surface datum, Feb. 16 - 17, 2000.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

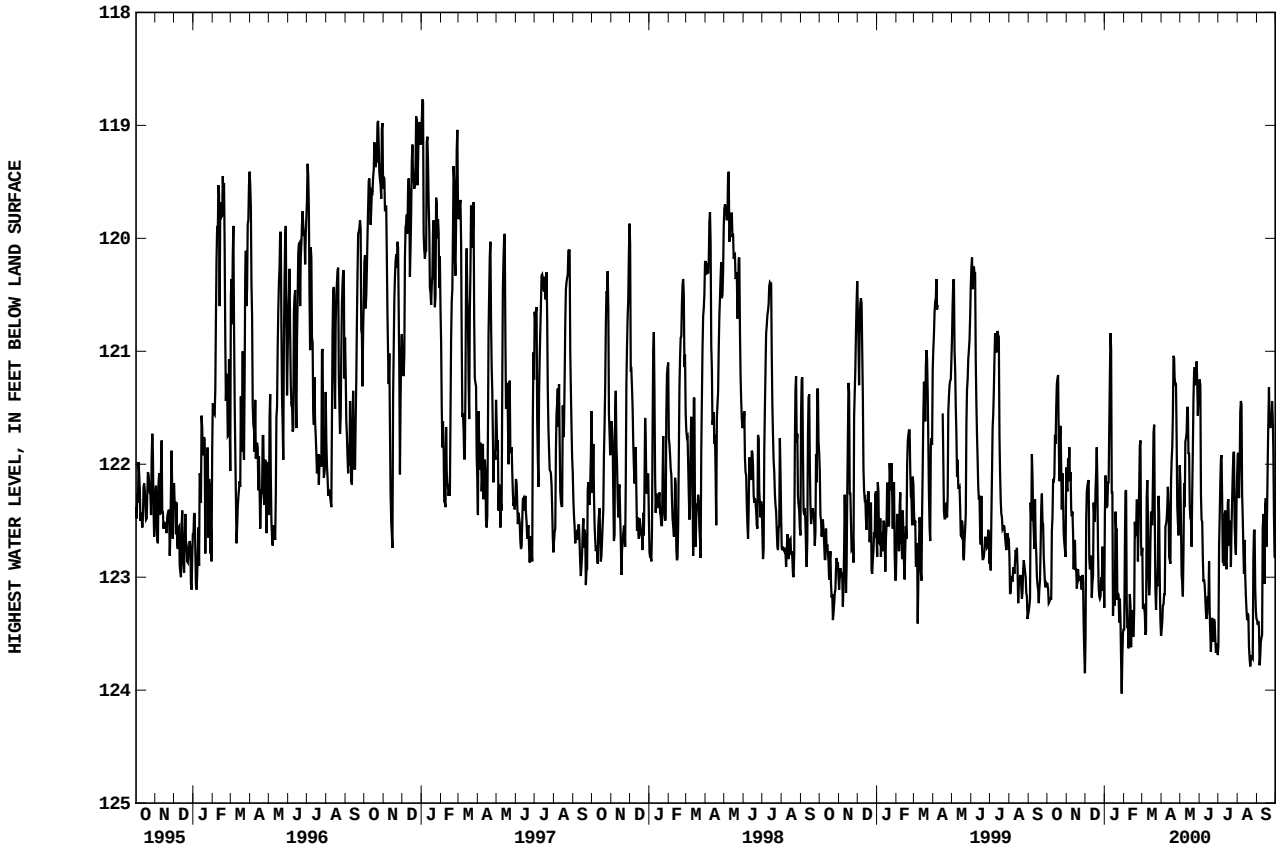
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	123.19	121.85	122.16	122.37	123.23	123.33	123.15	123.17	122.51	121.95	121.54	123.78
10	122.13	122.42	122.81	120.84	123.15	122.46	122.38	121.77	123.19	122.90	122.76	122.57
15	121.49	122.93	122.47	122.97	123.52	122.42	122.88	121.90	123.22	122.70	123.29	122.30
20	122.15	123.02	122.18	122.57	122.62	121.65	121.04	122.24	123.40	122.51	123.72	121.32
25	122.08	123.11	123.17	123.19	122.22	123.08	121.77	121.19	123.40	121.90	123.72	121.44
EOM	122.03	123.85	123.27	123.46	122.81	123.52	122.01	121.34	123.69	122.10	123.37	122.83

WTR YR 2000 HIGH 120.84 JAN 10

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	123.41	122.41	122.48	122.63	123.51	123.51	123.59	123.28	122.82	122.18	122.05	123.86
10	122.50	122.61	123.37	121.21	123.45	123.10	122.62	122.01	123.32	123.06	122.97	123.51
15	122.28	123.07	122.76	123.36	123.93	122.84	123.01	122.36	123.30	123.08	123.38	122.73
20	122.34	123.12	122.76	123.20	122.70	122.49	121.57	122.82	123.68	122.92	123.81	121.70
25	122.40	123.46	123.60	123.42	122.80	123.26	122.37	121.36	123.63	122.08	123.84	121.65
EOM	122.94	123.94	123.42	123.53	123.14	123.65	122.36	121.48	123.79	122.35	123.42	122.87

WTR YR 2000 LOW 124.24 FEB 16



HARRISON COUNTY

382323086044501. Local number, HR 8.
LOCATION.--Lat 38°23'23", long 86°04'45", in NW$^1/_4$NW$^1/_4$NE$^1/_4$ sec.33, T.1 S., R.4 E., Harrison County, Hydrologic Unit 05140104, on Harrison County right-of-way, 2.0 mi southeast of Palmyra.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Mississippian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 93 ft, cased to 54 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 827 ft above sea level, from topographic map. Measuring point: Top of floor of shelter, 3.10 ft above land-surface datum.

PERIOD OF RECORD.--November 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.56 ft below land-surface datum, June 7, l990, and Apr. 29, 1996; lowest, 20.29 ft below land-surface datum, Dec. 17, 1992.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

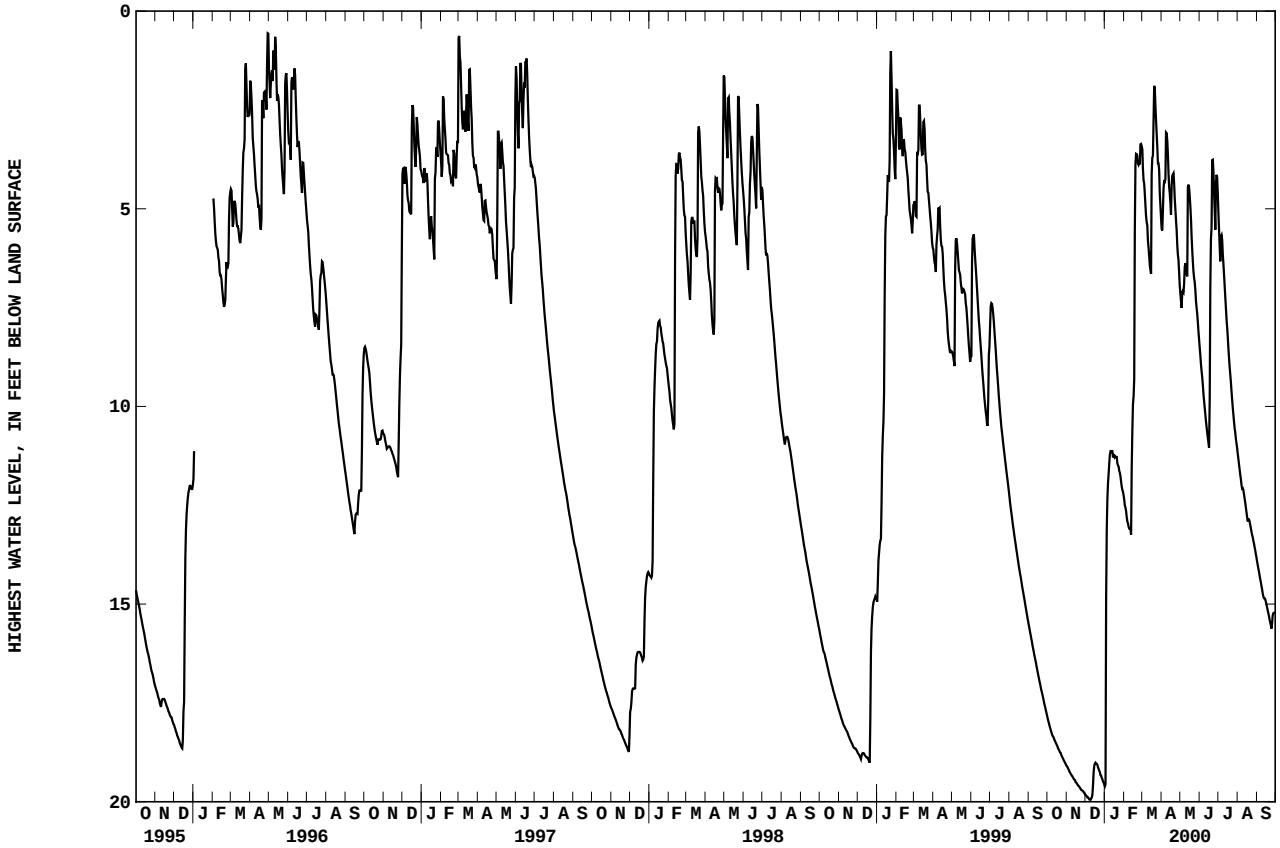
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.12	19.23	19.89	12.34	12.80	4.63	4.31	7.08	9.26	5.69	11.73	14.28
10	18.35	19.36	19.92	11.14	13.09	5.81	3.28	6.43	10.20	6.67	12.12	14.73
15	18.53	19.50	19.09	11.22	9.95	6.65	4.84	4.46	10.92	8.01	12.68	14.94
20	18.71	19.60	19.07	11.28	3.61	1.89	4.10	6.05	5.47	9.20	12.91	15.30
25	18.88	19.71	19.33	11.68	3.85	3.44	5.54	7.06	5.03	10.21	13.31	15.49
EOM	19.08	19.81	19.56	12.25	3.42	5.23	6.95	8.31	4.63	11.06	13.82	15.23

WTR YR 2000 HIGH 1.89 MAR 20

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.17	19.26	19.91	13.10	12.91	4.91	4.48	7.12	9.45	6.68	11.84	14.37
10	18.38	19.39	19.95	11.21	13.12	6.02	3.61	6.67	10.37	6.95	12.22	14.81
15	18.57	19.51	19.24	11.29	10.61	6.80	5.15	4.69	11.04	8.25	12.80	15.01
20	18.75	19.62	19.13	11.44	3.86	2.78	4.36	6.34	5.77	9.39	13.00	15.39
25	18.91	19.73	19.34	11.77	3.92	3.85	5.91	7.33	5.53	10.39	13.40	15.75
EOM	19.10	19.83	19.61	12.36	3.50	5.51	7.15	8.51	5.12	11.20	13.92	15.27

WTR YR 2000 LOW 19.96 DEC 8



HENDRICKS COUNTY

394025086400801. Local number, HD 4.
LOCATION.--Lat 39°40'25", long 86°40'08", in NW1/4NW1/4NW1/4 sec.8, T.14 N., R.2 W., Hendricks County, Hydrologic Unit 05120203, at the intersection of State Highway 75 and County Road 600 South on county right-of-way, and 1.0 mi south of Coatesville. Owner: U.S. Geological Survey.

AQUIFER.--Sandstone of Mississippian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 85 ft, cased to 70 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 860 ft above sea level, from topographic map. Measuring point: Top of floor of shelter, 1.92 ft above land-surface datum.

REMARKS.--Water level affected by pumpage.

PERIOD OF RECORD.--October 1966 to September 1971, November 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 18.65 ft below land-surface datum, Jan. 30, 1976; lowest, 29.02 ft below land-surface datum, Nov. 30, 1988.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

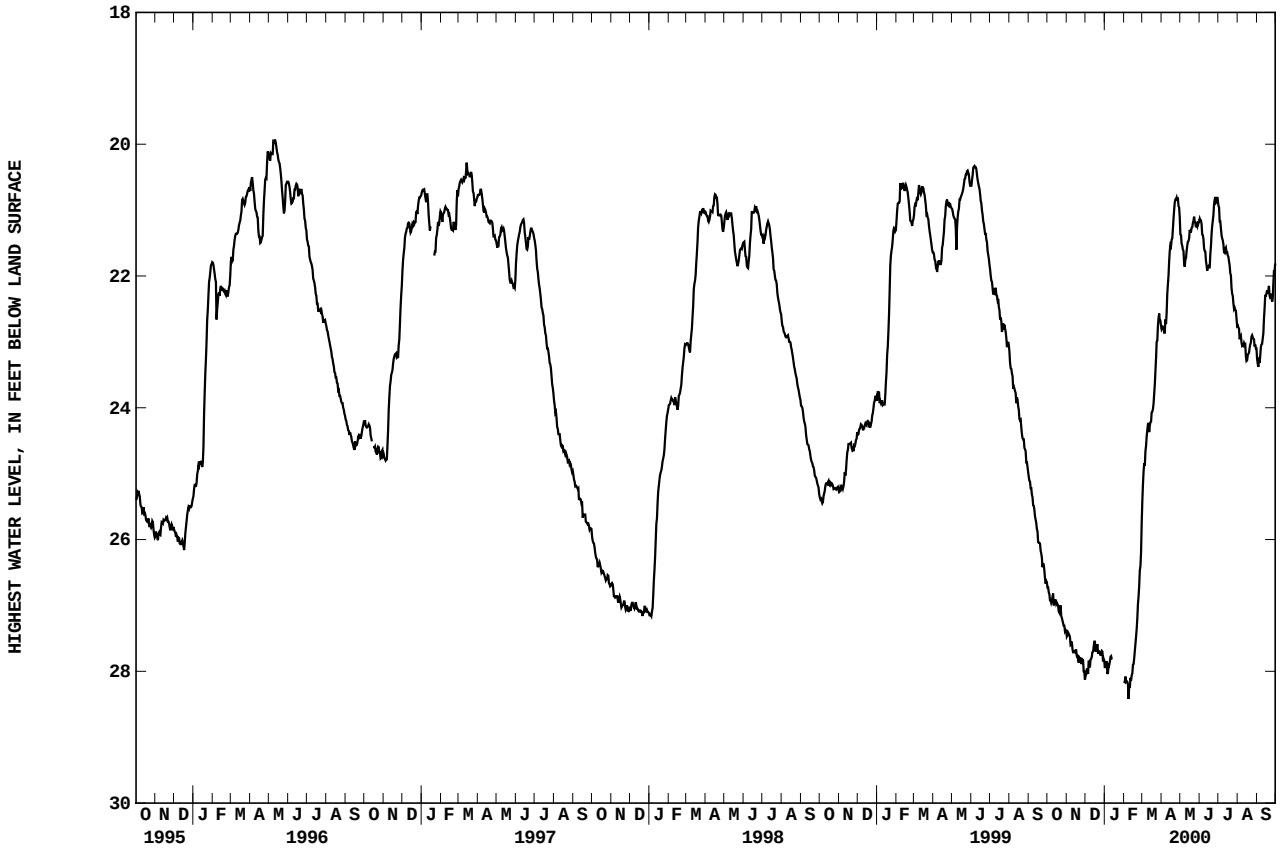
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.92	27.45	28.04	28.04	28.15	24.88	22.86	21.60	21.37	21.28	22.93	23.32
10	26.82	27.66	27.81	27.78	28.25	24.25	22.27	21.73	21.63	21.64	23.06	22.95
15	26.98	27.68	27.55	---	27.90	24.21	21.53	21.43	21.85	21.64	23.29	22.30
20	27.11	27.87	27.59	---	27.47	23.79	21.13	21.26	21.36	21.96	23.09	22.15
25	27.23	27.84	27.76	---	26.70	22.98	20.81	21.20	20.84	22.42	22.93	22.39
EOM	27.38	28.13	27.84	---	25.74	22.76	21.11	21.17	20.85	22.76	23.10	21.81

WTR YR 2000 HIGH 20.80 JUN 26

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	27.08	27.50	28.06	28.09	28.23	25.02	23.00	21.74	21.46	21.48	23.07	23.47
10	27.05	27.84	27.85	27.92	28.39	24.34	22.56	21.80	21.88	21.82	23.18	23.08
15	27.14	27.78	27.69	---	28.04	24.34	21.67	21.55	21.93	21.84	23.38	22.40
20	27.17	27.97	27.83	---	27.59	23.94	21.32	21.37	21.56	22.06	23.22	22.35
25	27.38	27.95	27.88	---	26.86	23.21	20.90	21.31	20.92	22.56	23.08	22.57
EOM	27.62	28.25	28.02	---	26.19	22.90	21.51	21.26	21.04	22.84	23.32	21.97

WTR YR 2000 LOW 28.46 FEB 8



HUNTINGTON COUNTY

404858085284301. Local number, HU 2.
LOCATION.--Lat 40°48'58", long 85°28'43", in SW$^1/_4$SW$^1/_4$SE$^1/_4$ sec.2, T.27 N., R.9 E., Huntington County, Hydrologic Unit 05120101, on the property of Luther Fusselman, 3.0 mi south of Huntington and 0.5 mi west of State Highway 5. Owner: U.S. Geoligical Survey.

AQUIFER.--Sand and gravel of the Pleistocene Epoch.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 148 ft, cased to 143 ft, screened to 148 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 819.70 ft above sea level. Measuring point: Top of casing, 3.30 ft above land-surface datum.

REMARKS.--Well affected by pumpage from water-supply well field.

PERIOD OF RECORD.--August 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 65.46 ft below land-surface datum, Dec. 24, 1988; lowest, 73.78 ft below land-surface datum, Sept. 3, 1994.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

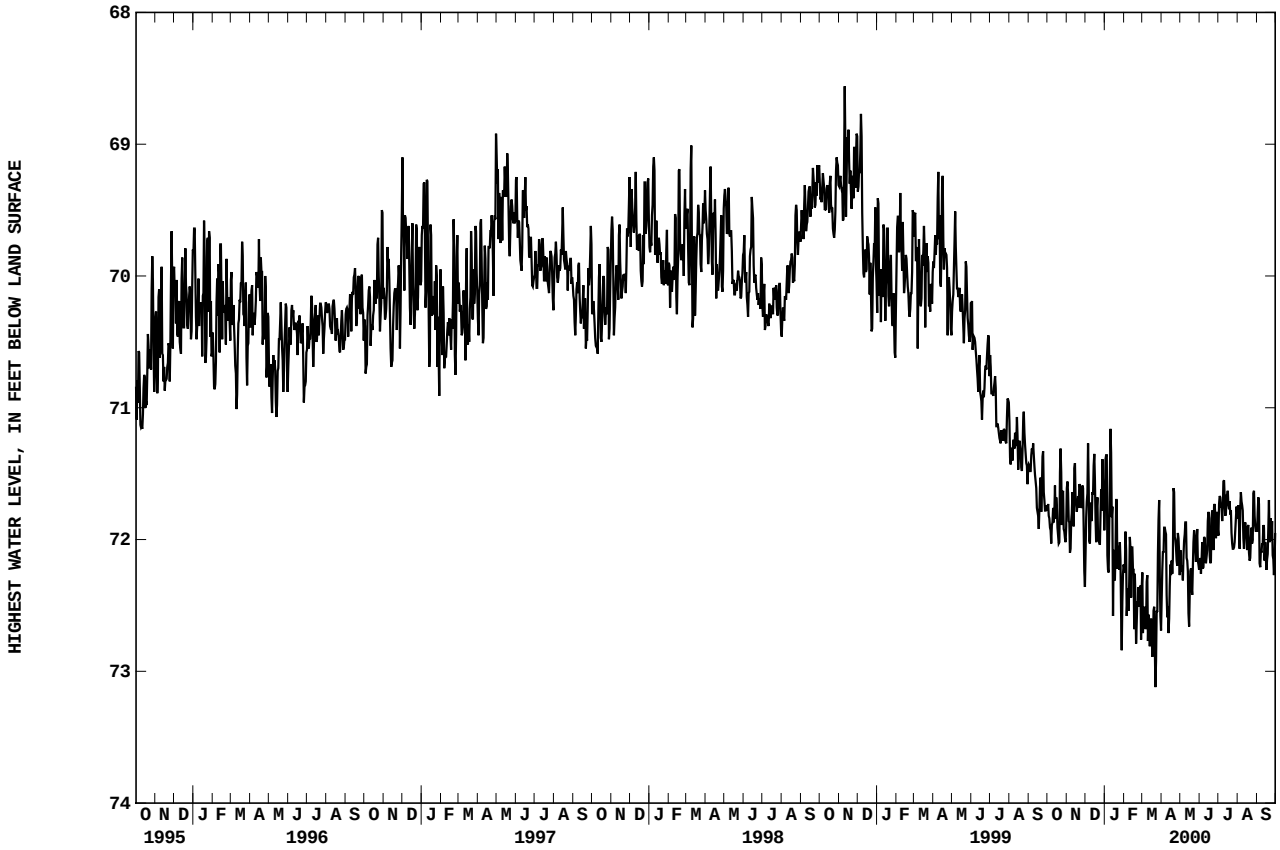
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	71.91	71.87	71.27	72.12	72.58	72.53	71.91	72.31	72.02	71.75	71.76	72.18
10	71.76	71.64	71.72	71.16	71.98	72.77	72.59	71.87	72.10	71.55	71.99	72.04
15	71.68	71.69	71.35	72.09	72.23	72.60	72.19	72.66	71.79	71.67	71.98	72.14
20	72.02	71.76	71.68	71.70	72.79	72.51	71.61	72.42	71.83	71.81	72.16	71.70
25	71.65	71.75	71.80	72.02	72.51	72.55	72.16	72.08	71.73	72.07	72.00	71.86
EOM	71.90	72.36	71.93	72.19	72.37	72.69	72.27	72.23	71.92	71.80	71.92	71.95

WTR YR 2000 HIGH 71.16 JAN 10

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	72.09	72.10	71.65	72.40	72.72	72.68	72.45	72.43	72.22	71.82	72.13	72.30
10	71.88	71.83	72.25	71.53	72.32	72.90	72.72	72.31	72.20	71.70	72.09	72.13
15	71.84	71.91	71.67	72.58	72.70	72.75	72.35	72.71	71.87	71.77	72.08	72.24
20	72.10	71.92	71.99	72.22	72.94	72.81	72.14	72.51	72.16	71.90	72.23	72.03
25	71.89	72.13	72.38	72.24	72.63	72.66	72.30	72.32	71.97	72.15	72.18	72.12
EOM	72.14	72.44	72.02	72.29	72.85	72.87	72.49	72.38	72.02	71.93	72.01	72.19

WTR YR 2000 LOW 73.23 MAR 17



JASPER COUNTY

410249087011201. Local number, JP 4.
LOCATION.--Lat 41°02'49", long 87°01'12", in SW$^1/_4$NE$^1/_4$SW$^1/_4$ sec.17, T.30 N., R.5 W., Jasper County, Hydrologic Unit 07120002, on property of William Gehring, Inc., 0.9 mi east of Newland.
Owner: William Gehring, Inc.

AQUIFER.--Limestone of Devonian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 16 in., depth 300 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 676.93 ft above sea level. Measuring point: Top of floor of shelter, 0.00 ft above land-surface datum.

REMARKS.--Water level affected by irrigation pumpage.

PERIOD OF RECORD.--July 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.95 ft below land-surface datum, Apr. 9, 1962; lowest, 40.17 ft below land-surface datum, July 25, 1980.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

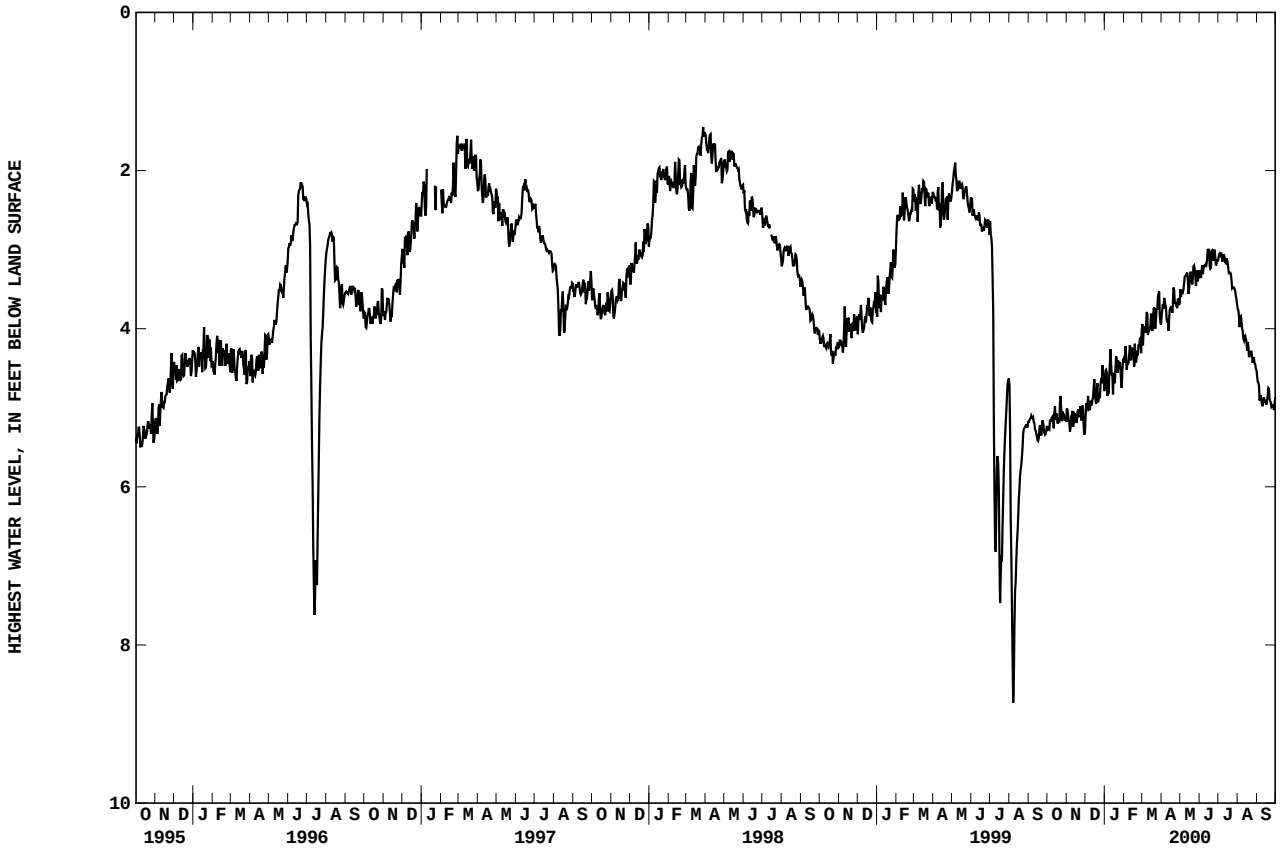
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.15	5.18	4.85	4.85	4.52	4.01	3.61	3.54	3.20	3.05	3.85	4.91
10	5.10	5.04	4.93	4.26	4.21	4.08	3.92	3.33	3.19	3.07	4.13	4.97
15	5.07	5.18	4.64	4.58	4.29	3.81	3.74	3.50	3.03	3.14	4.17	4.93
20	5.16	5.12	4.69	4.40	4.43	3.73	3.48	3.44	3.02	3.29	4.34	4.76
25	5.05	5.07	4.70	4.42	4.23	3.76	3.72	3.34	3.01	3.48	4.43	4.98
EOM	5.18	5.32	4.79	4.38	4.03	3.95	3.67	3.36	3.15	3.70	4.52	4.87

WTR YR 2000 HIGH 2.99 JUN 14

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.35	5.38	5.08	4.95	4.68	4.16	3.94	3.73	3.39	3.15	4.06	4.99
10	5.29	5.24	5.18	4.47	4.34	4.19	4.04	3.56	3.29	3.16	4.25	5.12
15	5.20	5.32	4.82	4.83	4.53	3.98	3.89	3.69	3.19	3.26	4.28	5.05
20	5.29	5.25	5.07	4.70	4.58	3.98	3.73	3.58	3.25	3.40	4.42	4.89
25	5.29	5.37	5.08	4.52	4.32	3.88	3.80	3.48	3.20	3.57	4.59	5.09
EOM	5.29	5.46	4.85	4.46	4.31	4.04	3.85	3.51	3.33	3.87	4.61	5.04

WTR YR 2000 LOW 5.49 OCT 3



JASPER COUNTY

410809087580801. Local number, JP 7.
LOCATION.--Lat 41°08'10", long 86°58'08", in SE$^1/_4$SE$^1/_4$NE$^1/_4$ sec.15, T.31 N., R.5 W., Jasper County, Hydrologic Unit 07120002, in northwest corner of intersection of County Roads 850 North and 400 East, 4.0 mi south of Tefft.
Owner: U.S. Geological Survey.

AQUIFER.--Dolomite of Middle Devonian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 130 ft, cased to 94 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 699.38 ft above sea level. Measuring point: Top of floor of shelter, 2.75 ft above land-surface datum.

REMARKS.--Water level affected by pumpage.

PERIOD OF RECORD.--May 1967 to current year. (Semi-annual tape-down readings only September 1971 to May 1978.)

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.04 ft below land-surface datum, Apr. 5, 1985; lowest, 18.15 ft below land-surface datum, Aug. 30, 1988.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

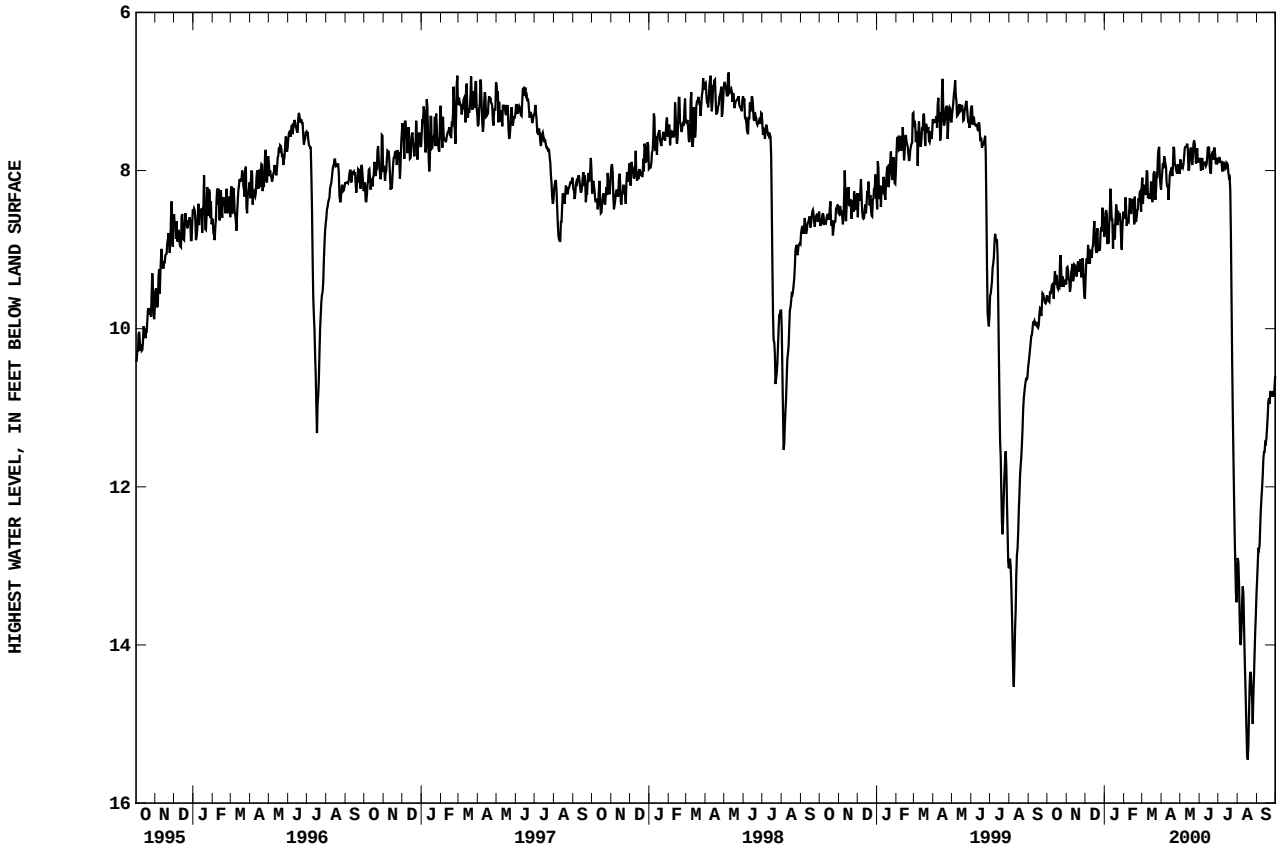
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.53	9.39	8.94	8.93	8.70	8.23	7.82	7.96	7.84	7.89	13.98	12.74
10	9.42	9.18	9.03	8.23	8.35	8.35	8.21	7.70	7.90	7.90	13.36	11.86
15	9.32	9.32	8.64	8.71	8.42	8.14	8.01	7.98	7.72	7.91	15.10	11.45
20	9.48	9.28	8.73	8.50	8.65	8.01	7.70	7.93	7.80	8.26	14.52	10.88
25	9.34	9.25	8.80	8.54	8.39	8.06	8.02	7.76	7.72	11.60	15.00	10.83
EOM	9.44	9.62	8.84	8.52	8.20	8.24	8.04	7.90	7.90	13.16	13.36	10.60

WTR YR 2000 HIGH 7.62 MAY 23

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.76	9.60	9.23	9.03	8.89	8.41	8.21	8.16	8.06	7.99	14.18	12.90
10	9.65	9.40	9.34	8.50	8.51	8.48	8.37	7.98	8.01	8.01	13.73	12.07
15	9.51	9.48	8.84	8.99	8.69	8.34	8.19	8.18	7.91	8.06	15.39	11.56
20	9.64	9.44	9.17	8.85	8.81	8.30	7.99	8.08	8.06	8.82	14.89	10.99
25	9.60	9.58	9.26	8.66	8.49	8.18	8.12	7.94	7.94	12.11	15.26	10.96
EOM	9.58	9.76	8.93	8.63	8.53	8.35	8.24	8.08	8.11	13.48	13.66	10.83

WTR YR 2000 LOW 15.67 AUG 17



JASPER COUNTY

410713087063201. Local number, JP 9.
LOCATION.--Lat 41°07'13", long 87°06'32", in NE$^1/_4$NW$^1/_4$SE$^1/_4$ sec.21, T.31 N., R.6 W., Jasper County, Hydrologic Unit 07120002, 4.4 mi northwest of Gifford.
Owner: William Gehring, Inc.

AQUIFER.--Silurian limestone.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 18 in., depth 260 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 685 ft above sea level, from topographic map. Measuring point: Lower lip of 2 in. tapedown pipe, 2.10 ft above land-surface datum.

REMARKS.--Water level affected by irrigation pumpage.

PERIOD OF RECORD.--July 1978 to April 2000 (discontinued). Record prior to October 1, 1978 available in District files.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.99 ft below land-surface datum, Apr. 1, 1998; lowest, 32.05 ft below land-surface datum, Aug. 5, 1988.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

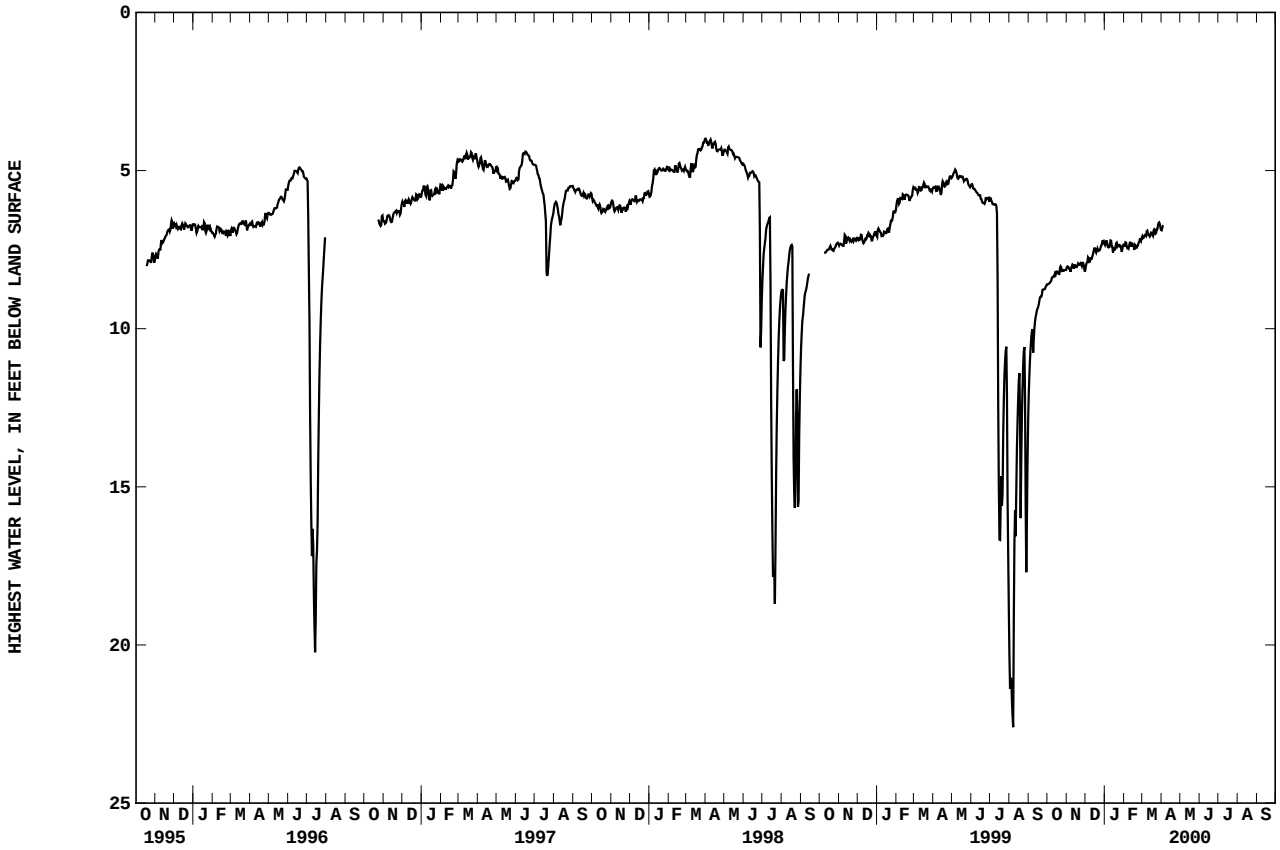
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.53	8.11	7.74	7.37	7.40	7.04	---	---	---	---	---	---
10	8.35	7.97	7.77	7.21	7.28	6.98	---	---	---	---	---	---
15	8.20	8.05	7.46	7.47	7.36	6.96	---	---	---	---	---	---
20	8.27	7.98	7.46	7.28	7.44	6.86	---	---	---	---	---	---
25	8.16	8.01	7.44	7.37	7.26	6.86	---	---	---	---	---	---
EOM	8.14	8.20	7.31	7.34	7.13	6.88	---	---	---	---	---	---

WTR YR 2000 HIGH 6.64 MAR 28

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.58	8.14	7.90	7.44	7.46	7.08	---	---	---	---	---	---
10	8.37	8.02	7.80	7.32	7.37	7.05	---	---	---	---	---	---
15	8.30	8.06	7.54	7.64	7.40	7.03	---	---	---	---	---	---
20	8.28	8.01	7.52	7.39	7.49	6.90	---	---	---	---	---	---
25	8.22	8.07	7.54	7.41	7.28	6.86	---	---	---	---	---	---
EOM	8.17	8.24	7.37	7.38	7.26	6.91	---	---	---	---	---	---

WTR YR 2000 LOW 8.66 OCT 3



JASPER COUNTY

410322087163101. Local number, JP 11.
LOCATION.--Lat 41°03'22", long 87°16'31", in NW1/4NW1/4NW1/4 sec.18, T.30 N., R.7 W., Jasper County, Hydrologic Unit 07120002, on Prudential Life Insurance Company of America property, 3.2 mi north of State Highway 14, and 1.5 mi southwest of Fair Oaks.
Owner: Prudential Insurance Company of America.

AQUIFER.--Limestone of Devonian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 16 in., depth 630 ft, cased to 63 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 697.50 ft above sea level. Measuring point: Top of floor of shelter, 3.50 ft above land-surface datum.

REMARKS.--Water level affected by irrigation pumpage.

PERIOD OF RECORD.--March 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.04 ft above land-surface datum, Apr. 3, 1982; lowest, 52.19 ft below land-surface datum, July 9, 1988.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

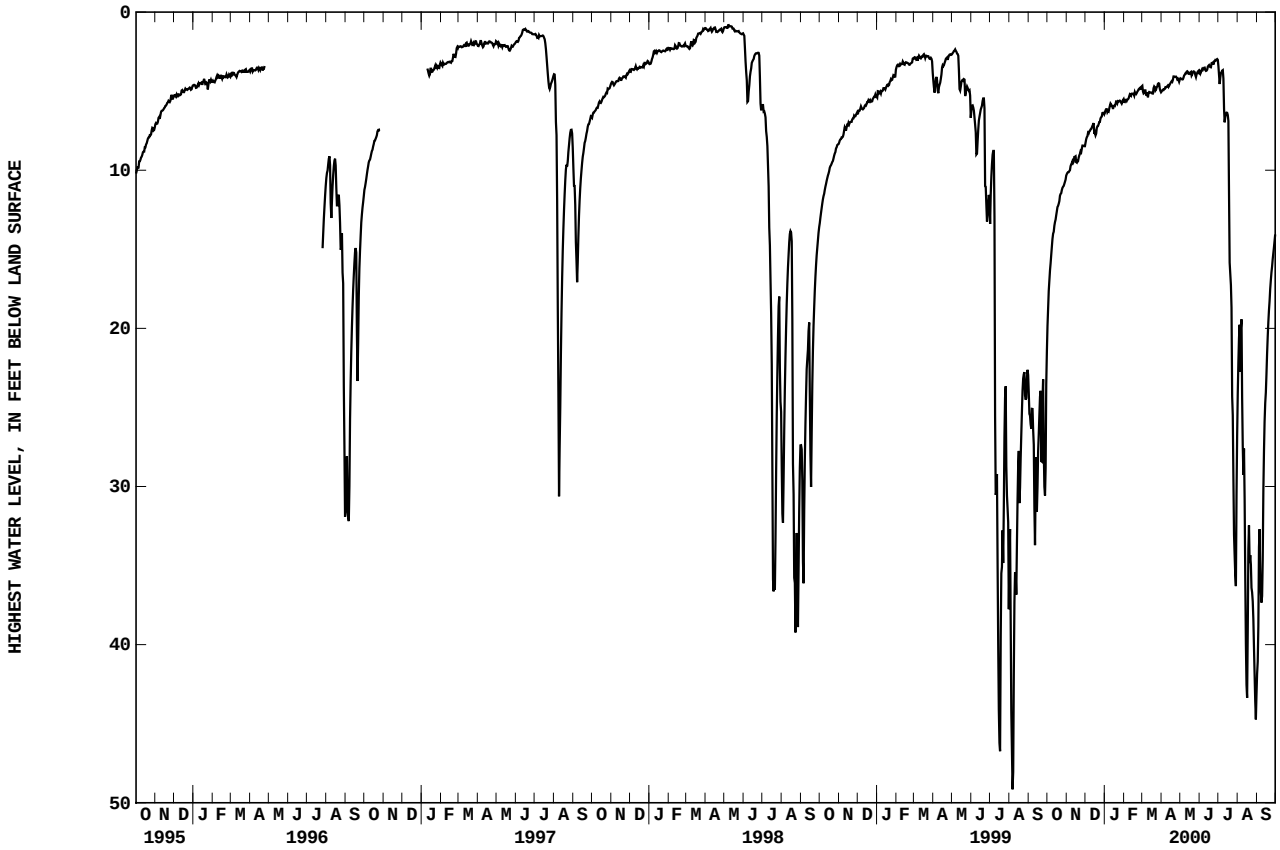
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.33	10.05	7.63	6.33	5.62	4.95	4.87	4.25	3.59	3.85	22.74	32.70
10	14.01	9.43	7.39	5.78	5.20	5.39	4.69	3.88	3.67	6.13	29.27	34.61
15	12.84	9.12	7.70	5.93	5.16	5.10	4.50	3.91	3.39	6.37	42.54	24.06
20	11.95	9.20	7.22	5.66	5.19	4.70	4.07	3.93	3.23	16.57	34.84	18.86
25	11.11	8.64	6.72	5.60	4.88	4.71	4.14	3.99	3.11	29.51	37.27	16.09
EOM	10.34	8.48	6.46	5.50	4.70	5.07	4.27	3.92	3.02	26.75	43.18	14.06

WTR YR 2000 HIGH 2.97 JUN 29

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.99	10.14	7.85	6.38	5.69	5.15	5.00	4.31	3.67	4.14	26.26	36.13
10	14.34	9.55	7.47	5.92	5.32	5.83	4.74	3.96	3.82	7.14	31.21	37.73
15	13.12	9.57	8.54	6.13	5.30	5.47	4.61	3.98	3.48	6.51	44.17	24.75
20	12.12	9.43	7.34	5.81	5.24	4.81	4.29	4.02	3.51	19.36	35.30	19.60
25	11.25	8.89	6.99	5.64	4.93	4.75	4.28	4.18	3.18	33.05	38.39	16.46
EOM	10.59	8.56	6.49	5.73	4.91	5.15	4.42	4.14	3.43	30.49	44.73	14.46

WTR YR 2000 LOW 45.03 AUG 30



JASPER COUNTY

410145087130401. Local number, JP 12.
LOCATION.--Lat 41°01'45", long 87°13'04", in NW$^1/_4$SW$^1/_4$SW$^1/_4$ sec.22, T.30 N., R.7 W., Jasper County, Hydrologic Unit 07120002, in Old Union Township school yard, 200 ft east of County Road 900 West, 750 ft north of State Highway 14, and in Parr. Owner: Prudential Insurance Company of America.

AQUIFER.--Limestone/dolomite of Silurian/Devonian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in., depth 150 ft, cased to 103 ft, open end.

INSTRUMENTATION.--Water-level recorder, data-collection platform, and incremental encoder.

DATUM.--Elevation of land-surface datum is 692.90 ft above sea level. Measuring point: Top of well casing, 2.6 ft above land-surface datum.

REMARKS.--Water level affected by irrigation pumpage.

PERIOD OF RECORD.--May 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.08 ft below land-surface datum, May 22, 1983; lowest, 53.41 ft below land-surface datum, Aug. 18, 1988.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

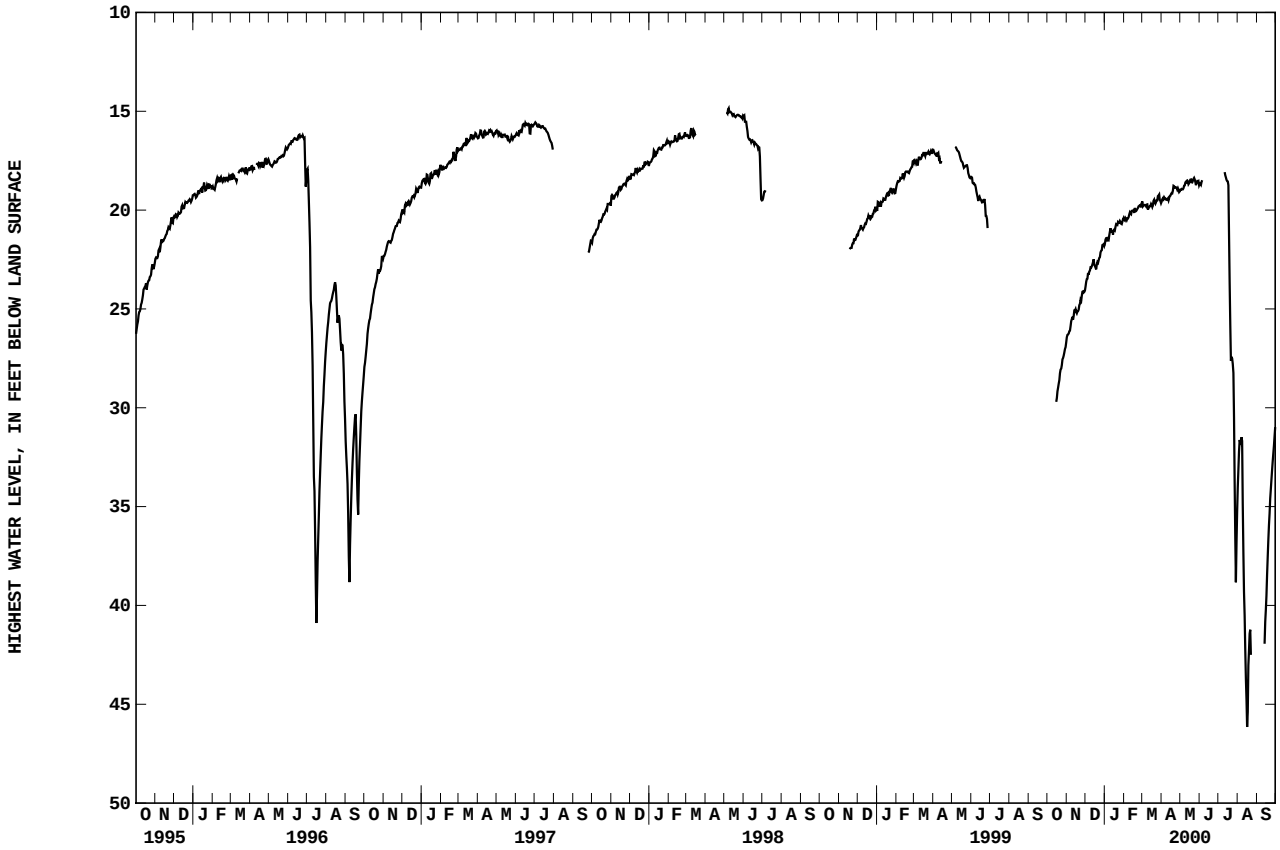
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	26.13	23.18	21.58	20.51	19.74	19.35	18.95	18.49	---	31.77	---
10	---	25.40	22.91	20.92	20.12	19.98	19.45	18.61	---	---	37.33	---
15	29.70	25.01	22.76	21.01	20.02	19.69	19.27	18.64	---	18.53	44.77	40.23
20	28.60	25.03	22.63	20.73	20.05	19.47	18.77	18.60	---	25.83	41.43	35.94
25	27.55	24.33	22.14	20.55	19.80	19.50	18.87	18.58	---	28.24	---	33.16
EOM	26.69	24.07	21.81	20.40	19.65	19.65	19.05	18.74	---	35.24	---	30.98

WTR YR 2000 HIGH 18.08 JUL 11

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	26.36	23.48	21.90	20.98	19.99	19.64	19.14	18.66	---	32.73	---
10	---	25.87	23.13	21.11	20.29	20.22	19.89	18.83	---	---	39.31	---
15	30.23	25.45	23.01	21.39	20.41	20.02	19.75	19.21	---	18.76	46.15	40.95
20	29.09	25.42	23.10	21.06	20.26	19.75	19.02	18.99	---	27.62	42.68	36.68
25	28.07	24.82	22.55	20.68	19.98	19.81	19.20	19.25	---	30.50	---	33.73
EOM	27.29	24.60	22.04	20.67	19.86	19.82	19.70	18.89	---	36.79	---	31.51

WTR YR 2000 LOW 47.36 AUG 17



JASPER COUNTY

405902087141501. Local number, JP 13.
LOCATION.--Lat 40°59'02", long 87°14'15", in NW1/4NW1/4NW1/4 sec.9, T.29 N., R.7 W., Jasper County, Hydrologic Unit 07120002, at southwest corner of North Newton school, and 4.6 mi northwest of Rensselaer.
Owner: Prudential Insurance Company of America.

AQUIFER.--Dolomite of Silurian/Devonian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in., depth 150 ft, cased to 106 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 700 ft above sea level, from topographic map. Measuring point: Top of well casing, 3.4 ft above land-surface datum.

REMARKS.--Water level affected by irrigation pumpage.

PERIOD OF RECORD.--March 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 20.98 ft below land-surface datum, Apr. 3, 1982; lowest, 55.85 ft below land-surface datum, Aug. 19, 1988.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

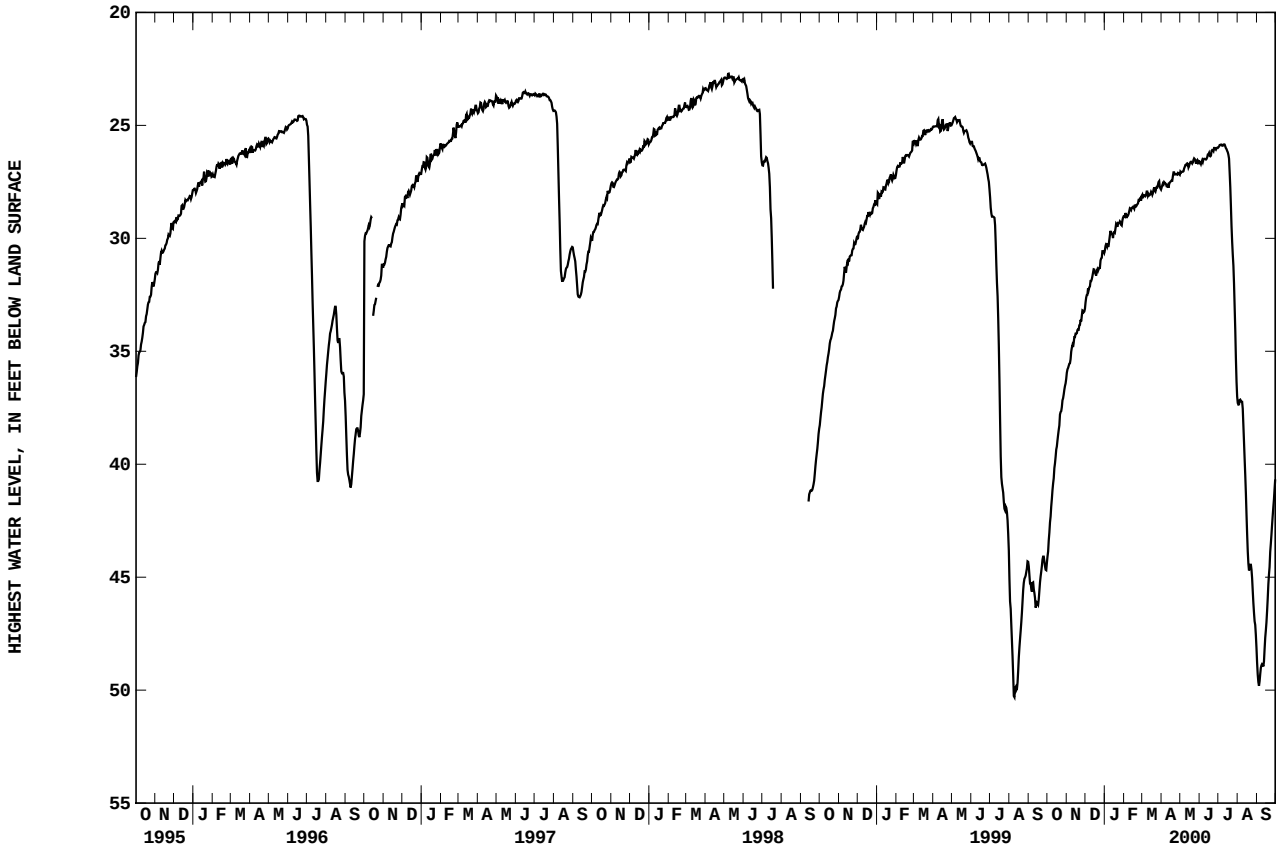
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	42.57	35.55	32.21	30.37	29.10	28.10	27.51	27.05	26.54	25.85	37.14	49.61
10	40.85	34.73	31.89	29.67	28.68	28.12	27.71	26.76	26.49	25.84	38.29	48.86
15	39.35	34.22	31.38	29.74	28.61	27.94	27.50	26.79	26.28	26.13	42.22	47.36
20	38.28	34.04	31.37	29.39	28.59	27.74	27.08	26.69	26.13	27.74	44.60	44.89
25	37.17	33.43	30.98	29.25	28.32	27.74	27.17	26.56	26.00	31.22	45.61	42.68
EOM	36.22	33.12	30.64	29.03	28.12	27.84	27.19	26.66	26.00	37.00	48.13	40.67

WTR YR 2000 HIGH 25.84 JUL 10

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	43.03	35.67	32.50	30.51	29.23	28.18	27.78	27.15	26.68	25.91	37.19	49.87
10	41.15	34.88	32.01	29.88	28.80	28.21	27.80	26.90	26.53	25.87	39.00	49.05
15	39.68	34.40	31.50	29.99	28.79	28.04	27.59	26.93	26.37	26.25	43.07	47.68
20	38.48	34.13	31.60	29.62	28.69	27.89	27.28	26.78	26.34	28.56	44.70	45.32
25	37.49	33.74	31.37	29.33	28.37	27.80	27.23	26.72	26.13	32.01	46.13	43.11
EOM	36.43	33.25	30.69	29.12	28.33	27.93	27.32	26.80	26.12	37.29	48.78	41.09

WTR YR 2000 LOW 49.89 SEP 4



JASPER COUNTY

405550087092301. Local number, JP 15.
LOCATION.--Lat 40°55'50", long 87°09'23",in SE$^1/_4$NW$^1/_4$SW$^1/_4$ sec.30, T.29 N., R.6 W., Jasper County, Hydrologic Unit 07120002, at the Peerless Superior Cleaners in the shopping center on the west side of State Highway 231 in Rensselaer.
Owner: Department of Natural Resources

AQUIFER.--Limestone/Dolomite of Silurian/Devonian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 8 in., depth 210 ft, cased to 25 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 665 ft above sea level (revised), from topographic map. Measuring point: Top of shelf, 2.00 ft above land-surface datum.

REMARKS.--Well affected by pumpage.

PERIOD OF RECORD.--Sept. 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 101.88 ft below land-surface datum, Sept. 9, 1996; lowest, 116.50 ft below land-surface datum, Sept. 28, 2000.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

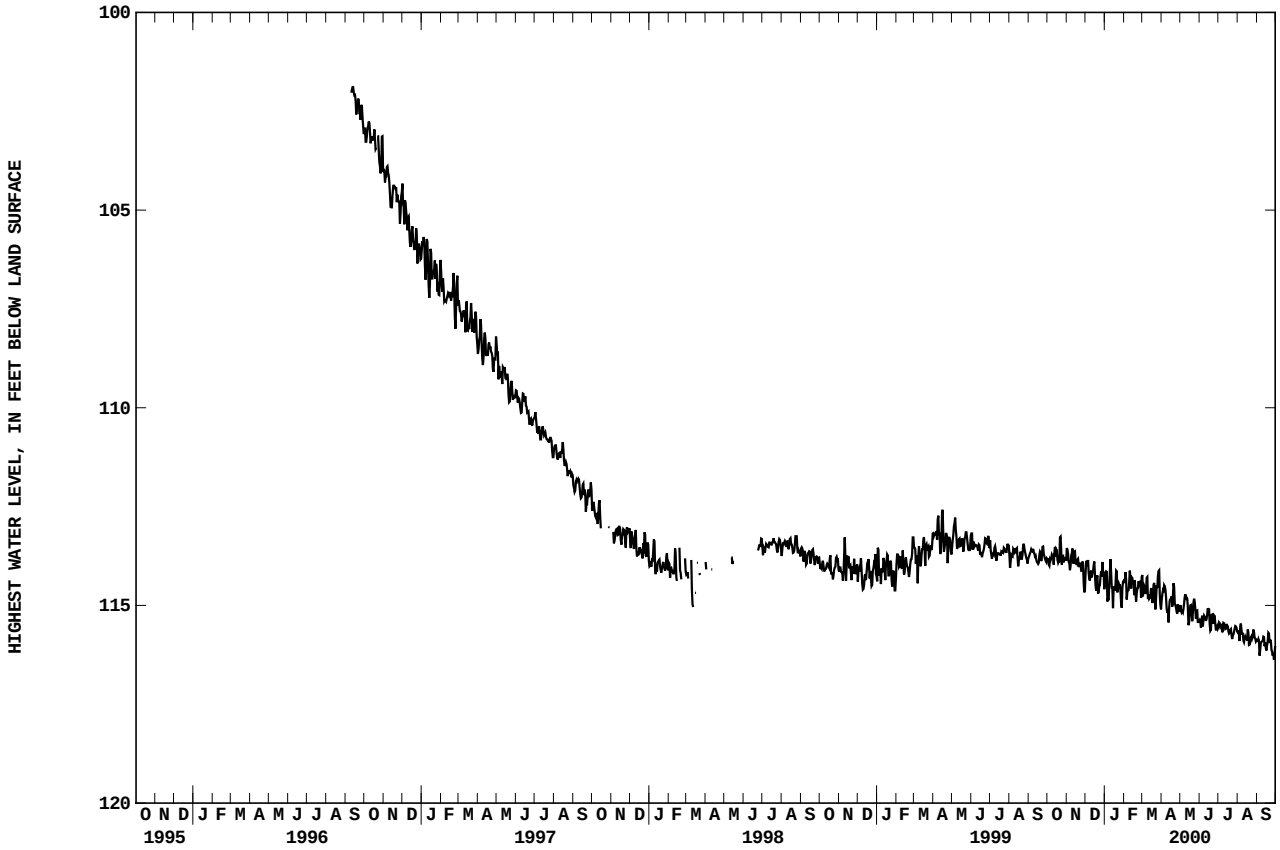
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	113.83	113.93	113.85	114.90	114.85	114.54	114.49	115.18	115.26	115.49	115.53	116.27
10	113.73	113.56	114.12	113.83	114.12	114.84	115.19	114.86	115.30	115.45	115.89	115.90
15	113.58	113.92	113.89	114.54	114.45	114.56	114.84	115.43	115.11	115.51	115.81	116.08
20	113.91	114.03	114.24	114.14	114.90	114.43	114.44	115.40	115.24	115.62	115.99	115.71
25	113.76	114.04	114.26	114.46	114.45	114.56	115.16	115.11	115.27	115.73	115.79	116.17
EOM	113.87	114.60	114.59	114.38	114.28	115.10	115.16	115.40	115.59	115.66	115.88	116.03

WTR YR 2000 HIGH 113.26 OCT 22

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	114.10	114.11	114.17	115.08	114.93	114.71	114.96	115.30	115.53	115.57	115.91	116.35
10	113.97	113.83	114.60	114.18	114.39	114.97	115.36	115.22	115.40	115.55	115.96	115.98
15	113.77	114.11	114.21	115.07	114.89	114.74	114.94	115.61	115.23	115.55	115.89	116.20
20	114.02	114.15	114.70	114.69	115.00	114.84	114.79	115.48	115.61	115.78	116.09	115.95
25	113.98	114.43	114.84	114.64	114.61	114.73	115.30	115.38	115.58	115.81	115.95	116.29
EOM	114.01	114.84	114.73	114.47	114.81	115.24	115.48	115.63	115.65	115.70	115.97	116.21

WTR YR 2000 LOW 116.50 SEP 28



JEFFERSON COUNTY

384949085251901. Local number, JF 5.
LOCATION.--Lat 38°49'49", long 85°25'19", in SE$^1/_4$NW$^1/_4$SW$^1/_4$ sec.33, T.5 N., R.10 E., Jefferson County, Hydrologic Unit 05120207, on Jefferson Proving Ground, 500 ft north of Airfield Road, 1,000 ft southwest of the water tower, and 2.2 mi west of main gate.
Owner: U.S. Army.

AQUIFER.--Limestone, dolomite, and shale of Silurian and Ordovician age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in., depth 200 ft, cased to 33 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 857.50 ft above sea level. Measuring point: Top of casing, 3.00 ft above land-surface datum.

REMARKS.--This well was drilled on a mapped fracture trace.

PERIOD OF RECORD.--March 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.97 ft below land-surface datum, Jan. 21, 1991; lowest, 10.03 below land-surface datum, Nov. 30, 1999.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

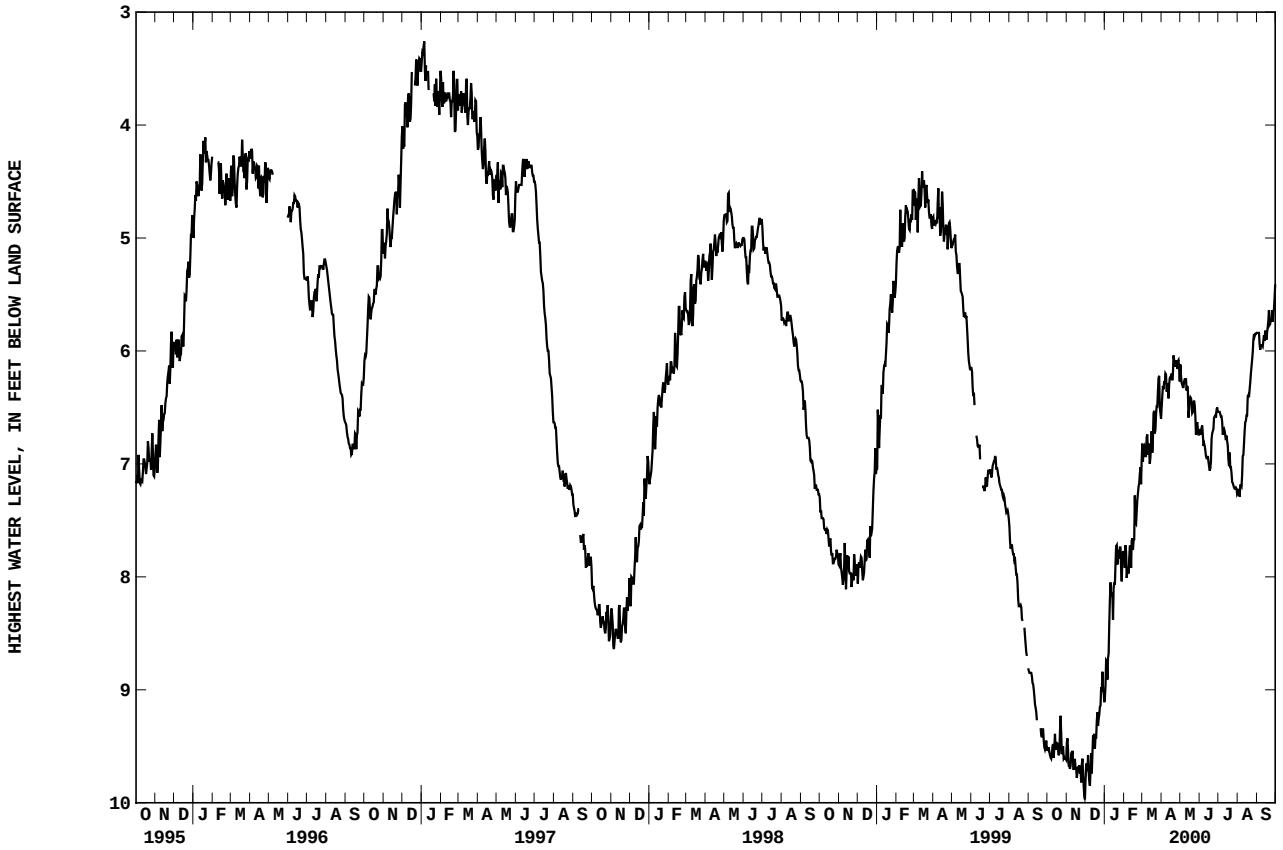
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.58	9.67	9.58	8.91	8.01	6.88	6.27	6.32	6.66	6.58	7.19	5.94
10	9.48	9.54	9.56	8.05	7.73	6.92	6.34	6.25	6.88	6.69	6.92	5.96
15	9.47	9.70	9.39	8.10	7.76	6.82	6.23	6.52	6.98	6.80	6.57	5.86
20	9.55	9.72	9.20	7.72	7.53	6.53	6.04	6.55	6.78	7.03	6.34	5.64
25	9.53	9.66	9.14	7.74	7.17	6.49	6.09	6.58	6.58	7.19	6.01	5.64
EOM	9.62	9.97	9.11	7.78	6.96	6.60	6.27	6.74	6.54	7.27	5.84	5.41

WTR YR 2000 HIGH 5.41 SEP 30

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.71	9.77	9.82	9.07	8.10	6.98	6.52	6.47	6.77	6.63	7.32	6.02
10	9.65	9.70	9.90	8.20	7.84	7.01	6.39	6.47	6.97	6.76	7.03	6.06
15	9.56	9.79	9.52	8.38	7.95	6.95	6.29	6.66	7.10	6.90	6.70	5.92
20	9.66	9.82	9.49	7.89	7.71	6.73	6.22	6.68	6.98	7.09	6.42	5.78
25	9.69	9.94	9.42	7.89	7.21	6.54	6.17	6.75	6.63	7.25	6.15	5.78
EOM	9.71	10.03	9.20	7.85	7.18	6.68	6.38	6.87	6.69	7.42	5.90	5.55

WTR YR 2000 LOW 10.03 NOV 30



JENNINGS COUNTY

385601085365701. Local number, JN 3.
LOCATION.--Lat 38°56'01", long 85°36'57", in SE$^1/_4$SW$^1/_4$NE$^1/_4$ sec.27, T.6 N., R.8 E., Jennings County, Hydrologic Unit 05120207, 200 ft west of State Highway 3, 1.6 mi south of Crosley Fish and Game Office and 3.0 mi south of Vernon.
Owner: U.S. Geological Survey.

AQUIFER.--Limestones and dolomites of Devonian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 180 ft, cased to 45 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 718 ft above sea level, from topographic map. Measuring point: Top of floor of shelter, 3.50 ft above land-surface datum.

PERIOD OF RECORD.--October 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 36.64 ft below land-surface datum, Jan. 2l, 1979; lowest, 40.93 ft below land-surface datum, Nov. 30, 1999.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

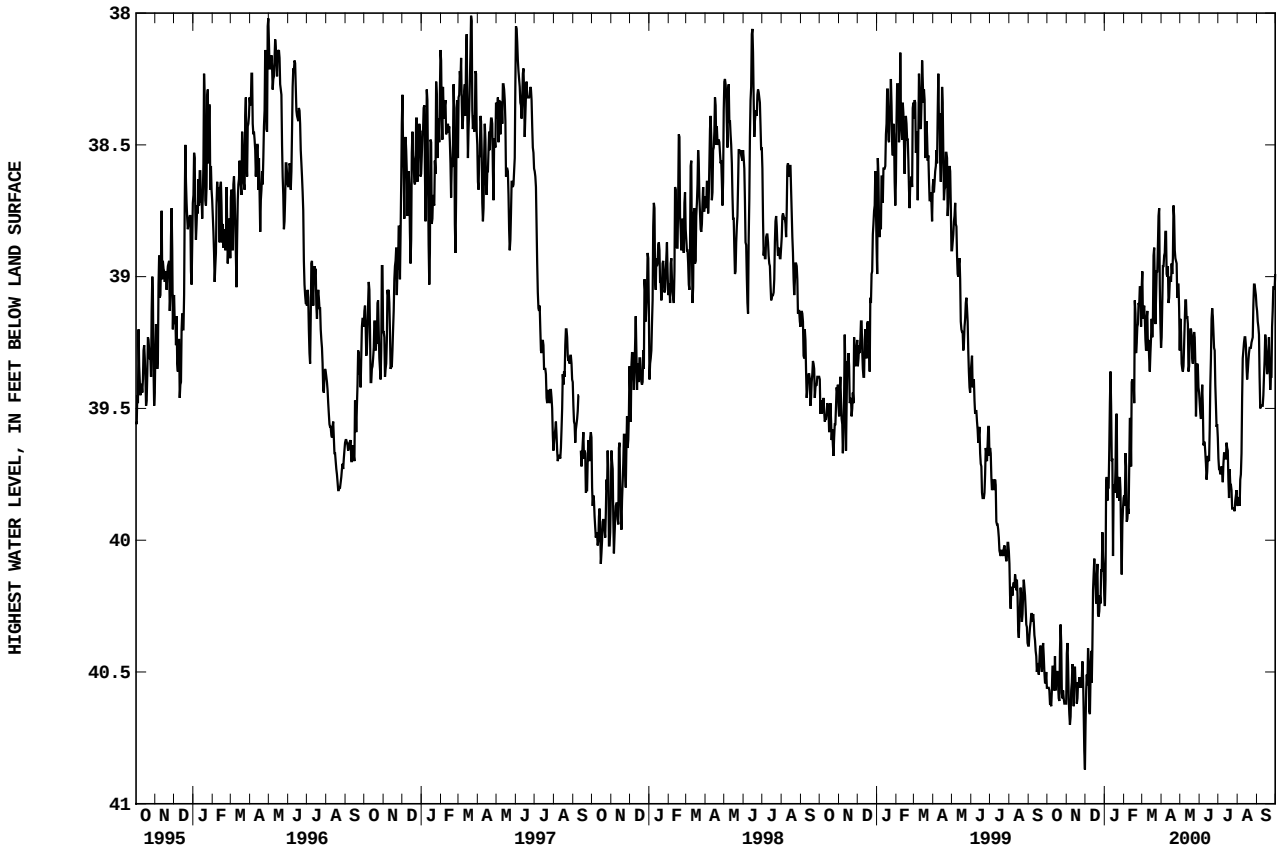
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	40.62	40.66	40.41	39.85	39.93	39.16	38.92	39.36	39.41	39.74	39.77	39.38
10	40.48	40.47	40.42	39.36	39.54	39.28	39.00	39.09	39.67	39.67	39.28	39.49
15	40.53	40.55	40.07	39.80	39.41	39.23	39.00	39.34	39.69	39.65	39.34	39.25
20	40.61	40.56	40.09	39.52	39.29	38.89	38.73	39.31	39.16	39.79	39.27	39.23
25	40.60	40.52	40.24	39.76	39.11	38.98	38.95	39.33	39.28	39.88	39.23	39.19
EOM	40.62	40.87	40.21	39.84	39.04	39.27	39.28	39.44	39.61	39.86	39.11	38.99

WTR YR 2000 HIGH 38.73 APR 20

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	40.68	40.71	40.56	39.90	40.00	39.24	39.09	39.41	39.49	39.75	39.88	39.50
10	40.57	40.55	40.66	39.49	39.72	39.38	39.03	39.25	39.71	39.71	39.33	39.53
15	40.58	40.61	40.18	40.06	39.58	39.29	39.03	39.41	39.73	39.67	39.39	39.31
20	40.65	40.60	40.28	39.84	39.32	39.03	38.93	39.38	39.31	39.83	39.29	39.33
25	40.67	40.71	40.40	39.86	39.16	39.03	39.08	39.53	39.42	39.91	39.27	39.38
EOM	40.68	40.93	40.32	39.89	39.22	39.34	39.35	39.49	39.69	39.90	39.13	39.05

WTR YR 2000 LOW 40.93 NOV 30



KNOX COUNTY

383247087361001. Local number, KN 7.
LOCATION.--Lat 38°32'47", long 87°36'10", in SE$^1/_4$SE$^1/_4$NW$^1/_4$ sec.2, T.1 N., R.11 W., Knox County, Hydrologic Unit 05120113, in the right-of-way of Sixth Street Road, 9.8 mi south of Vincennes.
Owner: Michael J. Kelley.

AQUIFER.--Sand and gravel Quaternary age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 43 ft, cased to 16 ft, slotted to 19 ft, open end.

INSTRUMENTATION.--Water-level recorder. Prior to April 1968, hand-taped monthly.

DATUM.--Elevation of land-surface datum is 405 ft above sea level, from topographic map. Measuring point: Top of floor of shelter, 2.42 ft above land-surface datum.

PERIOD OF RECORD.--November 1956 to December 1972, January 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.57 ft below land-surface datum, May 3, 1983; lowest, 11.35 ft below land-surface datum, Feb. 1-13, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

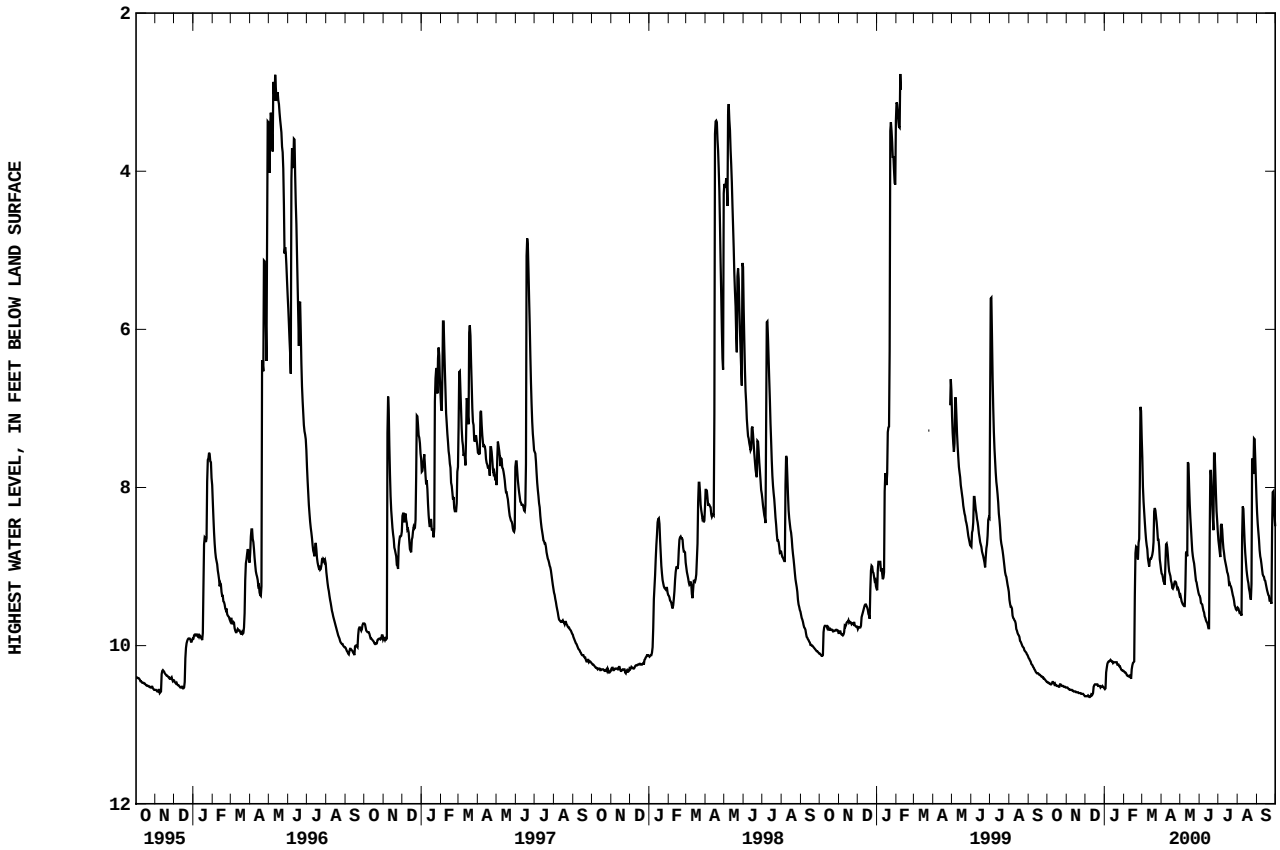
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.48	10.55	10.63	10.23	10.37	8.44	9.20	9.48	9.48	8.48	9.59	8.79
10	10.46	10.57	10.62	10.18	10.38	8.90	8.76	8.83	9.65	8.83	8.27	9.10
15	10.50	10.58	10.50	10.21	10.22	8.90	9.12	7.98	9.78	9.07	9.04	9.22
20	10.52	10.60	10.49	10.21	8.75	8.30	9.26	8.80	8.00	9.24	9.32	9.37
25	10.51	10.61	10.53	10.26	8.65	8.54	9.24	9.11	7.57	9.39	7.63	8.55
EOM	10.53	10.64	10.54	10.32	7.37	9.04	9.37	9.36	8.56	9.54	8.13	8.49

WTR YR 2000 HIGH 6.98 FEB 27

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.49	10.56	10.64	10.28	10.38	8.56	9.26	9.49	9.52	8.97	9.61	8.87
10	10.47	10.57	10.65	10.19	10.39	8.96	8.86	9.27	9.68	8.90	8.48	9.12
15	10.51	10.59	10.52	10.22	10.25	8.94	9.18	8.21	9.80	9.09	9.11	9.26
20	10.53	10.60	10.51	10.24	8.83	8.69	9.30	8.87	8.20	9.25	9.38	9.43
25	10.51	10.61	10.53	10.28	8.70	8.66	9.28	9.18	7.81	9.43	7.83	9.49
EOM	10.54	10.64	10.55	10.33	7.62	9.10	9.39	9.38	8.67	9.57	8.32	8.60

WTR YR 2000 LOW 10.66 DEC 8



KNOX COUNTY

384951087202501. Local number, KN 8.
LOCATION.--Lat 38°49'51", long 87°20'25", in M.D. 240, T.5 N., R.8 W., Knox County, Hydrologic Unit 05120111, on the northwest side of road at the southwest boundary of Chambers Cemetery about 2.5 mi southwest of Freelandville.
Owner: U.S. Geological Survey

AQUIFER.--Interbedded sandstone, shale, and coal of Pennsylvanian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 137 ft, cased to 41 ft, open hole.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 460 ft above sea level, from topographic map. Measuring point: Top of casing, 3.50 ft above land-surface datum.

PERIOD OF RECORD.--August 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.86 ft below land-surface datum, Jan. 28, 1994; lowest, 15.32 ft below land-surface datum, Oct. 19, 1991.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

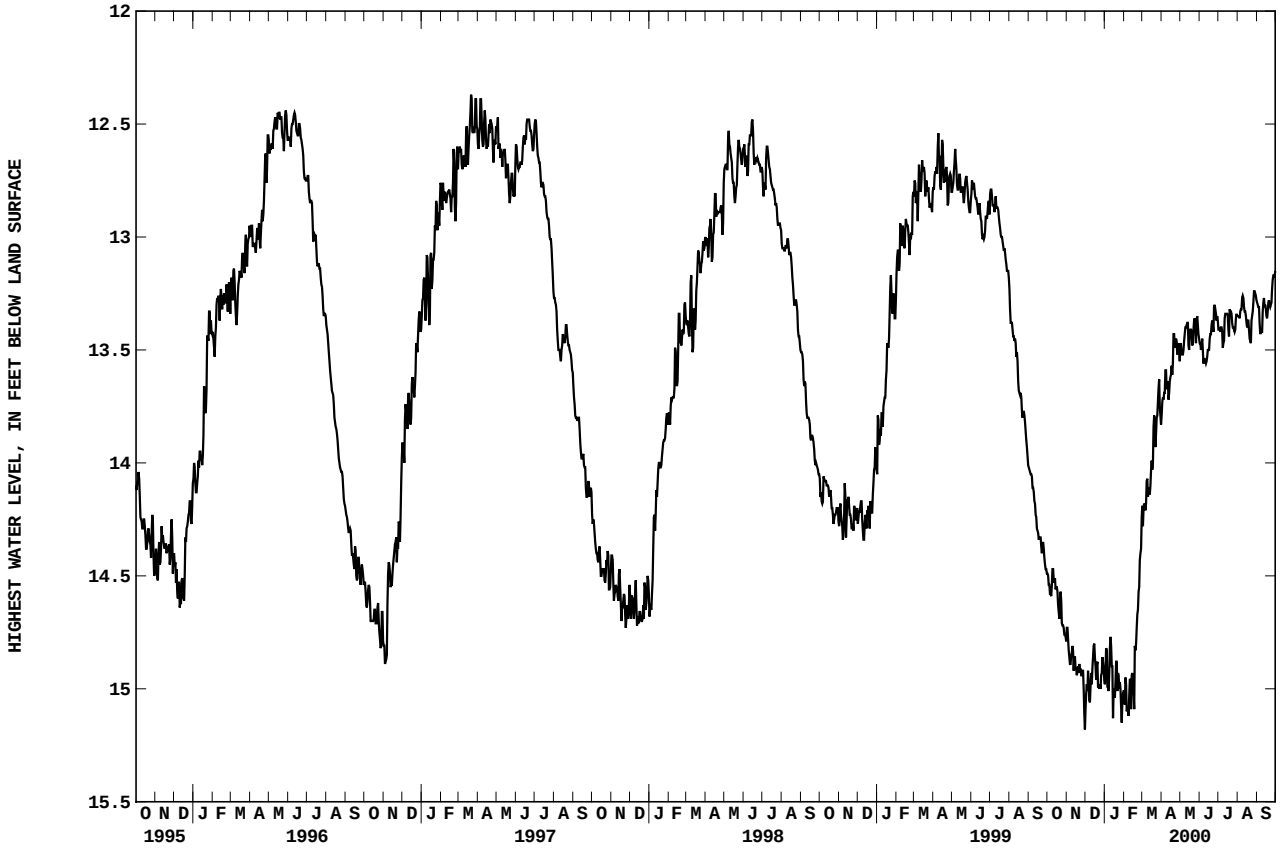
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.58	14.86	14.92	14.99	15.10	14.19	13.69	13.52	13.45	13.40	13.33	13.38
10	14.47	14.81	14.93	14.77	14.96	14.15	13.67	13.40	13.55	13.46	13.27	13.33
15	14.55	14.91	14.80	15.01	15.02	14.03	13.62	13.50	13.50	13.34	13.38	13.32
20	14.69	14.93	14.88	14.88	14.80	13.79	13.43	13.48	13.39	13.33	13.45	13.28
25	14.72	14.94	15.00	14.97	14.55	13.79	13.46	13.40	13.30	13.40	13.33	13.23
EOM	14.79	15.18	14.96	15.01	14.24	13.83	13.55	13.45	13.37	13.35	13.28	13.15

WTR YR 2000 HIGH 13.15 SEP 30

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.62	14.89	15.02	15.04	15.14	14.21	13.79	13.56	13.50	13.43	13.39	13.43
10	14.52	14.86	15.02	14.82	15.03	14.20	13.67	13.46	13.57	13.48	13.32	13.43
15	14.58	14.95	14.86	15.14	15.08	14.10	13.64	13.54	13.54	13.37	13.42	13.35
20	14.71	14.95	15.00	15.02	14.86	13.87	13.56	13.52	13.44	13.34	13.47	13.31
25	14.77	15.05	15.09	15.01	14.57	13.84	13.52	13.49	13.33	13.42	13.37	13.30
EOM	14.83	15.21	15.01	15.04	14.38	13.86	13.59	13.49	13.43	13.40	13.30	13.19

WTR YR 2000 LOW 15.21 NOV 30



KOSCIUSKO COUNTY

412556085513401. Local number, KO 9.
LOCATION.--Lat 41°25'56", long 85°51'34", in SW$^1/_4$NE$^1/_4$NW$^1/_4$ sec.5, T.34 N., R.6 E., Kosciusko County, Hydrologic Unit 04050001, on the north edge of property owned by the Dome Pipeline Corporation, on County Road 50 West, 1.5 mi northwest of Milford. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 4 in., depth 102 ft, cased to 99 ft, screened to 102 ft.

INSTRUMENTATION.--Water-stage recorder.

DATUM.--Elevation of land-surface datum is 830.90 ft above sea level. Measuring point: Top of floor of shelter, 3.2 ft above land-surface datum.

PERIOD OF RECORD.--October 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.24 ft below land-surface datum, Apr. 8, 9, 1985; lowest, 14.62 ft below land-surface datum, Feb. 21 - 22, 2000.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

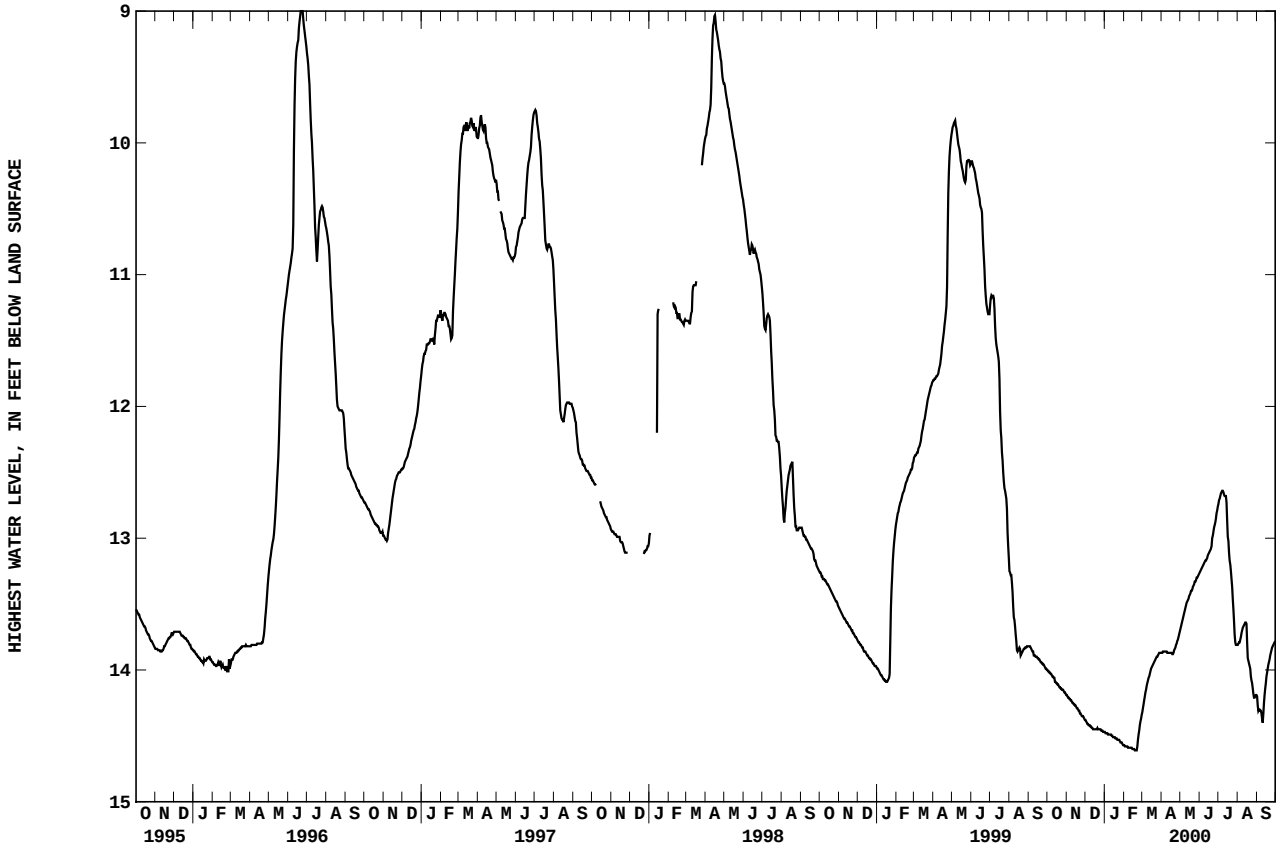
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.02	14.22	14.41	14.48	14.58	14.20	13.86	13.61	13.22	12.66	13.77	14.30
10	14.05	14.25	14.43	14.49	14.59	14.08	13.87	13.51	13.17	12.67	13.67	14.40
15	14.10	14.27	14.45	14.51	14.60	13.99	13.87	13.44	13.12	12.87	13.65	14.10
20	14.13	14.31	14.44	14.52	14.61	13.94	13.87	13.39	13.06	13.20	13.97	13.94
25	14.15	14.35	14.45	14.54	14.46	13.90	13.80	13.33	12.90	13.54	14.14	13.83
EOM	14.19	14.38	14.47	14.57	14.34	13.87	13.71	13.27	12.76	13.81	14.19	13.78

WTR YR 2000 HIGH 12.64 JUL 7

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.03	14.22	14.42	14.49	14.59	14.23	13.86	13.63	13.23	12.68	13.79	14.31
10	14.06	14.25	14.44	14.50	14.59	14.10	13.87	13.53	13.18	12.68	13.68	14.42
15	14.10	14.28	14.45	14.51	14.60	14.01	13.87	13.46	13.13	12.99	13.79	14.14
20	14.13	14.31	14.45	14.53	14.61	13.95	13.89	13.40	13.08	13.25	13.99	13.96
25	14.15	14.35	14.46	14.55	14.49	13.90	13.81	13.33	12.92	13.64	14.18	13.85
EOM	14.19	14.38	14.47	14.57	14.37	13.87	13.73	13.28	12.79	13.81	14.21	13.79

WTR YR 2000 LOW 14.62 FEB 21



LAGRANGE COUNTY

414318085200601. Local number, LG 2.
LOCATION.--Lat 41°43'18", long 85°20'06", in SW$^1/_4$SE$^1/_4$NE$^1/_4$ sec.26, T.38 N., R.10 E., Lagrange County, Hydrologic Unit 04050001, on northeast corner of intersection of State Highway 120 and County Road 475 East, and 1.2 mi west of Brighton. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 5 in., depth 86 ft, cased to 80 ft, screened to 86 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 911.02 ft above sea level. Measuring point: Top of floor of shelter, 3.0 ft above land-surface datum.

PERIOD OF RECORD.--May 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.00 ft below land-surface datum, July 1, 2, 1993; lowest, 16.93 ft below land-surface datum, Aug. 14, 15, 1988.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

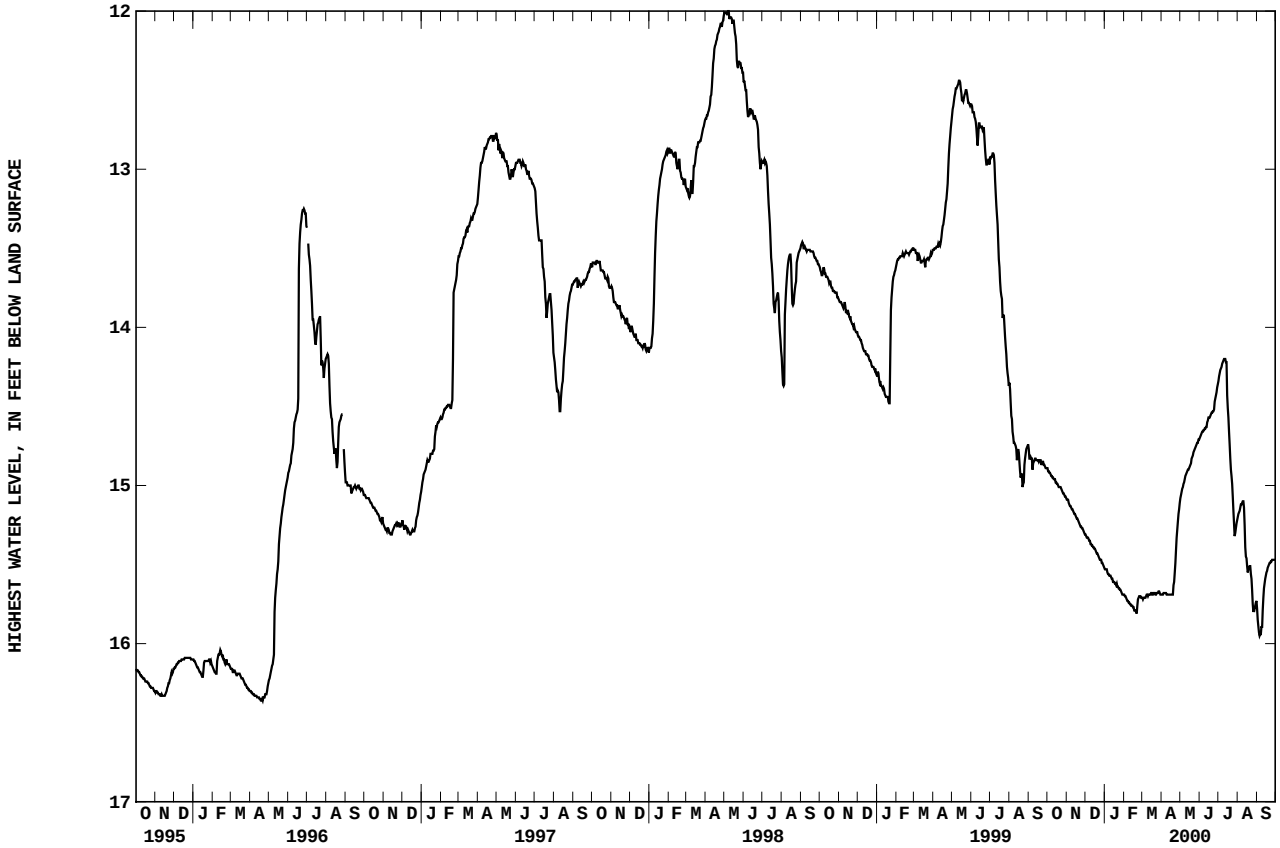
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.92	15.12	15.33	15.55	15.72	15.71	15.68	15.01	14.66	14.26	15.14	15.95
10	14.95	15.15	15.37	15.57	15.75	15.70	15.69	14.93	14.64	14.20	15.10	15.79
15	14.98	15.19	15.40	15.61	15.77	15.68	15.69	14.89	14.57	14.43	15.46	15.57
20	15.01	15.23	15.43	15.62	15.80	15.68	15.63	14.82	14.54	14.83	15.51	15.50
25	15.04	15.27	15.47	15.66	15.70	15.68	15.33	14.76	14.47	15.16	15.75	15.47
EOM	15.08	15.31	15.52	15.69	15.71	15.69	15.11	14.71	14.36	15.22	15.73	15.47

WTR YR 2000 HIGH 14.20 JUL 10

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.93	15.13	15.34	15.56	15.73	15.71	15.69	15.02	14.67	14.27	15.16	15.98
10	14.96	15.16	15.38	15.58	15.75	15.70	15.70	14.94	14.64	14.21	15.14	15.91
15	14.99	15.20	15.41	15.61	15.78	15.69	15.69	14.90	14.59	14.52	15.51	15.59
20	15.02	15.24	15.44	15.64	15.81	15.69	15.69	14.83	14.55	14.90	15.52	15.51
25	15.05	15.28	15.48	15.67	15.71	15.68	15.41	14.77	14.52	15.24	15.82	15.48
EOM	15.09	15.31	15.53	15.70	15.72	15.70	15.15	14.71	14.38	15.24	15.78	15.47

WTR YR 2000 LOW 15.98 SEP 5



LAGRANGE COUNTY

414158085253401. Local number, LG 3.
LOCATION.--Lat 41°41'58", long 85°25'34", in SE$^1/_4$SE$^1/_4$SE$^1/_4$ sec.36, T.38 N., R.9 E., Lagrange County, Hydrologic Unit 04050001, at northwest corner of intersection of State Highway 9 and County Road 400 North, at edge of woods, and 1.4 mi south of Howe. Owner: U.S. Geological Survey.

AQUIFER.--Fine to medium sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 40 ft, cased to 35 ft, screened to 40 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 870 ft above sea level, from topographic map. Measuring point: Top of floor of shelter, 3.7 ft above land-surface datum.

PERIOD OF RECORD.--June 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.48 ft below land-surface datum, Mar. 21, 1982; lowest, 8.82 ft below land-surface datum, Sept. 2, 1988.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

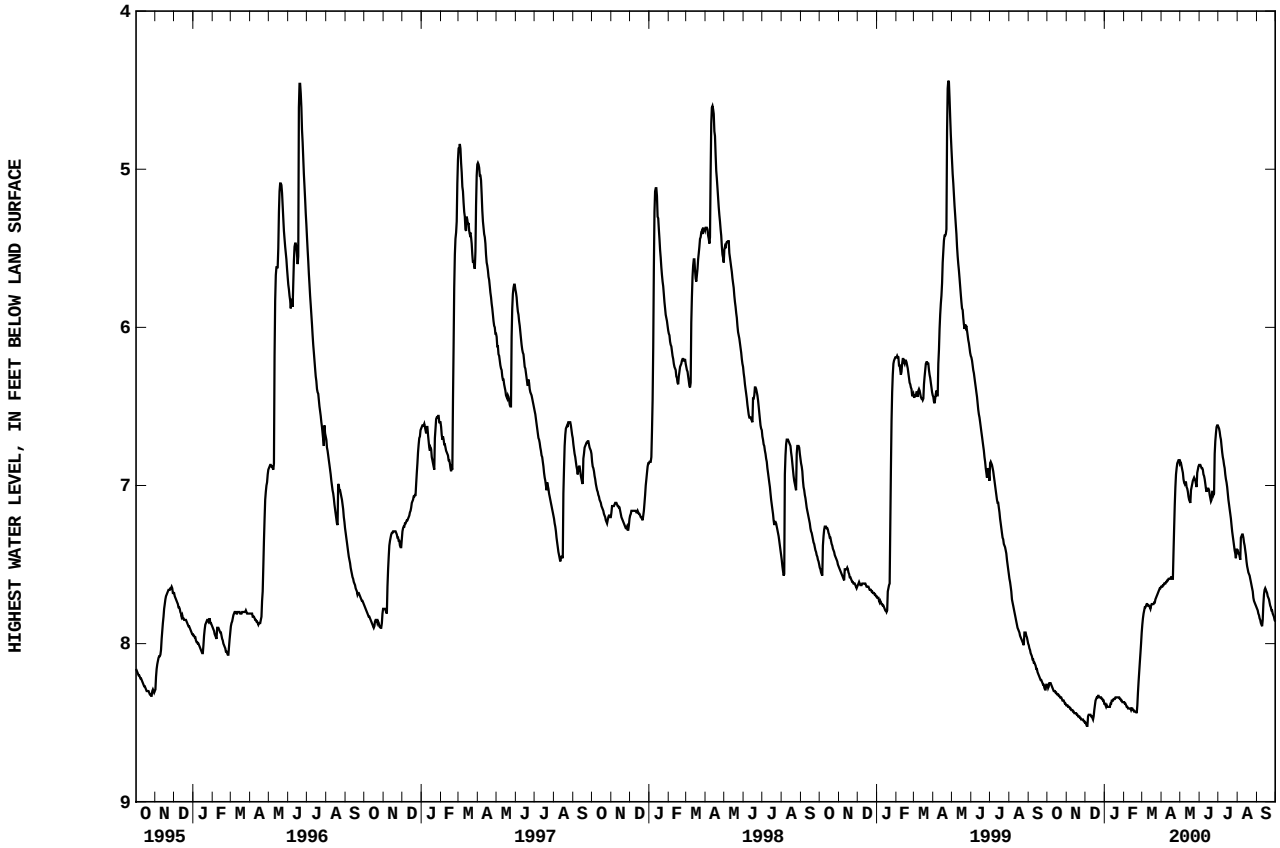
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.25	8.40	8.46	8.40	8.40	7.77	7.62	6.92	6.89	6.71	7.47	7.84
10	8.29	8.42	8.46	8.38	8.41	7.76	7.60	6.98	6.99	6.87	7.33	7.85
15	8.31	8.44	8.42	8.35	8.42	7.76	7.59	7.09	7.02	7.01	7.48	7.66
20	8.33	8.46	8.34	8.34	8.43	7.74	7.42	6.99	7.09	7.18	7.57	7.72
25	8.36	8.48	8.34	8.35	8.18	7.69	6.89	6.97	6.80	7.35	7.67	7.79
EOM	8.39	8.50	8.38	8.37	7.93	7.64	6.86	6.87	6.62	7.41	7.77	7.86

WTR YR 2000 HIGH 6.62 JUN 29

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.25	8.41	8.53	8.40	8.40	7.79	7.64	6.96	6.90	6.75	7.48	7.85
10	8.30	8.43	8.46	8.40	8.42	7.76	7.61	7.02	7.02	6.89	7.36	7.91
15	8.32	8.45	8.46	8.36	8.42	7.79	7.59	7.10	7.03	7.05	7.51	7.67
20	8.34	8.46	8.34	8.34	8.44	7.75	7.59	7.01	7.12	7.21	7.59	7.74
25	8.36	8.48	8.34	8.35	8.24	7.70	6.93	6.99	7.05	7.38	7.71	7.81
EOM	8.39	8.50	8.38	8.37	8.00	7.65	6.87	6.88	6.63	7.41	7.78	7.87

WTR YR 2000 LOW 8.53 DEC 4



LAKE COUNTY

411038087284701. Local number, LK 12.
LOCATION.--Lat 41°10'38", long 87°28'47", in SW$^1/_4$NE$^1/_4$SW$^1/_4$ sec.32, T.32 N., R.9 W., Lake County, Hydrologic Unit 07120001, on the northern edge of Kankakee River State Park, 2.0 mi southwest of Schneider.
Owner: U.S. Geological Survey.

AQUIFER.--Dolomite of Silurian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 82 ft, cased to 52 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 630.59 ft above sea level. Measuring point: Top of floor of shelter, 2.55 ft above land-surface datum.

REMARKS.--Water level may be affected by pumping.

PERIOD OF RECORD.--March 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.15 ft below land-surface datum, Jan. 12, 1973; lowest, 17.92 ft below land-surface datum, Aug. 27, 1988.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

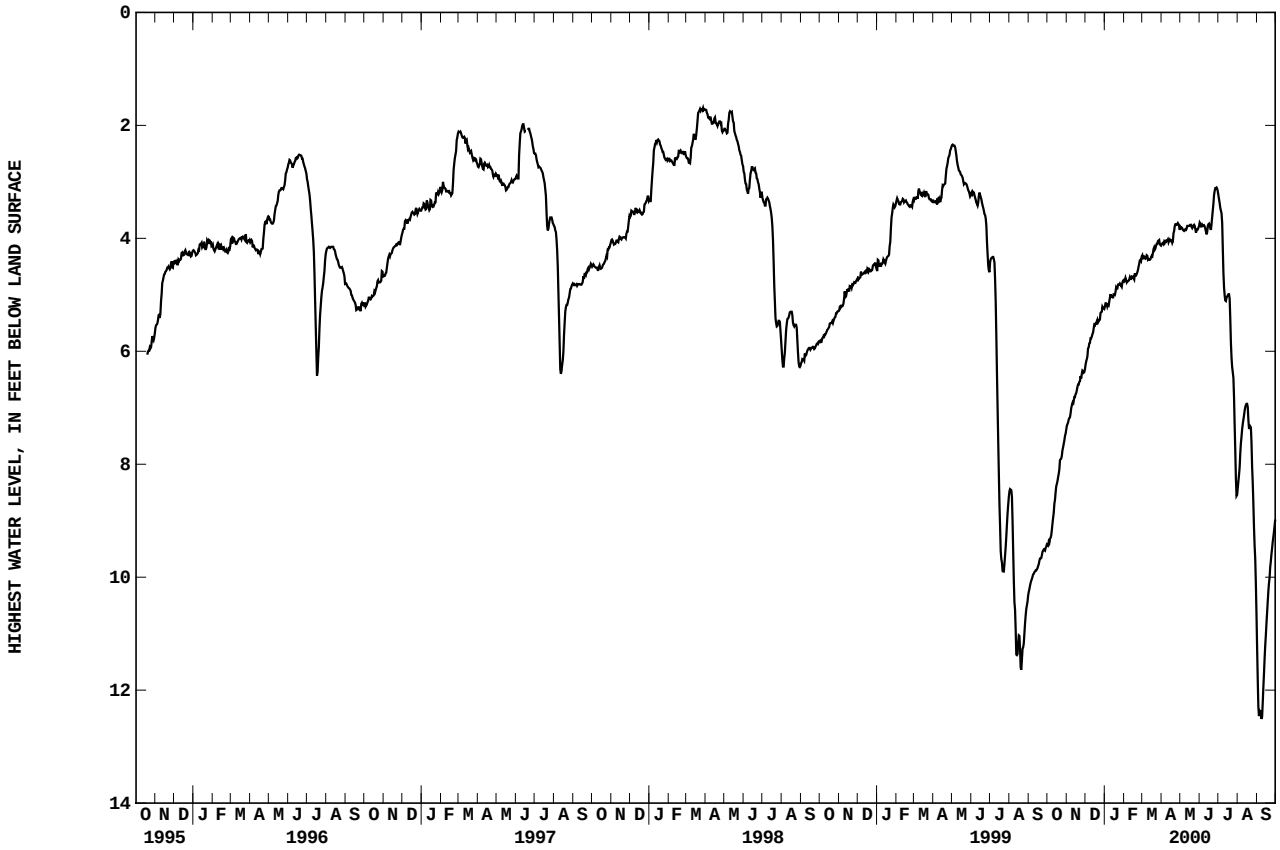
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.32	7.18	5.95	5.21	4.78	4.34	4.06	3.85	3.76	3.51	7.81	12.36
10	8.95	6.92	5.77	4.99	4.69	4.38	4.04	3.85	3.83	4.87	7.21	12.23
15	8.39	6.76	5.53	4.99	4.68	4.33	4.04	3.78	3.75	5.03	6.93	11.03
20	8.09	6.59	5.44	4.89	4.66	4.16	3.91	3.82	3.74	5.43	7.36	10.11
25	7.75	6.40	5.32	4.80	4.45	4.10	3.76	3.84	3.16	6.47	8.33	9.49
EOM	7.39	6.32	5.25	4.74	4.32	4.13	3.85	3.78	3.17	8.54	10.65	8.98

WTR YR 2000 HIGH 3.10 JUN 28

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.50	7.22	6.09	5.25	4.82	4.38	4.14	3.88	3.80	3.56	8.05	12.47
10	9.06	6.97	5.81	5.05	4.73	4.41	4.07	3.91	3.89	5.01	7.29	12.47
15	8.50	6.83	5.60	5.06	4.76	4.37	4.08	3.83	3.79	5.06	6.96	11.21
20	8.20	6.63	5.52	4.95	4.70	4.20	4.06	3.85	3.87	5.85	7.40	10.25
25	7.92	6.50	5.46	4.82	4.50	4.12	3.77	3.90	3.23	6.81	8.69	9.59
EOM	7.46	6.38	5.27	4.77	4.40	4.16	3.88	3.87	3.24	8.61	11.23	9.09

WTR YR 2000 LOW 12.61 SEP 8



LAKE COUNTY

413559087270301. Local number, LK 13.
LOCATION.--Lat 41°35'59", long 87°27'03", in SW1/4NW1/4SW1/4 sec.3, T.36 N., R.9 W., Lake County, Hydrologic Unit 04040001, at the Gibson Woods Nature Preserve on the north side of Hammond.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6.0 in., depth 23 ft, cased to 18 ft, screened to 23 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 591.91 ft above sea level. Measuring point: Top of casing, 3.33 ft above land-surface datum.

PERIOD OF RECORD.--July 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.00 ft below land-surface datum, June 30, July 2, 1993, Feb. 27, 1997: lowest, 5.23 ft below land-surface datum, Sept. 26, 27, 1999.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

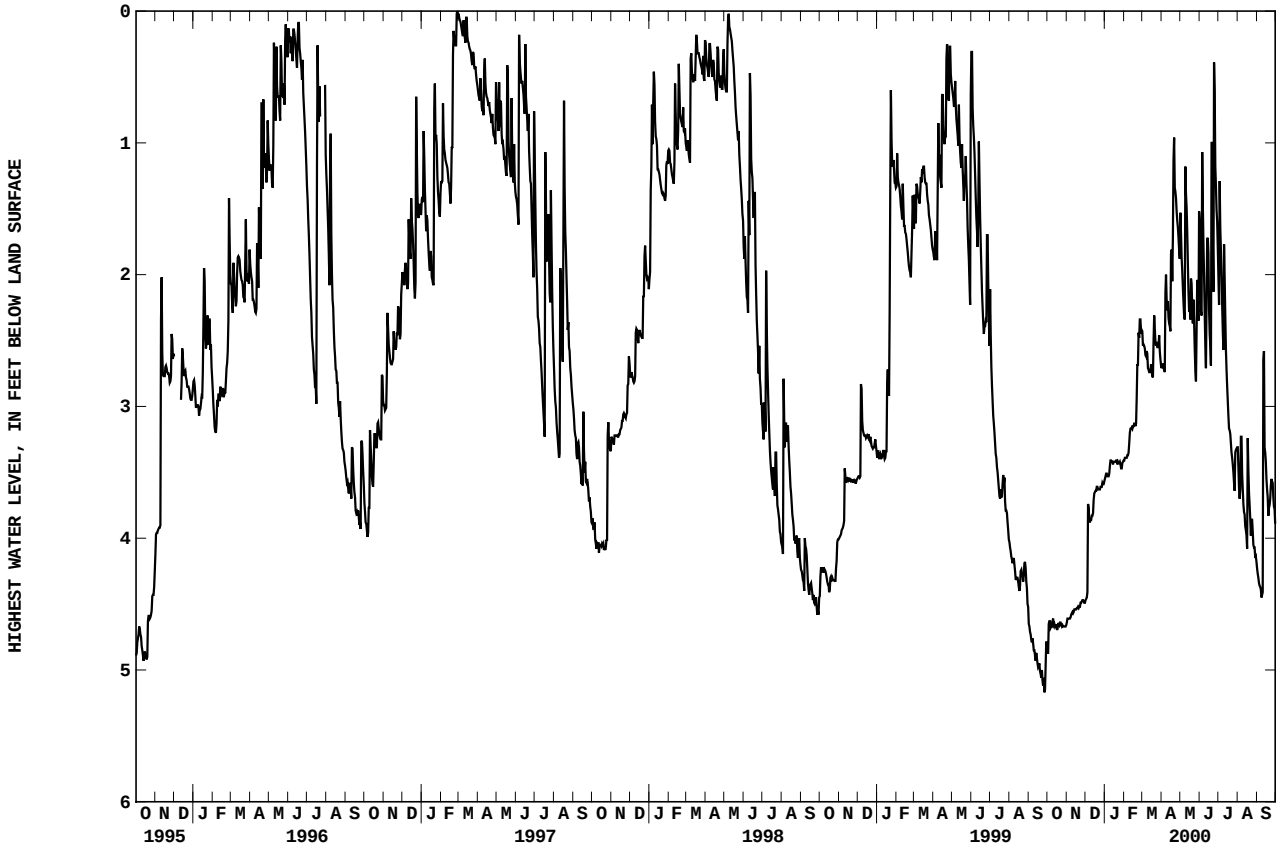
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.63	4.61	3.74	3.53	3.39	2.56	2.71	2.10	1.07	1.82	3.63	4.36
10	4.61	4.56	3.86	3.41	3.20	2.71	2.27	1.39	2.54	1.77	3.74	4.41
15	4.66	4.54	3.66	3.42	3.15	2.68	2.43	2.28	1.84	2.85	3.98	3.42
20	4.66	4.53	3.61	3.41	3.13	2.31	1.13	2.25	1.00	3.21	3.75	3.77
25	4.66	4.48	3.61	3.42	2.48	2.55	1.52	2.73	.61	3.50	3.95	3.57
EOM	4.66	4.49	3.57	3.41	2.42	2.69	1.88	1.52	1.80	3.31	4.18	3.89

WTR YR 2000 HIGH .39 JUN 24

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.71	4.61	4.41	3.55	3.40	2.61	2.78	2.22	2.34	2.05	3.90	4.47
10	4.68	4.57	3.88	3.45	3.28	2.74	2.38	1.77	2.84	2.73	3.95	4.53
15	4.71	4.55	3.71	3.44	3.21	2.74	2.48	2.43	2.33	3.11	4.21	3.59
20	4.67	4.53	3.63	3.45	3.15	2.51	1.86	2.40	2.87	3.43	3.94	4.00
25	4.67	4.49	3.66	3.45	2.50	2.62	1.59	2.93	1.20	3.73	4.21	3.62
EOM	4.67	4.50	3.59	3.42	2.47	2.71	1.92	2.58	2.08	3.33	4.37	4.06

WTR YR 2000 LOW 4.94 OCT 1



LAKE COUNTY

411146087204101. Local number, LK 14.
LOCATION.--Lat 41°11'46", long 87°20'41",in SE$^1/_4$SE$^1/_4$NW$^1/_4$ sec.28, T.32 N., R.8 W., Lake County, Hydrologic Unit 07120001, in Shelby on northwest corner of the intersection of Tyler Road and State Highway 55.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Silurian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 96.2 ft, cased to 50 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 641 ft above sea level, from topographic map. Measuring point: Top of casing, 3.50 ft above land-surface datum.

PERIOD OF RECORD.--July 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.70 ft below land-surface datum, May 11, 12, 1998; lowest, 22.86 ft below land-surface datum, July 28, l991.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

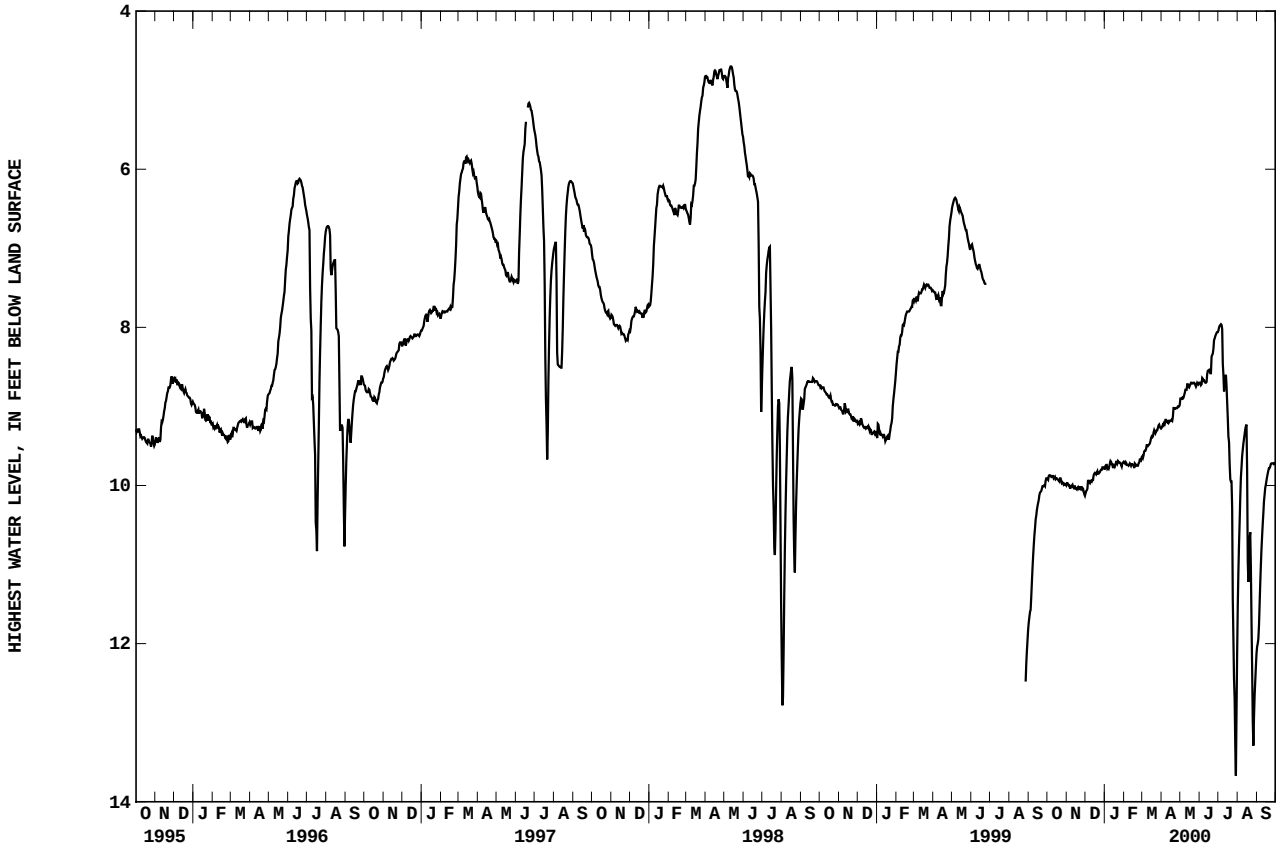
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.87	10.00	9.93	9.79	9.74	9.56	9.21	8.90	8.64	7.96	10.15	11.51
10	9.88	9.99	9.94	9.69	9.72	9.50	9.20	8.79	8.70	8.81	9.47	10.49
15	9.91	10.04	9.85	9.74	9.74	9.40	9.18	8.76	8.55	8.95	9.23	9.99
20	9.95	10.04	9.82	9.70	9.75	9.30	9.02	8.71	8.37	9.92	10.67	9.78
25	9.96	10.05	9.81	9.71	9.71	9.30	9.02	8.73	8.14	11.94	12.96	9.72
EOM	10.00	10.13	9.79	9.70	9.64	9.28	8.98	8.70	8.06	12.12	12.13	9.71

WTR YR 2000 HIGH 7.96 JUL 5

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.89	10.03	10.04	9.79	9.76	9.58	9.25	8.91	8.72	7.97	10.46	11.77
10	9.91	10.02	9.97	9.72	9.74	9.51	9.21	8.82	8.71	8.91	9.55	10.64
15	9.93	10.05	9.87	9.78	9.77	9.44	9.19	8.78	8.56	9.15	9.81	10.03
20	9.97	10.06	9.86	9.73	9.77	9.33	9.13	8.72	8.58	9.99	10.95	9.81
25	9.98	10.07	9.85	9.72	9.73	9.31	9.03	8.75	8.16	12.69	13.29	9.73
EOM	10.01	10.14	9.80	9.71	9.68	9.29	9.01	8.74	8.07	12.85	12.30	9.72

WTR YR 2000 LOW 13.99 JUL 29



LA PORTE COUNTY

412350086512801. Local number, LP 9.
LOCATION.--Lat 41°23'50", long 86°51'28", in SE$^1/_4$SW$^1/_4$NE$^1/_4$ sec.15, T.34 N., R.4 W., La Porte County, Hydrologic Unit 07120001, at the intersection of County Roads 1450 South and 825 West, 3.0 mi southeast of Wanatah.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 32 ft, cased to 27 ft, screened to 32 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 706.81 ft above sea level. Measuring point: Top of floor of shelter, 1.60 ft above land-surface datum.

PERIOD OF RECORD.--June 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.56 ft below land-surface datum, Apr. 5, 1985; lowest, 8.39 ft below land-surface datum, Dec. 13, 1999.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

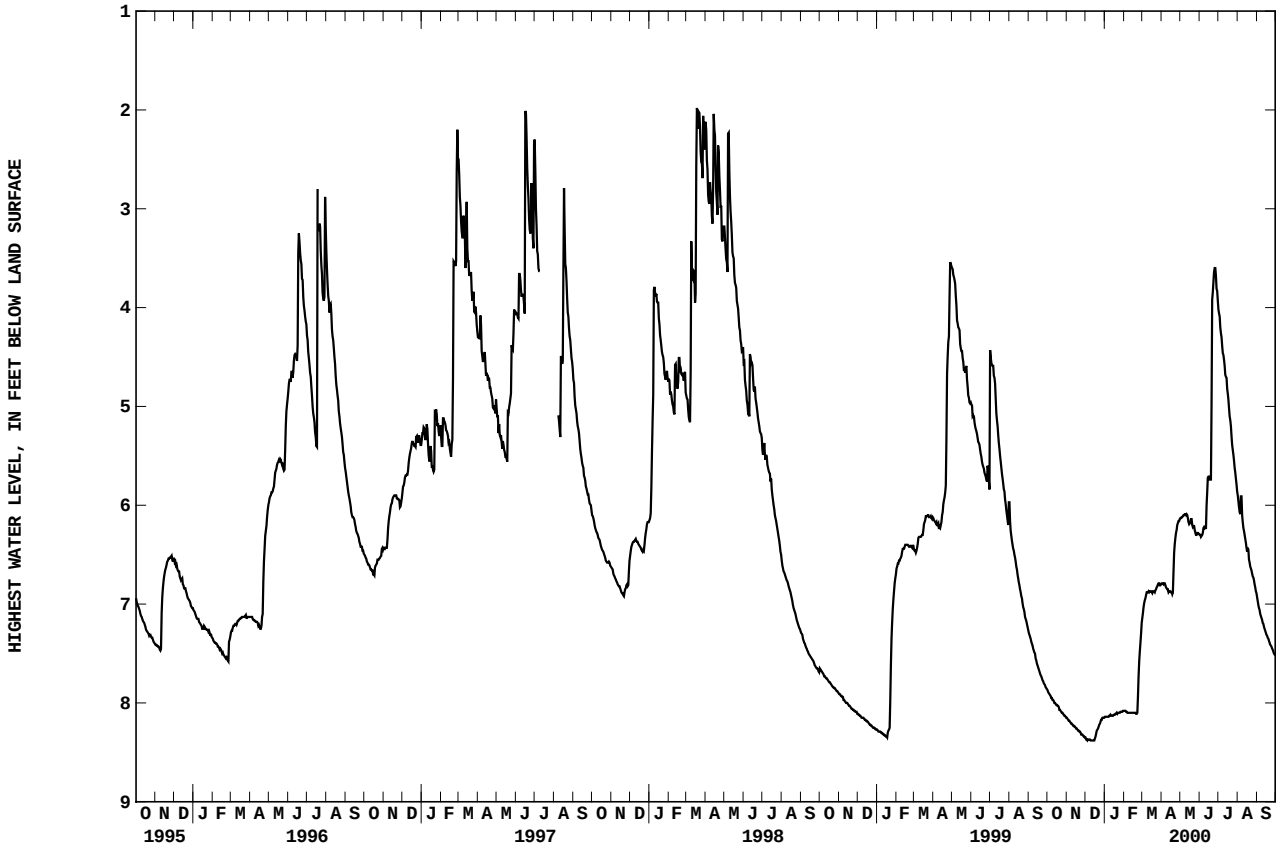
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.92	8.18	8.37	8.14	8.09	6.96	6.79	6.11	6.30	4.26	6.09	7.06
10	7.97	8.22	8.38	8.12	8.10	6.88	6.85	6.10	6.22	4.53	6.23	7.19
15	8.02	8.25	8.38	8.12	8.10	6.87	6.87	6.19	5.71	4.82	6.43	7.29
20	8.07	8.28	8.27	8.10	8.11	6.87	6.67	6.20	4.95	5.14	6.58	7.37
25	8.10	8.32	8.19	8.10	7.58	6.82	6.25	6.28	3.60	5.49	6.72	7.45
EOM	8.15	8.35	8.15	8.08	7.19	6.80	6.14	6.29	3.93	5.86	6.89	7.52

WTR YR 2000 HIGH 3.60 JUN 25

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.93	8.19	8.38	8.14	8.10	6.99	6.82	6.13	6.33	4.31	6.12	7.10
10	7.98	8.23	8.38	8.13	8.10	6.90	6.87	6.13	6.24	4.59	6.27	7.20
15	8.02	8.26	8.38	8.13	8.10	6.88	6.89	6.19	5.72	4.87	6.47	7.31
20	8.07	8.29	8.28	8.11	8.11	6.88	6.88	6.22	5.74	5.20	6.62	7.39
25	8.11	8.32	8.21	8.10	7.73	6.83	6.28	6.30	3.64	5.55	6.73	7.46
EOM	8.15	8.35	8.15	8.08	7.30	6.82	6.16	6.32	4.02	5.90	6.93	7.53

WTR YR 2000 LOW 8.39 DEC 13



LA PORTE COUNTY

413139086341401. Local number, LP 10.
LOCATION.--Lat 41°31'40", long 86°34'10", in SE$^1/_4$SW$^1/_4$NE$^1/_4$ sec.31, T.36 N., R.1 W., La Porte County, Hydrologic Unit 07120001, 200 ft north of the manager's residence at the Mixsawbah Fish Hatchery and 2.6 mi southeast of Stillwell.
Owner: State of Indiana.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 104 ft, cased to 102 ft, screened to 104 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 695 ft above sea level, from topographic map. Measuring point: Top of floor of shelter, 3.60 ft above land-surface datum.

PERIOD OF RECORD.--August 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.65 ft below land-surface datum, Dec. 29, 1990; lowest, 9.78 ft below land-surface datum, Nov. 16-24, 1999.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

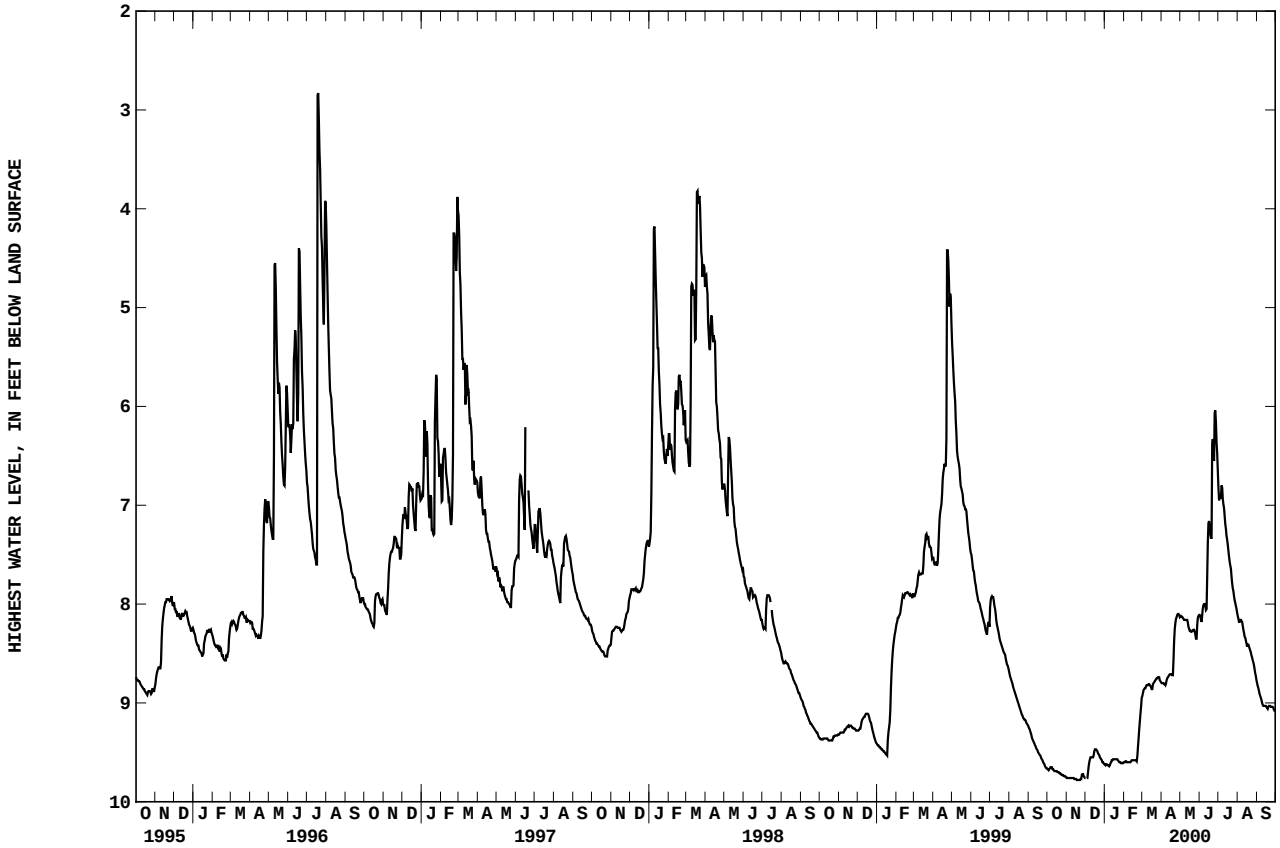
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.66	9.76	9.70	9.63	9.60	8.85	8.81	8.14	8.11	6.93	8.16	8.91
10	9.67	9.76	9.55	9.61	9.60	8.82	8.75	8.16	8.02	7.03	8.26	9.02
15	9.69	9.77	9.49	9.57	9.58	8.84	8.71	8.25	7.18	7.35	8.40	9.03
20	9.71	9.78	9.49	9.57	9.58	8.79	8.56	8.27	7.33	7.61	8.45	9.03
25	9.73	9.73	9.56	9.60	9.27	8.75	8.13	8.31	6.06	7.87	8.57	9.04
EOM	9.75	9.76	9.62	9.60	8.95	8.79	8.13	8.11	6.65	8.09	8.77	9.09

WTR YR 2000 HIGH 6.04 JUN 26

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.67	9.76	9.76	9.63	9.60	8.86	8.82	8.15	8.20	6.97	8.18	8.93
10	9.68	9.76	9.55	9.63	9.60	8.83	8.77	8.19	8.06	7.11	8.29	9.03
15	9.69	9.77	9.53	9.57	9.59	8.86	8.72	8.27	7.38	7.40	8.43	9.04
20	9.71	9.78	9.51	9.57	9.59	8.80	8.72	8.28	7.39	7.64	8.47	9.04
25	9.73	9.77	9.57	9.60	9.36	8.75	8.15	8.35	6.55	7.92	8.59	9.04
EOM	9.76	9.76	9.62	9.61	9.04	8.80	8.15	8.12	6.82	8.12	8.80	9.10

WTR YR 2000 LOW 9.78 NOV 16



LA PORTE COUNTY

412839086533101. Local number, LP 11.
LOCATION.--Lat 41°28'39", long 86°53'31", in SW$^1/_4$SW$^1/_4$SW$^1/_4$ sec.16, T.35 N., R.4 W., La Porte County, Hydrologic Unit 07120001, in the northeast corner of intersection of U.S. Highway 421 and County Road 900 South.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 100 ft, cased to 95 ft, screened to 100 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 760 ft above sea level, from topographic map. Measuring point: Top of floor of shelter, 4.1 ft above land-surface datum.

REMARKS.--Water level may be affected by pumpage.

PERIOD OF RECORD.--June 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.82 ft below land-surface datum, Dec. 30, 1990; lowest, 10.81 ft below land-surface datum, Feb. 20-23, 2000.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

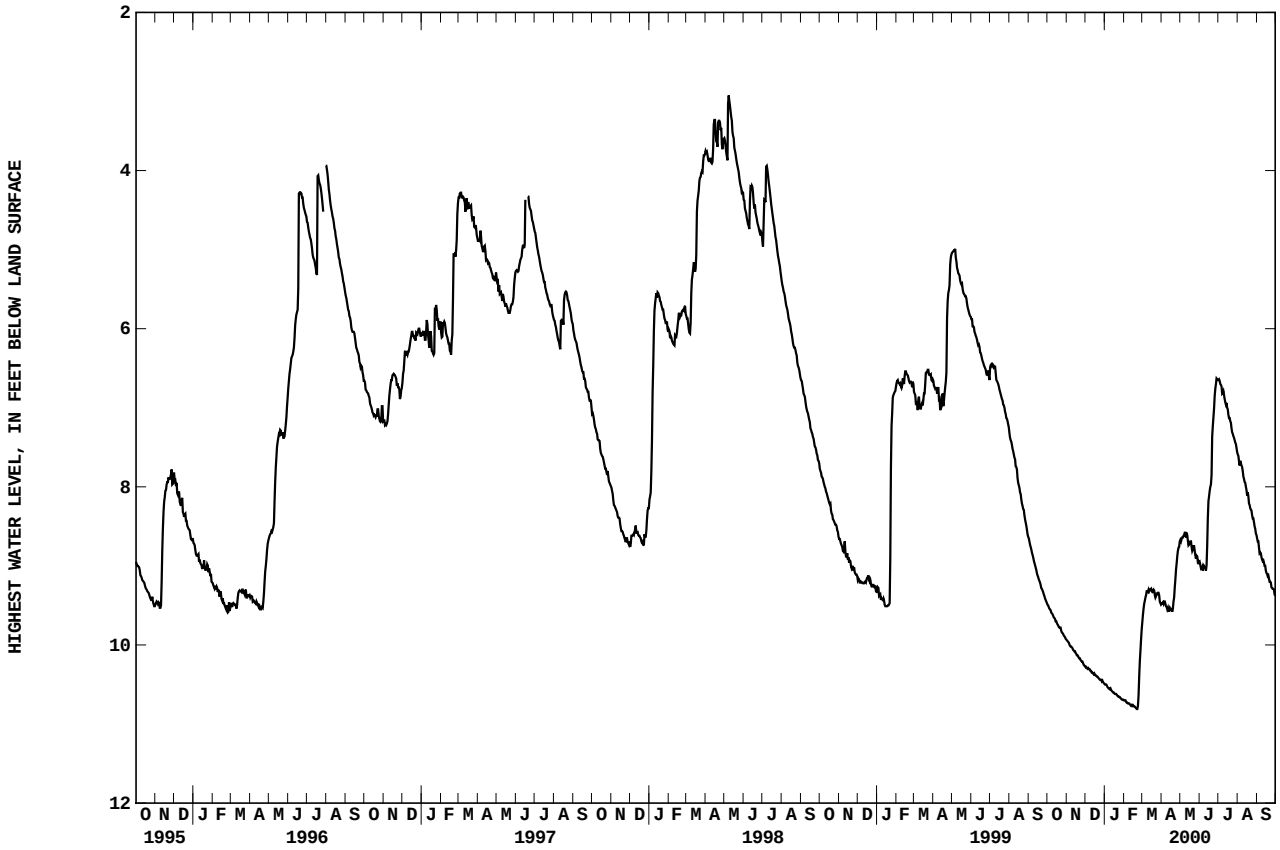
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.55	9.99	10.29	10.53	10.73	9.44	9.45	8.64	9.01	6.71	7.67	8.84
10	9.63	10.04	10.33	10.55	10.75	9.33	9.55	8.64	9.03	6.84	7.87	8.94
15	9.70	10.10	10.36	10.60	10.76	9.29	9.55	8.73	8.18	7.00	8.04	9.06
20	9.78	10.16	10.40	10.63	10.80	9.31	9.45	8.81	7.85	7.17	8.23	9.16
25	9.85	10.21	10.44	10.66	10.40	9.37	8.97	8.87	6.85	7.36	8.40	9.28
EOM	9.93	10.27	10.49	10.70	9.80	9.49	8.69	8.96	6.65	7.56	8.61	9.38

WTR YR 2000 HIGH 6.63 JUN 28

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.56	10.01	10.31	10.54	10.73	9.48	9.52	8.68	9.07	6.74	7.77	8.85
10	9.65	10.06	10.35	10.57	10.76	9.35	9.58	8.71	9.07	6.90	7.91	8.97
15	9.72	10.11	10.38	10.61	10.78	9.32	9.58	8.77	8.40	7.03	8.11	9.09
20	9.79	10.17	10.41	10.64	10.81	9.37	9.54	8.83	7.97	7.19	8.27	9.20
25	9.86	10.22	10.45	10.67	10.63	9.41	9.05	8.92	7.01	7.39	8.42	9.29
EOM	9.94	10.27	10.50	10.70	9.93	9.50	8.76	9.01	6.68	7.60	8.65	9.40

WTR YR 2000 LOW 10.81 FEB 20



LA PORTE COUNTY

413434086434701. Local number, LP 12.
LOCATION.--Lat 41°34'34", long 86°43'47", in NE$^1/_4$NE$^1/_4$NW$^1/_4$ sec.14, T.36 N., R.3 W., La Porte County, Hydrologic Unit 07120001, on County Road 150 West, at La Porte Municipal Airport, 1.6 mi south of La Porte.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 77 ft, cased to 71 ft, screened to 77 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 805 ft above sea level, from topographic map. Measuring point: Top of floor of shelter, 3.70 ft above land-surface datum.

REMARKS.--Water level may be affected by pumpage.

PERIOD OF RECORD.--July 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.96 ft below land-surface datum, Jan. 16, 1991; lowest, 22.98 ft below land-surface datum, Apr. 21-24, 2000.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

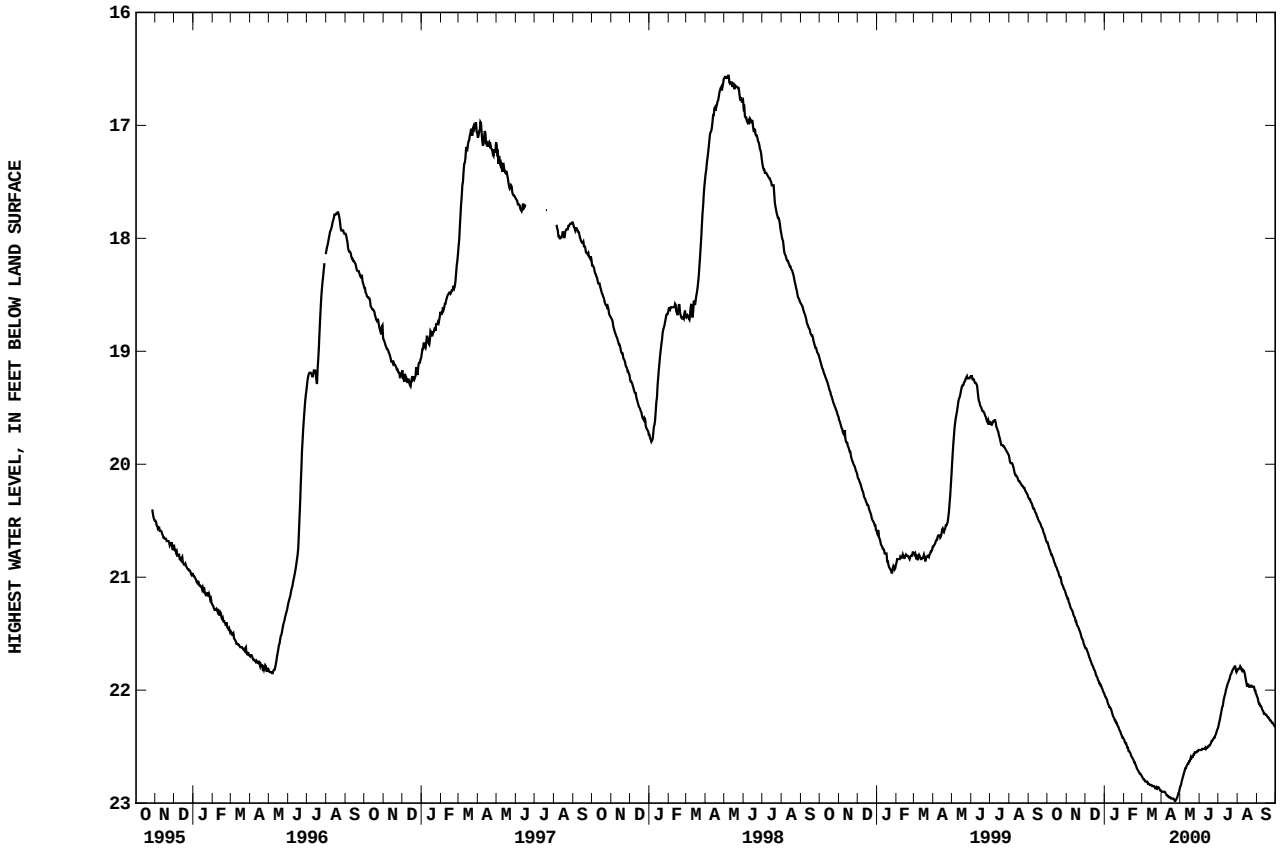
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	20.76	21.23	21.67	22.10	22.49	22.80	22.90	22.77	22.52	22.21	21.79	22.12
10	20.83	21.30	21.75	22.16	22.55	22.83	22.93	22.69	22.51	22.07	21.83	22.18
15	20.91	21.39	21.82	22.24	22.61	22.84	22.95	22.63	22.50	21.96	21.94	22.22
20	20.99	21.45	21.89	22.29	22.67	22.85	22.96	22.59	22.45	21.87	21.97	22.25
25	21.07	21.54	21.96	22.36	22.73	22.87	22.96	22.55	22.42	21.81	21.97	22.29
EOM	21.16	21.62	22.03	22.43	22.76	22.89	22.87	22.53	22.34	21.83	22.04	22.32

WTR YR 2000 HIGH 20.69 OCT 1

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	20.78	21.25	21.69	22.12	22.51	22.81	22.91	22.79	22.53	22.24	21.81	22.14
10	20.85	21.32	21.77	22.17	22.56	22.83	22.94	22.69	22.52	22.10	21.83	22.19
15	20.92	21.39	21.83	22.25	22.62	22.85	22.96	22.65	22.50	21.98	21.97	22.23
20	21.01	21.47	21.91	22.31	22.69	22.86	22.97	22.60	22.47	21.90	21.98	22.26
25	21.08	21.55	21.97	22.37	22.74	22.87	22.97	22.56	22.43	21.82	21.97	22.29
EOM	21.17	21.63	22.05	22.44	22.77	22.90	22.90	22.54	22.35	21.84	22.06	22.33

WTR YR 2000 LOW 22.98 APR 21



MARION COUNTY

393855086120701. Local number, MA 34.
LOCATION.--Lat 39°38'55", long 86°12'07", in NE$^1/_4$NW$^1/_4$NE$^1/_4$ sec.21, T.14 N., R.3 E., Marion County, Hydrologic Unit 05120201, about 0.5 mi northwest of Glenns Valley.
Owner: U.S. Geological Survey.

AQUIFER.--Coarse sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 66 ft, cased to 61 ft, screened to 66 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 670.73 ft above sea level. Measuring point: Top of casing, 3.70 ft above land-surface datum.

REMARKS.--Well affected by pumpage from water-supply well field.

PERIOD OF RECORD.--July 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.55 ft below land-surface datum, Nov. 17, 1993; lowest, 13.62 ft below land-surface datum, May 9, 13, 2000. An artificially created extreme of the lowest water level, 17.32 ft below land-surface datum, June 6-8, 9, 1998 was recorded during underground drainage construction in the vicinity immediately surrounding the well.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

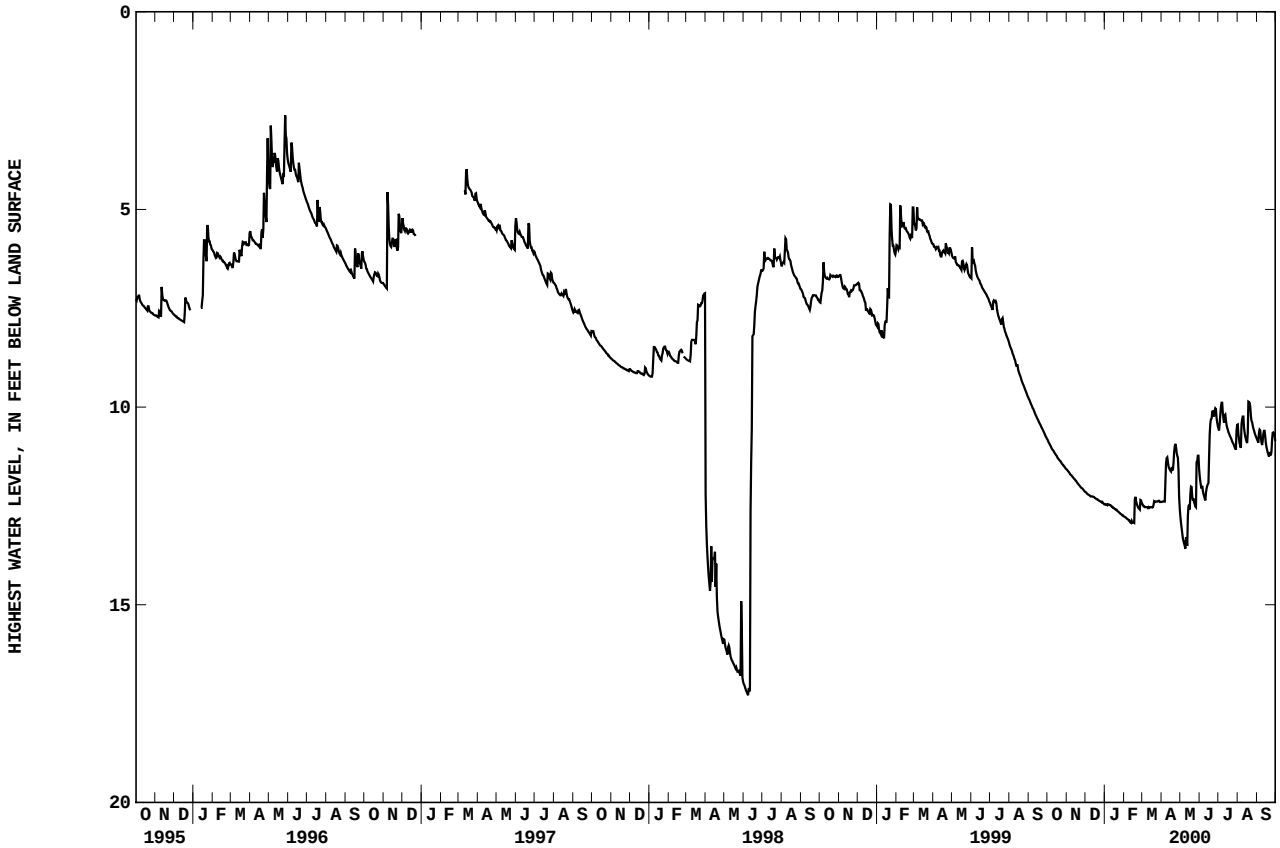
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.96	11.66	12.21	12.48	12.82	12.53	12.39	13.32	11.99	9.99	10.99	10.57
10	11.09	11.76	12.26	12.48	12.90	12.55	11.27	13.29	12.36	10.39	10.24	10.85
15	11.22	11.86	12.28	12.55	12.91	12.53	11.61	12.47	11.92	10.52	10.87	10.91
20	11.34	11.96	12.33	12.60	12.38	12.38	11.41	12.26	10.29	10.75	9.89	11.25
25	11.45	12.05	12.39	12.68	12.57	12.39	11.15	12.51	10.09	10.93	10.47	10.83
EOM	11.57	12.14	12.46	12.76	12.42	12.40	12.57	11.56	10.48	10.45	10.78	10.86

WTR YR 2000 HIGH 9.86 AUG 18

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.98	11.69	12.22	12.49	12.83	12.53	12.41	13.39	12.13	10.19	11.03	10.64
10	11.12	11.78	12.27	12.50	12.92	12.55	11.39	13.62	12.41	10.43	10.52	11.04
15	11.24	11.87	12.30	12.57	12.93	12.54	11.63	12.59	11.95	10.57	10.91	11.01
20	11.36	11.98	12.36	12.63	12.44	12.47	11.63	12.36	10.47	10.78	9.99	11.30
25	11.46	12.06	12.40	12.70	12.59	12.40	11.23	12.56	10.27	10.97	10.54	11.13
EOM	11.59	12.15	12.47	12.77	12.45	12.41	12.77	11.75	10.54	10.60	10.82	11.01

WTR YR 2000 LOW 13.62 MAY 9



MARION COUNTY

394632086092701. Local number, MA 35.
LOCATION.--Lat 39°46'32", long 86°09'27", in NW$^1/_4$SW$^1/_4$NW$^1/_4$ sec.1, T.15 N., R.3 E., Marion County, Hydrologic Unit 05120201, in the northeast corner of the intersection of Meridian and North Streets in Indianapolis.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 83 ft, cased to 77.5 ft, screened to 83 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 716.40 ft above sea level. Measuring point: Top of casing, 2.50 ft above land-surface datum.

REMARKS.--Water levels are affected by pumpage.

PERIOD OF RECORD.--September 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 30.30 ft below land-surface datum, Mar. 27, 1991; lowest, 37.65 ft below land-surface datum, Aug. 17, 2000.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

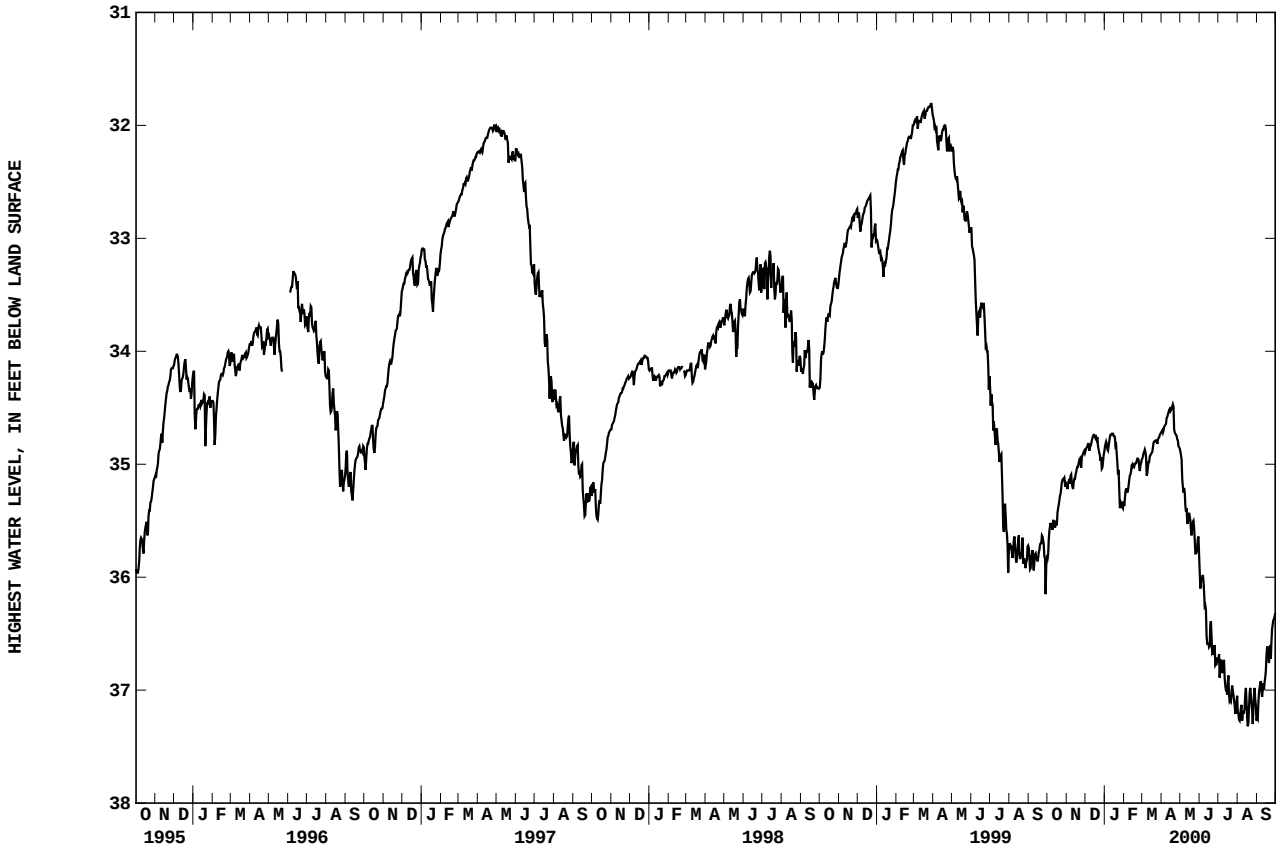
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	35.55	35.13	34.82	34.87	35.22	34.87	34.67	35.20	36.01	36.73	37.22	36.98
10	35.50	35.20	34.82	34.74	35.10	35.02	34.58	35.42	36.25	36.74	37.20	37.00
15	35.50	35.09	34.74	34.75	35.02	34.91	34.53	35.43	36.59	37.04	37.10	36.83
20	35.32	34.99	34.76	34.91	34.99	34.80	34.49	35.56	36.53	37.09	37.03	36.76
25	35.14	34.94	34.97	35.38	35.02	34.82	34.75	35.79	36.60	37.04	37.30	36.46
EOM	35.17	34.90	34.89	35.33	34.96	34.72	34.86	35.80	36.72	37.05	37.27	36.32

WTR YR 2000 HIGH 34.47 APR 19

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	35.72	35.28	34.84	34.97	35.47	34.95	34.72	35.52	36.31	37.12	37.48	37.26
10	35.59	35.33	34.88	34.77	35.14	35.17	34.64	35.52	36.52	37.18	37.59	37.20
15	35.85	35.14	34.80	34.84	35.11	35.00	34.62	35.56	36.90	37.33	37.57	37.13
20	35.40	35.05	34.84	34.99	35.10	34.84	34.77	35.63	36.92	37.42	37.28	37.09
25	35.21	35.03	35.02	35.49	35.38	34.88	34.85	36.06	36.90	37.42	37.59	36.57
EOM	35.26	34.98	34.94	35.54	35.04	34.77	34.97	36.18	37.03	37.47	37.60	36.57

WTR YR 2000 LOW 37.65 AUG 17



MARION COUNTY

394626086100201. Local number, MA 36.
LOCATION.--Lat 39°46'26", long 86°10'02", in SW$^1/_4$SW$^1/_4$NE$^1/_4$ sec.2, T.15 N., R.3 E., Marion County, Hydrologic Unit 05120201, in the southwest corner of the intersection of West and Michigan Streets in Indianapolis.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 70.6 ft, cased to 65.1 ft, screened to 70.6 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 710.06 ft above sea level. Measuring point: Top of casing, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--September 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 26.86 ft below land-surface datum, May 14, 1991; lowest, 33.41 ft below land-surface datum, Sept. 3-5, 1995.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

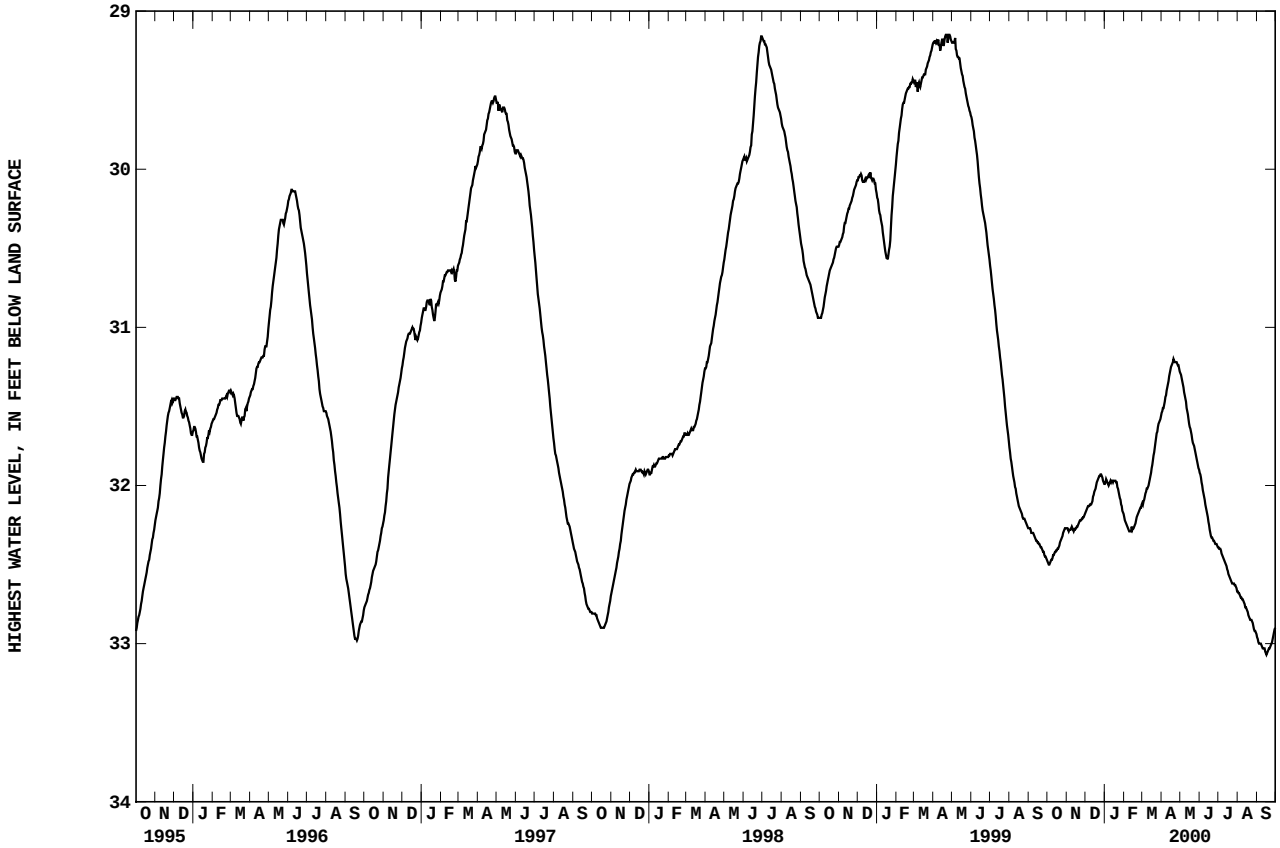
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	32.49	32.28	32.13	31.98	32.25	32.07	31.49	31.36	32.00	32.41	32.70	33.00
10	32.44	32.27	32.12	31.97	32.29	32.01	31.38	31.47	32.12	32.47	32.73	33.03
15	32.41	32.27	32.04	31.97	32.27	31.92	31.27	31.61	32.23	32.53	32.78	33.06
20	32.38	32.24	31.97	31.98	32.22	31.79	31.20	31.71	32.33	32.59	32.84	33.03
25	32.32	32.21	31.93	32.08	32.16	31.66	31.22	31.79	32.36	32.62	32.87	32.99
EOM	32.27	32.18	31.99	32.18	32.12	31.56	31.28	31.90	32.39	32.67	32.94	32.90

WTR YR 2000 HIGH 31.20 APR 20

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	32.50	32.29	32.14	31.99	32.26	32.09	31.51	31.38	32.03	32.43	32.71	33.01
10	32.46	32.28	32.13	31.98	32.29	32.02	31.40	31.51	32.14	32.48	32.74	33.04
15	32.42	32.28	32.06	31.98	32.28	31.94	31.29	31.63	32.25	32.54	32.79	33.07
20	32.39	32.25	31.98	32.01	32.24	31.81	31.22	31.73	32.33	32.60	32.85	33.04
25	32.33	32.22	31.94	32.09	32.17	31.67	31.23	31.81	32.37	32.62	32.89	33.00
EOM	32.27	32.19	32.00	32.20	32.14	31.58	31.29	31.92	32.39	32.67	32.96	32.91

WTR YR 2000 LOW 33.07 SEP 15



MARION COUNTY

394732086115501. Local number, MA 37.
LOCATION.--Lat 39°47'32", long 86°11'55", in SE$^1/_4$NE$^1/_4$NE$^1/_4$ sec. 33, T.16N., R.3E., Marion County, Hydrologic Unit 05120201, on the South Grove Municipal Golf Course property, west of the 11th fairway and east of White River Parkway in Indianapolis. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene Epoch.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 74 ft, cased to 69 ft, screened to 74 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 690 ft above sea level, from topographic map. Measuring point: Top of casing, 3.35 ft above land-surface datum.

REMARKS.--Water level affected by pumpage.

PERIOD OF RECORD.--July 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.22 ft below land-surface datum, Mar. 20, 1991; lowest, 17,04 ft below land-surface datum, Sept. 3, 9-10, 2000.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

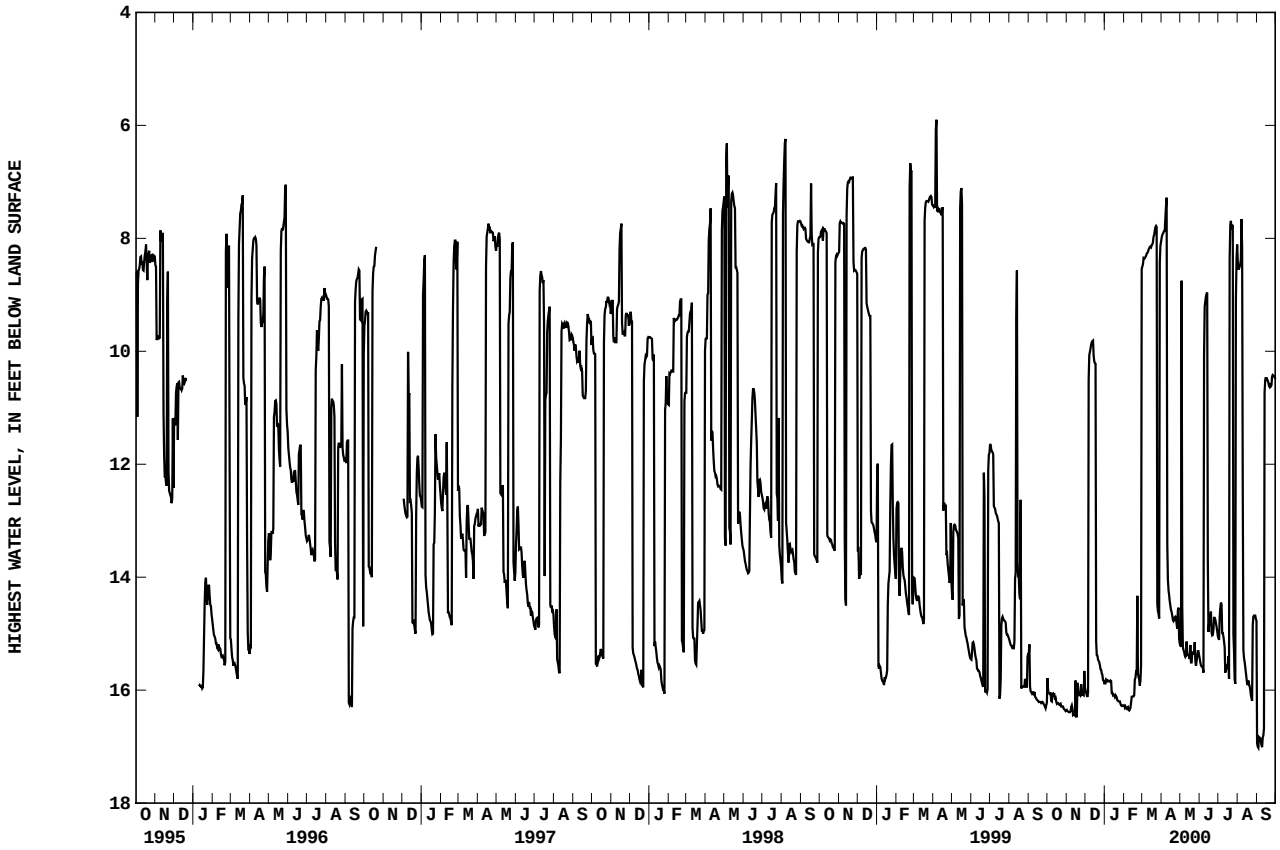
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.07	16.39	16.04	15.84	16.33	8.35	7.87	15.24	15.59	14.45	8.47	16.84
10	16.06	16.33	9.88	15.83	16.34	8.24	13.41	15.39	9.11	15.14	15.29	16.84
15	16.20	15.83	10.18	16.08	16.11	8.16	14.51	15.38	14.97	15.60	15.79	10.46
20	16.26	16.08	15.39	16.13	15.68	7.94	14.78	15.34	14.98	7.77	15.93	10.61
25	16.29	16.08	15.63	16.20	15.81	14.48	14.83	15.49	14.72	15.01	14.85	10.45
EOM	16.36	15.95	15.88	16.27	8.54	8.06	15.18	15.38	15.04	8.11	14.77	10.49

WTR YR 2000 HIGH 7.28 APR 9

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.09	16.40	16.12	15.89	16.36	8.37	7.90	15.29	15.64	14.59	8.50	16.89
10	16.09	16.45	9.95	15.87	16.37	8.28	14.04	15.51	9.21	15.25	15.43	17.04
15	16.26	16.63	10.23	16.09	16.16	8.19	14.58	15.46	15.02	15.63	15.88	10.53
20	16.33	16.10	15.47	16.20	15.78	7.97	14.82	15.52	15.09	8.36	15.99	10.66
25	16.31	16.12	15.64	16.24	16.30	14.61	14.91	15.58	14.76	15.47	16.50	10.60
EOM	16.37	16.07	15.88	16.28	15.79	8.13	15.21	15.45	15.11	8.42	16.94	10.54

WTR YR 2000 LOW 17.04 SEP 3



MARION COUNTY

393950086124701. Local number, MA 38.
LOCATION.--Lat 39°39'30", long 86°12'47", in SE$^1/_4$SW$^1/_4$SW$^1/_4$ sec. 9, T.14N., R.3E., Marion County, Hydrologic Unit 05120201, on Southport Road, west of Highway 37 0.7 mi.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene Epoch.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 64 ft, cased to 59 ft, screened to 64 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 675 ft above sea level, from topographic map. Measuring point: Top of casing, 3.50 ft above land-surface datum.

REMARKS.--Well affected by pumpage from water-supply well field.

PERIOD OF RECORD.--December 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.43 ft below land-surface datum, June 16, 1998; lowest, 16.00 ft below land-surface datum, Aug. 18, 1997.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

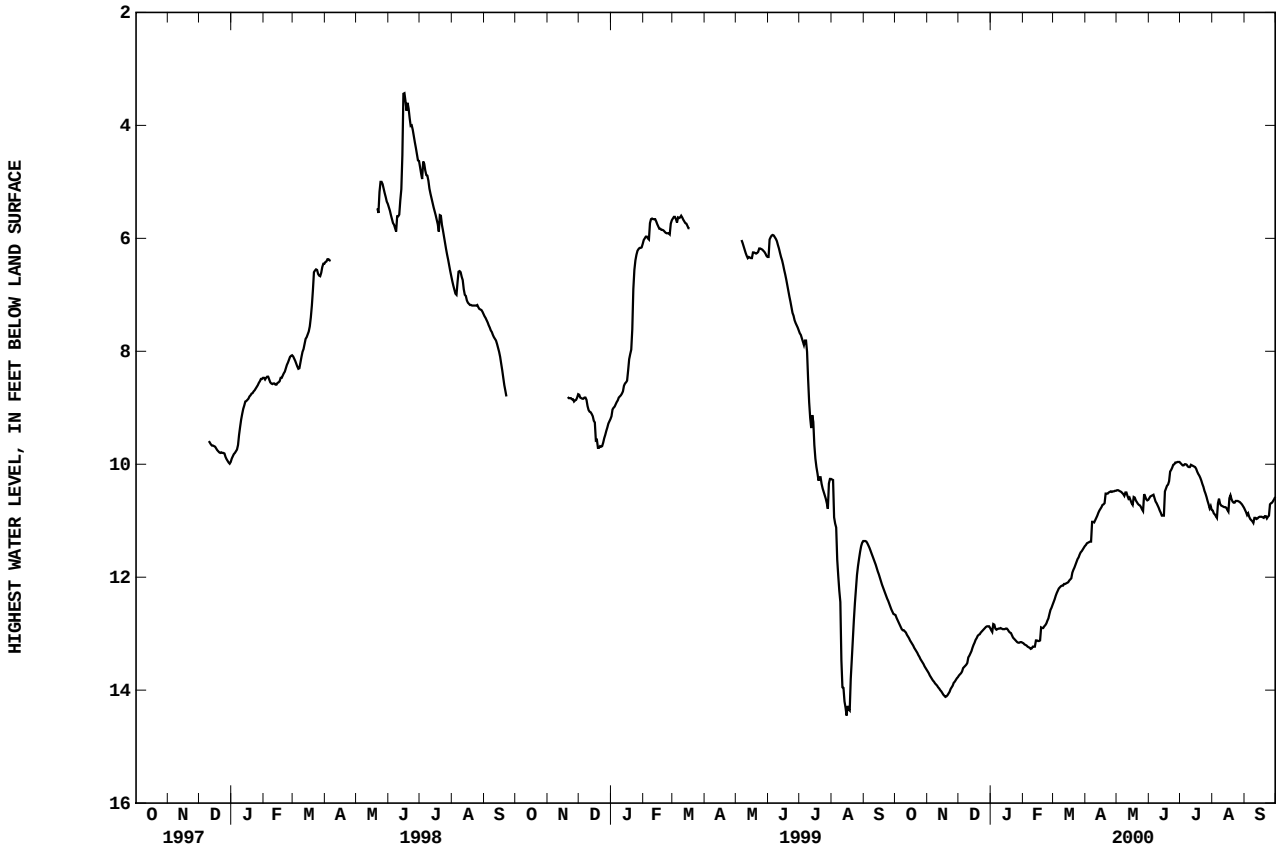
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.84	13.80	13.61	12.91	13.23	12.24	11.37	10.49	10.54	10.00	10.95	10.93
10	12.96	13.92	13.42	12.90	13.23	12.15	10.99	10.50	10.77	10.05	10.74	10.95
15	13.12	14.05	13.20	12.91	13.13	12.09	10.79	10.69	10.91	10.05	10.81	10.93
20	13.28	14.09	13.02	12.99	12.90	11.87	10.52	10.67	10.30	10.24	10.66	10.92
25	13.45	13.92	12.92	13.13	12.73	11.65	10.48	10.80	10.00	10.52	10.65	10.71
EOM	13.64	13.77	12.90	13.16	12.49	11.45	10.47	10.63	9.96	10.81	10.77	10.58

WTR YR 2000 HIGH 9.96 JUN 28

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.88	13.83	13.67	12.93	13.24	12.28	11.38	10.51	10.60	10.02	10.97	10.97
10	12.98	13.95	13.52	12.91	13.26	12.15	11.03	10.56	10.82	10.07	10.75	11.07
15	13.15	14.08	13.25	12.92	13.14	12.10	10.82	10.72	10.96	10.08	10.84	10.94
20	13.31	14.11	13.04	13.03	12.91	11.92	10.69	10.70	10.36	10.29	10.68	10.98
25	13.48	13.95	12.94	13.15	12.77	11.68	10.50	10.83	10.01	10.58	10.66	10.92
EOM	13.67	13.79	12.94	13.17	12.54	11.48	10.48	10.64	9.98	10.85	10.81	10.62

WTR YR 2000 LOW 14.14 NOV 18



MARTIN COUNTY

383659086545901. Local number, MT 5.
LOCATION.--Lat 38°36'59", long 86°54'59", in SE$^1/_4$NE$^1/_4$SW$^1/_4$ sec.12, T.2 N., R.5 W., Martin County, Hydrologic Unit 05120208, on private property 0.25 mi southwest of Whitfield.
Owner: Marjorie A. Arvin.

AQUIFER.--Sandstone of Pennsylvanian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 143 ft, cased to 53 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 565 ft above sea level, from topographic map. Measuring point: Top of casing, 2.80 ft above land-surface datum.

PERIOD OF RECORD.--May 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 22.80 ft below land-surface datum, July 2, 1997; lowest, 34.10 ft below land-surface datum, Jan. 1, 5, 22, 23, 1960, and Dec. 18, 19, 1964.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

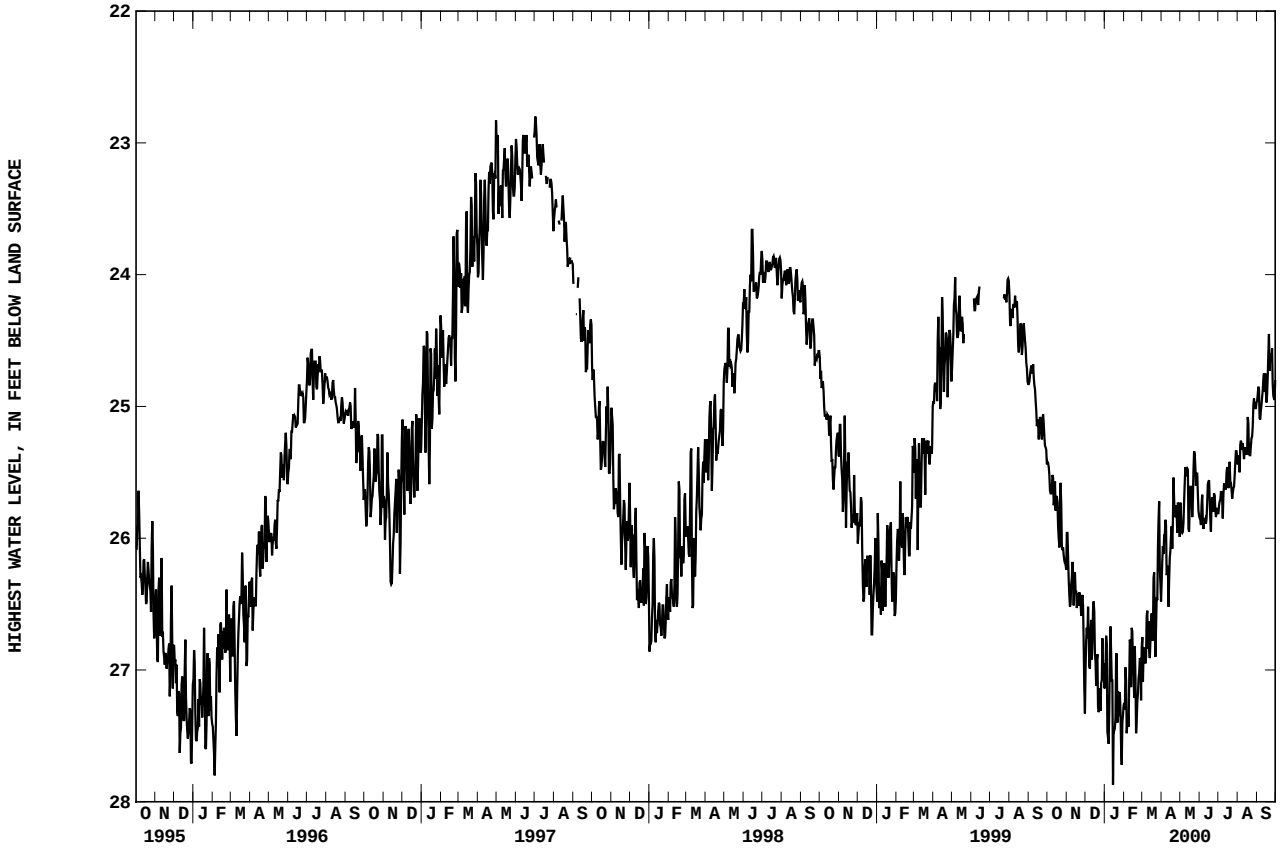
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.64	26.43	26.52	27.47	27.48	26.88	25.98	25.95	25.67	25.65	25.29	25.09
10	25.54	26.18	26.62	26.67	26.77	26.84	26.26	25.53	25.85	25.59	25.33	24.88
15	25.68	26.41	26.56	27.45	27.03	26.68	26.09	25.95	25.57	25.46	25.36	24.88
20	26.07	26.51	26.88	26.88	27.48	26.26	25.54	25.84	25.72	25.57	25.37	24.45
25	26.09	26.48	27.31	27.17	27.02	26.47	25.80	25.46	25.68	25.62	25.15	24.56
EOM	26.24	27.33	27.13	27.27	26.83	26.48	25.99	25.83	25.81	25.40	24.97	24.80

WTR YR 2000 HIGH 24.45 SEP 20

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.79	26.53	26.76	27.65	27.61	26.96	26.36	26.05	25.87	25.72	25.53	25.18
10	25.75	26.32	27.16	26.88	27.07	26.91	26.38	25.80	25.93	25.69	25.43	24.97
15	25.79	26.55	26.88	27.87	27.36	26.78	26.17	26.06	25.68	25.53	25.46	24.97
20	26.13	26.60	27.28	27.49	27.55	26.70	25.90	25.91	25.97	25.66	25.44	24.73
25	26.22	26.84	27.62	27.35	27.16	26.59	25.96	25.68	25.84	25.69	25.28	24.83
EOM	26.36	27.44	27.31	27.38	27.23	26.61	26.17	25.92	25.89	25.49	25.05	24.95

WTR YR 2000 LOW 28.11 JAN 14



400247086482101. Local number, MY 7.
LOCATION.--Lat 40°02'47", long 86°48'21", in NE$^1/_4$NW$^1/_4$SW$^1/_4$ sec.31, T.19 N., R.3 W., Montgomery County, Hydrologic Unit 05120110, on the county right-of-way at the intersection of State Highway 32 and County Road 525 East, and 4.5 mi east of Crawfordsville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 111 ft, cased to 107 ft, screened to 109 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 801 ft above sea level, from topographic map. Measuring point: Top of floor of shelter, 2.38 ft above land-surface datum.

REMARKS.--Well affected by pumpage from water-supply well field.

PERIOD OF RECORD.--July 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 26.10 ft below land-surface datum, Apr. 13, 1974; lowest, 42.34 ft below land-surface datum, Nov. 30, 1999.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

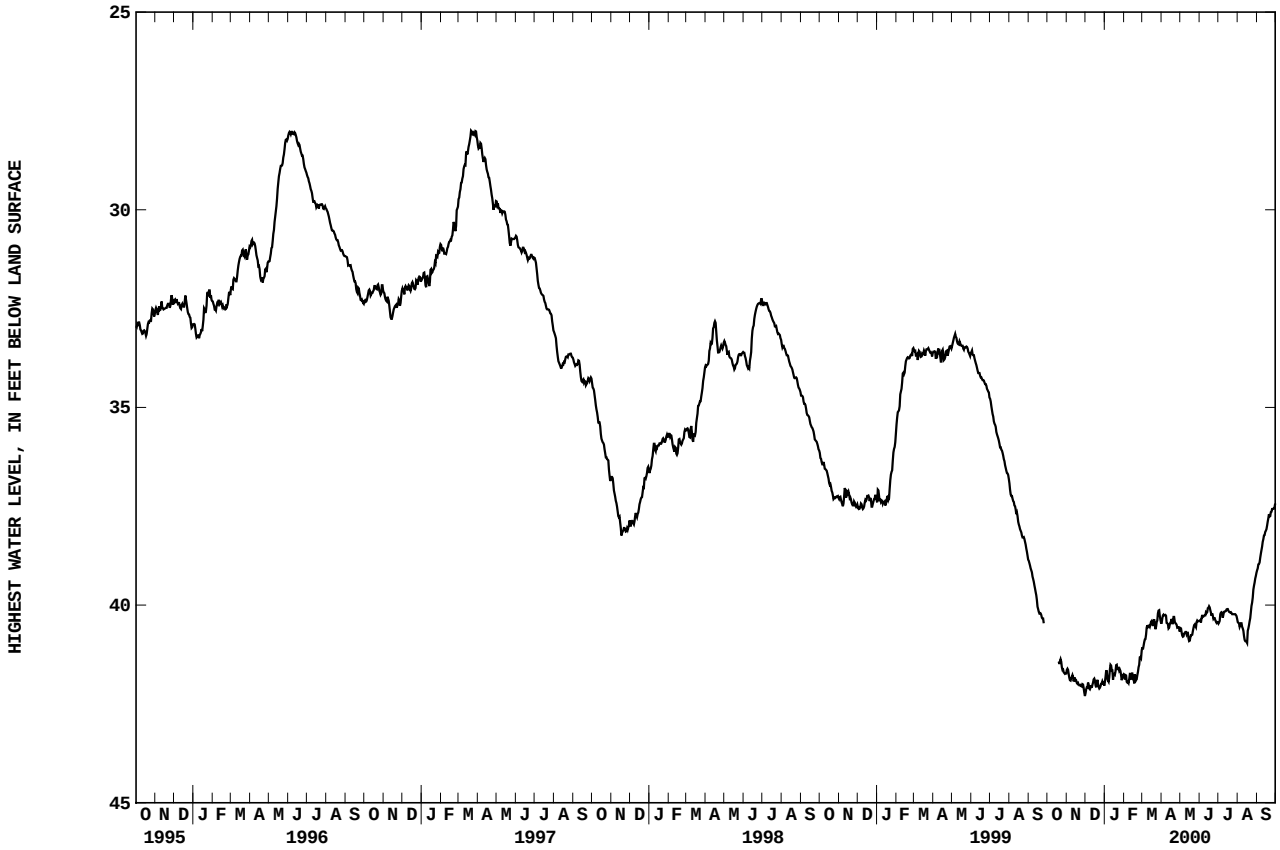
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	41.84	41.96	41.86	41.94	40.87	40.26	40.80	40.25	40.19	40.51	38.92
10	---	41.77	42.03	41.51	41.75	40.58	40.46	40.68	40.26	40.17	40.65	38.40
15	---	41.91	41.86	41.76	41.86	40.42	40.44	40.91	40.07	40.10	40.93	38.12
20	41.49	42.01	41.89	41.51	41.90	40.36	40.30	40.75	40.27	40.19	40.41	37.70
25	41.64	42.06	42.05	41.63	41.51	40.39	40.50	40.53	40.33	40.23	39.81	37.57
EOM	41.73	42.30	42.04	41.75	41.15	40.45	40.67	40.40	40.44	40.35	39.18	37.43

WTR YR 2000 HIGH 37.43 SEP 30

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	41.91	42.09	41.95	42.01	40.95	40.37	40.84	40.33	40.24	40.60	38.97
10	---	41.84	42.14	41.63	41.87	40.64	40.53	40.88	40.29	40.24	40.78	38.52
15	---	41.92	41.92	41.91	41.91	40.49	40.49	40.95	40.11	40.13	40.96	38.16
20	41.53	42.07	42.01	41.65	41.93	40.47	40.46	40.81	40.32	40.23	40.51	37.80
25	41.67	42.15	42.17	41.67	41.57	40.43	40.57	40.61	40.39	40.25	39.94	37.65
EOM	41.76	42.34	42.06	41.79	41.34	40.52	40.71	40.43	40.50	40.44	39.26	37.52

WTR YR 2000 LOW 42.34 NOV 30



MORGAN COUNTY

393423086161001. Local number, MG 4.
LOCATION.--Lat 39°34'23", long 86°16'10", in NW$^1/_4$NW$^1/_4$NW$^1/_4$ sec.13, T.13 N., R.2 E., Morgan County, Hydrologic Unit 05120201, on east side of County Road 850 East, 0.4 mi north of County Road 950 North, and 1.1 mi north of Waverly.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 64 ft, cased to 60 ft, screened to 64 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 645 ft above sea level, from topographic map. Measuring point: Top of floor of shelter, 2.90 ft above land-surface datum.

PERIOD OF RECORD.--May 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.93 ft below land-surface datum, Jan. 1, 1991; lowest, 16.19 ft below land-surface datum, Feb. 10-14, 2000.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

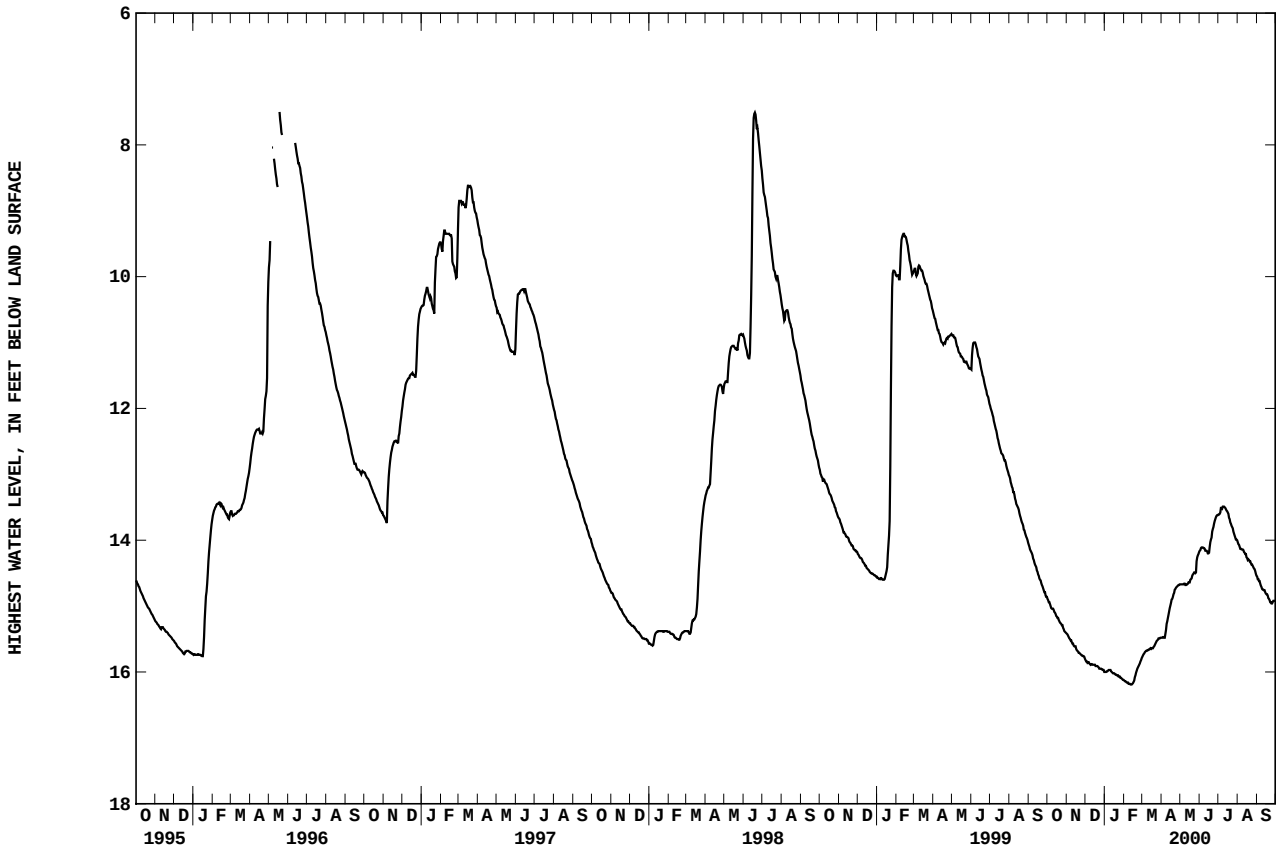
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.97	15.49	15.85	15.99	16.16	15.70	15.48	14.67	14.11	13.51	14.13	14.62
10	15.04	15.57	15.88	15.97	16.18	15.67	15.23	14.68	14.16	13.49	14.15	14.75
15	15.15	15.61	15.89	16.02	16.17	15.65	14.99	14.64	14.20	13.56	14.26	14.81
20	15.23	15.71	15.91	16.05	16.01	15.61	14.82	14.54	13.96	13.73	14.32	14.89
25	15.29	15.75	15.95	16.07	15.89	15.52	14.71	14.50	13.71	13.87	14.39	14.96
EOM	15.41	15.80	16.00	16.12	15.79	15.48	14.67	14.18	13.62	14.00	14.54	14.92

WTR YR 2000 HIGH 13.49 JUL 8

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.02	15.52	15.86	15.99	16.16	15.72	15.51	14.69	14.11	13.58	14.13	14.66
10	15.06	15.59	15.90	15.99	16.19	15.70	15.27	14.71	14.16	13.51	14.19	14.76
15	15.18	15.65	15.91	16.02	16.18	15.67	15.03	14.65	14.20	13.58	14.28	14.84
20	15.26	15.72	15.94	16.05	16.05	15.62	14.86	14.58	13.99	13.75	14.32	14.92
25	15.34	15.77	15.95	16.09	15.91	15.54	14.73	14.51	13.75	13.90	14.42	14.96
EOM	15.42	15.82	16.00	16.13	15.82	15.50	14.68	14.21	13.63	14.03	14.56	14.93

WTR YR 2000 LOW 16.19 FEB 10



NEWTON COUNTY

405105087173301. Local number, NE 6.
LOCATION.--Lat 40°51'05", long 87°17'33", in SE$^1/_4$SW$^1/_4$SE$^1/_4$ sec.23, T.28 N., R.8 W., Newton County, Hydrologic Unit 07120002, on the right-of-way of County Road 1000 South, 1.0 mi south of Foresman.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 80 ft, cased to 76 ft, screened to 78 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 654.10 ft above sea level. Measuring point: Top of floor of shelter, 2.15 ft above land-surface datum.

REMARKS.--Well affected by pumpage.

PERIOD OF RECORD.--May 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.94 ft below land-surface datum, Mar. 20, 21, 1982; lowest, 18.82 ft below land-surface datum, Oct. 29, 1988.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

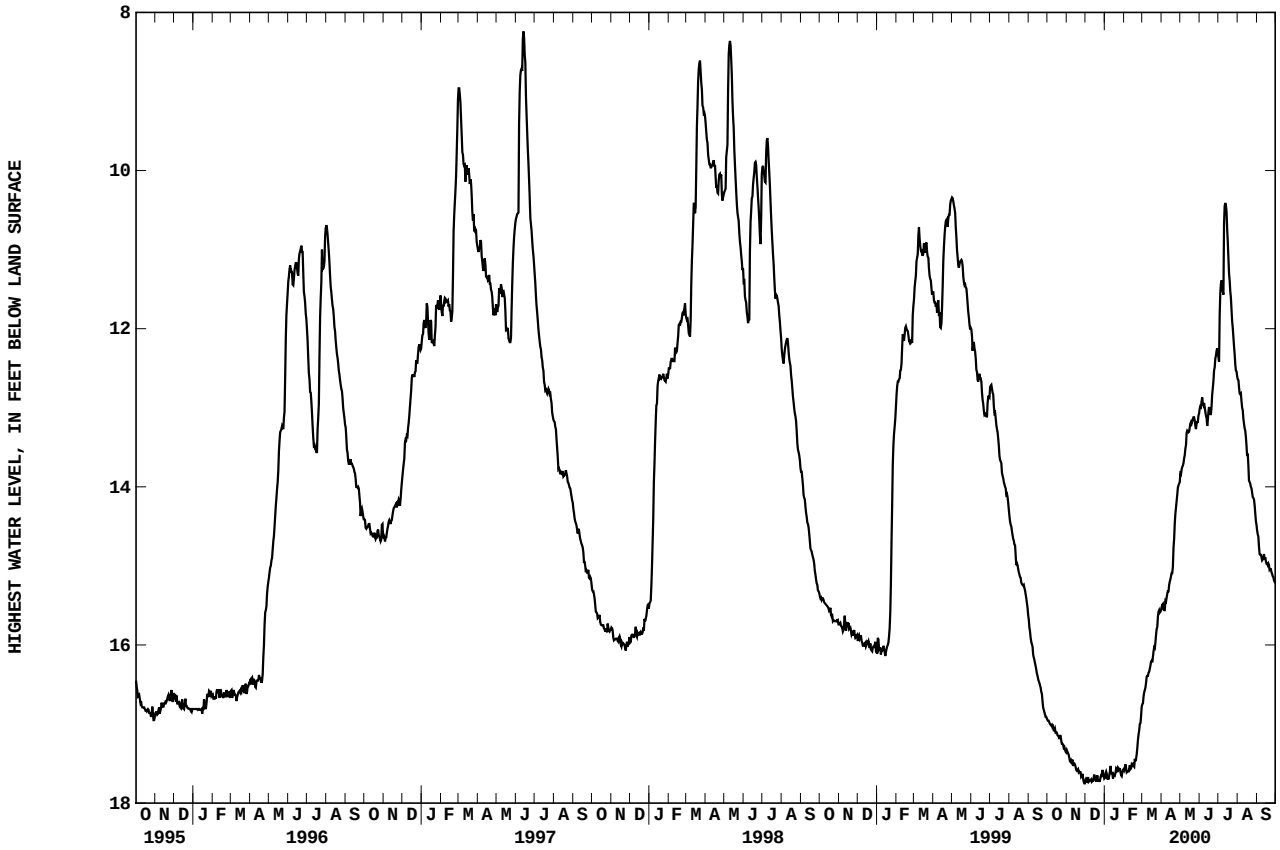
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.00	17.43	17.67	17.70	17.61	16.57	15.56	13.73	12.87	11.43	12.83	14.85
10	17.03	17.45	17.70	17.53	17.52	16.39	15.35	13.47	13.05	10.67	13.14	14.92
15	17.11	17.54	17.64	17.63	17.49	16.21	15.17	13.30	13.05	10.74	13.48	14.94
20	17.19	17.61	17.65	17.57	17.44	16.03	14.77	13.17	12.98	11.53	13.94	14.99
25	17.25	17.66	17.67	17.56	17.08	15.77	14.18	13.23	12.49	12.11	14.13	15.10
EOM	17.36	17.75	17.69	17.57	16.78	15.56	13.94	13.07	12.31	12.60	14.48	15.19

WTR YR 2000 HIGH 10.41 JUL 12

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.02	17.49	17.74	17.73	17.66	16.61	15.68	13.77	12.97	11.55	12.88	14.88
10	17.08	17.53	17.79	17.61	17.57	16.45	15.41	13.54	13.14	11.64	13.22	14.97
15	17.11	17.60	17.72	17.69	17.59	16.26	15.21	13.33	13.17	10.90	13.61	14.99
20	17.21	17.66	17.76	17.65	17.48	16.09	15.01	13.21	13.13	11.62	13.97	15.06
25	17.29	17.71	17.77	17.61	17.14	15.80	14.26	13.33	12.55	12.23	14.19	15.17
EOM	17.38	17.78	17.72	17.61	16.90	15.62	14.00	13.14	12.39	12.67	14.57	15.22

WTR YR 2000 LOW 17.79 NOV 29



NEWTON COUNTY

405959087282901. Local number, NE 7.
LOCATION.--Lat 40°59'59", long 87°28'29", in SE$^1/_4$SW$^1/_4$SE$^1/_4$ sec.32, T.30 N., R.9 W., Newton County, Hydrologic Unit 07120002, in the Willow Slough Game Preserve, 2.0 mi southwest of Enos.
Owner: State of Indiana.

AQUIFER.--Limestone of Silurian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 150 ft, cased to 136 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 680.83 ft above sea level. Measuring point: Top of floor of shelter, 2.03 ft above land-surface datum.

REMARKS.--Well affected by pumpage.

PERIOD OF RECORD.--February 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 34.65 ft below land-surface datum, Apr. 14, 1980; lowest, 97.33 ft below land-surface datum, Aug. 29, 30, 1988.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

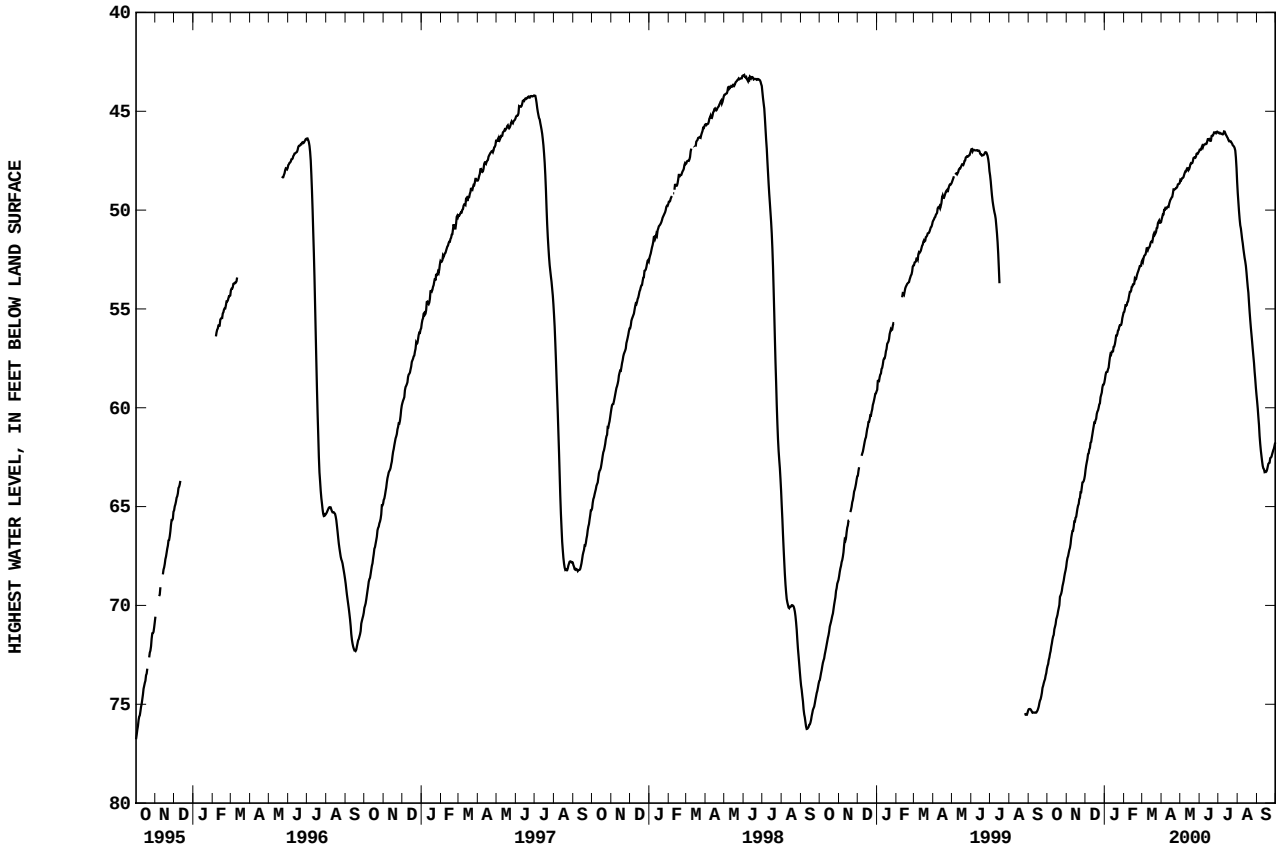
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	72.44	67.19	62.34	58.18	54.81	52.28	49.99	48.37	46.76	46.13	50.77	61.43
10	71.57	66.23	61.73	57.28	54.14	52.01	49.86	48.04	46.65	46.02	51.96	62.94
15	70.70	65.56	60.75	56.92	53.76	51.60	49.48	47.93	46.41	46.31	53.16	63.25
20	69.98	64.87	60.19	56.35	53.49	51.16	48.95	47.62	46.25	46.53	55.15	62.80
25	69.03	64.03	59.47	55.82	52.94	50.89	48.87	47.35	46.07	46.75	57.03	62.36
EOM	68.04	63.42	58.74	55.18	52.61	50.61	48.62	47.03	46.05	48.58	59.34	61.76

WTR YR 2000 HIGH 46.02 JUL 10

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	72.64	67.34	62.59	58.31	54.94	52.35	50.27	48.45	46.85	46.16	50.93	61.84
10	71.72	66.41	61.77	57.45	54.30	52.04	49.93	48.11	46.68	46.14	52.19	63.07
15	70.95	65.75	60.95	57.15	53.95	51.69	49.59	48.02	46.50	46.36	53.53	63.31
20	70.14	65.02	60.31	56.41	53.59	51.24	49.16	47.69	46.49	46.57	55.56	62.85
25	69.27	64.30	59.80	55.91	53.04	50.92	48.88	47.37	46.14	46.79	57.38	62.48
EOM	68.22	63.60	58.84	55.32	52.82	50.65	48.72	47.12	46.14	49.14	59.66	61.92

WTR YR 2000 LOW 73.21 OCT 1



NEWTON COUNTY

410428087231501. Local number, NE 8.
LOCATION.--Lat 41°04'28", long 87°25'44", in NW1/4SW1/4SW1/4 sec.2, T.30 N., R.9 W., Newton County, Hydrologic Unit 07120001, in the Beaver Lake Prairie Chicken Refuge, 3.0 mi north of Enos.
Owner: State of Indiana.

AQUIFER.--Limestone of Silurian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 150 ft, cased to 97 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 663.34 ft above sea level. Measuring point: Top of floor of shelter, 2.83 ft above land-surface datum.

REMARKS.--Water level affected by irrigation pumpage.

PERIOD OF RECORD.--February 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.04 ft below land-surface datum, May 31, 1976; lowest, 98.40 ft below land-surface datum, July 29, 1988.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

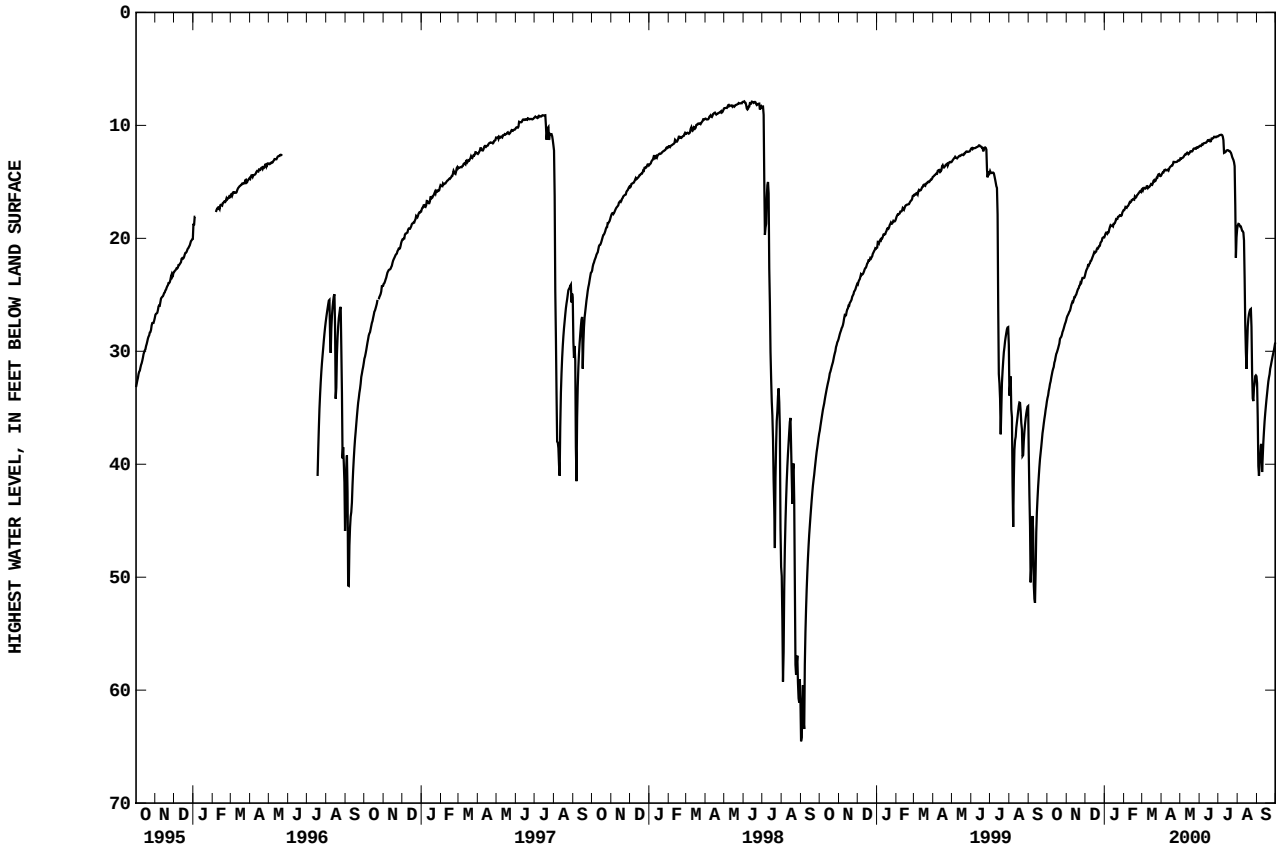
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	32.88	26.49	22.39	19.58	17.29	15.55	13.99	12.86	11.66	10.83	18.96	39.91
10	31.55	25.61	21.98	18.85	16.78	15.54	13.97	12.56	11.54	12.43	19.49	39.35
15	30.24	25.05	21.22	18.71	16.53	15.18	13.66	12.50	11.31	12.20	31.56	34.88
20	29.31	24.41	20.86	18.30	16.38	14.84	13.23	12.30	11.16	12.35	26.45	32.32
25	28.30	23.70	20.38	17.95	15.95	14.64	13.24	12.07	11.01	13.06	34.18	30.69
EOM	27.24	23.31	19.92	17.50	15.67	14.46	13.08	11.89	10.98	19.18	32.21	29.23

WTR YR 2000 HIGH 10.83 JUL 5

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	33.24	26.63	22.63	19.68	17.41	15.62	14.23	12.94	11.75	10.87	19.01	41.03
10	31.77	25.78	22.06	19.00	16.90	15.59	14.03	12.66	11.59	12.49	20.19	41.22
15	30.52	25.23	21.39	18.94	16.70	15.31	13.75	12.60	11.39	12.26	32.85	35.49
20	29.52	24.53	21.01	18.41	16.45	14.95	13.44	12.38	11.40	12.42	26.70	32.67
25	28.57	23.97	20.70	18.02	16.04	14.68	13.27	12.13	11.10	13.26	35.66	30.97
EOM	27.44	23.49	19.99	17.60	15.89	14.52	13.19	11.97	11.06	19.90	32.82	29.57

WTR YR 2000 LOW 43.30 SEP 4



NEWTON COUNTY

405959087282902. Local number, NE 9.
LOCATION.--Lat 40°59'59", long 87°28'29", in SE$^1/_4$SW$^1/_4$SE$^1/_4$ sec.32, T.30 N., R.9 W., Newton County, Hydrologic Unit 07120002, in the Willow Slough Game Preserve, 2.0 mi southwest of Enos.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2 in., depth 45 ft, cased to 42 ft, screened to 45 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 681 ft above sea level, from topographic map. Measuring point: Bottom lip of "Y" in well casing, 3.10 ft above land-surface datum.

PERIOD OF RECORD.--May 1978 to current year. Fragmentary record prior to March 1981.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.07 ft below land-surface datum, May 3, 1978; lowest, 15.44 ft below land-surface datum, Oct. 19-21, 26-31, 1988.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

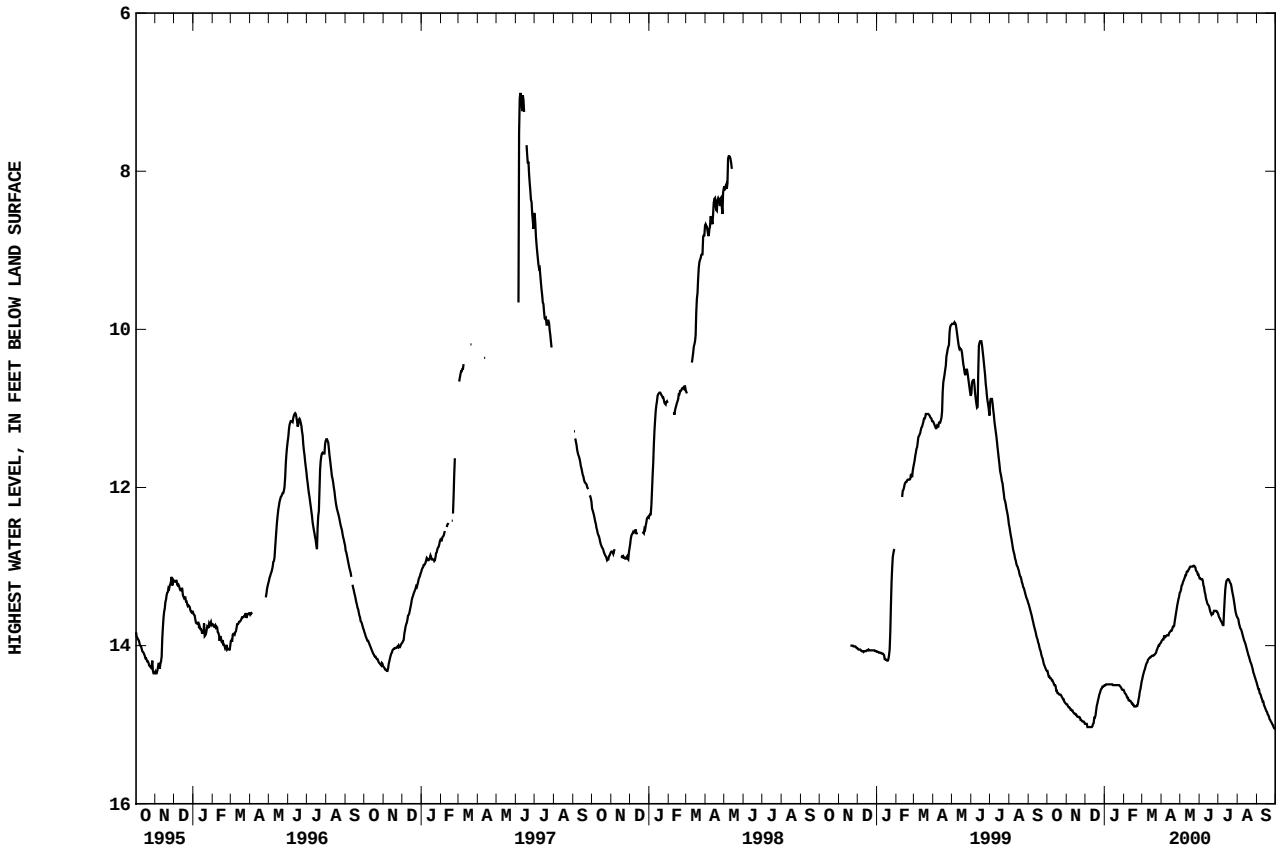
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.41	14.78	15.03	14.49	14.64	14.30	13.88	13.20	13.16	13.69	13.78	14.60
10	14.46	14.82	15.03	14.49	14.70	14.18	13.87	13.11	13.35	13.57	13.90	14.71
15	14.57	14.87	14.91	14.50	14.75	14.14	13.82	13.03	13.49	13.17	14.03	14.81
20	14.62	14.90	14.73	14.50	14.77	14.12	13.76	13.00	13.61	13.21	14.17	14.90
25	14.66	14.95	14.57	14.51	14.64	14.04	13.54	13.01	13.56	13.39	14.30	14.99
EOM	14.74	14.99	14.51	14.56	14.45	13.96	13.33	13.13	13.59	13.64	14.46	15.06

WTR YR 2000 HIGH 12.99 MAY 22

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.41	14.79	15.03	14.49	14.66	14.32	13.92	13.23	13.18	13.70	13.79	14.61
10	14.48	14.84	15.04	14.49	14.70	14.21	13.88	13.12	13.40	13.76	13.93	14.71
15	14.57	14.87	14.98	14.50	14.75	14.15	13.83	13.04	13.50	13.18	14.06	14.83
20	14.62	14.91	14.76	14.50	14.77	14.12	13.76	13.00	13.61	13.22	14.20	14.93
25	14.68	14.96	14.60	14.52	14.68	14.06	13.59	13.05	13.57	13.44	14.34	15.00
EOM	14.74	14.99	14.51	14.58	14.50	13.97	13.38	13.17	13.61	13.65	14.49	15.08

WTR YR 2000 LOW 15.08 SEP 30



NEWTON COUNTY

410428087231502. Local number, NE 10.
LOCATION.--Lat 41°04'28", long 87°25'44", in NW1/4SW1/4SW1/4 sec.2, T.30 N., R.9 W., Newton County, Hydrologic Unit 07120001, in the Beaver Lake Prairie Chicken Refuge, 3.0 mi north of Enos.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 2 in., depth 45 ft, cased to 41 ft, screened to 44 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 662.60 ft above sea level. Measuring point: Bottom lip of "Y" in well casing, 2.65 ft above land-surface datum.

PERIOD OF RECORD.--May 1978 to current year. Fragmentary record prior to March 1981.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.03 ft below land-surface datum, Mar. 16, 1982; lowest, 7.10 ft below land-surface datum, Sept. 13, 17, 18, 19-20, 2000.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

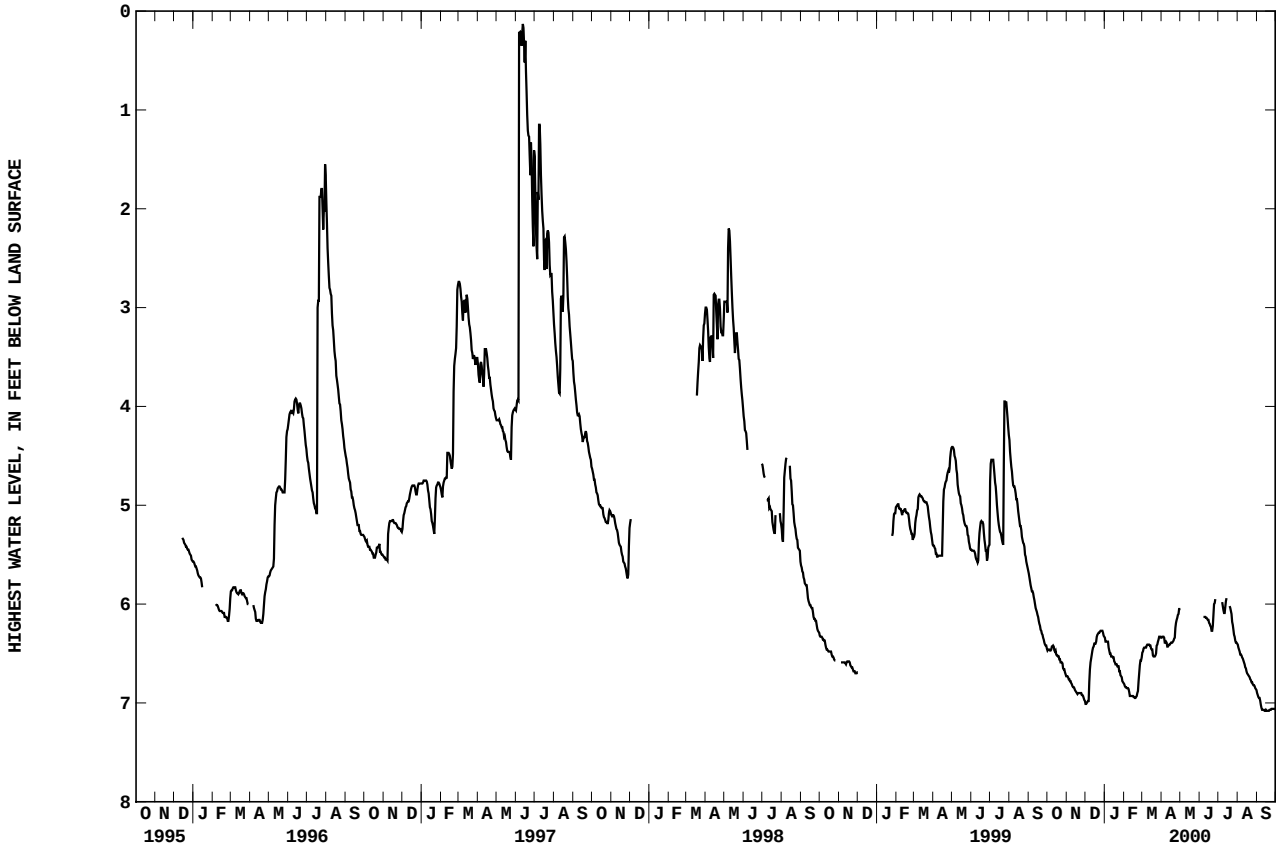
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.47	6.76	6.98	6.38	6.85	6.44	6.34	---	---	---	6.51	6.95
10	6.42	6.83	6.55	6.50	6.93	6.41	6.43	---	6.13	6.09	6.57	7.07
15	6.51	6.88	6.40	6.54	6.93	6.45	6.40	---	6.16	---	6.68	7.07
20	6.56	6.90	6.31	6.61	6.94	6.53	6.37	---	6.27	6.04	6.74	7.08
25	6.60	6.92	6.27	6.68	6.70	6.41	6.16	---	5.99	6.26	6.81	7.06
EOM	6.73	6.98	6.33	6.80	6.54	6.34	6.05	---	---	6.40	6.87	7.07

WTR YR 2000 HIGH 5.94 JUL 14

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.47	6.78	6.99	6.38	6.85	6.44	6.39	---	---	---	6.53	6.98
10	6.44	6.85	6.59	6.54	6.93	6.41	6.43	---	6.15	6.10	6.60	7.07
15	6.54	6.89	6.43	6.58	6.94	6.48	6.41	---	6.19	---	6.70	7.09
20	6.57	6.91	6.33	6.63	6.95	6.53	6.39	---	6.27	6.09	6.76	7.10
25	6.65	6.92	6.29	6.72	6.78	6.42	6.19	---	6.00	6.31	6.82	7.06
EOM	6.73	7.02	6.35	6.81	6.57	6.34	6.06	---	---	6.41	6.90	7.09

WTR YR 2000 LOW 7.10 SEP 13



NEWTON COUNTY

410235087305901. Local number, NE 11.
LOCATION.--Lat 41°02'35", long 87°30'59", in SW$^1/_4$SW$^1/_4$SE$^1/_4$ sec.13, T.30 N., R.10 W., Newton County, Hydrologic Unit 07120001, on right-of-way of County Road 300 North, 0.5 mi west of County Road 600 West, and 4.0 mi northwest of Enos. Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Silurian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 5 in., depth of 150 ft, cased to 90 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 670 ft above sea level, from topographic map. Measuring point: Top of casing, 3.30 ft above land-surface datum.

REMARKS.--Water level affected by pumpage.

PERIOD OF RECORD.--October 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 22.78 ft below land-surface datum, May 6, 1982; lowest recorded, 98.83 ft below land-surface datum, Aug. 5, 6, 1988.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

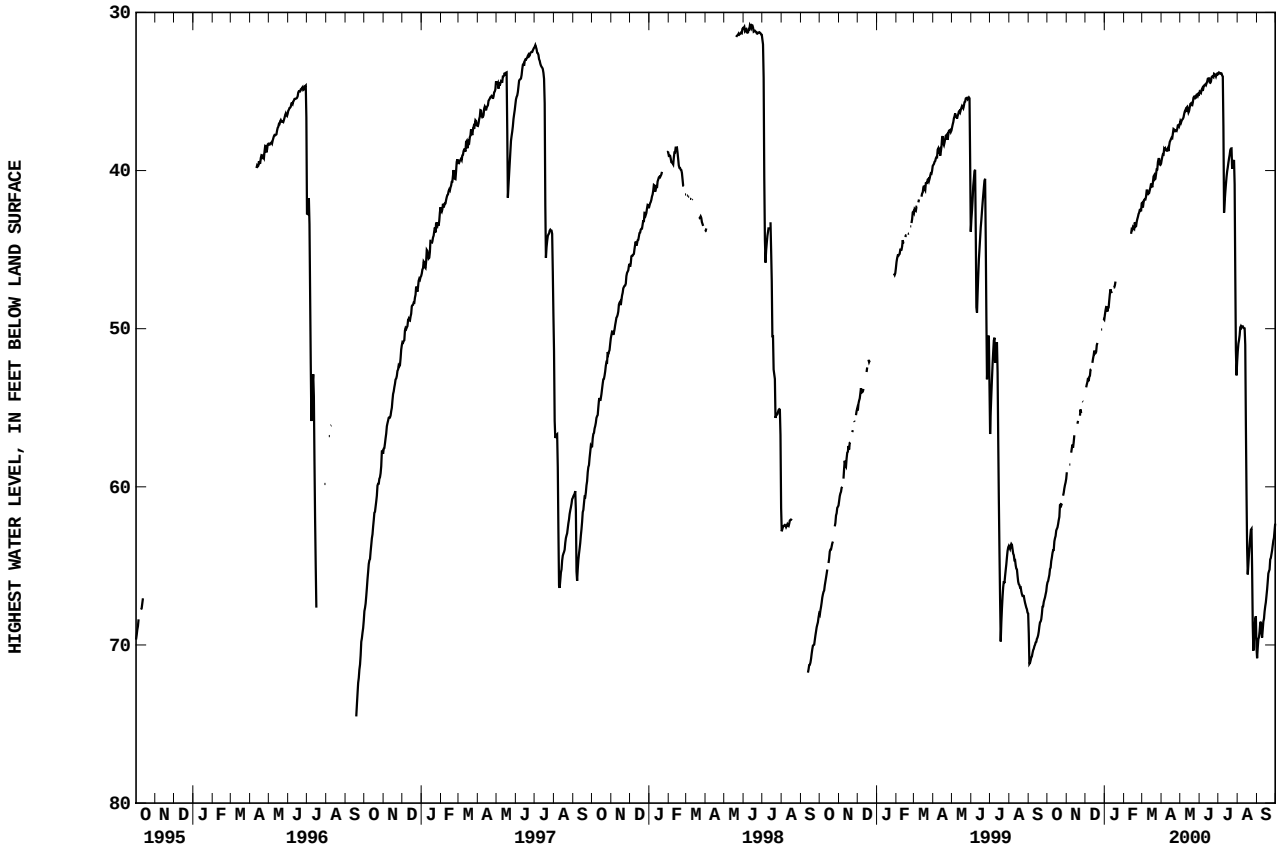
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	65.20	58.59	53.11	48.91	---	41.81	38.62	36.73	34.81	33.84	49.92	69.14
10	64.01	57.33	52.56	47.51	---	41.55	38.73	36.29	34.55	42.66	49.93	69.04
15	62.76	---	51.39	47.39	43.57	40.82	38.10	36.22	34.17	40.04	60.35	67.30
20	61.90	---	50.90	---	43.52	40.30	37.37	35.87	34.10	38.70	63.67	65.34
25	---	---	---	---	42.65	39.92	37.49	35.42	33.91	39.43	68.73	64.03
EOM	59.49	---	49.43	---	42.07	39.57	37.07	35.18	33.92	52.09	70.12	62.33

WTR YR 2000 HIGH 33.80 JUL 2

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	65.57	58.72	53.37	49.13	---	41.94	39.14	36.88	35.00	33.90	50.41	69.52
10	64.19	57.58	52.80	47.80	---	41.67	38.89	36.47	34.68	43.48	50.04	69.53
15	63.12	---	51.71	47.83	44.00	41.06	38.26	36.41	34.35	40.41	63.87	67.59
20	62.14	---	51.24	---	43.61	40.56	37.68	36.00	34.41	39.05	64.24	65.49
25	---	---	---	---	42.86	40.03	37.55	35.55	34.14	39.65	71.34	64.27
EOM	59.80	---	49.60	---	42.58	39.73	37.35	35.31	34.05	52.95	71.77	62.76

WTR YR 2000 LOW 71.77 AUG 31



NEWTON COUNTY

410917087285801. Local number, NE 14.
LOCATION.--Lat 41°09'17", long 87°28'58", in NE$^1/_4$SW$^1/_4$NW$^1/_4$ sec.8, T.31 N., R.9 W., Newton County, Hydrologic Unit 07120001, 100 ft south of wildlife area parking lot in La Salle State Fish and Wildlife Area.
Owner: U.S. Geological Survey.

AQUIFER.--Dolomitic limestone of Silurian/Devonian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 150 ft, cased to 82 ft, open end.

INSTRUMENTATION.--Water-level recorder, data-collection platform, and incremental encoder.

DATUM.--Elevation of land-surface datum is 636.62 ft above sea level. Measuring point: Top of casing, 3.30 ft above land-surface datum.

REMARKS.--Water level affected by pumpage.

PERIOD OF RECORD.--August 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.18 ft below land-surface datum, Mar. 27, 1991; lowest, 31.19 ft below land-surface datum, Aug. 26, 1988.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

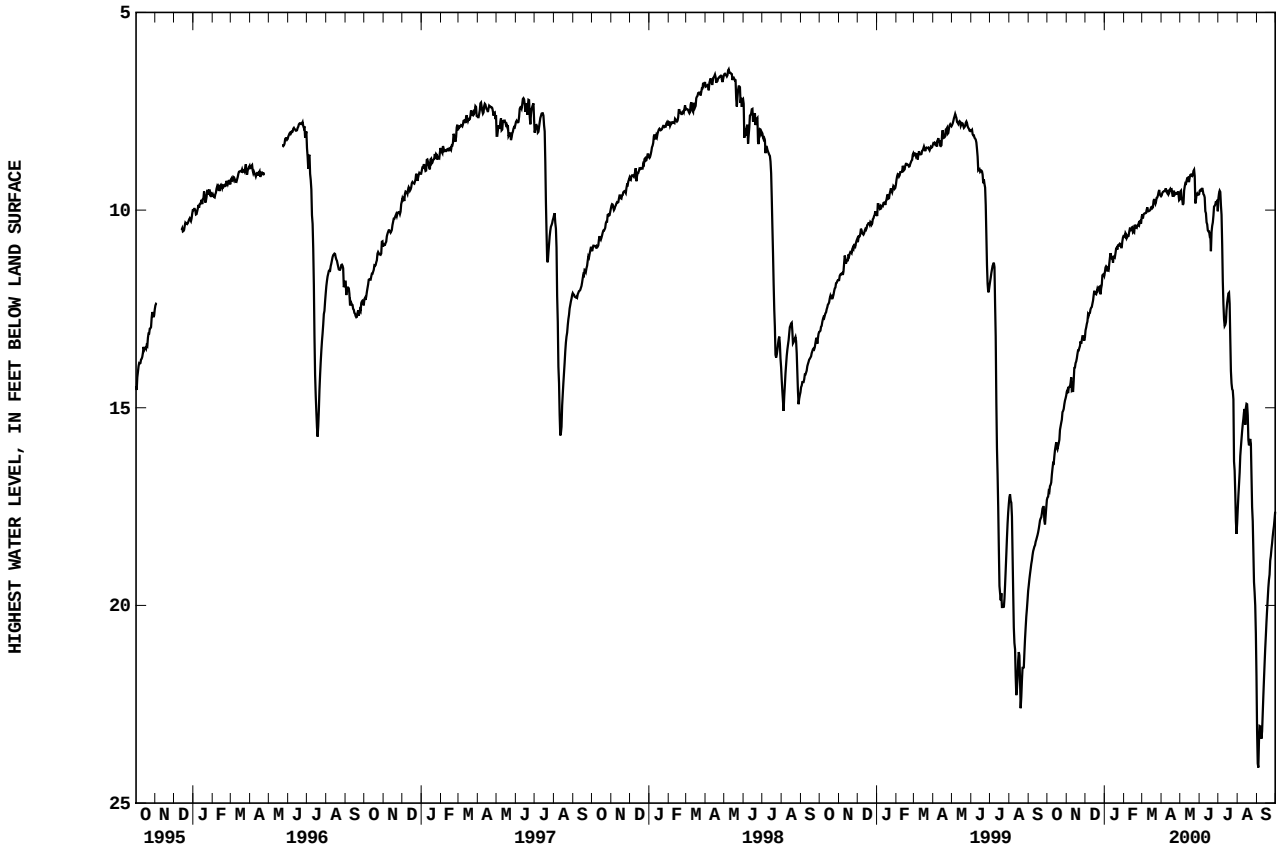
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.98	14.47	12.64	11.55	10.71	10.08	9.52	9.87	9.44	9.88	16.22	23.05
10	16.40	14.54	12.47	11.09	10.47	10.03	9.57	9.33	10.03	12.76	15.28	22.74
15	15.87	13.87	12.04	11.18	10.56	9.93	9.46	9.27	10.54	12.34	14.90	20.77
20	15.81	13.55	11.99	10.95	10.44	9.72	9.53	9.14	10.55	13.27	15.85	19.35
25	15.11	13.29	12.13	10.85	10.37	9.68	9.59	9.83	9.89	14.79	17.87	18.43
EOM	14.69	13.22	11.66	10.65	10.17	9.65	9.73	9.60	10.03	17.92	21.79	17.63

WTR YR 2000 HIGH 8.98 MAY 23

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.13	14.65	12.82	11.59	10.74	10.11	9.63	10.08	9.52	10.12	16.67	23.41
10	16.54	14.61	12.55	11.21	10.55	10.11	9.62	9.48	10.10	12.95	15.43	23.18
15	16.01	14.00	12.17	11.33	10.85	10.03	9.51	9.32	10.61	12.53	15.00	21.09
20	15.92	13.59	12.09	11.06	10.53	9.81	9.67	9.18	11.37	14.07	15.95	19.55
25	15.31	13.48	12.26	10.89	10.43	9.71	9.61	9.88	9.94	16.36	18.62	18.57
EOM	14.79	13.35	11.74	10.69	10.34	9.78	9.95	9.75	10.83	18.19	23.19	17.81

WTR YR 2000 LOW 24.59 SEP 3



NOBLE COUNTY

411922085221801. Local number, NO 8.
LOCATION.--Lat 41°19'22", long 85°22'18", in SE$^1/_4$SW$^1/_4$SE$^1/_4$ sec.9, T.33 N., R.10 E., Noble County, Hydrologic Unit 04050001, near the east edge of Chain O'Lakes State Park, and 5.0 mi south of Albion.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 149 ft, cased to 146 ft, screened to 148 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 928 ft above sea level, from topographic map. Measuring point: Top of floor of shelter, 2.65 ft above land-surface datum.

PERIOD OF RECORD.--December 1966 to September 1971, August 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 27.88 ft below land-surface datum, Feb. 14, 1991; lowest, 32.49 ft below land-surface datum, Jan. 18, 1967.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

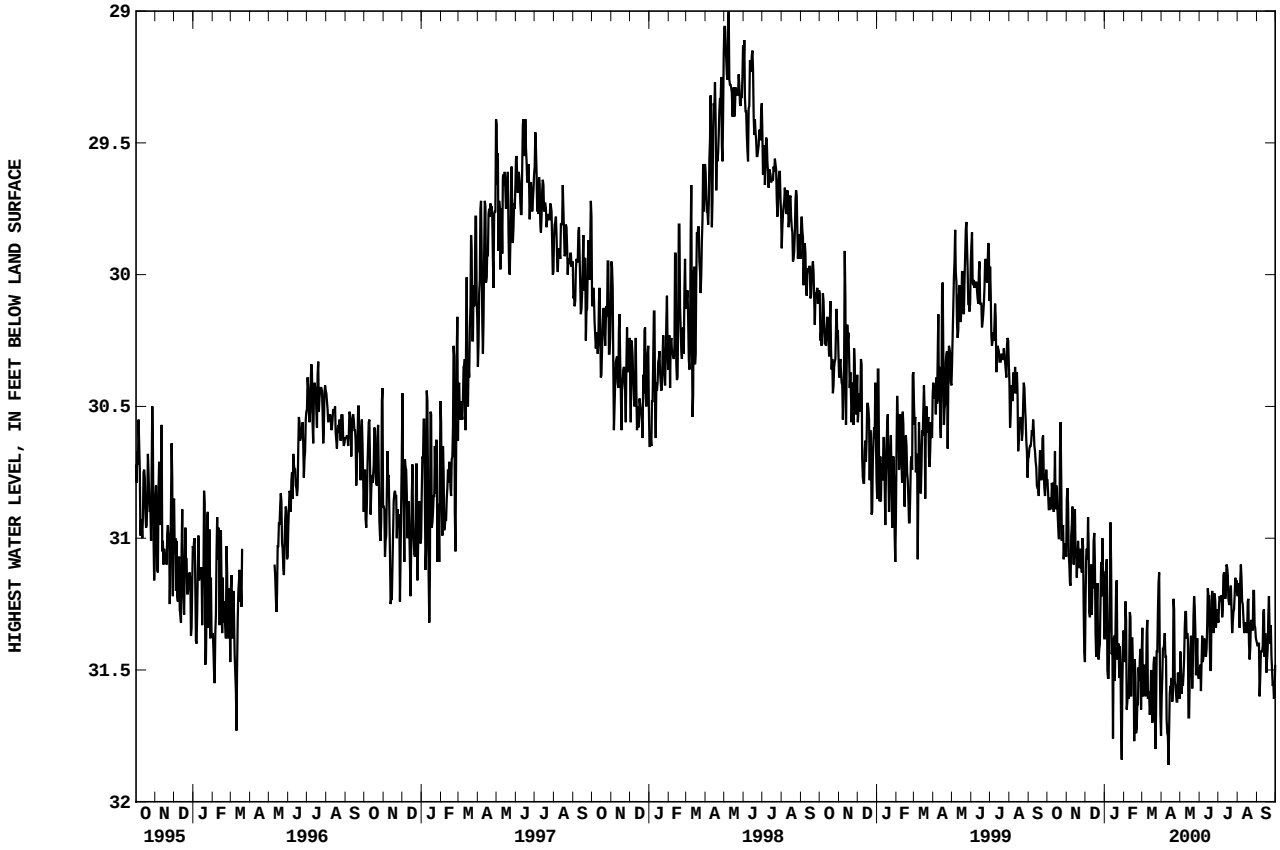
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	30.85	31.10	30.92	31.50	31.65	31.50	31.40	31.56	31.37	31.22	31.16	31.60
10	30.79	30.88	31.10	30.94	31.28	31.61	31.74	31.28	31.42	31.13	31.30	31.41
15	30.80	31.07	30.98	31.39	31.50	31.50	31.56	31.68	31.22	31.11	31.32	31.42
20	31.00	31.06	31.17	31.16	31.74	31.45	31.23	31.57	31.24	31.20	31.46	31.22
25	30.97	31.13	31.23	31.41	31.54	31.43	31.62	31.35	31.21	31.28	31.35	31.50
EOM	31.07	31.47	31.38	31.35	31.44	31.75	31.61	31.53	31.30	31.21	31.39	31.48

WTR YR 2000 HIGH 30.56 OCT 22

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	30.97	31.17	31.12	31.67	31.73	31.60	31.65	31.62	31.47	31.25	31.36	31.65
10	30.90	30.96	31.38	31.19	31.48	31.73	31.88	31.57	31.46	31.17	31.37	31.44
15	30.90	31.15	31.10	31.76	31.74	31.62	31.61	31.74	31.27	31.15	31.38	31.51
20	31.05	31.17	31.40	31.46	31.82	31.62	31.58	31.62	31.50	31.27	31.50	31.34
25	31.09	31.31	31.55	31.53	31.63	31.49	31.66	31.52	31.39	31.32	31.42	31.56
EOM	31.11	31.56	31.48	31.40	31.73	31.81	31.76	31.56	31.36	31.25	31.42	31.58

WTR YR 2000 LOW 31.96 APR 12



NOBLE COUNTY

413106085232701. Local number, NO 9.
LOCATION.--Lat 41°31'06", long 85°23'27", in NW$^1/_4$NE$^1/_4$SE$^1/_4$ sec.5, T.35 N., R.10 E., Noble County, Hydrologic Unit 04050001, at the intersection of County Roads 175 East and 1150 North, and 2.0 mi west of Wolcottville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in,. depth 44 ft, cased to 39 ft, screened to 42 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 930 ft above sea level, from topographic map. Measuring point: Top of floor of shelter, 2.60 ft above land-surface datum.

PERIOD OF RECORD.--June 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.37 ft below land-surface datum, Jan. 5, 1993; lowest, 17.86 ft below land-surface datum, Feb. 17, 2000.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

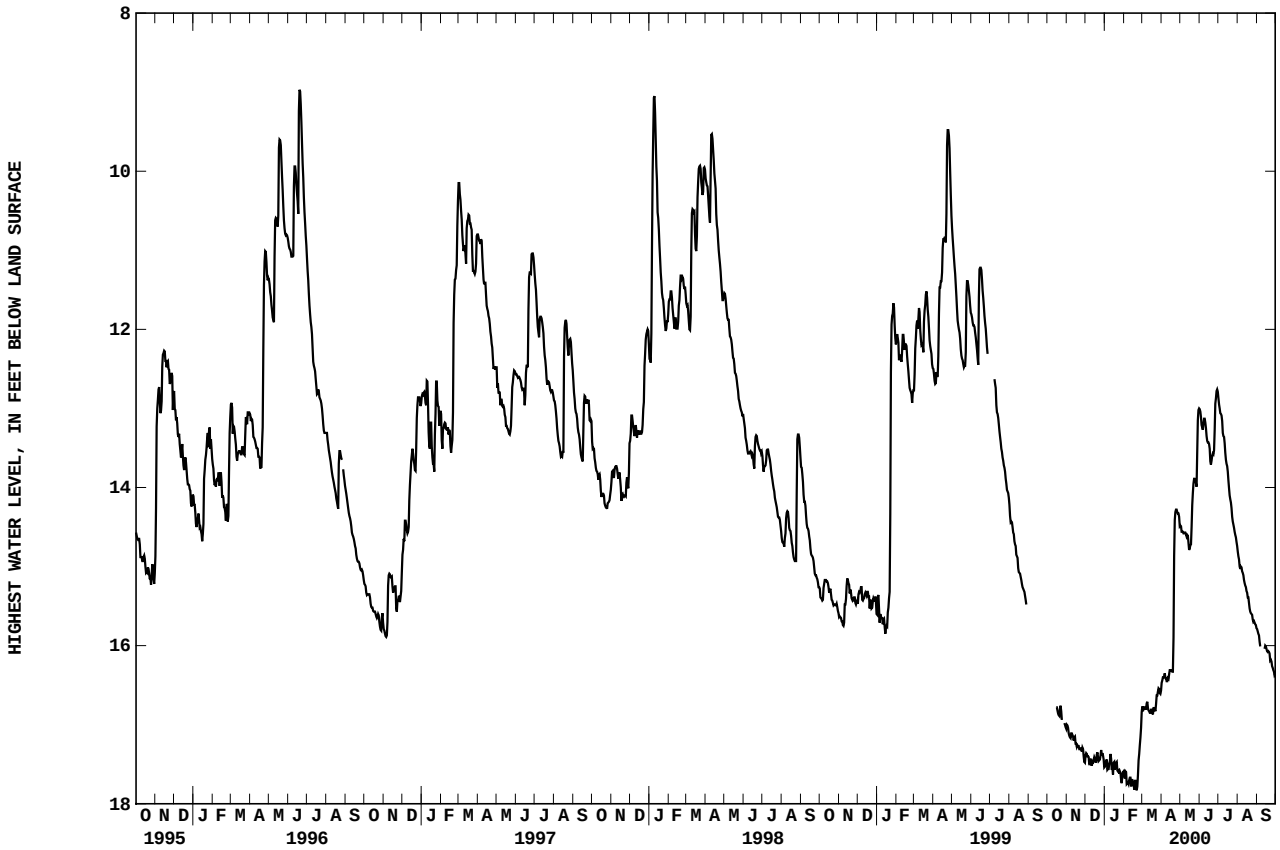
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	17.14	17.40	17.57	17.75	16.78	16.39	14.56	13.24	13.07	15.03	15.95
10	---	17.13	17.43	17.37	17.67	16.79	16.45	14.59	13.18	13.36	15.11	---
15	16.78	17.24	17.41	17.48	17.75	16.81	16.31	14.79	13.43	13.73	15.31	16.01
20	16.89	17.27	17.35	17.47	17.80	16.79	15.90	14.22	13.66	14.15	15.53	16.08
25	---	17.34	17.39	17.59	17.37	16.63	14.28	13.90	13.27	14.47	15.67	16.26
EOM	17.05	17.48	17.54	17.59	16.84	16.57	14.49	13.00	12.79	14.74	15.78	16.37

WTR YR 2000 HIGH 12.76 JUN 29

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	17.16	17.46	17.63	17.78	16.80	16.45	14.58	13.27	13.09	15.07	16.01
10	---	17.15	17.53	17.46	17.70	16.87	16.47	14.69	13.25	13.44	15.17	---
15	16.80	17.27	17.46	17.63	17.81	16.85	16.31	14.81	13.45	13.80	15.33	16.04
20	16.91	17.32	17.41	17.58	17.83	16.81	16.33	14.50	13.74	14.19	15.57	16.10
25	---	17.39	17.49	17.65	17.45	16.64	14.31	13.95	13.53	14.51	15.70	16.28
EOM	17.07	17.50	17.57	17.62	17.04	16.61	14.55	13.02	12.87	14.81	15.79	16.38

WTR YR 2000 LOW 17.86 FEB 17



NOBLE COUNTY

412405085154501. Local number, NO 11.
LOCATION.--Lat 41°24'05", long 85°15'45", in NW$^1/_4$NE$^1/_4$SW$^1/_4$ sec.16, T.34 N., R.11 E., Noble County, Hydrologic Unit 04100003, on the property of Ron Karst on the south side of County Road 350 North, 0.6 mi west of State Highway 3 and about 22 mi north of Fort Wayne.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled artsian well, diameter 6 in., depth 216 ft, cased to 211 ft, screened to 216 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 1,036.94 ft above sea level. Measuring point: Top of casing, 3.45 ft above land-surface datum.

PERIOD OF RECORD.--November 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 113.24 ft below land-surface datum, Nov. 6, 1988; lowest, 115.69 ft below land-surface datum, Nov. 30 - Dec. 1, 1999.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

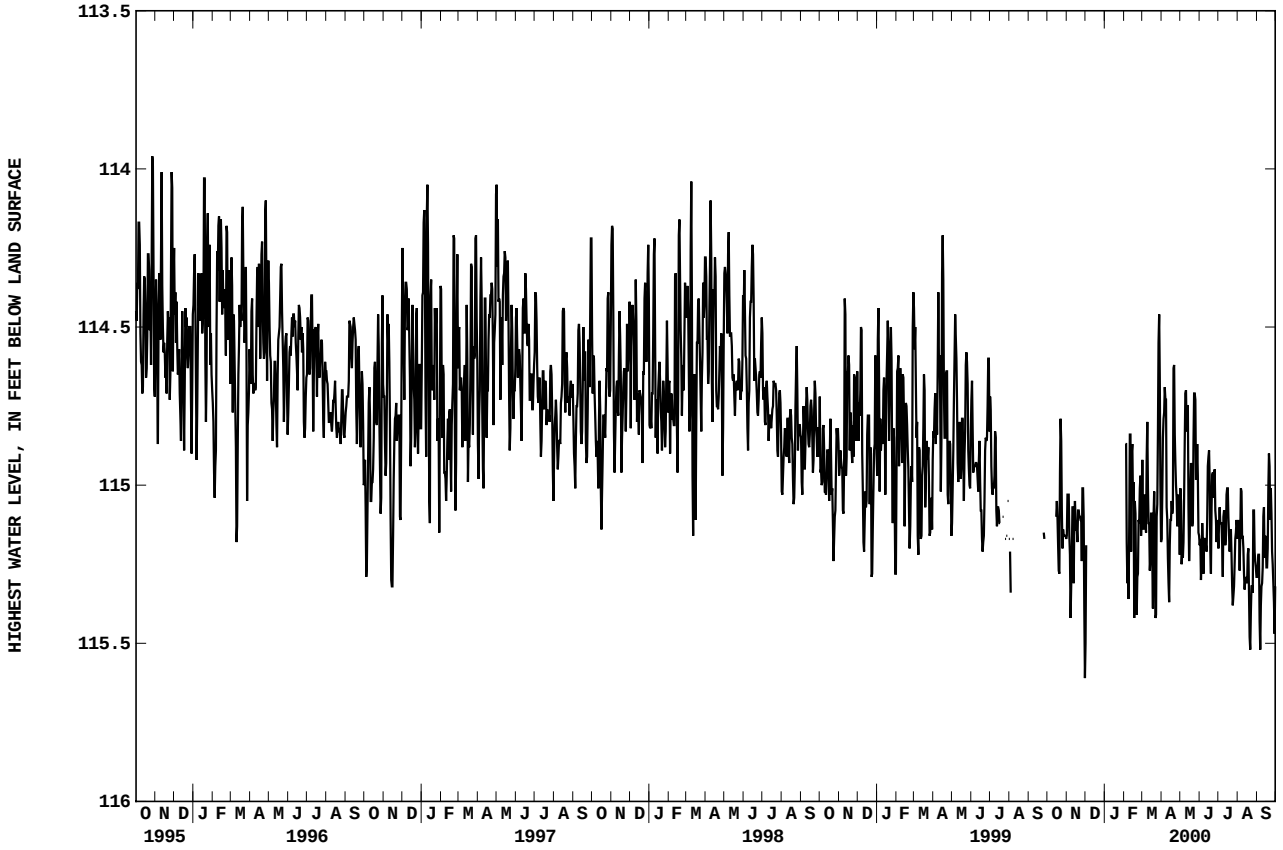
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	115.16	---	---	115.18	115.03	114.77	115.23	115.12	115.12	115.16	115.43
10	---	115.07	---	---	114.84	115.01	115.11	114.70	115.18	115.08	115.20	115.26
15	115.10	115.11	---	---	115.05	115.09	115.11	115.24	114.91	115.01	115.29	115.18
20	115.28	115.08	---	---	115.32	115.02	114.63	115.13	115.07	115.17	115.48	114.90
25	115.20	115.24	---	---	115.12	115.06	115.04	114.73	114.95	115.35	115.34	115.21
EOM	115.17	115.61	---	---	115.09	115.18	115.22	115.16	115.15	115.13	115.29	115.32

WTR YR 2000 HIGH 114.46 MAR 28

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	115.22	---	---	115.33	115.12	115.04	115.28	115.24	115.17	115.35	115.57
10	---	115.22	---	---	115.13	115.23	115.30	114.99	115.23	115.10	115.28	115.31
15	115.23	115.14	---	---	115.22	115.23	115.19	115.32	114.96	115.05	115.35	115.26
20	115.31	115.10	---	---	115.44	115.14	115.07	115.21	115.33	115.23	115.54	115.01
25	115.28	115.27	---	---	115.20	115.10	115.13	114.98	115.12	115.40	115.43	115.25
EOM	115.23	115.69	---	---	115.34	115.28	115.32	115.21	115.23	115.21	115.34	115.47

WTR YR 2000 LOW 115.69 NOV 30



NOBLE COUNTY

412405085154504. Local number, NO 14.
LOCATION.--Lat 41°24'05", long 85°15'45", in NW$^1/_4$NE$^1/_4$SW$^1/_4$ sec.16, T.34 N., R.11 E., Noble County, Hydrologic Unit 04100003, on the property of Ron Karst on the south side of County Road 350 North, 0.6 mi west of State Highway 3 and about 22 mi north of Fort Wayne.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 145 ft, cased to 140 ft, screened to 145 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 1,037.24 ft above sea level. Measuring point: Top of casing, 3.50 ft above land-surface datum.

PERIOD OF RECORD.--November 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 112.21 ft below land-surface datum, Dec. 15, 1987; lowest, 114.76 ft below land-surface datum, Jan. 14, 2000.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

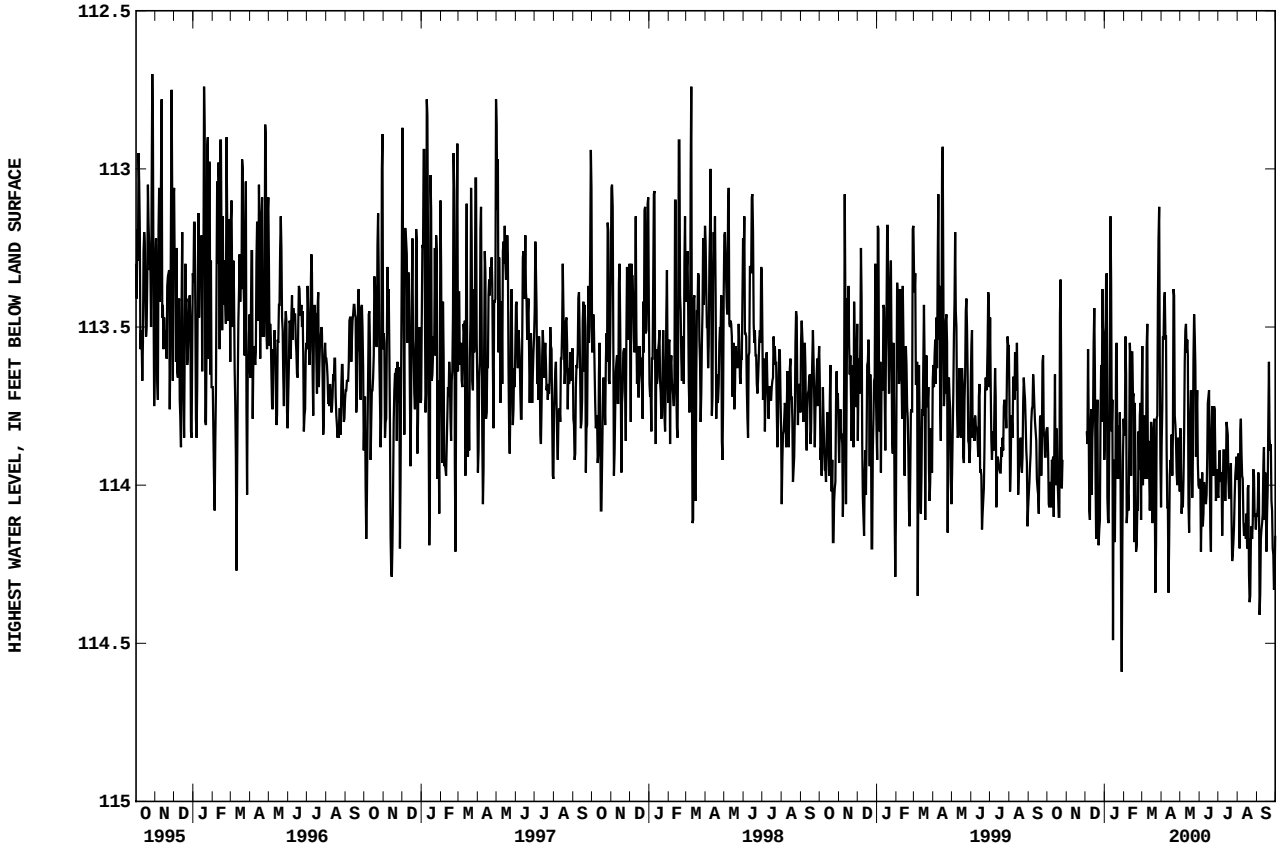
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	113.99	---	113.57	114.04	114.12	113.82	113.42	114.07	113.96	113.97	113.83	114.41
10	113.91	---	113.76	113.15	113.55	113.98	114.07	113.49	114.00	113.89	114.11	114.09
15	113.82	---	113.44	113.93	113.72	113.80	113.92	114.15	113.72	113.82	114.09	114.07
20	114.10	---	113.73	113.55	114.21	113.79	113.38	114.04	113.83	113.97	114.37	113.61
25	113.92	---	113.78	113.77	113.95	113.78	113.96	113.62	113.76	114.18	114.12	114.08
EOM	---	---	113.92	113.79	113.73	114.07	114.02	114.01	114.03	113.98	114.09	114.16

WTR YR 2000 HIGH 113.12 MAR 28

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	114.20	---	113.87	114.31	114.31	113.98	113.90	114.18	114.13	114.04	114.23	114.51
10	114.10	---	114.25	113.53	113.88	114.18	114.28	113.94	114.10	113.99	114.19	114.16
15	114.00	---	113.71	114.49	114.20	114.00	114.01	114.24	113.80	113.88	114.23	114.21
20	114.18	---	114.11	113.99	114.35	114.05	113.86	114.12	114.21	114.11	114.46	113.85
25	114.12	---	114.41	113.98	114.09	113.88	114.07	113.91	114.05	114.26	114.30	114.20
EOM	---	---	114.04	113.91	114.22	114.20	114.30	114.14	114.13	114.04	114.18	114.32

WTR YR 2000 LOW 114.76 JAN 14



PARKE COUNTY

393619087043001. Local number, PA 6.
LOCATION.--Lat 39°36'19", long 87°04'30", in SE$^1/_4$SW$^1/_4$SE$^1/_4$ sec.33, T.14 N., R.6 W., Parke County, Hydrologic Unit 05120111, on county right-of-way on north side of road at the Parke-Clay county line, 1.7 mi east of Carbon, 2.6 mi east of State Highway 59, and 6.2 mi north of Brazil.
Owner: U.S. Geological Survey.

AQUIFER.--Sandstone of Pennsylvanian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 155 ft, cased to 46 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 703.24 ft above sea level. Measuring point: Top of shelf, 2.40 ft above land-surface datum.

PERIOD OF RECORD.--July 1967 to August 1971, October 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.53 ft below land-surface datum, Apr. 19, 1970; lowest, 16.87 ft below land-surface datum, Oct. 30, 1988.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

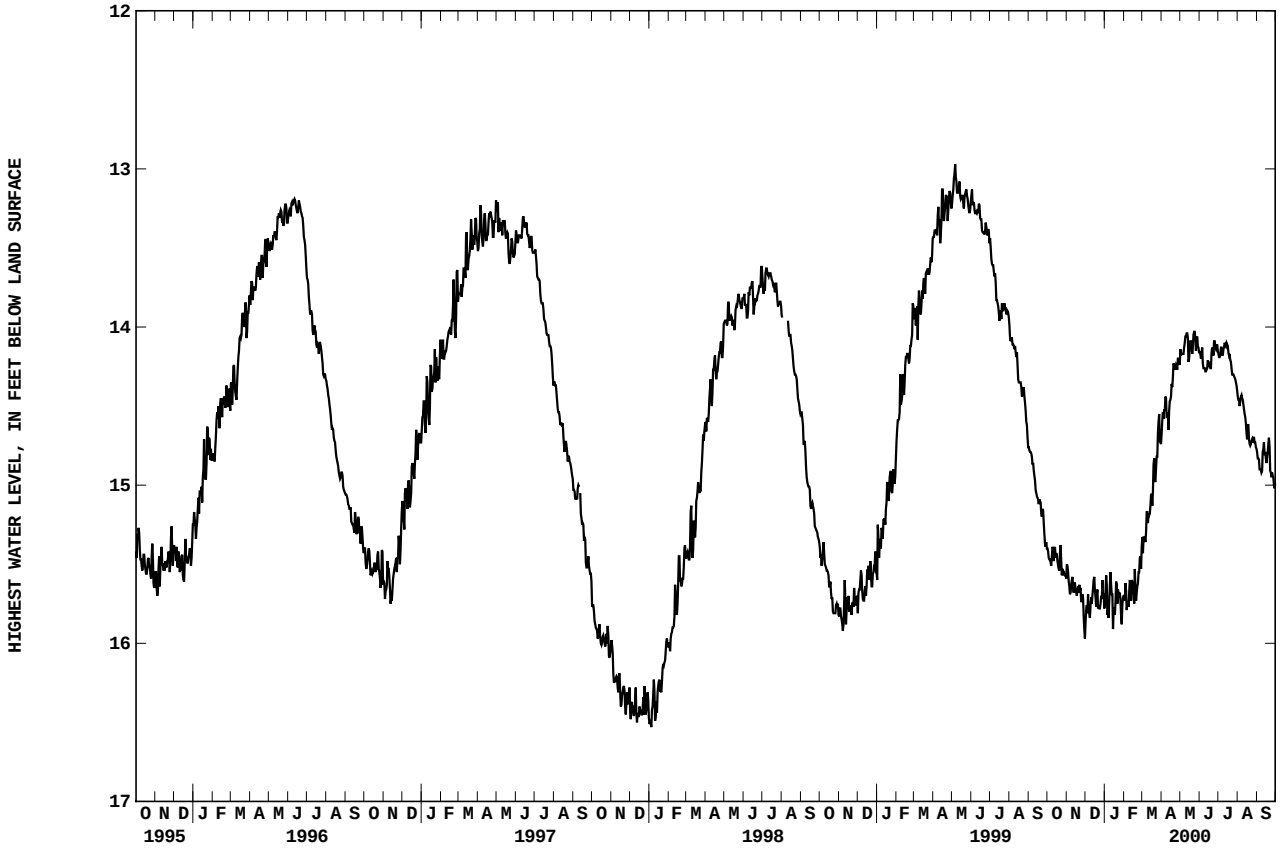
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.47	15.64	15.69	15.82	15.79	15.34	14.52	14.17	14.13	14.13	14.47	14.90
10	15.40	15.58	15.71	15.55	15.60	15.24	14.57	14.06	14.28	14.13	14.49	14.79
15	15.43	15.67	15.58	15.78	15.66	15.06	14.46	14.20	14.23	14.11	14.67	14.83
20	15.54	15.68	15.66	15.63	15.73	14.83	14.23	14.17	14.16	14.21	14.74	14.70
25	15.53	15.71	15.75	15.68	15.55	14.82	14.25	14.07	14.09	14.30	14.73	14.92
EOM	15.59	15.97	15.78	15.70	15.39	14.74	14.24	14.16	14.15	14.40	14.77	14.99

WTR YR 2000 HIGH 14.03 MAY 23

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.55	15.70	15.83	15.86	15.84	15.39	14.69	14.24	14.24	14.18	14.56	14.94
10	15.48	15.65	15.86	15.63	15.67	15.30	14.60	14.14	14.32	14.18	14.55	14.94
15	15.49	15.74	15.67	15.91	15.79	15.13	14.50	14.27	14.31	14.16	14.72	14.87
20	15.59	15.73	15.85	15.82	15.78	14.97	14.32	14.22	14.26	14.24	14.77	14.77
25	15.62	15.84	15.91	15.73	15.58	14.86	14.29	14.16	14.16	14.35	14.80	14.98
EOM	15.64	16.01	15.82	15.74	15.53	14.78	14.31	14.23	14.22	14.48	14.80	15.06

WTR YR 2000 LOW 16.01 NOV 30



POSEY COUNTY

380758087551001. Local number, PY 3.
LOCATION.--Lat 38°07'58", long 87°55'10", in NW$^1/_4$NW$^1/_4$SW$^1/_4$ sec.31, T.4 S., R.13 W., Posey County, Hydrologic Unit 05120113, on property of the New Harmony Park Board, at the east edge of New Harmony.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 58 ft, cased to 54ft, screened to 56 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 380.55 (revised) ft above sea level. Measuring point: Top of floor of shelter, 3.00 ft above land-surface datum.

REMARKS.--Water level affected by Wabash River floods.

PERIOD OF RECORD.--April 1967 to September 1971, September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.95 ft below land-surface datum, May 14, 1983; lowest, 21.40 ft below land-surface datum, Nov. 4, 8-15, 1988.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

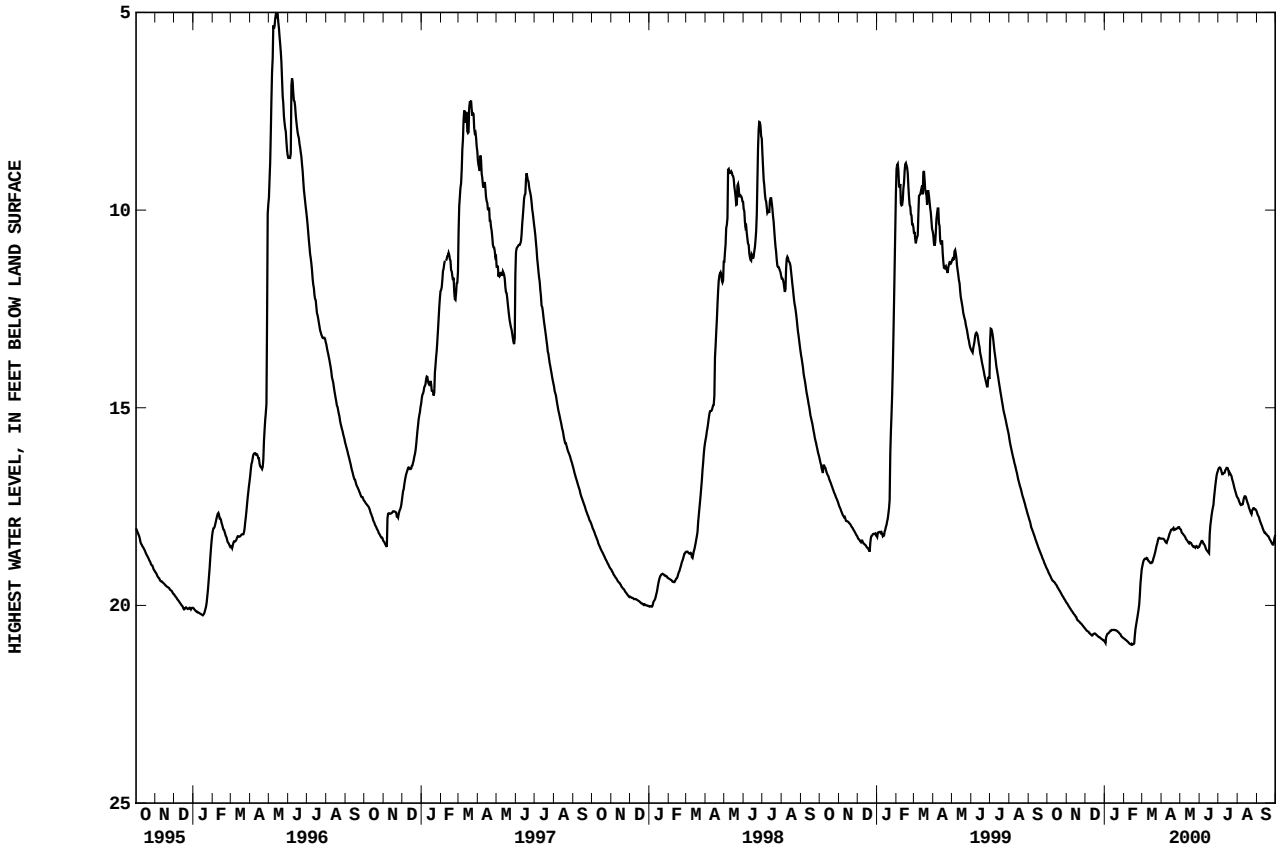
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.24	20.04	20.66	20.72	20.89	18.82	18.33	18.19	18.37	16.56	17.44	17.83
10	19.38	20.16	20.74	20.64	20.97	18.86	18.36	18.32	18.52	16.65	17.35	18.05
15	19.48	20.28	20.71	20.62	20.98	18.93	18.14	18.43	18.66	16.52	17.32	18.19
20	19.62	20.40	20.77	20.64	20.50	18.75	18.04	18.48	17.72	16.67	17.57	18.28
25	19.76	20.48	20.83	20.72	19.98	18.43	18.06	18.54	17.12	16.92	17.57	18.44
EOM	19.92	20.58	20.90	20.83	19.09	18.31	18.06	18.52	16.60	17.26	17.61	18.22

WTR YR 2000 HIGH 16.51 JUL 3

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.27	20.07	20.67	20.76	20.91	18.84	18.38	18.21	18.39	16.62	17.46	17.88
10	19.40	20.19	20.76	20.66	20.98	18.88	18.42	18.35	18.57	16.66	17.44	18.09
15	19.50	20.29	20.72	20.62	20.99	18.95	18.17	18.43	18.68	16.53	17.37	18.20
20	19.64	20.41	20.78	20.65	20.60	18.80	18.09	18.50	17.86	16.70	17.62	18.32
25	19.78	20.50	20.84	20.73	20.10	18.48	18.07	18.55	17.27	16.99	17.60	18.46
EOM	19.94	20.60	20.92	20.84	19.27	18.32	18.08	18.54	16.65	17.29	17.66	18.29

WTR YR 2000 LOW 21.01 FEB 13



POSEY COUNTY

380546087474301. Local number, PY 5.
LOCATION.--Lat 38°05'46", long 87°47'43", in NE$^1/_4$NW$^1/_4$NE$^1/_4$ sec. 18, T.5S., R.12W., Posey County, Hydrologic Unit 05120113, about 0.5 mi southwest of Wadesville along the west edge of Laurel Hill Cemetary.
Owner: U.S. Geological Survey

AQUIFER.--Sandstone of Pennsylvanian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 221 ft, cased to 160 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 460.60 ft above sea level. Measuring point: Top of casing, 3.60 ft above land-surface datum.

REMARKS.--Well record may be affected by pumpage.

PERIOD OF RECORD.--September 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 132.83 ft below land-surface datum, Mar. 27, 1991; lowest, 151.99 ft below land-surface datum, Sept. 18, 1999.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

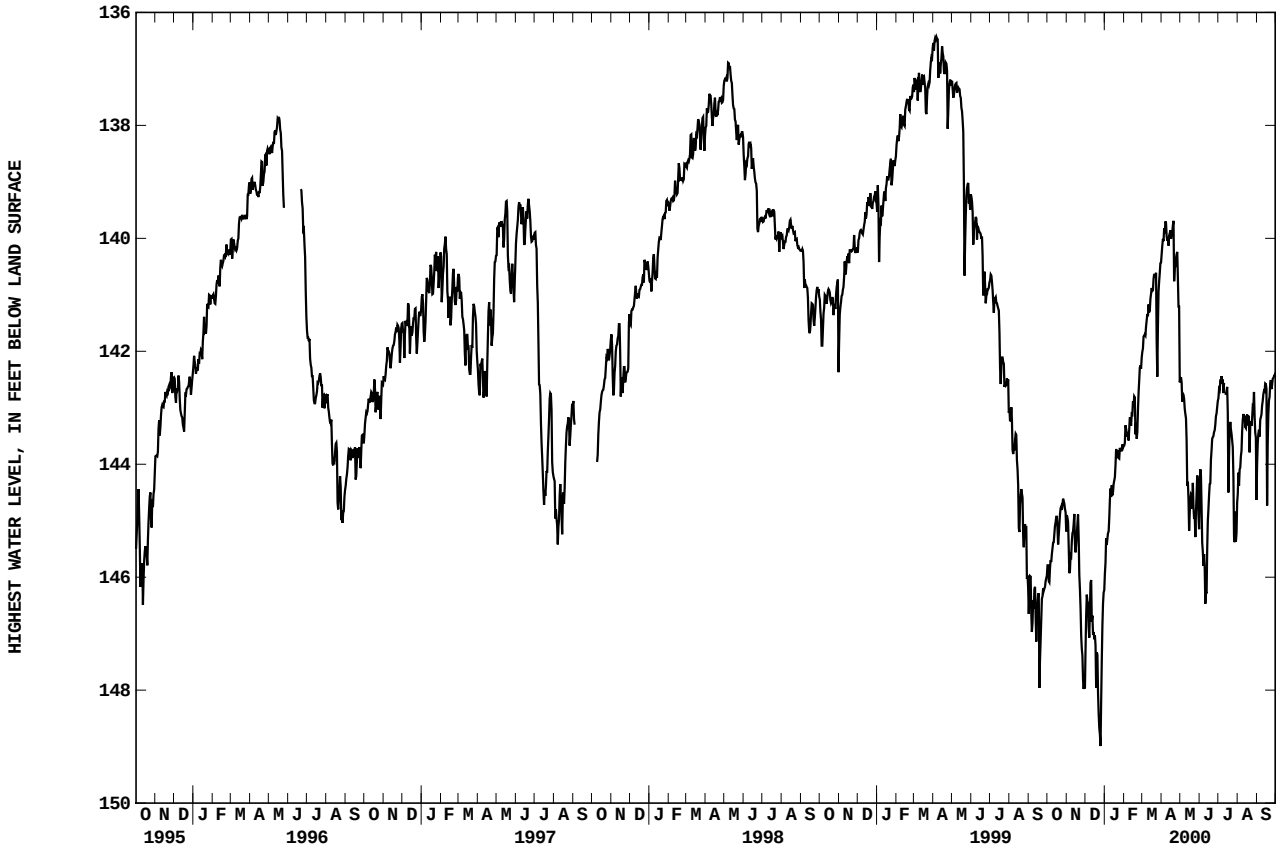
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	145.84	145.93	146.45	145.32	143.45	141.70	139.82	142.75	145.39	142.54	144.06	143.51
10	145.39	145.22	146.05	144.43	143.17	141.38	140.04	143.19	146.47	142.56	143.11	142.88
15	144.93	145.56	147.10	144.35	142.89	140.98	139.86	145.18	144.79	142.63	143.20	142.58
20	145.07	145.31	147.37	143.81	143.26	140.63	139.69	144.79	143.75	143.25	143.79	142.87
25	144.71	147.27	148.99	143.71	142.52	142.45	140.28	145.29	143.40	144.22	142.98	142.60
EOM	145.19	147.97	146.23	143.68	142.11	140.43	142.55	145.15	142.88	144.68	144.63	142.45

WTR YR 2000 HIGH 139.69 APR 20

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	146.14	146.31	146.97	145.94	143.75	142.01	140.24	143.01	145.91	142.97	144.62	144.02
10	145.64	145.63	147.03	144.66	143.51	141.49	140.32	145.40	147.90	142.90	145.34	143.17
15	145.21	146.11	147.36	144.60	143.36	141.25	140.23	146.15	145.16	143.66	143.50	142.83
20	145.37	146.04	148.21	144.32	143.62	140.80	143.78	145.43	143.98	145.57	144.27	143.22
25	144.98	147.74	149.59	143.96	142.89	142.67	140.45	147.05	143.69	147.05	143.39	143.22
EOM	145.33	148.27	146.40	143.93	142.51	140.64	143.08	146.07	143.17	146.99	144.86	145.68

WTR YR 2000 LOW 149.59 DEC 25



PULASKI COUNTY

405916086530701. Local number, PU 6.
LOCATION.--Lat 40°59'16", long 86°53'07", in NW$^1/_4$SE$^1/_4$SW$^1/_4$ sec.4, T.29 N., R.4 W., Pulaski County, Hydrologic Unit 05120106, on private property at the north edge of Francesville.
Owner: Earl Overmeyer.

AQUIFER.--Limestone of Devonian age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 8 in., depth 663 ft, cased to 11 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 678.60 ft above sea level. Measuring point: Top of casing, 3.00 ft above land-surface datum.

REMARKS.--Water level affected by pumpage and earthquakes.

PERIOD OF RECORD.--July 1956 to February 1971, January 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.03 ft below land-surface datum, June 15, 1958; lowest, 27.91 ft below land-surface datum, Apr. 5, 1996.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

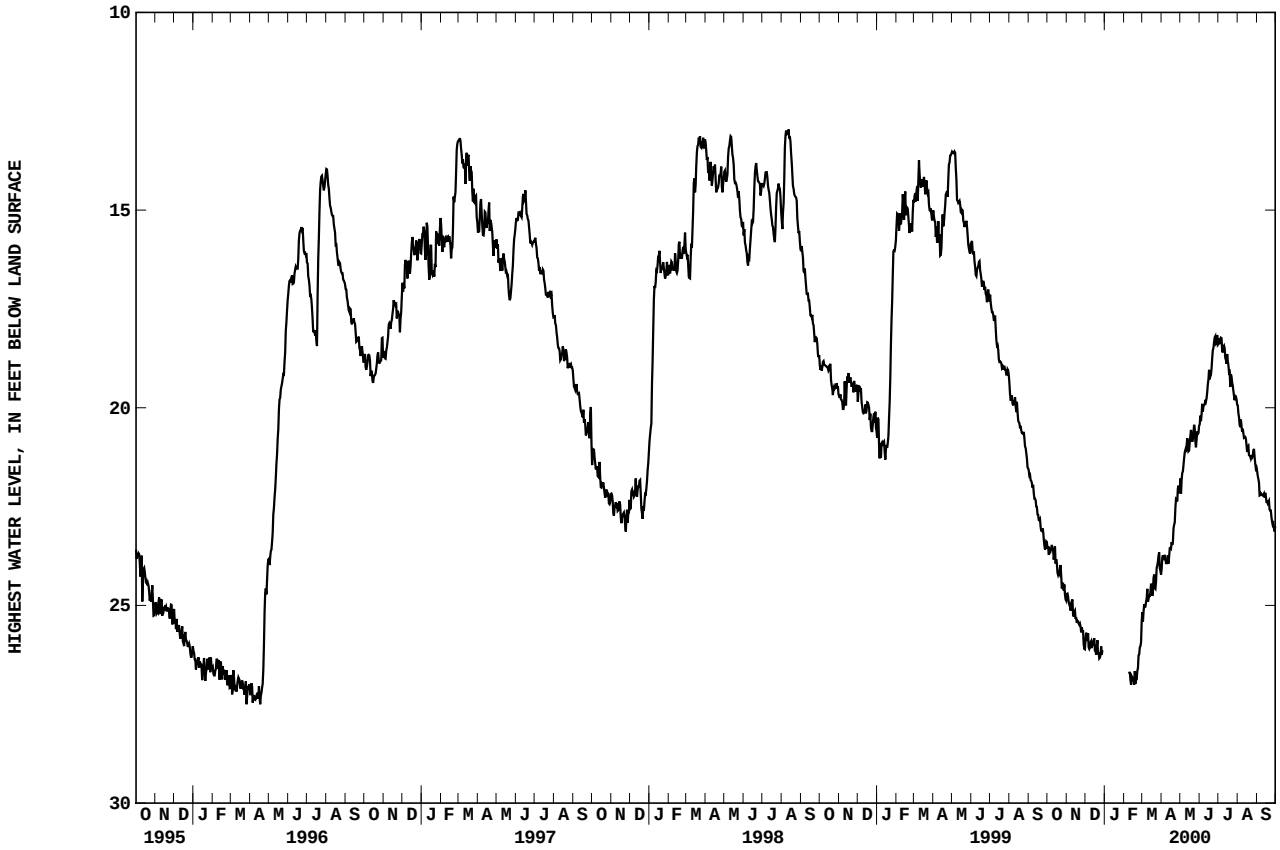
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.59	24.98	25.70	---	---	25.04	23.81	21.61	19.90	18.23	20.49	22.22
10	23.59	24.85	25.90	---	26.68	24.91	23.93	21.12	19.80	18.43	20.65	22.22
15	23.83	25.34	25.83	---	26.87	24.45	23.54	21.08	19.28	18.64	20.94	22.24
20	24.21	25.46	25.88	---	26.84	24.22	23.05	20.86	19.00	19.47	21.21	22.35
25	24.45	25.55	26.26	---	26.24	23.99	22.33	20.85	18.22	19.58	21.22	22.88
EOM	24.88	26.11	---	---	25.40	24.22	22.14	20.46	18.41	19.92	21.51	23.00

WTR YR 2000 HIGH 18.16 JUN 29

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.83	25.39	26.34	---	---	25.43	24.24	22.06	20.35	18.60	20.86	22.70
10	24.10	25.44	26.45	---	27.02	25.27	24.22	21.47	20.28	18.86	21.10	22.61
15	24.16	25.73	26.40	---	27.31	24.90	24.10	21.48	19.71	19.06	21.47	22.62
20	24.57	25.84	26.51	---	27.34	24.92	23.58	21.32	19.58	20.15	21.57	22.74
25	24.91	26.12	26.75	---	26.63	24.53	22.88	21.32	18.57	20.07	21.68	23.22
EOM	25.09	26.28	---	---	26.04	24.54	22.75	20.87	18.78	20.31	21.99	23.33

WTR YR 2000 LOW 27.52 FEB 16



PULASKI COUNTY

410739086365201. Local number, PU 7.
LOCATION.--Lat 41°07'39", long 86°36'52", in NE$^1/_4$NE$^1/_4$NW$^1/_4$ sec.23, T.31 N., R.2 W., Pulaski County, Hydrologic Unit 05120106, in the Winamac State Fish and Game Area, 0.8 mi southwest of Beardstown.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 105 ft, cased to 98 ft, screened to 100 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 715.26 ft above sea level. Measuring point: Top of floor of shelter, 2.50 ft above land-surface datum.

PERIOD OF RECORD.--August 1967 to September 1971, September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.69 ft below land-surface datum, June 15, 1981; lowest, 11.91 ft below land-surface datum, Dec. 3, 4, 1999.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

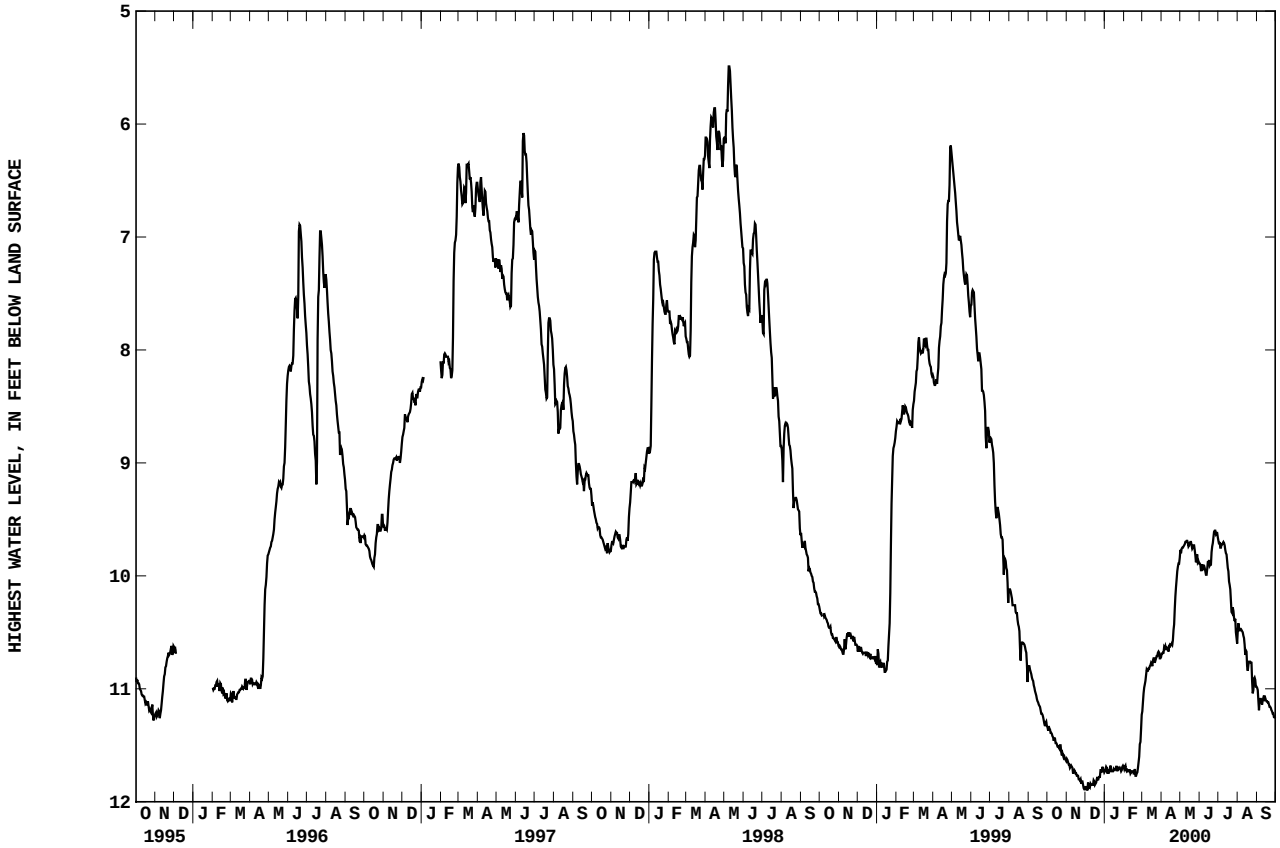
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.36	11.67	11.83	11.75	11.73	10.96	10.63	9.75	9.90	9.75	10.47	11.11
10	11.43	11.70	11.85	11.68	11.72	10.84	10.65	9.70	9.96	9.71	10.53	11.10
15	11.48	11.75	11.82	11.71	11.73	10.77	10.62	9.73	9.88	9.87	10.67	11.10
20	11.53	11.80	11.78	11.69	11.77	10.73	10.48	9.76	9.79	10.12	10.76	11.14
25	11.57	11.82	11.72	11.70	11.60	10.71	10.03	9.82	9.60	10.31	11.04	11.20
EOM	11.64	11.89	11.74	11.69	11.23	10.72	9.84	9.89	9.66	10.60	10.98	11.26

WTR YR 2000 HIGH 9.60 JUN 25

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.39	11.71	11.90	11.77	11.75	11.00	10.69	9.77	9.95	9.81	10.54	11.19
10	11.47	11.75	11.89	11.73	11.75	10.88	10.68	9.77	9.99	9.73	10.55	11.16
15	11.49	11.78	11.86	11.73	11.78	10.79	10.64	9.76	9.91	9.94	10.86	11.12
20	11.55	11.81	11.84	11.75	11.78	10.77	10.58	9.78	9.91	10.22	10.76	11.16
25	11.59	11.86	11.79	11.71	11.65	10.73	10.10	9.88	9.65	10.37	11.09	11.23
EOM	11.65	11.90	11.75	11.71	11.36	10.74	9.90	9.92	9.69	10.63	11.00	11.27

WTR YR 2000 LOW 11.91 DEC 3



RANDOLPH COUNTY

401532085085301. Local number, RA 3.
LOCATION.--Lat 40°15'32", long 85°08'53", in NE$^1/_4$NE$^1/_4$SE$^1/_4$ sec.23, T.21 N., R.12 E., Randolph County, Hydrologic Unit 05120103, at the east edge of Purdue University Agriculture Experiment Station, about 5.5 mi north of Farmland. Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Silurian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 54 ft, cased to 33 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 969.67 ft above sea level. Measuring point: Top of floor of shelter, 3.85 ft above land-surface datum.

PERIOD OF RECORD.--October 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.68 ft below land-surface datum, Dec. 30, 1990; lowest, 15.24 ft below land-surface datum, Nov. 22, 1999.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

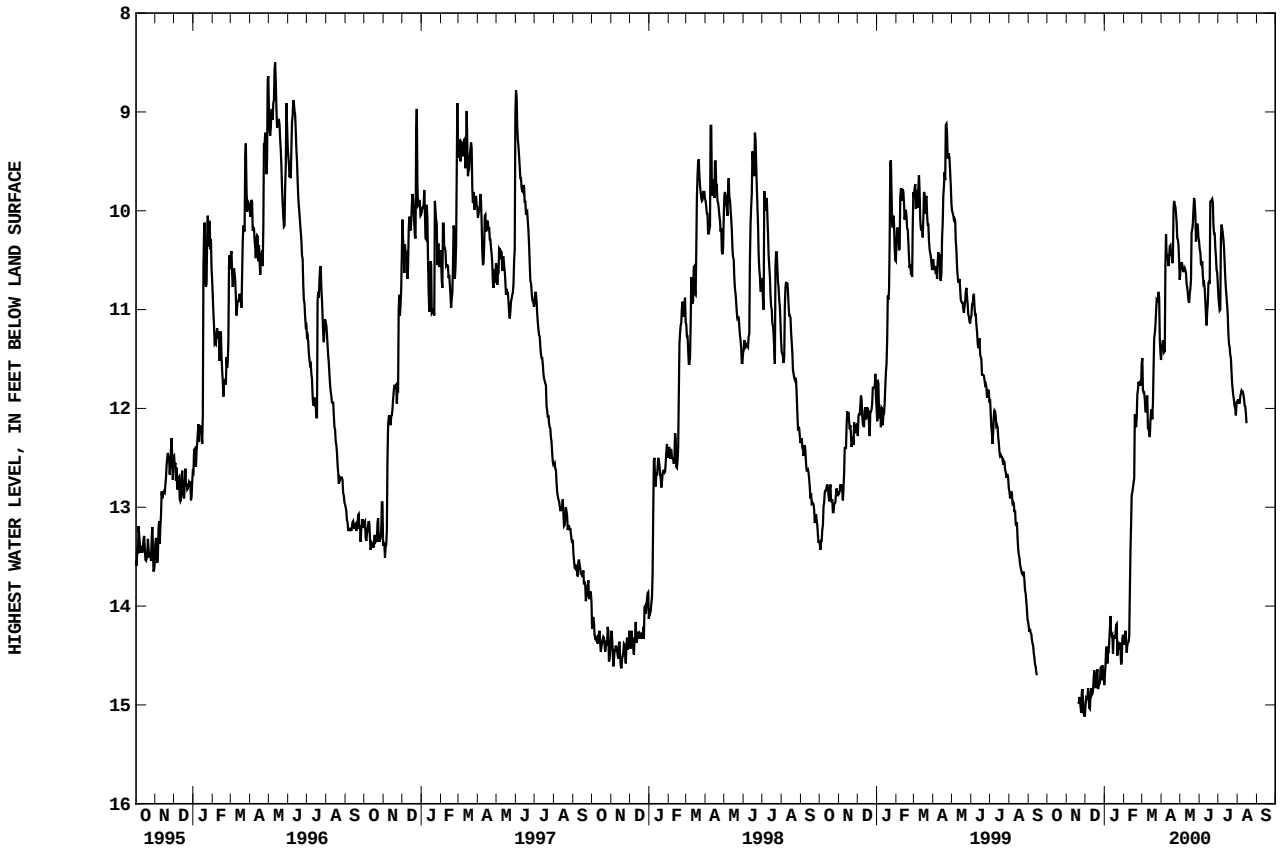
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	14.83	14.58	14.47	11.91	11.43	10.59	10.51	10.27	11.88	---
10	---	---	14.83	14.10	13.87	12.21	10.50	10.63	10.91	10.38	11.86	---
15	---	---	14.65	14.31	12.80	12.02	10.35	10.93	10.73	10.96	12.15	---
20	---	14.99	14.64	14.18	12.19	11.29	9.98	10.19	9.89	11.46	---	---
25	---	14.87	14.63	14.37	11.77	10.91	10.12	10.04	10.23	11.88	---	---
EOM	---	15.11	14.80	14.32	11.55	11.51	10.70	10.31	10.74	11.93	---	---

WTR YR 2000 HIGH 9.87 MAY 23

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	14.94	14.84	14.56	12.03	11.64	10.65	10.65	11.06	12.00	---
10	---	---	15.06	14.31	14.31	12.30	10.59	10.88	11.05	10.53	11.91	---
15	---	---	14.79	14.48	13.10	12.12	10.46	11.00	10.94	11.06	12.25	---
20	---	15.05	14.87	14.53	12.24	11.60	10.51	10.25	9.96	11.51	---	---
25	---	15.08	14.89	14.45	11.83	11.03	10.28	10.31	10.41	11.92	---	---
EOM	---	15.21	14.86	14.41	11.77	11.61	10.80	10.43	10.87	12.00	---	---

WTR YR 2000 LOW 15.24 NOV 22



413120086055601. Local number, SJ 31.
LOCATION.--Lat 41°31'20", long 86°05'56", in SW$^1/_4$SW$^1/_4$SW$^1/_4$ sec.31, T.36 N., R.4 E., St. Joseph County, Hydrologic Unit 07120001, 4 mi west of Wakarusa.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 109 ft, cased to 104 ft, screened to 109 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 830.50 ft above sea level. Measuring point: Top of casing, 3.40 ft above land-surface datum.

PERIOD OF RECORD.--August 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.71 ft below land-surface datum, Jan. 23, 1991; lowest, 13.29 ft below land-surface datum, Sept. 28, 1999.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

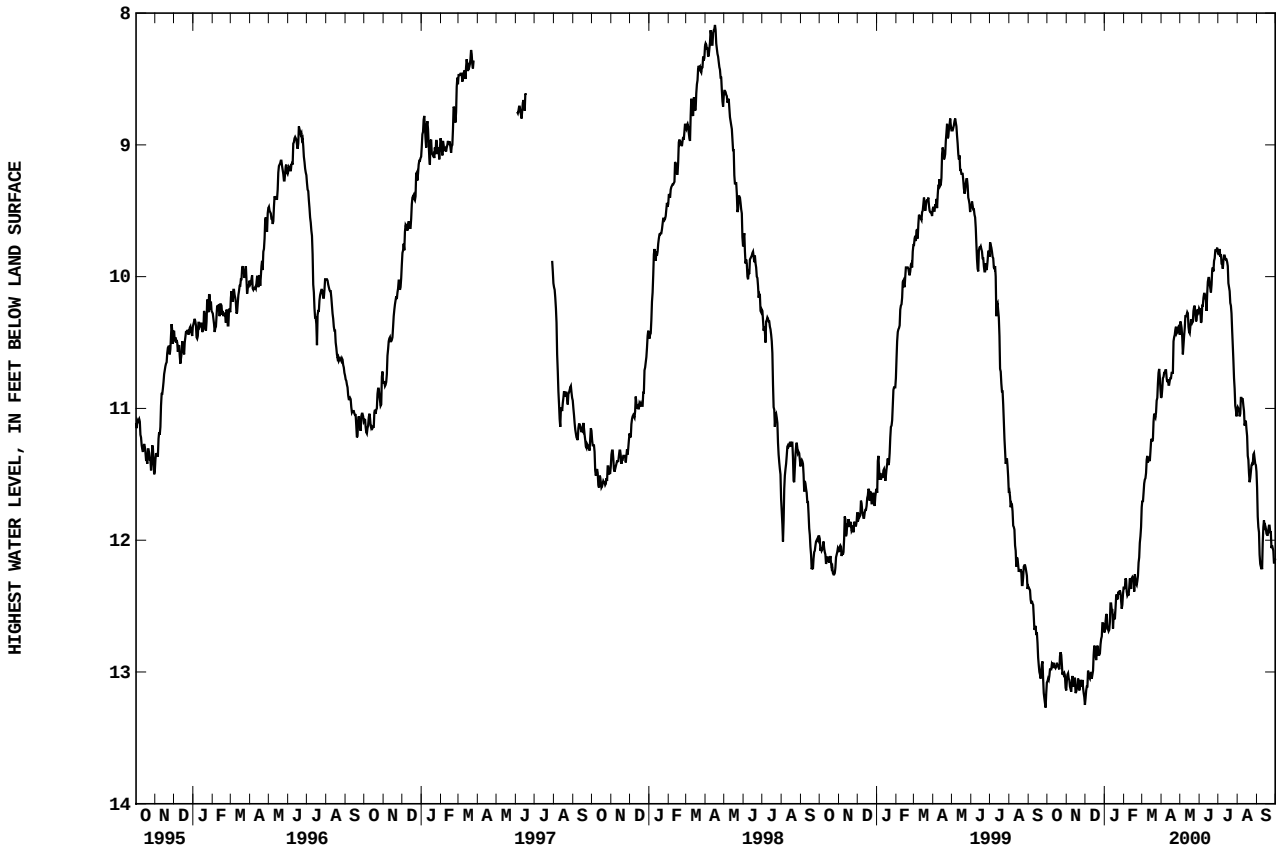
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.98	13.06	12.99	12.67	12.39	11.54	10.73	10.59	10.22	9.83	11.04	12.11
10	12.93	13.03	13.00	12.48	12.29	11.41	10.80	10.30	10.16	9.84	10.98	12.02
15	12.96	13.16	12.80	12.58	12.29	11.25	10.77	10.42	10.01	9.89	11.16	11.91
20	12.98	13.07	12.80	12.41	12.33	11.04	10.49	10.35	10.06	10.20	11.56	11.89
25	13.02	13.11	12.79	12.38	12.13	10.92	10.43	10.28	9.86	10.64	11.43	12.04
EOM	13.14	13.25	12.70	12.36	11.75	10.92	10.44	10.24	9.82	11.01	11.48	12.14

WTR YR 2000 HIGH 9.78 JUN 29

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.04	13.11	13.17	12.71	12.45	11.59	10.81	10.68	10.34	9.90	11.09	12.18
10	12.98	13.10	13.07	12.62	12.36	11.43	10.85	10.37	10.22	9.88	11.03	12.22
15	13.05	13.25	12.88	12.67	12.35	11.33	10.80	10.54	10.30	9.95	11.22	11.95
20	13.01	13.20	12.87	12.47	12.37	11.10	10.73	10.43	10.18	10.23	11.68	11.92
25	13.08	13.15	12.91	12.41	12.18	10.94	10.45	10.35	9.91	10.77	11.46	12.08
EOM	13.16	13.27	12.73	12.41	11.90	11.01	10.47	10.29	9.86	11.10	11.60	12.18

WTR YR 2000 LOW 13.27 NOV 30



SHELBY COUNTY

393943085490901. Local number, SH 2.
LOCATION.--Lat 39°39'43", long 85°49'09", in SW$^1/_4$SW$^1/_4$NW$^1/_4$ sec.13, T.14 N., R.6 E., Shelby County, Hydrologic Unit 05120204, on the county right-of-way at the intersection of County Roads 950 North and 200 West, 3.0 mi south of Carrollton. Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Devonian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 150 ft, cased to 128 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 816.10 ft above sea level. Measuring point: Top of floor of shelter, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--September 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.90 ft below land-surface datum, May 27, 1968; lowest, 23.51 ft below land-surface datum, Jan. 28, 2000.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

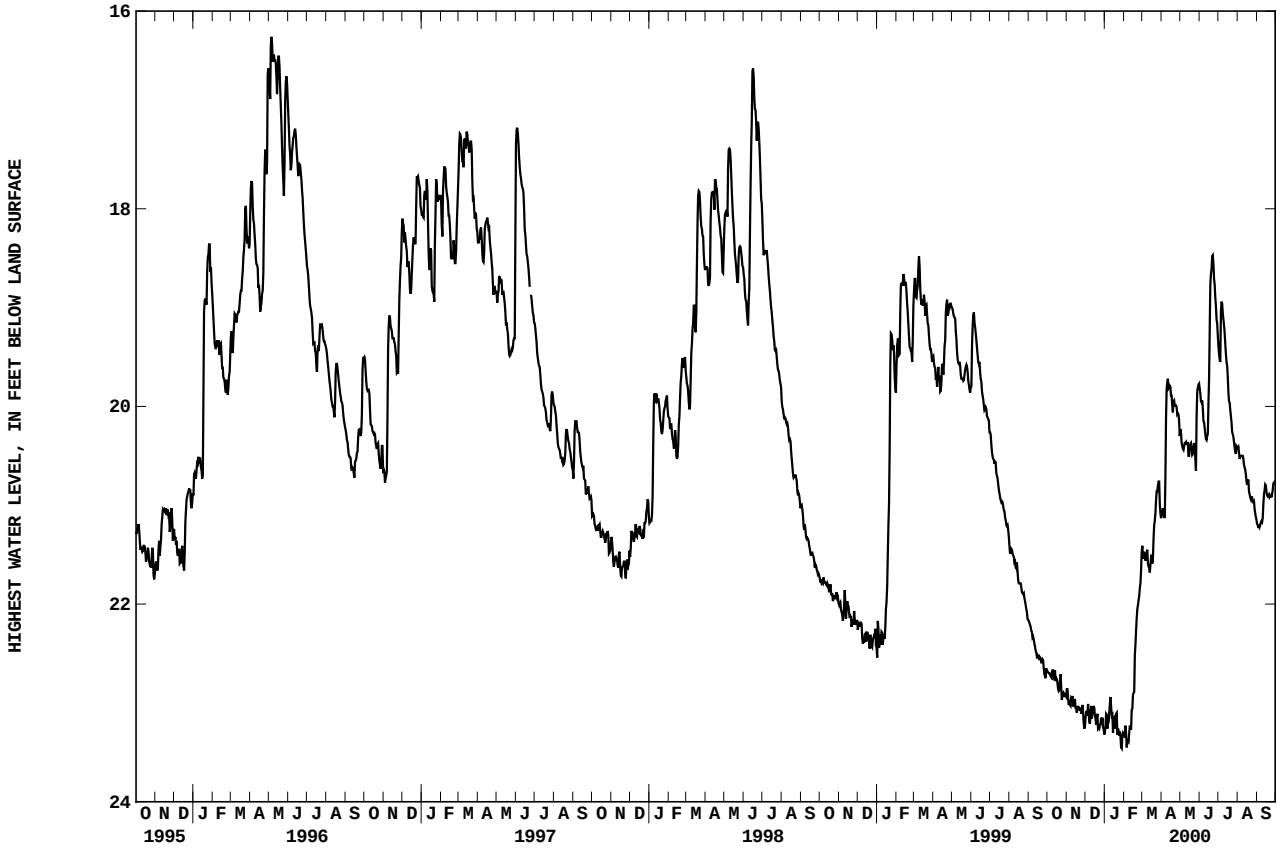
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	22.71	23.00	23.01	23.26	23.45	21.51	21.12	20.43	19.94	19.04	20.51	21.22
10	22.67	22.93	23.03	22.94	23.23	21.59	19.76	20.36	20.28	19.18	20.53	21.13
15	22.75	23.05	23.05	23.16	22.92	21.53	19.80	20.50	19.97	19.59	20.76	20.80
20	22.87	23.05	23.11	23.10	22.27	21.20	19.95	20.49	18.61	20.04	20.89	20.89
25	22.91	23.07	23.21	23.29	21.92	20.86	20.01	20.53	18.77	20.31	20.97	20.89
EOM	22.94	23.24	23.32	23.31	21.47	21.13	20.30	19.77	19.28	20.41	21.15	20.75

WTR YR 2000 HIGH 18.47 JUN 22

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	22.78	23.05	23.15	23.31	23.49	21.56	21.21	20.51	20.02	19.55	20.59	21.26
10	22.77	23.00	23.24	23.04	23.30	21.69	19.82	20.49	20.38	19.29	20.62	21.21
15	22.78	23.10	23.13	23.30	23.12	21.60	19.89	20.55	20.28	19.71	20.83	20.86
20	22.91	23.10	23.28	23.36	22.41	21.34	20.07	20.54	18.67	20.12	20.94	20.93
25	23.00	23.19	23.37	23.34	21.96	20.91	20.08	20.67	18.94	20.38	21.05	20.97
EOM	22.98	23.30	23.38	23.36	21.66	21.18	20.38	19.87	19.41	20.49	21.21	20.78

WTR YR 2000 LOW 23.51 JAN 28



STARKE COUNTY

411342086365601. Local number, SK 2.
LOCATION.--Lat 41°13'42", long 86°36'56", in NW$^1/_4$NE$^1/_4$NW$^1/_4$ sec.14, T.32 N., R.2 W., Starke County, Hydrologic Unit 07120001, on private property in the southeast angle of intersection of U.S. Highway 35 and County Road 500 South, and 5.0 mi south of Knox.
Owner: Samuel A. Craigmile.

AQUIFER.--Gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 85 ft, cased to 77 ft, screened to 85 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 712.97 ft above sea level. Measuring point: Top of floor of shelter, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--October 1935 to December 1952 (random instantaneous measurements only), August 1963 to October l966, June l976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.83 ft below land-surface datum, June 17, 1949; lowest, 6.99 ft below land-surface datum, Aug. 2, 1939, Sept. 17, 18, 1988.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

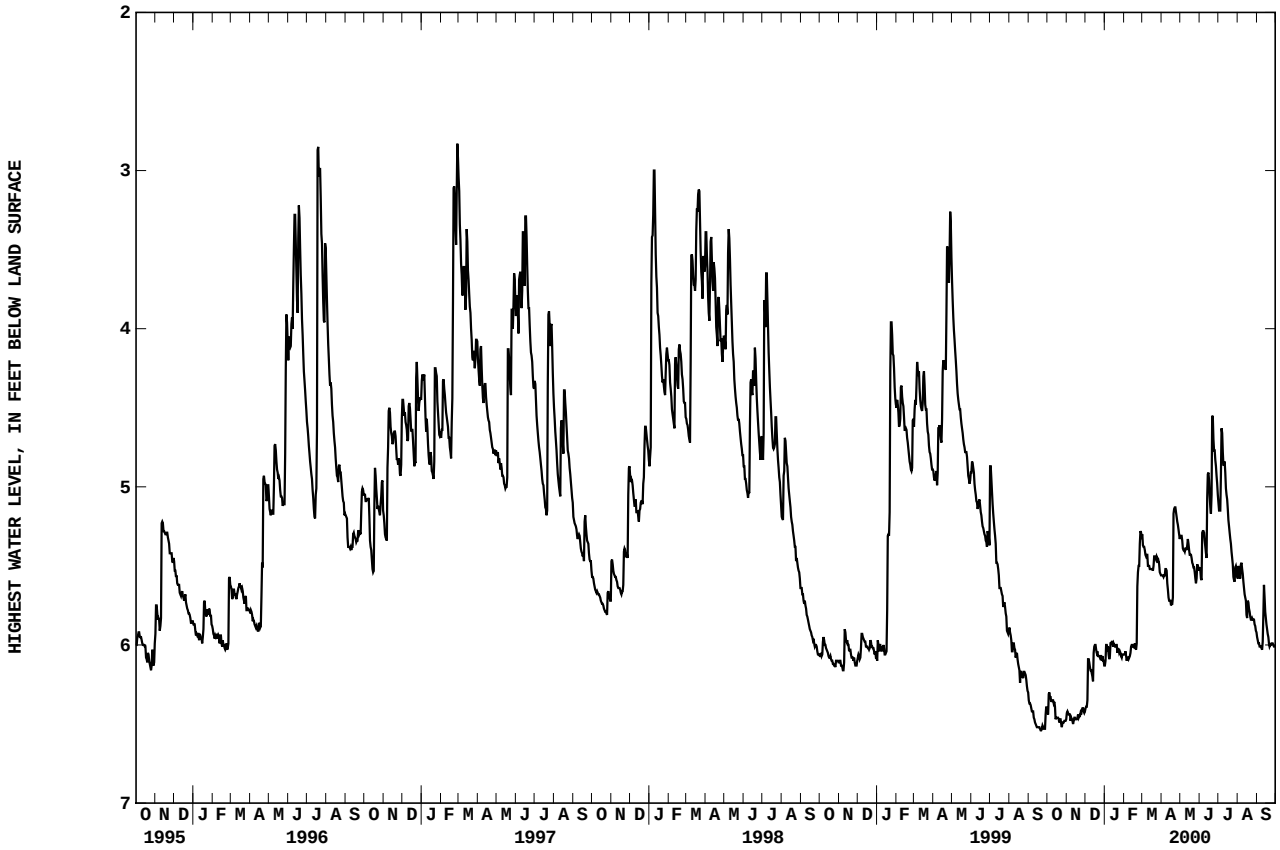
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.33	6.44	6.09	6.02	6.10	5.40	5.56	5.39	5.29	4.92	5.58	6.01
10	6.35	6.48	6.16	5.99	6.07	5.50	5.61	5.39	5.38	4.86	5.60	5.98
15	6.46	6.47	6.01	5.99	6.01	5.52	5.72	5.40	4.91	5.08	5.81	5.83
20	6.49	6.46	6.04	6.00	6.03	5.44	5.17	5.48	5.05	5.33	5.79	5.99
25	6.49	6.41	6.07	6.04	5.50	5.45	5.19	5.58	4.77	5.57	5.84	5.99
EOM	6.47	6.42	6.13	6.06	5.31	5.56	5.33	5.53	5.05	5.56	5.92	6.01

WTR YR 2000 HIGH 4.55 JUN 21

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.33	6.44	6.35	6.03	6.11	5.43	5.60	5.41	5.59	5.21	5.61	6.04
10	6.37	6.50	6.19	6.07	6.08	5.50	5.65	5.43	5.42	4.95	5.64	6.03
15	6.47	6.49	6.05	6.01	6.04	5.53	5.76	5.44	4.96	5.14	5.86	5.87
20	6.50	6.46	6.07	6.05	6.04	5.50	5.70	5.50	5.23	5.36	5.82	6.01
25	6.53	6.45	6.10	6.05	5.50	5.49	5.22	5.61	4.83	5.61	5.85	5.99
EOM	6.48	6.43	6.13	6.06	5.31	5.57	5.35	5.57	5.10	5.58	5.95	6.01

WTR YR 2000 LOW 6.53 OCT 23



STEUBEN COUNTY

414204085054002. Local number, SB 6.
LOCATION.--Lat 41°42'04", long 85°05'40", in SE$^1/_4$SE$^1/_4$SW$^1/_4$ sec.36, T.38 N., R.12 W., Steuben County, Hydrologic Unit 04050001, 0.5 east of Panama on the north side of the Lake Gage Congregational Church.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 76 ft, cased to 71 ft, screened to 76 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 987.89 ft above sea level. Measuring point: Top of casing, 3.60 ft above land-surface datum.

PERIOD OF RECORD.--August 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.68 ft below land-surface datum, July 1, 1993; lowest, 19.30 ft below land-surface datum, Mar. 1, 2, 1995.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

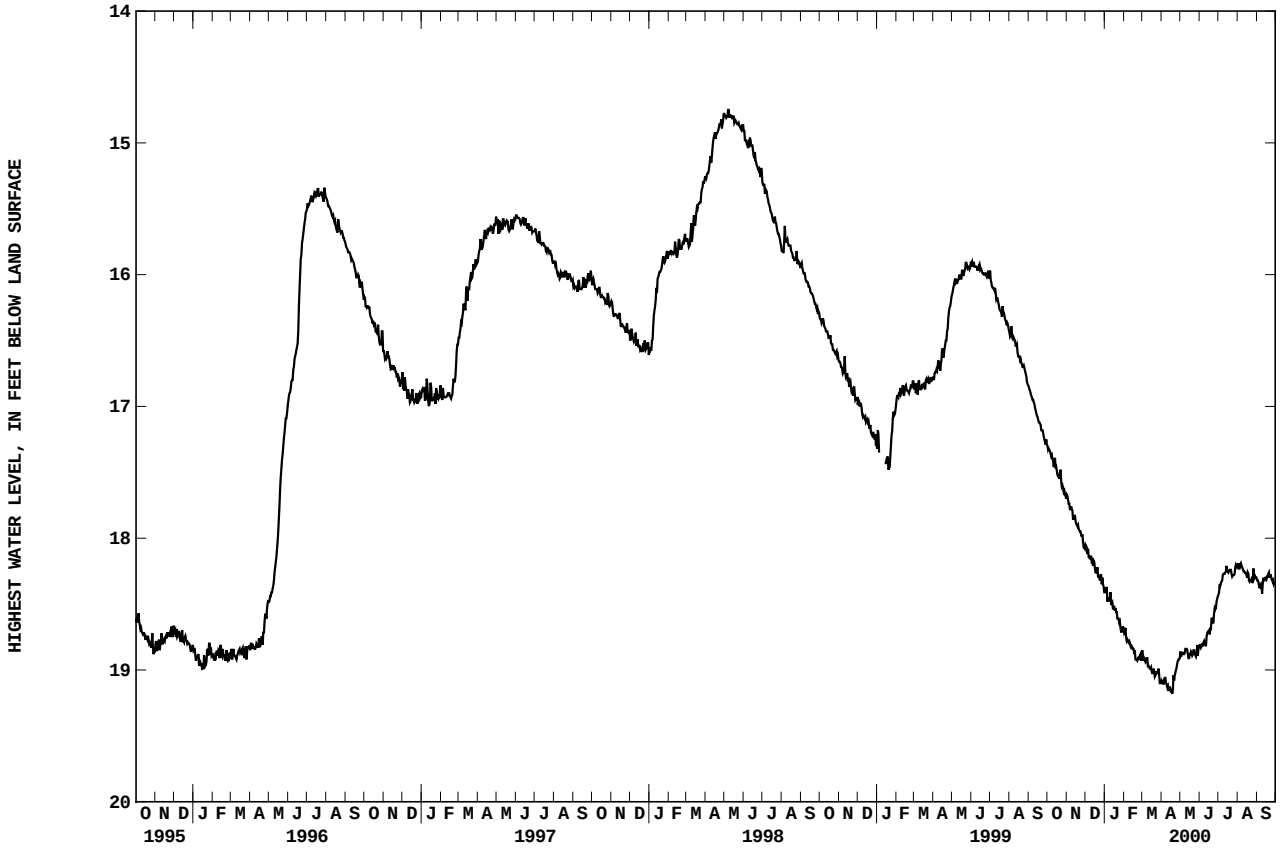
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.34	17.74	18.08	18.48	18.78	18.93	19.07	18.87	18.80	18.34	18.20	18.38
10	17.41	17.79	18.14	18.41	18.79	18.98	19.13	18.84	18.81	18.27	18.25	18.35
15	17.46	17.87	18.18	18.52	18.84	18.98	19.14	18.91	18.71	18.25	18.28	18.30
20	17.55	17.93	18.22	18.56	18.92	19.01	19.04	18.89	18.61	18.24	18.33	18.26
25	17.60	17.98	18.28	18.63	18.92	19.03	18.98	18.89	18.53	18.28	18.34	18.31
EOM	17.70	18.08	18.41	18.69	18.88	19.10	18.91	18.83	18.44	18.22	18.30	18.34

WTR YR 2000 HIGH 17.30 OCT 1

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.38	17.80	18.14	18.51	18.83	18.97	19.17	18.92	18.83	18.38	18.24	18.40
10	17.47	17.86	18.23	18.51	18.82	19.00	19.19	18.93	18.84	18.29	18.27	18.44
15	17.49	17.90	18.23	18.54	18.91	19.02	19.20	18.95	18.76	18.28	18.31	18.33
20	17.59	17.98	18.33	18.64	18.96	19.06	19.17	18.94	18.69	18.29	18.34	18.30
25	17.64	18.03	18.36	18.68	18.96	19.07	19.00	18.93	18.62	18.32	18.37	18.35
EOM	17.72	18.11	18.44	18.75	18.93	19.14	18.96	18.87	18.49	18.26	18.33	18.37

WTR YR 2000 LOW 19.24 APR 18



TIPPECANOE COUNTY

402734087033401. Local number, TC 17.
LOCATION.--Lat 40°27'34", long 87°03'34", NW$^1/_4$NE$^1/_4$NE$^1/_4$ sec.11, T.23 N., R.6 W., Tippecanoe County, Hydrologic Unit 05120108, on the property of Purdue University and at the southeast corner of the intersection of County Roads 300 North and 825 West, about 3.0 mi southeast of Otterbein.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age (Teays Valley aquifer).

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 212.5 ft, cased to 207.5 ft, screened to 212.5 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 681 ft above sea level, from topographic map. Measuring point: Top of casing, 3.60 ft above land-surface datum.

PERIOD OF RECORD.--August 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 109.69 ft below land-surface datum, Nov. 10, 1998; lowest, 121.28 ft below land-surface datum, Aug. 18, 1989.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

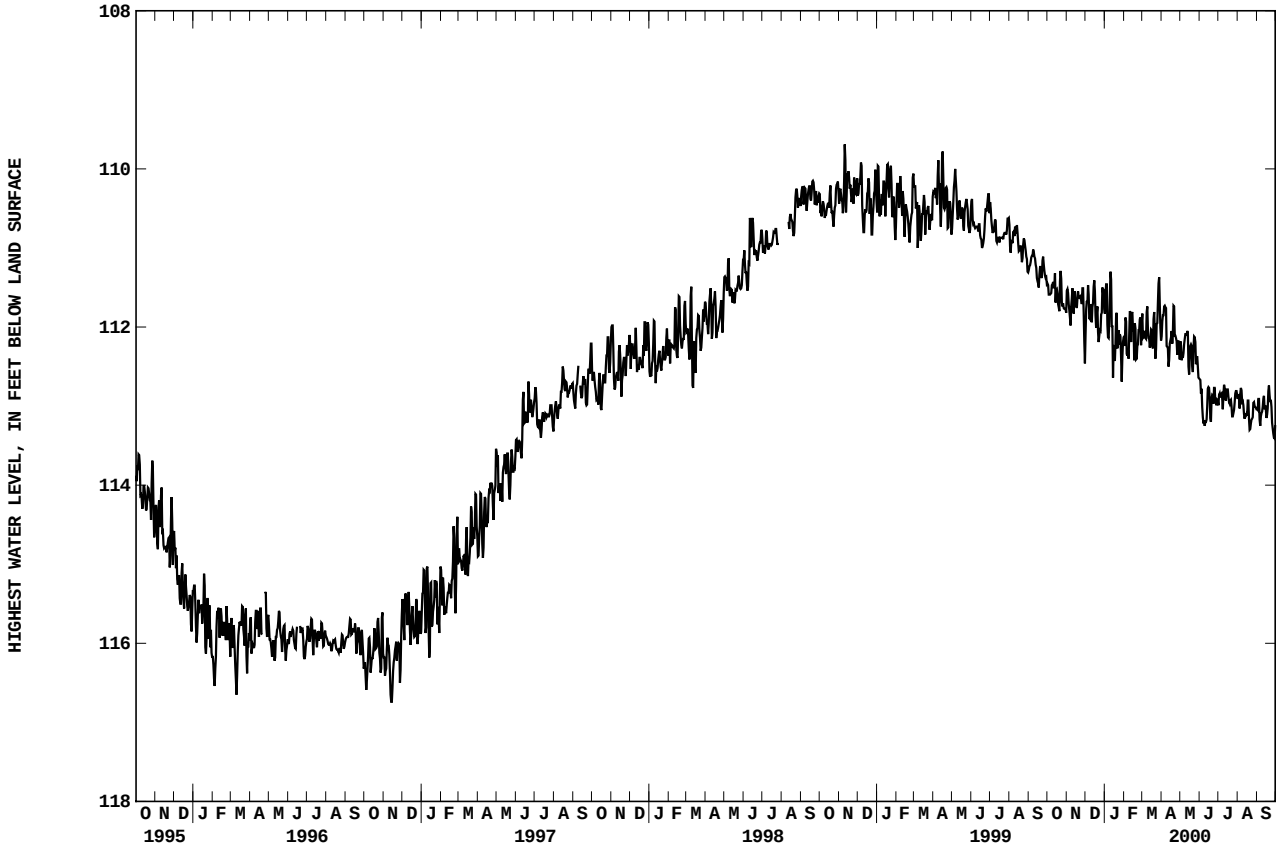
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	111.59	111.79	111.47	111.97	112.34	112.06	111.74	112.39	113.01	112.85	112.85	113.17
10	111.43	111.51	111.71	111.30	111.80	112.04	112.25	112.09	113.20	112.73	112.99	113.01
15	111.53	111.72	111.41	112.25	112.02	112.03	112.17	112.60	112.76	112.79	113.10	113.04
20	111.80	111.62	111.74	111.82	112.41	111.81	111.73	112.49	112.91	112.93	113.30	112.74
25	111.74	111.71	112.05	112.09	112.04	111.95	112.18	112.19	112.77	113.09	113.14	113.21
EOM	111.82	112.46	111.77	112.13	111.95	112.17	112.41	112.65	112.93	112.86	113.04	113.24

WTR YR 2000 HIGH 111.29 OCT 22

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	111.72	111.88	111.74	112.21	112.48	112.14	112.10	112.46	113.14	112.90	113.12	113.31
10	111.51	111.64	112.02	111.58	112.09	112.26	112.39	112.36	113.25	112.86	113.12	113.07
15	111.69	111.82	111.55	112.73	112.25	112.18	112.21	112.67	112.84	112.82	113.15	113.15
20	111.85	111.73	112.06	112.27	112.54	112.06	112.07	112.75	113.23	113.00	113.33	112.86
25	111.83	111.95	112.32	112.24	112.12	112.04	112.35	112.47	112.98	113.13	113.21	113.28
EOM	111.89	112.53	111.96	112.19	112.35	112.26	112.53	112.70	113.03	112.92	113.08	113.41

WTR YR 2000 LOW 113.50 SEP 28



TIPPECANOE COUNTY

402734087033402. Local number, TC 18.
LOCATION.--Lat 40°27'34", long 87°03'34", NW1/4NE1/4NE1/4 sec.11, T.23 N., R.6 W., Tippecanoe County, Hydrologic Unit 05120108, on the property of Purdue University and at the southeast corner of the intersection of County Roads 300 North and 825 West, about 3.0 mi southeast of Otterbein.
Owner: U.S. Geological Survey

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 64 ft, cased to 59 ft, screened to 64 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 681 ft above sea level, from topographic map. Measuring point: Top of casing, 3.50 ft above land-surface datum.

PERIOD OF RECORD.--August 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.67 ft below land-surface datum, Mar. 27, 1991; lowest, 22.79 ft below land-surface datum, Feb. 16-17, 2000.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

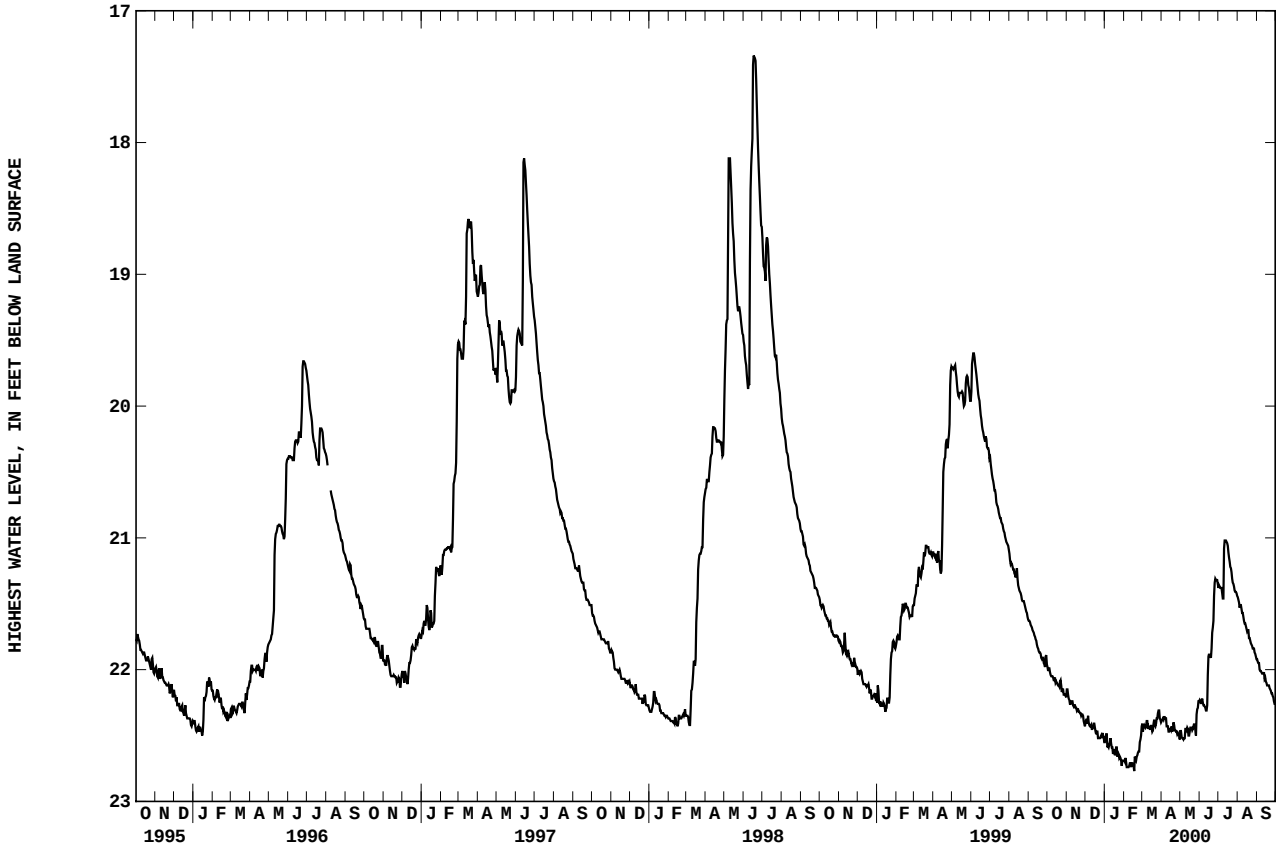
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	22.02	22.23	22.35	22.59	22.74	22.43	22.36	22.52	22.22	21.38	21.51	22.00
10	22.06	22.24	22.42	22.52	22.71	22.45	22.43	22.45	22.29	21.08	21.60	22.03
15	22.09	22.29	22.41	22.61	22.73	22.42	22.45	22.50	21.90	21.04	21.69	22.09
20	22.13	22.32	22.47	22.59	22.69	22.38	22.40	22.46	21.84	21.22	21.76	22.12
25	22.15	22.34	22.51	22.66	22.62	22.37	22.47	22.46	21.34	21.35	21.84	22.18
EOM	22.21	22.43	22.55	22.69	22.43	22.40	22.53	22.24	21.35	21.44	21.92	22.26

WTR YR 2000 HIGH 21.02 JUL 11

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	22.04	22.26	22.41	22.59	22.75	22.44	22.41	22.54	22.25	21.39	21.54	22.01
10	22.08	22.27	22.48	22.56	22.73	22.46	22.45	22.49	22.31	21.47	21.63	22.04
15	22.11	22.30	22.44	22.64	22.77	22.45	22.46	22.51	22.04	21.06	21.71	22.10
20	22.14	22.33	22.52	22.66	22.69	22.42	22.45	22.46	21.92	21.23	21.78	22.14
25	22.17	22.38	22.56	22.67	22.62	22.39	22.49	22.50	21.44	21.37	21.86	22.20
EOM	22.22	22.44	22.56	22.70	22.50	22.41	22.54	22.26	21.38	21.46	21.92	22.26

WTR YR 2000 LOW 22.79 FEB 16



VANDERBURGH COUNTY

380608087395901. Local number, VA 6.
LOCATION.--Lat 38°06'08", long 87°39'59", in SE$^1/_4$SW$^1/_4$NW$^1/_4$ sec.8, T.5 S., R.11 W., Vanderburgh County, Hydrologic Unit 05120113, on county right-of-way at the intersection of Buente and New Harmony Roads, 1.0 mi southwest of Armstrong. Owner: U.S. Geological Survey.

AQUIFER.--Sandstone of Pennsylvanian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 125 ft, cased to 80 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 446.57 ft above sea level. Measuring point: Top of floor of shelter, 3.40 ft above land-surface datum.

REMARKS.--Well may be affected by pumpage.

PERIOD OF RECORD.--May 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.88 ft below land-surface datum, Apr. 3, 4, 1968; lowest, 35.87 ft below land-surface datum, Nov. 14, 1994.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

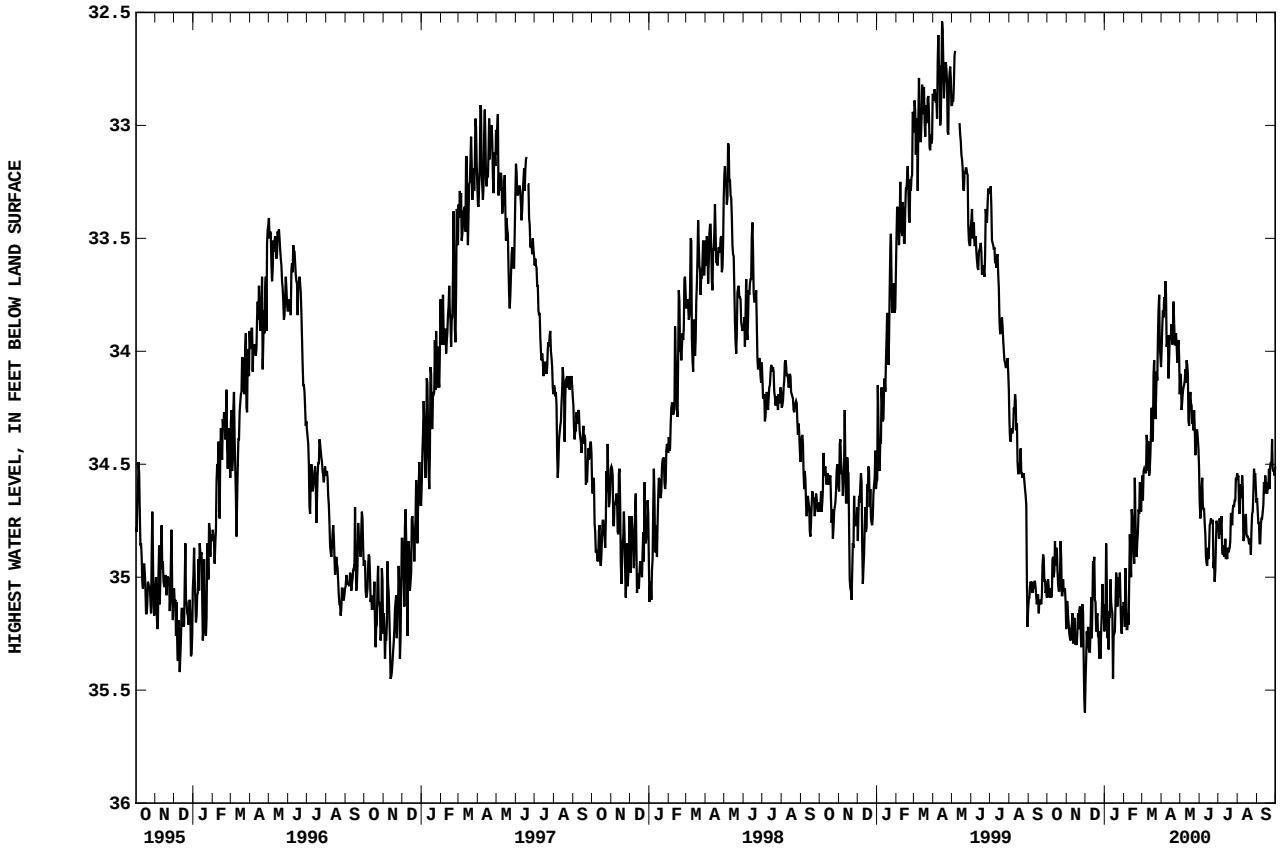
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	35.08	35.25	35.22	35.27	35.23	34.53	33.76	34.18	34.56	34.76	34.62	34.85
10	34.91	35.16	35.09	35.01	34.81	34.53	33.96	34.14	34.81	34.91	34.84	34.71
15	34.88	35.30	34.91	35.26	34.85	34.35	33.95	34.33	34.92	34.92	34.81	34.59
20	35.06	35.23	35.16	35.02	34.89	34.04	33.78	34.32	34.76	34.84	34.85	34.52
25	35.08	35.22	35.36	34.98	34.72	34.13	33.97	34.46	35.02	34.68	34.71	34.39
EOM	35.23	35.60	35.24	35.11	34.61	34.07	34.19	34.52	34.77	34.54	34.67	34.51

WTR YR 2000 HIGH 33.69 APR 7

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	35.22	35.38	35.43	35.36	35.34	34.62	34.02	34.30	34.68	34.91	34.77	34.89
10	35.07	35.34	35.39	35.18	35.02	34.62	34.06	34.21	34.93	35.02	34.95	34.86
15	34.97	35.42	35.10	35.45	35.02	34.48	34.03	34.44	35.03	35.05	34.91	34.67
20	35.14	35.28	35.39	35.26	35.00	34.25	33.99	34.44	34.88	34.95	34.91	34.66
25	35.22	35.46	35.58	35.13	34.79	34.26	34.12	34.54	35.20	34.75	34.78	34.57
EOM	35.28	35.68	35.35	35.23	34.76	34.14	34.24	34.68	34.94	34.68	34.79	34.63

WTR YR 2000 LOW 35.68 NOV 29



VANDERBURGH COUNTY

380626087344401. Local number, VA 7.
LOCATION.--Lat 38°06'26", long 87°34'44", in NE$^1/_4$NW$^1/_4$NW$^1/_4$ sec.7, T.5 S., R.10 W., Vanderburgh County, Hydrologic Unit 05120113, on north side of Salem United Church of Christ 0.5 mi north of Darmstadt.
Owner: U.S. Geological Survey.

AQUIFER.--Inglefield Sandstone Member, Patoka Formation of Pennsylvanian Period.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 70 ft, cased to 39.3 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 475.35 ft above sea level. Measuring point: Top of floor of shelter, 4.04 ft above land-surface datum.

PERIOD OF RECORD.--June 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 19.27 ft below land-surface datum, June 19, 1997; lowest, 25.06 ft below land-surface datum, Oct. 29, 1988.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

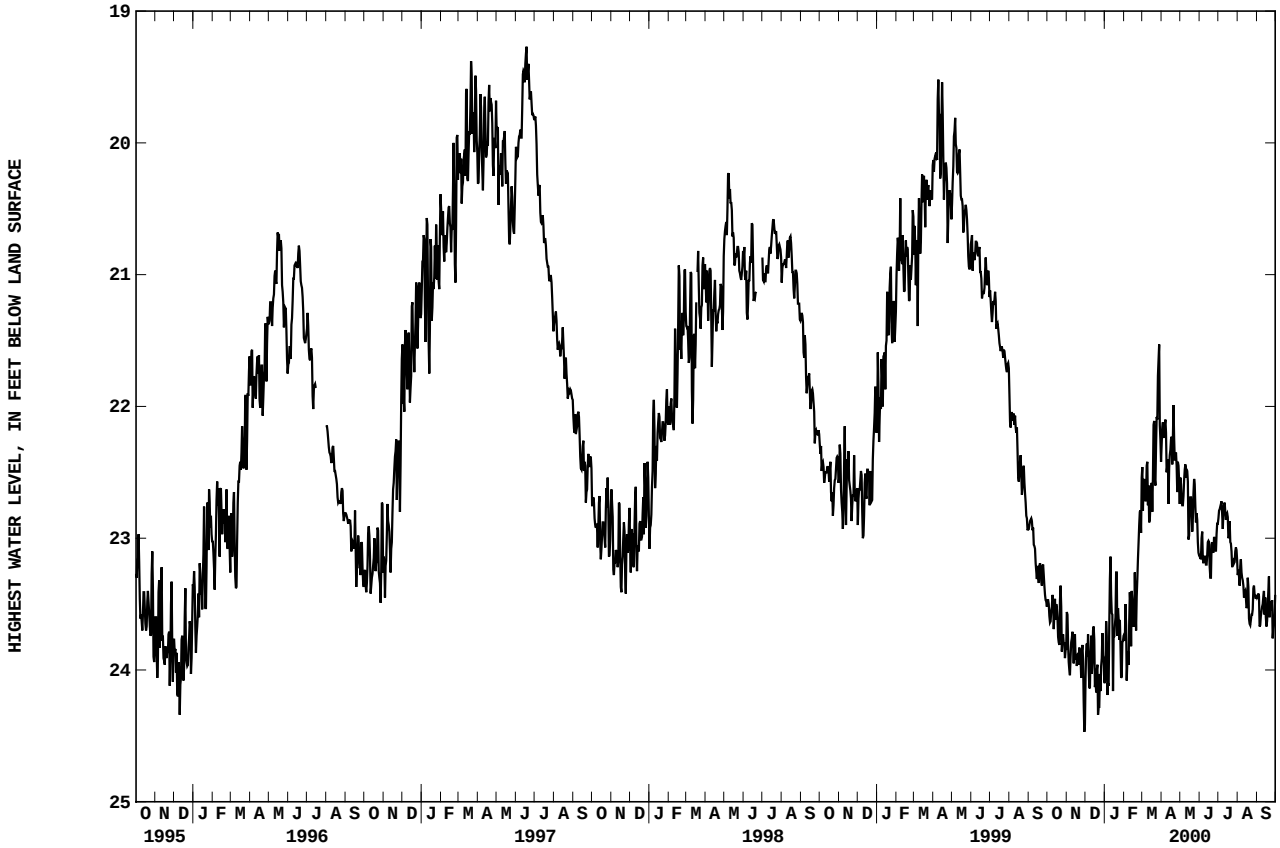
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.64	24.00	23.73	24.19	24.08	22.65	22.12	22.75	22.95	22.74	23.21	23.67
10	23.47	23.71	23.74	23.14	23.41	22.75	22.45	22.54	23.14	22.75	23.36	23.50
15	23.50	23.92	23.77	23.74	23.67	22.66	22.33	22.98	23.02	22.81	23.53	23.60
20	23.81	23.96	23.96	23.26	23.70	22.11	21.99	22.95	23.05	23.03	23.65	23.29
25	23.77	23.86	24.16	23.62	22.90	22.10	22.45	22.76	23.01	23.17	23.54	23.47
EOM	23.84	24.42	24.09	23.74	22.54	22.42	22.74	23.13	22.89	23.17	23.43	23.43

WTR YR 2000 HIGH 21.53 MAR 28

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.81	24.09	23.98	24.40	24.16	22.74	22.50	22.89	23.16	22.78	23.40	23.74
10	23.70	23.80	24.31	23.43	23.63	22.83	22.55	22.78	23.22	22.83	23.46	23.59
15	23.62	24.02	24.13	24.16	23.99	22.76	22.39	23.16	23.14	22.85	23.60	23.72
20	23.87	24.07	24.47	23.90	23.81	22.55	22.28	23.02	23.30	23.11	23.72	23.60
25	23.92	24.24	24.54	23.81	23.10	22.29	22.69	23.00	23.16	23.23	23.69	23.79
EOM	23.97	24.62	24.29	23.84	22.96	22.53	22.92	23.25	22.96	23.37	23.51	23.58

WTR YR 2000 LOW 24.62 NOV 30



VIGO COUNTY

392820087242601. Local number, VI 7.
LOCATION.--Lat 39°28'20", long 87°24'26", in SE$^1/_4$SE$^1/_4$NE$^1/_4$ sec.21, T.12 N., R.9 W., Vigo County, Hydrologic Unit 05120111, on the campus of Indiana State University, in Terre Haute.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 70 ft, cased to 67 ft, screened to 70 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 502 ft above sea level, from topographic map. Measuring point: Top of floor of shelter, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--January 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 38.35 ft below land-surface datum, Dec. 13, 1993; lowest, 51.90 ft below land-surface datum, Sept. 29 to Oct. 1, 1972.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

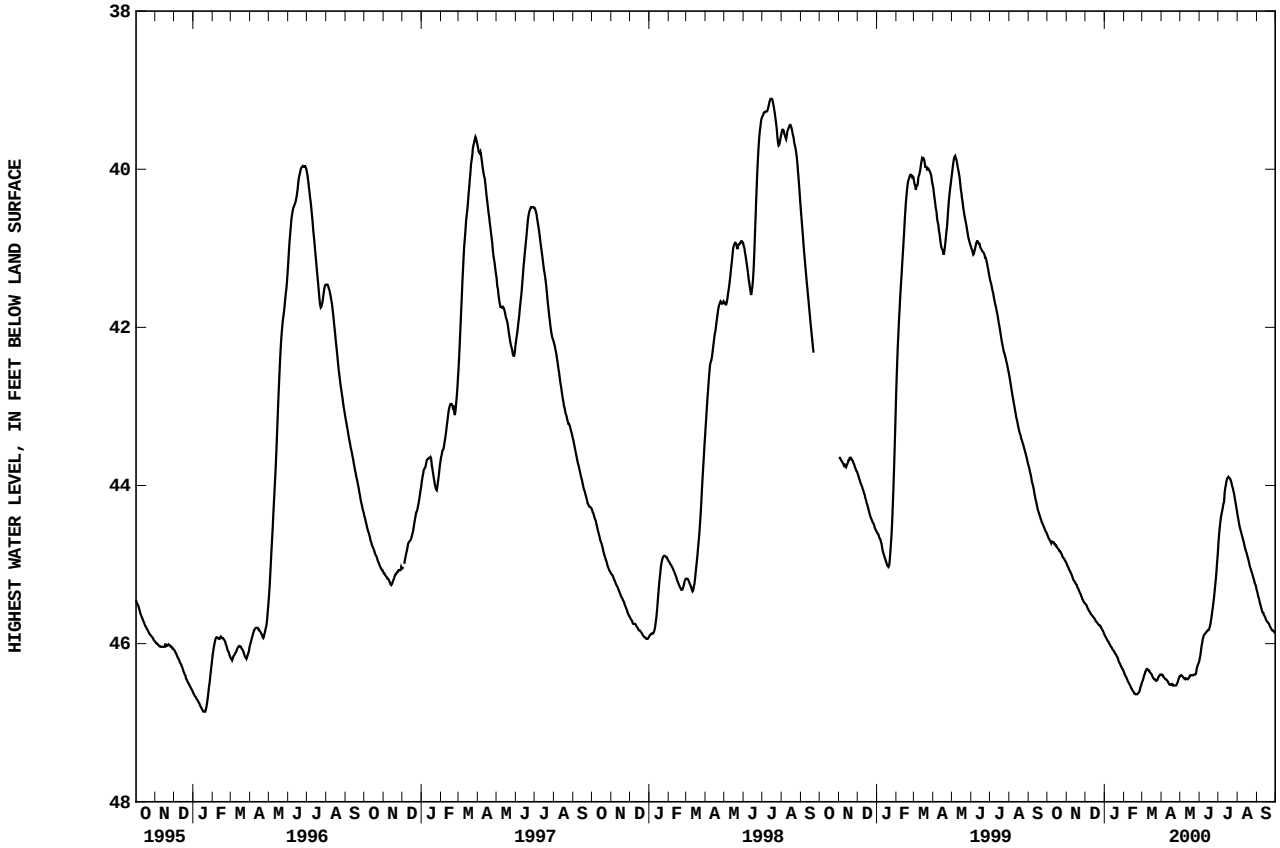
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	44.70	45.07	45.56	45.96	46.44	46.38	46.43	46.42	45.99	44.40	44.55	45.47
10	44.72	45.16	45.63	46.03	46.52	46.33	46.47	46.44	45.87	44.21	44.70	45.61
15	44.76	45.24	45.68	46.09	46.60	46.38	46.52	46.43	45.83	43.91	44.85	45.69
20	44.83	45.32	45.74	46.16	46.64	46.45	46.53	46.40	45.66	43.92	45.01	45.75
25	44.90	45.41	45.78	46.25	46.61	46.46	46.52	46.39	45.33	44.07	45.14	45.83
EOM	44.98	45.49	45.88	46.35	46.50	46.39	46.41	46.23	44.86	44.34	45.31	45.86

WTR YR 2000 HIGH 43.89 JUL 17

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	44.71	45.08	45.58	45.97	46.46	46.40	46.45	46.43	46.03	44.47	44.58	45.50
10	44.72	45.18	45.64	46.04	46.54	46.34	46.49	46.45	45.88	44.23	44.73	45.63
15	44.78	45.25	45.69	46.10	46.61	46.39	46.52	46.44	45.83	43.94	44.88	45.71
20	44.83	45.34	45.75	46.17	46.64	46.45	46.54	46.40	45.71	43.94	45.04	45.78
25	44.91	45.44	45.80	46.27	46.62	46.47	46.53	46.40	45.41	44.10	45.17	45.85
EOM	44.99	45.50	45.90	46.37	46.53	46.40	46.43	46.25	44.96	44.39	45.34	45.87

WTR YR 2000 LOW 46.65 FEB 18



WABASH COUNTY

404424085422801. Local number, WB 3.
LOCATION.--Lat 40°44'24", long 85°42'28", in SE$^1/_4$SE$^1/_4$SW$^1/_4$ sec.35, T.27 N., R.7 E., Wabash County, Hydrologic Unit 05120101, on State Highway 124, 3.5 mi west of the county line and in the southwest corner of United Telephone Company property. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 105 ft, cased to 100 ft, screened to 105 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 850.45 ft above sea level. Measuring point: Top of casing, 3.50 ft above land-surface datum.

REMARKS.--Well affected by pumpage.

PERIOD OF RECORD.--August 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 43.85 ft below land-surface datum, Mar. 27, 1991 and Apr. 1, 1993; lowest, 49.66 ft below land-surface datum, Mar. 10, 1996.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

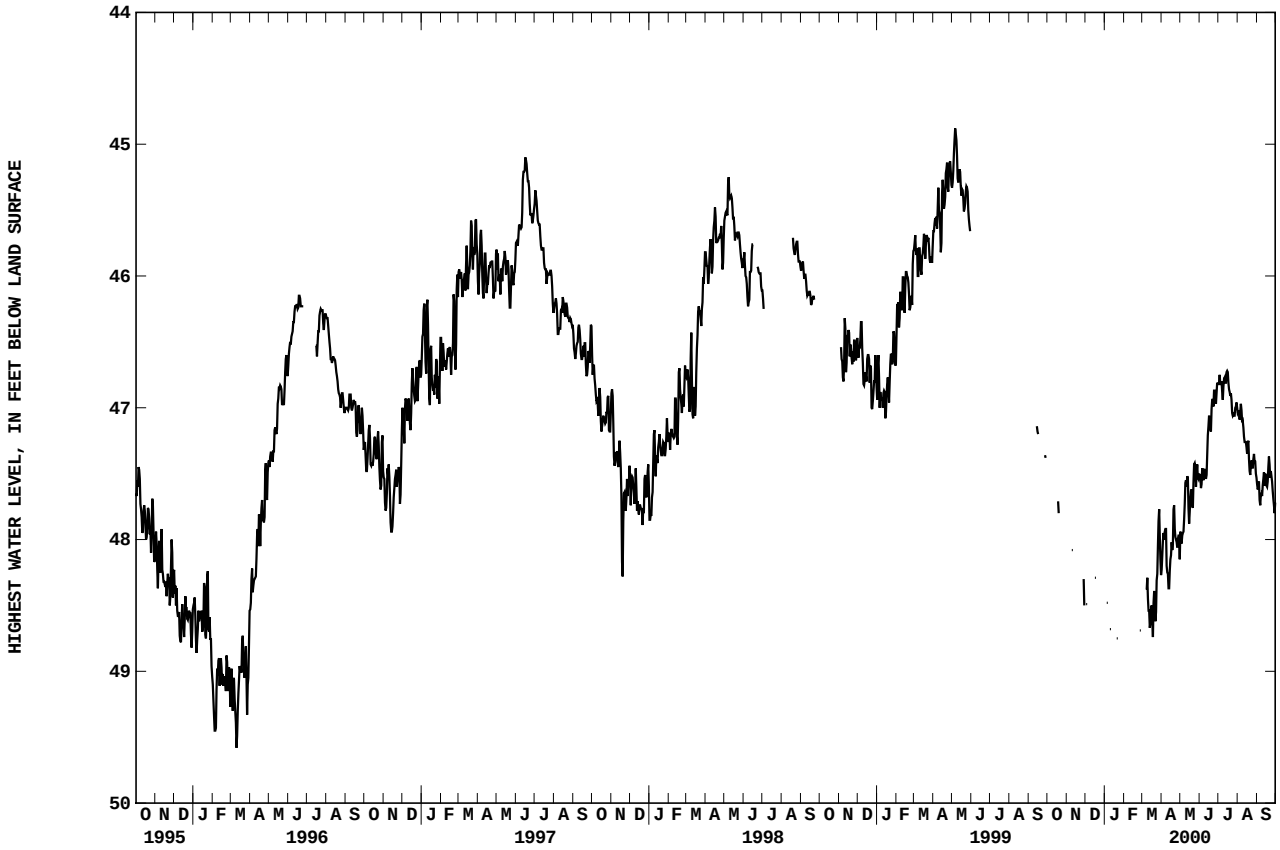
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	48.00	47.95	47.46	46.82	47.03	47.70
10	---	---	---	---	---	48.45	48.25	47.55	47.48	46.78	47.15	47.59
15	---	---	---	---	---	48.53	48.15	47.88	47.14	46.72	47.30	47.52
20	---	---	---	48.75	---	48.39	47.77	47.74	47.01	46.91	47.48	47.37
25	---	---	---	---	---	48.26	48.02	47.45	46.87	47.05	47.46	47.56
EOM	---	---	---	---	---	48.27	48.15	47.50	46.82	47.00	47.53	47.72

WTR YR 2000 HIGH 46.72 JUL 15

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	48.14	48.01	47.58	46.85	47.15	47.76
10	---	---	---	---	---	48.62	48.37	47.76	47.55	46.84	47.22	47.69
15	---	---	---	---	---	48.63	48.24	47.95	47.21	46.77	47.35	47.59
20	---	---	---	48.88	---	48.48	48.04	47.84	47.18	46.95	47.52	47.45
25	---	---	---	---	---	48.31	48.08	47.60	47.06	47.08	47.50	47.63
EOM	---	---	---	---	---	48.34	48.23	47.57	46.87	47.07	47.59	47.80

WTR YR 2000 LOW 48.88 JAN 20



WABASH COUNTY

403948085414601. Local number, WB 4.
LOCATION.--Lat 40°39'48", long 85°41'46", in NE$^1/_4$SE$^1/_4$NE$^1/_4$ sec. 35, T.26N., R.7E., Wabash County, Hydrologic Unit 05120103, on America Road, 1.3 mi southeast of La Fountaine.
Owner: U.S. Geological Survey

AQUIFER.--Sand and gravel of the Pleistocene age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 118 ft, cased to 113 ft, screened to 118 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 837.40 ft above sea level. Measuring point: Top of casing, 3.30 ft above land-surface datum.

REMARKS.--Well affected by pumpage.

PERIOD OF RECORD.--August 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 38.19 ft below land-surface datum, Nov. 5, 1988; lowest, 48.03 ft below land-surface datum, Jan. 14, 2000.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

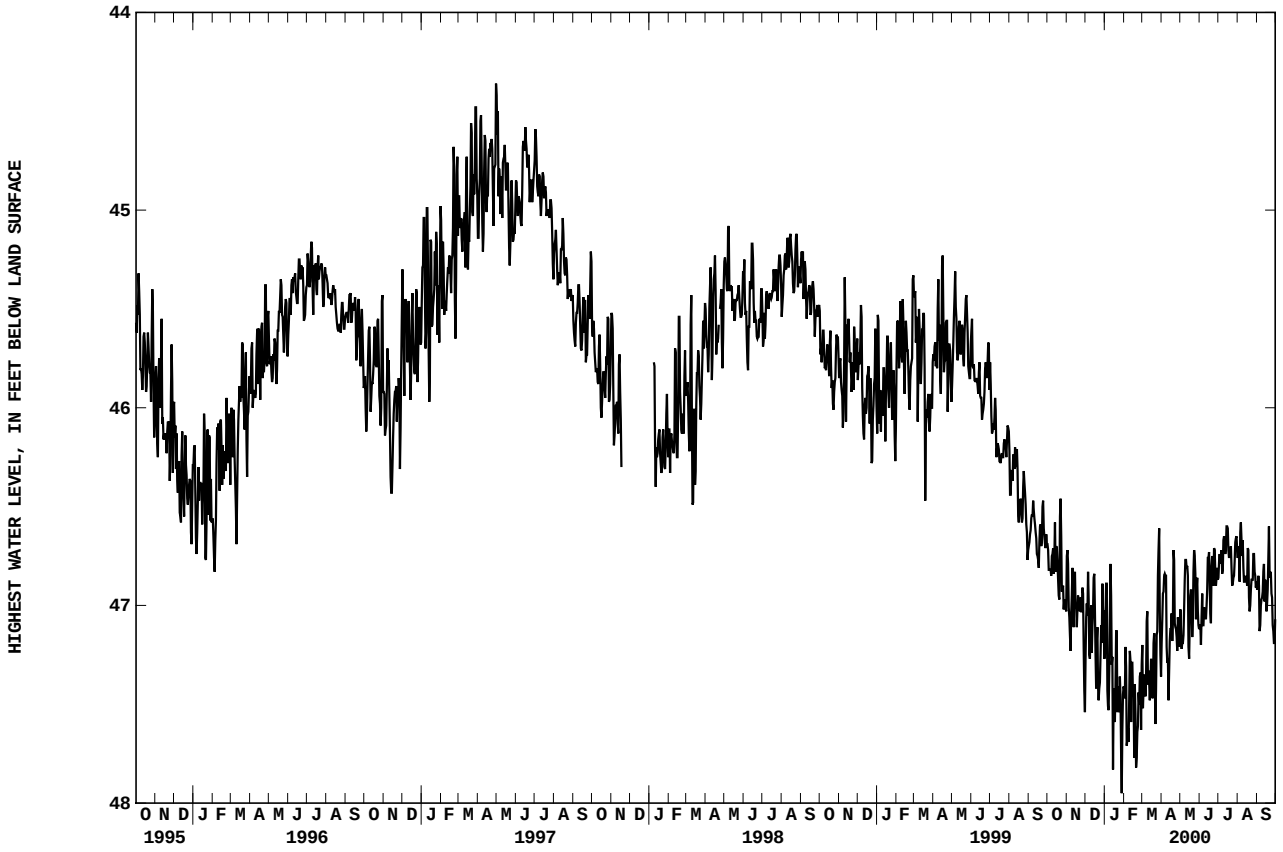
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	46.82	47.06	46.83	47.43	47.71	47.38	46.85	47.19	46.94	46.76	46.63	47.13
10	46.71	46.81	47.00	46.79	47.23	47.40	47.29	46.77	47.05	46.65	46.81	46.93
15	46.70	47.01	46.84	47.44	47.46	47.27	47.12	47.27	46.76	46.60	46.86	46.93
20	46.97	47.02	47.11	47.13	47.82	47.14	46.72	47.16	46.80	46.73	47.03	46.60
25	46.92	47.03	47.25	47.36	47.50	47.13	47.16	46.84	46.72	46.86	46.87	46.96
EOM	47.03	47.54	47.27	47.41	47.30	47.36	47.21	47.12	46.87	46.72	46.88	47.07

WTR YR 2000 HIGH 46.46 OCT 22

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	46.96	47.15	47.05	47.63	47.82	47.46	47.22	47.28	47.10	46.80	46.91	47.20
10	46.84	46.95	47.37	47.04	47.47	47.53	47.43	47.08	47.09	46.69	46.89	46.98
15	46.83	47.13	47.02	47.83	47.78	47.39	47.20	47.34	46.83	46.63	46.94	47.03
20	47.03	47.12	47.41	47.54	47.91	47.38	47.08	47.21	47.09	46.81	47.08	46.83
25	47.05	47.30	47.62	47.54	47.59	47.22	47.27	47.08	46.93	46.91	46.97	47.10
EOM	47.10	47.64	47.40	47.48	47.67	47.46	47.39	47.22	46.93	46.79	46.94	47.19

WTR YR 2000 LOW 48.03 JAN 14



WARRICK COUNTY

380624087164801. Local number, WK 4.
LOCATION.--Lat 38°06'24", long 87°16'48", in SE$^1/_4$SW$^1/_4$SW$^1/_4$ sec.2, T.5 S., R.8 W., Warrick County, Hydrologic Unit 05140201, on State Highway 61, 4.2 mi north of Boonville.
Owner: U.S. Geological Survey.

AQUIFER.--Sandstone from lower Dugger Formation of Pennsylvanian age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 105 ft, cased to 30 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 446.18 ft above sea level. Measuring point: Top of floor of shelter, 4.09 ft above land-surface datum.

PERIOD OF RECORD.--June 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.85 ft below land-surface datum, June 17, 1997; lowest, 18.20 ft below land-surface datum, Oct. 30, 1988.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

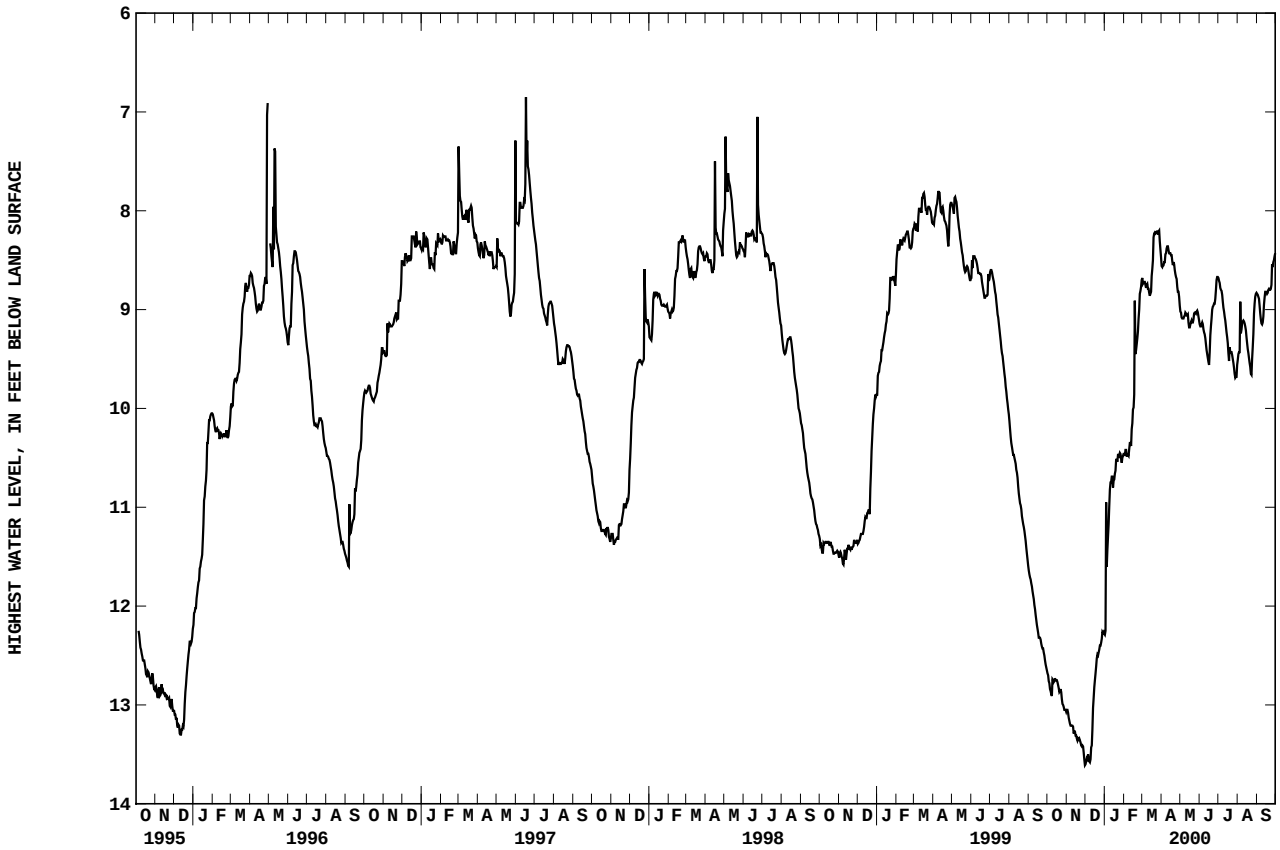
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.84	13.16	13.50	11.43	10.48	8.72	8.52	9.09	9.13	8.80	8.92	8.96
10	12.75	13.21	13.43	10.75	10.35	8.79	8.36	9.04	9.29	9.02	9.11	9.13
15	12.75	13.31	12.82	10.73	10.01	8.82	8.43	9.18	9.53	9.28	9.28	8.82
20	12.87	13.35	12.49	10.52	9.41	8.23	8.52	9.13	9.09	9.43	9.54	8.79
25	12.99	13.42	12.40	10.45	9.00	8.21	8.69	9.03	8.94	9.54	9.38	8.54
EOM	13.07	13.61	12.28	10.46	8.70	8.47	8.96	9.11	8.67	9.56	8.83	8.43

WTR YR 2000 HIGH 8.20 MAR 28

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.87	13.19	13.55	11.60	10.50	8.75	8.58	9.11	9.15	8.82	9.43	9.04
10	12.77	13.22	13.55	10.82	10.41	8.83	8.38	9.09	9.35	9.07	9.12	9.16
15	12.76	13.32	12.93	10.80	10.15	8.84	8.45	9.20	9.56	9.34	9.34	8.83
20	12.89	13.36	12.53	10.57	9.46	8.27	8.55	9.15	9.17	9.46	9.58	8.81
25	13.01	13.45	12.46	10.48	9.09	8.26	8.77	9.07	8.97	9.59	9.50	8.75
EOM	13.09	13.63	12.31	10.48	8.77	8.56	9.02	9.16	8.69	9.70	8.84	8.46

WTR YR 2000 LOW 13.63 NOV 30



383012086124501. Local number, WA 2.
LOCATION.--Lat 38°30'12", long 86°12'45", IN NE$^1/_4$SW$^1/_4$SW$^1/_4$ sec.20, T.1 N., R.3 E., Washington County, Hydrologic Unit 05140104, on West Washington School Road, 5.1 mi north of Fredericksburg.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Mississippian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 142.5 ft, cased to 101 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 780 ft above sea level, from topographic map. Measuring point: Top of casing, 3.50 ft above land-surface datum.

PERIOD OF RECORD.--August 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 61.14 ft below land-surface datum, Apr. 30, 1996; lowest, 75.95 ft below land-surface datum, Nov. 29, 1999.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

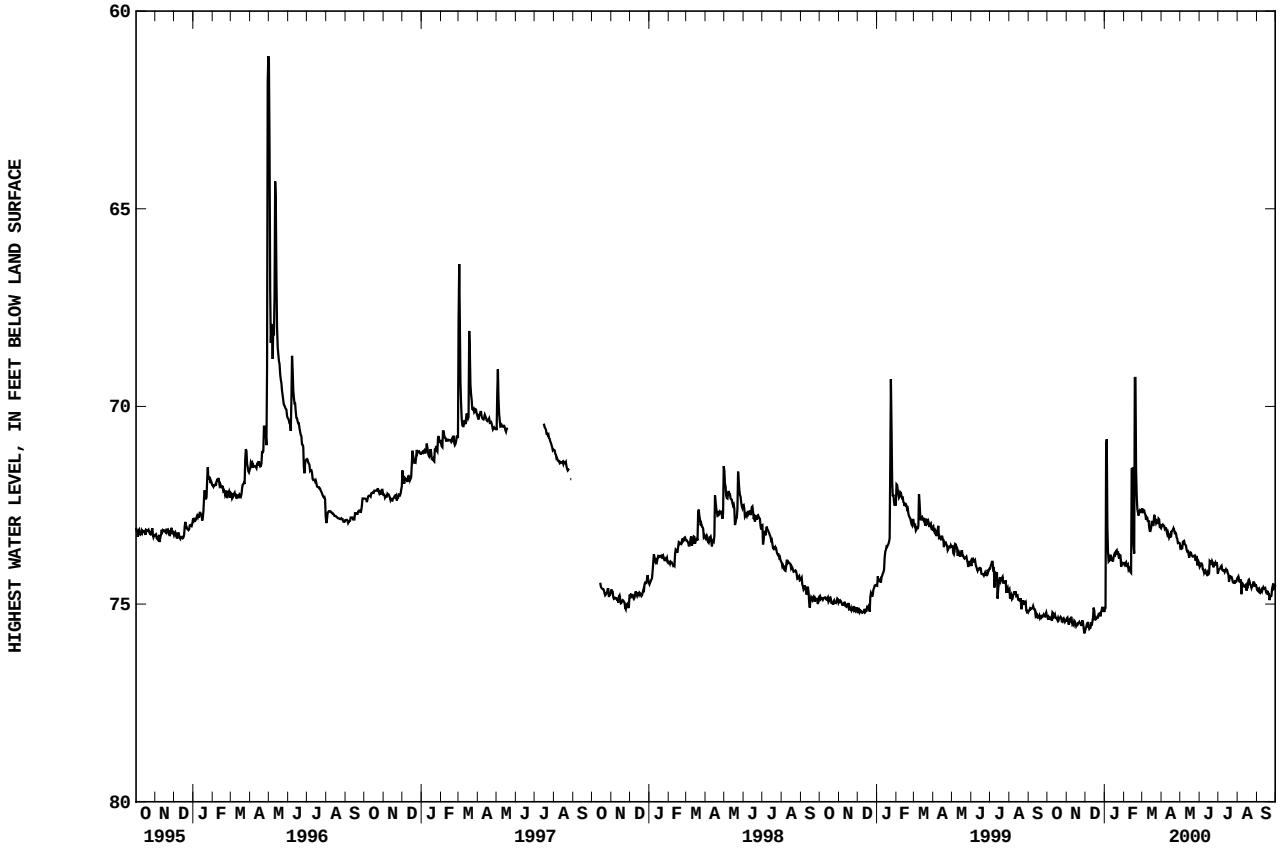
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	75.37	75.47	75.45	73.05	74.06	72.71	73.02	73.43	74.00	74.05	74.40	74.71
10	75.23	75.52	75.46	73.75	74.05	72.92	73.23	73.52	74.15	74.15	74.52	74.61
15	75.35	75.50	75.17	73.80	73.32	73.08	73.24	73.83	74.25	74.15	74.66	74.67
20	75.36	75.48	75.32	73.64	71.58	72.74	73.08	73.79	74.01	74.33	74.43	74.74
25	75.45	75.48	75.31	73.76	72.66	72.95	73.32	73.88	73.98	74.46	74.54	74.61
EOM	75.42	75.70	75.20	73.96	72.66	73.08	73.46	73.97	74.23	74.35	74.57	74.51

WTR YR 2000 HIGH 69.28 FEB 18

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	75.63	75.58	75.63	73.71	74.15	72.80	73.17	73.63	74.14	74.17	74.51	74.80
10	75.39	75.72	75.66	73.99	74.19	73.03	73.29	73.79	74.32	74.36	74.65	74.78
15	75.49	75.67	75.48	73.92	73.54	73.24	73.40	73.93	74.39	74.29	74.93	74.98
20	75.67	75.57	75.50	73.86	72.27	73.00	73.23	73.92	74.16	74.51	74.60	74.90
25	75.59	75.70	75.44	73.86	72.78	73.02	73.36	74.06	74.09	74.73	74.67	74.80
EOM	75.61	75.94	75.26	74.06	72.77	73.17	73.76	74.14	74.64	74.53	74.79	74.61

WTR YR 2000 LOW 75.95 NOV 29



WAYNE COUNTY

394426085080601. Local number, WE 6.
LOCATION.--Lat 39°44'26", long 85°08'06", in SE$^1/_4$NW$^1/_4$NE$^1/_4$ sec.24, T.15 N., R.12 E., Wayne County, Hydrologic Unit 05080003, on county right-of-way, 750 ft east of State Highway 1, and 4.0 mi south of East Germantown.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 49 ft, cased to 47 ft, screened to 49 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 888 ft above sea level, from topographic map. Measuring point: Top of collar in shelter, 3.60 ft above land-surface datum.

PERIOD OF RECORD.--September 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.09 ft below land-surface datum, May 8 and 9, 1996; lowest, 21.68 ft below land-surface datum, Feb. 1, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

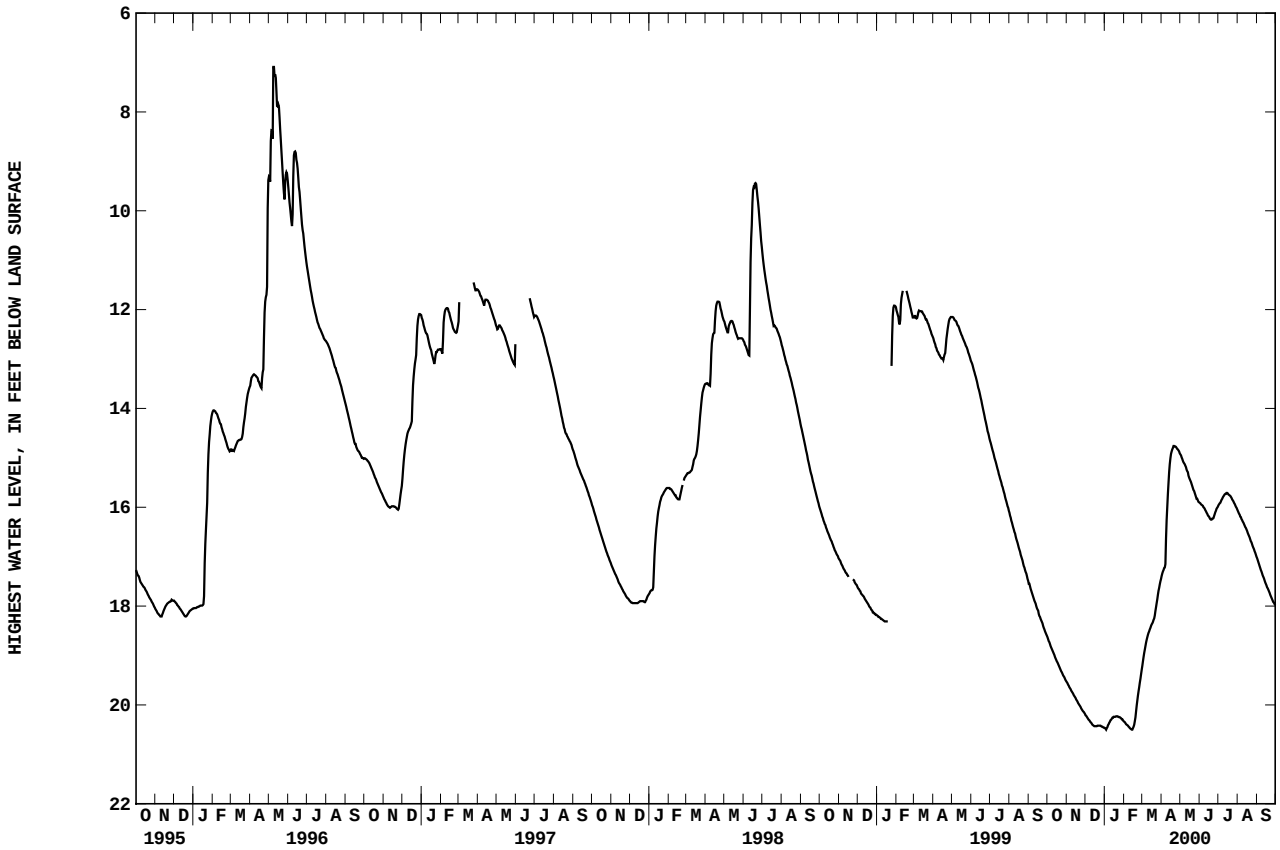
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.77	19.64	20.28	20.45	20.40	18.88	17.23	15.06	15.96	15.88	16.19	17.19
10	18.93	19.75	20.36	20.31	20.47	18.58	15.99	15.19	16.06	15.76	16.31	17.38
15	19.09	19.86	20.43	20.24	20.47	18.40	15.01	15.40	16.18	15.71	16.45	17.55
20	19.23	19.98	20.42	20.23	20.13	18.25	14.76	15.57	16.25	15.77	16.61	17.70
25	19.37	20.09	20.42	20.25	19.64	17.86	14.80	15.75	16.14	15.88	16.79	17.86
EOM	19.52	20.18	20.46	20.33	19.29	17.45	14.91	15.90	15.99	16.04	17.00	17.98

WTR YR 2000 HIGH 14.76 APR 20

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.81	19.66	20.30	20.47	20.41	18.95	17.27	15.09	15.97	15.91	16.20	17.23
10	18.96	19.77	20.38	20.34	20.48	18.63	16.26	15.24	16.08	15.78	16.34	17.41
15	19.12	19.89	20.43	20.26	20.50	18.44	15.13	15.43	16.19	15.72	16.48	17.58
20	19.26	20.00	20.43	20.23	20.25	18.28	14.80	15.61	16.26	15.79	16.65	17.73
25	19.40	20.11	20.43	20.26	19.72	17.94	14.82	15.79	16.18	15.91	16.82	17.89
EOM	19.54	20.21	20.47	20.34	19.38	17.50	14.93	15.91	16.01	16.07	17.03	17.99

WTR YR 2000 LOW 20.51 FEB 13



WELLS COUNTY

404331085064701. Local number, WL 4.
LOCATION.--Lat 40°43'31", long 85°06'47", in SE$^1/_4$NW$^1/_4$NE$^1/_4$ sec.12, T.26 N., R.12 E., Wells County, Hydrologic Unit 05120101, 3.5 mi southeast of Bluffton on Hwy 316 to entrance of Quabache State Park.
Owner: U.S. Geological Survey.

AQUIFER.--Silty dolomite of Silurian age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 79 ft, cased to 46 ft, open end.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 826.04 ft above sea level. Measuring point: Top of floor of shelter, 2.35 ft above land-surface datum.

PERIOD OF RECORD.--January 1967 to current year. (Semi-annual tape-down readings only September 1971 to December 1981.)

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 17.70 ft below land-surface datum, Apr. 4, 1973; lowest, 26.27 ft below land-surface datum, Jan. 27, Feb. 4, 16, 2000.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

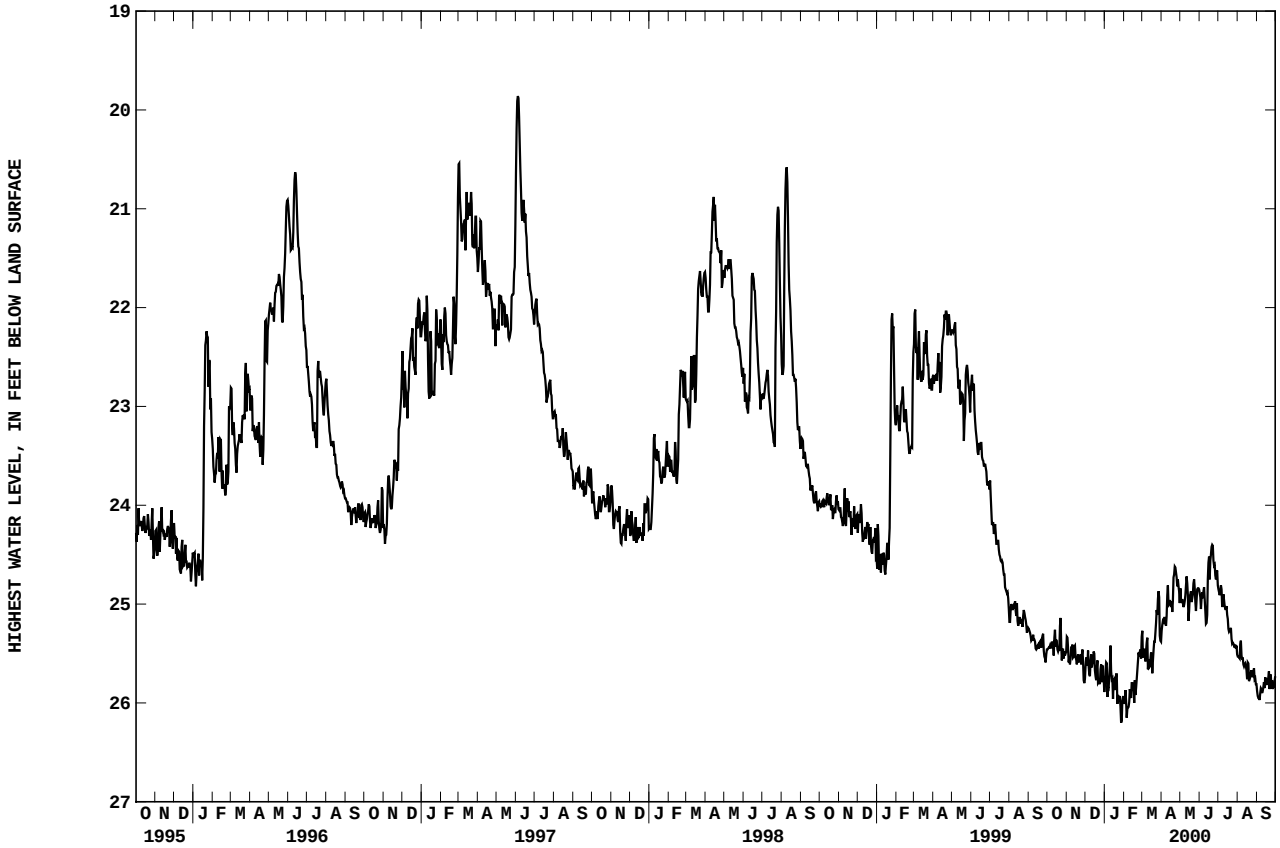
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.42	25.53	25.47	25.94	26.15	25.49	25.14	24.99	24.88	24.81	25.41	25.97
10	25.40	25.41	25.51	25.42	25.86	25.66	24.91	24.81	25.07	24.96	25.61	25.88
15	25.36	25.54	25.50	25.77	25.85	25.49	24.98	25.07	24.58	25.11	25.67	25.78
20	25.46	25.59	25.57	25.71	25.85	25.38	24.73	24.94	24.42	25.27	25.76	25.68
25	25.46	25.52	25.66	25.93	25.53	25.11	24.73	24.98	24.60	25.40	25.74	25.77
EOM	25.48	25.76	25.89	25.94	25.33	25.38	24.99	24.85	24.81	25.51	25.81	25.73

WTR YR 2000 HIGH 24.40 JUN 21

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.58	25.63	25.63	26.06	26.27	25.60	25.43	25.07	24.96	25.03	25.59	26.06
10	25.52	25.54	25.84	25.70	25.99	25.71	25.17	24.91	25.23	25.08	25.70	25.99
15	25.44	25.66	25.68	25.96	26.14	25.56	25.09	25.25	24.75	25.24	25.80	25.85
20	25.55	25.67	25.86	26.07	25.94	25.48	24.97	25.05	24.54	25.35	25.84	25.86
25	25.60	25.75	25.96	26.04	25.62	25.20	24.85	25.13	24.86	25.49	25.81	25.89
EOM	25.57	25.88	25.95	26.05	25.57	25.49	25.12	24.97	24.94	25.63	25.91	25.81

WTR YR 2000 LOW 26.27 JAN 27



WHITE COUNTY

404914086403001. Local number, WT 4.
LOCATION.--Lat 40°49'14", long 86°40'30", in NW1/4SW1/4NW1/4 sec.5, T.27 N., R.2 E., White County, Hydrologic Unit 05120106, in the southwest corner of the Pious Chapel property, 4.25 mi north of Idaville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in., depth 134 ft, cased to 129 ft, screened to 134 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 683.06 ft above sea level. Measuring point: Top of casing, 3.20 ft above land-surface datum.

REMARKS.--Well may be affected by pumpage.

PERIOD OF RECORD.--July 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.65 ft below land-surface datum, Jan. 7, 1993; lowest, 13.66 ft below land-surface datum, Aug. 3, 1991.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

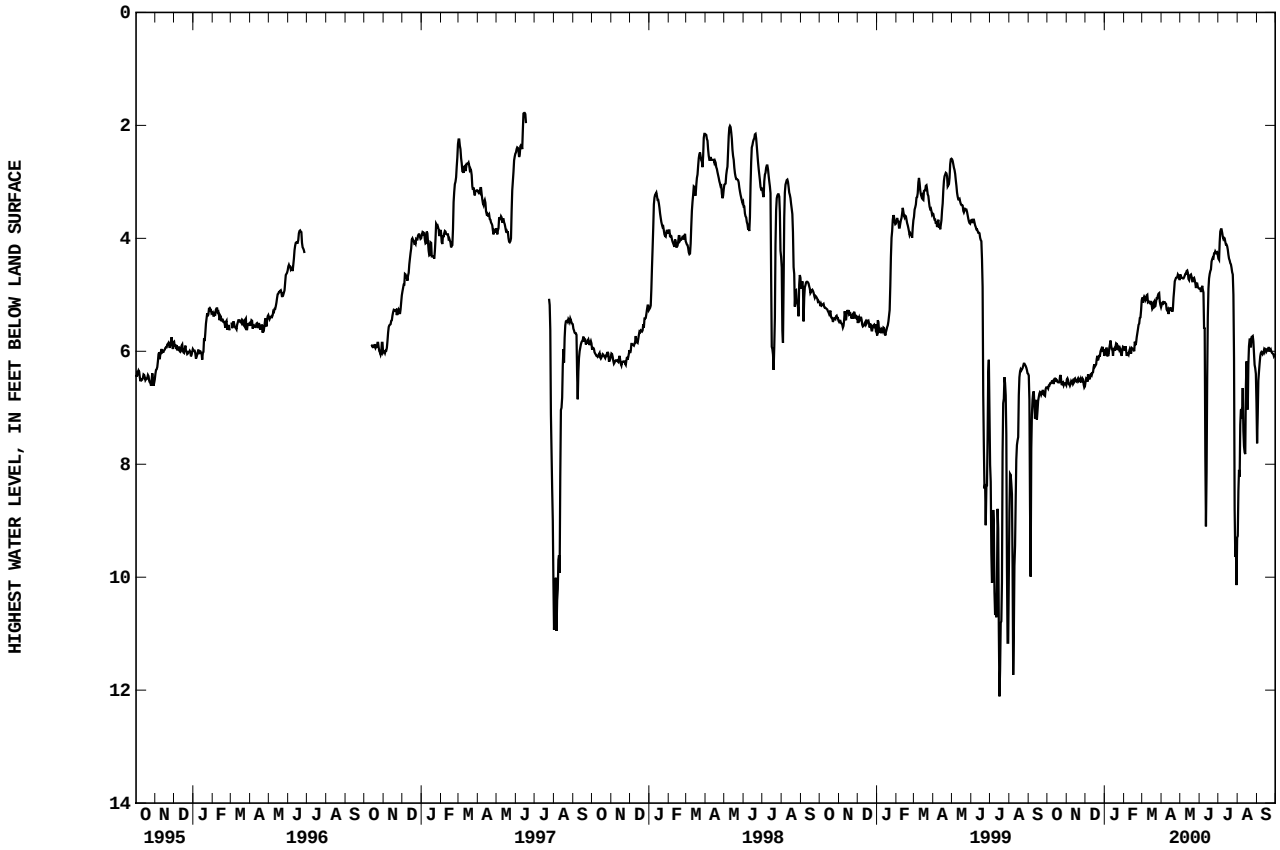
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.57	6.58	6.41	6.09	6.08	5.05	5.13	4.71	4.84	3.84	7.30	6.22
10	6.52	6.53	6.40	5.81	5.96	5.13	5.28	4.63	7.84	3.99	7.41	6.05
15	6.50	6.53	6.23	5.96	5.96	5.11	5.24	4.74	4.89	4.14	6.18	5.97
20	6.55	6.52	6.08	5.87	5.85	5.12	5.05	4.76	4.41	4.44	5.79	5.94
25	6.56	6.51	6.00	5.94	5.51	5.06	4.70	4.80	4.27	5.00	5.73	6.03
EOM	6.60	6.62	6.08	5.93	5.10	5.22	4.74	4.89	4.30	9.30	6.92	6.05

WTR YR 2000 HIGH 3.84 JUL 5

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.64	6.62	6.55	6.12	6.12	5.10	5.22	4.76	4.91	3.88	8.22	6.36
10	6.58	6.58	6.50	5.90	6.01	5.18	5.33	4.70	9.33	4.01	7.68	6.09
15	6.54	6.57	6.31	6.08	6.06	5.18	5.27	4.76	5.40	4.20	6.81	6.01
20	6.58	6.56	6.20	6.00	5.90	5.21	5.26	4.79	4.55	4.46	5.91	5.99
25	6.61	6.61	6.14	5.97	5.56	5.10	4.72	4.88	4.30	6.12	5.82	6.06
EOM	6.62	6.67	6.10	5.96	5.28	5.24	4.78	4.93	4.36	10.14	7.63	6.09

WTR YR 2000 LOW 10.89 JUL 30



WHITLEY COUNTY

410337085264201. Local number, WY 3.
LOCATION.--Lat 41°03'37", long 85°26'42", in NW$^1/_4$SE$^1/_4$NW$^1/_4$ sec.18, T.30 N., R.10 E., Whitley County, Hydrologic Unit 05120104, on the county right-of-way of Evergreen Road, and 0.75 mi north of Laud.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in., depth 191 ft, cased to 187 ft, screened to 191 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 870 ft above sea level, from topographic map. Measuring point: Top of floor of shelter, 2.68 ft above land-surface datum.

PERIOD OF RECORD.--December 1966 to September 1971, August 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 49.30 ft below land-surface datum, Mar. 27, 1976; lowest, 53.83 ft below land-surface datum, Dec. 25, 1999.

HIGHEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

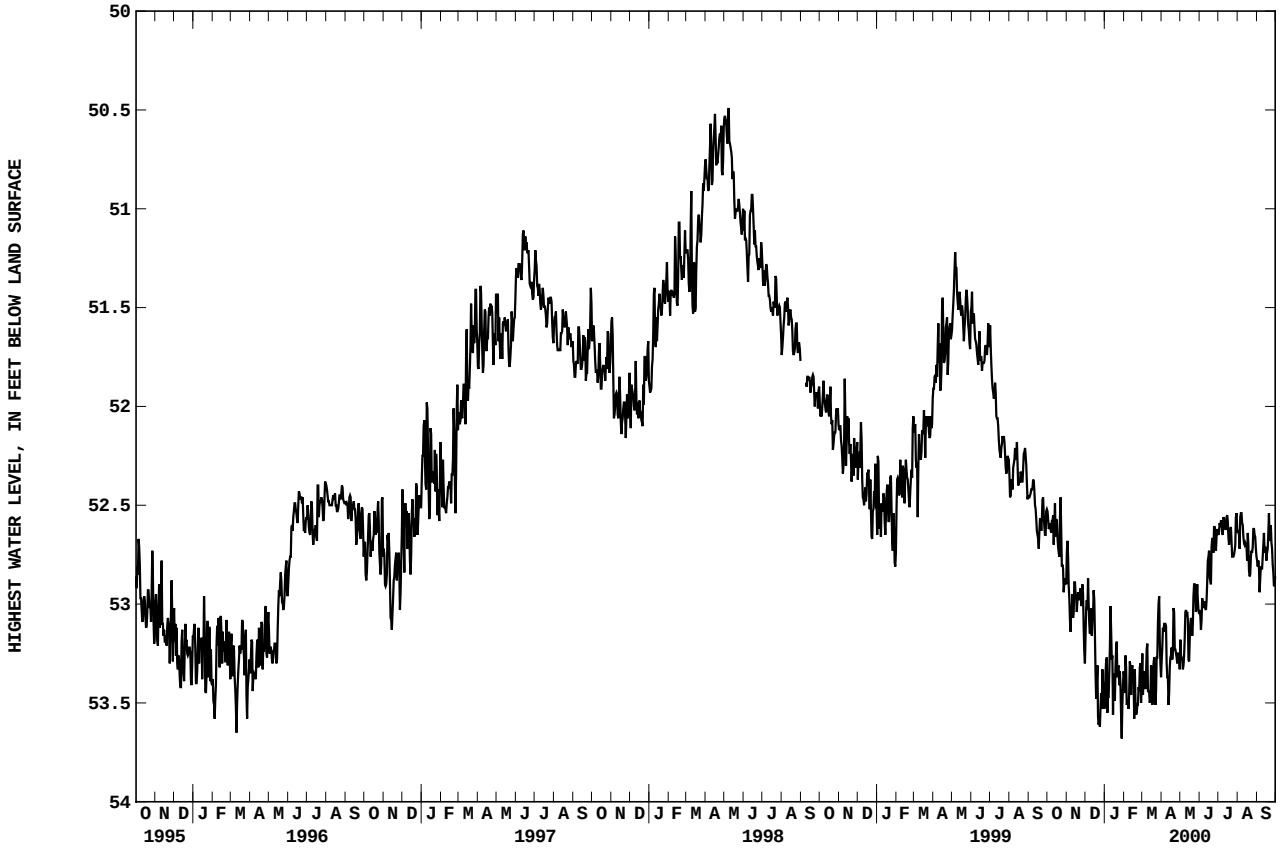
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	52.59	52.97	52.87	53.55	53.51	53.36	53.10	53.33	52.97	52.58	52.56	52.94
10	52.55	52.95	53.02	53.01	53.29	53.44	53.37	53.03	53.02	52.57	52.66	52.76
15	52.57	52.95	52.98	53.36	53.39	53.31	53.27	53.29	52.76	52.55	52.71	52.73
20	52.76	52.98	53.31	53.19	53.56	53.27	53.02	53.16	52.71	52.62	52.86	52.54
25	52.80	52.99	53.52	53.34	53.44	53.27	53.27	52.94	52.61	52.76	52.71	52.72
EOM	52.90	53.30	53.53	53.34	53.36	53.37	53.33	53.05	52.64	52.61	52.76	52.86

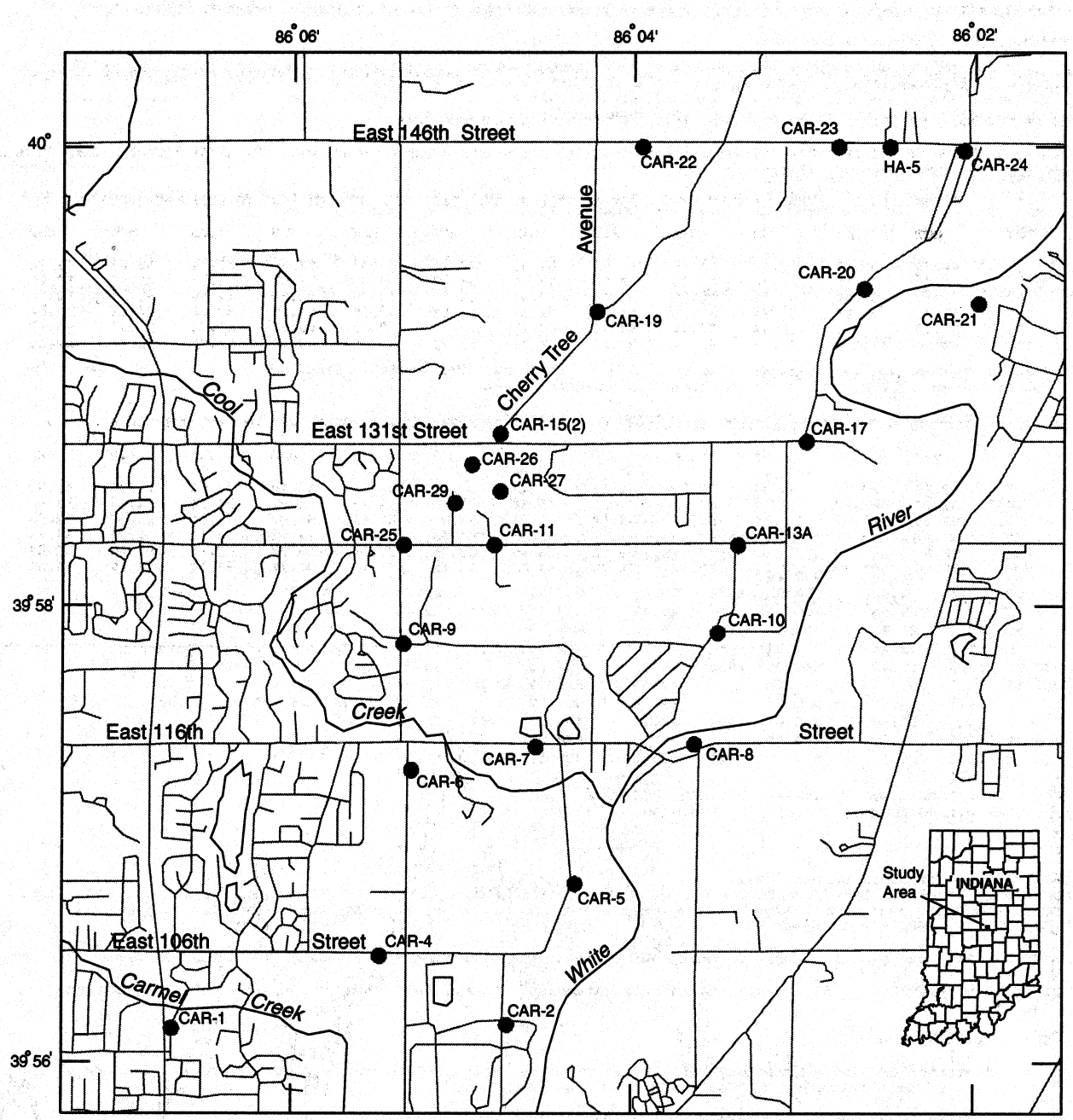
WTR YR 2000 HIGH 52.46 OCT 22

LOWEST WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	52.75	53.12	53.05	53.61	53.65	53.48	53.33	53.45	53.10	52.64	52.78	52.98
10	52.72	53.07	53.27	53.22	53.46	53.54	53.50	53.27	53.07	52.64	52.75	52.86
15	52.69	53.06	53.16	53.56	53.59	53.46	53.37	53.41	52.87	52.64	52.79	52.81
20	52.87	53.09	53.63	53.46	53.67	53.43	53.28	53.25	52.92	52.70	52.91	52.69
25	52.93	53.20	53.83	53.44	53.51	53.36	53.35	53.06	52.77	52.83	52.86	52.84
EOM	52.96	53.37	53.62	53.44	53.55	53.46	53.45	53.15	52.77	52.72	52.82	52.97

WTR YR 2000 LOW 53.83 DEC 25





Base from U.S. Geological Survey digital data, 1:100,000 1983.
Albers Equal-Area Conic projection
Standard parallels 29°30' and 45°30' central meridian -86°

0 1 2 MILES

0 1 2 KILOMETERS

EXPLANATION

CAR-1 ● WELL LOCATION AND NAME--Number in parenthesis indicates number of wells at site, if more than one

Figure 13.--Location of wells in the Carmel, Hamilton County network.

GROUND-WATER LEVELS FOR THE ALLUVIAL AQUIFER NEAR THE CITY OF CARMEL, HAMILTON COUNTY NETWORK

The following tables contain ground-water level measurements from a network of monitoring wells near Carmel, Indiana. The data were collected as part of a cooperative effort with the City of Carmel to determine ambient ground-water level conditions on an biannual basis within the alluvial aquifer near the White River. Locations of observation wells where measurements were made are shown in figure 13.

395609086064201. Local number CAR-1.
LOCATION.--Lat 39°56′09″, long 86°06′42″, in NW$^1/_4$SE$^1/_4$NE$^1/_4$ sec.7, T.17 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, between Keystone Avenue and Frontage Road, at 10200 North in Carmel.
Owner: U.S. Geological Survey.

AQUIFER--Sand and gravel outwash deposit, White River valley-train of Pleistocene age, Atherton Formation.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 1.5 in., depth 50.1 ft, cased to 47.1 ft, screened to 50.1 ft.

INSTRUMENTATION.--None.

DATUM.--Elevation of land-surface datum is 774.71 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of well casing, 0.30 ft above land-surface datum.

PERIOD OF RECORD.--September 1974 to current year. Measured irregularly in semi-annual status.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
SEP 26, 1974	18.81	NOV 30, 1981	20.97	OCT 02, 1987	21.69	APR 14, 1994	19.50
NOV 06	22.95	APR 23, 1982	19.40	JUN 02, 1988	20.80	NOV 29	21.90
APR 14, 1975	19.32	OCT 29	22.74	SEP 07	22.96	MAY 11, 1995	21.45
APR 20, 1976	19.98	APR 22, 1983	20.09	OCT 27	23.29	OCT 26	22.40
OCT 20	22.98	AUG 26	22.45	MAY 26, 1989	19.12	JUN 26, 1996	19.36
JUN 06, 1977	21.70	APR 11, 1984	19.63	AUG 30	20.77	JUN 05, 1997	19.22
NOV 02	22.16	OCT 31	22.78	APR 24, 1990	19.39	OCT 29	21.75
APR 29, 1978	19.52	MAY 09, 1985	19.79	NOV 16	21.53	FEB 08, 1999	19.84
OCT 11	21.06	AUG 20	22.00	APR 17, 1991	18.69	SEP 23	22.54
APR 02, 1979	19.68	OCT 03	23.16	NOV 12	22.47	MAY 03, 2000	21.90
OCT 15	21.51	JUN 03, 1986	22.76	APR 23, 1992	20.16		
APR 28, 1980	19.52	SEP 05	23.55	DEC 01	20.00		
APR 18, 1981	21.05	MAY 09, 1987	19.72	JUL 19, 1993	19.18		

PERIOD OF RECORD HIGHEST 18.69 APR 17, 1991
PERIOD OF RECORD LOWEST 23.55 SEP 05, 1986

- -

395610086044401. Local number CAR-2.
LOCATION.--Lat 39°56′10″, long 86°04′44″, in NE$^1/_4$SW$^1/_4$NE$^1/_4$ sec.9, T.17 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, 10300 North River Avenue, on eastside at slight jog in road, north of field entrance.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel outwash deposit, White River valley-train of Pleistocene age, Atherton Formation.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in., depth 24.2 ft, cased to 21.2 ft, screened to 24.2 ft.

INSTRUMENTATION.--None.

DATUM.--Elevation of land-surface datum is 740.23 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of well casing, 0.30 ft above land-surface datum.

REMARKS.--Water level may be affected by nearby dewatering for mining.

PERIOD OF RECORD.--September 1974 to November 1999. Measured irregularly in semi-annual status.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
SEP 25, 1974	15.77	APR 18, 1981	21.81	MAY 09, 1987	22.33	APR 14, 1994	21.46
NOV 06	16.60	DEC 10	22.43	OCT 02	22.94	NOV 29	23.71
APR 14, 1975	15.22	APR 23, 1982	19.82	JUN 02, 1988	21.24	MAY 11, 1995	22.78
APR 20, 1976	15.56	OCT 29	22.24	SEP 07	23.10	OCT 25	23.39
OCT 20	18.05	APR 22, 1983	21.37	OCT 27	22.84	JUN 26, 1996	10.27
JUN 06, 1977	18.11	AUG 26	22.96	AUG 30, 1989	21.09	JUN 05, 1997	21.80
NOV 02	19.95	APR 11, 1984	21.38	APR 24, 1990	21.23	OCT 29	23.30
APR 28, 1978	16.59	OCT 31	23.14	NOV 16	22.69	JUN 03, 1998	19.85
OCT 11	17.94	MAY 09, 1985	20.32	APR 17, 1991	23.17	FEB 08, 1999	22.00
APR 02, 1979	17.26	OCT 03	23.48	APR 23, 1992	22.44	NOV 04	DRY
OCT 15	20.13	JUN 03, 1986	20.28	DEC 02	20.31		
MAY 01, 1980	19.88	SEP 05	21.98	JUL 19, 1993	21.68		

PERIOD OF RECORD HIGHEST 10.27 JUN 26, 1996
PERIOD OF RECORD LOWEST DRY NOV 04, 1999

GROUND-WATER LEVELS FOR THE ALLUVIAL AQUIFER NEAR THE CITY OF CARMEL, HAMILTON COUNTY NETWORK.--Continued

- -

395628086052901. Local number CAR-4.
LOCATION.--Lat 39°56′28″, long 86°05′29″, in NW$^1/_4$NE$^1/_4$NE$^1/_4$, sec.8, T.17 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, 1000 ft west of Gray Road (Hinkle Road on topographic map) on south side of East 106th Street, in Carmel.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel outwash deposit, White River valley-train of Pleistocene age, Atherton Formation.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 1.5 in., depth 23.8 ft, cased to 20.8 ft, screened to 23.8 ft.

INSTRUMENTATION.--None.

DATUM.--Elevation of land-surface datum is 744.42 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of well casing, 0.25 ft above land-surface datum.

REMARKS.--Water level may be affected by nearby mining.

PERIOD OF RECORD.--September 1974 to current year. Measured irregularly in semi-annual status.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
SEP 25, 1974	9.71	APR 28, 1980	7.01	OCT 03, 1985	10.91	DEC 01, 1992	9.38
NOV 06	10.43	APR 18, 1981	8.45	JUN 03, 1986	7.59	OCT 25, 1995	13.90
APR 14, 1975	6.89	DEC 10	9.36	SEP 05	11.56	JUN 26, 1996	6.64
APR 20, 1976	7.40	APR 23, 1982	5.07	MAY 09, 1987	10.38	JUN 05, 1997	7.29
OCT 20	10.75	OCT 29	7.70	OCT 02	13.31	OCT 29	11.73
JUN 06, 1977	11.26	APR 22, 1983	6.31	JUN 04, 1988	12.76	JUN 03, 1998	7.97
APR 27, 1978	5.88	AUG 26	8.53	SEP 07	16.41	FEB 08, 1999	7.20
OCT 11	9.51	APR 11, 1984	5.35	OCT 27	16.69	SEP 23	12.59
APR 02, 1979	7.64	OCT 31	10.34	NOV 12, 1991	14.93	MAY 03, 2000	12.90
OCT 15	10.60	MAY 09, 1985	6.59	APR 23, 1992	10.12		

PERIOD OF RECORD HIGHEST 5.07 APR 23, 1982
PERIOD OF RECORD LOWEST 16.69 OCT 27, 1988

- -

395647086042001. Local number CAR-5.
LOCATION.--Lat 39°56′47″, long 86°04′20″, in NW$^1/_4$NE$^1/_4$SE$^1/_4$ sec.4, T.17 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, 11000 North River Avenue, on eastside, north of turn in road, destroyed by road widening in 1988.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel outwash deposit, White River valley-train of Pleistocene age, Atherton Formation.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in., depth 34.4 ft, cased to 31.4 ft, screened to 34.4 ft.

INSTRUMENTATION.--None.

DATUM.--Elevation of land-surface datum is 750.8 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of well casing, at land surface.

PERIOD OF RECORD.--September 1974 to October 1987 (discontinued). Measured irregularly in semi-annual status.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
SEP 25, 1974	22.41	NOV 02, 1977	23.83	NOV 30, 1981	24.12	MAY 09, 1985	19.46
OCT 04	22.20	APR 27, 1978	19.88	APR 23, 1982	20.10	OCT 03	23.65
NOV 14	23.42	OCT 11	21.98	OCT 29	23.45	JUN 03, 1986	19.52
APR 14, 1975	21.80	APR 02, 1979	20.28	APR 22, 1983	22.11	SEP 05	22.57
APR 20, 1976	20.89	OCT 15	22.53	AUG 26	23.01	MAY 09, 1987	23.03
OCT 20	22.30	MAY 01, 1980	21.44	APR 11, 1984	20.17	OCT 02	24.19
JUN 06, 1977	23.54	APR 18, 1981	23.22	OCT 31	23.30		

PERIOD OF RECORD HIGHEST 19.46 MAY 09, 1985
PERIOD OF RECORD LOWEST 24.19 OCT 02, 1987

GROUND-WATER LEVELS FOR THE ALLUVIAL AQUIFER NEAR THE CITY OF CARMEL, HAMILTON COUNTY NETWORK.--Continued

- -

395717086051801. Local number CAR-6.
LOCATION.--Lat 39°57'17", long 86°05'18", in NW$^1/_4$NW$^1/_4$NW$^1/_4$ sec.4, T.17 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, 11500 North Gray Road, well on east side, 600 ft south of East 116th Street.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel outwash deposit, White River valley-train of Pleistocene age, Atherton Formation.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in., depth 34.7 ft, cased to 31.7 ft, screened to 34.7 ft.

INSTRUMENTATION.--None.

DATUM.--Elevation of land-surface datum is 768.36 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of well casing, at land surface.

PERIOD OF RECORD.--November 1974 to current year. Measured irregularly in semi-annual status.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06, 1974	20.75	APR 18, 1981	20.89	MAY 09, 1987	19.93	DEC 01, 1992	19.94
APR 14, 1975	18.40	NOV 30	23.14	OCT 02	21.93	JUL 19, 1993	20.29
APR 20, 1976	19.49	APR 23, 1982	18.29	JUN 02, 1988	20.93	APR 14, 1994	20.60
OCT 20	21.45	OCT 29	21.30	SEP 07	22.46	NOV 29	22.39
MAY 04, 1977	21.03	APR 22, 1983	19.67	OCT 27	22.72	MAY 11, 1995	21.87
JUN 06	21.13	AUG 26	21.01	MAY 26, 1989	20.06	OCT 25	22.35
NOV 02	21.38	APR 11, 1984	18.59	AUG 30	21.13	JUN 26, 1996	18.10
APR 27, 1978	20.07	OCT 31	21.24	APR 24, 1990	19.39	NOV 03, 1997	21.93
OCT 11	20.15	MAY 09, 1985	18.63	NOV 16	21.43	JUN 05, 1998	19.94
APR 02, 1979	18.35	OCT 02	21.36	APR 17, 1991	18.63	FEB 08, 1999	20.85
OCT 15	20.51	JUN 24, 1986	18.58	NOV 12	22.26	NOV 04	22.67
APR 28, 1980	18.81	SEP 05	20.46	APR 23, 1992	20.70	MAY 03, 2000	22.44

PERIOD OF RECORD HIGHEST 18.10 JUN 26, 1996
PERIOD OF RECORD LOWEST 23.14 NOV 30, 1981

- -

395723086042901. Local number CAR-7.
LOCATION.--Lat 39°57'23", long 86°04'29", in NE$^1/_4$NW$^1/_4$NE$^1/_4$ sec.4, T.17 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, 5400 East 116th Street, south side, 350 ft west of intersection with River Avenue. Well destroyed by road widening in 1989.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel outwash deposit, White River valley-train of Pleistocene age, Atherton Formation.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in., depth 34.4 ft, cased to 31.4 ft, screened to 34.4 ft.

INSTRUMENTATION.--None.

DATUM.--Elevation of land-surface datum is 749.49 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of well casing, at land surface.

REMARKS.--Water level may be affected by nearby dewatering for mining.

PERIOD OF RECORD.--November 1974 to May 1989 (discontinued). Measured irregularly in semi-annual status.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06, 1974	15.96	APR 02, 1979	14.06	AUG 26, 1983	17.71	OCT 02, 1987	18.09
APR 14, 1975	13.40	OCT 15	16.07	APR 11, 1984	15.47	JUN 02, 1988	20.39
APR 20, 1976	14.39	MAY 01, 1980	14.56	OCT 31	17.70	SEP 07	18.41
OCT 20	17.47	APR 18, 1981	15.95	MAY 09, 1985	15.26	OCT 27	17.84
JUN 06, 1977	16.22	DEC 10	16.89	OCT 03	17.73	MAY 26, 1989	15.61
NOV 02	17.19	APR 23, 1982	14.03	JUN 04, 1986	13.97		
APR 27, 1978	13.83	OCT 29	17.89	SEP 05	16.94		
OCT 11	15.68	APR 22, 1983	15.73	MAY 09, 1987	16.78		

PERIOD OF RECORD HIGHEST 13.40 APR 14, 1975
PERIOD OF RECORD LOWEST 20.39 JUN 02, 1988

GROUND-WATER LEVELS FOR THE ALLUVIAL AQUIFER NEAR THE CITY OF CARMEL, HAMILTON COUNTY NETWORK.--Continued

- -

395723086043401. Local number CAR-8.
LOCATION.--Lat 39°57'23", long 86°04'34", in NE$^1/_4$NE$^1/_4$NW$^1/_4$ sec.8, T.17 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, 1000 ft east of White River, in northwest quadrant of first cross road and 116th Street. Well destroyed one month after installation.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel outwash deposit, White River valley-train of Pleistocene age, Atherton Formation.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in., depth 15.4 ft, cased to 12.4 ft, screened to 15.4 ft.

INSTRUMENTATION.--None.

DATUM.--Elevation of land-surface datum is 738.34 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of well casing, at land surface.

PERIOD OF RECORD.-- September 1974 to April 1975 (discontinued).

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
SEP 20, 1974	15.00	NOV 06, 1974	13.52	APR 14, 1975	10.04

PERIOD OF RECORD HIGHEST 10.04 APR 14, 1975
PERIOD OF RECORD LOWEST 15.00 SEP 20, 1974

- -

395750086052101. Local number CAR-9.
LOCATION.--Lat 39°57'50", long 86°05'21", in SW$^1/_4$SW$^1/_4$NW$^1/_4$ sec.33, T.18 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, 12100 North Gray Road, on eastside, north of entrance road into abandoned gravel pit.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel outwash deposit, White River valley-train of Pleistocene age, Atherton Formation.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 1.5 in., depth 48.38 ft, cased to 45.38 ft, screened to 48.38 ft.

INSTRUMENTATION.--None.

DATUM.--Elevation of land-surface datum is 778.74 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of well casing, at land surface.

REMARKS.--Water level may be affected by nearby dewatering for mining.

PERIOD OF RECORD.--September 1974 to November 1999. Measured irregularly in semi-annual status.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
SEP 20, 1974	26.27	APR 18, 1981	29.11	MAY 09, 1987	29.50	APR 14, 1994	31.76
NOV 06	27.55	NOV 30	29.17	OCT 02	30.44	NOV 28	30.57
APR 14, 1975	25.09	APR 23, 1982	25.94	JUN 02, 1988	30.39	MAY 11, 1995	31.00
APR 20, 1976	27.72	OCT 29	29.92	SEP 07	31.72	OCT 25	32.04
OCT 20	28.20	APR 22, 1983	28.84	OCT 27	31.59	JUN 26, 1996	28.33
JUN 06, 1977	30.69	AUG 26	28.65	MAY 26, 1989	28.31	NOV 03, 1997	31.43
NOV 02	30.86	APR 11, 1984	26.96	AUG 30	29.45	JUN 03, 1998	29.56
APR 27, 1978	26.98	OCT 31	29.90	APR 24, 1990	26.59	FEB 08, 1999	31.82
OCT 11	28.43	MAY 09, 1985	26.41	NOV 12, 1991	30.19	NOV 04	34.09
APR 02, 1979	27.00	OCT 02	29.52	APR 23, 1992	28.47		
OCT 15	28.41	JUN 04, 1986	24.75	DEC 01	29.59		
APR 28, 1980	27.06	SEP 05	28.30	JUL 19, 1993	31.39		

PERIOD OF RECORD HIGHEST 24.75 JUN 04, 1986
PERIOD OF RECORD LOWEST 34.09 NOV 04, 1999

GROUND-WATER LEVELS FOR THE ALLUVIAL AQUIFER NEAR THE CITY OF CARMEL, HAMILTON COUNTY NETWORK.--Continued

- -

395753086033001. Local number CAR-10.
LOCATION.--Lat 39°57′53″, long 86°03′30″, in SE$^1/_4$SW$^1/_4$NE$^1/_4$ sec.34, T.18 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, northeast corner of North River Avenue and 122nd Street, at entrance to old "Purdue University's Lynnwood Farm" now privately owned. Well filled with fine sand and was plugged, cut-off, and abandoned in 1991.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel outwash deposit, White River valley-train of Pleistocene age, Atherton Formation.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in., depth 24.1 ft, cased to 21.1 ft, screened to 24.1 ft.

INSTRUMENTATION.--None.

DATUM.--Elevation of land-surface datum is 747.42 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of well casing, at land surface.

PERIOD OF RECORD.--September 1974 to April 1991 (discontinued). Measured irregularly in semi-annual status.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
SEP 26, 1974	17.51	OCT 11, 1978	10.96	AUG 26, 1983	12.16	JUN 02, 1988	DRY
NOV 06	11.36	APR 02, 1979	8.99	APR 11, 1984	8.78	SEP 07	DRY
APR 14, 1975	8.98	OCT 15	11.31	OCT 31	DRY	OCT 26	DRY
APR 20, 1976	9.56	MAY 01, 1980	9.42	MAY 09, 1985	8.99	MAY 26, 1989	DRY
OCT 20	12.28	APR 18, 1981	10.20	OCT 03	DRY	APR 24, 1990	DRY
JUN 06, 1977	11.17	NOV 30	11.67	JUN 04, 1986	8.09	NOV 16	DRY
AUG 03	12.28	APR 23, 1982	8.66	SEP 05	DRY	APR 17, 1991	DRY
NOV 02	12.14	OCT 29	12.38	MAY 09, 1987	DRY		
APR 27, 1978	8.37	APR 22, 1983	9.92	OCT 02,	DRY		

PERIOD OF RECORD HIGHEST 8.09 JUN 04, 1986
PERIOD OF RECORD LOWEST DRY OCT 31, 1984, OCT 03, 1985, SEP 05, 1986, MAY 09, 1987, OCT 02, 1987, JUN 02, 1988, SEP 07, 1988, OCT 26, 1988, MAY 26, 1989, APR 24, 1990, NOV 16,1990, APR 17, 1991

- -

395816086044901. Local number CAR-11.
LOCATION.--Lat 39°58′16″, long 86°04′49″, in SE$^1/_4$SE$^1/_4$SW$^1/_4$ sec.28, T.18 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, 5200 East 126th Street, north side, at east entrance to Clay Jr. High School.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel outwash deposit, White River valley-train of Pleistocene age, Atherton Formation.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 1.5 in., depth 59.0 ft, cased to 56.0 ft, screened to 59.0 ft.

INSTRUMENTATION.--None.

DATUM.--Elevation of land-surface datum is 789.59 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of well casing, at land surface.

REMARKS.--Water level may be affected by nearby Carmel Utility Wells.

PERIOD OF RECORD.--November 1974 to current year. Measured irregularly in semi-annual status.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06, 1974	35.54	APR 23, 1982	37.71	SEP 07, 1988	43.22	NOV 28, 1994	42.43
APR 14, 1975	32.77	OCT 29	40.62	OCT 26	45.07	MAY 11, 1995	43.36
APR 20, 1976	38.73	APR 22, 1983	40.93	MAY 26, 1989	38.49	OCT 26	44.89
OCT 20	42.73	AUG 26	40.78	AUG 30	38.79	JUN 25, 1996	40.29
JUN 06, 1977	43.23	APR 11, 1984	38.43	APR 23, 1990	35.62	JUN 05, 1997	40.67
AUG 03	42.61	OCT 31	41.61	NOV 20	38.77	OCT 29	43.58
24	43.29	MAY 09, 1985	37.73	APR 17, 1991	35.29	JUN 03, 1998	42.44
AUG 23, 1979	37.74	OCT 02	40.09	NOV 12	42.45	FEB 08, 1999	47.90
OCT 15	38.88	SEP 05, 1986	36.77	APR 23, 1992	39.18	SEP 23	48.17
MAY 01, 1980	38.53	MAY 09, 1987	40.67	DEC 01	39.08	MAY 03, 2000	48.04
APR 18, 1981	41.01	OCT 02	41.99	JUL 19, 1993	39.10		
NOV 30	42.09	JUN 04, 1988	40.90	APR 14, 1994	39.49		

PERIOD OF RECORD HIGHEST 32.77 APR 14, 1975
PERIOD OF RECORD LOWEST 48.17 SEP 23, 1999

MISCELLANEOUS PROJECT DATA

GROUND-WATER LEVELS FOR THE ALLUVIAL AQUIFER NEAR THE CITY OF CARMEL, HAMILTON COUNTY NETWORK.--Continued

- - - -

GROUND-WATER LEVELS FOR THE ALLUVIAL AQUIFER NEAR THE CITY OF CARMEL, HAMILTON COUNTY NETWORK.--Continued

- -

395845086044702. Local number CAR-15S.
LOCATION.--Lat 39°58′45″, long 86°04′47″, in SW$^1/_4$SW$^1/_4$NE$^1/_4$ sec.28, T.18 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, on east side of Cherry Tree Avenue, 350 ft north of East 131st Street, just north of turn in road. Well destroyed by road construction in 1996.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel outwash deposit, White River valley-train of Pleistocene age, Atherton Formation.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 1.5 in., depth 55.7 ft, cased to 52.7 ft, screened to 55.7 ft.

INSTRUMENTATION.--None.

DATUM.--Elevation of land-surface datum is 785.63 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of well casing, at land surface.

REMARKS.--Deep well of two wells drilled at this location. Water level may be affected by near by Carmel Utility well field.

PERIOD OF RECORD.--September 1974 to June 1996 (discontinued). Measured irregularly in semi-annual status.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
SEP 12, 1974	19.19	OCT 26, 1988	23.04	APR 17, 1991	17.55	APR 14, 1994	19.91
AUG 24, 1977	24.65	MAY 26, 1989	20.54	NOV 12	23.83	NOV 28	22.75
APR 28, 1980	19.63	AUG 30	20.68	APR 23, 1992	21.21	MAY 11, 1995	23.59
JUN 02, 1988	21.82	APR 23, 1990	18.67	DEC 01	21.61	OCT 26	24.39
SEP 07	23.39	NOV 20	21.42	JUL 19, 1993	19.32	JUN 26, 1996	30.18

PERIOD OF RECORD HIGHEST 17.55 APR 17, 1991
PERIOD OF RECORD LOWEST 30.18 JUN 26, 1996

- -

395843086025901. Local number CAR-17.
LOCATION.--Lat 39°58′43″, long 86°02′59″, in SW$^1/_4$SW$^1/_4$NW$^1/_4$ sec.26, T.18 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, on east side of River Avenue, north of 131st Street. Well was destroyed by vehicle traffic in 1981.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel outwash deposit, White River valley-train of Pleistocene age, Atherton Formation.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in., depth 34.5 ft, cased to 31.5 ft, screened to 34.5 ft.

INSTRUMENTATION.--None.

DATUM.--Elevation of land-surface datum is 752.19 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of well casing, at land surface.

PERIOD OF RECORD.--September 1974 to April 1983 (discontinued). Measured irregularly in semi-annual status.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06, 1974	13.25	OCT 20, 1976	15.73	APR 27, 1978	10.69	APR 28, 1980	11.42
MAR 11, 1975	9.62	JUN 06, 1977	14.95	OCT 11	12.93	APR 18, 1981	13.86
APR 14	9.92	AUG 03	14.67	APR 02, 1979	11.56	NOV 30	14.10
APR 20, 1976	12.42	NOV 02	14.87	OCT 15	13.43	APR 22, 1983	12.78

PERIOD OF RECORD HIGHEST 9.62 MAR 11, 1975
PERIOD OF RECORD LOWEST 15.73 OCT 20, 1976

GROUND-WATER LEVELS FOR THE ALLUVIAL AQUIFER NEAR THE CITY OF CARMEL, HAMILTON COUNTY NETWORK.--Continued

- -

395917086041301. Local number CAR-19.
LOCATION.--Lat 39°59′17″, long 86°04′13″, in NW$^1/_4$SW$^1/_4$SW$^1/_4$ sec.22, T.18 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, on northeast corner of Cherry Tree Avenue and Hazel Dell Road. Well is 1,000 ft southeast of Cherry Tree Elementary School. Well destroyed by road construction in 1997.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel outwash deposit, White River valley-train of Pleistocene age, Atherton Formation.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in., depth 29.7 ft, cased to 26.7 ft, screened to 29.7 ft.

INSTRUMENTATION.--None.

DATUM.--Elevation of land-surface datum is 778.06 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of well casing, at land surface.

PERIOD OF RECORD.--November 1974 to June 1997 (discontinued). Measured irregularly in semi-annual status.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06, 1974	11.66	APR 18, 1981	10.24	SEP 05, 1986	12.08	NOV 12, 1991	12.97
APR 14, 1975	9.76	NOV 30	12.32	MAY 09, 1987	11.38	APR 24, 1992	9.69
APR 20, 1976	10.67	APR 23, 1982	9.18	OCT 02	12.94	DEC 01	11.58
OCT 20	13.18	OCT 29	12.91	JUN 04, 1988	11.80	JUL 19, 1993	10.72
JUN 06, 1977	12.24	APR 22, 1983	9.89	SEP 07	13.84	APR 14, 1994	9.90
NOV 02	13.08	AUG 26	12.79	OCT 26	12.91	NOV 28	13.33
APR 28, 1978	9.27	APR 11, 1984	9.24	MAY 26, 1989	8.01	MAY 11, 1995	14.10
OCT 11	11.64	OCT 31	12.88	AUG 30	11.77	OCT 26	14.71
APR 02, 1979	9.24	MAY 09, 1985	9.70	APR 23, 1990	9.88	JUN 26, 1996	12.42
OCT 15	11.95	OCT 02	13.04	NOV 20	12.81	JUN 05, 1997	12.01
APR 28, 1980	9.57	JUN 04, 1986	9.27	APR 17, 1991	7.47		

PERIOD OF RECORD HIGHEST 7.47 APR 17, 1991
PERIOD OF RECORD LOWEST 14.71 OCT 26, 1995

- -

395923086023901. Local number CAR-20.
LOCATION.--Lat 39°59′23″, long 86°02′39″, in SE$^1/_4$NE$^1/_4$SW$^1/_4$ sec.23, T.18 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, eastside of 13900 North River Avenue, just south of private drive.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel outwash deposit, White River valley-train of Pleistocene age, Atherton Formation.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in., depth 34.6 ft, cased to 31.6 ft, screened to 34.6 ft.

INSTRUMENTATION.--None.

DATUM.--Elevation of land-surface datum is 753.45 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of well casing, 0.24 ft above land-surface datum.

REMARKS.--Water level may be affected by nearby dewatering for mining.

PERIOD OF RECORD.--November 1974 to current year. Measured irregularly in semi-annual status.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06, 1974	10.00	APR 18, 1981	6.89	MAY 09, 1987	7.50	APR 14, 1994	5.93
MAR 11, 1975	6.11	NOV 30	7.81	OCT 02	8.04	NOV 28	7.77
APR 14	6.46	APR 23, 1982	6.54	JUN 02, 1988	7.34	MAY 11, 1995	9.49
APR 20, 1976	6.67	OCT 29	8.07	SEP 07	8.21	OCT 25	8.92
OCT 20	7.44	APR 22, 1983	6.48	OCT 26	8.26	JUN 26, 1996	6.45
JUN 06, 1977	7.11	AUG 26	8.07	MAY 26, 1989	6.55	JUN 05, 1997	8.15
NOV 02	7.28	APR 11, 1984	6.43	AUG 30	5.96	OCT 29	11.90
APR 28, 1978	5.94	OCT 31	7.70	APR 23, 1990	6.27	FEB 08, 1999	7.58
OCT 11	7.07	MAY 09, 1985	6.49	NOV 13, 1991	8.17	SEP 23	9.39
APR 02, 1979	6.05	OCT 02	8.03	APR 24, 1992	6.48	MAY 03, 2000	9.69
OCT 15	7.13	JUN 04, 1986	6.42	DEC 02	6.28		
APR 28, 1980	6.21	SEP 05	7.72				

PERIOD OF RECORD HIGHEST 5.93 APR 14, 1994
PERIOD OF RECORD LOWEST 11.90 OCT 29, 1997

GROUND-WATER LEVELS FOR THE ALLUVIAL AQUIFER NEAR THE CITY OF CARMEL, HAMILTON COUNTY NETWORK.--Continued

- -

395919086015901. Local number CAR-21.
LOCATION.--Lat 39°59'19", long 86°01'59", in NE$^1/_4$SE$^1/_4$SE$^1/_4$ sec.23, T.18 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, south side of Connor Lane, 0.5 mi west of Allisonville Road, on Connor Prairie Museum property.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel outwash deposit, White River valley-train of Pleistocene age, Atherton Formation.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in., depth 23.9 ft, cased to 20.9 ft, screened to 23.9 ft.

INSTRUMENTATION.--None.

DATUM.--Elevation of land-surface datum is 744.70 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of well casing, 1.60 ft above land-surface datum.

REMARKS.--Water level may be affected by river stage in White River, which is located 400 ft north of the well.

PERIOD OF RECORD.--November 1974 to current year. Measured irregularly in semi-annual status.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06, 1974	11.30	NOV 30, 1981	13.01	OCT 02, 1987	13.29	JUL 20, 1993	9.17
APR 14, 1975	9.50	APR 23, 1982	8.74	JUN 02, 1988	12.48	APR 14, 1994	8.26
APR 20, 1976	10.95	OCT 29	13.50	SEP 07	13.94	NOV 29	13.52
OCT 20	13.59	APR 22, 1983	10.21	OCT 26	14.11	MAY 11, 1995	11.80
JUN 06, 1977	12.59	AUG 26	13.33	MAY 26, 1989	9.75	OCT 25	13.67
NOV 02	13.44	APR 11, 1984	8.55	AUG 30	11.74	JUN 26, 1996	9.16
APR 28, 1978	11.07	OCT 31	13.08	APR 23, 1990	9.84	JUN 06, 1997	8.59
OCT 11	12.62	MAY 09, 1985	9.88	NOV 15	11.90	OCT 29	13.59
APR 02, 1979	9.57	OCT 02	13.03	APR 17, 1991	8.38	JUN 03, 1998	11.31
OCT 15	12.48	JUN 03, 1986	9.58	NOV 13	13.70	FEB 08, 1999	8.08
MAY 01, 1980	9.80	SEP 05	12.77	APR 28, 1992	9.20	SEP 23	13.76
APR 18, 1981	9.89	MAY 27, 1987	12.23	DEC 02	8.03	MAY 03, 2000	12.13

PERIOD OF RECORD HIGHEST 8.03 DEC 02, 1992
PERIOD OF RECORD LOWEST 14.11 OCT 26, 1988

- -

400000086035701. Local number CAR-22.
LOCATION.--Lat 40°00'00", long 86°03'57", in NE$^1/_4$NW$^1/_4$NW$^1/_4$ sec.22, T.18 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, 6000 East 146th Street, southside. Well is 1,200 ft east of Hazel Dell Road. Well destroyed by road construction in 1994.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel outwash deposit, White River valley-train of Pleistocene age, Atherton Formmation.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in., depth 23.9 ft, cased to 20.9 ft, screened to 23.9 ft.

INSTRUMENTATION.--None.

DATUM.--Elevation of land-surface datum is 775.71 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of well casing, at land surface.

PERIOD OF RECORD.--November 1974 to April 1994 (discontinued). Measured irregularly in semi-annual status.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06, 1974	7.61	APR 28, 1980	6.66	OCT 02, 1985	10.76	APR 23, 1990	8.96
APR 14, 1975	6.85	APR 18, 1981	6.81	JUN 03, 1986	8.19	NOV 20	10.12
APR 20, 1976	7.47	DEC 10	7.91	SEP 05	10.38	APR 17, 1991	7.53
OCT 20	8.76	APR 23, 1982	6.58	MAY 09, 1987	9.98	NOV 13	10.68
JUN 17, 1977	7.74	OCT 29	8.70	OCT 02	11.08	APR 24, 1992	8.48
NOV 02	8.54	APR 22, 1983	6.76	JUN 02, 1988	10.29	DEC 01	8.57
APR 28, 1978	6.43	AUG 26	8.75	SEP 07	11.49	JUL 19, 1993	8.86
OCT 11	6.98	APR 11, 1984	6.44	OCT 27	11.99	APR 14, 1994	7.94
APR 02, 1979	6.62	OCT 31	8.28	MAY 26, 1989	6.92		
OCT 15	8.04	MAY 09, 1985	6.86	AUG 30	6.29		

PERIOD OF RECORD HIGHEST 6.29 AUG 30, 1989
PERIOD OF RECORD LOWEST 11.99 OCT 27, 1988

MISCELLANEOUS PROJECT DATA

GROUND-WATER LEVELS FOR THE ALLUVIAL AQUIFER NEAR THE CITY OF CARMEL, HAMILTON COUNTY NETWORK.--Continued

- - - -

GROUND-WATER LEVELS FOR THE ALLUVIAL AQUIFER NEAR THE CITY OF CARMEL, HAMILTON COUNTY NETWORK.--Continued

- -

395816086052101. Local number CAR-25.
LOCATION.--Lat 39°58′16″, long 86°05′21″, in SE$^1/_4$SE$^1/_4$SE$^1/_4$ sec.29, T.18 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, northwest corner of East 126th Street and Gray Road (Hinkle Road on topographic map). Well was destroyed by construction in 1981.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel outwash deposit, White River valley-train of Pleistocene age, Atherton Formation.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 1.5 in., depth 30 ft, cased to 27 ft, screened to 30 ft.

INSTRUMENTATION.--None.

DATUM.--Elevation of land-surface datum is 786.94 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of well casing, at land surface.

REMARKS.--Water level may be affected by nearby dewatering for mining.

PERIOD OF RECORD.--April 1976 to April 1982 (discontinued). Measured irregularly in semi-annual status.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 20, 1976	21.92	NOV 02, 1977	23.02	OCT 15, 1979	21.92	APR 23, 1982	20.22
OCT 20	22.97	APR 27, 1978	20.70	APR 28, 1980	20.78		
JUN 06, 1977	22.81	OCT 11	21.76	APR 18, 1981	22.06		
AUG 24	23.06	APR 02, 1979	20.86	NOV 30	22.32		

PERIOD OF RECORD HIGHEST 20.22 APR 23, 1982
PERIOD OF RECORD LOWEST 23.06 AUG 24, 1977

- -

395837086045701. Local number CAR-26.
LOCATION.--Lat 39°58′37″, long 86°04′57″, in NW$^1/_4$NE$^1/_4$SW$^1/_4$ sec.28, T.18 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, in northwest part of Clay Jr. High School property, near southeast corner of private property, west of School Administration Building.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel outwash deposit, White River valley-train of Pleistocene age, Atherton Formation.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 1.5 in., depth 63.3 ft, cased to 60.3 ft, screened to 63.3 ft.

INSTRUMENTATION.--None.

DATUM.--Elevation of land-surface datum is 777.81 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of well casing, 3.0 ft above land-surface datum.

REMARKS.--Water level may be affected by nearby Carmel Utility well field.

PERIOD OF RECORD.--April 1976 to current year. Measured irregularly in semi-annual status.

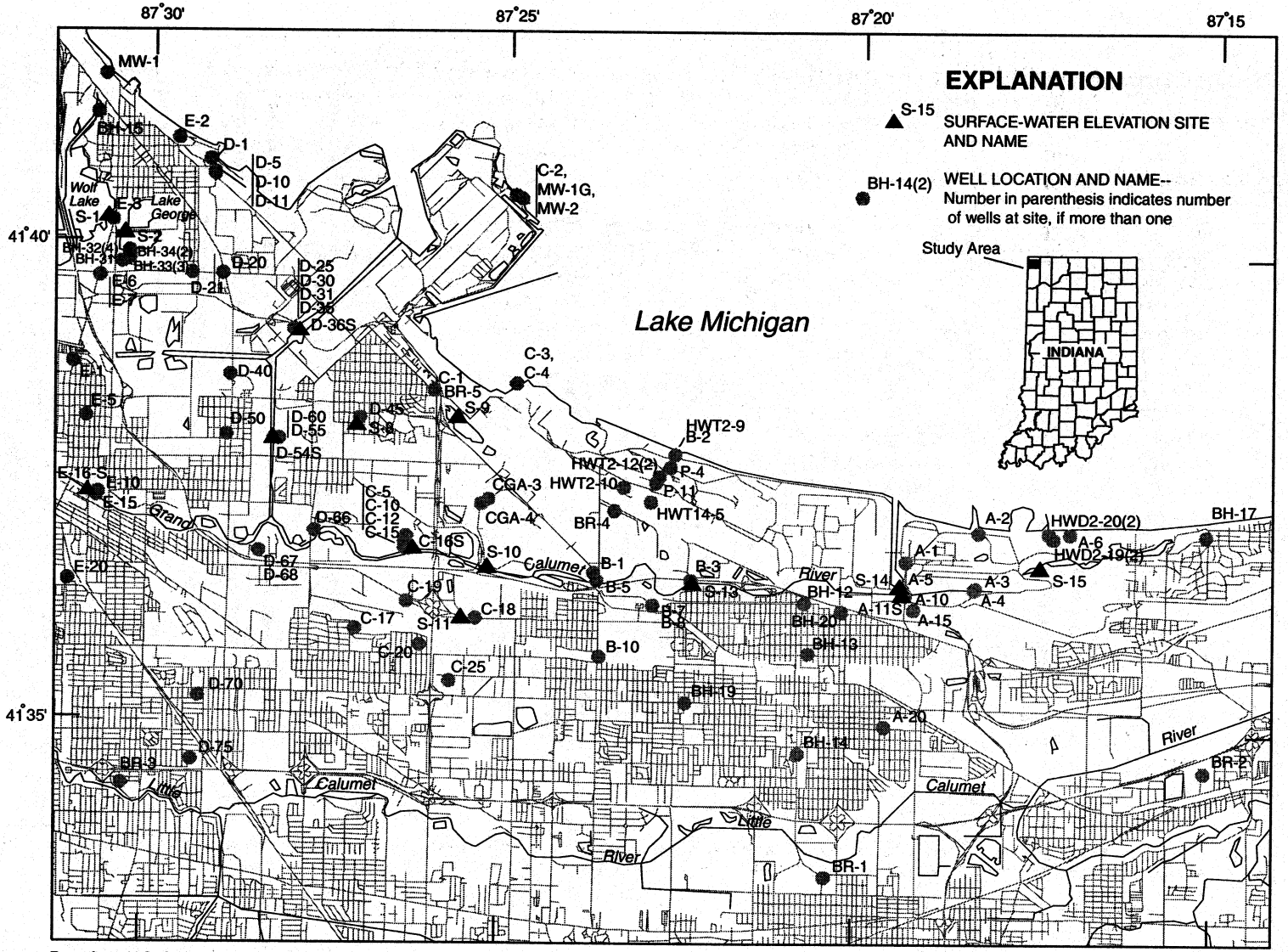
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 20, 1976	15.63	APR 23, 1982	13.94	JUN 02, 1988	17.17	APR 14, 1994	14.66
OCT 20	19.09	OCT 29	17.05	SEP 07	18.39	NOV 29	17.55
JUN 06, 1977	19.59	APR 22, 1983	17.77	OCT 26	18.89	MAY 11, 1995	17.97
AUG 24	19.93	AUG 26	17.78	MAY 26, 1989	15.41	OCT 26	19.31
NOV 02	19.75	APR 11, 1984	14.90	AUG 30	15.06	JUN 25, 1996	20.06
APR 27, 1978	11.76	OCT 31	17.68	APR 23, 1990	12.98	JUN 05, 1997	15.19
OCT 11	15.18	MAY 09, 1985	14.04	NOV 20	15.86	OCT 29	19.34
APR 02, 1979	15.03	OCT 17	17.64	APR 17, 1991	12.12	JUN 03, 1998	20.97
OCT 15	15.08	JUN 04, 1986	12.34	NOV 13	17.23	FEB 08, 1999	19.74
MAY 01, 1980	14.39	SEP 05	14.42	APR 28, 1992	15.96	SEP 23	21.52
APR 18, 1981	17.17	MAY 09, 1987	17.37	DEC 01	16.24	MAY 03, 2000	22.86
NOV 30	17.66	OCT 02	18.69	JUL 20, 1993	14.09		

PERIOD OF RECORD HIGHEST 11.76 APR 27, 1978
PERIOD OF RECORD LOWEST 22.86 MAY 03, 2000

MISCELLANEOUS PROJECT DATA

GROUND-WATER LEVELS FOR THE ALLUVIAL AQUIFER NEAR THE CITY OF CARMEL, HAMILTON COUNTY NETWORK.--Continued

- - - -



Base from U.S. Geological Survey digital data, 1:100,000 1983.
Albers Equal-Area Conic projection
Standard parallels 29°30' and 45°30' central meridian -86°

0 2 4 6 MILES
0 2 4 6 KILOMETERS

Figure 14.--Location of wells in the Northern Lake County network.

MISCELLANEOUS PROJECT DATA

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY. INDIANA

The following tables (1-5) list characteristics of water wells, surface-water stage measurement sites, and the results of ground-water level and miscellaneous measurements of surface-water stage in Northern Lake County, Indiana. Data presented here were periodically collected from water years 1993 to 2000 to provide a base of information to evaluate ground-water flow directions and ground-water/surface-water interactions. Locations of wells and sites are shown in figure 14.

Table 1. Characteristics of observation wells in the Northern Lake County network.

USGS, U.S. Geological Survey; Auger, hollow-stem auger; SS, stainless steel; CA, Calumet aquifer; USEPA, U.S. Environmental Protection Agency; PVC, polyvinyl chloride; n.a., not applicable; ?, not known; GAA, Gary Airport Authority; USX, USX Corporation; ISPAT, ISPAT Inland Incorporated.

Well name	Well owner	Latitude/longitude	USGS site identifier	Date drilled (month–year)	Method of installation	Land surface, in feet above sea level	Open interval, in feet below land surface	Screen and casing material	Aquifer and relative vertical position of open interval in aquifer
A-1	USGS	41°36′47″/87°19′19″	413647087191901	07–85	Auger	604	18-21	SS 304	CA Top
A-2	USGS	41°37′06″/87°18′18″	413706087181800	06–87	Auger	603	34-39	SS 316L	CA Middle
A-3	USGS	41°36′31″/87°18′20″	413631087182000	06–87	Hand driven	590	3-6	SS 316L	CA Top
A-4	USGS	41°36′30″/87°18′16″	413630087182100	06–87	Auger	603	18-23	SS 316L	CA Middle
A-5	USGS	41°36′29″/87°19′21″	413629087192102	12–85	Auger	601	18-21	SS 304	CA Top
A-6	USGS	41°37′06″/87°17′01″	413706087170101	06–87	Hand driven	588	4-7	SS 316L	CA Top
A-10	USGS	41°36′26″/87°19′19″	413626087191901	07–85	Hand driven	590	12-15	SS 304	CA Top
A-15	USGS	41°36′17″/87°19′12″	413617087191201	07–85	Hand driven	591	2-5	SS 304	CA Top
A-20	USGS	41°35′03″/87°19′35″	413503087193501	12–85	Auger	614	21-24	SS 304	CA Top
B-1	USGS	41°36′37″/87°23′43″	413637087234301	08–85	Hand driven	585	9-12	SS 304	CA Top
B-2	USGS	41°37′52″/87°22′35″	413752087223500	06–87	Auger	608	43-48	SS 316L	CA Middle
B-3	USGS	41°36′33″/87°22′20″	413633087222000	06–87	Auger	594	18-23	SS 316L	CA Middle
B-5	USGS	41°36′32″/87°23′40″	413632087234001	08–85	Hand driven	589	8-11	SS 304	CA Top
B-7	USGS	41°36′16″/87°22′51″	413617087225202	06–87	Hand driven	596	8-11	SS 316L	CA Top
B-8	USGS	41°36′17″/87°22′51″	413617087225201	06–87	Auger	596	32-37	SS 316L	CA Bottom
B-10	USGS	41°35′44″/87°23′37″	413544087233700	12–85	Auger	607	17-20	SS 304	CA Top
BH-12	USEPA	41°36′20″/87°20′44″	413620087204401	06–92	Mud rotary	601	10-20	PVC	CA Top
BH-13	USEPA	41°35′48″/87°20′40″	413548087204001	06–92	Mud rotary	603	9-19	PVC	CA Top
BH-14	USEPA	41°34′45″/87°20′47″	413445087204701	06–92	Mud rotary	610	9-19	PVC	CA Top
BH-15	USEPA	41°41′20″/87°30′47″	414120087304701	06–92	Mud rotary	585	10-15	PVC	CA Top

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 1. Characteristics of observation wells in the Northern Lake County network.—Continued

Well name	Well owner	Latitude/longitude	USGS site identifier	Date drilled (month–year)	Method of installation	Land surface, in feet above sea level	Open interval, in feet below land surface	Screen and casing material	Aquifer and relative vertical position of open interval in aquifer
BH-17	USEPA	41°37′06″/87°15′07″	413706087150701	06–92	Mud rotary	599	10-20	PVC	CA Top
BH-19	USEPA	41°35′16″/87°22′23″	413516087222301	06–92	Mud rotary	602	10-20	PVC	CA Top
BH-20	USEPA	41°36′15″/87°20′13″	413615087201301	06–92	Mud rotary	600	14-24	PVC	CA Top
BH-31	USEPA	41°39′47″/87°30′25″	413947087302501	04–93	Mud rotary	598	18-28	PVC	CA Top
BH-32-D	USGS	41°39′49″/87°30′19″	413949087301901	07–96	Auger	597	36-38.5	PVC	CA Bottom
BH-32-I	USGS	41°39′49″/87°30′19″	413949087301902	07–96	Auger	597	26.4-28.9	PVC	CA Middle
BH-32-SH	USGS	41°39′49″/87°30′19″	413949087301903	07–96	Auger	597	21.6-23.1	PVC	CA Top
BH-32-SL	USGS	41°39′49″/87°30′19″	413949087301904	07–96	Auger	597	7.4-19.9	PVC	Slag Bottom
BH-33-I	USGS	41°39′51″/87°30′19″	413951087301901	07–96	Auger	585	11.5-14	PVC	CA Middle
BH-33-SH	USGS	41°39′51″/87°30′19″	413951087301902	07–96	Auger	585	7.6-10.1	PVC	CA Top
BH-33-SL	USGS	41°39′51″/87°30′19″	413951087301903	07–96	Auger	585	2.5-5	PVC	Slag Bottom
BH-34-D	USGS	41°39′54″/87°30′19″	413954087301901	07–96	Hand driven	580	4.4-6.4	PVC	CA Top
BH-34-SH	USGS	41°39′54″/87°30′19″	413954087301902	07–96	Hand driven	581	1.8-3.8	PVC	Slag Bottom
BR-1	USGS	41°33′28″/87°20′24″	413328087202301	12–93	Mud rotary	595	135-145	PVC	Devonian
BR-2	USGS	41°34′37″/87°15′06″	413437087150601	12–93	Mud rotary	600	136-146	PVC	Silurian
BR-3	USGS	41°34′19″/87°30′17″	413419087301701	11–94	Mud rotary	595	137-147	PVC	Silurian
BR-4	USGS	41°37′17″/87°23′26″	413716087232601	11–94	Mud rotary	595	138-148	PVC	Silurian
BR-5	USEPA	41°37′32″/87°25′58″	413732087255801	06–95	Mud rotary	587	146-156	PVC	Silurian
C-1	USGS	41°38′30″/87°26′00″	413830087260000	12–85	Auger	587	4-7	SS 304	CA Top
C-2	USGS	41°40′30″/87°24′51″	414031087245000	06–87	Auger	594	13-18	SS 316L	CA Top
C-3	USGS	41°38′27″/87°25′16″	413828087251301	06–87	Auger	589	23-28	SS 316L	CA Middle
C-4	USGS	41°38′27″/87°25′16″	413828087251302	06–87	Auger	589	8-13	SS 316L	CA Top
C-5	USGS	41°36′55″/87°26′20″	413655087275202	07–85	Hand driven	584	2-5	SS 304	CA Top
C-10	USGS	41°36′50″/87°26′20″	413652087274901	07–85	Hand driven	584	1-4	SS 304	CA Top
C-12	USGS	41°36′50″/87°26′20″	413650087262000	06–87	Auger	584	13-18	SS 316L	CA Middle

Table 1. Characteristics of observation wells in the Northern Lake County network.—Continued

Well name	Well owner	Latitude/longitude	USGS site identifier	Date drilled (month–year)	Method of installation	Land surface, in feet above sea level	Open interval, in feet below land surface	Screen and casing material	Aquifer and relative vertical position of open interval in aquifer
C-15	USGS	41°36′48″/87°26′20″	413650087274802	07–85	Hand driven	583	1-4	SS 304	CA Top
C-17	USGS	41°35′59″/87°27′03″	413559087270301	07–86	Mud rotary	592	18-23	?	CA Bottom
C-18	USGS	41°36′07″/87°25′22″	413607087252200	06–87	Auger	595	17-22	SS 316L	CA Bottom
C-19	USGS	41°36′17″/87°26′20″	413617087262001	12–86	Hand driven	592	2-5	SS 304	CA Top
C-20	USGS	41°35′57″/87°26′11″	413557087283901	07–85	Hand driven	593	3-6	SS 304	CA Top
C-25	USGS	41°35′27″/87°25′43″	413527087270301	07–85	Hand driven	599	2-5	SS 304	CA Top
CGA-3	GAA	41°37′22″/87°25′13″	413722087251301	pre–1985	?	590	?	PVC	CA ?
CGA-4	GAA	41°37′19″/87°25′19″	413719087251901	pre–1985	?	591	?	PVC	CA ?
D-1	USGS	41°40′52″/87°29′12″	414052087291201	07–85	Hand driven	590	8-11	SS 304	CA Top
D-5	USGS	41°40′44″/87°29′08″	414044087290801	07–85	Hand driven	588	2-7	SS 304	CA Top
D-10	USGS	41°40′43″/87°29′08″	414043087290802	07–85	Hand driven	588	7-10	SS 304	CA Top
D-11	USGS	41°40′43″/87°29′08″	414043087290801	06–87	Auger	588	17-22	SS 316L	CA Middle
D-20	USGS	41°39′41″/87°29′00″	413941087290000	07–85	Hand	588	6-9	SS 304	CA Top
D-21	USGS	41°39′41″/87°29′26″	413941087292600	06–87	Auger	584	13-18	SS 316L	CA Middle
D-25	USGS	41°39′09″/87°28′03″	413804087291102	07–85	Hand driven	588	5-8	SS 304	CA Top
D-30	USGS	41°39′07″/87°27′58″	413758087290702	07–85	Hand driven	586	6-9	SS 304	CA Top
D-31	USGS	41°39′07″/87°27′58″	413907087275901	06–87	Auger	586	12-17	SS 316L	CA Middle
D-35	USGS	41°39′06″/87°27′57″	413757087290601	07–85	Hand driven	586	4-7	SS 304	CA Top
D-40	USGS	41°38′35″/87°28′51″	413835087245101	07–85	Hand driven	584	4-7	SS 304	CA Top
D-45	USGS	41°38′12″/87°27′02″	413812087270201	07–85	Hand driven	586	6-9	SS 304	CA Top
D-50	USGS	41°38′00″/87°28′54″	413800087285401	12–85	Hand driven	585	9-12	SS 304	CA Top
D-55	USGS	41°37′58″/87°28′14″	413758087281401	07–85	Hand driven	585	5-8	SS 304	CA Top
D-60	USGS	41°37′58″/87°28′10″	413758087281001	07–85	Hand driven	587	5-8	SS 304	CA Top
D-66	USGS	41°36′54″/87°27′40″	413654087274000	06–87	Auger	587	17-22	SS 316L	CA Middle
D-67	USGS	41°36′47″/87°28′25″	413647087282502	06–87	Hand driven	589	4-7	SS 316L	CA Top

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 1. Characteristics of observation wells in the Northern Lake County network.—Continued

Well name	Well owner	Latitude/longitude	USGS site identifier	Date drilled (month–year)	Method of installation	Land surface, in feet above sea level	Open interval, in feet below land surface	Screen and casing material	Aquifer and relative vertical position of open interval in aquifer
D-68	USGS	41°36′47″/87°28′25″	413647087282501	06–87	Auger	589	18-23	SS 316L	CA Middle
D-70	USGS	41°35′15″/87°29′15″	413515087291401	07–85	Hand driven	603	6-9	SS 304	CA Top
D-75	USGS	41°34′34″/87°29′19″	413435087291901	07–85	Hand driven	601	5-8	SS 304	CA Top
E-1	USGS	41°38′44″/87°31′04″	413844087310401	07–85	Hand driven	582	5-8	SS 304	CA Top
E-2	USGS	41°41′05″/87°29′39″	414105087293900	06–87	Hand driven	585	3-6	SS 316L	CA Top
E-3	USGS	41°40′13″/87°30′33″	414013087303300	06–87	Auger	585	8-13	SS 316L	CA Middle
E-5	USGS	41°38′10″/87°30′52″	413810087305201	07–85	Hand driven	587	9-12	SS 304	CA Top
E-6	USGS	41°39′38″/87°30′43″	413938087 304301	06–87	Auger	586	17-22	SS 316L	CA Bottom
E-7	USGS	41°39′38″/87°30′43″	413938087 304302	06–87	Hand driven	586	2-5	SS 316L	CA Top
E-10	USGS	41°37′22″/87°30′41″	413722087 304101	07–85	Hand driven	586	6-9	SS 304	CA Top
E-15	USGS	41°37′20″/87°30′42″	413720087 304201	07–85	Hand driven	584	11-14	SS 304	CA Top
E-20	USGS	41°36′27″/87°31′05″	413627087310500	07–85	Hand driven	592	5-8	SS 304	CA Top
HWD2-19D	USX	41°37′06″/87°17′19″	413706087171901	12–93	Auger	598	47-57	PVC	CA Bottom
HWD2-19S	USX	41°37′06″/87°17′19″	413706087171902	12–93	Auger	598	6-21	PVC	CA Top
HWD2-20D	USX	41°37′03″/87°17′15″	413703087171501	12–93	Auger	617	62-72	PVC	CA Middle
HWD2-20S	USX	41°37′03″/87°17′15″	413703087171502	12–93	Auger	617	23-38	PVC	CA Middle
HWT2-9	USX	41°37′52″/87°22′35″	413752087223501	04–84	Auger	608	50-70	PVC	Slag + CA
HWT2-10	USX	41°37′32″/87°23′22″	413732087232201	04–84	Auger	589	24-44	PVC	CA Top
HWT2-12D	USX	41°37′38″/87°22′48″	413738087224803	03-91	Auger	600	49-59	PVC	CA Bottom
HWT2-12S	USX	41°37′38″/87°22′48″	413738087224801	03-91	Auger	601	14-29	PVC	Slag + CA
HWT14-5	USX	41°37′22″/87°22′55″	413722087225501	04–84	Auger	589	37-47	PVC	CA Bottom
P-4	USX	41°37′44″/87°22′39″	413744087223901	04–84	Auger	603	25-35	PVC	Slag
P-11	USX	41°37′34″/87°22′51″	413734087225101	04–84	Auger	596	15-25	PVC	CA Top
MW-1	USEPA	41°41′44″/87°30′41″	414144087304101	?	Auger	591	21-24	SS 304	CA Bottom
MW-1G	ISPAT	41°40′33″/87°24′55″	414033087245501	?	Drilled	594	?-13	PVC	Slag
MW-2	ISPAT	41°40′33″/87°24′55″	414033087245502	?	Drilled	594	?-124	PVC	Silurian

[1] This well is also known as LK-13, a continuous recording water-level well operated by the USGS as part of a Statewide ground-water-data network. Water levels for LK-13 are published in the U.S. Geological Survey water data reports, IN-87-1 to IN-99-1, and page 341 of this report.

MISCELLANEOUS PROJECT DATA

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 2. Period of record for observation wells in the Northern Lake County network.

Well name	Period of Record Beginning (month–year)	Period of Record End (month–year)	Well name	Period of Record Beginning (month–year)	Period of Record End (month–year)
A-1	10-1985	08-2000	C-1	12-1985	08-2000
A-2	06-1987	08-2000	C-2	07-1987	09-1998
A-3	06-1987	03-1998	C-3	06-1987	08-2000
A-4	06-1987	08-2000	C-4	06-1987	08-2000
A-5	12-1985	08-2000	C-5	10-1985	06-1997
A-6	07-1987	01-1995	C-10	10-1985	08-2000
A-10	10-1985	08-2000	C-12	08-1987	08-2000
A-15	10-1985	08-2000	C-15	10-1985	03-1998
A-20	01-1986	08-2000	C-17	07-1986	08-2000
B-1	08-1985	09-1999	C-18	06-1987	06-2000
B-2	06-1987	08-2000	C-19	12-1986	08-2000
B-3	07-1987	06-2000	C-20	08-1985	06-2000
B-5	08-1985	08-2000	C-25	12-1985	08-2000
B-7	06-1987	08-2000	CGA-3	10-1985	03-1999
B-8	07-1987	08-2000	CGA-4	10-1985	08-1999
B-10	12-1985	08-2000	D-1	08-1985	08-2000
BH-12	06-1992	08-2000	D-5	08-1985	08-2000
BH-13	06-1992	08-2000	D-10	08-1985	08-2000
BH-14	06-1992	08-2000	D-11	06-1987	08-2000
BH-15	06-1992	08-2000	D-20	08-1985	01-1995
BH-17	06-1992	08-2000	D-21	07-1987	08-2000
BH-19	06-1992	08-1999	D-25	12-1985	08-2000
BH-20	06-1992	09-1998	D-30	12-1985	08-2000
BH-31	04-1993	09-1998	D-31	07-1987	08-2000
BH-32-D	07-1996	09-2000	D-35	12-1985	08-2000
BH-32-I	07-1996	08-2000	D-40	10-1985	08-2000
BH-32-S	07-1996	08-2000	D-45	10-1985	08-2000
BH-32-SL	07-1996	08-2000	D-50	12-1985	08-2000
BH-33-I	07-1996	08-2000	D-55	10-1985	01-1995
BH-33-S	07-1996	08-2000	D-60	10-1985	01-1995
BH-33-SL	07-1996	08-2000	D-66	07-1987	08-2000
BH-34-D	06-1996	07-1998	D-67	07-1987	08-2000
BH-34-SH	06-1996	07-1998	D-68	07-1987	08-2000
BR-1	01-1995	08-2000	D-70	01-1986	08-2000
BR-2	01-1995	08-2000	D-75	01-1986	08-2000
BR-3	07-1995	06-1999	E-1	12-1985	08-2000
BR-4	07-1995	08-2000	E-2	06-1987	08-2000
BR-5	07-1995	08-2000	E-3	06-1987	08-2000
E-5	08-1985	08-2000	HWT2-9	12-1985	08-2000
E-6	06-1987	08-2000	HWT2-10	12-1985	12-1997
E-7	06-1987	08-2000	HWT2-12D	12-1992	12-1998
E-10	10-1985	06-1992	HWT2-12S	06-1992	12-1998
E-15	10-1985	08-2000	HWT14-5	12-1985	07-1996
E-20	08-1985	08-2000	P-4	12-1985	08-2000
HWD2-19D	07-1995	08-2000	P-11	10-1985	08-2000
HWD2-19S	07-1995	08-2000	MW-1	06-1992	08-2000
HWD2-20D	07-1996	08-2000	MW-1G	10-1992	08-2000
HWD2-20S	07-1996	08-2000	MW-2	10-1992	08-2000

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.

SITE ID NUMBER: 413647087191901
STATION NAME: USGS WELL A-1 @ USX NR. BOAT SLIP, GARY, IN.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 16, 1993	18.12	APR 25, 1995	17.60	MAR 24, 1998	17.08	SEP 01, 1999	18.77
JUN 08	17.14	JUL 18	16.95	SEP 10	17.34	JAN 05, 2000	19.74
SEP 08	15.72	NOV 30	16.74	DEC 16	18.86	MAR 29	20.12
NOV 08, 1994	17.54	MAR 27, 1996	18.84	MAR 03, 1999	18.85	JUN 29	18.65
JAN 18, 1995	17.67	JUL 10	16.63	JUN 30	18.25	AUG 29	18.62

HIGHEST 15.72 SEP 08, 1993
LOWEST 20.12 MAR 29, 2000

PERIOD OF RECORD HIGHEST 15.72 SEP 08, 1993 LOWEST 20.12 MAR 29, 2000
RECORD AVAILABLE FROM OCT 24, 1985 TO AUG 29, 2000 50 MEASUREMENTS

- - - -

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

MISCELLANEOUS PROJECT DATA

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- -

SITE ID NUMBER: 413515087291401
STATION NAME: USGS WELL D70 AT HAMMOND, IN.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 18, 1993	2.93	DEC 01, 1995	3.82	MAR 02, 1999	4.48	JUN 27, 2000	3.44
JUN 10	1.93	MAR 29, 1996	3.97	JUN 30	4.23	AUG 29	5.04
SEP 10	3.17	JUL 12	4.13	AUG 31	4.69		
NOV 09, 1994	3.19	SEP 09, 1998	4.04	JAN 05, 2000	4.66		
JAN 24, 1995	2.86	DEC 15	DRY	MAR 28	4.40		

HIGHEST 1.93 JUN 10, 1993
LOWEST 5.04 AUG 29, 2000

PERIOD OF RECORD HIGHEST 1.10 NOV 28, 1990 LOWEST 5.04 AUG 29, 2000
RECORD AVAILABLE FROM JAN 07, 1986 TO AUG 29, 2000 48 MEASUREMENTS

- -

SITE ID NUMBER: 413435087291901
STATION NAME: USGS WELL D-75 @ HAMMOND, IN.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 18, 1993	4.24	DEC 01, 1995	4.55	JUL 10, 1997	4.70	AUG 31, 1999	4.88
JUN 10	3.40	MAR 29, 1996	4.79	SEP 09, 1998	4.19	JAN 04, 2000	4.95
SEP 10	4.02	JUL 12	4.70	DEC 16	4.74	MAR 28	4.81
NOV 09, 1994	4.03	MAR 31, 1997	4.40	MAR 02, 1999	4.58	JUN 27	3.87
JAN 24, 1995	4.12	JUN 24	4.34	JUN 30	4.50	AUG 29	4.76

HIGHEST 3.40 JUN 10, 1993
LOWEST 4.95 JAN 04, 2000

PERIOD OF RECORD HIGHEST 3.40 JUN 10, 1993 LOWEST 5.02 JUN 24, 1992
RECORD AVAILABLE FROM JAN 07, 1986 TO AUG 29, 2000 53 MEASUREMENTS

- -

SITE ID NUMBER: 413844087310401
STATION NAME: USGS WELL E1 @ HAMMOND, IN.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 15, 1993	2.56	MAR 29, 1996	2.95	MAR 24, 1998	2.43	AUG 31, 1999	3.22
JUN 10	2.25	JUN 06	2.25	JUL 16	3.05	JAN 04, 2000	3.00
SEP 07	2.87	JUL 18	1.08	SEP 09	3.21	MAR 30	3.09
NOV 07, 1994	2.95	MAR 31, 1997	2.76	DEC 17	3.48	JUN 28	2.17
JAN 17, 1995	2.29	JUN 24	2.88	MAR 04, 1999	2.74	AUG 30	3.13
DEC 01	2.80	DEC 09	3.55	JUN 30	2.70		

HIGHEST 1.08 JUL 18, 1996
LOWEST 3.55 DEC 09, 1997

PERIOD OF RECORD HIGHEST 1.08 JUL 18, 1996 LOWEST 3.97 OCT 12, 1988
RECORD AVAILABLE FROM DEC 13, 1985 TO AUG 30, 2000 57 MEASUREMENTS

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.—Continued

- - - -

MISCELLANEOUS PROJECT DATA

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 3. Water level records for observation wells in the Northern Lake County network, water years 1993-2000.

- - - -

Table 4. Location and description of surface-water stage measurement sites in Northern Lake County network.

Site name	Surface-water body	Latitude/longitude	USGS site identifier	Measurement location
S-1	Wolf Lake	41°40′16″/87°30′37″	414016087303701	Fishing pier in Wolf Lake Park, Hammond, Ind.
S-2	Lake George	41°40′06″/87°30′23″	414006087302301	125th Street, east of Calumet Ave., Hammond, Ind.
S-8	Sewer	41°38′08″/87°27′05″	413808087270501	Sewer grate, Washington Park, East Chicago, Ind.
S-9	Lake (unnamed)	41°38′14″/87°25′40″	413814087254001	North shore near Buffington Harbor, Gary, Ind.
S-10	Grand Calumet River	41°36′40″/87°25′13″	413640087251301	Confluence with drainage ditch, Gary, Ind.
S-11	Ditch	41°36′08″/87°25′34″	413608087253401	Ditch along US 20, east of Cline Avenue, Gary, Ind.
S-13	Grand Calumet River	41°36′32″/87°22′18″	413632087221900	At Bridge Street bridge, Gary, Ind.
S-14	Lake Michigan	41°36′32″/87°19′24″	413632087192401	Gary Harbor, Ind., southern end of turning basin, USX Corp., Gary, Ind.
S-15	West Grand Calumet Lagoon	41°36′45″/87°17′26″	413645087172601	West Grand Calumet Lagoon, south side, USX Corp., Gary, Ind.
A-11S	Grand Calumet River	41°36′26″/87°19′18″	413627087192201	At Tennessee Street, USX Corp. Gary, Ind.
C-16S	Grand Calumet River	41°36′47″/87°26′20″	413648087283502	E.I. du Pont de Nemours and Co., East Chicago, Ind.
D-36S	Indiana Harbor Canal	41°39′05″/87°27′56″	413756087290602	At Indiana Road 912, East Chicago, Ind.
D-54S	Indiana Harbor Canal	41°37′59″/87°28′15″	413759087281502	At Phillips Petroleum, East Chicago, Ind.
E-16S	Grand Calumet River	41°37′19″/87°30′44″	413719087304302	Spohn School, Hammond, Ind

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 5. Reference point altitude and miscellaneous measurements of depth to surface water (surface-water stage) in the Northern Lake County network, water years 1993-2000.

FT or ft, feet; LSD, land surface datum; --, not recorded; >, greater than

Site name	USGS site identifier	Date	Time	Depth to water surface below measuring point (ft)	Altitude of measuring point (ft above LSD)[1]	Remarks
S-1	414016087303701	OCT 7, 1992	--	1.60	854.55	
		DEC 7, 1992	--	1.42	854.55	DEPTH TO ICE
		MAR 15, 1993	1110	1.40	854.55	DEPTH TO ICE
		MAR 15, 1994	1110	1.46	854.55	DEPTH TO WATER
		JUN 7, 1994	1503	0.93	854.55	
		SEP 7, 1994	1313	1.41	854.55	WAVE ACTION, DEPTH IS +/- 0.05 FT
		NOV 7, 1994	1406	0.99	854.55	
		JAN 17, 1995	1226	0.96	854.55	
		APR 24, 1995	1240	1.20	854.55	
		JUL 17, 1995	--	1.56	854.55	WAVE ACTION, DEPTH IS +/-0.3 FT
		NOV 28, 1995	--	1.23	854.55	
		MAR 29, 1996	--	1.36	854.55	
		APR 5, 1996	--	1.44	854.55	
		JUN 6, 1996	--	1.15	854.55	
		JUL 18, 1996	--	1.10	854.55	
		AUG 2, 1996	--	1.13	854.55	
		APR 1, 1997	--	1.02	854.55	
		JUN 24, 1997	--	0.95	854.55	WAVE ACTION, DEPTH IS +/- 0.1 FT
		DEC 9, 1997	--	0.81	854.55	
		MAR 24, 1998	--	0.84	854.55	
		JUL 15, 1998	--	0.70	854.55	
		SEP 9, 1998	--	1.47	854.55	
		DEC 17, 1998	--	1.39	854.55	
		MAR 4, 1999	--	1.70	854.55	
		JUN 29, 1999	--	1.66	854.55	
		SEP 1, 1999	--	1.68	854.55	
		JAN 4, 2000	--	1.70	854.55	
		MAR 29, 2000	--	1.65	854.55	
		AUG 30, 2000	--	1.58	854.55	
S-2	414006087302301	DEC 7, 1992	--	2.67	584.24	
		MAR 15, 1993	1151	2.10	584.24	DEPTH TO ICE
		MAR 15, 1993	1151	2.17	584.24	DEPTH TO WATER
		JUN 7, 1993	1524	2.34	584.24	
		SEP 7, 1993	1328	2.11	584.24	
		NOV 7, 1994	1415	3.10	584.24	
		JAN 17, 1995	1302	3.37	584.24	
		APR 24, 1995	1250	2.41	584.24	
		JUL 17, 1995	--	3.10	584.24	DEPTH IS +/- 0.05 FT, CHOPPY WATER SURFACE
		NOV 28, 1995	--	3.68	584.24	
		MAR 29, 1996	--	3.32	584.24	
		APR 5, 1996	--	3.58	585.46	

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 5. Reference point altitude and miscellaneous measurements of depth to surface water (surface-water stage) in the Northern Lake County network, water years 1993-2000.—Continued

Site name	USGS site identifier	Date	Time	Depth to water surface below measuring point (ft)	Altitude of measuring point (ft above LSD)[1]	Remarks
S-2	414006087302301	JUN 6, 1996	--	2.30	585.46	DEPTH IS +/- 0.2 FT CHOPPY WATER SURFACE
		JUN 14, 1996	--	2.71	585.46	
		JUL 17, 1996	--	3.07	585.46	DEPTH IS +/- 0.1 FT CHOPPY WATER SURFACE
		JUL 18, 1996	--	2.51	585.46	
		AUG 2, 1996	--	2.27	585.46	DEPTH IS +/- 0.1 FT CHOPPY WATER SURFACE
		AUG 13, 1996	--	2.36	585.46	
		AUG 15, 1996	--	2.06	585.46	DEPTH IS +/- 0.1 FT CHOPPY WATER SURFACE
		APR 1, 1997	--	2.40	585.46	
		JUN 24, 1997	--	2.99	585.46	
		DEC 9, 1997	--	3.56	585.46	
		JUL 14, 1998	--	3.26	585.46	
		SEP 9, 1998	--	3.72	585.46	
		SEP 1, 1999	--	3.72	585.46	
		MAR 29, 2000	--	3.87	585.46	
		AUG 30, 2000	--	0.95	581.41	
		SEP 6, 2000	--	0.80	581.41	
S-8	413808087270501	MAR 15, 1993	1351	1.58	581.56	
		JUN 11, 1993	842	1.71	581.56	
		SEP 9, 1993	1134	1.61	581.56	
		NOV 9, 1994	1456	1.51	581.56	
		JAN 24, 1995	1505	1.50	581.56	
		APR 27, 1995	953	1.58	581.56	
		JUL 20, 1995	--	1.65	581.56	
		MAR 26, 1996	--	1.71	581.56	
		APR 2, 1997	--	1.57	581.56	
		JUN 26, 1997	--	1.58	581.56	
		DEC 12, 1997	--	1.08	581.56	
		SEP 8, 1998	--	1.62	581.56	
		DEC 16, 1998	--	1.61	581.56	
		MAR 2, 1999	--	1.53	581.56	
		JUN 29, 1999	--	1.51	581.56	
		SEP 1, 1999	--	1.72	581.56	
		JAN 6, 2000	--	1.42	581.56	
		MAR 29, 2000	--	1.48	581.56	
		AUG 29, 2000	--	1.50	581.56	
S-9	413814087254001	OCT 7, 1992	--	1.07	586.14	
		DEC 10, 1992	--	0.76	586.14	
		MAR 17, 1993	1339	0.27	586.14	DEPTH TO ICE
		MAR 17, 1993	1339	0.78	586.14	DEPTH TO WATER
		JUN 11, 1993	737	0.92	586.14	MEASURING POINT IS LEANING
		SEP 9, 1993	1105	0.78	586.14	DEPTH IS +/- 0.10 FT, WAVE ACTION ON SURFACE

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 5. Reference point altitude and miscellaneous measurements of depth to surface water (surface-water stage) in the Northern Lake County network, water years 1993-2000.—Continued

Site name	USGS site identifier	Date	Time	Depth to water surface below measuring point (ft)	Altitude of measuring point (ft above LSD)[1]	Remarks
S-9	413814087254001	SEP 17, 1993	1339	0.78	586.14	DEPTH TO WATER
		NOV 9, 1994	1022	2.53	586.14	
		JAN 19, 1995	1324	1.58	586.14	
		APR 26, 1995	1405	2.20	586.14	DEPTH IS +/- 0.02 FT, WAVE ACTION ON SURFACE
		JUL 20, 1995	1030	2.42	586.65	
		NOV 29, 1995	--	3.44	586.14	
S-10	413640087251301	DEC 9, 1992	--	3.64	585.04	
		MAR 17, 1993	850	3.42	585.04	
		JUN 9, 1993	1257	2.36	585.04	
		SEP 9, 1993	750	3.15	585.04	
		NOV 9, 1994	820	3.27	585.04	
		JAN 19, 1995	1003	3.33	585.04	
		APR 26, 1995	905	3.77	585.04	
		JUL 20, 1995	1145	2.77	585.04	
		NOV 28, 1995	--	3.51	585.04	
		MAR 26, 1996	--	3.65	585.04	
		APR 3, 1997	--	2.82	585.00	
		JUN 26, 1997	--	2.10	585.00	
		DEC 11, 1997	--	2.83	585.00	
		MAR 24, 1998	--	2.91	585.00	
		JUL 14, 1998	--	2.90	585.00	
		SEP 18, 1998	--	2.84	585.00	
		DEC 15, 1998	--	3.01	585.00	
		MAR 2, 1999	--	2.93	585.00	
		JUN 29, 1999	--	3.40	585.00	
		SEP 1, 1999	--	3.61	585.00	
		JAN 4, 2000	--	3.55	585.00	
		MAR 28, 2000	--	3.05	585.00	
		AUG 29, 2000	--	3.46	585.00	
S-11	413608087253401	DEC 10, 1992	--	0.94	590.34	
		MAR 18, 1993	810	0.99	590.34	
		JUN 10, 1993	704	0.81	590.34	
		SEP 9, 1993	1213	0.49	590.34	
		NOV 10, 1994	1632	0.47	590.34	
		JAN 19, 1995	1633	0.42	590.34	
		APR 26, 1995	929	0.58	590.34	
		JUL 20, 1995	1400	0.49	590.34	
S-13	413632087221900	DEC 8, 1992	--	17.93	600.02	
		MAR 16, 1993	748	17.88	600.02	
		JUN 9, 1993	645	21.95	600.02	
		SEP 8, 1993	1249	17.12	600.02	
		NOV 8, 1993	1557	17.54	600.02	
		JAN 18, 1995	1000	17.92	600.02	
		APR 26, 1995	746	17.41	600.02	
		JUL 18, 1995	1422	16.78	600.02	

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 5. Reference point altitude and miscellaneous measurements of depth to surface water (surface-water stage) in the Northern Lake County network, water years 1993-2000.—Continued

Site name	USGS site identifier	Date	Time	Depth to water surface below measuring point (ft)	Altitude of measuring point (ft above LSD)[1]	Remarks
S-13	413632087221900	NOV 28, 1995	--	17.76	600.02	
		MAR 27, 1996	--	18.06	600.02	
		APR 3, 1997	--	16.61	600.02	
		JUN 23, 1997	--	17.58	600.02	
		DEC 11, 1997	--	17.51	600.02	
		MAR 24, 1998	--	17.66	600.02	
		JUL 13, 1998	--	17.38	600.02	
		SEP 8, 1998	--	17.84	600.02	
		DEC 14, 1998	--	17.77	600.02	
		MAR 2, 1999	--	17.71	600.02	
		JUN 28, 1999	--	17.54	600.02	
		AUG 30, 1999	--	17.62	600.02	
		JAN 4, 2000	--	18.00	600.02	
		MAR 27, 2000	--	17.77	600.02	
		AUG 28, 2000	--	17.78	600.02	
S-14	413632087192401	DEC 8, 1992	--	9.19	589.16	
		MAR 16, 1993	940	10.12	589.16	
		JUN 8, 1993	948	13.66	589.16	
		SEP 8, 1993	944	7.97	589.16	
		NOV 8, 1994	1035	15.94	589.16	
		JAN 18, 1995	1408	9.55	589.16	
		APR 26, 1995	1108	9.14	589.16	
		JUL 18, 1995	--	8.96	589.16	
		NOV 30, 1995	--	9.63	589.16	
		MAR 24, 1998	--	8.21	589.16	
		SEP 9, 1998	--	8.67	589.16	
S-15	413645087172601	DEC 8, 1992	--	0.25	588.15	
		MAR 16, 1993	856	0.52	588.15	
		JUN 8, 1993	850	0.15	588.15	
		SEP 8, 1993	849	0.22	588.15	
		NOV 8, 1994	955	0.44	588.15	
		APR 25, 1995	--	0.80	588.15	
		JUL 18, 1995	--	0.66	588.15	
		NOV 30, 1995	--	0.46	588.15	
		MAR 24, 1998	--	0.10	588.15	
A-11S	413627087192201	DEC 8, 1992	--	4.62	589.99	
		MAR 16, 1993	923	4.53	589.99	
		JUN 8, 1993	910	3.88	589.99	
		SEP 8, 1993	923	4.27	589.99	
		NOV 8, 1994	1016	4.55	589.99	
		JAN 18, 1995	1434	4.61	589.99	
		APR 25, 1995	1121	4.57	589.99	
		JUL 18, 1995	--	4.44	589.99	
		JUL 19, 1995	--	4.44	589.99	
		NOV 30, 1995	--	4.61	589.99	
		MAR 24, 1998	--	4.53	589.99	

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 5. Reference point altitude and miscellaneous measurements of depth to surface water (surface-water stage) in the Northern Lake County network, water years 1993-2000.—Continued

Site name	USGS site identifier	Date	Time	Depth to water surface below measuring point (ft)	Altitude of measuring point (ft above LSD)[1]	Remarks
A-11S	413627087192201	SEP 9, 1998	--	4.24	589.99	
		JUN 30, 1999	--	3.04	589.99	
C-16S	413648087283502	DEC 10, 1992	--	3.75	585.52	MEASURING POINT IN SHELTER
		MAR 18, 1993	837	3.27	585.52	MEASURING POINT IN SHELTER, DEPTH TO TOP OF ICE
		JUN 10, 1993	733	3.37	585.52	MEASURING POINT IN SHELTER
		SEP 9, 1993	1309	3.44	585.52	MEASURING POINT IN SHELTER
		NOV 9, 1994	1056	3.38	585.52	MEASURING POINT IN SHELTER
		JAN 19, 1995	1427	4.20	585.52	MEASURING POINT IN SHELTER
		APR 26, 1995	1012	3.39	585.52	MEASURING POINT IN SHELTER
D-36S	413756087290602	MAR 9, 1993	1408	0.10	581.22	DEPTH IS +/- 0.05 FT, WAVE ACTION ON SURFACE
		MAR 17, 1993	955	1.00	581.22	
		SEP 9, 1993	905	1.55	581.22	
		NOV 7, 1993	1551	1.28	581.22	
		JAN 17, 1995	1504	1.22	581.22	
		APR 24, 1995	1449	1.02	581.22	
		JUL 19, 1995	1430	0.66	581.22	
		NOV 30, 1995	--	1.83	586.03	
		APR 1, 1997	--	4.70	586.03	
		DEC 17, 1998	--	>1.60	581.22	DRY
		JUN 30, 1999	--	>1.60	581.22	DRY
		JAN 4, 2000	--	>1.60	581.22	DRY
		MAR 29, 2000	--	>1.60	581.22	DRY
D-54S	413759087281502	DEC 9, 1992	--	1.97	581.85	
		MAR 17, 1993	1405	1.42	581.85	
		JUN 11, 1993	805	0.41	581.85	
		SEP 9, 1993	1006	1.73	581.85	
		NOV 9, 1994	1318	0.94	581.85	
		JAN 24, 1995	1414	1.59	581.85	
		JUL 21, 1995	1024	1.30	581.85	
E-16S	413719087304302	DEC 9, 1992	--	4.80	584.69	
		MAR 17, 1993	1139	4.63	584.69	
		JUN 10, 1993	1027	3.30	584.69	
		SEP 10, 1993	720	4.34	584.69	
		NOV 9, 1994	1332	3.94	584.69	
		JAN 24, 1995	1636	4.63	584.69	
		APR 27, 1995	825	4.04	584.69	

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 5. Reference point altitude and miscellaneous measurements of depth to surface water (surface-water stage) in the Northern Lake County network, water years 1993-2000.—Continued

Site name	USGS site identifier	Date	Time	Depth to water surface below measuring point (ft)	Altitude of measuring point (ft above LSD)[1]	Remarks
E-16S	413719087304302	JUL 20, 1995	925	8.49	588.82	
		JUL 21, 1995	925	4.36	584.69	
		DEC 1, 1995	--	8.78	588.82	
		JUL 18, 1996	--	4.92	588.82	HEAVY RAIN OF 3.0 TO 6.0 INCHES ON PRECEDING DAY
		DEC 9, 1997	--	7.21	588.82	
		MAR 24, 1998	--	4.19	584.69	
		JUL 15, 1998	--	4.17	584.69	
		SEP 9, 1998	--	4.06	584.69	
		DEC 17, 1998	--	>8.80	588.82	OUT OF WATER
		MAR 2, 1999	--	6.62	588.82	
		JUN 29, 1999	--	6.71	588.82	
		AUG 30, 1999	--	6.94	588.82	
		JAN 4, 2000	--	6.87	588.82	
		MAR 30, 2000	--	6.66	588.82	
		AUG 30, 2000	--	6.94	588.82	

[1] Several sites have multiple measuring points to accommodate changing site conditions.

Page

Access to USGS water data 30
Accuracy of the records 21
Acid neutralizing capacity, definition of 31
Acre-foot, definition of 31
Adams Lake near Wolcottville 254
Alkalinity, definition of 31
Allen 5 300
Allen 6 301
Allen 8 302
Anderson River Basin, gaging-station records in 69
Annual mean, definition of 19
Annual runoff, definition of 20,31
Annual runoff (AC-FT), definition of 20
Annual runoff (CFSM), definition of 20
Annual runoff (INCHES), definition of 20
Annual 7-day minimum, definition of 19,33
Annual total, definition of 19
Aquifer, definition of 29,31
Arrangement of records 23
Artesian, definition of 31

Back Creek at Leesville 168
Bacteria, definition of 31
Ball Lake near Hamilton 254
Bartholomew 4 303
Bartholomew 8 304
Bartholomew 9 305
Bartholomew 10 306
Bartholomew 13 307
Bass Lake at Bass Lake 255
Bear Lake near Wolflake 255
Bed material, definition of 31
Benton 4 308
Big Blue River (head of East Fork White River) at Carthage 157
at Shelbyville 152
Big Chapman Lake near Warsaw 256
Big Creek near Wadesville 188
Big Lake near Wolflake 256
Big Lick Creek near Hartford City 79
Big Long Lake near Stroh 257
Big Raccoon Creek at Coxville 108
at Ferndale 107
near Fincastle 106
Big Walnut Creek (head of Eel River) near Reelsville 146
Bixler Lake at Kendallville 257
Blue Lake near Churubusco 258
Blue River Basin, gaging-station records in 65-68
Blue River at Fredericksburg 66
near White Cloud 68
Boone 17 309
Bower Lake near Pleasant Lake 258
Brush Creek near Nebraska 164
Buck Creek Basin, gaging-station records in 63
Buck Creek at Acton 154
near Muncie 115
near New Middletown 63
Burns Ditch at Portage 194
Burns Waterway, gaging-station records in 191-194
Busseron Creek near Carlisle 112
near Hymera 111

Cass Lake near Shipshewana 259
Cass 3 310
Cedar Creek near Cedarville 213
Cedar Lake at Cedar Lake 259
Center Lake at Warsaw 260
Climate divisions in Indiana 4,5
Classification of Records 22
Clay 6 311
Clay 7 312
Clear Lake at Clear Lake 260
at LaPorte 261
Clifty Creek at Hartsville 160
Cobb Ditch near Kouts 226
Collection and computation of data, surface water 14-22
Collection and examination of data, surface-water quality 22-25
Collection and examination of data, lake levels 26-27
Collection and examination of data, ground -water levels 27-29
Collection and examination of data, ground-water quality 30
Confined aquifer, definition of 32
Contents, definition of 32
Continuous-record station, definition of 32
Control, definition of 32
Control structure, definition of 32
Conversion of chemical constituents, factors for 43
Conversion of sediment concentrations, factors for 43
Cooperation 2
Cooperation, definition of 17
Crooked Creek Basin, gaging-station records in 70
Crooked Creek at Indianapolis 122
near Santa Claus 70
Crooked Lake at Crooked Lake 261
Cubic foot per second, definition of 32
Cubic foot per second-day, definition of 32

Page

Cubic feet per second per square mile, definition of 32

Daily record, definition of 32
Data collection and computation 14,26,28
Data presentation 15,24,26,28,30
Data table of daily mean values 18
Datum, definition of 29
Datum of gage, definition of 26
Decatur 2 ..... 9, 313
Deep River at Lake George Outlet at Hobart 191
Deer Creek near Delphi 88
Definition of terms 31-42
Delaware 4 314
Derbyshire Creek at Southport 138
Des Plaines River Basin, gaging-station records in 232-235
Dewart Lake near Leesburg 262
Diamond Lake near Silver Lake 262
near Wawaka 263
Discharge, definition of. 32
Discharge at miscellaneous sites 236
Discontinued surface-water stations ..... xviii-xx
Discontinued surface-water-quality stations ..... xxi-xxii
Dissolved, definition of 33, 40
Dissolved oxygen, definition of 33
Dissolved-solids concentration, definition of 33
Dissolved trace-element concentrations 25
Downstream order system 12
Drainage area, definition of 16,24,26,33
Drainage basin, definition of 34

Eagle Creek at Indianapolis 130
at Zionsville 127
Eagle Creek Reservoir near Indianapolis 128
below Reservoir at Indianapolis 129
East Fork White River at Columbus 159
at Seymour 161
at Shoals 7, 170
near Bedford 167
East Fork Whitewater River at Abington 58
at Brookville 59
E coli, definition of 31
Eel River at Bowling Green 149
at North Manchester 84
near Logansport 86
Elkhart River at Goshen 205
Elkhart 4 ..... 9, 315
Elkhart 7 316
Elkhart 9 317
Engle Lake near Ligonier 263
Escherichia coli, definition of 31
Established legal level, definition of 27
Explanation of the records 12-30
Extremes for period of record, definition of 27,29
Extremes outside period of record, definition of 17

Factors for conversion of chemical constituents 43
Factors for conversion of sediment concentrations 43
Falcon Creek at 30th St. at Indianapolis 133
Fall Creek at Millersville 124
near Fortville 123
Fish Creek near Artic 209
Fish Creek near Artic sediment data 210-211
Fish Creek at Hamilton 208
Fish Lake near Plato 264
Fish Lake near Scott 264
Flatrock River at Columbus 158
at St. Paul 157
Flint Lake near Valparaiso 265
Forker Creek near Burr Oak 202
Fountain 3 318
Franklin 5 319
Fulton 7 320

Gage, definition of 16,27
Gage datum, definition of 34
Gage height, definition of 34
Gaging station, definition of 34
Galena River near LaPorte 196
Galien River Basin, gaging-stations records in 196
Gilbert Lake near Washington Center 265
Grand Calumet River Basin, gaging-station records in 189-190
Grand Calumet River at Industrial Hwy at Gary 189
Grand Calumet River at Hohman Ave. at Hammond 235
Grand Calumet River water-quality 240-252
Grant 8 321
Grant 10 322
Graph showing precipitation 5
Graph showing mean discharge at index stations 7
Graph showing monthly and yearly mean of ground-water levels at three Indiana wells 9
Great Miami River Basin, gaging-station records in 53-60
Ground water, summary of 8
Ground-water, explanation of records 27-29
Ground-water levels, monthly and yearly mean at three observation wells 9

Page

Ground-water levels, station records 300-388
Ground-water quality, explanation of records 30
Ground-water wells, number by county 299
Guion Creek above 52nd St. at Indianapolis 132

Hackenburg Lake near Wolcottville 266
Hall Creek near St. Anthony 177
Hamilton Lake at Hamilton 266
Harberts Creek near Madison 162
Hardness, definition of 34
Harrison 8 323
Hart Ditch at Dyer 232
at Munster 233
Heaton Lake near Elkhart 267
Hendricks 4 324
High Lake near Wolflake 267
Highest annual mean, definition of 19
Highest daily mean, definition of 19
Hill Lake near Silver Lake 268
Hogback Lake near Angola 268
Huntington 2 325
Hydrologic Benchmark Network, definition of 10
Hydrologic Benchmark station, definition of 34
Hydrologic conditions, summary of 3
Hydrologic unit, definition of 34

Identifying estimated daily discharge 21
Illinois River Basin, gaging-station records in 220-231
Indiana Harbor Canal at East Chicago 190
Indiana Harbor Canal water-quality 240-252
Indian Creek Basin, gaging-station records in 64
Indian-Kentuck Creek Basin, gaging-station records in 61
Indian-Kentuck Creek near Canaan 61
Inlet and outlet, definition of 27
Instantaneous discharge, definition of 33
Instantaneous low flow, definition of 20
Instantaneous peak flow, definition of 20
Instantaneous peak stage, definition of 20
Internet access 30
Instrumentation, definition of 29
Introduction 1
Iroquois River at Rensselaer 230
at Rosebud 229
near Foresman 231

Jasper 4 326
Jasper 7 327
Jasper 9 328
Jasper 11 329
Jasper 12 330
Jasper 13 331
Jasper 15 332
Jefferson 5 333
Jennings 3 334
Jimmerson Lake at Nevada Mills 269
Juday Creek near South Bend 207

Kankakee River at Davis 221
at Dunns Bridge 224
at Shelby 227
near Kouts 225
near North Liberty 220
King Lake near Delong 269
Knapp Lake near Washington Center 270
Knox 7 335
Knox 8 336
Kokomo Creek near Kokomo 95
Koontz Lake at Koontz Lake 270
Kosciusko 9 337

Laboratory measurements 24
Lagrange 2 338
Lagrange 3 339
Lake Eliza near Beatrice. 271
Lake Gage at Panama 271
Lake George at Hobart 272
at Jamestown 272
Lake-level control, definition of 27
Lake levels, explanation of records 26-27
Lake levels, station records 254-293
Lake Manitou at Rochester 273
Lake Maxinkuckee at Culver 273
Lake of the Woods near Bremen 274
near Helmer 274
Lake Pleasant near Nevada Mills 275
Lake 12 340
Lake 13 341
Lake 14 342
Lakes by county, number of 253
Lake stations, other maps available 298
Lake stations, records available 294-297
Land-surface datum, definition of 34
LaPorte 9 343
LaPorte 10 344

Page

LaPorte 11 345
LaPorte 12 346
Latitude-longitude system 13
Lick Creek at Indianapolis 136
List of discontinued surface-water discharge or stage-only stations ..... xviii-xx
List of discontinued surface-water-quality stations ..... xxi-xxii
List of ground-water wells ..... xv-xvii
List of lake gaging stations ..... xiii-xv
List of stream and reservoir gaging stations ..... viii-xiii
Little Buck Creek at Southport 139
near Indianapolis 140
near Southport 137
Little Calumet River at Gary 192
at Munster 234
at Porter 193
Little Eagle Creek at Speedway 134
at 52nd St. at Indianapolis 131
Little Elkhart River at Middlebury 199
Little Indian Creek near Galena 64
Little Long Lake at Kendallville 275
Little River near Huntington 74
Location, definition of 16,24,26,28
Locations of streamflow- and water-quality-gaging stations in Indiana 50-51
Locations of streamflow-gaging stations in Marion County 52
Locations of water-quality sampling sites in Lake County 240, 247
Locations of wells in the Carmel, Hamilton County network 389
Locations of wells in the northern Lake County network 402
Long Lake at Laketon 276
at Moonlight 276
Lost Lake at Culver 277
Lost River near Leipsic 171
Lowest annual mean, definition of 19
Lowest daily mean, definition of 19
Lukens Lake near Disko 277

Map showing climate divisions 4
Map showing number of ground-water wells by county 299
Map showing locations of streamflow and water-quality gaging stations in Indiana 50-51
Map showing locations of streamflow-gaging stations in Marion County 52
Map showing locations of wells in the Carmel, Hamilton County network 389
Map showing locations of wells in the northern Lake County network 402
Map showing water-quality sampling sites in Montgomery County 237
Map showing water-quality sampling sites in Lake County 240, 247
Map showing number of lake gages by county 253
Marion 34 347
Marion 35 348
Marion 36 349
Marion 37 350
Marion 38 351
Martin 5 ..... 9, 352
Maumee River at Fort Wayne 218
at New Haven 219
Maumee River Basin, gaging-station records in 208-219
Mean concentration of suspended sediment, definition of 38
Mean discharge, definition of 33
Mean discharge at Indiana index stations 7
Mean ground-water levels at three Indiana wells 9
Measuring point, definition of 34
Membrane filter, definition of 34
Micrograms per liter, definition of 35
Micrometer, definition of 35
Microsiemens per centimeter, definition of 35
Middle Fork Anderson River at Bristow 69
Mill Creek near Cataract 147
near Manhattan 148
Milligrams per liter, definition of 35
Miscellaneous ground- and surface-water levels in northern Lake County network 402-446
Miscellaneous ground-water levels, City of Carmel, Hamilton County network 390-401
Miscellaneous project data 389-446
Miscellaneous site, definition of 35
Miscellaneous sites, discharge measurements 236
Miscellaneous streams in Montgomery County, water-quality data 237-239
Miscellaneous water-quality station analysis 240-252
Mississinewa River at Marion 7, 80
at Peoria 81
near Ridgeville 78
Montgomery 7 353
Montgomery County, miscellaneous water-quality analysis 238-239
Montgomery County, sampling sites 237
Morgan 4 354
Mud Pine Creek near Oxford 101
Muncie Lake near Burr Oak 278
Muscatatuck River near Deputy 163

National Atmospheric Deposition Program, definition of 10

Page

National Geodetic Vertical Datum of 1929, definition of ... 35
National Stream-Quality Accounting Network, definition of ... 10, 35
National Trends Network, definition of ... 10
National Trends Network procedures, change in ... 25
National Water-Quality Assessment Program, definition of ... 10, 36
Nephelometric turbidty unit, definition of ... 36
Newton 6 ... 355
Newton 7 ... 356
Newton 8 ... 357
Newton 9 ... 358
Newton 10 ... 359
Newton 11 ... 360
Newton 14 ... 361
Noble 8 ... 362
Noble 9 ... 363
Noble 11 ... 364
Noble 14 ... 365
North Branch Elkhart River at Cosperville ... 201
North Twin Lake near Howe ... 278
Nyona Lake near Greenoak ... 279

Ogle Lake near Nashville ... 279
Ohio River Basin, gaging-station records in ... 53-188
Oliver Lake near Valentine ... 280
On-site measurements and sample collection ... 23
Open or screened interval, definition of ... 36
Organic carbon, definition of ... 36
Organochlorine compounds, definition of ... 36
Other lake records available ... 294
Other lake maps available ... 298
Other records available, explanation of ... 22
Outlet, definition of ... 27

Palestine Lake at Palestine ... 280
Parameter code, definition of ... 36
Parke 6 ... 366
Partial-record station, definition of ... 36
Particle size, definition of ... 36
Particle-size classification, definition of ... 37
Patoka River at Jasper ... 176
  at Winslow ... 178
  near Cuzco ... 175
  near Hardinsburg ... 174
  near Princeton ... 180
Percent composition, definition of ... 37
Percent exceeds, definition of ... 20
Percent total, definition of ... 37
Period of record, definition of ... 16,24,26,29
Periodic station, definition of ... 37
Pesticides, definitions of ... 37
PH, definition of ... 37
Pigeon Creek Basin, gaging-station records in ... 71
Pigeon Creek near Angola ... 197
  near Fort Branch ... 71
Pigeon River near Scott ... 198
Pike Lake at Warsaw ... 281
Pine Creek near Elkhart ... 200
Pine Lake at LaPorte ... 281
Pipe Creek at Frankton ... 117
  near Bunker Hill ... 83
Pleasant Run at Arlington Avenue at Indianapolis ... 126
Plum Creek near Bainbridge ... 145
Polychlorinated biphenyls, definition of ... 37
Posey 3 ... 367
Posey 5 ... 368
Prairie Creek near Lebanon ... 103
Precipitation, summary of ... 3
Pretty Lake near Plymouth ... 282
Publications on Techniques of Water-Resources Investigations ... 44-48
Pulaski 6 ... 369
Pulaski 7 ... 370

Randolph 3 ... 371
Records available on lakes ... 294
References, selected ... 49
Remark codes ... 25
Remarks, definition of ... 17,24,29
Return period, definition of ... 37
Revised records, definition of ... 16
Revisions, definition of ... 17,24,27
Riddles Lake near Lakeville ... 282
Ridinger Lake near Pierceton ... 283
Rimmell Branch near Albion ... 203
River mile, definition of ... 37
River mileage, definition of ... 37
Runoff in inches, definition of ... 38

St. Joseph 31 ... 372
St. Joseph River at Elkhart ... 206
  near Fort Wayne ... 214
  near Newville ... 212
St. Joseph River Basin, gaging-station records in ... 197-207
St. Marys River at Decatur ... 215
  near Fort Wayne ... 216

Page

Salamonie River at Dora ... 76
  near Warren ... 75
Salt Creek near Harrodsburg ... 169
Sample collection and analysis ... 30
Sawmill Lake near North Webster ... 283
Sea level, definition of ... 38
Sediment data, Fish Creek near Artic ... 210-211
Sediment, definition of ... 38
Slected references ... 49
Shelby 2 ... 373
Sherburn Lake near Pierceton ... 284
Shipshewana Lake near Shipshewana ... 284
Shoe Lake near Oswego ... 285
Shriner Lake at Tri-Lakes ... 285
Silver Creek Basin, gaging-station records in ... 62
Silver Creek near Sellersburg ... 62
Silver Lake at Silver Lake ... 286
Simonton Lake near Elkhart ... 286
Singleton Ditch at Schneider ... 228
Skinner Lake near Albion ... 287
Smalley Lake near Washington Center ... 287
Solomon Creek near Syracuse ... 204
Solute, definition of ... 39
South Fork Patoka River near Spurgeon ... 179
South Fork Wildcat Creek near Lafayette ... 98
Special networks and programs ... 10
Specific conductance, definition of ... 39
Spy Run Creek at Fort Wayne ... 217
Stage-discharge relation, definition of ... 39
Starke 2 ... 374
Station identification numbers ... 12
Station manuscript, explanation of ... 16
Station records, ground-water ... 300-388
Station records, lakes ... 254-293
Station records, surface-water ... 53-235
Statistics of monthly mean data ... 18
Steuben 6 ... 375
Stone Lake near Scott ... 288
Stony Creek near Noblesville ... 119
Streamflow, definition of ... 39
Streams tributary to Lake Erie, gaging-station records in ... 208-219
Streams tributary to Lake Michigan, gaging-station records in ... 189-207
Sugar Creek at Crawfordsville ... 104
  at New Palestine ... 153
  in Montgomery County, water-quality data ... 238-239
  near Edinburgh ... 156
Summary of hydrologic conditions ... 3
Summary statistics ... 18
Surface area, definition of ... 26,39
Surface-water records, others available ... 22
Surface-water, explanation of records ... 14-22
Surface-water, station records ... 53-235
Surface-water, summary of ... 6
Surface-water-quality, explanation of records ... 22-25
Suspended, definition of ... 39
Suspended, recoverable, definition of ... 39
Suspended sediment, definition of ... 38
Suspended-sediment concentration, definition of ... 38
Suspended-sediment discharge, definition of ... 38
Suspended-sediment load, definition of ... 38
Suspended, total, definition of ... 40
Sylvan Lake at Rome City ... 288
Syracuse Lake at Syracuse ... 289
System for numbering wells ... 13

Techniques of Water-Resources Investigations, Publications ... 44-48
Time-weighted average, definition of ... 40
Tippecanoe Lake at Oswego ... 289
Tippecanoe River at North Webster ... 89
  at Oswego ... 90
  near Delphi ... 93
  near Ora ... 92
Tippecanoe 17 ... 376
Tippecanoe 18 ... 377
Tons per acre-foot, definition of ... 40
Tons per day, definition of ... 40
Total, definition of ... 40
Total discharge, definition of ... 40
Total, recoverable, definition of ... 40
Total-sediment discharge, definition of ... 38
Total-sediment load, definition of ... 38
Trail Creek Basin, gaging-station records in ... 195
Trail Creek at Michigan City Harbor ... 195
Turbidity,definition of ... 41

Upper Long Lake near Wolflake ... 290
Upper Mississippi River Basin, gaging-station records in ... 220-235
USGS water data, access to ... 30

Vanderburgh 6 ... 378
Vanderburgh 7 ... 379
Vernon Fork Muscatatuck River at Vernon ... 166
  near Butlerville ... 165
Versailles Lake near Versailles ... 290

Page

Vigo 7 380
Volatile organic compounds, definition of 41

Wabash River Basin, gaging-station records in 72-188
Wabash River at Covington 102
at Huntington 73
at Lafayette 100
at Linn Grove 72
at Logansport 87
at Montezuma 105
at Mount Carmel, IL 7, 181
at New Harmony 182
at New Harmony, water-quality data 183-187
at Peru 82
at Riverton 110
at Terre Haute 109
at Vincennes 113
at Wabash 77
Wabash 3 381
Wabash 4 382
Waldron Lake near Cosperville 291
Walnut Creek near Warsaw 91
Warrick 4 383
Washington 2 384
Water-discharge and stage records, collection and computation of 14
Water level, definition of 41
Water-quality analyses:
at Grand Calumet River in Lake County 240-252
at Indiana Harbor Canal in Lake County 240-252
at miscellaneous streams in Montgomery County 238-239
at Sugar Creek in Montgomery County 238-239
at Wabash River at New Harmony 183-187
at Whitewater River near Alpine 56-57
Water-quality records, collection and examination of 22-25
Water-quality-sampling sites, Lake County 240, 247
Water-resources data, records of 53
Water-Resources Investigations Publications, Techniques of 44-48
Water table, definition of 41
Water-table aquifer, definition of 41
Water year, definition of 41
Wauhob Lake near Valparaiso 291
Wayne 6 385
WDR, definition of 41

Page

Webster Lake at North Webster 292
Weesau Creek near Deedsville 85
Well, definition of 42
Well characteristics, definition of 29
Weighted average, definition of 42
Wells 4 386
West Fork Blue River at Salem 65
West Fork White Lick Creek at Danville 141
Wharton Lake near South Bend 292
Whiskey Run at Marengo 67
White 4 387
White Lick Creek at Mooresville 142
White River above Petersburg 172
at Broad Ripple 121
at Indianapolis 125
at Muncie 114
at Newberry 150
at Noblesville 118
at Petersburg 173
at Raible St. at Anderson 116
at Spencer 141
at Stout Gen. Stn. at Indianapolis 135
near Centerton 143
near Nora 120
Whitewater River at Brookville 60
near Alpine 55
near Alpine water-quality data 56-57
near Economy 53
near Hagerstown 54
Whitley 3 388
Wildcat Creek at Kokomo 96
at Owasco 97
near Jerome 94
near Lafayette 99
Winona Lake at Warsaw 293
WSP, definition of 42

Yellow River at Knox 223
at Plymouth 222
Youngs Creek near Edinburgh 155

7-day 10-year low flow, definition of 39